66th ANNUAL REPORT OF THE STATE OIL & GAS SUPERVISOR

1980

California Division of Oil & Gas

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DIVISION OF OIL AND GAS
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1980

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OIL AND GAS OPERATIONS

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OIL AND GAS DISTRICT BOUNDARIES

AND
DIVISION OF OIL AND GAS OFFICES

SCALE
0 50 100 MILES

SUMMARY OF OIL AND GAS OPERATIONS

Oil Production

Oil production in California continued to increase in 1980. Production increased to 346.9 million barrels,¹ compared with 341.4 million barrels in 1979. An additional 10.1 million barrels was produced from federal leases in the Outer Continental Shelf (OCS) area, for a grand total of 357 million barrels.

Most of the production increases occurred in Kern County where production from eight oil fields, including Elk Hills (Naval Petroleum Reserve No. 1), increased about 13.7 million barrels. Continued field development caused production to increase about 3.9 million barrels in Elk Hills, which continued as the state's top oil field. The increases in the other fields resulted primarily from enhanced heavy-oil production operations using steam injection, although hydraulic fracturing also contributed significantly to the production gains in South Belridge and Lost Hills fields.

Each of the eight fields showed a significant increase in production rate from January 1980 to December 1980. The December 1980 production rates (in barrels per day) and the increases in production rate during the year (shown in parentheses) are: Elk Hills, 166,200 (9,900); South Belridge, 64,400 (11,900); Kern River, 109,000 (15,100); Lost Hills, 13,500 (6,000); Mount Poso, 25,600 (7,800); Midway-Sunset, 114,400 (9,000); McKittrick, 12,500 (9,900); and Cymric, 11,200 (2,300). These impressive production gains followed the decontrol of heavy-oil prices in late 1979, and were responsible for offsetting the net production decline in most of California's other oil fields in 1980.

The Wilmington oil field in Los Angeles County led the declining oil fields in the state with a decrease of about 3.8 million barrels or 8.7 percent from the 1979 total. The decline allowed the Midway-Sunset field in Kern County to overtake Wilmington as the second-largest producing oil field in California.

Although the Huntington Beach field was ranked fourth among the declining oil fields in 1980, its cumulative production topped the 1 billion barrel mark, making it the third field in the state to do so (the other two fields are Wilmington and Midway-Sunset).

In 1980, California's oil was produced from 231 active fields at a rate of about 950,000 barrels per day. There were 44,889 oil wells in operation at the end of 1980, an increase of about 1,240 wells over the previous year. In

addition, about 27,700 barrels per day was produced from 205 wells in three fields on federal OCS leases.

Incremental oil production from all types of enhanced recovery projects accounted for about 48 percent of California's total oil production (OCS production excluded). Steam stimulation was credited with about 30 percent of the state's total, and waterflood operations accounted for about 17 percent. Gas injection and in situ combustion (fireflood) projects accounted for the rest of the incremental oil production.

Offshore production from California's tidelands continued to decline in 1980; however, it still accounted for 12 percent of the state's crude oil production. The combined state and federal (OCS) offshore production amounted to 14 percent of California's production total. This total should increase significantly in 1981 as two federal fields (Hondo and Beta Offshore) begin production, and development continues in Santa Clara Offshore, which began producing in 1980.

Five-Year Production Forecast

Assuming no major policy changes in crude-oil pricing or operating procedures, California's oil production will continue to increase at a rate between 1 and 2 percent per year for the next few years. Yearly production, excluding federal OCS production, is expected to reach about 384 million barrels (1,052,000 barrels per day) by 1985. This forecast is based on anticipated production increases in the major oil fields in the San Joaquin Valley, and on the continuing production decline of the rest of the state's fields. The forecast does not include oil that may be produced from mining or other unconventional operations.

Based on published estimates, federal OCS oil production is expected to reach about 130,000 barrels per day by 1985.

Gas Production

In 1980, California's net gas production decreased from 1979 production levels. Production totaled 311.2 billion cubic feet, with an additional 6.0 billion cubic feet produced from the federal OCS area, for a decrease of nearly 25.8 billion from the 1979 combined total. The amount of associated (oil zone) gas produced during the year decreased to 158.7 billion cubic feet (from 164.7 billion cubic feet), with an additional 6.0 billion cubic feet of OCS production, totaling nearly 5.4 billion cubic feet less

¹ One barrel equals 42 gallons.

than in 1979. Nonassociated gas production decreased from 172.9 billion cubic feet in 1979 to 152.4 billion cubic feet in 1980.

Elk Hills oil field again accounted for the most significant increase in associated gas production. The drop in nonassociated gas apparently resulted from lower demand during the warmer winter months in 1980. (A public utility purchases most of the nonassociated gas produced in California.)

Reserves

California's estimated, proved oil reserves, as of December 31, 1980, totaled 5.2 billion barrels, approximately the same as in 1979. The depletion of the 1979 amount due to 1980 production was offset by increases in the reserve estimates, which resulted from the decontrol of oil prices. Recoverable gas reserves, as of December 31, 1980, were estimated at 4.0 trillion cubic feet.

OFFSHORE

Production

Despite the completion of 64 new wells in state and federal waters in 1980, total oil and gas production from offshore leases in California continued a decline begun in 1969.

Production from state offshore leases during 1980 totaled 40.0 million barrels of oil and 13.1 billion cubic feet of natural gas, compared with 42.2 million barrels of oil and 13.6 billion cubic feet of natural gas produced in 1979. This is a 5 percent decrease in oil and 4 percent decrease in natural gas production.

The offshore areas of Wilmington and Huntington Beach oil fields continued to account for the majority of production from state offshore leases. Together, the two fields produced 86 percent of the oil and 51 percent of the natural gas from offshore state leases. In 1980, offshore oil production in the two fields was 34.4 million barrels of oil, a decrease of 4 percent from 1979, and 6.6 billion cubic feet of gas, a decrease of 10 percent from 1979.

Production from federal offshore leases during 1980 was 10.1 million barrels of oil and 6.0 billion cubic feet of natural gas. This is a 9 percent decrease in oil production, but a 10 percent increase in natural gas production from 1979. See the *Offshore Oil and Gas Fields* table for additional production figures.

Drilling Activity in State Waters

Based on the number of new well completions, offshore drilling activity in state waters decreased by 13 percent in 1980, with 26 new wells completed to production compared with 30 new wells in 1979. However, the number of new well completions does not indicate the true extent of offshore drilling activity because, rather than drilling new wells, many existing offshore wells are redrilled and recompleted (due to the limited number of well slots on offshore islands and platforms) (Figs. 1a and 1b). By including redrills in an evaluation of drilling activity (29 wells were redrilled in 1980 compared with 59

Drilling Activity

Total footage drilled for new wells in 1980 was 9,015,485 feet, a 34 percent increase from the 1979 figure. Footage drilled while redrilling or deepening existing wells totaled 372,356 feet, about the same as the 1979 rework total. The number of prospect (exploratory) wells drilled increased from 279 in 1979 to 307 in 1980.

During the year, 6 new fields were discovered (2 oil and 4 gas), 1 new area was found in a gas field, 10 new pools were discovered (9 in oil fields and 1 in a gas field), and the productive areas of 17 fields were extended (10 in oil fields and 7 in gas fields). The number of oil and gas wells completed to production increased from 1,644 to 2,297, an all-time high and a reflection of the record number of notices that were received in 1980 to drill new oil and gas wells.

wells redrilled in 1979) overall offshore drilling activity in state waters decreased by 23 percent in 1980.

The offshore areas of Wilmington and Huntington Beach fields continued to be the most active in well drilling operations. The total new-well footage in 1980 was 224,740 feet, and the total redrill footage was 87,110 feet.

Belmont and Wilmington Offshore Fields

In the Belmont Offshore field, two new wells were drilled, including an 11,290 foot exploratory well drilled by Exxon Corporation. The well, "State PRC 186" 130, was being tested at the year's end with a string of 4-1/2 inch casing cemented at 11,266 feet. In addition, two wells were redrilled in the field.

In 1980, 19 new wells were completed and 17 wells were redrilled in the offshore area of the Wilmington field. In September 1980, THUMS Long Beach Company produced the 500 millionth barrel from the offshore Wilmington property, about 15 years after the first well was completed there in August 1965.

In August 1980, THUMS Long Beach Company initiated a caustic flood project and began injecting slugs of salt and caustic solution into the Ranger zone of Fault Block VII. In December 1980, the company began a pilot steamflood project in the Tar zone of Fault Block V.

Huntington Beach Field, Offshore Area

Aminoil USA, Inc. drilled and completed 8 new wells and redrilled 6 wells in the offshore portion of Huntington Beach field. The company proposed a pilot steamflood project of the TM zone on State leases "392" and "91".

South Elwood Offshore Field

ARCO Oil and Gas Company continued to extend the South Elwood Offshore field by drilling and completing three new wells from Platform Holly.

In June 1980, the company completed a \$40 million South Elwood Offshore crude oil and gas onshore processing plant that will process production from Platform

Figures 1a and 1b. California offshore oil platforms and islands in state and federal waters.

Holly. The plant was designed to process the sour crude from the Monterey zone.

Carpinteria and Rincon Offshore Fields

Chevron U.S.A. Inc. drilled and completed 3 new wells and redrilled 2 wells in the Carpinteria Offshore field.

In the offshore portion of the Rincon field, Mobil Oil Corporation redrilled 1 well, completing it in the Deep zone.

Activity in Federal Waters

Drilling activity remained high in the Southern California Outer Continental Shelf (OCS) where 46 wells were drilled or redrilled during the year compared with 34 wells in 1979. Of the total, 30 new development wells and 5 redrilled wells were completed, 3 new development wells were suspended, and 8 exploratory wells were drilled and abandoned. Four new development wells and 5 exploratory wells were being drilled at the year's end.

During 1980, production from federal acreage was in Carpinteria and Dos Cuadras fields, and the Santa Clara Unit. A new field in the Santa Clara Unit began producing towards the end of 1980, and two more fields are scheduled to come on stream in 1981: Beta field in San Pedro Bay, 9 miles offshore from Huntington Beach; and Hondo field (in the Santa Ynez Unit) in the Santa Barbara Channel, 20 miles west of the City of Santa Barbara.

Carpinteria Offshore Field

Phillips Petroleum Corporation drilled 5 new wells and redrilled 4 wells in the federal portion of the Carpinteria Offshore field in 1980. Sun Production Company, developing the western extension of the field, drilled 8 new wells, of which 7 were completed and 1 was suspended. One well was being drilled at the year's end. Sun's first well in the field, "OCS-P0240" B-1, was drilled from Platform Henry in February 1980.

With the Sun wells on stream in 1980, oil production in the federal portion of the field increased 21 percent above 1979 levels, while production in the state portion declined 16 percent. Gas production in the federal portion of the field increased 42 percent over 1979 levels, while production in the state portion declined 32 percent.

Dos Cuadras Offshore Field

Field oil production decreased 14.2 percent from the 1979 level, and gas production declined 7.5 percent. The field remained the biggest producer in the Santa Barbara Channel OCS, with 21,802 barrels per day in 1980, compared with 22,010 barrels a year ago.

Santa Clara Unit

The Santa Clara Unit became the third producing area in federal waters off California. In June 1980, Chevron U.S.A. Inc. completed the first well from Platform Grace in the Santa Clara Unit. Later, five more wells were drilled and completed in the fractured Monterey zone. Two wells were still being drilled at the year's end.

Union Oil Company filed plans with the U.S.G.S. to install the 90-slot Platform Gilda on the "OCS-P0216"

lease in 210 feet of water. The lease is also in the Santa Clara Unit, about 10 miles west of Oxnard.

Hueneme Offshore Field

Union Oil Company's 15-slot Platform Gina was positioned December 1980, in the "OCS-P0202" lease in 95 feet of water. The platform is about 4 miles west of Port Hueneme.

Beta Field

In August 1980, Shell Oil Company began drilling the first well from Platform Ellen in the Beta field. By the end of the year, the company had drilled and completed six new wells, but none will produce until Platform Elly, connected to Platform Ellen by a 200-foot catwalk, is completed. The oil will be processed on Platform Elly before flowing by pipeline to Long Beach.

The company plans to drill 60 to 80 wells at a rate of about 18 wells a year to recover an estimated 150 million barrels of oil. Production of about 15,000 barrels of oil a day is expected in 3 years, with a peak of 25,000 barrels a day in 5 years.

Chevron U.S.A. Inc. is designing a 10-slot platform to use in developing the northern portion of the Beta field. Designated Platform Edith, the structure is planned for placement in 160 feet of water.

Hondo Field in the Santa Ynez Unit

Most 1980 drilling activity in the Santa Ynez Unit occurred in the Hondo field. Exxon Corporation drilled the 11th through 17th of 28 wells projected to be drilled from Platform Hondo. The 18th well was being drilled in December. All completed wells will be put on stream in early 1981, once offshore production facilities are completed.

Exxon Corporation drilled 2 wells in the Pescado area of the Santa Ynez Unit. Well "OCS-P018" 2 was drilled and abandoned at a total depth of 12,450 feet, and well "OCS-P018" 3 was being drilled at the year's end. Chevron U.S.A. Inc. drilled wells "OCS-P0193" 3 and 4 in the Sacate area of the Santa Ynez Unit. Each well was drilled to a total depth of over 10,000 feet and then abandoned.

Point Conception

Chevron U.S.A. Inc. was the most active operator in the Point Conception area. The company was drilling exploratory wells "OCS-P0316" 1, "OCS-P0317" 1, and "OCS-P0318" 1 at the year's end.

Mobil Oil Corporation, Operator, drilled well "OCS-P0321" 1 to a total depth of 11,460 feet in the area before abandoning the well in July 1980.

Tanner Bank

Two 10,000-foot exploratory wells were drilled and abandoned in 1980 in the Tanner Bank area. The wells were Marathon Oil Company well "OCS-P0276" 1 and Texaco Inc., well "OCS-P0257" 1.

Pitas Point and Santa Rosa Units

In the Santa Rosa Unit, Exxon Corporation drilled well "OCS-P0238" 1 to about 12,000 feet before abandoning it.

About 12 miles east at the Pitas Point Unit, Texaco Inc. drilled and abandoned well "OCS-P0234" 7 at a total depth of 16,750 feet. The company has filed plans to install Platform Habitat in the unit in 1981. Platform Habitat will be 10 miles west of Carpinteria in 288 feet of water.

Santa Rosa Island - South

Chevron U.S.A. Inc. drilled and abandoned well "OCS-P0245" 1 at a total depth of 6,000 feet on Santa Rosa Island - South.

DISTRICT NO. 1

Production

Oil production in District 1 totaled 83.0 million barrels in 1980, a 6 percent decrease from the 88.2 million barrels in 1979, and a 50 percent decrease from the all-time high of 165 million barrels produced in 1969. Production from Wilmington and Huntington Beach fields accounted for 51.2 million barrels, 62 percent of the district total; however, production from the Wilmington field declined by 3.8 million barrels, which represents 72 percent of the district's decline in production for 1980. Of the district's 50 active fields, 13 showed an increase in production in 1980, compared with 14 fields in 1979. Associated and nonassociated gas production in District 1 was 25.6 billion cubic feet, a decrease of 7 percent from the 27.4 billion cubic feet produced in 1979.

Drilling Activity

Drilling activity in District 1 increased 47 percent in 1980, with 151 new wells drilled compared with 103 in 1979. Of the 151 wells drilled, 111 were completed to production and 32 completed as service wells.

Wilmington, West Newport, and Torrance fields accounted for 75 percent of all new wells drilled; and Wilmington, Torrance, and Huntington Beach fields accounted for 85 percent of the 78 redrilled wells.

The number of wells abandoned during 1980 remained relatively unchanged from the previous year: 127 compared with 125 in 1979. Of the 127 wells abandoned, 102 were former producers, 16 were service wells, and 9 were dry holes.

For the second consecutive year, new-well footage increased significantly. The 700,303 feet drilled in 1980 reflects a 34 percent increase over 1979 footage and a 100 percent increase over that of 1978. Redrill footage in 1980 totaled 180,570 feet, a 28 percent increase over 1979 and a 93 percent increase over 1978.

Enhanced Recovery

Incremental oil production from all secondary and tertiary recovery projects in District 1 totaled 47.9 million barrels in 1980, a 5.9 percent decrease from 1979 incremental production. Of this total, 26.8 million barrels was produced from the Wilmington field. During 1980, 7 new enhanced recovery projects were approved (Table 1).

An estimated 80,000 barrels of incremental oil was produced by chemical flooding (augmented waterfloods) in 1980. This figure should increase dramatically in the next few years as the preflush phase of these projects is completed.

Waterflood

Waterflooding continued as the dominant method of enhanced recovery used in District 1 throughout 1980. During the year, there were 157 active waterflood projects in 23 fields. The projects yielded about 44.2 million barrels of incremental oil, a 6 percent decrease over incremental oil produced in 1979. Most of the incremental oil from the Wilmington field was produced from waterflooding operations, as the chemical floods are still in the developmental stages.

Union Oil Company of California received division approval to develop a waterflood project in the Meyer zone of the Santa Fe Springs field. The Union project will be developed in two phases of 25 acres and 20 acres each.

Thermal Projects

During the year, thermal enhanced recovery projects were underway in six fields: steamflood operations in Brea-Olinda, Huntington Beach, West Newport, Wilmington, and Yorba Linda; cyclic steam operations in Brea-Olinda, Huntington Beach, West Newport, and Torrance; and fireflood (in situ combustion) operations in Brea-Olinda and West Newport.

Table 1. Enhanced recovery projects approved in 1980.

Project Type	Field	Company	Zone	Approval Date	Status
Waterflood	Santa Fe Springs	Union Oil	Meyer	1/7/80	New Project
Steamflood	Brea-Olinda	Union Oil	Second Pliocene	1/24/80	New Project
Steamflood	Wilmington	THUMS	Tar-FB V	3/10/80	New Project
Fireflood	Brea-Olinda	Union Oil	Third Pliocene	4/8/80	New Project
CO ₂ flood	Wilmington	Champlin	Tar-FB III	7/21/80	New Project
Caustic flood	Torrance	Superior	Main	7/24/80	New Project
Steamflood	Huntington Beach	Aminoil	TM	12/5/80	New Project

An estimated 3.7 million barrels of incremental oil was produced by thermal enhanced recovery methods in 1980, compared with 3.9 million barrels in 1979. The decrease was due to normal production decline. Of the 1980 total, 3.2 million barrels was attributed to steamflood and cyclic operations, and 0.5 million barrels was due to fireflood (in situ combustion) operations.

Wilmington Field

THUMS Long Beach Company gained approval to initiate a pilot steamflood project in Fault Block V, Tar zone, in the Wilmington oil field. Initially, the project will include 1 injector and 4 producing wells on five acres in an inverted five-spot pattern. If the project is successful, it will be expanded to develop an additional 200 acres.

Huntington Beach Field

Aminoil USA, Inc. received division approval to begin the first steamflood project in the offshore portion of the Huntington Beach oil field. Three separate pilot projects are to be conducted in the TM zone. Each project will consist of 1 steam injector surrounded by 2 to 6 producers. The TM zone in each of the project areas has undergone cyclic steaming for several years, with results ranging from poor to excellent.

Caustic Flood - Torrance Field

The Superior Oil Company has been converting a portion of the Joughin Unit waterflood to a caustic flood project. The project will use an inverted, nine-spot pattern and encompass 604 acres. The softened brine preflush will last 4 years; caustic injection is scheduled for mid-1985.

CO₂ Flood - Wilmington Field

Champlin Petroleum Company has begun the state's first pilot immiscible carbon dioxide injection project (water-alternating-gas) in the Wilmington field. The pilot project is designed to test the process in the Tar zone in Fault Block III in an area where recovery with conventional waterflooding techniques is nearing the economic limit. Injection of liquid CO₂ is scheduled to begin the first quarter of 1981. The 40-acre pilot project will consist of 4 injection and 3 production wells. Presently, there is insufficient data to predict when producing wells will respond to the CO₂ stimulation.

Water Disposal

There were 36 active water disposal projects in 17 fields during 1980. Six inactive disposal projects were terminated during the year.

Gas Storage

Activity was low in District 1 natural gas storage projects in 1980. Most activity occurred at the Montebello project where two new wells were completed and the downhole safety equipment installation was almost completed.

LPG Storage

Liquefied petroleum gases (LPG) continued to be stored in the El Segundo field as part of a project operated by Chevron U.S.A. Inc. Lack of surface storage facilities has made the project necessary, even though project economies are marginal. Propane, butane, and olefins are

Figure 2. Vertical movement, in feet, Wilmington oil field. August 1979 to August 1980.

stored in a saltwater aquifer by means of five, injection-withdrawal wells. In 1980, 273,859 barrels of LPG were injected and 166,091 barrels of LPG were withdrawn. Available LPG in storage is estimated at 568,800 barrels.

Subsidence Abatement

In 1980, through the joint efforts of the Division of Oil and Gas, the City of Long Beach, and several oil operators, an extensive program was initiated that greatly increased water injection in Fault Blocks II through VI in the Wilmington subsidence area. The increase has reversed a trend of renewed subsidence that developed over the last several years from low injection rates.

During 1980, injection in Fault Blocks II through VI increased by about 27,000 barrels per day. Projected fu-

ture injection increases for 1981 are about 63,000 barrels per day.

Additional injection activity took place through new wells, redrills, conversions, reworked wells, and stimulation activities.

The results of this increased injection are illustrated in Figure 2. The central areas of Fault Blocks II through VI have rebounded from 0.05 to 0.175 feet during the year, although a few areas of localized elevation losses remain. Rebound continues to occur in the westernmost portions of the field and, in varying degrees, in the easternmost portion.

Maximum elevation loss, about 0.20 feet on Island White (THUMS), was probably due to insufficient injection in the area. Revisions to the general waterflood plan should help to stabilize the few remaining areas where elevation losses were recorded.

DISTRICT NO. 2

Production

Oil production from the 54 active fields in District 2 was 21.2 million barrels during 1980, compared with 22.0 million barrels during 1979, a decrease of 4 percent. Ventura oil field led the district in oil production with 7.1 million barrels, followed by San Miguelito with 2.3 million barrels, and Rincon with 1.8 million barrels. The most significant changes in field performances were a 592 thousand barrel decrease in Ventura oil field, a 258 thousand barrel decrease in Rincon oil field, and 217 thousand barrel increase in Ojai oil field.

Gas production in 1980 totaled 25.9 billion cubic feet, compared with 24.8 billion cubic feet in 1979, an increase of 4 percent. Ventura, Rincon, and Ojai oil fields were the largest natural gas producers, producing 3.5, 2.9, and 2.4 billion cubic feet of gas, respectively.

Drilling Activity

During 1980, 131 new wells were drilled in District 2 compared with 107 in 1979, an increase of 22 percent. Drilling activity increased in 1980 for the third consecutive year, resulting in a cumulative 3 year increase of 82 percent.

Sespe oil field led the district with 18 wells drilled, followed by Ojai with 17, and Placerita with 9. Total footage drilled during 1980 was 654,051 feet compared with 539,080 feet in 1979. Redrill footage in 1980 totaled 45,035 feet, a 12 percent decrease from 1979.

Exploratory activity during 1980 increased 46 percent from that of 1979, with 35 prospect wells drilled, 9 of which were completed to production. Discoveries included nine new pools or extensions in Chaffee Canyon, Del Valle, Moorpark West, Ojai, Shiells Canyon, South Mountain, and Tapo Ridge fields.*

*See Oil and Gas Discoveries table.

Chaffee Canyon Field Reactivated - New Pool Discovery

In October 1980, Occidental Petroleum, Inc. discovered an oil pool in Chaffee Canyon field (an abandoned gas field) with the completion of well, "Ventura Realty" 344-1 (Photo 1). Casing was cemented at 8,493 feet and perforated from 6,904 to 7,760 feet. Initial production after formation fracturing was 314 barrels of 38.4° API gravity oil and 775 Mcf of gas per day.

Production is from Eocene strata in the upthrown block north of the Oakridge fault. The producing zone is structurally separated by the fault system from an abandoned gas well 4,500 feet to the northeast, which comprised the old gas field. This well had produced 11 million cubic feet of gas from the Pico Formation (Pliocene) at a depth of 8,712 feet.

Before the field name was officially adopted, Wiley Canyon, East Chaffee, and Los Robles had been used to identify the discovery.

Photo 1. Drilling rig on the drill site of well Occidental Petroleum, Inc. "Ventura Realty" 1, the discovery well of Chaffee Canyon oil field. Photo by Fred Taylor.

Fillmore Oil Field - Reactivated

In July 1973, the last of the 62 producing wells in Fillmore oil field was abandoned. However, the field was reactivated in early 1980 when Santa Fe Minerals, Inc. drilled out the cement plug in well "S" 14, Sec. 27, T.4N., R.20W., S.B.B.&M., and reperforated part of the original producing interval between 13,880 and 13,832 feet. On September 1, the well was recompleted, producing 175 barrels of 29.5° API gravity oil and 97 Mcf of gas per day.

Approvals have been issued to reenter three additional wells in the field.

Del Valle Oil Field - New Pool Discovery

With the completion of well "N.L.&F." 1-20, Black Hawk Resources Corporation has discovered a new pool and reactivated the abandoned South Area of Del Valle oil field. The initial production rate was 142 barrels of oil per day. The well is about 2,000 feet northeast of the area's former, single producer.

A confirmation well, "N.L. & F." 2, was completed in December with 7-inch casing cemented at 4,920 feet. The well is midway between the discovery well and the former producer.

Ojai Oil Field- Extensions

Union Oil Co. confirmed the discovery of the Sulphur Crest Area, in Ojai oil field, with the completion in the area of three additional wells. The wells that contributed most to Ojai field's increased 1980 production are between the North Sulphur Mountain and Silverthread Areas. ARCO Oil and Gas Company and Santa Fe Energy Company drilled eight wells that progressively extended the production limits of the North Sulphur Mountain Area about one half mile east to adjoin the Silverthread Area. Several of the wells were completed at rates exceeding 200 barrels of oil per day. Production is from faulted, steeply dipping Miocene strata at depths ranging from 3,500 to 6,000 feet.

Shiells Canyon Oil Field - New Eocene Pool and Extension

In 1980, Texaco, Inc., completed five wells in a Shiells Canyon oil field, Eocene pool, as a part of a deeper-pool development program. Well "Shiells" E4 extended the limits of the pool about 900 feet south. After hydraulic fracturing, initial zone production in August 1980 was 60 barrels of 29° API gravity oil per day cutting 60 percent water from perforations between 6,800 and 6,890 feet. Well "Shiells" E6 is a new Eocene pool discovery. Unlike its predecessors, this Eocene well was completed flowing

at a substantial rate. Initial production in November 1980 was 650 barrels of 29.7° API gravity oil and 287 Mcf of gas per day from selected intervals between 7,760 and 7,820 feet.

South Mountain Oil Field - Bridge Pool Extension

Lawrence Barker, Jr. extended the production limits of the Bridge pool of South Mountain oil field northeasterly one quarter mile with the completion of well "Harvey-Snyder" 1 in August 1980. Initial production was 168 barrels of clean, 30° API gravity oil from intervals between 7,777 and 8,125 feet opposite Pico Formation sands (Pliocene).

Enhanced Recovery

In 1980, incremental oil production from all enhanced recovery projects in District 2 totaled 6.4 million barrels or 30 percent of the total oil production from all fields in the district. During the year, two new reservoir stimulation projects were approved (Table 2).

Waterflood

Waterflooding continued to be the dominant method of enhanced recovery used in the district, accounting for 5.8 million barrels of incremental oil or 91 percent of the district total. About 84 million barrels of water was injected into 395 waterflood wells. Ventura oil field led in waterflood activity, and waterflood projects in the field continue to expand.

Gas Injection

During 1980, gas injection projects accounted for about 350 thousand barrels of incremental oil in the district.

Cyclic Steam

During 1980, cyclic steam projects were undertaken in Oxnard, Placerita, and Shiells Canyon oil fields. Two projects for Oxnard, approved by Ventura County, should get underway in 1981. Incremental oil attributed to steam injection in the district during 1980 totaled 220,000 barrels.

Water Disposal

Approvals to initiate water disposal in eight wells were issued during 1980. Total water disposed of equaled 10 million barrels. About 50 injection wells were used in 23 oil fields.

Table 2. Enhanced recovery projects approved in 1980.

Type of Project	Field	Company	Zone	Approval Date	Status
Waterflood Caustic	Newhall-Potrero San Miguelito	Sun Oil Co. Conoco Inc.	Fifth Third Grubb	7/24/80 9/25/80	New Project Pilot

Environmental Protection

In 1980, seven wells adjacent to Santa Paula Creek in Santa Paula oil field, Ventura County, were plugged and abandoned under the division's Hazardous and Idle-De-

serted Well Abandonment Program (Photo 2). The wells were leaking oil, gas, or water, which posed a potential threat to the creek and the subsurface water deposits. Total abandonment costs were about \$55,000.

Photo 2. Cementing operations at Monticello Oil Co. Ltd. well No. 2, classified as hazardous by the California Division of Oil and Gas. Photo by Ed Hickey.

DISTRICT NO. 3

Production

Oil production from the district's 31 active fields was 27.1 million barrels in 1980 compared with 27.6 million barrels in 1979, a decrease of 2 percent. San Ardo topped the list of oil fields with 10.8 million barrels, followed by Cat Canyon with 5.8 million barrels. Gas production totaled 12.1 million cubic feet, compared with 11.8 billion cubic feet in 1979, an increase of 3 percent. Cat Canyon and Santa Maria Valley fields were the largest gas producers with 4.6 and 2.7 billion cubic feet, respectively.

Drilling Activity

Drilling activity in District 3 increased 22 percent in 1980; 256 new wells were drilled, compared with 210 new wells drilled in 1979. The number of wells completed to production decreased from 180 to 178. During the year, new-well footage amounted to 789,770 feet, compared

**See Oil and Gas Discoveries table.*

with 578,362 feet in 1979. Redrill footage totaled 18,425 feet, compared with 31,546 feet in 1979. Most of the development work took place in San Ardo field where 81 new wells were drilled. The second and third most active fields were Cat Canyon with 74 new wells and Guadalupe with 22.

Field Extensions*

One mile southwest of San Ardo field, Texaco Inc. drilled well "Labarere" 2-15 to a depth of 5,154 feet. The well was completed in an interval above 3,875 feet, and produced about 9 barrels of oil per day. Additional drilling is planned.

The Bradley Area of Santa Maria Valley field was extended one-half mile to the northwest by Coastal Oil and Gas Corp. with well "GPE-Orcutt North" 1. The well flowed through an 11/64 inch choke at a daily rate of 100 barrels of oil and 250 Mcf of gas per day at a tubing pressure of 300 psi. The producing zone is an interval in

Table 3. Enhanced recovery projects approved in 1980.

Type of Project	Field	Company	Zone	Approval Date	Status
Steamflood	Cat Canyon	Chevron U.S.A. Inc.	Sg	3/4/80	New project
Steamflood	Arroyo Grande	Grace Petroleum	Dollie	1/10/80	New project

the Monterey Formation, 7,333 feet to 8,000 feet deep. Further drilling is planned.

The West Area of Santa Maria Valley field was extended to the west by almost 1 mile with the completion of Union Oil Co. of Calif. well "Leroy" 1-18.

Exploratory Drilling

A new field, Sisquoc Ranch, was discovered when exploratory well Chevron U.S.A. Inc. "Chevron-Sulpetro Sisquoc Ranch" 1, was completed as a small producer in this new field in September 1980*. After a short time, the well was placed on steam injection.

Enhanced Recovery

In 1980, 62 percent of the district's oil production was from reservoir stimulation. Estimated incremental oil produced during the year totaled 16.9 million barrels. For enhanced recovery projects approved in 1980, see Table 3.

Waterflood

Approximately 59 million barrels of water was injected into 188 waterflood wells. Orcutt, Santa Maria Valley, and Cat Canyon fields accounted for 89 percent of all water injected in waterflood projects. Incremental oil produced through waterflooding was estimated at 5.7 million barrels.

Steamflood

The only full-scale steamflood projects were in San Ardo field. Altogether, 91 wells were used to inject 42 million barrels of hot water and water-as-steam into the Lombardi and Aurignac zones. Incremental oil produced from the steamflood projects in San Ardo was estimated at 6.8 million barrels.

Cyclic Steam

Cyclic steam continued to be a very effective method of reservoir-stimulation; 97 wells in 5 fields were treated with over 12 million barrels of water. Cat Canyon, Arroyo Grande, and Guadalupe fields accounted for most of the cyclic steaming activity. Incremental oil credited to this method was estimated at 3.6 million barrels.

Fireflood (In Situ Combustion)

Two fireflood projects have been in operation in San Ardo field. Incremental oil from fireflood projects was estimated at 642,000 barrels.

Water Disposal

Extensions of several existing water disposal projects and eight new projects were approved in 1980. Total water disposed of in 103 wells in 14 fields amounted to 132 million barrels, some of which may have had a waterflooding effect.

DISTRICT NO. 4

Production

Oil production in District 4 totaled 204.2 million barrels in 1980, an increase of 6 percent from the 193.4 million barrels in 1979. This was the fifth consecutive year that an all-time record was set. The increase can be attributed to more heavy oil production from the expansion of steamflood projects, and from the continued development of Elk Hills field, the diatomite zone in South Belridge field, and the chert zone in Lost Hills field.

Kern County (which accounts for nearly all District 4 production) is responsible for 59 percent of the oil produced in California (Photo 3). If Kern County were a state, it would rank fourth, nationally, in oil production.

New, all-time production records were set in 1980 by South Belridge, Elk Hills, Kern River, Lost Hills, and Mid-

way-Sunset fields. Elk Hills led the district and state in oil production, with a total of 58.9 million barrels. Production from the next three largest fields amounted to: Midway-Sunset, 41.5 million barrels; Kern River, 36.8 million barrels; and South Belridge, 21.6 million barrels. Of these fields, South Belridge showed the largest gain, 3.9 million barrels over the previous year.

Gas Production

After a 4 year increase, gas production in District 4 decreased in 1980 to 89.8 billion cubic feet from 92.8 billion cubic feet produced in 1979. Most of the decrease was in Yowlumne and South Coles Levee oil fields. Of the

*See Oil and Gas Discoveries table.

Photo 3. Oil well in Fruitvale oil field, Kern County. Photo by Hal Bopp.

total gas produced during the year, all but 2.4 billion cubic feet was gas associated with oil.

Drilling Activity

In 1980, 2,396 wells were drilled in District 4, a 56 percent increase from the 1,531 wells drilled in 1979. Of this total, 72 percent were drilled in Midway-Sunset, Kern River, South Belridge, and Lost Hills oil fields. Midway-Sunset was the district's most active field, with a 94 percent increase in wells drilled. Of the 614 wells drilled in the field, 528 were completed to production, 70 were placed in service as injectors in steamflood programs, and 9 were abandoned as dry holes.

Footage drilled for new wells during 1980 totaled 4,869,183 feet, an increase of almost 34 percent from the footage drilled in 1979. An additional 85,354 feet were drilled to deepen and redrill existing wells, a decrease of 6 percent from the previous year.

New Field, Pools, and Extension

Exploratory drilling in 1980 increased from 96 prospect wells drilled in 1979 to a total of 102. In 1980, 1 new field, 2 field extensions, and 6 new pools (5 oil and 1 gas) resulted from prospect drilling.*

Los Padres Oil Field - Field Discovery

In January 1980, Tenneco Oil Company completed well "Tenneco-White Wolf" 26X-A about one and one-half miles northeast of the White Wolf field. The well flowed at the daily rate of 100 barrels of oil through a 14/64-inch bean from perforations below 13,000 feet. However, the sole producer was shut-in after being on production less than two months.

*See *Oil and Gas Discoveries* table.

Lost Hills Oil Field - Extended

In March 1981, Chevron U.S.A. Inc. well "Monte Cristo" 181X extended the productive limits of the Lost Hills field one-half mile to the southeast. Initial daily production was 480 barrels of 27.8° API gravity oil, cutting 17.2 percent water and 680 Mcf of gas from a productive interval between 4,590 to 4,770 feet. By the end of 1980, 33 additional wells were completed in this area, as drilling continued at a brisk pace. All the wells were hydraulically fractured before being placed on production.

Semitropic - Oil Pool Extension

Gary Drilling Company completed oil and gas wells in Semitropic field. One well, "Johnson" 1, extended the productive limits of the oil zone about one-half mile to the north.

Deep Exploratory Drilling

Eleven prospect wells were drilled in Kern County below 12,000 feet. Five of the wells were abandoned and 6 were being evaluated at the end of the year. Five of the 11 prospect wells were drilled to depths exceeding 15,000 feet, and one well neared the 18,000-foot level.

Enhanced Recovery

Enhanced recovery was an even more prominent factor in oil production during 1980 than in 1979 (Table 4). Incremental oil produced as a result of reservoir stimulation was estimated at 87.7 million barrels, another all-time record high, and 43.2 percent of the district total oil production of 204.2 million barrels. This amount represents an increase of 13.4 million barrels over last year's figure. Steam injection, both cyclic and flood, accounted for 84.6 million barrels of incremental oil, with the balance attributed to waterflooding, except for a minor amount

Table 4. Enhanced recovery and water disposal projects approved in 1980.

Type of Project	Field	Area	Company	Zone	Approval Date	Status
Water Disposal	Fruitvale	Main	John L. Sowers	Chanac (Mason-Parker)	1/3/80	New Project
Steamflood	Midway-Sunset		Chevron U.S.A. Inc.	Webster	1/17/80	New Project
Water Disposal	Mount Poso	West	Thomas Oil Co.	Olcese	1/31/80	Project Expansion
Water Disposal	Lost Hills		Petro-Lewis Corp.	Etchegoin	2/14/80	New Project
Steamflood	Midway-Sunset		General Amer. Oil Co. of Texas	Monarch	2/25/80	New Project
Water Disposal	Kern River	Main	Getty Oil Co.	Vedder & Famosa	3/8/80	Project Expansion
Water Disposal	Fruitvale		Gary Drilling Co.	Fairhaven & Chanac	5/5/80	New Project
Steamflood	Midway-Sunset	Main	Getty Oil Co.	Spellacy	5/15/80	New Project
Steamflood	McKittrick		Getty Oil Co.	Oligocene	5/16/80	New Project
Steamflood	Kern River		Chevron U.S.A. Inc.	Kern River	5/21/80	Project Expansion
Water Disposal	Rio Viejo		Tenneco Oil Co.	San Joaquin	5/23/80	New Project
Water Disposal	Round Mountain	Sharktooth	Thomas Oil Co.	Olcese	6/4/80	Project Expansion
Water Disposal	Fruitvale	Main	Semark Calif., Inc.	Fairhaven-Kernco	7/7/80	New Project
Water Disposal	Kern River	Main	Petro-Lewis Corp.	Santa Margarita	8/5/80	New Project
Gas Storage	Ten Section		South Calif. Gas Co.	Upper Stevens	8/8/80	New Project
Steamflood	Midway-Sunset		Shell Oil Co.	Monarch	8/12/80	Project Expansion
Steamflood	Kern River		Santa Fe Energy Co.	Kern River (200 Sand)	8/19/80	Project Expansion
Water Disposal	Mount Poso	Dorsey	Petro Resources Inc.	Vedder	8/27/80	New Project
Water Disposal	McKittrick	Main	Circle Oil Co.	Upper Tulare	10/31/80	New Project
Water Disposal	Poso Creek	Premier	Tenneco Oil Co.	Vedder	11/26/80	New Project
Steamflood	Kern Front		Chevron U.S.A. Inc.	Chanac	12/16/80	Project Expansion
Steamflood	Kern River		Shell Oil Co.	Kern River	12/22/80	Project Re-activation and Expansion
Steamflood	Kern River		Getty Oil Co.	Kern River	Periodic, all year	Project Expansion
Steamflood	So. Belridge		Kernridge Oil Co.	Tulare	Periodic, all year	Project Expansion

produced by fireflood (in situ combustion) operations.

Kern River field was the district leader in incremental oil production for the fourth consecutive year, with 31 million barrels, an increase of 2.2 million barrels over 1979. Incremental oil in Midway-Sunset, the second-ranked field, increased 3 million barrels over the previous year.

Kern River Field Steam Generators

In Kern River field, the remaining 49 of the 62 Getty Oil Company steam generators forced to shut down in December 1978 were placed back in operation in 1980; the first 13 were restarted in 1979. The generators were shut down because emissions exceeded both state and federal standards for a 1 day period (Photo 4).

Steamflood and Cyclic Steam

Steamflooding continued to be a major method of reservoir stimulation and, as in previous years, this activity was concentrated mainly in South Belridge, Kern River, and Midway-Sunset fields, where 285 million barrels of steam were injected into 2,476 steamflood wells.

New steamflood projects were approved in two fields; 1 project in McKittrick and 3 in Midway-Sunset. Expansions were approved for existing steamflood projects in South Belridge, Kern Front, Kern River, and Midway-Sun-

Photo 4. Steam generators, Mount Poso oil field, Kern County. Photo by Hal Bopp.

Photo 5. Steam injector, Mount Poso oil field, Kern County. Photo by Hal Bopp.

set oil fields; four of the expansions were in Kern River field.

Altogether, 2,688 steamflood wells were used to inject 331 million barrels of water converted to steam, and 811 wells were treated with 84 million barrels in cyclic steam operations (Photo 5).

Waterflood

Waterflooding was the second most widely used reservoir stimulation method in District 4. Nineteen fields underwent waterflooding operations in 1980. No proposals for new projects were received during the year; however, the expansion of an existing project in South Coles Levee field was approved.

Fireflood (In Situ Combustion)

A minor amount of oil was produced during the year by fireflooding (in situ combustion), and one new project was approved in the Main Area of Fruitvale field.

Unconventional Heavy Oil Recovery Methods

Underground Mining

Fenix and Scisson, Inc. operator for Barber Oil Company, has drilled a 7-foot diameter hole to a depth of 491 feet in Kern River oil field. The well, "HOP Main Shaft" 1, will be used to test Barber's proposed "hot-plate" process. Spudded on April 4, the well took 80 days to drill. After drilling, 5 days were needed to run and cement 416 feet of casing that was 5 feet in diameter.

Below the casing, miners cut out an inverted, 10-foot deep cone-like portion, expanding the hole's diameter from 7 feet to 31 feet. The miners excavated 10 feet below the base of this cone and put in reinforcing material. They

poured 3-foot concrete walls to enclose a working area 10 feet high and 25 feet in diameter. A floor will be installed later.

Eight, 8- $\frac{5}{8}$ inch lateral holes will be drilled through the walls of the concrete-lined chamber, forming a spoke-like pattern under the oil sand. Four holes will be 70 feet long and four about 430 feet long. A 50 million Btu generator will be used to inject steam through two offsetting holes at a time. A 65-to-70 percent recovery of the oil-in-place is expected.

Hydraulic Mining

California Tar Sands Development Corporation may produce heavy oil in the McKittrick field with a hydraulic mining process. The process would use a jet of drilling fluid to dislodge a large volume of oil sand, and the oil and sand would be separated at the surface. The sand is returned to the initial site once the oil is extracted. About 67 percent of the oil-in-place can be recovered with this method.

The corporation has cored a continuous hole from the surface to a total depth of 410 feet. Core analysis data will be used to determine whether or not to proceed with the project.

Open-Pit Mining

Getty Oil Company is constructing a pilot, open-pit mining project in the heavy oil-saturated diatomite zone at McKittrick field. Oil will be extracted from the mined sand by solvent and retort methods in a test to determine which method is the more economical. The two pilot plants will be completed in 1981.

According to Getty Oil, an estimated 380 million barrels of oil could be recovered over a 48 year period should either or both of the methods prove to be economically successful. Evaluation of the processes should be completed in 1982.

Photo 6. Site of the Getty Oil Company diatomite processing plant, McKittrick oil field. *Photo by Mike Cummings.*

Photos 7 and 8. Solar water heater used to preheat water for the steam generators, McNeil lease, McKittrick oil field. *Photos by Mike Cummings.*

Photo 9. Site of the co-generation project, Fee C lease, Kern River oil field. *Photo by Mike Cummings.*

Down-hole Steam Generators Tested

In 1980, down-hole steam generators were tested on both the eastern and western sides of the San Joaquin Valley in District 4. One test was successful, proving that heavy oil can be produced from greater depths than was once possible.

Waste combustion gases from the steam generators were injected into the oil sand, reducing air pollution and preventing some deeper heat losses through the injection tubing.

Co-Generation

In the latter part of 1980, the first oilfield co-generation project began in Kern River field. Electricity for the project will be produced by a steam-powered generator. After passing through the generator, the steam will be injected into field steamflood wells.

The turbine unit is owned and operated by Optimum Energy Development Company of Palos Verdes Estates, California. The company is producing steam for Tenneco Oil Company's steamflood project on the Fee C lease in Kern River field, and electricity that is sold to Pacific Gas and Electric Company.

The pilot project is scheduled to furnish steam for 20 wells and the electricity requirements for an equivalent of 130 homes. The project will be enlarged to 10 units if the initial unit is successful.

Gas Storage

Gas storage projects were approved for Lost Hills and Ten Section fields. The project in the latter field is a joint venture by Southern California Gas Company and Pacific Gas and Electric Company. The project will have a "working volume" of 56 billion cubic feet of gas and will require an additional cushion of 41 million cubic feet before the depleted storage zone can rise to operating pressure. An estimated 5 million barrels of incremental oil will be recovered from the Ten Section operation.

Water Disposal

Disposal of produced waste water by subsurface injection continued to increase in 1980 with the approval of nine new projects in seven fields: Fruitvale, Kern River, Lost Hills, McKittrick, Mount Poso, Poso Creek, and Rio Viejo. Approval was given for the expansion of existing projects in Kern River, Mount Poso, and Round Mountain fields.

In all, 250 million barrels was injected into wells in 34 fields, representing an increase over last year of 52 million barrels of water.

The cumulative volume of water disposed of by subsurface injection in District 4 has passed 2 billion barrels.

DISTRICT NO. 5

Production

Oil production from the 22 active fields in District 5 was 11.1 million barrels in 1980, an 11 percent increase from the 10 million barrels produced in 1979. This first major increase in oil production in many years was due to enhanced recovery operations. In 1980, gas production in District 5 declined by 17 percent, from the 12.6 billion cubic feet produced in 1979 to 10.5 billion cubic feet.

Drilling Activity

In 1980, 163 new wells were drilled in District 5, a 31 percent increase over the 124 wells drilled in 1979. Of the 163 new wells drilled, 112 were completed to production and 33 were service wells. Footage drilled for new wells decreased by 10 percent with 346,112 feet drilled in 1980 compared with 384,066 feet in 1979. Redrill footage totaled 975 feet compared with the 12,326 feet in 1979.

Exploratory activity decreased in 1980 with the footage of the 13 prospect wells drilled totaling 93,347 feet. This accounts for 27 percent of the total footage drilled and is a substantial decrease from the 171,074 feet drilled in 1979.

The average depth of prospect wells was 6,690 feet, with the deepest well drilled to 12,605 feet. Fresno County led the district in the number of prospect wells drilled, followed by San Benito and Merced Counties.

Coalinga Field

The major part of district activity occurred in Coalinga field, where 90 new wells were completed to production, 33 service wells were drilled, and 131 former producers and 2 service wells were abandoned.

Enhanced Recovery

Incremental oil production was almost 5.8 million barrels, or about 52 percent of the total district production. This represented an increase of 2.0 million barrels over the 3.8 million barrels of incremental oil produced in 1979. The increase was due to additional steam-injection activity in Coalinga oil field, where oil production increased by 1.6 million barrels over the 1979 total.

Hazardous and Idle-Deserted Wells Abandoned

During 1980, two hazardous wells were abandoned under the division's Hazardous and Idle-Deserted Well Abandonment Program. The wells were Maurits F. Osterberg well No. 2G1 in Stanislaus County and Pacific Oil and Gas Company well No. 1 in Dudley Ridge Gas Field,

Kings County. Both wells were drilled to relatively shallow depths in the 1920's, deserted without proper abandonment, and had been leaking brackish water for many years. The Osterberg well has been drilled illegally as no notice-to-drill was filed with the division, and the division received no records of the Pacific Oil and Gas Company well. The proper abandonment of these wells removed two pollution sources from the environment.

DISTRICT NO. 6

Production

Oil production from the five active oil fields in District 6 during 1980 was about 212,000 barrels, a decline of 14 percent from 1979 production and the seventh successive year with a production decline. Brentwood oil field, as usual, was the largest producer, and accounted for 70 percent of the district's total.

During 1980, nonassociated gas production in the district was 147 billion cubic feet compared with 167 billion cubic feet during 1979, a decrease of 12 percent. Rio Vista Gas field was again the largest nonassociated gas field in the state. Production from this field was 34.1 billion cubic feet in 1980, a 13 percent decrease from 1979. It represents 23.2 percent of the district's and 22.4 percent of the state's nonassociated gas total.

During the last half of 1980, Pacific Gas and Electric Company, the major gas purchaser in Northern California, paid \$2.30 per Mcf for locally produced, 1,000 Btu gas. The company paid \$4.40 per Mcf for Canadian gas of the same quality at the Canadian-U.S.A. border.

Drilling Activity

During 1980, 236 new wells were drilled in District 6, a 42 percent increase over 1979. Seventy-seven gas wells and 1 oil well were completed during the year, an increase of 77 percent over the number of completions in 1979. Total footage drilled during 1980 was 1,656,066 feet, a 49 percent increase over 1979. Redrill footage was 41,997 feet.

Deepest Well

The deepest well drilled during the year in District 6 was the Shell Oil Company "Vilche" 2-5, in Sec. 5, T. 27N., R. 4W., M.D.B. & M., Tehama County. It was drilled to a total depth of 19,670 feet before being abandoned. It is also the deepest well ever drilled in District 6, surpassing the previous record well by 1,395 feet.

New Pool and Fields

In 1980, exploratory drilling resulted in the discovery of a new area in Princeton Gas field; a new pool in South Compton Landing Gas field; and four new fields: Grays Bend Gas, Harlan Ranch Gas, and Howells Point Gas fields in Yolo County, and Knightsen Gas field in Contra Costa County. A successful followup well was drilled in Grays Bend Gas field, but no additional drilling occurred in the other new fields during the year.

Two abandoned gas fields, Merritt Island Gas and Thornton Gas, were reactivated in 1980. Merritt Island Gas was discovered in 1966, and cumulative production prior to reactivation was 624,765 Mcf. Thornton Gas was discovered in 1943, and cumulative production prior to reactivation was 53,641,229 Mcf.

No successful offset drilling occurred in 3 of the 4 fields discovered during 1979: Black Butte Dam Gas in Tehama County, East Dixon Gas in Solano County, and Verona Gas in Sutter County. In the fourth field, Robbins Gas in Sutter County, two additional wells were completed. Gas from this field has a high nitrogen content (86 percent) and a correspondingly low heat value (140 Btu/cubic foot).

Significant extensions to productive areas were made in Conway Ranch Gas, Grimes Gas, Crossroads Gas, Millar Gas, Putah Sink Gas, Stone Lake Gas, and West Grimes Gas fields. Grimes Gas and Millar Gas, both with six wells, had the most new-well completions during the year. Four wells were completed in both Rio Vista Gas and Sutter City Gas fields.

Half Moon Bay oil field, which had been shut in for several years, was returned to active status in 1980 when three long-idled wells were returned to production.

Gas Storage Projects

In 1980, no drilling occurred in the district's four gas storage fields. Upon completion of the surface facilities, Los Medanos Gas storage field will be fully operational.

The gas storage projects in Kirby Hill Gas and Pleasant Creek Gas fields are essentially inactive. During 1980, in McDonald Island Gas field, 14,428,707 Mcf of natural gas was injected and 13,337,797 Mcf was withdrawn, resulting in a net increase of 1,090,910 Mcf in the volume of gas in storage over the previous year.

Water Disposal

Twenty-two water disposal projects were active in District 6 at the end of the year, compared with 21 in 1979. Two new projects were completed in 1980, and 1 project was abandoned.

Two Fields Abandoned

Cache Slough Gas field in Solano County and Willow

Pass Gas field in Contra Costa County were abandoned in 1980. Cache Slough Gas field was discovered in 1945, originally abandoned in 1969, and reactivated in 1978. Willow Pass Gas field was discovered in 1959.

Hazardous and Idle-Deserted Wells Abandoned

In 1980, 3 wells, 2 in Colusa County and 1 in Yolo County, were abandoned under the division's Hazardous and Idle-Deserted Well Abandonment Program. Total cost of the abandonment operations was \$43,067, of which \$33,067 came from the hazardous and idle-deserted well abandonment allotment and \$10,000 from sureties.

OIL AND GAS STATISTICS

CALIFORNIA OIL AND GAS FACTS 1980

GENERAL STATISTICS

Total land area of California	101,563,520 acres
Total land area productive as of 12/31/80 (Table C)	443,251 acres (or) 0.44%
Counties with oil and/or gas production	30
First year of commercial production	1876

CRUDE OIL PRODUCTION

Counties producing crude oil (see county table)	17
Active oil fields	231
Wells producing crude oil in Dec. '80	44,881
Average daily production of crude oil per well on 12/31/80	21.2 bbl
Year of greatest crude oil production	1968
Crude oil produced in record year	373.2 million bbl†
Crude oil produced in 1980	346.9 million bbl*
Cumulative crude oil production as of 12/31/80	18.7 billion bbl

† Does not include federal OCS production which was 2.2 million barrels.

* Does not include federal OCS production. See below.

NATURAL GAS PRODUCTION

Active gas fields	96
Natural gas wells producing in Dec. '80	1,125
Year of greatest natural gas production (total gas)	1966
Natural gas produced in record year*	714.6 Bcf
Natural gas produced in 1980*	311.2 Bcf
Cumulative natural gas production as of 12/31/80	28.9 Tcf

* Includes both associated and nonassociated gas. Does not include federal OCS production.

RESERVES

Estimated oil reserves as of December 31, 1980	5.2 billion bbl
Estimated gas reserves as of December 31, 1980	4.0 Tcf

OFFSHORE (STATE AND FEDERAL)

Percent of total state crude oil production	12%
State offshore lease production	40.0 million bbl
Federal offshore lease production (OCS)	10.1 million bbl
Total	50.1 million bbl

Percent of total state natural gas production	6%
State offshore lease production	13.1 Bcf
Federal offshore lease production (OCS)	6.0 Bcf

Total 19.1 Bcf

EXPLORATION AND DEVELOPMENT

Onshore

Deepest dry hole:

Total depth: 22,711 feet (Stevens)
Year drilled: 1974
County: Kern (Sec. 34, T.32S., R.28E.)
Operator: Tenneco Oil Company
Well designation: "Tenneco-Superior-Sandhills" 64X

Deepest oil well (not producing):

Total depth: 18,876 feet
Year completed: 1975
Producing interval: 17,610-18,060 feet (Phacoides) (abandoned-1977)
Field: Semitropic
County: Kern (Sec. 3, T.27S., R.22E.)
Operator: Tenneco Oil Company
Well designation: "Tenneco-Union-GBR et al" 66X

Deepest gas well (not producing):

Total depth: 11,402 feet
Year completed: 1966
Producing interval: 11,064-11,144 feet (Forbes) (abandoned-1974)
Field: Clarksburg Gas
County: Yolo (Proj. Sec. 32, T.7N., R.4E.)
Operator: Occidental Petroleum Corporation
Well designation: "Sherman Unit" 5

Deepest oil well (producing in 1980):

Total depth: 15,250 feet
Year completed: 1979
Producing interval: 14,473-14,496 feet (Stevens)
Field: Rio Viejo
County: Kern (Sec. 34, T.12N., R.21W.)
Operator: Tenneco Oil Company
Well designation: "Tenneco-Chevron-Sargent" 82X

Deepest gas well (producing in 1980):

Total depth: 10,690 feet
Year completed: 1971
Producing interval: 10,484-10,532 feet (Starkey)
Field: Lindsey Slough Gas
County: Solano (Sec. 3, T.4N., R.2E.)
Operator: Amerada Hess Corp., Operator
Well designation: "Union Pet. Est." 1

State Offshore

Deepest Dry Hole:

Total depth: 17,180 feet (TVD† - 16,666 feet)*
Year drilled: 1966
County: Ventura (Proj. Sec. 22, T.3N., R.24W.)
Operator: Chevron U.S.A. Inc.
Well designation: "State 3403" 1

Deepest Oil Well:

Total depth: 14,236 feet (TVD - about 13,240 feet)*
Year completed: 1956
Producing interval: Confidential
Field: West Montalvo, Offshore Area
County: Ventura (Proj. Sec. 35, T.2N., R.23W.)
Operator: Chevron U.S.A. Inc.
Well designation: "State" C-5

Deepest Gas Well:

Total depth: 7,810 feet (TVD - about 6,990 feet)
Year completed: 1968
Producing interval: 7,004-7,311 feet (Vaqueros-Sespe-Alegria)**
Field: Molino Offshore Gas
County: Santa Barbara (Proj. Sec. 16, T.4N., R.31W.)
Operator: Phillips Petroleum Company
Well designation: "State 2933" 4-A

† True vertical depth.

* Drilled from an onshore location.

** Seafloor completion.

CALIFORNIA OIL & WATER PRODUCTION

CALIFORNIA GAS PRODUCTION

NEW WELLS DRILLED IN CALIFORNIA 1969-1980

(includes oil, gas, exploratory, and service wells)

FOOTAGE DRILLED AND WELLS COMPLETED

LARGEST CALIFORNIA FIELDS - 1980

OIL

Field	Discovery date	Oil production (Mbbbl)	Cumulative oil production (Mbbbl)	Estimated reserves (Mbbbl) (Dec. 31, 1980)
1. Elk Hills (1) *	1911	58,885,139	496,679	929,756
2. Midway-Sunset (3)	1894±	41,453,009	1,464,333	626,324
3. Wilmington (2)	1932	40,921,501	1,994,304	407,906
4. Kern River (4)	1899	36,824,920	828,760	1,117,817
5. Belridge, South (5)	1911	21,614,446	284,764	470,250
6. San Ardo (6)	1947	10,789,720	348,343	181,704
7. Huntington Beach (7)	1920	10,249,636	1,000,986	83,174
8. Mount Poso (10)	1926	8,420,534	203,242	92,773
9. Coalinga (11)	1890	7,627,248	673,838	110,557
10. Ventura (8)	1919	7,131,566	936,654	63,905

ASSOCIATED GAS (OIL ZONE GAS)

Field	Discovery date	Net gas production (Mcf)	Cumulative gas production (MMcf)	Estimated reserves (MMcf) (Dec. 31, 1980)
1. Elk Hills (2)	1911	26,160,078	232,183	967,619
2. Coles Levee, South (1)	1938	10,376,664	273,363	139,576
3. Yowlumne (3)	1974	9,297,152	52,338	57,183
4. Buena Vista (4)	1909	8,370,442	957,667	72,666
5. Wilmington (5)	1932	6,956,912	1,006,848	66,177
6. Kettleman North Dome (6)	1928	5,968,580	2,902,462	48,576
7. Lost Hills (11)	1910	5,360,173	134,880	16,818
8. Cat Canyon (7)	1908	4,649,458	135,324	74,676
9. Ventura (8)	1919	3,471,020	1,989,000	38,422
10. Midway-Sunset (10)	1894±	2,911,779	528,834	23,902

NONASSOCIATED GAS

Field	Discovery date	Net gas production (Mcf)	Cumulative gas production (MMcf)	Estimated reserves (MMcf) (Dec. 31, 1980)
1. Rio Vista Gas (1)	1936	34,108,690	3,101,812	398,295
2. Union Island Gas (2)	1972	14,992,780	93,323	156,267
3. Brentwood, East, Gas (24)	1978	8,301,865	9,967	30,033
4. Grimes Gas (4)	1960	8,196,885	381,395	104,532
5. Lindsey Slough Gas (3)	1962	7,402,505	134,741	59,045
6. Millar Gas (5)	1944	6,996,276	87,170	77,130
7. Lathrop Gas (7)	1961	5,498,544	295,008	58,286
8. Willows-Beehive Bend Gas (8)	1938	4,596,897	314,563	32,436
9. Ryer Island Gas (10)	1967	3,845,212	107,204	20,783
10. Malton-Black Butte Gas (9)	1964	3,823,625	71,257	14,600

* Numbers in parentheses indicate 1979 field rankings.

CALIFORNIA'S GIANT OIL FIELDS *

(Fields with Ultimate Recovery of 100 Million Barrels or More)

Field	Year Discovered	Cumulative Production (Mbbbl)	Estimated Reserves (Mbbbl) (12/31/80)	1980 Production (Mbbbl)	Producing Wells (12/80)
1. Wilmington	1932	1,994,304	407,906	40,922	2,156
2. Midway-Sunset	1894+	1,464,333	626,324	41,453	7,589
3. Huntington Beach	1920	1,000,986	83,174	10,250	978
4. Long Beach	1921	885,535	44,672	3,298	489
5. Ventura	1919	836,654	63,905	7,132	635
6. Kern River	1899	828,760	1,117,817	36,825	5,227
7. Coalinga	1890	673,838	110,557	7,627	2,093
8. Buena Vista	1909	632,197	25,169	2,312	1,176
9. Santa Fe Springs	1919	605,463	16,791	754	171
10. Elk Hills	1911	498,619	929,756	58,885	1,093
11. Coalinga, East, Extension	1938	485,717	9,760	2,224	71
12. Kettleman North Dome	1928	454,920	1,319	334	70
13. Brea-Olinda	1880	363,560	22,787	2,942	752
14. San Ardo	1947	348,343	181,704	10,790	832
15. Inglewood	1924	318,512	44,523	3,777	448
16. Belridge, South	1911	284,764	470,250	21,614	3,623
17. Dominguez	1923	263,969	9,577	740	115
18. Cat Canyon	1908	253,725	81,274	5,773	852
19. Coyote, West	1909	242,092	7,930	1,235	138
20. McKittrick	1896+	235,191	39,325	4,585	1,185
21. Cuyama, South	1949	213,527	2,453	483	137
22. Mount Poso	1926	203,242	92,773	8,421	550
23. Torrance	1922	195,086	18,367	1,884	353
24. Seal Beach	1924	194,230	9,108	956	164
25. Montebello	1917	187,963	3,741	510	141
26. Santa Maria Valley	1934	178,124	60,327	3,175	203
27. Richfield	1919	176,856	17,785	1,740	233
28. Orcutt	1901	157,213	18,910	1,208	187
29. Kern Front	1912	154,443	32,500	2,466	1,079
30. Coles Levee, North	1938	154,149	12,402	1,748	110
31. Cymric	1909	151,571	42,578	3,832	821
32. South Mountain	1916	138,740	9,034	1,173	405
33. Rincon	1927	137,421	13,714	1,788	294
34. Lost Hills	1910	134,025	29,149	3,584	1,399
35. Edison	1928	122,440	13,102	1,622	774
36. Rio Bravo	1937	113,839	2,755	313	12
37. Greeley	1936	110,645	1,349	287	34
38. Fruitvale	1928	108,308	13,079	1,005	412
39. Elwood	1928	103,637	241	59	9
40. Coyote, East	1909	103,369	6,959	803	135
41. Beverly Hills	1900	100,074	33,714	2,954	110
42. Oxnard	1937	35,944	101,199	206	79
TOTALS		15,846,328	4,828,759	303,689	37,334

* Federal offshore (OCS) fields are not included because reserve estimates have not been released by the U. S. Geological Survey. Dos Cuadras field has a cumulative production total of 166,416 Mbbbl.

NOTE: If future reserve estimates are revised upwards, Yorba Linda and Round Mountain fields may make this list. The cumulative production for these two fields is 68,688 Mbbbl and 93,394 Mbbbl, respectively, and the estimated reserves are 26,094 Mbbbl and 4,300 Mbbbl, respectively.

TEN OIL FIELDS WITH LARGEST PRODUCTION INCREASES (bbbl) - 1979 to 1980 †

Field	Production in 1979	Production in 1980	Increase
1. Elk Hills	54,944,008	58,885,139	3,891,131
2. South Belridge	18,069,660	21,614,446	3,544,786
3. Kern River	34,611,432	36,824,920	2,213,488
4. Coalinga	6,055,583	7,627,248	1,571,665
5. Lost Hills	2,256,014	3,584,145	1,328,131
6. Mount Poso	7,470,437	8,420,534	950,097
7. Midway-Sunset	40,703,327	41,453,009	749,682
8. McKittrick	4,027,158	4,585,339	558,181
9. Cymric	3,380,418	3,831,778	451,360
10. Rio Bravo	36,452	313,184	276,732
Total Increase:			15,535,253

TEN OIL FIELDS WITH LARGEST PRODUCTION DECREASES (bbbl) - 1979 to 1980 †

Field	Production in 1979	Production in 1980	Decrease
1. Wilmington	44,769,410	40,921,501	3,847,909
2. Yowlume	7,638,801	5,905,387	1,733,414
3. Ventura	7,723,360	7,131,566	591,794
4. Huntington Beach	10,681,768	10,249,636	432,132
5. Coles Levee, North	2,156,564	1,747,984	408,580
6. Coalinga, East, Extension	2,529,495	2,224,319	305,176
7. Belmont Offshore	1,710,429	1,447,913	262,516
8. Rincon	2,045,390	1,787,740	257,650
9. Cat Canyon	6,012,682	5,772,936	239,746
10. Carpinteria Offshore*	1,257,811	1,051,020	206,791
Total Decrease:			8,285,708

† Federal offshore fields not included.

*State portion of the field only. Production from the federal portion of the field increased 349,805 barrels and the total field production increased 143,014 barrels.

THIRTY LARGEST OIL PRODUCERS IN CALIFORNIA

PRODUCER	OIL PRODUCTION (thousand barrels)
1. Getty Oil Company (1) [†]	40,823
2. Chevron U.S.A. Inc. (2) [*]	37,348
3. Shell Oil Company (3)	30,697
4. THUMS Long Beach Company (4)	23,371
5. Kernridge Oil Company (6)	17,204
6. Union Oil Company of California (5)	15,973
7. Texaco Inc. (7)	12,994
8. Mobil Oil Corporation (8)	12,688
9. Williams Brothers Engineering Company (9) [*]	11,966
10. Santa Fe Energy Company (10)	10,058
11. ARCO Oil and Gas Company (11)	9,641
12. Aminoil USA, Inc. (13)	7,995
13. Tenneco Oil Company (12)	6,465
14. Exxon Corporation (14)	5,930
15. Sun Oil Company (16)	5,225
16. Champlin Petroleum Company (15)	4,991
17. Conoco, Inc. (17)	4,567
18. Mobil Oil Corporation, Operator (18)	3,571
19. Gulf Oil Corporation (19)	2,739
20. Tenneco Oil Company, Operator (25)	2,094
21. Long Beach Oil Development Company (20)	1,953
22. Occidental Petroleum Corporation (21)	1,728
23. Petro-Lewis Corporation (29)	1,601
24. M. H. Whittier Corporation (22)	1,230
25. MCOR Oil and Gas Corporation (24) ^{**}	1,208
26. Powerline Oil Company (Operator for the City of Long Beach) (23)	1,177
27. The Superior Oil Company (49)	1,137
28. Husky Oil Company (26)	1,089
29. Grace Petroleum Corporation (30)	1,003
30. Argo Petroleum Corporation (27)	995

[†] Numbers in parentheses indicate 1979 rankings.

^{*} Production shown for Williams Brothers Engineering Company is Chevron U.S.A. Inc.'s portion of Elk Hills production and not included in Chevron's total. The U. S. Department of Energy portion of Elk Hills production was 46.9 million barrels.

^{**} Formerly McCulloch Oil and Gas Corporation.

TWENTY LARGEST GAS PRODUCERS IN CALIFORNIA

PRODUCER	NET GAS PRODUCTION * (million cubic feet)
1. Chevron U.S.A. Inc.	44,866
2. Union Oil Company of California	29,848
3. Amerada Hess Corporation, Unit Operator	24,474
4. Marathon Oil Company	17,519
5. Shell Oil Company	13,866
6. Getty Oil Company	11,945
7. Mobil Oil Corporation	11,190
8. Amerada Hess Corporation	11,034
9. Texaco Inc.	10,712
10. Aminoil USA, Inc.	10,688
11. ARCO Oil and Gas Company	8,964
12. Occidental Petroleum Corporation	7,438
13. Sun Oil Company	6,339
14. Kernridge Oil Company	6,137
15. Tenneco Oil Company	5,479
16. MCOR Oil and Gas Corporation [†]	5,319
17. Depco, Inc.	5,283
18. THUMS Long Beach Company	5,028
19. Exxon Corporation	4,835
20. Atlantic Oil Company	4,100

^{*} Figures include associated and nonassociated gas.

[†] Formerly McCulloch Oil and Gas Corporation.

TABLE A
PRODUCTION BY DISTRICTS

1980					
District number	Oil (bbl)	Gas (McF)			Water (bbl)
		Associated (oil zone gas)	Nonassociated (gas zones)	Total	
Dist. 1	83,030,989	25,577,676	51,167	25,628,843	848,174,273
Dist. 2	21,246,667	25,275,891	626,142	25,902,033	72,558,485
Dist. 3	27,148,567	10,845,206	1,266,346	12,111,552	220,901,940
Dist. 4	204,172,133	87,414,956	2,407,177	89,822,133	887,275,533
Dist. 5	11,100,117	9,059,088	1,413,907	10,472,995	84,239,919
Dist. 6	211,540	554,936	146,676,216	147,231,152	4,099,793
Totals	346,910,013	158,727,753	152,440,955	311,168,708	2,117,249,943

1979					
Dist. 1	88,201,662	27,250,392	107,825	27,358,217	845,007,395
Dist. 2	22,036,996	24,174,106	617,807	24,791,913	73,905,887
Dist. 3	27,569,323	10,189,300	1,650,680	11,839,980	224,367,148
Dist. 4	193,373,144	91,210,196	1,776,213*	92,986,409	833,034,812
Dist. 5	9,979,562	10,963,998	1,663,767	12,627,765	76,315,551
Dist. 6	246,416	932,943	167,089,518	168,022,461	4,319,061
Totals	341,407,103	164,720,935	172,905,810	337,626,745	2,056,949,854

*Corrected figure.

TABLE B
NOTICES FILED AND INSPECTIONS

1980												
District Number	Notices to drill				Notices to rework				Notices to abandon			
	Prospect wells	Development wells		Total	Oil and gas wells	Service wells	Dry holes	Total	Oil and gas wells	Service wells	Dry holes	Total
		Oil and gas	Service									
Dist. 1	5	170	63	238	323	185	1	509	107	19	5	131
Dist. 2	28	88	5	121	191	50	9	250	31	3	14	48
Dist. 3	60	163	30	253	163	49	12	224	39	18	33	90
Dist. 4	123	1,958	537	2,618	1,042	165	4	1,211	990	46	90	1,126
Dist. 5	18	121	46	185	83	18	1	102	155	4	20	179
Dist. 6	120†	120	5	245	112	3	8	123	41	0	160	201
Totals	354	2,620	686	3,660	1,914	470	35	2,419	1,363	90	322	1,775

1979												
Dist. 1	2	131	34	167	328	210	0	538	107	22	8	137
Dist. 2	23	72	11	106	132	57	0	189	61	7	13	81
Dist. 3	56	208	25	289	150	72	5	227	65	15	25	105
Dist. 4	121	1,366	284	1,771	999	414	0	1,433	417	13	92	522
Dist. 5	31	41	13	85	114	20	0	134	185	0	31	216
Dist. 6	95	72	2	169	106	2	6	114	43	0	114	157
Totals	328	1,890	369	2,587	1,829	775	11	2,615	878	57	283	1,218

† Includes 10 geologic information wells.

REPORTS ISSUED BY THE STATE OIL AND GAS SUPERVISOR - 1980
TOTALS BY DISTRICT

District Number	Reports on wells inspections	Reports on proposals for				Total
		New wells	Reworks	Abandonments	Supplementary (all kinds)	
District 1	1,371	238	511	130	111	990
District 2	319	116	243	46	54	459
District 3	324	261	228	92	92	673
District 4	1,668	2,476	1,246	1,102	206	5,030
District 5	311	183	101	178	41	503
District 6	435	252	116	197	64	629
Totals	4,428	3,526	2,445	1,745	568	8,284

PRODUCING WELLS AND PRODUCTION OF OIL, GAS, AND WATER BY COUNTY - 1980

County	Average number of producing wells						Oil production (bbl)	Gas production (Mcf)			Water production (bbl)
	Oil			Gas				Associated (from oil zones)	Nonassociated (from gas zones)	Total	
	Prod.	Standing	Shut-in	Prod.	Standing	Shut-in					
Alameda	6	0	0	0	0	0	43,065	0	0	0	69,573
Butte	0	0	0	11	14	1	0	0	1,341,681	1,341,681	3,322
Colusa	0	0	0	86	9	39	0	0	7,116,380	7,116,380	105,745
Contra Costa	38	12	4	31	22	9	148,000 ^a	553,990	11,558,517	12,112,507	2,738,039
Fresno	2,374	462	1,145	11	2	2	10,767,403 ^b	5,053,054	222,245	5,275,299	82,962,827
Glenn	0	0	0	106	5	17	0 ^c	0	8,495,550	8,495,550	129,055
Humboldt	0	0	0	23	1	8	0 ^d	0	2,561,645	2,561,645	6,934
Kern	27,616	2,678	6,515	67	18	61	203,975,342 ^e	87,350,166	2,207,745	89,557,911	882,969,401
Kings	131	16	189	6	5	1	271,195	3,999,338	9,417	4,008,755	929,508
Los Angeles	5,874	1,269	1,492	6	6	6	63,546,619 ^e	24,995,548	54,231	25,049,779	653,835,616
Madera	0	0	2	19	21	5	0	0	1,154,750	1,154,750	41,900
Merced	0	0	0	1	1	1	0	0	36,578	36,578	26
Monterey	941	88	291	0	0	0	10,836,581	2,664	0	2,664	102,224,328
Orange	3,067	415	874	0	1	0	22,018,025 ^f	5,170,586	0	5,170,586	210,968,029
Riverside	6	0	9	3	0	1	15,620 ^f	59,413	37,917	97,330	3,801
Sacramento	0	0	0	98	20	45	0 ^g	0	21,195,229	21,195,229	62,249
San Benito	37	13	4	0	7	1	61,519	6,696	0	6,696	306,684
San Bernardino	42	5	0	0	0	0	65,750 ^h	11,590	0	11,590	97,415
San Joaquin	0	0	0	80	14	16	0 ^h	0	23,564,972	23,564,972	190,663
San Luis Obispo	328	57	60	0	0	0	1,833,246	271,996	0	271,996	7,467,883
San Mateo	15	9	6	0	0	0	20,475 ⁱ	946	0	946	140,359
Santa Barbara	1,853	568	526	7	1	9	15,750,101 ⁱ	12,827,773	1,266,346	14,094,119	117,934,395
San Clara	7	0	0	0	0	0	15,079 ^j	6,588	0	6,588	1,507
Solano	0	0	0	155	44	56	0 ^j	0	37,354,580	37,354,580	235,133
Sonoma	0	0	1	3	5	0	0	0	14,503	14,503	0
Sutter	0	0	0	126	8	43	0	0	12,307,862	12,307,862	188,534
Tehama	0	0	0	24	3	33	0	0	1,732,697	1,732,697	9,887
Tulare	59	13	0	7	19	0	83,752 ^k	2	190,349	190,351	3,595,451
Ventura	2,495	445	558	7	0	1	17,458,241 ^k	18,417,403	585,161	19,002,564	49,811,379
Yolo	0	0	0	60	43	70	0	0	19,432,600	19,432,600	220,300
State Totals	44,889	6,050	11,676	937	269	425	346,910,013	158,727,753	152,440,955	311,168,708	2,117,249,943

- a/ Produced 28,866 barrels of condensate from gas fields.
b/ Produced 5,465 barrels of condensate from gas fields.
c/ Produced 11 barrels of condensate from gas fields.
d/ Produced 2,790 barrels of condensate from gas fields.
e/ Produced 56 barrels of condensate from gas fields.
f/ Produced 700 barrels of condensate from gas fields.
g/ Produced 5,218 barrels of condensate from gas fields.
h/ Produced 692 barrels of condensate from gas fields.
i/ Produced 12,179 barrels of condensate from gas fields.
j/ Produced 62,198 barrels of condensate from gas fields.
k/ Produced 54 barrels of condensate from gas fields.

OFFSHORE OIL AND GAS FIELDS - 1980

Field, area, or pool	Average number of wells			Oil & condensate (bbl)	Gas (Mcf)	Water (bbl)	Cumulative production		Estimated reserves December 31, 1980	
	Producing	Standing	Shut-in				Oil & condensate (Mbbbl)	Gas (MMcf)	Oil (Mbbbl)	Gas (MMcf)
STATE										
Alegria Offshore	1	0	0	9,257	7,202	1,322	593	3,667	241	263
Belmont Offshore	65	24	17	1,447,913	415,748	2,190,393	50,589	33,876	33,037	7,482
Gas Zone	0	0	1	0	0	0	0	3,645	0	0
Caliente Offshore Gas	1	0	2	0	40,770	114,206	0	32,386	0	0
Carpinteria Offshore	53	0	17	1,051,020	1,011,905	5,570,024	27,959	24,116	7,058	10,178
Coal Oil Point Offshore	0	2	1	0	0	0	1,307	3,270	0	361
Conception Offshore	0	21	0	0	0	0	20,933	12,326	0	0
Cuarta Offshore	0	9	0	0	0	0	613	6,765	0	0
Gas Zone	0	2	0	0	0	0	1	12,002	0	0
Elwood (Offshore Area)	8	16	0	58,883	254,751	869,609	76,763	66,785	241	510
Elwood, South, Offshore	21	0	6	2,181,656	262,795	171,437	17,284	7,730	12,925	13,806
Gaviota Offshore Gas	1	0	2	0	2,160	83,347	0	69,938	0	2
Huntington Beach (Offshore Area)	278	3	190	7,936,132	1,004,934	83,691,219	491,677	294,374	67,688	9,950
Molino Offshore Gas	4	0	2	12,179	1,223,416	7,762	4,367	233,627	0	6,374
Montalvo, West (Offshore Area)	2	0	9	25,325	14,794	39,787	5,559	3,293	0	16
Newport, West (Offshore Area)	16	0	0	55,623	34,840	229,780	4,390	1,486	336	91
Point Conception (Offshore Area)	4	2	0	25,883	25,485	768,806	1,023	469	177	112
Rincon (Offshore Area)	81	2	18	364,916	171,670	690,297	31,716	32,346	1,883	863
Ryer Island Gas (Offshore Area)	2	0	0	0	1,180,134	346	36	32,902	0	6,379
Summerland Offshore	16	0	31	122,381	1,187,122	446,494	25,528	91,126	646	8,843
Torrance (Offshore Area)	40	9	0	199,569	582,517	4,734,295	6,920	8,282	1,289	2,311
Venice Beach (Offshore Area)	2	3	0	43,218	38,513	2,393,630	2,500	1,407	746	425
Wilmington (Offshore Area)	905	261	121	26,444,897	5,615,980	217,025,691	992,158	596,257	352,598	61,425
Total	1,500	359	417	39,978,852	13,074,736	319,028,445	1,761,916	1,572,075	478,865	129,391
FEDERAL (OCS)										
Carpinteria Offshore	69	0	2	2,051,723	1,961,545	2,018,348	34,472	24,260	N.A.	N.A.
Dos Cuadras Offshore	152	0	4	7,997,750	3,744,237	16,521,002	166,416	76,897	N.A.	N.A.
Santa Clara Offshore	6	0	0	108,161	258,369	57,633	108	258	N.A.	N.A.
Total	227	0	6	10,117,634	5,964,151	18,596,983	200,996	101,415	N.A.	N.A.
GRAND TOTAL	1,727	359	423	50,096,486	19,038,887	337,625,428	1,962,912	1,673,490		

** Figure less than 100,000 bbl or 1,000 Mcf.

**TABLE C: OPERATIONS & PROVED ACREAGE-
OIL & GAS FIELDS**

API CODES USED IN TABLE C

COUNTY CODES

Alameda - - - -	001 (201)	Kings - - - - -	031	Placer - - - - -	061	Sierra - - - - -	091
Alpine - - - - -	003	Lake - - - - -	033	Plumas - - - - -	063	Siskiyou - - - -	093
Amador - - - - -	005	Lassen - - - - -	035	Riverside - - - -	065	Solano - - - - -	095 (295)
Butte - - - - -	007	Los Angeles - - -	037 (237)	Sacramento - - -	067	Sonoma - - - - -	097 (297)
Calaveras - - - -	009	Madera - - - - -	039	San Benito - - - -	069	Stanislaus - - - -	099
Colusa - - - - -	011	Marin - - - - -	041 (241)	San Bernardino - -	071	Sutter - - - - -	101
Contra Costa - - -	013 (213)	Mariposa - - - - -	043	San Diego - - - - -	073 (273)	Tehama - - - - -	103
Del Norte - - - -	015 (215)	Mendocino - - - -	045 (245)	San Francisco - - -	075 (275)	Trinity - - - - -	105
El Dorado - - - -	017	Merced - - - - -	047	San Joaquin - - - -	077	Tulare - - - - -	107
Fresno - - - - -	019	Modoc - - - - -	049	San Luis Obispo - -	079 (279)	Tuolumne - - - - -	109
Glenn - - - - -	021	Mono - - - - -	051	San Matedo - - - -	081 (281)	Ventura - - - - -	111 (211)
Humboldt - - - - -	023 (223)	Monterey - - - - -	053 (253)	Santa Barbara - - -	083 (283)	Yolo - - - - -	113
Imperial - - - - -	025	Napa - - - - -	055 (255)	Santa Clara - - - -	085	Yuba - - - - -	115
Inyo - - - - -	027	Nevada - - - - -	057	Santa Cruz - - - - -	087 (287)		
Kern - - - - -	029	Orange - - - - -	059 (259)	Shasta - - - - -	089		

OFFSHORE ISLAND CODES

Anacapa - - - -	116 (216)	San Miguel - - -	120 (220)	Santa Barbara - - -	124 (224)	Santa Cruz - - -	128 (288)
San Clemente - -	118 (218)	San Nicholas - -	122 (222)	Santa Catalina - -	126 (226)	Santa Rosa - - -	130 (230)

Note: Numbers without parentheses indicate onshore codes.
Numbers in parentheses indicate offshore codes within the 3-mile limit.

TABLE C
OPERATIONS AND PROVED ACREAGE-OIL AND GAS FIELDS-1980

Field	API county codes	Well totals														Proved acreage as of Dec.31,1980	
		Drilled				Completed to production†			Redrilled or deepened				Abandoned				
		Development		Prospect	Total	Oil	Gas	Total	Oil and gas	Service	Dry (uncompleted)	Total	Oil and gas	Service	Dry (uncompleted)		Total
		Oil and gas	Service														
District 1																	
Alondra	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Anaheim (abd.)	069	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bandini	037	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Belmont Offshore	259	1	0	1	2	1	0	1	1	0	1	2	0	0	0	0	760
Old Area																	335
Gas Zone		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Surfside Area																	425
Beverly Hills	037	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1,170
East Area																	870
West Area																	300
Boyle Heights (abd.)	037	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Brea-Olinda		1	0	0	1	1	0	1	0	0	0	0	2	0	0	2	2,195
	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	535
	069	1	0	0	1	1	0	1	0	0	0	0	2	0	0	2	1,660
Buena Park, East (abd.)	069	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Buena Park, West (abd.)	069	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cheviot Hills	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	810
Chino-Souquel	071	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	30
Coyote, East	069	2	1	0	3	2	0	2	0	0	0	0	0	0	0	0	700
Coyote, West		0	0	0	0	1	0	1	1	0	0	1	0	2	0	2	770
	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150
	069	0	0	0	0	1	0	1	1	0	0	1	0	2	0	2	620
Christianitos Creek (abd.)	069	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dominguez	037	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4	550
El Segundo	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
Gas Zone (abd.)		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Esperanza	069	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85
Gaffey (abd.)	037	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Howard Townsite	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110
Huntington Beach		8	0	0	8	8	0	8	10	0	0	10	4	0	0	4	4,715
Offshore	259	8	0	0	8	8	0	8	6	0	0	6	0	0	0	0	2,345
Onshore	069	0	0	0	0	0	0	0	4	0	0	4	4	0	0	4	2,370
Hyperion	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Inglewood	037	4	2	0	6	4	0	4	2	1	0	3	6	3	0	9	1,070
Kraemer	069	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
Kraemer, Northeast (abd.)	069	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Kraemer, West (abd.)	069	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
La Mirada (abd.)	037	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lapworth (abd.)	037	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Las Cienegas	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	860
Fourth Avenue Area																	140
Good Shepard Area																	10
Jefferson Area																	300
Murphy Area																	270
Pacific Electric Area																	140
Lawndale	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Leffingwell (abd.)	037	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Long Beach	037	6	0	0	6	5	0	5	2	0	0	2	8	0	0	8	1,040
Northwest Extension Area																	45
Old Area																	965
Recreation Park Area																	30
Long Beach Airport	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	115
Los Angeles City	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90
Los Angeles Downtown	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210
Gas Zone		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*10
Los Angeles, East	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
Mahala		1	0	0	1	0	0	0	1	0	0	1	0	0	1	1	255
	065	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	071	1	0	0	1	0	0	0	1	0	0	1	0	0	1	1	250
Abacherli Area																	85
Mahala Area																	25
Mahala, West Area																	135
Prado Dam Area																	10
Montebello	037	0	2	0	2	1	0	1	0	0	0	0	8	1	0	9	750
Newgate	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Newport (abd.)	069	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Newport, West		17	2	0	19	17	0	17	0	0	0	0	2	0	1	3	655
Offshore	259	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
Onshore	069	17	2	0	19	17	0	17	0	0	0	0	2	0	1	3	575
Gas Zone (abd.)		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Olive	069	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
Playa del Rey	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	170
Del Rey Hills Area																	140
Kidson Area (abd.)																	--
Venice Area																	30
Potrero	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150
East Area																	50
Inglewood City Area																	100
Prado-Corona	065	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	215
Goedhart Area																	130
Gas Zone		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*80
Sardco Area																	85
Richfield	069	2	0	0	2	2	0	2	0	0	0	0	13	0	0	13	1,110
Rosecrans	037	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	320
Rosecrans, East	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Rosecrans, South	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
Rowland (abd.)	037	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Salt Lake	037	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	370
Salt Lake, South	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200
San Clemente (abd.)	069	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE C
OPERATIONS AND PROVED ACREAGE-OIL AND GAS FIELDS-1980

Field	API county codes	Well totals															Proved acreage as of Dec. 31, 1980	
		Drilled					Completed to production †			Redrilled or deepened				Abandoned				
		Development		Prospect	Total	Oil	Gas	Total	Oil and gas	Service	Dry (uncompleted)	Total	Oil and gas	Service	Dry (uncompleted)	Total		
		Oil and gas	Service															
District 1 - Continued																		
Sansinena	037	0	0	0	0	0	0	0	0	0	0	0	2	0	2	4	655	
12-G Area																	15	
Central Area																	30	
Curtis Area																	35	
East Area																	260	
New England Area																	45	
West Area																	270	
Santa Fe Springs	037	0	0	0	0	0	0	0	0	0	0	0	32	0	0	32	700	
San Vicente	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	330	
Sawtelle	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200	
Seal Beach	037	0	0	0	0	0	0	0	2	0	0	2	2	0	0	2	575	
	059	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	290	
		0	0	0	0				2	0	0	2	0	0	0	0	285	
Alamitos Area																	45	
North Block																	215	
Gas Zone		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*10	
North Block, East Extension																	140	
South Block																	175	
Sherman (abd.)	037	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Sunset Beach	059	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	25	
Talbert (abd.)	059	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Torrance		10	7	0	17	10	0	10	9	3	0	12	9	4	0	13	4,000	
Offshore	237	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	700	
Onshore	037	10	7	0	17	10	0	10	9	3	0	12	9	4	0	13	3,500	
Turnbull (abd.)	037	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Union Station	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	
Venice Beach		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	125	
Offshore	237	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80	
Onshore	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	
Walnut (abd.)	037	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Whittier	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	900	
Central Area																	710	
La Habra Area																	90	
Rideout Heights Area																	100	
Whittier Heights, North (abd.)	037	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Wilmington		60	18	0	78	58	0	58	30	14	0	44	10	4	0	14	13,005	
Offshore	237	21	0	0	21	19	0	19	17	0	0	17	0	0	0	0	6,025	
Onshore	037	39	18	0	57	39	0	39	13	14	0	27	10	4	0	14	6,980	
Gas Zone		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*10	
Yorba Linda	059	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	620	
COUNTIES																		
Imperial County	025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Los Angeles County	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Orange County	059	0	0	1	1	0	0	0	0	0	1	1	0	0	1	1	1	
Riverside County	065	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	1	
San Bernardino County	071	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	
San Diego County	073	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals:																		
Offshore		30	0	1	31	20	0	20	24	0	1	25	0	0	0	0		
Onshore		86	32	2	120	91	0	91	34	18	1	53	102	16	9	127		
Oil Acreage:																		
Offshore																	9,990	
Onshore																	31,105	
Gas Acreage:																		
Offshore																	0	
Onshore																	110*	
District Totals		116	32	3	151	111	0	111	58	18	2	78	102	16	9	127	41,095	
District 2																		
Aliso Canyon	037	3	5	0	8	3	0	3	1	0	0	1	0	0	0	0	1,190	
Bardsdale	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	480	
Big Mountain	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	
Bouquet Canyon (abd.)	037	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	30	
Canada Larga	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	
Canton Creek	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	215	
Carpinteria Offshore	283	3	0	0	3	3	0	3	2	0	0	2	0	0	0	0	50	
Cascade	037	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	400	
Castaic Hills	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,370	
Castaic Junction	037	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	10	
Chaffee Canyon	111	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	--	
Charlie Canyon (abd.)	037	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Conejo (abd.)	111	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Del Valle	037	1	0	2	3	1	0	1	0	0	0	0	0	0	1	1	560	
Kinler Area (abd.)																	540	
Main Area																	*120	
Gas Zone																	20	
South Area																	--	
Elizabeth Canyon (abd.)	037	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
El Rio	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	160	
Eureka Canyon	111	2	0	1	3	2	0	2	0	0	0	0	0	0	1	1	40	
Fillmore	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	
Hasley Canyon	037	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	120	
Holser	111	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	670	
Honor Rancho	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	270	
Main Area																	400	
Southeast Area																		

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OPERATIONS AND PROVED ACREAGE-OIL AND GAS FIELDS-1980

Field	API county codes	Well totals															Proved acreage as of Dec.31,1980	
		Drilled				Completed to production ↑			Redrilled or deepened				Abandoned					
		Development		Prospect	Total	Oil	Gas	Total	Oil and gas	Service	Dry (uncompleted)	Total	Oil and gas	Service	Dry (uncompleted)	Total		
		Oil and gas	Service															
District 2 - Continued																		
Hopper Canyon	111	2	0	1	3	2	0	2	0	0	0	0	0	0	0	1	1	110
Main Area																		110
North Area (abd.)																		—
Horse Meadows (abd.)	037	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Las Lajas	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Las Posas	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Long Canyon	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Lyon Canyon	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Mission	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Montalvo, West		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offshore	211	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,480
Onshore	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	260
Gas Zone	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,220
Moorpark	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*70
Moorpark West	111	0	0	1	1	1	0	1	0	0	0	0	0	0	0	1	1	10
Newhall	037	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	30
De Witt Canyon Area (abd.)																		320
Elamere Area																		—
Pico Canyon Area																		20
Rice Canyon Area (abd.)																		65
Townsite Area																		—
Towsley Canyon Area																		30
Tunnel Area																		30
Whitney Canyon Area																		135
Wiley Canyon Area (abd.)																		40
Newhall-Potrero	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	—
Oak Canyon	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,410
Oak Park	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	260
Oakridge	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150
Oakview (abd.)	111	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	425
Oat Mountain	037	3	0	0	3	3	0	3	0	0	0	0	0	0	0	0	0	—
Ojai	111	13	0	4	17	14	0	14	0	0	0	0	0	0	0	0	0	100
Lion Mountain																		1,485
North Sulphur Mountain Area																		40
Oakview Area (abd.)																		555
Silverthread Area																		—
Sisar Creek Area																		520
Sulphur Crest Area	111																	250
Sulphur Mountain Area																		30
Tip Top Area (abd.)																		60
Weldon Canyon Area																		—
Ozard	111	7	0	0	7	7	0	7	0	0	0	0	0	0	0	0	0	30
Piru	111	0	0	0	0	0	0	0	0	0	0	0	5	0	1	6	1	1,350
Piru Creek (abd.)	111	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	55
Placerita	037	8	1	0	9	6	0	6	0	0	0	0	0	0	0	0	0	—
Ramona	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	760
Ramona, North (abd.)	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	520
Rincon	211	2	0	0	2	2	0	2	0	0	1	1	1	0	2	2	2	240
Offshore	111	0	0	0	0	0	0	0	2	0	0	2	1	0	0	1	1	2,050
Onshore	111	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	550
San Miguelito	111	6	0	0	6	8	0	8	5	0	0	5	1	0	1	2	1	1,500
Santa Clara Avenue	111	1	0	1	2	1	0	1	0	0	0	0	0	0	0	0	0	670
Santa Paula	111	0	0	0	0	0	0	0	0	0	0	0	7	0	0	7	7	220
Santa Susana	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	130
Saticoy	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	250
Saugus	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	390
Sespe	111	18	0	0	18	17	0	17	1	0	0	1	0	0	0	0	0	40
Foot of the Hills Area																		2,775
Little Sespe Creek Area																		50
Section 23 and 26 Area																		170
Tar Creek-Topatopa Area																		45
Shiells Canyon	111	4	0	3	7	7	0	7	0	0	0	0	0	0	0	0	0	2,510
Simi	111	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	965
Old Area																		240
Strathern Area (abd.)																		100
Canada de la Brea Area																		—
Alamos Canyon Area																		110
Somis (abd.)	111	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30
South Mountain	111	1	0	1	2	2	0	2	0	0	0	0	0	0	0	0	0	—
Summerland	083	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,860
Gas Zone (abd.)																		0
Summerland Offshore	283	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	830
Tapia	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	160
Tapo, North	111	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	90
Tapo Canyon, South	111	5	0	0	5	4	0	4	0	0	0	0	0	0	0	0	0	240
Tapo Ridge	111	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	20
Temescal	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150
Timber Canyon	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	280
Loel-Marwell Area																		10
Main Area																		270
Torrey Canyon	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	260
Ventura	111	1	3	0	4	1	0	1	0	4	0	4	9	7	0	16	16	3,170
Wayside Canyon	037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100
West Mountain	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	240
COUNTIES																		
Los Angeles County	037	0	0	5	5	0	0	0	0	0	0	0	0	0	3	3	3	—
Santa Barbara County	083	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	—
Ventura County	111	0	0	12	12	1	0	1	0	0	0	0	0	0	4	4	4	240

TABLE C
OPERATIONS AND PROVED ACREAGE-OIL AND GAS FIELDS-1980

Field	API county codes	Well totals														Proved acreage as of Dec. 31, 1980	
		Drilled				Completed to production †			Redrilled or deepened				Abandoned				
		Development		Prospect	Total	Oil	Gas	Total	Oil and gas	Service	Dry (uncompleted)	Total	Oil and gas	Service	Dry (uncompleted)		Total
		Oil and gas	Service														
District 2 - Continued																	
Totals:																	
Offshore		3	0	0	3	3	0	3	3	0	0	3	1	0	0	1	
Onshore		83	10	35	128	85	0	85	8	4	1	13	25	7	15	47	
Oil acreage:																	1,855
Offshore																	28,260
Onshore																	0
Gas acreage:																	*190
Offshore																	
Onshore																	
District totals		86	10	35	131	88	0	88	11	4	1	16	26	7	15	48	30,115
District 3																	
Alegria (abd.)	083	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Alegria Offshore	283	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Arroyo Grande	079	11	0	0	11	12	0	12	0	0	0	0	7	0	0	7	520
Oak Park Area																	110
Tiber Area																	410
Barham Ranch	083	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
Caliente Offshore Gas	283	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	140
Capitan		0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	250
Offshore (abd.)	283	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Onshore	083	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	250
Gas Zone - Sespe		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*40
Gas Zone - Covarrubias (abd.)		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gas Zone - Coldwater (abd.)		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Careaga Canyon	083	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Casmalia	083	11	1	0	12	13	0	13	0	0	0	0	0	0	0	0	2,060
Cat Canyon	083	54	15	5	74	54	0	54	1	2	0	3	17	2	1	20	8,070
Central Area																	580
East Area																	1,790
Gato Ridge Area																	650
Olivera Canyon Area																	190
Sisquoc Area																	2,300
Tinaquic Area																	50
West Area																	2,510
Gas Zone - S ₁ , S ₂ , S ₃ (abd.)		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Coal Oil Point Offshore	283	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Devereaux Area																	40
Old Area (abd.)																	--
Conception Offshore	283	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	195
Cuarta Offshore	283	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120
Gas Zone		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*120
Cuyama, Central (abd.)	083	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cuyama, South	083	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	2,150
East Area (abd.)																	--
Main Area																	2,140
Gas Zone - 52 - 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*70
Southeast Area																	15
Elwood		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150
Offshore	283	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150
Onshore (abd.)	083	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Elwood, South, Offshore	283	2	0	1	3	3	0	3	1	0	0	1	0	0	0	0	370
Four Deer	083	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	150
Gaviota Offshore Gas	283	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	470
Glen Annie Gas (abd.)	083	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Goleta (abd.)	083	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guadalupe		14	7	1	22	14	0	14	1	0	0	1	23	0	0	23	2,010
	079	14	7	0	21	14	0	14	1	0	0	1	23	0	0	23	1,990
	083	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	20
Huama	079	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
La Voie - Hadley Area																	40
Tar Springs Area (abd.)																	--
Jesus Maria	083	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
King City	083	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	130
3-1-32 Area																	20
Doud Area																	110
Kent-Basham Area																	60
La Goleta Gas	083	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	280
Las Varas Canyon (abd.)	083	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gas Zone		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lompoc	083	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2,110
Lopez Canyon (abd.)	079	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Los Alamos (abd.)	083	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lynch Canyon	083	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
McCool Ranch	083	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70
Mesa (abd.)	083	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Main Area																	--
Palisades Area																	--
Molino Offshore Gas	283	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	960
Monroe Swell	083	2	0	0	2	3	0	3	1	0	0	1	0	0	0	0	70
Moody Gulch (abd.)	085	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Morales Canyon	079	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Clayton Area (abd.)																	--
Government 18 Area																	--
Naples Offshore Gas (abd.)	283	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE C
OPERATIONS AND PROVED ACREAGE-OIL AND GAS FIELDS-1980

Field	API county codes	Well totals														Proved acreage as of Dec. 31, 1980	
		Drilled				Completed to production †			Redrilled or deepened				Abandoned				
		Development		Prospect	Total	Oil	Gas	Total	Oil and gas	Service	Dry (uncompleted)	Total	Oil and gas	Service	Dry (uncompleted)		Total
		Oil and gas	Service														
District 3 - Continued																	
Orcutt	083	2	0	2	4	3	0	3	0	0	0	0	0	2	0	2	3,630
Caracas Area (abd.)																	---
Main Area																	3,630
Paris Valley	063	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Biaggi Area (abd.)																	---
Main Area																	40
Point Conception		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
Offshore	283	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
Onshore	063	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Quinada Canyon	063	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Refugio Cove Gas (abd.)	063	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Russell Ranch		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---
Main Area																	1,210
	079	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,120
	063	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	460
	063																660
Southeast Area	063																90
San Ardo		63	15	3	81	50	0	50	18	4	0	22	19	12	1	32	4,340
Main Area																	4,300
North Area																	40
Santa Maria Valley	063	18	0	3	21	19	0	19	0	0	0	0	1	0	1	2	5,620
Bradley Area																	500
Clark Area																	230
Main Area																	4,150
North Area (abd.)																	---
Southeast Area																	610
West Area																	130
Sargent	085	2	0	0	2	2	0	2	0	0	0	0	0	0	0	0	20
Sisquoc Ranch	083	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	10
Taylor Canyon	079	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Zaca	063	4	0	1	5	4	0	4	1	0	0	1	0	0	0	0	520
COUNTIES																	
Monterey County	063	0	0	5	5	0	0	0	0	1	0	1	0	0	5	5	---
San Luis Obispo County	079	0	0	6	6	0	0	0	0	0	1	1	0	0	6	6	---
Santa Barbara County		0	0	7	7	0	0	0	0	0	0	0	0	0	10	10	---
Offshore	283	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---
Onshore	063	0	0	7	7	0	0	0	0	0	0	0	0	0	10	10	---
Santa Clara County	085	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---
Santa Cruz County	087	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---
Totals:																	---
Offshore		2	0	1	3	3	0	3	1	0	0	1	0	0	0	0	---
Onshore		181	38	34	253	175	0	175	22	7	1	30	69	16	26	111	---
Oil Acreage:																	955
Offshore																	33,240
Onshore																	---
Gas Acreage:																	1,690
Offshore																	390
Onshore																	36,275
District totals		183	38	35	256	178	0	178	23	7	1	31	69	16	26	111	---
District 4																	
Ant Hill	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	285
Antelope Hills	029	2	0	2	4	3	0	3	0	0	0	0	0	0	1	1	535
Hopkins Area																	70
Nepple Area (abd.)																	---
Williams Area																	465
Gas Zone		0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	*40
Antelope Hills, North	029	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	280
Antelope Plains Gas (abd.)	029	---	---	1	1	---	---	---	---	---	---	---	---	---	---	---	---
Asphalto	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	820
Beer Nose	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
Belgian Anticline	029	1	0	0	1	1	0	1	0	0	0	0	0	0	1	1	1,630
Main Area																	1,010
Northwest Area																	620
Gas Zone		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*490
Bellevue	029	3	0	1	4	2	0	2	0	0	0	0	0	0	0	0	210
Main Area																	160
North Area																	40
South Area																	10
Bellevue, West	029	2	0	0	2	1	0	1	1	0	0	1	0	0	0	0	115
Belridge, North	029	18	0	0	18	14	0	14	0	0	0	0	2	1	0	3	2,080
Belridge, South	029	432	103	2	537	425	0	425	1	0	1	2	77	5	3	85	8,690
Blackwells Corner	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	240
Bowerbank Gas	029	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Gas Zone		1	0	0	1	0	0	0	1	0	1	2	0	0	0	0	40
Buena Vista	029	7	1	1	9	7	0	7	0	0	0	0	68	4	1	73	12,740
Buena Vista Front Area																	2,240
Buena Vista Hills Area																	10,500
Gas Zone		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*2,000
Buttonwillow Gas (abd.)	029	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cal Canal	029	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	760
Calders Corner	029	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	40
Canal	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	390
Gas Zone		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*40
Canfield Ranch	029	4	0	0	4	2	0	2	0	0	0	0	1	0	0	1	1,655
Gosford, East Area																	1,030
Gosford, South Area																	440
Gosford, West Area																	40
Old Area																	135
Old River Area																	10

TABLE C
OPERATIONS AND PROVED ACREAGE-OIL AND GAS FIELDS-1980

Field	API county code	Well totals															Proved acreage as of Dec. 31, 1980	
		Drilled					Completed to production †			Redrilled or deepened				Abandoned				
		Development		Prospect	Total	Oil	Gas	Total	Oil and gas	Service	Dry (uncompleted)	Total	Oil and gas	Service	Dry (uncompleted)	Total		
		Oil and gas	Service															
District 4 - Continued																		
Capitola Park	029	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	20	
Carneros Creek	029	3	0	0	3	4	0	4	0	0	0	0	0	0	0	0	40	
Chico-Martinez	029	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	290	
Cienega Canyon	029	0	0	2	2	1	0	1	0	0	0	0	0	0	0	0	10	
Coles Levee, North	029	8	0	1	9	9	0	9	0	0	0	0	0	0	0	0	3,360	
Gas Zone		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*200	
Coles Levee, South	029	3	0	0	3	2	0	2	0	0	0	0	0	1	0	1	3,120	
Gas Zone		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*110	
Comanche Point	029	2	0	1	3	2	0	2	0	0	0	0	0	0	0	0	55	
Cymric	029	51	12	3	66	50	0	50	1	0	0	1	13	0	1	14	4,935	
Cymric Flank Area																	90	
McKittrick Front Area																	1,455	
1-Y Area																	100	
Salt Creek Main Area																	455	
Salt Creek West Area																	30	
Sheep Springs Area																	750	
Welpot Area																	2,055	
Deer Creek	107	3	0	1	4	3	0	3	0	0	0	0	0	0	0	0	160	
Deer Creek North	107	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	15	
Devils Den	029	5	0	1	6	1	0	1	0	0	0	0	1	0	5	6	780	
Alferitz Area																	400	
Bates Area																	130	
Old Area																	250	
Dyer Creek (abd.)	029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Edison	029	51	0	0	51	51	1	52	3	0	0	3	11	0	0	11	5,610	
Edison Groves Area																	555	
Jeppi Area																	265	
Main Area																	1,930	
Portals-Fairfax Area																	485	
Racetrack Hill Area																	1,335	
West Area																	1,040	
Edison, Northeast	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	
Elk Hills a/	029	48	1	0	49	36	0	36	1	0	0	1	7	0	1	8	20,960	
Gas Zone		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*10,260	
English Colony	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	
Fruitvale	029	22	0	1	23	15	0	15	2	0	1	3	0	0	0	0	2,905	
Calloway Area																	140	
Greenacres Area (abd.)																	--	
Main Area																	2,765	
Garrison City Gas (abd.)	029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Gonyer Anticline (abd.)	029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Goosloo	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120	
Greeley	029	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	1,590	
Jasmin	029	3	0	0	3	4	0	4	0	0	0	0	0	0	3	3	460	
Jasmin, West	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	
Jerry Slough	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	610	
Kern Bluff	029	4	1	0	5	3	0	3	0	0	0	0	0	0	1	1	5,295	
Kern Front	029	27	5	0	32	28	0	28	3	0	0	3	15	0	0	15	9,555	
Kern River	029	191	245	0	436	164	0	164	b/ 4	0	0	4	73	2	0	75	--	
Kernsummer (abd.)	029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Lakeside	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	
Lakeside, South (abd.)	029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Los Lobos	029	0	1	3	4	1	1	2	0	0	0	0	0	0	0	0	60	
Los Padres	029	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	20	
Lost Hills	029	112	16	10	138	124	0	124	0	0	0	0	7	0	2	9	4,105	
Lost Hills, Northwest	029	0	0	1	1	2	0	2	0	0	0	0	0	0	0	0	20	
McClung (abd.)	029	--	--	--	--	--	--	--	--	--	1	1	--	--	1	1	--	
McDonald Anticline	029	3	0	1	4	0	0	0	0	0	0	0	0	0	2	2	550	
Bacon Hills Area																	20	
Layman Area																	530	
McKittrick	029	99	14	4	117	100	0	100	0	0	0	0	8	0	2	10	3,400	
Main Area																	1,400	
Northeast Area																	2,000	
Midway-Sunset	029	540	70	4	614	528	0	528	5	0	0	5	91	5	9	105	26,030	
	079	540	70	4	614	528	0	528	5	0	0	5	91	5	9	105	25,790	
Mount Poso	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	240	
Baker-Grover Area		33	3	0	36	27	0	27	1	0	0	1	7	0	6	13	3,600	
Dominion Area																	100	
Dorsey Area																	660	
Granite Canyon Area																	360	
Main Area																	75	
West Area																	2,220	
Mountain View	029	3	0	4	7	3	0	3	1	0	1	2	3	0	2	5	185	
Arvin Area																	2,560	
Arvin, West Area																	340	
DiGiorgia Area (abd.)																	465	
Main Area																	--	
Vaccaro Area																	1,705	
Paloma	029	1	0	2	3	0	1	1	0	0	0	0	0	0	0	0	50	
Main Area																	3,530	
Gas Zone		0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	*120	
Symons Area																	110	
Pioneer	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	
Pleito	029	2	0	2	4	3	0	3	3	0	0	3	0	0	0	0	310	
Creek Area																	150	
Ranch Area																	160	
Poso Creek	029	76	13	3	92	72	0	72	1	0	0	1	13	0	3	16	3,945	
Enas Area																	230	
McVan Area																	360	
Premier Area																	3,555	

TABLE C
OPERATIONS AND PROVED ACREAGE-OIL AND GAS FIELDS-1980

Field	API county codes	Well totals														Proved acreage as of Dec.31,1980	
		Drilled				Completed to production †			Redrilled or deepened				Abandoned				
		Development		Prospect	Total	Oil	Gas	Total	Oil and gas	Service	Dry (uncompleted)	Total	Oil and gas	Service	Dry (uncompleted)		Total
		Oil and gas	Service														
District 4 - Continued																	
Railroad Cap	029	0	2	0	2	0	0	0	0	0	0	0	1	0	0	1	470
Gas Zone		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*40
Rio Bravo	029	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1,680
Gas Zone		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*160
Rio Viejo	029	3	0	1	4	3	0	3	5	0	0	5	0	0	0	0	300
Rosedale	029	3	0	0	3	2	0	2	1	0	1	2	0	0	1	1	190
East Area																	20
Main Area																	120
North Area																	40
South Area																	10
Rosedale Ranch	029	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	630
Round Mountain	029	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2,425
Alma Area																	50
Coffee Canyon Area																	435
Main Area																	1,415
Pyramid Area																	280
Sharktooth Area																	245
San Emidio Nose	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	950
San Emidio (abd.)	029	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
San Emidio Creek (abd.)	029	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Semitropic	029	18	0	1	19	16	3	19	0	0	0	0	0	0	1	1	1,020
Gas Zone		3	0	0	3	0	3	3	0	0	0	0	0	0	0	0	*680
Semitropic, Northwest Gas (abd.)	029	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Seventh Standard	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Shafter (abd.)	029	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Shafter, Southeast Gas (abd.)	029	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Shale Flats Gas (abd.)	029	1	---	1	2	---	---	---	1	---	---	1	---	---	---	---	---
Shale Point Gas (abd.)	029	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Stockdale (abd.)	029	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Strand	029	0	0	3	3	2	0	2	0	0	0	0	0	0	0	0	850
East Area																	210
Main Area																	470
Northwest Area																	170
South Area (abd.)																	---
Gas Zones - Main & NW (abd.)																	---
Tejon	029	9	0	0	9	0	0	0	0	0	1	1	0	0	1	1	1,380
Central Area																	485
Eastern Area																	195
Southeast Area																	160
Western Area																	540
Tejon Flats (abd.)	029	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tejon Hills	029	3	0	1	4	3	0	3	0	0	0	0	2	0	0	2	705
Tejon, North	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,695
Tembler, East	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Tembler Hills	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Tembler Ranch	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90
Ten Section	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,195
Main Area																	2,090
Gas Zone																	*100
Northwest Area																	105
Terra Bella (abd.)	107	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Trico Gas	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,020
	031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200
	107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
																	2,740
Union Avenue	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Valpredo	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Wasco (abd.)	029	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Welcome Valley	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110
Wheeler Ridge	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,290
Central Area																	610
Northwest Area																	80
Southeast Area																	90
Telegraph Canyon Area (abd.)																	---
Windgap Area																	510
White Wolf	029	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90
Yowlumne	029	3	0	1	4	3	0	3	0	0	0	0	0	0	0	0	3,050
COUNTIES																	
Kern County	029	0	0	32	32	0	0	0	0	0	0	0	0	0	28	28	---
Kings County	031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---
San Luis Obispo County	079	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---
Tulare County	107	0	0	6	6	0	0	0	0	0	0	0	0	0	8	8	---
Totals:																	
Oil Acreage																	158,015
Gas Acreage																	17,270
District totals		1,802	492	102	2,396	1,724	6	1,730	36	0	7	43	403	18	85	506	175,285
District 5																	
Bitterwater	069	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70
Burrel	019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
Burrel, Southeast	019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70
Camden	019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Canusa Creek (abd.)	019	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cheney Ranch Gas	019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	360
Chowchilla Gas	039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	420
	047	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	240
																	180

TABLE C
OPERATIONS AND PROVED ACREAGE-OIL AND GAS FIELDS-1980

Field	API county codes	Well totals															Proved acreage as of Dec. 31, 1980	
		Drilled				Completed to production ↑			Redrilled or deepened				Abandoned					
		Development		Prospect	Total	Oil	Gas	Total	Oil and gas	Service	Dry (uncompleted)	Total	Oil and gas	Service	Dry (uncompleted)	Total		
		Oil and gas	Service															
District 5 - Continued																		
Coalinga	019	90	33	0	123	90	0	90	1	0	0	1	131	2	0	133	14,621	
Coalinga, East, Extension	019	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2,695	
Coalinga Nose Area																	2,695	
Northeast Area (abd.)																	--	
Dudley Ridge Gas (abd.)	031	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Five Points	019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
Gill Ranch Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	835	
	019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	835	
Guajarral Hills	019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	950	
Main Area																	400	
Northwest Area (abd.)																	--	
Polvadero Area																	550	
West Area																	0	
Hanford (abd.)	031	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Harvester Gas	031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	
Helm	019	1	0	0	1	1	0	1	0	0	0	0	5	1	0	6	955	
Hollister	069	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	380	
Flint Hills Area																	10	
Gas Zone																	* 370	
Lomera Area (abd.)																	--	
Jacalitos	019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,280	
Kettleman City	031	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	160	
Kettleman Middle Dome	031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	130	
Kettleman North Dome		0	0	0	0	0	0	0	0	0	0	0	22	2	1	25	11,660	
	019	0	0	0	0	0	0	0	0	0	0	0	11	1	1	13	4,311	
	031	0	0	0	0	0	0	0	0	0	0	0	11	1	0	12	7,349	
Kreyenhagen	019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	
Moffat Ranch Gas	039	4	0	0	4	0	3	3	0	0	0	0	0	0	1	1	570	
Pleasant Valley	019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	
Pyramid Hills	031	12	0	0	12	10	0	10	0	0	0	0	0	0	2	2	510	
Daguerre Area																	125	
Norris Area																	125	
Orchard Ranch Area (abd.)																	--	
West Slope Area																	260	
West Area - Gas Zone (abd.)																	--	
Raisin City	019	2	0	0	2	1	0	1	0	0	0	0	1	0	1	2	1,100	
Riverdale	019	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	795	
San Joaquin	019	2	0	0	2	0	0	0	0	0	0	0	0	0	2	2	70	
San Joaquin, Northwest, Gas	019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120	
Trico, Northwest, Gas	031	3	0	0	3	0	2	2	0	0	0	0	0	0	0	0	150	
Turk Anticline	019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	
Vallecitos	069	1	0	1	2	0	0	0	0	0	0	0	0	0	1	1	290	
Ashurst Area																	20	
Cedar Flat Area																	10	
Central Area																	100	
Franco Area																	110	
Griswold Canyon Area																	20	
Los Pinos Canyon Area (abd.)																	--	
Pimental Canyon Area, Gas Zone (abd.)																	--	
Silver Creek Area																	30	
Westhaven	019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	
COUNTIES																		
Fresno County	019	0	0	5	5	3	0	3	0	0	1	1	0	0	3	3		
Kings County	031	0	0	1	1	0	1	1	0	0	0	0	0	0	2	2		
Madera County	039	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1		
Merced County	047	0	0	2	2	0	0	0	0	0	0	0	0	0	2	2		
San Benito County	069	0	0	3	3	0	0	0	0	0	0	0	0	0	3	3		
Stanislaus County	099	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals:																		
Oil acreage																	36,736	
Gas acreage																	2,865	
District totals		117	33	13	163	106	6	112	2	0	1	3	159	5	20	184	39,601	
District 6																		
Afton Gas	021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	140	
Afton, South, Gas	021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	
Angel Slough Gas (abd.)	021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Arbuckle Gas	011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,720	
Artois Gas	021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80	
Black Butte Dam Gas	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	
Boumdre Creek Gas		1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	340	
	011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	
	021	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	310	
Brentwood	013	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1	910	
Main Area																	830	
West Area																	80	
Gas Zone (both areas)	013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	* 340	
Brentwood, East, Gas	013	4	0	0	4	0	3	3	0	0	0	0	0	0	0	0	420	
Buckeye Gas	011	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	800	
Bunker Gas	065	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	880	
Butte Sink Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210	
	011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210	
	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Butte Slough Gas		0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	400	
	011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80	
	101	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	320	

TABLE C
OPERATIONS AND PROVED ACREAGE-OIL AND GAS FIELDS- 1980

Field	API county codes	Well totals														Proved acreage as of Dec. 31, 1980	
		Drilled				Completed to production [†]			Redrilled or deepened				Abandoned				
		Development		Prospect	Total	Oil	Gas	Total	Oil and gas	Service	Dry (uncompleted)	Total	Oil and gas	Service	Dry (uncompleted)	Total	
		Oil and gas	Service														
District 6 - Continued																	
Cache Creek Gas	113	2	0	0	2	0	1	1	0	0	0	0	0	0	1	1	200
Cache Slough Gas (abd.)	005	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	---
Catlett Gas	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120
Chico Gas (abd.)	007	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Clarkburg Gas	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150
Collegeville, East, Gas	077	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
Compton Landing Gas	011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	130
Compton Landing, South, Gas	011	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	80
Concord Gas (abd.)	013	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Conway Ranch Gas	113	2	0	1	3	0	3	3	0	0	0	0	0	0	0	0	2,320
Corning Gas	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Corning, South, Gas (abd.)	103	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Crossroads Gas	113	2	0	1	3	0	2	2	0	0	0	0	0	0	0	0	1,260
Davis Southeast Gas	005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	130
Denverton Gas (abd.)	005	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	130
Denverton Creek Gas	005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dixon Gas (abd.)	005	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dixon, East, Gas	113	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dry Slough Gas	005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
East Area	113	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	40
West Area (abd.)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dufour Gas	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
Dunnigan Hills Gas (abd.)	113	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Durham Gas	007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---
Dutch Slough Gas	013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	870
Fairfield Knolls Gas	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,030
Florin Gas	007	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	160
Freeport Gas (abd.)	007	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fremont Landing Gas	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
French Camp Gas	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Galt Gas	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
Grand Island Gas	007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	220
Grays Bend Gas	007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
Greens Lake Gas (abd.)	101	1	0	0	1	0	2	2	0	0	0	0	0	0	0	0	460
Greenwood Gas	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
Greenwood, South, Gas	021	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	100
Grimes Gas	021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
Grimes, West, Gas	011	8	0	1	9	0	6	6	0	1	0	1	0	1	2	2	13,150
Half Moon Bay	101	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	3,770
Harlan Ranch Gas	011	1	0	1	2	0	1	1	0	0	0	0	0	0	2	2	9,380
Harte Gas	001	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2,790
Honker Gas (abd.)	113	1	0	1	2	0	1	1	0	0	0	0	0	0	0	0	5
Offshore	077	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	160
Onshore	005	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	60
Hospital Nose Gas (abd.)	005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	---
Howells Point Gas	011	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Karnak Gas	113	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	40
Kirby Hill Gas	101	2	0	0	2	0	0	0	0	0	0	0	0	0	2	2	100
Main Area	005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	960
North Area	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Kirby Hill, North, Gas (abd.)	005	2	0	0	2	0	0	0	0	0	0	0	0	0	1	1	910
Kirk Gas	---	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	50
Kirkwood Gas	011	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	640
Knighten Gas	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	640
La Honda	103	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0
Main Area	013	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	1,360
South Area	001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	160
Larkin, West, Gas (abd.)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Lathrop Gas	021	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Lathrop Southeast Gas (abd.)	077	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120
Liberty Cut Gas (abd.)	005	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Liberty Island Gas	005	0	0	1	1	0	0	0	0	0	0	0	1	0	1	2	300
Lindsey Slough Gas	005	7	0	2	9	0	3	3	0	0	0	0	0	0	2	2	1,400
Livermore	001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,400
Llano Seco Gas	007	5	0	0	5	0	3	3	0	0	0	0	1	0	2	3	4,760
Lodi Gas (abd.)	021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,640
Lodi Airport Gas (abd.)	077	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1,860
Lone Tree Creek Gas	077	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Los Medanos Gas	013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,040
Maine Prairie Gas	005	4	0	0	4	0	2	2	0	0	0	0	0	0	1	1	320
Malton-Black Butte Gas	---	1	0	0	1	0	1	1	0	0	0	0	2	0	0	2	80
McDonald Island Gas	021	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0
McMullin Ranch Gas	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Merritt Gas	077	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Merritt Island Gas	113	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0
---	007	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0
---	113	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0

TABLE C
OPERATIONS AND PROVED ACREAGE-OIL AND GAS FIELDS- 1980

Field	API county codes	Well totals															Proved acreage as of Dec. 31, 1980	
		Drilled				Completed to production [†]			Redrilled or deepened				Abandoned					
		Development		Prospect	Total	Oil	Gas	Total	Oil and gas	Service	Dry (uncompleted)	Total	Oil and gas	Service	Dry (uncompleted)	Total		
		Oil and gas	Service															
District 6 - Continued																		
Millar Gas	095	10	0	2	12	0	6	6	1	0	0	1	1	0	6	7	4,060	
.....	113	8	0	2	10	0	6	6	1	0	0	1	1	0	4	5	3,180	
.....	113	2	0	0	2	0	0	0	0	0	0	0	0	0	2	2	880	
Main Area		0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2,490	
West Area		0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1,570	
Moon Bend Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,570	
.....	011	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	
.....	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Mulligan Hill Gas (abd.)	013	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Nicolaus Gas	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	160	
Oakley Gas (abd.)	013	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Oakley, South, Gas	013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	
Oil Creek	081	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80	
Ord Bend Gas	021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	240	
Orland Gas	021	1	0	0	1	0	1	1	1	0	0	1	1	0	1	2	100	
Peace Valley Gas	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	
Perkins Lake Gas	007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	440	
Petaluma	097	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Gas Zone		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80	
Petrolia (abd.)	023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Pinole Point (abd.)	013	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Plainfield Gas	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	
Pleasant Creek Gas	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	230	
Poppy Ridge Gas	067	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	140	
Potrero Hills Gas (abd.)	095	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Princeton Gas	011	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	370	
.....	021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	370	
Main Area		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Town lot Area		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	290	
Putah Sink Gas	113	1	0	1	2	0	1	1	0	0	0	0	1	0	2	3	810	
Rancho Capay Gas	021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	720	
Red Bank Creek Gas (abd.)	103	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Rice Creek Gas	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,720	
Rice Creek, East, Gas	103	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	220	
Rio Jesus Gas	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	160	
Rio Vista Gas		6	1	2	9	4	4	4	0	0	0	0	0	0	4	4	21,140	
.....	013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,275	
.....	067	2	1	0	3	0	1	1	0	0	0	0	0	0	1	1	11,877	
.....	095	4	0	2	6	0	3	3	0	0	0	0	0	0	3	3	7,988	
River Break Gas	013	0	0	0	0	0	1	1	1	0	0	1	1	0	0	1	630	
River Island Gas		5	0	1	6	0	2	2	1	0	0	1	0	0	4	4	2,090	
.....	067	5	0	0	5	0	2	2	1	0	0	1	0	0	3	3	1,715	
.....	077	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	375	
Robbins Gas	101	2	0	0	2	0	2	2	0	0	0	0	0	0	0	0	320	
Roberts Island Gas	077	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	400	
Ryer Island Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	400	
Offshore	295	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	160	
Onshore	095	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	240	
Sacramento Airport Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,620	
.....	067	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,155	
.....	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	350	
.....	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	115	
Sacramento Bypass Gas (abd.)	113	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Saxon Gas		2	0	1	3	0	2	2	0	0	0	0	0	0	1	1	1,240	
.....	095	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
.....	113	2	0	1	3	0	2	2	0	0	0	0	0	0	1	1	1,240	
Schohr Ranch Gas (abd.)	007	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	--	
Sherman Island Gas		1	0	0	1	0	1	1	0	0	0	0	1	0	0	1	880	
.....	013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
.....	067	1	0	0	1	0	1	1	0	0	0	0	1	0	0	1	725	
.....	095	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	155	
Stegeman Gas	011	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	120	
Stone Lake Gas	067	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	180	
Sugarfield Gas	113	2	0	0	2	0	0	0	0	0	0	0	0	0	2	2	240	
Suisun Bay Gas	095	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	340	
Sutter Buttes Gas	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,560	
Sutter City Gas	101	3	0	0	3	0	4	4	0	0	0	0	0	0	1	1	3,330	
Main Area		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	490	
South Area		2	0	1	3	0	3	3	0	0	0	0	0	0	1	1	2,840	
Sycamore Gas	011	2	0	1	3	0	3	3	0	0	0	0	0	0	1	1	1,990	
.....	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,685	
.....	113	1	0	1	2	0	0	0	0	0	0	0	0	0	2	2	305	
Sycamore Slough Gas (abd.)	023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Table Bluff Gas (abd.)		2	0	0	2	0	1	1	0	0	0	0	0	0	1	1	80	
Thornton Gas	067	2	0	0	2	0	1	1	0	0	0	0	0	0	1	1	80	
.....	077	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Thornton, West-Walnut Grove Gas		0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	520	
.....	067	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	380	
.....	077	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	140	
Tisdale Gas	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	640	
Todhunter Lake Gas		1	0	0	1	0	1	1	0	0	0	0	3	0	1	4	2,375	
.....	095	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
.....	113	1	0	0	1	0	1	1	0	0	0	0	3	0	1	4	2,375	
.....	023	2	0	5	7	0	2	2	0	0	0	0	0	0	5	5	1,440	
Tompkins Hill Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,400	
Main Area		0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	40	
West Area		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	230	
Tracy Gas	077	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,840	
Tremont Gas	065	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	350	
Union Island Gas	077	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,850	
Van Sickle Island Gas	095	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,850	
Vernalis Gas		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
.....	077	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
.....	099	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

TABLE C
OPERATIONS AND PROVED ACREAGE-OIL AND GAS FIELDS-1980

Field	API county codes	Well totals														Proved acreage as of Dec. 31, 1980	
		Drilled				Completed to production †			Redrilled or deepened				Abandoned				
		Development		Prospect	Total	Oil	Gas	Total	Oil and gas	Service	Dry (uncompleted)	Total	Oil and gas	Service	Dry (uncompleted)		Total
		Oil and gas	Service														
District 6 - Continued																	
Vernalis, Southwest, Gas (abd.)	077	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Verona Gas	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
West Butte Gas (abd.)	101	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Wild Goose Gas	007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210
	011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210
	011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Williams Gas	011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Willow Pass Gas (abd.)	013	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	--
Willow Slough Gas	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,600
Willows-Beehive Bend Gas	021	5	0	0	5	0	2	2	0	0	0	0	0	0	5	5	9,510
Winchester Lake Gas	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	480
Winters Gas	095	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	400
	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	195
	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	205
Oil Zone (abd.)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Woodland Gas	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	460
Zamora Gas	113	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	350
COUNTIES																	
Alameda County	001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Butte County	007	0	0	2	2	0	0	0	0	0	0	0	0	0	3	3	3
Colusa County	011	3	0	8	11	0	0	0	0	0	1	1	0	0	12	12	7
Contra Costa County	013	1	0	7	8	0	0	0	0	0	1	1	0	0	7	7	3
Glenn County	021	1	0	2	3	0	0	0	0	0	0	0	0	0	3	3	11
Humboldt County	023	0	0	11	11	0	0	0	0	0	0	0	0	0	11	11	0
Lassen County	035	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	4
Sacramento County	067	0	0	4	4	0	0	0	0	0	0	0	0	0	4	4	17
San Joaquin County	077	0	0	17	17	0	0	0	0	0	0	0	0	0	17	17	1
San Mateo County	081	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	16
Solano County	085	2	0	10	12	0	0	0	0	0	1	1	0	0	16	16	0
Stanislaus County	089	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Sutter County	101	0	0	5	5	0	0	0	0	0	0	0	0	0	4	4	3
Tehama County	103	0	0	3	3	0	0	0	0	0	0	0	0	0	3	3	3
Yolo County	113	5	0	16	21	0	0	0	0	0	0	0	0	0	23	23	0
Yuba County	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals:																	
Offshore		1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0
Onshore	115	1	1	119	235	1	77	78	5	1	3	9	22	1	161	184	1,195
Oil Acreage:																	160
Offshore																	134,680
Onshore																	134,680
Gas Acreage:																	136,035
Offshore																	136,035
Onshore																	136,035
District totals		116	1	119	236	1	77	78	5	1	3	9	22	1	162	185	136,035
STATE TOTALS:																	
Offshore		36	0	2	38	26	0	26	28	0	1	29	1	0	1	2	12,800
Onshore		2,384	606	305	3,295	2,182	89	2,271	107	30	14	151	780	63	316	1,159	288,551
Oil Acreage:																	2,150
Offshore																	155,205
Onshore																	155,205
Gas acreage:																	458,706
Offshore																	458,706
Onshore																	458,706
GRAND TOTALS		2,420	606	307	3,333	2,208	89	2,297	135	30	15	180	781	63	317	1,161	458,706

NOTE: All active, inactive, and abandoned fields and areas are included in this table; areas are listed for inclusion of proved acreage only. Zero proved acreage is listed for fields and areas with inactive wells and depleted reserves; dashes are shown for abandoned fields and areas. Proved acreage for gas storage projects is added into district and state totals.

† New wells only. Includes suspended wells capable of production.

* Gas acreage, all or part of which is included in the oil acreage figure. Total duplicated acreage as of December 31, 1980 was 15,457 acres.

#/ Includes figures formerly in Tule Elk field. Tule Elk field is now part of Elk Hills field.

b/ Redrilled or deepened column includes one well widened from 7-5/8 inch diameter to 7-foot diameter to a depth of 488 feet.

c/ Includes 15,457 acres of duplicate acreage.

PRODUCTION & RESERVES

Using the Production Table

Statistics in the production table are given for fields, areas, and pools (zones). If there is more than one area within a field, information is subtotaled at the area level and the grand totals are shown on the field line. Also, county totals are given if a field covers portions of more than one county.

Project types (indicating the kinds of wells in fields, areas, and pools) are summarized at all levels if more than one type is present. The following project types appear in the production tables:

- OG – oil and associated gas,
- DG – nonassociated (dry) gas,
- GS – gas storage withdrawal, and
- LG – liquified petroleum gas storage withdrawal.

The number of wells shown is an average based on the amount of time a well is producing, shut-in, etc.

Condensate statistics appear in the "Oil and condensate" column when a nonassociated gas (DG) project is listed.

Cumulative totals and estimated reserves shown for gas storage (GS) projects pertain to the native reservoir gas only.

API CODES USED IN PRODUCTION & RESERVES TABLES

COUNTY CODES			
Alameda - - - -	001 (201)	Kings - - - - -	031
Alpine - - - - -	003	Lake - - - - -	033
Amador - - - - -	005	Lassen - - - - -	035
Butte - - - - -	007	Los Angeles - -	037 (237)
Calaveras - - -	009	Madera - - - - -	039
Colusa - - - - -	011	Marin - - - - -	041 (241)
Contra Costa - -	013 (213)	Mariposa - - - -	043
Del Norte - - - -	015 (215)	Mendocino - - -	045 (245)
El Dorado - - - -	017	Merced - - - - -	047
Fresno - - - - -	019	Modoc - - - - -	049
Glenn - - - - -	021	Mono - - - - -	051
Humboldt - - - -	023 (223)	Monterey - - - -	053 (253)
Imperial - - - -	025	Napa - - - - -	055 (255)
Inyo - - - - -	027	Nevada - - - - -	057
Kern - - - - -	029	Orange - - - - -	059 (259)
		Placer - - - - -	061
		Plumas - - - - -	063
		Riverside - - - -	065
		Sacramento - - -	067
		San Benito - - -	069
		San Bernardino -	071
		San Diego - - - -	073 (273)
		San Francisco - -	075 (275)
		San Joaquin - - -	077
		San Luis Obispo -	079 (279)
		San Mateo - - - -	081 (281)
		Santa Barbara - -	083 (283)
		Santa Clara - - -	085
		Santa Cruz - - - -	087 (287)
		Shasta - - - - -	089
		Sierra - - - - -	091
		Siskiyou - - - - -	093
		Solano - - - - -	095 (295)
		Sonoma - - - - -	097 (297)
		Stanislaus - - - -	099
		Sutter - - - - -	101
		Tehama - - - - -	103
		Trinity - - - - -	105
		Tulare - - - - -	107
		Tuolumne - - - - -	109
		Ventura - - - - -	111 (211)
		Yolo - - - - -	113
		Yuba - - - - -	115
OFFSHORE ISLAND CODES			
Anacapa - - - -	116 (216)	San Miguel - - -	120 (220)
San Clemente - -	118 (218)	San Nicholas - -	122 (222)
		Santa Barbara - -	124 (224)
		Santa Catalina - -	126 (226)
		Santa Cruz - - -	128 (228)
		Santa Rosa - - -	130 (230)

Note: Numbers without parentheses indicate onshore codes.
Numbers in parentheses indicate offshore codes within the 3-mile limit.

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbt)	Cumulative oil and condensate (Mbbt)	Daily production per well (bbt)	Estimated oil reserves (Mbbt) (12-31-80)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft ³ /bbl)	Estimated gas reserves (MMcf) (12-31-80)	Water (bbt)	% water
AFTON GAS- - - - -	821	DG	1		1					6,415		4,789		91		
AFTON, SOUTH, GAS- - - - -	821															
KIONE- - - - -	DG		1							42,279		91		909		
ALEGRIA (ABD)- - - - -	083	OG					7					13				
ALEGRIA OFFSHORE - - - - -	283	OG	1			9,257	593		241	7,202	7,202	3,667	778	263	1,322	12
ALISO CANYON - - - - -	837		123	1	51	518,712	2/ 53,268		2,059	317,178	317,178	177,778		980	3,669,568	
	OG		113	2	59	518,712	2/ 53,268	13		317,178	317,178	177,778	3,549	980	3,637,113	88
	GS		27	5	54					23,650,128	-2,510,258				32,455	
ALISO- - - - -	OG		15		9	54,516	5,486	10		53,618	53,618	2,792	983	51	779,414	93
ALISO, WEST- - - - -	OG		2			4,984	150	7		4,012	4,012	192	804	89	23,447	82
PORTER-DEL ALISO A-36- - - -	OG		38		7	266,242	22,931	19		255,432	255,432	25,793	959	831	2,832,971	91
PORTER, WEST- - - - -	OG						64					111		0		
MISSION-ADRIAN (ABD) - - - -	OG						21					449				
SESNON-FREM- - - - -	OG		57	2	43	189,690	2/ 24,429	9				148,256		0		11
	GS		27	5	54					23,650,128	-2,510,258				32,455	
FAULTED SESNON - - - - -	OG		1			3,280	187	9		4,116	4,116	185	1,254	8	1,281	28
ALONDRA- - - - -	837	OG	1			1,425	2,140	4	HK	262	262	1,406	183	2	125,619	99
ANAHEIM (ABD)- - - - -	059	OG					4					0				
ANGEL SLOUGH GAS (ABD) - - - -	021	DG										400				
ANT HILL - - - - -	029	OG	29	4	2	123,165	6,740	12	† 829			233		0	4,283,630	97
OLCESE - - - - -	OG		28	4	2	122,401	6,184	12				0		0	4,208,045	97
JEMETT - - - - -	OG		1			764	556	2				233		0	75,585	99
ANTELOPE HILLS - - - - -	029		56	17	4	132,135	14,525		† 1,553	23,970	23,970	† 8,528		187	1,728,836	
	OG		56	16	4	132,135	14,525	6		21,614	21,614	7,699	163	163	1,728,836	93
	DG		1							2,356		829		23		
HOPKINS AREA- - - - -	OG		4	2		7,310	471	5				0		0	1,726	19
PHACOIDES- - - - -	OG		1	1		922	51	3				0		0	121	12
Eocene - - - - -	OG		3	1		6,388	420	6				0		0	1,605	20
WILLIAMS AREA - - - - -			52	15	4	124,825	14,053			23,970	23,970	8,125		187	1,727,110	
	OG		52	14	4	124,825	14,053	7		21,614	21,614	7,699	173	163	1,727,110	93
	DG		1							2,356		426		23		
GAS ZONE - - - - -	DG			1						2,356		426		23		
UPPER- - - - -	OG		2		1	904	35	1				3		0	34	4
EAST BLOCK-BUTTON BED- - - -	OG		22	2	1	47,331	2,481	6		19,940	19,940	1,270	421	90	338,274	88
EAST BLOCK-AGUA- - - - -	OG		12	2		41,356	4,265	9		1,081	1,081	1,174	26	46	1,031,786	96
WEST BLOCK-BUTTON BED & AGUA	OG		17	9	2	35,234	7,272	6		593	593	5,251	16	27	357,816	91
HEPPLE AREA GAS (ABD) - - - -	DG											403				
ANTELOPE HILLS, NORTH- - - - -	029															
MIOCENE- - - - -	OG		15	2	7	20,869	3,385	4	† 173	7,402	7,402	739	354	89	437,526	95
ANTELOPE PLAINS GAS (ABD)- - - -	029	DG										35				
ARBuckle GAS - - - - -	011	DG	21	3	2					502,186		64,706		5,311	2,808	
ARROYO GRANDE- - - - -	079	OG	131	10	15	474,757	4,804	10	† 2,496			41		HK	4,446,398	90
OAK PARK AREA - - - - -	OG		9	7	1	11,902	782	4				33		HK	2,914	20
TIBER AREA- - - - -	OG		121	4	14	462,855	4,022	10				8		HK	4,445,484	91
ARTOIS GAS - - - - -	021	DG	1			11				8,787		405		402	84	
KIONE- - - - -	DG											0		500		
FORBES - - - - -	DG		1			11				8,787		405		102	84	

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbbl)	Cumulative oil and condensate (Mbbbl)	Daily production per well (bbl)	Estimated oil reserves (Mbbbl) (12-31-80)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft ³ /bbl)	Estimated gas reserves (MMcf) (12-31-80)	Water (bbl)	% water
ASPHALTO - - - - -	829	00	43	6	27	277,012	32,146	18	† 2,269	2,337,600	2,337,600	78,503	8,438	9,896	3,244,498	92
TULARE - - - - -	00		1			156	-					8		0	546	78
ETCHEGOIN - - - - -	00		1			887	110	2				11		0	3,521	80
OLIO - - - - -	00			1	2		28					1,638		10		
ANTELOPE SHALE (ABD) - - - - -	00						19					7				
STEVENS - - - - -	00		36	6	23	209,399	30,201	16		119,361	119,361	30,835	570	650	3,155,191	94
1ST CARNEROS (ABD) - - - - -	00						40					80				
CARNEROS - - - - -	00		6		2	66,570	1,748	30		2,218,239	2,218,239	45,931	33,321	9,237	85,232	56
BANDINI - - - - -	837	00	17	8		30,879	5,529	5	371	21,012	21,012	15,246	680	443	447,548	94
PLIOCENE - - - - -	00		17	8		30,879	5,510	5		21,012	21,012	15,218	680	443	447,548	94
MIOCENE (ABD) - - - - -	00						19					28				
BARDSDALE - - - - -	111	00	94	31	3	104,214	13,199	3	853	466,988	466,988	77,475	4,481	1,826	119,809	53
BARHAM RANCH - - - - -	083	00	5			10,899	193	6	NR			0		0	16,475	62
BEER NOSE - - - - -	029															
BLOEMER - - - - -	00		2		1	12,576	452	17	NR	5,439	5,439	157	432	19	5,881	32
BELOIAN ANTICLINE - - - - -	029		105	27	66	385,532	46,042		† 2,988	908,234	908,234	163,622		6,068	713,322	
	00		105	27	53	305,532	46,042	8		731,416	731,416	147,451	2,393	4,749	713,322	70
	00		2		12					176,818		† 16,171		1,318		
MAIN AREA - - - - -	00		68	24	25	256,917	29,500	10		566,313	566,313	116,561	2,204	3,440	466,725	64
NORTHWEST AREA - - - - -			37	3	40	48,615	16,543			341,921	341,921	47,061		2,628	246,597	
	00		35	3	28	48,615	16,543	4		165,103	165,103	30,890	3,396	1,510	246,597	84
	00		2		12					176,818		16,171		1,518		
NO POOL BREAKDOWN - - - - -	00		35	3	28	48,615	16,543	4		165,103	165,103	30,890	3,396		246,597	84
MIOCENE - - - - -	00				2					12,628		979				
EOCENE - - - - -	00		2		11					164,190		15,192				
BELLEVUE - - - - -	029	00	12	2	1	103,249	4,935	24	† 774	60,016	60,016	4,645	19	488	590,148	79
MAIN AREA - - - - -	00															
STEVENS - - - - -	00		9	2	1	76,416	4,781	23		50,000	50,000	4,415		485	352,625	82
NORTH AREA - - - - -																
STEVENS - - - - -	00		2			22,410	45	31				13		0	36,307	62
SOUTH AREA - - - - -																
STEVENS - - - - -	00		1			4,423	109	12		2,016	2,016	217	455	3	1,136	20
BELLEVUE, WEST - - - - -	029															
STEVENS - - - - -	00		5	4		45,561	3,426	25	† 273	10,107	10,107	1,968	221	† 127	435,444	91
BELMONT OFFSHORE - - - - -	259		65	24	17	1,447,913	50,589		33,037	415,748	415,748	37,521		7,482	2,190,393	
	00		64	24	16	1,447,913	50,589	61		415,748	415,748	33,876	274	7,482	2,190,393	60
	00		1									3,645		0		
OLD AREA - - - - -			24	18	8	673,368	22,294			83,875	83,875	23,002		2,318	1,282,338	
	00		23	18	7	673,368	22,294	80		83,875	83,875	19,357	124	2,318	695,172	51
	00				1							3,645		0		
NO POOL BREAKDOWN - - - - -	00											3,645		0		
UPPER - - - - -	00		16	5	2	546,216	11,493	93		48,328	48,328	9,402	80	1,041	602,861	52
	00				1											
INTERMEDIATE - - - - -	00		1	1		19,066	1,097	52		216	216	466	11	99	74,192	80
LOWER - - - - -	00		7	12	5	108,086	9,785	42		35,331	35,331	9,488	326	1,179	18,919	15
SURFSIDE AREA - - - - -	00		41	5	9	774,545	28,294	52		351,873	351,873	14,519	411	5,164	1,495,221	66
BELRIDGE, NORTH - - - - -	029	00	216	25	106	937,631	† 73,321	12	† 7,524	4,735,468	2,629,203	548,704	5,050	† 62,032	4,770,487	84
SHALLOW - - - - -	00		172	24	26	590,856	7,459	9		498,256	498,256	11,841	843	† 2,535	2,439,710	81
TEMBLOR - - - - -	00		12		12	131,860	20,571	30		725,275	725,275	50,573	5,500	2,332	1,905,180	94
R SAND - - - - -	00		10		8	10,610	2,088	5		662,487	662,487	125,434	35,598	2,458	14,693	44
BELRIDGE 64 - - - - -	00		20	1	58	145,994	40,222	20		2,727,037	620,572	353,083	18,679	54,345	207,280	59
Y SAND - - - - -	00		3		4	50,311	2,992	46		122,613	122,613	7,853	2,437	362	203,624	80

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbd)	Cumulative oil and condensate (Mbbbl)	Daily production per well (bbd)	Estimated oil reserves (Mbbbl) (12-31-80)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft ³ /bbl)	Estimated gas reserves (MMcf) (12-31-80)	Water (bbd)	% water
BELRIDGE, SOUTH- - - - -	029	00	3,623	333	353	21,614,446	284,764	16	1,478,258	7,895,972	7,895,972	31,951	334	120,929	135,857,849	86
BEVERLY HILLS- - - - -	037	00	105	19	21	2,954,138	100,074	74	33,714	2,449,045	2,449,045	173,128	824	25,666	8,136,876	73
EAST AREA- - - - -	00		85	3	10	2,798,738	79,911	86		2,175,533	2,175,533	142,360	772	22,783	7,811,619	73
PLIOCENE- - - - -	00		14		4	381,822	9,672	57		388,025	388,025	12,509	776	2,218	1,396,052	78
MIOCENE- - - - -	00		79	3	10	2,416,916	70,239	83		1,867,508	1,867,508	129,851	772	20,565	6,415,567	73
WEST AREA- - - - -	00		20	16	11	155,400	29,163	20		273,512	273,512	30,749	1,772	2,882	342,457	70
PLIOCENE- - - - -	00		1	3	2	1,994	4,529	5		5,156	5,156	1,431	2,585	357	17,975	90
MIOCENE- - - - -	00		19	12	10	153,406	15,634	21		268,356	268,356	29,336	1,761	2,526	324,482	69
BIG MOUNTAIN- - - - -	111	00	4	1		37,827	1,103	26	162	45,380	45,380	1,157	1,199	263	23,941	38
SESPE- - - - -	00		4	1		37,827	1,102	26		45,380	45,380	1,157	1,199	263	23,941	38
EOCENE- - - - -	00						2					0		0		
BITTERWATER- - - - -	069	00	11			4,990	255	1	NR			0		0	228	4
BLACK BUTTE DAM GAS- - - - -	103															
FORBES- - - - -	00				2							0		N.A.		
BLACKWELLS CORNER- - - - -	029	00	8	2	24	5,959	903	2	NR			91		0	6,310	51
BOUNDE CREEK GAS- - - - -	021	00	3	1	2					424,483		14,689		13,297	12,030	
BOUQUET CANYON (ADD)- - - - -	037	00						9				0				
BOWERBANK- - - - -	029			1				5				13,719		0		
GAS ZONE- - - - -	00			1				5				13,717		0		
STEVENS (ADD)- - - - -	00			1				5				13,717		0		
BOYLE HEIGHTS (ADD)- - - - -	037	00					273					113				
BREA-OLINDA- - - - -	00		749	184	59	2,942,353	363,368	11	22,787	1,864,551	1,864,551	438,557		20,466	7,071,510	
GAS ZONE- - - - -	037		83	19	2	368,703				219,400	219,400				894,324	
STEVENS (ADD)- - - - -	059		665	165	57	2,573,650				1,645,151	1,645,151				6,177,186	
BRENTWOOD- - - - -	013		40	15	7	148,394	7,833		476	640,368	640,368	55,071		22,469	2,713,565	
GAS ZONE- - - - -	00		38	12	4	148,000	7,810	11		553,990	553,990	49,359	3,743	21,581	2,683,943	95
ANY AREA- - - - -	00		2	3	3	394	23	1		86,378		5,712		888	29,622	
GAS ZONE- - - - -	00		2	3	3	394	23	1		86,378		5,712		888	29,622	
MAIN AREA- - - - -	00		33	12	4	120,510	6,749	10		511,297	511,297	47,435	4,242	21,437	2,390,483	95
PREMETT- - - - -	00		3	1		27,270	619	25		22,905	22,905	4,413	839	352	329,025	92
FIRST MASSIVE- - - - -	00		6	4	2	6,347	1,046	3		404,259	404,259	25,554	63,692	20,637	238,270	97
FIRST MASSIVE BLOCK IA- - - - -	00		2	3		4,986	696	7				2,073		47	90,233	95
FIRST MASSIVE BLOCK III- - - - -	00		1	2			59			3,390	3,390	3,426		1		
SECOND MASSIVE- - - - -	00		5	2		12,992	810	7		26,754	26,754	7,184	2,059	229	508,103	98
THIRD MASSIVE- - - - -	00		16	1		68,915	3,539	12		53,989	53,989	4,786	783	190	1,224,744	95
WEST AREA- - - - -	00		5			27,490	1,041	15		42,693	42,693	1,924	1,553	125	293,469	91
FIRST MASSIVE- - - - -	00		1			1,279	23	3		2,324	2,324	33	1,817	16	85	6
SECOND MASSIVE- - - - -	00		3			25,523	968	23		35,033	35,033	1,633	1,372	42	247,949	91
THIRD MASSIVE- - - - -	00		1			688	50	2		5,336	5,336	258	7,755	66	45,426	99
BRENTWOOD, EAST, GAS- - - - -	013															
THIRD MASSIVE- - - - -	00		4			24,475	29	17		8,301,865		9,967		30,033	7,139	
BUCKEYE GAS- - - - -	011	00	5							269,673		11,580		1,011	1,570	
BUENA PARK, EAST (ADD)- - - - -	059	00					197					20				
BUENA PARK, WEST (ADD)- - - - -	059	00					50					17				

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbd)	Cumulative oil and condensate (Mbbd)	Daily production per well (bbd)	Estimated oil reserves (Mbbd) (12-31-80)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft ³ /bbd)	Estimated gas reserves (MMcf) (12-31-80)	Water (bbd)	% water
BUENA VISTA-----	829		1,186	193	391	2,314,840	632,204		† 25,169	9,130,411	9,113,276	1,043,477		80,283	13,743,836	
	00	06	1,139	198	377	2,312,058	632,197	6		8,387,777	8,378,442	957,667	3,627	72,666	13,735,825	86
		05	51	4	17	2,790	7			742,834		85,811		7,615	8,011	
BUENA VISTA FRONT AREA-----	00		124	48	69	307,195	126,607	7		103,772	103,772	59,016	337	742	1,889,778	86
BUENA VISTA HILLS AREA-----			1,066	154	325	2,007,645	585,597			9,026,839	9,009,504	984,462		79,539	11,854,866	
	00		1,014	150	308	2,004,855	585,598	5		8,284,885	8,266,670	898,651	4,131	71,924	11,846,855	86
		05	51	4	17	2,790	7			742,834		85,811		7,615	8,011	
GAS ZONE-----	00		2		1					68	68					
		05	51	4	14	2,790	7			742,834		85,811		7,615	8,011	
UPPER (UNDIFFERENTIATED)---	00		776	132	198	1,272,265	324,989	4		4,014,938	4,014,938	622,683	3,155	12,314	4,926,052	79
		05			3											
278 (UNDIFFERENTIATED)---	00		66	17	78	66,272	99,322	3		582,864	582,864	77,259	8,795	886	1,025,084	94
ANTELOPE SHALE-EAST DOME---	00		78		20	125,755	22,255	4		2,303,563	2,303,563	134,957	18,317	28,009	1,768,379	93
ANTELOPE SHALE-WEST DOME---	00		48		3	62,680	8,554	4		615,434	615,434	39,042	9,818	9,943	636,977	91
355 STEVENS-----	00		45	1	9	477,883	50,470	29		767,138	749,803	24,711	1,405	28,851	3,489,563	88
BUNKER GAS-----	895	00	5	2	2	5,981	272	2		1,368,557		65,284		† 9,848	35,019	
BURREL-----	819															
MIocene-----	00		2	4		20,837	1,512	28	NH	10,419	10,419	2,222	500	78	673,150	97
BURREL, SOUTHEAST-----	819															
MIocene-----	00		3	2	1	2,937	1,141	3	NH	1,092	1,092	591	371	14	99,276	97
BUTTE SINK GAS-----	811	00	1		4					5,987	5,987	5,186		297	210	
BUTTE SLOUGH GAS-----		00	1		2					64,833	64,833	4,264		556	737	
	811				2										250	
	101		1							64,833	64,833				487	
BUTTONMILLW OAS (ABD)-----	829	00										38,331				
CACHE CREEK GAS-----	113	00	2							218,549		219		4,476	4	
STARKEY-----		00	1							104,797		105		3,590	2	
WINTERS-----		00	1							113,752		114		886	2	
CACHE SLOUGH GAS (ABD)-----	895	00			1							11,498				
CAL CANAL-----	829															
STEVENS-----	00		17			380,191	1,478	48	† 1,619	967,392	967,392	5,400	3,222	32,946	213,050	42
CALDERS CORNER-----	820															
STEVENS-----	00		1	1		2,881	490	8	NH	6,094	6,094	598	2,115	24	71,528	96
CALIENTE OFFSHORE GAS-----	203	00	1		2					40,770		32,386		† --	114,206	
CAMDEN-----	819															
MIocene-----	00		1			1,085	273	3	NH			347		3		
CANADA LARGA-----	111	00	2		1	890	97	1	NH			76		8	900	50
CANAL-----	829		11	13	5	39,151	25,540		† 249	34,259	34,259	27,618		137	491,023	
	00		11	13	4	39,151	25,540	10		34,259	34,259	26,316	875	137	491,023	93
		05			1							1,302		0		
GAS ZONE-----	00				1							1,302		0		
UPPER STEVENS-----	00		4	10	4	12,870	24,412	9		11,086	11,086	25,435	861	49	249,844	95
MIDDLE STEVENS-----	00		5	3	1	21,159	71	12		20,984	20,984	61	991	75	207,372	91
LOWER STEVENS-----	00		2			5,122	1,056	7		2,189	2,189	820	427	13	33,807	87
CANFIELD RANCH-----	829	00	82	15	5	438,760	31,413	15	† 5,166	344,196	344,196	† 32,030	784	2,120	1,940,403	82
GOSFORD, EAST, AREA-----		00	55	4	4	326,387	23,114	16		263,783	263,783	24,625	808	1,381	1,666,247	84
STEVENS-----		00	53	4	4	317,504	23,105	16		258,176	258,176	24,619	813	1,381	1,594,938	83

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbt)	Cumulative oil and condensate (Mbbt)	Daily production per well (bbt)	Estimated oil reserves (12-31-80) (Mbbt)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft ³ /bbt)	Estimated gas reserves (12-31-80) (MMcf)	Water (bbt)	% water
LARIMER EQUIV. - - - - -	00	00	2			8,883	9	12		5,607	5,607	6	631	N.A.	71,389	89
GOSFORD, SOUTH, AREA - - - - -																
STEVENS - - - - -	00	00	18	7	1	98,888	6,532	14		33,114	33,114	4,664	364	333	144,281	61
GOSFORD, WEST, AREA - - - - -																
STEVENS - - - - -	00	00	1	1		737	322	2		3,385	3,385	345	4,592	N.A.	38,723	98
OLD AREA - - - - -																
STEVENS - - - - -	00	00	8	3		18,780	1,259	6		22,789	22,789	1,801	1,213	99	91,438	83
OLD RIVER AREA - - - - -																
STEVENS - - - - -	00	00	1			2,048	186	6		21,125	21,125	593	10,314	307	7,714	79
CANTON CREEK - - - - -	037	00	1		2	67	19		NN			8		8		
CANTUA CREEK (ADD) - - - - -	019	00					48					801				
CANTUA NUEVA - - - - -	019	00	1			7,685	8	21	NN			8		8	38	1
CAPITAN - - - - -	083		18	40	10	61,241	19,594		1,186			14,778		72	2,762,920	
	00	00	18	39	9	61,241	19,592	9				12,561		72	2,762,920	98
	00	00		1	1		2					2,217				
OFFSHORE (ADD) - - - - -	00						71					33				
ONSHORE - - - - -			18	40	10	61,241	19,523					14,745		72	2,762,920	
	00	00	18	39	9	61,241	19,521	9				12,527		72	2,762,920	98
	00	00		1	1		2					2,217				
NO POOL BREAKDOWN - - - - -	00	00	18	39	9	61,241	19,521	9				12,527		72	2,762,920	98
COVARRUBIAS-GAS ZONE (ADD) - - - - -	00						1					9				
SESPE-GAS ZONE - - - - -	00			1	1		1					2,844		8		
COLDWATER-GAS ZONE (ADD) - - - - -	00						N					165				
CAPITOLA PARK - - - - -	029	00	1	1		803	18	2	NN	234	234	5	291	8	297	27
CAREAGA CANYON - - - - -	083															
MONTEREY - - - - -	00	00	1			4,898	31	13	NN			8		8	18,263	79
CARHEROS CREEK - - - - -	029															
PHACOIDES - - - - -	00	00	4			7,189	18	5	NN			8		8	2,390	25
CARPINTERIA OFFSHORE - - - - -	283	00	53		17	1,051,020	27,959	54	7,058	1,011,905	1,011,905	24,114	983	10,178	5,578,024	85
CASCADE - - - - -	037	00	9			49,671	1,393	15	364			61		8	48,638	49
CASHALIA - - - - -	083	00	163	38	16	672,140	35,237	11	14,265	369,664	369,664	13,374	549	10,506	13,502,820	95
CATAIC HILLS - - - - -	037	00	23	3	13	42,178	8,528	5	† 371	133,654	133,654	18,123	3,168	† 836	121,881	74
GOLDEN - - - - -	00				1		10					18		8		
STERLING - - - - -	00	00	21		7	35,429	6,896	5		121,107	121,107	14,763	3,399	† 754	110,183	76
STERLING, EAST - - - - -	00	00	1		4	2,912	1,305	8				2,569		8	11,332	88
RYMNE-FISHER - - - - -	00	00	1		1	3,637	345	10		12,547	12,547	773	3,449	82	344	9
CATAIC JUNCTION - - - - -	037	00	27	24	5	254,556	29,456	26	† 1,288	794,496	794,496	52,463	3,121	† 5,118	597,952	78
10-A - - - - -	00	00	16	8	3	186,470	16,190	32		251,052	251,052	3,565	1,344	† 1,500	342,330	74
10-B - - - - -	00	00	2	2		13,596	2,230	19		69,442	69,442	4,714	5,107	† 220	44,246	76
15 - - - - -	00	00	1	3	1	10,511	2,786	29		15,417	15,417	15	1,466	† 92	7,803	48
21 DEL VALLE - - - - -	00	00	1	3		2,962	465	8		75,750	75,750	7,305	25,573	† 251	511	15
21 MAIN - - - - -	00	00	3	2	2	13,943	1,513	13		211,457	211,457	18,927	15,165	† 2,635	1,392	9
21 NORTH - - - - -	00	00	3	8		26,874	6,271	24		171,378	171,378	17,936	6,377	† 420	2,470	8
CAT CANYON - - - - -	083		845	110	205	5,772,936	253,725		† 81,274	4,649,458	4,649,458	† 135,323		† 74,676	31,466,546	
	00	00	845	110	205	5,772,936		18		4,649,458	4,649,458	† 135,013	805		31,466,546	84
	00	00										510				
CENTRAL AREA - - - - -	00	00	45	6	20	204,979		12		155,740	155,740		759		1,413,980	87
EAST AREA - - - - -	00	00	259	10	77	1,808,291		19		1,087,775	1,087,775		601		5,684,575	76

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbD)	Cumulative oil and condensate (MbbD)	Daily production per well (bbD)	Estimated oil reserves (MbbD) (12-31-80)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft ³ /bbD)	Estimated gas reserves (MMcf) (12-31-80)	Water (bbD)	% water
GATO RIDGE AREA - - - - -	06		63	13	9	258,915		11		395,324	395,324		1,526		1,223,758	83
OLIVERA CANYON AREA - - - - -	06		18	2	1	129,818		22							1,892,477	89
SISQUOC - - - - -	06		1			2,428									9,572	80
BROOKS - - - - -	06		1			900									8,867	91
MONTEREY - - - - -	06		16	2	1	126,490		22							1,074,038	89
SISQUOC AREA - - - - -	06		337	25	29	2,455,141		20		1,447,733	1,447,733		589		6,847,089	74
TINAQUAIC AREA - - - - -																
MONTEREY - - - - -	06		4	2		7,858		5		9	9		1		8,825	53
WEST AREA - - - - -			148	52	69	907,934				1,562,877	1,562,877				15,195,842	
	06		148	52	69	907,934		18		1,562,877	1,562,877		1,721		15,195,842	94
CATLETT GAS - - - - -	181															
STARKEY - - - - -	06				2							8		500		
CHAFFEE CANYON - - - - -	111					16,895	17		183	104,285	104,285	115		1,896	15,124	
Eocene - - - - -	06		1			16,895	17			104,285	104,285	104	6,172	1,896	15,124	47
GAS ZONE (ABD) - - - - -	06											11				
CHARLEY CANYON (ABD) - - - - -	037	06										0				
CHENEY RANCH GAS - - - - -	019															
U. CRETACEOUS - - - - -	06		4	1		3,092	113	2		134,661		2,785		1,264	27,467	
CHEVIDOT HILLS - - - - -	037	06	25	19	25	137,605	24,617	15	4,743	250,360	250,360	138,694	1,819	9,236	111,662	45
PLIOCENE - - - - -	06		2		1	10,419	786	14		6,734	6,734	652	646	392	58,376	85
MIOCENE - - - - -	06		22	19	25	127,186	23,911	16		243,626	243,626	138,042	1,915	8,844	53,286	30
CHICO GAS (ABD) - - - - -	087	06										1,542				
CHICO-MARTINEZ - - - - -	029	06	58	2	17	10,563	383	1	NM	124	124	N	11	0	130,518	93
CHINO-SOQUEL - - - - -	071	06	8	3		3,088	309	1	NM			349		5	857	22
CHOMCHILLA GAS - - - - -		06	9	1	3					643,177	643,177	24,953		10,203	26	
	039		8	1	2					606,599	606,599					
	047		1	1	1					36,578	36,578				26	
ZILCH UPPER SANDS - - - - -	06		6	1	1					36,578		1,727		1,830	26	
ZILCH 1-20 SANDS - - - - -	06				1							2,251		0		
CRETACEOUS - - - - -	06		2	1	2					606,599		20,975		8,372		
CIENAGA CANYON - - - - -	029															
TEMBLOR - - - - -	06		2		1	10,917	23	15	† 123	234	234	1	21		8,992	45
CLARKSBURG GAS - - - - -	113															
	06		1	1						41,177		2,691		179	25	
POLLOCK - - - - -	06		1	1						41,177		2,571		179	25	
FORBES - - - - -	06											120		0		
COLLEGEVILLE, EAST, GAS - - - - -	077															
FORBES - - - - -	06				1							0		N.A.		
COALINGA - - - - -	019	06	2,062	253	760	7,627,248	673,838	10	† 110,557	280	280	225,860		3	48,129,971	86
COALINGA, EAST, EXTENSION - - - - -	019	06	87	66	28	2,224,319	485,717	70	9,760	22,650,296	2,237,381	306,979	10,183	† 70,000	11,290,894	84
COALINGA NOSE AREA - - - - -	06		87	66	28	2,224,319	449,657	70		22,650,296	2,237,381	195,563	10,183	† 70,000	11,290,894	84
VAQUEROS (ABD) - - - - -	06						86					62				
GATCHELL - - - - -	06		87	66	28	2,224,319	449,571	70		22,650,296	2,237,381	195,501	10,183	† 70,000	11,290,894	84
NORTHEAST AREA (ABD) - - - - -																
GATCHELL (ABD) - - - - -	06						36,060					111,416				

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Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbbl)	Cumulative oil and condensate (Mbbbl)	Daily production per well (bbbl)	Estimated oil reserves (12-31-80) (Mbbbl)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (m³/bbl)	Estimated gas reserves (12-31-80) (MMcf)	Water (bbbl)	% water
COAL OIL POINT OFFSHORE- - - - -	283						1,507		HH			5,270		361		
OLD AREA (ADD)- - - - -	00						1					18				
DEVEREAUX - - - - -	00			2			1,306					3,252		361		
COLES LEEVEE, NORTH - - - - -	029		105	6	33	1,747,984	154,149		† 12,402	919,427	919,427	250,738		10,575	6,779,115	
GAS ZONE - - - - -	00		103	6	29	1,747,984	154,149	46		913,052	913,052	239,308	522	10,235	6,773,684	79
STEVENS (UNDIFFERENTIATED) -	00		1		4					6,375		11,430		340	5,431	
MIOCENE-EOCENE (ADD) - - - -	00		105	6	29	1,747,984	154,143	46		913,052	913,052	239,226	522	10,235	6,773,684	79
MIOCENE-EOCENE (ADD) - - - -	00						6					82				
COLES LEEVEE, SOUTH - - - - -	029		65	11	6	413,361	53,100		† 5,639	20,095,992	10,376,664	273,194		139,576	213,350	
GAS ZONE - - - - -	00			2	2							35,831		0		
STEVENS - - - - -	00		66	9	4	413,361	53,100	17		20,095,992	10,376,664	237,363	48,616	139,576	213,350	34
COMANCHE POINT - - - - -	029	00	12	6		5,307	219	1	HH			H		0	42,267	89
COMPTON LANDING GAS- - - - -	011	00	1	1						30,470		8,264		† 704		
COMPTON LANDING, SOUTH, GAS- - -	011	00	2							114,739		343		2,294	1	
KIONE- - - - -	00		1							90,848		319		1,818		
FORBES - - - - -	00		1							23,891		24		476	1	
CONCEPTION OFFSHORE- - - - -	283	00		21			20,933		0			12,326		0		
CONCORD GAS (ADD)- - - - -	013	00										3,069				
CONEJO (ADD) - - - - -	111	00					110					12				
CONWAY RANCH GAS - - - - -	113	00	11	8	15					2,172,154		18,836		11,133	2,222	
CORNING GAS- - - - -	103	00	1		1					9,235		8,169		61	991	
CORNING, SOUTH, GAS (ADD)- - - -	103	00										1,257				
COYOTE, EAST - - - - -	059	00	135	39	18	802,807	103,369	16	6,959	221,285	221,285	56,911	275	3,032	4,411,408	85
COYOTE, WEST - - - - -	00		138	2	150	1,234,517	† 242,092		7,930	220,129	220,129	267,648		1,258	46,836,061	97
037 - - - - -	00		19		21	272,558				74,219	74,219				10,638,776	
059 - - - - -	00		119	2	129	961,959				145,910	145,910				36,197,285	
CRISTIANITOS CREEK (ADD) - - - - -	059	00					3					10				
CROSSROADS GAS - - - - -	113	00	7		4					2,002,240		7,072		4,628	9,554	
STARKEY- - - - -	00		4		2					1,014,349		3,526		2,674	8,726	
WINTERS- - - - -	00		3		5					987,891		3,546		1,954	828	
CUARTA OFFSHORE- - - - -	283			13			614		0			18,767		0		
00 - - - - -	00			11			613					6,765		0		
00 - - - - -	00			2			1					12,002		0		
NO POOL BREAKDOWN- - - - -	00			11			613					6,765		0		
GAS ZONE - - - - -	00			2			1					12,002		0		
CUYAMA, CENTRAL (ADD)- - - - -	083	00					33					12				
CUYAMA, SOUTH- - - - -	083		136	13	71	483,155	213,527		2,453	959,057	437,955	† 220,431		4,874	8,081,303	
00 - - - - -	00		136	13	69	483,155	213,527	10		959,057	437,955	† 219,910	1,984	4,874	8,081,303	94
00 - - - - -	00			2								521		0		
MAIN AREA - - - - -	00		136	12	71	483,155	213,376			959,057	437,955	220,369		4,874	8,081,303	
00 - - - - -	00		136	12	69	483,155	213,376	10		959,057	437,955	219,848	1,984	4,874	8,081,303	94
00 - - - - -	00			2								521		0		
NO POOL BREAKDOWN- - - - -	00		136	12	69	483,155	213,376	10		959,057	437,955	219,848	1,984	4,874	8,081,303	94
52-1-GAS ZONE- - - - -	00				2							521		0		
SOUTHEAST AREA- - - - -	00															
COX- - - - -	00			1			109					32		0		
EAST AREA (ADD) - - - - -	00						42					30				

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbbl)	Cumulative oil and condensate (Mbbbl)	Daily production per well (bbd)	Estimated oil reserves (Mbbbl) (12-31-80)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft ³ /bbbl)	Estimated gas reserves (MMcf) (12-31-80)	Water (bbbl)	% water
CYMRIC - - - - -	029	00	841	117	383	3,831,778	151,571	12	† 42,578	1,639,796	758,388	109,572	427	7,655	29,115,103	88
CYMRIC PLANK AREA - - - - -		00	4		1	19,772	1,710	14		26,467	26,467	6,068	1,338	437	46,899	70
CARNEROS - - - - -		00	4		1	19,772	1,705	14		26,467	26,467	6,061	1,338	437	46,899	70
PHACOIDES (ADD) - - - - -		00						4				7				
MCKITTRICK FRONT AREA - - - - -		00	267	22	174	1,434,271	43,477	15		312,041	312,041	16,317	217	1,888	13,262,925	90
TULARE (UNDIFFERENTIATED) - - - - -		00	257	15	168	1,331,756	31,935	14		25,124	25,124	2,313	18	106	11,723,972	90
TULARE (AMINICOLA) - - - - -		00	1			31,508	32	86				0		0	469,185	94
REEF RIDGE - - - - -		00	3	7	1	29,077	6,975	16		9,438	9,438	2,408	324	122	261,929	90
CARNEROS - - - - -		00	2			16,981	1,126	23		152,854	152,854	2,107	9,001	952	660,256	97
PHACOIDES - - - - -		00	2		5	24,255	3,049	33		49,517	49,517	4,685	2,041	170	130,289	84
OCEANIC - - - - -		00	1		1	694	360	2		75,108	75,108	4,723	108,224	938	17,294	96
1-Y AREA - - - - -																
REEF RIDGE - - - - -		00	14		5	22,179	345	4		109,225	109,225	3,086	4,924	753	518,866	96
SALT CREEK MAIN AREA - - - - -		00	66	3	22	228,676	27,680	9		992,423	103,015	5,305	4,339	3,402	461,003	67
ETCHEGOIN - - - - -		00	6		1	1,287	88	1				21		0	12,621	91
CARNEROS WEST - - - - -		00	11		2	26,910	2,118	7		15,307	15,307	1,397	568	64	114,229	81
CARNEROS UNIT - - - - -		00	47	2	19	192,383	24,614	11		976,009	86,601	3,733	5,073	3,333	220,193	53
PHACOIDES - - - - -		00	3		1	8,096	861	7		1,107	1,107	154	136	5	113,968	93
SALT CREEK WEST AREA - - - - -																
PHACOIDES - - - - -		00	4	5		1,981	235	1				0		0	11	1
SHEEP SPRINGS AREA - - - - -		00	89	18	17	70,709	5,880	2		26,477	26,477	6,132	374	213	323,254	82
TULARE - - - - -		00	6		2	9,798	14	4							23,829	70
ETCHEGOIN - - - - -		00	76	11	12	30,361	3,523	2		25,581	25,581	1,856	507	144	259,764	84
CARNEROS - - - - -		00	4	5		4,595	1,390	3		190	190	332	41	12	16,836	75
PHACOIDES - - - - -		00	1		1	2,374	135	6		78	78	49	32	3	10,334	81
OCEANIC - - - - -		00	3	1	2	3,581	819	3		628	628	3,096	175	53	16,891	82
WELPORT AREA - - - - -		00	397	69	164	2,054,190	72,243	14		173,163	173,163	69,864	84	960	14,502,145	88
TULARE - - - - -		00	323	58	127	1,786,983	40,087	15		25,501	25,501	1,555	14	205	12,748,576	88
ETCHEGOIN - - - - -		00	41	2	14	213,933	2,811	14		90,246	90,246	3,033	421	267	1,003,932	82
CARNEROS - - - - -		00	9	2	7	20,350	2,956	4		20,087	20,087	3,170	977	87	244,479	92
AGUA - - - - -		00	3	1	3	2,506	373	2		3,658	3,658	341	1,459	11	73,829	97
PHACOIDES - - - - -		00	2		4	1,607	2,142	2		10,352	10,352	2,321	6,441	43	36,210	96
OCEANIC - - - - -		00	11	2	11	16,066	21,844	4		10,346	10,346	34,910	643	81	305,580	95
POINT OF ROCKS - - - - -		00	9	3		12,545	2,031	4		12,973	12,973	24,533	1,034	266	89,539	88
DAVIS SOUTHEAST GAS - - - - -	095	00		2								1,930		55		
DEER CREEK - - - - -	107	00	54	13		80,837	† 1,422	4	† 357	2	2	0		00	3,384,795	98
DEER CREEK, NORTH - - - - -	107	00	5			2,915	8	2	00			0		0	202,300	99
DEL VALLE - - - - -	037		30	23	22	84,103	25,426		468	184,459	184,459	† 91,692		612	486,252	
		00	27	19	17	84,047	25,426	9		143,478	143,478	76,529	1,707	401	444,529	84
		00	3	5	5	56	*			40,981		15,163		211	41,723	
KINLER AREA (ADD) - - - - -		00					237					103				
MAIN AREA - - - - -			30	24	22	76,613	25,063			184,459	184,459	91,438		612	486,009	
		00	27	19	17	76,557	25,063	8		143,478	143,478	76,275	1,874	401	444,286	85
		00	3	5	5	56	*			40,981		15,163		211	41,723	
SOUTH AREA - - - - -		00	1			7,490	127					150		0	243	3
DENVERTON GAS (ADD) - - - - -	095	00										232				
DENVERTON CREEK GAS - - - - -	095	00	1			1,830	6	3		292,704		1,234		1,478	369	
DEVILS DEN - - - - -	029	00	92	31	40	47,296	3,351	1	† 395	14,704	14,704	4,508	310	33	542,016	92
ALFERITZ AREA - - - - -		00	34	1	28	36,510	2,803	3		14,704	14,704	4,508	402	33	459,993	93
BATES AREA - - - - -		00	13	9		4,759	341	1				*		0	821	15
OLD AREA - - - - -		00	45	21	12	6,027	208					0		0	81,202	93

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbd)	Cumulative oil and condensate (Mbbbl)	Daily production per well (bbd)	Estimated oil reserves (Mbbbl) (12-31-80)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft ³ /bbl)	Estimated gas reserves (MMcf) (12-31-80)	Water (bbl)	% water
DIXON GAS (ABD) - - - - -	095	DG										637				
DIXON, EAST, GAS - - - - -	095	DG			1							0		† 300		
DOMINGUEZ - - - - -	037	OG	122	57	6	740,135	263,969	17	9,577	518,978	518,978	380,494	701	3,900	9,425,732	93
DRY SLOUGH GAS - - - - -	113	DG	2							15,406		274		† 490	2	
EAST AREA - - - - -																
WINTERS - - - - -	DG		1							10,116		10		490		
WEST AREA - - - - -																
WINTERS - - - - -	DG		1							5,290		264		† 0	2	
DUDLEY RIDGE GAS (ABD) - - - - -	031	DG										4,866				
DUFOR GAS - - - - -	113	DG	1		1					306,472		938		† 862	7	
DUNHIGAN HILLS GAS - - - - -	113	DG		1	1			1				10,372		0		
DURHAM GAS - - - - -	007	DG	3		1					684,657		31,317		2,705	27	
DUTCH SLOUGH GAS - - - - -	013	DG	12	16	1	1,057	201			1,306,519		109,925		15,069	3,337	
DYER CREEK (ABD) - - - - -	029	OG					35					0				
EDISON - - - - -	029	OG	741	103	160	1,622,367	122,440	6	† 13,102	344,425	344,425	67,932	212	708	12,390,120	88
EDISON GROVES AREA - - - - -	OG		118	5	33	108,579	3,027	3		7,050	7,050	254	64	33	3,995,140	97
JEPPI AREA - - - - -	OG		17	1	21	77,863	5,941	13		17,922	17,922	11,561	230	162	246,716	76
MAIN AREA - - - - -	OG		326	39	29	882,108	71,211	7		170,829	170,829	12,882	193	19	3,061,902	78
PORTALS-FAIRFAX AREA - - - - -	OG		41	2	13	68,471	4,068	5		52	52	425		5	41,532	38
RACE TRACK HILL AREA - - - - -	OG		153	19	36	374,154	18,589	7		97,610	97,610	37,374	260	426	4,669,853	93
WEST AREA - - - - -	OG		86	39	27	111,192	19,603	4		50,962	50,962	5,436	458	63	374,977	77
CHANAC-JEWETT - - - - -	OG		73	31	23	90,583	18,080	3		39,886	39,886	1,666	440	34	320,421	78
PYRAMID HILL-VEDDER - - - - -	OG		13	7	4	20,609	1,523	4		11,076	11,076	3,771	537	29	54,556	73
EDISON, NORTHEAST - - - - -	029															
CHANAC - - - - -	OG		13		1	14,343	78	3	† 109			0		0	41,448	74
ELIZABETH CANYON (ABD) - - - - -	037	OG					1					2				
ELK HILLS ^{d/} - - - - -	029		1,117	64	552	58,885,139	498,619		† 929,754	81,713,103	27,344,997	332,611		1,187,949	13,582,292	
	OG		1,093	63	544	58,885,139	498,619	148		80,372,614	26,160,078	233,442	1,365	967,619	13,582,292	19
	DG		22	1	5					1,184,919	5,392	99,169		220,330		
	GS		2		3					155,570						
TULARE - - - - -	OG				7		1					0		0		
GAS ZONE - - - - -	DG		22	1	5					1,184,919	-5,392	99,169		220,330		
	GS		2		3					155,570						
UPPER (UNDIFFERENTIATED) - - - - -	OG		741	52	343	15,278,118	351,410	56		6,663,269	6,663,269	181,880	436	148,264	8,828,400	37
STEVENS - - - - -	OG		328	10	136	41,161,408	142,760	344		70,564,394	16,351,858	46,589	1,714	677,641	4,712,961	10
STEVENS-NORTHWEST ^{d/} - - - - -	OG		21		45	2,359,591	4,328	309		1,684,453	1,684,453	2,943	714	50,727	39,739	2
CARNEROS - - - - -	OG		3		7	56,922	117	51		1,460,498	1,460,498	2,008	26,070	90,987	1,191	2
AGUA - - - - -	OG				1		3					21		0		
POINT OF ROCKS - - - - -	OG				1							0		0		
EL RIO - - - - -	111	OG	1			6,313	351	17	MM	3,168	3,168	183	501	12	31,463	83
EL SEGUNDO - - - - -	037		11		1	36,601	13,874		290	11,414	11,414	† 34,551		174	851,032	
	OG		6		1	36,601	13,874	17		11,414	11,414	11,595	311	174	851,032	96
	DG									d/ 166,091	d/ -107,768	22,956				
	LG		5													
ELWOOD - - - - -	283		8	16		58,883	103,637		241	254,751	254,751	97,297		† 510	869,609	
OFFSHORE - - - - -	OG		8	16		58,883	76,763	20		254,751	254,751	66,785	2,288		869,609	94
ONSHORE (ABD) - - - - -	083	OG					26,874					30,512				
ELWOOD, SOUTH, OFFSHORE - - - - -	283	OG	21		6	2,181,456	17,284	285	12,925	1,268,900	262,795	7,730	582	13,806	171,437	7

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
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ENGLISH COLONY - - - - -	829															
STEVENS - - - - -	00		3			8,979	1,284	8	† 143	19,828	19,828	4,198	2,210	95	13,880	61
ESPERANZA - - - - -	859	00	12		1	19,122	986	4	132	876	876	679	45	5	6,100	24
EUREKA CANYON - - - - -	111	00	16	3	6	19,279	649	3	106			60		15	49,486	72
FAIRFIELD KNOLLS GAS - - - - -	113	D0		2								2,599		48		
FILLMORE - - - - -	111	00	1			21,125	12,618		NN	12,631	12,631	19,656	597	N.A.	1,060	5
FIVE POINTS - - - - -	819															
EOCENE - - - - -	00		1			1,358	196	4	NN	2,335	2,335	382	1,719	98	738	35
FLORIN GAS - - - - -	867															
WINTERS - - - - -	D0		1							132,950		133		† 967		
FOUR DEER - - - - -	883															
MONTREY - - - - -	00		7		4	8,394	1,111	3	NN	35,382	35,382	2,496	6,597	304	22,348	
FREEPORT GAS (ADD) - - - - -	867	D0										2,647				
FREMONT LANDING GAS - - - - -	113															
MOSELUMNE RIVER - - - - -	D0			1								0		500		
FRENCH CAMP GAS - - - - -	877	D0	1	1						45,472		† 4,945		915	1	
FRUITVALE - - - - -	829	D0	414	40	27	1,804,622	188,388	7	† 13,079	507,592	507,592	38,155	505	1,294	11,501,153	92
CALLOWAY AREA - - - - -	00		15	1	2	41,968	1,872	8		50,072	50,072	817	1,193	134	1,898,589	98
GREENACRES AREA (ADD) - - - - -	00						39					0				
MAIN AREA - - - - -	00		398	39	25	962,654	106,398	7		457,520	457,520	37,339	475	1,160	9,602,564	91
GAFFEY (ADD) - - - - -	837	00					10					0				
GALT GAS - - - - -	877	D0		1								3,061		350		
GARRISON CITY GAS (ADD) - - - - -	829	D0										2,622				
GAZIOTA OFFSHORE GAS - - - - -	283															
Vaqueros-Sespe - - - - -	D0		1		2					2,160		69,938		† 2	83,347	
GILL RANCH GAS - - - - -	839	D0														
EOCENE & CRETACEOUS - - - - -	D0		7	11	1					536,805		61,329		1,919	41,756	
GLEN ANNIE GAS (ADD) - - - - -	883	D0										491				
GOLETA (ADD) - - - - -	883	00					136					56				
GONYER ANTICLINE (ADD) - - - - -	829	00					3					4				
GOOSLOO - - - - -	829															
STEVENS - - - - -	00		5			13,475	223	7	NN	27,632	27,632	399	2,020	54	191,086	93
GRAND ISLAND GAS - - - - -	867	D0	1	2	3					85,448		1,373		327	8,367	
GRAYS BEND GAS - - - - -	113															
WINTERS - - - - -	D0			1								0		N.A.		
GREELEY - - - - -	829	D0	38	7	41	287,463	118,645	21	† 1,349	415,020	415,020	181,226	1,444	5,752	2,787,412	91
STEVENS (UNDIFFERENTIATED) - - - - -	00		12	3	4	182,348	8,644	23		77,654	77,654	18,879	759	119	178,529	64
OLCESE 12-21 - - - - -	00		5	3	7	59,145	6,104	32		55,561	55,561	901	465	5,073	9,515	14
RIO BRAVO-VEDDER - - - - -	00		9	1	30	125,970	95,895	38		281,805	281,805	81,447	3,697	559	2,493,187	95
GREENS LAKE GAS (ADD) - - - - -	113	D0										338				
GREENHOOD GAS - - - - -	821															
EOCENE - - - - -	D0		1		1					33,212		40		† 67		

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Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
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GREENWOOD, SOUTH GAS - - - - -	821															
EOCENE - - - - -	DG		1		1					174,853		202		† 325		
GRIMES GAS - - - - -	DG		60	4	18					8,196,885		381,395		† 104,532	189,541	
	011		11	3	11					1,001,058					9,282	
	101		50	1	7					7,195,835					100,259	
GRIMES, WEST, GAS - - - - -	011	DG	17		1					880,634		44,148		† 3,785	1,547	
GUADALUPE - - - - -	06		134	18	18	1,159,401	29,893	24	13,908	527,816	527,816	18,687	455	4,869	1,603,029	
	079		130	18	18	1,145,391				527,816	527,816				1,601,250	
	083		4			16,010									1,779	
GUIJARRAL HILLS - - - - -	019	OG	7	32	41	35,854	49,595	14	223	30,913	30,913	76,549	862	574	145,347	88
MAIN AREA - - - - -	OG		5	8	36	22,078	42,628	12		13,223	13,223	66,813	598	402	144,245	87
SMITH - - - - -	OG			3	3		1,179					950		39		
ALLISON - - - - -	OG		3		4	9,971	4,288	9		10,064	10,064	5,631	1,809	100	77,026	89
LEDA - - - - -	OG		1		14	10,518	23,285	29		3,159	3,159	32,290	300	111	58,690	85
LEDA, NORTH - - - - -	OG			2	1		9,488					22,214		29		
DESSEL - - - - -	OG				2		410					366		4		
GATCHELL - - - - -	OG		1	3	12	1,589	3,985	4				5,382		119	8,529	84
NORTHWEST AREA (ABD) - - - - -	OG						291					383				
POLVADERO AREA - - - - -	OG		2	24	2	13,776	5,923	19		17,690	17,690	8,809	1,284	166	1,102	7
SANGER - - - - -	OG			2	1		246					300		0		
BOURDIEU - - - - -	OG		2	22	1	13,776	5,677	19		17,690	17,690	8,508	1,284	166	1,102	7
WEST AREA - - - - -																
LEDA - - - - -	OG				2		752					544		6		
HALF MOON BAY - - - - -	081	OG	1	1	1	785	43	2	NN	9	9	20	12	0	53	7
HAMFORD (ABD) - - - - -	031	OG					4									
HARLAN RANCH GAS - - - - -	113	DG			1							0		N.A.		
HARTE GAS - - - - -	077	DG	2							234,198		1,067		983		
MOSELUMME RIVER - - - - -	DG		2							234,198		1,045		955		
STARKEY - - - - -	DG											22		28		
HARVESTER GAS - - - - -	031	DG		1								8,961		20		
FIRST MYA - - - - -	DG			1								1,408		20		
ATWELL ISLAND (ABD) - - - - -	DG											7,533				
HASLEY CANYON - - - - -	037	OG	7			74,355	335	29	543	10,580	10,580	23	142	55	33,495	31
HELM - - - - -	019	OG	35	23	8	150,391	30,220	12	668	75,183	75,183	77,666	499	375	4,693,633	97
MIOCENE - - - - -	OG		25	15	8	107,660	19,618	12		57,281	57,281	18,937	532	156	4,478,222	98
EOCENE & CRETACEOUS - - - - -	OG		10	9		42,731	10,602	12		17,902	17,902	58,729	418	220	215,411	83
HOLLISTER - - - - -	069			9	1		9		NN			7,560		240		
	OG			2			9									
	DG			7	1							7,560		240		
FLINT HILLS AREA - - - - -				9	1		2					7,560		240		
	OG			2			2									
	DG			7	1							7,560		240		
LOMERIAS AREA (ABD) - - - - -	OG						6					0				
HOLSER - - - - -	111	OG	13	2	1	42,725	867	9	337	48,045	48,045	389	1,124	428	41,224	49
HONKER GAS (ABD) - - - - -	095	DG										301				
HONOR RANCHO - - - - -	037		33	2	25	314,182	5/ 27,424		1,684	67,175	67,175	40,182		321	430,797	
	OG		25	4	30	314,182	5/ 27,424	34		67,175	76,175	40,182	214	321	352,102	53
	OS		12		28					13,116,558	-8,066,356				78,695	

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbd)	Cumulative oil and condensate (Mbbd)	Daily production per well (bbl)	Estimated oil reserves (Mbbd) (12-31-80)	Gross gas (Mcft)	Net gas (Mcft)	Cumulative gas (MMcft)	Gross gas-oil ratio (ft ³ /bbl)	Estimated gas reserves (MMcft) (12-31-80)	Water (bbl)	% water
MAIN AREA - - - - -	00		18	2	9	84,549	10,727	23		67,175	67,175	11,679	794	321	352,102	81
GABRIEL - - - - -	00		2	1	1	2,559	287	3		9,132	9,132	973	3,568	85	424	14
RANCHO - - - - -	00		2	1	5	5,724	1,454	8		28,452	28,452	3,976	4,978	193	8,547	68
MAYSIDE - - - - -	00		4		3	76,266	8,786	35		29,591	29,591	4,738	387	43	343,131	82
SOUTHEAST AREA - - - - -			27	2	48	229,633	± 16,697			13,132,879	-8,048,035	28,502			78,695	
MAYSIDE 13 - - - - -	00		15	2	21	229,633	± 16,697	42		13,132,879	-8,048,035	28,502			78,695	
	05		12		28											
HOPPER CANYON - - - - -	111	00	11		15	43,425	2,768	11	121	100,105	100,105	3,381	2,305	87	231,851	84
MAIN AREA - - - - -	00		11		15	43,425	2,668	11		100,105	100,105	3,381	2,305	87	231,851	84
NORTH AREA (ABD) - - - - -	00						100					0				
HORSE MEADOWS (ABD) - - - - -	837	00					137					87				
HOSPITAL ROSE GAS (ABD) - - - - -	881	00										14				
HOWARD TOWNSITE - - - - -	837	00	17	3	2	56,169	5,391	9	681	289,018	289,018	25,263	5,145	1,737	198,659	77
HOWELLS POINT GAS - - - - -	113	00			1							0		N.A.		
HUASNA - - - - -	879	00		5			31		0			0		0		
LA VOIE-HADLEY AREA - - - - -												0		0		
SANTA MARGARITA - - - - -	00			5			28					0		0		
TAR SPRINGS AREA (ABD) - - - - -	00						11					0				
HUNTINGTON BEACH - - - - -	00		996	96	539	10,249,636	1,000,966		83,174	2,379,815	2,379,815	800,588	242	18,532	111,204,424	
OFFSHORE - - - - -	259	00	278	3	190	7,936,132	491,677	80	67,688	1,804,934	1,804,934	294,374	127	9,958	83,691,219	91
ONSHORE - - - - -	859	00	718	93	349	2,313,504	509,389	9	15,486	1,374,881	1,374,881	586,214	594	8,562	27,513,205	92
HYPERION - - - - -	837	00	1			8,312	568	23	NH	1,005	1,005	189	128	11	485	6
INGLEWOOD - - - - -	837	00	458	48	214	3,776,763	318,512	23	44,523	1,742,519	1,742,519	248,007	461	21,557	65,786,302	93
JACALITOS - - - - -	819															
TEMBLOR - - - - -	00		37	14	88	76,156	21,647	6	363	65,055	65,055	25,669	854	1,376	161,208	68
JASMIN - - - - -	829	00	47	18	7	146,549	2,441	9	† 1,438	1,007	1,007	4	6	NH	2,896,877	95
CANTLEBERRY - - - - -	00		47	18	7	146,549	2,448	9		1,007	1,007	4	6	NH	2,896,877	95
PYRAMID HILL (ABD) - - - - -	00						1					0				
JASMIN, WEST - - - - -	829															
FAMOSO - - - - -	00		2	2		927	67	1	NH	48	48	N	51	NH	2,008	68
JERRY SLOUGH - - - - -	829	00	1			1,164	129	3	NH	4,528	4,528	244	3,898	22	1,244	92
JESUS MARIA - - - - -	883															
MONTEREY - - - - -	00			6			148		0			3		0		
KARNAK GAS - - - - -	181															
STARKEY - - - - -	00				2							0		1,508		
KERN BLUFF - - - - -	829															
MIOCENE - - - - -	00		131	14	20	152,768	10,513	3	† 1,804			0		0	5,329,361	97
KERN FRONT - - - - -	829	00	1,062	30	304	2,463,586	154,443	6	† 32,500	612,483	612,483	18,353	248	2,647	38,428,961	94
KERN RIVER - - - - -	829															
KERN RIVER - - - - -	00		5,839	232	978	36,824,920	828,760	20	1,117,817	42,344	42,344	2,684	1	N.A.	282,534,048	85
KERN SUMMER (ABD) - - - - -	829	00					8					3				
KETTLEMAN CITY - - - - -	831	00	2	4		28,180	180	38	NH	146,515	146,515	485	5,199	458	56,263	67
KETTLEMAN MIDDLE DOVE - - - - -	831	00	2	1		3,125	1,339	4	NH	5,797	5,797	23,977		4	1,487	
ETCHEGOIN-JACALITOS (ABD) - - - - -	00						3					0				

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbbl)	Cumulative oil and condensate (Mbbbl)	Daily production per well (bbd)	Estimated oil reserves (Mbbbl) (12-31-80)	Gross gas (Mcft)	Net gas (Mcft)	Cumulative gas (MMcft)	Gross gas-oil ratio (ft³/bbl)	Estimated gas reserves (MMcft) (12-31-80)	Water (bbbl)	% water
TEMLOR (ABD) - - - - -	00						550					19,419				
KREYENHAGEN - - - - -	00		2	1		3,125	421	4		5,797	5,797	690	1,855	4	1,407	31
Eocene-McADAMS (ABD) - - - - -	00						365					3,868				
KETTLEMAN NORTH DOME - - - - -	00		73	15	329	333,657	454,920		1,319	5,968,580	5,968,580	2,982,462		48,576	1,978,476	86
	019		30	5	160	172,064				2,197,546	2,197,546				1,417,159	
	031		44	10	168	161,593				3,771,034	3,771,034				561,321	
TEMLOR - - - - -	00		52	12	249	187,325	404,535	10		2,558,308	2,558,308	1,787,762	13,457	23,496	1,823,416	91
WHEPLEY - - - - -	00		1			32,976	114	90		35,329	35,329	113	1,071	232		
VAQUEROS - - - - -	00		10	1	46	70,548	26,404	19		45,448	45,448	48,515	644	132	121,514	43
KREYENHAGEN - - - - -	00		1			1,413	34	4				3		7	18,420	93
UPPER MCADAMS - - - - -	00		4	1	23	1,764	14,941	1		3,078,382	3,078,382	1,848,691	745,114	23,493	10,125	85
LOWER MCADAMS - - - - -	00		7	1	16	39,431	8,891	15		251,113	251,113	17,378	6,336	1,017	5,203	12
KING CITY - - - - -	053	00	20	2		32,790	1,818	4	182			62			5,225,481	99
3-1-32 AREA - - - - -																
THORUP - - - - -	00							2				0			0	
DOUD AREA - - - - -																
THORUP - - - - -	00		20	2		32,790	1,710	4				62			5,225,481	99
KENT-BASHAM AREA - - - - -																
THORUP - - - - -	00						106					0			0	
KIRBY HILL GAS - - - - -	095	DG	5	3	8					86,747		53,555		1,950	42	
	DG		2	3	8					86,747		53,555		1,950	41	
	GS		3							259,898	259,898				1	
MAIN AREA - - - - -			5	3	7					86,747		53,555		† 150	42	
	DG		2	3	7					86,747		53,555		† 150	41	
	GS		3							259,898	259,898				1	
DOMENGINE - - - - -	DG		3							259,898	259,898	13,908		0	1	
	GS		3													
OTHER - - - - -	DG		2	3	7					86,747		39,647		† 150	41	
NORTH AREA - - - - -																
DOMENGINE - - - - -	DG				1							0		1,800		
KIRBY HILL, NORTH, GAS (ABD) - - - - -	095	DG										187				
KIRK GAS - - - - -	011	DG	5							78,367		5,542		570	2,228	
KIRKWOOD GAS - - - - -	103	DG	3		6					267,068		10,944		958	3,771	
KNIGHTSEN GAS - - - - -	013															
MOKELUMNE RIVER - - - - -	DG				1							0		N.A.		
KRAEMER - - - - -	059	00	20		1	39,984	3,588	5	278	141	141	1,077	3	131	1,416,145	97
KRAEMER, NORTHEAST (ABD) - - - - -	059	00										0				
KRAEMER, WEST (ABD) - - - - -	059	00					10					0				
KREYENHAGEN - - - - -	019															
TEMLOR - - - - -	00		9	10		2,437	21	1	NN			0		0	3,922	60
LA GOLETA GAS - - - - -	083		10	1	7							47,293		0	4,792	
VAQUEROS - - - - -	DG		10	1	7					12,442,370	-335,407	47,293			4,792	
LA HONDA - - - - -	081	00	10	7	2	14,113	1,247	4	NN	208	208	137	14	10	140,220	91
MAIN AREA - - - - -	00		4	3	2	2,896	779	2		208	208	98	71	5	28,960	91
SOUTH AREA - - - - -	00		6	4		11,217	468	5				39		5	111,260	91
LA MIRADA (ABD) - - - - -	037	00					25					10				
LAKESIDE - - - - -	029															
STEVENS - - - - -	00		2			3,153	154	4	NN			201		6	6,924	69

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbt)	Cumulative oil and condensate (Mbbt)	Daily production per well (bbt)	Estimated oil reserves (12-31-80) (Mbbt)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft ³ /bbt)	Estimated gas reserves (MMcf) (12-31-80)	Water (bbt)	% water
LAKEVIEW, SOUTH (ABD) - - - - -	829	OG					3					2				
LAPWORTH (ABD) - - - - -	837	OG					55					H				
LARKIN, WEST, GAS - - - - -	821	DG										3		0		
LAS CIENEGAS - - - - -	837	OG	75	14	2	1,114,971	50,581	41	8,895	1,599,913	717,413	44,500	1,434	7,809	5,426,687	83
FOURTH AVENUE AREA - - - - -	OG		6	2		71,988	8,852	33		29,425	29,425	5,810	408	1,179	1,471,099	95
GOOD SHEPHERD AREA - - - - -	OG		1			41,782	2,776	114		31,808	31,808	2,823	761	889	764,614	95
JEFFERSON AREA - - - - -	OG		31	9	1	449,457	18,014	40		371,198	371,198	17,550	825	1,956	1,779,238	80
MURPHY AREA - - - - -	OG		27		1	487,951	16,492	49		1,102,787	220,287	10,876	2,260	2,466	679,659	58
PACIFIC ELECTRIC AREA - - - - -	OG		11	2		63,593	4,247	16		64,695	64,695	7,441	1,017	1,317	732,077	92
LAS LLAJAS - - - - -	837	OG	2			2,591	69	4	NH	1,983	1,983	29	765	† 10	1,776	41
LAS POSAS - - - - -	111	OG	1			1,963	16	5	NH			0		0	4,871	71
LAS VARAS CANYON (ABD) - - - - -	883	DG					5					287				
	DG						5					275				
	DG											12				
LATHROP GAS - - - - -	877	DG	21	4	1					5,498,544		295,008		58,286	47,417	
LATHROP, SOUTHEAST, GAS (ABD) - - - - -	877	DG										98				
LAWDALE - - - - -	837	OG	1		1	10,485	3,668	29	107	6,023	6,023	6,657	574	8	316,513	97
UPPER (ABD) - - - - -	OG						1,624					2,008				
SCHIST CONGLOMERATE - - - - -	OG		1		1	10,485	2,043	29		6,023	6,023	4,649	574	N.A.	316,513	97
LEFFINGWELL (ABD) - - - - -	837	OG					763					2,460				
LIBERTY CUT GAS (ABD) - - - - -	895	DG										179		0		
LIBERTY ISLAND GAS - - - - -	895	DG			1		1					27,436		† 0		
LINDSEY SLOUGH GAS - - - - -	895	DG	22	6	7	42,625	681	5		7,402,505		134,741		59,845	66,018	
LIVERMORE - - - - -	881	OG	6			43,865	1,368		231			0		0	69,573	62
LLANO SECO GAS - - - - -	887	DG	2	8						34,997		5,797		782		
LODI GAS (ABD) - - - - -	877	DG										23,204				
LODI AIRPORT GAS (ABD) - - - - -	877	DG										10				
LOMPOC - - - - -	883															
MONTEREY - - - - -	OG		88	16	25	218,766	42,165	7	2,835	500,480	500,480	44,529	2,287	5,291	13,422,889	98
LOME TREE CREEK GAS - - - - -	877	DG			1							0		N.A.		
LONG BEACH - - - - -	837	OG	479	104	108	3,298,061	883,335		44,672	795,256	795,256	1,078,016	244	10,562	47,038,547	94
NORTHWEST EXTENSION AREA - - - - -	OG		9		8	32,122	7,536			23,991	23,991	4,244	746	226	156,650	83
OLD AREA - - - - -	OG		463	104	100	3,212,401	876,739	19		674,225	674,225	1,071,536	213	8,877	46,841,108	94
HARDLOW - - - - -	OG		9	1		20,442	3,417	6		57,275	57,275	9,760	2,771	1,251	29,724	59
OTHERS - - - - -	OG		454	103	100	3,191,739	873,323	19		616,950	616,950	1,061,777	196	7,626	46,811,384	94
RECREATION PARK AREA - - - - -	OG		8			53,538	1,260	18		97,040	97,040	2,235	1,812	1,460	40,789	43
LONG BEACH AIRPORT - - - - -	837															
DEEP - - - - -	OG		18	5	8	59,227	10,305	9	412	85,638	85,638	33,313	1,445	770	371,675	86
LONG CANYON - - - - -	111	OG		1			17					39		0		
LOPEZ CANYON (ABD) - - - - -	879	OG					2					0				
LOS ALAMOS (ABD) - - - - -	883	OG					4					0				

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbt)	Cumulative oil and condensate (Mbbt)	Daily production per well (bbl)	Estimated oil reserves (12-31-80) (Mbbt)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft ³ /bbl)	Estimated gas reserves (12-31-80) (MMcf)	Water (bbl)	% water
LOS ANGELES CITY - - - - -	937	00	51	3	1	52,554	22,229	3	445	136	136	1	3	HH	458,848	98
LOS ANGELES DOWNTOWN - - - - -	937		21		1	273,726	11,105		3,448	443,575	443,575	16,434		4,752	1,464,511	
	00		28		1	273,726	11,105	37		430,325	430,325	14,974	1,572	4,459	1,427,493	84
	00		1							13,258		1,468		294	37,818	
LOS ANGELES, EAST- - - - -	937	00	14	1		48,397	6,555	8	339	50,841	50,841	11,834	1,238	819	965,688	96
LOS LOBOS- - - - -	929		2	1	1	5,025	4,076		HH	884	884	2,232		† 26	11,858	
	00		2	1	1	5,025	4,076	7		884	884	2,232	175	6	11,858	69
	00													† 20		
ETCHEGOIN- - - - -	00		2	1	1	4,399	2,817	4		862	862	1,264	195	6	7,132	62
	00													† 20		
REEF RIDGE (ABD) - - - - -	00						1,258					968				
MONTEREY - - - - -	00		1			626	1			22	22	H	35	HH	3,926	86
LOS MEDANOS GAS- - - - -	913		1	1	13							31,937		0		
	00			1								31,937		0		
MAIN BLOCK-DOMENGINE - - - - -	00		1		13					8,239	-785,934			0		
	00									8,239	-785,934	27,507		0		
OTHER- - - - -	00			1								4,438		0		
LOS PADRES - - - - -	929	00	1			2,533	3		HH			2		0	2,956	95
LOST HILLS - - - - -	929		1,429	70	228	3,584,145	134,025		† 29,149	5,360,173	5,360,173	134,888	1,542	† 16,818	16,323,086	83
TULARE-ETCHEGOIN - - - - -	00		1,379	69	223	2,895,595	129,356	6		3,734,888	3,734,888	118,221	1,298	6,694	14,986,673	84
CANN - - - - -	00		50		4	688,550	4,665	38		1,625,293	1,625,293	16,644	2,368	† 10,122	1,336,413	66
CARNEROS - - - - -	00				1		5					15		2		
LOST HILLS, NORTHWEST- - - - -	929	00	2			2,958	159		HH			39		0	837	22
ETCHEGOIN- - - - -	00		2			2,958	128	4				9		0	837	22
ANTELOPE SHALE (ABD) - - - - -	00						30					30				
LYNCH CANYON - - - - -	953															
LANIGAN- - - - -	00				3		125		HH			0		0		
LYON CANYON- - - - -	937	00	3			5,279	291	5	111	1,431	1,431	323	271	30	1,688	24
MAHALA - - - - -	00		35	2		63,348	3,537		194	11,590	11,590	1,496		88	96,578	
	065		1			678									20	
	071		34	2		62,662				11,590	11,590				96,558	
ABACHERLI AREA- - - - -	00		13			12,420	1,186	3		1,140	1,140	461	91	4	3,398	21
MAHALA AREA - - - - -	00		3			4,126	145	4		1,125	1,125	75	272	9	3,375	45
MAHALA, WEST, AREA- - - - -	00		18	1		45,577	2,164	7		9,325	9,325	968	204	76	89,778	66
PRADO DAM AREA- - - - -	00		1	1		1,217	42	3				0		0	35	3
MAINE PRAIRIE GAS- - - - -	995	00	12	4	2	4,769	167	1		2,886,631		121,778		† 21,827	11,841	
MALTON-BLACK BUTTE GAS - - - - -		00	37	1	21					3,823,625		71,257		14,688	54,581	
	921		28	1	2					3,844,644					54,276	
	183		9		19					778,979					305	
MCCLUNG (ABD)- - - - -	929	00					146					182				
MCCOOL RANCH - - - - -	953															
LOMBARDI - - - - -	00		1	2	4	219	112	1	HH			0		0	2,199	91
MCDONALD ANTICLINE - - - - -	929	00	73	29	3	213,775	17,018	8	† 1,858	188,725	188,725	13,458	871	† 848	1,151,557	84
BACON HILLS - - - - -	00		5	1		1,416	176	1				889		0		
ANTELOPE - - - - -	00		5	1		1,416	14	1				0		0	1,777	56
OCEANIC (ABD)- - - - -	00						163					889				
LAYMAN AREA - - - - -	00		48	28	3	212,359	16,841	8		188,725	188,725	12,569	877	† 848	1,149,788	84

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbd)	Cumulative oil and condensate (Mbbd)	Daily production per well (bbl)	Estimated oil reserves (Mbbd) (12-31-80)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft³/bbl)	Estimated gas reserves (MMcf) (12-31-80)	Water (bbl)	% water
MCDONALD ISLAND GAS - - - - -	877	DG	9	1	66					13,337,797	-1,890,910	183,552		0	3	
MCKITTRICK - - - - -	829	DG	1,202	68	331	4,585,339	235,191	18	†39,325	2,186,957	2,186,957	185,941	476	13,834	28,813,672	82
		DG	1,202	68	331	4,585,339	235,191	18		2,186,957	2,186,957	182,681	476	13,834	28,813,672	82
												1,259		0		
MAIN AREA - - - - -		DG	807	38	225	2,557,598	176,958	9		210,706	210,706	31,839	82	1,222	9,359,447	79
UPPER - - - - -		DG	771	37	207	2,411,000	165,757	9		18,719	18,719	16,802	7	259	6,849,287	74
ANTELOPE SHALE - - - - -		DG	1			925	1	3				0		0	2,461	74
STEVENS - - - - -		DG	35	1	18	145,673	11,200	11		191,987	191,987	15,836	1,317	963	2,587,499	95
NORTHEAST AREA - - - - -		DG	395	38	106	2,827,741	58,234			1,976,251	1,976,251	152,102		12,612	11,454,225	
		DG	395	38	106	2,827,741	58,234	14		1,976,251	1,976,251	159,843	974	12,612	11,454,225	85
												1,259		0		
GAS ZONE - - - - -		DG														
UPPER - - - - -		DG	337	28	75	1,666,596	15,434	14		37,765	37,765	590	22	169	9,942,052	86
ANTELOPE SHALE - - - - -		DG	6		6	15,679	315	7		46,555	46,555	865	2,969	285	94,584	86
CARMEROS - - - - -		DG	12	1	5	32,586	2,462	7		278,838	278,838	22,674	8,311	1,326	638,146	95
PHACOIDES - - - - -		DG	39		16	284,788	34,736	20		1,367,537	1,367,537	86,764	4,801	8,236	742,279	72
OCEANIC - - - - -		DG	3	1	8	28,894	5,287	26		253,556	253,556	39,940	9,825	2,604	37,164	57
MCMULLIN RANCH GAS - - - - -	877	DG	12	4	7					178,373		68,928		†1,476	238	
BLEMETT 5 & TRACY - - - - -		DG	9	4	3					152,426		48,917		†1,375	189	
E ZONE - - - - -		DG	3		5					25,947		20,884		†101	49	
MERRITT GAS - - - - -	113	DG	1		2					65,504		760		1,950		
MERRITT ISLAND GAS - - - - -	113	DG										678		N.A.		
MESA (ABD) - - - - -	883	DG					3,725					8				
MAIN AREA - - - - -		DG					3,704					8				
PALISADES AREA - - - - -		DG					21					0				
MIDWAY-SUNSET - - - - -	00	DG	7,409	568	1,725	41,453,889	1,464,333	15	†426,324	2,926,910	2,911,779	528,834	70	23,902	103,264,811	71
	829	DG	7,371	567	1,712	41,339,978				2,862,122	2,846,991				102,557,156	
	879	DG	38	1	15	113,039				64,788	64,788				789,655	
MILLAR GAS - - - - -	DG	DG	38	14	8					6,996,274		87,178		†31,963	26,798	
	895	DG	21	11	7					5,942,224					22,924	
	113	DG	9	3	1					3,054,052					5,872	
MAIN AREA - - - - -	DG	DG	18	11	4					4,519,143		64,449		†17,794	12,609	
WEST AREA - - - - -	DG	DG	12	4	4					2,477,133		22,722		†14,169	16,189	
MISSION (ABD) - - - - -	837	DG					537					302				
FERNANDO - - - - -		DG					415					185				
MISSION - - - - -		DG					122					117				
MOFFAT RANCH GAS - - - - -	839	DG														
Eocene - - - - -	DG	DG	4	9	4					11,346		7,356		245	144	
MOLINO OFFSHORE GAS - - - - -	283	DG														
VAQUEROS-SESPE-ALEGRIA - - - - -	DG	DG	4		2	12,179	4,367	8		1,223,416		253,627		†6,374	7,762	
MONROE SMELL - - - - -	853	DG	5		10	13,510	189	7	126	2,464	2,464	3	197	N.A.	39,484	75
MONTALVO, WEST - - - - -		DG	24		49	94,680	36,415		†638	757,379	757,379	57,618		†2,699	477,907	
OFFSHORE - - - - -	211	DG	2		9	25,325	5,359	33	**	14,794	14,794	3,293	584	†16	39,787	61
ONSHORE - - - - -	111	DG	22		40	69,275	30,854		547	742,585	742,585	54,317		†2,683	438,120	
		DG	16		39	69,275	30,854	12		309,480	309,480	33,824	4,467	†1,176	438,120	86
		DG	6		1					433,105		20,493		†1,507		
NO POOL BREAKDOWN - - - - -		DG	16		39	69,275	30,854	12		309,480	309,480	33,824	4,467	†1,176	438,120	86
GAS ZONE - - - - -		DG	6		1					433,105		20,493		†1,507		

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Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
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MONTEBELLO - - - - -	037		167	13	90	510,333	±/187,963		3,741	382,303	382,303	±214,270		3,176	8,702,087	
	06		169	17	92	510,333	±/187,963	9		382,303	382,303	214,270	1,998	3,176	8,683,687	94
	05		14	2	31					3,914,033	-196,196				18,408	
ANY AREA - - - - -	06		143	9	68	504,306	158,516	10		379,598	379,598	214,232	752	3,176	8,681,638	95
MAIN AREA - - - - -	06		1	2						2,705	2,705	3		NH	2,049	
WEST AREA - - - - -			31	7	55	6,027	±/29,447					36		0	18,408	
8TH - - - - -	06		17	5	24	6,027	±/29,447	1				36		0		
	05		14	2	31					3,914,033	-196,196				18,408	
MOODY GULCH (ABD) - - - - -	085	06						98	0			44		0		
MOON BEND GAS - - - - -	011	06	17	1	5		3			2,558,415		33,252		6,345	64,147	
MOORPARK - - - - -	111	06					29		0			0		0		
MOORPARK WEST - - - - -	111	06	2			22,561	92	31	119	1,630	1,630	2	72	N.A.	1,194	5
MORALES CANYON - - - - -	079	06	1			2,592	2,399	7	NH			1,766		NH	6,950	73
CLAYTON AREA (ABD) - - - - -							1,023					494				
GOVERNMENT 18 AREA - - - - -																
GOVERNMENT 18 - - - - -	06		1			2,582	1,377	7				1,272		NH	6,950	73
MOUNT POSO - - - - -	029	06	513	141	78	8,420,536	203,242	45	† 92,773			1,980		5	135,374,662	94
BAKER-GROVER AREA - - - - -																
VEDDER - - - - -	06		8	4	9	14,717	3,790	5				0		0	1,225,136	99
DOMINION AREA - - - - -																
VEDDER - - - - -	06		108	34	4	126,778	6,586	3				0		0	7,813,895	98
DORSEY AREA - - - - -																
VEDDER - - - - -	06		44	1	14	62,658	5,241	4				0		0	2,540,167	98
GRANITE CANYON AREA - - - - -																
VEDDER - - - - -	06		25	5		20,510	902	2				0		0	53,100	72
MAIN AREA - - - - -																
PYRAMID HILL-VEDDER - - - - -	06		309	86	42	8,157,866	183,627	72				1,980		5	120,123,076	94
WEST AREA - - - - -																
VEDDER - - - - -	06		19	11	9	38,005	3,096	5				0		0	3,619,288	99
MOUNTAIN VIEW - - - - -	029	06	202	36	62	460,050	82,987	6	† 7,536	201,488	201,488	85,106	437	1,230	1,544,312	77
ARVIN AREA - - - - -	06		12		25	37,674	4,108	9		29,077	29,077	7,767	771	133	44,970	54
ARVIN, WEST, AREA - - - - -	06		33	4	12	100,775	10,284	8		87,343	87,343	14,903	866	406	122,559	55
RICHARDS - - - - -	06		8		5	19,733	734	7		3,745	3,745	1,193	189	57	6,622	25
CHANAC-CATTANI - - - - -	06			2	2		3,345					5,655		0	2,700,00	
CATTANI - - - - -	06		4			6,698	1,012	5				1,037		0	933	12
HOUCHIN, MAIN - - - - -	06		5		2	27,009	1,184	15		5,257	5,257	825	194	25	62,217	70
HOUCHIN, NORTHWEST & BRITE - - - - -	06		14	1	2	36,070	2,760	7		68,486	68,486	4,527	1,898	273	34,792	49
STENDERUP - - - - -	06		3	1	1	11,265	1,217	10		9,855	9,855	1,634	874	51	15,295	58
FRICK (ABD) - - - - -	06						34					32				
DIGIOGIO AREA (ABD) - - - - -	06						116					43				
MAIN AREA - - - - -	06		151	32	24	313,479	67,603	6		84,410	84,410	61,817	269	683	1,361,834	81
VACCARO AREA - - - - -	06		6		1	8,122	875	4		658	658	576	81	8	14,949	65
CHANAC - - - - -	06		2			1,466	599	2				488		2	7,686	84
UPPER MIOCENE - - - - -	06		4		1	6,656	277	5		658	658	89	98	6	7,263	52
MULLIGAN HILL GAS (ABD) - - - - -	013	06										124				
NAPLES OFFSHORE GAS (ABD) - - - - -	283	06					223					20,815				
NEMGATE - - - - -	037	06	1			5,592	266	15	NH	3,699	3,699	303	661	56	12,544	69
NEMHALL - - - - -	037	06	42	10	11	29,511	7,724	2	315	6,495	6,495	5,249	220	67	37,668	56
DE WITT CANYON AREA (ABD) - - - - -	06						25					0				

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ELSMERE AREA-----	06	OG	1		1	189	1,861	1				1		0	410	68
PICO CANYON AREA-----	06	OG	13		4	8,857	3,235	2		6,495	6,495	2,998	733	67	4,193	32
RICE CANYON AREA (ABD)-----	06	OG					111					120				
TOWNSITE AREA-----	06	OG	1			1,093	130	3				16		0	730	40
TOMSLEY CANYON AREA-----	06	OG	4	3	3	497	83					11		0	5	1
TUNNEL AREA-----	06	OG	18	6		15,747	2,198	2				1,833		0	22,297	59
WHITNEY CANYON AREA-----	06	OG	6	1	3	3,128	370	1				6		0	18,833	76
WILEY CANYON AREA (ABD)-----	06	OG					510					1,820				
MEMMALL-POTRERO-----	037	OG	107	7	33	354,210	72,433	9	2,764	7,829,588	2,769,281	89,677	19,845	57,114	271,762	43
1-2-3-----	06	OG	41	4	22	119,436	33,859	8		1,331,444	12,826	51,430	11,147	12,546	180,917	60
5TH-----	06	OG	37	2	4	126,415	17,225	9		3,134,188	1,587,667	24,694	24,792	17,442	26,533	17
6TH-----	06	OG	10	1	2	26,121	7,661	7		419,130	233,834	9,598	16,845	15,176	28,689	52
7TH-----	06	OG	21	1	6	82,238	13,627	11		2,144,754	936,554	3,885	26,879	11,949	36,683	31
9TH (ABD)-----	06	OG					61					69				
MEMPORT-----	059	OG	1				187			2/ 34,809	2/ 34,809	106		N.A.		
MEMPORT, WEST-----			261	3	57	1,085,149	50,874		17,895	37,101	37,101	7,938	37	94	6,452,516	
	06	OG	261	3	57	1,085,149	50,874	11		37,101	37,101	7,748	36	94	6,452,516	87
	06	OG										191				
OFFSHORE-----	259		16			55,623	4,390	10	334	34,840	34,840	1,486	626	91	229,780	
ONSHORE-----	059		245	3	57	949,526	46,487		17,558	2,261	2,261	6,453	2	3	6,222,736	
	06	OG	245	3	57	949,526	46,487	11		2,261	2,261	6,262	2	3	6,222,736	87
	06	OG										191				
BOLSA (ABD)-----	06	OG														
A-----	06	OG	84	2	4	271,268		9							2,071,850	88
B-----	06	OG	138	1	46	614,670		12		2,261	2,261		3		4,041,526	87
C-----	06	OG	14		7	33,705		7							49,135	59
D-----	06	OG	9			29,883		9							60,225	67
NICOLAUS GAS-----	101	OG			1							0		300		
OAK CANYON-----	037	OG	21	2	2	268,048	13,171	37	1,000	261,266	261,266	19,791	907	1,404	661,169	70
1-A-----	06	OG	3	1	1	1,481	317	1		3,002	3,002	809	2,027	12	12,207	89
3-AB-----	06	OG	5			45,550	2,805	25		78,212	78,212	3,962	1,717	503	91,131	67
3-CD-----	06	OG			1							0		0		
4-AB AND 5-A-----	06	OG	9	1		207,031	7,650	63		88,523	88,523	10,868	427	116	510,879	71
6-AB, 7 AND 8-AB-----	06	OG	4	1		33,986	2,399	23		91,529	91,529	4,153	2,693	972	46,952	58
OAK PARK-----	111															
SESPE-----	06	OG	15			54,868	800	10	247	13,836	13,836	162	252	88	35,855	40
OAK VIEW (ABD)-----	111	OG					1					0				
OAKLEY GAS (ABD)-----	013	OG										15				
OAKLEY, SOUTH GAS-----	013	OG	1			2,717	11	7		1,267,842		7,862		4,364		
OAKRIDGE-----	111															
MIOCENE-----	06	OG	17	4	5	140,110	12,774	23	1,127	70,902	70,902	6,148	506	502	957,188	87
OAT MOUNTAIN-----	037	OG														
SESHON-EOCENE-----	06	OG	5			92,176	923	50	372	41,549	41,549	391	450	145	42,356	31
OIL CREEK-----	081	OG	4	1	3	5,657	167	4	HH	729	729	76	128	8	86	1
OJAI-----	111	OG	178	14	41	1,380,551	18,007	21	12,566	3,506,885	2,905,356	20,206	2,540	17,195	715,798	34
LION MOUNTAIN AREA-----	06	OG	8			8,048	470	3		120	120	215	14	2	3,167	28
LOWER SESPE-----	06	OG	6			3,909	233	2				130		0	2,567	40
EOCENE-----	06	OG	2			4,139	238	6		120	120	85	28	2	600	13

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NORTH SULPHUR MOUNTAIN AREA - - -																
MIOCENE - - - - -	00		53	1	2	494,865	4,981	26		1,350,352	1,350,352	8,794	2,728	† 8,758	172,457	26
OAKVIEW AREA (ABD) - - - - -	00						"					0				
SILVERTHREAD AREA - - - - -	00		64	8	34	671,834	8,835	29		1,959,415	1,357,886	9,749	2,919	† 7,342	473,934	41
SISAR CREEK AREA - - - - -	00		39	5	5	92,686	2,355	6		85,847	85,847	469	926	111	42,194	31
SAUGUS - - - - -	00		19	3		16,263	34	2						"	9,116	36
SAUGUS-MIOCENE - - - - -	00		15	2	3	26,199	2,211	5				344		† 0	22,588	46
MIOCENE - - - - -	00		6		1	50,224	110	23		85,847	85,847	125	1,789	† 111	10,578	17
SULPHUR CREST AREA - - - - -																
MIOCENE - - - - -	00		3			89,415	89	81		65,422	65,422	65	731	468	8,826	9
SULPHUR MOUNTAIN AREA - - - - -																
MIOCENE - - - - -	00		8			6,281	318	2		94	94	64	14	† 1	5,648	47
TIP TOP AREA (ABD) - - - - -	00						232					67				
MELDON CANYON AREA - - - - -	00		3			18,222	866	17		45,635	45,635	784	2,584	† 529	7,572	29
OLIVE - - - - -	059 00		5	3		44,613	1,978	24	342	1,974	1,974	1,281	44	15	17,638	28
ORCUTT - - - - -	083 00		193	67	26	1,208,281	157,213	17	18,910	778,553	778,553	273,879	644	11,128	16,079,849	93
CAREAGA AREA - - - - -	00						15					6				
MAIN AREA - - - - -	00		193	67	26	1,208,281	157,198	17		778,553	778,553	273,873	644	11,128	16,079,849	93
ORD BEND GAS - - - - -	021 DG		1	1						12,991		9,951		168	1,968	
ORLAND GAS - - - - -	021 DG		1		2					6,989		182		1,098	48	
OXNARD - - - - -	111 00		79	16	27	285,767	35,944	7	101,199	154,566	154,566	22,359	751	1,290	1,289,454	86
PLIOCENE TAR - - - - -	00		9	2	7	58,067	479	18				0		0	29,909	34
MIOCENE TAR - - - - -	00		7	7	13	18,240	11,406	7		170	170	2,325	9	8	27,010	60
MCINNES - - - - -	00		49	3	5	99,472	28,011	6		142,533	142,533	15,262	1,435	1,189	1,187,187	92
LUCAS (ABD) - - - - -	00						45					51				
LIVINGSTON AND E-D - - - - -	00		14	4	2	29,988	4,003	6		11,863	11,863	4,721	395	93	45,348	68
PALOMA - - - - -	029		48	37	19	182,485	58,944		† 1,368	482,997	482,997	438,304		† 4,781	85,841	
	00		47	36	19	182,485	58,944	6		413,489	413,489	423,987	4,837	† 3,693	85,841	46
	DG		1	1						69,588		14,317		1,088		
MAIN AREA - - - - -			47	36	18	93,683	57,858			464,650	464,650	428,809		† 4,677	85,841	
	00		46	35	18	93,683	57,858	6		395,062	395,062	414,492	4,217	† 3,589	85,841	48
	DG		1	1						69,588		14,317		1,088		
GAS ZONE - - - - -	DG		1	1								14,317		1,088		
PALOMA - - - - -	00		42	35	18	75,363	57,678	5		283,442	283,442	413,583	3,761	2,416	78,488	48
LOWER STEVENS - - - - -	00		4			18,320	179	13		111,620	111,620	989	6,892	† 1,173	15,353	46
SYMONS AREA - - - - -	00		1	1		8,722	1,095	24		18,347	18,347	9,495	2,103	104		
SYMONS - - - - -	00						477					8,597		8		
PALOMA - - - - -	00		1	1		8,722	618	24		18,347	18,347	897	2,103	104		
PARIS VALLEY - - - - -	053 00			17	2		131		148			0		0		
BIAGGI AREA (ABD) - - - - -	00						"					0				
MAIN AREA - - - - -																
AMSBERRY - - - - -	00			17	2		138					0		0		
PEACE VALLEY GAS - - - - -	181 DG				1							0		† 1,500		
PERKINS LAKE GAS - - - - -	087 DG		4	1						483,185		34,783		988	3,264	
PETALUMA - - - - -	097		3	5	1		14			14,503		1,202		318		
	00						14					0		0		
	DG		3	5	1					14,503		1,202		318		
NO POOL BREAKDOWN - - - - -	00				1		14					0		0		
GAS ZONE - - - - -	DG		3	5						14,503		1,202		318		
PETROLIA (ABD) - - - - -	023 00						"					0				

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbf)	Cumulative oil and condensate (Mbbf)	Daily production per well (bbf)	Estimated oil reserves (Mbbf) (12-31-80)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft ³ /bbf)	Estimated gas reserves (MMcf) (12-31-80)	Water (bbf)	% water
PINOLE POINT (ABD) - - - - -	013	06					14					111				
PIONEER - - - - -	029															
MIOCENE - - - - -	00		1		1	1,015	177	3	HH	3,290	3,290	267	3,241	28	32,076	97
PIRU - - - - -	111	06	9		11	2,668	450	1	HH			156		0	1,681	39
PIRU CREEK (ABD) - - - - -	111	06					4					4				
PLACERITA - - - - -	037	06	232	98	79	385,958	42,444	5	4,093			6,052		28	9,988,342	96
PLAINFIELD GAS - - - - -	113	06		1								0		100		
PLAYA DEL REY - - - - -	037		34	6	29	42,823	±/62,140		487	325	325	61,878		74	912,129	
	06		31	6	32	42,823	±/62,140	4		325	325	61,878		74	199,307	96
	05		13		10					10,709,036	1,235,470				712,822	
DEL REY HILLS AREA - - - - -			41	6	37	30,712	±/11,377			10,709,036	1,235,470	14,428		0	712,822	
	06		28	6	27	30,712	±/11,377	3				14,428		0		97
	05		13		10					10,709,036	1,235,470				712,822	
KIDSON AREA (ABD) - - - - -	00						17					37				
VENICE AREA - - - - -	00		3	1	5	12,111	50,746	11		325	325	47,413	26	74	199,307	94
PLEASANT CREEK GAS - - - - -	113		6	2								5,076		340		
	06			2								5,076		340		
ROMINGER - - - - -	06		6		2					8,729	8,729					
PETERS - - - - -	06											308		340		
	05		6							8,729	8,729	4,768		0		
PLEASANT VALLEY - - - - -	019															
GATCHELL - - - - -	06		2	5	1	6,343	13,237	9	HH	4,480	4,480	12,095	706	27	33,160	84
PLEITO - - - - -	029	06	21		1	428,911	4,384	56	† 3,557	180,667	180,667	2,255	421	† 1,330	291,923	40
CREEK AREA - - - - -	00		13		1	22,920	1,571	5		9,050	9,050	1,151	401	† 50	8,146	27
RANCH AREA - - - - -	06		8			406,391	2,813	139		171,647	171,647	1,104	422	† 1,280	283,777	44
POINT CONCEPTION - - - - -	06		6	2		37,185	1,135	17	† 270	33,453	33,453	530	899	† 148	984,262	96
OFFSHORE - - - - -	283	06	4	2		25,883	1,023	18	177	25,485	25,485	469	984	112	768,806	97
ONSHORE - - - - -	083	06	2			11,302	112	15	**	7,968	7,968	60	705	36	215,456	95
POPPY RIDGE GAS - - - - -	067	06			3							0		† 1,000		
POSO CREEK - - - - -	029	06	625	51	170	1,647,970	67,481	7	† 15,995	481,624	481,624	6,886	292	2,617	46,775,896	97
ENAS AREA - - - - -	00		20	2	6	29,718	1,256	3		644	644	5	21	HH	373,279	93
MCVAN AREA - - - - -	06		102	5	17	403,712	4,146	11		12	12	H		HH	4,887,189	93
PREMIER AREA - - - - -	06		495	44	148	1,214,540	61,999	7		480,968	480,968	6,884	396	2,617	41,513,428	97
POTRERO - - - - -	037	06	16		11	81,849	14,373	14	454	127,554	127,554	70,760	1,558	577	287,754	78
EAST AREA - - - - -	06		8		8	26,879	11,727	9		9,759	9,759	41,507	363	483	251,097	90
INGLEWOOD CITY AREA - - - - -	06		8		3	54,970	2,646	19		117,795	117,795	29,253	2,142	96	36,657	40
POTRERO HILLS GAS (ABD) - - - - -	093	06										22				
PRADO-CORONA - - - - -	065		7		10	15,642	725		363	97,330	97,330	3,324		1,123	3,781	
	06		5		9	14,942	723	8		59,413	59,413	322	3,976	199	3,666	20
	06		3		1	700	2	1		37,917		3,002		924	95	
GOEDHART AREA - - - - -			7		1	15,642	241			97,330	97,330	3,099		924	3,781	
	06		5		1	14,942	239	8		59,413	59,413	97	3,976	N.A.	3,666	20
	06		3		1	700	2	1		37,917		3,002		924	95	
SARDCO AREA - - - - -	06				9		484					225		199		
PRINCETON GAS - - - - -	011	06	1	1	1					50,732		9,300		1,416	5	

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbd)	Cumulative oil and condensate (Mbbd)	Daily production per well (bbl)	Estimated oil reserves (12-31-80) (Mbbd)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft ³ /bbl)	Estimated gas reserves (12-31-80) (MMcf)	Water (bbl)	% water
MAIN AREA - - - - -	DG		1	1	1					59,732		9,300		416	5	
TOMNLOT AREA - - - - -	DG				1							0		1,000		
PUTAH SINK GAS - - - - -	113 DG		2		7					3,344,751		19,282		11,841	24	
PYRAMID HILLS - - - - -	031		83	1	21	78,297	5,399		777	75,992	75,992	7,041		601	308,791	
	OG		83	1	21	78,297	5,399	3		75,992	75,992	7,033	970	601	308,791	80
	DG			1								8				
DAGANY AREA - - - - -	OG		25		5	22,587	1,184	2				26		3	51,981	70
KR - - - - -	OG		25		5	22,587	1,183	2				21		3	51,981	70
CANOS (ABD) - - - - -	OG						2					5				
NORRIS AREA - - - - -			25	1	5	20,140	1,980			75,419	75,419	6,570		562	159,468	
	OG		25		5	20,140	1,980	2		75,419	75,419	6,570	3,744	562	159,468	89
	DG			1								0		N.A.		
MIOCENE - - - - -	OG				1		8					0		0		
KR - - - - -	OG		14		4	13,104	949	3		16,026	16,026	423	1,222	52	131,990	91
Eocene - - - - -	OG		11			7,036	1,024	2		59,393	59,393	6,147	8,441	510	27,478	80
	DG			1								0		N.A.		
ORCHARD RANCH AREA (ABD) - - - - -	OG						45					28				
WEST AREA (ABD) - - - - -	DG											8				
WEST SLOPE AREA - - - - -																
KR - - - - -	OG		34	1	11	35,570	2,189	3		573	573	409	16	36	97,342	73
QUINADO CANYON - - - - -	053															
GAMBOA-KELLY - - - - -	OG		1			342	9	1	NR			3		0	13,267	97
RAILROAD GAP - - - - -	029		36	1	28	131,913	9,268		† 377	1,284,508	1,284,508	76,011		4,071	1,383,793	
	OG		36	1	27	131,913	9,268	10		1,284,508	1,284,508	75,334	9,737	4,071	1,383,793	91
	DG			1								0				
GAS ZONE - - - - -	DG				1							677		0		
AMNICOLA - - - - -	OG		11		2	67,283	1,144	17				0		0	1,018,859	94
OLIG - - - - -	OG		1			1,723	181	5		10,961	10,961	874	6,361	76	940	35
ANTELOPE SHALE - - - - -	OG		13	1	11	32,482	1,888	7		179,795	179,795	8,782	5,335	718	309,658	91
VALV - - - - -	OG				1		54					557		0		
CARNEROS - - - - -	OG		6		16	14,267	3,925	6		952,932	952,932	50,077	66,792	2,922	49,626	78
PHACOIDES - - - - -	OG		4		4	16,238	2,076	11		140,820	140,820	15,045	8,672	1,155	4,680	22
RAISIN CITY - - - - -	019		59	33	53	233,020	39,668		2,597	204,985	204,985	23,365		2,338	14,031,839	
	OG		58	33	53	230,647	39,666	11		163,488	163,488	23,324	708	2,338	13,868,873	98
	DG		1			2,373	2	6		41,497		41		N.A.	162,966	
MIOCENE TAR - - - - -	OG		25	15	18	111,514	10,967	12		65,401	65,401	3,395	586	29	7,512,973	99
	DG				1							0		N.A.		
MIOCENE - - - - -	OG		30	18	34	97,507	24,574	9		28,264	28,264	12,498	289	705	5,436,521	98
Eocene - - - - -	OG		5	2	3	21,546	4,125	12		69,823	69,823	7,431	3,240	1,604	919,379	98
	DG		1			2,373	2	6		41,497		41		N.A.	162,966	
RAMONA - - - - -	OG		102	4	13	150,775	20,525	4	1,836	242,249	242,249	39,373		2,698	97,821	39
	037		38	1	7	49,784				110,635	110,635				38,015	
	111		64	3	6	100,989				131,614	131,614				59,806	
RAMONA, NORTH (ABD) - - - - -	037 OG						2					0				
RANCHO CAPAY GAS - - - - -	021 DG		3	1						143,998		† 3,228		785	488	
RED BANK CREEK GAS (ABD) - - - - -	103 DG											19				
REFUGIO COVE GAS (ABD) - - - - -	083 DG						3					990				
RICE CREEK GAS - - - - -	103 DG		11	3	4					677,415		21,929		8,926	4,820	
RICE CREEK, EAST, GAS - - - - -	103 DG				1							0		† 2,000		
RICHFIELD - - - - -	059 OG		244	71	31	1,740,124	† 176,856	19	17,785	95,119	95,119	170,509	54	1,058	15,865,075	90

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbf)	Cumulative oil and condensate (Mbbf)	Daily production per well (bbf)	Estimated oil reserves (Mbbf) (12-31-80)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft ³ /bbf)	Estimated gas reserves (MMcf) (12-31-80)	Water (bbf)	% water
RINCON - - - - -	00		286	11	105	1,787,740	137,421	17	13,714	2,353,639	2,353,639	198,380	1,396	17,683	5,320,809	
OFFSHORE - - - - -	211 00		81	7	18	364,916	31,716	12	1,883	171,670	171,670	32,346	470	863	690,297	65
ONSHORE - - - - -	111 00		285	4	88	1,422,824	105,705	19	11,831	2,181,969	2,181,969	166,034	1,533	16,820	4,630,512	76
RIO BRAVO - - - - -	029		38	20	43	313,184	113,839		† 2,755	181,154	181,154	140,133		24,113	278,611	
	00		28	18	46	313,184	113,839	31		166,246	166,246	129,945	531	23,740	236,958	43
	06		2	2						14,908		10,188		353	41,653	
GAS ZONE - - - - -	00		2	2						14,908		10,188		353	41,653	
ROUND MOUNTAIN - - - - -	00				1		0					0		0		
OLCESE - - - - -	00		5	1	2	244,686	521	134		103,978	103,978	763	425	237	39,367	14
ROUND MT-OLCESE - - - - -	00				1		0					0		N.A.		
RIO BRAVO-MAIN VEDDER-OSBORNE	00		18	15	42	52,199	108,740	8		46,261	46,261	126,264	886	23,369	139,578	73
HELBLING - - - - -	00		3	2	3	16,299	4,578	15		16,007	16,007	2,918	892	154	58,013	78
RIO JESUS GAS - - - - -	113 00		1		1					340,398		1,278		1,220		
RIO VIEJO - - - - -	029															
STEVENS - - - - -	00		8	1		523,280	2,611	148	† 2,797	171,375	171,375	731	328	† 727	205,751	39
RIO VISTA GAS - - - - -	00		153	20	40	12,706	1,354			34,108,690	34,108,690	3,101,822		398,295	107,607	
	013		4	3	1	59				283,776	283,776				133	
	067		73	6	17	3,454				17,256,070	17,256,070				31,747	
	095		76	11	23	8,993				16,568,844	16,568,844				75,727	
RIVER BREAK GAS - - - - -	013 00		8		4	164	10			312,137		8,825		† 3,590	13,865	
RIVER ISLAND GAS - - - - -	00		20	9	9					2,381,319	2,381,319	125,426		15,308	21,876	
	067		15	8	8					1,417,486	1,417,486				5,590	
	077		4	1						963,833	963,833				16,266	
MARKLEY-NORTONVILLE - - - - -	00		9	4	5					250,101		33,310		1,809	2,531	
DOMENGINE-CAPAY - - - - -	00				1							19,062		236		
MOKELUMNE RIVER - - - - -	00		7	4	4					562,733		32,095		8,429	2,960	
WINTERS - - - - -	00		5	1						1,403,975		40,959		4,833	16,385	
RIVERDALE - - - - -	019 00		34	14	4	121,169	19,908	10	1,862	202,493	202,493	29,443	1,671	1,649	2,027,196	94
MIOCENE - - - - -	00		29	14	4	87,251	13,921	8		202,493	202,493	21,580	2,320	1,309	1,853,349	96
EOCENE - - - - -	00		5			33,918	5,987	19				7,864		340	173,847	84
ROBBINS GAS - - - - -	101 00				2							0		N.A.		
ROBERTS ISLAND GAS - - - - -	077															
MOKELUMNE RIVER - - - - -	00		3	1						641,136		30,639		4,939	2,133	
ROSECRANS - - - - -	037 00		72	14	19	308,177	79,041	12	4,298	430,114	430,114	162,563	1,395	3,767	1,426,282	82
ROSECRANS, EAST - - - - -	037 00		2			4,111	176	4	NR	4,967	4,967	186	1,208	45	5,564	58
ROSECRANS, SOUTH - - - - -	037 00		16			39,891	8,454	7	381	96,131	96,131	19,989	2,409	671	62,970	61
ROSEDALE - - - - -	029 00		16		2	52,876	4,883	9	† 331	64,905	64,905	6,169	1,227	185	393,008	88
EAST AREA - - - - -																
STEVENS - - - - -	00		2			2,682	383	4		7,747	7,747	728	2,977	72	103,897	98
MAIN AREA - - - - -																
STEVENS - - - - -	00		10		2	42,519	3,597	12		50,401	50,401	4,851	1,185	99	281,220	87
NORTH AREA - - - - -																
STEVENS - - - - -	00		3			6,014	256	3		6,757	6,757	176	1,123	15	6,221	51
SOUTH AREA - - - - -																
STEVENS - - - - -	00		1			1,741	646	5				414		0	1,670	49
ROSEDALE RANCH - - - - -	029 00		42		28	124,205	13,221	8	† 875	115,885	115,885	9,650	933	750	4,863,113	98
ETCHEGOIN - - - - -	00		5			18,967	690	10		18,359	18,359	294	967	106	704,688	97

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbbl)	Cumulative oil and condensate (Mbbbl)	Daily production per well (bbbl)	Estimated oil reserves (Mbbbl) (12-31-80)	Gross gas (Mcft)	Net gas (Mcft)	Cumulative gas (MMcft)	Gross gas-oil ratio (ft ³ /bbbl)	Estimated gas reserves (MMcft) (12-31-80)	Water (bbbl)	% water
LERDO-CHANAC - - - - -	00		37		28	105,238	12,531	8		97,526	97,526	9,356	926	644	4,158,425	98
ROUND MOUNTAIN - - - - -	029	00	273	33	99	426,622	93,394	4	† 4,300	170	170	1,572		131	45,089,114	99
ALMA AREA - - - - -																
VEDDER - - - - -	00		1	7	1	908	639	2				8		8	7,768	90
COFFEE CANYON AREA - - - - -																
PYRAMID HILL-VEDDER - - - - -	00		57	3	24	103,327	19,275	5		170	170	68	1	MM	6,565,699	98
MAIN AREA - - - - -																
JEWETT-VEDDER - - - - -	00		152	10	51	243,693	62,227	4				1,442		131	31,150,538	99
PYRAMID AREA - - - - -																
VEDDER - - - - -	00		41	1	8	48,721	6,154	6				7		8	5,187,769	98
SHARKTOOTH AREA - - - - -																
VEDDER - - - - -	00		23	12	14	29,973	5,899	4				56		8	4,177,348	99
ROHLAND (ABD) - - - - -	037	00					2					8				
RUSSELL RANCH - - - - -	00		67	37	40	204,321	66,196		† 2,363	722,082	271,625	45,835		4,370	2,596,060	
	079		26	23	14	96,905				129,849	-320,608				697,381	
	083		41	14	26	107,416				592,233	592,233				1,898,679	
MAIN AREA - - - - -	00		67	34	35	205,123	65,556	8		702,907	252,450	42,776	3,460	4,324	2,592,129	93
SOUTHEAST AREA - - - - -																
DIBBLEE - - - - -	00		1	3	6	1,198	640	3		19,175	19,175	3,059	16,005	46	3,931	77
RYER ISLAND GAS - - - - -	00		6		1		118			3,845,212		107,204		20,783	4,338	
OFFSHORE - - - - -	295		2				36			1,180,134		† 32,902		† 6,379	346	
ONSHORE - - - - -	095		4		1		82			2,665,078		† 74,302		† 14,405	3,992	
SACRAMENTO AIRPORT GAS - - - - -	00		4	1	9					1,685,914	1,685,914	6,788		11,411	2	
	067		2	1	9					1,619,655	1,619,655				2	
	101		1	1						21,870	21,870					
	113		1							44,389	44,389					
SACRAMENTO BY-PASS GAS (ABD) - - - - -	113	00										2				
SALT LAKE - - - - -	037	00	33	13	4	193,987	50,154	16	4,099	230,319	230,319	209,156	1,187	2,737	183,439	49
SALT LAKE, SOUTH - - - - -	037	00	11	1	6	238,990	6,932	59	3,159	184,223	184,223	3,254	770	1,249	831,397	78
SAN ARDO - - - - -	053	00	914	67	272	10,789,720	348,343	32	181,704			71,416		8	96,943,897	90
MAIN AREA - - - - -	00		914	62	269	10,789,720	348,036	32				71,416		8	96,943,897	90
LOMBARDI - - - - -	00		457	47	219	1,402,768		8				0		0	37,226,697	96
AURIGNAC - - - - -	00		458	15	49	9,386,952		56				0		0	59,717,000	86
NORTH AREA - - - - -																
LOMBARDI - - - - -	00			5	3		306					0		0		
SAN CLEMENTE (ABD) - - - - -	059	00					1									
SAN EMIDIO NOSE - - - - -	029	00	5	6	8	114,335	18,890	78	† 380	53,339	53,339	5,263	466	297	306,211	73
REEF RIDGE - - - - -	00		1	6	5	3	11,517					3,756		4	9,983,000	
STEVENS - - - - -	00		4		3	114,332	7,373	78		53,339	53,339	1,507	466	293	296,228	72
SAN EMIGDIO (ABD) - - - - -	029	00					2					8				
SAN EMIGDIO CREEK (ABD) - - - - -	029	00					58					470				
SAN JOAQUIN - - - - -	019															
EOCENE - - - - -	00		6	1		17,829	1,001	8	MM			230		0	73,658	81
SAN JOAQUIN, NORTHWEST, GAS - - - - -	019															
EOCENE - - - - -	00		1		1					46,087		4,051		852	4,224	
SAN MIGUELITO - - - - -	111	00	85			2,346,568	80,861	75	10,454	797,530	797,530	190,330	339	5,850	3,298,544	58

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbd)	Cumulative oil and condensate (Mbbd)	Daily production per well (bbl)	Estimated oil reserves (Mbbd) (12-31-80)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft ³ /bbl)	Estimated gas reserves (MMcf) (12-31-80)	Water (bbl)	% water
SANSIENNA - - - - -	037	00	116	43	19	468,622	49,835	11	5,104	736,548	736,548	59,833	1,571	5,259	340,986	42
12-0 AREA - - - - -	00			1			41					0		0		
CENTRAL AREA - - - - -	00		6	2		22,125	801	10		11,480	11,480	1,088	518	201	14,011	39
CURTIS AREA - - - - -	00		10			30,689	1,423	8		21,310	21,310	1,151	694	44	10,864	26
EAST AREA - - - - -	00		19	33	11	95,321	15,186	14		143,036	143,036	20,959	1,508	1,998	64,041	48
NEW ENGLAND AREA - - - - -	00		6		1	11,742	386	5		1,369	1,369	76	116	MM	2,438	17
WEST AREA - - - - -	00		75	7	8	308,745	31,999	11		559,353	559,353	36,578	1,811	3,018	249,632	45
SANTA CLARA AVENUE - - - - -	111	00	17	1	1	307,359	2,704	49	2,564	164,703	164,703	1,294	535	642	110,351	26
SANTA FE SPRINGS - - - - -	037	00	190	137	58	754,185	605,463	11	16,791	293,751	293,751	834,151	389	6,361	18,940,588	96
SANTA MARIA VALLEY - - - - -	003	00	202	215	70	5,175,176	178,124	43	60,327	2,686,820	2,686,820	236,688	846	36,619	13,776,711	81
MAIN AREA - - - - -	00		120	198	43	661,218	149,694	15		1,781,524	1,781,524	220,919	2,694		8,720,079	93
NORTH AREA (ABD) - - - - -	00						1					0				
WEST AREA - - - - -	00		5		1	66,610	618	36		63,861	63,861	356	958		23,252	26
BRADLEY AREA - - - - -	00		24		2		12,332	176		307,335	307,335	10,026	198		2,358,459	60
BASAL SISQUOC - - - - -	00		20			1,510,799	11,976	206		301,994	301,994	9,961	199		1,941,899	56
MONTEREY - - - - -	00		4		1		356	25		5,341	5,341	64	147		416,560	92
CLARK AREA - - - - -	00		21	2	3	633,215	5,546	82		288,587	288,587	880	455		1,840,951	74
FOXEN - - - - -	00			1			*					0				
SISQUOC - - - - -	00		1			3,255	141	9		1,592	1,592	10	489		16,836	84
CLARK - - - - -	00		20	1	3	629,960	5,405	86		286,995	286,995	870	455		1,824,115	74
SOUTHEAST AREA - - - - -	00		31	15	21	267,152	9,932	24		245,513	245,513	4,507	919		833,970	76
FOXEN - - - - -	00			2			0					0				
SISQUOC - - - - -	00		24	12	17	99,709	5,653	11		129,497	129,497	3,615	1,298		330,864	77
MOUK - - - - -	00		6		4	149,544	4,185	68		105,009	105,009	803	702		409,430	73
MONTEREY - - - - -	00		1	1	1	17,899	94	49		11,007	11,007	88	614		93,476	84
SANTA PAULA - - - - -	111	00	22	11	11	10,972	2,208	1	† 110	4,689	4,689	604	427	† 41	16,142	60
SANTA SUSANA - - - - -	111	00	13	1	3	128,940	6,977	27	† 544	701,670	701,670	† 7,810	5,441	† 2,740	292,947	69
FIRST SESPE - - - - -	00		1	1	3		136					1,659		22		
SECOND AND THIRD SESPE - - - - -	00		13		2	128,940	6,841	27		701,670	701,670	6,151	5,441	† 2,718	292,947	69
SAN VICENTE - - - - -	037															
CLIFTON, DAYTON AND HAY - - - - -	00		32	1	4	543,116	11,480	46	2,289	359,132	359,132	10,942	661	2,076	1,068,601	66
SARGENT - - - - -	085	00	7			15,079	808	6	MM	6,588	6,588	284	436	N.A.	1,507	9
SATICOY - - - - -	111	00	27	25		138,720	20,600	13	1,027	34,727	34,727	40,229	265	260	468,707	78
SAUGUS - - - - -	037	00	3			7,856	542	7	MM	260	260	784	33	MM	81,041	91
SANTELLE - - - - -	037	00	10			303,793	10,075	83	1,962	220,791	220,791	9,604	726	2,347	210,254	41
SAXON GAS - - - - -	113	00	11	3	1					2,612,706		20,557		† 13,957	6,739	
SCHOHR RANCH GAS (ABD) - - - - -	007	00										2,113				
SEAL BEACH - - - - -			166	6	28	956,497	194,230		9,108	663,910	663,910	206,099		5,278	6,785,245	
	037		98	6	12	432,419				483,980	483,980				5,664,295	
	039		68		16	304,078				179,930	179,930				1,120,950	
	00		166	5	28	956,497	194,230	16		663,910	663,910	205,898	694	4,478	6,785,245	88
	00			1								201		800		
ALAMITOS AREA - - - - -	00		23	2		78,475	30,854	9		107,305	107,305	42,546	1,367	628	373,503	83
NORTH BLOCK - - - - -	00		65	2	14	395,854	49,590			386,356	386,356	63,116		2,775	1,187,057	
	00		65	1	14	395,854	49,590	17		386,356	386,356	62,916	976	1,975	1,187,057	75
	00			1								201		800		

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbbl)	Cumulative oil and condensate (Mbbbl)	Daily production per well (bbl)	Estimated oil reserves (12-31-80) (Mbbbl)	Gross gas (Mcft)	Net gas (Mcft)	Cumulative gas (MMcft)	Gross gas-oil ratio (ft ³ /bbl)	Estimated gas reserves (12-31-80) (MMcft)	Water (bbbl)	% water
NORTH BLOCK-EAST EXTENSION- - - -	00		15		7	92,839	8,694	17		1,036	1,036	7,859	11	514	556,280	86
WASEM- - - - -	00		3		1	17,705	528	16				1,332		109	240,800	93
MCCRATH- - - - -	00		12		6	75,134	8,075	17		1,036	1,036	6,527	13	405	315,480	81
SOUTH BLOCK- - - - -	00		63	2	7	389,329	105,172	17		169,213	169,213	92,578	434	1,361	4,668,405	92
SEMITROPIC- - - - -	029		43	2	4	153,798	915		† 2,197	89,363	89,363	16,718		220	30,022	
	00		41	1	1	153,798	915	10		79,416	79,416	539	528	101	30,022	16
	00		2	1	3					9,947		16,179		119		
GAS ZONE- - - - -	00		2	1	3					9,947		16,179		119		
RANDOLPH- - - - -	00		41	1		153,798	905	10		79,416	79,416	529	516	101	30,010	16
VEDDER (ABD)- - - - -	00						10					10				
SEMITROPIC, NW GAS (ABD)- - - - -	029	00										52				
SESPE- - - - -	111	00	234	11	33	1,417,437	26,450	17	8,391	1,713,001	1,713,001	25,419	1,208	8,105	306,358	18
FOOT OF THE HILLS AREA- - - - -	00		6		3	14,219		6							16,927	54
MIDDLE SESPE- - - - -	00				2										14,740	00
BASAL SESPE- - - - -	00		4		2	13,845		9							2,187	14
Eocene- - - - -	00		1			374		1								
LITTLE SESPE CREEK AREA- - - - -	00		12	11		19,137		5							1,235	6
UPPER SESPE- - - - -	00		11	11		18,970		5							1,235	6
BASAL SESPE- - - - -	00		1			167										
TAR CREEK-TOPATOPIA AREA- - - - -	00		216		30	1,384,081		18		1,713,001	1,713,001		1,237		288,196	17
RINCON-VAQUEROS- - - - -	00		17		12	28,462		5		46,611	46,611		1,637		33,750	54
VAQUEROS- - - - -	00		5			30,627		17		53,144	53,144		1,735		3,048	9
UPPER SESPE- - - - -	00		5		6	1,370		1		440	440		321		163	11
MIDDLE SESPE- - - - -	00		3		3	2,082		2		2,809	2,809		1,349		70	3
BASAL SESPE- - - - -	00		183		10	1,304,597		19		1,569,036	1,569,036		1,202		250,470	14
COLDWATER- - - - -	00		5			16,943		9		40,961	40,961		2,417		695	4
SEVENTH STANDARD- - - - -	029															
LOWER STEVENS- - - - -	00		3		1	13,813	1,416	13	NH	10,023	10,023	1,005	725	196	256,339	95
SHAFTER (ABD)- - - - -	029	00					55					46				
SHAFTER, SE GAS (ABD)- - - - -	029	00										2,131				
SHALE FLATS GAS (ABD)- - - - -	029	00										154				
SHALE POINT GAS (ABD)- - - - -	029	00										1,740				
SHERMAN (ABD)- - - - -	037	00					93					50				
SHERMAN ISLAND GAS- - - - -	067	00	3	3	2	1,564	98	1		497,018		31,031		6,616	11,403	
SHIELLS CANYON- - - - -	111	00	85	57	19	264,811	24,674	9	5,819	726,389	726,389	44,854	2,743	347	826,839	76
SIMI- - - - -	111		39	3	1	27,757	3,849		† 201	164,941	164,941	1,705		† 835	36,980	
	00		38	3	1	27,703	3,849	2		12,885	12,885	1,553	465		36,426	57
	00		1			54				152,056		152			554	
OLD AREA- - - - -			24	3	1	5,056				152,056	152,056	152			9,060	
	00		23	2	1	5,002		1		152,056		152			8,506	63
	00		1			54				152,056		152			554	
GAS ZONE- - - - -	00		1													
STRATHEARN AREA (ABD)- - - - -	00						13									
CANADA DE LA BREA AREA- - - - -	00		12			15,498		4		8,618	8,618		548		27,634	64
ALAMOS CANYON AREA- - - - -	00		3			7,003		6		4,267	4,267		609		286	4
SISQUOC RANCH- - - - -	083															
MONTEREY- - - - -	00		1			1,362	1		NH			0		0	16,430	92
SOMIS (ABD)- - - - -	111	00					2					1				

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbd)	Cumulative oil and condensate (Mbbd)	Daily production per well (bbl)	Estimated oil reserves (12-31-80) (Mbbd)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft ³ /bbl)	Estimated gas reserves (12-31-80) (MMcf)	Water (bbl)	% water
SOUTH MOUNTAIN - - - - -	111 00		403	68	33	1,172,553	138,740	8	9,834	2,190,018	2,190,018	278,172	1,868	12,376	1,989,103	63
STEGEMAN GAS - - - - -	011															
KIONE - - - - -	00		1							282,445		889		† 2,200		
STOCKDALE (ABD) - - - - -	029 00						1					0				
STONE LAKE GAS - - - - -	047 00		1							150,746		482		518	5,140	
STRAND - - - - -	029		24	25	3	72,149	21,480		† 242	76,759	76,759	† 17,603		549	658,220	
	00		24	25	3	72,149	21,480	8		76,759	76,759	17,515	1,043	549	658,220	90
	00											88				
EAST AREA - - - - -																
STEVENS - - - - -	00		5	8	1	12,574	4,363	7		12,734	12,734	3,659	1,012	94	156,707	93
MAIN AREA - - - - -			13	14		40,500	14,914			16,181	16,181	11,919		125	374,716	
	00		13	14		40,500	14,914	9		16,181	16,181	11,900	399	125	374,716	90
	00											19				
GAS ZONE (ABD) - - - - -	00											19				
UPPER STEVENS - - - - -	00		7	5		19,188	7,898	7		13,462	13,462	6,520	701	87	187,517	91
LOWER STEVENS - - - - -	00		6	9		8,160	5,544	4		2,719	2,719	3,008	333	38	62,361	88
VEDDER - - - - -	00		1			13,152	1,472	36				2,372		8	124,838	90
NORTHWEST AREA - - - - -			5	2	2	19,075	2,083			47,844	47,844	1,957		329	126,707	
	00		5	2	2	19,075	2,083	10		47,844	47,844	1,887	2,508	329	126,707	87
	00											70				
GAS ZONE (ABD) - - - - -	00											70				
STEVENS - - - - -	00		5	2	2	19,075	2,083	10		47,844	47,844	1,887	2,508	329	126,707	87
SOUTH AREA (ABD) - - - - -	00						128					69				
SUGARFIELD GAS - - - - -	113 00		2		2					472,615		473		1,427	555	
STARKEY - - - - -	00		1		1					398,025		398		402	418	
WINTERS - - - - -	00		1		1					74,590		75		1,225	137	
SUISUN BAY GAS - - - - -	095 00		4		3		29			401,951		84,923		3,015	11,803	
SUMMERLAND - - - - -	083 00			8			3,224		0			0		0		
	00						0					1,704		0		
SUMMERLAND OFFSHORE - - - - -	283 00		16		31	122,581	25,528	21	646	1,187,122	1,187,122	91,126	9,700	8,843	446,494	78
SUNSET BEACH - - - - -	059 00		5		1	13,394	6,684	7	HH			9,591		8	103,840	93
SUTTER BUTTES GAS - - - - -	101 00		45	3	20					2,836,524		157,116		44,759	62,369	
SUTTER CITY GAS - - - - -	101 00		25	2	6					1,418,292		78,111		† 24,059	15,755	
MAIN AREA - - - - -	00		8		3					154,233		19,553		† 3,212	9,457	
SOUTH AREA - - - - -	00		17	2	3					1,264,059		58,558		20,847	6,298	
SYCAMORE GAS - - - - -	00		5		15					1,551,986	1,551,986	25,693		15,352	31,664	
	011		4		12					1,341,682	1,341,682				23,677	
	101		1		3					210,304	210,304				7,987	
SYCAMORE SLOUGH GAS (ABD) - - - - -	113 00											714				
TABLE BLUFF GAS (ABD) - - - - -	023 00											189				
TALBERT (ABD) - - - - -	059 00						124					4				
TAPSA - - - - -	037 00		13	5	5	27,039	1,214	6	105			0		0	83,919	76
TAPD, NORTH - - - - -	111 00		15	7		13,895	1,112	3	HH			159		0	68,492	83
TAPD CANYON, SOUTH - - - - -	111 00		15	17	3	57,043	4,645	10	255	5,124	5,124	1,936	89	35	113,676	62
TAPD RIDGE - - - - -	111 00		2			4,416	26	6	HH	1,008	1,008	6	228	† 7	27,741	86

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbl)	Cumulative oil and condensate (Mbbbl)	Daily production per well (bbl)	Estimated oil reserves (Mbbbl) (12-31-80)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft ³ /bbl)	Estimated gas reserves (MMcf) (12-31-80)	Water (bbl)	% water
TAYLOR CANYON - - - - -	079															
QUAIL CANYON - - - - -	00		2			2,562	483	4	NH			141		0	4,249	62
TEJON - - - - -	029	00	155	29	32	228,816	29,851	4	† 3,505	36,155	36,155	18,785	158	264	2,762,275	92
CENTRAL AREA - - - - -	00		59	16	7	69,383	13,643	3		7,657	7,657	14,598	110	102	499,749	88
EASTERN AREA - - - - -	00		17			14,760	1,595	2		3,084	3,084	319	208	18	33,840	49
SOUTHEAST AREA - - - - -	00		21	1		63,079	1,791	8		11,705	11,705	298	185	42	541,726	90
WESTERN AREA - - - - -	00		59	12	25	80,794	12,822	4		13,709	13,709	3,491	169	109	1,687,768	95
TEJON FLATS (ABD) - - - - -	029	00					22					7				
TEJON HILLS - - - - -	029	00	94	81	58	57,243	12,935	2	† 882	15,315	15,315	2,566	267	193	2,444,505	98
TEJON, NORTH - - - - -	029	00	64		14	150,537	21,235	6	† 1,350	1,211,345	1,211,345	206,855		12,031	298,546	66
FRUITVALE - - - - -	00				1		0					0		0		
OLCESE (ABD) - - - - -	00						190					224				
JV-BASALT - - - - -	00		2			10,442	1,319	14		2,438	2,438	18,694	233	23	96,789	90
VEDDER-Eocene - - - - -	00		62		13	140,895	19,726	6		1,208,907	1,208,907	187,936	8,629	12,008	201,757	59
TEMBLOR EAST - - - - -	029	00		2	1		15		† 0			0		0		
TEMBLOR HILLS - - - - -	029															
AQUA & POINT OF ROCKS - - - - -	00		1			934	5	3	NH	35,559	35,559	211	38,071	1,975		
TEMBLOR RANCH - - - - -	029															
MIOCENE - - - - -	00		15	18		6,549	1,119	1	NH			0		0	67,234	91
TEMESCAL - - - - -	111	00	15		3	43,070	7,070	8	† 150	13,926	13,926	5,487	323	† 63	521,184	92
TEN SECTION - - - - -	029		48	69	35	235,314	80,796		† 820	602,341	-284,897	† 182,719		40,895	649,540	
	00		48	66	31	235,314	80,796	13		602,341	-284,897	175,410	2,560	40,376	649,540	73
	00		3	3	4							7,309		519		
MAIN AREA - - - - -			43	69	32	227,065	78,900			600,866	-286,372	180,786		40,894	577,836	
	00		43	66	31	227,065	78,900	14		600,866	-286,372	173,477	2,646	40,375	577,836	72
	00		3	3	4							7,309		519		
GAS ZONE - - - - -	00			3	4											
UPPER STEVENS - - - - -	00		27	66	29	118,152	74,100	12		476,912	-410,326	166,796	4,036	40,056	475,979	80
LOWER STEVENS - - - - -	00		16		2	108,913	4,800	19		123,954	123,954	6,681	1,138	319	101,057	48
NORTHWEST AREA - - - - -																
STEVENS - - - - -	00		5		1	8,249	1,896	5		1,475	1,475	1,933	178	1	72,504	90
TERRA BELLA (ABD) - - - - -	107	00					18					0				
THORNTON GAS - - - - -	067	00			1							53,641		0		
THORNTON, N. - WALNUT GROVE GAS - - - - -	00		3		3		1			84,424	84,424	417,110		735	1,300	
	067		2		2					35,856	35,856					
	077		1		1					48,568	48,568				1,300	
TIMBER CANYON - - - - -	111	00	30	4	4	84,702	5,563	8	1,274	224,789	224,789	9,890	2,653	3,066	39,666	32
LOEL-MAXWELL AREA - - - - -	00		1			2,126	86	6				112		28	967	31
MAIN AREA - - - - -	00		29	4	4	82,576	5,478	8		224,789	224,789	9,777	2,722	3,046	38,699	32
TISDALE GAS - - - - -	101	00	3	1						561,004		14,842		3,272	1,677	
TODHUNTERS LAKE GAS - - - - -	113	00	11	11	21					2,506,884		75,157		42,200	173,002	
TOMPKINS HILL GAS - - - - -	023	00	23	1	8					2,561,645		72,845		9,838	6,934	
MAIN AREA - - - - -	00		22	1	7					2,561,593		72,830		9,788	6,934	
WEST AREA - - - - -	00		1		1					52		15		50		
TORRANCE - - - - -	00		340	32	88	1,884,094	195,086	14	18,367	1,436,268	1,436,268	134,639		13,991	19,837,059	
OFFSHORE - - - - -	237	00	40	9		199,569	6,920	14		582,517	582,517	8,282	2,918	2,311	4,734,295	96

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbbl)	Cumulative oil and condensate (Mbbbl)	Daily production per well (bbl)	Estimated oil reserves (Mbbbl) (12-31-80)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft ³ /bbl)	Estimated gas reserves (MMcf) (12-31-80)	Water (bbl)	% water
DEL AMO - - - - -	00	00	4	1		14,184	723	18		41,418	41,418	785	2,956	184	244,364	95
OTHERS - - - - -	00	00	34	8		183,465	6,197	14		541,107	541,107	7,497	2,917	2,128	4,489,931	96
ONSHORE - - - - -	037	00	388	23	88	1,484,525	188,167	15		853,751	853,751	126,357	586	11,479	15,182,744	98
OTHERS - - - - -	00	00	257	18	71	1,408,924	142,988	17		721,844	721,844	98,895	441	19,679	14,441,678	98
DEL AMO - - - - -	00	00	43	5	17	83,599	25,258	5		132,711	132,711	28,262	1,587	1,889	661,886	89
TORREY CANYON - - - - -	111	00	42	10	12	193,488	19,484	13	797	1,579,257	1,579,257	23,943	8,145	17,281	58,853	23
FIRST SESPE - - - - -	00	00	4	7	5	9,377	426	4							27,176	74
SECOND SESPE - - - - -	00	00	6	3	1	5,888	5,382	3							77	1
THIRD SESPE - - - - -	00	00	10		2	24,735	1,848	7							19,314	44
DEEP - - - - -	00	00	28		4	153,488	12,838	21		1,579,257	1,579,257		18,294		11,486	7
TURNBULL (ADD) - - - - -	037	00					764					582				
TRACY GAS - - - - -	077	00	1							28,386		13,796		188	447	
TREMONT GAS - - - - -	095	00	3	1						186,899		2,572		865	344	
TRICO GAS - - - - -	00	00	8	22	1					199,432	199,432	199,985		1,244	9,382	
	029			2												
	031		2	1	1					9,883	9,883				1,026	
	107		7	19						198,349	198,349				8,356	
TRICO, NORTHWEST, GAS - - - - -	031	00	4	2						334		8,844		148	788	
FIRST MYA - - - - -	00	00	1	1						14		2,788		148	78	
ATWELL ISLAND - - - - -	00	00	3	1						328		5,264		MM	638	
TURK ANTICLINE - - - - -	019	00	3	1	1	33,673	198	31	198	3,622	3,622	24	187	28	118,217	78
TEMBLOR - - - - -	00	00	1			287	164					28				
UPPER McDONALD - - - - -	00	00	1			18,238	18	58		2,824	2,824	2	111			
LOWER McDONALD - - - - -	00	00	1	1	1	15,156	15	41		1,598	1,598	2	185		118,217	89
UNION AVENUE - - - - -	029	00	2	2		13,922	1,347	18	MM			829		0	547,184	47
UNION ISLAND GAS - - - - -	077															
WINTERS - - - - -	00	00	12	1	1	692	2			14,992,788		93,323		156,267	118,962	
UNION STATION - - - - -	037	00	5		3	31,225	1,451	17	444	87,874	87,874	4,279	2,788	1,419	81,848	72
VALLECITOS - - - - -	069		26	11	4	56,529	4,744		634	6,696	6,696	3,598		84	386,456	
	00	00	26	11	4	56,529	4,744	4		6,696	6,696	3,859	118	84	386,456	84
	00	00										1,738				
ASHURST AREA - - - - -																
YOKUT SAND - - - - -	00	00	4	1	1	4,785	54	3		36	36	5	7	67	258	5
CEDAR FLAT AREA - - - - -	00	00	1			71	9					8		8	47	48
CENTRAL AREA - - - - -	00	00	8		2	38,799	3,236	11		918	918	2,967	29	11	271,856	98
ASHURST - - - - -	00	00	1		1	1,112	49	3				4		8	973	47
DOMENGINE-YOKUT - - - - -	00	00	7		1	29,687	3,186	12		918	918	2,963	38	11	278,883	98
FRANCO AREA - - - - -	00	00	18	3	1	28,492	1,349	4		5,758	5,758	883	281	6	35,881	63
GRISMOLD CANYON AREA - - - - -	00	00	2	1		478	17	1				8		8		
LOS PINOS CANYON AREA (ADD) - - - - -	00	00										8				
SILVER CREEK AREA - - - - -	00	00	1	6		32	88					5		8	22	41
PIMENTAL CANYON (ADD) - - - - -	00	00										1,738				
VALPREDO - - - - -	029															
MIOCENE - - - - -	00	00	1			2,892	98	4	MM			18		8	38,388	95
VAN SICKLE ISLAND GAS - - - - -	095	00	2	2	2		38			261,937		18,242		4,959	6,076	
VENICE BEACH - - - - -	00	00	4	3	1	68,112	3,898	47	791	67,374	67,374	1,828		576	3,167,985	

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbd)	Cumulative oil and condensate (Mbbd)	Daily production per well (bbd)	Estimated oil reserves (Mbbd) (12-31-80)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft ³ /bbl)	Estimated gas reserves (MMcf) (12-31-80)	Water (bbl)	% water
OFFSHORE- - - - -	237		23			43,218	2,500	59	746	38,513	38,513	1,407	891	425	2,393,630	98
ONSHORE - - - - -	937		2			24,894	598	34	NN	28,861	28,861	420	1,159	151	774,355	97
VENTURA- - - - -	111	OG	625	139	165	7,131,566	836,654	38	63,985	3,471,020	3,471,020	1,989,000	502	38,422	32,223,945	82
VERNALIS GAS - - - - -	877	DG	23	1	4					941,682		91,344		7,988	3,876	
VERNALIS, SM, GAS (ABD)- - - - -	877	DG										12				
VERONA GAS - - - - -	181	DG			1							0		N.A.		
WALNUT (ABD) - - - - -	937	OG					71					0				
MASCO (ABD)- - - - -	829	OG					5,071					3,276				
WAYSIDE CANYON - - - - -	837	OG	8		4	34,805	2,450	12	118			0		0	134,269	79
WELCOME VALLEY - - - - -	829	OG	2	43		524	71	1	NN			0		0	1,559	75
WEST BUTTE GAS (ABD) - - - - -	181	DG										668				
WEST MOUNTAIN- - - - -	111	OG	21	2		38,568	3,615	5	592	40,248	40,248	2,949	1,043	694	35,710	48
WESTHAVEN- - - - -	819															
TEMBLOR- - - - -	OG		1	1		35,971	112	98	NN	58,767	58,767	208	1,633	N.A.	32,542	47
WHEELER RIDGE- - - - -	829	OG	94	26	39	444,788	52,274	13	2,602	339,166	339,166	86,697	762	883	1,550,688	78
CENTRAL AREA- - - - -	OG		64	23	27	262,690	36,195	11		278,105	278,105	71,299	1,058	601	668,166	72
COAL OIL CANYON- - - - -	OG		22	2	5	51,126	2,855	6		22,720	22,720	1,098	444	22	138,398	72
MAIN - - - - -	OG		21	14		20,542	6,623	3				4,059		0	40,541	66
VALV - - - - -	OG		3		3	11,472	862	10		15,238	15,238	713	1,328	37	33,956	75
2-38 - - - - -	OG		1	3		326	403	1				529		0	1,525	82
OLCESE - - - - -	OG		3		4	3,892	1,555	4		7,801	7,801	2,495	2,004	55	22,401	85
ZA-5 - - - - -	OG		1		2	106	198			7,017	7,017	2,205	66,198	27	1,904	95
ZB-5 - - - - -	OG		4	2	3	6,858	1,133	5		7,759	7,759	3,637	1,131	24	3,427	33
REFUGIAN EOCENE- - - - -	OG		10	2	9	168,368	22,566	46		217,570	217,570	56,564	1,292	436	426,014	72
NORTHEAST AREA- - - - -	OG		4	3	1	9,245	1,258	6		2,279	2,279	367	246	8	14,027	68
FA-2 - - - - -	OG		4	3	1	9,245	1,238	6		2,279	2,279	346	246	8	14,027	68
HAGOOD (ABD) - - - - -	OG						15					7				
ZB-1 (ABD) - - - - -	OG						5					14				
SOUTHEAST AREA- - - - -																
OLCESE - - - - -	OG		2		3	6,404	1,013	9		18,390	18,390	3,073	2,784	72	1,104	14
TELEGRAPH CANYON AREA (ABD) - - - - -	OG						100					2,006				
WINDGAP AREA- - - - -	OG		24		8	166,249	13,708	19		40,392	40,392	9,953	242	203	875,311	84
RESERVE- - - - -	OG		22		4	160,556	13,428	20		34,724	34,724	3,430	216	169	874,626	84
OLCESE - - - - -	OG		2		4	5,693	281	8		5,668	5,668	6,523	995	33	485	11
WHITE WOLF - - - - -	829	OG	8	7		26,619	969	9	† 319			0		0	11,822	51
WHITTIER - - - - -	837		211	13	202	646,065	2/ 47,165		5,758	572,558	572,558	44,660		3,347	7,223,621	
	OG		205	13	200	646,065	2/ 47,165	9		572,558	572,558	44,660	886	3,347	7,223,621	92
	GS		6		2					2,115,098	-364,658					
CENTRAL AREA- - - - -	OG		175	12	199	367,972	42,635	6		298,691	298,691	41,088	811	2,247	6,952,303	95
UPPER- - - - -	OG		152	10	182	288,546	37,042	5		121,038	121,038	23,818	419	944	6,279,916	96
184 ANTICLINE- - - - -	OG		24	2	17	79,426	5,593	9		177,653	177,653	17,271	2,236	1,303	472,387	89
LA HABRA AREA - - - - -			8	1	2	22,824	2/ 803			32,934	32,934	2,466		91	96,223	
	OG		2	1		22,824	2/ 803	31		32,934	32,934	2,466	1,442	91	96,223	81
	GS		6		2					2,115,098	-364,658					
RIDEOUT HEIGHTS AREA- - - - -	OG		28		1	255,269	3,726	25		240,933	240,933	1,105	943	1,008	175,095	41
PLIOCENE - - - - -	OG		16		1	162,319	1,321	28		156,437	156,437	839	963	988	142,077	47
MIOCENE- - - - -	OG		12			92,950	2,405	21		84,496	84,496	265	909	21	33,018	26

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas					Water	
			Producing	Standing	Shut-in	Oil and condensate (bbt)	Cumulative oil and condensate (Mbbt)	Daily production per well (bbt)	Estimated oil reserves (Mbbt) (12-31-80)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft ³ /bbt)	Estimated gas reserves (MMcf) (12-31-80)	Water (bbt)	% water
WHITTIER HEIGHTS, NORTH (ABD) - - - - -	837	00					85					84				
WILD GOOSE GAS - - - - -	807	00	2	5						218,842		102,418		426	31	
WILLIAMS GAS - - - - -	811	00			1							0		1,008		
WILLOW PASS GAS (ABD) - - - - -	813	00			5							2,891				
WILLOW SLOUGH GAS - - - - -	113	00	5	1						1,264,659		5,715		5,685		
WILLOWS-BEEHIVE BEND GAS - - - - -	821	00	65	1	8					4,596,897		314,563		† 32,456	60,177	
WILMINGTON - - - - -	00		2,319	495	267	40,921,501	1,994,304	48	407,906	6,956,912	6,956,912	1,060,848		66,177	415,490,809	
OFFSHORE - - - - -	237		905	261	121	26,444,897	992,158		352,598	5,615,980	5,615,980	596,257		61,425	217,025,691	
ONSHORE - - - - -	837		1,414	234	146	14,476,604	1,002,146		55,308	1,340,932	1,340,932	464,591		4,753	198,464,318	
FAULT BLOCK I - - - - -			510	151	77	5,813,502	247,587			403,933	403,933	107,222			52,536,148	
	00		510	151	76	5,813,502	247,587	31		403,933	403,933	107,222	69		52,536,148	90
FAULT BLOCK II - - - - -	00		278	32	34	2,727,641	238,754	27		302,836	302,836	151,104	111		58,423,785	96
FAULT BLOCK III - - - - -	00		168	35	19	1,827,879	169,855	30		242,386	242,386	99,885	133		55,896,822	96
FAULT BLOCK IV - - - - -	00		385	52	63	2,366,478	412,281	17		365,226	265,226	308,634	156		37,372,343	95
FAULT BLOCK V - - - - -	00		325	147	46	3,164,794	304,188	27		483,006	483,006	172,333	153		54,213,721	94
FAULT BLOCK VI - - - - -	00		329	63	15	9,955,242	345,584	83		1,837,322	1,837,322	107,571	185		91,411,533	90
FAULT BLOCK VII - - - - -	00		181	2	2	4,209,822	92,057	114		840,383	840,383	24,976	200		30,633,784	88
FAULT BLOCK VIII - - - - -	00		56	1	3	2,626,538	37,619	128		573,334	573,334	19,396	218		7,824,255	75
FAULT BLOCK 90 - - - - -	00		166	12	10	8,174,839	144,943	135		1,879,752	1,879,752	68,670	229		27,069,783	77
FAULT BLOCK 98 - - - - -	00		4	1		56,374	1,516	39		28,734	28,734	975	509		107,835	66
WINCHESTER LAKE GAS - - - - -	113	00	4	2	1					238,409		773		2,727	8,207	
WINTERS GAS - - - - -			2	4			19			293,733	293,733	37,732		3,006	1,451	
	895		1	2						271,169	271,169				1,430	
	113		1	2						22,564	22,564				21	
	00		2	4			19					0		0		
	00									293,733		37,732		3,006	1,451	
WOODLAND GAS - - - - -	113	00	2	1	1					17,298		2,811		158	1,408	
YORBA LINDA - - - - -	859	00	472	12	8	2,815,596	68,688	16	26,894	12,727	12,727	1,972	4	74	25,724,989	98
SHALLOW - - - - -	00		398	8	5	2,955,969	54,396	18				173		0	20,252,376	89
MAIN - - - - -	00		52	4	1	142,230	9,186	7		12,303	12,303	824	93	51	3,144,390	96
SHELL - - - - -	00				1							883		0		
E SAND - - - - -	00		10			64,713	1,515	18				0		0	1,117,102	95
F SAND - - - - -	00		10			49,256	5,403	13				0		0	1,157,907	96
MIOCENE CONTACT - - - - -	00		2			3,426	267	5		424	424	94	125	25	53,214	94
YOMLUNNE - - - - -	829	00	84	6	3	5,905,387	36,473	193	† 27,452	9,297,152	9,297,152	52,338	1,574	† 57,183	1,304,582	18
ETCHEGOIN - - - - -	00		2			40,303	1,147	55		14,241	14,241	400	353	521	125,303	76
STEVENS - - - - -	00		77	6	3	5,737,695	35,199	204		9,062,195	9,062,195	51,717	1,579	† 56,662	1,138,239	16
SOUTH YOMLUNNE - - - - -	00		5			127,589	127	70		220,716	220,716	221	1,733	N.A.	41,040	24
ZACA - - - - -	883	00	25		21	549,845	22,899	60	6,589			2,866		0	8,614,128	94
ZAMORA GAS - - - - -	113															
STARKEY - - - - -	00		3		3					692,373		1,759		† 3,441	12,658	

PRODUCTION AND RESERVES - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Oil and condensate				Gas				Water		
			Producing	Standing	Shut-in	Oil and condensate (bbl)	Cumulative oil and condensate (Mbbbl)	Daily production per well (bbl)	Estimated oil reserves (Mbbbl) (12-31-00)	Gross gas (Mcf)	Net gas (Mcf)	Cumulative gas (MMcf)	Gross gas-oil ratio (ft³/bbl)	Estimated gas reserves (MMcf) (12-31-00)	Water (bbl)	% water
STATE TOTAL - - - - -			45,874	6,307	12,131	347,028,242	18,658,332	5,206,318	407,150,984	311,168,788	28,895,895	3,992,156	2,117,249,943			
		OG	44,889	6,050	11,676	346,910,813	18,650,567	215,206,318	254,710,029	158,727,753	428,804,752	717	2,445,396	2,114,611,396	40	
		DG	937	269	425	118,229	7,766		152,440,955		48,091,142		1,546,760	1,792,379		
		GS	95	8	222				79,933,777	-13,015,612				846,168		
		LG	5						d/ 166,091	d/ -107,768						
ONSHORE - - - - -			44,374	5,953	11,736	307,049,390	16,896,417	4,727,453	393,070,143	298,093,972	27,325,819		3,862,765	1,798,221,490		
		OG	43,397	5,690	11,266	306,943,340	16,895,055	194,727,453	243,075,668	148,099,497	419,617,177	772	2,328,768	1,795,788,612	75	
		DG	925	268	418	186,050	7,362		149,994,475		47,706,642		1,534,005	1,586,718		
		GS	94	8	222				79,933,777	-13,015,612				846,168		
		LG	5						d/ 166,091	d/ -107,768						
OFFSHORE - - - - -			1,500	359	417	39,978,852	1,761,916	478,865	14,080,841	13,074,736	41,572,075		129,391	319,028,445		
		OG	1,491	359	418	39,966,673	1,757,512	73	478,865	11,634,361	10,628,256	41,187,575	288	116,636	318,022,784	89
		DG	10		7	12,179	4,404	3	2,446,480		4,384,500		12,755	285,661		
DISTRICT NUMBER - 1 - - - - -			8,308	1,511	2,105	83,031,689	7,323,865	854,326	26,511,343	25,628,843	47,119,813		259,595	848,174,273		
		OG	8,283	1,514	2,108	83,030,989	7,323,865	27	854,326	26,460,176	25,577,676	47,088,358	334	257,577	847,405,938	91
		DG	5	2	2	700			51,167		31,455		2,018	37,113		
		GS	33	2	43				16,738,167	674,616				731,222		
		LG	5						d/ 166,091	d/ -107,768						
ONSHORE - - - - -			7,002	1,211	1,777	46,904,337	5,775,631	398,632	18,818,811	17,936,311	46,180,486		177,911	537,909,265		
		OG	6,978	1,214	1,780	46,903,637	5,775,629	18	398,632	18,767,644	17,885,144	46,152,676	425	175,893	537,140,938	92
		DG	5	2	1	700			51,167		27,818		2,018	37,113		
		GS	33	2	43				16,738,167	674,616				731,222		
		LG	5						d/ 166,091	d/ -107,768						
OFFSHORE - - - - -			1,305	300	329	36,127,352	1,548,234	455,694	7,692,532	7,692,532	4,939,327		81,684	310,265,008		
		OG	1,305	300	328	36,127,352	1,548,234	75	455,694	7,692,532	7,692,532	4,935,682	214	81,684	310,265,008	90
		DG			1							5,645				
DISTRICT NUMBER - 2 - - - - -			3,297	623	865	21,246,777	1,824,215	262,246	36,763,789	25,902,833	43,692,686		223,099	72,558,485		
		OG	3,270	621	873	21,246,667	1,824,215	17	262,246	36,137,647	25,275,891	43,655,163	1,501	221,381	72,406,858	78
		DG	10	5	6	110			626,142		43,523		1,718	42,277		
		GS	39	5	81				36,783,007	-10,558,293				110,150		
ONSHORE - - - - -			3,145	616	791	19,683,135	1,733,453	252,659	28,378,298	23,516,542	43,541,805		203,199	65,811,883		
		OG	3,118	614	800	19,683,025	1,733,453	17	252,659	27,752,156	22,890,400	43,504,282	1,489	201,481	65,659,456	77
		DG	10	5	6	110			626,142		43,523		1,718	42,277		
		GS	39	5	81				36,783,007	-10,558,293				110,150		
OFFSHORE - - - - -			152	7	74	1,563,642	90,762	9,587	2,385,491	2,385,491	150,881		19,900	6,746,602		
		OG	152	7	74	1,563,642	90,762	25	9,587	2,385,491	2,385,491	150,881	1,674	19,900	6,746,602	83
DISTRICT NUMBER - 3 - - - - -			3,038	712	832	27,160,746	1,532,615	402,363	14,089,216	12,111,552	41,632,154		174,173	220,901,940		
		OG	3,022	712	816	27,148,567	1,528,019	24	402,363	12,822,870	10,845,206	41,211,552	467	167,797	220,691,833	89
		DG	7	1	9	12,179	4,596	5	1,266,346		420,602		6,376	205,315		
		GS	11	1	7				12,642,370	-335,407				4,792		
ONSHORE - - - - -			2,998	665	818	24,872,888	1,409,731	388,779	11,266,532	10,294,973	41,183,189		152,745	218,885,451		
		OG	2,988	663	808	24,872,888	1,409,503	23	388,779	11,266,532	10,294,973	41,110,540	453	152,745	218,880,659	90
		DG	10	1	3		228				72,649			4,792		
		GS	10	1	7				12,642,370	-335,407						
OFFSHORE - - - - -			41	47	14	2,287,858	122,884	13,584	2,822,684	1,816,579	448,965		21,428	2,016,489		
		OG	34	49	8	2,275,479	118,514	158	13,584	1,556,338	550,233	410,012	650	15,052	1,811,174	48
		DG	7		6	12,179	4,368	5	1,266,346		434,953		6,376	205,315		
DISTRICT NUMBER - 4 - - - - -			27,784	2,727	6,572	204,174,923	46,158,615	3,558,316	157,669,574	89,822,133	49,639,097		1,885,743	887,275,533		
		OG	27,713	2,692	6,528	204,172,133	46,158,608	2013,558,316	155,262,397	87,414,956	45,879,778	717	1,650,774	887,211,056	83	
		DG	76	38	62	2,790		1	2,407,177		4,559,327		232,969	64,477		
		GS	3		3				155,570	-1,190,311						
DISTRICT NUMBER - 5 - - - - -			2,577	524	1,342	11,105,582	1,805,295	128,360	30,885,910	10,472,995	43,851,878		141,151	84,239,919		
		OG	2,542	491	1,340	11,100,117	1,805,180	12	128,360	29,472,003	9,059,088	43,720,206	2,655	126,268	84,002,636	88
		DG	34	34	9	5,465	119		1,413,907		4,131,672		14,883	237,283		
DISTRICT NUMBER - 6 - - - - -			871	211	436	308,525	13,728	707	147,231,152	147,231,152	46,960,266		1,310,395	4,099,793		
		OG	58	22	11	211,540	10,682	10	707	554,936	554,936	49,703	2,623	21,599	2,893,875	93
		DG	803	182	337	96,985	4,304		146,676,216		46,910,563		1,288,796	1,205,914		
		GS	10	1	88				13,614,663	-1,606,217				4		
ONSHORE - - - - -			869	211	436	308,525	13,692	707	146,051,018	146,051,018	46,927,364		1,304,016	4,099,447		
		OG	58	22	11	211,540	10,682	10	707	554,936	554,936	49,703	2,623	21,599	2,893,875	93
		DG	801	182	337	96,985	4,301		145,496,082		46,877,661		1,282,417	1,205,568		
		GS	10	1	88				13,614,663	-1,606,217				4		
OFFSHORE - - - - -			2					36	1,180,134	1,180,184	432,902		6,379	346		
		DG	2					36	1,180,134		432,902		6,379	346		

PRODUCTION AND RESERVES FOOTNOTES - 1980

NOTE: Wells completed in more than one pool (multiple completions) are counted once in area, field, and district totals. A standing well is incapable of production in its present condition; a shut-in well is capable of production in its present condition.

Gas storage and liquified petroleum gas figures are not included in area, field, district, or state gas totals.

† Revised reserve figure.

‡ Corrected cumulative figure.

* Cumulative figure less than 500 bbl or 500 Mcf.

** Reserve figure less than 100,000 bbl or 1,000 Mcf.

a/ Crude oil produced from gas storage wells is included in the field and area cumulative totals.

b/ Figures for Aliso Canyon field no longer contain data for Oat Mountain Area. Oat Mountain Area has been designated a field and can be found on page 63.

c/ Includes figures formerly in Tule Elk field. Tule Elk field is now part of Elk Hills field.

d/ Figure shown is expressed in barrels.

e/ Flared gas from shallow gas sands (source unknown).

PRESSURE MAINTENANCE PROJECTS

PRESSURE MAINTENANCE PROJECTS

FIELD, AREA, AND POOL	YEAR STARTED	YEAR DISCONTINUED	CUMULATIVE INJECTION (MMcf)	FIELD, AREA, AND POOL	YEAR STARTED	YEAR DISCONTINUED	CUMULATIVE INJECTION (MMcf)
DISTRICT 1				DISTRICT 3			
Beverly Hills				Capitan			
Pliocene	1977	1978	90	Onshore	1937	1957	920
Miocene	1977	1978	57	Cat Canyon	1947	1955	2,958
Brea-Olinda	1957	1959	178	Cuyama, South			
Coyote, West				Main Area	1950	Active	401,863
99 East	1945	1962	20,931	Elwood			
Emery	1949	1967	153,913	Offshore	1930	1978 ^b	2,721
Dominguez				Elwood, South, Offshore	1973	Active	5,910
East Block				Guadalupe	1955	1959	1,782
1st	1935 (?)	1936	3,925	Lompoc	1929	1961	5,803
2nd	1936	1941	46	Morales Canyon			
3rd, 4th & 5th	1936	1936	1	Clayton Area	1952	1952	48
East Central Block				Orcutt	1926	1948	1,500
1st	1935 (?)	1942 (?)	7,618	Russell Ranch			
2nd	1935	1942	101	Main Area	1949	Active ^c	46,384
West Central Block				San Ardo	1955	1955	322
1st	1935 (?)	1935 (?)	4,631	Santa Maria Valley	1955	1955	.331
2nd	1935 (?)	1935	771				
3rd, 4th & 5th	1935	1941	27	DISTRICT 4			
7th	1937	1937	1				
Northeast Central Block				Belridge, North			
3rd	1940	1941	41	Temblor	1938	1975 ^b	49,043
Northwest Central Block				Belridge 64	1941	Active	424,589
3rd & 4th	1939	1941	758	Y Sand	1949	1960	18,981
Huntington Beach				Buena Vista			
South Area, Onshore				Buena Vista Hills Area			
A-37	1947	1951	1,864	Upper (Undifferentiated)	1927	1968	15,545
South Area, Offshore				Upper (Sub-Scale II-D Unit)	1944	1954	1,374
Jones	1951	1956	1,865	27B (Undifferentiated)	1949	1958	84,441
Inglewood	1964	1970	12,222	555 Stevens	1970	Active	54,042
Kraemer	1954	1957	27	Canal			
Las Cienegas				Upper Stevens	1941	1959	55,630
Murphy Area (WAG)	1964	Active	16,815	Coles Levee, North			
Los Angeles Downtown				Stevens (21-1 & Western)	1943	1971	133,569
Miocene	1965	1967	1,181	Stevens (Main Western)	1942	1969	727,690
Richfield				Coles Levee, South			
Chapman	1943	1946	133	Stevens (F1 & F2)	1945	Active	727,478
Rosecrans				Cymric			
Main Area				Salt Creek Main Area			
O'Dea	1947	1964	1,999	Carneros Unit	1948	Active	28,750
Salt Lake	1966	1971	1,099	Elk Hills			
Sansinena				Upper (Undifferentiated)	1945	1979	36,499
East Area				Stevens	1976	Active	141,993
A-10, Block III	1955	1972	12,904	Greeley			
West Area	1956	1963	2,662	Olcese 12-21	1964	1976	12,021
Santa Fe Springs				Rio Bravo-Vedder	1948	1967	75,276
Santa Fe	1948	1949	27	Los Lobos			
Savtelle	1977	1978	30	Reef Ridge (abd.)	1955	1962	1,314
Wilmington				McDonald Anticline			
Fault Block V-B				Layman Area	1953	1978 ^b	2,361
Upper Terminal	1953	1960	8,390	McKittrick			
Lower Terminal	1953	1960	5,878	Northeast Area			
Fault Block VI				Phacoides	1967	1969 ^b	1,145
Upper Terminal	1954	1959	4,204	Midway-Sunset	1944	Active ^b	43,350
DISTRICT 2				Paloma			
				Main Area			
Castaic Junction				Lower Stevens	1941	1966	374,599
10-A & 10-B	1954	1969	59,274	Rio Bravo			
15	1958	1970	14,072	Rio Bravo-Main Vedder-			
21 Del Valle & 21 Main	1961	1965	9,014	Osborne	1946	1974	171,867
21 North	1961	1971	9,311	Rosedale Ranch			
Fillmore	1967	1970	1,668	Lerdo	1955	1956	522
Honor Rancho				San Emidio Nose			
Main Area				Stevens	1963	1966	3,597
Wayside	1954	1961	6,679	Ten Section			
Southeast Area				Main Area			
Wayside 13	1960	1966	13,296	Upper Stevens	1954	Active ^b	29,323
Hopper Canyon				Wheeler Ridge			
Main Area	1978	1979	4	Central Area			
Montalvo, West				Main Area	1960	1965	1,286
Onshore				Massive Eocene	1960	1969	26,051
McGrath	1956	1968	5,141	Windgap			
Colonia	1956	1971	907	Reserve	1960	1968	1,653
Newhall - Potrero				DISTRICT 5			
1-2-3	1944	Active	193,053				
5th	1952	Active	102,978	Coalinga			
6th	1953	Active	47,697	Temblor	?	1948	127
7th	1954	Active	76,603	Coalinga, East, Extension			
Oakridge	1956	1958	461	Coalinga Nose Area			
Ojai				Catchell	1951 ^d	Active	364,438
Silverthread Area				Guajarral Hills			
Miocene	1972	Active	3,777	Main Area	1957	1967	24,046
North Sulfur Mtn. Area	1948	1949	774	Polvadero Area			
San Miguelito				Bourdieu	1957	1967	17,696
First Grubb	1940	1949	6,781	Kettleman North Dome			
Santa Susana				Temblor	1938	1969	670,649
Second & Third Sespe	1965	1977	24,936	Vaqueros	1950	1968	20,166
South Mountain							
Main Area	1961	1961	288				
Torrey Canyon							
First, Second & Third Sespe	1948	1949	157				
Deep	1955	1977	44,776				
Ventura							
C-3	1955	1958 ^a	5,241				
Wayside Canyon	1966	1966	32				

* Temporary gas storage.

a/ 13 MMcf injected in 1962.

b/ Intermittent gas injection during the project.

c/ Discontinued in 1968, reactivated in 1978.

INJECTION

Using the Injection Table

Statistics in the injection table are given for fields, areas, and pools (zones). If there is more than one area within a field, information is subtotaled at the area level and the grand totals are shown on the field line. Also, county totals are given if a field covers portions of more than one county.

Project types (indicating the kinds of wells in fields, areas, and pools) are summarized at all levels if more than one type is present. The following project types appear in the injection tables:

WF – waterflood,
SF – steamflood (steam drive),

SC – cyclic steam (steam soak),
AI – air injection (in situ combustion/fireflood),
PM – pressure maintenance (gas injection),
GS – gas storage injection,
WD – water disposal, and
LG – liquified petroleum gas storage injection.

The number of wells shown is an average based on the amount of time a well is injecting, shut down, etc. *Therefore, the total number of cyclic steam wells in a field, area, or pool is the sum of the figures in the "Injecting" and "Shut-in" columns.*

API CODES USED IN INJECTION TABLES

COUNTY CODES			
Alameda - - - -	001 (201)	Kings - - - - -	031
Alpine - - - - -	003	Lake - - - - -	033
Amador - - - - -	005	Lassen - - - - -	035
Butte - - - - -	007	Los Angeles - -	037 (237)
Calaveras - - - -	009	Madera - - - - -	039
Colusa - - - - -	011	Marin - - - - -	041 (241)
Contra Costa - - -	013 (213)	Mariposa - - - -	043
Del Norte - - - -	015 (215)	Mendocino - - - -	045 (245)
El Dorado - - - - -	017	Merced - - - - -	047
Fresno - - - - -	019	Modoc - - - - -	049
Glenn - - - - -	021	Mono - - - - -	051
Humboldt - - - - -	023 (223)	Monterey - - - - -	053 (253)
Imperial - - - - -	025	Napa - - - - -	055 (255)
Inyo - - - - -	027	Nevada - - - - -	057
Kern - - - - -	029	Orange - - - - -	059 (259)
Placer - - - - -	061	San Bernardino -	071
Plumas - - - - -	063	San Diego - - - -	073 (273)
Riverside - - - - -	065	San Francisco - -	075 (275)
Sacramento - - - -	067	San Joaquin - - -	077
San Benito - - - - -	069	San Luis Obispo -	079 (279)
Sierra - - - - -	091	San Mateo - - - -	081 (281)
Siskiyou - - - - -	093	Santa Barbara - -	083 (283)
Solano - - - - -	095 (295)	Santa Clara - - -	085
Sonoma - - - - -	097 (297)	Santa Cruz - - - -	087 (287)
Stanislaus - - - - -	099	Shasta - - - - -	089
Sutter - - - - -	101		
Tehama - - - - -	103		
Trinity - - - - -	105		
Tulare - - - - -	107		
Tuolumne - - - - -	109		
Ventura - - - - -	111 (211)		
Yolo - - - - -	113		
Yuba - - - - -	115		
OFFSHORE ISLAND CODES			
Anacapa - - - - -	116 (216)	San Miguel - - -	120 (220)
San Clemente - - -	118 (218)	San Nicholas - -	122 (222)
		Santa Barbara - -	124 (224)
		Santa Catalina - -	126 (226)
		Santa Cruz - - -	128 (228)
		Santa Rosa - - -	130 (230)

Note: Numbers without parentheses indicate onshore codes.
Numbers in parentheses indicate offshore codes within the 3-mile limit.

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbd)	Cumulative water (Mbbd)	Water disposed (bbd)	Cumulative water disposed (Mbbd)
			Injecting	Standing	Shut-in						
ALISO CANYON ^{a/} - - - - -	037		35	5	58	26,160,386		1,725,417	10,131	1,867,284	85,730
		GS	27	5	54	26,160,386					
		SC			1						
		WF	5					1,725,417	10,131		
		WD	3		3					1,867,284	85,730
NO POOL BREAKDOWN- - - - -		WD									78,869
PORTER-DEL ALISO A-36- - - -		SC			1						
		WF	5					1,725,417	10,131		
		WD	3		3					1,867,284	6,861
SESNON-FREN- - - - -		GS	27	5	54	26,160,386					
ANT HILL - - - - -	029		3		3				20	3,879,735	58,217
OLCESE - - - - -		SC			3				20		
		WD	3							3,879,735	58,217
ANTELOPE HILLS - - - - -	029				1				17		301
		SC							17		
		WD			1						301
WILLIAMS AREA - - - - -					1				17		301
		SC							17		
		WD			1						301
BUTTON BED - - - - -		WD			1						301
ANTELOPE HILLS, NORTH- - - - -	029	SC							34		
ARROYO GRANDE- - - - -	079		29		82			2,586,041	4,979	2,771,203	5,860
		SC	23		82			2,176,414	3,974		
		SF	4					409,627	410		
		WF							595		
		WD	2		3					2,771,203	5,860
TIBER AREA- - - - -			29		82			2,586,041	4,979	2,771,203	5,860
		SC	23		79			2,176,414	3,974		
		SF	4					409,627	410		
		WF							595		
		WD	2		3					2,771,203	5,860
NO POOL BREAKDOWN- - - - -		SC	1		1			37,749	1,186		
DOLLIE - - - - -		SC	22		78			2,138,665	2,788		
		SF	4					409,627	410		
		WF							595		
		WD	2		3					2,771,203	5,860
ASPHALTO - - - - -	029										
STEVENS- - - - -		WF			1				191		
BARSDALE- - - - -	111				2						1,550
		WF			2						
		WD									1,550
BELGIAN ANTICLINE- - - - -	029		1		1			130,552	1,922		
		SC			1				1		
		WF	1					130,552	1,921		
MAIN AREA - - - - -		WF	1					130,552	1,921		
OCEANIC- - - - -		WF	1					130,552	837		
POINT OF ROCKS (ABD) - - - -		WF							1,085		

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbd)	Cumulative water (Mbbd)	Water disposed (bbd)	Cumulative water disposed (Mbbd)
			Injecting	Standing	Shut-in						
NORTHWEST AREA - - - - -		SC			1				1		
BELLEVUE - - - - -	029	WD	2							308,605	7,866
MAIN AREA - - - - -											
ETCHEGOIN - - - - -		WD	2							308,605	7,866
BELLEVUE, WEST - - - - -	029										
TULARE-ETCHEGOIN - - - - -		WD	1	1						446,018	7,355
BELMONT OFFSHORE - - - - -	259		8	4	18			3,087,350	74,834	178,834	2,696
		WF	7	4	16			3,087,350	74,834	178,834	2,696
		WD	1		2					178,834	2,696
OLD AREA - - - - -			7		4			3,033,098	31,713	178,834	2,696
		WF	7		2			3,033,098	31,713	178,834	2,696
		WD	1		2					178,834	2,696
SURFSIDE AREA - - - - -		WF	1	4	14			54,252	43,121		
BELBRIDGE, NORTH - - - - -	029		21	2	55	2,106,465		1,191,618	5,854	400,520	1,625
TULARE - - - - -		WD	1							400,520	1,625
SHALLOW - - - - -		SC	3		39			295,933	2,117		
		SF	14	1	11			895,685	3,335		
BELBRIDGE 64 - - - - -		PM	3	1	4	2,106,465					
		WF			1				403		
BELBRIDGE, SOUTH - - - - -	029		485	33	351		1,578,129	60,229,013	† 354,330	10,897,725	103,218
		SC	26		268			2,435,069	44,579		
		SF	449	29	73			57,793,944	308,396		
		WF							1,355		
		AI	4	4	7		1,578,129			10,897,725	103,218
		WD	6		3						
NO POOL BREAKDOWN - - - - -		SC	26		266			2,435,069	4,437		
		AI	3	4	1		1,203,535				
TULARE - - - - -		SF	5					1,346,593	1,347		
		AI			6					248,921	942
		WD	3								
TULARE-ETCHEGOIN - - - - -		WD	3		2					10,648,804	102,231
TULARE-DIATOMITE - - - - -		SC			3				40,142		
		SF	444	29	73			56,447,351	307,049		
		AI	1		1		374,594				
DIATOMITE - - - - -		WF							1,355		
		WD			1						45
BEVERLY HILLS - - - - -	037		24	1	4			11,292,963	108,486	134,414	3,347
EAST AREA - - - - -		WF	23	1	4			11,292,963	108,486		
PLIOCENE - - - - -		WF	5	1	1			1,156,961	12,079		
MIOCENE - - - - -		WF	22	1	4			10,136,002	96,407		
WEST AREA - - - - -											
PLIOCENE - - - - -		WD	1							134,414	3,347
BIG MOUNTAIN - - - - -	111										
SESPE - - - - -		WF	1		1			11,327	227		

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbd)	Cumulative water (Mbbd)	Water disposed (bbd)	Cumulative water disposed (Mbbd)
			Injecting	Standing	Shut-in						
BLACKWELLS CORNER- - - - -	029		1	1					17	7,440	647
		SC							17		
		WD	1	1						7,440	647
AGUA - - - - -		SC							17		
		WD		1							246
TUMEY- - - - -		WD	1							7,440	400
BREA-OLINDA- - - - -			44		46		724,855	6,792,556	53,275	858,839	12,578
	037		14		2			2,313,101			
	059		30		45		724,855	4,479,455		858,839	
		SC	2		30			236,517	3,348		
		SF	2		1			346,198	7,100		
		WF	36		12			6,209,841	42,827		
		AI	3		2		724,855				
		WD	1		1					858,839	12,578
NO POOL BREAKDOWN- - - - -		SC	2		30			236,517	775		
		WF			3				807		
		AI	2		2		577,184				
		WD	1		1					858,839	12,578
PLIOCENE - - - - -		SC							2,392		
		SF	1					9,756	913		
		WF			1				11,327		
THIRD PLIOCENE - - - - -		AI	1				147,671				
MIOCENE- - - - -		SC							181		
		SF	1		1			336,442	6,187		
		WF	1		1			49,609	2,062		
SECOND MIOCENE - - - - -		WF	15		3			3,121,769	7,654		
THIRD MIOCENE- - - - -		WF	21		6			3,038,463	20,977		
BRENTWOOD- - - - -	013	WD	1							740,447	2,280
MAIN AREA - - - - -											
THIRD MASSIVE- - - - -		WD	1							740,447	2,280
BUENA VISTA- - - - -	029		14	1	60	17,335		36,528	43,840	8,230,783	79,732
		PM	1		11	17,335					
		SC			1				56		
		WF	1		43			36,528	43,784		
		WD	12	1	5					8,230,783	79,732
BUENA VISTA FRONT AREA- - - - -			3		2				890	2,976,441	33,284
		WF							890		
		WD	3		2					2,976,441	33,284
TULARE - - - - -		WD	3		2					2,976,441	33,284
BUENA VISTA HILLS AREA- - - - -			11	1	58	17,335		36,528	42,950	5,254,342	46,447
		PM	1		11	17,335					
		SC			1				56		
		WF	1		43			36,528	42,894		
		WD	9	1	3					5,254,342	46,447
TULARE - - - - -		WD	8	1	3					5,230,263	44,658
UPPER (UNDIFFERENTIATED) - - - - -		PM			5						
		SC			1				56		
UPPER (SUB-SCALEZ) - - - - -		WD									1,641
UPPER (SUB-SCALEZ 11-D UNIT)		WF			5				11,103		
UPPER (TO-ETCHEGOIN 8D)- - - - -		WF			10				8,473		
UPPER (TO-SUB CALITROLEUM 27B)		WF			4				1,070		
UPPER (WILHELM CALITROLEUM 1C)		WF	1		16			36,528	13,279		

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Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbd)	Cumulative water (Mbbd)	Water disposed (bbd)	Cumulative water disposed (Mbbd)
			Injecting	Standing	Shut-in						
UPPER (GUSHER) - - - - -		WD	1							24,079	148
UPPER (99-9D) - - - - -		WF			2				2,833		
27B (UNDIFFERENTIATED) - - -		PM			4						
27B (E-1) - - - - -		WF			6				2,859		
ANTELOPE SHALE-EAST DOME - -		WF							1,984		
ANTELOPE SHALE-WEST DOME - -		WF							1,294		
555 STEVENS - - - - -		PM	1		2	17,335					
BUNKER GAS - - - - -	095										
POST-Eocene - - - - -		WD	1							35,182	377
BURREL - - - - -	019	WD	2		1					673,150	19,961
BURREL, SOUTHEAST - - - - -	019	WD	2							110,059	8,343
CAL CANAL - - - - -	029										
TULARE-SAN JOAQUIN - - - - -		WD	1							214,097	337
CANAL - - - - -	029		3	9	3			111,792	33,051	574,110	742
ETCHEGOIN - - - - -		WD	2							574,110	742
UPPER STEVENS - - - - -		WF	1	9	3			111,792	33,051		
CANFIELD RANCH - - - - -	029	WD	5		2					1,430,761	37,536
GOSFORD, EAST, AREA - - - - -											
ETCHEGOIN - - - - -		WD	3		2					1,215,275	35,609
GOSFORD, SOUTH, AREA - - - - -											
ETCHEGOIN - - - - -		WD	1							100,513	1,812
GOSFORD, WEST, AREA - - - - -											
ETCHEGOIN - - - - -		WD	1							114,973	115
CAPITAN - - - - -	083		2		4			1,132,390	16,488		
		SC							4		
		WF	2		4			1,132,390	16,484		
ONSHORE - - - - -			2		4			1,132,390	16,488		
		SC							4		
		WF	2		4			1,132,390	16,484		
VAQUEROS - - - - -		WF	2		4			1,132,390	16,360		
ERBURU (ABD) - - - - -		WF							106		
COUARRUBIAS (ABD) - - - - -		WF							18		
CASCADE - - - - -	037		1					50,498	364		
		SC							5		
		WF	1					50,498	358		
PLIOCENE - - - - -		WF	1					50,498	358		
SUNSHINE RANCH - - - - -		SC							5		
CASMALIA - - - - -	083		17		68			845,379	5,269	13,715,658	161,216
		SC	10		66			845,379	5,269		
		WD	7		2					13,715,658	161,216
NO POOL BREAKDOWN - - - - -		SC	10		66			845,379	1,186		

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Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbf)	Cumulative water (Mbbf)	Water disposed (bbf)	Cumulative water disposed (Mbbf)
			Injecting	Standing	Shut-in						
MONTEREY - - - - -		SC							4,082		
		WD	6		2					7,944,097	17,987
MONTEREY-PT. SAL - - - - -		WD	1							5,771,561	143,230
CATAIC HILLS- - - - -	037		4	7	4			140,978	7,991		441
		SC							34		
		SF			3				34		
		WF	4	7				140,978	7,923		
		WD	1								441
NO POOL BREAKDOWN- - - - -		WD			1						441
STERLING - - - - -		WF	4	7				140,978	7,922		
STERLING, EAST - - - - -		WF							2		
UPPER RADOVICH - - - - -		SC							21		
		SF			2				31		
LOWER RADOVICH - - - - -		SC							13		
		SF			1				3		
CATAIC JUNCTION - - - - -	037		3	11				787,387	30,327		
		PM		1							
		WF	3	10				787,387	30,327		
10-A - - - - -		WF	3	5				787,387	23,296		
10-B - - - - -		WF		1					2,494		
15 - - - - -		WF		1					1,896		
21 NORTH - - - - -		PM		1							
		WF		3					2,641		
CAT CANYON - - - - -	083		132	3	481			20,209,393	262,514	18,427,435	129,993
		SC	46		454			6,463,269	28,011		
		SF	6	1	2			674,453	6,977		
		WF	50		16			13,071,671	227,526		
		WD	32	2	9					18,427,435	125,741
CENTRAL AREA- - - - -			8		25			1,393,634	34,778	2,285,453	6,643
		SC	1		18			82,941	2,050		
		WF	5		5			1,310,693	32,728		
		WD	3		1					2,285,453	6,643
NO POOL BREAKDOWN- - - - -		SC	1		18			82,941	350		
SISQUOC- - - - -		WF	5		5			1,310,693	32,728		
		WD	3		1					2,285,453	6,643
S1B- - - - -		SC							1,550		
S2 - - - - -		SC							89		
S6-S9- - - - -		SC							61		
EAST AREA - - - - -			31		187			2,477,548	16,566	617,333	5,237
		SC	25		185			2,280,120	11,900		
		SF	4		2			197,428	4,666		
		WD	1							617,333	5,237
NO POOL BREAKDOWN- - - - -		SC	25		185			2,280,120	5,724		
SISQUOC- - - - -		WD	1							617,333	4,297
MONTEREY - - - - -		SC							51		
		WD									940
S1B- - - - -		SF	4					197,428	2,800		
S1B-S9 - - - - -		SC							5,565		

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Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbf)	Cumulative water (Mbbf)	Water disposed (bbf)	Cumulative water disposed (Mbbf)
			Injecting	Standing	Shut-in						
BROOKS - - - - -		SF			2				1,866		
		SC							560		
GATO RIDGE AREA - - - - -			2	1	2				272	587,533	5,735
		SC							272		
		WD	2	1	2					587,533	5,735
SISQUOC - - - - -		SC							17		
MONTEREY - - - - -		WD	1	1	2					506,888	5,518
		SC							256		
SISQUOC-MONTEREY - - - - -		WD	1							80,645	217
OLIVERA CANYON AREA - - - - -		WD	2							1,441,543	14,185
SISQUOC - - - - -		WD	1							213,333	8,099
MONTEREY - - - - -		WD	1							1,228,210	6,086
SISQUOC AREA - - - - -			30	2	253			4,577,233	15,682	6,180,140	46,032
		SC	20		250			4,100,208	13,371		
		SF	2	1				477,025	2,311		
		WD	9	1	3					6,180,140	46,032
NO POOL BREAKDOWN - - - - -		SC	20		250			4,100,208	13,342		
S9 - - - - -		SF	2	1				477,025	2,311		
FOXEN - - - - -		SC							12		
SISQUOC - - - - -		WD	2	1	2					1,536,353	14,063
		SC							10		
MONTEREY - - - - -		WD	6		1					4,632,373	30,233
		SC							7		
THOMAS - - - - -		WD	1							11,414	1,735
WEST AREA - - - - -			40		15			11,760,978	195,211	7,315,433	52,161
		SC			1				413		
		WF	45		11			11,760,978	194,798		
		WD	15		2					7,315,433	52,161
NO POOL BREAKDOWN - - - - -		SC			1				19		
SISQUOC - - - - -		WF	45		11			11,760,978	192,447		
		WD	8							2,766,403	27,694
S1B - - - - -		SC							120		
S2-S5 - - - - -		SC							19		
MONTEREY - - - - -		SC							256		
		WF							2,351		
		WD	9		2					4,549,030	24,467
TINAQUAIC AREA - - - - -		SC							5		
CHEVIOT HILLS - - - - -	037	WD	2		2					278,163	2,737
PLIOCENE - - - - -		WD	2		1					271,537	2,388
MIOCENE - - - - -		WD	1		1					6,626	350
CHICO-MARTINEZ - - - - -	029	SC							230		
COALINGA - - - - -	019		185	2	492			31,104,613	350,917	7,456,775	137,589
TEMBLOR - - - - -		SC	12		406			921,770	49,365		
		SF	95		56			22,197,308	74,891		
		WF	66		50			7,985,535	226,660		
		WD	13	2	7					7,456,775	137,589
COALINGA, EAST, EXTENSION - - - - -	019		7		16	20,412,915			15,155		
		PM									
		WF	7		16	20,412,915			15,155		

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Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bb0)	Cumulative water (Mbb0)	Water disposed (bb0)	Cumulative water disposed (Mbb0)
			Injecting	Standing	Shut-in						
COALINGA NOSE AREA- - - - -			7		16	20,412,915			14,984		
GATCHELL - - - - -		PM	7		16	20,412,915			14,984		
NORTHEAST AREA (ABD)- - - - -		WF							250		
COAL OIL POINT OFFSHORE- - - - -	283	WD			2						156
DEVEREAUX - - - - -		WD			2						156
COLES LEVEE, NORTH - - - - -	029		73	2	21			12,037,733	322,736		3,187
		WF	73	1	17			12,037,733	322,736		3,187
		WD		1	4						3,187
TULARE - - - - -		WD			1						359
SAN JOAQUIN - ETCHEGOIN- - -		WD		1	3						2,828
STEVENS (21-1 & UPPER WESTERN)		WF	10	1	13			1,234,257	55,218		
STEVENS (MAIN WESTERN) - - -		WF	64		4			10,803,476	267,517		
COLES LEVEE, SOUTH - - - - -	029		19		2	9,719,328		2,280,045	6,319	347,194	† 5,163
		PM	7		2	9,719,328					
		SC									
		WF	11					2,280,045	6,319	347,194	5,163
		WD	1								980
TULARE - - - - -		WD									800
TULARE - SAN JOAQUIN - - -		WD	1							347,194	70
SAN JOAQUIN-ETCHEGOIN- - -		WD									
STEVENS- - - - -		WF	11					2,280,045	6,319		3,312
		WD									
F1 - - - - -		PM	3		1	2,588,567					
F2 - - - - -		PM	4		1	7,130,761					
COMANCHE POINT - - - - -	029	SC							21		
COMPTON LANDING GAS- - - - -	011	WD									1
COYOTE, EAST - - - - -	059		19		22			6,412,791	68,944		902
		SC							48		
		WF	19		22			6,412,791	68,896		902
		WD									
ANY AREA- - - - -			19		19			6,412,791	65,147		902
		SC							48		
		WF	19		19			6,412,791	65,099		902
		WD									902
NO POOL BREAKDOWN- - - - -		WD									
FIRST ANAHEIM, EAST- - - - -		WF			7				7,723		
HUALDE, ANAHEIM, & STERN, WEST		WF	19		12			6,412,791	57,376		
ANAHEIM- - - - -		SC							48		
NORTHWEST BLOCK - - - - -											
STERN- - - - -		WF			3				3,797		

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Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbf)	Cumulative water (Mbbf)	Water disposed (bbf)	Cumulative water disposed (Mbbf)
			Injecting	Standing	Shut-in						
COYOTE, WEST - - - - -			72		34			42,098,470	823,023		
	037		14		5			8,463,908			
	059		59		30			33,634,562			
		WF	72		35			42,098,470	823,023		
		WD			1						
MAIN & 99 EAST - - - - -		WF	22		12			12,020,195	312,330		
MAIN & 99 WEST - - - - -		WF	37		5			27,339,012	433,318		
		WD			1						
EMERY EAST AND 138 - - - - -		WF	7		10			1,142,015	28,683		
EMERY, WEST- - - - -		WF	7		9			1,597,248	48,692		
CUYAMA, SOUTH- - - - -	083		20	1	33	521,102		3,520,849	194,556	4,940,343	62,549
MAIN AREA - - - - -			20	1	33	521,102		3,520,849	194,556	4,940,343	62,549
		PM	1		9	521,102					
		WF	17	1	24			3,520,849	194,556		
		WD	2							4,940,343	62,549
NO. POOL BREAKDOWN- - - - -		PM	1		9	521,102					
SANTA MARGARITA-BRANCH CANYON		WD	2							4,940,343	62,549
HOMAN- - - - -		WF	17		20			3,520,849	176,528		
HIBBERD- - - - -		WF		1	4				18,028		
CYMRIC - - - - -	029		94	2	531	889,408		7,908,713	† 50,099	270,037	5,425
		PM	4	1	3	889,408					
		SC	33		525			2,709,503	36,517		
		SF	56		1			5,199,210	13,335		
		WF		1					248		
		AI			3						
		WD	1		2					270,037	5,425
MCKITTRICK FRONT AREA - - - - -			28		207			3,335,711	22,977	270,037	4,383
		SC	11		206			854,805	18,758		
		SF	16					2,480,906	3,971		
		WF		1					248		
		WD	1		1					270,037	4,383
TULARE (UNDIFFERENTIATED)- -		SC	11		204			854,805	18,758		
		SF	2					192,764	1,197		
		WF		1							
		WD	1		1					270,037	4,383
TULARE (AMINICOLA) - - - - -		SC			1						
		SF	14					2,288,142	2,774		
		WF							248		
REEF RIDGE - - - - -		SC			2						
1-Y AREA- - - - -											
REEF RIDGE - - - - -		SC	1		5			32,188	280		
SALT CREEK MAIN AREA- - - - -			4	1	3	889,408			18		
		PM	4	1	3	889,408					
		SC							18		
CARNEROS UNIT- - - - -		PM	4	1	3	889,408					
SHEEP SPRINGS AREA- - - - -		SC	2		23			80,507	260		
TULARE - - - - -		SC	1		5			38,075	38		
ETCHEGOIN- - - - -		SC	1		17			42,432	221		

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Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bb0)	Cumulative water (Mbb0)	Water disposed (bb0)	Cumulative water disposed (Mbb0)
			Injecting	Standing	Shut-in						
WELPORT AREA - - - - -			59		294			4,460,307	26,564		1,042
		SC	19		291			1,742,003	17,201		
		SF	40		1			2,718,304	9,363		
		AI			3						
		WD			1						1,042
TULARE - - - - -			18		251			1,590,538	16,130		
		SF	40		1			2,718,304	9,363		
		AI			3						
ETCHEGOIN - - - - -		SC	2		40			151,465	1,071		
PHACOIDES - - - - -		WD			1						1,042
DEER CREEK - - - - -	107			1	1						2,829
SANTA MARGARITA - - - - -		WD		1	1						2,829
DEER CREEK, NORTH - - - - -	107	SC							7		
DEL VALLE - - - - -	037										
MAIN AREA - - - - -			5		1			388,179	15,921	118,775	25,311
		WF	2		1			388,179	15,921		
		WD	3							118,775	25,311
NO POOL BREAKDOWN - - - - -		WD	3							118,775	25,311
UPPER DEL VALLE - - - - -		WF	1					232,936	10,560		
LOWER DEL VALLE ^{b/} - - - - -		WF	2		1			155,243	5,361		
DEVILS DEN - - - - -	029								81		
		SC							42		
		SF							39		
OLD AREA - - - - -									53		
		SC							14		
		SF							39		
ALFERITZ AREA - - - - -											
ESCUDO - - - - -		SC							16		
POINT OF ROCKS - - - - -		SC							12		
DOMINGUEZ - - - - -	037		32		68			7,572,821	† 412,920		
		SC							22		
		WF	32		68			7,572,821	412,899		
ANY AREA - - - - -		WF	1		1			201,545	221		
EAST BLOCK - - - - -		WF	11		22			3,123,656	133,039		
1ST - - - - -		WF	4		16			1,698,569	68,751		
2ND - - - - -		WF	4		2			479,465	25,173		
3RD - - - - -		WF	4		1			663,763	18,808		
4TH & UPPER 5TH - - - - -		WF	3		2			281,859	17,910		
LOWER 5TH & 6TH - - - - -		WF			2				2,397		
EAST CENTRAL BLOCK - - - - -		WF	1		19			423,217	83,982		
1ST - - - - -		WF	1		13			109,899	50,255		
2ND - - - - -		WF	1		6			314,118	33,727		
EAST FLANK - - - - -											
2ND, 3RD, 4TH, 5TH & 6TH - - - - -		WF			1				778		
NORTHEAST CENTRAL BLOCK - - - - -		WF							12,105		

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Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbf)	Cumulative water (Mbbf)	Water disposed (bbf)	Cumulative water disposed (Mbbf)
			Injecting	Standing	Shut-in						
SOUTHEAST CENTRAL BLOCK - - - - -			3		2			389,798	27,878		
		SC							22		
		WF	3		2			389,798	27,849		
3RD - - - - -		SC							22		
		WF	2		1			370,898	16,280		
4TH & UPPER 5TH - - - - -		WF	1		2			18,900	11,569		
SOUTHWEST CENTRAL BLOCK - - - - -											
7TH & UPPER 8TH - - - - -		WF	3		3			378,279	17,842		
WEST BLOCK - - - - -		WF							6,577		
WEST CENTRAL BLOCK - - - - -		WF	10		17			2,536,729	69,819		
1ST & 2ND - - - - -		WF	3		6			567,938	13,326		
3RD & 4TH - - - - -		WF	5		9			885,610	39,979		
5TH - - - - -		WF							3,532		
LOWER 6TH & UPPER 7TH - - - - -		WF							287		
7TH & 8TH - - - - -		WF	3		2			1,083,181	12,695		
WEST UNIT - - - - -											
7TH & 8TH - - - - -		WF	2		4			519,597	60,687		
DUTCH SLOUGH GAS - - - - -	013	WD									1
EDISON - - - - -	029		32	3	172			2,291,491	† 17,284	8,144,686	54,347
		SC	12		165			1,032,088	11,712		
		SF	6		7			1,259,403	3,440		
		WF		1					2,132		
		WD	14	2	1					8,144,686	54,347
ANY AREA - - - - -		SC							22		
EDISON GROVES AREA - - - - -			2		27			9,095	3,236	4,086,950	27,227
NO POOL BREAKDOWN - - - - -		SC			20			9,095	580		
KERN RIVER CHANAC - - - - -		SC							1,290		
		SF			9				1,366		
OLCESE - - - - -		WD	2							4,086,950	27,227
MAIN AREA - - - - -			16		79			740,734	5,702	3,919,684	23,217
		SC	9		78			740,734	4,583		
		WF							1,119		
		WD	7		1					3,919,684	23,217
NO POOL BREAKDOWN - - - - -		SC	9		78			740,734	2,023		
SANTA MARGARITA - - - - -		WD	2							553,766	2,321
FREEMAN-JENETT - - - - -		WF							982		
KERN RIVER-SCHIST - - - - -		SC							2,560		
SCHIST - - - - -		WD	5		1					3,365,918	20,896
		WF							137		
PORTALS-FAIRFAX AREA - - - - -			1	1					222	1,240	2
SANTA MARGARITA - - - - -		WD	1							1,240	2
MAIN WICKER - - - - -		WF		1					222		
RACE TRACK HILL AREA - - - - -			10		67			1,541,662	8,182	120,745	149
		SC	3		67			282,259	5,237		
		SF	6					1,259,403	2,074		
		WF							791		
		WD	1							120,745	149
NO POOL BREAKDOWN - - - - -		SC	3		67			282,259	1,378		

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Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbbl)	Cumulative water (Mbbbl)	Water disposed (bbbl)	Cumulative water disposed (Mbbbl)
			Injecting	Standing	Shut-in						
KERN RIVER-TRANSITION- - - -		SC							3,859		
CHANAC - - - - -		SF	6					1,259,483	2,074		
OLCESE - - - - -		WD	1							120,745	149
PYRAMID HILL - - - - -		WF							791		
WEST AREA - - - - -		WD	2	1						16,067	3,752
CHANAC - - - - -		WD	1							15,355	51
CHANAC-SANTA MARGARITA - - -		WD		1							133
SANTA MARGARITA - - - - -		WD	1							712	1
WICKER - - - - -		WD									3,568
EDISON, NORTHEAST- - - - -	029		4		11			122,048	419		
CHANAC - - - - -		SC	3		11			121,336	233		
		SF	1					704	186		
ELK HILLS- - - - -	029		20	2	22	55,558,417		4,110,524	75,950		
		GS	2		3	1,345,881					
		PM	11	2	9	54,212,536					
		SC			1				9		
		WF	7	1	10			4,110,524	75,941		
TULARE - - - - -		SC							9		
GAS ZONE - - - - -		GS	2		3	1,345,881					
UPPER (UNDIFFERENTIATED) - -		PM			6						
		SC			1						
UPPER (SUB-SCALEZ) - - - -		WF			3				38,360		
STEVENS- - - - -		PM	12	2	3	54,212,536			31,270		
		WF									
STEVENS-MAIN BODY B SAND - -		WF	4	1	7			2,324,235	2,984		
STEVENS-24Z SAND - - - - -		WF	3					1,786,289	3,328		
EL SEGUNDO - - - - -	037		6			* 273,859				25,620	182
		LG	5			* 273,859					
		WD	1							25,620	182
ELWOOD - - - - -			3		2					652,538	9,338
OFFSHORE- - - - -	283		3		1					485,926	
ONSHORE - - - - -	083		1		1					166,612	
		PM	**		1						
		WD	3		1					652,538	9,338
OFFSHORE- - - - -			3		2					485,926	7,634
NO POOL BREAKDOWN- - - - -		PM	**		1						
VAQUEROS - - - - -		WD	2		1					485,926	7,634
ONSHORE - - - - -											
VAQUEROS - - - - -		WD	1							166,612	1,704
ELWOOD, SOUTH, OFFSHORE- - -	283		3		1	1,006,105			7,209		
		PM	3			1,006,105					
		WF			1				7,209		
MONTEREY - - - - -		PM	3			1,006,105					
		WF			1						
RINCON - - - - -		WF							7,209		

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Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbf)	Cumulative water (Mbbf)	Water disposed (bbf)	Cumulative water disposed (Mbbf)
			Injecting	Standing	Shut-in						
EUREKA CANYON- - - - -	111	WD	2							28,644	392
FOUR DEER- - - - -	083										
MONTEREY CHERT - - - - -	WF		1					17,413	1,063		
FRENCH CAMP GAS- - - - -	077										
POST-Eocene- - - - -	WD				1						60
FRUITVALE- - - - -	029		21	3	23		74,131	326,730	13,866	13,176,340	148,989
	SC		3		20			326,730	475		
	WF		1						13,392		
	AI		17	3	3		74,131			13,176,340	148,989
	WD										
CALLOWAY AREA - - - - -	WD		3		1					1,773,636	18,377
ETCHEGOIN- - - - -	WD		1							63,477	13,281
ETCHEGOIN-CHANAC - - - - -	WD		2		1					1,710,159	5,895
MAIN AREA - - - - -			18	3	22		74,131	326,730	13,866	11,402,704	130,613
	SC		3		20			326,730	475		
	WF		1						13,392		
	AI		14	3	2		74,131			11,402,704	130,613
	WD										
NO POOL BREAKDOWN- - - - -	SC		4		19			326,730	327		
ETCHEGOIN- - - - -	SC				2						
	WD		8	1	1					10,139,318	129,240
ETCHEGOIN-CHANAC - - - - -	WD		2							1,195,389	1,266
CHANAC - - - - -	SC								148		
	WD		4	2						67,997	106
MARTIN & KERNCO- - - - -	WF								902		
KERNCO - - - - -	AI		1				74,131				
	WF								12,490		
GAFFEY (ABD) - - - - -	037	SC							19		
GILL RANCH GAS - - - - -	039	WD	1							40,754	351
GREELEY- - - - -	029		4		8			907,049	54,663	1,352,112	38,317
	PM				1						
	WF		1		1			907,049	54,663		
	WD		3		6					1,352,112	38,317
ETCHEGOIN- - - - -	WD		3		2					1,352,112	18,060
STEVENS (UNDIFFERENTIATED) - - - - -	WD				1						18,675
OLCESE 12-21 - - - - -	PM				1						
RIO BRAVO-VEDDER - - - - -	WF		1		1			907,049	54,663		
	WD				3						1,582
GRIMES GAS - - - - -	101										
KIONE- - - - -	WD		2							99,950	1,188
GRIMES, WEST, GAS- - - - -	011										
KIONE- - - - -	WD		1							7,857	226
GUADALUPE- - - - -	079		14		158			1,871,560	22,438	1,959,381	9,909

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Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bb0)	Cumulative water (Mbb0)	Water disposed (bb0)	Cumulative water disposed (Mbb0)
			Injecting	Standing	Shut-in						
NO POOL BREAKDOWN- - - - - SISQUOC- - - - - MONTEREY-KNOXVILLE - - - - - SANTA BARBARA COUNTY - - - - -		SC	11		156			1,871,560	21,882		
		SF			1						
		WF			1				1,356		
		WD	3							1,959,381	9,909
		SC	11		154			1,871,560	5,903		
		SC							15,179		
		SF			1						
		WF			1				1,356		
		WD									964
		WD	3							1,959,381	8,944
GUIJARRAL HILLS- - - - - ANY AREA- - - - - MAIN AREA - - - - - PLIOCENE - - - - - SMITH & ALLISON- - - - -	019	WD	1		1					8,529	936
		WD	1		1					8,529	923
		WD									1
		WD									12
HELM - - - - -	019		10	3	2				514	4,562,432	138,500
		WF							514		
		WD	10	3	2					4,562,432	138,500
HOLSER - - - - -	111	SC							1		
HONOR RANCHO - - - - - MAIN AREA - - - - - RANCHO - - - - - WAYSIDE- - - - - YULE SAND- - - - - STRAY SAND - - - - - UPPER, MIDDLE & LOWER RANCHO SOUTHEAST AREA- - - - - WAYSIDE 13 - - - - -	037		13		31	21,180,914			336	459,256	13,487
		WD	1		3					459,256	13,487
		WD			1						
		WD	1							459,256	6,590
		WD			2						2,915
		WD									3,615
		WD									367
			12		28	21,180,914			336		
		GS WF	12		28	21,180,914			336		
HOPPER CANYON- - - - - MAIN AREA - - - - -	111		1		1					281,532	979
			1		1					281,532	879
		PM WD	1		1					281,532	979
HOWARD TOWNSITE- - - - -	037	WF			1				32		
HUASNA - - - - -	079	SC							85		
HUNTINGTON BEACH - - - - - OFFSHORE- - - - - ONSHORE - - - - - ANY AREA ONSHORE- - - - -			87	1	189			129,515,764	† 1,834,847		4,913
			68		95			124,811,056			
			19	1	94			4,704,708			
		SC	2		56			283,075	12,161		
		SF			5				7,206		
		WF	86	1	169			129,232,689	1,815,480		4,913
		WD			34						
		SC SF							11,471 7,184		

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Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbf)	Cumulative water (Mbbf)	Water disposed (bbf)	Cumulative water disposed (Mbbf)
			Injecting	Standing	Shut-in						
TAR ZONE - - - - -		SC							7,191		
		SF							7,184		
GARFIELD ZONE - - - - -		SC							95		
BOLSA - - - - -		SC							347		
A-37 - - - - -		SC							246		
A-121 - - - - -		SC							22		
JONES - - - - -		SC							3,570		
NORTH AREA - - - - -					20				26,100		
		WF			11				26,100		23
		WD			9						
UPPER & MIDDLE BOLSA - - - - -		WF			9				6,753		
		WD			9						23
MIDDLE & LOWER BOLSA - - - - -		WF							2,209		
UPPER ASHTON - - - - -		WF			1				1,405		
LOWER ASHTON - - - - -		WF			1				15,733		
SOUTH AREA OFFSHORE - - - - -			68		95			124,811,056	1,638,764		
		WF	69		94			124,811,056	1,638,764		
		WD			1						
UPPER JONES - - - - -		WF	22		17			13,830,105	120,418		
LOWER JONES - - - - -		WF	12		37			6,737,946	387,618		
UPPER MAIN - - - - -		WF	2		2			219,910	1,809		
		WD			1						
LOWER MAIN - - - - -		WF	35		44			104,023,095	1,128,919		
SOUTH AREA ONSHORE - - - - -			15	1	63			4,223,544	144,817		
		WF	15	1	63			4,223,544	144,817		
		WD			10						
TAR - - - - -		WF			12				16,915		
		WD			9						
A-37 - - - - -		WF	9	1	26			1,465,912	51,272		
		WD			1						
JONES - - - - -		WF	2		15			375,075	25,893		
A-121 - - - - -		WF			3				2,907		
MAIN - - - - -		WF	5		7			2,384,557	47,830		
SE EXTENSION TOWNLOT AREA - - - - -											
JONES - - - - -		WF	2		1			198,089	5,472		
SURF AREA - - - - -		WF							327		
ONSHORE - - - - -			2		74			283,075	712		4,890
		SC	2		56			283,075	690		
		SF			5				22		
		WD			14						4,890
NO POOL BREAKDOWN - - - - -		SC	2		56			283,075	690		
		SF			1				22		
		WD			14						4,890
TAR - - - - -		SF			4						
INGLEWOOD - - - - -	837		80		70			58,830,835	877,318		411
		SC							867		
		SF			1				359		
		WF	80		69			58,830,835	876,093		
		WD									411

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Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bb0)	Cumulative water (Mbb0)	Water disposed (bb0)	Cumulative water disposed (Mbb0)
			Injecting	Standing	Shut-in						
INVESTMENT - - - - -		SC			1				761		
		SF							359		
VICKERS-MACHADO- - - - -		SC							106		
VICKERS-MACHADO, EAST- - - - -		WF	9		34			3,473,833	208,321		
VIC-MACH/RINDGE, M - - - - -		WF	39		22			33,250,298	477,638		
VIC-MACH/RINDGE, MU- - - - -		WF	22		4			15,091,522	112,150		
RUBEL, EAST- - - - -		WF			4				5,940		
RUBEL, WEST UNIT - - - - -		WF	8		1			6,091,434	52,007		
MOYNIER, WEST- - - - -		WF	2		5			923,748	20,037		
JACALITOS- - - - -	019		1		4				1,057	20,048	188
NO POOL BREAKDOWN- - - - -		WD	1		2					20,048	165
TEMBLOR- - - - -		WF			2				1,057		
		WD									24
JASMIN - - - - -	029		1		1				21	905,804	† 2,544
		SC							21		
		WD	1		1					905,804	2,544
PYRAMID HILL (ADD) - - - - -		SC							9		
VEDDER - - - - -		WD	1							905,804	2,544
CANTLEBERRY- - - - -		SC							13		
KERN BLUFF - - - - -	029		11		15			768,112	5,636	3,882,896	15,293
		SC	4		12			358,685	4,452		
		SF	1		1			409,427	1,184		
		WD	6		2					3,882,896	15,293
KERN RIVER - - - - -		WD	1							410,530	411
MIOCENE- - - - -		SC	4		12			358,685	4,452		
		SF			1				500		
CHANAC-SANTA MARGARITA - - - - -		SC									
		SF	1					409,427	684		
TRANSITION-SANTA MARGARITA - - - - -		WD	3		2					2,000,108	13,410
VEDDER - - - - -		WD	2							1,472,258	1,472
KERN FRONT - - - - -	029		44	11	494			4,887,972	39,203		
		SC	26	11	492			2,294,158	35,201		
		SF	18		1			2,593,814	4,002		
		WD			1						
NO POOL BREAKDOWN- - - - -		SC	25	11	431			2,150,672	9,411		
KERN RIVER-CHANAC- - - - -		SC	1		70			143,486	25,789		
		SF	4		1			257,724	1,433		
ETCHEGOIN-CHANAC - - - - -		SF	6					759,808	986		
CHANAC - - - - -		SF	8					1,576,282	1,584		
SANTA MARGARITA- - - - -		WD			1						
KERN RIVER - - - - -	029		2,033	15	5,027			227,890,072	1,688,186	14,070,215	176,401
		SC	180		4,690			22,537,747	516,218		
		SF	1,837	15	345			202,439,483	1,158,789		
		WF	24		6			2,912,842	13,179		
		WD	14		6					14,070,215	176,401
KERN RIVER - - - - -		SC	180		4,690			22,537,747	516,218		
		SF	1,837	15	345			202,439,483	1,158,789		
		WF	24		6			2,912,842	13,179		
		WD	2							704,493	2,506

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Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbd)	Cumulative water (Mbbd)	Water disposed (bbd)	Cumulative water disposed (Mbbd)
			Injecting	Standing	Shut-in						
CHANAC - - - - -		WD			1						
CHANAC SANTA MARGARITA - - -		WD	2		1					324,590	435
SANTA MARGARITA - - - - -		WD	6		3					8,217,037	147,111
VEDDER - - - - -		WD	4		1					4,824,095	26,349
KETTLEMAN NORTH DOME - - - - -		WD	5		5				6,132	1,941,570	47,107
	019		3		3					1,457,820	
	031		4		1					483,750	
		WF			4				6,132		
		WD	5		2					1,941,570	47,107
NO POOL BREAKDOWN - - - - -		WD	5		2					1,941,570	47,107
TEMBLOR - - - - -		WF			4				5,828		
VAQUEROS - - - - -		WF			2				304		
KING CITY - - - - -	053	WD	6	2						5,358,184	30,339
3-1-32 AREA - - - - -											
THORUP - - - - -		WD	2							1,554,452	1,554
DOUD AREA - - - - -											
THORUP - - - - -		WD	1	1						696,711	8,282
KENT-BASHAM AREA - - - - -											
THORUP - - - - -		WD	3	1						3,107,021	20,502
KIRBY HILL GAS - - - - -	095	GS			3						
MAIN AREA - - - - -											
DOMENGINE - - - - -		GS			3						
KRAEMER - - - - -	059										
KRAEMER - - - - -		WF	8		6			1,383,465	20,249		
KREYENHAGEN - - - - -	019	SC							4		
LA GOLETA GAS - - - - -	083										
VAQUEROS - - - - -		GS	10	1	7	12,977,777					
LA HONDA - - - - -	081	WD	2							82,480	3,003
MAIN AREA - - - - -											
PURISIMA - - - - -		WD	1							27,490	1,145
SOUTH AREA - - - - -											
VAQUEROS - - - - -		WD	1							54,990	1,858
LAKESIDE - - - - -	029		1						104	14,653	101
STEVENS - - - - -		WF							104		
SAN JOAQUIN - - - - -		WD	1							14,653	101
LAS CIENEGAS - - - - -	037		16		16	882,500		4,014,330	† 92,742	1,410,844	4,182
		PM	3		1	882,500			† 552		
		WF	10		15			4,014,330	92,910		
		WD	4		1					1,410,844	4,182
FOURTH AVENUE AREA - - - - -			3		4			1,473,672	32,285		1,174
NO POOL BREAKDOWN - - - - -		WD			1						1,174
PACIFIC ELECTRIC - - - - -		WF	3		3			1,473,672	32,285		

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Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bb0)	Cumulative water (Mbb0)	Water disposed (bb0)	Cumulative water disposed (Mbb0)
			Injecting	Standing	Shut-in						
GOOD SHEPHERD AREA - - - - -											
P E ZONE - - - - -		WF	1						307	759,665	1,623
JEFFERSON AREA - - - - -		WF	5		11			1,791,097	41,807		
JEFFERSON, JEFFERSON BLOCK -		WF	3		9			826,422	28,714		
JEFFERSON, ST. JAMES BLOCK -		WF	1		1			746,878	8,942		
LOWER BROADWAY - - - - -		WF			1				1,246		
MASSIVE, ST. JAMES BLOCK - -		WF	1					217,797	2,905		
MURPHY AREA - - - - -			5		1	882,500		17,485	857	651,179	1,385
		PM	3		1	882,500			† 552		
		WF	1		1			17,485	305		
		ND	3							651,179	1,385
NO POOL BREAKDOWN - - - - -		PM	3		1	882,500			† 552		
		WD	1							590,851	1,262
A,B,C, & PE ZONES, B BLOCK -		WD	2							60,328	123
A,B,C, & PE ZONES, D BLOCK -		WF	1		1			17,485	305		
PACIFIC ELECTRIC AREA - - - - -											
PACIFIC ELECTRIC - - - - -		WF	2					732,076	17,486		
LATHROP GAS - - - - -	077										
STARKEY - - - - -		WD	1							45,721	148
LINDSEY SLOUGH GAS - - - - -	095										
FIRST STARKEY - - - - -		WD			1						
LIVERMORE - - - - -	001										
GREENVILLE - - - - -		WD	1							70,443	558
LODI GAS (ABD) - - - - -	077	WD									428
LOMPOC - - - - -	083	WD	3		3					13,797,568	117,156
MONTEREY - - - - -		WD			3						14,199
LOSPE - - - - -		WD	1							5,233,172	25,201
KNOXVILLE - - - - -		WD	2							8,564,396	77,755
LONG BEACH - - - - -	037		96	2	22			53,620,184	278,883		1,840
		WF	96	2	22			53,620,184	278,883		
		WD									1,840
OLD AREA - - - - -			96	2	22			53,620,184	278,883		1,840
		WF	96	2	22			53,620,184	278,883		
		WD									1,840
ALAMITOS - - - - -		WF	33	1	4			9,611,910	74,148		
BROWN - - - - -		WF	73	2	26			41,309,317	188,371		
DEEP - - - - -		WF	13		5			2,698,957	16,364		
LONG BEACH AIRPORT - - - - -	037	WF							510		
LOS ANGELES DOWNTOWN - - - - -	037										
BROADWAY AND MASSIVE - - - -		WF	7					1,499,874	26,828		

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbd)	Cumulative water (Mbbd)	Water disposed (bbd)	Cumulative water disposed (Mbbd)
			Injecting	Standing	Shut-in						
LOS LOBOS - - - - -	029			2					1,855		64
REEF RIDGE (ABD) - - - - -		WD									64
ETCHEGOIN - - - - -		WF		2					1,855		
LOS MEDANOS GAS - - - - -	013										
MAIN BLOCK-DOMENGINE - - - - -		GS	1		13	792,173					
LOST HILLS - - - - -	029		69	1	163		721,654	5,551,592	39,046	8,385,446	29,641
		SC	26		154			1,907,511	9,849		
		SF	29		7			3,610,553	6,405		
		WF	1		5			33,528	22,792		
		AI	4	1	1		721,654				
		WD	14		1					8,385,446	29,641
TULARE - - - - -		SC			21						
		SF	6		3			1,735,745	2,671		
		AI			1						
		WD	5							5,209,091	19,201
TULARE-ETCHEGOIN - - - - -		SC	20		128			1,299,928	9,144		
		AI	4	1			721,654				
		SF							568		
		WD	1							93,259	93
CAHN (D) - - - - -		WF			3				1,355		
M-3 - - - - -		WF			2				20,750		
ETCHEGOIN - - - - -		SC	6		6			607,583	705		
		SF	24		4			1,874,808	3,166		
		WF	1					33,528	687		
		WD	9		1					5,083,096	10,347
LYNCH CANYON - - - - -	053								229		459
SANTA MARGARITA - - - - -		WD									459
LANIGAN - - - - -		SC							229		
		AI									
MAHALA - - - - -	071		1					90,528	689		
		SC							10		
		WF	1					90,528	679		
MAHALA, WEST, AREA - - - - -											
WILLIS - - - - -		WF	1					90,528	679		
MCCLUNG (ABD) - - - - -	029	WD									77
MCCOOL RANCH - - - - -	053		1						1,588	2,200	3
		WF							1,588		
LOMBARDI - - - - -		WD	1							2,200	3
MCDONALD ANTICLINE - - - - -	029		1		13			6,120	† 13,264		
		PM			1						
		SC	1		12			6,120	10		
		WF							13,254		
LAYMAN AREA - - - - -			1		13			6,120	13,264		
		PM			1						
		SC	1		12			6,120	10		
		WF							13,254		
NO POOL BREAKDOWN - - - - -		SC	1					6,120	6		
TULARE - - - - -		SC							4		

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Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbf)	Cumulative water (Mbbf)	Water disposed (bbf)	Cumulative water disposed (Mbbf)
			Injecting	Standing	Shut-In						
TOLCO- - - - -		PM			1				3,955		
		WF			3						
PHACOIDES- - - - -		WF							432		
FIRST POINT OF ROCKS - - - -		WF			6				1,471		
MAIN POINT OF ROCKS- - - - -		WF			3				7,396		
MCDONALD ISLAND GAS- - - - -	077	GS	9	1	66	14,428,707					
MCKITTRICK - - - - -	029		135	1	997			13,000,093	126,969		1.063
		SC	90		980			7,774,631	100,255		
		SF	46	1	7			5,225,462	21,493		
		WF			4				5,221		
		AI			5						
		WD			2						1.063
MAIN AREA - - - - -			74		662			6,814,856	87,775		1.063
		SC	69		654			5,950,770	82,636		
		SF	4		7			864,086	5,139		
		WD			2						1.063
UPPER- - - - -		SC	68		653			5,947,597	82,633		
		SF	4		7			864,086	5,139		
		WD									18
OLIG - - - - -		WD			1						1.044
STEVENS- - - - -		SC	1		1			3,173	3		
		WD			1						
NORTHEAST AREA- - - - -			61	1	335			6,185,237	39,194		
		SC	21		326			1,823,861	17,619		
		SF	41	1	1			4,361,376	16,354		
		WF			4				5,221		
		AI			5						
UPPER- - - - -		SC	21		325			1,823,861	17,619		
		SF	41	1	1			4,361,376	16,354		
		WF			1						
		AI			5						
CARNEROS - - - - -		SC			1						
PHACOIDES- - - - -		WF			3				5,221		
MIDWAY-SUNSET- - - - -			614	14	4,620	15,131	3,013,579	62,170,687	631,316	18,535,674	177,616
	029		614	14	4,609	15,131	3,013,579	62,151,462		18,535,674	
	079				11			19,225			
		PM	2		3	15,131					
		SC	386		4,483			37,696,964	462,367		
		SF	190	4	86			24,473,723	148,108		
		WF			2				20,839		
		AI	16	6	12		3,013,579				
		WD	20		10					18,535,674	177,616
NO POOL BREAKDOWN- - - - -		PM	2		3	15,131					
		SC	384		4,493			37,471,346	461,882		
		SF	190	4	85			24,473,723	148,108		
		AI	16	6	12		3,013,579				
		WD									5,937
ALLUVIUM - - - - -		WD	5	3						6,559,531	102,403
TULARE - - - - -		WD	4							3,704,293	4,805
TULARE 13A - - - - -		WD	2		2					4,804,100	19,216
TULARE-PMO - - - - -		WD	1							3,637	14
TULARE - SAN JOAQUIN - - - -		WD	2							991,940	1,917
TULARE-SAN JOAQUIN ETCHEGOIN		SF			1						
TOP OIL & KINSEY 5K- - - - -		WF							9,884		
		WD		1	1						

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbd)	Cumulative water (Mbbd)	Water disposed (bbd)	Cumulative water disposed (Mbbd)
			Injecting	Standing	Shut-in						
TOP OIL-CALITROLEUM 20D- - -		WF			2						
		WD			4						2,187
ETCHEGOIN 9C - - - - -		WF							1,967		
WILHELM 4C - - - - -		WD	1							5,733	46
CALITROLEUM 20D- - - - -		WF							2,390		
POTTER - - - - -		SC	1		14			126,211	126		6,728
		WD			2						
MONARCH 22C- - - - -		WD	1						6,597	307,000	469
		WF									
METSON - - - - -		WD	2							1,268,630	27,155
LEUTHOLTZ- - - - -		SC	1					99,407	359		
		WD	2		1					890,810	6,740
MISSION (ADD)- - - - -	037	WD									1,752
MOLINO OFFSHORE GAS- - - - -	283										
VAQUEROS - - - - -		WD	2							179,472	2,139
MONROE SWELL - - - - -	053	SC							2		
MONTALVO, WEST - - - - -	111	WF	4		4			396,997	14,390		
ONSHORE - - - - -		WF	4		4			396,997	14,390		
SESPE- - - - -		WF	1					14,763	930		
MCGRATH- - - - -		WF	1		2			87,439	7,784		
COLONIA- - - - -		WF	2		2			294,795	5,676		
MONTEBELLO - - - - -	037		15	2	37	4,110,229		2,583,561	68,494		753
		GS	14	2	31	4,110,229					
		WF	1		6			2,583,561	68,494		753
		WD			1						
MAIN AREA - - - - -			1		6			2,583,561	68,494		753
		WF	1		6			2,583,561	68,494		753
		WD			1						
NO POOL BREAKDOWN- - - - -		WF			1						753
		WD			1						
1ST AND 2ND- - - - -		WF	1		5			2,583,561	68,494		
WEST AREA - - - - -											
8TH- - - - -	GS		14	2	31	4,110,229					
MORALES CANYON - - - - -	079	WF							194		
MOUNT POSO - - - - -	029		53	1	29			30,811,101	169,515	74,295,634	469,419
		SC	1		6			2,500,000	4,112		
		SF	32	1	16			26,794,455	136,951		
		WF	2		4			1,516,646	28,452		
		WD	18		3					74,295,634	469,419
BAKER-GROVER AREA - - - - -		WD	2							452,834	958
OLCESE - - - - -		WD	1							63,524	149
VEDDER - - - - -		WD	1							389,310	809
DOMINION AREA - - - - -			2		4			2,500,000	2,677	167,672	789
		SC	1		4			2,500,000	2,677		
		WD	1							167,672	789
OLCESE - - - - -		WD									

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bb0)	Cumulative water (Mbb0)	Water disposed (bb0)	Cumulative water disposed (Mbb0)
			Injecting	Standing	Shut-in						
VEDDER - - - - -	SC	WD	1		4			2,500,000	2,677		
			1							167,672	789
DORSEY AREA - - - - -											
VEDDER - - - - -		WD	3		1					1,372,214	8,155
GRANITE CANYON AREA - - - - -		SC							19		
MAIN AREA - - - - -			45	1	25			28,311,101	166,819	67,889,239	447,747
	SC				3				1,416		
	SF		32	1	16			26,794,455	136,951		
	WF		2		4			1,516,646	28,452		
	WD		11		2					67,889,239	447,747
OLCESE - - - - -		WD	1							1,409,557	5,837
PYRAMID HILL - - - - -		WF			4				608		
PYRAMID HILL-VEDDER- - - - -	SC				1				5		
	WF		1					8,940	9		
VEDDER - - - - -	SC				2				1,411		
	SF		32	1	16			26,794,455	136,951		
	WF		1					1,507,706	27,835		
	WD		8		2					61,141,186	422,092
VEDDER AND WALKER- - - - -		WD	2							5,338,496	19,818
WEST AREA - - - - -											
OLCESE - - - - -		WD	2							4,413,675	11,770
MOUNTAIN VIEW- - - - -	029		3	6					4,001	173,978	† 3,522
		SC									
		WF		5					4,001		
		WD	3	1						173,978	3,522
ARVIN AREA- - - - -				4					1,601		686
		WF		4					1,601		686
		WD									686
KERN RIVER - - - - -		WD									
CHANAC-GEORGE- - - - -		WF		4					1,601		
ARVIN, WEST, AREA - - - - -			1						449	108,145	2,233
		WF							449		
		WD	1							108,145	2,233
KERN RIVER - - - - -		WD									2,079
CATTANI- - - - -		WF							449		
CHANAC-SANTA MARG.-STENDERUP		WD	1							108,145	153
MAIN AREA - - - - -			2	2					1,951	65,833	603
	SC										
	WF			1					1,951		
	WD		2	1						65,833	603
NO POOL BREAKDOWN- - - - -	SC										
	WD			1							
KERN RIVER-CHANAC- - - - -		WD	1							34,201	151
NICHOLS- - - - -		WF		1					1,269		
TRANSITION-SANTA MARGARITA -		WF							683		
		WD	1							31,632	452
MEMHALL- - - - -	037		2		5				2,119	19,789	2,300
		SC			2				134		
		WF			1				1,985		
		WD	2		2					19,789	2,300

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbf)	Cumulative water (Mbbf)	Water disposed (bbf)	Cumulative water disposed (Mbbf)
			Injecting	Standing	Shut-in						
ELSMERE AREA- - - - -		SC			2						
PICO CANYON AREA- - - - -					1				1,061		9
		WF			1				1,061		9
		WD									
PICO CANYON- - - - -		WF			1				1,061		
TOWNSLEY CANYON AREA - - - - -		WD			1						25
TUNNEL AREA - - - - -			2						924	19,789	2,188
		WF							924		
		WD	2							19,789	2,188
WHITNEY CANYON AREA - - - - -		WD			1						78
DE MITT CANYON AREA (ABD) - - - - -		SC							134		
NEWHALL-POTRERO- - - - -	037		20	6	3	4,260,227		1,274,337	14,683		843
		PM	9	4		4,260,227					
		WF	11	2	3			1,274,337	14,683		843
		WD									
1-2-3- - - - -		PM	2	1		1,319,418					843
		WD									
1-D- - - - -		WF							280		
2- - - - -		WF							249		
3- - - - -		WF	8	2	1			605,866	10,690		
3-A- - - - -		WF	1	1				39,189	2,166		
5TH- - - - -		PM	3	2		1,546,513					
		WF		1	2						
6TH- - - - -		PM	2	1		186,096					
7TH- - - - -		PM	2	1		1,208,200					
		WF	3					629,282	1,297		
NEWPORT, WEST- - - - -	059		45		80		2,579,786	572,373	† 9,905		8
		SC	9		78			433,173	9,550		
		SF	2					139,200	355		
		AI	34		4		2,579,786				8
		WD									
ONSHORE - - - - -			45		80		2,579,786	572,373	9,689		8
		SC	9		78			433,173	9,550		
		SF	2					139,200	355		
		AI	34		4		2,579,786				8
		WD									
BOLSA- - - - -		SC							29		
A- - - - -		SC	6		46			264,931	3,689		
		SF	2		1			139,200	355		
		AI									8
		WD									
B- - - - -		SC	3		33			168,242	5,732		
		AI	34		3		2,579,786				
C- - - - -		SC							101		
OAK CANYON - - - - -	037		5	1	1			750,682	6,071	690,101	5,531
NO POOL BREAKDOWN- - - - -		WD	2							690,101	5,531
4-AB AND 5-A - - - - -		WF	3	1	1			750,682	6,071		
OAK PARK - - - - -	111		1		1				336	48,069	172
SESPE- - - - -		SC			1				9		
		WF							328		
		WD	1							48,069	172

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Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bb0)	Cumulative water (Mbb0)	Water disposed (bb0)	Cumulative water disposed (Mbb0)
			Injecting	Standing	Shut-in						
OAKRIDGE - - - - -	111		14		10			1,256,800	29,752		
MIOCENE- - - - -		SC									
		WF	14		10			1,256,800	29,720		
OAT MOUNTAIN - - - - -	037										
UPPER MIOCENE- - - - -		WD	1							7,837	83
OIL CREEK- - - - -	081										
TONY AND COSTA - - - - -		WD	1							295	3
OJAI - - - - -	111		7	2		601,529			911	508,421	1,333
		PM	2	1		601,529					
		SC							29		
		WF		1					882		
		WD	5	1						508,421	1,333
NORTH SULPHUR MOUNTAIN AREA - - -											
MIOCENE- - - - -		WD	1							181,264	692
SILVERTHREAD AREA - - - - -			5	2		601,529			885	324,971	398
		PM	2	1		601,529					
		SC							3		
		WF		1					882		
		WD	3	1						324,971	398
PLIOCENE - - - - -		WF							144		
		WD	2							6,120	13
MIOCENE- - - - -		PM	2	1		601,529					
		SC							3		
		WF		1					738		
		WD	1	1						318,851	385
SISAR CREEK AREA- - - - -			1						20	2,186	143
		SC							20		
		WD	1							2,186	143
LION MOUNTAIN AREA- - - - -		WD									29
SULPHUR MOUNTAIN AREA - - - - -		SC							7		
VOGEL AREA- - - - -		WD									71
ORCUTT - - - - -	083		62		16			25,465,991	438,698	646,659	5,591
MAIN AREA - - - - -			62		16			25,465,991	438,698	646,659	5,591
		SC			1				8		
		WF	60		15			25,465,991	438,690		
		WD	2							646,659	5,591
NO POOL BREAKDOWN- - - - -		SC			1						
1ST & 2ND- - - - -		WF			3				774		
3RD- - - - -		WF	60		12			25,465,991	437,916		
MONTEREY - - - - -		WD	2							646,659	5,591
FOXEN- - - - -		SC							8		
ORD BEND GAS - - - - -	021										
KIONE- - - - -		WD	1	1						14,405	895
OXNARD - - - - -	111		4		9			151,999	2,055	70,228	298
		SC	2		9			103,200	922		
		WF	1					48,799	1,134		
		WD	1							70,228	298

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbd)	Cumulative water (Mbbd)	Water disposed (bbd)	Cumulative water disposed (Mbbd)
			Injecting	Standing	Shut-in						
PLIOCENE TAR - - - - -		SC	1					85,418	833		
MIOCENE TAR - - - - -		SC	1		9			17,782	88		
		WF	1					48,799	321		
		WD	1							70,228	298
MCINNES - - - - -		WF							813		
PALOMA - - - - -	829		2		2					81,874	2,815
MAIN AREA - - - - -			2		2					81,874	2,815
		PM			1						
		WD	2		1					81,874	2,815
TULARE - - - - -		WD	1		1					68,245	2,802
SAN JOAQUIN - - - - -		WD	1							13,629	14
LOWER STEVENS - - - - -		PM			1						
PARIS VALLEY - - - - -	853			21	6				553		1,643
MAIN AREA - - - - -				21	6				553		1,643
ANSBERRY - - - - -		SC		17	5				508		
		SF		6					46		
		AI			1						1,643
		WD									
PIRU - - - - -	111	WD	1							1,236	10
PLACERITA - - - - -	837		36		55			5,210,211	73,029	5,571,897	59,842
		SC	12		40			793,964	4,473		
		WF	16		12			4,416,247	68,556		
		WD	8		3					5,571,897	59,842
ANY AREA - - - - -			12		40			793,964	1,097	734,384	1,101
		SC	12		40			793,964	1,097		
		WD	1							734,384	1,101
JUANITA AREA - - - - -		WD	1							688,000	16,136
OLD AREA - - - - -			22		15			4,416,247	71,932	4,229,513	42,605
		SC							3,376		
		WF	16		12			4,416,247	68,556	4,229,513	42,605
		WD	6		3						
UPPER KRAFT - - - - -		WF	2		1				1,124	1,790,181	17,932
		WD									
LOWER KRAFT - - - - -		WF	16		12			4,416,247	67,432	2,363,376	24,502
		WD	3		2						
KRAFT - - - - -		SC							3,376	75,956	171
		WD	1								
PLAYA DEL REY - - - - -	837		13		10	9,473,566			176		825
		GS	13		10	9,473,566					
		WF							176		825
		WD									
DEL REY HILLS AREA - - - - -			13		10	9,473,566					
		GS	13		10	9,473,566					
VENICE AREA - - - - -		WF							176		825
		WD									
PLEASANT CREEK GAS - - - - -	113										
PETERS - - - - -		GS			6						

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbd)	Cumulative water (Mbbd)	Water disposed (bbd)	Cumulative water disposed (Mbbd)
			Injecting	Standing	Shut-in						
PLEITO - - - - -	029		2	1	1				299	276,408	589
		WF		1	1				299		
		WD	2							276,408	589
CREEK AREA- - - - -											
SANTA MARGARITA- - - - -		WF		1	1				299		
RANCH AREA- - - - -											
KERN RIVER-CHANAC- - - - -		WD	2							276,408	589
POINT CONCEPTION - - - - -	283	WD			1						367
OFFSHORE- - - - -											
SACATE - - - - -		WD			1						367
POSD CREEK - - - - -	029		38		230			1,516,156	14,626	31,682,059	210,694
		SC	21		295			1,516,156	13,847		
		SF			2				654		
		WF			1				125		
		WD	18		3					31,682,059	210,694
ENAS AREA - - - - -			2		12			10,794	637	73,200	899
		SC	1		12			10,794	637		
		WD	1							73,200	899
NO POOL BREAKDOWN- - - - -		SC	1		12			10,794	249		
ETCHEGOIN & CHANAC - - - - -		WD	1							28,800	810
CHANAC - - - - -		SC							388		
		WD	1							44,400	89
MCVAN AREA- - - - -			11		30			637,538	3,523		53
		SC	11		29			637,538	3,307		
		SF			1				216		
		WD									53
NO POOL BREAKDOWN- - - - -		SC	11		31			637,538	1,385		
ETCHEGOIN- - - - -		SC			1				1,924		
		SF			1				216		
VEDDER - - - - -		WD									53
PREMIER AREA- - - - -			25		256			867,824	10,466	31,608,859	209,742
		SC	8		252			867,824	9,903		
		SF			1				438		
		WF			1				125		
		WD	17		3					31,608,859	209,742
NO POOL BREAKDOWN- - - - -		SC	8		252			867,824	2,800		
		WF			1						
ETCHEGOIN- - - - -		SF			1				438		
		WD	7		2					13,141,045	126,558
BASAL ETCHEGOIN- - - - -		WF							121		
ETCHEGOIN-CHANAC - - - - -		SC			3				7,103		
		WD	4							1,340,498	8,766
CHANAC - - - - -		WD	1							665,789	10,489
CHANAC R - - - - -		WF							4		
CHANAC-SANTA MARGARITA - - - - -		WD	5							16,461,527	63,928
PYRAMID HILLS- - - - -	031	SC							217		
RAILROAD GAP - - - - -	029		9		11			658,371	4,923		
		SC	1		11			16,960	683		
AMNICOLA - - - - -		SF	8					641,411	4,240		

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbf)	Cumulative water (Mbbf)	Water disposed (bbf)	Cumulative water disposed (Mbbf)
			Injecting	Standing	Shut-in						
RAISIN CITY - - - - -	819	WD	11	1	5					11,838,726	566,617
RAMONA - - - - -	111		4						4	58,128	1,642
		SC WD	4						4	58,128	1,642
RICHFIELD - - - - -	859		79	1	33			20,339,145	309,669		
		SC			1				33		
		WF	79	1	32			20,339,145	309,636		
NO POOL BREAKDOWN - - - - -		SC			1						
TAR - - - - -		SC							33		
UPPER CHAPMAN, NORTH - - - - -		WF	1					131,778	305		
CHAPMAN & KRAEMER, CENTRAL - - - - -		WF	23		15			4,206,012	96,839		
CHAPMAN & KRAEMER, EAST - - - - -		WF	36	1	4			9,931,413	55,938		
CHAPMAN & KRAEMER, WEST - - - - -		WF	6		8			866,591	85,047		
KRAEMER, WEST - - - - -		WF	13		4			5,203,359	71,507		
RINCON - - - - -			18	1	35			4,617,399	59,917	39,661	630
OFFSHORE - - - - -	211		8		11			711,937			
ONSHORE - - - - -	111		9	1	24			3,905,462		39,661	
		WF WD	17	1	35			4,617,399	59,917	39,661	630
OFFSHORE - - - - -											
MILEY - - - - -		WF	8		11			711,937	26,502		
ONSHORE - - - - -			9	1	24			3,905,462	61,102	39,661	630
		WF WD	8	1	24			3,905,462	61,102	39,661	630
NO POOL BREAKDOWN - - - - -		WD									524
1-S - - - - -		WF	1		1			475,124	1,418		
S - - - - -		WF	1					41,766	1,330		
TOP - - - - -		WF			3				5,133		
INTERMEDIATE - - - - -		WF			3				87		
PADRE - - - - -		WF WD	4	1	10			1,395,163	32,294	39,661	106
FAULT BLOCK 2 - - - - -		WF	1		10			1,757,511	20,748		
WEST BLOCK - - - - -		WF	1					35,898	92		
RIO BRAVO - - - - -	929		3	2	6			293,541	70,819		
		PM			3						
		WF	3	2	3			293,541	70,819		
RIO BRAVO-MAIN VEDDER-OSBORN		PM			3						
MAIN VEDDER - - - - -		WF	3	2				293,541	64,916		
OSBORN - - - - -		WF			3				5,904		
RIO VISTA GAS - - - - -			2							28,898	233
	867		1							14,525	
	895		1							14,373	
		WD	2							28,898	233

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bb0)	Cumulative water (Mbb0)	Water disposed (bb0)	Cumulative water disposed (Mbb0)
			Injecting	Standing	Shut-in						
MARKLEY - - - - -		WD	1							9,742	40
WEST EMIGH - - - - -		WD	1							14,373	188
MOKELUMNE RIVER - - - - -		WD	1							4,783	5
RIVER BREAK GAS - - - - -	013										
CAPAY - - - - -		WD	1							9,076	86
RIVER ISLAND GAS - - - - -	077										
NORTONVILLE - - - - -		WD	1							21,064	68
RIVERDALE - - - - -	019	WD	4	1						1,939,397	71,121
ROBERTS ISLAND GAS - - - - -	077										
POST-EOCENE - - - - -		WD	1		2					1,788	362
ROSECRANS - - - - -	037		5					761,508	7,872	348,734	6,690
MAIN AREA - - - - -			5					761,508	7,872	348,734	6,690
		WF	4					761,508	7,872	348,734	6,690
		WD	1							348,734	6,690
PADELFORD - - - - -		WD									1,763
UPPER AND LOWER ZINS - - - - -		WF	1					51,560	1,541		
		WD	1							348,734	3,489
O,DEA - - - - -		WF	4					709,948	6,331		1,438
		WD									
ROSEDALE - - - - -	029		1		1				3,591	340,108	7,607
MAIN AREA - - - - -			1		1				3,591	340,108	7,607
		WF			1				3,591		
		WD	1							340,108	7,607
ETCHEGOIN - - - - -		WD	1							340,108	3,301
STEVENS - - - - -		WF			1				3,591		
LOWER STEVENS - - - - -		WD									4,306
ROSEDALE RANCH - - - - -	029		4		3			717,812	53,266	3,892,726	62,038
		SC							8		
		WF	1		2			717,812	53,259		
		WD	3		1					3,892,726	62,038
ETCHEGOIN - - - - -		SC							8		
		WD	2							2,637,032	37,838
LERDO - - - - -		WF	1		2			717,812	53,259		
		WD			1						561
CHANAC - - - - -		WD	1							1,255,694	23,639
ROUND MOUNTAIN - - - - -	029		22	2	3			4,084,443	† 36,432	37,255,156	284,005
		SC							121		
		WF	8		1			4,084,443	36,311		
		WD	14	1	2					37,255,156	284,005
ALMA AREA - - - - -			1	1				7,765	234		165
VEDDER - - - - -		WF	1					7,765	234		165
		WD		1							
COFFEE CANYON AREA - - - - -			9	1	1			2,476,543	23,848	12,004,680	55,675

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbd)	Cumulative water (Mbbd)	Water disposed (bbd)	Cumulative water disposed (Mbbd)
			Injecting	Standing	Shut-in						
		SC							115		
		WF	4					2,476,543	23,733		
		WD	4							12,004,680	55,675
FREEMAN-JEWETT-PH- - - - -		WD									203
PYRAMID HILL - - - - -		SC							1		
		WF	2					584,041	19,589		
PYRAMID HILL-VEDDER- - - - -		SC							103		
		WF	2					1,892,502	4,144		
		WD	2							5,379,169	15,785
VEDDER - - - - -		SC							11		
		WD	1							785,837	11,280
WALKER - - - - -		WD	1							5,839,674	28,407
MAIN AREA - - - - -			5		2			69,630	2,108	19,192,913	197,684
		WF	1		1			69,630	2,108		
		WD	4		1					19,192,913	197,684
JEWETT - - - - -		WF	1					69,630	1,236		
JEWETT-VEDDER- - - - -		WD			1						
VEDDER - - - - -		WF			1				873		
VEDDER-WALKER- - - - -		WD	2							4,746,886	43,883
WALKER - - - - -		WD	2							14,446,027	153,801
PYRAMID AREA- - - - -			6					1,530,505	10,240	1,575,965	7,099
		SC							4		
		WF	2					1,530,505	10,237		
		WD	4							1,575,965	7,099
OLCESE - - - - -		WD	1							201,434	799
JEWETT AND PYRAMID HILL- - -		WD	1							272,032	2,693
VEDDER - - - - -		SC							4		
		WF	2					1,530,505	10,237		
		WD	2							1,102,499	3,607
SHARKTOOTH AREA - - - - -			2						2	4,481,598	23,382
		SC							2		
		WD	2							4,481,598	23,382
OLCESE - - - - -		WD	2							4,481,598	23,382
VEDDER - - - - -		SC							2		
RUSSELL RANCH- - - - -			4	2	27	450,457		1,694,881	216,719	906,702	22,285
	079		1		16	450,457		7,454			
	083		3	2	12			1,687,427		906,702	
		PM	1			450,457					
		SC							54		
		WF	2	2	26			1,694,881	216,665		
		AI			1						
		WD	1		1					906,702	22,285
MAIN AREA - - - - -			3	2	27	450,457		1,694,881	216,719		6,361
		PM	1			450,457					
		SC							54		
		WF	2	2	26			1,694,881	216,665		
		AI			1						
		WD									6,361
NO POOL BREAKDOWN- - - - -		PM	1			450,457			47		
		SC									
SANTA MARGARITA- - - - -		WD									6,361
DIBBLEE- - - - -		WF	2	2	26			1,694,881	216,665		
		AI			1						

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbf)	Cumulative water (Mbbf)	Water disposed (bbf)	Cumulative water disposed (Mbbf)
			Injecting	Standing	Shut-in						
GRIGGS-DIBBLEE - - - - -		SC							7		
SOUTHEAST AREA- - - - -											
BRANCH CANYON- - - - -		WD	1		1					906,702	15,924
SALT LAKE- - - - -	037	WD	1							74,481	623
SAN ARDO - - - - -	053		121	7	109		701,194	42,886,989	488,243	56,591,293	956,260
		SC	7		90			632,934	72,418		
		SF	91	4	12			42,254,055	415,825		
		AI	6	2	3		701,194			56,591,293	956,260
		WD	25	1	5						
MAIN AREA - - - - -			115	6	106		701,194	42,886,989	488,243	18,887,499	119,357
		SC	7		90			632,934	72,418		
		SF	91	4	12			42,254,055	415,825		
		AI	6	2	3		701,194			18,887,499	119,357
		WD	18		4						
SANTA MARGARITA- - - - -		WD									77
S MARGARITA D E AND LOMBARDI		WD	7							9,702,620	9,783
LOMBARDI - - - - -		SC	3		32			264,211	56,152		
		SF	17	4	11			1,413,373	73,528		
		AI		2	2					5,819,711	100,110
		WD	10		2						
AURIGNAC - - - - -		SC	4		59			368,723	16,266		
		SF	74		2			40,840,682	342,296		
		AI	6		1		701,194			3,365,168	9,467
		WD	1		2						
NORTH AREA- - - - -		WD	7	1	1					37,703,794	836,903
D SAND - - - - -		WD									13,795
LOMBARDI - - - - -		WD	7	1	1					37,703,794	735,302
SANTA MARGARITA- - - - -		WD									81,749
E SAND - - - - -		WD									6,057
SAN EMIDIO NOSE- - - - -	029		4		4			153,995	8,701	147,940	6,555
		WF	2		2			153,995	8,701		
		WD	2		2					147,940	6,555
TULARE - SAN JOAQUIN - - - -		WD	1		2					42,259	6,252
ETCHEGOIN-REEF RIDGE - - - -		WD	1							105,681	303
REEF RIDGE - - - - -		WF							439		
STEVENS- - - - -		WF	2		2			153,995	8,262		
SAN JOAQUIN- - - - -	019	WD	2							233,558	2,533
SAN MIGUELITO- - - - -	111	WF	41	2	2			5,869,090	98,254		
FIRST GRUBB- - - - -		WF	21					2,843,778	59,118		
SECOND GRUBB- - - - -		WF	16	1				2,429,169	27,203		
THIRD GRUBB- - - - -		WF	1					24,350	1,332		
D-5- - - - -		WF	4	1	1			300,210	3,744		
D-6- - - - -		WF	4	1	2			271,583	6,857		
SANSINENA- - - - -	037		1		3				3,329	817	13
		WF			3				3,329		
		WD	1							817	13

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbd)	Cumulative water (Mbbd)	Water disposed (bbd)	Cumulative water disposed (Mbbd)
			Injecting	Standing	Shut-in						
EAST AREA - - - - -											
A-10, BLOCK II - - - - -		WF			3				3,329		
WEST AREA - - - - -		WD	1							817	13
SANTA FE SPRINGS - - - - -	037	WF	29	1	4			11,755,909	88,301		
MEYER - - - - -		WF	25					9,604,234	52,703		
CLARK-HATHAWAY - - - - -		WF	4					2,151,675	22,983		
SANTA FE - - - - -		WF		1	4				12,615		
SANTA MARIA VALLEY - - - - -	083		60	1	27			14,024,445	† 144,473	3,450,269	10,127
		SC			7				613		
		SF			2				151		
		WF	54		17			14,024,445	143,709		
		WD	6	1	1					3,450,269	10,127
MAIN AREA - - - - -			42		16			9,093,905	120,317	639,834	2,643
		SC							361		
		SF			2				151		
		WF	39		14			9,093,905	119,805		
		WD	3							639,834	2,643
FOXEN - - - - -		SC							251		
		SF			2				151		
SISQUOC - - - - -		SC							18		
MONTEREY - - - - -		WF	5		3			1,154,692	37,663		
		WD	1							567,776	2,431
		SC							6		
SISQUOC-MONTEREY - - - - -		WD	1							71,036	71
PT. SAL-BATTLES - - - - -		WF	6		7			3,023,922	44,775		
PT. SAL-O'DONNELL - - - - -		WF	28		4			4,915,291	37,367		
LOSPE - FRANCISCAN - - - - -		WD	1							1,022	59
PT. SAL - - - - -		SC							86		
		WD									81
WEST AREA - - - - -					2				495		
MONTEREY - - - - -		SC							28		
		WF			2				467		
NORTH AREA (ABD) - - - - -		SC							27		
BRADLEY AREA - - - - -											
BASAL SISQUOC - - - - -		WF	13					4,820,519	19,796		
CLARK AREA - - - - -											
SISQUOC - - - - -		WD	1		1					161,242	421
SOUTHEAST AREA - - - - -			4	1	8			110,021	3,839	2,649,193	7,063
		SC			7				197		
		WF	2		1			110,021	3,642		
		WD	2	1						2,649,193	7,063
SISQUOC - - - - -		SC			6				183		
		WF	2		1			110,021	3,633		
		WD	2	1						2,649,193	7,063
HOUK - - - - -		WF							9		
MONTEREY - - - - -		SC			1				14		
SANTA PAULA - - - - -	111	WD	3							7,525	35
SANTA SUSANA - - - - -	111				2						1,625
		PM			1						
		WD			1						1,625

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Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbbl)	Cumulative water (Mbbbl)	Water disposed (bbbl)	Cumulative water disposed (Mbbbl)
			Injecting	Standing	Shut-in						
NO POOL BREAKDOWN- - - - -	WD				1						1,625
FIRST SESPE- - - - -	PM				1						
SECOND AND THIRD SESPE - - -	PM				1						
SAN VICENTE- - - - -	037										
CLIFTON, DAYTON AND HAY- - -	WF		4					1,613,102	7,471		
SARGENT- - - - -	085	SC							8		
SATICOY- - - - -	111				1				903		630
NO POOL BREAKDOWN- - - - -	WD										630
O TO K SANDS - - - - -	WF				1				903		
SAUGUS - - - - -	037	WD	1							81,041	625
SAMTELLE - - - - -	037	WD	1	1						208,628	2,274
SEAL BEACH - - - - -			19		8			1,583,388	20,894	2,137,821	18,695
	037		17		2			1,583,388		1,117,347	
	059		2		7					1,020,534	
	WF		9		4			1,583,388	20,894		
	WD		10		5					2,137,881	18,695
NORTH BLOCK - - - - -			10		4			979,225	18,752	1,007,893	7,487
	WF		5		2			979,225	18,752		
	WD		5		2					1,007,893	7,487
SAN GABRIEL- - - - -	WD		1		1					172,300	2,708
BIXBY- - - - -	WD		2							256,867	3,896
SELOVER- - - - -	WD		1		1					130,500	131
WASEM- - - - -	WF				1				689		
	WD		1							448,226	752
MCGRATH- - - - -	WF		5		1			979,225	18,863		
NORTH BLOCK-EAST EXTENSION- - -					3						1
RECENT - - - - -	WD				1						1
MCGRATH- - - - -	WF				2						
SOUTH BLOCK - - - - -			9		2			604,163	2,142	1,129,988	11,207
	WF		4					604,163	2,142		
	WD		5		2					1,129,988	11,207
RECENT - - - - -	WD				2						1
PLIOCENE - - - - -	WD		5							1,129,988	11,206
WASEM- - - - -	WF		3					230,698	950		
MCGRATH- - - - -	WF		3					307,638	942		
LANE - - - - -	WF		3					65,827	250		
SESPE- - - - -	111		2	1	5			103,372	5,593	15,175	229
	WF		1	1	5			103,372	5,593		
	WD		1							15,175	229
FOOT OF THE HILLS AREA- - - - -	WD		1							15,175	122
TAR CREEK-TOPATOPA AREA - - - -			1	1	5			103,372	5,593		107
	WF		1	1	5			103,372	5,593		
	WD										107

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Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbf)	Cumulative water (Mbbf)	Water disposed (bbf)	Cumulative water disposed (Mbbf)
			Injecting	Standing	Shut-in						
VAQUEROS - - - - -		WF	1					103,372	1,358		
UPPER SESPE- - - - -		WF		1					289		
BASAL SESPE- - - - -		WF			5				3,946		
SEVENTH STANDARD - - - - -	029										
ETCHEGOIN- - - - -	WD		2							242,377	5,753
SHERMAN (ABD)- - - - -	037	SC							1		
SHERMAN ISLAND GAS - - - - -	095										
ANDERSON - - - - -	WD		1							13,745	85
SHIELLS CANYON - - - - -	111		21	1	24			2,182,069	58,447		
		SF			2			193,285	1,643		
		WF	21	1	22			1,988,784	56,804		
ANY AREA- - - - -											
INTERMEDIATE-BASOLO- - - - -		WF			2						
MAIN AREA - - - - -			21	1	22			2,182,069	58,447		
SHALLOW- - - - -		SF	2					193,285	1,643		
		WF							6,144		
INTERMEDIATE - - - - -		WF	19	1	22			1,988,784	58,668		
SIMI - - - - -	111		2		10		7,560		144	28,543	680
		SC			7				144		
		WF			3						
		AI	1				7,560				
		WD	2							28,543	680
OLD AREA- - - - -			1		3				144	623	11
		SC							144		
		WF			3						
		WD	1							623	11
NO POOL BREAKDOWN- - - - -		WD	1							623	11
SESPE- - - - -		SC							144		
LLAJAS - - - - -		WF			3						
CANADA DE LA BREA AREA- - - - -			2		6		7,560			27,920	666
		SC			6						
		AI	1				7,560				
		WD	1							27,920	666
ALAMOS CANYON AREA- - - - -		SC			1						
STRATHEARN AREA (ABD) - - - - -		WD									3
SISQUOC RANCH- - - - -	083										
MONTEREY - - - - -		SC	1					13,353	13		
SOUTH MOUNTAIN - - - - -	111		3	4	5			290,040	15,959		206
		SC							126		
		SF							16		
		WF	3	4	5			290,040	15,817		
		WD			1						206
ANY AREA- - - - -			2		4			218,829	2,054		

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bb0)	Cumulative water (Mbb0)	Water disposed (bb0)	Cumulative water disposed (Mbb0)
			Injecting	Standing	Shut-in						
SESPE- - - - -		SC							126		
		SF							16		
		NF	2		4			218,829	1,912		
MAIN AREA - - - - -		NF	1	4				71,211	13,905		
SESPE- - - - -		NF			1				7,532		
I-D- - - - -		NF		1					711		
II-III - - - - -		NF		2					3,371		
IV - - - - -		NF	1	1				71,211	2,291		
BRIDGE AREA - - - - -											
PLIOCENE - - - - -		ND			1						206
STRAND - - - - -	029		8	1				240,604	359	912,134	† 9,577
		NF	3					240,604	359		
		ND	5	1						912,134	9,577
EAST AREA - - - - -			1	1					5	28,560	957
		NF							5		
		ND	1	1						28,560	957
ETCHEGOIN- - - - -		ND		1							445
UPPER STEVENS- - - - -		ND	1							28,560	512
STEVENS- - - - -		NF							5		
MAIN AREA - - - - -			6					240,604	353	796,840	7,270
		NF	3					240,604	353		
		ND	3							796,840	7,270
SAN JOAQUIN- - - - -		ND									790
ETCHEGOIN- - - - -		ND	3							796,840	6,032
UPPER STEVENS- - - - -		NF	3					240,604	353		
		ND									447
NORTHWEST AREA- - - - -		ND	1							86,734	1,351
SAN JOAQUIN- - - - -		ND									323
STEVENS- - - - -		ND	1							86,734	1,029
SUTTER BUTTES GAS- - - - -	101										
KIONE- - - - -		ND	1							73,206	611
TAPIA- - - - -	037	ND	1							83,920	1,653
TAPD, NORTH- - - - -	111										
MIOCENE- - - - -		NF	1					68,356	6,412		
TAPD CANYON, SOUTH - - - - -	111		2		6			345,573	1,006	44,654	1,844
		SC			6				58		
		NF	1					345,573	948		
		ND	1							44,654	1,844
NO POOL BREAKDOWN- - - - -		SC			6						
		ND	1							44,654	1,844
TERRY- - - - -		NF	1					345,573	948		
SESPE- - - - -		SC							58		
TEJON- - - - -	029		10	1	14			1,376,302	47,773	985,472	12,109
		SC	1		3			40	169		
		NF	3	1	8			1,376,262	47,604		
		ND	6		3					985,472	12,109

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbd)	Cumulative water (Mbbd)	Water disposed (bbd)	Cumulative water disposed (Mbbd)
			Injecting	Standing	Shut-in						
CENTRAL AREA- - - - -											
OLCESE - - - - -		WD	1							1,283	12
EASTERN AREA- - - - -											
TRANSITION-SANTA MARGARITA -		WF	2	1	1			32,601	676		2
		WD									
SOUTHEAST AREA- - - - -											
RESERVE SAND - - - - -		WD	2							541,726	5,106
WESTERN AREA- - - - -			5		13			1,343,701	1,513	442,463	6,989
		SC	1		3			40	169		
		WF	1		7			1,343,661	46,928		
		WD	3		3					442,463	6,989
NO POOL BREAKDOWN- - - - -		SC	1		3			40	2		189
		WD									
TRANSITION - - - - -		WD			2						32
TRANSITION-SANTA MARGARITA -		SC							167		
		WF	1		7			1,343,661	46,928		787
		WD									
UPPER FRUITVALE SAND - - - -		WD	1		1					21,234	5,449
S MARGARITA-FRUITVALE-RD MTN		WD	1							28,378	299
FRUITVALE-ROUND MOUNTAIN - -		WD	1							392,851	393
TEJON HILLS- - - - -	029		1	10	2			2,241,881	46,020		
		SC							7		
		WF	1	10	2			2,241,881	46,012		
SANTA MARGARITA- - - - -		SC							7		
		WF	1	10	2			2,241,881	45,886		
VALV - - - - -		WF							126		
TEJON, NORTH - - - - -	029										
SANTA MARGARITA- - - - -		WD			1						1,928
TEMESCAL - - - - -	111	WF	4					516,561	6,481		
TEN SECTION- - - - -	029		7	1	8	887,238			4,769	3,935,823	64,751
		GS									
		PM	2		3	887,238			4,769		
		WF									
		WD	5	1	5					3,935,823	64,751
MAIN AREA - - - - -			7	1	8	887,238				3,935,823	64,751
SAN JOAQUIN-ETCHEGOIN- - - -		WD	5	1	5					3,935,823	64,751
UPPER STEVENS- - - - -		GS									
		PM	2		3	887,238					
NORTHWEST AREA- - - - -									4,769		
STEVENS- - - - -		WF							4,769		
TIMBER CANYON- - - - -	111	WD	1		1					30,389	441
MAIN AREA - - - - -		WD	1		1					30,389	441
TODHUNTERS LAKE GAS- - - - -	113	WD	3							200,401	537
MOKELUMNE RIVER- - - - -		WD	1							61,533	128
STARKEY- - - - -		WD	2	1						138,868	410

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbf)	Cumulative water (Mbbf)	Water disposed (bbf)	Cumulative water disposed (Mbbf)
			Injecting	Standing	Shut-in						
TORRANCE - - - - -	837		22	2	29			13,099,633	178,920	3,150	28
		SC							57		
		WF	21	2	29			13,099,633	178,863		
		WD	1							3,150	28
ONSHORE - - - - -			22	2	29			13,099,633	178,920	3,150	28
		SC							57		
		WF	21	2	29			13,099,633	178,863		
		WD	1							3,150	28
TAR- - - - -		WD	1							3,150	28
TAR-RANGER & MAIN- - - - -		SC							18		
TAR-RANGER & MAIN, CENTRAL -		WF	2		26			4,733,009	73,901		
TAR-RANGER & MAIN, EAST- - -		WF	14	2				7,355,029	94,159		
TAR-RANGER & MAIN, SOUTH - -		WF	5		3			1,011,595	10,803		
MAIN - - - - -		SC							39		
TORREY CANYON- - - - -	111		1		7			105,994	10,849		
		PM			3				18		
		SC							18		
		WF	1		4			105,994	10,831		
FIRST SESPE- - - - -		WF	1		3			105,994	9,907		
THIRD SESPE- - - - -		WF			1				924		
DEEP - - - - -		PM			3						
SESPE (ADD)- - - - -		SC							18		
TURK ANTICLINE - - - - -	019	WD									416
TURNBULL (ADD) - - - - -	037	WD									554
UNION AVENUE - - - - -	029	WD									790
UNION ISLAND GAS - - - - -	077										
MORENO - - - - -		WD	1							107,866	375
VALLECITOS - - - - -	069	WD			1						2,296
VENICE BEACH - - - - -	237	WD	2							3,167,985	34,412
OFFSHORE- - - - -		WD	2							3,167,985	34,412
PLIOCENE - - - - -		WD									4,674
SCHIST SAND- - - - -		WD	2							3,167,985	29,738
VENTURA- - - - -	111		198	1	91			59,025,757	836,460		107
		WF	198		91			59,025,757	836,460		
		WD		1							107
NO POOL BREAKDOWN- - - - -		WF	1					465,433	465		107
		WD									
B-2A - - - - -		WF			1				1,418		
B-2B/B-3 - - - - -		WF	11		12			1,455,506	76,241		
B-4/B-5- - - - -		WF	10		8			777,786	28,247		
C-BLOCK UNIT - - - - -		WF	47		17			25,832,060	276,103		
C-2(E) - - - - -		WF							1,793		
C-2(W) - - - - -		WF			6				20,392		

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbbl)	Cumulative water (Mbbbl)	Water disposed (bbbl)	Cumulative water disposed (Mbbbl)
			Injecting	Standing	Shut-In						
C-2/C3/C4A(E)-----		WF	21		3			9,542,163	49,672		
C-3/C-4A(W)-----		WF	20		9			3,865,156	107,930		
C-4B-----		WF							321		
D-3-----		WF	5		1			433,472	839		
D-4-----		WF	11		1			1,070,953	1,583		
D-5-----		WF	17					3,906,267	5,783		
D-6-----		WF	27					4,074,130	24,661		
D-7-----		WF	8					629,415	765		
5-N/T-410-----		WF	4		9			330,991	49,947		
6-N/T-410-----		WF	11		20			1,304,914	79,188		
5/6-N/T-180(W)-----		WF	21		6			2,440,208	57,456		
7-N/T-410-----		WF	26		8			2,897,303	53,610		
BARNARD D-7-----		WF WD		1	1				45		
WEST MOUNTAIN-----	111				3				725		2,109
NO POOL BREAKDOWN-----		WD			3						2,109
SESPE-----		WF			3				725		
WHEELER RIDGE-----	029		14		23			1,681,945	67,929	14,969	185
		SC							313		
		SF							1,997		
		WF	13		23			1,681,945	65,619		
		WD	1							14,969	185
CENTRAL AREA-----			3		18			677,514	39,303		
		SC							309		
		SF							1,997		
		WF	3		18			677,514	36,997		
COAL OIL CANYON-----		SC							309		
		SF							1,997		
		WF	1		10			114,902	9,852		
MAIN-----		WF			2				1,034		
MASSIVE EOCENE-----		WF	2		6			562,612	26,111		
NORTHEAST AREA-----			1						4	14,969	185
		SC							4		
		WD	1							14,969	185
SANTA MARGARITA-----		SC							4		
FA-2-----		WD	1							14,969	185
SOUTHEAST AREA-----											
OLCESE-----		WF			1				37		
WINDGAP AREA-----		WF	10		4			1,004,431	28,585		
RESERVE-----		WF	10		4			1,004,431	28,585		
WHITE WOLF-----	029	SC							111		
WHITTIER-----	037		23		17	2,479,756		5,907,207	103,769	254	4,185
		GS	6		2	2,479,756			42		
		SC									
		WF	19		13			5,907,207	103,727		
		WD	1		2					254	4,185

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbf)	Cumulative water (Mbbf)	Water disposed (bbf)	Cumulative water disposed (Mbbf)
			Injecting	Standing	Shut-in						
ANY AREA- - - - -		SC							42		
CENTRAL AREA- - - - -			18		13			5,358,273	102,537	254	68
		WF	17		13			5,358,273	102,537		
		WD	1							254	68
2ND & 3RD, UPPER - - - - -		WF	13		10			4,654,775	87,505		
6TH- - - - -		WD	1							254	25
6TH, 184 ANTICLINE - - - - -		WF	4		2			703,498	14,100		
CENTRAL- - - - -		WD									43
CENTRAL, 184 ANTICLINE - - - - -		WF			1				932		
LA HABRA AREA - - - - -		GS	6		2	2,479,756					
SOUTHWEST FAULT BLOCK - - - - -			2		2			548,934	1,190		4,117
1ST- - - - -		WF	2					548,934	1,190		4,117
		WD			2						
WILD GOOSE GAS - - - - -	007										
EOCENE - - - - -		WD	1							350	785
WILLOWS-BEEHIVE BEND GAS - - - - -	021										
KIONE- - - - -		WD	1							92,201	1,502
WILMINGTON - - - - -			682	177	101			465,389,216	† 7,824,356	7,311,842	1,145,061
OFFSHORE- - - - -	237		261	89	54			249,078,314			
ONSHORE - - - - -	037		423	88	47			216,310,902		7,311,842	
		SC	3		19			93,561	† 18,171		
		SF							24		
		WF	639	175	78			465,295,655	† 7,806,161	7,311,842	1,145,061
		WD	40	2	8						
ANY BLOCK - - - - -		WD	40	2	8					7,311,842	1,145,061
GASPUR - - - - -		WD	40	2	8					7,311,842	1,144,090
RANGER - - - - -		WD									971
FAULT BLOCK I ONSHORE - - - - -			133	10	18			66,828,949	435,508		
		SC	1					13,784	2,588		
		WF	133	10	18			66,815,165	432,920		
NO POOL BREAKDOWN- - - - -		SC	1					13,784	2,588		
		WF							1,166		
TAR, RANGER, & UPPER TERMINAL		WF	11					7,120,217	7,120		
RANGER - - - - -		WF	48	4	12			13,584,869	155,135		
RANGER-UPPER TERMINAL- - - - -		WF	34	1	2			22,231,491	120,011		
UPPER TERMINAL - - - - -		WF	41	3	4			20,462,138	128,414		
LOWER TERMINAL - - - - -		WF	18	2				3,275,688	16,714		
UNION PACIFIC- - - - -		WF	2	2				43,382	3,241		
FORD - - - - -		WF	1					97,380	1,118		
FAULT BLOCK II ONSHORE- - - - -			17	2	2			5,813,110	24,456		
		SC							2,277		
		WF	17	2	2			5,813,110	22,179		
NO POOL BREAKDOWN- - - - -		SC							2,277		
TAR & RANGER - - - - -		WF							199		
TAR, RANGER, & UPPER TERMINAL		WF			1						
RANGER - - - - -		WF	13					2,890,161	4,696		

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Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbd)	Cumulative water (Mbbd)	Water disposed (bbd)	Cumulative water disposed (Mbbd)
			Injecting	Standing	Shut-in						
RANGER & UPPER TERMINAL- - -	WF		3					986,104	1,679		
UNION PACIFIC- - - - -	WF		2		1			925,692	10,511		
FORD - - - - -	WF		2	1	1			1,011,153	3,455		
237- - - - -	WF			1					1,639		
FAULT BLOCK II-A OFFSHORE - - -	WF		11	5	4			8,111,659	214,916		
TAR- - - - -	WF		1					1,351,461	21,509		
RANGER - - - - -	WF		7	2	3			2,416,427	42,490		
UPPER TERMINAL - - - - -	WF		4	1	1			3,723,509	117,727		
LOWER TERMINAL - - - - -	WF		2	2				620,262	33,190		
FAULT BLOCK II-A ONSHORE- - - -	WF		60	16	2			33,516,754	581,173		
TAR- - - - -	WF		15	4	1			7,531,889	138,479		
RANGER - - - - -	WF		20	4	1			5,556,132	103,707		
UPPER TERMINAL - - - - -	WF		32	7				15,166,988	256,804		
LOWER TERMINAL - - - - -	WF		12	4				5,261,745	82,183		
FAULT BLOCK II-B ONSHORE- - - -	WF		15	12				10,627,761	208,649		
TAR- - - - -	WF		2	2				1,000,747	26,675		
RANGER - - - - -	WF		6	2				2,642,703	40,587		
UPPER TERMINAL - - - - -	WF		5	6				4,521,114	85,940		
LOWER TERMINAL - - - - -	WF		4	4				2,463,197	55,447		
FAULT BLOCK III OFFSHORE- - - -			16	7	4			8,944,554	279,940		
	SC								47		
	WF		16	7	4			8,944,554	279,893		
NO POOL BREAKDOWN- - - - -	SC								47		
TAR- - - - -	WF		3	2				1,190,036	74,676		
RANGER - - - - -	WF		11	2	3			4,032,760	104,130		
UPPER TERMINAL - - - - -	WF		3	3	1			3,637,021	86,521		
LOWER TERMINAL - - - - -	WF		1					84,737	14,566		
FAULT BLOCK III ONSHORE - - - -			63	32	1			45,893,422	711,036		
	SC								335		
	SF								24		
	WF		63	32	1			45,893,422	710,677		
NO POOL BREAKDOWN- - - - -	SC								335		
TAR- - - - -	WF		11	12				6,318,184	185,337		
RANGER - - - - -	SF								24		
	WF		37	13	1			19,361,412	238,062		
UPPER TERMINAL - - - - -	WF		12	6				13,070,711	197,098		
LOWER TERMINAL - - - - -	WF		7	3				6,903,691	89,212		
UNION PACIFIC- - - - -	WF		2	1				639,424	967		
FAULT BLOCK IV OFFSHORE - - - -			23	13	7			22,033,042	648,561		
	SC								147		
	WF		23	13	7			22,033,042	648,414		
NO POOL BREAKDOWN- - - - -	SC								147		
TAR- - - - -	WF		2	2				1,335,385	81,501		
RANGER - - - - -	WF		16	4	5			10,181,847	203,602		

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bb0)	Cumulative water (Mbb0)	Water disposed (bb0)	Cumulative water disposed (Mbb0)
			Injecting	Standing	Shut-in						
UPPER TERMINAL - - - - -		WF	6	4				8,059,584	259,279		
LOWER TERMINAL - - - - -		WF	6	5	1			2,456,226	104,032		
FAULT BLOCK IV ONSHORE- - - - -			37	4	1			24,273,998	553,160		
		SC							393		
		WF	37	4	1			24,273,998	552,767		
NO POOL BREAKDOWN- - - - -		SC							393		
TAR- - - - -		WF	4					3,426,854	53,873		
RANGER - - - - -		WF	17	4				6,579,461	121,423		
UPPER TERMINAL - - - - -		WF	7					7,369,095	197,072		
LOWER TERMINAL - - - - -		WF	9					6,320,573	170,015		
UNION PACIFIC- - - - -		WF	1					578,015	9,294		
FORD - - - - -		WF			1				1,090		
FAULT BLOCK IV-A OFFSHORE - - - - -		WF							1,521		
UNION PACIFIC- - - - -		WF							1,022		
FORD - - - - -		WF							499		
FAULT BLOCK IV-B OFFSHORE - - - - -											
237- - - - -		WF			2				3,108		
FAULT BLOCK IV-C OFFSHORE - - - - -											
237- - - - -		WF			1				3,695		
FAULT BLOCK IV-D OFFSHORE - - - - -		WF	3	1	1			554,673	10,541		
UNION PACIFIC- - - - -		WF	1					352,763	5,715		
FORD - - - - -		WF	2	1	1			201,910	4,430		
237- - - - -		WF		1					396		
FAULT BLOCK V OFFSHORE- - - - -			47	25	8			30,385,425	664,029		
		SC			1				3,018		
		WF	47	25	7			30,385,425	661,011		
NO POOL BREAKDOWN- - - - -		SC			1				3,018		
		WF							180		
TAR- - - - -		WF	21	7	5			13,167,569	309,094		
RANGER FB VI - - - - -		WF	1		1			14,064	14		
TAR BOTTOM - - - - -		WF	14	10	2			2,950,313	5,678		
RANGER - - - - -		WF	20	13	2			14,253,479	346,045		
FAULT BLOCK V ONSHORE - - - - -		WF	23	2	4			7,551,207	179,494		
RANGER - - - - -		WF	23	2	4			7,551,207	179,494		
FAULT BLOCK V-B OFFSHORE- - - - -		WF	19	15	5			15,314,225	581,911		
UPPER TERMINAL - - - - -		WF	15	9	4			10,973,306	437,383		
LOWER TERMINAL - - - - -		WF	4	6	1			4,340,919	132,536		
UNION PACIFIC- - - - -		WF		1	1				6,250		
FORD - - - - -		WF			1				5,741		
FAULT BLOCK VI OFFSHORE - - - - -			77	8	10			86,104,504	1,331,227		
		SC			1				3,670		
		WF	77	8	9			86,104,504	1,327,557		
NO POOL BREAKDOWN- - - - -		SC			1				3,670		
RANGER - - - - -		WF	62	3	5			67,098,310	905,222		

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbd)	Cumulative water (Mbbd)	Water disposed (bbd)	Cumulative water disposed (Mbbd)
			Injecting	Standing	Shut-in						
UPPER TERMINAL - - - - -		WF	14	2	2			15,785,351	303,236		
LOWER TERMINAL - - - - -		WF	5	3				3,220,843	108,326		
UNION PACIFIC - - - - -		WF		1	1				4,847		
FORD - - - - -		WF		1	1				5,928		
FAULT BLOCK VI ONSHORE - - - - -			23	5	12			11,665,724	225,010		
		SC			5				2,778		
		WF	23	5	9			11,665,724	222,232		
NO POOL BREAKDOWN - - - - -		SC			3				2,778		
RANGER - - - - -		WF	23	5	9			11,665,724	222,232		
FAULT BLOCK VII OFFSHORE - - - - -			23		1			28,604,156	309,264		
		SC							24		
		WF	23		1			28,604,156	309,240		
NO POOL BREAKDOWN - - - - -		SC							24		
RANGER - - - - -		WF	19		1			23,816,602	303,413		
RANGER ERDA - - - - -		WF	4					4,787,354	5,827		
FAULT BLOCK VII ONSHORE - - - - -			8	2				9,214,542	153,227		
		SC							1,437		
		WF	8	2				9,214,542	151,790		
NO POOL BREAKDOWN - - - - -		SC							1,437		
RANGER - - - - -		WF	4	2				4,800,519	141,962		
RANGER ERDA - - - - -		WF	4					5,214,823	9,827		
FAULT BLOCK VIII OFFSHORE - - - - -			6	2	4			5,843,895	97,616		
		SC			4				423		
		WF	6	2				5,843,895	97,193		
NO POOL BREAKDOWN - - - - -		SC			4				423		
		WF							392		
RANGER - - - - -		WF	3	1				3,316,522	94,254		
RANGER & TERMINAL - - - - -		WF		1					22,683		
TERMINAL - - - - -		WF	1					1,403,428	4,301		
UNION PACIFIC - FORD - - - - -		WF	2					1,121,945	15,543		
FAULT BLOCK VIII ONSHORE - - - - -		WF	2	1				925,435	59,999		
RANGER - - - - -		WF	2	1				925,435	59,999		
FAULT BLOCK 90 OFFSHORE - - - - -			34	12	9			43,182,181	546,313		
		SC	1		8			79,777	1,032		
		WF	33	12	1			43,182,404	545,281		
NO POOL BREAKDOWN - - - - -		SC	1		8			79,777	1,032		
		WF							444		
RANGER - - - - -		WF	27	6	1			32,855,586	392,374		
RANGER - TERMINAL - - - - -		WF	1	1				2,793,450	46,786		
TERMINAL-UNION PACIFIC-FORD - - - - -		WF	1	1				894,906	6,694		
UNION PACIFIC - FORD - - - - -		WF	5	4				6,598,462	98,981		
NIXTERS GAS - - - - -	095	WD									254
YORBA LINDA - - - - -	059		81		212			11,511,398	† 112,204	8,624	3,797

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbd)	Cumulative water (Mbbd)	Water disposed (bbd)	Cumulative water disposed (Mbbd)
			Injecting	Standing	Shut-in						
NO POOL BREAKDOWN- - - - -		SC	30		207			2,830,623	64,912		
		SF	50		7			8,486,075	47,097		
		WF	1		1			194,700	195	8,624	3,797
		WD	1		2						
		SC	1					2,788	3	8,624	3,667
		WD	1		1						
		SC	28		206			2,735,828	61,635		
		SF	44		5			5,948,069	30,142		
		SC							2,362		
		SF	2		1			1,112,492	5,009		
		SC							820		
		SF	1					81,135	9,758		
		WF	1		1			194,700	195		
		SF	2					938,313	1,534		130
		WD			1						
		SC	1		1			92,007	102		
		SF	2					406,066	654		
YONLUMNE - - - - -	029										
STEVENS- - - - -		WF	5					5,193,173	14,493		
ZACA - - - - -	083		6		3				148	8,720,684	172,458
MONTEREY NORTH BLOCK - - - - -		SC							148		
		WD	6		3					8,720,684	172,458
STATE TOTAL- - - - -			6,716	462	15,984	189,205,524	9,400,888	1,546,897,691	† 20,972,405	438,504,646	6,213,058 †
ONSHORE- - - - -		GS	95	8	222	92,949,389					
		LG	5			* 273,859					
		PM	59	9	69	95,982,276			† 552		
		SC	975	78	13,870			101,228,423	† 1,541,073		
		SF	2,939	55	646			406,037,475	† 2,374,688		
		WF	2,078	256	1,091			1,039,631,793	† 17,056,092		
		AI	77	19	30		9,400,888			438,504,646	6,213,058 †
		WD	511	41	185						
			6,359	368	15,803	188,199,419	9,400,888	1,169,209,034		434,492,429	
		GS	94	8	222	92,949,389					
		LG	5			* 273,859					
		PM	57	9	69	94,976,171					
		SC	975	78	13,856			101,148,646			
		SF	2,939	55	646			406,037,475			
		WF	1,732	163	931			662,022,913			
OFFSHORE - - - - -		AI	77	19	30		9,400,888			434,492,429	
		WD	503	41	180						
			357	93	181	1,006,105		377,688,657		4,012,217	
		PM	3			1,006,105					
		SC			15			79,777			
		WF	346	93	161			377,608,880			
		WD	8		5					4,012,217	
DISTRICT NUMBER - 1- - - - -			1,552	193	1,060	17,219,910	3,304,641	861,328,371	† 13,408,962	16,149,110	1,251,706 †
ONSHORE - - - - -		GS	33	2	43	16,063,551					
		LG	5			* 273,859					
		PM	3		1	882,500			† 552		
		SC	42		395			3,876,949	† 109,241		
		SF	53		15			8,971,473	† 62,141		
		WF	1,301	187	589			848,479,949	† 13,237,028		
		AI	38		6		3,304,641			16,149,110	1,251,706 †
		WD	82	4	45						
			1,212	100	894	17,219,910	3,304,641	484,351,651		12,802,291	
		GS	33	2	43	16,063,551					
		LG	5			* 273,859					
		PM	3		1	882,500					
		SC	42		380			3,797,172			
		SF	53		15			8,971,473			
		WF	965	94	439			471,583,006			
		AI	38		6		3,304,641				
		WD	79	4	44					12,802,291	

INJECTION - 1980

Field, area, and pool	API county code	Project type	Average number of wells			Gas (Mcf)	Air (Mcf)	Water (bbf)	Cumulative water (Mbbf)	Water disposed (bbf)	Cumulative water disposed (Mbbf)
			Injecting	Standing	Shut-in						
OFFSHORE- - - - -			339	93	166			376,976,720		3,346,819	
	SC				15			79,777			
	WF		336	93	150			376,896,943		3,346,819	
	WD		4		2						
DISTRICT NUMBER - 2- - - - -			470	42	367	52,203,056	7,560	85,269,023	† 1,309,799	10,062,105	212,510 †
	GS		39	5	81	47,341,300					
	PM		12	5	4	4,861,756					
	SC		13		67			897,164	† 5,989		
	SF		2		3			193,285	1,693		
	WF		356	30	200			84,178,574	† 1,302,117		
	AI		1				7,560			10,062,105	212,510 †
	WD		47	3	14						
ONSHORE - - - - -			461	42	357	52,203,056	7,560	84,557,086		10,062,105	
	GS		39	5	81	47,341,300					
	PM		12	5	4	4,861,756					
	SC		13		67			897,164			
	SF		2		3			193,285			
	WF		348	30	190			83,466,637			
	AI		1				7,560			10,062,105	
	WD		47	3	14						
OFFSHORE- - - - -			8		11			711,937			
	WF		8		11			711,937			
DISTRICT NUMBER - 3- - - - -			501	50	1,014	14,955,441	701,194	114,268,684	† 1,805,470	132,119,589	1,697,848 †
	GS		11	1	7	12,977,777					
	PM		5		9	1,977,664					
	SC		97	28	849			12,002,909	† 132,426		
	SF		101	5	17			43,338,135	† 423,409		
	WF		188	3	102			58,927,640	† 1,249,635		
	AI		7	8	3		701,194			132,119,589	1,697,848 †
	WD		103	7	29						
ONSHORE - - - - -			492	49	1,010	13,949,336	701,194	114,268,684		131,454,191	
	GS		10	1	7	12,977,777					
	PM		2		9	971,559					
	SC		97	28	849			12,002,909			
	SF		101	5	17			43,338,135			
	WF		187	3	102			58,927,640			
	AI		7	8	3		701,194			131,454,191	
	WD		98	7	26						
OFFSHORE- - - - -			9		4	1,006,105				665,398	
	PM		3			1,006,105				665,398	
	WF		1								
	WD		4		4						
DISTRICT NUMBER - 4- - - - -			3,930	168	12,924	69,193,322	5,387,493	454,927,000	† 4,074,179	249,711,509	2,100,970 †
	GS		3		3	1,345,881					
	PM		33	4	40	67,847,441					
	SC		811	50	12,154			83,529,631	† 1,243,831		
	SF		2,688	50	556			331,337,274	† 1,812,554		
	WF		165	35	147			40,060,095	† 1,017,794		
	AI		32	11	21		5,387,493			249,711,509	2,100,970 †
	WD		207	20	71						
DISTRICT NUMBER - 5- - - - -			231	7	525	20,412,915		31,104,613	† 373,995	28,816,998	935,958
	PM		7		16	20,412,915					
	SC		12		406			921,770	† 49,586		
	SF		95		56			22,197,308	74,891		
	WF		68		54			7,985,535	249,518		
	WD		51	7	20					28,816,998	935,958
DISTRICT NUMBER - 6- - - - -			32	2	94	15,220,880				1,645,335	14,066 †
	GS		10	1	88	15,220,880					
	WD		21	1	6					1,645,335	14,066 †

INJECTION FOOTNOTES - 1980

NOTE: Wells completed in more than one pool (multiple completions) are counted once in area, field, and district totals. A standing well is incapable of injection in its present condition; a shut-in well is capable of injection in its present condition.

† Corrected figure.

* Figure shown is expressed in barrels.

** Project to dispose of sour gas.

a/ Figures for Aliso Canyon field no longer contain data for Oat Mountain Area. Oat Mountain Area has been designated a field and can be found on page 104.

b/ Formerly known as Sepulveda.

OIL & GAS DISCOVERIES

OIL AND GAS DISCOVERIES - 1980

County	Field				R. & M.	Type† Disc.	Comp. date	Operator	Well designation and API number	Producing interval (drilled depth)	Initial test data	Stratigraphy of producing interval
		T.	R.	Sec.								
								District 1				
								NONE				
								District 2				
Los Angeles	Del Valle, Main Area	4N	17W	20	SB	NP	9/11	Black Hawk Resources Corp.	"N.L. & F." 1-20 (037-22052)		Confidential	
Ventura	Chaffee Canyon	3N	19W	1		NP	10/15	Oxy Petroleum, Inc.	"Ventura Realty" 1 (111-20987)	6904-7760	315 B/D (37.5°) oil, 750 Mcf/D gas	Eocene
	Moorpark West	3N	20W	36		EX	6/13	SANMAR Oil Company	"Ventavo III" N-1 (111-20917)	6256-6414	Confidential	
	Ojai, No. Sulphur Mountain Area	4N	22W	19		EX	8/13	ARCO Oil and Gas Company	"Ojai" 109 (111-20982)		Confidential	
	Ojai, Sulphur Crest Area	4N	22W	23		EX	5/17	Union Oil Co. of Calif.	"Sulphur Crest" 3-23 (111-20952)		Confidential	
	Shiells Canyon, Main Area	3N	19W	4		EX	5/10	Texaco Inc.	"Shiells" E2 (111-20958)		Confidential	
	Shiells Canyon Main Area	3N	19W	4		NP	11/7	Texaco Inc.	"Shiells" B5 (111-21004)	7760-7860	650 B/D oil (29.7°), 0.1% water cut, 287 Mcf/D gas	Eocene
	South Mountain	3N	21W	12		EX	7/11	Lawrence Barker, Jr.	"Harvey-Snyder" 1 (111-20967)	7777-8125	160 B/D oil (33.1°), 4.5% water cut, 504 Mcf/D gas	Eocene
	Tapo Ridge	3N	18W	1		EX	9/6	Union Oil Co. of Calif.	"Tapo Ridge" 1-1 (111-20943)		Confidential	
								District 3				
Monterey	San Ardo, Main Area	23S	10E	15	MD	EX	8/13	Texaco Inc.	"Labarere" 2-15 (053-20897)		Confidential	
Santa Barbara	Santa Maria Valley, Bradley Area	9N	34W	11	SB	EX	9/1	Coastal Oil & Gas Corp.	"GPE-Orcutt North" 1 (083-21336)	7333-8007*	100 B/D oil (24°), 250 Mcf/D gas	Monterey (Miocene)
	Santa Maria Valley West Area	10N	35W	18		EX	6/16	Union Oil Co. of Calif.	"Leroy" 1-18 (083-21323)		Confidential	
	Sisquoc Ranch	9N	31W	19		NP	6/20	Chevron U.S.A. Inc.	"Chevron-Sulpetro Sisquoc Ranch" 1 (083-21304)		Confidential	
								District 4				
Kern	Lost Hills	27S	21E	16	MD	EX	3/14	Chevron U.S.A. Inc.	"Monte Cristo" 181X (029-60261)	4590-4770	480 B/D oil (27.8°), 100 B/D water, 680 Mcf/D gas	Cahn (Miocene)
	Semitropic	27S	23E	11		EX	12/12	Gary Drilling Co.	"Johnson" 1 (029-62833)		Confidential	
	Rosedale	29S	26E	15		NP	1/17	Aminoil USA, Inc.	"Tenneco Fee" 22-15 (029-60370)		Confidential	
	Buena Vista	31S	23E	18		NP	11/16	Quintana Production Co.	"USA" 1 (029-61915)		Confidential	
	Los Lobos	11N	22W	28	SB	NP	9/5	Tenneco Oil Co.	"Santiago C" 55-28 (029-61994)		Confidential	
	Los Lobos	11N	22W	30		NP	12/6	Tenneco Oil Co.	"Santiago A" 72-30 (029-62340)		Confidential	
	Los Padres	11N	21W	28		NP	1/24	Tenneco Oil Co.	"Tenneco-White Wolf" 26X-A (029-59925)		Confidential	
	Pleito	11N	20W	30		NP	1/27	Tenneco Oil Co.	"Pleito" 1-30 (029-59930)		Confidential	
Tulare	Deer Creek	23S	27E	4	MD	NP	8/15	Merel Co., Inc.	"Phelan" 1 (029-20157)	1594-1633	1 B/D oil (15°), 9 B/D water	Olcene (Miocene)
								District 5				
								NONE				
								District 6				
Colusa	Compton Landing, South, Gas	17N	2W	14		NP	4/7	Chevron U.S.A. Inc.	"Jimeno Rancho" 1 (011-20139)	5164-5175*	1,020 Mcf/D gas (893 Btu), 1/2-in. bean, 1,980 psi flow pressure	Forbes (U Cretaceous)
	Grimes, West, Gas	14N	1W	26		EX	9/10	Chevron U.S.A. Inc.	"College City" 2 (011-20145)	8418-8430	1,463 Mcf/D gas (Btu NA), 6/64-in. bean, 3,460 psi flow pressure	Forbes (U Cretaceous)
	Princeton Gas, Townlot Area	18N	1W	19		NA	10/22	Jordan Oil & Gas Co.	"Transamerica" 1-19 (011-20153)	2325-2338	2,101 Mcf/D gas (842 Btu), 5/16-in. bean, 915 psi flow pressure	Kione (U Cretaceous)

OIL AND GAS DISCOVERIES - 1980

County	Field				B. & M.	Type [†] Disc.	Comp. date	Operator	Well designation and API number	Producing interval (drilled depth)	Initial test data	Stratigraphy of producing interval
		T.	R.	Sec.								
								District 6 - Continued				
Contra Costa	Knightsen Gas	1N	3E	5	MD	NF	3/30	Natural Gas Corp. of Calif.	"Western-Murphy-et al" 1 (013-20157)	8678-8688 8700-8708	1,098 Mcf/D gas (1050 Btu), 10/64-in. bean, 2,250 psi flow pressure, 15 bbl/D condensate	Third Massive sand, Mokelumne River (U Cretaceous)
Sacramento	Stone Lake Gas	6N	4E	1		EX	10/25	Argo Petroleum Corp.	"Elliott Ranch" 1-73 (067-20163)	7094-7097	1,246 Mcf/D gas (903 Btu), 5/32-in. bean, 1,970 psi flow pressure	Winters (U Cretaceous)
Solano	Miller Gas, West Area	6N	2E	9		EX	10/3	Hamilton Brothers Oil Co.	"Belleair" 1 (095-20421)		Confidential	
Tehama	Rice Creek, East, Gas	23N	2W	21		EX	12/23	Oxy Petroleum, Inc.	"NARECO-Slade" 1 (103-20115)		Confidential	
Yolo	Conway Ranch Gas	10N	3E	30		EX	9/19	Nahama & Weagant, Inc.	"Cache Basin" 5 (113-20586)		Confidential	
	Crossroads Gas	10N	2E	34		EX	10/26	ARCO Oil and Gas Co.	"A.G. Richter" 1 (113-20602)	5282-5292 5301-5305	1,593 Mcf/D gas (Btu NA), 12/64-in. bean, 1,995 psi flow pressure	Winters (U Cretaceous)
	Grays Bend Gas	11N	3E	31		NF	1/14	Hilliard Oil & Gas, Inc.	"Hershey A" 1 (113-20574)	4460-4490	3,756 Mcf/D gas (840 Btu), 5/16-in. bean, 1,608 psi flow pressure	Winters (U Cretaceous)
	Harlan Ranch Gas	9N	1E	13		NF	10/18	Seaward Resources, Inc.	"Harlan" 1-13 (113-20610)		Confidential	
	Howells Point Gas	12N	1E	5		NF	12/11	Champlin Petroleum Co.	"Monckton" 1-5 (113-20606)		Confidential	
	Putah Sink Gas	8N	3E	35		EX	10/27	Natural Gas Corp. of Calif.	"Western Glide-Colby" 1 (113-20595)	6612-6614	1,168 Mcf/D gas (923 Btu), 12/64-in. bean, 1,682 psi flow pressure	Winters (U Cretaceous)

† NF - New Field; NA - New Area; NP - New Pool; EX - Extension.

• Directional well.

OIL AND GAS DISCOVERIES PRIOR TO 1980 [†]

County	Field				B. & M.	Type Disc.	Comp. date	Operator	Well designation and API number	Producing interval (drilled depth)	Initial test data	Stratigraphy of producing interval
		T.	R.	Sec.								
								District 6				
Colusa	Williams Gas	16N	2W	31	MD	NF	9/25/78	Davis Oil Co.	"Zumwalt" 1 (011-20119)	5305- 5310 & 5315- 5317	710 Mcf/D gas (970 Btu), 1/4-in. bean, 470 psi flow pressure	Forbes (U Cretaceous)
Sacramento	Florin Gas	8N	5E	35		NF	12/14/77	Union Oil Co. of Calif.	"Florin" 1 (067-20125)	3882- 3902* & 3905- 3908*	2,326 Mcf/D gas (904 Btu), 1,102 psi flow pressure	Winters (U Cretaceous)
San Joaquin	Lone Tree Creek Gas	1S	8E	17		NF	5/12/78	Texaco Inc.	"Vieira" 1 (077-20307)	6804- 6810	1,644 Mcf/D gas (831 Btu), 3/16-in. bean, 1,960 psi flow pressure	Lathrop sand, Panoche (U Cretaceous)
Sutter	Robbins Gas	13N	3E	32		NF	2/6/79	Sutter Gas Co.	"Sutter Gas Company" 1 (101-20139)	6710- 6739*	5,000 Mcf/D gas (139 Btu), 2,200 psi flow pressure	Forbes (U Cretaceous)

† NF - New field.

† These wells or, due to confidentiality, well data were omitted from the Discoveries table printed in the year the wells were completed.

• Directional well.

PROSPECT WELLS

PROSPECT WELLS DRILLED TO TOTAL DEPTH IN 1980

County	T.	R.	Sec.	R. & M.	Operator	Well designation and API number	Elev. (feet)	Month drilling completed	Total depth (feet)	Stratigraphic units penetrated and/or time-stratigraphic unit at total depth (depth in feet)
District 1										
Orange	5S	12W	22	SB	Exxon Corp.	"State FRC 186" 130 (259-20981)	57	Dec.	11290	"237" zone 9500-10720; schist 10720-10820
	8S	7W	9		Santa Fe Energy Co.	"Reed-Krum" 1 (059-20965)	645	June	6606	Cretaceous
	8S	7W	23		Texaco Inc.	"O'Neill" 3 (059-21004-01)	485	Dec.		Confidential
Riverside	3S	7W	28		John B. Quinn	"Coronita" 1 (065-20035)	600	Apr.	2496	Hunter zone 2432; Miocene
District 2										
Los Angeles	4N	17W	4		Blackfoot-Cherokee Energy, Inc.	"Donchin" 1 (037-22053)	1536	May	4314	Val Verde
	** 4N	17W	7		Argo Petroleum Corp.	"Black Ranch" 7-15 (037-22059)	1307	May	4070*	Confidential
	** 4N	17W	7		Argo Petroleum Corp.	"Black Ranch" 7-25 (037-22062)	1353	Aug.	4007	Confidential
	** 4N	17W	14		Santa Fe Energy Co.	"NL&F" 1 (037-22056)	1125	Dec.	14174*	Confidential
	** 4N	17W	17		Marathon Oil Co.	"Vasquez" 20 (037-22026)	1519	July	11005*	Sepulveda 5282, Bering 8064, Barnes 9670, Lincoln 9948 (Miocene)
	** 4N	17W	20		Black Hawk Resources Corp.	"N.L. & F." 1-20 (037-22052)	1177	Sept.	8200*	Confidential
	2N	15W	9		Union Oil Co. of Calif.	"San Fernando" 1-9 (037-22050)	1020	Mar.	8925	Confidential
Ventura	4N	24W	20		J.L.M. & Associates, Inc.	"Tiger" 1 (111-20720)	1507	July	2640*	Confidential
	** 4N	22W	1		Argo Petroleum Corp.	"Newton" 1 (111-21009)	2043	Dec.	6500	Confidential
	** 4N	22W	23		Union Oil Co. of Calif.	"Sulphur Crest" 3-23 (111-20952)	2311	May	5463*	Confidential
	** 4N	21W	16		Argo Petroleum Corp.	"Ferndale" 8 (111-20732)	1218	Nov.	10135*	Confidential
	** 4N	21W	19		ARCO Oil and Gas Co.	"Ojai" 109 (111-20982)	2408	Aug.	2408*	Confidential
	4N	21W	25		Texas Pacific Oil Co.	"Rudolph" 22-25 (111-20986)	1733	Oct.	10888	Confidential
	4N	19W	22		Argo Petroleum Corp.	"Hickler" 1-22 (111-20925)	2022	Aug.	3205	Confidential
	4N	19W	24		Argo Petroleum Corp.	"Smith Ranch" 4 (111-20933)	750	Jan.	971	Confidential
	4N	19W	26		Argo Petroleum Corp.	"Smith Ranch" 3 (111-20932)	1140	Feb.	1100	Confidential
	4N	19W	27		Argo Petroleum Corp.	"Smith Ranch" 2 (111-20931)	1075	Jan.	1172	Confidential
	4N	19W	28		Argo Petroleum Corp.	"Smith Ranch" 1 (111-20930)	610	Mar.	370	Confidential
Ventura	4N	18W	11		Argo Petroleum Corp.	"Black Ranch" 11-78 (111-21002)	1058	Sept.	4651*	Confidential
	4N	18W	19		Argo Petroleum Corp.	"Smith Ranch" 5 (111-20934)	1050	Mar.	235	Confidential
	** 4N	18W	33		Phillips Petroleum Co.	"Sloan Ranch" 1 (111-20942)	1295	July	16019	Confidential
	3N	24W	12		Sun Oil Company	"Hoffman" 1 (111-20948)	1355	June	3004	Confidential
	** 3N	21W	12		Lawrence Barker, Jr.	"Harvey-Snyder" 1 (111-20967)	328	June	8190	Pico (Pliocene)
	** 3N	20W	36		SANMAR Oil Company	"Ventavo III" N-1 (111-20917)	651	June	6531*	Confidential
	** 3N	19W	4		Texaco Inc.	"Shiella" E2 (111-20938)	1040	Aug.	8356*	Confidential
	** 3N	19W	4		Texaco Inc.	"Shiella" E6 (111-21004)	1119	Nov.	8764*	Confidential
	** 3N	19W	4		Texaco Inc.	"Shiella" E8 (111-21017)	1086	Dec.	9410*	Eocene
	3N	19W	1		Oxy Petroleum, Inc.	"Ventura Realty" 1 (111-20987)	862	Oct.	8501	Confidential
	** 3N	18W	4		Union Oil Co. of Calif.	"Tapo Ridge" 1-1 (111-20943)	2105	Mar.	6033*	Confidential
	2N	22W	14		Chevron U.S.A. Inc.	"Hertel-Woolsey" 1 (111-20961)	100	Oct.	12950	Confidential
	2N	21W	19		Hunnicuttt & Camp Drilling Co.	"Sakioka" 1 (111-20971)	112	Aug.	9500*	Confidential
	2N	21W	20		Kenneth Hunter, Jr.	"Pacific Farm" 1 (111-20957)	107	Dec.	7130	Volcanics
District 3										
Monterey	16S	5E	18	MD	Texaco Inc.	"Chesholm" 1 (053-20865)	255	Mar.	2304	Confidential
	20S	8E	30		Gibraltar Resources	"Madero" 1 (053-20866)	489	Sept.	2398	Thorup 2360; m Miocene
	21S	8E	4		Gibraltar Resources	"Currell" 4 (053-20863)	677	Feb.	2320	Miocene
	21S	10E	34		Don J. Leeman	"Grigory-Bernal" 1 (053-20854)	1093	Jan.	1964	Lanigan 1658; Miocene
	** 23S	10E	4		Hydrocarbons Ltd.	"Pyramid" 2 (053-20855)	1040	Apr.	2850	Aurignac 2738; Miocene
	24S	12E	32		Eastern Natural Gas Corp.	"Work" 1 (053-20940)	1070	Dec.	3660	Miocene
San Luis Obispo	31S	12E	26		Phillips Petroleum Co.	"Core Hole" 1 (079-20486)	722	Jan.	88	Pliocene
			26		Phillips Petroleum Co.	"Core Hole" 3 (079-20488)	759	Jan.	74	Pliocene
			26		Phillips Petroleum Co.	"Core Hole" 4 (079-20489)	766	Jan.	63	Pliocene

PROSPECT WELLS DRILLED TO TOTAL DEPTH IN 1980

County				B. & M.	Operator	Well designation and API number	Elev. (feet)	Month drilling completed	Total depth (feet)	Stratigraphic units penetrated and/or time-stratigraphic unit at total depth (depth in feet)
	T.	R.	Sec.							
Santa Barbara	District 3 - Continued									
	32S	15E	14	MD	Huasna Petroleum Co.	"Messer" 1 (079-20478)	1050	June	1392	u Miocene
			14		Huasna Petroleum Co.	"Messer" 2 (079-20479)	1073	June	1982	u Miocene
			15		Huasna Petroleum Co.	"Messer" 3 (079-20480)	802	June	1462	u Miocene
	10N	35W	8	SB	Baumgartner Oil Co.	"Baumgartner" 1-8 (083-21417)	70	Dec.	4177	Foxen sand 3267; Sisquoc 3760; Pt. Sal 3932; Jurassic
	10N	27W	16		A & M Pipeline Corp.	"Quintana" 1-16 (083-21326)	2282	June	6184	Dibbles 4484; Colgrove 5905; 6020-6184 Cretaceous
	9N	33W	17		Husky Oil Co.	"Ellie" 1 (083-21300)	886	Jan.	8374	Sisquoc 3775; Monterey 6935-8374 (Miocene)
			28		Gulf Oil Corp.	"Los Flores" 102 (083-21415)	966	Nov.	7500	-----Confidential-----
			33		Gulf Oil Corp.	"Los Flores Ranch" 18-33 (083-21414)	1211	Aug.	2986	-----Confidential-----
	**	9N	32W	6	Texaco Inc.	"Rice Estates" 5 (083-21384)	466	May	1616	Foxen 850; Pliocene
	**	9N	26W	5	Petro Resources, Inc.	"Cox" 1 (083-21463)	2744	Nov.	8023	Cretaceous
		9N	25W	2	Getty Oil Company	"Reserve-Wright" 1-2 (083-21299)	2516	Feb.	-----	-----Confidential-----
				5	Chevron U.S.A. Inc.	"Chevron-Sulpetro Wylie U.S.L." 1 (083-21334)	2585	March	11408	-----Confidential-----
		8N	32W	14	Black Hawk Resources Corp.	"Gulf-B. Pezsoni Estate Co." 28-14 (083-21272)	877	Aug.	4158	Monterey 1930; Pt. Sal 3560; Miocene
Kern	**		16		ARCO Oil and Gas Co.	"Gato Ridge Core Hole" 1 (083-21479)	1055	Dec.	1509	Sisquoc 570-1509 (Pliocene)
	District 4									
	25S	24E	11	MD	Black Hawk Resources Corp.	"Sharkarian-Musser" 43-11 (029-62341)	257	Sept.	3700	1st Mya 2586; Atwell Island 3382; Pliocene
	25S	27E	8		Cemco Oil Corp.	"Quinn 55X-8 (029-60371)	583	Feb.	3635	Round Mountain 2158; Olocene 2380; Pyramid Hill 3072; Vedder 3179; Cantleberry 3395; Walker 3555; (Oligocene)
	26S	28E	25		Lawrence P. Reischman	"Stockton" 1 (029-60624)	1084	July	533	Vedder 250 (Oligocene)
	**	27S	19E	8	Armstrong Petroleum Corp.	1 (029-60688)	930	Feb.	3278	Point of Rocks 685; Canoes 2840 (Eocene)
	**		9		Armstrong Petroleum Corp.	"Shell" 2 (029-61437)	930	June	2710	Point of Rocks 450; Canoes 2305 (Eocene)
	**		27		Armstrong Petroleum Corp.	27-1 (029-62856)	901	Dec.	-----	-----Confidential-----
	**	27S	23E	11	Gary Drilling Co.	"Johnson" 1 (029-62833)	276	Dec.	-----	-----Confidential-----
		27S	29E	19	Mount Poso Dowlers, Inc.	"Brown" 1 (029-61858)	936	July	1302	basement, granite 1090 (U Jurassic ?)
	**	28S	20E	20	Black Hawk Resources Corp.	"Theta" 1-20 (029-62802)	1020	Dec.	2750	Miocene
	**		21		Saratoga Co.	"Bacon" 3 (029-62018)	930	Aug.	1115	Pleistocene
			26		Chevron U.S.A. Inc.	"Chevron-Conlon" 1 (029-61423)	870	May	-----	-----Confidential-----
			27		Gulf Oil Corp.	"Gulf-Bacon Hills" 1 (029-61778)	1016	June	-----	-----Confidential-----
			28		ARCO Oil & Gas Co.	"Carneros Creek Fee" 1 (029-61636)	1040	July	-----	-----Confidential-----
	**		29		Pyramid Oil Co.	"Stanford" 1 (029-60695)	1109	Feb.	3325	Button Bed 2360; Carneros 2863; Miocene
	**		30		Pyramid Oil Co.	"Theta" 30-1 (029-60844)	1130	March	4175	Button Bed 2096; Carneros 2802; Wygal 3674; Point of Rocks 4018 (Eocene)
		28S	21E	8	Kernridge Oil Co.	26-8 (029-59438)	565	Jan.	15026	Wygal 13980 - 14545; Oligocene
	**		31		Maranatha Petroleum, Inc.	"Mission" 26 (029-61832)	715	June	590	Pleistocene
		28S	22E	16	Texaco Inc.	"Houchin" 1-X (029-60667)	270	May	-----	-----Confidential-----
		28S	23E	29	Britton Management Corp.	"Big Bend" 1 (029-62387)	283	Dec.	-----	-----Confidential-----
		28S	25E	19	Delaware Northwest Exploration Co.	"West Rio Bravo" 1 (029-60414)	330	March	-----	-----Confidential-----
		28S	26E	34	Kaiser Oil (U.S.) Ltd.	"Standard Ranch" 1 (029-61129)	384	April	7500	Macoma 4167; Santa Margarita 5410; Stevens 6100; Round Mountain 7455 (Miocene)
	Kern	28S	28E	3	Shell Oil Co.	"Shell-Magee-Glide" 6-8-3 (029-61823)	1068	June	-----	-----Confidential-----
		29S	21E	15	Dynasonics Corp.	44X-15 (029-60748)	692	Jan.	1555	Ammicola 1480; Pleistocene
			32		Black Hawk Resources Corp.	"Twisselman Federal" 32-32 (029-61836)	1383	Dec.	7657	Tulare 0-1467; Antelope 1467; McDonald 2887; Media 4237; Santos 5347; Wygal 5667; Kreyenhagen 6237 (Eocene)
	29S	22E	7	Chevron U.S.A. Inc.	18-7X (029-60093)	494	May	-----	-----Confidential-----	
**	29S	25E	23	Nahama & Weagant, Inc.	"West Greeley" 1 (029-60498)	345	Feb.	9500	Stevens 8658 (Miocene)	

PROSPECT WELLS DRILLED TO TOTAL DEPTH IN 1980

County				B. & M.	Operator	Well designation and API number	Elev. (feet)	Month drilling completed	Total depth (feet)	Stratigraphic units penetrated and/or time-stratigraphic unit at total depth (depth in feet)
	T.	R.	Sec.							

PROSPECT WELLS DRILLED TO TOTAL DEPTH IN 1980

County	T.	R.	Sec.	B. & M.	Operator	Well designation and API number	Elev. (feet)	Month drilling completed	Total depth (feet)	Stratigraphic units penetrated and/or time-stratigraphic unit at total depth (depth in feet)
District 5 - Continued										
Kings	17S	16E	1	MD	Argo Petroleum Corp.	"Bravo" 43-1 (019-21287)	232	Jan.		Confidential
			21		Hamilton Brothers Oil Co.	"Hamilton-Bravo" 1-21 (019-21424)	273	Dec.		Confidential
	23S	16E	11		Chevron U.S.A. Inc.	"Core Hole" C (031-20179)	1608	Jan.		Confidential
Madera	11S	14E	15		Phelps Dodge Fuel Development Corp.	"Triangle T Ranch" 1 (039-20027)	147	May	6403	Domengine 3760; 1st Panoche 5870; 2nd Panoche 6315
Merced	7S	12E	7		D. Monroe	"D. Monroe-DaCaRR-Pinheiro" 1 (047-20062)	133	Sept.		Confidential
	8S	13E	32		Buttes Resources Co.	"Buttes-Favier" 32-1 (047-20061)	132	Jan.		Confidential
San Benito	12S	4E	9		Gulf Oil Company	"San Benito Ranch Co." 1 (069-20051)	1012	Oct.		Confidential
	14S	6E	7		Santa Fe Energy Co.	"Lew" 80X-1 (069-20050)	1132	Aug.		Confidential
	17S	11E	11		Tannehill Oil Company	"Tannehill-Nicolini" 1 (069-20046)	1728	Feb.	9887	Tembler 3520; Kreyenhagen 7500; Yokut 9498
District 6										
Butte	21N	1W	21		Seaward Resources, Inc.	"M & T" 1-21 (007-20052)	134	Oct.	5500	base Princeton Canyon fill 4100; Kione 4100; Forbes 4455; Dobbins 5470-5500 (U Cretaceous)
	21N	1E	20		Texaco Inc.	"Fortino" 1 (007-20042)	143	May		Confidential
Colusa	18N	1W	36		Husky Oil Co.	"Tenneco B of A" 1-36 (011-20169)	80	Nov.		Confidential
	17N	2W	21		Seaward Resources, Inc.	"Welch" 1-21 (011-20155-01)	66	Aug.	2900	Forbes (U Cretaceous)
	17N	1W	6		Jordan Oil & Gas Co.	"Hopper" 1 (011-20150)	100	June		Confidential
	15N	2W	8		Depco, Inc.	"Zumwalt" 24X-8 (011-20167)	72	Oct.	5911	base Princeton Canyon fill 2300; Kione 2300; Forbes 2590-5911 (U Cretaceous)
			30		Davis Oil Co.	"Plank" 1 (011-20161)	104	Dec.	6400	Forbes (U Cretaceous)
	14N	1W	34		Chevron U.S.A. Inc.	"College City" 3 (011-20176)	44	Dec.		Confidential
	14N	1E	31		Coastal Oil & Gas Corp.	"College City" 1 (011-20144)	46	April		Confidential
	2N	2W	10		The Dow Chemical Co.	"Tosco" 1 (013-20154)	20	Jan.		Confidential
Contra Costa			23		The Dow Chemical Co.	"Tosco" 2 (013-20155)	123	Feb.		Confidential
	2N	3E	24		Hilliard Oil & Gas, Inc.	"Galli" 1 (013-20161)	1	Sep.	6658	Domengine 4750; Capay 5315; Mokelumne River 5675-6658 (U Cretaceous)
			35		Delaware Northwest Exploration Co.	"Baldocchi" 1 (013-20162)	5	Oct.	7915	Domengine 5195; Capay 5910; Meganos Canyon fill 6440; Mokelumne River 7305-7915 (U Cretaceous)
	1N	2E	25		MOOR Oil & Gas Corp.	"Arata" 1-25 (013-20163)	124	Oct.		Confidential
	1S	2E	26		Universal Resources	"Vaquero" 1 (013-20159)	382	May		Confidential
	22N	3W	34		Cities Service Co.	"Sherwood" A-1 (021-20195)	239	Nov.	5654	Princeton Canyon fill 1305; Kione 1465; Forbes 2560; Dobbins 5330-5654 (U Cretaceous)
Humboldt	18N	2W	4		The Termo Co.	"Willow Creek" 3 (021-20199)	90	Dec.	5600	Princeton Canyon fill 2115; Kione 3065; Forbes 3850-5600 (U Cretaceous)
	18N	1W	8		Jordan Oil & Gas Co.	"Zumwalt" 1-8 (021-20189)	72	Oct.		Confidential
	4N	1W	8	H	Pacific Gas and Electric Co.	"WCC" 7 (023-20050)	10	June		Confidential
			8		Pacific Gas and Electric Co.	"WCC" 8 (023-20051)	13	June		Confidential
			8		Pacific Gas and Electric Co.	"WCC" 9 (023-20054)	10	June		Confidential
			8		Pacific Gas and Electric Co.	"WCC" 10 (023-20048)	6	April		Confidential
			8		Pacific Gas and Electric Co.	"WCC" 11 (023-20055)	27	July		Confidential
			17		Pacific Gas and Electric Co.	"WCC" 6 (023-20042)	178	March		Confidential
			18		Pacific Gas and Electric Co.	"WCC" 4 (023-20049)	16	May		Confidential
			18		Pacific Gas and Electric Co.	"WCC" 5 (023-20043)	12	March		Confidential

PROSPECT WELLS DRILLED TO TOTAL DEPTH IN 1980

County	T.	R.	Sec.	B. & M.	Operator	Well designation and API number	Elev. (feet)	Month drilling completed	Total depth (feet)	Stratigraphic units penetrated and/or time-stratigraphic unit at total depth (depth in feet)
District 6 - Continued										
Sacramento	3N	1W	18	H	Pacific Gas and Electric Co.	"WOO" 12 (023-20039)	8	Jan.		Confidential
			20		Pacific Gas and Electric Co.	"WOO" 18 (023-20041)	207	Feb.		Confidential
			23		Pacific Gas and Electric Co.	"WOO" 21 (023-20047)	690	June		Confidential
			23		Pacific Gas and Electric Co.	"WOO" 22 (023-20046)	700	May		Confidential
			23		Pacific Gas and Electric Co.	"WOO" 23 (023-20045)	669	May		Confidential
			23		Pacific Gas and Electric Co.	"WOO" 24 (023-20044)	635	May		Confidential
Sacramento	8N	8E	29	MD	Bruno T. Biscaglia	"Poston" 1 (067-20155)	149	July		Confidential
			33		McFarland Energy, Inc.	"Calplane-Poppy Ridge" 3 (067-20164)	35	Nov.	8028*	Domengine 2610; Capay 3315; Mokelumne River 3575; B&T 4065; Starkey 4170; Winters 6020; Sacramento shale 6800; Forbes 7090-8028 (U Cretaceous)
			4		Hunnicut & Camp Drilling Co.	"H&C-Harlander Unit 1" 1 (067-20151)	76	May		Confidential
			5		Nahama & Weagant, Inc.	"Lower Sherman Island" 1 (067-20166)	24	Nov.	8595	Martinez (Paleocene)
			11		Gulf Oil Corp.	"M. V. Holthouse, Jr. Et Al" 1 (077-20366)	20	Dec.		Confidential
			18		Texaco Inc.	"Narducci" 1 (077-20334-01)	15	Jan.		Confidential
San Joaquin	3N	5E	30		Hamilton Brothers Oil Co.	"Champlin River Investment Et Al" 30-1 (077-20361)	6	Sep.		Confidential
			4		Natural Gas Corp. of Calif.	"Big Valley-Finkbohner" 1 (077-20354)	8	June		Confidential
			18		Union Oil Co. of Calif.	"Roventa & Kroll" 1 (077-20364)	8	Nov.		Confidential
			32		Texaco Inc.	"Pellegrini Estate" 1 (077-20356)	5	Aug.		Confidential
			6		Hilliard Oil & Gas, Inc.	"Teresi" 1 (077-20353)	107	May	4287	Domengine 2395; Mokelumne River 2665; Starkey 2925; U Cretaceous
			20		MOOR Oil & Gas Corp.	"Warren, et al" 1-20 (077-20358)	8	Sep.		Confidential
San Joaquin	2N	4E	22		Geochemical Surveys, Inc.	"Zuckerman" 1-22 (077-20349)	7	July		Confidential
			23		Natural Gas Corp. of Calif.	"Big Valley-Eberhardt" 1 (077-20351)	21	April		Confidential
			25		Quintana Production Co.	"Bossi" 1 (077-20350)	71	May	3774	Starkey (U Cretaceous)
			24		McFarland Energy, Inc.	"Airport Western" 1 (077-20355)	27	Aug.	8790	Blewett 3085; Ragged Valley 4095; Tracy 4775; Sawtooth 6665; Lathrop 7095-8790 (U Cretaceous)
			36		Hunnicut & Camp Drilling Co.	"Ohlendorf Unit 2" 1 (077-20359)	9	Sep.		Confidential
			6		Hunnicut & Camp Drilling Co.	"Ohlendorf Unit 1" 1 (077-20348)	15	April		Confidential
San Joaquin	2S	6E	32		The Dow Chemical Co.	"Aegidius Well" 1 (077-20357)	56	Sep.		Confidential
			9		Carlsberg Petroleum Corp.	"Wool" 1 (081-20041)	1072	Oct.	3400	San Lorenzo 1240; Butano 3100-3400 (Eocene)
			25		Geo-Logic, Inc.	"Golden West" 1 (095-20442)	60	Oct.	7820	Nortonville 3775; Domengine 4275; Capay 4430; Mokelumne River 5160; B&T 5655; Starkey 5730; Winters 7075-7820 (U Cretaceous)
			30		Sumpf-Williams	"Leong" 1 (095-20410)	60	March	6052	Nortonville 3880; Domengine 4220; Capay 4395; Mokelumne River 5005; B&T 5575; Starkey 5640-6052 (U Cretaceous)
			7		Hunnicut & Camp Drilling Co.	"Whitlock" 1 (095-20420)	42	June		Confidential
			1		St. Michael Exploration Co.	"A.F.B." 1 (095-20409)	91	Jan.		Confidential
Solano	5N	1W	11		St. Michael Exploration Co.	"A.F.B." 2 (095-20444)	122	Oct.		Confidential

PROSPECT WELLS DRILLED TO TOTAL DEPTH IN 1980

County				B. & M.	Operator	Well designation and API number	Elev. (feet)	Month drilling completed	Total depth (feet)	Stratigraphic units penetrated and/or time-stratigraphic unit at total depth (depth in feet)
	T.	R.	Sec.							
						District 6 - Continued				
	5N	2E	25	ND	MOOR Oil & Gas Corp.	"Sanchez" 1-25 (095-20412)	22	June		Confidential
**	5N	3E	30		Cities Service Co.	"Moresco" A-1 (095-20405)	12	June		Confidential
	4N	2E	6		Oxy Petroleum, Inc.	"Collins-Hatch" 1 (095-20423)	69	Aug.		Confidential
			9		MOOR Oil & Gas Corp.	"McCormack" 1-9 (095-20403-01)	79	Jan.		Confidential
**			11		G. R. Mance Co., Inc.	"McGrath" 1-11 (095-20402-01)	54	Jan.		Confidential
**			33		MOOR Oil & Gas Corp.	"McKinnon Ranch" 1-33 (095-20418)	199	July		Confidential
	3N	2E	5		MOOR Oil & Gas Corp.	"Anderson" 1-5 (095-20430)	240	Oct.		Confidential
			7		MOOR Oil & Gas Corp.	"GP" 1-7 (095-20436)	204	Sep.		Confidential
Sutter	16N	1E	9		Tenneco Oil Co.	"Buttes Community" 1-9 (101-20164)	143	Oct.		Confidential
	14N	2E	5		Seaward Resources, Inc.	"O.P.I. Guisti" 1-5 (101-20162)	45	Oct.	6650	Capay 2420; Starkey 2665; Winters 2850; Sacramento shale 3000; Kione 3250; Forbes 4075; Dobbins 6180-6650 (U Cretaceous)
	12N	2E	36		The Dow Chemical Co.	"T.D.C." 1 (101-20156)	32	Feb.		Confidential
	11N	4E	9		Getty Oil Co.	"Morrison" 1-9 (101-20155)	37	March		Confidential
Tehama	27N	4W	5		Shell Oil Co.	"Vilche" 2-5 (103-20109)	511	June		Confidential
	23N	2W	34		Tenneco Oil Co.	"Pucek-Butler" 1 (103-20113)	188	April		Confidential
Yolo	** 12N	1E	20		Natural Gas Corp. of Calif.	"Big Valley Recl. Dist." 108-2 (113-20578)	32	April	5525	Capay 3265; Starkey 3710; Winters 4430; Sacramento shale 4920; Kione 5255-5525 (U Cretaceous)
	11N	2E	30		ARCO Oil and Gas Co.	"Borach" 1 (113-20579)	63	May		Confidential
	10N	2E	12		L. R. Perryman	"Tooby-Anderson" 1 (113-20601)	46	Sep.	5512	Capay 2835; Mokelumne River 3185; HRT 3350; Starkey 3380; Winters 4590; Sacramento shale 5350-5512 (U Cretaceous)
			13		L. R. Perryman	"Knaggs-Anderson Farms" 2 (113-20622)	47	Dec.	4355*	Capay 3025; Mokelumne River 3395; HRT 3535; Starkey 3555-4355 (U Cretaceous)
			25		The Dow Chemical Co.	"Mission-Woodland Farms" 1 (113-20570)	37	July		Confidential
			35		Aminoil USA, Inc.	"Strong" 1 (113-20614)	38	Nov.		Confidential
	10N	3E	5		Hilliard Oil & Gas, Inc.	"Hershey A" 3 (113-20611)	37	Oct.	5000	Capay 2490; Mokelumne River 2805; HRT 2975; Starkey 3015; Winters 4170; Sacramento shale 4900-5000 (U Cretaceous)
			15		Seaward Resources, Inc.	"Dow-Veress" 1 (113-20623)	36	Dec.		Confidential
			18		Hilliard Oil & Gas, Inc.	"OCR" 1 (113-20575)	40	Feb.	5500	base Capay 3085; Mokelumne River 3085; HRT 3255; Starkey 3285; Winters 4495; Sacramento shale 5365-5500 (U Cretaceous)
	8N	1E	13		Cities Service Co.	"University B" 1 (113-20573)	83	May		Confidential
			16		Hilliard Oil & Gas, Inc.	"Chew Farms" 1 (113-20585)	106	July	6244	Markley 2670; Nortonville 2950; Domengine 3265; Capay 3515; Starkey 4120; Winters 4905-6244 (U Cretaceous)
	8N	2E	3		Hilliard Oil & Gas, Inc.	"Nishikawa" 1 (113-20582-01)	51	May	6300	Nortonville 3140; Domengine 3500; Capay 3650; Mokelumne River 4070; HRT 4225; Starkey 4260; Winters 5680-6300 (U Cretaceous)
	8N	3E	32		Hilliard Oil & Gas, Inc.	"Beltrami" 1 (113-20583)	36	May	7348*	base Markley Canyon fill 3295; Nortonville 3295; Domengine 3455; Capay 3680; Mokelumne River 4005; HRT 4510; Starkey 4560; Winters 6535-7348 (U Cretaceous)
	6N	3E	20		Aminoil USA, Inc.	"Yolo Ranch" 4 (113-20591)	18	July		Confidential
			30		Aminoil USA, Inc.	"Yolo Ranch" 3 (113-20590)	22	June		Confidential
			33		Anacapa Oil Corp.	"Fahn" 2 (113-20597)	24	July	8300	base Markley Canyon fill 5320; Mokelumne River 5320; HRT 5595; Starkey 5705; Winters 7265-8300 (U Cretaceous)
	6N	4E	22		The Dow Chemical Co.	"Herritt-Greene Well" 1 (113-20613)	21	Nov.		Confidential

NOTE: This table, issued annually, serves as a supplement to our publication Exploratory Wells Drilled Outside of Oil and Gas Fields in California to December 31, 1963.

* Directional Well

** Prospect well drilled within the administrative boundaries of a field.

PROSPECT WELLS DRILLED TO TOTAL DEPTH PRIOR TO 1980

County				B. & M.	Operator	Well designation and API number	Elev. (feet)	Month drilling completed	Total depth (feet)	Stratigraphic units penetrated and/or time-stratigraphic unit at total depth (depth in feet)
	T.	R.	Sec.							
Los Angeles	1S	14W	25	SB	Chevron U.S.A. Inc.	District 1 "Ambassador Core Hole "1 (037-21776)	251	Apr. 77	7361	Mohnian 1752 (u Miocene); Massive 2803; Modular shale 5770; Topanga 6540-7361 (u Miocene)
	1S	14W	30		Occidental Petroleum Corp.	"Cresta KH" 1 (037-21913)	171	Sept. 78	12674	Rapetto 4720; Miocene 10,660; Hauser 12,220-12,674
	1S	15W	28		Argo Petroleum Corp. and Aladdin Oil Corp.	"Argo & Aladdin Adhuc" 179-1 (037-21927)	354	Aug. 78	12085	Santa Monica fault 7940; Rancho 11,720-12,085 (u Miocene)
	2S	11W	17		Mitchell Energy Corp.	"Mitchell Energy Corp" S-20 (037-21928)	375	June 78	4328	Miocene
	3S	14W	1		Oxy Petroleum Inc.	"Mono Racetrack" 1 (037-21909)	210	May 78	12117	Rapetto 3730; Miocene 8010-12,117
District 2 NONE										
Monterey <										

PROSPECT WELLS DRILLED TO TOTAL DEPTH PRIOR TO 1980 †

County	T.	R.	Sec.	R & M	Operator	Well designation and API number	Elev. (feet)	Month drilling completed	Total depth (feet)	Stratigraphic units penetrated and/or time-stratigraphic unit at total depth (depth in feet)
District 4 - Continued										
Kern	28S	25E	22	MD	Tenneco Oil Co.	"Tenneco-Rio Bravo" 32 (029-56437)	349	Feb. 78	12250	Rio Bravo 2850; Vedder 11792; Helbling 12158 (Oligocene)
	** 29S	21E	16		Union Oil Co. of Calif.	"Clifford Trust" 1 (029-58210)	771	Dec. 78	1369	Ammicola 1338 (Pleistocene)
	**		16		Union Oil Co. of Calif.	"Clifford Trust" 2 (029-58211)	770	Dec. 78	1600	Ammicola 1407 (Pleistocene)
	**		20		Inland Resources Co.	"Anderson" 17X (029-57366)	1021	Mar. 78	2770	Etchegoin 1196; Wygal 2697 (Oligocene)
	**		27		Getty Oil Co.	"Midway-Premier" 27-132 (029-57971)	789	Aug. 78	2739	54-21 sand 2670 (Pliocene)
	29S	29E	17		Chevron U.S.A. Inc.	5-7A (029-58027)	730	Oct. 78	1500	Basal Chanac 812; Santa Margarita 935; Miocene
	** 29S	21E	34		Chevron U.S.A. Inc.	51-34W (029-54123)	860	Dec. 76	2510	Etchegoin 1825; Antelope 2235 (Miocene)
	29S	29E	19		Chevron U.S.A. Inc.	1-10A (029-58194)	766	Nov. 78	2500	Transition 1870; Miocene
			19		Chevron U.S.A. Inc.	3-6A (029-58195)	859	Nov. 78	2400	Transition 1750; Miocene
			22		Samson Resources Co.	"Siegfus" (029-50461) 8X-22	815	Feb. 75	4448	Santa Margarita 1120; Fruitvale 1800; Olcese 2795; Jewett 4276 (Miocene)
	30S	22E	3		Chevron U.S.A. Inc.	11X (029-57467)	625	Mar. 78	2500	Ammicola 1324; Pliocene
			14		Williams Brothers Engineering Co.	544-14E (029-58511)	910	June 79		Confidential
	** 30S	23E	32		Williams Brothers Engineering Co.	368-32R (029-59366)	1110	Nov. 79	8150	Stevens 7310; Miocene
	30S	26E	10		Tenneco Oil Co.	"Centerfield" 37X-10 (029-56684)	356	Mar. 78	10317	"N" Point 7259; Stevens 7900; Miocene
	30S	27E	22		Tenneco Oil Co.	"Tenneco-Chevron-Wible Road" 14 (029-58017)	382	Oct. 78	13532	base Santa Margarita 8940; Wicker 10280; Valv 11440; Saucian 13160 (Miocene)
	** 31S	22E	16		Union Oil Co. of Calif.	"Bremer" 555X (029-58569)	1668	Dec. 78	4507	Spellacy 1768; Miocene
	** 31S	23E	4		Williams Brothers Engineering Co.	312-4B (029-56780)	1087	April 78	9480	Wilhelm 4106; Stevens 7630 (Miocene)
			9		Chevron U.S.A. Inc.	324X (029-55428)	915	Aug. 77	8099	Mulinia 3675; Stevens 7835 (Miocene)
	32S	30E	30		Comanche Creek Associates	"Tejon" 1 (029-58429)	994	Dec. 78	916	basement, granite 880 (U Jurassic ?)
Tulare	12N	21W	28	SB	Tenneco Oil Co.	"Tenneco-Chevron-Rio Viejo" 77X (029-56431)	406	Jan. 78	14775	Reef Ridge sand 12580; "N" Point 14184; Stevens 14347 (Miocene)
	** 11N	21W	4		Tenneco Oil Co.	"Tenneco-Chevron-Rio Viejo, South" 81X (029-57202)	454	May 78	13700	Reef Ridge sand 11932; "N" Point 13234; Stevens 13421 (Miocene)
			29		Tenneco Oil Co.	"Tenneco-White Wolf" 48 (029-57226)	1126	April 78	14318	Etchegoin 9870; Reef Ridge 12270; "N" Chert 12470; Pulv 14000; Miocene
	10N	21W	7		Tenneco Oil Co.	"Tenneco-Eagles Rest" 58X (029-57513)	2580	Aug. 78	13561	Miocene 5500; Tejon 7200 (Eocene)
	10N	19W	5		The Dow Chemical Co.	"DDCP-Tejon Ranch NWRS" 1 (029-57884)	1186	Sept. 78	9485	Santa Margarita 2978; Freeman-Jewett 6690; basalt 7380; Vedder 9270 (Oligocene)
	18S	24E	15	MD	Shell Oil Co.	"Shell-Shannon-Gibraltar" 15-1 (107-20098)	323	Jan. 78	2981	Santa Margarita 1846; Zilch 2305; basement, slate 2776 (U Jurassic ?)
	19S	25E	29		Tannehill Oil Co.	"Warren" 17 (107-20105)	324	Feb. 78	3495	basement, schist 3400 (U Jurassic ?)
	20S	25E	9		Tannehill Oil Co.	"Brazil" 27X (107-20104)	310	Feb. 78	3450	basement, slate 3410 (U Jurassic ?)
	District 5									
Fresno	16S	15E	29		Aminoil USA, Inc.	"Aminoil-Calplans" 1-29 (019-21248)	337	Feb. 79	8800	Tembler 5770; Kreyenhagen 7317; Domingine 8330
San Benito	15S	10E	26		Allstates Petroleum Corp.	"Eilers" 1 (069-20038)	1386	Mar. 79	3163	Cretaceous 1478
District 6										
Butte	20N	1W	23		Franwin Oil & Gas Co.	"Exxon-Parrott" 23-1 (007-20039)	116	Oct. 78	3920	Princeton Canyon fill 2135; Kione 3075; Forbes 3705-3920 (U Cretaceous)
	18N	2E	6		Getty Oil Co.	"Transamerica" 1-6 (007-20045)	93	Dec. 79		Confidential
Colusa	15N	3W	36		Champlin Petroleum Co.	"Le Grande" 1 (011-20104)	122	Feb. 78	7005	Forbes (U Cretaceous)
Contra Costa	2N	3E	31		Atlantic Oil Co.	"Regester" 1 (013-20149)	64	Nov. 79	9946	Domingine 4515; Capey 5325; Margaret Hamilton 6335; Meganos Canyon fill 6825; Third Massive 8200; U Cretaceous
	1N	1E	8		Nahama & Weagant, Inc.	"Oil Canyon" 1 (013-20150)	1590	Nov. 79	3177	base Meganos Canyon fill 2035; Martinez 2035; U Cretaceous (?)
			14		Nahama & Weagant, Inc.	"Oil Canyon" 3 (013-20152)	566	Nov. 79	2218	base Meganos Canyon fill 1630; U Cretaceous (?)

PROSPECT WELLS DRILLED TO TOTAL DEPTH PRIOR TO 1980

County				R & M	Operator	Well designation and API number	Elev. (feet)	Month drilling completed	Total depth (feet)	Stratigraphic units penetrated and/or time-stratigraphic unit at total depth (depth in feet)	
	T.	R.	Sec.								
District 6 - Continued											
Glenn	**	1N	3E	15	MD	CONOCO Inc.	"S & S Farms" 1 (013-20122)	40	Feb. 78	9000	Domengine 5295; Capay 6140; Meganos Canyon fill 6850; Third Massive 8510; U Cretaceous
		1S	4E	30		MOOR Oil & Gas Corp.	"Danielson-Moore" 1-30 (013-20129)	20	May 78	11622*	Domengine 5615; Capay 6100; Second Massive 6200; Hall shale 6325; Third Massive 6450; Tracy 8890; Sawtooth 10325; Winters 10855; Lathrop 11330-11622 (U Cretaceous)
		22N	2W	15		Gulf Oil Corp.	"Weldgen Eddins" 2 (021-20152)	195	July 78	5750	Princeton Canyon fill 1805; Kione 2600; Forbes 4500-5750 (U Cretaceous)
		20N	3W	33		Shell Oil Co.	"Domenighini" 1-33 (021-20147-01)	146	Mar. 78	4500	Kione 2900; Forbes 3410-4500 (U Cretaceous)
		18N	2W	9		The Termo Co.	"Willow Creek" 1 (021-20171)	88	Jan. 79	6591	Princeton Canyon fill 1820; Kione 2700; Forbes 3775-6591 (U Cretaceous)
Humboldt		4N	1W	17	H	Pacific Gas and Electric Co.	"WOC" 3 (023-20037)	8	Dec. 79		Confidential
San Joaquin		4N	6E	7	MD	Champlin Petroleum Co.	"Feist" 1-7 (077-20305)	34	Feb. 78	8500	Domengine 2830; Capay 3375; Mokelumne River 3580; HRT 4560; Starkey 4625; Winters 6425; Sacramento shale 7790; Forbes 8235-8500 (U Cretaceous)
		3N	5E	14		Buttes Resources Co.	"Ratto" 14-1 (077-20345)	19	Nov. 79	5820	Domengine 3585; Capay 4415; Meganos Canyon fill 4545; Mokelumne River 4995; HRT 5625; Starkey 5725-5820 (U Cretaceous)
				19		Texaco Inc.	"Transamerica" 1-19 (077-20336)	5	Dec. 79		Confidential
		2N	4E	16		The Dow Chemical Co.	"CPC-Zuckerman-Mandeville" 1 (077-20313)	2	Sep. 78	6967	Domengine 4505; Capay 5165; Meganos Canyon fill 5615; Mokelumne River 6580; U Cretaceous
		1N	4E	12		ARCO Oil and Gas Co.	"Allied Properties" 2 (077-20304-02)	8	Apr. 78	9948	Domengine 4695; Capay 5195; Mokelumne River 5430; Tracy 8465; Sawtooth 9180; Winters 9655; Lathrop 9880-9948 (U Cretaceous)
		1S	5E	32		Union Oil Co. of Calif.	"Phillips-Bronich A " 1 (077-20323)	36	Jan. 79	11700	Garzas 4190; Blewett 6600; Ragged Valley 6830; Tracy 7180; Sawtooth 9750; Winters 9980; Lathrop 10275-11700 (U Cretaceous)
		1S	8E	8		Texaco Inc.	"Fransia" 1 (077-20319)	73	Jan. 79	10718	Garzas 3385; Blewett 3985; Ragged Valley 4830; Tracy 4990; Sawtooth 6150; Lathrop 6595; Sacramento shale 7380; Forbes 7825; basement 10680
				20		Texaco Inc.	"Fransia" 2 (077-20342)	73	Nov. 79		Confidential
		2S	5E	3		Aminoil USA, Inc.	"Paradise Cut Unit 1" 1 (077-20317)	20	Oct. 78	8500	Blewett 5310; Ragged Valley 5605; Tracy 5985; Sawtooth 6980; Winters 7465; Lathrop 7770-8500 (U Cretaceous)
	Solano	**	8N	2E	15		Union Oil Co. of Calif.	"U.C. Davis" 1 (095-20366-01)	64	Mar. 78	7496*
		7N	1W	7		G. R. Mance Co., Inc.	"Mance/Timm" 1 (095-20363)	332	Dec. 77	3740	Nortonville 1515; Domengine 2185; Capay 2265; Winters 3475-3740 (U Cretaceous)
		4N	2W	31		Ben F. Mingoia	"Lopes" 3 (095-20368)	47	Apr. 78	4163	base Sonoma Volcanics 2835; J-1 zone 2835; U Cretaceous
Sutter		14N	2E	36		Chevron U.S.A. Inc.	"Brubeck" 1 (101-20129)	45	May 78	5950	Capay 2065; Starkey 2315; Winters 2510; Sacramento shale 2740; Kione 2995; Forbes 3450; Dobbins 5595; Guinda (?) 5845-5950 (U Cretaceous)
Tehama		28N	2W	28		Tenneco Oil Co.	"McKenzie" 1 (103-20102)	1185	Dec. 78	3077	Forbes (?) (U Cretaceous)
		25N	2W	13		PanCanadian Petroleum Co.	"Leininger" 1 (103-20095)	346	Aug. 78	6500	base Princeton Canyon fill 3560; Kione 3560; Forbes 4340; Dobbins 6420-6500 (U Cretaceous)
				21		MOOR Oil & Gas Corp.	"Call" 1-21 (103-20110)	220	Dec. 79		Confidential
		24N	5W	14		Texaco Inc.	"L. J. Flournoy" 1 (103-20100)	533	Jan. 79	8465	L Cretaceous
		24N	4W	13		Shell Oil Co.	"Transamerica" 1-13 (103-20099)	349	Dec. 78	4749	Forbes 2215-4749 (U Cretaceous)
Yolo		11N	2E	11		The Dow Chemical Co.	"Depco-R.G.F. 11" 1 (113-20516)	38	Oct. 78	5400	base Capay 2835; Starkey 2835; Winters 3920; Sacramento shale 4625; Kione 5035; Forbes 5175-5400 (U Cretaceous)
				33		Chevron U.S.A. Inc.	"Pecht" 1 (113-20491)	54	May 78	6000	base Capay 3430; Starkey 3430; Winters 4540; Sacramento shale 5480; Kione 5825; Forbes 5970-6000 (U Cretaceous)
		10N	1W	14		Getty Oil Co.	"Reiff" 1 (113-20571)	173	Dec. 79		Confidential
		10N	2E	25		The Dow Chemical Co.	"W.F.L. 25" 1 (113-20515)	40	Nov. 78	5300	Domengine 2935; Capay 3050; Starkey 3425; Winters 4850-5300 (U Cretaceous)

PROSPECT WELLS DRILLED TO TOTAL DEPTH PRIOR TO 1980[†]

County				B. & M.	Operator	Well designation and API number	Elev. (feet)	Month drilling completed	Total depth (feet)	Stratigraphic units penetrated and/or time-stratigraphic unit at total depth (depth in feet)
	T.	R.	Sec.							
	District 6 - Continued									
**	8N	1E	3		Cities Service Co.	"Reardon A" 1 (113-20506)	92	Oct. 78	8301	base Nortonville 2985; Domengine 2985; Capay 3180; Starkey 3760; Winters 4735; Sacramento shale 7550; Forbes 7895-8301 (U Cretaceous)
	7N	3E	26		Aminoil USA, Inc.	"Mariposa Glide" 1 (113-20507)	15	Sep. 78	7950	base Markley Canyon fill 5535; Starkey 5535; Winters 6715-7950 (U Cretaceous)
Yuba	14N	3E	1		Ring Petroleum Prospect of Yuba County	"Leal" 1 (115-20005)	66	Oct. 78	3285	Ione 1135; Capay 1320; Starkey-Winters (undiff.) 1415; Sacramento shale 1545; Kione 1710; Forbes 2040; Dobbins 2950; Guinda 3130; basement 3260

NOTE: This table serves as a supplement to our publication, *Exploratory Wells Drilled Outside Oil and Gas Fields in California to December 31, 1963*.

[†] These wells or, due to confidentiality, well data were omitted from the Prospect Well table printed the year the wells were drilled.

• Directional well.

•• Well drilled within the administrative boundaries of a field.

GEO THERMAL OPERATIONS

GEOHERMAL DISTRICT BOUNDARIES AND DISTRICT OFFICES

SUMMARY OF GEOTHERMAL OPERATIONS

Drilling Activity

Fourteen geothermal prospect wells were drilled in 1980, 6 more than in 1979. In 1980, 27 development wells were drilled, compared with 25 in 1979; however, 31 wells were completed to production in 1980, 9 more than in 1979. In 1980, 112 observation wells were drilled, and 1 geothermal well and 59 observation wells were abandoned.

Calistoga

The California Divisions of Oil and Gas and Mines and Geology (CDOG and CDMG) conducted a joint study of the Calistoga Geothermal Resource Area. The CDOG gathered water samples from wells in Calistoga and made a well location map. The CDMG completed a geophysical survey and drilled three stratigraphic wells. A report written by the CDMG will be available in late 1981.

The Geysers

In May 1980, power plant Unit 13 began commercial operations at The Geysers Geothermal field (Photo 10). The unit has the largest geothermal turbine-generator in the world, with a generating capacity of 135 Megawatts of electricity (MWe). The power plant is supplied with 2.7 million pounds of steam per hour from 21 wells operated by Aminoil USA, Inc. Aminoil estimates that the steam reserves over the life of the power plant are equivalent to 45 million barrels of crude oil.

Unit 14, a 110 MWe power plant, began commercial operations in September 1980. Union Oil Company of California wells supply over 2 million pounds of steam per hour to Unit 14.

In 1980, the 15 power plants owned and operated by Pacific Gas and Electric Company (PG&E) at The Geysers Geothermal field were producing 908 MWe. This amount of power represents about 8 percent of the company's total generating capacity.

Power plants under construction include PG&E Units 17 (110 MWe), and 18 (110 MWe), Northern California Power Agency (NCPA) No. 2, (110 MWe), California Department of Water Resources (DWR) Bottle Rock (55 MWe), and Sacramento Metropolitan Utility District, SMUDGE No. 1 (70 MWe). When these units are com-

pleted, the total field generating capacity will be about 1,350 MWe.

Well Record Data Storage

A computerized file of geothermal well data for The Geysers Geothermal field has been created by the division. Available tabulations for the open-record file include annual and cumulative field production data by month, well, and operator.

Lassen County

Susanville

In December 1979, the division designated part of the Susanville Geothermal Resource Area as a geothermal field. The field includes portions of Sections 28 through 34, T. 30N., R. 12E., and Sections 3 through 6, T. 29N., R. 12E., M.D. B.&M. Within the administrative boundaries of the field are 22 low-temperature geothermal wells and temperature observation holes.

In 1980, well "Susan" 1 was drilled within the City of Susanville to provide low-temperature geothermal fluid for space heating 23 public buildings. If the space heating project is successful, a city-wide geothermal heating system will be built.

Photo 10. Power plant Unit 13, The Geysers Geothermal field. Steam enters the power plant through pipelines in the foreground. The plant has an electrical generating capacity of 135 MWe.

Litchfield

From 1975 through 1980, the Bureau of Reclamation drilled 20 temperature observation holes in a geothermal anomaly near Litchfield. A deep test well drilled in 1980 flowed water with a maximum temperature of 82°C.

Riverside County

Coachella Valley

In August 1980, under a grant from the Department of Energy, Aquafarms International, Inc., Mecca, California, drilled and completed three, low-temperature geothermal wells for use in prawn farming operations on the northeastern shore of the Salton Sea. Water temperatures are above 28°C there, and flow rates are sufficient for the project.

Nakashimia Nursery Company is developing a 40-acre nursery complex about 1.6km north of the Salton Sea. The company plans to build ten, 2.5-acre greenhouses within a 10 year period. Low-temperature geothermal energy will be piped to the greenhouses from a recently drilled artesian well cased with 14-inch pipe and flowing about 1,000 gallons per minute of 46°C water.

Imperial County

Brawley

The first, pilot power plant in the Imperial Valley using steam flashed from hot water went on line in June 1980 at Brawley. The Southern California Edison 10 MWe plant receives steam from 3 Union Oil Company of California wells. Waste water is injected into the reservoir through 3 injection wells. The electricity produced by the plant enters the Imperial Irrigation District power grid network.

Altogether, Union has drilled 9 geothermal wells at the site: 4 producers, 4 injectors, and 1 standby well. Fluids produced from the wells range in temperature from 246°C to 274°C and contain about 100,000 ppm total dissolved solids. The pilot demonstration facility is designed to evaluate methods of controlling severe corrosion, scaling, and plugging problems in wells producing hot, saline fluids.

Heber

Fluor Power Services (a subsidiary of Fluor Corporation), the Department of Energy, and San Diego Gas and Electric Company (SDG&E), signed contracts for the primary engineering and procurement of a 50 MWe binary demonstration power plant to be built near Heber in early 1983. The plant will demonstrate the commercial viability of generating electricity with binary conversion technology from moderate-temperature geothermal resources.

In May, Chevron USA Inc. and San Diego Gas and

Electric Company received approval from the California Water Resources Control Board for rights to use 50,000 and 20,000 acre feet of water per year, respectively, from the New River in Imperial County. The water will be needed for the Heber power plant cooling towers and for underground injection to replace withdrawn reservoir fluids.

Salton Sea

Southern California Edison has awarded a contract to Fluor Power Services for the engineering and design of a 10 MWe single flash geothermal pilot plant in the Salton Sea area near Niland. Scheduled for completion by mid-1982, the plant will receive geothermal water from wells operated by Union Oil Company.

Magma Power Company and SDG&E have signed a power purchase agreement under which Magma is to construct a 28 MWe power plant at the site of SDG&E's former Geothermal Loop Experimental Facility. The plant will begin operating in 1982. At that time, Magma will build a 49 MWe plant nearby that could be operational by 1985. SDG&E will purchase the electricity.

Imperial Valley Survey

Subsidence induced by geothermal fluid production has long been recognized as a potential problem to Imperial Valley irrigated farm lands. Current survey data show that significant tectonic (natural) subsidence is occurring in the valley at rates up to 2.75 inches per year. To monitor the subsidence, the Imperial Valley Subsidence Detection Committee was formed in 1971 to survey a level network. Committee membership includes representatives from federal, state, and local governments, industry, and utility companies.

The Division of Oil and Gas, recognizing the need to resurvey the Imperial Valley level network after many of the benchmarks were disturbed by the October 1979 earthquake, requested that the Imperial Valley Subsidence Detection Committee meet to discuss and determine the amount of releveing and financial support that would be required to conduct a resurvey. Through cooperative efforts by the members of the committee, sufficient funding was raised to commence surveying the grid in December 1980.

U.S. Purchases Mexican Geothermal Power

An agreement for the first purchase of geothermal power by the United States from a foreign nation was signed in November 1980 by SDG&E, Southern California Edison, and the Comision Federal de Electricidad of Mexico. Under the agreement, SDG&E will purchase 150 MWe over a 10-year period from Mexico's Cerro Prieto Geothermal field, and Southern California Edison will purchase 70 MWe from the field. The Mexican electricity will not serve San Diego customers until 1984.

GEOHERMAL STATISTICS

GEOTHERMAL OPERATIONS AND METERS DRILLED - 1980

Field or county	API county codes	Drilled					Compl.				Redrilled or deepened					Abandoned					Suspended	Meters drilled		
		Develop.		Explor.	Observ.	Total	Prod.	Serv.	Observ.	Total	Explor.	Geoth.	Serv.	Observ.	Total	Explor.	Geoth.	Serv.	Observ.	Total		New wells	Reworks	
		Geoth.	Serv.																					
DISTRICT G-1																								
Susanville	035	1	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	290	0
Colusa County	011	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2774	0
Lassen County	035	0	0	4	0	4	1	0	4	5	0	0	0	0	0	0	0	0	0	0	0	0	998	0
District 1 Totals		1	0	5	0	6	2	0	4	6	0	0	0	0	0	0	0	0	0	0	0	1	4062	0
DISTRICT G-2																								
Brawley	025	1	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2137	0
Heber	025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Mesa	025	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salton Sea	025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Imperial County	025	0	0	7	47	54	7	0	47	54	1	0	0	0	1	0	0	8	0	8	0	22933	2508	
San Diego County	073	0	0	0	5	5	0	0	5	5	0	0	0	0	0	0	0	5	0	5	0	0	0	0
District 2 Totals		1	0	7	53	61	8	0	53	61	1	0	0	0	1	0	0	13	0	13	0	25070	2508	
DISTRICT G-3																								
The Geysers	033	1	0	0	0	1	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	3028	1226
	097	21	0	0	0	21	19	0	0	19	3	1	0	0	4	1	0	0	0	1	0	43405	9828	
Lake County	033	1	0	1	57	59	1	0	57	58	0	0	0	0	0	0	0	17	0	17	1	8593	0	
Mendocino County	045	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3237	0	
Napa County	055	1	0	0	1	2	0	0	0	0	0	0	1	0	1	0	0	29	0	29	0	101	0	
Sonoma County	097	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	
District 3 Totals		25	0	2	59	86	21	0	57	78	4	1	1	0	6	1	0	46	0	47	2	58464	11054	
STATE TOTALS																								
		27	0	14	112	153	31	0	114	145	5	1	1	0	7	1	0	59	0	60	3	87596	13562	

PRODUCTION AND INJECTION The Geysers Geothermal Field

Year	Average number of producing wells	Gross steam produced pounds (thousands)	* Net steam produced pounds (thousands)	Average number of injection wells	Water injected (barrels)
† 1968	16	7,750,994	7,540,679	—	—
1969	20	15,018,995	12,722,222	1	2,768,946
1970	20	**14,301,954	**10,848,115	2	5,696,583
1971	22	17,226,192	11,462,009	2	7,831,760
1972	37	34,782,559	30,409,763	3	18,269,968
1973	53	47,319,902	41,565,962	4	25,561,109
1974	66	58,044,321	53,682,846	5	33,738,432
1975	81	67,228,755	62,232,271	5	46,574,145
1976	91	70,497,963	68,130,275	6	48,535,336
1977	94	71,709,149	68,505,766	6	47,148,097
1978	94	60,959,223	56,589,112	6	41,724,876
1979	118	79,341,707	73,456,243	9	55,729,602
1980	151	1,037,878,200	97,681,890	11	70,591,998
Totals		1,582,059,914	594,827,153		404,170,852

* Steam sent to power plants.

** Contains estimated data.

† Data for April to December.

GEOHERMAL NOTICES FILED AND INSPECTIONS - 1980

FIELD OR COUNTY	NOTICES TO DRILL					NOTICES TO REWORK					NOTICES TO ABANDON					TOTAL INSPECTIONS BY DISTRICT
	EXPLOR.	OBSER.	DEV.	SERV.	TOTAL	EXPLOR.	DEV.	SERV.	OBSER.	TOTAL	EXPLOR.	DEV.	SERV.	OBSER.	TOTAL	
DISTRICT G-1																
Casa Diablo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Lake City	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Susenville	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	9
Colusa County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Lassen County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Modoc County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Mono County	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
District 1 Totals	0	0	1	0	1	0	0	0	5	5	0	0	0	0	0	41
DISTRICT G-2																
Brawley	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	14
Heber	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
East Mesa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Salton Sea	1	0	0	0	1	0	2	2	0	4	0	0	0	0	0	21
Imperial County	13	134	0	0	147	0	0	0	0	0	1	0	0	0	1	56
San Bernardino Co.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
San Diego County	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	1
District 2 Totals	15	141	0	0	156	0	2	2	0	4	1	0	0	0	1	109
DISTRICT G-3																
The Geysers	0	0	15	0	15	0	27	3	0	30	0	1	0	0	1	194
Lake County	14	88	1	0	103	10	1	0	1	12	0	0	0	0	0	72
Mendocino County	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	14
Napa County	0	2	2	0	4	0	0	0	1	1	0	0	0	29	29	67
Sonoma County	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	8
District 3 Totals	15	90	20	0	125	12	28	3	2	45	0	1	0	29	30	355
STATE TOTALS	30	231	21	0	282	12	30	5	7	54	1	1	0	29	31	505

PROSPECT WELLS DRILLED TO TOTAL DEPTH IN 1980

County				R & M	Operator	Well designation and API number	Elev. (meters)	Month drilling completed	Total depth (meters)	Stratigraphic units penetrated and/or time-stratigraphic unit at total depth
	T.	R.	Sec.							
Colusa	14N	5W	29	MD	Sunoco Energy Dev. Co.	DISTRICT G-1	437	Sept.	2774	Franciscan Complex
						"Sunedco/Bailey Minerals" 1 (011-90003)				
Imperial	11S	14E	17	SB	Republic Geothermal Inc.	DISTRICT G-2				Pliocene
						"Fee" 1 (025-90279)				
						"Britz" 3 (025-90315)				
						"Currier" 2 (025-90256)				
						Westmorland Geothermal Associates				
						Union Oil Co. of Calif.				
						"East High Line Unit" 1 (025-90314)				
Imperial	13S	13E	15		Occidental Geothermal Inc.	"Rutherford" 1 (025-90284)	-8	May	3271	Pliocene
Imperial	14S	16E	5		Phillips Petroleum Co.	"Borchard" 1 (025-90278)	-14	Sept.	4086	Pliocene
Imperial	14S	16E	28		McCulloch Geothermal Corp.	"Locey" 1-28 (025-90312)	-38	August	2772	Pliocene
Lake Mendocino	13N	8W	33	MD	Occidental Geothermal Inc.	DISTRICT G-3	596	Feb.	3002	Franciscan Complex
						"Neasham" 1 (033-90254)				
Mendocino	12N	9W	30		Sunoco Energy Dev. Co.	"Bud Taylor" 3 (045-90042)	879	Feb.	3237	Franciscan Complex

GEOHERMAL CEQA APPLICATIONS AND SITE VISITS - 1980

	Projects filed			Notices issued				Reports				Site inspections		
	Obser.	Explor.	Total	Preparation	Exemption	Determination	Total	Negative declaration	Draft EIR	Final EIR	Total	General	Specific	Total
State Totals	24	6	30	9	20	6	35	3	4	4	11	2	9	11

FINANCIAL REPORT

FINANCIAL REPORT

The following report is made in accordance with Section 3108, Division 3, Public Resources Code, which reads as follows: "On or before the first day of October of each year the supervisor shall make public for the benefit of all interested persons, a report in writing showing:

(a) The total amounts of oil and gas produced in each county in the state during the previous calendar year. (Figures for 1979 are published in the *65th Annual Report of the State Oil and Gas Supervisor.*)

(b) The total cost of the division for the previous fiscal year.

(c) The total amount delinquent and uncollected from any assessments of charges levied pursuant to this chapter.

The report shall also include such other information as

the supervisor deems advisable."

Collection of Funds by Assessment

Funds for the support of the Division of Oil and Gas are raised by the assessment of a special tax on the oil industry as provided for in Article 7 of Division 3, Public Resources Code.

The tax rate is established based on the projected expenditures of the division, taking into account any previous surpluses or deficiencies. For the 1980-81 fiscal year, the rate of assessment was established at \$0.0135953 per barrel of oil or ten thousand cubic feet of gas. (The corrected assessment rate for the 1979-80 fiscal year is \$.0108613.)

Financial Statement 1979-80 Fiscal Year

General Fund

Disbursements and Obligations

Net total from budget report as of	
July 1, 1979.....	\$3,946,520.00
Total disbursements and obligations	\$3,946,520.00

Accumulated Surplus: Oil, Gas, and Geothermal Operations

	<i>Oil and Gas Operations</i>	<i>Geothermal Operations</i>	<i>Total</i>
Accumulated surplus			
July 1, 1979	\$ 725,185.00	-\$324,630.00	\$400,555.00
Add: Revenue fiscal			
year 1979-1980	3,460,252.00	27,020.00	3,487,272.00
Prior year adjustments.....	110,995.00	0	110,995.00
Total resources	\$4,296,432.00	-\$297,610.00	\$3,998,822.00
Deduct: disbursements			
and obligations			
fiscal year 1979-80	-3,594,120.00	-352,400.00	-3,946,520.00
Prior year disbursement.....	(+)24,470.00	0	(+)24,470.00
Accumulated surplus/deficit			
June 30, 1980	\$726,782.00	-\$650,010.00	\$ 76,772.00

**List of Delinquent Assessments and Penalties:
Oil, Gas, and Geothermal Operations
As of June 30, 1980**

<i>Production Year</i>	<i>Amount</i>
1974.....	\$ 320.37
1975.....	19.01
1976.....	53.44
1977.....	946.40
1978.....	1,531.82
1979.....	1,251.51
	<u>\$4,122.55</u>

**Hazardous Well Abandonment Expenditures
Fiscal Year 1979-1980**

Number of hazardous wells abandoned	13
Total expenditures for abandoning hazardous wells.....	\$121,638.17
Less reimbursements.....	<u>0</u>
Net expenditure ¹	\$121,638.17

¹Section 3258 of the Public Resources Code limits expenditures for this purpose in any fiscal year to \$500,000.00. This amount was reduced to \$162,422.00 by legislative action.

NEW PUBLICATIONS

Drilling and Operating Oil, Gas,
and Geothermal Wells in an
H₂S Environment
(Publication No. M10) Free

Energy Map of California
(Map S-2) \$3.00

California Oil and Gas Fields,
Northern California. Volume III
(Publication No. TR10). \$8.25