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CALIFORNIA DIVISION OF OIL AND GAS
HYDROCARBON-PRODUCING
AQUIFER EXEMPTIONS

VI

CALIFORNIA

OIL AND GAS FIELDS

REPORT NO. TR12

CALIFORNIA OIL AND GAS FIELDS

VOLUME II

South, Central Coastal and Offshore California

A Publication of the

CALIFORNIA DIVISION OF OIL AND GAS

Sacramento

1974

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HOW TO USE THIS VOLUME

Volume II consists of oil and gas field maps and data sheets arranged alphabetically by the API regions South, Central Coastal and Offshore California, shown on the index map on page vii. Turn to the index map first to determine in which region the field is located, then use the index tabs to find the region. All data sheets are arranged alphabetically; however, South Cuyama will be found listed as Cuyama, South, etc. Regional cross sections are found at the beginning of each regional section, as are the index maps outlining the productive areas of all fields in the region.

INTRODUCTION

This volume is a compilation of oil and gas field geologic and statistical data for all fields in the API regions of South, Central Coastal and Offshore California (see index map on page vii). It exhibits a departure in format from the original map and data sheet publication which first appeared in October 1960. Aside from the loose-leaf format, which will permit periodic updating, many other changes have been made. For example, a typical or composite electric log is shown for most fields, and additional statistical data have been added.

Preparation of the data for this volume was a joint effort of Division of Oil and Gas engineering, drafting, stenographic, and clerical staffs in Long Beach, Santa Paula, Santa Maria, and Sacramento. Contributions by companies and by individuals not employed by the division are acknowledged on the map sheets.

MAJOR OCCURRENCES OF OIL AND GAS

LOS ANGELES BASIN

Oil occurs chiefly in Pliocene and Miocene strata, with smaller amounts in Pleistocene strata and in fractured schist (Cretaceous or older).

VENTURA BASIN

Oil occurs in the Pliocene, Miocene, Oligocene, and Eocene. Smaller amounts of oil are found in lower Pleistocene, Paleocene, and Upper Cretaceous strata. Some dry gas occurs in the Pliocene.

SANTA MARIA BASIN

Oil is found chiefly in Pliocene and Miocene strata.

VENTURA – SANTA BARBARA OFFSHORE BASIN

Oil occurs in the Miocene, Oligocene, and upper Eocene. Gas is found in the lower Miocene.

SALINAS BASIN


Oil occurs in the Miocene.


CUYAMA BASIN

Oil occurs chiefly in Miocene strata with lesser amounts in the Pliocene.

EXPLANATIONS

MAP SHEETS

Typical log – A single electric log of a typical well in a particular oil or gas field. For convenience, long sections not significant for correlation purposes may have been removed in some logs. This is shown by the symbol .

Composite log – Consists of a composite of two or more electric logs of wells in particular oil or gas field. Sections removed are shown by the symbol .

Note: Some typical or composite logs may be of wells outside administrative field boundaries, and may therefore have greater depth than the deepest well in the field.












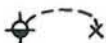


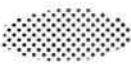





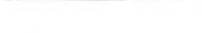



Productive area - Productive area may be shown in one of two ways:

- 1) By inference from well symbols on the contour map.
- 2) By shading (see legend) on contour map. Shading is also used on cross sections to indicate productive zones.





Productive area shown on a contour map is the *maximum* productive area as of January 1, 1974. Productive areas shown on index maps are generalized.








Contour map – Datum is sea level.

Contour map legend:

	Drilling
	Drilling - idle
	Abandoned - dry hole
	Producing - oil
	Idle - oil
	Abandoned - oil
	Producing - gas
	Idle - gas
	Abandoned - gas
	Water disposal
	Oil well converted to water disposal
	Intersection of bore-hole and contoured horizon
	Onshore drillsite
	Offshore drilling platform or island
	Productive area
	Contour line (good control)
	Contour line (poor control)
	Axis of anticline
	Axis of syncline
	Fault
	Possible fault
	Fault dip direction
	Fault movement (+ up, - down)
	Fault movement (lateral)

Cross section legend:

	} Oil zones
	
	} Gas zones
	

	Correlation line (good control)
	Correlation line (poor control)
	Unconformity
	Fault
	Possible fault
	Fault movement (up/down)
	Fault movement (● toward observer, + away from observer)

Scales - Map scales can generally be inferred from public land survey data. When such an inference cannot be drawn, a map scale is shown.

Note: Cross sections depicted schematically are not necessarily drawn to scale.

DATA SHEETS

Most listed items are self explanatory. A few, however, need additional elaboration.

Discovery data - Zones are listed in stratigraphic sequence.

Producing zones - The average depth means the *average* area or field depth to the **top** of the productive zone. The average net thickness means the average *productive* thickness of the zone and is only an approximation.

Class BOPE required - Refers to Division of Oil and Gas blowout prevention equipment class requirements, copies of which are available from any Division of Oil and Gas office. Classes shown should be used only as a guide, *and do not represent final determination of blowout equipment required* on any particular well. There are five classes: Class I through V. The higher the class number, the more stringent the requirements.

Spacing Act - Refers to the application of Chapter 3, Division 3 of the Public Resources Code, *Spacing of Wells and Community Leases*. Final determination of well spacing requirements is made by the State Oil and Gas Supervisor and entries under "Spacing Act" *do not represent final judgement of whether or not the Spacing Act applies*.

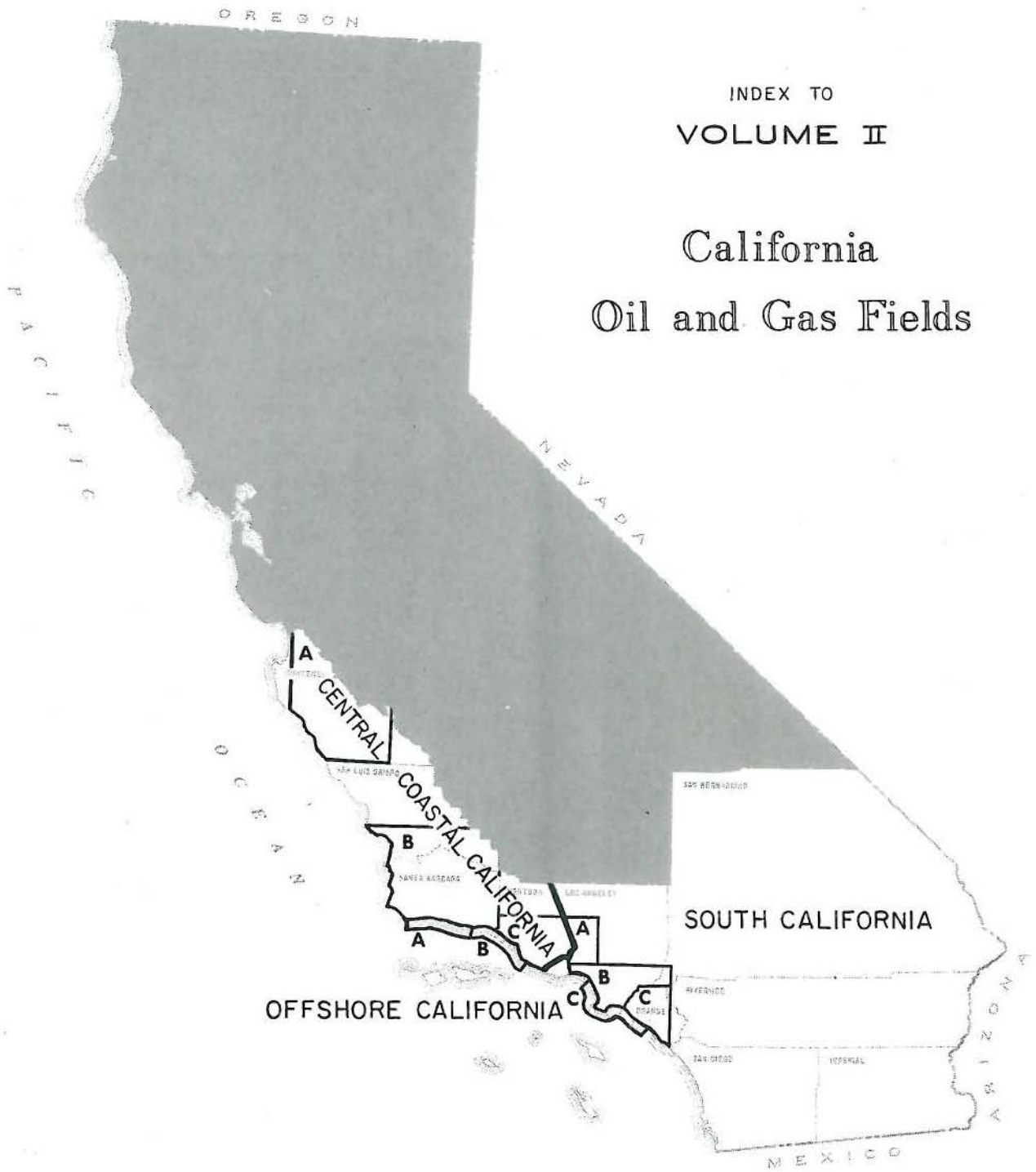
LIST OF ABBREVIATIONS

B&M	Base and Meridian
MD	Mount Diablo
SB	San Bernardino
psig	pounds per square inch (gauge)
bbl	barrels (42 U.S. gallons)
Mcf	1000 cubic feet
Btu	British thermal unit
gr/gal	grains per gallon

cem.	cemented
N.A.	not available
--	not applicable
Abd.	Abandoned
Holo.	Holocene
Pleis.	Pleistocene
Plio.	Pliocene
Mio.	Miocene
Olig.	Oligocene
Eo.	Eocene
Paleoc.	Paleocene
Cret.	Cretaceous
Jur.	Jurassic
E or e	early
M or m	middle
Lt or It	late
undiff.	undifferentiated

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VOLUME II

California
Oil and Gas Fields

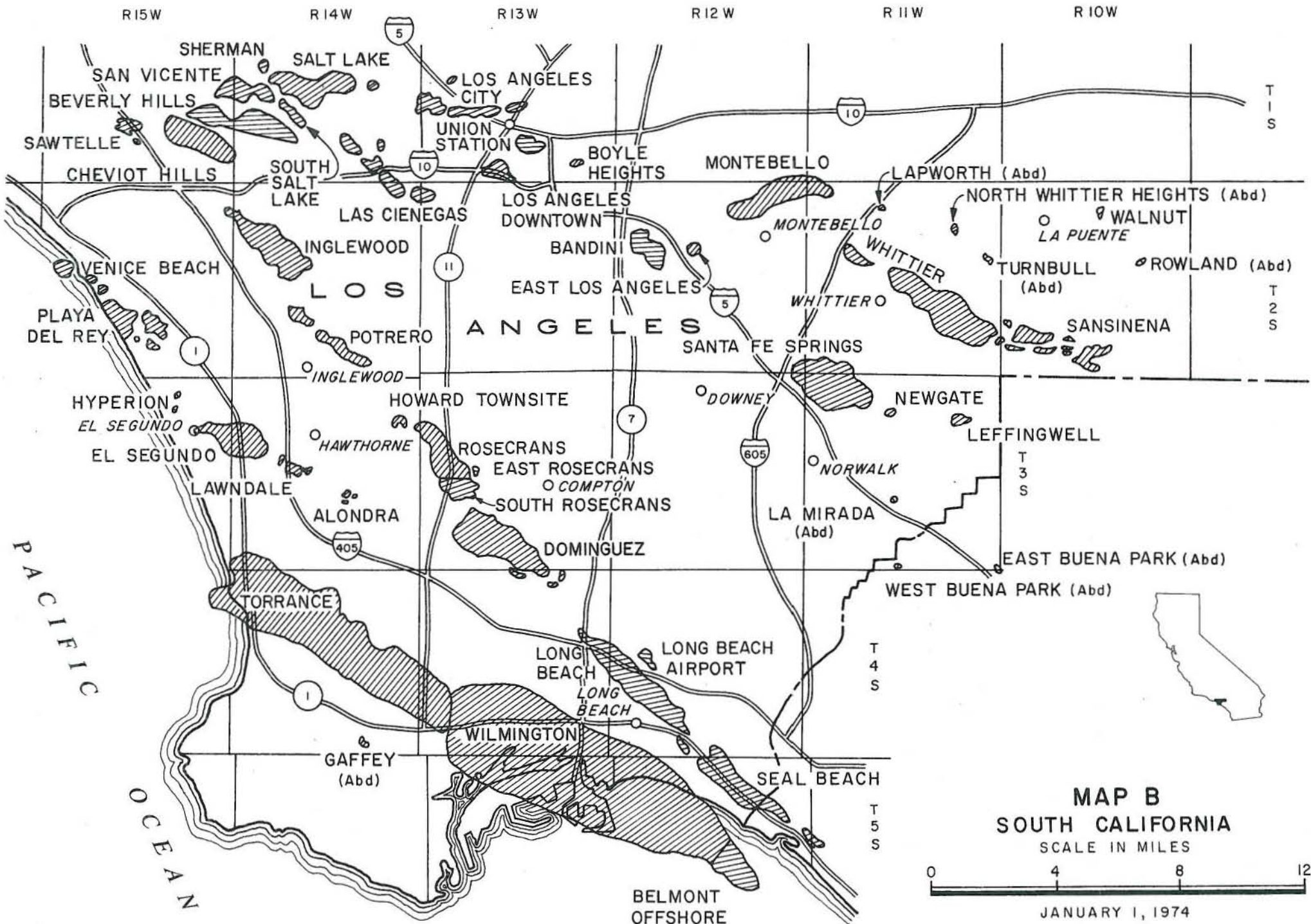


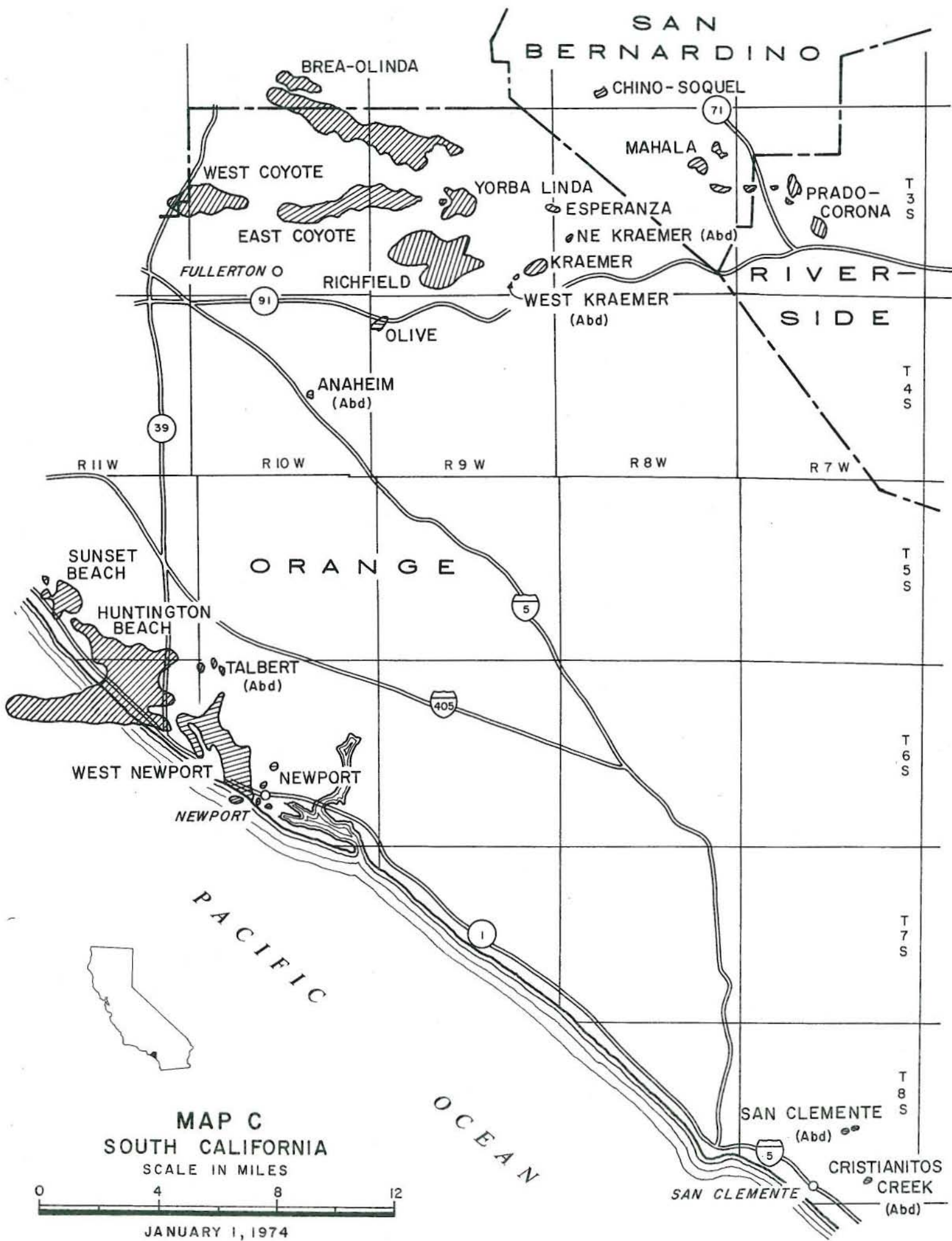


MAP A
SOUTH CALIFORNIA
 SCALE IN MILES



JANUARY 1, 1974





MAP C
SOUTH CALIFORNIA
 SCALE IN MILES

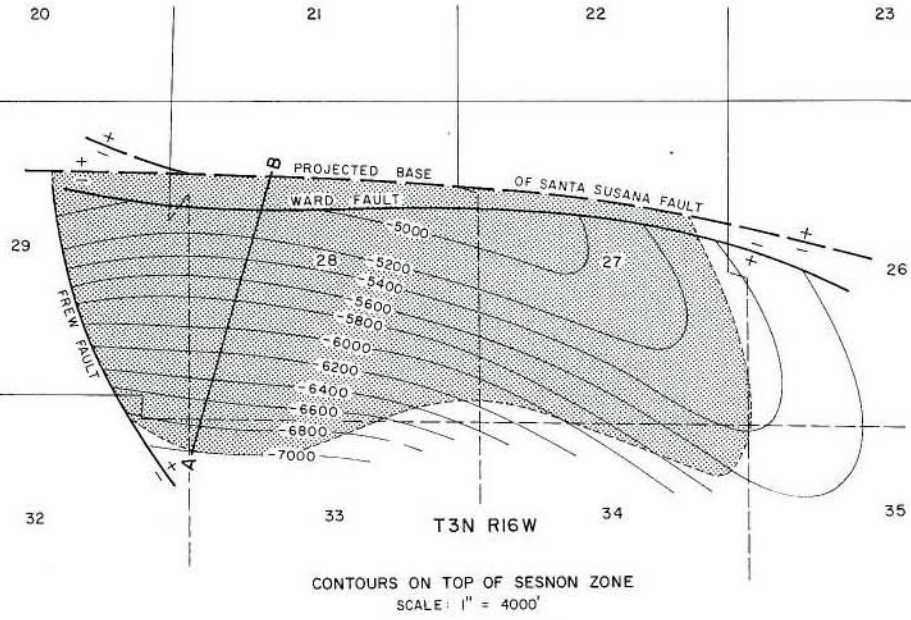


JANUARY 1, 1974

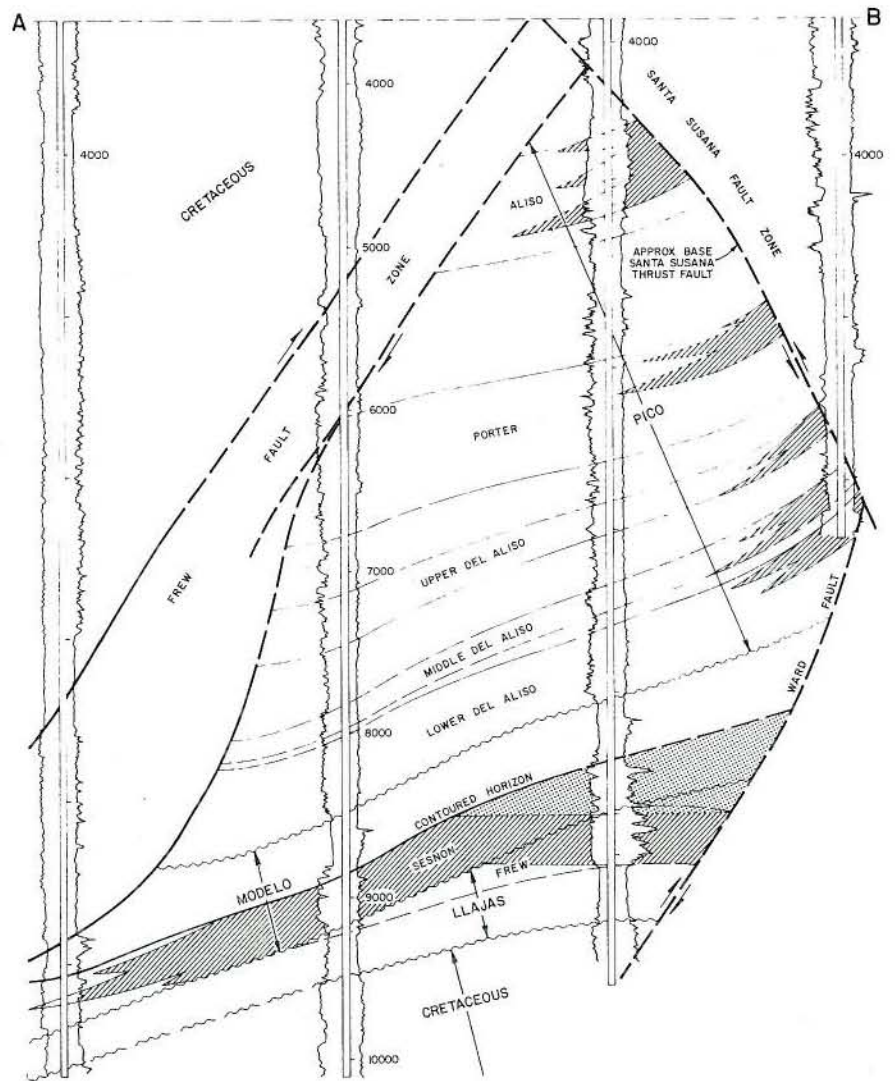
*SOUTH CALIFORNIA
MAPS AND DATA SHEETS*

ALISO CANYON OIL FIELD

19
 OAT MOUNTAIN AREA



SERIES	FORMATION AND ZONE	TYPICAL ELECTRIC LOG
MIDDLE MIOCENE	MODELO BASE OF SANTA SUSANA	4000
PLIOCENE	ALISO	5000
	PICO	
	PORTER	6000
	UPPER DEL ALISO	7000
	MIDDLE DEL ALISO	
LOWER	LOWER DEL ALISO	8000
	MODELO	
MIDDLE MIOCENE	SESNON	
EOCENE	FREW	9000
	LLAJAS	
UPPER CRETACEOUS	UNDIFF MARINE STRATA	



CALIFORNIA DIVISION OF OIL AND GAS

ALISO CANYON OIL FIELD

Los Angeles County

LOCATION: 24 miles northwest of Los Angeles

TYPE OF TRAP: See areas

ELEVATION: 1,680 - 3,600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Porter	Getty Oil Co. "Porter" 1	Tidewater Associated Oil Co. "Porter" 1	27 3N 16W	SB	700	200	Oct 1938

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Pacific Lighting Service Co. "SFZU" SS-17	Tidewater Associated Oil Co. "Standard-Sesnon" 1-17	Mar 1952	28 3N 16W	SB	12,417	Undiff. marine	Cretaceous

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu))	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
607,542	5,953,662	3,042,022	1,080	90	49,731,147	107,136,211	2,906,872	1955	201	154	1,100

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS:

REFERENCES: Hodges, F.C., and E.R. Murray-Aaron, Newhall-Potrero, Aliso Canyon, Del Valle, and Oak Canyon Oil Fields: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 29, No. 1 (1943).
 Ingram, W.L., Aliso Canyon Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 45, No. 1 (1959).

CALIFORNIA DIVISION OF OIL AND GAS

ALISO CANYON OIL FIELD

MAIN AREA

Los Angeles County

LOCATION: See map sheet of Aliso Canyon Oil Field

TYPE OF TRAP: Faulted nose

ELEVATION: 1,680 - 3,300

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Aliso	Getty Oil Co. "Porter" 27	Tidewater Associated Oil Co. "Porter" 27	28 3N 16W	SB	510	154	Apr 1950
Porter	Getty Oil Co. "Porter" 1	Tidewater Associated Oil Co. "Porter" 1	27 3N 16W	SB	700	200	Oct 1938
Del Aliso	Standard Oil Co. of Calif. "Del Aliso 1" 1	Standard Oil Co. of Calif. "Del Aliso" 1	29 3N 16W	SB	122	49	Sep 1947
Sesnon	Pacific Lighting Service Co. "SFZU" P-12	Tidewater Associated Oil Co. "Porter" 12	27 3N 16W	SB	40	13,500	Apr 1940
Frew	Standard Oil Co. of Calif. "Del Aliso 1" 1	Standard Oil Co. of Calif. "Del Aliso" 1	29 3N 16W	SB	37	380	Feb 1945

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Pacific Lighting Service Co. "SFZU" SS-17	Tidewater Associated Oil Co. "Standard-Sesnon" 1-17	Mar 1952	28 3N 16W	SB	12,447	Undiff. marine	Cretaceous

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Aliso	4,300	100	Pliocene	Pico	12 - 17	1,000	III
Porter	5,050	150	Pliocene	Pico	21 - 25	1,000	III
Del Aliso	6,500	200	Pliocene	Pico	17 - 27	1,000	III
Sesnon	8,100	110	Miocene	Modelo	20 - 53	700	IV
Frew	8,650	190	Eocene	Llajas	20 - 23	900	IV

PRODUCTION DATA (Jan. 1, 1974)

Oil (bbl)	1973 Production		1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
582,450	5,947,092	3,020,531	1,060	88	49,075,053	106,866,863	2,888,271	1955	195	150	1,060

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 100 - 800

CURRENT CASING PROGRAM: 13 3/8" cem. 500; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: All waste water is injected into disposal wells.

REMARKS: Storage of gas in the Sesnon-Frew zones began in 1973; a total of 22,596,368 Mcf. of gas was injected during the year.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

ALISO CANYON OIL FIELD

OAT MOUNTAIN AREA

Los Angeles County

LOCATION: See map sheet of Aliso Canyon Oil Field

TYPE OF TRAP: Unknown

ELEVATION: 3,200 - 3,600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Porter	Union Oil Co. of Calif. "Del Aliso" 1-2	Same as present	19 3N 16W	SB	221	16	Mar 1956
Del Aliso	Union Oil Co. of Calif. "Del Aliso" 1-1	Same as present	19 3N 16W	SB	205	55	Nov 1955
Sesnon	Same as above	Same as above	19 3N 16W	SB	*	*	Nov 1955
Frew	Edwin W. Pauley "Btow" 36	Standard Oil Co. of Calif. "Wigdal" 1	19 3N 16W	SB	100	0	Sep 1946

Remarks: * Initial production from Del Aliso and Sesnon zones was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Edwin W. Pauley "Btow" 36	Standard Oil Co. of Calif. "Wigdal" 1	Sep 1946	19 3N 16W	SB	9,525	Undiff. marine	Cretaceous

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Porter	6,750	800	Pliocene	Pico	16	1,000	III
Del Aliso	7,170	300	Pliocene	Pico	18	1,000	III
Sesnon	7,650	100	Miocene	Modelo	20	700	III
Frew	8,850	500	Eocene	Llajas	18	900	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
25,092	6,570	21,491	20	2	656,094	269,348	68,590	1956	6	4	40

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

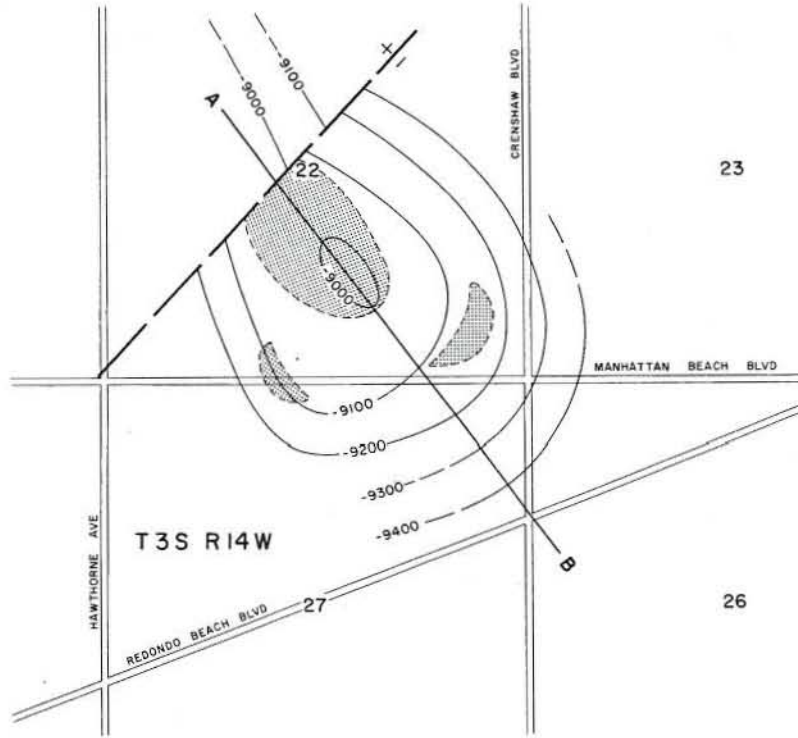
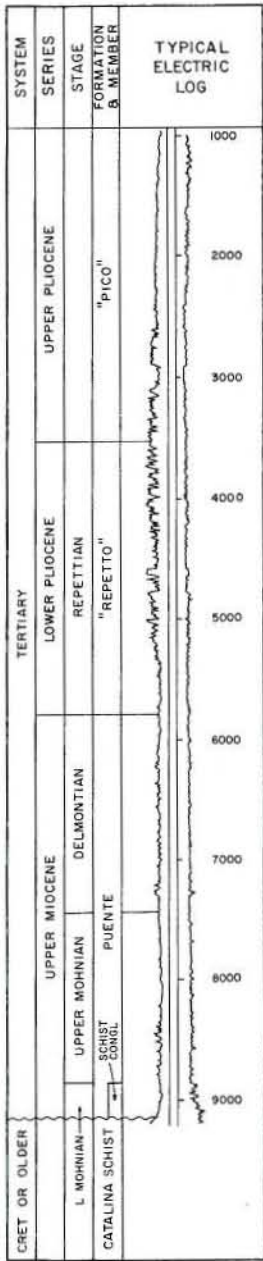
CURRENT CASING PROGRAM: 13 3/8" or 11 3/4" cem. 2,500; 7" cem. through zone.

METHOD OF WASTE DISPOSAL: All waste water is injected into disposal well.

REMARKS:

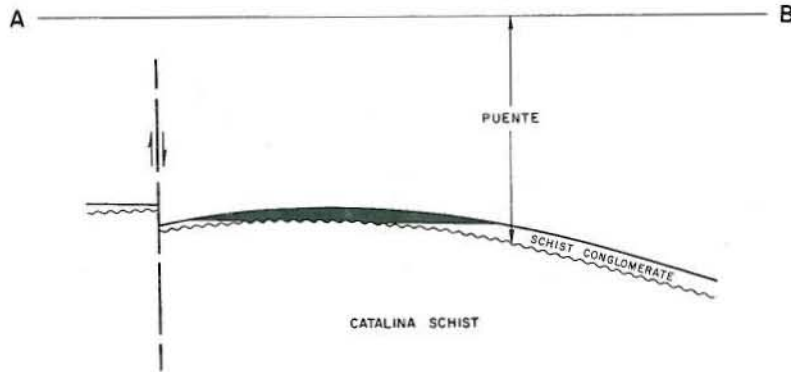
REFERENCES:

ALONDRA OIL FIELD



CONTOURS ON TOP OF SCHIST CONGLOMERATE

SCALE: 1" = 2400'



CALIFORNIA DIVISION OF OIL AND GAS

ALONDRA OIL FIELD
Los Angeles County

LOCATION: 12 miles southwest of downtown Los Angeles

TYPE OF TRAP: Faulted dome

ELEVATION: 70

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Schist conglomerate	Gulf Oil Corp. "Bodger" 1	The British-American Oil Producing Co. "Bodger" 1	22 3S 14W	SB	897	295	Aug 1946

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Gulf Oil Corp. "Village Community" 2	The British-American Oil Producing Co. "Village Community" 2	May 1948	22 3S 14W	SB	*9,472	Catalina Schist	Cret or older

* True vertical depth is 9,295.

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Schist conglomerate	9,000	45	late Miocene	Puente	26 - 29	1,100	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
16,325	10,171	348,459	75	2	2,118,180	1,404,273	330,888	1947	8	5	75

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 2,250

CURRENT CASING PROGRAM: 8 5/8" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Water disposed of through sewage system.

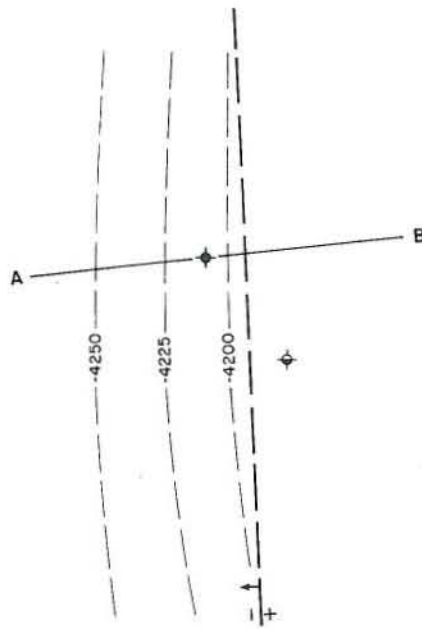
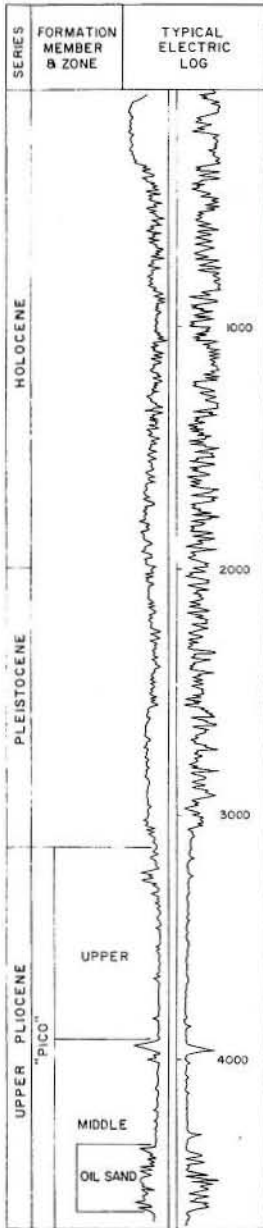
REMARKS:

REFERENCES: White, J.L., Lawdale Oil Field and Alondra Area: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 36, No. 2 (1950).

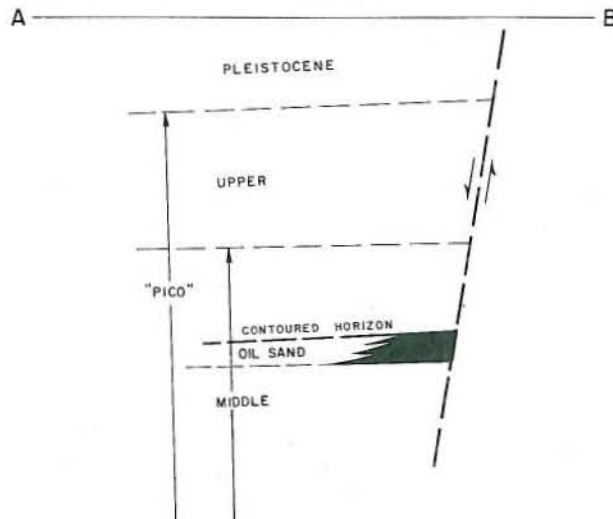
ANAHEIM OIL FIELD (Abandoned)

T4S RIOW

15 14
22 23



CONTOURS ON TOP OF OIL SAND
SCALE: 1" = 650'



CALIFORNIA DIVISION OF OIL AND GAS

ANAHEIM OIL FIELD (Abandoned)

Orange County

LOCATION: 2 miles south of Anaheim

TYPE OF TRAP: Fault

ELEVATION: 147

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Oil sand	McVicar-Rood-Hall "Holsinger" 1	Patrick A. Doheny "Holsinger" 1	22 4S 10W	SB	49	0	Jan 1951

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Sun Oil Co. "Foiles" 1	Sunray Oil Corp. "Foiles" 1	Mar 1951	22 4S 10W	SB	4,700	"Pico"	late Plio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Oil sand	4,350	130	late Pliocene	"Pico"	11	N.A.	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	3,856	0	3,856	1951	2	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 3,050

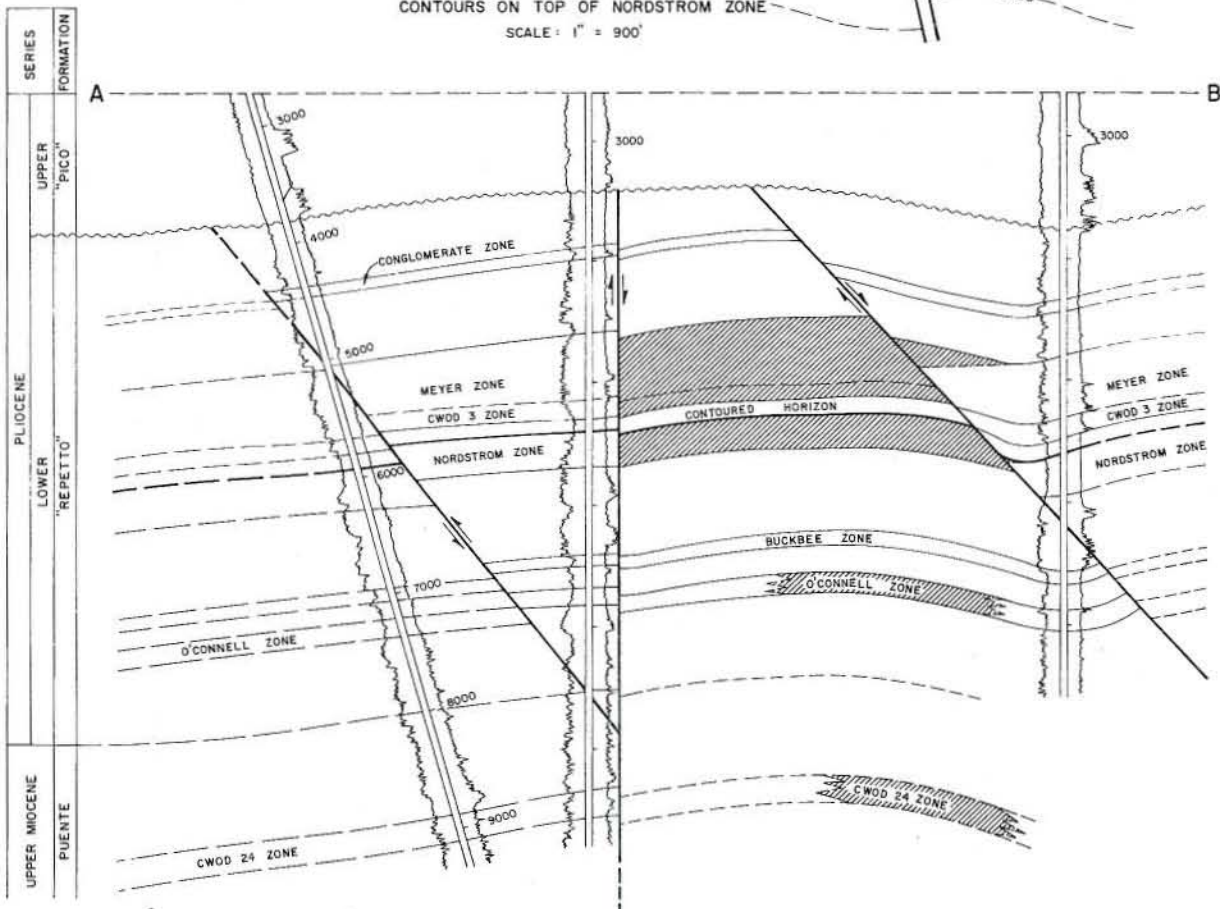
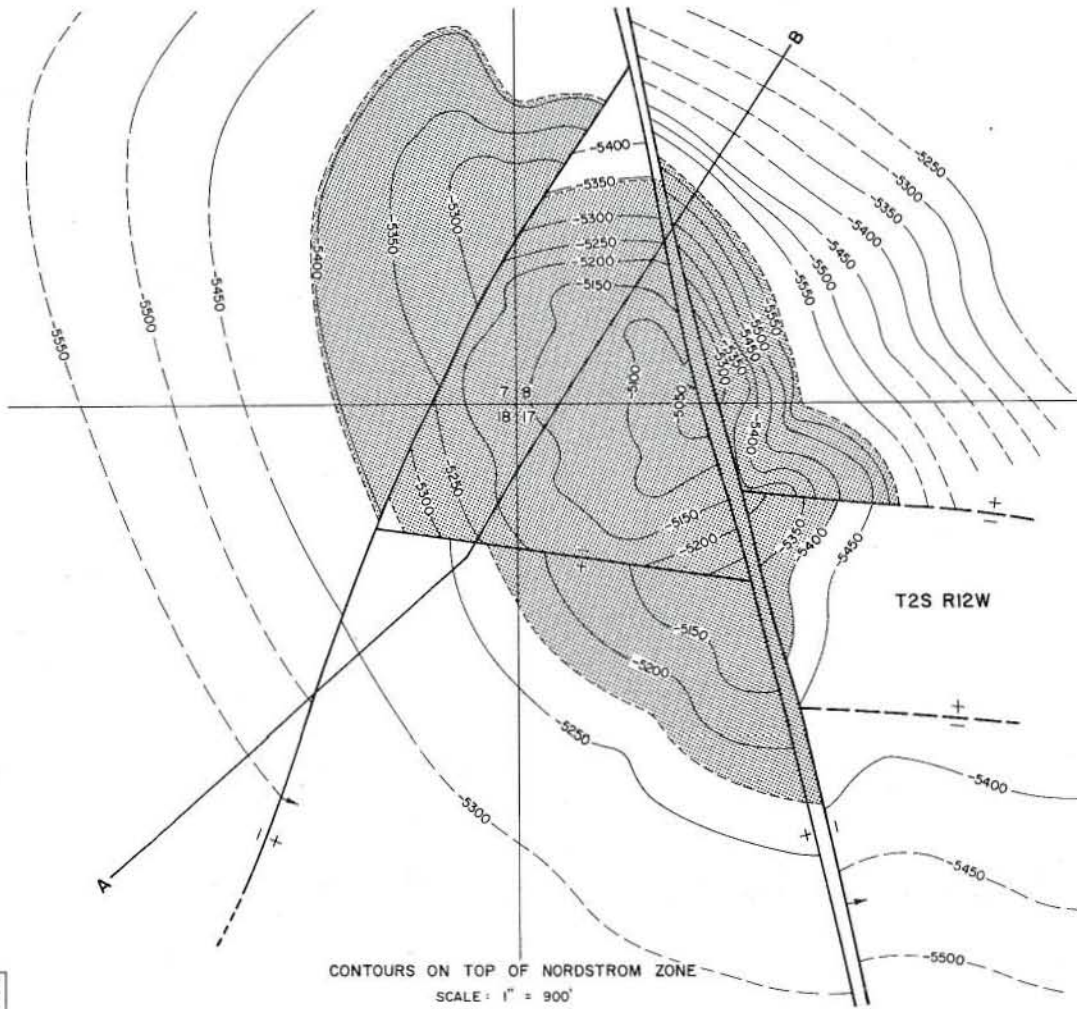
CURRENT CASING PROGRAM: 11 3/4" cem. 1,200; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Last production June 1951. Field abandoned in 1952.

REFERENCES:

BANDINI OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

BANDINI OIL FIELD

Los Angeles County

LOCATION: 6 miles southeast of downtown Los Angeles

TYPE OF TRAP: Faulted anticline

ELEVATION: 160

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & W	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Conglomerate Meyer	Atlantic Richfield Co. "Southside A" 8	Richfield Oil Corp. "Southside A" 8	8 2S 12W	SB	325	125	Mar 1957
	General Exploration Co. "C.W.O.D." 15	General Exploration Co. of Calif. "C.W.O.D." 15	17 2S 12W	SB	339	205	Apr 1956
C.W.O.D. 3 Nordstrom	Atlantic Oil Co. "C.W.O.D." 3	Same as present	17 2S 12W	SB	1,560	400	Sep 1956
	General Exploration Co. "C.W.O.D." 3	General Exploration Co. of Calif. "C.C.M.O." 3	17 2S 12W	SB	285	960	May 1954
Buckbee	General Exploration Co. "C.W.O.D." 1	General Exploration Co. of Calif. "C.C.M.O." 1	17 2S 12W	SB	519	330	Sep 1953
O'Connell	General Exploration Co. "C.W.O.D." 9	General Exploration Co. of Calif. "C.W.O.D." 9	17 2S 12W	SB	224	560	May 1955
C.W.O.D. 24	General Exploration Co. "C.W.O.D." 24	General Exploration Co. of Calif. "C.W.O.D." 24	17 2S 12W	SB	120	70	Jan 1957

Remarks:

The initial O'Connell zone production was commingled with Buckbee zone.
 The initial Conglomerate zone production was commingled with Meyer zone.
 The C.W.O.D. 3 zone may be equivalent to the lower Meyer.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
General Exploration Co. "C.W.O.D." 25	General Exploration Co. of Calif. "C.W.O.D." 25	Sep 1957	17 2S 12W	SB	9,912	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Conglomerate Meyer	4,200	70	early Pliocene	"Repetto"	32	1,500	IV
C.W.O.D. 3 Nordstrom	4,500	300	early Pliocene	"Repetto"	38	1,840	IV
Buckbee	5,000	175	early Pliocene	"Repetto"	39	1,840	IV
O'Connell	5,200	200	early Pliocene	"Repetto"	40	1,840	IV
C.W.O.D. 24	6,200	100	early Pliocene	"Repetto"	39	N.A.	IV
	6,500	150	early Pliocene	"Repetto"	40	650	IV
	8,400	200	late Miocene	Puente	36	700	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
62,336	63,863	472,512	285	21	5,203,761	14,979,024	760,958	1956	67	52	300

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,100

CURRENT CASING PROGRAM: 13 3/8" or 11 3/4" cem. 1,100; 8 5/8" or 7" cem. above zone; 6 5/8" or 5 1/2" liner landed through zone.

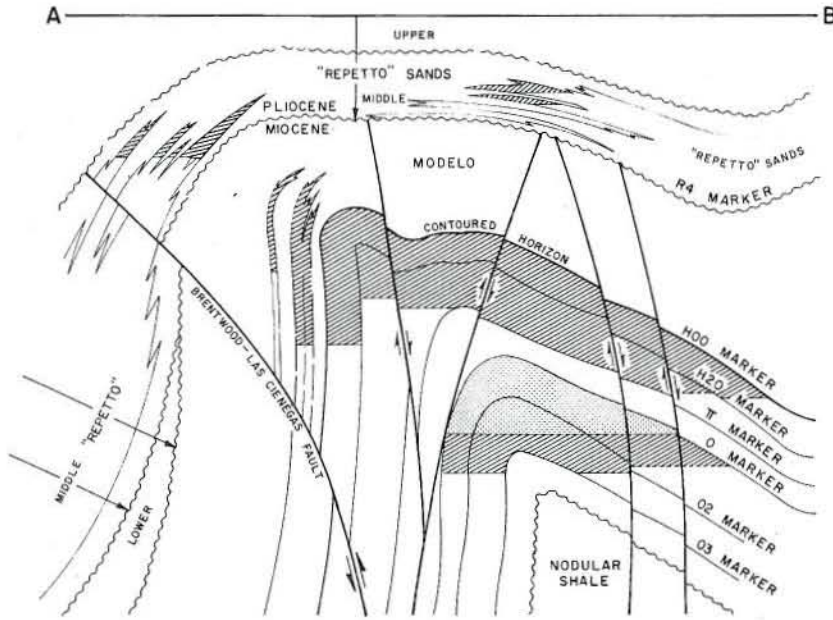
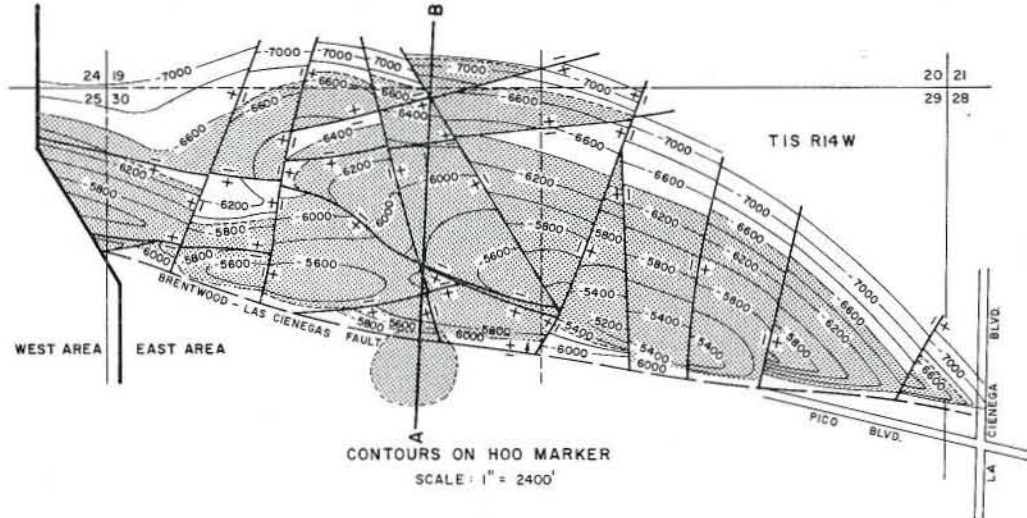
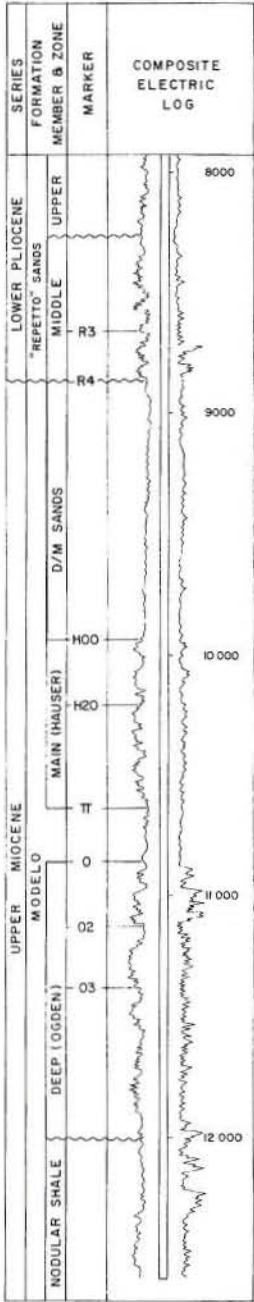
Alternate Program: 7" cem. through zone.

METHOD OF WASTE DISPOSAL: Waste water disposed of through city sewage system.

REMARKS: The majority of wells were directionally drilled from one site. A water-flood project was begun in 1968 and terminated in 1969 after having injected 75,818 bbls. into one well.

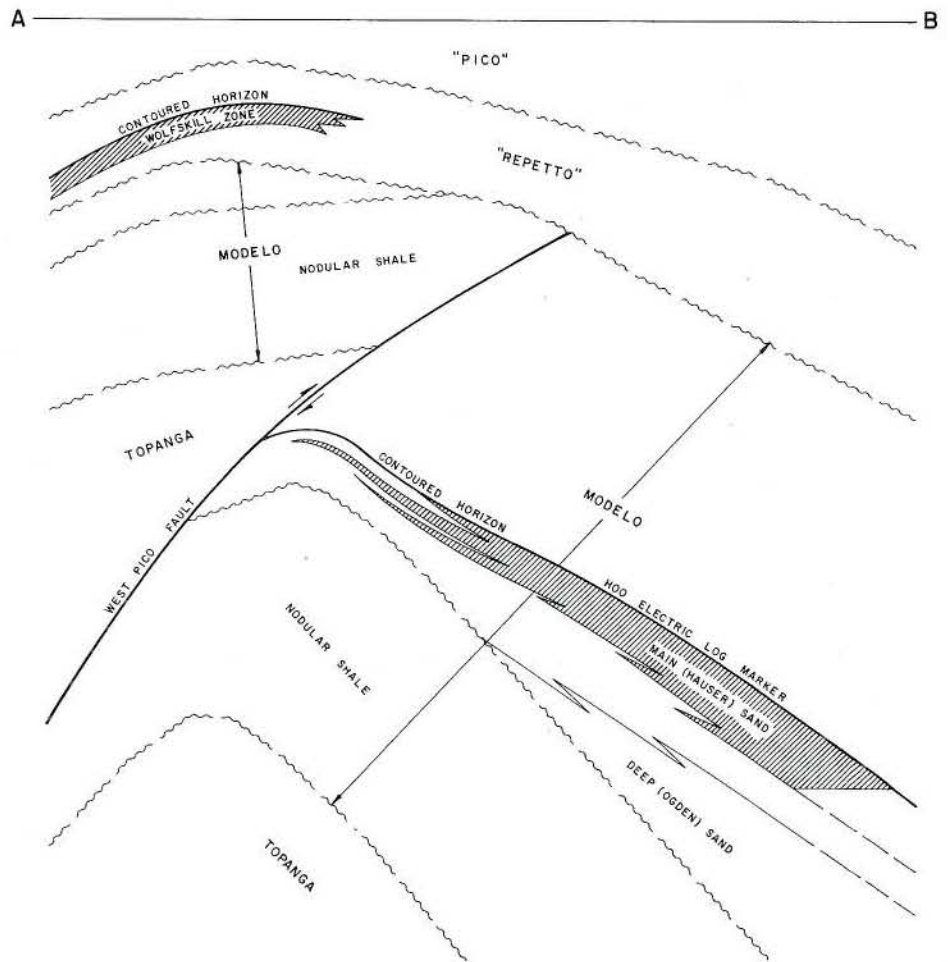
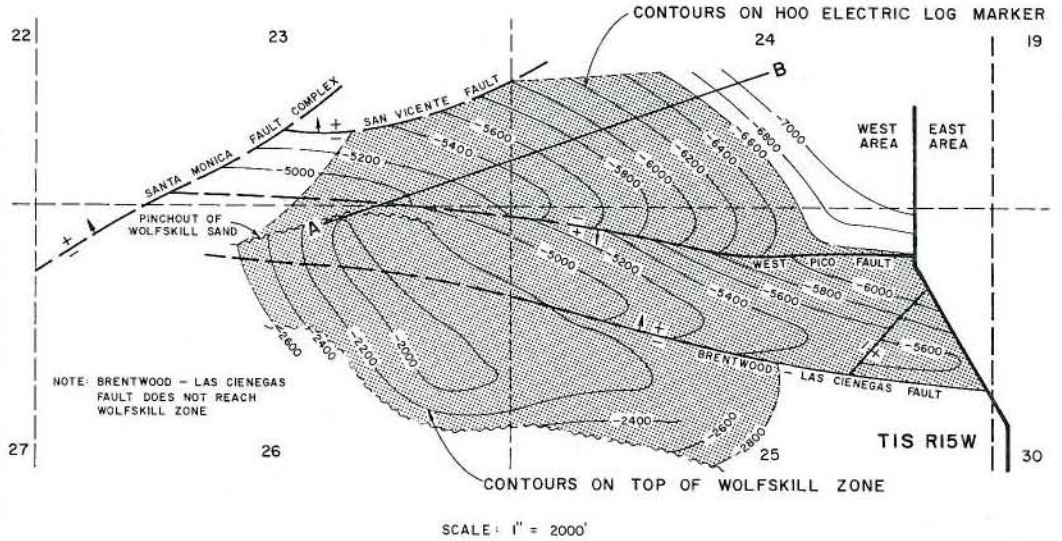
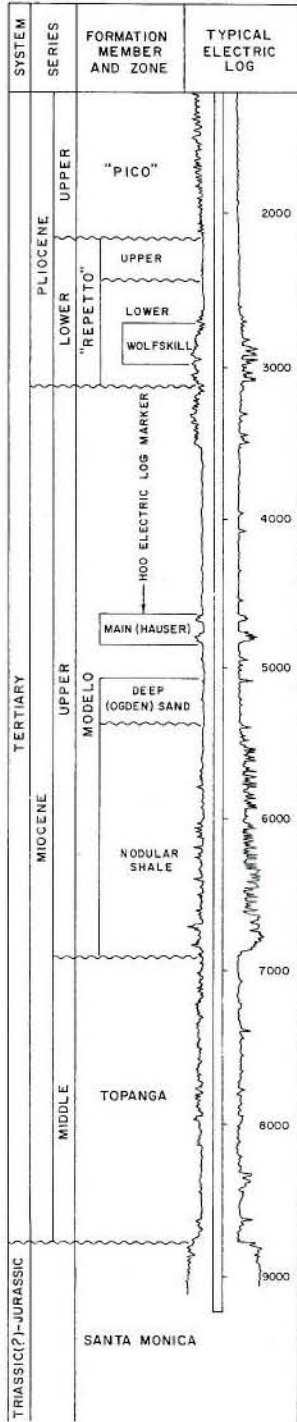
REFERENCES: Dosch, M.W., and W.J. Hunter, Bandini Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 44, No. 1 (1958).

BEVERLY HILLS OIL FIELD East Area



GENERALIZED CROSS SECTION (COURTESY OCCIDENTAL PETROLEUM CORP)

BEVERLY HILLS OIL FIELD West Area



CALIFORNIA DIVISION OF OIL AND GAS

BEVERLY HILLS OIL FIELD

Los Angeles County

LOCATION: 9 miles west of downtown Los Angeles

TYPE OF TRAP: See areas

ELEVATION: 250

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Wolfskill	W. W. Orcutt well number unknown	Same	25 or 26 1S 15W	SB	N.A.	N.A.	Jul 1900

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. No. S-54	Same	Jan 1972	20 1S 14W	SB	12,683	Modelo	late Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
5,559,110	8,430,869	3,912,436	1,250	129	73,779,324	146,885,934	12,550,605	1968	*211+	*185+	1,310

* No records available on many early wells.

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: See areas

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

BEVERLY HILLS OIL FIELD

EAST AREA

Los Angeles County

LOCATION: See map sheet of Beverly Hills Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 250

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
"Repetto" sands	Occidental Petroleum Corp. "West Pico" 7	Same as present	30 1S 14W	SB	827	690	Jan 1967
D/M sands	Standard Oil Co. of Calif. P-10	Same as present	29 1S 14W	SB	1,601	*885	Jul 1967
Main (Hauser)	Occidental Petroleum Corp. "West Pico" 1	Same as present	30 1S 14W	SB	519	352	Apr 1966
Deep (Ogden)	Standard Oil Co. of Calif. P-6	Same as present	29 1S 14W	SB	397	6,714	Jun 1967

Remarks: * D/M and Main zone production commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. S-54	Same	Jan 1972	20 1S 14W	SB	12,683	Modelo	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
"Repetto" sands	4,800	350	Pliocene	"Repetto"	35	N.A.	IV
D/M sands	9,000	200	late Miocene	Modelo	27	N.A.	IV
Main (Hauser)	9,900	700	late Miocene	Modelo	30 - 35	840	IV
Deep (Ogden)	10,800	800	late Miocene	Modelo	23 - 60	1,100	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
5,105,158	7,740,172	3,501,980	950	88	55,876,281	118,678,949	11,816,162	1968	*88+	*88+	950

* No records available on many early wells.

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1968	39,393,016	23

SPACING ACT: Applies

BASE OF FRESH WATER: 500

CURRENT CASING PROGRAM: 10 3/4" cem. 650 - 950; 7" cem. through zone.

METHOD OF WASTE DISPOSAL: Water-flood project.

REMARKS: All present drilling is done from sound-proofed urban drillsites.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

BEVERLY HILLS OIL FIELD

WEST AREA

Los Angeles County

LOCATION: See map sheet of Beverly Hills Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 250

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Wolfskill	W. W. Orcutt well number unknown	Same as present	25 or 26 1S 15W	SB	N.A.	N.A.	Jul 1900
Main (Hauser)	Gulf Oil Corp. "Twentieth Century Fox" 1	Universal Consolidated Oil Co. "Twentieth Century Fox" 1	25 1S 15W	SB	525	525	Feb 1954

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Gulf Oil Corp. "Twentieth Century Fox" 27-F	Gulf Oil Corp. of Calif. "Aladdin" 27E	Apr 1964	26 1S 15W	SB	12,000	Modelo	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Wolfskill	2,500	250	early Pliocene	"Repetto"	15 - 22	1,560	III
Main (Hauser)	4,500	100	late Miocene	Modelo	23 - 60	840	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
453,952	690,697	410,456	300	41	17,903,043	28,206,985	3,717,262	1961	*123+	*107+	360

* No records available on many early wells.

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 500

CURRENT CASING PROGRAM: 16" cem. 600; 11 3/4" cem. above zone; 7" cem. through zone.

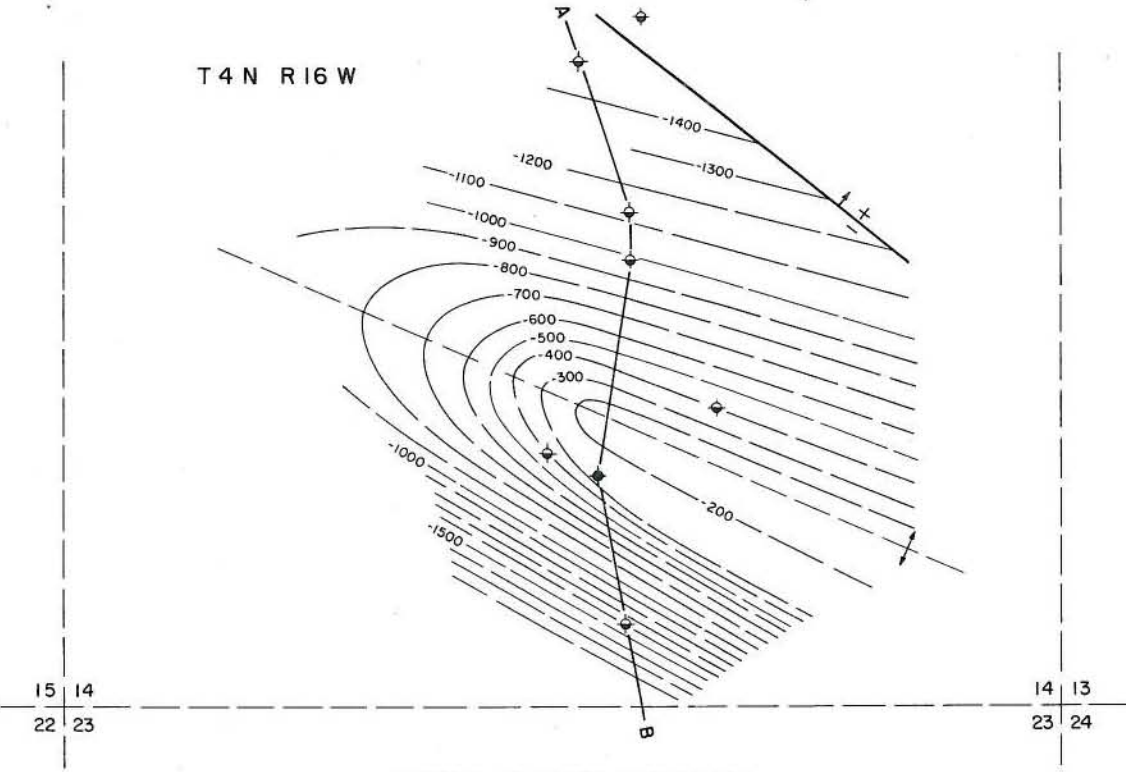
METHOD OF WASTE DISPOSAL: Waste water is injected into Wolfskill zone.

REMARKS: Nearly all recent wells have been directionally drilled from sound-proofed drillsites.

REFERENCES:

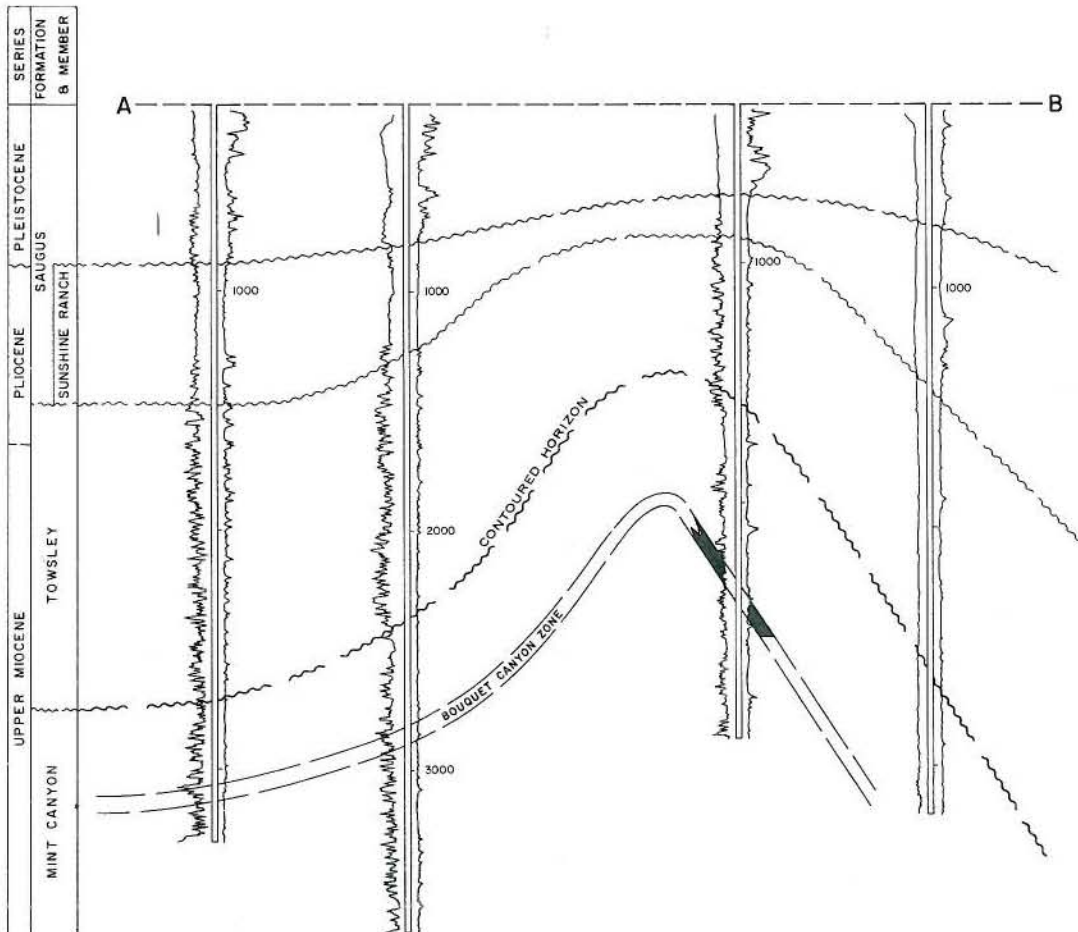
BOUQUET CANYON OIL FIELD (Abandoned)

T 4 N R 16 W



CONTOURS ON TOP OF MINT CANYON

SCALE: 1" = 1000'



CALIFORNIA DIVISION OF OIL AND GAS

BOUQUET CANYON OIL FIELD (Abandoned)

Los Angeles County

LOCATION: 30 miles northwest of Los Angeles

TYPE OF TRAP: Permeability barrier on anticline

ELEVATION: 1,375

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Bouquet Canyon	Edward Lustgarten "Lucky Lusty" 1	Same as present	14 4N 16W	SB	29	0	Jun 1958

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Edward Lustgarten "Lucky Lusty" 4	Same	Apr 1963	14 4N 16W	SB	5,473	Mint Canyon	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Bouquet Canyon	2,340	70	late Miocene	Mint Canyon	39	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	8,528	0	1,266	1958	10	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 700

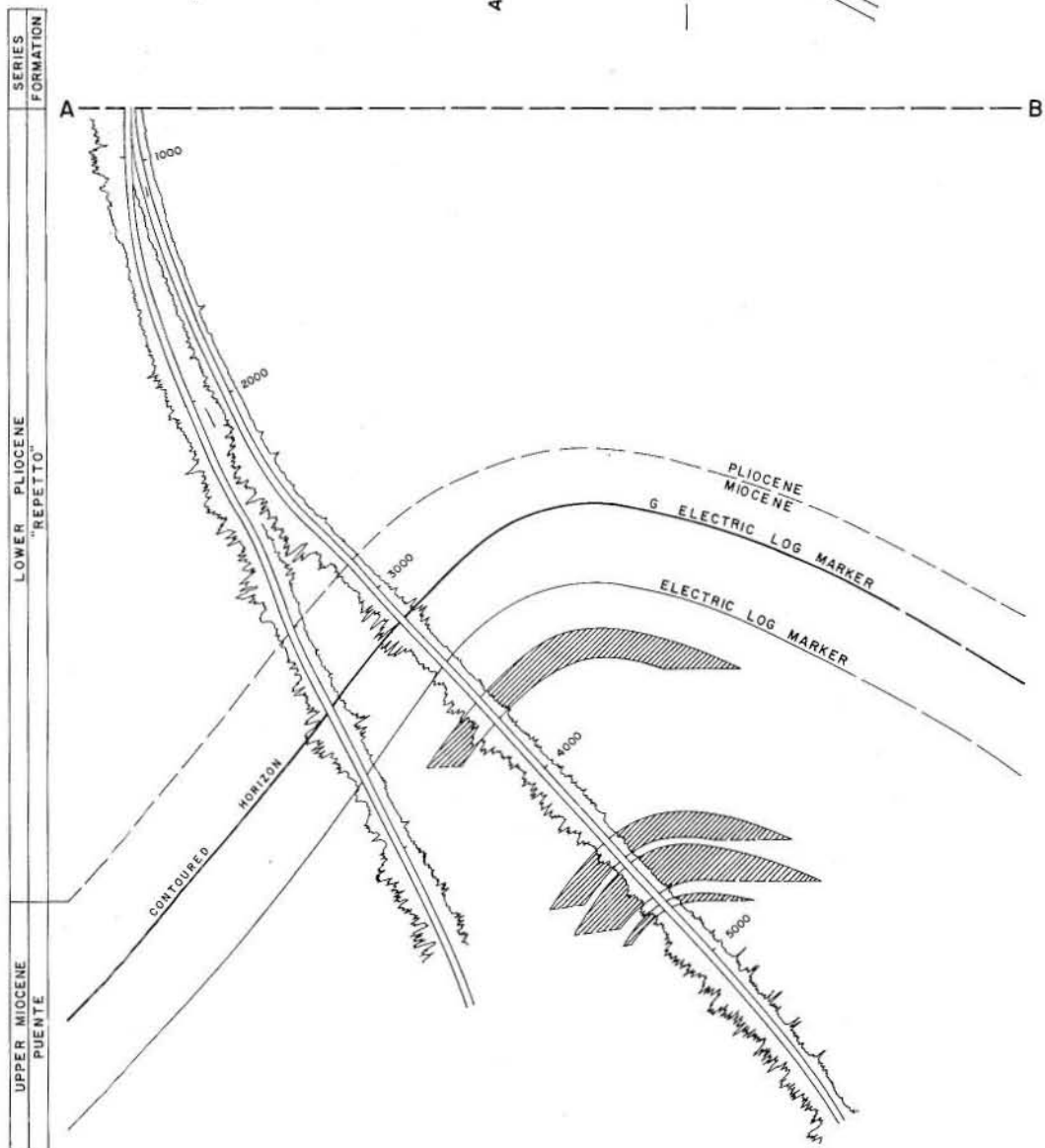
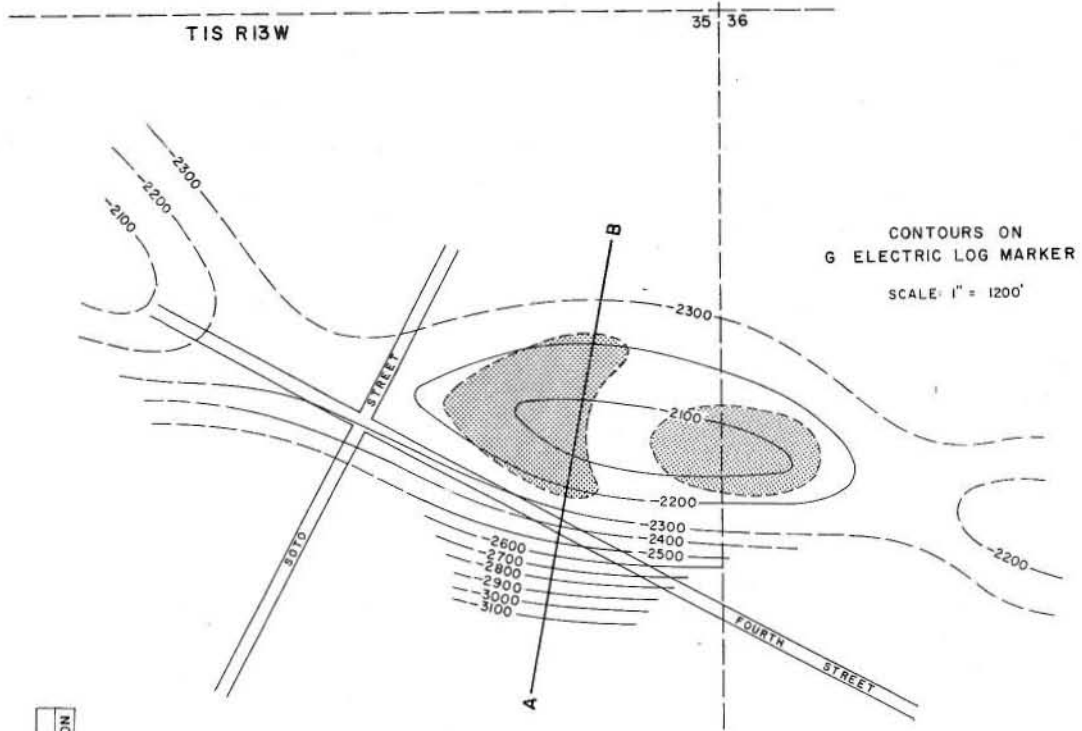
CURRENT CASING PROGRAM: 12 3/4" cem. 150; 7" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

REMARKS: Field abandoned in 1971.

REFERENCES: Zulberti, J.L., Bouquet Canyon Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 53, No. 2--Part 2 (1967).

BOYLE HEIGHTS OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

BOYLE HEIGHTS OIL FIELD (Abandoned)

Los Angeles County

LOCATION: 2 miles southeast of downtown Los Angeles

TYPE OF TRAP: Anticline

ELEVATION: 300

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Puente sands	Atlantic Richfield Co. "Industrial Community" 1-1	Richfield Oil Corp. "Boyle Industrial" 1	35 1S 13W	SB	200	0	Dec 1955

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Atlantic Richfield Co. "Evergreen" 1	Richfield Oil Corp. "Industrial Community" 1A-1	Nov 1957	36 1S 13W	SB	7,110	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Puente sands	2,500	400	late Miocene	Puente	26	1,430	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
6,793	1,697	6,576	30	3	273,308	113,374	42,311	1957	4	3	30

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 200

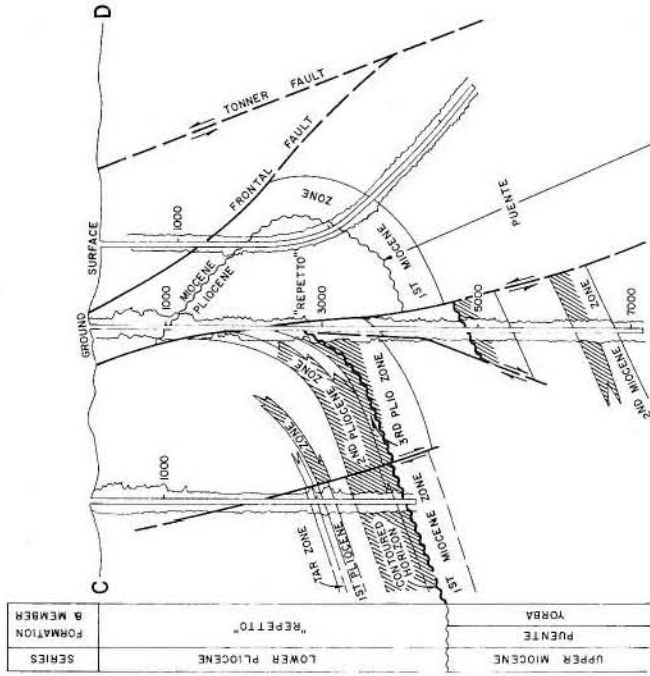
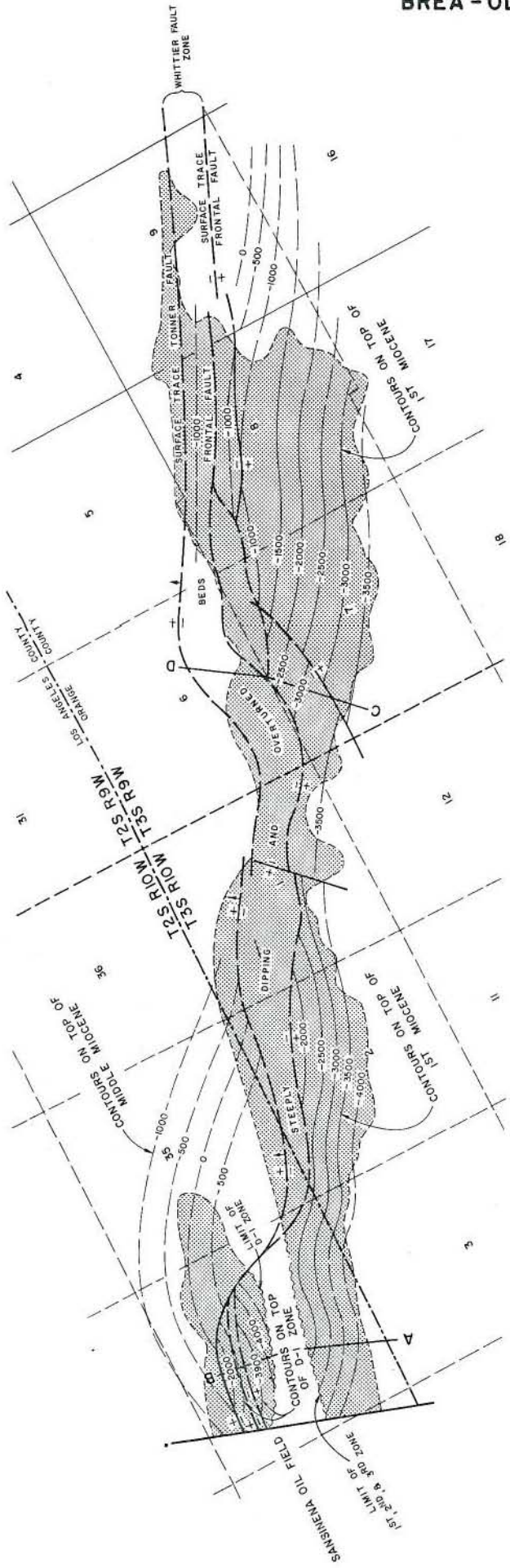
CURRENT CASING PROGRAM: 13 3/8" cem. 600; 8 5/8" cem. above zone; 6 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water shipped with produced oil by tank truck.

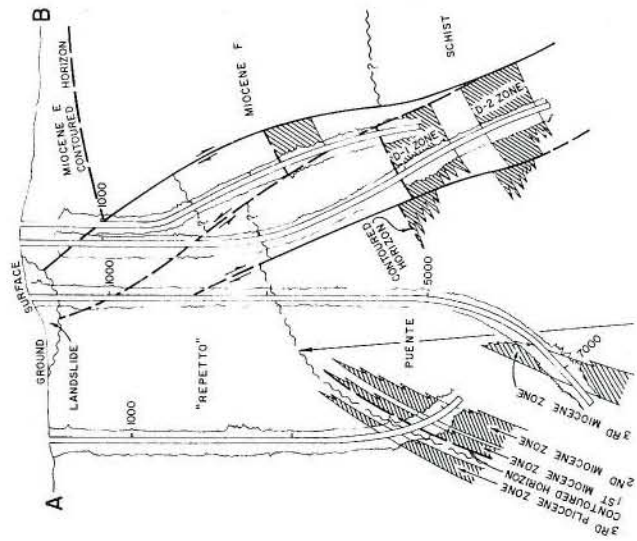
REMARKS: All wells drilled from single drillsite. Last production was in September 1973. Field abandoned in December 1975.

REFERENCES: A.A.P.G. - S.E.P.M. Guidebook, 1958 Joint Annual Meeting, Los Angeles, Calif.

BREA-OLINDA OIL FIELD



SERIES	FORMATION	B MEMBER
UPPER MIOCENE	PUENTE	YORBA
LOWER PLIOCENE	"REPETTO"	



CALIFORNIA DIVISION OF OIL AND GAS

BREA-OLINDA OIL FIELD

Los Angeles and Orange Counties

LOCATION: 25 miles southeast of downtown Los Angeles

TYPE OF TRAP: Faulted homocline; faulted nose in Puente Hills area

ELEVATION: 450 - 1,400

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
1st, 2nd, 3rd Pliocene	Operator and well number unknown	Same as present	8 3S 9W	SB	N.A.	N.A.	1897
1st, 2nd, 3rd Miocene	Same as above	Same as above	N.A.		N.A.	N.A.	N.A.
D-1, D-2	Shell Oil Co. "Puente" D-1	Same as above	34 2S 10W	SB	54	110	Jan 1954
E, F	Operator and well number unknown	Puente Oil Co. and Rowland & Lacy well number unknown	35 2S 10W	SB	15	N.A.	1880

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Shell Oil Co. "Menchecho" 36	Same	Aug 1969	1 3S 10W	SB	12,012	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
1st, 2nd, 3rd Pliocene	1,800	350	early Pliocene	"Repetto"	15 - 18	N.A.	II
1st, 2nd, 3rd Miocene	4,000	770	late Miocene	Puente	23 - 31	900	III
D-1, D-2	5,000	700	late Miocene	Puente	28	1,000	III
E, F	1,200	300	Miocene	Puente-Topanga	18 - 28	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
3,683,580	3,600,000	5,115,578	2,250	717	341,730,156	416,011,015	8,540,338	1953	1,364+	1,255+	2,430

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1964	15,893,414	11
Cyclic steam	1964	2,346,062	112
Steam flood	1963	4,897,158	9
Fire flood	1972	N.A.	3

SPACING ACT: Does not apply

BASE OF FRESH WATER: 0 - 1,300

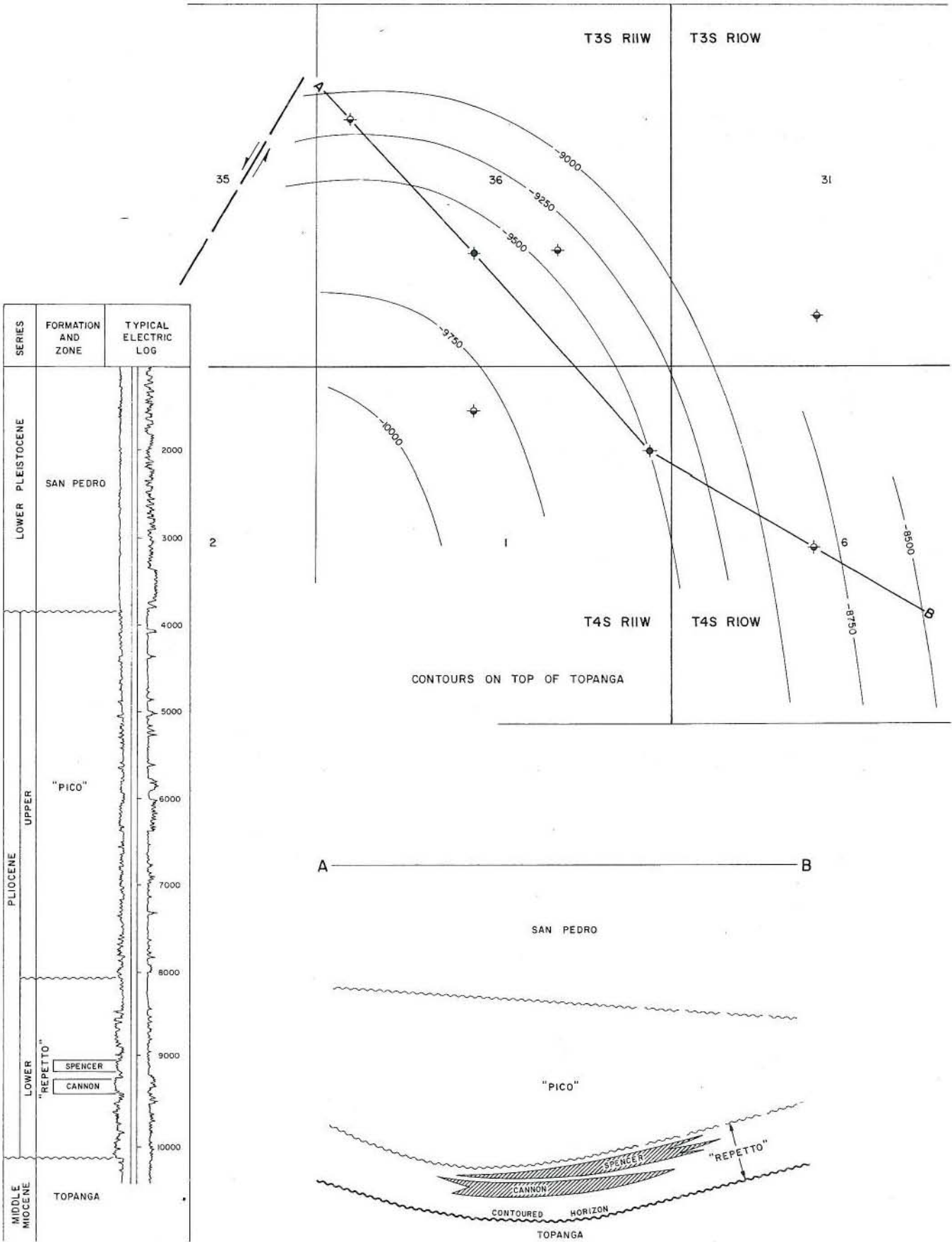
CURRENT CASING PROGRAM: 11 3/4" cem. 600; 7" combination string cemented above zone and across base of fresh water.

METHOD OF WASTE DISPOSAL: Some waste water is disposed of in two disposal wells. A portion of it is used in two Miocene water-flood projects, and the remainder is disposed of in facilities of the Fullerton Waste Water Disposal Company.

REMARKS:

REFERENCES: Gaede, V.F., R.V. Rothermel, and L.H. Axtell, Brea-Olinda Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 53, No. 2, Part 2 (1967).

EAST BUENA PARK OIL FIELD (Abandoned)



CALIFORNIA DIVISION OF OIL AND GAS

BUENA PARK, EAST, OIL FIELD (Abandoned)

Orange County

LOCATION: 4 miles northwest of Anaheim

TYPE OF TRAP: Sand pinchout on syncline

ELEVATION: 70

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Spencer Cannon	Texaco Inc. "Spencer" 1	Same as present	1 4S 11W	SB	97	0	Mar 1942
	Texaco Inc. "Buena Park 4-E" 1	The Texas Co. "Buena Park 4-E" 1	36 3S 11W	SB	402	50	Aug 1942

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Texaco Inc. "Stern" 1	Same	Oct 1944	1 4S 11W	SB	10,431	Topanga	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Spencer Cannon	8,900	32	early Pliocene	"Repetto"	21	800	IV
	9,240	75	early Pliocene	"Repetto"	22	1,000	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	196,860	19,590	48,237	1943	4	2	20

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 3,100

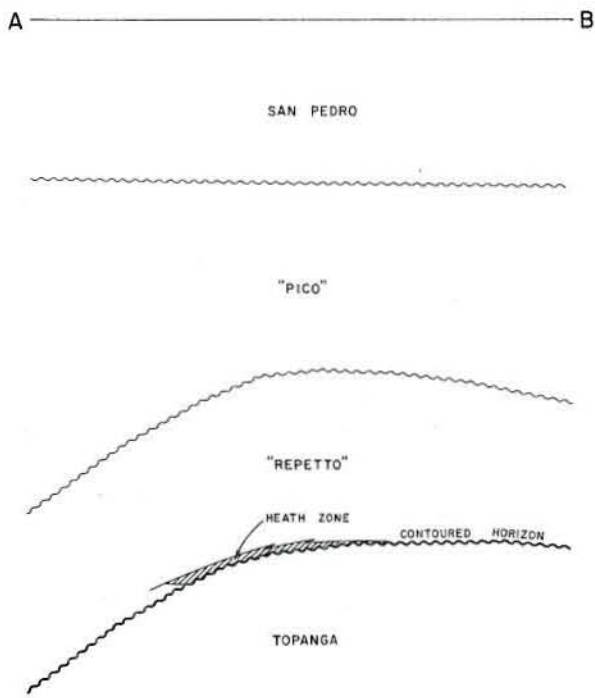
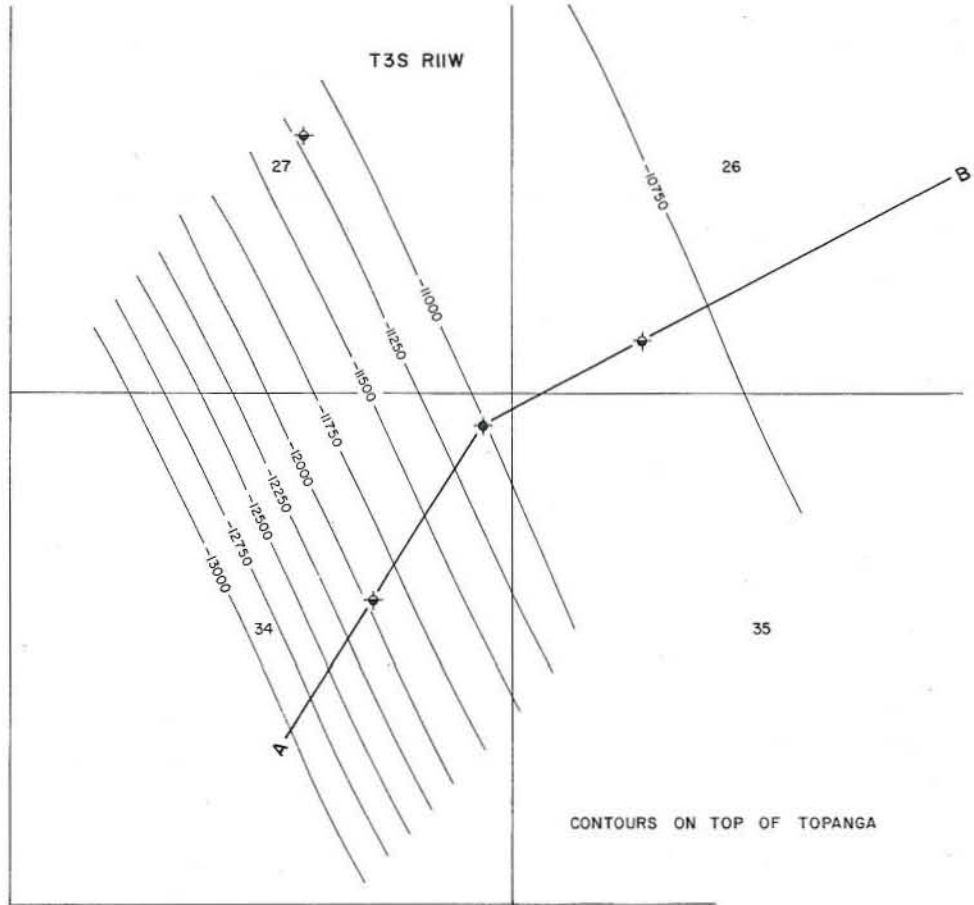
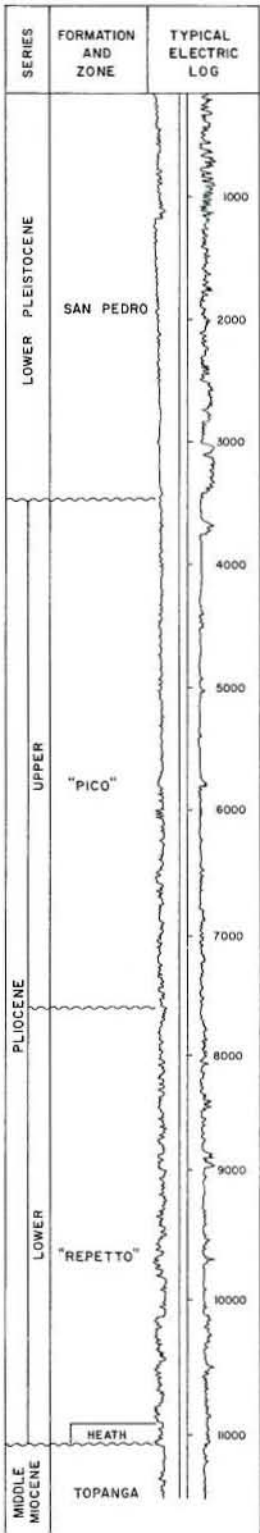
CURRENT CASING PROGRAM: 11 3/4" cem. 1,000; 5 1/2" cem. above zone; 4" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Last production July 1952. Field abandoned in 1954.

REFERENCES:

WEST BUENA PARK OIL FIELD (Abandoned)



CALIFORNIA DIVISION OF OIL AND GAS

BUENA PARK, WEST, OIL FIELD (Abandoned)

Orange County

LOCATION: 6 miles northwest of Anaheim

TYPE OF TRAP: Stratigraphic trap on monocline

ELEVATION: 70

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Heath	Mobil Oil Corp. "Heath" 1	General Petroleum Corp. "Heath" 1	34 3S 11W	SB	135	37	Sep 1944

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Mobil Oil Corp. "Heath" 1	General Petroleum Corp. "Heath" 1	Jan 1944	34 3S 11W	SB	11,422	Topanga	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Heath	11,000	200	early Pliocene	"Repetto"	28	N.A.	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	49,965	16,585	16,462	1945	2	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 3,100

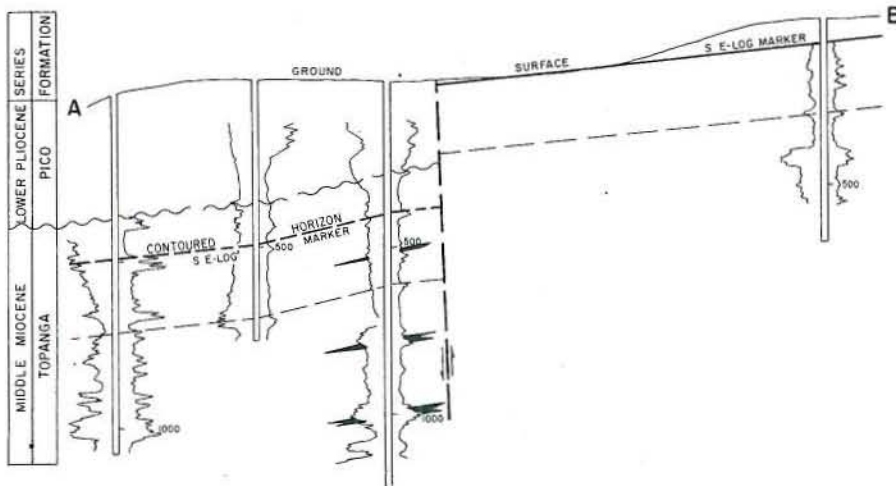
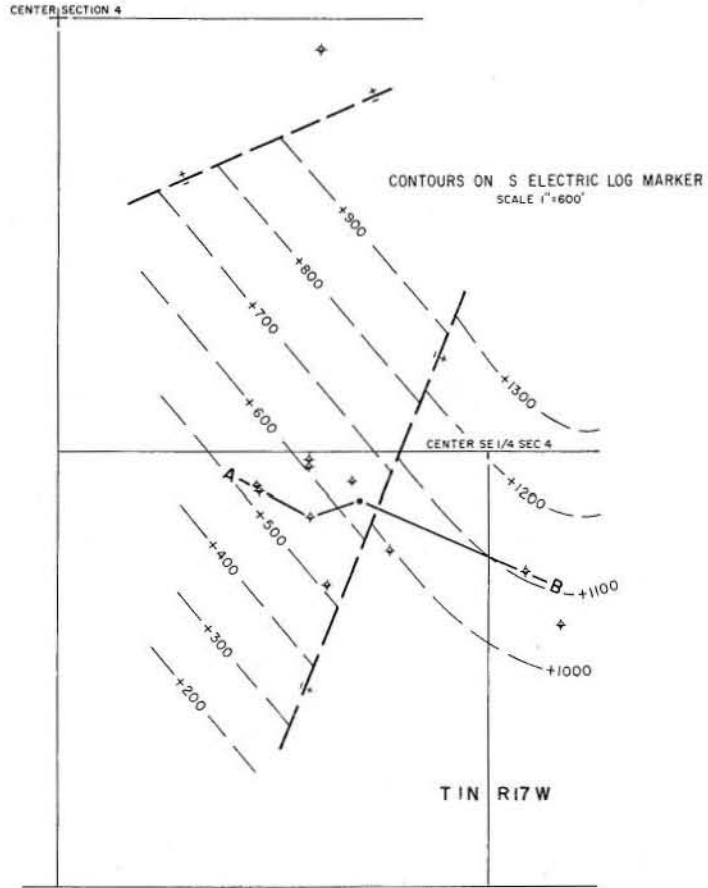
CURRENT CASING PROGRAM: 11 3/4" cem. 1,000; 5 1/2" cem. above zone; 4" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Last production was in January 1950; field abandoned.

REFERENCES:

CANOGA PARK OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

CANOGA PARK OIL FIELD

Los Angeles County

LOCATION: 12 miles west of Van Nuys

TYPE OF TRAP: Lenticular sands on faulted homocline

ELEVATION: 1,000 - 1,300

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Oil sand	Knapp Bros. "Frank Knapp" 1	W. J. McCarthy "Frank Knapp" 1	4 1N 17W	SB	1	0	Apr 1952

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
W. J. McCarthy-Wally Dennis "Knapp" 2	Same	May 1952	4 1N 17W	SB	1,530	Topanga	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Oil sand	750	65	middle Miocene	Topanga	38	N.A.	I

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	10	0	1,224	0	278	1953	10	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 270

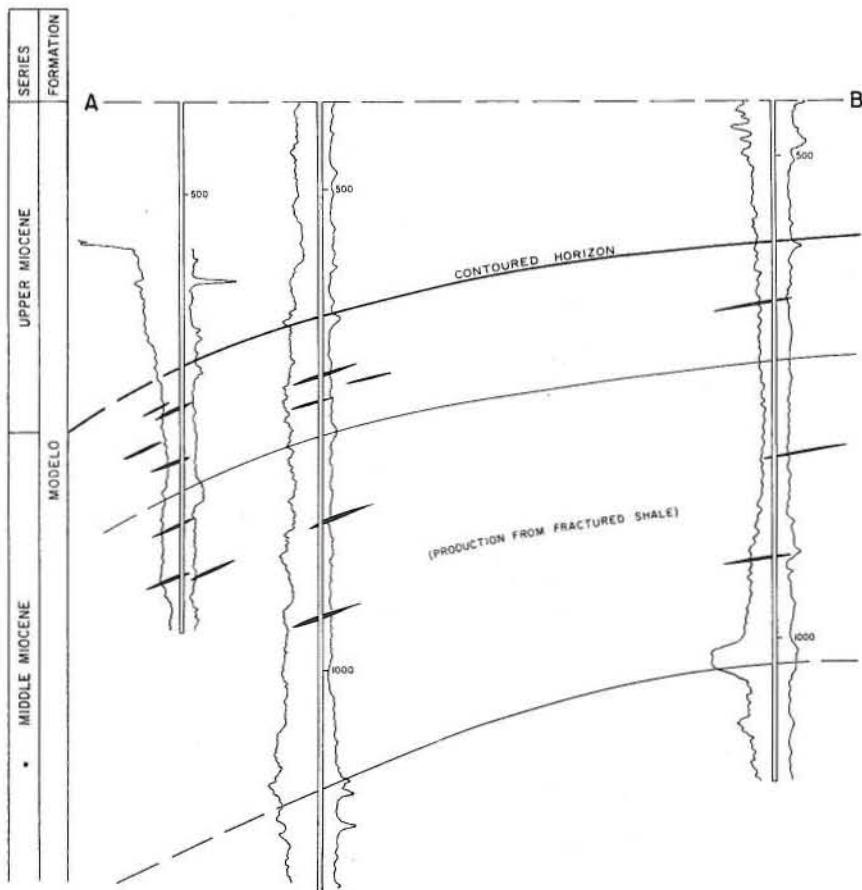
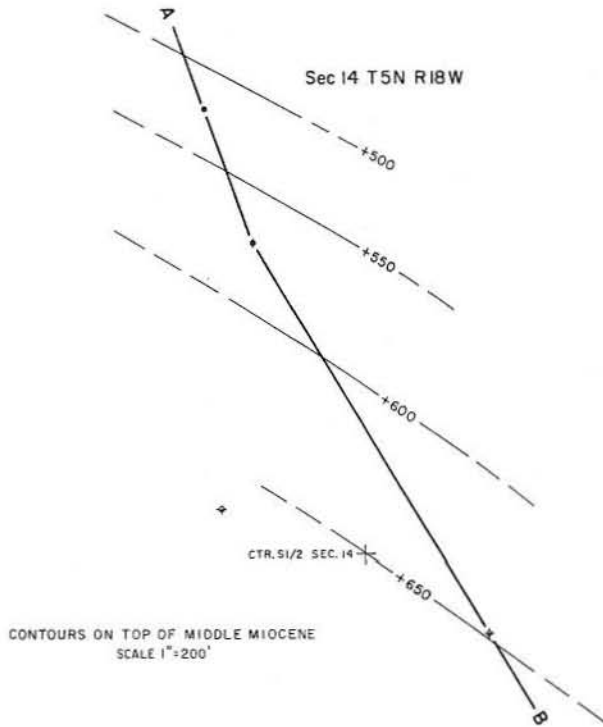
CURRENT CASING PROGRAM: 11 3/4" cem. 100; 7" cem. through zone and across base of fresh water.

METHOD OF WASTE DISPOSAL: See remarks.

REMARKS: The one producing well has been idle since 1963.

REFERENCES: Rothermel, R.V., Canoga Park Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 50, No. 2 (1964).

CANTON CREEK OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

CANTON CREEK OIL FIELD

Los Angeles County

LOCATION: 35 miles northeast of Ventura

TYPE OF TRAP: Fractured shale on a homocline

ELEVATION: 1,200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	Lacal Oil Corp. "Engman" 14-2	Harold C. Morton & H. S. Kohlbush "Engman" 1	14 5N 18W	SB	29	40	Nov 1957

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Lacal Oil Corp. "Engman" 14-2	Harold C. Morton & H. S. Kohlbush "Engman" 1	Oct 1957	14 5N 18W	SB	2,775	Vaqueros	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
(Unnamed)	900	300	middle Miocene	Modelo	30	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	17,972	0	5,262	1958	6	3	30

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

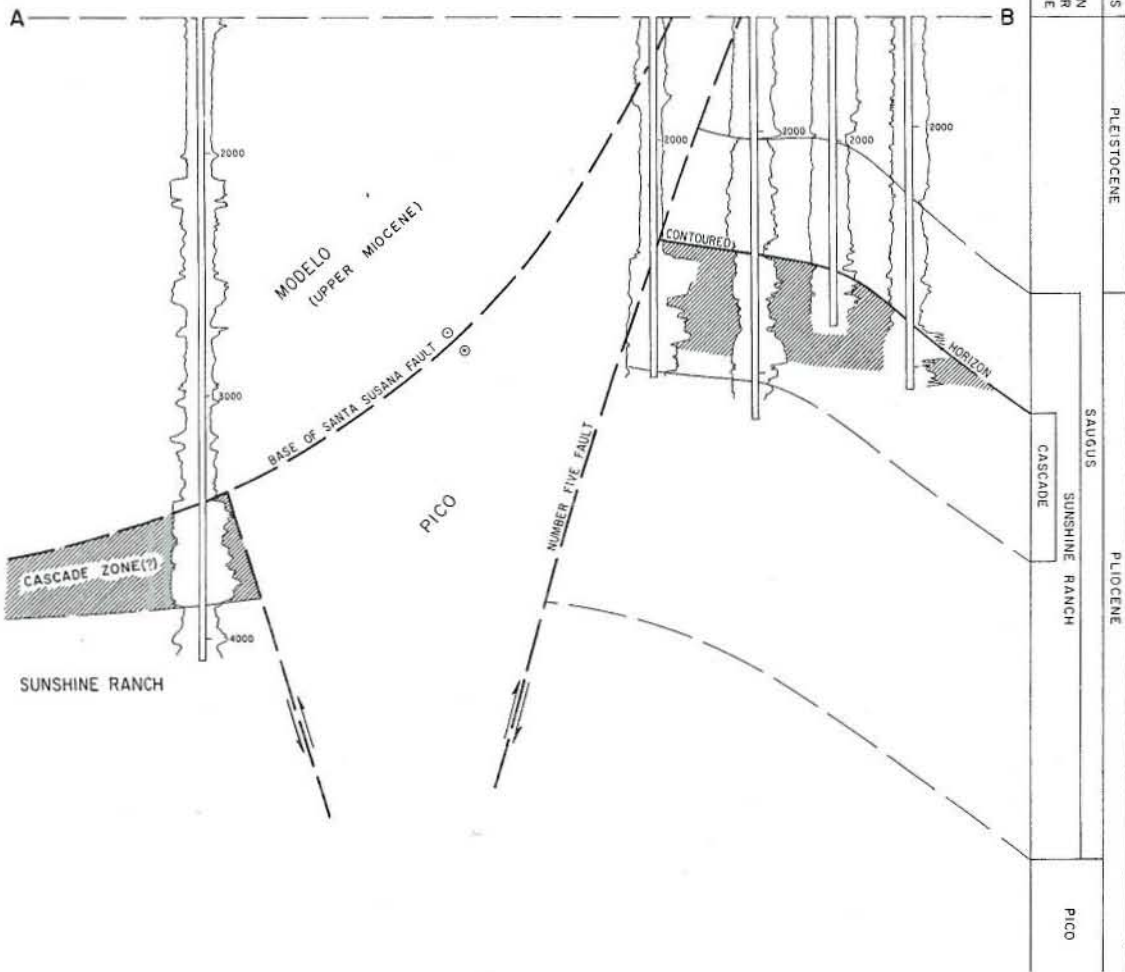
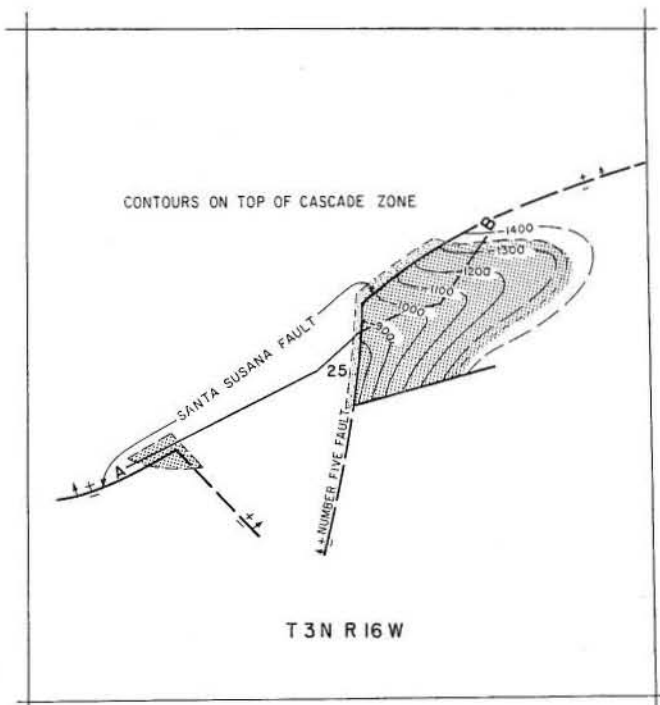
CURRENT CASING PROGRAM: 11 3/4" cem. 350; 8 5/8" cem. through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: The field was abandoned in 1961, then reactivated in 1964. There has been no production from the field since 1970.

REFERENCES: Ledingham, G.W., Canton Creek Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 54, No. 2--Part 2 (1968).

CASCADE OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

CASCADE OIL FIELD
Los Angeles County

LOCATION: 24 miles northwest of Los Angeles

TYPE OF TRAP: Faulted anticlinal noses

ELEVATION: 1,525

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Cascade	McCulloch Oil Corp. of Calif. "Mission-Visco" 1	C.W. Teater "Teater-Wadley" 1	25 3N 16W	SB	150	100	Nov 1954

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
McCulloch Oil Corp. "Mission-O'Melveny" 12	Same	Feb 1963	35 3N 16W	SB	10,026	Modelo	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Cascade	2,550	350	Pliocene	Saugus	23	5	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
33,740	0	19,432	40	6	1,041,770	60,710	143,155	1956	14	9	50

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1970	75,130	1

SPACING ACT: Applies

BASE OF FRESH WATER: 1,000

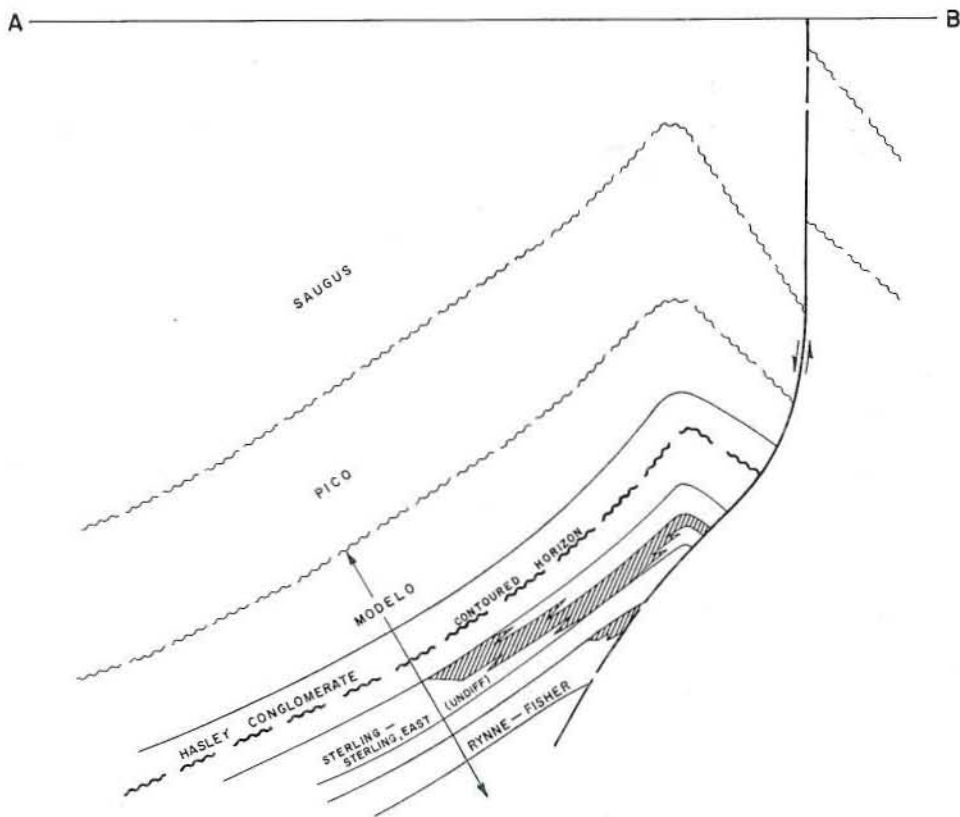
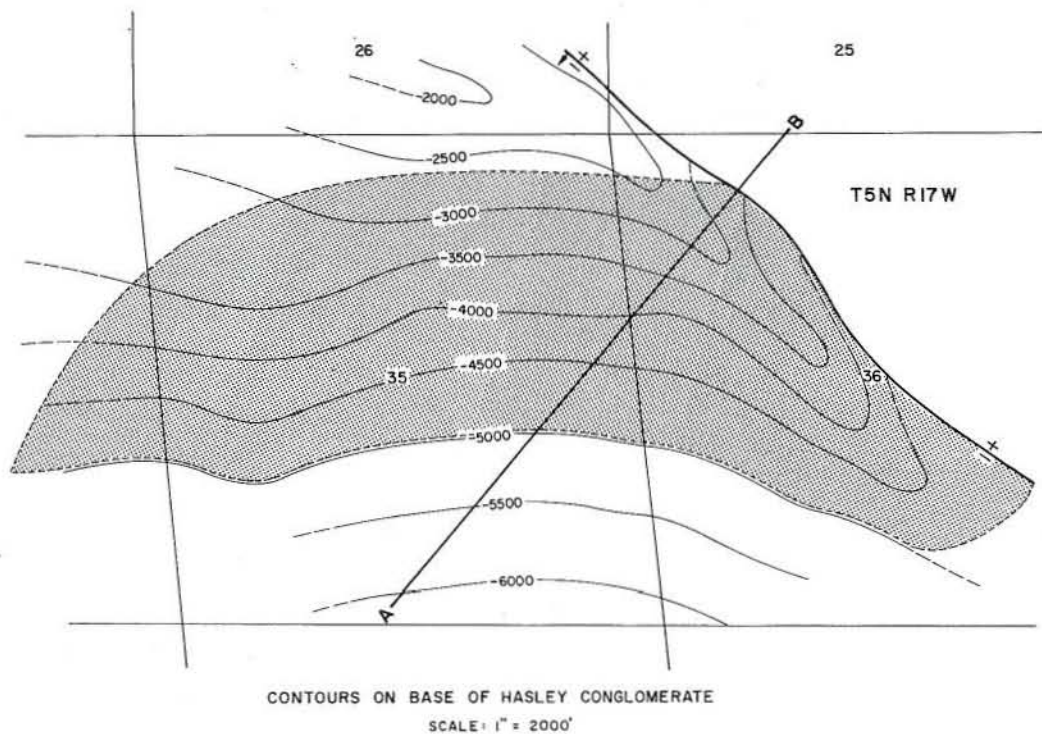
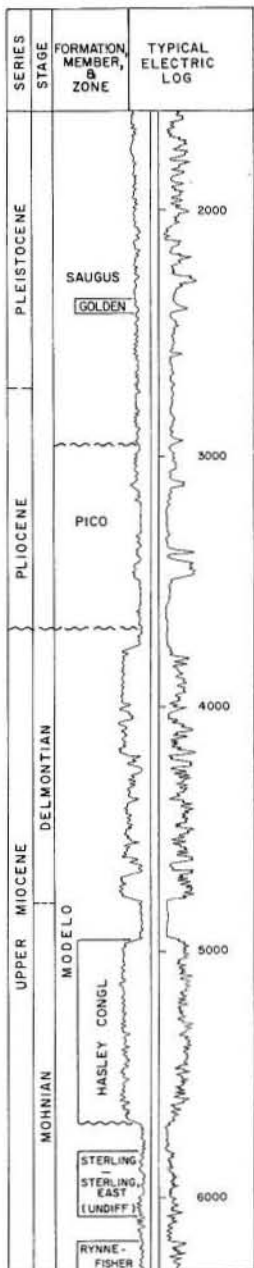
CURRENT CASING PROGRAM: 11 3/4" cem. 200; 7" combination string landed through zone and cemented through ports above the zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water is used in water-flood operations.

REMARKS: Field name derived from a nearby aerating spillway of the Los Angeles aqueduct.

REFERENCES: Ingram, W.L., Cascade Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 49, No. 1 (1963).
Roth, G.H., Cascade Oil Field, A Guide to the Geology and Oil Fields of the Los Angeles and Ventura Regions: Pacific Section Am. Assoc. Petroleum Geologists, p. 166-171 (1958).

CASTAIC HILLS OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

CASTAIC HILLS OIL FIELD

Los Angeles County

LOCATION: 37 miles northwest of Los Angeles

TYPE OF TRAP: Faulted anticlinal nose; sand pinchouts and other stratigraphic variations.

ELEVATION: 1,100 - 1,800

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & W	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Golden Sterling	Standard Oil Co. of Calif. "Villa" 36	Same as present Standard Oil Co. of Calif. "Standard, Trousdale & Sterling, Villa" 45	35 5N 17W	SB	22	0	Jan 1955
	Atlantic Richfield Co. "CHU" 45-35		35 5N 17W	SB	396	185	Mar 1953
Sterling, East Rynne-Fisher	Atlantic Richfield Co. "CHU" 1-35	Ted Sterling, Operator "Rynne-Fisher" 1 Richfield Oil Corp. "Rynne-Fisher" 82-35	35 5N 17W	SB	233	138	Sep 1951
	Atlantic Richfield Co. "Rynne-Fisher" 82-35		35 5N 17W	SB	145	84	Sep 1954

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Atlantic Richfield Co. "CHU" 75-35	Standard Oil Co. of Calif. "Golden" 75-2	Jul 1952	35 5N 17W	SB	8,988	Modelo	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (lb/cu ft)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Golden	4,000	40	Pleistocene	Saugus	9	N.A.	III
Sterling	5,500	150	late Miocene	Modelo	32	1,190	III
Sterling, East	5,900	80	late Miocene	Modelo	33	1,200	III
Rynne-Fisher	6,000	100	late Miocene	Modelo	33	1,200	III

PRODUCTION DATA (Jan. 1, 1974)

Oil (bbl)	1973 Production		1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
46,630	97,077	156,746	400	27	8,243,587	17,413,532	1,512,700	1953	79	63	520

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1964	7,213,575	11

SPACING ACT: Applies

BASE OF FRESH WATER: 300 - 800

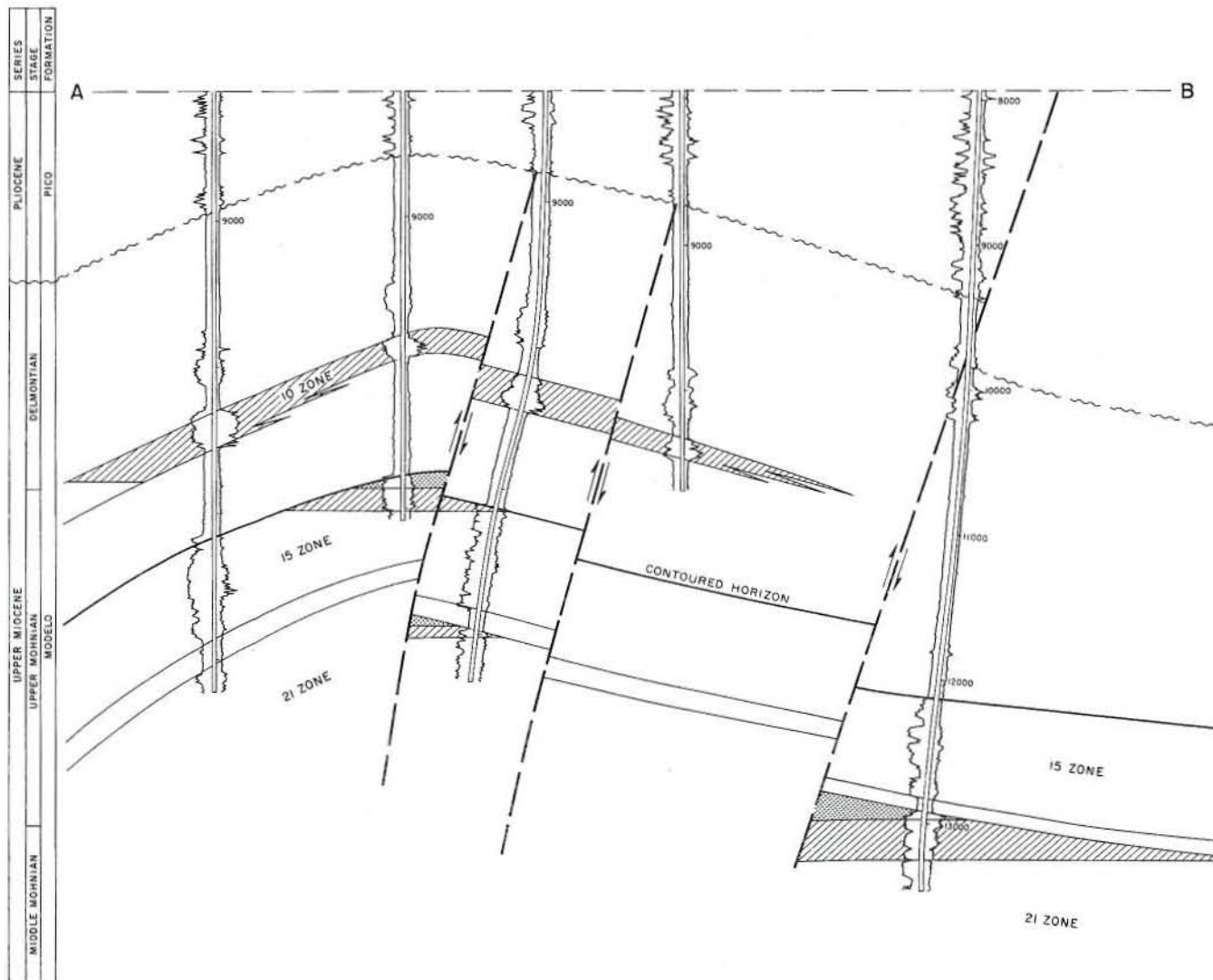
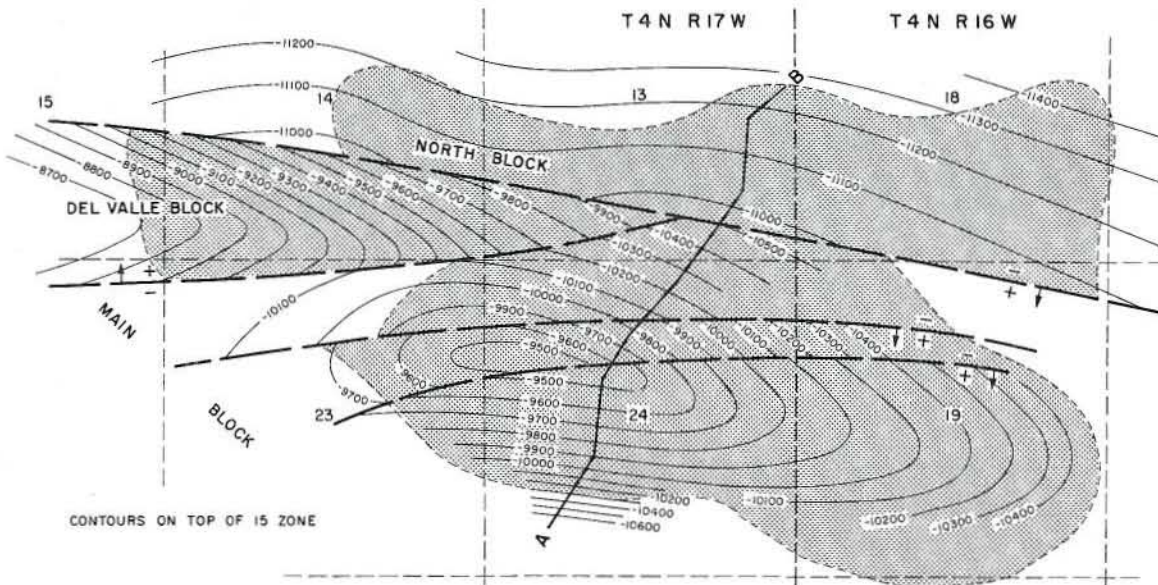
CURRENT CASING PROGRAM: 11 3/4" cem. 300; 8 5/8" or 7" cem. above zone and across base of fresh-water sands; 6 5/8" or 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is used in water-flood operations.

REMARKS: Castaic Hills was separated from Honor Rancho field and classified as a separate field on July 1, 1953. A cyclic-steam injection project was started in 1966 and was discontinued the same year, after the injection of 23,023 equivalent bbls. of water.

REFERENCES: Matthews, J.F., Jr., The Honor Rancho Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 39, No. 1 (1953).

CASTAIC JUNCTION OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

CASTAIC JUNCTION OIL FIELD

Los Angeles County

LOCATION: 33 miles northwest of Los Angeles

TYPE OF TRAP: Faulted anticline

ELEVATION: 950 - 1,500

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
10	Exxon Corp. "Newhall Land & Farming Co." 3	Humble Oil & Refining Co. "Newhall Land & Farming Co." 3	24 4N 17W	SB	280	140	Dec 1950
15	Exxon Corp. "Newhall Land & Farming Co." 8	Humble Oil & Refining Co. "Newhall Land & Farming Co." 8	24 4N 17W	SB	581	640	Jan 1952
21	Exxon Corp. "Newhall Land & Farming Co." 1	Humble Oil & Refining Co. "Newhall Land & Farming Co." 1	23 4N 17W	SB	156	685	Jan 1950

Remarks: For reservoir performance evaluations, the 10 zone is divided into two fault-block pools: 10-A and 10-B. Similarly, the 21 zone is broken into three fault block pools: 21-North, 21-Main, and 21-Del Valle. The 15 zone is not subdivided.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Exxon Corp. "Newhall Land & Farming Co." 64	Humble Oil & Refining Co. "Newhall Land & Farming Co." 64	Jun 1959	13 4N 17W	SB	14,426	Modelo	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
10	8,400	200	late Miocene	Modelo	18 - 22	800	IV
15	9,400	220	late Miocene	Modelo	27 - 31	1,400	IV
21	10,200	300	late Miocene	Modelo	28 - 38	1,000	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
667,810	2,718,958	490,194	1,370	28	26,876,336	43,512,416	1,871,399	1960	81	74	1,640

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1958	22,090,015	6

SPACING ACT: Applies

BASE OF FRESH WATER: 400

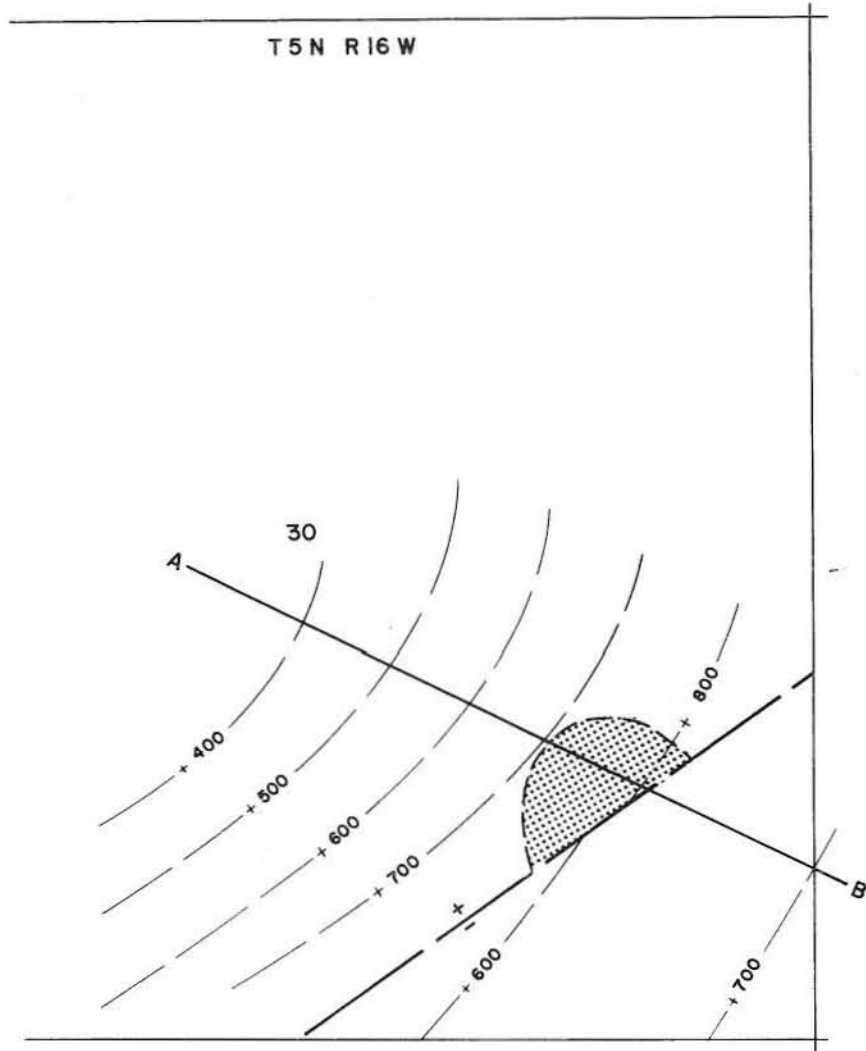
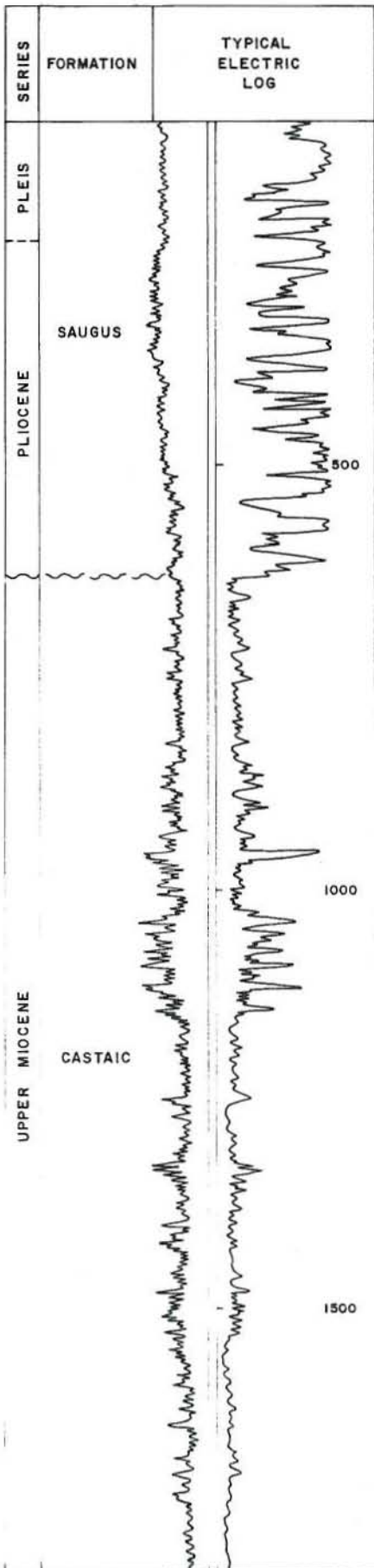
CURRENT CASING PROGRAM: 10 3/4" cem. 800; 7" cem. through zone.

METHOD OF WASTE DISPOSAL: All waste water is injected into water-flood wells.

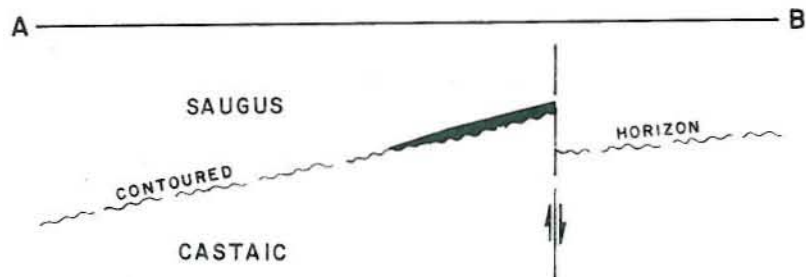
REMARKS: Gas injection for pressure maintenance was started in 1954 and was terminated in 1971; 91,676,000 Mcf. of gas was injected into three wells.

REFERENCES: Cordova, S., Castaic Junction Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 52, No. 2, Part 2 (1966). Gaede, V.F., Castaic Junction Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 39, No. 2 (1953).

CHARLIE CANYON OIL FIELD (Abandoned)



CONTOURS ON TOP OF CASTAIC
SCALE 1" = 1000'



CALIFORNIA DIVISION OF OIL AND GAS

CHARLIE CANYON (Abandoned)

Los Angeles County

LOCATION: 28 miles northwest of Los Angeles

TYPE OF TRAP: Sand lens on faulted homocline

ELEVATION: 1,430

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	Philip L. Pike "Howell" 2	Vagabond Oil "Howell" 2	30 SN 16W	SB	5	0	Jun 1956

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Dutch Oil Co. "Howell" 1	Vagabond Oil "Howell" 1	Jan 1958	30 SN 16W	SB	1,830	Castaic	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
(Unnamed)	600	20	Pliocene	Saugus	14	N.A.	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	195	0	195	1958	3	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 600

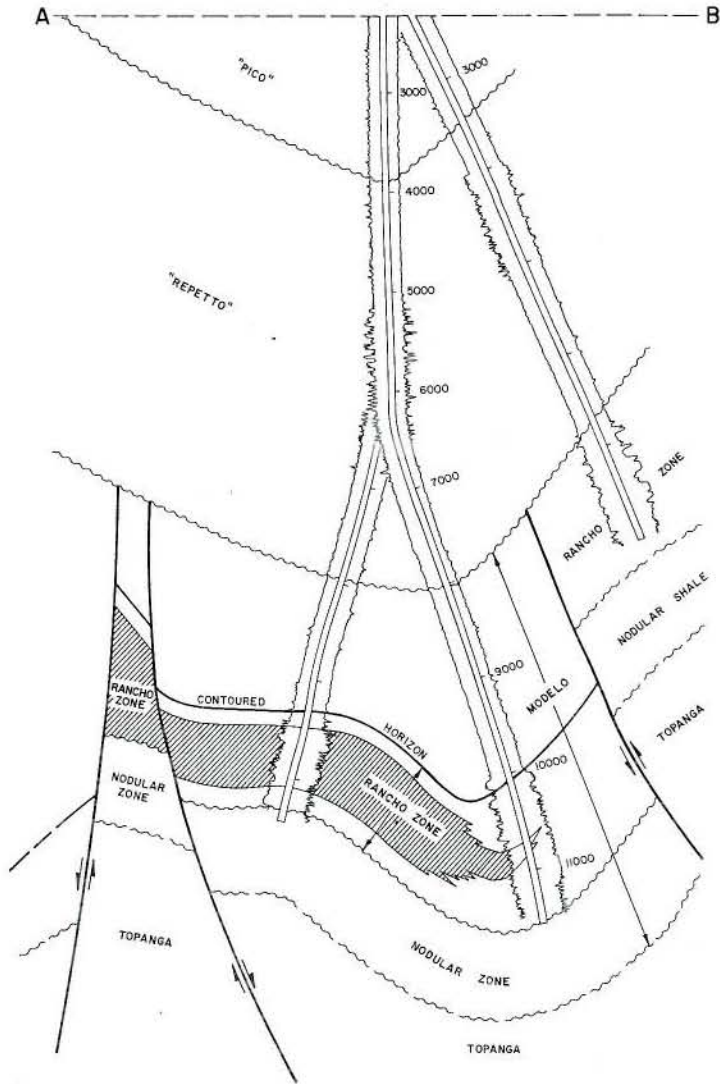
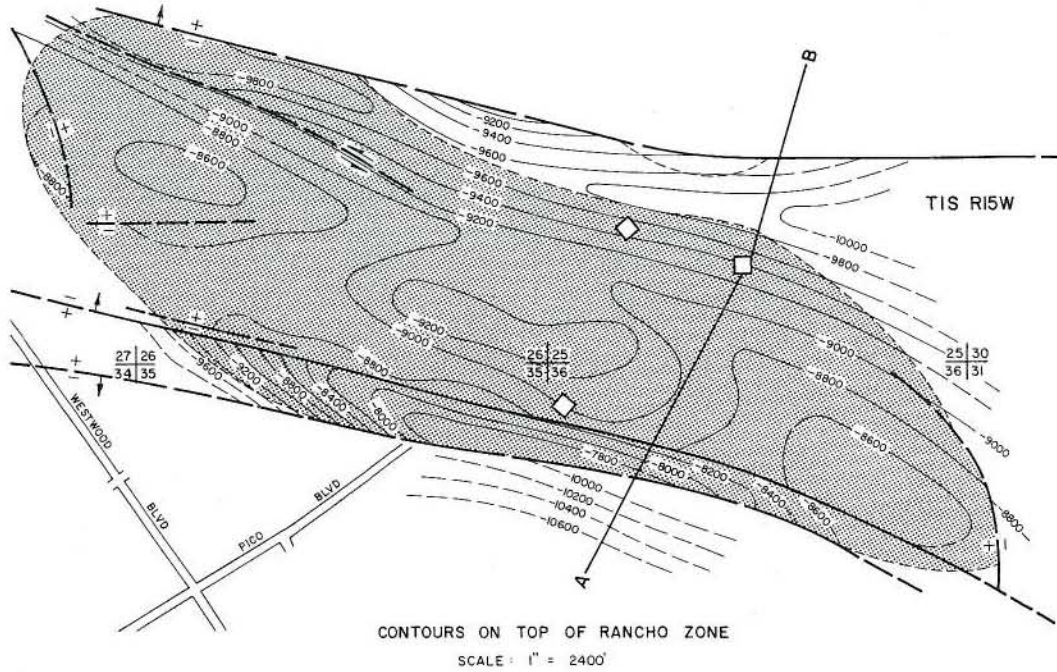
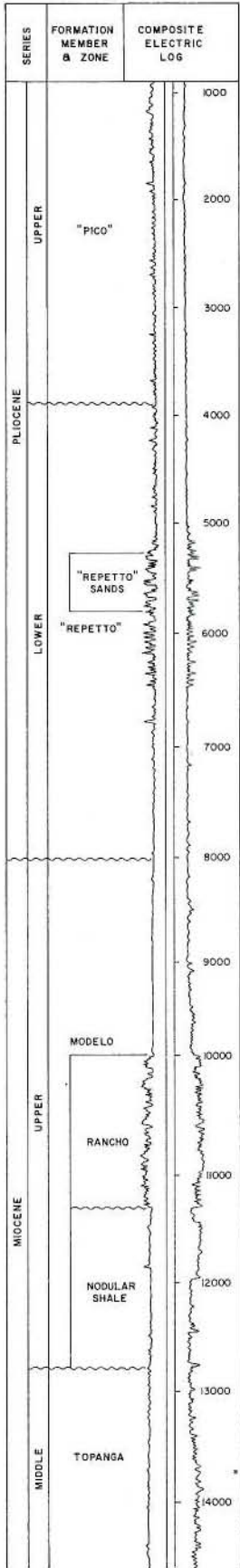
CURRENT CASING PROGRAM: 7" cemented through zone and to the surface.

METHOD OF WASTE DISPOSAL:

REMARKS: Field abandoned in June 1963.

REFERENCES:

CHEVIOT HILLS OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

CHEVIOT HILLS OIL FIELD

Los Angeles County

LOCATION: 10 miles west of downtown Los Angeles

TYPE OF TRAP: Faulted anticline and faulted syncline

ELEVATION: 175 - 300

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
"Repetto" sands Rancho	Atlantic Richfield Co. "ARCO U-47" 3	Signal Oil and Gas Co. "Signal-Richfield-U-49 Aladdin" 4	25 1S 15W	SB	114	0	Mar 1964
	Atlantic Richfield Co. "Rancho Park" 1	Signal Oil and Gas Co. "Signal-Richfield-Rancho" 1	36 1S 15W	SB	425	3,200	Sep 1958

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Atlantic Richfield Co. "Rancho Park" 1	Signal Oil and Gas Co. "Signal-Richfield-Rancho" 1	May 1958	36 1S 15W	SB	12,688	Topanga	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
"Repetto" sands Rancho	4,800	250	early Pliocene	"Repetto"	22	1,500	IV
	8,800	550	late Miocene	Modelo	27 - 60	880	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
449,292	1,287,284	155,974	810	36	22,499,797	133,503,377	3,739,835	1963	77	78	820

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
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SPACING ACT: Applies

BASE OF FRESH WATER: 300 - 700

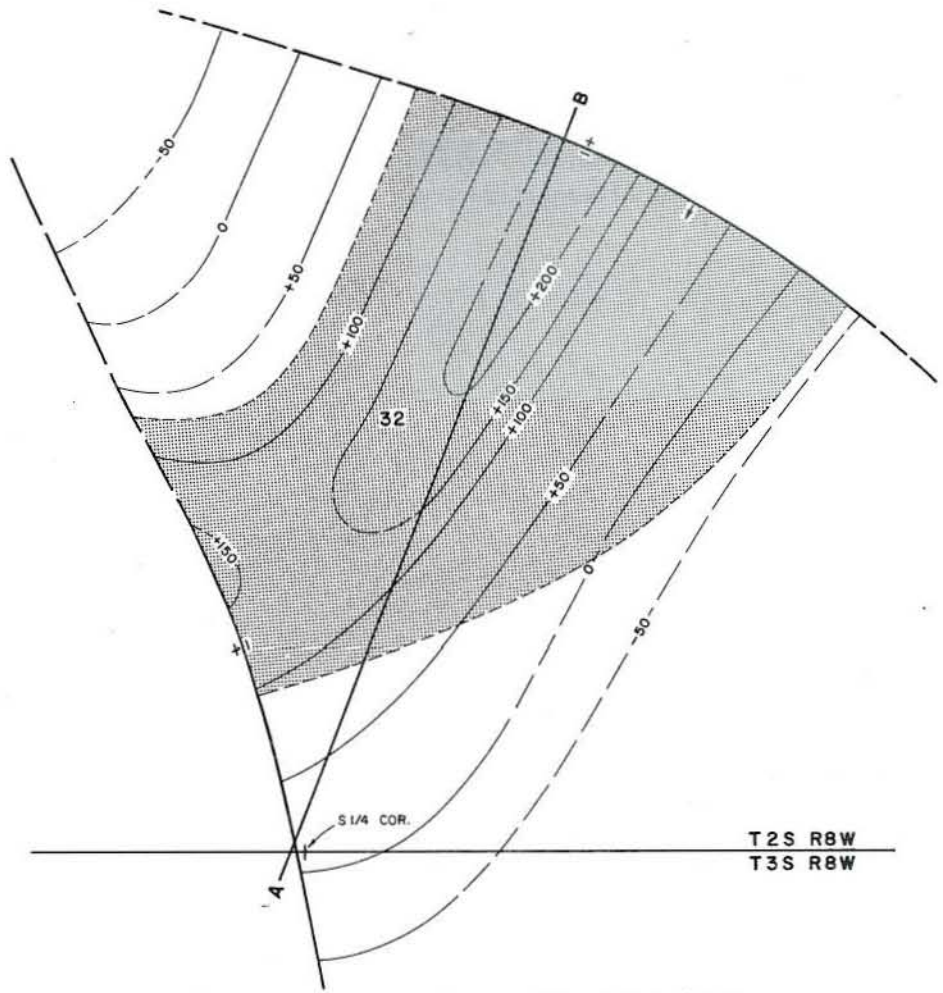
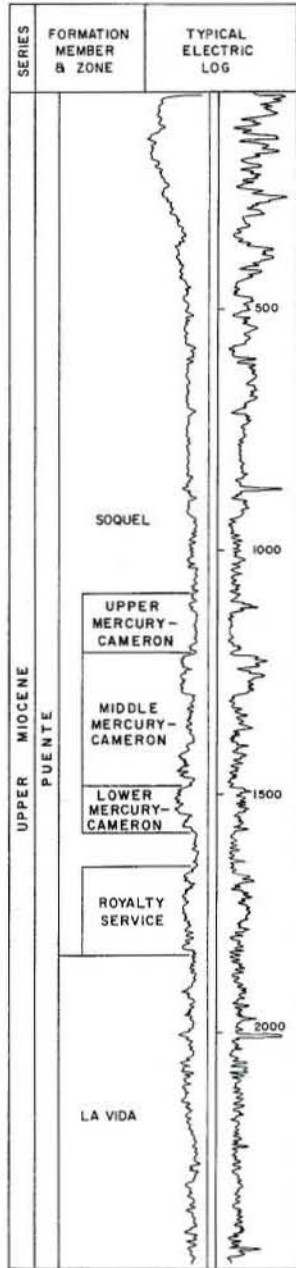
CURRENT CASING PROGRAM: 11 3/4" or 13 3/8" cem. 1,000; 7" cem. through zone or 7" cem. above zone and 5" liner landed through zone.

METHOD OF WASTE DISPOSAL: Some waste water is injected into Rancho zone; the rest is disposed of into the City sewage system.

REMARKS: All wells drilled from urban drillsites.

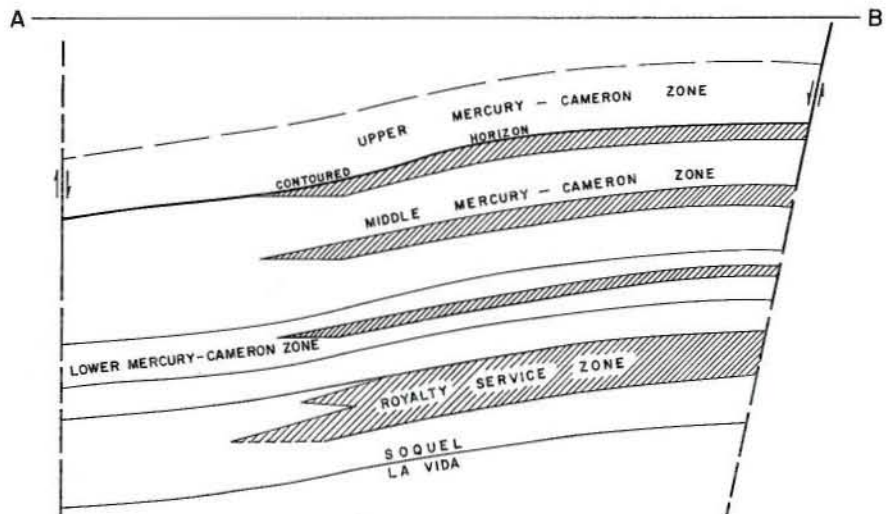
REFERENCES: Crowder, R.E., Cheviot Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 54, No. 1 (1968).

CHINO-SOQUEL OIL FIELD



CONTOURS ON TOP OF MIDDLE MERCURY-CAMERON ZONE

SCALE: 1" = 400'



CALIFORNIA DIVISION OF OIL AND GAS

CHINO-SOQUEL OIL FIELD
San Bernardino County

LOCATION: 5 miles south of Chino

TYPE OF TRAP: Faulted anticline

ELEVATION: 1,350

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Upper Mercury - Cameron	Chino Land and Water Co. No. 3	Jennings Bros. No. 3	32 2S 8W	SB	15	N.A.	1902
Middle Mercury - Cameron	Pedersen & Abacherli "Gas Merc." 1	Mercury Oil Co. No. 1	32 2S 8W	SB	6	750	Jan 1949
Lower Mercury - Cameron	Pedersen & Abacherli "Bannon" M-2	L. H. Cameron "M"-2	32 2S 8W	SB	80	N.A.	Jan 1951
Royalty Service	Pedersen & Abacherli "Roy. Ser." 32-1	Royalty Service Corp., Ltd. No. 32-1	32 2S 8W	SB	11	N.A.	Apr 1950

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Pedersen & Abacherli "Roy. Ser." M-8	L. H. Cameron "M"-8	Oct 1951	32 2S 8W	SB	2,463	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Upper Mercury - Cameron	1,100	80	late Miocene	Puente	24	1,000	I
Middle Mercury - Cameron	1,300	70	late Miocene	Puente	18 - 23	1,000	I
Lower Mercury - Cameron	1,700	50	late Miocene	Puente	18 - 23	1,000	II
Royalty Service	1,800	120	late Miocene	Puente	18 - 23	1,000	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
4,010	800	461	30	6	283,043	348,982	23,112	1952	26	10	35

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 700

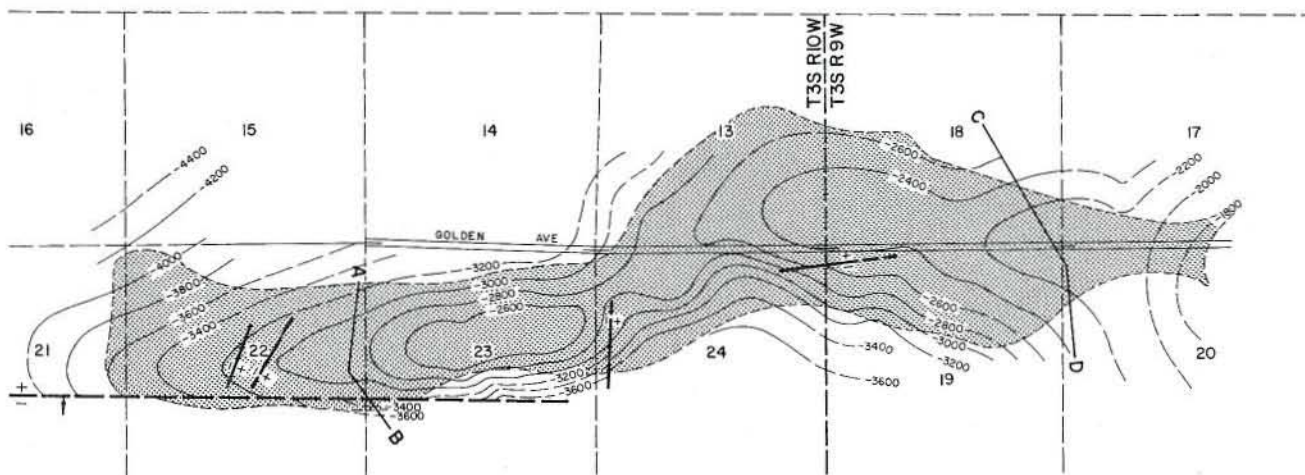
CURRENT CASING PROGRAM 11 3/4" cem. 100; 8 5/8" cem. above zone and across base of fresh-water sands; 6 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL: Evaporation sumps.

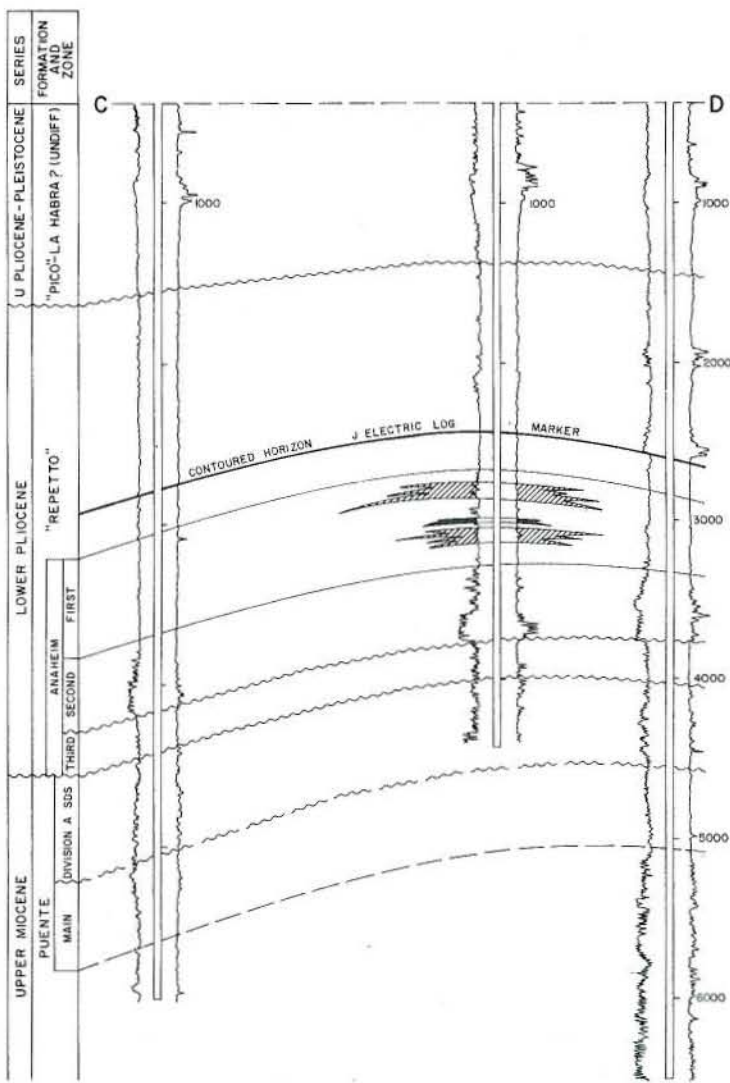
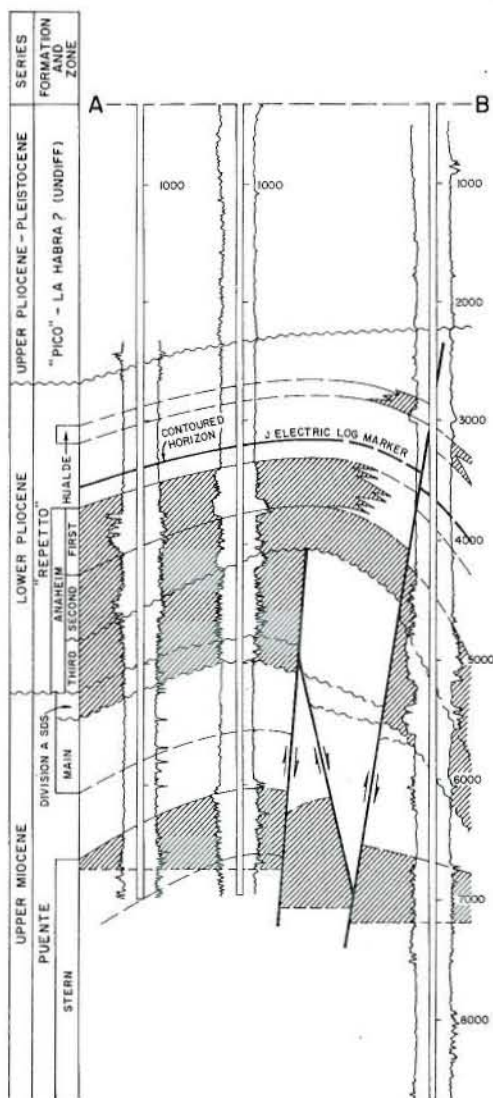
REMARKS:

REFERENCES: Gaede, V.F. and M. Dosch, Oil and Gas Development in San Bernardino County: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 41, No. 2 (1955).

EAST COYOTE OIL FIELD



CONTOURS ON J ELECTRIC LOG MARKER



CALIFORNIA DIVISION OF OIL AND GAS

COYOTE, EAST, OIL FIELD

Orange County

LOCATION: 2 miles northeast of Fullerton

TYPE OF TRAP: Faulted anticlines

ELEVATION: 275 - 700

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Hualde	Getty Oil Co. "Anaheim" 1	Amalgamated Oil Co. "Anaheim" 1	13 3S 10W	SB	700	N.A.	Nov 1909
1st Anaheim	Same as above	Same as above	13 3S 10W	SB	*	N.A.	Nov 1909
2nd Anaheim	Getty Oil Co. "Anaheim" 3	Amalgamated Oil Co. "Anaheim" 3	13 3S 10W	SB	30	N.A.	Jan 1913
3rd Anaheim	Union Oil Co. of Calif. "Graham-Loftus" 1	Graham-Loftus No. 1	18 3S 9W	SB	90	N.A.	Nov 1930
Division "A" sands	Tri-State Petroleum, Inc. "Lenke" 1	Herndon and Hunter "Lenke" 1	19 3S 10W	SB	240	15,000	1927
Main	Operator and well number unknown	Same as present	-	-	-	-	-
Stern	Union Oil Co. of Calif. "Stern Realty" 1A	Bartholomae Oil Corp. "Stern" 1	22 3S 10W	SB	281	N.A.	Dec 1939

Remarks: * Hualde and 1st Anaheim production commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Atlantic Richfield Co. "Edwards" 1	Richfield Oil Corp. "Edwards" 1	Aug 1953	15 3S 10W	SB	9,591	Puente	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Hualde	2,500	50	early Pliocene	"Repetto"	17 - 20	N.A.	II
1st Anaheim	3,100	200	early Pliocene	"Repetto"	16 - 25	640	III
2nd Anaheim	3,400	200	early Pliocene	"Repetto"	16 - 25	640	III
3rd Anaheim	4,000	250	early Pliocene	"Repetto"	17 - 27	640	IV
Division "A" sands	4,600	100	late Miocene	Puente	25	1,000	IV
Main	5,000	300	late Miocene	Puente	25	1,000	IV
Stern	5,500	400	late Miocene	Puente	26	1,200	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
690,867	445,317	3,141,308	901	173	98,153,062	54,917,700	2,727,018	1952	454	402	1,505

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1966	19,973,900	26
Cyclic steam	1969	47,630	2

SPACING ACT: Does not apply

BASE OF FRESH WATER: 50 - 1,250

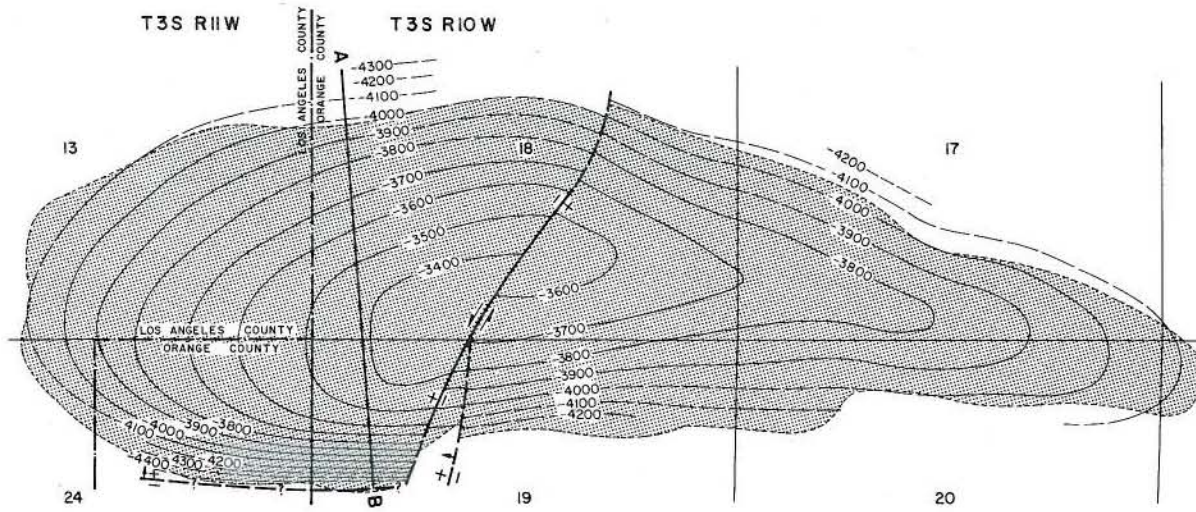
CURRENT CASING PROGRAM: 12 3/4" cem. 350; 7" combination string landed through zone and cem. above zone with sufficient cement to fill above all upper zones.

METHOD OF WASTE DISPOSAL: Some waste water is injected and balance piped to Fullerton waste-water plant.

REMARKS:

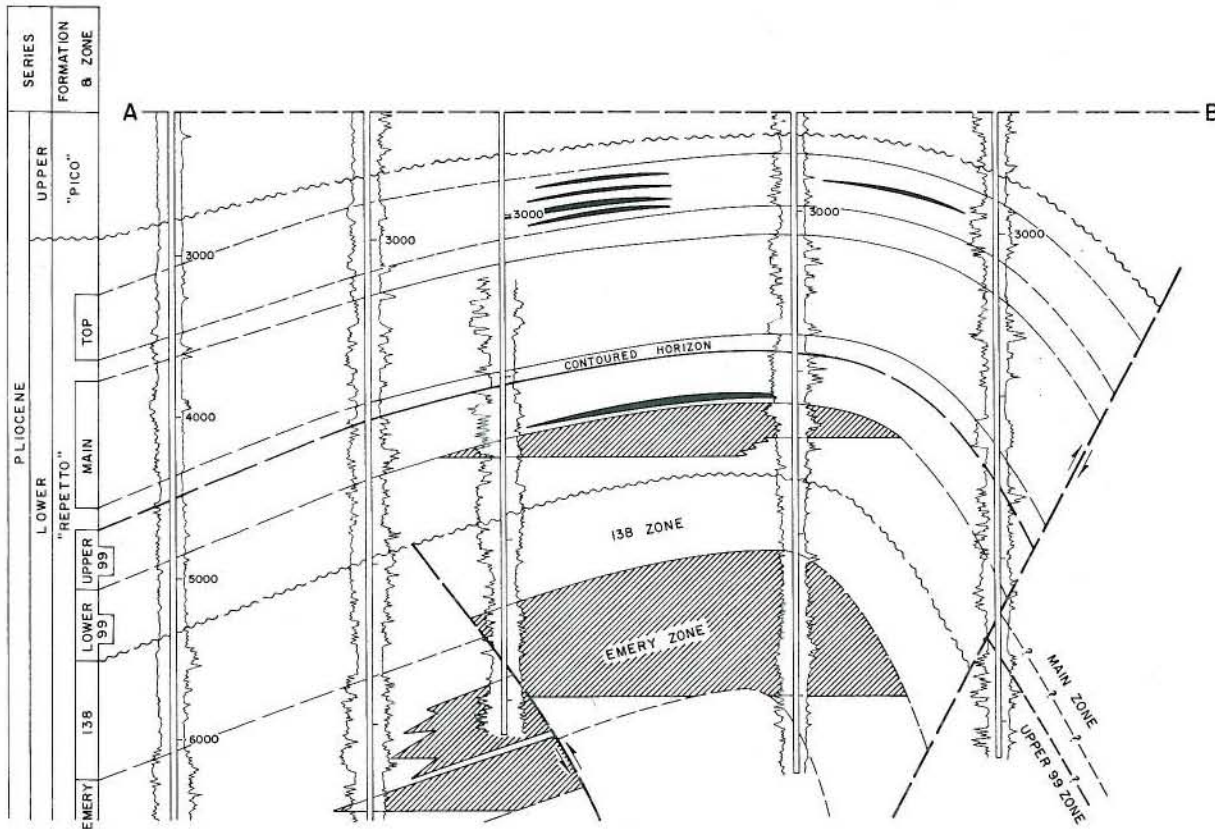
REFERENCES: Ybarra, R.A., M.W. Dosch, and A.D. Stockton, East Coyote Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 1 (1960).

WEST COYOTE OIL FIELD



CONTOURS ON TOP OF UPPER 99 ZONE

SCALE: 1" = 2250'



CALIFORNIA DIVISION OF OIL AND GAS

COYOTE, WEST, OIL FIELD
Orange and Los Angeles Counties

LOCATION: 2 miles northwest of Fullerton

TYPE OF TRAP: Faulted anticline

ELEVATION: 300 - 600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Top	Standard Oil Co. of Calif. "Murphy-Coyote" 44	Same as present	18 3S 10W	SB	380	N.A.	Jul 1918
Main	Standard Oil Co. of Calif. "Murphy-Coyote" 3	Murphy Oil Co. "Coyote" 3	17 3S 10W	SB	N.A.	N.A.	Apr 1909
Upper 99	Standard Oil Co. of Calif. "Murphy-Coyote" 99	Same as present	18 3S 10W	SB	1,084	N.A.	May 1924
Lower 99	Standard Oil Co. of Calif. "Murphy-Coyote" 99	Same as present	18 3S 10W	SB	*	N.A.	May 1924
138	Standard Oil Co. of Calif. "Murphy-Coyote" 193	Same as present	18 3S 10W	SB	318	301	Jun 1947
Emery	Standard Oil Co. of Calif. "Emery" 43-A	Same as present	13 3S 11W	SB	1,500	660	Mar 1930

Remarks: * Upper 99 and Lower 99 zone production commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "Emery" 92	Same	Mar 1952	13 3S 11W	SB	12,048	Topanga	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Top	2,900	125	early Pliocene	"Repetto"	19	N.A.	III
Main	3,300	800	early Pliocene	"Repetto"	26 - 30	760	III
Upper 99	4,100	300	early Pliocene	"Repetto"	29	760	III
Lower 99	4,400	350	early Pliocene	"Repetto"	29	760	III
138	4,900	250	early Pliocene	"Repetto"	23 - 28	1,000	III
Emery	5,500	500	early Pliocene	"Repetto"	30 - 35	1,665	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
2,130,710	260,308	41,073,878	850	161	230,049,277	266,115,645	11,000,000	1918	499	464	1,125

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1952	513,242,094	95

SPACING ACT: Does not apply

BASE OF FRESH WATER: 150 - 350

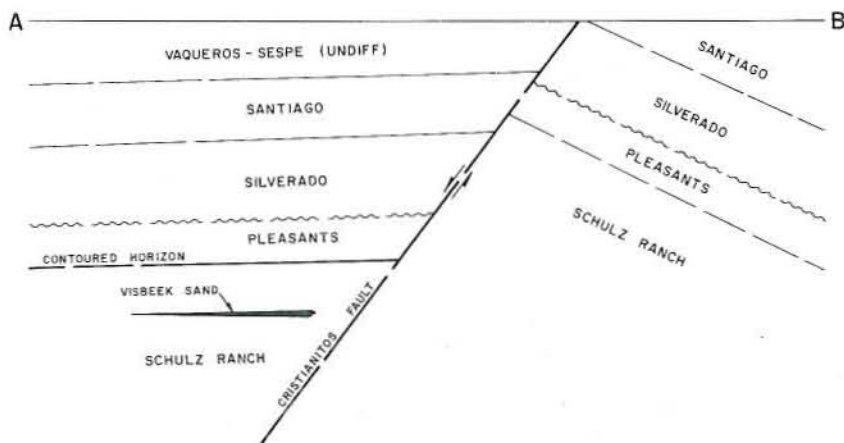
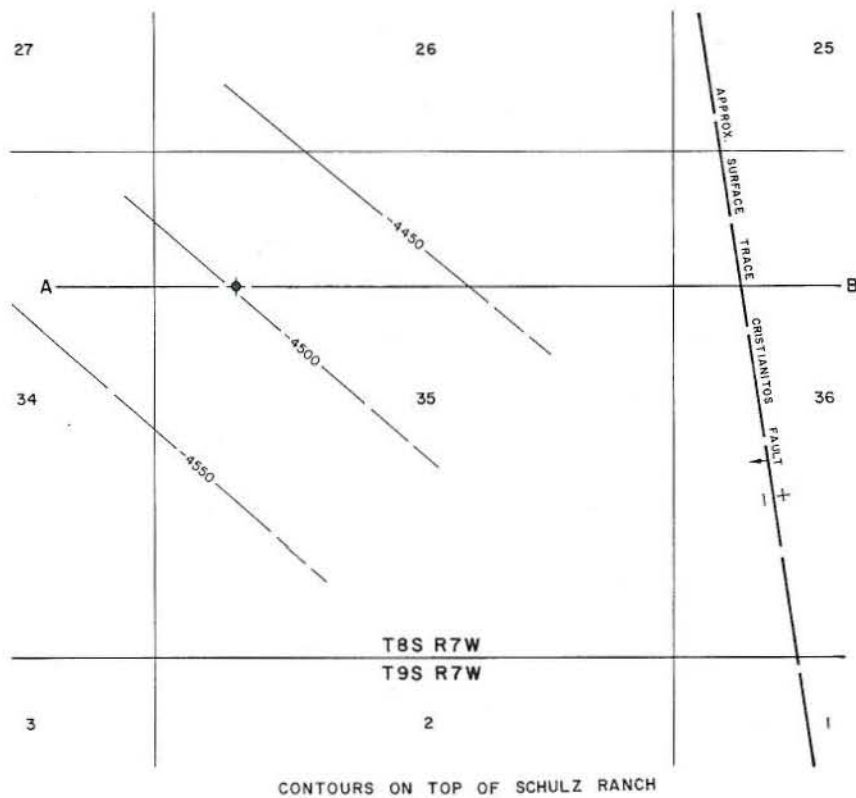
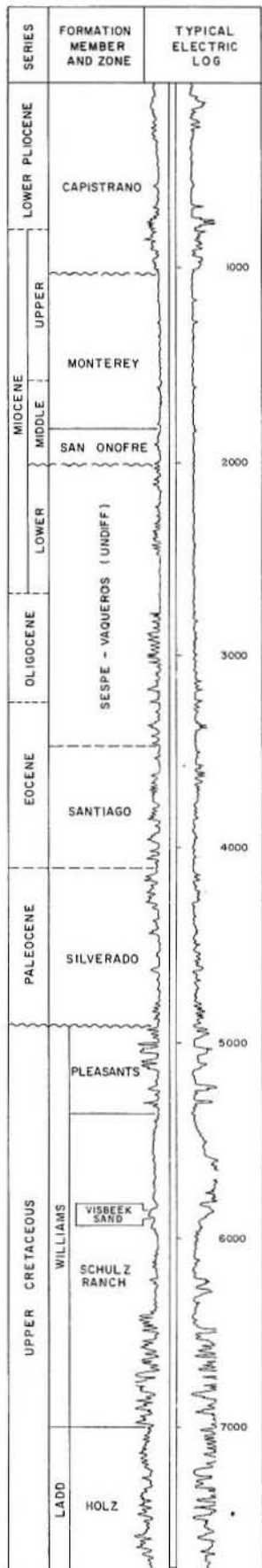
CURRENT CASING PROGRAM: 11 3/4" cem. 400; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Water-flood project.

REMARKS: A gas injection program was started in 1944 and continued until 1945, no prior records are readily available. A total of 12,730,052 Mcf. of gas was injected in repressuring projects from 1962 to 1967.

REFERENCES: Mefford, M.G., and S. Cordova, West Coyote Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 1 (1962).

CRISTIANITOS CREEK OIL FIELD (Abandoned)



CALIFORNIA DIVISION OF OIL AND GAS

CRISTIANITOS CREEK OIL FIELD (Abandoned)

Orange County

LOCATION: 2 miles east of San Clemente

TYPE OF TRAP: Lenticular sand on homocline

ELEVATION: 800

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Visbeek sand	Exxon Corp. "Roy Visbeek et al" 1	Humble Oil & Refining Co. "Roy Visbeek et al" 1	35 8S 7W	SB	52	105	Oct 1959

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Exxon Corp. "Roy Visbeek et al" 1	Humble Oil & Refining Co. "Roy Visbeek et al" 1	Jul 1959	35 8S 7W	SB	7,992	Ladd	Late Cret

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Visbeek sand	5,860	30	Lt Cretaceous	Williams	54	N.A.	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	3,079	10,474	2,134	1959	2	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 900

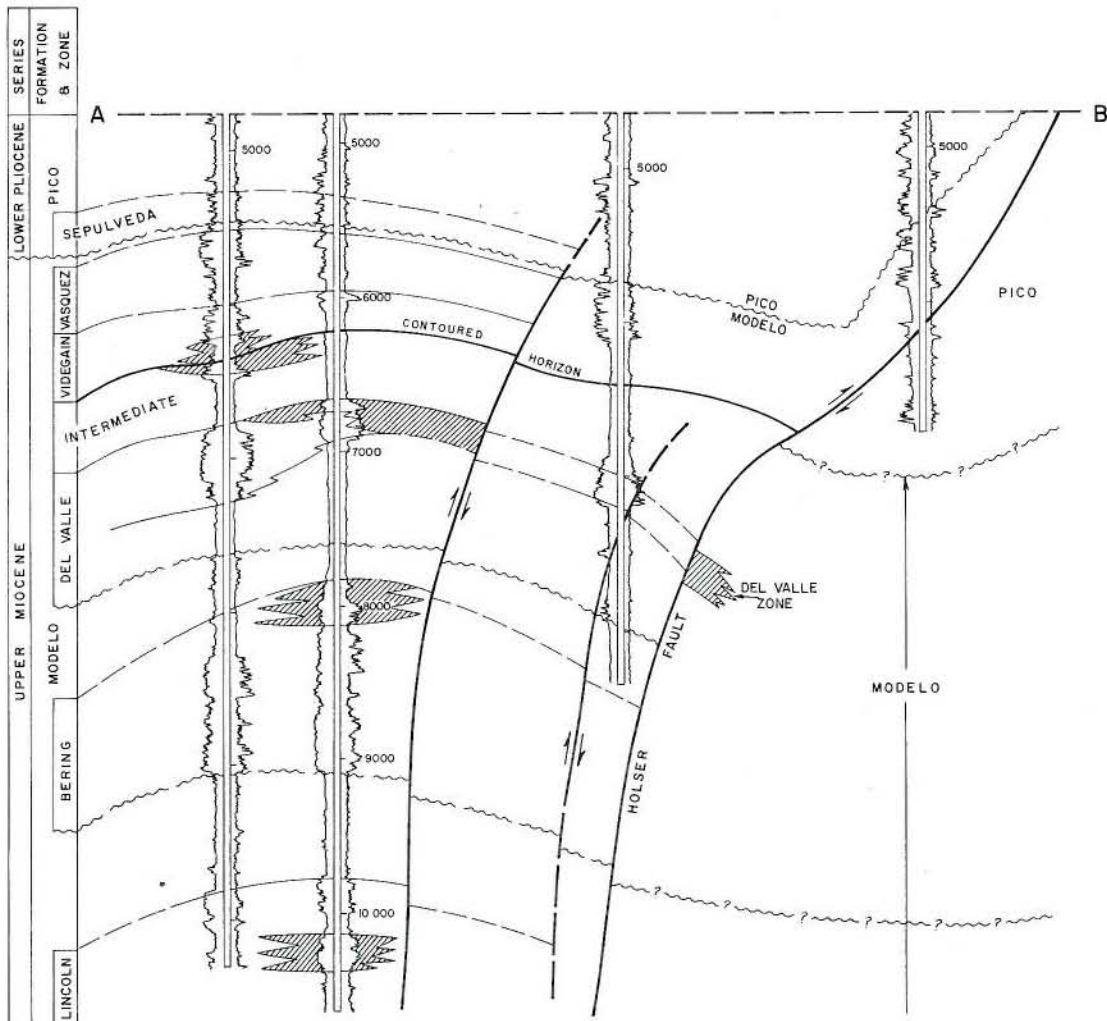
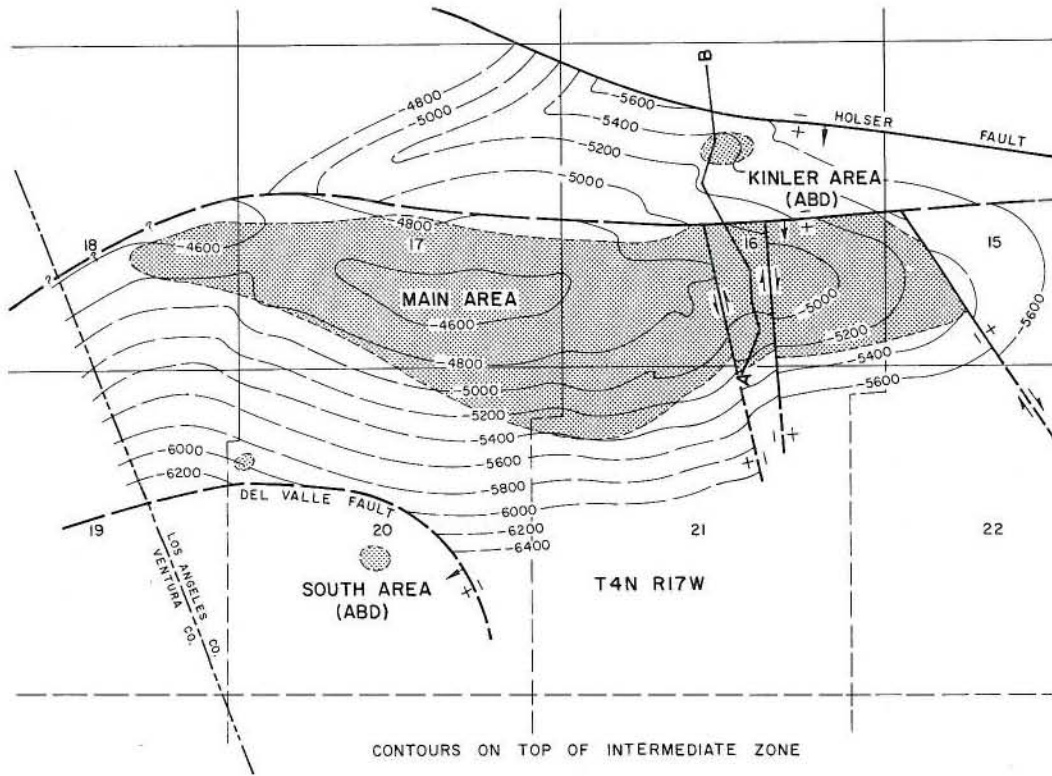
CURRENT CASING PROGRAM: 9 5/8" cem. 500; 4 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

REMARKS: Last production was in April 1960; field abandoned in 1960.

REFERENCES:

DEL VALLE OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

DEL VALLE OIL FIELD

Los Angeles County

LOCATION: 35 miles northwest of Los Angeles

TYPE OF TRAP: See areas

ELEVATION: 900 - 2,150

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Del Valle	Union Oil Co. of Calif., Opr. "Lincoln" 1	Havenstrite Oil Co., Opr. "Lincoln" 1	16 4N 17W	SB	400	11,000	Sep 1940

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif., Opr. "Lincoln" 16	Havenstrite Oil Co. "Lincoln" 16	Sep 1949	16 4N 17W	SB	13,035	Modelo	late Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu))	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
109,549	252,299	593,728	540	32	24,793,838	75,137,901	1,938,240	1945	117	93	660

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: See areas

REFERENCES: Lande, D., Del Valle Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 50, No. 2 (1964).
 Winterer, E.L., and D.L. Durham, Geology of the Southeastern Ventura Basin, Los Angeles County, Calif.: U.S. Geol. Survey Prof. Paper 334-H (1962).

CALIFORNIA DIVISION OF OIL AND GAS

KINLER AREA (Abandoned)

DEL VALLE OIL FIELD (Field)
Los Angeles County (County)

LOCATION: See index map of Del Valle Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 1,375

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Del Valle *	Amex Petroleum Corp. "Kinler" 1	Southern Calif. Petroleum Corp., Opr., "Socalpete-Kinler" 1	16 4N 17W	SB	140	20	Mar 1950

Remarks: * Also known as the Kinler zone.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "Boobier" 1	Same	Jan 1947	15 4N 17W	SB	8,855	Modelo	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Del Valle	7,100	200	late Miocene	Modelo	20	N.A.	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	236,761	103,498	11,929	1952	9	4	40

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,150

CURRENT CASING PROGRAM: 11 3/4" cem. 1,000; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: The area was abandoned in March 1961. Last production was in January 1961.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

DEL VALLE OIL FIELD

MAIN AREA

Los Angeles County

LOCATION: See index map of Del Valle Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 900 - 2,150

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Gas zone	Union Oil Co. of Calif., Opr. "Barnes" 11	Havenstrite Oil Co. "Barnes" 11	16 4N 17W	SB	0	10,000	Oct 1950
Sepulveda	Standard Oil Co. of Calif. "Sepulveda" 3	Same as present	17 4N 17W	SB	1,470	840	Aug 1942
Vasquez	Marathon Oil Co. "Vasquez" 1	The Ohio Oil Co. "Vasquez" 1	17 4N 17W	SB	1,512	885	Sep 1941
Vidagain	Union Oil Co. of Calif., Opr. "Lincoln" 2	R. E. Havenstrite, Opr. "Lincoln" 2	16 4N 17W	SB	3,000	3,000	Dec 1940
Intermediate	Standard Oil Co. of Calif. "Sepulveda" 12	Same as present	16 4N 17W	SB	626	3,125	Jul 1950
Del Valle	Union Oil Co. of Calif., Opr. "Lincoln" 1	R. E. Havenstrite, Opr. "Lincoln" 1	16 4N 17W	SB	400	11,000	Sep 1940
Bering	Union Oil Co. of Calif., Opr. "Barnes" 2	R. E. Havenstrite, Opr. "Barnes" 2	16 4N 17W	SB	972	580	Feb 1943
Lincoln	Union Oil Co. of Calif., Opr. "Lincoln" 15	R. E. Havenstrite, Opr. "Lincoln" 15	16 4N 17W	SB	75	160	Aug 1947

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif., Opr. "Lincoln" 16	Havenstrite Oil Co. "Lincoln" 16	Sep 1949	16 4N 17W	SB	13,035	Modelo	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (-API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Gas zone	3,800	130	early Pliocene	Pico	1,155	1,274	III
Sepulveda	5,000	80	early Pliocene	Pico	35	800	III
Vasquez	5,500	200	late Miocene	Modelo	31	800	III
Vidagain	6,000	160	late Miocene	Modelo	36	850	III
Intermediate	6,300	200	late Miocene	Modelo	35	850	III
Del Valle	6,900	350	late Miocene	Modelo	33	900	III
Bering	8,000	500	late Miocene	Modelo	44	950	III
Lincoln	10,000	200	late Miocene	Modelo	32	1,000	III

PRODUCTION DATA (Jan. 1, 1974) (Dry gas production data not included - see remarks.)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
109,549	252,299	593,728	540	32	24,437,656	74,884,318	1,938,240	1945	98	87	600

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1959	12,470,721	2

SPACING ACT: Applies

BASE OF FRESH WATER: 350

CURRENT CASING PROGRAM: 13 3/8" cem. 600 - 1,000; 7" cem. over zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Most of the waste water is used in the water-flood project; the remainder is injected into water-disposal wells.

REMARKS: 1973 dry gas production 164,089 Mcf. from two producing wells; cumulative dry gas production 14,925,240 Mcf. Thirteen wells drilled and completed; maximum proved acreage 200.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

DEL VALLE OIL FIELD

SOUTH AREA (Abandoned)

Los Angeles County

LOCATION: See index map of Del Valle Oil Field

TYPE OF TRAP: Lithofacies change on faulted homocline

ELEVATION: 1,440

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Intermediate	Standard Oil Co. of Calif. "Newhall Land & Farming Co. 3" 1	Same as present	20 4N 17W	SB	48	50	May 1944
Bering	Standard Oil Co. of Calif. "N.L. & F." 1	Southern California Petroleum Corp. "N.L. & F." 1	20 4N 17W	SB	90	220	Jul 1951
9700	Same as above	Same as above	20 4N 17W	SB	*101	*90	Jun 1952

Remarks: * Commingled with Bering zone.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Mobil Oil Co. "N.L. & F." 3	General Petroleum Corp. "N.L. & F." 3	Oct 1952	20 4N 17W	SB	11,497	Modelo	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Intermediate	5,400	600	late Miocene	Modelo	30	800 - 1,000	III
Bering	8,850	100	late Miocene	Modelo	28	800 - 1,000	III
9700	9,600	300	late Miocene	Modelo	33	800 - 1,000	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	119,421	150,085	43,857	1951	10	2	20

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
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SPACING ACT: Applies

BASE OF FRESH WATER: 100

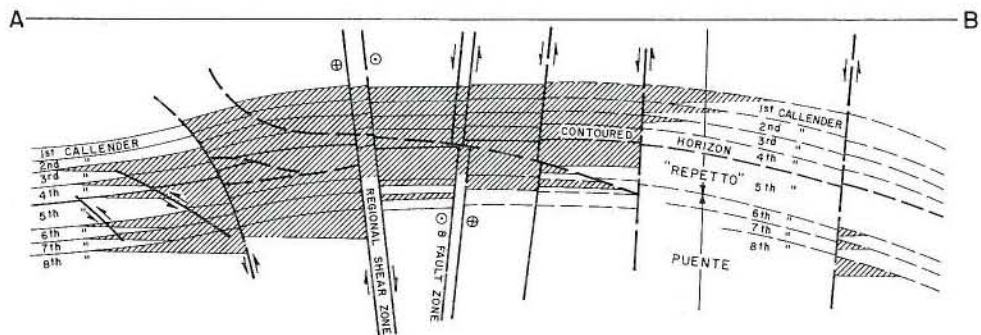
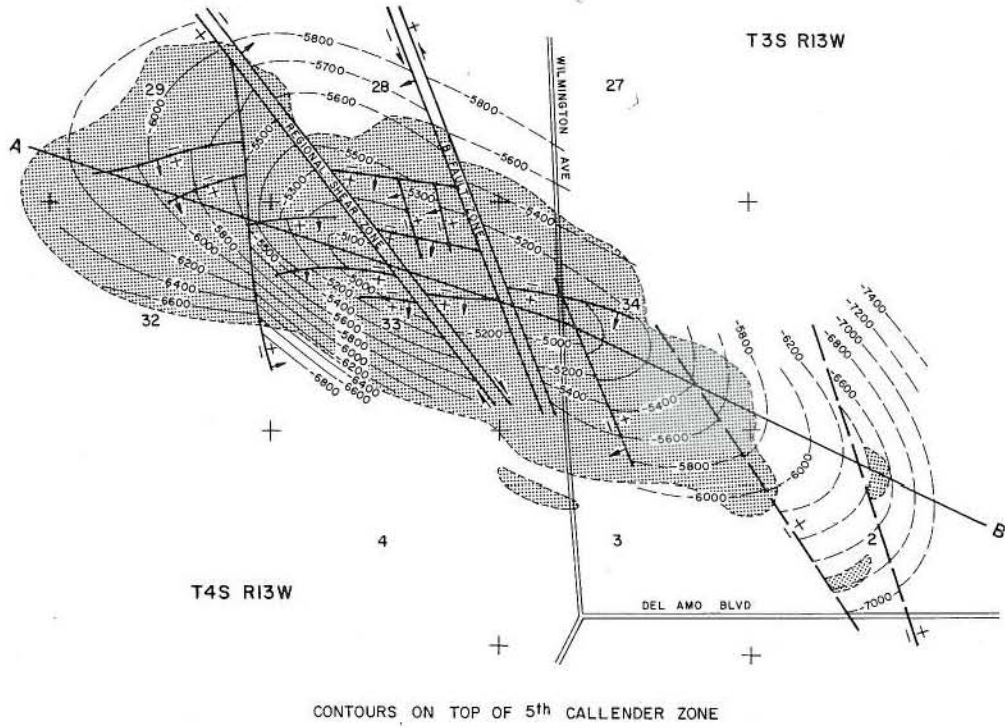
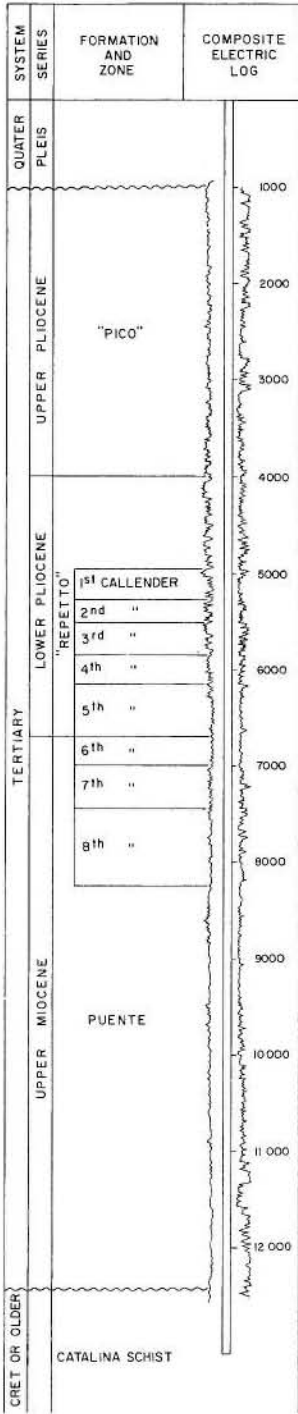
CURRENT CASING PROGRAM: 13 3/8" cem. 600; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: This area was abandoned in 1964. Last production was in May 1961.

REFERENCES:

DOMINGUEZ OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

DOMINGUEZ OIL FIELD

Los Angeles County

LOCATION: 12 miles south of downtown Los Angeles

TYPE OF TRAP: Faulted asymmetrical anticline

ELEVATION: 120

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
1st Callender	Union Oil Co. of Calif. "Callender" 1	Same as present	33 3S 13W	SB	1,193	N.A.	Sep 1923
2nd Callender	Union Oil Co. of Calif. "Hellman" 2	Same as present	33 3S 13W	SB	941	N.A.	Apr 1924
3rd Callender	Union Oil Co. of Calif. "Callender" 12	Same as present	32 3S 13W	SB	850	N.A.	Jul 1925
4th Callender	Union Oil Co. of Calif. "Callender" 19	Same as present	33 3S 13W	SB	780	N.A.	Sep 1927
5th Callender	Union Oil Co. of Calif. "Callender" 26	Same as present	33 3S 13W	SB	274	N.A.	Nov 1931
6th Callender	Union Oil Co. of Calif. "Callender" 32	Same as present	33 3S 13W	SB	768	N.A.	Nov 1933
7th Callender	Union Oil Co. of Calif. "Callender" 33	Same as present	33 3S 13W	SB	97	N.A.	Nov 1933
8th Callender	Shell Oil Co. "Reyes" 84	Same as present	33 3S 13W	SB	3,696	2,800	Nov 1936

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strat.	Age
Union Oil Co. of Calif. "Callender" 79	Same	Jun 1940	32 3S 13W	SB	12,720	Catalina Schist	Cret or older

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
1st Callender	3,950	200	early Pliocene	"Repetto"	29 - 33	1,870	III
2nd Callender	4,250	110	early Pliocene	"Repetto"	29 - 33	1,880	III
3rd Callender	4,530	230	early Pliocene	"Repetto"	29 - 33	1,830	III
4th Callender	4,830	170	early Pliocene	"Repetto"	29 - 33	1,780	III
5th Callender	5,300	340	early Pliocene	"Repetto"	29 - 33	1,890	III
6th Callender	5,870	150	late Miocene	Puente	29 - 33	1,750	III
7th Callender	6,360	300	late Miocene	Puente	29 - 33	1,740	III
8th Callender	7,050	480	late Miocene	Puente	29 - 33	1,410	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,324,619	676,480	12,552,528	745	137	257,336,316	377,122,261	13,465,970	1925	600	532	1,670

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1947	351,426,115	119

SPACING ACT. Does not apply

BASE OF FRESH WATER: 1,500 - 2,600

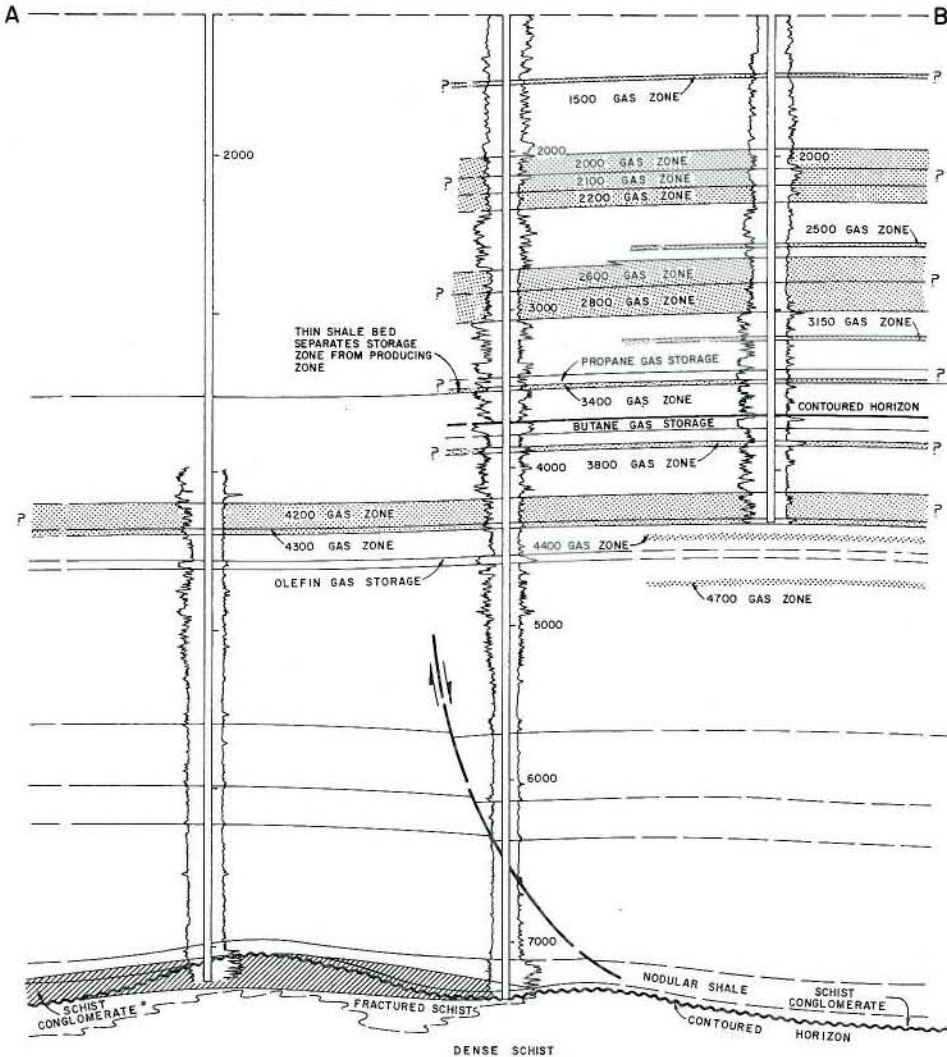
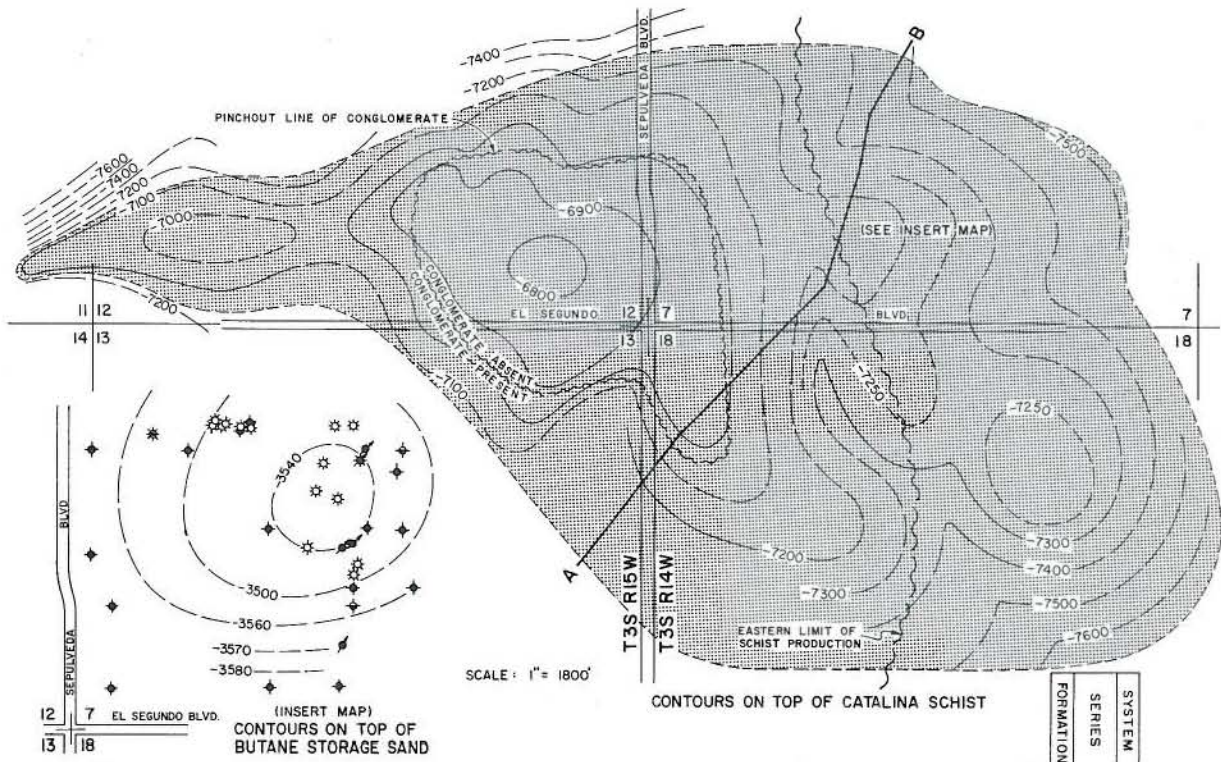
CURRENT CASING PROGRAM: 11 3/4" cem. 1,000; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Water-flood project.

REMARKS:

REFERENCES: Dodd, H.V., Dominguez Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 12, No. 4 (1926).
 Graves, D.T., Geology of the Dominguez Oil Field: Div. of Mines Bull. 170, Map Sheet 32 (1954).
 Swigart, T.E., Efficiency of Flowing Wells in Dominguez Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 10, No. 7 (1925).

EL SEGUNDO OIL FIELD



FORMATION	SERIES	SYSTEM
"PICO"	UPPER	TERTIARY PLIOCENE
"REPETTO"	LOWER	TERTIARY
PUENTE	UPPER	UPPER MIOCENE
CATALINA	OR OLDER	CRETACEOUS

CALIFORNIA DIVISION OF OIL AND GAS

EL SEGUNDO OIL FIELD
Los Angeles County

LOCATION: 11 miles southwest of downtown Los Angeles

TYPE OF TRAP: Fractured schist; anticline

ELEVATION: 115

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Pliocene (Gas) Nodular shale	Standard Oil Co. of Calif. "Gough" 12	Ohio Oil Co. "A.S. Gough" 12	7 3S 14W	SB	0	5,000	May 1943
	Standard Oil Co. of Calif. "Block" 13	Republic Petroleum Co., Ltd. "Republic El Segundo" 1	18 3S 14W	SB	500	N.A.	Aug 1935
Schist	Same as above	Same as above	18 3S 14W	SB	*	N.A.	Aug 1935
	Same as above	Same as above	18 3S 14W	SB	*	N.A.	Aug 1935

Remarks: * Production from the Nodular shale, Conglomerate and Schist zones was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Occidental Petroleum Corp. "Title Insurance and Trust Co." 3	Same	Jul 1966	11 3S 15W	SB	9,008	Catalina Schist	Cret or older

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Pliocene (Gas)	1,490 - 4,180	300	late & early Pliocene	"Pico" - "Repetto"	1,000	70 - 1,250	III
Nodular shale	7,000	125	late Miocene	Puente	22 - 26	1,020	IV
	7,200	50	late Miocene	Puente	17 - 28	1,020	IV
Schist	7,250	150	Cret or older	Catalina Schist	14 - 28	1,050	IV

PRODUCTION DATA (Jan. 1, 1974) (Dry gas production data not included--see remarks)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
34,883	18,274	241,842	80	6	13,610,695	11,491,827	3,869,039	1938	205	122	805

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,400 - 1,600

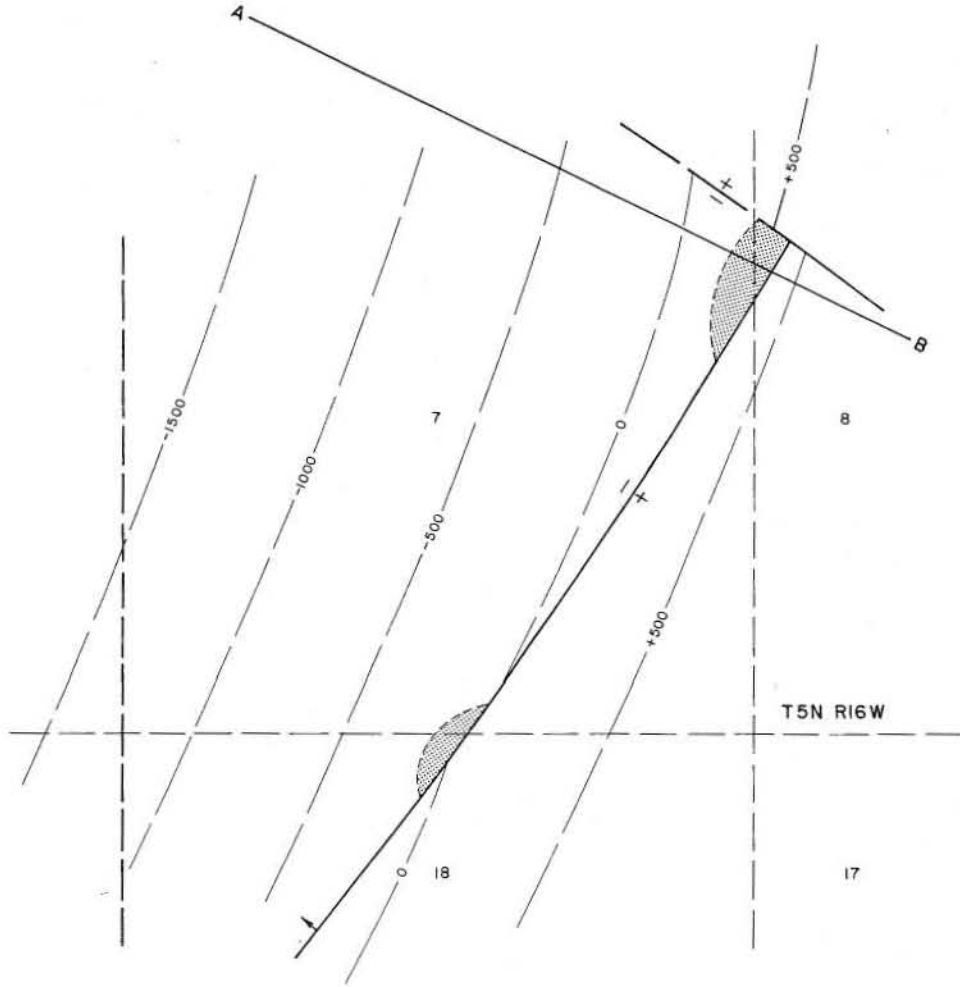
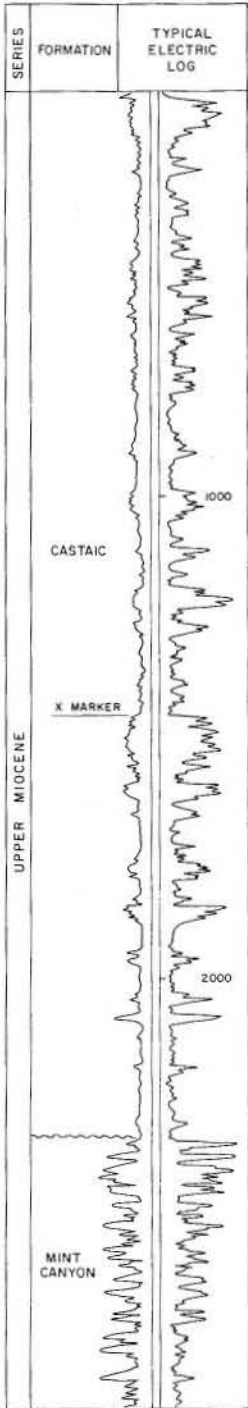
CURRENT CASING PROGRAM: 11 3/4" cem 1,000; 7" cem. above zone and across base of fresh water; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Local sewer system.

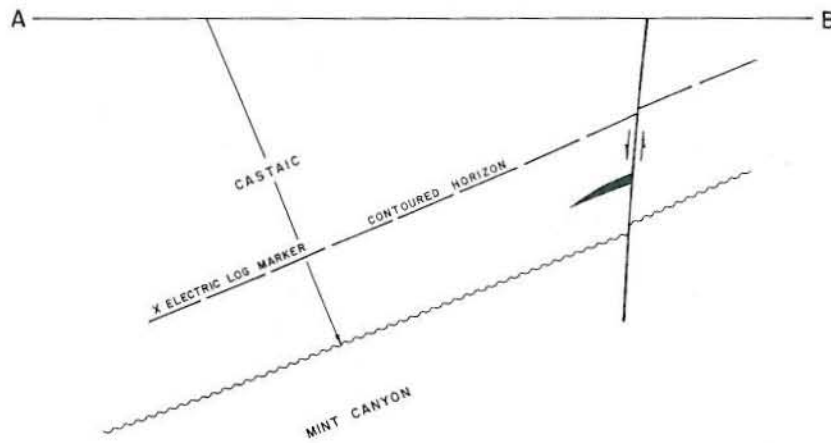
REMARKS: Gas sands are now used for L.P.G. storage. Pliocene gas zone was abandoned in 1971. Cumulative dry gas production 22,956,104 Mcf.; 20 wells drilled and completed; maximum proved acreage 80.

REFERENCES: Cordova, S., El Segundo Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 49, No. 2 (1963).

ELIZABETH CANYON OIL FIELD (Abandoned)



CONTOURS ON X ELECTRIC LOG MARKER
SCALE: 1" = 1600'



CALIFORNIA DIVISION OF OIL AND GAS

ELIZABETH CANYON OIL FIELD (Abandoned)

Los Angeles County

LOCATION: 39 miles northwest of Los Angeles

TYPE OF TRAP: Faulted homocline

ELEVATION: 1,200 - 1,500

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Castaic	T & M Exploration Co. "Kinler" 1	Same as present	18 5N 16W	SB	12	100	Feb 1950

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Ember Oil & Gas Co. "Scattle-Toledo-Lyons" 1	North Star Mining & Development Co. "North Star-Lyons" 1	Apr 1956	7 5N 16W	SB	4,027	Mint Canyon	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Castaic	3,200	50	late Miocene	Castaic	41	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	601	2,368	253	1950	8	2	15

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 700

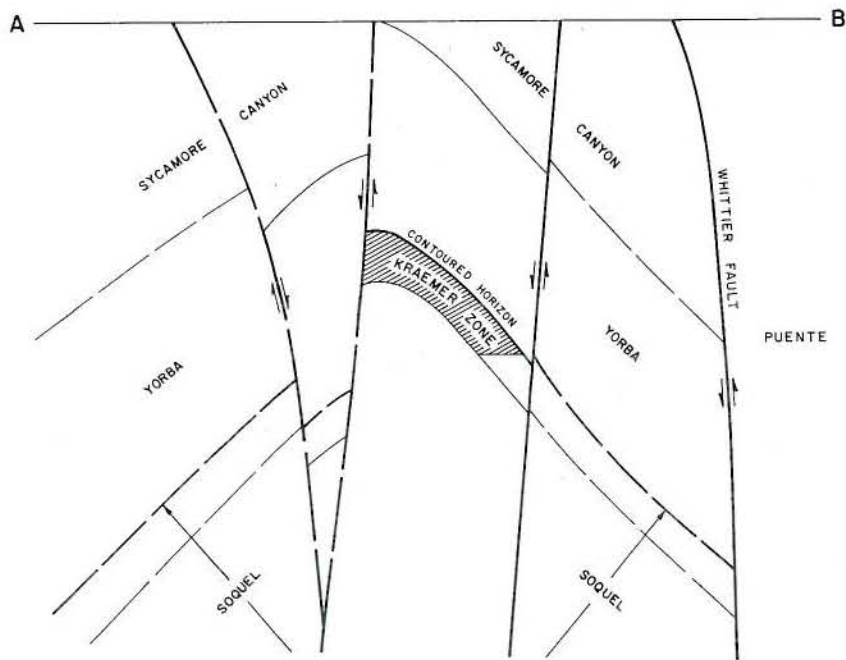
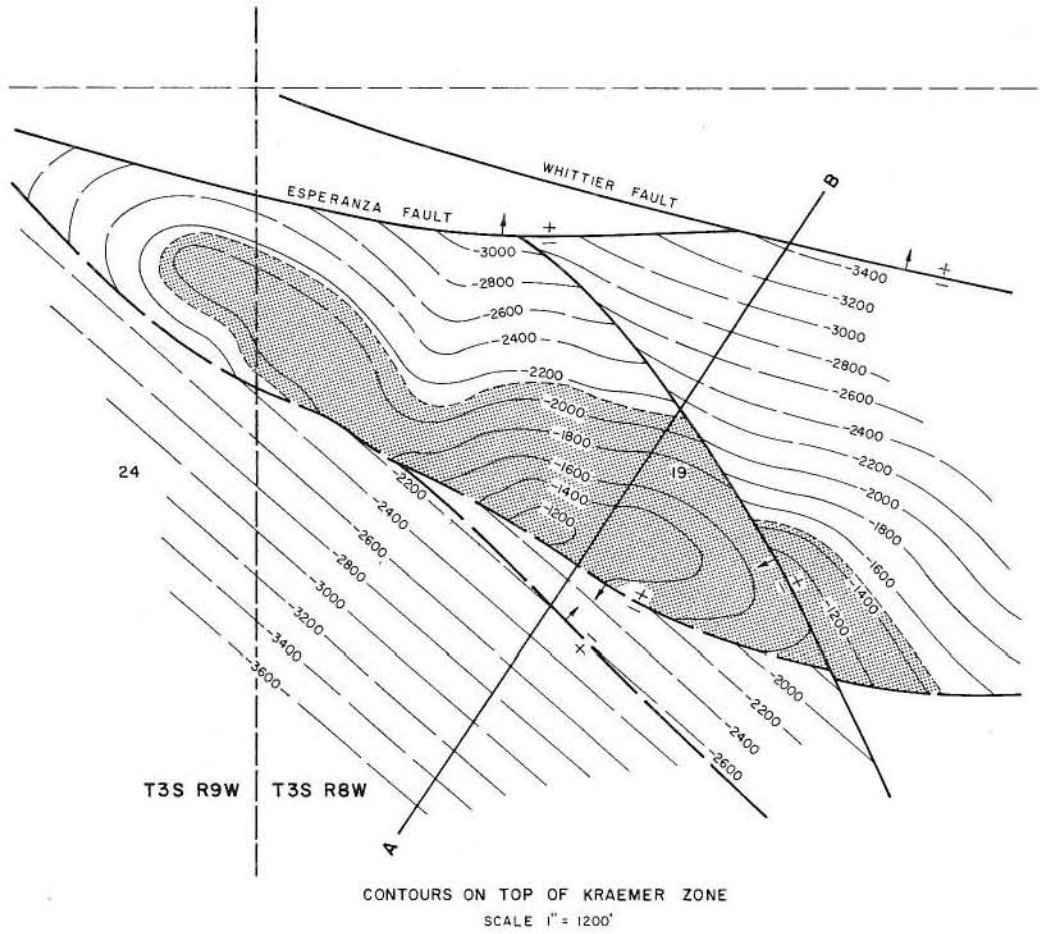
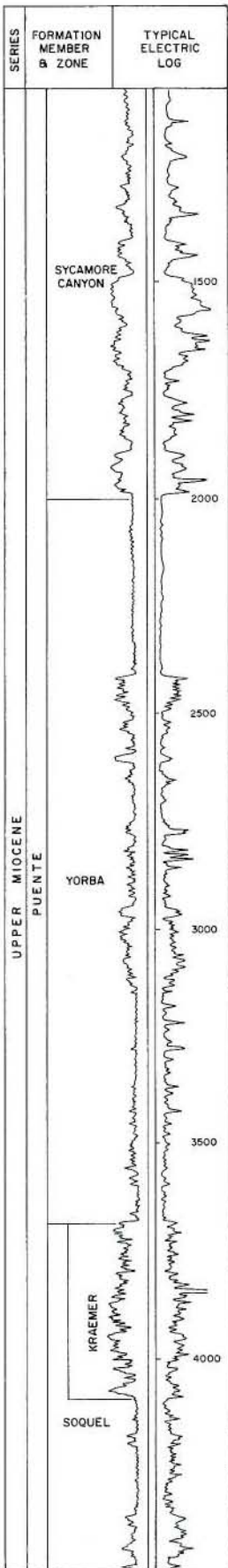
CURRENT CASING PROGRAM: 13 3/8" or 11 3/4" cem. 200; 8 5/8" or 7" cem. above zone and across base of fresh-water sands; 6 5/8" or 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Last production was in March 1954; abandoned in 1954.

REFERENCES:

ESPERANZA OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

ESPERANZA OIL FIELD

Orange County

LOCATION: 10 miles northeast of Fullerton

TYPE OF TRAP: Faulted anticline

ELEVATION: 550 - 750

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Kraemer	York Petroleum Co. "Dometal" 1	Shell Oil Co. "Dominguez" 24-19	19 3S 8W	SB	90	106	Oct 1956

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
York Petroleum Co. "Dometal" 1	Shell Oil Co. "Dominguez" 24-19	Sep 1956	19 3S 8W	SB	5,000	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Kraemer	1,600	375	late Miocene	Puente	27	70 - 140	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
23,151	9,299	9,164	100	12	837,773	674,051	153,947	1958	20	16	110

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT Applies

BASE OF FRESH WATER: 1,100 - 2,150

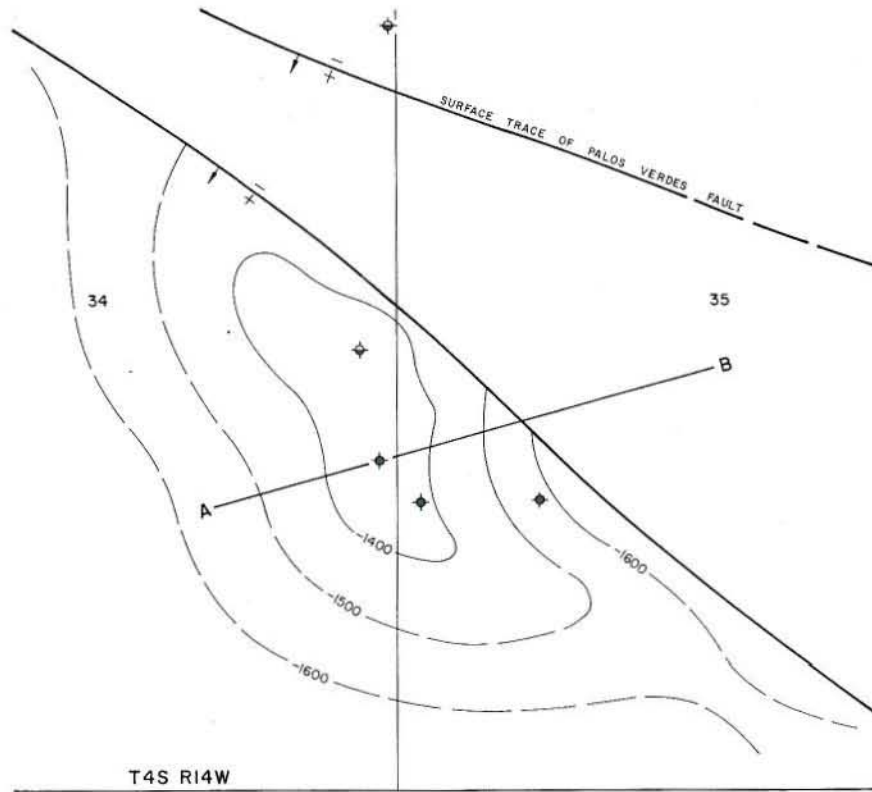
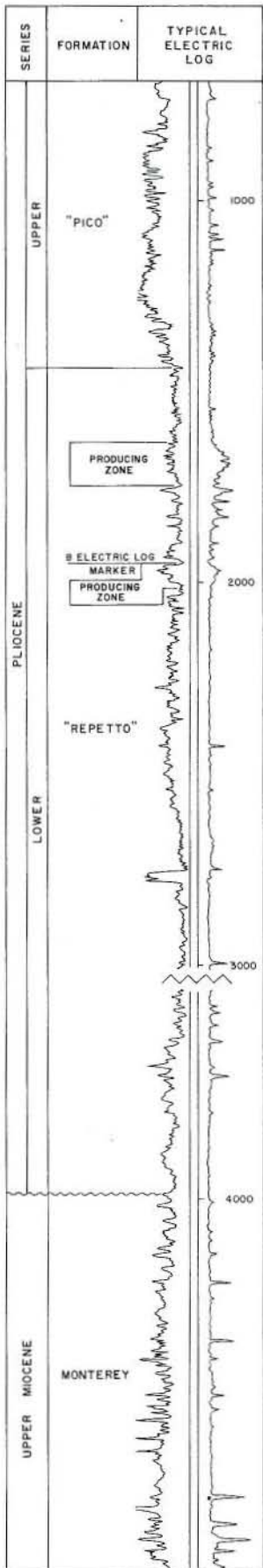
CURRENT CASING PROGRAM: 10 3/4" com. 350; 5 1/2" combination string landed through zone and cemented across base of fresh water.

METHOD OF WASTE DISPOSAL: Shipped by pipeline to disposal plant.

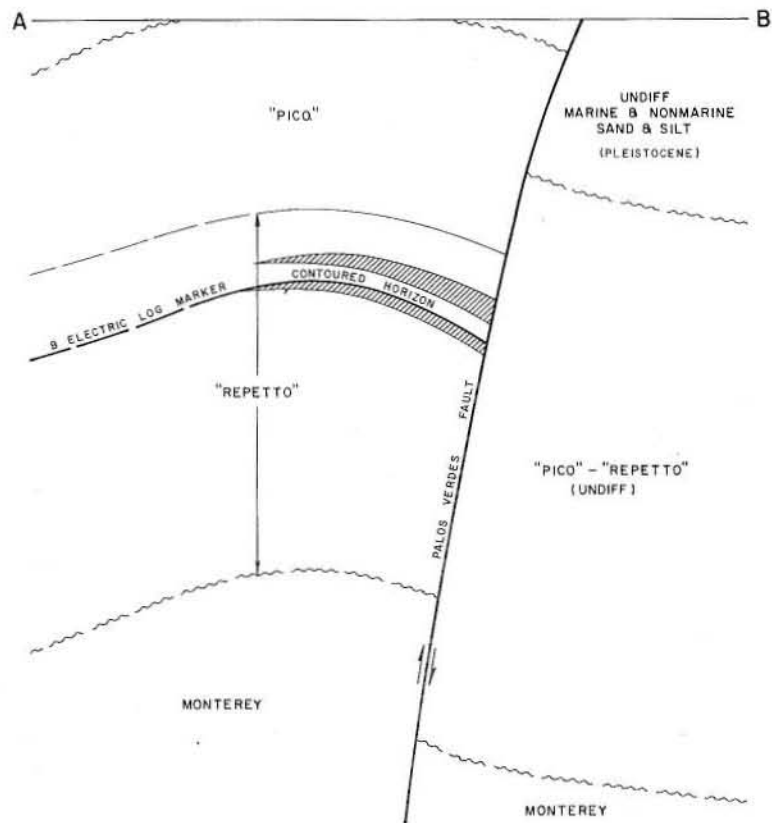
REMARKS:

REFERENCES: Gaede, V.F., Esperanza Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 45, No. 2 (1959).

GAFFEY OIL FIELD (Abandoned)



CONTOURS ON TOP OF B ELECTRIC LOG MARKER
SCALE: 1" = 1200'



CALIFORNIA DIVISION OF OIL AND GAS

GAFFEY OIL FIELD (Abandoned)

Los Angeles County

LOCATION: 7 miles west of Long Beach

TYPE OF TRAP: Faulted anticline

ELEVATION: 150 - 375

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Pliocene	Tideland Exploration Co. "Chandler-McBurney" 1	Same as present	35 4S 14W	SB	12	0	Nov 1955

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Tideland Exploration Co. "Chandler-McBurney" 1	Same	Nov 1954	35 4S 14W	SB	7,203	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Pliocene	1,500	100	early Pliocene	"Repetto"	10	1,500	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	10,042	0	1,737	1957	4	3	20

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 600

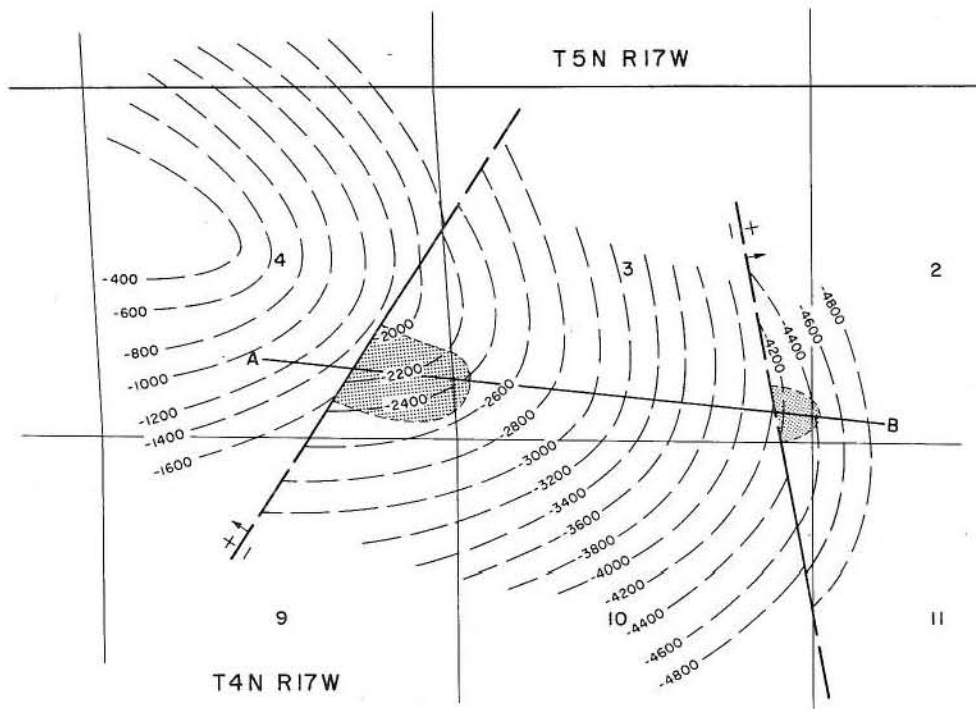
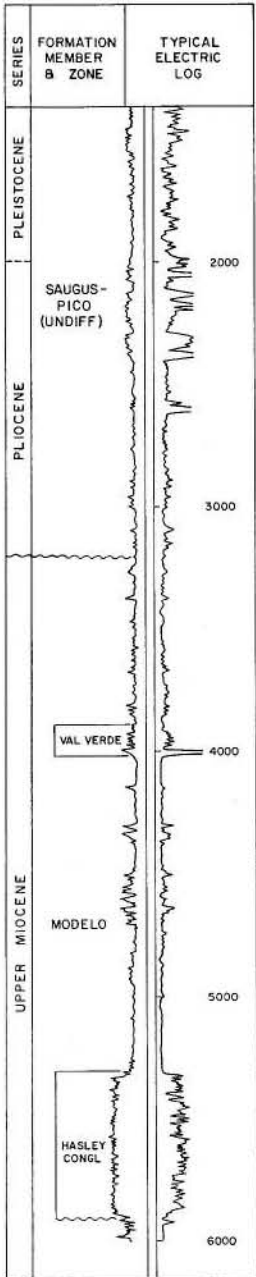
CURRENT CASING PROGRAM: 11 3/4" cem. 100; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone and gravel packed.

METHOD OF WASTE DISPOSAL:

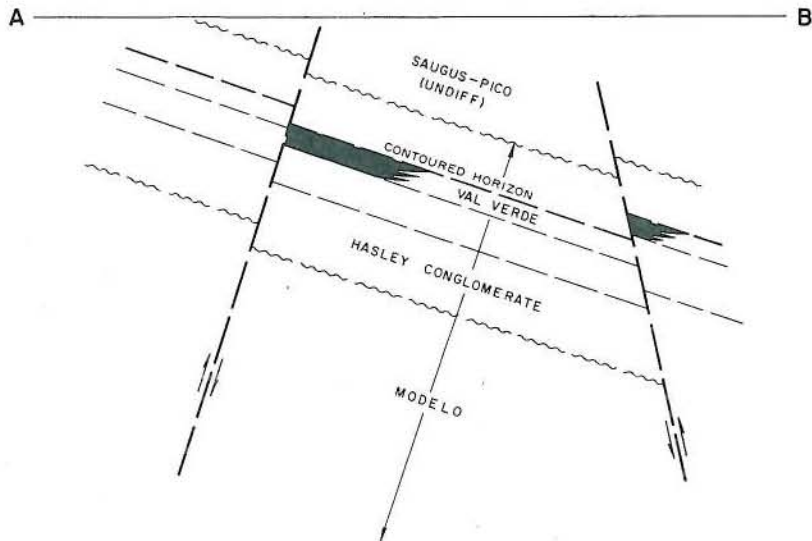
REMARKS: Last production was in 1966. Field abandoned in April 1967. A cyclic-steam project was attempted in 1966, when 19,066 equivalent bbls. were injected into two wells.

REFERENCES:

HASLEY CANYON OIL FIELD



CONTOURS ON TOP OF VAL VERDE
SCALE: 1" = 2800'



CALIFORNIA DIVISION OF OIL AND GAS

HASLEY CANYON OIL FIELD

Los Angeles County

LOCATION: 35 miles northwest of Los Angeles

TYPE OF TRAP: Faulted nose

ELEVATION: 1,300 - 1,700

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Val Verde	Porsco Opr. Co., "Claiborne" 88-4	Shell Oil Co. "Claiborne" 88-4	4 4N 17W	SB	36	N.A.	Dec 1944

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Petrominerals Corp., "Mabel E. Strawn" 1	Newhall Land & Farming Co. "Mabel E. Strawn" 1	May 1958	3 4N 17W	SB	6,722	Modelo	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu))	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Val Verde	4,800	200	Miocene	Modelo	13 - 18	561	III

PRODUCTION DATA (Jan. 1, 1974)

Oil (bbl)	1973 Production		1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	10	0	32,157	0	3,331	1947	4	3	30

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,500

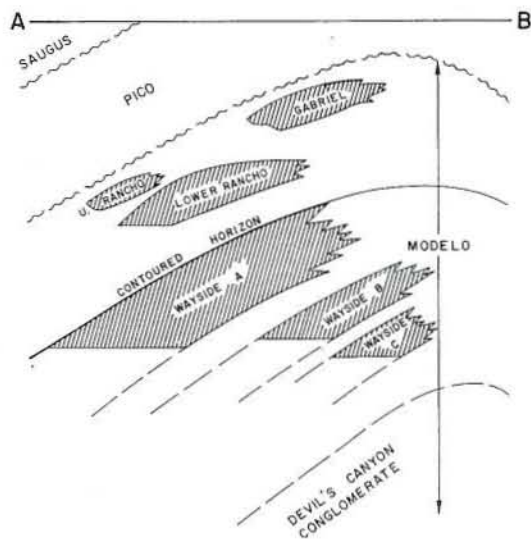
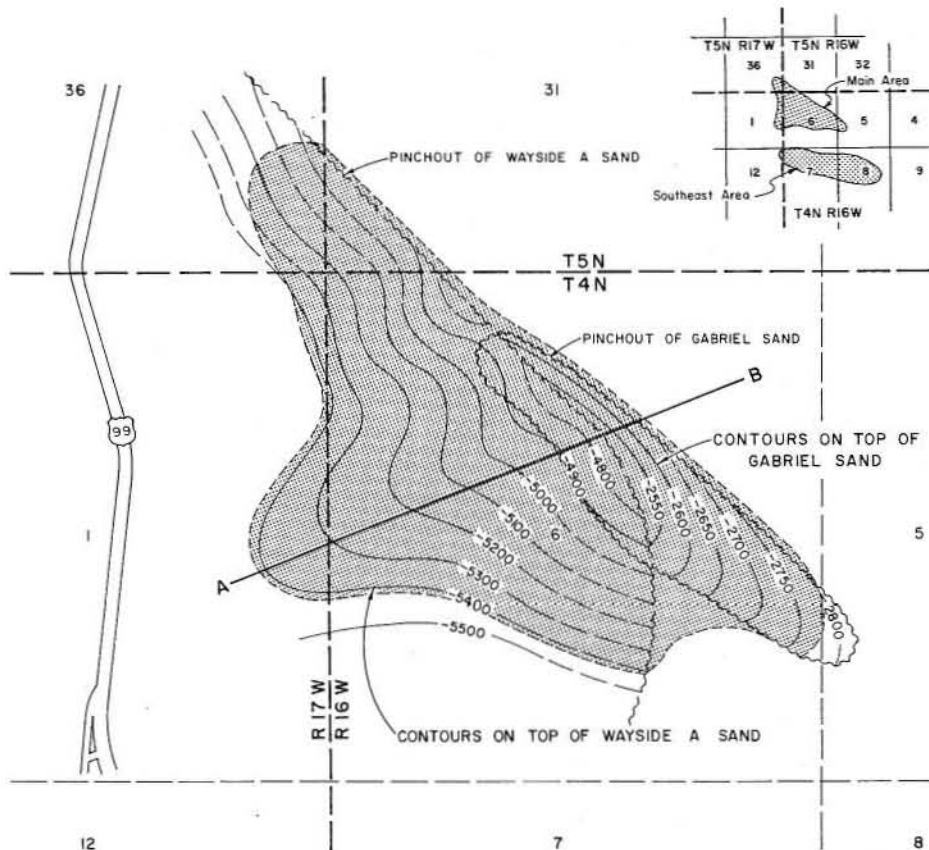
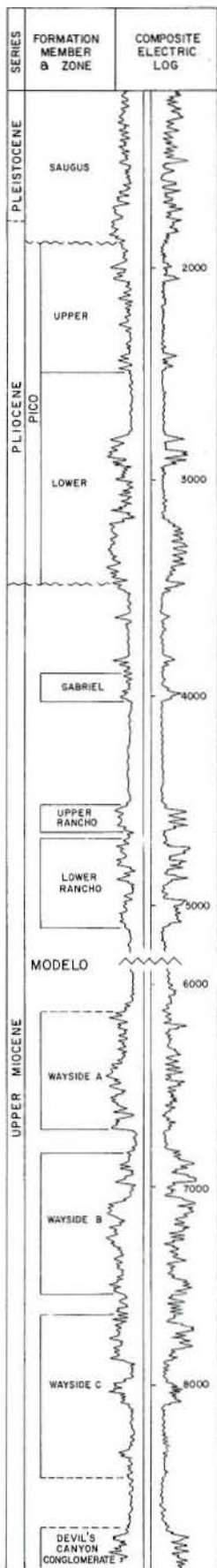
CURRENT CASING PROGRAM: 11 3/4" cem. 500; 7" cem. above zone and across base of fresh-water sands; 4 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: No water produced.

REMARKS: Wells idle; field last produced in 1972.

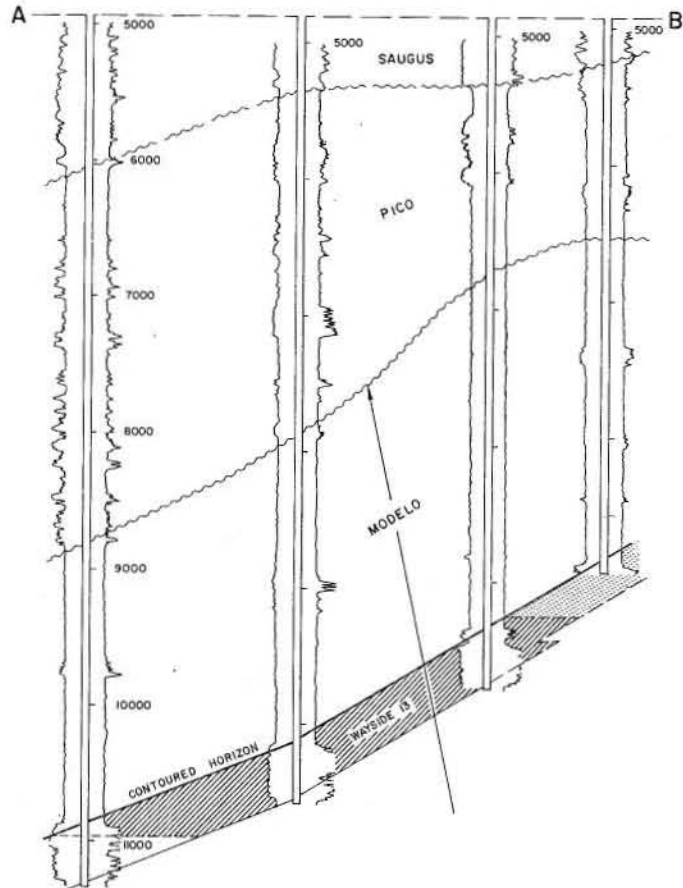
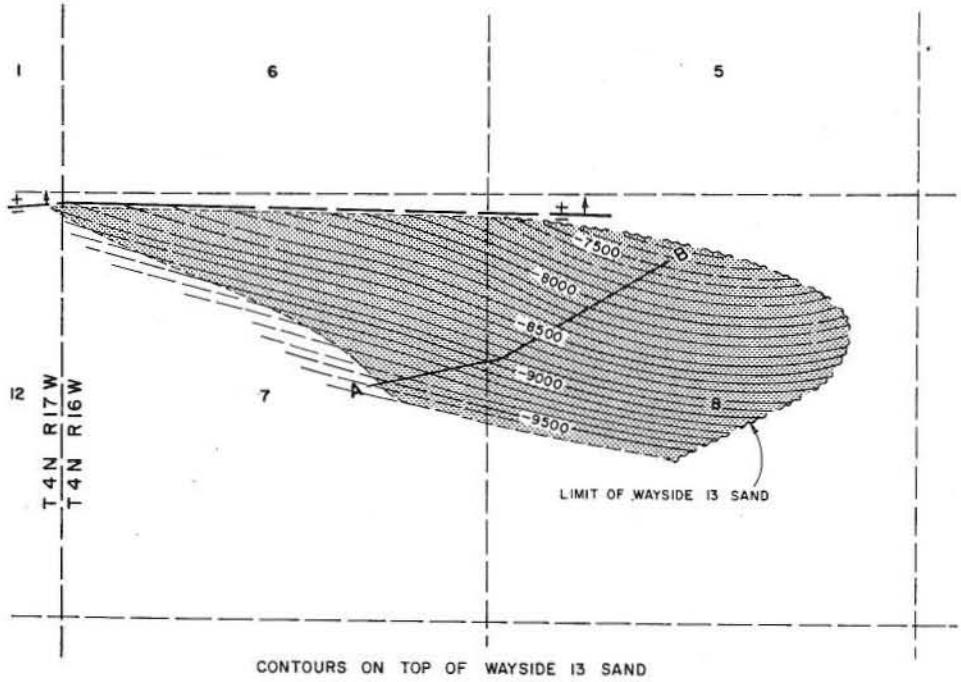
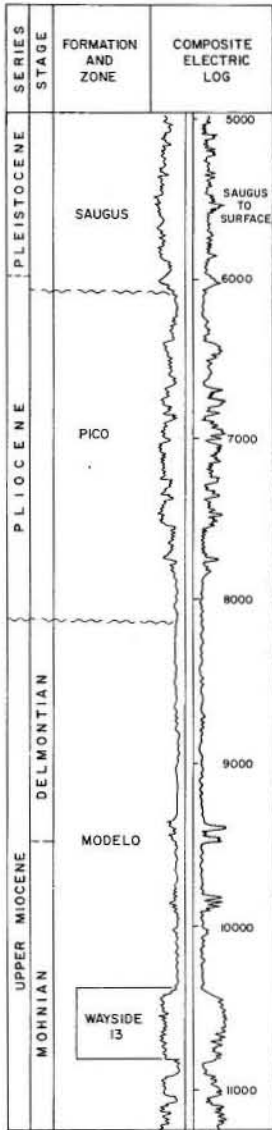
REFERENCES:

HONOR RANCHO OIL FIELD Main Area



HONOR RANCHO OIL FIELD

Southeast Area



CALIFORNIA DIVISION OF OIL AND GAS

HONOR RANCHO OIL FIELD

Los Angeles County

LOCATION: 32 miles northwest of Los Angeles

TYPE OF TRAP: See areas

ELEVATION: 1,000 - 1,400

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Rancho	Texaco Inc. "Honor Rancho 'A' (NCT-1)" 1	The Texas Co. "Honor Rancho 'A' (NCT-1)" 1	6 4N 16W	SB	673	428	Aug 1950

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Texaco Inc., Opr. "Wayside Unit" 28	Texaco Inc. "Honor Rancho 'A' (NCT-1)" 28	Mar 1960	7 4N 16W	SB	11,747	Modelo	Miocene

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
214,424	1,308,243	445,972	680	16	25,313,335	38,300,796	2,637,460	1957	73	57	720

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: Applies

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS:

REFERENCES: Herring, D.G., Jr., Geology of Honor Rancho Oil Field, Los Angeles County, Geology of Southern California: Calif. Div. of Mines Bull. 170, Map Sheet 30 (1954).

CALIFORNIA DIVISION OF OIL AND GAS

HONOR RANCHO OIL FIELD

MAIN AREA

Los Angeles County

LOCATION: 33 miles northwest of Los Angeles

TYPE OF TRAP: Sand pinchouts on flank of anticline

ELEVATION: 1,000 - 1,350

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Gabriel	Texaco Inc. "Honor Rancho 'A' (NCT-2)" 2	The Texas Co. "Honor Rancho 'A' (NCT-2)" 2	6 4N 16W	SB	53	14	Jun 1952
Rancho	Texaco Inc. "Honor Rancho 'A' (NCT-1)" 1	The Texas Co. "Honor Rancho 'A' (NCT-1)" 1	6 4N 16W	SB	673	428	Aug 1950
Wayside	Texaco Inc. "Honor Rancho 'A' (NCT-1)" 2	The Texas Co. "Honor Rancho 'A' (NCT-1)" 2	1 4N 17W	SB	258	133	Dec 1950

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Exxon Corp. "Newhall Land & Farming Co." C-1	Humble Oil & Refining Co. "Newhall Land & Farming Co." C-1	Dec 1950	1 4N 17W	SB	11,440	Modelo	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Gabriel	3,800	50	late Miocene	Modelo	37	1,250	III
Upper Rancho	5,200	40	late Miocene	Modelo	37	600	III
Lower Rancho	5,400	100	late Miocene	Modelo	36	600	III
Wayside A	6,200	200	late Miocene	Modelo	36	1,450	III
Wayside B	6,300	100	late Miocene	Modelo	36	1,450	III
Wayside C	6,400	100	late Miocene	Modelo	36	1,450	III

PRODUCTION DATA (Jan. 1, 1974)

Oil (bbl)	1973 Production		1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
104,042	92,712	278,759	270	9	10,100,003	11,089,163	1,438,301	1953	43	32	310

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Gas injection	1954	6,679,000	1

SPACING ACT: Applies

BASE OF FRESH WATER: 1,150

CURRENT CASING PROGRAM: 10 3/4" cem. 500 - 700; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: All waste water is injected into water-disposal wells.

REMARKS: A water-flood project into the Upper and Lower Rancho zones was terminated in October 1966, after 574,000 barrels of water had been injected. A water-flood project into the Wayside zone was terminated in December 1967, after 3.3 million barrels of water had been injected.

REFERENCES: Matthews, John F., Jr., Honor Rancho Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 39, No. 1 (1953).

CALIFORNIA DIVISION OF OIL AND GAS

HONOR RANCHO OIL FIELD

SOUTHEAST AREA

Los Angeles County

LOCATION: 31 miles northwest of Los Angeles

TYPE OF TRAP: Faulted homocline with sand pinchouts

ELEVATION: 1,000 - 1,400

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Wayside 13	Texaco Inc., Opr. "Wayside Unit" 13	The Texas Co. "Honor Rancho 'A' (NCT-2)" 13	8 4N 16W	SB	1,101	1,260	May 1956

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Texaco Inc., Opr. "Wayside Unit" 28	Texaco Inc. "Honor Rancho 'A' (NCT-1)" 28	Mar 1960	7 4N 16W	SB	11,747	Modelo	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Wayside 13	10,000	375	late Miocene	Modelo	37	1,600	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
110,382	1,215,531	167,213	410	7	15,213,332	27,211,633	2,086,330	1957	30	25	410

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1972	156,490	1
Gas injection	1960	13,328,000	2

SPACING ACT: Applies

BASE OF FRESH WATER: 600

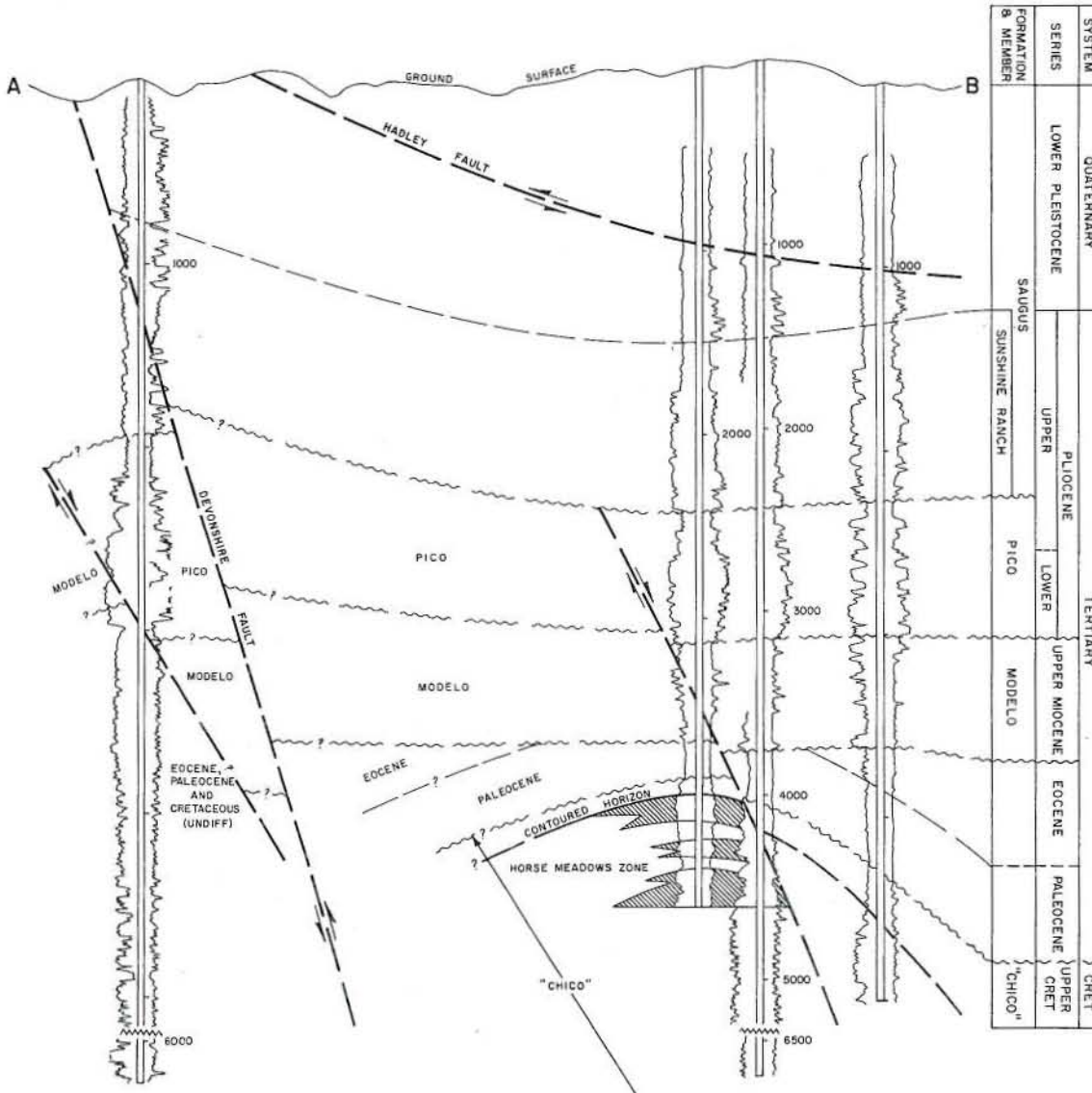
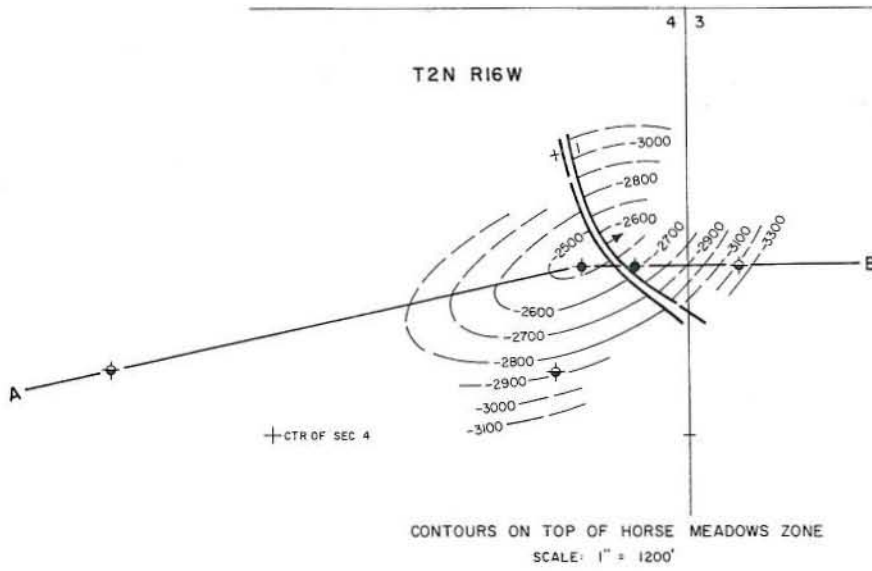
CURRENT CASING PROGRAM: 10 3/4" cem. 600; 7" combination string landed through zone and cemented through ports above zone.

METHOD OF WASTE DISPOSAL: Waste water is injected into water-flood well.

REMARKS:

REFERENCES: Ritzius, D.E., Southeast Area of Honor Rancho Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 45, No. 2 (1959).

HORSE MEADOWS OIL FIELD (Abandoned)



SYSTEM	SERIES	FORMATION & MEMBER
QUATERNARY	LOWER PLEISTOCENE	SAUGUS
TERTIARY	PLIOCENE	UPPER
		SUNSHINE RANCH
TERTIARY	LOWER	PICO
		MODELO
TERTIARY	EOCENE	MODELO
		PALEOCENE
CRETACEOUS	UPPER CRET.	"CHICO"
		"CHICO"

CALIFORNIA DIVISION OF OIL AND GAS

HORSE MEADOWS OIL FIELD (Abandoned)

Los Angeles County

LOCATION: 24 miles northwest of Los Angeles

TYPE OF TRAP: Faulted anticline

ELEVATION: 1,300 - 1,600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Horse Meadows	Porter Sesnon et al "Horse Meadows" 2-47	Union Oil Co. of Calif. "Porter Sesnon" 1	4 2N 16W	SB	86	30	Jul 1952

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Porter Sesnon et al "Horse Meadows" 2-47	Union Oil Co. of Calif. "Porter Sesnon" 1	Jun 1952	4 2N 16W	SB	6,696	"Chico"	Lt Cret

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Horse Meadows	4,150	500	Late Cret	"Chico"	24	N.A.	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	136,556	86,746	13,250	1955	5	2	20

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 300

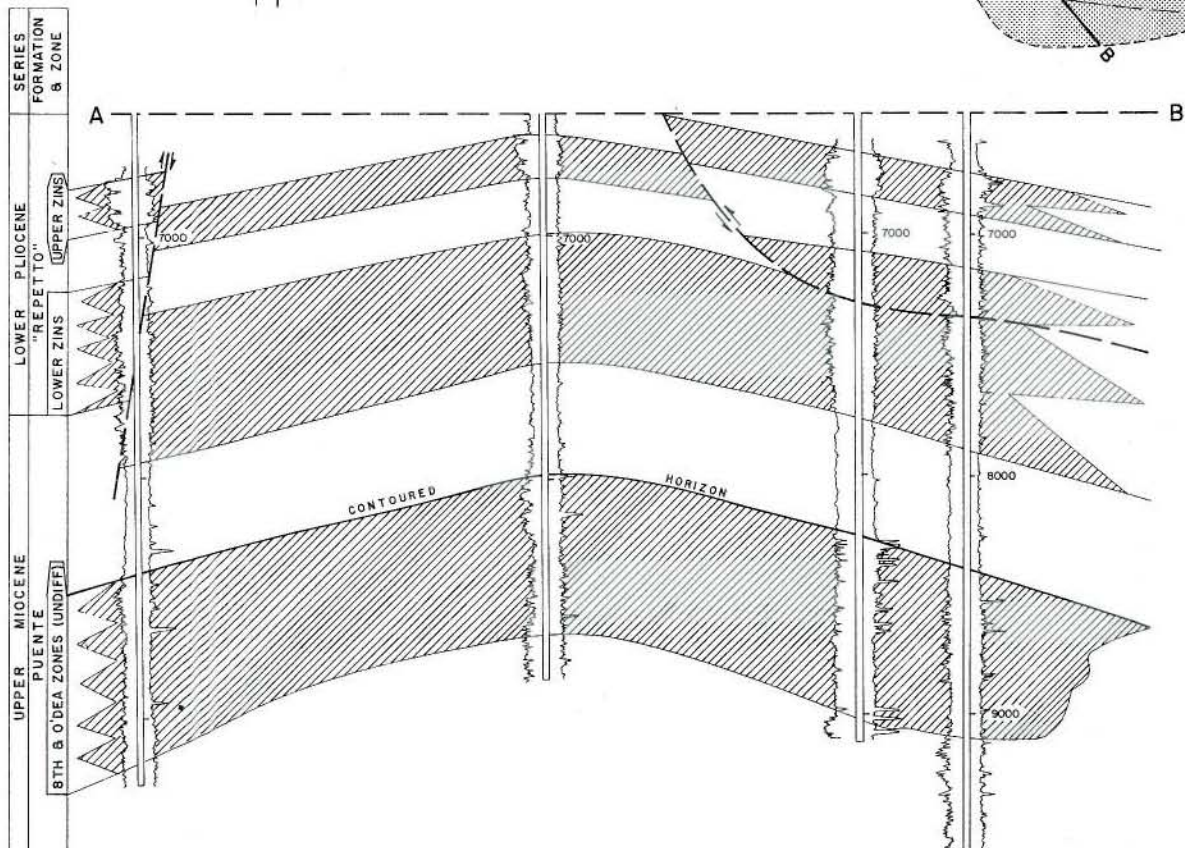
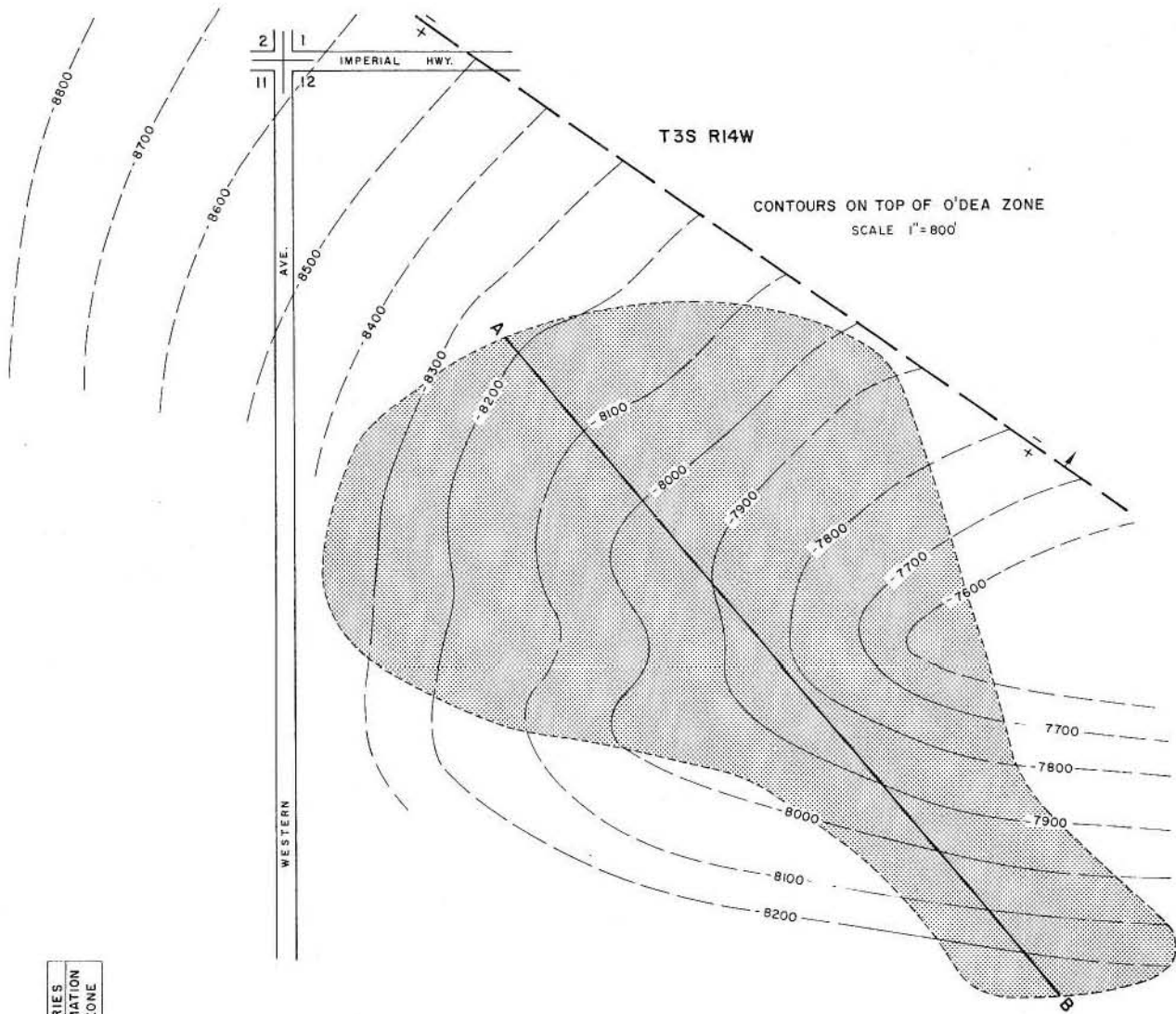
CURRENT CASING PROGRAM: 11 3/4" cem. 500; 5 1/2" and cemented through ports above zone.

METHOD OF WASTE DISPOSAL:

REMARKS: The field last produced and was abandoned in 1966.

REFERENCES: Cordova, S., Horse Meadows Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Field, Vol. 51, No. 1 (1965).

HOWARD TOWNSITE OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

HOWARD TOWNSITE OIL FIELD

Los Angeles County

LOCATION: 8 miles south of downtown Los Angeles

TYPE OF TRAP: Faulted anticlinal nose

ELEVATION: 180

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Zins O'Dea & 8th	Pauley Petroleum Co. "SCLQE" 1	San Cayetano Land and Exploration Co. No. 1	12 3S 14W	SB	24	842	Jun 1952
	Beren Corp. "Union-Poindexter" 1	Shell Oil Co. "Union-Poindexter" 1	12 3S 14W	SB	138	75	Sep 1947

Remarks: Although both wells produced oil prior to September 1947, production was considered to be noncommercial at that time.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Texaco Inc. "Century Park Unit One" 1	Texaco Inc. "C.P. Unit One" 1	Jan 1960	11 3S 14W	SB	11,646	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Zins O'Dea 8th	5,650	50	early Pliocene	"Repetto"	48 - 60	1,500	IV
	8,100	300	late Miocene	Puente	27 - 35	1,400	IV
	8,600	200	late Miocene	Puente	27 - 35	1,400	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
81,731	374,600	115,205	155	19	4,907,334	22,874,082	343,777	1951	35	28	195

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 2,000 - 2,400

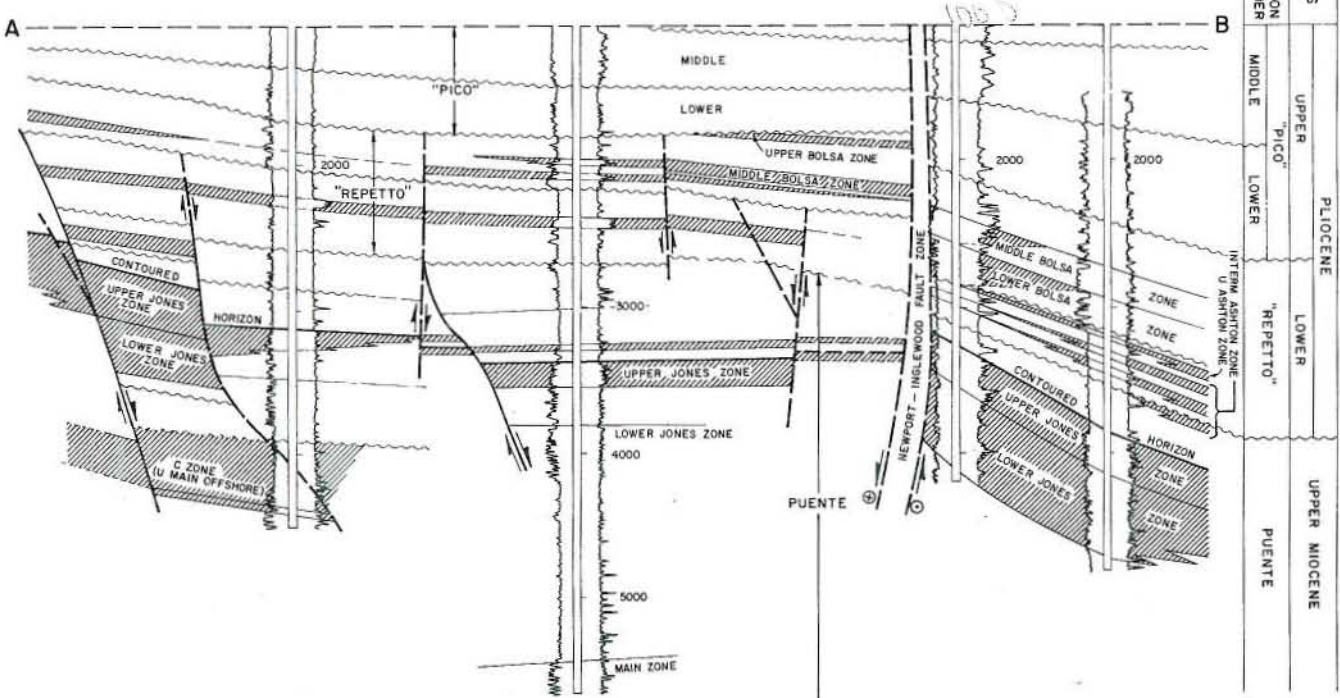
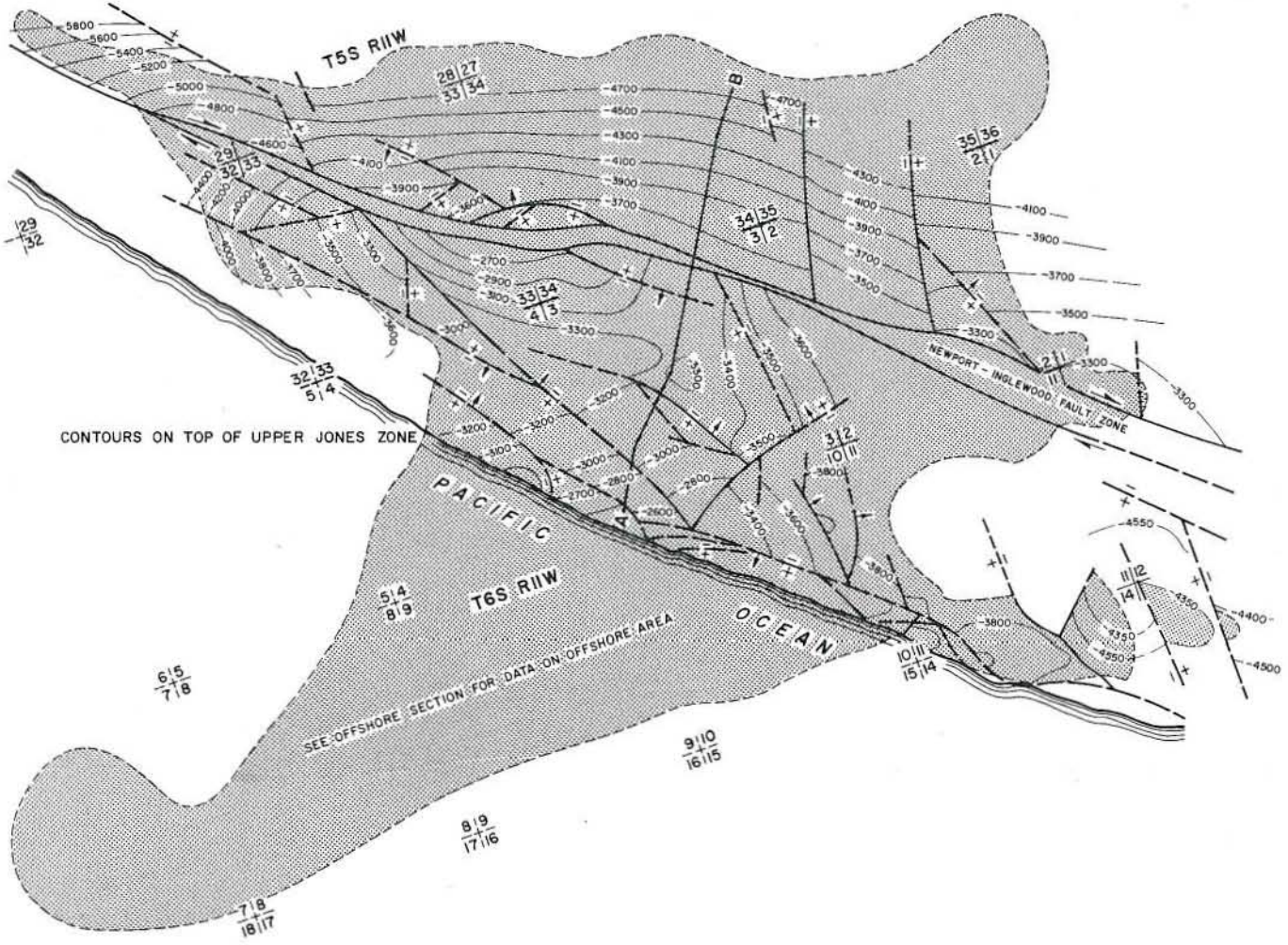
CURRENT CASING PROGRAM: 11" cem. 1,000; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water disposed of through sewer system.

REMARKS:

REFERENCES: Matthews, J.F., Jr., Howard Townsite Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 40, No. 2 (1954).

HUNTINGTON BEACH OIL FIELD



SERIES	FORMATION & MEMBER
PLIOCENE	UPPER "PICO"
	MIDDLE
	LOWER
LOWER Pliocene	"REPETTO"
	INTERMEDIATE ASHTON ZONE
UPPER MIOCENE	PUENTE
	LOWER MIOCENE

CALIFORNIA DIVISION OF OIL AND GAS

HUNTINGTON BEACH OIL FIELD

Orange County

LOCATION: 35 miles southeast of downtown Los Angeles

TYPE OF TRAP: See areas

ELEVATION: 60

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Middle Bolsa (Upper Tar)	Standard Oil Co. of Calif. "Huntington A" 1	Same as present	3 6S 11W	SB	70	N.A.	Jun 1920

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Type
Signal Oil & Gas Co. "State PRC 426" 143	Same	Aug 1956	33 5S 11W	SB	12,236	Puente	late Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btul)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1973)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (tbbf)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
20,571,010	5,071,326	101,053,406	5,268	1,136	905,048,045	776,037,023	33,813,185	1923	3,337	2,986	6,290

STIMULATION DATA (Jan. 1, 1973) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT. See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: See areas

REFERENCES: Hazenbush, G.C., and D.R. Allen, Huntington Beach Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 44, No. 1 (1958).

CALIFORNIA DIVISION OF OIL AND GAS

HUNTINGTON BEACH OIL FIELD

ONSHORE AREA

Orange County

LOCATION: See map sheet of Huntington Beach Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 60

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Upper Bolsa	G. J. Landers "Dubois" 1	McKeon Drilling Co., Inc. "Dubois" 1	10 6S 11W	SB	68	N.A.	Nov 1926
Middle Bolsa (Upper Tar)	Standard Oil Co. of Calif. "Huntington A" 1	Same as present	3 6S 11W	SB	45	N.A.	May 1920
Lower Bolsa (Lower Tar)	Same as above	Same as above	3 6S 11W	SB	*	N.A.	May 1920
Upper Ashton	Same as above	Same as above	3 6S 11W	SB	70	N.A.	Jul 1920
Intermediate Ashton	Signal Oil and Gas Co. "State PRC 1350" 1	The Superior Oil Co. "Jones" 1	10 6S 11W	SB	472	N.A.	Jul 1926
Upper Jones (L. Ashton)	Signal Oil and Gas Co. "Jones" 2	The Superior Oil Co. "Jones" 2	10 6S 11W	SB	2,024	N.A.	Dec 1926
Lower Jones (L. Ashton)	Operator and well no. unknown	Same as present	N.A.	SB	N.A.	N.A.	N.A.
"C" (Hamilton)	Wilson Oil Co. "WP" 1	Clark C. Peterson No. 1	11 6S 11W	SB	500	2,000	Aug 1953
Main	Signal Oil and Gas Co. "State PRC 920" 1-A	Wilshire Oil Co. "H.B." 1	10 6S 11W	SB	688	N.A.	Sep 1926

Remarks: * Initial production from Middle and Lower Bolsa zones commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Signal Oil and Gas Co. "South Bolsa" S-1-D	Same	Apr 1955	33 5S 11W	SB	11,669	Puente	late Mio

PRODUCING ZONES

Zone *	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Upper Bolsa	1,800	100	early Pliocene	"Repetto"	11 - 24	1,195	II
Middle Bolsa (Upper Tar)	2,200	150	early Pliocene	"Repetto"	11 - 24	1,195	II
Lower Bolsa (Lower Tar)	2,300	100	early Pliocene	"Repetto"	11 - 24	1,195	II
Upper Ashton	3,900	100	early Pliocene	"Repetto"	14 - 31	1,360	III
Intermediate Ashton	4,100	200	early Plio - late Mio	"Repetto" & Puente	14 - 31	1,360	III
Upper Jones (L. Ashton)	4,300	275	late Miocene	Puente	13 - 23	1,270	III

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Lower Jones (L. Ashton)	4,600	150	late Miocene	Puente	13 - 23	1,270	III
"C" (Hamilton)	3,800	100	late Miocene	Puente	18 - 26	1,300	III
Main	4,300	277	late Miocene	Puente	11 - 26	1,425	IV

* A few geographically restricted minor productive sands are not described.

PRODUCTION DATA (Jan. 1, 1974)

1972 Production			1972 Proved acreage	Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
4,520,628	2,784,783	24,589,288	2,923	804	487,666,315	492,539,651	33,813,185	1923	2,634	2,300	3,925

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1961	120,544,312	35
Cyclic steam	1964	9,599,301	272
Steam flood	1965	5,169,574	14

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,000 - 2,400

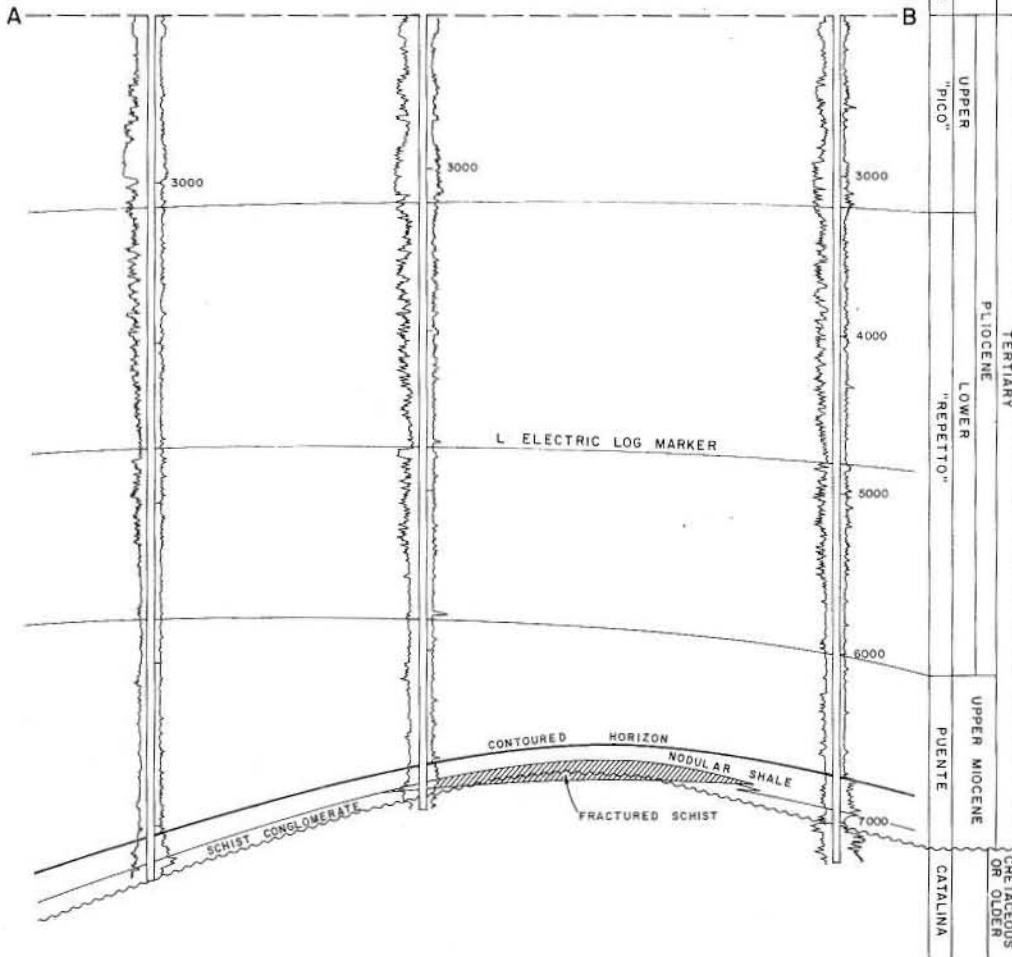
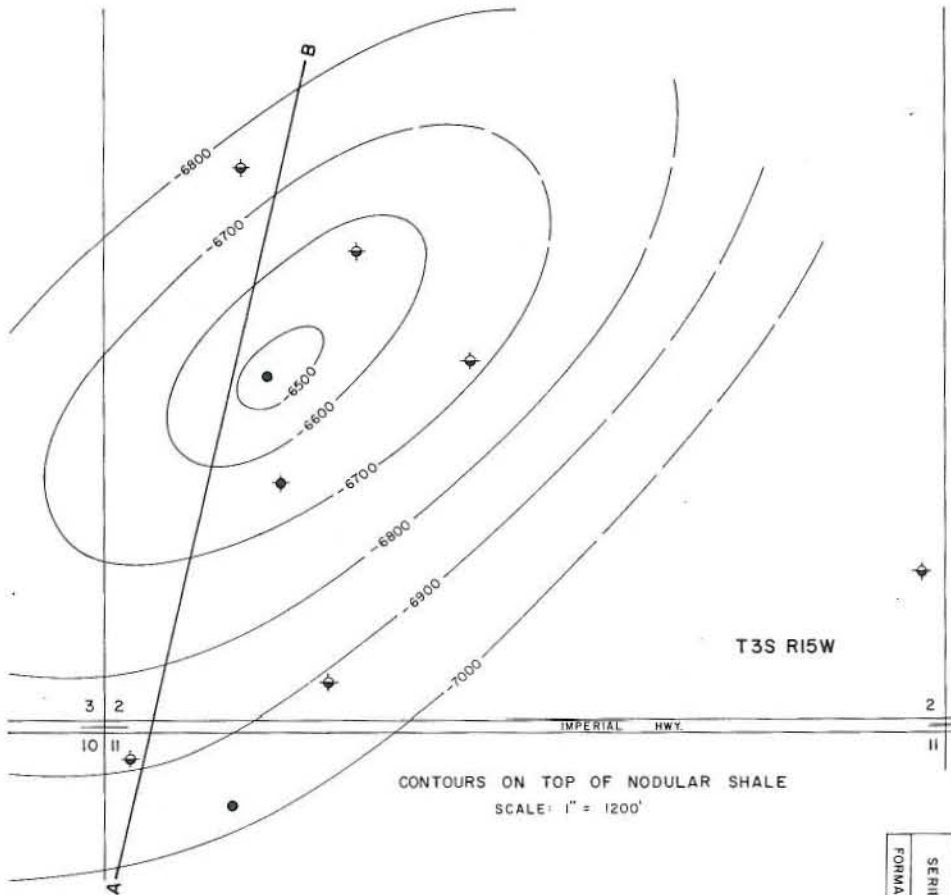
CURRENT CASING PROGRAM: 11 3/4" cem. 500; 8 5/8" or 7" cem. above zone and across base of fresh-water sands; 6 5/8" or 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Water-flood project and disposal wells.

REMARKS:

REFERENCES: Carls, J.M., Recent Developments in the Tar Sands of the Townlot Area, Huntington Beach Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 35, No. 1 (1949).
 Carriel, J.T., Huntington Beach Oil Field - Old Field Portion: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 28, No. 1 (1942).
 Case, J.B., Report on Huntington Beach Oil Field, Orange County, Calif., with Special Reference to Lack of Definite Subsurface Information after Eighteen Months of Drilling Activity: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 7, No. 5 (1921).
 Case, J.B., and V.H. Wilhelm, Report on Huntington Beach Oil Field, Including Geochemical Relationship of Waters Encountered in the Huntington Beach Field, by M.A. Grizzle: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 9, No. 6 (1923).
 Dolman, S.G., Tar Sands in the Townlot Area of Huntington Beach Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 13, No. 12 (1928).
 Graser, F.A., Recent Developments in Huntington Beach Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 12, No. 12 (1927).
 Hazenbush, G.C., and D.R. Allen, Huntington Beach Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 44, No. 1 (1958).
 Hunter, A.L., W.C. Bradford, and D.R. Allen, Huntington Beach Oil Field - Southeast Extension of Townlot Area: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 41, No. 1 (1955).

HYPERION OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

HYPERION OIL FIELD
Los Angeles County

LOCATION: 7 miles southeast of Santa Monica
TYPE OF TRAP: Anticline over basement high
ELEVATION: 85

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Nodular shale	Pauley Petroleum, Inc. "Loftus" 1	Edwin W. Pauley and Harold R. Pauley "Loftus" 1	11 3S 15W	SB	50	N.A.	Apr 1944
Schist conglomerate	Pauley Petroleum, Inc. "Loftus" 1	Edwin W. Pauley and Harold R. Pauley "Loftus" 1	11 3S 15W	SB	*	N.A.	Apr 1944
Schist	Standard Oil Co. of Calif. "Six Companies Fee" 1	Shell Oil Co., Inc., Opr. "Six Companies" 1	2 3S 15W	SB	165	50	Aug 1946

Remarks: * Nodular shale and conglomerate production commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Edwin W. & Harold R. Pauley "Los Angeles City-Hyperion" 1	Same	Jan 1952	11 3S 15W	SB	7,332	Catalina Schist	Cret or older

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Nodular shale	6,835	40	late Miocene	Puente	15 - 18	800	IV
Schist conglomerate	7,045	45	late Miocene	Puente	15 - 18	800	IV
Schist	7,125	35	Cret or older	Catalina Schist	15 - 18	800	IV

PRODUCTION DATA (Jan. 1, 1974)

Oil (bbl)	1973 Production		1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
9,955	1,615	580	20	1	496,700	179,658	47,963	1948	8	4	40

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 840

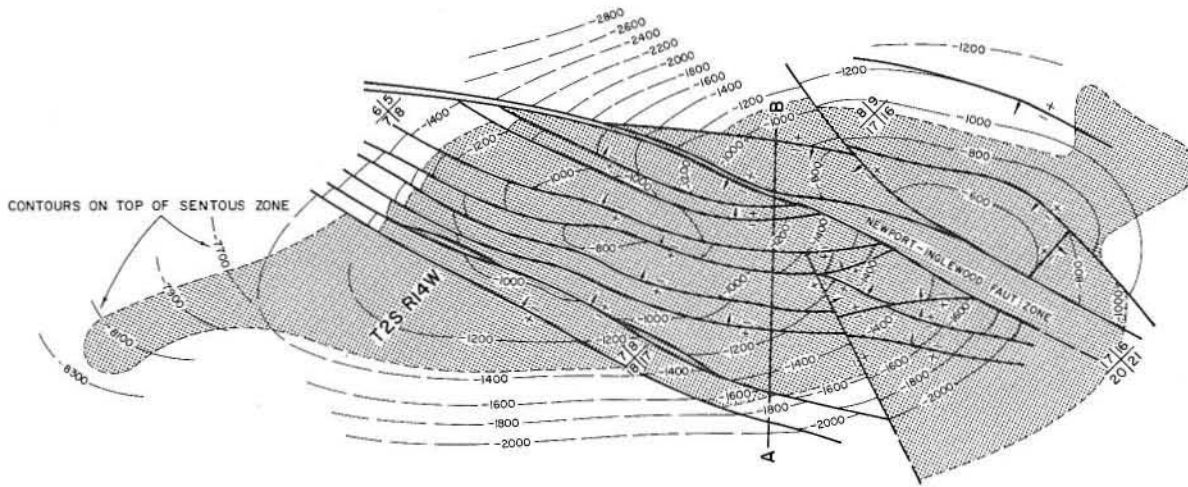
CURRENT CASING PROGRAM: 11 3/4" cem. 1,000; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Sewer system.

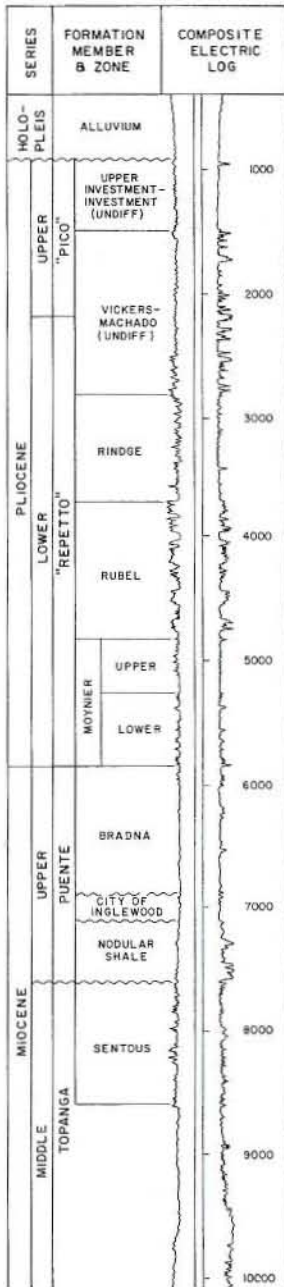
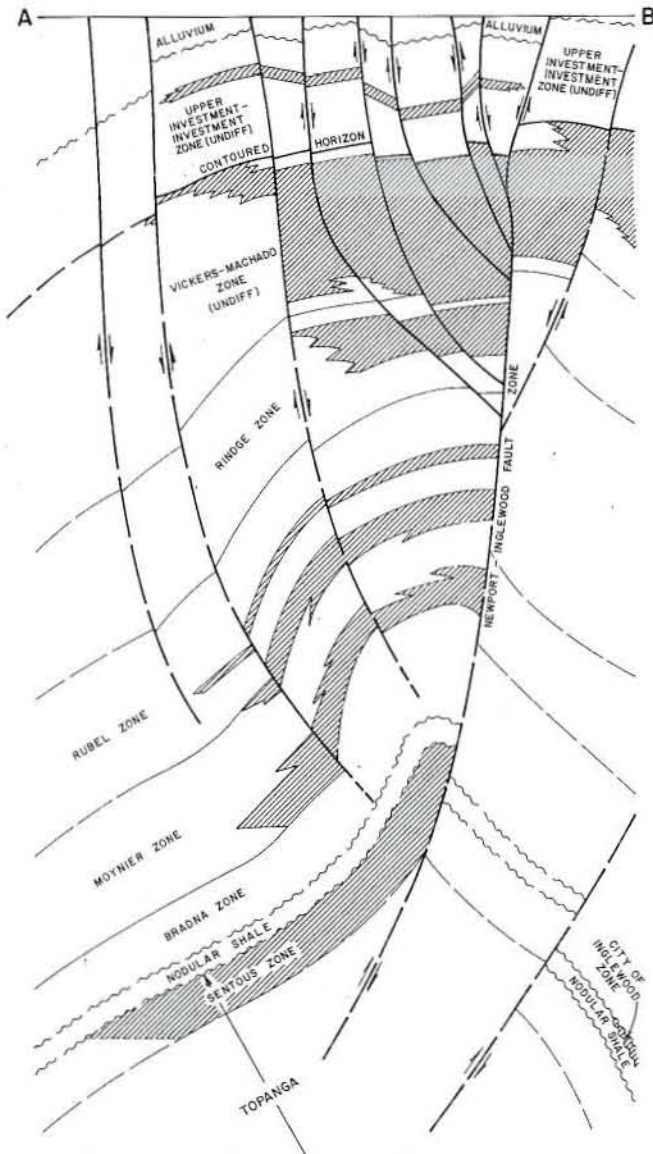
REMARKS:

REFERENCES: Crowder, R.E., Hyperion Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 1 (1960).

INGLEWOOD OIL FIELD



CONTOURS ON TOP OF VICKERS ZONE
SCALE 1" = 2900'



CALIFORNIA DIVISION OF OIL AND GAS

INGLEWOOD OIL FIELD
Los Angeles County

LOCATION: 9 miles southwest of downtown Los Angeles

TYPE OF TRAP: Faulted anticline

ELEVATION: 300

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Upper Investment	Standard Oil Co. of Calif. "L.A. Investment" 1-96	Same as present	17 2S 14W	SB	89	10	Aug 1948
Investment	Standard Oil Co. of Calif. "L.A. Investment" 1-1	Same as present	17 2S 14W	SB	120	N.A.	Sep 1924
Vickers-Machado	Same as above	Same as above	17 2S 14W	SB	145	N.A.	Sep 1924
Rindge	Standard Oil Co. of Calif., Unit Opr. "VR" 187	Shell Oil Co. of Calif. "Rindge" 4	8 2S 14W	SB	1,057	N.A.	Jul 1925
Rubel	Standard Oil Co. of Calif., Unit Opr. "RU" 310	Standard Oil Co. of Calif. "Rubel" 17	8 2S 14W	SB	1,903	850	Aug 1934
Moynier	Frederick Beyl No. 5	E. K. Allison Syndicated "Baldwin Hills" 1	8 2S 14W	SB	50	N.A.	Apr 1932
Bradna	Standard Oil Co. of Calif. "Bradna Community" 3	Same as present	16 2S 14W	SB	110	138	Aug 1957
City of Inglewood (Marlow Burns)	Standard Oil Co. of Calif. "Marlow Burns" 306	Same as present	16 2S 14W	SB	396	422	May 1960
Sentous	Standard Oil Co. of Calif. "Sentous" 7	R. R. Bush "Sentous" 1	17 2S 14W	SB	75	125	Sep 1940

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	Approximate depth	
						Strata	Age
Standard Oil Co. of Calif. "Buckler" 1A	Humble Oil and Refining Co. "Buckler Community" 1	Oct 1959	16 2S 14W	SB	13,516	Topanga (?)	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Upper Investment	950	100	late Pliocene	"Pico"	14	200	II
Investment	1,050	100	late Pliocene	"Pico"	15	1,500	II
Vickers-Machado	1,500	750	late & early Pliocene	"Pico" - "Repetto"	13 - 29	1,700	III
Rindge	2,400	400	early Pliocene	"Repetto"	20 - 38	1,800	III
Rubel	3,400	325	early Pliocene	"Repetto"	20 - 35	1,800	III
Moynier	4,200	300	early Pliocene	"Repetto"	22	2,000	III
Bradna	8,000	80	late Miocene	Puente	27	2,000	IV
City of Inglewood (Marlow Burns)	9,000	125	late Miocene	Puente	27 - 32	2,000	IV
Sentous	8,200	350	middle Miocene	Topanga	32	2,000	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
3,565,517	2,924,360	53,526,680	1,133	442	293,429,948	235,338,520	18,371,536	1925	1,020	905	1,215

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1954	510,371,403	100

SPACING ACT: Does not apply

BASE OF FRESH WATER: 200 - 350

CURRENT CASING PROGRAM: Shallow: 11 3/4" cem. 100; 9 5/8" cem. above zone and across base of fresh-water sands; 6 5/8" liner landed through zone.

Deep: 13 3/8" cem. 1,000; 11 3/4" cem. 3,000; 6 5/8" combination liner landed through zone.

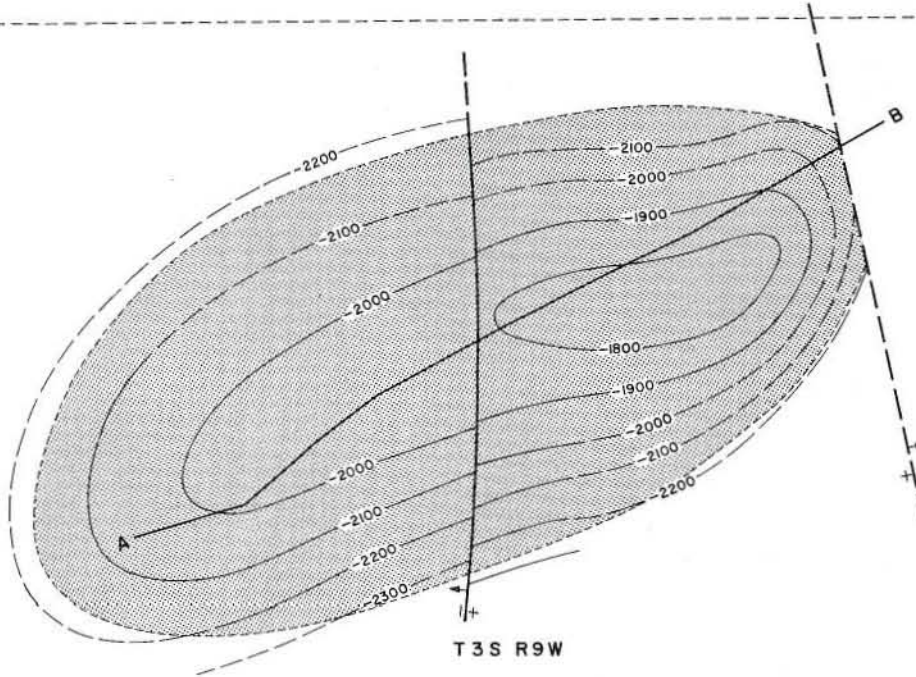
METHOD OF WASTE DISPOSAL: Water-flood project and disposal well.

REMARKS: A cyclic-steam project was begun in 1964 and terminated in 1965 after having injected 358,500 bbls. of water equivalent into 56 wells. A pilot steam-flood was attempted in 1965 when 866,637 bbls. of water equivalent was injected into one well. A gas-injection, pressure-maintenance project was started in 1964 and was terminated in 1970 after having injected 11,979,505 Mcf. into two wells.

REFERENCES: Driver, H.L., Inglewood Oil Field: Calif. State Div. of Mines, Bull. 118, p. 306-309 (1943).
Huguenin, E., Inglewood Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 11, No. 12 (1926).

KRAEMER OIL FIELD

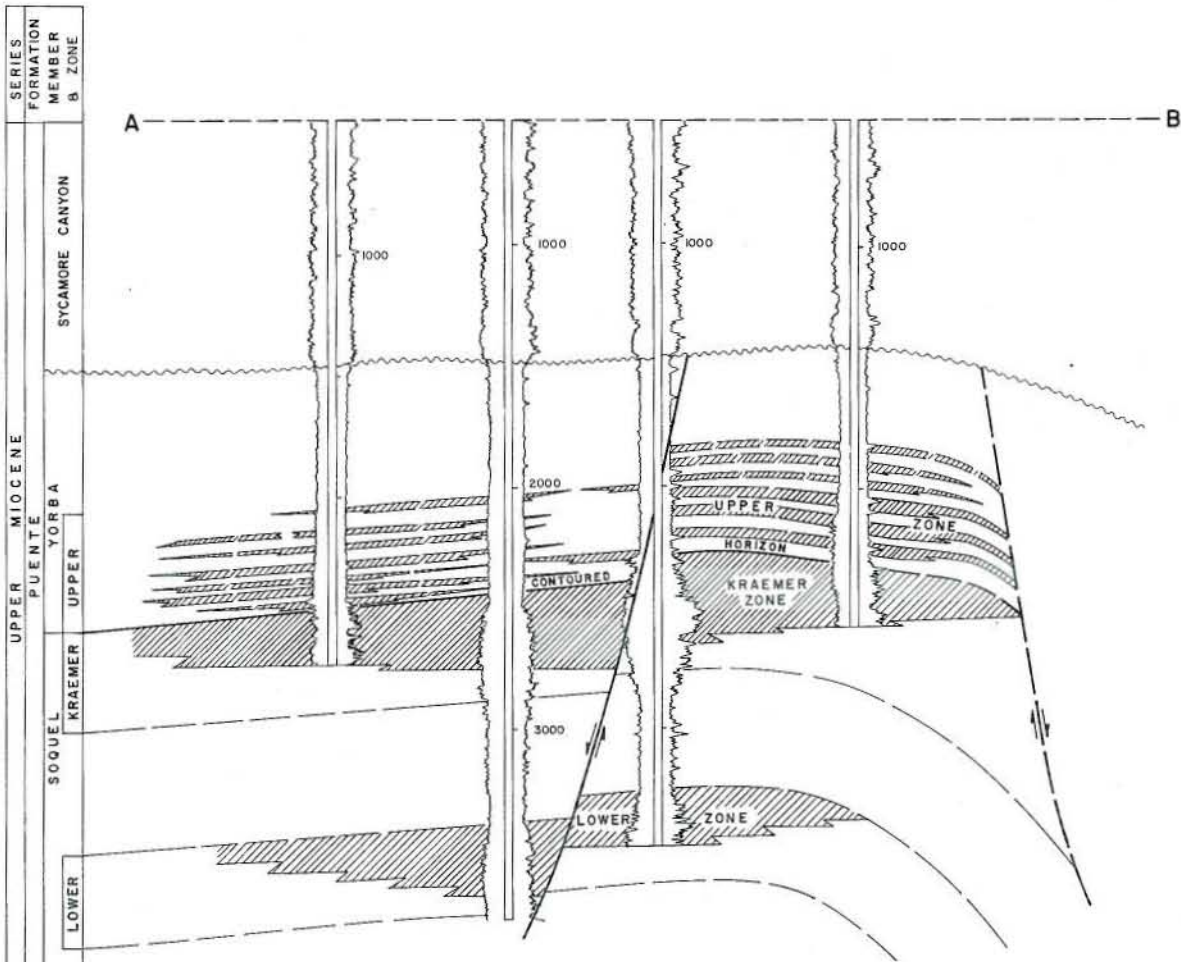
25 30
36 31



T 3 S R 9 W

CONTOURS ON TOP OF KRAEMER ZONE

SCALE: 1" = 800'



CALIFORNIA DIVISION OF OIL AND GAS

KRAEMER OIL FIELD
Orange County

LOCATION: 8 miles east of Fullerton

TYPE OF TRAP: Faulted anticline

ELEVATION: 200 - 600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Upper Kraemer	Palm Petroleum "Kraemer Estates" 3	Standard Oil Co. "Kraemer 1" 3	36 3S 9W	SB	318	N.A.	Jun 1919
	Standard Oil Co. of Calif. "Kraemer 1" 1	Standard Oil Co. "Kraemer 1" 1	36 3S 9W	SB	144	N.A.	Sep 1918
Lower	Palm Petroleum "Kraemer Estates" 3S	Shell Oil Co. "Shell-Kraemer" 1	36 3S 9W	SB	20	N.A.	Nov 1954

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Shell Oil Co. "Shell Travis" 1	Same	Jul 1954	36 3S 9W	SB	6,185	Topanga	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (ftu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Upper Kraemer	1,900	200	late Miocene	Puente	17 - 20	N.A.	I
	2,400	300	late Miocene	Puente	18 - 20	420	II
Lower	3,300	250	late Miocene	Puente	22	200	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
68,037	15,805	1,213,556	85	18	3,246,046	1,005,279	189,089	1920	55	48	145

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1952	10,098,227	12

SPACING ACT: Does not apply

BASE OF FRESH WATER: 50 - 1,500

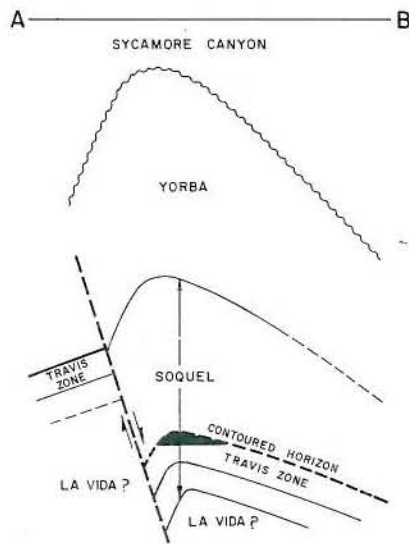
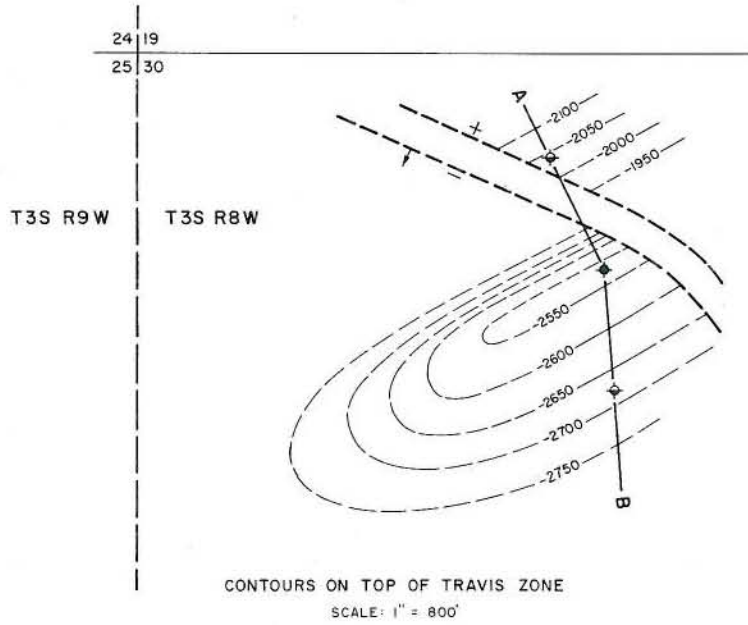
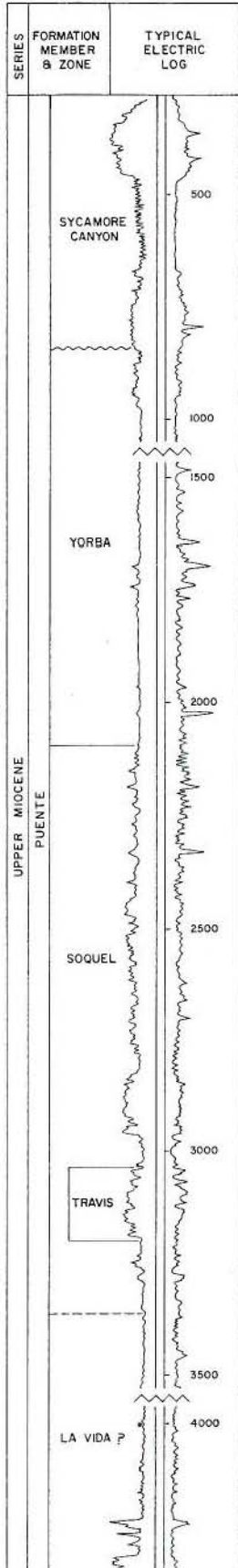
CURRENT CASING PROGRAM: 11 3/4" cem. 300; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Water-flood project.

REMARKS: The Lower zone was of little economic importance. The two wells completed in that zone were subsequently recompleted in the Kraemer zone.

REFERENCES: Ingram, W.L., Kraemer Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 1 (1960).

NORTHEAST KRAEMER OIL FIELD (Abandoned)



CALIFORNIA DIVISION OF OIL AND GAS

KRAEMER, NORTHEAST, OIL FIELD (Abandoned)

Orange County

LOCATION: 10 miles east of Fullerton

TYPE OF TRAP: Faulted nose

ELEVATION: 500

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Travis	Texaco Inc. "Travis" 1	Same as present	30 3S 8W	SB	3	N.A.	Mar 1953

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Texaco Inc. "Travis" 1	Same	Jan 1953	30 3S 8W	SB	4,872	Topanga	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Travis	3,035	85	late Miocene	Puente	23	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	389	0	389	1953	4	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
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SPACING ACT: Applies

BASE OF FRESH WATER: 400

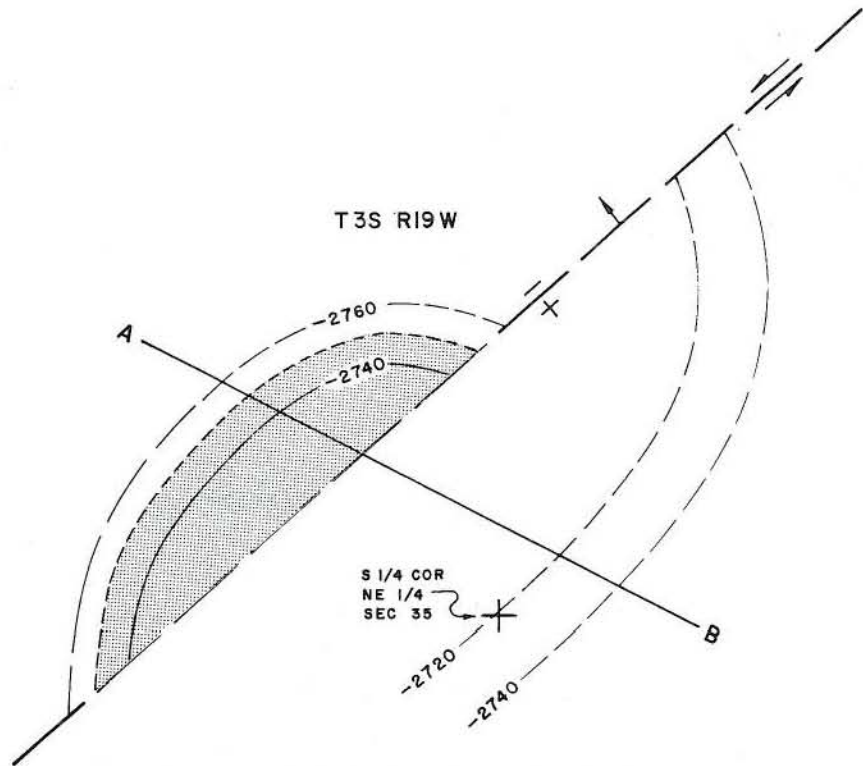
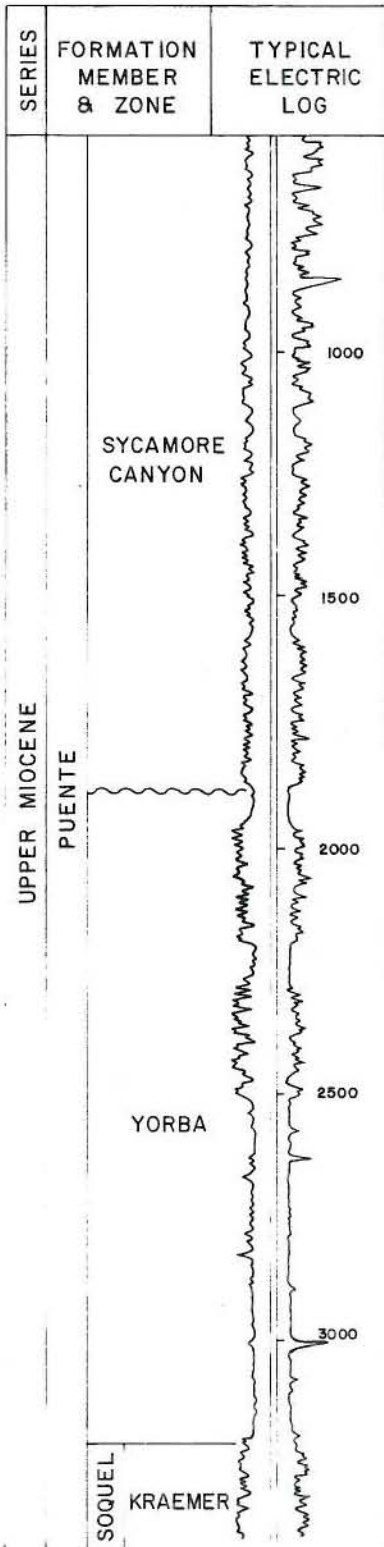
CURRENT CASING PROGRAM: 11 3/4" cem. 400; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

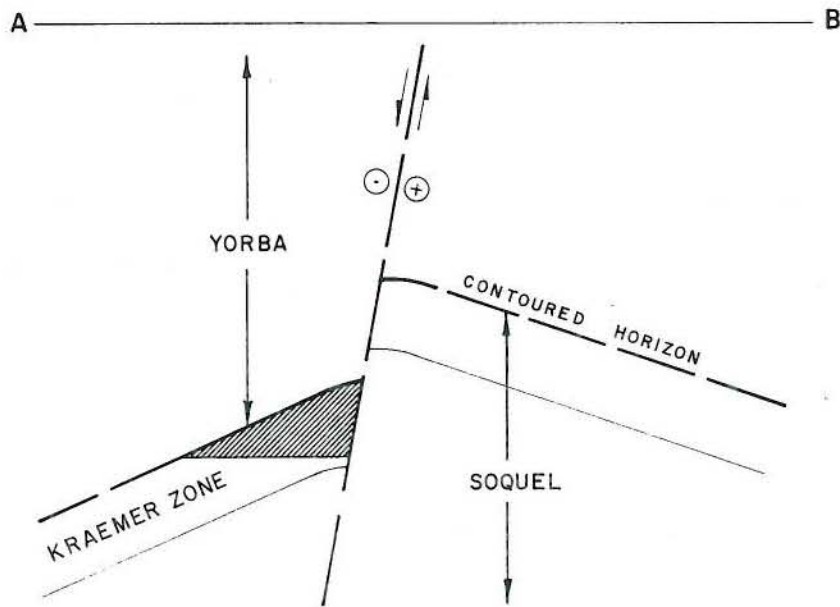
REMARKS: Last production was in December 1953. Field abandoned in 1954.

REFERENCES:

WEST KRAEMER OIL FIELD
(Abandoned)



CONTOURS ON TOP OF KRAEMER ZONE
SCALE: 1" = 150'



CALIFORNIA DIVISION OF OIL AND GAS

KRAEMER, WEST, OIL FIELD (Abandoned)

Orange County

LOCATION: 7 miles east of Fullerton

TYPE OF TRAP: Faulted anticline

ELEVATION: 400

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Kraemer	Patrick A. Doheny "Stern" 1	Same as present	35 3S 9W	SB	14	N.A.	May 1956

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	A ^{1st}
Patrick A. Doheny "Stern" 3	Same	Oct 1956	35 3S 9W	SB	3,418	Soquel	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Kraemer	3,100	100	late Miocene	Puente	19	218	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	9,583	0	3,779	1957	3	2	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,250

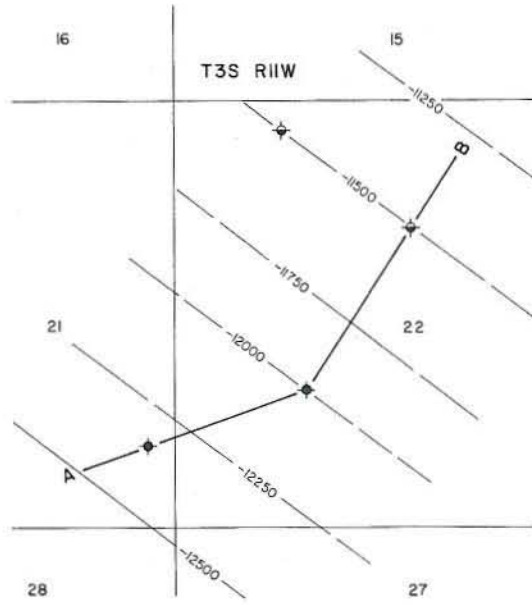
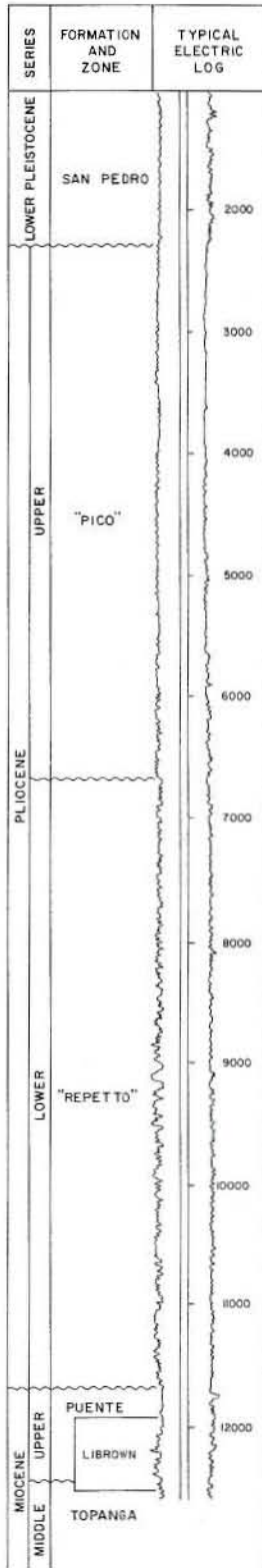
CURRENT CASING PROGRAM: 11 3/4" cem. 300; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Last production in February 1959. Field abandoned in March 1959.

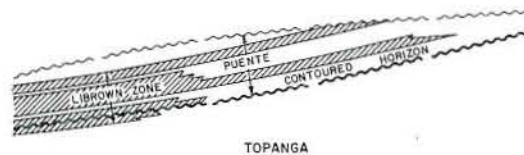
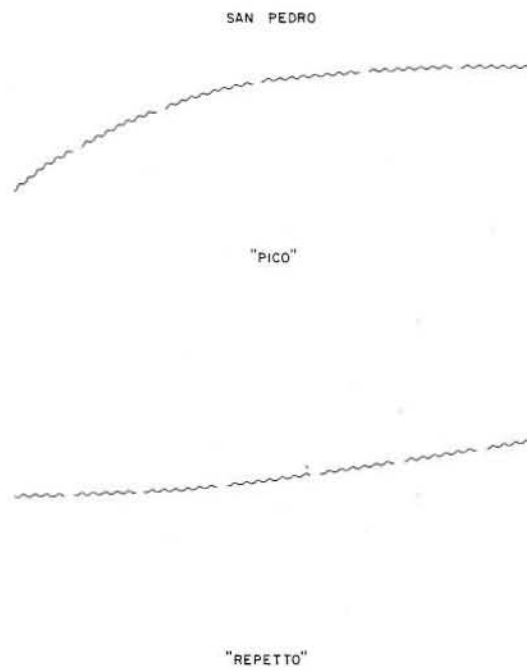
REFERENCES:

LA MIRADA OIL FIELD (Abandoned)



CONTOURS ON TOP OF TOPANGA
SCALE: 1" = 2400'

A ————— B



TOPANGA

CALIFORNIA DIVISION OF OIL AND GAS

LA MIRADA OIL FIELD (Abandoned)

Los Angeles County

LOCATION: 7 miles northwest of Anaheim along U.S. Highway 101

TYPE OF TRAP: Sand pinchout on a homocline

ELEVATION: 85

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Librown	Mobil Oil Corp. "Librown" 1	General Petroleum Corp. "Librown" 1	21 3S 11W	SB	268	N.A.	Feb 1946

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Mobil Oil Corp. "Librown" 1	General Petroleum Corp. "Librown" 1	Mar 1945	21 3S 11W	SB	12,600	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Librown	11,900	500	Miocene	Puente-Topanga	30	240	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	25,250	10,425	19,498	1946	4	2	20

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
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SPACING ACT: Applies

BASE OF FRESH WATER: 2,200

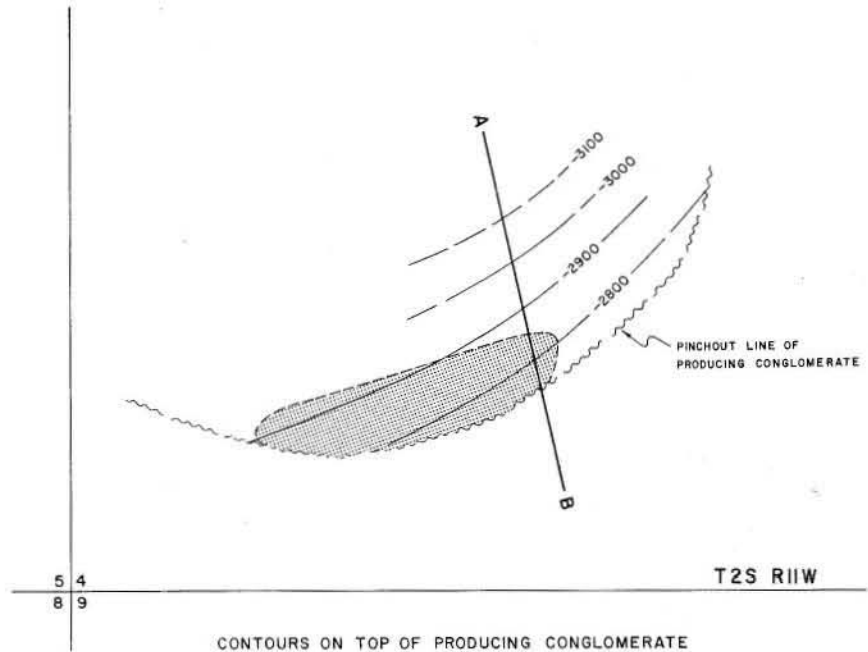
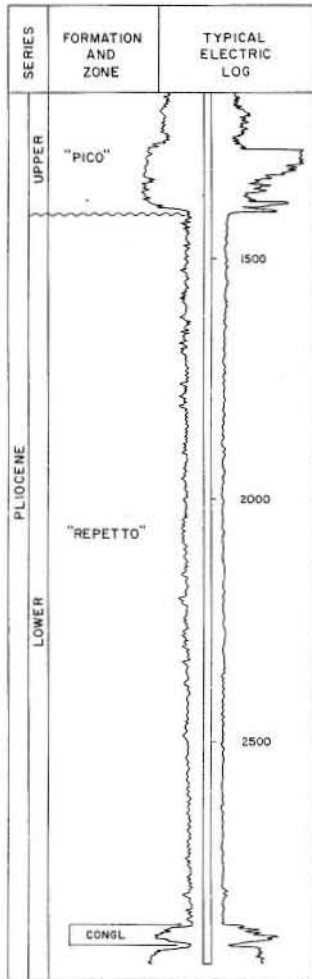
CURRENT CASING PROGRAM: 13 3/8" cem. 1,000; 7" cem. above zone and across the base of fresh water; 5" liner landed through zone.

METHOD OF WASTE DISPOSAL:

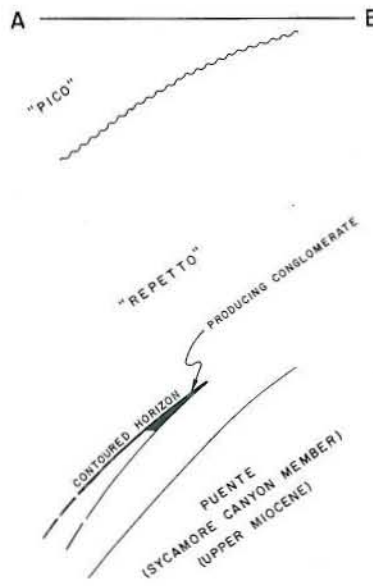
REMARKS: Last production was in July 1954; field abandoned.

REFERENCES:

LAPWORTH OIL FIELD (Abandoned)



CONTOURS ON TOP OF PRODUCING CONGLOMERATE
SCALE: 1" = 600'



CALIFORNIA DIVISION OF OIL AND GAS

LAPWORTH OIL FIELD (Abandoned)

Los Angeles County

LOCATION: 5 miles west of Puente

TYPE OF TRAP: Lenticular conglomerate on a homocline

ELEVATION: 230

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Conglomerate	Flanders and Brown "Lapworth" 1	Woodward Oil Co. "Lapworth" 1	4 2S 11W	SB	220	N.A.	Jul 1935

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Shell Oil Co. "Pollissier" 1	Same	May 1935	4 2S 11W	SB	8,374	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Conglomerate	3,100	20	early Pliocene	"Repetto"	28 - 31	30	III

PRODUCTION DATA (Jan. 1, 1974)

Oil (bbl)	1973 Production		1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	54,829	429	9,504	1935	8	3	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
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SPACING ACT: Applies

BASE OF FRESH WATER: 2,800

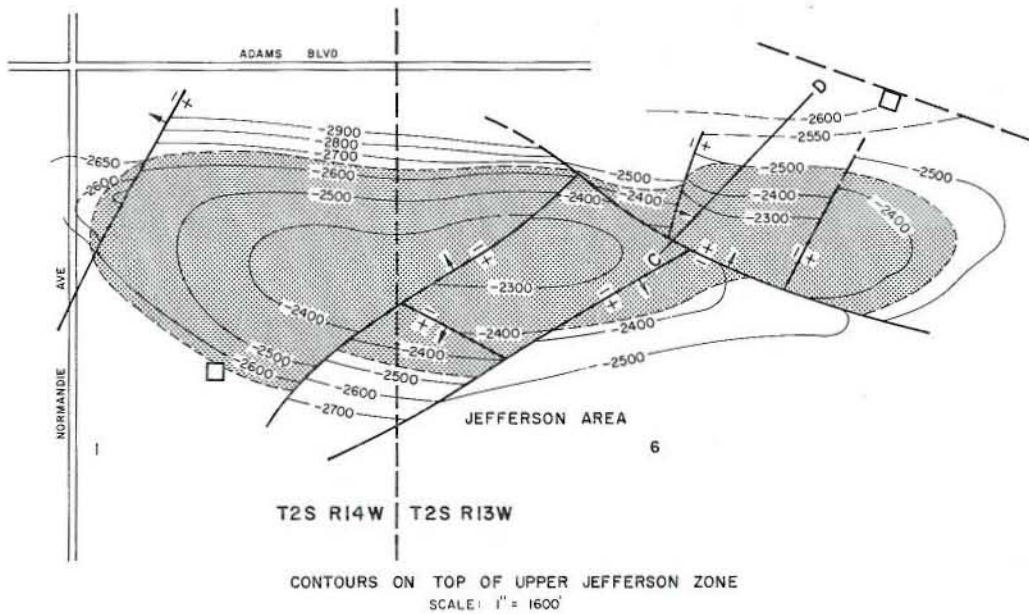
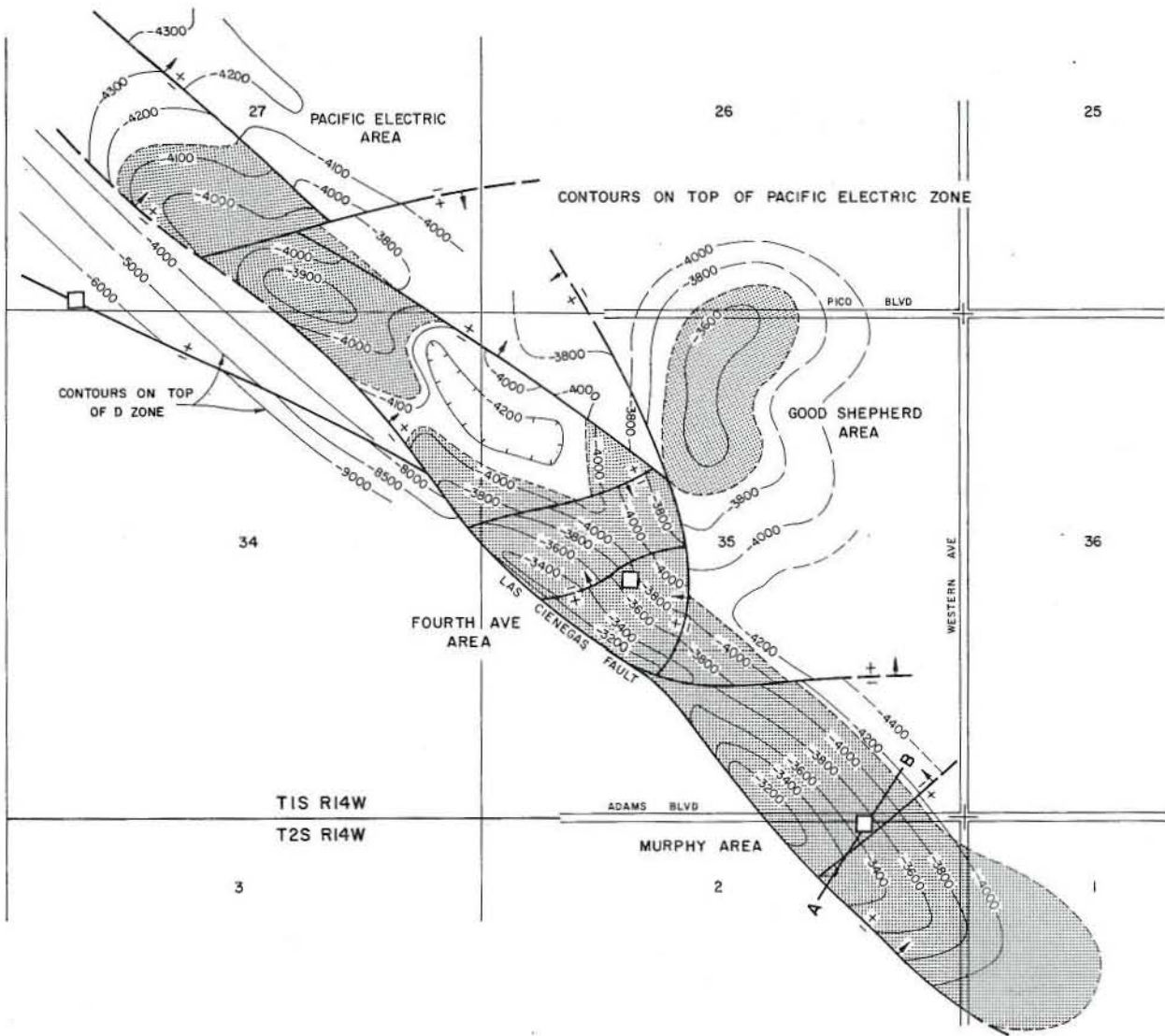
CURRENT CASING PROGRAM: 13 3/8" cem. 300 - 1,000 and across base of fresh-water sands; 8 5/8" cem. above zone; 6 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL:

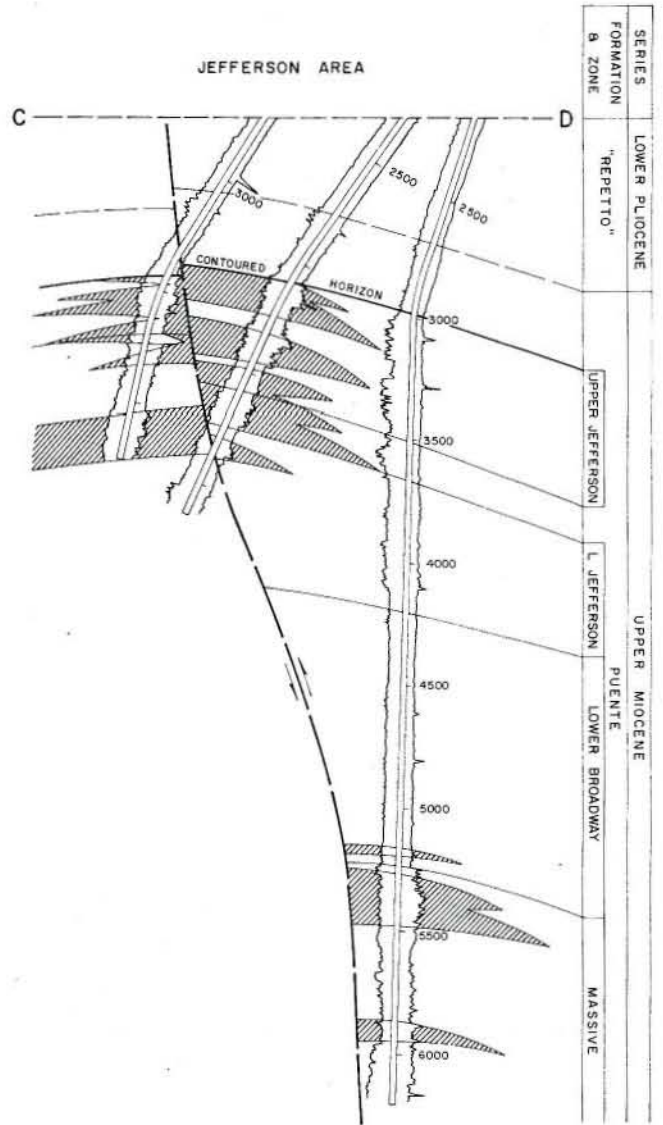
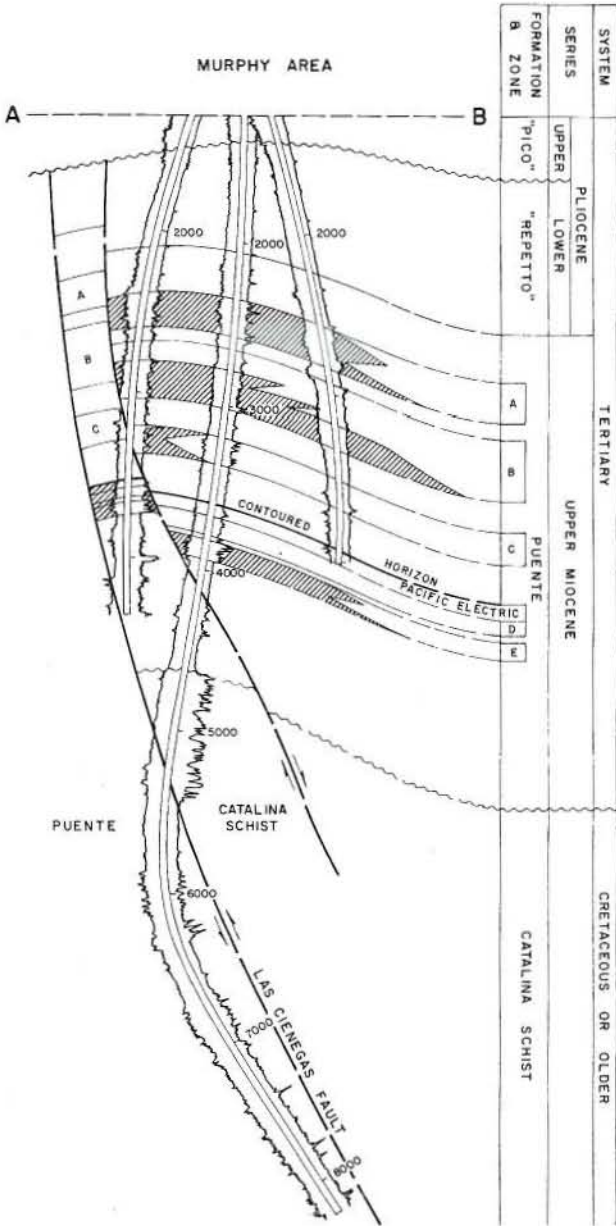
REMARKS: Last production was in July 1943; field abandoned.

REFERENCES:

LAS CIENEGAS OIL FIELD



LAS CIENEGAS OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

LAS CIENEGAS OIL FIELD

Los Angeles County

LOCATION: 4 miles southwest of downtown Los Angeles

TYPE OF TRAP: See areas

ELEVATION: 185

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Pacific Electric	Union Oil Co. of Calif. "Pacific Electric" 1	Union Oil Co. of Calif. "Union-Signal-Pacific Electric" 1	27 1S 14W	SB	309	115	Sep 1961
D	Same as above	Same as above	27 1S 14W	SB	*	*	Sep 1961

Remarks: * Initial production from Pacific Electric and D zones was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Fourth Avenue" 16	Union Oil Co. of Calif. "Union-Signal Fourth Avenue" 16	Apr 1965	35 1S 14W	SB	9,514	Puente	late Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
2,262,654	2,015,542	6,266,195	950	78	40,370,414	37,174,424	4,998,562	1968	129	108	970

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: All wells drilled from urban drillsites.

REFERENCES: See areas

CALIFORNIA DIVISION OF OIL AND GAS

LAS CIENEGAS OIL FIELD

FOURTH AVENUE AREA

Los Angeles County

LOCATION: See map sheet of Las Cienegas Oil Field

TYPE OF TRAP: Faulted asymmetrical anticline

ELEVATION: 200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
A	Union Oil Co. of Calif. "Fourth Avenue" 4	Union Oil Co. of Calif. "Union-Signal Fourth Avenue" 4	35 1S 14W	SB	162	225	May 1964
B	Union Oil Co. of Calif. "Fourth Avenue" 2	Union Oil Co. of Calif. "Union-Signal Fourth Avenue" 2	35 1S 14W	SB	416	171	Apr 1964
C	Same as above	Same as above	35 1S 14W	SB	*	*	Apr 1964
Pacific Electric	Union Oil Co. of Calif. "Fourth Avenue" 1	Union Oil Co. of Calif. "Union-Signal Fourth Avenue" 1	35 1S 14W	SB	726	191	Apr 1964

Remarks: * B and C zones initial production was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Fourth Avenue" 16	Union Oil Co. of Calif. "Union-Signal Fourth Avenue" 16	Apr 1965	35 1S 14W	SB	9,514	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
A	2,500	65	late Miocene	Puente	27 - 36	1,000	IV
B	2,750	45	late Miocene	Puente	27 - 36	1,100	IV
C	3,500	80	late Miocene	Puente	27 - 36	1,100	IV
Pacific Electric	4,000	150	late Miocene	Puente	27 - 36	1,300	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
296,101	241,277	2,084,383	150	8	7,760,826	5,087,931	1,536,182	1965	19	16	160

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1965	17,202,438	6

SPACING ACT: Applies

BASE OF FRESH WATER: 400

CURRENT CASING PROGRAM: 11 3/4" cem. 900; 7" combination string landed through zone and cemented through ports above zone.

METHOD OF WASTE DISPOSAL: Water-flood project and sewer system.

REMARKS:

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

LAS CIENEGAS OIL FIELD

GOOD SHEPHERD AREA

Los Angeles County

LOCATION: See map sheet of Las Cienegas Oil Field

TYPE OF TRAP: Asymmetrical anticline

ELEVATION: 200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & W	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Pacific Electric D	Union Oil Co. of Calif. "Fourth Avenue" 5-A	Union Oil Co. of Calif. "Union-Signal Fourth Avenue" 5-A	3S 1S 14W	SB	592	557	Nov 1964
	Union Oil Co. of Calif. "Fourth Avenue" 6-A	Union Oil Co. of Calif. "Union-Signal Fourth Avenue" 6-A	3S 1S 14W	SB	618	527	Dec 1964

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	S & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Fourth Avenue" 5-A	Union Oil Co. of Calif. "Union-Signal Fourth Avenue" 5-A	Mar 1964	3S 1S 14W	SB	7,047	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Pacific Electric D	3,900	40	late Miocene	Puente	29 - 33	1,300	IV
	4,250	30	late Miocene	Puente	29 - 33	1,300	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
143,116	209,640	1,264,327	20	2	2,313,564	2,132,230	307,562	1966	4	2	20

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACFT: Applies

BASE OF FRESH WATER: 400

CURRENT CASING PROGRAM: 11 3/4" cem. 900; 7" cem. through zone.

METHOD OF WASTE DISPOSAL: Sewer system.

REMARKS: Both completed wells were drilled from the Fourth Avenue drillsite.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

LAS CIENEGAS OIL FIELD

JEFFERSON AREA

Los Angeles County

LOCATION: See map sheet of Las Cienegas Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 185

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbi)	Gas (Mc)	
Upper Jefferson	Union Oil Co. of Calif. "Jefferson" 8	Union Oil Co. of Calif. "Union-Signal-Jefferson" 8-1	1 2S 14W	SB	1,082	207	Oct 1965
Lower Jefferson	Union Oil Co. of Calif. "Jefferson" 4	Union Oil Co. of Calif. "Union-Signal-Jefferson" 4-2	1 2S 14W	SB	679	218	Oct 1965
C	Union Oil Co. of Calif. "Jefferson" 7	Union Oil Co. of Calif. "Jefferson Pool" 7-3	1 2S 14W	SB	852	275	Dec 1965
Pacific Electric	Same as above	Same as above	1 2S 14W	SB	*	*	Dec 1965
Lower Broadway	Atlantic Richfield Co. "St. James" 8	Same as present	6 2S 13W	SB	360	270	Dec 1967
Massive	Atlantic Richfield Co. "St. James" 2	Same as present	6 2S 13W	SB	652	318	Jul 1968

Remarks: * Initial production from C and Pacific Electric zones was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Jefferson" 35	Union Oil Co. of Calif. "Signal-Jefferson E.H." 1	Jul 1967	1 2S 14W	SB	8,500	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Upper Jefferson	2,900	240	late Miocene	Puente	18 - 26	1,550	IV
Lower Jefferson	3,500	150	late Miocene	Puente	24 - 36	1,550	IV
C	4,600	160	late Miocene	Puente	28 - 42	1,550	IV
Pacific Electric	6,420	40	late Miocene	Puente	28 - 42	1,550	IV
Lower Broadway	5,100	75	late Miocene	Puente	38 - 42	1,200	IV
Massive	5,500	200	late Miocene	Puente	42	1,370	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbi)	Net gas (Mc)	Water (bbi)			Oil (bbi)	Gas (Mc)	Barrels	Year	Drilled	Completed	
828,098	600,235	1,576,212	350	34	14,080,779	14,705,658	2,751,197	1968	62	49	350

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mc; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1967	22,138,519	11

SPACING ACT: Applies

BASE OF FRESH WATER: 650

CURRENT CASING PROGRAM 10 3/4" cem. 950; 7" combination string landed through zone and cemented through ports above zone or 7" cem. through zone.

METHOD OF WASTE DISPOSAL: Water-flood project and sewer system.

REMARKS:

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

LAS CIENEGAS OIL FIELD

MURPHY AREA

Los Angeles County

LOCATION: See map sheet of Las Cienegas Oil Field

TYPE OF TRAP: Faulted asymmetrical anticline

ELEVATION: 210

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
A	Union Oil Co. of Calif. "Murphy" 4	Union Oil Co. of Calif. "Union-Signal-Murphy" 4	2 2S 14W	SB	277	226	Mar 1962
B	Same as above	Same as above	2 2S 14W	SB	*	*	Mar 1962
C	Same as above	Same as above	2 2S 14W	SB	*	*	Mar 1962
Pacific Electric	Union Oil Co. of Calif. "Murphy" 1	Union Oil Co. of Calif. "Union-Signal-Murphy" 1	2 2S 14W	SB	313	128	Mar 1962
D	Union Oil Co. of Calif. "Murphy" 4	Union Oil Co. of Calif. "Union-Signal-Murphy" 4	2 2S 14W	SB	277	226	Mar 1962
E	Same as above	Same as above	2 2S 14W	SB	*	*	Mar 1962

Remarks: * Initial production of A, B, C, D, and E zones was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Murphy" 6	Union Oil Co. of Calif. "Union-Signal-Murphy" 6	Jan 1964	2 2S 14W	SB	8,802	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
A	2,500	150	late Miocene	Puente	22	1,000	IV
B	2,750	100	late Miocene	Puente	32	1,100	IV
C	3,500	100	late Miocene	Puente	30	1,100	IV
Pacific Electric	3,900	110	late Miocene	Puente	36	1,300	IV
D	4,100	60	late Miocene	Puente	36	1,300	IV
E	4,200	80	late Miocene	Puente	36	1,300	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
794,528	688,717	531,100	290	22	12,746,503	8,697,831	1,986,504	1965	27	27	290

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Gas injection for pressure maintenance	1964	11,084,702	1

SPACING ACT: Applies

BASE OF FRESH WATER: 800

CURRENT CASING PROGRAM: 13 3/8" cem. 900; 7" combination string landed through zone and cemented through ports above zone.

METHOD OF WASTE DISPOSAL: Sewer system.

REMARKS: Gas is being injected into all zones for pressure maintenance.

REFERENCES: Mefferd, M.G., Murphy Area of Las Cienegas Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 56, No. 1 (1970).

CALIFORNIA DIVISION OF OIL AND GAS

LAS CIENEGAS OIL FIELD

PACIFIC ELECTRIC AREA

Los Angeles County

LOCATION: See map sheet of Las Cienegas Oil Field

TYPE OF TRAP: Faulted asymmetrical anticline

ELEVATION: 135

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Pacific Electric	Union Oil Co. of Calif. "Pacific Electric" 1	Union Oil Co. of Calif. "Union-Signal-Pacific Electric" 1	27 1S 14W	SB	309	115	Sep 1961
D	Same as above	Same as above	27 1S 14W	SB	*	*	Sep 1961

Remarks: * Pacific Electric and D zone initial production was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Pacific Electric" 1	Union Oil Co. of Calif. "Union-Signal-Pacific Electric" 1	Dec 1959	27 1S 14W	SB	9,512	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Pacific Electric	4,100	55	late Miocene	Puente	32 - 36	1,300	IV
D	4,300	45	late Miocene	Puente	32 - 36	1,300	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
200,811	275,673	810,173	140	12	3,468,742	6,550,774	466,464	1962	17	14	150

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1965	9,959,707	2

SPACING ACT: Applies

BASE OF FRESH WATER: 400

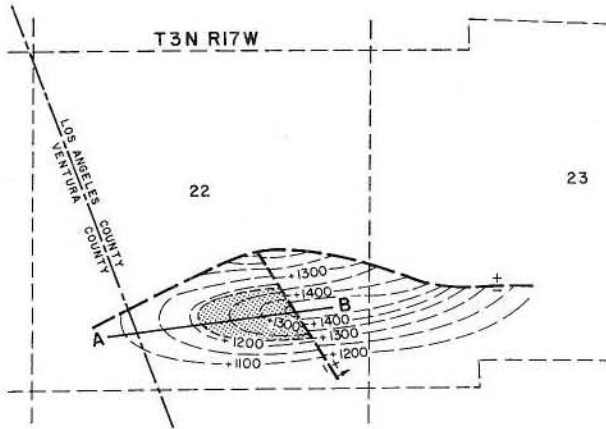
CURRENT CASING PROGRAM: 13 3/8" cem. 900; 7" cem. through zone.

METHOD OF WASTE DISPOSAL: Water-flood project and sewer system.

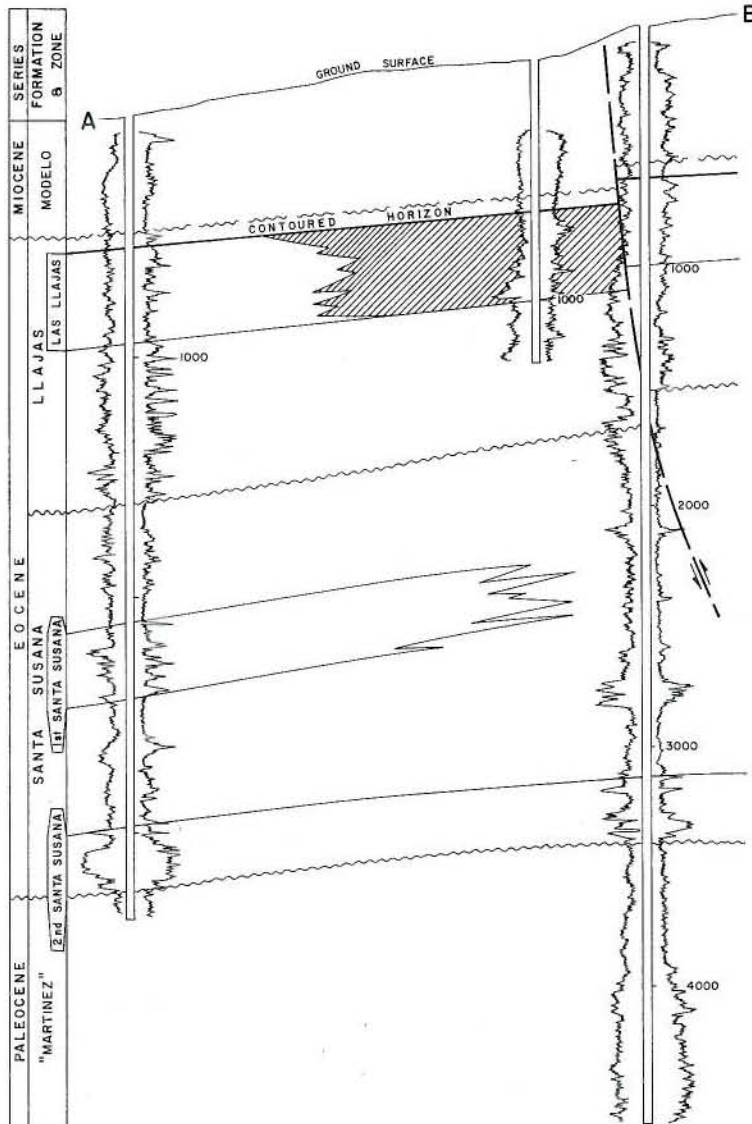
REMARKS:

REFERENCES:

LAS LLAJAS OIL FIELD



CONTOURS ON TOP OF LAS LLAJAS ZONE



CALIFORNIA DIVISION OF OIL AND GAS

LAS LLAJAS OIL FIELD

Los Angeles County

LOCATION: 28 miles northwest of Los Angeles

TYPE OF TRAP: Faulted anticlinal nose

ELEVATION: 1,700 - 2,100

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Las Llajas	Union Oil Co. of Calif. "Las Llajas" 5	Union Oil Co. of Calif. "Simi" 5	22 3N 17W	SB	11	N.A.	Sep 1945

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Las Llajas" 9	Same	May 1956	22 3N 17W	SB	4,572	"Martinez"	Paleocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Las Llajas	700	200	Eocene	Llajas	27	1,160	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	15	0	46,872	15,414	4,746	1951	5	2	15

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 700

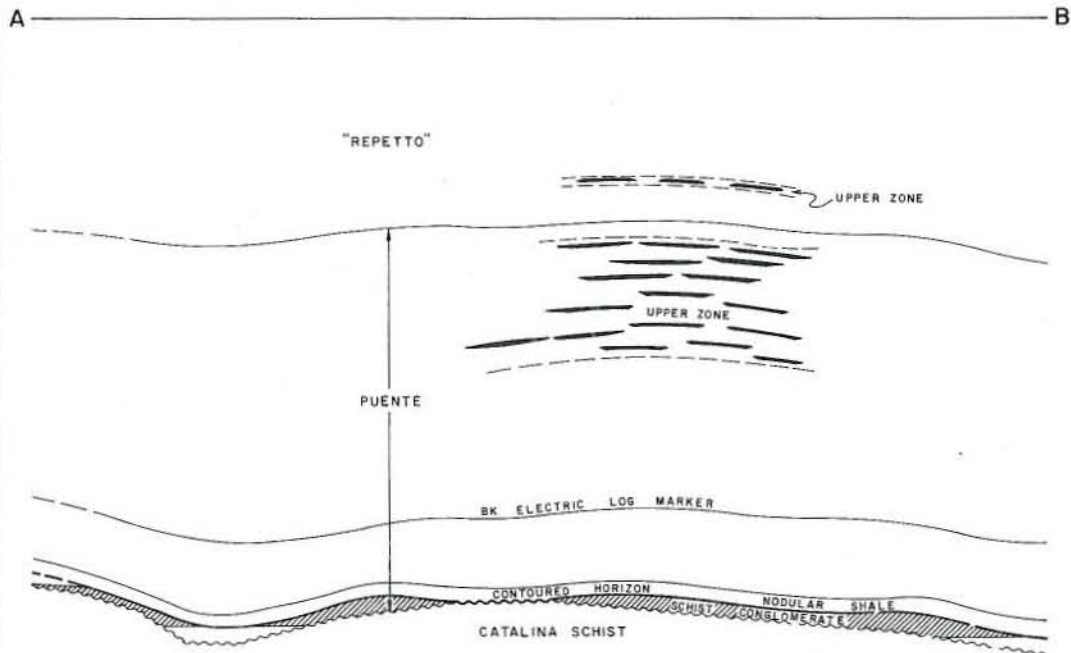
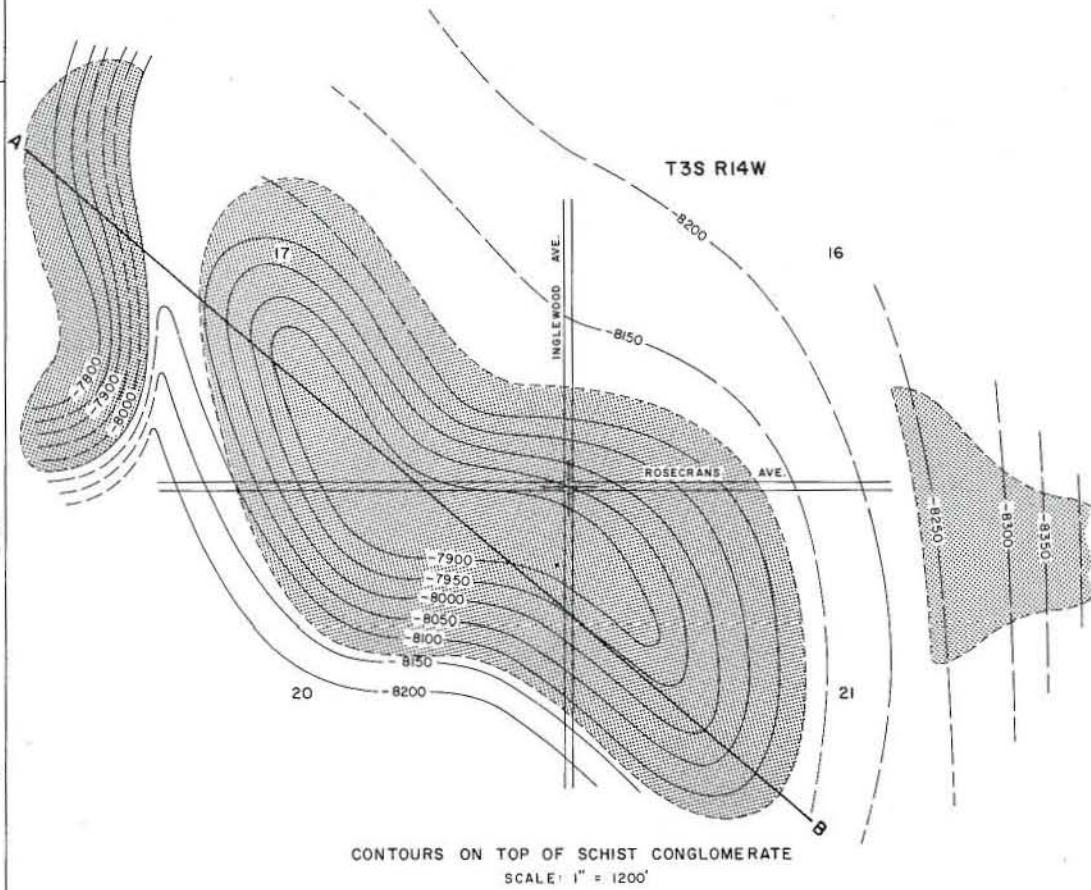
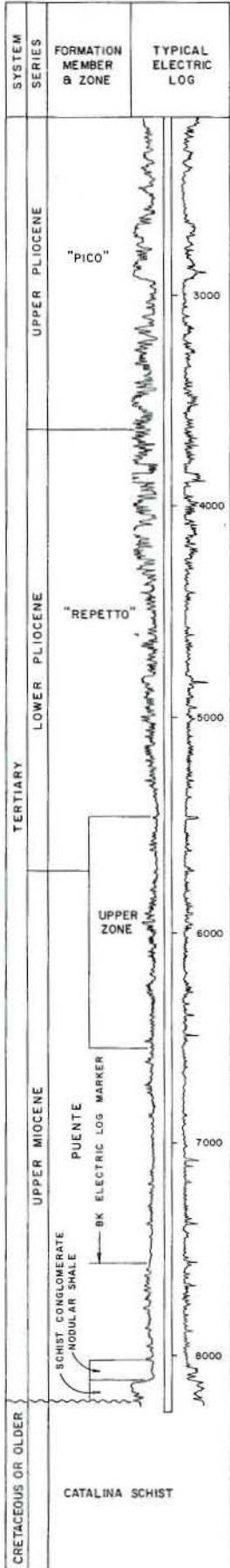
CURRENT CASING PROGRAM: 9 5/8" cem. 200; 6 5/8" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Last production from the field was in 1970.

REFERENCES: Levorsen, Robert: Geology of the Las Llajas Canyon Area, California. Thesis on file at Univ. of California, Los Angeles (1947).
 Oakeshott, G.B., Geology and Mineral Deposits of San Fernando Quadrangle, Los Angeles County, California: Calif. Div. of Mines Bull. 172, p. 58 (1958).
 Tudor, R.B., Las Llajas Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 49, No. 2 (1963).

LAWDALE OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

LAWDALE OIL FIELD
Los Angeles County

LOCATION: 12 miles southwest of downtown Los Angeles

TYPE OF TRAP: Anticline

ELEVATION: 70

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Upper Schist conglomerate	Texaco Inc. "Pauley-Seaboard Peck" 1	San Clemente Oil Co. No. 1	20 3S 14W	SB	140	N.A.	Jul 1928
	Amax Petroleum Corp. "Johnson" 1	Seaboard Oil Co. of Delaware "Johnson" 1	17 3S 14W	SB	225	2,250	Sep 1947

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Pauley Petroleum, Inc. "S.F.L.I." 83-20	Same	Sep 1948	20 3S 14W	SB	8,213	Catalina Schist	Cret or older

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Upper	6,000	200	early Pliocene	"Repetto" -	27 - 32	N.A.	IV
Schist conglomerate	7,900	60	late Miocene	Puente	28	1,200	IV
			late Miocene	Puente			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
12,961	4,813	531,050	15	2	3,574,917	6,618,535	389,937	1929	80	18	140

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
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SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,400

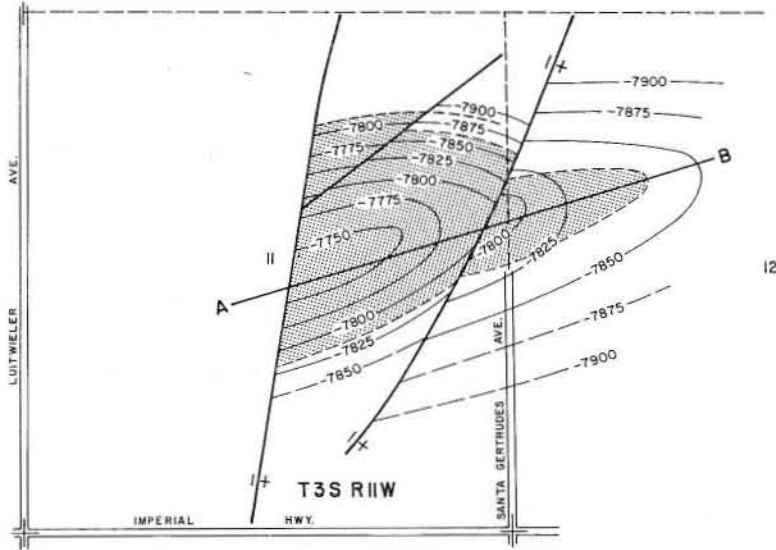
CURRENT CASING PROGRAM: 11 3/4" or 11 3/8" cem. 1,500; 7" or 5 1/2" cem. above zone; 5 1/2" or 4 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Sewer system.

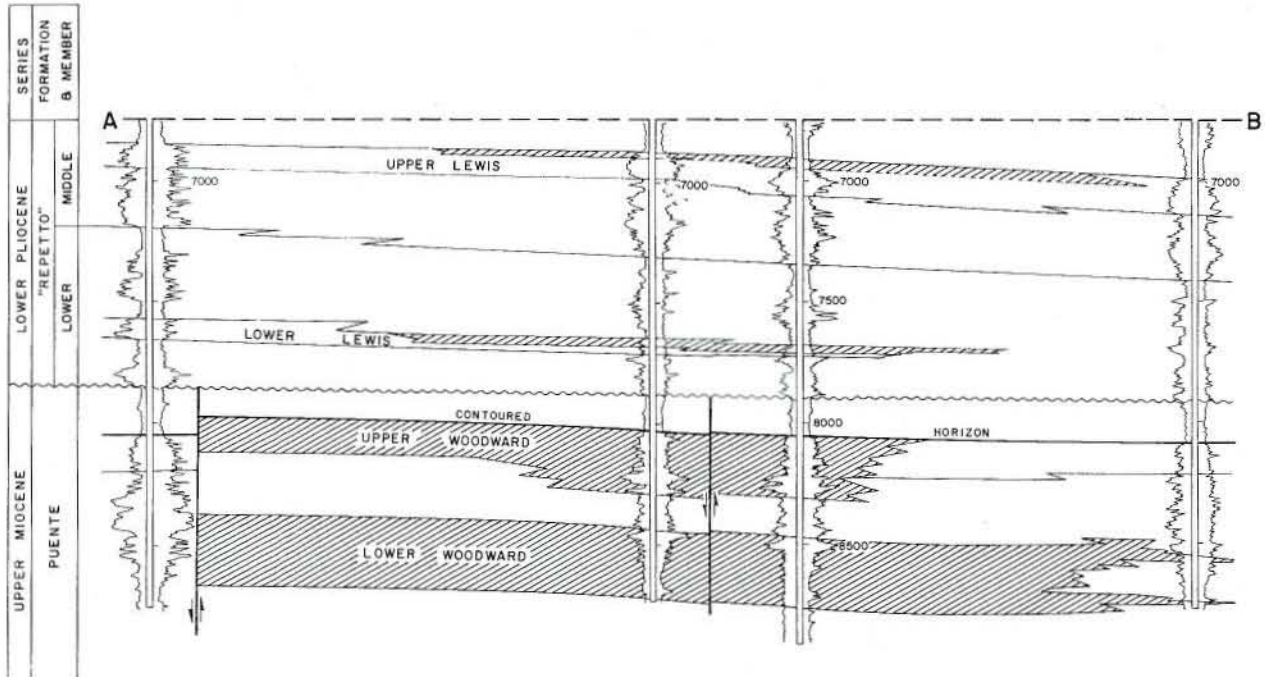
REMARKS: Most production was obtained from the Schist conglomerate.

REFERENCES: White, J.L., Lawndale Oil Field and Alondra Area: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 36, No. 2 (1950).

LEFFINGWELL OIL FIELD (Abandoned)



CONTOURS ON
TOP OF UPPER WOODWARD ZONE



CALIFORNIA DIVISION OF OIL AND GAS

LEFFINGWELL OIL FIELD (Abandoned)

Los Angeles County

LOCATION: 12 miles southeast of downtown Los Angeles

TYPE OF TRAP: Faulted nose

ELEVATION: 225

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Upper Lewis	Pyramid Oil Co. "K" 1	Standard Oil Co. of Calif. "Lewis Community" 1	11 3S 11W	SB	162	33	Jan 1946
Lower Lewis	Same as above	Same as above	11 3S 11W	SB	145	150	Sep 1946
Upper Woodward	Signal Oil and Gas Co. "Signal-Stern" 1	Same as present	11 3S 11W	SB	104	47	Jul 1953
Lower Woodward	Hathaway Co. "Woodward" 1	Standard Oil Co. of Calif. "K" 1	11 3S 11W	SB	196	800	Mar 1953

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Pyramid Oil Co. "K" 1	Standard Oil Co. of Calif. "Lewis Community" 1	Mar 1946	11 3S 11W	SB	2,184	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu))	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Upper Lewis	6,875	30	early Pliocene	"Repetto"	34	190	IV
Lower Lewis	7,600	30	early Pliocene	"Repetto"	32	230	IV
Upper Woodward	8,000	100	late Miocene	Puente	31 - 42	270	IV
Lower Woodward	8,400	200	late Miocene	Puente	29	270	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	30	0	762,796	2,459,919	109,347	1954	20	13	125

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 850

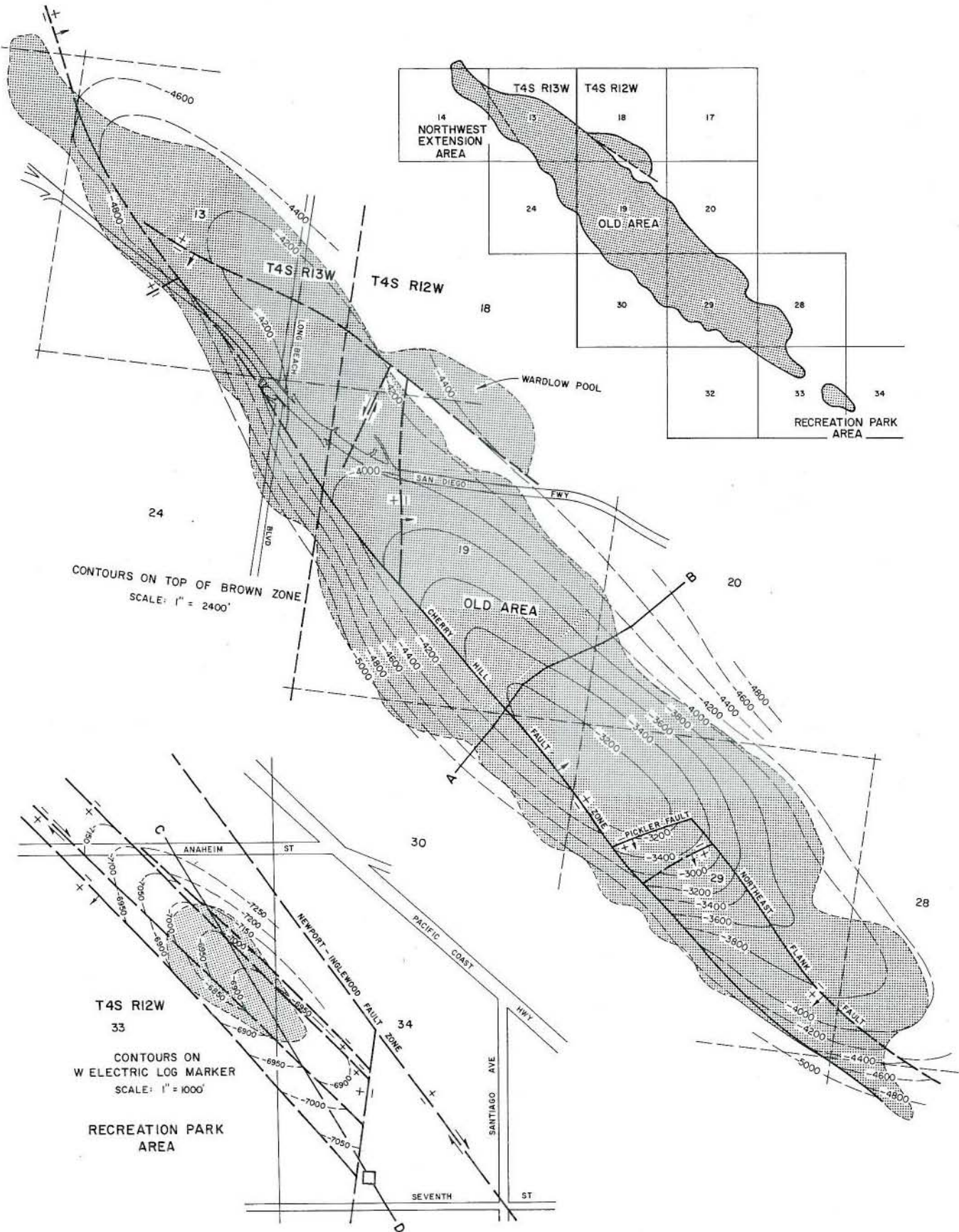
CURRENT CASING PROGRAM: 11 3/4" cem. 850; 7" combination string cem. above zone.

METHOD OF WASTE DISPOSAL: Sewer system.

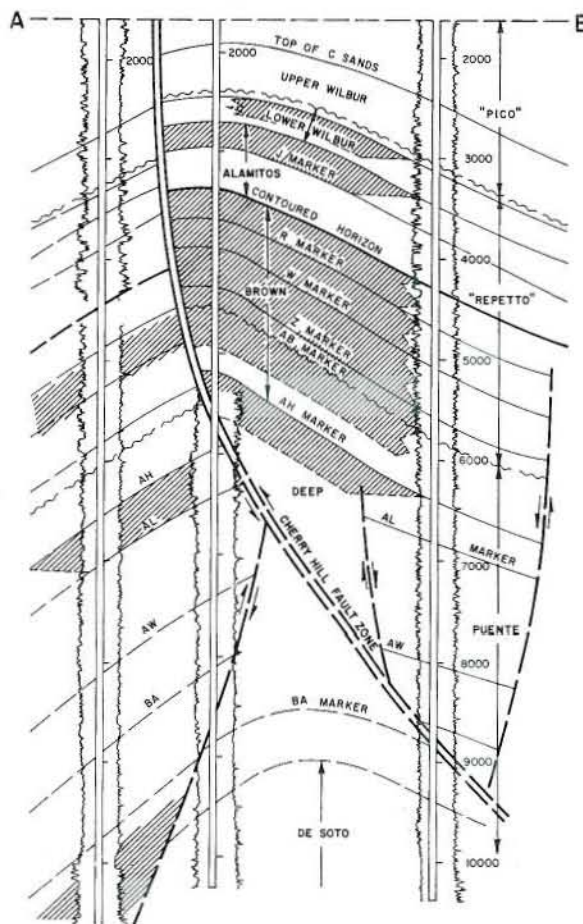
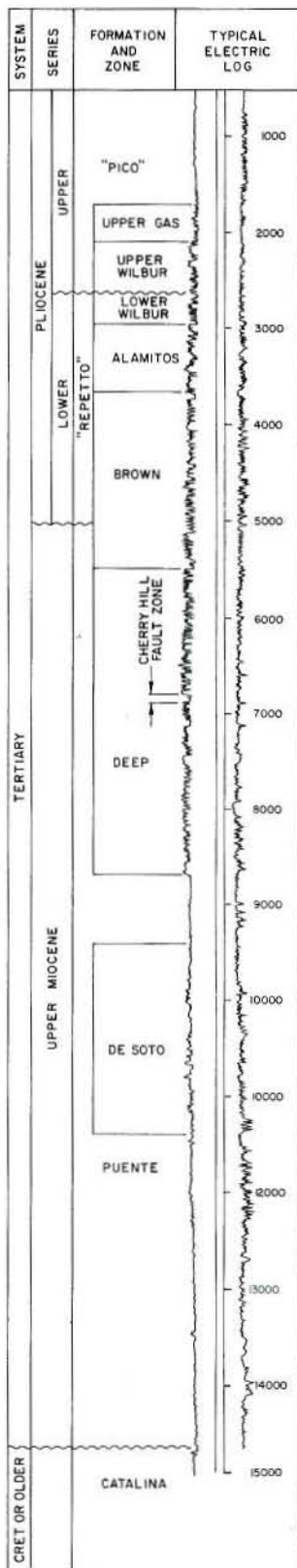
REMARKS: Only one well, the discovery well, produced from the Lewis zones. Last production was October 1971. Field abandoned in December 1973.

REFERENCES: Gaede, V.F., Leffingwell Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 43, No. 2 (1957).

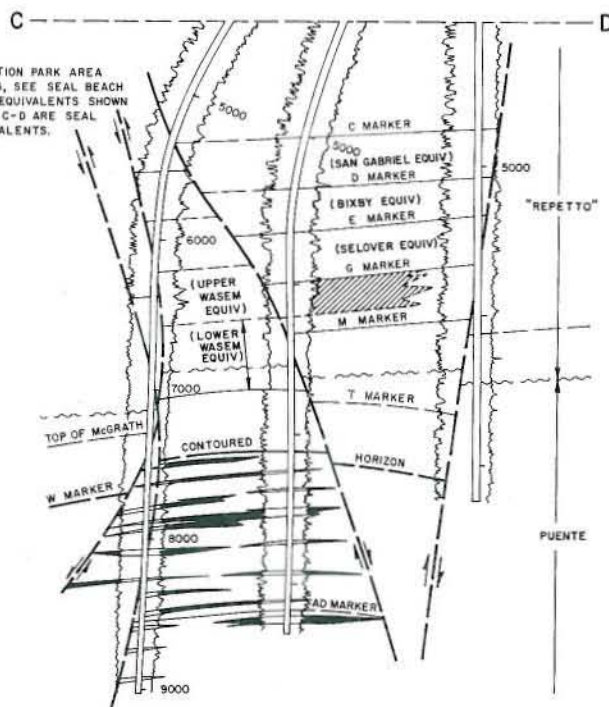
LONG BEACH OIL FIELD



LONG BEACH OIL FIELD



NOTE: FOR RECREATION PARK AREA TYPICAL LOG, SEE SEAL BEACH OIL FIELD EQUIVALENTS SHOWN ON SECTION C-D ARE SEAL BEACH EQUIVALENTS.



CALIFORNIA DIVISION OF OIL AND GAS

LONG BEACH OIL FIELD

Los Angeles County

LOCATION: 18 miles south of downtown Los Angeles

TYPE OF TRAP: See areas

ELEVATION: 40 - 375

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Alamitos	Atlantic Richfield Co. No. 149	Shell Oil Co. "Alamitos" 1	29 4S 12W	SB	483	N.A.	Jun 1921

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Shell Oil Co. "Alamitos" 48-A	Same	Oct 1944	29 4S 12W	SB	14,950	Catalina Schist	Cret or older

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
2,588,806	1,767,413	23,500,116	1,270	671	865,735,569	1,069,987,400	68,323,589	1923	2,517	2,145	1,815

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS:

REFERENCES: Ingram, W.L., Long Beach Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 54, No. 1 (1968).

CALIFORNIA DIVISION OF OIL AND GAS

LONG BEACH OIL FIELD

NORTHWEST EXTENSION AREA

Los Angeles County

LOCATION: See map sheet of Long Beach Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 50

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Alamitos Brown	Atlantic Richfield Co. "Bixby" 3 General Exploration Co. "Flood Control" 4	The United Oil Co. "Bixby" 3 Hilldon Oil Co. "Flood Control" 4	13 4S 13W 13 4S 13W	SB SB	156 329	N.A. 88	Jan 1926 Dec 1940

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Berry-Loukonen, Ltd. "Jones" 1	General Petroleum Corp. "Los Cerritos" 1	Sep 1948	13 4S 13W	SB	11,493	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Alamitos	4,040	85	early Pliocene	"Repetto"	21 - 25	1,600	III
Brown	5,230	700	early Plio-lt Mio	"Repetto"-Puente	25	1,800	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
51,977	55,228	328,351	58	12	7,239,486	3,969,772	1,146,201	1938	37	26	85

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
-2			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 2,500

CURRENT CASING PROGRAM: 10 3/4" cem. 722; 7" cem. through zone and base of fresh water.

METHOD OF WASTE DISPOSAL: Sewer system.

REMARKS:

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

LONG BEACH OIL FIELD

OLD AREA

Los Angeles County

LOCATION: See map sheet of Long Beach Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 40 - 375

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Upper Wilbur	Chester F. Yunker "Barbara" 2	Same as present	24 4S 12W	SB	80	40	Apr 1938
Lower Wilbur	Shell Oil Co. "Wilbur" 1	Same as present	29 4S 12W	SB	36	7,000	Dec 1921
Alamitos	Atlantic Richfield Co. No. 149	Shell Oil Co. "Alamitos" 1	29 4S 12W	SB	485	N.A.	Jun 1921
Brown	Texaco Inc. "Ryder" 1	Petroleum Midway Co., Ltd. "Ryder" 1	30 4S 12W	SB	3,650	N.A.	Nov 1922
Deep	Zone Petroleum "Hass" 8	United Oil Co. "Hass" 8	19 4S 12W	SB	2,500	N.A.	Nov 1926
Deep (Wardlow Pool)	Victory Oil Co. "Wardlow" 1	Golden Dome Oil Co. "Wardlow" 1	18 4S 12W	SB	750	1,700	Apr 1951
De Soto	Davis Investment Co. No. 25	De Soto Oil Co. "De Soto" 1	30 4S 12W	SB	300	350	Dec 1938

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Shell Oil Co. "Alamitos" 48-A	Same	Oct 1944	29 4S 12W	SB	14,950	Catalina Schist	Cret or older

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Upper Wilbur	2,000	110	late Pliocene	Pico	14 - 23	1,700	II
Lower Wilbur	2,400	165	early Pliocene	"Repetto"	21 - 24	1,750	II
Alamitos	2,800	430	early Pliocene	"Repetto"	21 - 28	1,600	III
Brown	3,600	840	e Plio-lt Mio	"Repetto"-Puente	18 - 30	1,800	III
Deep	5,300	500	late Miocene	Puente	24 - 27	1,300	IV
Deep (Wardlow Pool)	6,700	600	late Miocene	Puente	32	N.A.	IV
De Soto	7,500	300	late Miocene	Puente	24 - 27	700	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
2,489,561	1,596,418	23,152,935	1,182	654	857,528,792	1,064,406,465	68,325,589	1923	2,474	2,114	1,700

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1964	9,107,619	30

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,800

CURRENT CASING PROGRAM: 9 5/8" cem. 1,800; 5 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL: Part of the waste water produced in the field is shipped by pipeline to Dominguez field for use in water flooding. The waste water has a high iodine content useful as a geochemical tracer for water flooding.

REMARKS: Upper gas zone is subcommercial.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

LONG BEACH OIL FIELD

RECREATION PARK AREA

Los Angeles County

LOCATION: See map sheet of Long Beach Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 40

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Upper Wasem	Hagee-Lewis Petroleum Corp. "Recreation Park E" 1	Richfield Oil Corp. "Recreation Park E" 1	33 4S 12W	SB	66	50	Jun 1962
McGrath	Same as above	Same as above	33 4S 12W	SB	141	48	Oct 1952

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Hagee-Lewis Petroleum Corp. "Recreation Park E" 1	Richfield Oil Corp. "Recreation Park E" 1	May 1952	33 4S 12W	SB	9,781	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ('API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Upper Wasem	6,000	250	early Pliocene	"Repetto"	21 - 27	1,500	III
McGrath	6,900	650	late Miocene	Puente	28 - 32	1,500	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
47,268	115,767	18,830	30	5	967,291	1,611,163	138,885	1963	6	5	30

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 2,400

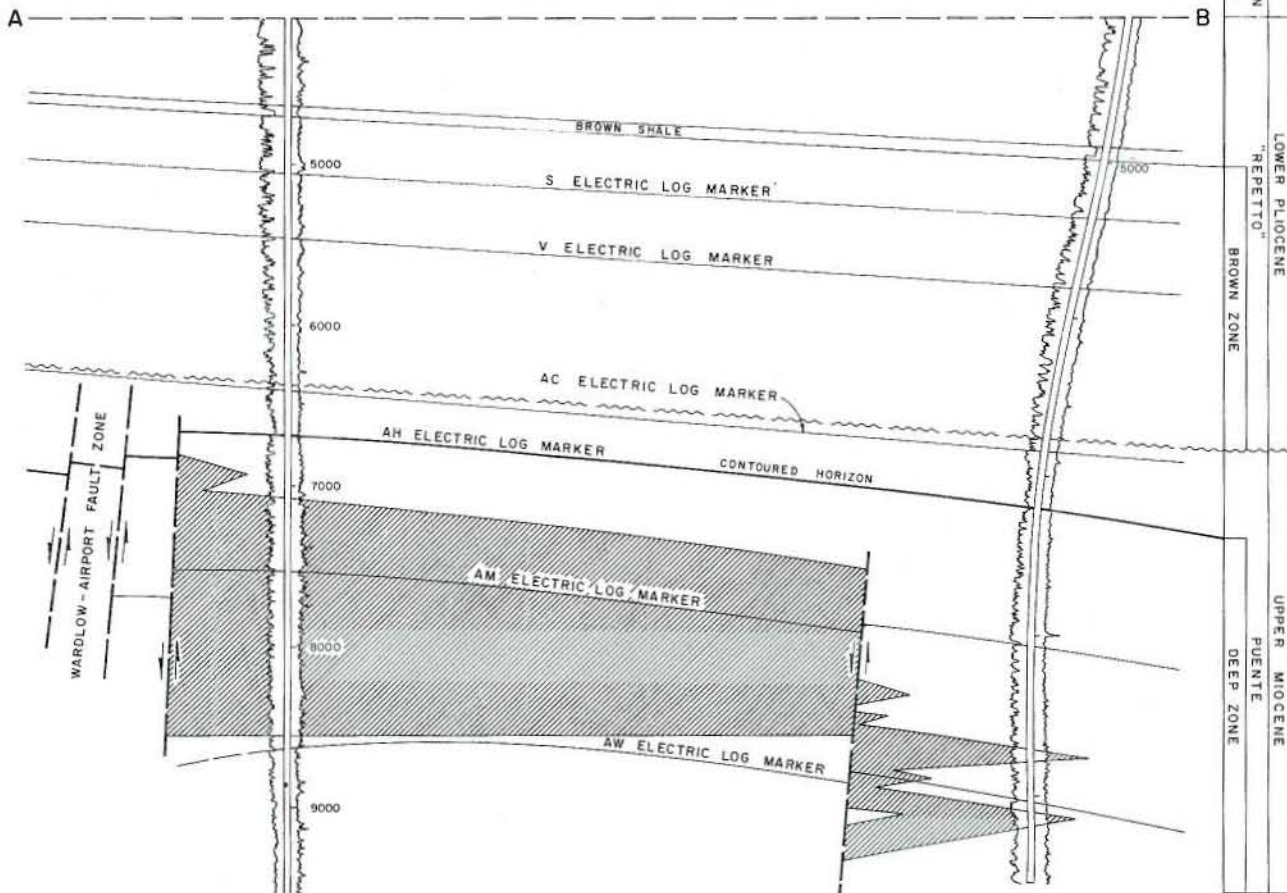
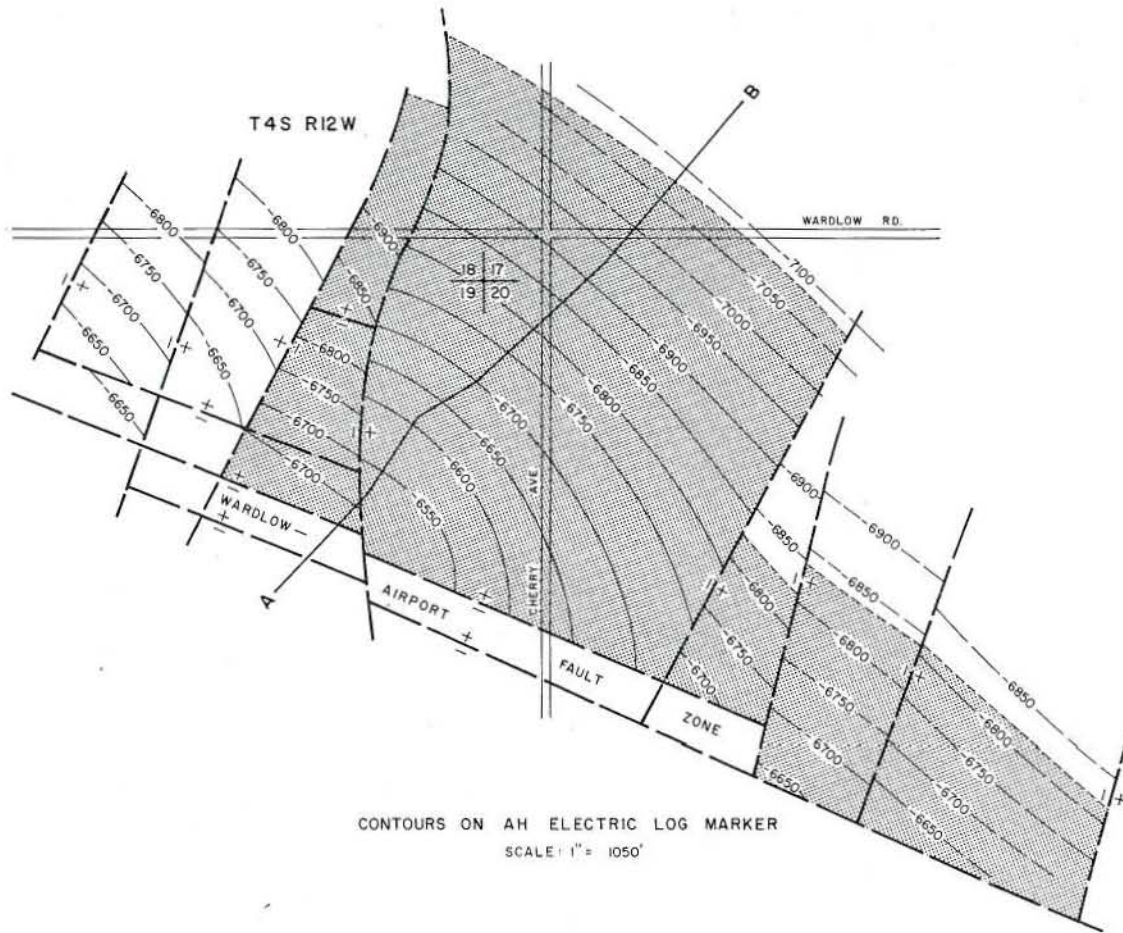
CURRENT CASING PROGRAM: 11 3/4" cem. 800; 7" combination string landed through zone and cemented across base of fresh water and above McGrath zone or 7" cem. above zone and across base of fresh water; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Sewer system.

REMARKS:

REFERENCES: Ingram, W.L., Recreation Park Area of Long Beach Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. oil Fields, Vol. 52, No. 2, Part 2 (1966).

LONG BEACH AIRPORT OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

LONG BEACH AIRPORT OIL FIELD

Los Angeles County

LOCATION: 3 miles north of downtown Long Beach

TYPE OF TRAP: Faulted anticlinal nose

ELEVATION: 80

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Deep	Texaco Inc. "Long Beach Airport (NCT-1)" 1	The Texas Co. "Long Beach Airport (NCT-1)" 1	20 4S 12W	SB	148	122	Feb 1954

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Texaco Inc. "Long Beach Airport (NCT-1)" 1	The Texas Co. "Long Beach Airport (NCT-1)" 1	Sep 1953	20 4S 12W	SB	13,016	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Deep	8,200	1,200	late Miocene	Puente	32 - 36	1,300	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
93,322	161,858	405,110	93	20	9,859,750	32,593,492	3,243,681	1955	64	62	173

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 2,100

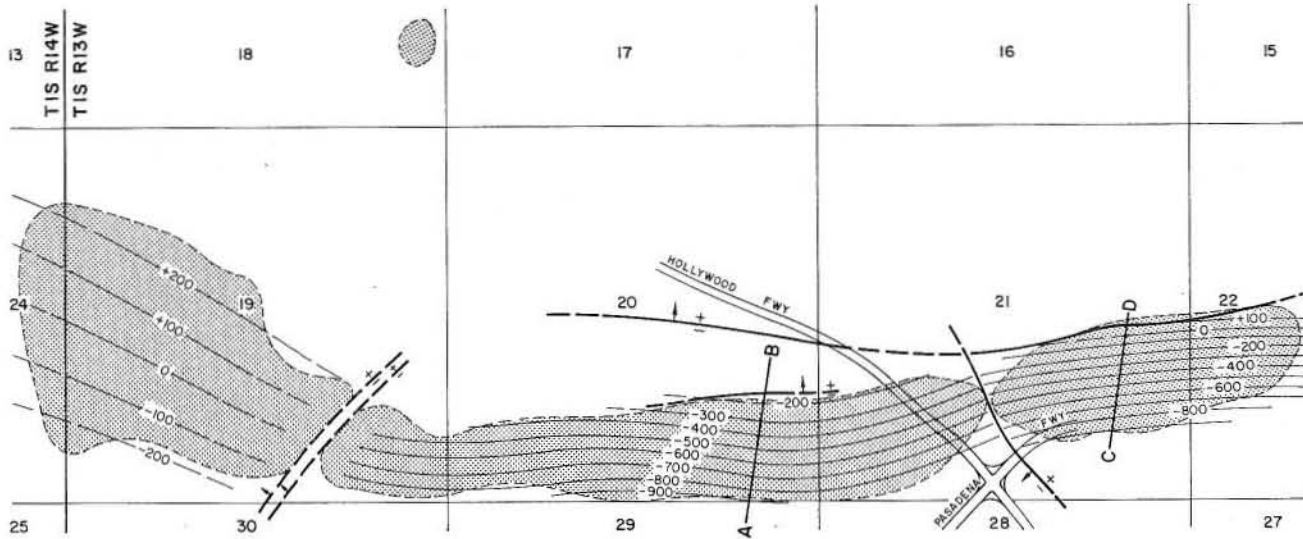
CURRENT CASING PROGRAM: 11 5/4" cem. 700; 7" combination string landed through zone and cemented above zone and at the base of fresh water.

METHOD OF WASTE DISPOSAL: Long Beach oil field for treatment and disposal into the L. A. County Flood Control Channel.

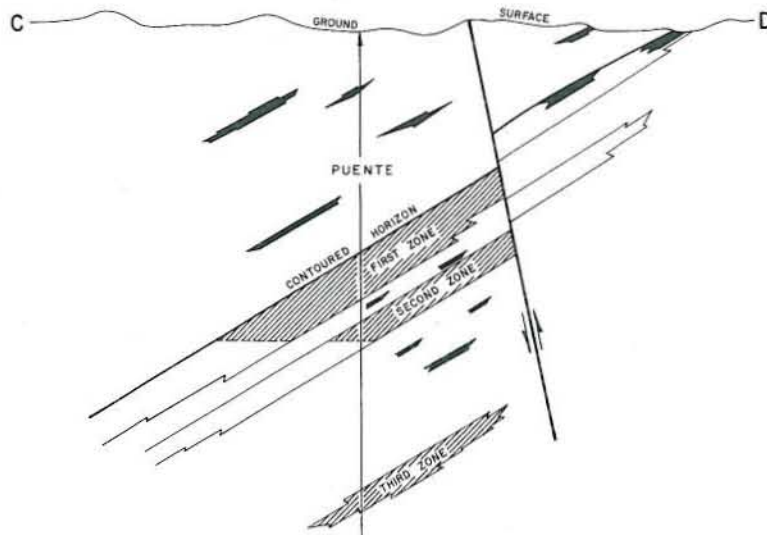
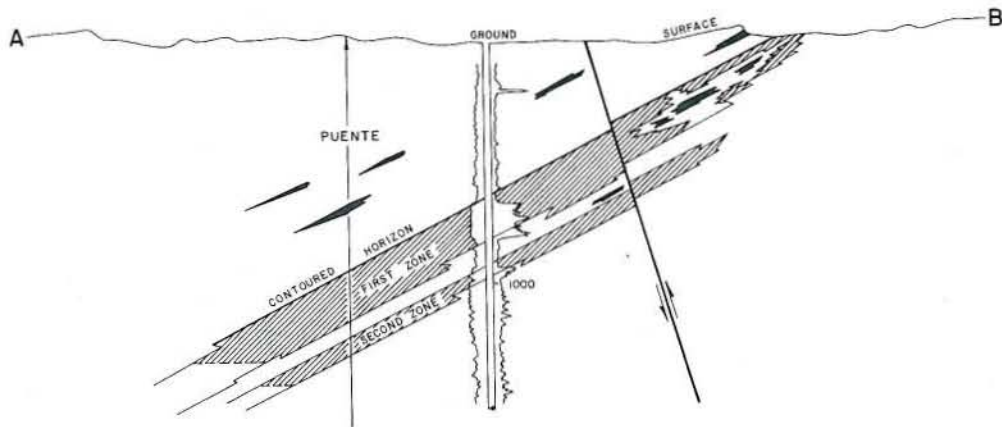
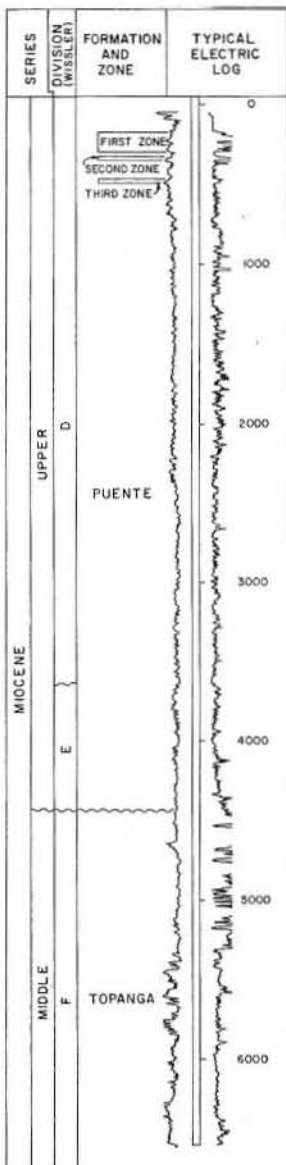
REMARKS: Pilot water-flood project initiated in 1961 and terminated in 1964 after having injected 510,084 Bbls. into one well.

REFERENCES: Loken, K.P., Long Beach Airport Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 50, No. 1 (1964).

LOS ANGELES CITY OIL FIELD



CONTOURS ON TOP OF FIRST ZONE



CALIFORNIA DIVISION OF OIL AND GAS

LOS ANGELES CITY OIL FIELD

Los Angeles County

LOCATION: 1 mile north of downtown Los Angeles

TYPE OF TRAP: Faulted homocline

ELEVATION: 375

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
First	Maltman Oil Co. "Maltman" 1	Same as present	19 1S 13W	SB	2	0	About 1890
Second	Operator and well number unknown		N.A.		N.A.	N.A.	N.A.
Third	Operator and well number unknown		N.A.		N.A.	N.A.	N.A.

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Ventura Oil Co. "L.A. Brick" 1	Seaboard Oil Co. of Delaware "L.A. Brick" 1	May 1945	21 1S 13W	SB	7,505	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
First	900	125	late Miocene	Puente	19	60	I
Second	1,100	30	late Miocene	Puente	12 - 16	190	I
Third	1,500	30	late Miocene	Puente	14	200	I

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
50,247	0	495,667	129	48	21,882,305	0	1,830,000	1901	1,251+	1,150	780

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 150

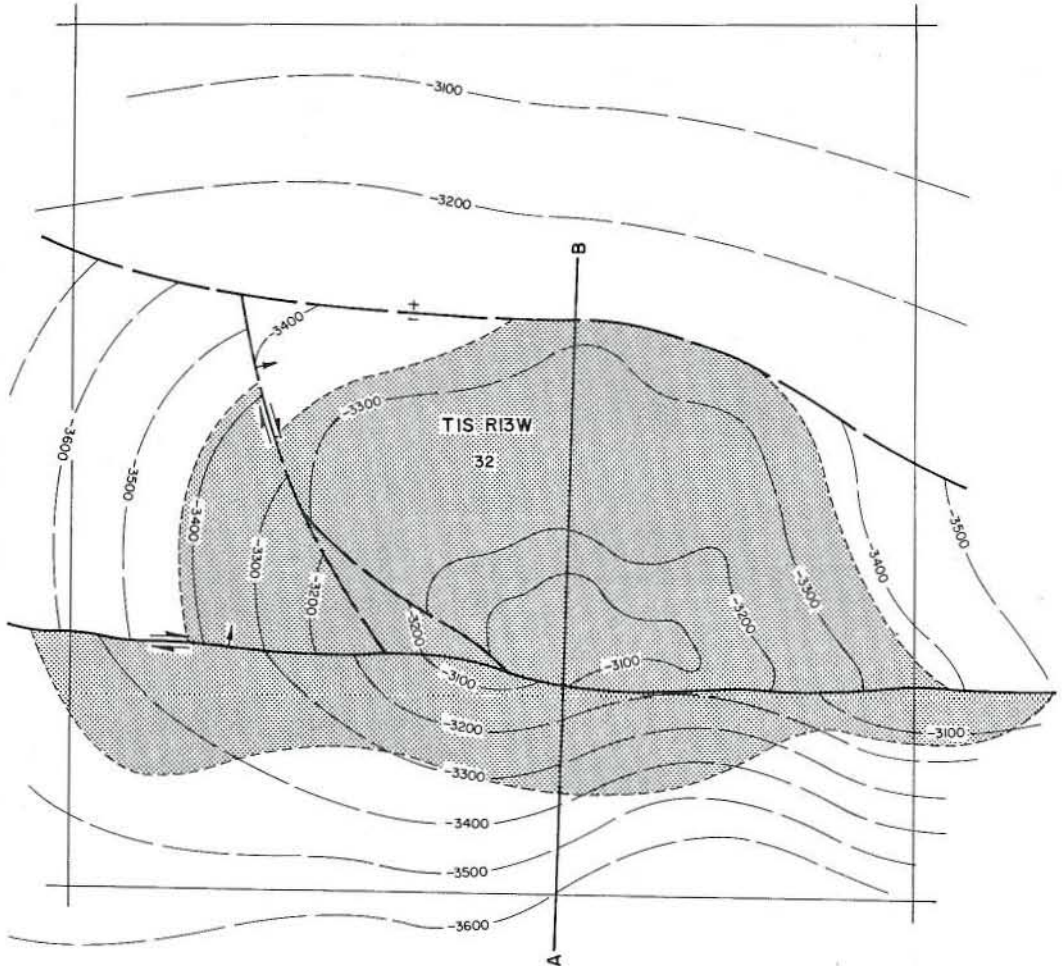
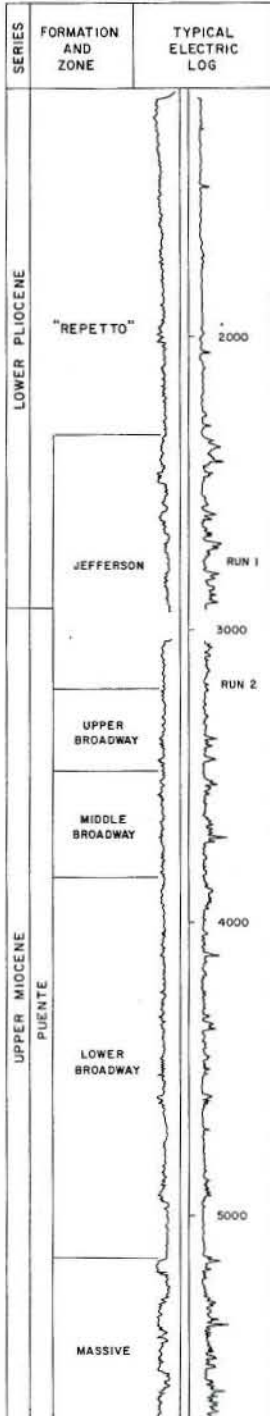
CURRENT CASING PROGRAM: 9 5/8" cem. 200; 7" cem. through zone.

METHOD OF WASTE DISPOSAL: Hauled to approved disposal site.

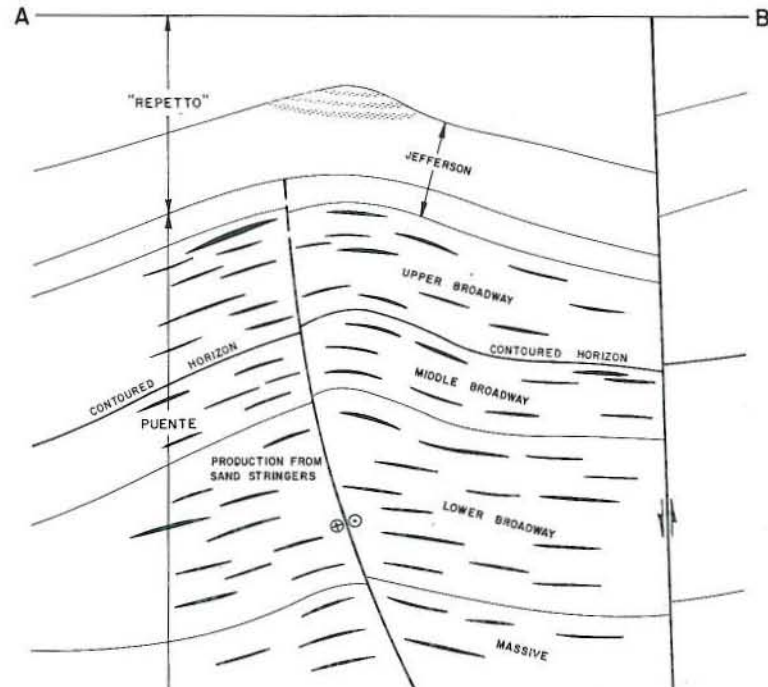
REMARKS: The first known well was dug by hand and was locally known as the Dryden well. It is known to have produced heavy oil for several years. Predating the arrival of white settlers, Indians commonly made use of asphaltum to tar canoe bottoms and water-proof containers.

REFERENCES: Crowder, R.E., Los Angeles City Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 1 (1961).
 Eldridge, G.H. and R. Arnold: U.S. Geol. Survey Bull. 309 (1907).
 McLaughlin, R.P., Petroleum Industry of California: Calif. State Mining Bureau Bull. 69 (1914).
 Soper, E.K., Los Angeles City Oil Field: Geologic Formations and Economic Development of California: State Div. of Mines Bull. 118.
 Watts, W.L., Calif. State Mining Bureau Bull. 11 (1896).
 Watts, W.L., Oil and Gas Yielding Formations of California: Calif. State Mining Bureau Bull. 19 (1900).

LOS ANGELES DOWNTOWN OIL FIELD



CONTOURS ON TOP OF MIDDLE BROADWAY



CALIFORNIA DIVISION OF OIL AND GAS

LOS ANGELES DOWNTOWN OIL FIELD

Los Angeles County

LOCATION: Downtown Los Angeles

TYPE OF TRAP: Faulted anticline

ELEVATION: 235

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Jefferson (Gas)	Standard Oil Co. of Calif. "L.A. Unit" 6	Standard Oil Co. of Calif. "Flower Community Corehole" 1	32 1S 13W	SB	0	1,169	Mar 1969
Upper Broadway	Standard Oil Co. of Calif. "L.A. Unit Venice Comm." 2	Standard Oil Co. of Calif. "Venice Community" 2	32 1S 13W	SB	106	248	Mar 1965
Middle Broadway	Standard Oil Co. of Calif. "L.A. Unit Venice Comm." 2	Standard Oil Co. of Calif. "Venice Community" 2	32 1S 13W	SB	*	*	Mar 1965
Lower Broadway	Standard Oil Co. of Calif. "L.A. Unit Venice Comm." 1	Standard Oil Co. of Calif. "Venice Community" 1	32 1S 13W	SB	320	264	Mar 1965
Massive	Standard Oil Co. of Calif. "L.A. Unit Flower Comm." 2	Standard Oil Co. of Calif. "Flower Community" 2	32 1S 13W	SB	135	490	May 1965

Remarks: * Production from Upper and Middle Broadway zones was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "Spring" 2	Same	Jul 1969	32 1S 13W	SB	8,510	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Jefferson (Gas)	2,000	40	early Pliocene	"Repetto"	-	860	IV
Upper Broadway	2,900	200	late Miocene	Puente	29	1,370	IV
Middle Broadway	3,100	400	late Miocene	Puente	34	1,370	IV
Lower Broadway	3,500	1,300	late Miocene	Puente	37	1,370	IV
Massive	4,800	1,100	late Miocene	Puente	35	1,370	IV

PRODUCTION DATA (Jan. 1, 1974) (Dry gas production data not included--see remarks)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
598,109	956,735	1,361,294	220	15	8,173,371	10,349,193	1,687,957	1967	32	27	240

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative Injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1966	20,715,645	7

SPACING ACT: Applies

BASE OF FRESH WATER: 300

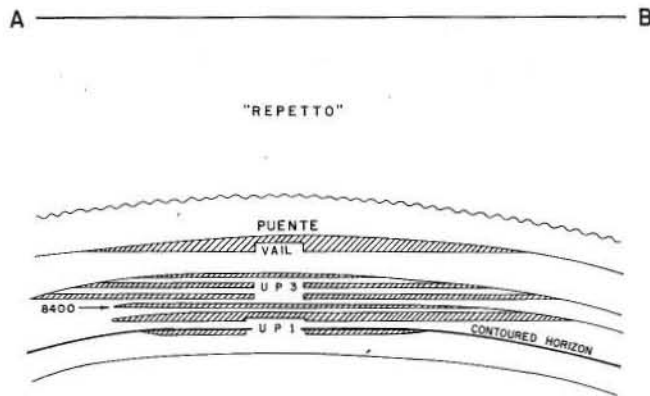
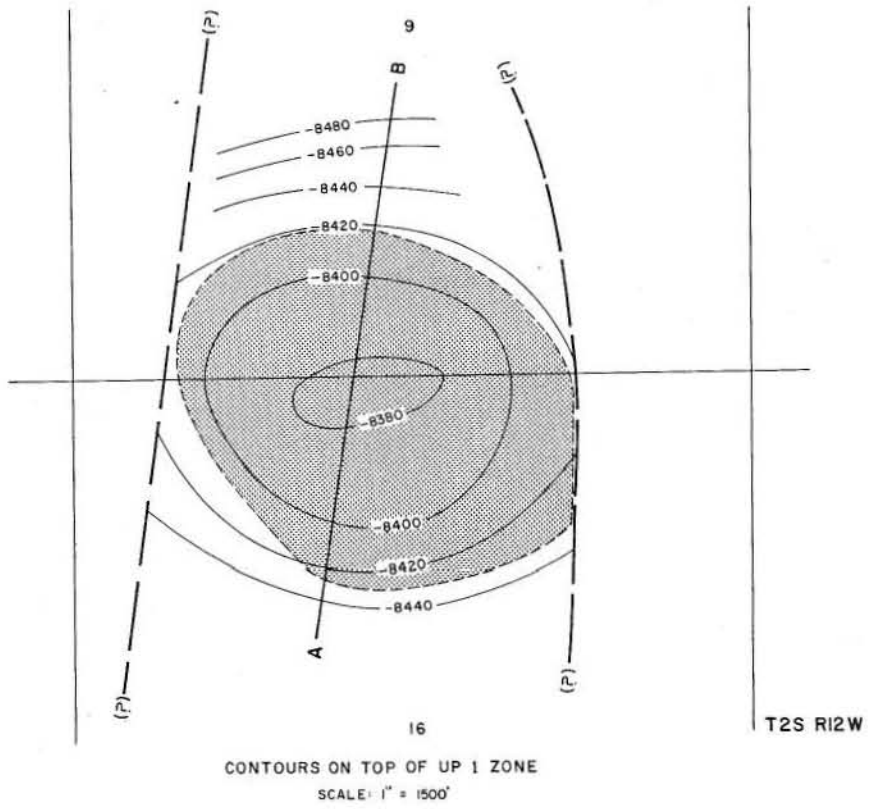
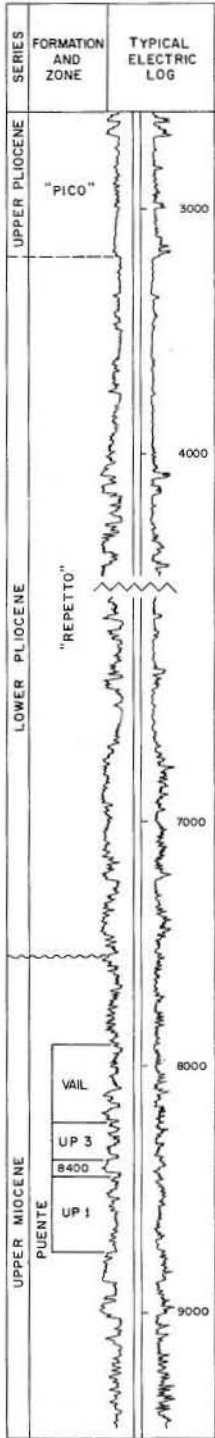
CURRENT CASING PROGRAM: 20" cem. 90; 13 3/8" cem. 1,000; 9 5/8" or 7" cem. through zone.

METHOD OF WASTE DISPOSAL: Sewer system.

REMARKS: 1973 dry gas production 196,677 Mcf. from 1 producing well; cumulative dry gas production 1,153,861; proved acreage (1973) 10, maximum 10.

REFERENCES:

EAST LOS ANGELES OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

LOS ANGELES, EAST, OIL FIELD

Los Angeles County

LOCATION: 6 miles southeast of downtown Los Angeles

TYPE OF TRAP: Dome

ELEVATION: 160

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Vail	Atlantic Richfield Co. "Vail" 1	Richfield Oil Corp. "Vail" 1	16 2S 12W	SB	405	4,320	Feb 1946
U. P. 3	Atlantic Richfield Co. "U. P. Unit" 3	Richfield Oil Corp. "U. P. Unit" 3	16 2S 12W	SB	235	81	Jan 1947
8400	Same as above	Same as above	16 2S 12W	SB	*	*	Jan 1947
U. P. 1	Atlantic Richfield Co. "U. P. Unit" 1	Richfield Oil Corp. "U. P. Unit" 1	9 2S 12W	SB	239	1,050	Feb 1946

Remarks: * U. P. 3 and 8400 production was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Atlantic Richfield Co. "U. P. Unit" 1	Richfield Oil Corp. "U. P. Unit" 1	Jun 1948	9 2S 12W	SB	9,629	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Vail	8,100	18	late Miocene	Puente	33 - 36	1,350	IV
U. P. 3	8,400	28	late Miocene	Puente	33 - 36	1,350	IV
8400	8,500	12	late Miocene	Puente	33 - 36	1,400	IV
U. P. 1	8,560	23	late Miocene	Puente	33 - 36	1,400	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
86,334	179,374	900,479	85	15	6,145,996	11,097,203	562,038	1950	24	20	125

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
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SPACING ACT: Applies

BASE OF FRESH WATER: 2,000

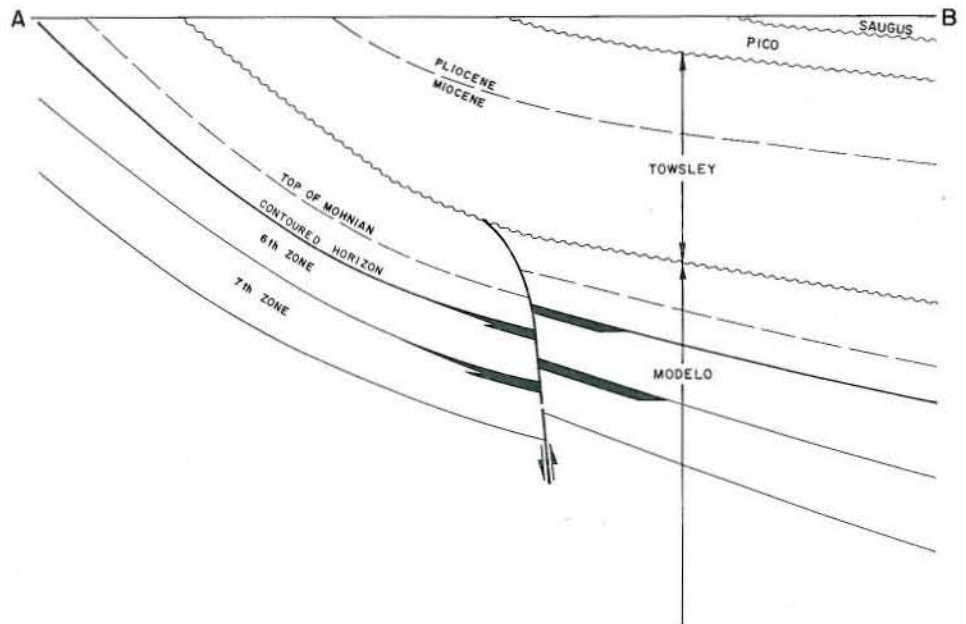
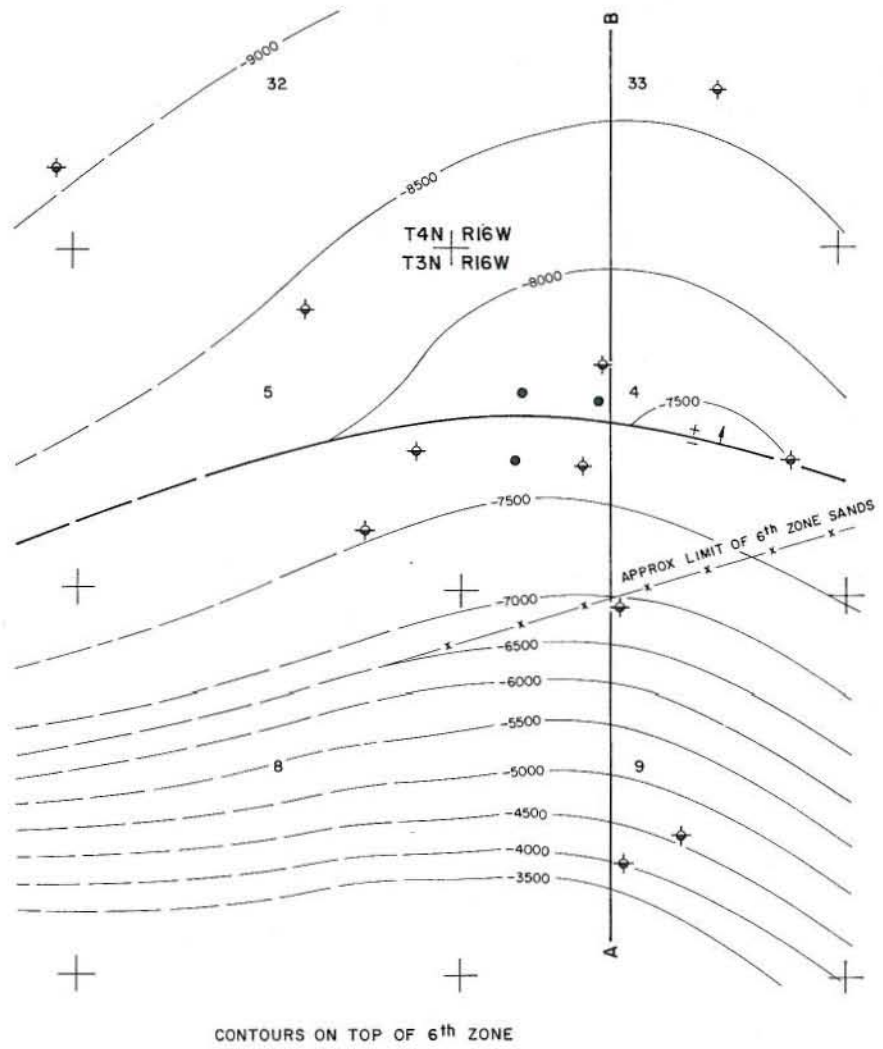
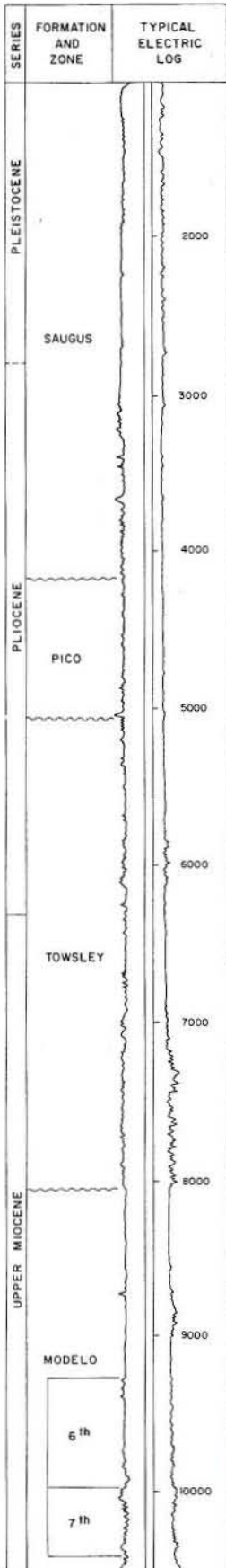
CURRENT CASING PROGRAM: 11 3/4" cem. 900; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water disposed of through sewer system.

REMARKS:

REFERENCES: Winterburn, R., East Los Angeles Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 38, No. 1 (1952).

LYON CANYON OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

LYON CANYON OIL FIELD

Los Angeles County

LOCATION: 28 miles northwest of Los Angeles

TYPE OF TRAP: Faulted homocline

ELEVATION: 1,450

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sixth Seventh	American Pacific International, Inc. 24X-4	MACPET 24X-4	4 3N 16W	SB	100	160	Jan 1970
	American Pacific International, Inc. 35X-4	Arrowhead Exploration Co. 35X-4	4 3N 16W	SB	475	2,100	Mar 1969

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
American Pacific International, Inc. 35X-4	Arrowhead Exploration Co.	Dec 1968	4 3N 16W	SB	10,950	Modelo	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Sixth Seventh	9,130	570	Miocene	Modelo	35	1,250	IV
	9,775	750	Miocene	Modelo	33	1,280	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
24,660	26,129	20,300	30	3	229,474	263,376	109,014	1969	5	3	30

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 2,500

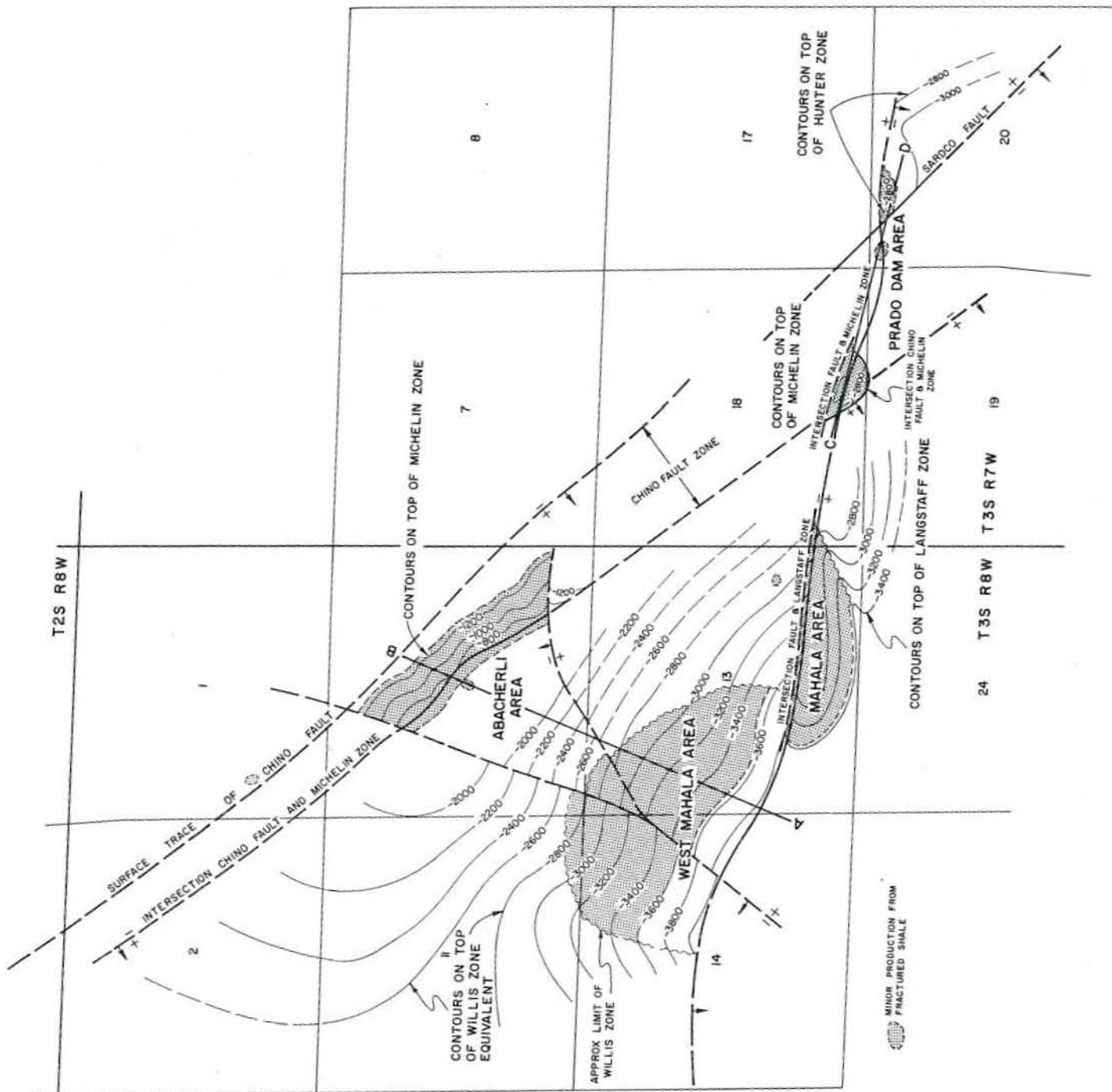
CURRENT CASING PROGRAM: 10 3/4" cem. 1,000; 7" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water is hauled to disposal site.

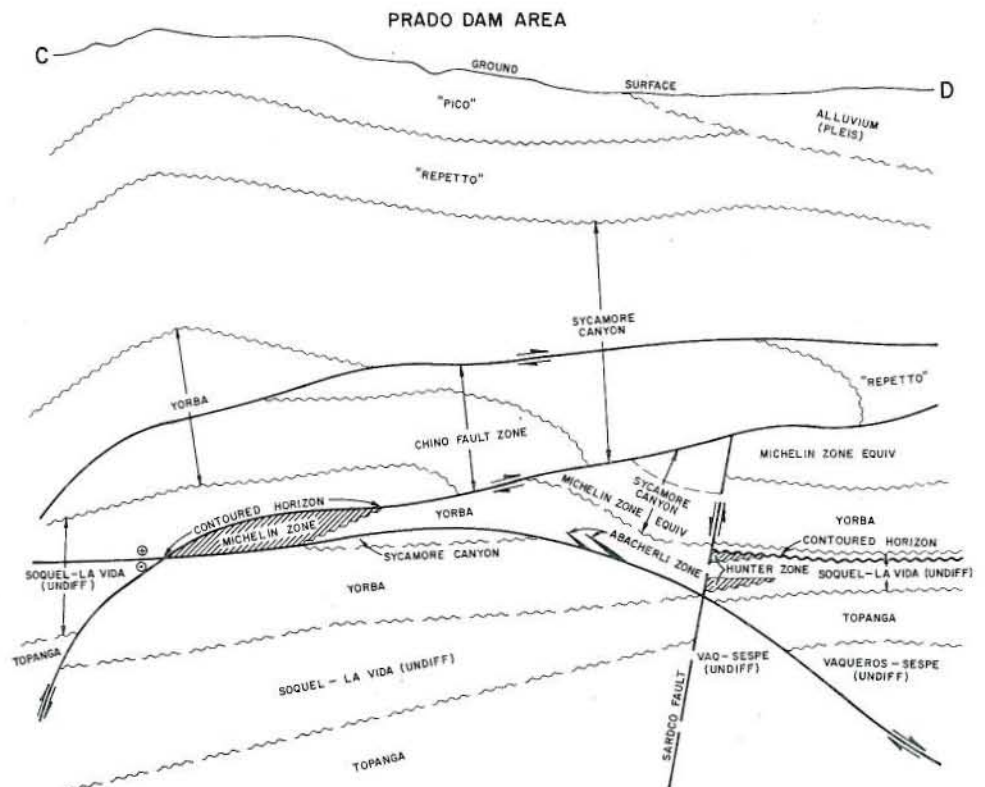
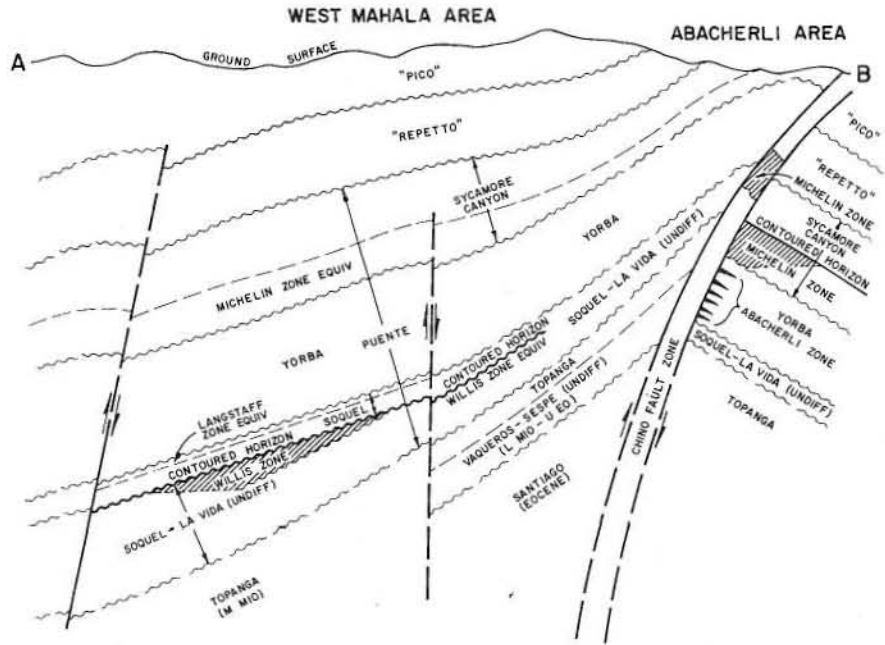
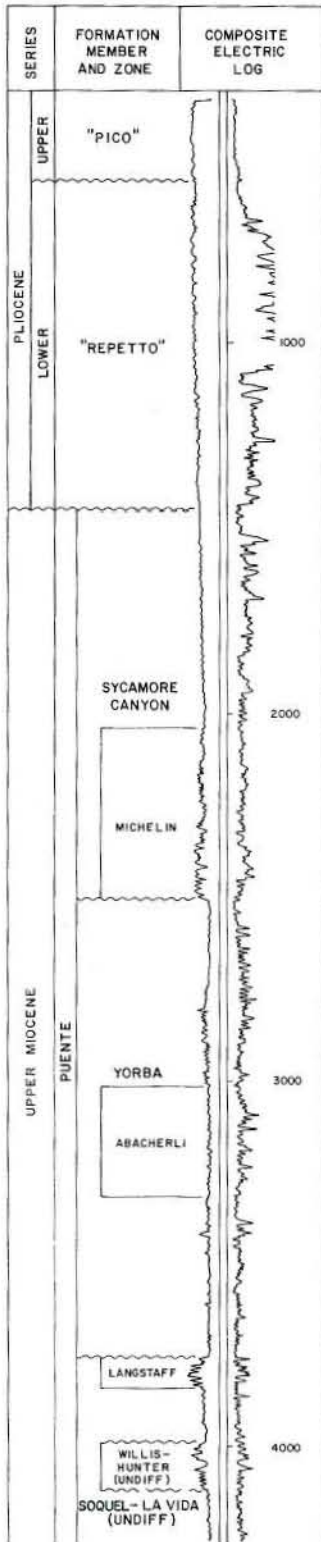
REMARKS:

REFERENCES: Stockton, A.D., Lyon Canyon Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 59, No. 1 (1974).

MAHALA OIL FIELD



MAHALA OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

MAHALA OIL FIELD
San Bernardino County

LOCATION: 5 miles northwest of Corona, approximately 32 miles east of Los Angeles

TYPE OF TRAP: See areas

ELEVATION: 500 - 1,200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Abacherli	California-Time Petroleum, Inc. "Mahala" 1	Mahala Oil & Gas Co. No. 1	12 3S 8W	SB	11	N.A.	Oct 1921

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	S & M	Depth (feet)	At total depth	
						Strata	Age
Jade Oil & Gas Co. "Scott" 7	L. H. Scott Co., Inc. "Scott" 7	Jun 1957	18 3S 7W	SB	5,416	Topanga	middle Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
234,431	118,342	69,544	245	32	2,806,690	1,267,444	547,099	1970	80	48	335

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: See areas

REFERENCES: Durham, D.L., and R.F. Yerkes, Geology and Oil Resources of the Eastern Puente Hills Area, Southern California in Geology of the Eastern Los Angeles Basin, Southern California: U.S. Geol. Survey Prof. Paper 420-B (1964).
Gray, C.H. Jr., Geology of the Corona South Quadrangle and the Santa Ana Narrows Area, Riverside, Orange and San Bernardino Counties, California: Calif. Div. of Mines Bull. 178 (1961).

CALIFORNIA DIVISION OF OIL AND GAS

MAHALA OIL FIELD

ABACHERLI AREA

San Bernardino County

LOCATION: 7 miles northwest of Corona

TYPE OF TRAP: Faulted homocline

ELEVATION: 700 - 1,200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	E & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Michelin Abacherli	KMT Oil Co. Inc. "Abacherli" 1 Hathaway Co. "Abacherli" 1	James Michelin "Abacherli" 1 Western Gulf Oil Co. "Abacherli" 1	12 3S 8W 12 3S 8W	SB SB	194	30	Jun 1955
					65	N.A.	May 1931

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	E & M	Depth (feet)	At total depth	
						Strata	Age
Mahala Oil & Gas Co. No. 2	Same	Dec 1921	13 3S 8W	SB	5,080	Topanga	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Michelin Upper production	1,000	250	late Miocene	Puente	25	300	III
Lower production	1,700	400	late Miocene	Puente	26	300	III
Abacherli*	2,500	600	late Miocene	Puente	14 - 23	N.A.	III

* Minor production from three wells from fractured shale.

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
23,254	2,534	2,935	85	12	1,069,283	453,281	33,003	1957	33	17	90

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 200 - 700

CURRENT CASING PROGRAM: 11 3/4" cem. 250; 7" combination string landed through zone and cemented above zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water is sprayed over the ground surface.

REMARKS: A cyclic-steam project was initiated in 1964 and terminated in 1965 after injecting 10,279 equivalent bbls. into three wells.

REFERENCES: Gaede, V.F., and M. Dosch, Oil and Gas Development in San Bernardino County: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 21, No. 2 (1955).

CALIFORNIA DIVISION OF OIL AND GAS

MAHALA OIL FIELD

MAHALA AREA

San Bernardino County

LOCATION: 6 miles northwest of Corona

TYPE OF TRAP: Faulted anticline, sand pinchouts

ELEVATION: 900

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Abacherli Langstaff	California-Time Petroleum, Inc. "Mahala" 1 KMT Oil Co. Inc. "Franco-Langstaff" 57	Mahala Oil & Gas Co. No. 1 Franco Western Oil Co. "Langstaff-Willis" 57A-13	13 3S 8W	SB	11	0	Oct 1921
			13 3S 8W	SB	101	100*	Jan 1962
Willis	Casex Co. "L & W" 1	Jade Oil & Gas Co. "Langstaff-Willis" 1	13 3S 8W	SB	120	0	Mar 1965

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
KMT Oil Co. Inc. "Franco-Langstaff" 57	Franco Western Oil Co. "Langstaff-Willis" 57A-13	Dec 1961	13 3S 8W	SB	4,900	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Abacherli*	3,700	400	late Miocene	Puente	23	N.A.	III
Langstaff	4,100	50	late Miocene	Puente	24	1,000	III
Willis	4,400	25	late Miocene	Puente	24	1,200	III

* Minor production from three wells from fractured shale.

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
3,118	1,160	935	25	2	128,928	70,152	17,245	1962	13	7	75

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 2,300

CURRENT CASING PROGRAM: 13 3/8" cem. 200; 5 1/2" cem. 4,000 and across base of fresh-water sands; 4 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is transported by truck to a Class I dumpsite.

REMARKS:

REFERENCES: Gaede, V.F., and M. Dosch, Oil and Gas Development in San Bernardino County: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 41, No. 2 (1955).

CALIFORNIA DIVISION OF OIL AND GAS

WEST MAHALA AREA

MAHALA OIL FIELD

San Bernardino County

LOCATION: 7 miles northwest of Corona

TYPE OF TRAP: Erosional truncation of sands on homocline

ELEVATION: 900

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Willis	Casex Co. "Abacherli" 1	M. J. Castro "Abacherli" 1	13 3S 8W	SB	400	100	Apr 1969

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Casex Co. "Abacherli" 5	Fleet Exploration, Ltd. "Abacherli" 5	Mar 1970	13 3S 8W	SB	5,112	Topanga	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (bu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Willis	4,000	100	late Miocene	Puente	31	1,200	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	-Year	Drilled	Completed	
207,735	114,648	65,667	125	17	1,570,551	744,011	509,732	1970	22	19	125

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1973	41,056	1

SPACING ACT: Applies

BASE OF FRESH WATER: 2,500

CURRENT CASING PROGRAM: 8 5/8" cem. 300; 5 1/2" combination string landed through zone and cemented above zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water is injected into a water-flood well and also transported by truck to a Class I dumpsite.

REMARKS:

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

PRADO DAM AREA

MAHALA OIL FIELD

Riverside County

LOCATION: 5 miles northwest of Corona

TYPE OF TRAP: Faulted homocline, sand pinchout

ELEVATION: 500 - 950

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Michelin	Atlantic Oil Co. "Aros" 1	Same as present	18 3S 7W	SB	125	40	May 1957
Abacherli	Macrate Oil Co. G-G 1	Lyle A. Garner "Govt. G-G" 1	20 3S 7W	SB	12	0	Mar 1957
Hunter	A. L. Hunter, Opr. "Sardco" 1	Same as present	20 3S 7W	SB	190	100	Dec 1960

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Jade Oil & Gas Co. "Scott" 7	L. H. Scott Co., Inc. "Scott" 7	Jun 1957	18 3S 7W	SB	5,416	Topanga	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu))	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Michelin	3,500	250	late Miocene	Puente	20	N.A.	III
Abacherli*	3,500	100	late Miocene	Puente	22	N.A.	III
Hunter	3,400	50	late Miocene	Puente	29	N.A.	III

* Minor production from one well from fractured shale.

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
324	0	7	10	1	37,928	0	4,786	1961	12	5	45

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 800 - 2,400

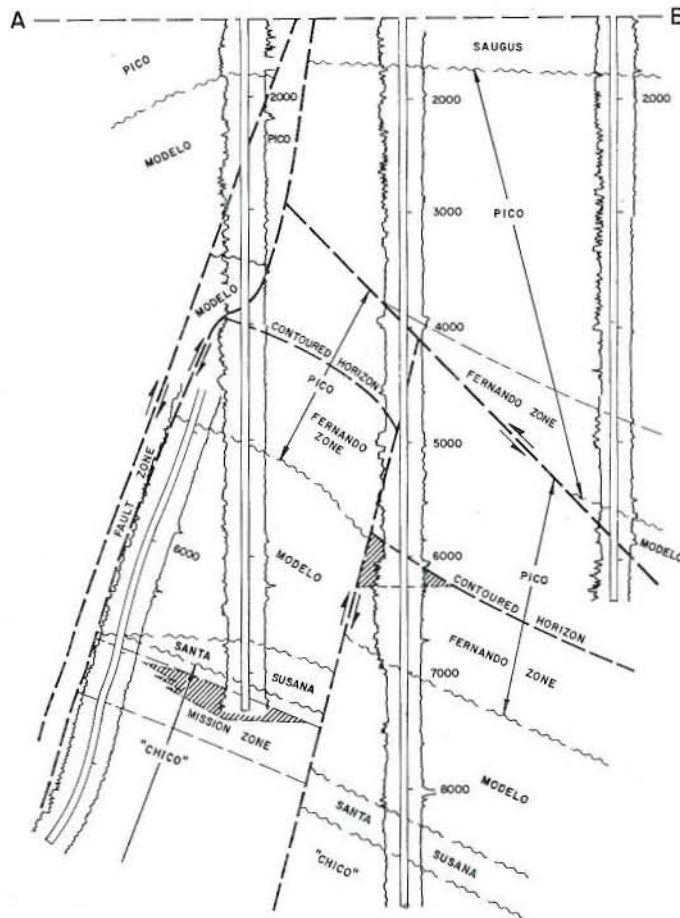
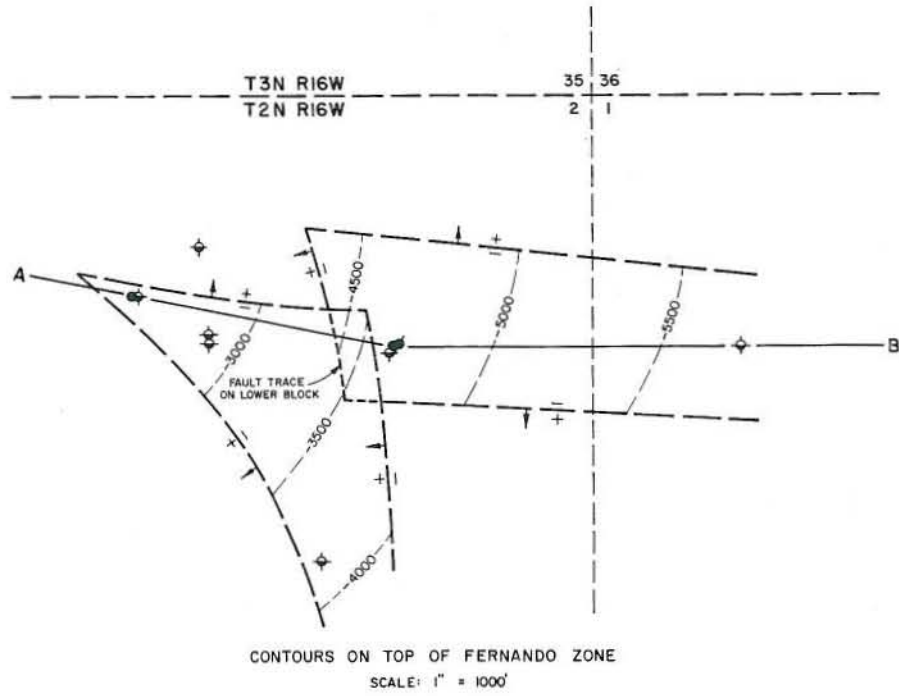
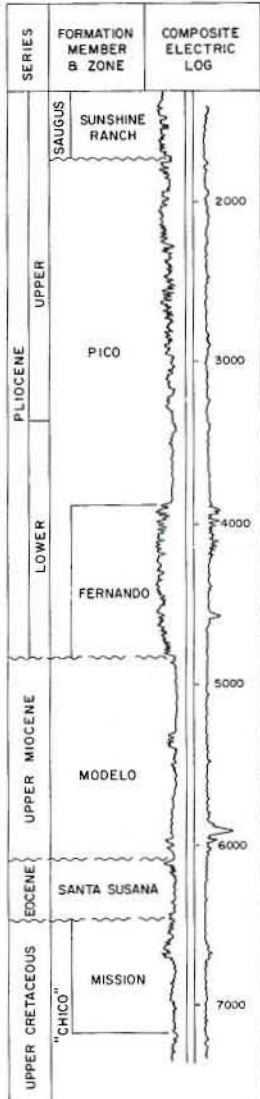
CURRENT CASING PROGRAM: 11 3/4" cem. 300; 7" cem. 3,400 and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is transported by truck to a Class I dumpsite.

REMARKS:

REFERENCES:

MISSION OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

MISSION OIL FIELD
Los Angeles County

LOCATION: 23 miles northwest of Los Angeles

TYPE OF TRAP: Faulted anticlinal nose; permeability variations

ELEVATION: 1,250 - 1,450

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Fernando Mission	Standard Oil Co. of Calif. "Mission 5" 1	Same as present	2 2N 16W	SB	855	260	Dec 1953
	Standard Oil Co. of Calif. "Mission 6" 1	Same as present	2 2N 16W	SB	229	N.A.	May 1953

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "Mission 5" 1	Same	Sep 1953	2 2N 16W	SB	9,510	"Chico"	Lt Cret

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Fernando Mission	6,000	100	early Pliocene	Pico	28	N.A.	III
	7,200	200	Late Cret	"Chico"	26	N.A.	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
6,465	4,354	70,459	20	1	527,058	294,703	82,304	1954	10	3	30

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
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SPACING ACT: Applies

BASE OF FRESH WATER: 1,500

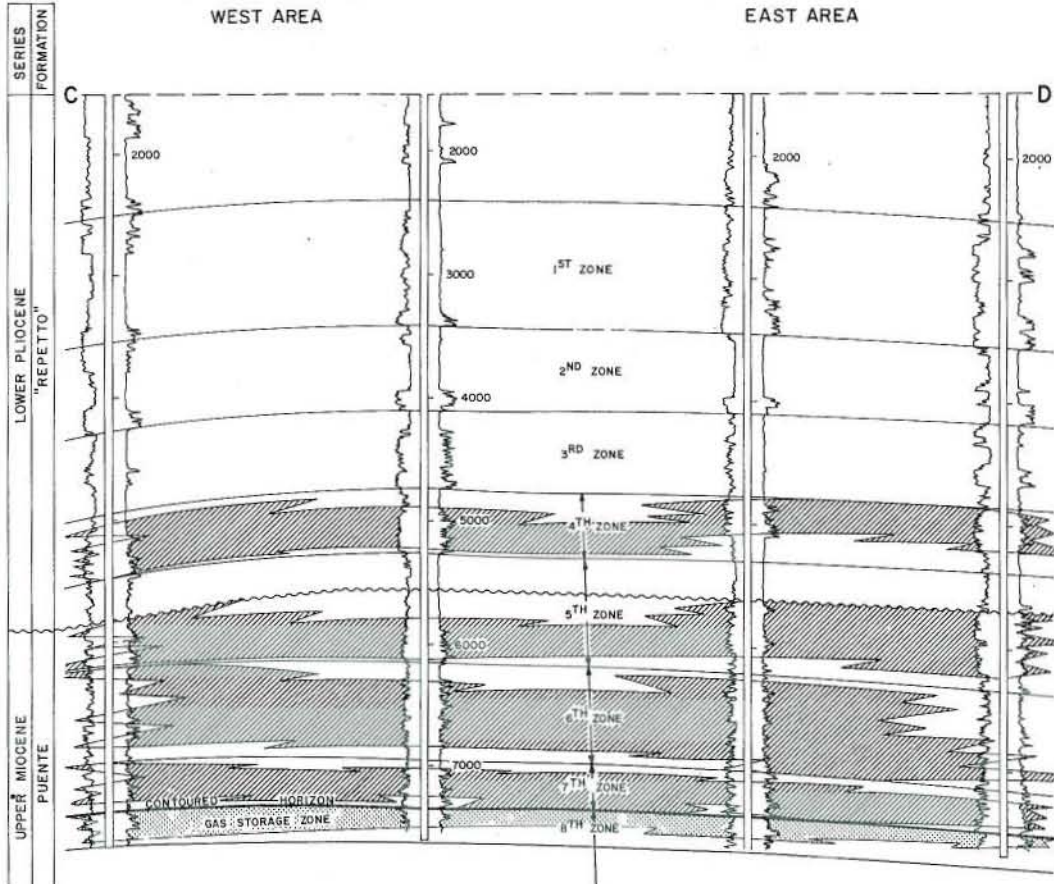
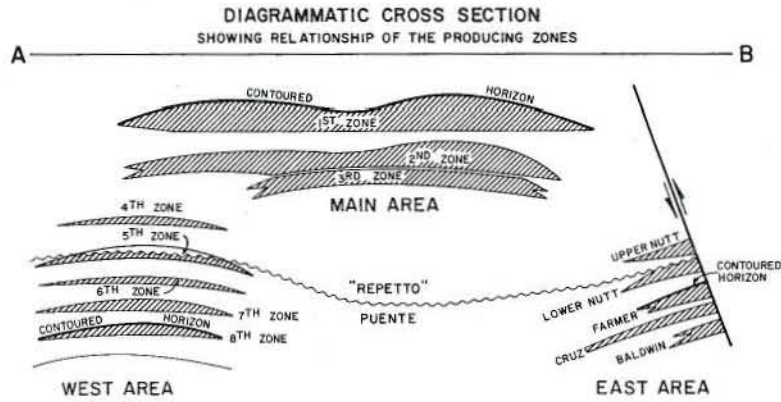
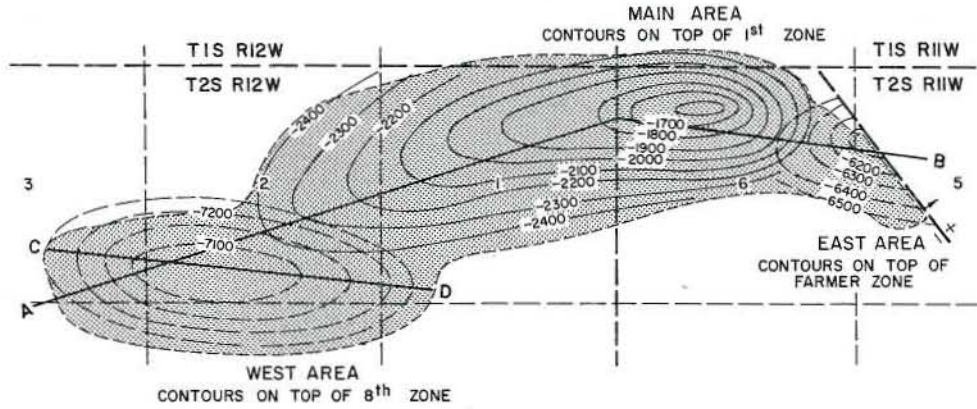
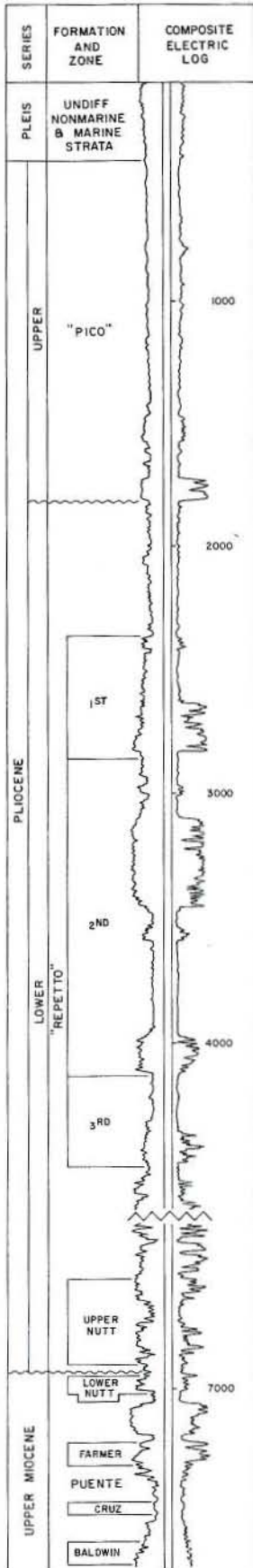
CURRENT CASING PROGRAM: 11 3/4" cem. 950; 7" cem. above zone and across the base of fresh water; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: All of the waste water is injected into a disposal well.

REMARKS:

REFERENCES: Mefferd, M.G., and S. Cordova, Mission Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 1 (1961).

MONTEBELLO OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

MONTEBELLO OIL FIELD
Los Angeles County

LOCATION: 10 miles southeast of downtown Los Angeles

TYPE OF TRAP: Anticline and faulted nose

ELEVATION: 200 - 600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
1st	Operator and well number unknown	Same as present	N.A.	SB	N.A.	N.A.	Feb 1917
2nd	Same as above	Same as present	N.A.	SB	N.A.	N.A.	Feb 1917
3rd	Same as above	Same as present	N.A.	SB	N.A.	N.A.	Feb 1917
4th	Continental Development of Calif., Inc. "Monterey" 15	Kern Oil Co., Ltd. "Monterey" 15	2 2S 12W	SB	180	N.A.	Jun 1927
5th	Pacific Lighting Service Co. "Monterey" 24	Kern Oil Co., Ltd. "Monterey" 24	2 2S 12W	SB	1,628	N.A.	Apr 1938
Upper Nutt	Operator and well number unknown	Same as present	N.A.	SB	N.A.	N.A.	N.A.
Lower Nutt	Same as above	Same as present	N.A.	SB	N.A.	N.A.	N.A.
Farmer	Same as above	Same as present	N.A.	SB	N.A.	N.A.	N.A.
6th	Continental Development of Calif., Inc. "Monterey" 20	Kern Oil Co., Ltd. "Monterey" 20	2 2S 12W	SB	786	N.A.	Dec 1937
Cruz	Atlantic Oil Co. "Cruz" 1-J	Universal Consolidated Oil Co. C-1	6 2S 11W	SB	900	N.A.	Aug 1933
Baldwin	Operator and well number unknown	Same as present	N.A.	SB	N.A.	N.A.	N.A.
7th	Hathaway Co. "Dore" 1	Same as present	11 2S 12W	SB	475	N.A.	Nov 1938
8th	Pacific Lighting Service Co. "La Merced" 30	Union Oil Co. of Calif. "La Merced" 30	1 2S 12W	SB	710	N.A.	Apr 1939

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Pacific Lighting Service Co. "Howard & Smith" 3	Union Oil Co. of Calif. "Howard & Smith" 3	Aug 1938	2 2S 12W	SB	10,772	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
1st	2,200	600	early Pliocene	"Repetto"	19	820	IV
2nd	3,500	600	early Pliocene	"Repetto"	24	820	IV
3rd	4,500	300	early Pliocene	"Repetto"	30	820	IV
4th	4,800	20	early Pliocene	"Repetto"	36	850	IV
5th	5,700	300	lt Mio-e Plio	Puente-"Repetto"	38	850	IV
Upper Nutt	5,300	30	early Pliocene	"Repetto"	38	N.A.	IV
Lower Nutt	5,500	150	late Miocene	Puente	38	N.A.	IV
Farmer	6,500	100	late Miocene	Puente	44	N.A.	IV
6th	6,100	300	late Miocene	Puente	36	900	IV
Cruz	6,900	50	late Miocene	Puente	37	1,000	IV
Baldwin	7,000	100	late Miocene	Puente	38	1,200	IV
7th	7,200	400	late Miocene	Puente	35	1,400	IV
8th	7,650	250	late Miocene	Puente	35	1,500	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (tbb)			Oil (tbb)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
627,456	694,564	7,457,403	905	196	183,788,774	210,838,169	7,428,016	1939	667	584	1,600

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, tbb; Gas, Mcf; Steam, tbb (water equivalent)	Maximum number of wells used for injection
Water flood	1953	52,646,257	2

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,600

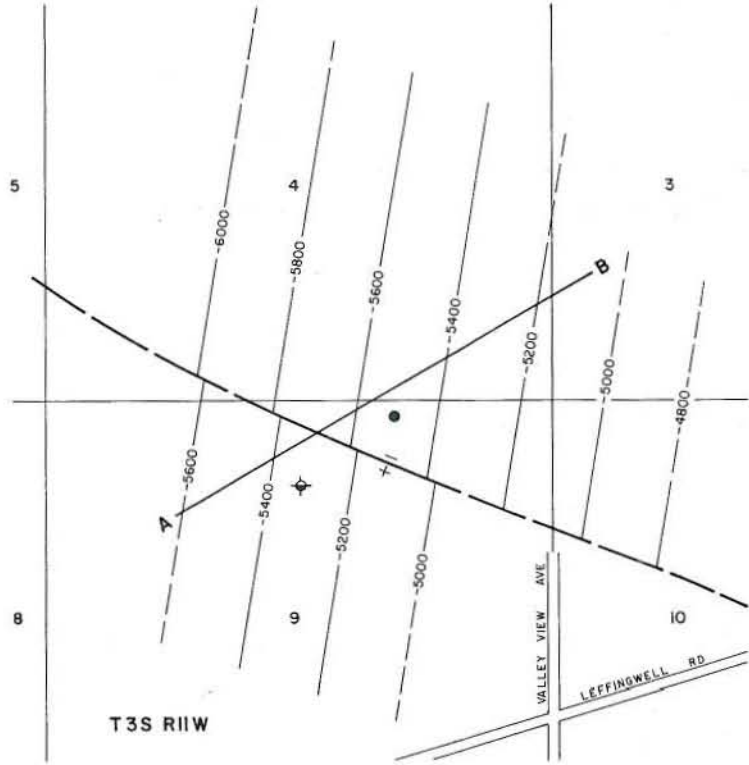
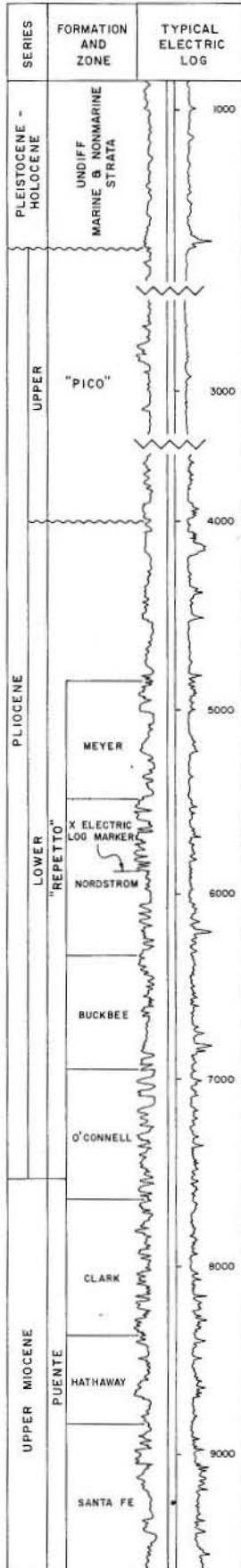
CURRENT CASING PROGRAM: 13 3/8" cem. 700; 9" or 7" cem. above zone and across base of fresh-water sands; 6 5/8" or 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Water-flood project.

REMARKS: The 8th zone is being used for gas storage.

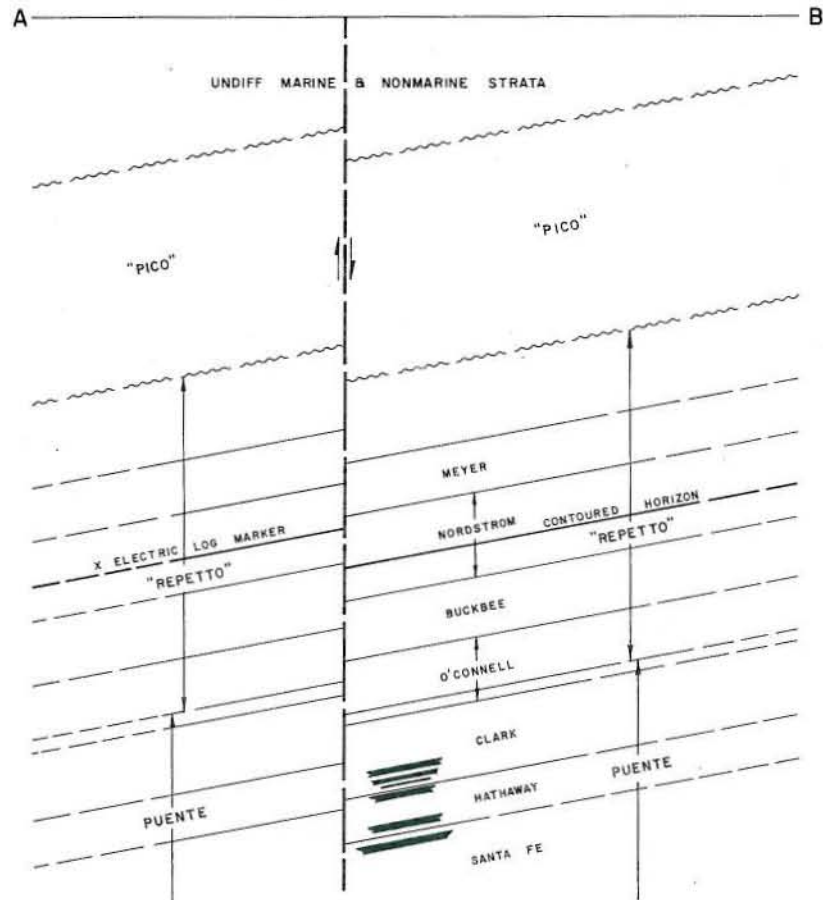
REFERENCES: McLaughlin, R.P., Montebello Oil Field, Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 15, No. 11.
Stolz, H.P., West Montebello Oil Field and Application of the State Gas Law: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 25 (1939).

NEWGATE OIL FIELD



T3S R11W

CONTOURS ON X ELECTRIC LOG MARKER
SCALE: 1" = 2000'



CALIFORNIA DIVISION OF OIL AND GAS

NEWGATE OIL FIELD
Los Angeles County

LOCATION: 3 1/2 miles south of Whittier

TYPE OF TRAP: Sand lenses-on faulted homocline

ELEVATION: 170

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Clark	Gulf Oil Corp. "Newgate Unit A" 1	Western Gulf Oil Co. "Newgate Unit A" 1	9 3S 11W	SB	125	154	Jan 1957
Hathaway	Same as above	Same as above	9 3S 11W	SB	*	*	Jan 1957
Santa Fe	Same as above	Same as above	9 3S 11W	SB	54	480	Jul 1956

Remarks: * Initial production from Clark and Hathaway zones was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Gulf Oil Corp. "Newgate Unit A" 1	Western Gulf Oil Co. "Newgate Unit A" 1	Apr 1956	9 3S 11W	SB	9,556	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Clark	7,700	120	late Miocene	Puente	32	1,450	IV
Hathaway	8,400	90	late Miocene	Puente	32	1,450	IV
Santa Fe	8,900	120	late Miocene	Puente	33	900	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
9,616	9,694	20,983	10	1	213,688	254,145	17,409	1960	2	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,700

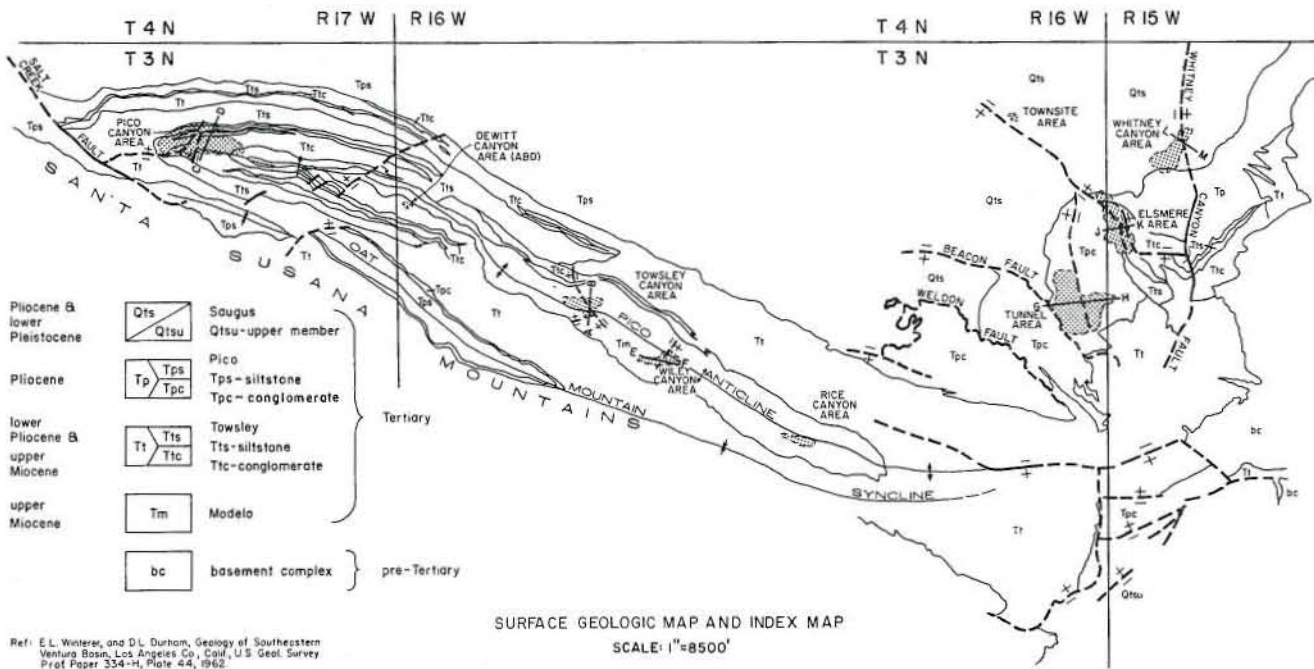
CURRENT CASING PROGRAM: 13 3/8" cem. 1,200; 7" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water trucked from lease to Santa Fe Springs for water flooding.

REMARKS:

REFERENCES:

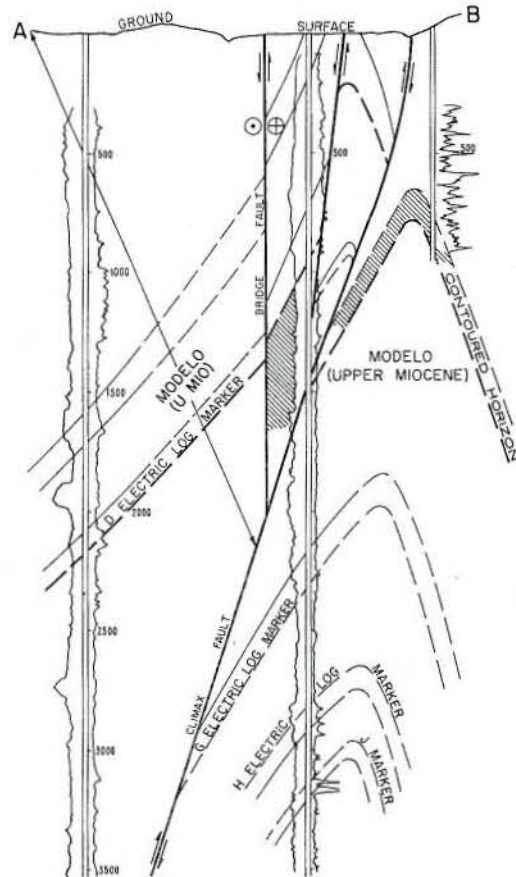
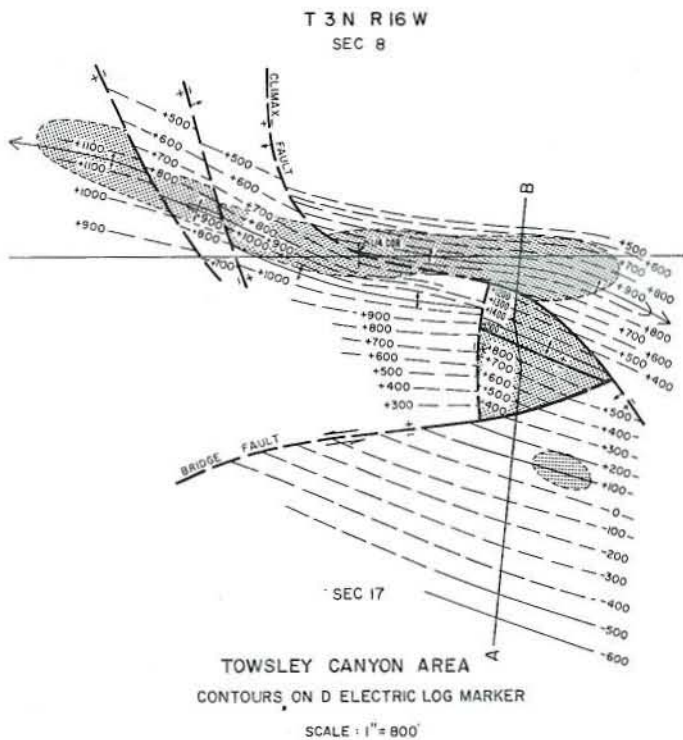
NEWHALL OIL FIELD



Ref: E.L. Winterer, and D.L. Durham, Geology of Southeastern Ventura Basin, Los Angeles Co., Calif., U.S. Geol. Survey Prof. Paper 334-H, Plate 44, 1962.

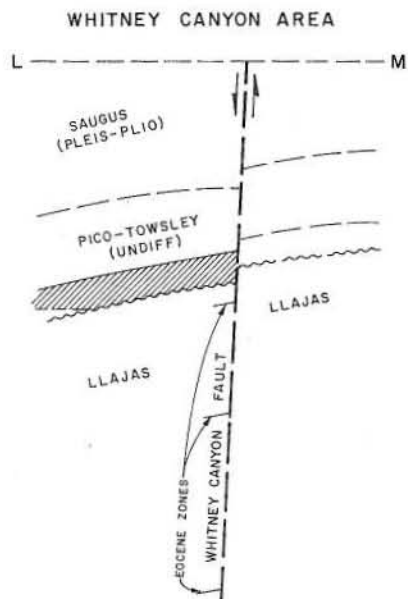
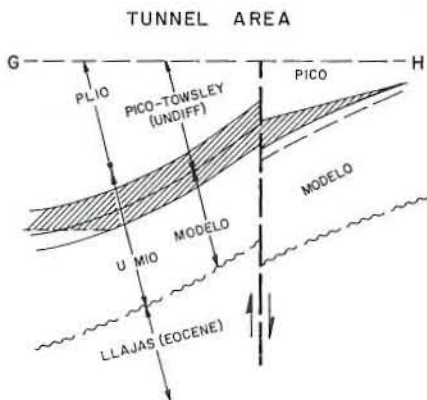
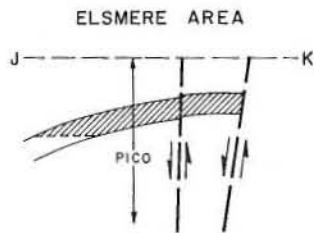
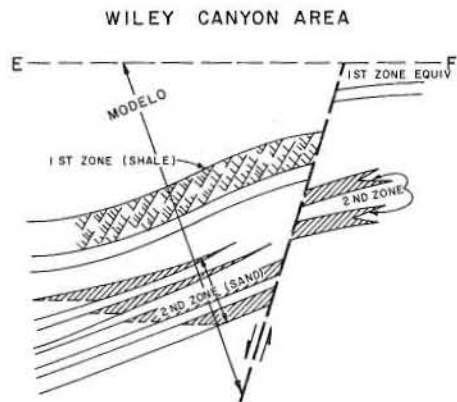
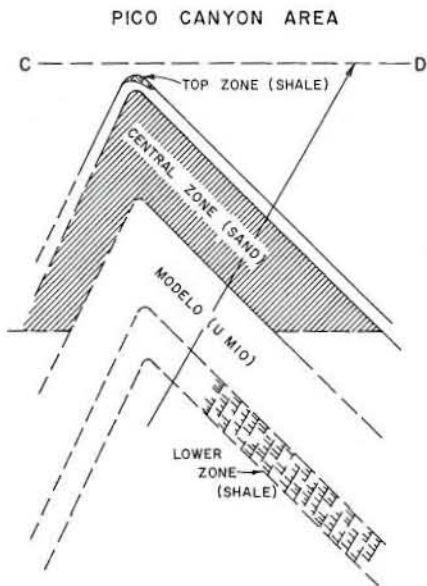
SURFACE GEOLOGIC MAP AND INDEX MAP
SCALE: 1"=8500'

DEFINITIVE SUBSURFACE DATA AVAILABLE ONLY FOR THE TOWSLEY CANYON AREA.



NEWHALL OIL FIELD

GENERALIZED CROSS SECTIONS OF AREAS
OTHER THAN TOWSLEY CANYON AREA
(TOWSLEY CANYON AREA IS SHOWN ON PRECEDING PAGE)



CALIFORNIA DIVISION OF OIL AND GAS

NEWHALL OIL FIELD
Los Angeles County

LOCATION: 26 miles northwest of Los Angeles

TYPE OF TRAP: See areas

ELEVATION: 1,300 - 2,400

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Top	Standard Oil Co. of Calif. "C.S.O." 4	C.C. Mentry "Pico" 4	2 3N 17W	SB	25	N.A.	Sep 1876

Remarks: This was the first commercial oil well in California.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Sun Oil Co. "Limbocker" 1	Barnsdall Oil Co. "Limbocker" 1	Aug 1941	17 3N 16W	SB	7,056	Modelo	late Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
39,407	9,798	32,967	440	41	7,483,261	5,188,584	187,660	1931	315	194	690

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: See areas

REFERENCES: Eldridge, G.H., and R. Arnold, The Santa Clara Valley, Puente Hills, and Los Angeles Oil Districts, Southern California: U.S. Geol. Survey Bull. 309, p. 90-101 (1907).
Kew, W.S.W., Geology and Oil Resources of a Part of Los Angeles and Ventura Counties, California: U.S. Geol. Survey Bull. 753, p. 144-160 (1924).
Walling, R.W., Report on Newhall Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 20, No. 2 (1934).
Winterez, E.L., and D.L. Durham, Geology of Southeastern Ventura Basin, Los Angeles County, California: U.S. Geol. Survey Prof. Paper 334-H (1962).

CALIFORNIA DIVISION OF OIL AND GAS

NEWHALL OIL FIELD

DE WITT CANYON AREA (Abandoned)

Los Angeles County

LOCATION: See index map of Newhall Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 1,700 - 2,200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed sands and fractured shales)	Pacific Coast Oil Co. No. 1	Hardison and Stewart No. 1	7 3N 16W	SB	N.A.	N.A.	1882

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Pacific Coast Oil Co. No. 3	Hardison and Stewart No. 3	1883?	7 3N 16W	SB	1,600+	Modelo	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
(Unnamed sands and fractured shales)	90 - 2,000	30+	late Miocene	Modelo	21	250	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	25,000	N.A.	N.A.	N.A.	7+	2+	15

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: Does not apply

BASE OF FRESH WATER: 0 - 100

CURRENT CASING PROGRAM: 8 5/8" cem. 60; 7" cem. through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: The area was abandoned prior to 1900. Oil was mined from two placer mining claims in 1890.

REFERENCES: Walling, R.W., Report on Newhall Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 20, No. 2 (1934).

CALIFORNIA DIVISION OF OIL AND GAS

NEWHALL OIL FIELD

ELSMERE AREA

Los Angeles County

LOCATION: See index map of Newhall Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 1,600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	Standard Oil Co. of Calif. "Elsmere" 2	Pacific Coast Oil Co. "Elsmere" 2	7 3N 15W	SB	57	N.A.	Mar 1891

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "Elsmere" 23	Same	Dec 1953	7 3N 15W	SB	2,821	Llajas	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
(Unnamed)	780	100	Pliocene	"Pico"	15	N.A.	I

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	50	0	1,061,111	785	N.A.	N.A.	34	24	90

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 100 - 500

CURRENT CASING PROGRAM: 8 5/8" cem. above zone; 6 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: There has been no production from the Elsmere Canyon area since 1943.

REFERENCES: Walling, R.W., Report on Newhall Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 20, No. 2 (1934).

CALIFORNIA DIVISION OF OIL AND GAS

NEWHALL OIL FIELD

PICO CANYON AREA

Los Angeles County

LOCATION: See index map of Newhall Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 1,900 - 2,400

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & V	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Top	Standard Oil Co. of Calif. "C.S.O." 4	G.C. Mentry "Pico" 4	2 3N 17W	SB	25	N.A.	Sep 1876
Central	Standard Oil Co. of Calif. "P.C.O." 11	San Francisco Petroleum Co. No. 2	1 3N 17W	SB	N.A.	N.A.	1880
Lower	Standard Oil Co. of Calif. "C.S.O." 32	Pacific Coast Oil Co. "Pico" 32	2 3N 17W	SB	N.A.	N.A.	Mar 1905

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "C.S.O." 32	Standard Oil Co. of Calif. "C.S.O.W." 32	Feb 1903	2 3N 17W	SB	3,445	Modelo	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Top	145	50	late Miocene	Modelo	32	N.A.	None
Central	1,250	400	late Miocene	Modelo	38	N.A.	I
Lower	3,000	175	late Miocene	Modelo	34	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
11,760	9,798	4,033	110	13	3,161,607	2,937,807	N.A.	N.A.	86	56	110

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1963	1,039,040	2

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 7 5/8" cem. 100 - 450; 5 5/8" cem. above zone; 4 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: All waste water is used in the water-flood project.

REMARKS: Seepage oil was collected in Pico Canyon in 1850 by Andreas Pico and used by the San Fernando Mission for illumination. Oil was mined at five placer claims from 1865 to 1890.

REFERENCES: Walling, R.W., Report on Newhall Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 20, No. 2 (1934).

CALIFORNIA DIVISION OF OIL AND GAS

RICE CANYON AREA (Abandoned)

NEWHALL OIL FIELD

Los Angeles County

LOCATION: See index map of Newhall Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 1,600 - 2,200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & W	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
1st	Standard Oil Co. of Calif. "Rice" 1	Pacific Coast Oil Co. "Rice" 1	22 3N 16W	SB	N.A.	N.A.	Nov 1899
2nd	Ricano Oil Co. No. 1	Inspiration Oil Co. No. 6	22 3N 16W	SB	N.A.	N.A.	N.A.

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Ricano Oil Co. No. 1	Inspiration Oil Co. No. 1	N.A.	22 3N 16W	SB	1,580	Modelo	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
1st	700	150	late Miocene	Modelo	25	N.A.	I
2nd	1,275	200	late Miocene	Modelo	31	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	111,175	120,000	N.A.	N.A.	11	8	20

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 0 - 100

CURRENT CASING PROGRAM: 14" or 10" cem. 160 - 540; 8 1/4" or 6 1/4" cem. above zone; 4 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: There has been no production from the Rice Canyon area since 1955; however, the area was officially abandoned in 1972.

REFERENCES: Walling, R.W., Report on Newhall Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 20, No. 2 (1934).

CALIFORNIA DIVISION OF OIL AND GAS

NEWHALL OIL FIELD
Los Angeles County

TOWNSITE AREA

LOCATION: See index map of Newhall Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 1,300

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Braille	Southwest Oil Co. "Braille" 1	Talisman Oil Co. "Braille" 1	1 3N 16W	SB	30	50	Mar 1951

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Continental Oil Co. "Braille" 3	Same	Dec 1951	1 3N 16W	SB	3,835	Modelo	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Braille	2,735	82	late Miocene	Modelo	20	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

Oil (bbl)	1973 Production		1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,618	0	861	10	1	121,035	15,970	11,796	1951	17	4	50

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,400

CURRENT CASING PROGRAM 11 3/4" cem. 250; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is hauled by vacuum truck to a water-flood project in Placerita field.

REMARKS:

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

NEWHALL OIL FIELD

TOWSLEY CANYON AREA

Los Angeles County

LOCATION: See index map of Newhall Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 1,660 - 2,900

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed sands and fractured shales)	International Oil & Mining Co. "Climax" 1	Temple Oil Co.	17 3N 16W	SB	N.A.	N.A.	Prior to 1893

Remarks: Caswell, Ellis and Wiley operated Towsley Petroleum Mine; the sketch attached to their mineral certificate, filed in 1876 with the General Land Office, shows two oil wells already on the claim. It is possible that these were the first commercial oil wells in California, antedating Standard Oil Company's well No. "C.S.O." 4 in the Pico Canyon area.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Sun Oil Co. "Limbocker" 1	Barnsdall Oil Company "Limbocker" 1	Aug 1941	17 3N 16W	SB	7,056	Modelo	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
(Unnamed sands and fractured shales)	90 - 2,200	30 - 200	Miocene	Modelo	21	250	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
450	0	97	30	4	79,957	10,710	3,349	1955	29	18	30

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 0 - 100

CURRENT CASING PROGRAM: 14" cem. 200; 6 5/8" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps (to be phased out).

REMARKS: Indians first gathered petroleum here by soaking blankets in oil from the seeps located in this canyon. Oil was mined from oil seeps prior to 1876.

REFERENCES: Bailey, Thomas L., Geology of Towsley Canyon Oil Field: Manuscript prepared for the Waterflood Oil Company, on file in the office of Lewis A. Bond in San Marino, California (1957).
 Prutzman, Paul W., Petroleum in Southern California: Calif. State Mining Bureau Bull. 63, p. 167 (1913).
 Stanley and Stolz, Towsley Canyon Properties: Manuscript on file in the office of Welburn Mayock (1951).
 Walling, R.W., Report on Newhall Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 20, No. 2 (Reprint No. 2) (1934).
 Wents, John H., Jr., The Oil Possibilities of Towsley Canyon Area on the Pico Anticline Newhall District Los Angeles County, California: Manuscript on file in the office of Welburn Mayock (1948).
 Zurberti, J.L., Towsley Canyon Area of Newhall Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 52, No. 1 (1966).

CALIFORNIA DIVISION OF OIL AND GAS

NEWHALL OIL FIELD

TUNNEL AREA

Los Angeles County

LOCATION: See index map of Newhall Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 1,450 - 1,950

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	Eureka Crude Oil Co. No. 1	Zenith Oil Co. No. 1	13 3N 16W	SB	7	N.A.	1900
(Unnamed)	*E.A. Clampitt No. 4	Pearl Oil Co. No. 3	13 3N 16W	SB	N.A.	N.A.	1903+

Remarks: * Production records are not available, however 4 1/2 and 5 5/8" inner string was run and history states, "casing was removed" - this was about 1917.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Morton and Dolley "Needham" 5	Union Oil Co. of Calif., Opr. "Needham" 3	Jan 1952	12 3N 16W	SB	4,037	Llajas	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
(Unnamed)	600 - 2,000	70 - 300 (per sand bed)	late Miocene	Towsley - Modelo	13 - 25	N.A.	I

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
21,929	0	22,770	140	18	2,068,379	1,082,814	113,190	1953	65	46	210

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1971	779,891	1

SPACING ACT: Does not apply

BASE OF FRESH WATER: 100 - 500

CURRENT CASING PROGRAM: 10 3/4" cem. 60; 8 5/8" cem. above zone and across base of fresh-water sands; 6 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL: All waste water is injected into a water-disposal well.

REMARKS:

REFERENCES: Walling, R.W., Report on Newhall Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 20, No. 2 (1934).

CALIFORNIA DIVISION OF OIL AND GAS

WHITNEY CANYON AREA

NEWHALL OIL FIELD

Los Angeles County

LOCATION: See index map of Newhall Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 1,425 - 1,750

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	Paul B. Rhodes "Banner" 1	Banner Oil Co. "Banner" 1	6 3N 15W	SB	100	N.A.	1893
Eocene	Occidental Petroleum Corp. "Price" 4	Southern Production Co., Ltd. No. 1	6 3N 15W	SB	2	N.A.	Jun 1933

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Occidental Petroleum Corp. "Price" 4	Southern Production Co., Ltd. No. 1	Jul 1930	6 3N 15W	SB	2,842	Llajas	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (-API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
(Unnamed)	1,075	150	late Miocene	Towsley	18	N.A.	I
Eocene	2,000	150	Eocene	Llajas	27	N.A.	I

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
3,650	0	5,206	60	5	344,748	0	4,347	1933	37	17	120

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 100 - 500

CURRENT CASING PROGRAM: 16" or 12 1/2" cem. 350; 10" cem. above zone and across base of fresh-water sands; 8 1/4" liner landed through zone.

METHOD OF WASTE DISPOSAL: All waste water is injected into a disposal well, located in Sec. 6, T. 3N, R. 15W, SBB&M.

REMARKS:

REFERENCES: Walling, R.W., Report on Newhall Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 20, No. 2 (1934).

CALIFORNIA DIVISION OF OIL AND GAS

NEWHALL OIL FIELD

WILEY CANYON AREA

Los Angeles County

LOCATION: See index map of Newhall Oil Field

TYPE OF TRAP: Faulted anticline; sand pinchout

ELEVATION: 1,600 - 2,200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
1st	Standard Oil Co. of Calif. "Wiley" 4 Same as above	* Pacific Coast Oil Co. "Wiley" 4 Same as above	16 3N 16W	SB	2	N.A.	May 1884
2nd			16 3N 16W	SB	2	N.A.	May 1884

Remarks: * Generally credited with the first commercial production from this area.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "Wiley" 25	Same	1910	16 3N 16W	SB	3,835	Modelo	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
1st	1,000	150	late Miocene	Modelo	25	N.A.	None
2nd	1,275	250	late Miocene	Modelo	31	N.A.	I

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (tbb)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	40	0	510,249	1,020,498	5,822	1933	29	19	45

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 0 - 100

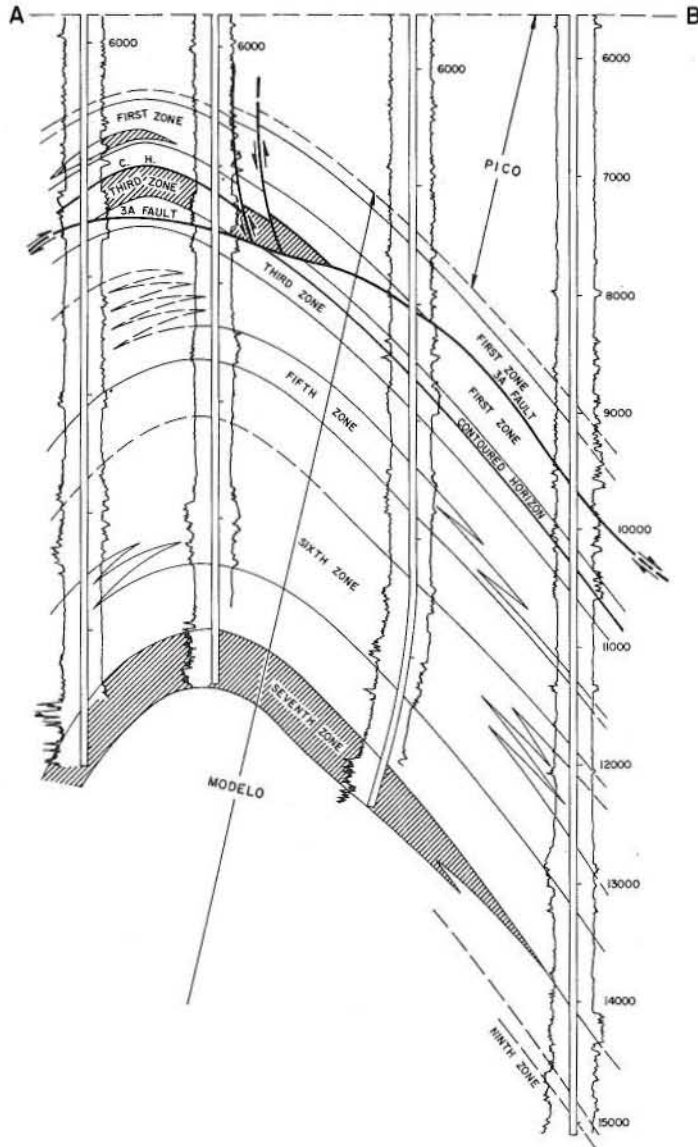
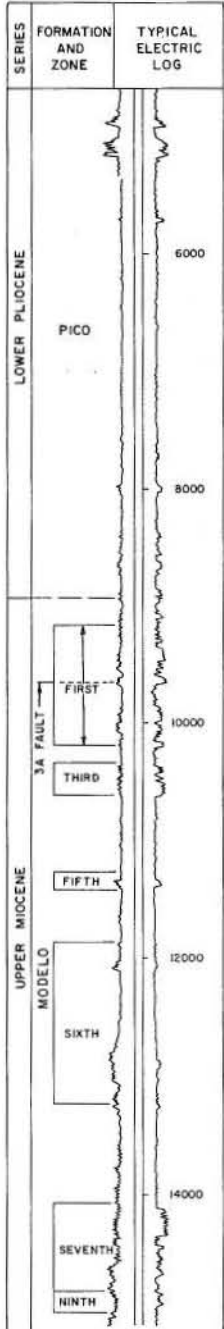
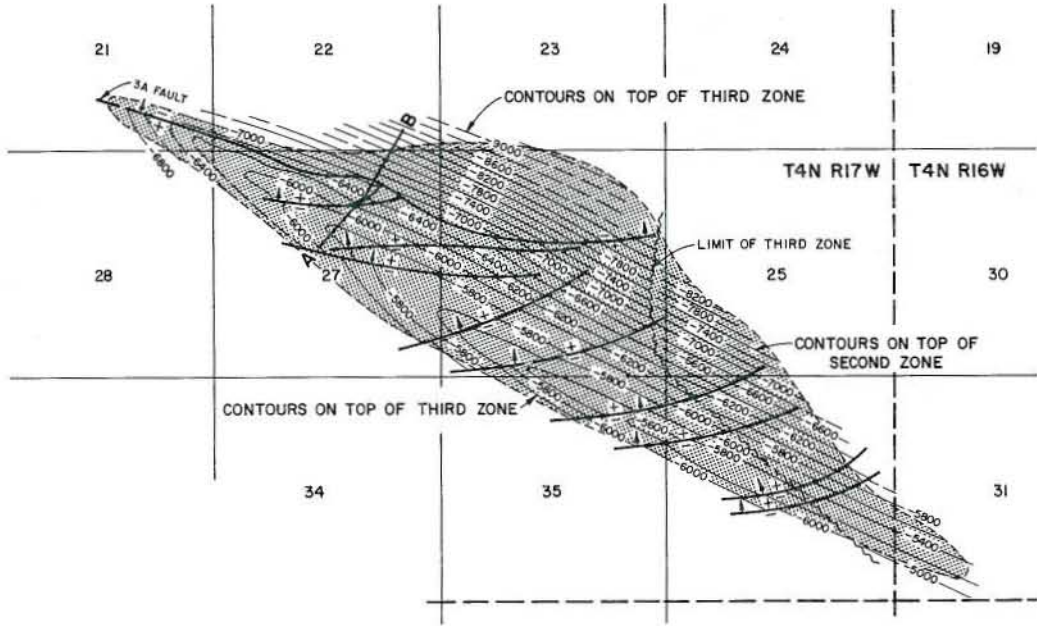
CURRENT CASING PROGRAM: 14" or 10" cem. 160 - 540; 8 1/4" or 6 1/4" cem. above zone; 4 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: There has been no production from the Wiley Canyon area since 1940. Seepage oil was collected and sold to the Metropolitan Gas Works in San Francisco as early as 1868. Two tunnels were dug 300 to 400 feet into the canyon's side in unsuccessful attempts to increase seepage. In 1869, a dry hole was drilled using the spring pole method.

REFERENCES: Walling, R.W., Report on Newhall Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 20, No. 2 (1934).

NEWHALL - POTRERO OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

NEWHALL-POTRERO OIL FIELD

Los Angeles County

LOCATION: 33 miles northwest of Los Angeles

TYPE OF TRAP: Faulted anticline with lithofacies variations

ELEVATION: 900 - 1,600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
First	Sun Oil Co. "Rancho San Francisco" 1-3	Barnsdall Oil Co. "Rancho San Francisco" 1	26 4N 17W	SB	118	200	Mar 1937
Second	Sun Oil Co. "Rancho San Francisco" 2-12	Barnsdall Oil Co. "Rancho San Francisco" 2	26 4N 17W	SB	631	555	Feb 1938
Third	Sun Oil Co. "Rancho San Francisco" 4-1	Barnsdall Oil Co. "Rancho San Francisco" 4	26 4N 17W	SB	790	455	Sep 1938
Fifth	Sun Oil Co. "Rancho San Francisco" 53-5	Barnsdall Oil Co. "Rancho San Francisco" 53-5	26 4N 17W	SB	336	370	Jun 1946
Sixth	Sun Oil Co. "Rancho San Francisco" 44-5	Barnsdall Oil Co. "Rancho San Francisco" 44	26 4N 17W	SB	577	505	Mar 1945
Seventh	Sun Oil Co. "Rancho San Francisco" 65-7	Barnsdall Oil Co. "Rancho San Francisco" 65-6	26 4N 17W	SB	430	230	Apr 1948
Ninth*	Sun Oil Co. "Rancho San Francisco" 66-7	Barnsdall Oil Co. "Rancho San Francisco" 66	27 4N 17W	SB	55	20	Dec 1947

Remarks: *Abandoned.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Sun Oil Co. "Rancho San Francisco" 154-7	Sunray Mid-Continent Oil Co. "Rancho San Francisco" 154	Oct 1961	27 4N 17W	SB	15,490	Modelo	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
First	6,500	300	Miocene	Modelo	34	350	III
Second	6,900	200	Miocene	Modelo	35	350	III
Third	7,400	250	Miocene	Modelo	34	350	III
Fifth	9,300	300	Miocene	Modelo	35	400	III
Sixth	9,700	400	Miocene	Modelo	35	350	III
Seventh	11,500	200	Miocene	Modelo	31	400	IV
Ninth	14,200	300	Miocene	Modelo	29	350	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
510,209	1,545,319	112,659	1,410	71	69,407,085	78,760,206	3,611,887	1955	176	170	1,490

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1958	7,640,560	2
Gas injection for pressure maintenance	1944	375,990,202	25

SPACING ACT: Applies

BASE OF FRESH WATER: 0 - 300

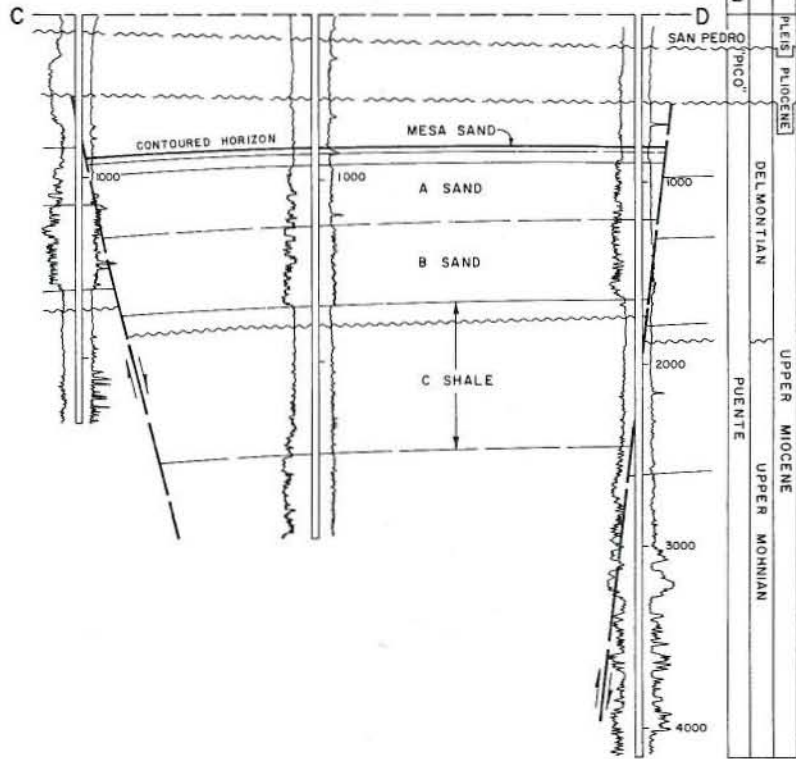
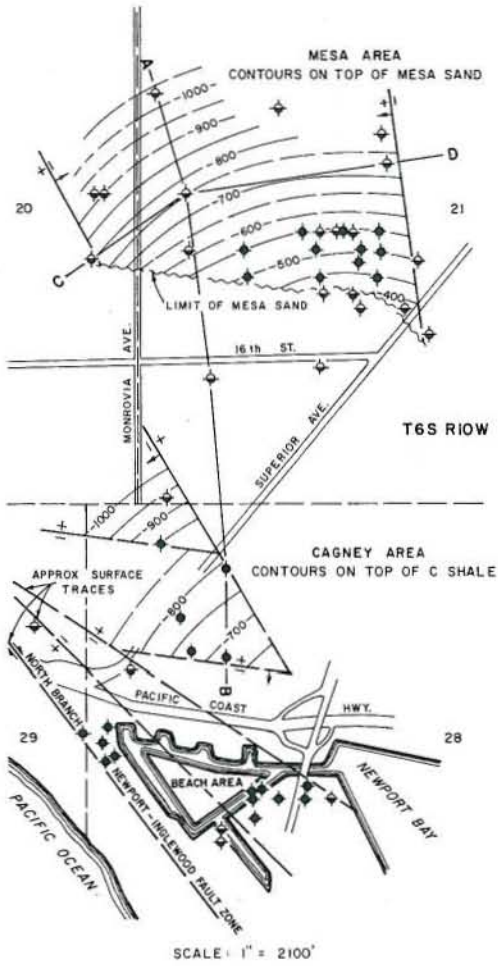
CURRENT CASING PROGRAM: 13 3/8" cem. 300 - 400; 8 5/8" or 7" cem. over zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is used in water-flood operations.

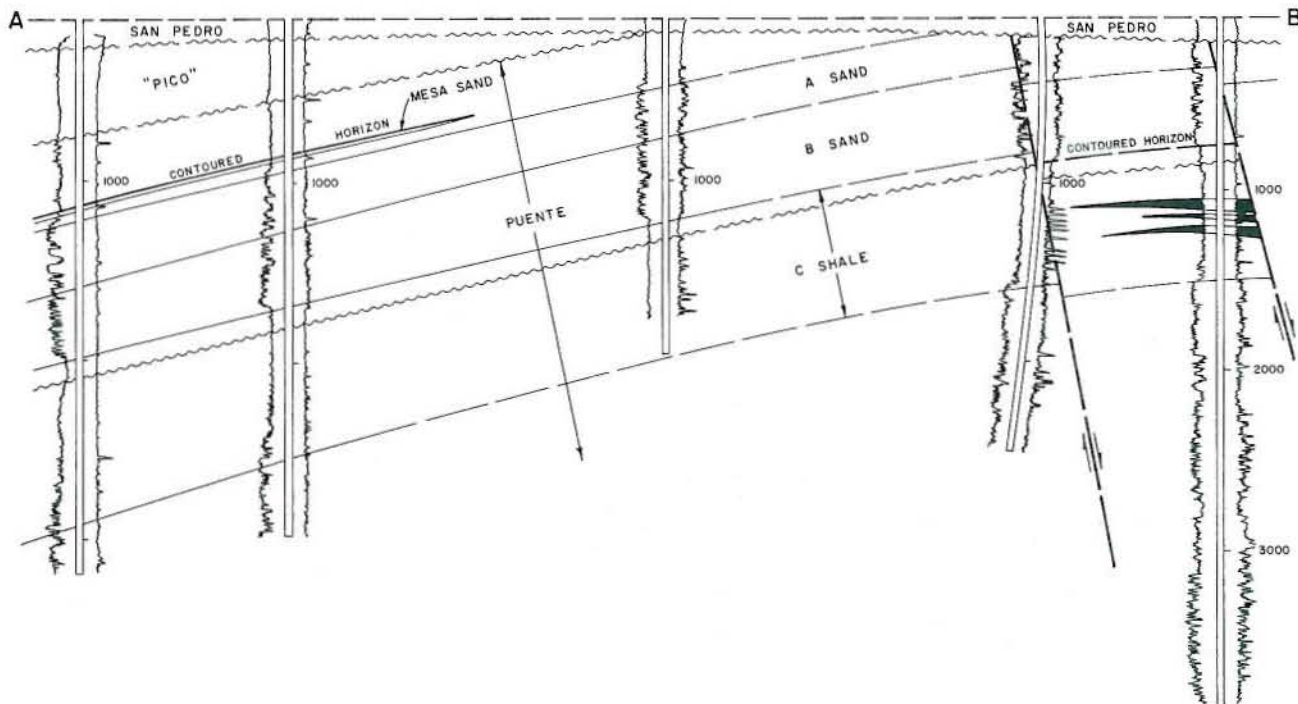
REMARKS:

REFERENCES: Hodges, F.C., and E.R. Murray-Aaron, Newhall-Potrero, Aliso Canyon, Del Valle and Oak Canyon Oil Fields: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 29, No. 1 (Reprint No. 2) (1943).
 Looftbourow, J.S., Jr., Newhall-Potrero Oil Field: A.A.P.G. - S.E.P.M. - S.E.G. Guidebook, Joint Ann. Meeting, Los Angeles (1952).
 Mefferd, M.G., Newhall-Potrero Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 51, No. 2 (1965).
 Winterer, E.L., and D.L. Durham, Geology of Southeastern Ventura Basin, Los Angeles County, California: U.S. Geol. Survey Prof. Paper 334-H (1962).

NEWPORT OIL FIELD



SERIES	PLEISTOCENE	PLIOCENE	DEL. MONTANIAN	UPPER MIOCENE	UPPER MOHNIAN
FORMATION	"PICO"			PUENTE	



CALIFORNIA DIVISION OF OIL AND GAS

NEWPORT OIL FIELD

Orange County

LOCATION: In and adjacent to the town of Newport Beach

TYPE OF TRAP: See areas

ELEVATION: See areas

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Shale	Gilbert H. Beesemyer "Steel Rig" 1	Bulkerson et al No. 1	28 6S 10W	SB	15	N.A.	1922

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Ajax Petroleum Co., Ltd. "Mesa" 1	Same	Dec 1927	21 6S 10W	SB	7,253	Topanga	middle Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	25	0	186,697	0	37,223	1925	58	31	90

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: Fresh water zones have been invaded by sea water.

REFERENCES: Ingram, W.L., Newport Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 54, No. 2--Part 2 (1968).

CALIFORNIA DIVISION OF OIL AND GAS

NEWPORT OIL FIELD

BEACH AREA (Abandoned)

Orange County

LOCATION: See map sheet of Newport Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 20

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
C shale	Gilbert H. Bessemyer "Steel Rig" 1	Fulkerson et al No. 1	28 6S 10W	SB	15	N.A.	1922

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Gilbert H. Bessemyer "Steel Rig" 1	Mitchell, Bouer, & Fulkerson No. 1	May 1920	28 6S 10W	SB	1,750	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
C shale	1,225	300	late Miocene	Puente	12	0	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	120,397	0	28,946	1925	16	13	40

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 8 5/8" or 10 3/4" cem. above zone with a liner landed through the zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Area abandoned in 1921.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

NEWPORT OIL FIELD

CAGNEY AREA

Orange County

LOCATION: See map sheet of Newport Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 40

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
C shale	James Cagney - William Cagney "Cagney" 1	California Exploration Co. "Cagney" 1	28 6S 10W	SB	120	0	Jun 1947

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
James Cagney - William Cagney "Cagney" 5	Jergins Oil Co. "Cagney" 5	Sep 1948	28 6S 10W	SB	3,878	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
C shale	1,500	300	late Miocene	Puente	9	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	25	0	32,603	0	4,270	1948	13	5	25

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 8 5/8" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: A bottom-hole heater was installed in one well, but production was noncommercial and the well was abandoned in 1964. All wells have been idle since May 1949. Fresh-water zones have been invaded by sea water.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

NEWPORT OIL FIELD

MESA AREA (Abandoned)

Orange County

LOCATION: See map sheet of Newport Oil Field

TYPE OF TRAP: Pinchout on a faulted homocline

ELEVATION: 100

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Mesa	Costa Mesa Oil Co. "Tedesco" 1	Barnett Rosenberg "Mesa" 1	21 6S 10W	SB	210	N.A.	May 1925

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Ajax Petroleum Co., Ltd. "Mesa" 1	Same	Dec 1927	21 6S 10W	SB	7,253	Topanga	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Mesa	500	15	late Miocene	Puente	12	N.A.	I

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	33,697	0	14,055	1926	29	13	25

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
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SPACING ACT: Does not apply

BASE OF FRESH WATER: None

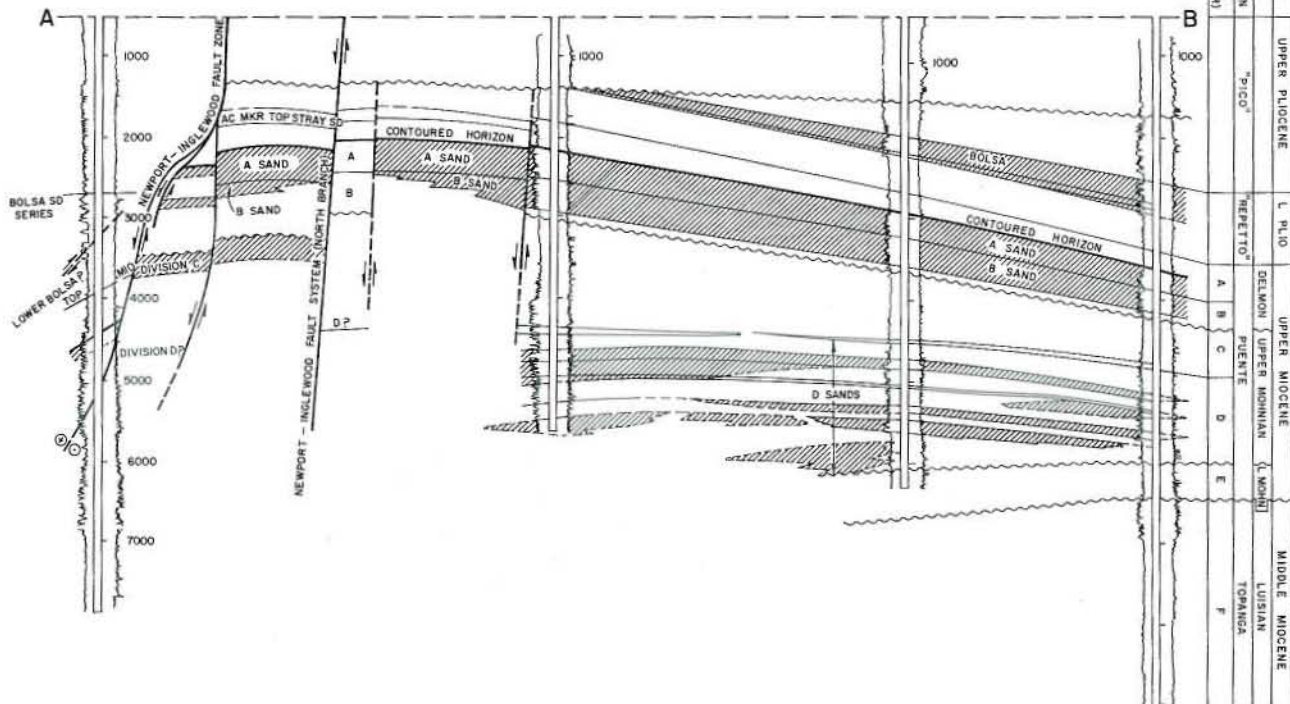
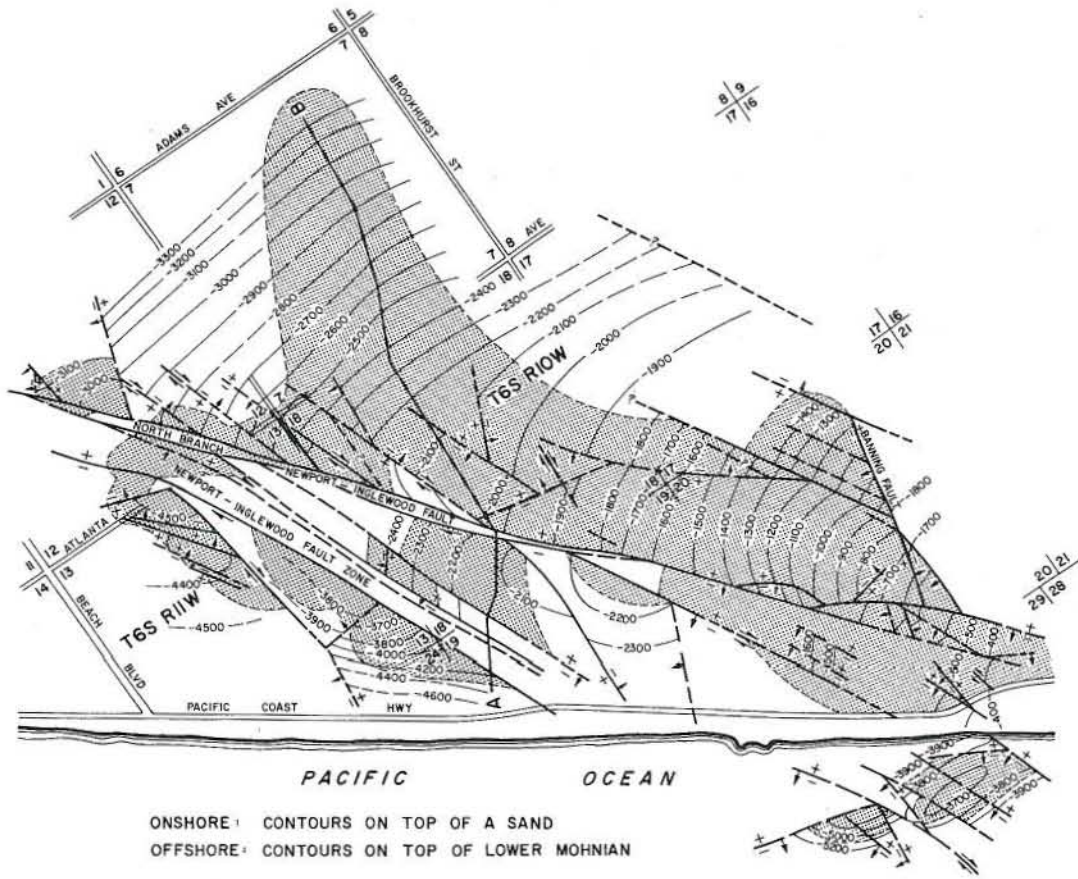
CURRENT CASING PROGRAM: 8 5/8" or 10 3/4" cem. above zone with a liner landed through the zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Area abandoned in 1945.

REFERENCES:

WEST NEWPORT OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

WEST NEWPORT OIL FIELD

Orange County

LOCATION: 3 miles southeast of Huntington Beach along Pacific Coast Highway

TYPE OF TRAP: See area sheets

ELEVATION: 15 - 150

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & W	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
B	G. E. Kadane and Sons "Banning" 1	D. W. Elliott "Townsend Land Co." 1	20 6S 10W	SB	26	0	Apr 1943

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Exxon Corp. "State 1549" 2	Monterey Oil Co. "State 1549" 2	Feb 1956	19 6S 10W	SB	10,896	Topanga	middle Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,535,365	38,739	3,744,157	650	234	42,332,770	7,487,913	2,593,403	1947	605	487	1,328

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS:

REFERENCES: Corwin, C.H., West Newport Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 32, No. 2 (1946).
 Hunter, A.L. and D.R. Allen, Recent Developments in West Newport Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 42, No. 2 (1956).

CALIFORNIA DIVISION OF OIL AND GAS

WEST NEWPORT OIL FIELD

ONSHORE AREA

Orange County

LOCATION: See map sheet of West Newport Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 85

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Bolsa (gas)	E.C.S. Oil Co. "Estella" 2	Victor W. Posta, Opr. "Estella" 2	18 6S 10W	SB	0	967	Jul 1954
Bolsa	Surfland Oil Co. "Newland" 3	Republic Opr., Inc. "Newland" 3	12 6S 11W	SB	150	N.A.	Oct 1947
A	Standard Oil Co. of Calif. "Karales" 1	Delaney Petroleum Corp. "Karales" 1	19 6S 10W	SB	150	N.A.	Feb 1945
B	General Crude Oil Co. Opr. "Banning" 1	D. W. Elliott "Townsend Land Co." 1	20 6S 10W	SB	26	N.A.	Apr 1943
C	General Crude Oil Co. Opr. "Banning" 2	Signal Oil and Gas Co. "Banning" 2	20 6S 10W	SB	12	N.A.	Nov 1943
D sands	Morton & Sons "Anaheim-Sugar" 7-1	A. W. Lyddon, Opr. "Anaheim-Sugar" 7-1	7 6S 10W	SB	1,000	N.A.	Jul 1946

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Exxon Corp. "Thorpe" 1	Monterey Oil Co. "Thorpe" 1	Apr 1955	19 6S 10W	SB	7,889	Topanga	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Bolsa (gas)	1,400	100	early Pliocene	"Repetto"	1,005	0	III
Bolsa	2,400	100	early Pliocene	"Repetto"	18	1,500	III
A	2,500	100	late Miocene	Puente	23	1,000	III
B	2,850	200	late Miocene	Puente	18	1,000	III
C	3,500	100	late Miocene	Puente	23	800	III
D sands	5,300	250	late Miocene	Puente	23	300	IV

PRODUCTION DATA (Jan. 1, 1974) (Dry gas production not included - see Remarks)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,417,122	1,583	3,637,803	570	219	38,521,867	6,254,195	2,593,403	1947	589	473	1,248

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Cyclic steam	1964	3,379,668	239
Fire flood	1969	N.A.	31

SPACING ACT: Applies

BASE OF FRESH WATER: 0 - 1,300

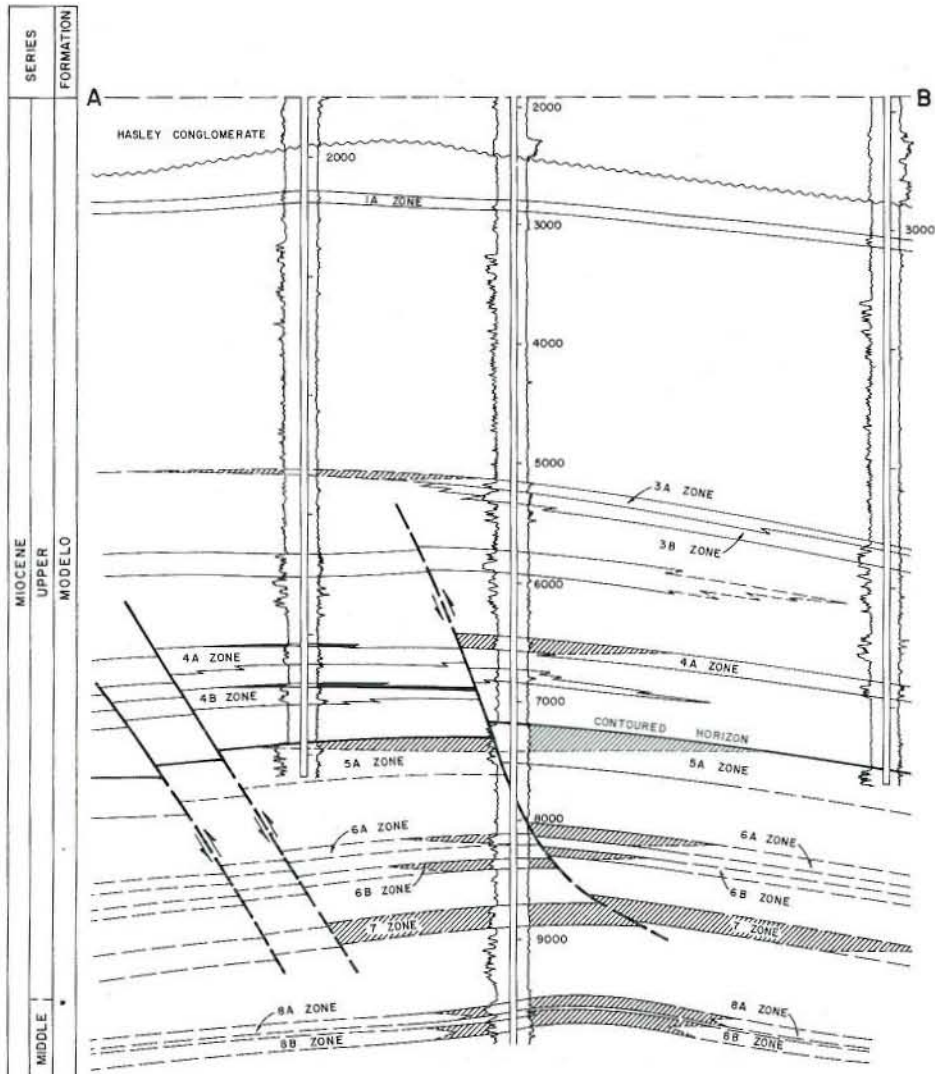
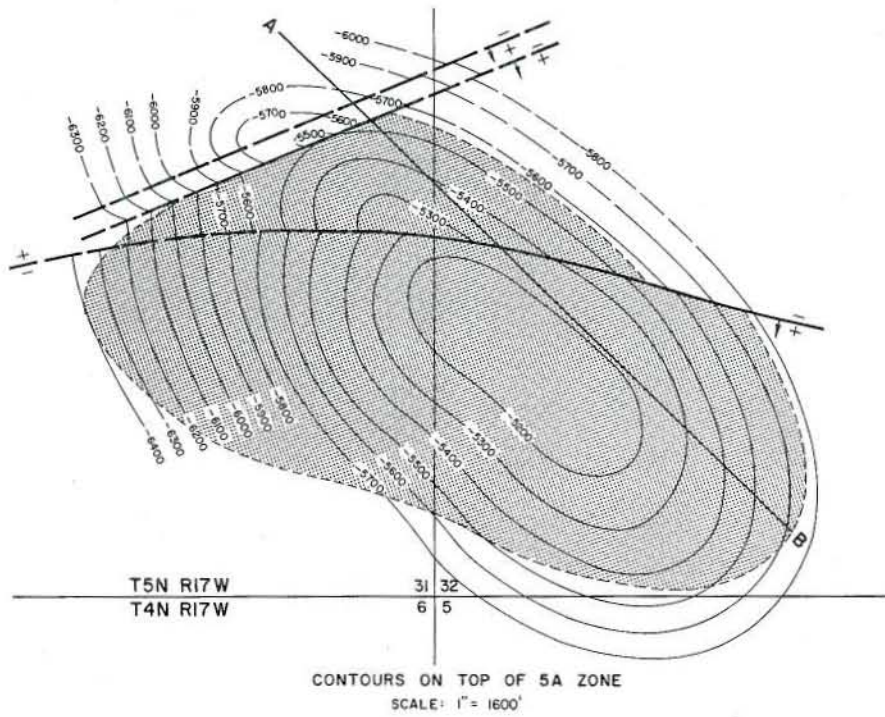
CURRENT CASING PROGRAM: 11 3/4" cem. 300; 7" cem. above zone and across the base of fresh water sands.

METHOD OF WASTE DISPOSAL: Local sewer system.

REMARKS: Cumulative dry gas production from the Bolsa gas sands is 190,545 Mcf. This zone was produced only from the discovery well and was abandoned May 1964.

REFERENCES: Corwin, C.H., West Newport Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 32, No. 2 (1946).
 Hunter, A.L. and D.R. Allen, Recent Developments in West Newport Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 42, No. 2 (1956).

OAK CANYON OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

OAK CANYON OIL FIELD

Los Angeles County

LOCATION: 36 miles northwest of Los Angeles

TYPE OF TRAP: Faulted anticline

ELEVATION: 1,275 - 2,475

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
1A	Gulf Oil Corp. "Geo. M. Lechler" 1	Western Gulf Oil Co. 1-"Lechler"	31 5N 17W	SB	56	2	Feb 1941
3A	Gulf Oil Corp. "L.W. Gilmour Fee" 1	Western Gulf Oil Co. 1-"L.W. Gilmour Fee"	32 5N 17W	SB	194	44	Jan 1944
3B	Same as above	Same as above	32 5N 17W	SB	*	*	Jan 1944
4A	Gulf Oil Corp. "USL-F" 8	Western Gulf Oil Co. 1-A "Geo. R. Wickham Jr. US"	31 5N 17W	SB	172	0	Jan 1945
4B	Same as above	Same as above	31 5N 17W	SB	55	10	Jan 1945
5A	Gulf Oil Corp. "Geo. M. Lechler" 2	Western Gulf Oil Co. 2-"Lechler"	31 5N 17W	SB	398	212	Jul 1941
6A	Gulf Oil Corp. "USL-G" 6	Western Gulf Oil Co. 6-"USL-G"	32 5N 17W	SB	83	0	Apr 1945
6B	Same as above	Same as above	32 5N 17W	SB	83	0	Apr 1945
7	Same as above	Same as above	32 5N 17W	SB	194	194	Dec 1947
8A	Gulf Oil Corp. "USL-G" 6	Western Gulf Oil Co. 6 - "USL-G" 6	32 5N 17W	SB	114	94	Jun 1945
8B	Same as above	Same as above	32 5N 17W	SB	114	94	Jun 1945

Remarks: * Production from 3A and 3B zones commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Gulf Oil Corp. "USL-G" 6	Western Gulf Oil Co. 6-"USL-G"	Jun 1945	32 5N 17W	SB	10,816	Modelo	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
1A	2,400	85	Miocene	Modelo	22	820	III
3A	5,350	50	Miocene	Modelo	23	820	III
3B	5,450	60	Miocene	Modelo	23	820	III
4A	6,825	80	Miocene	Modelo	26	820	III
4B	6,950	60	Miocene	Modelo	30	820	III
5A	7,240	80	Miocene	Modelo	34	820	III
6A	8,130	60	Miocene	Modelo	34	820	III
6B	8,380	60	Miocene	Modelo	33	820	III
7	8,720	100	Miocene	Modelo	33	820	III
8A	9,550	60	Miocene	Modelo	33	820	III
8B	9,650	60	Miocene	Modelo	33	820	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
178,616	270,417	238,827	290	19	11,712,911	18,088,174	739,242	1945	42	28	290

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1972	748,924	1

SPACING ACT: Applies

BASE OF FRESH WATER: 500

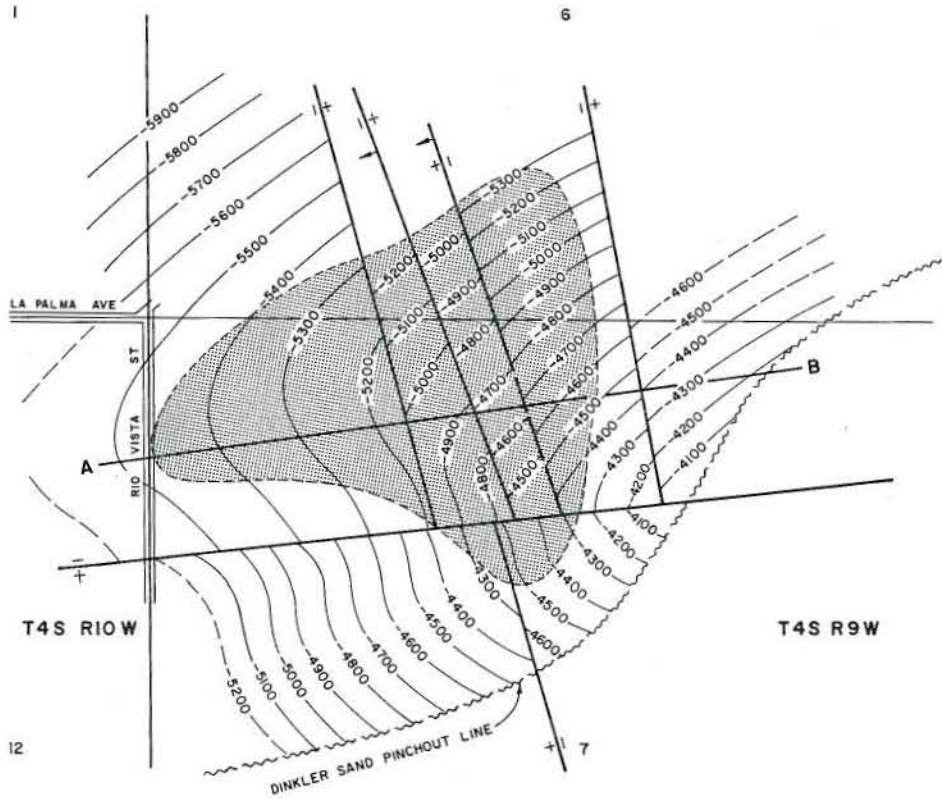
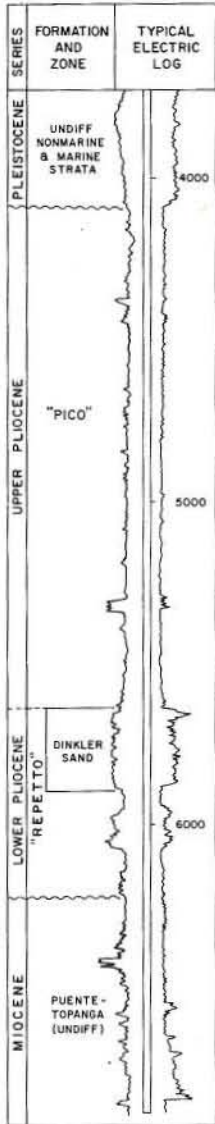
CURRENT CASING PROGRAM: 11 5/8" or 10 3/4" cem. 600 - 1,300; 7" combination string landed through zone and cemented through zone.

METHOD OF WASTE DISPOSAL: All waste water is injected into water-flood wells.

REMARKS:

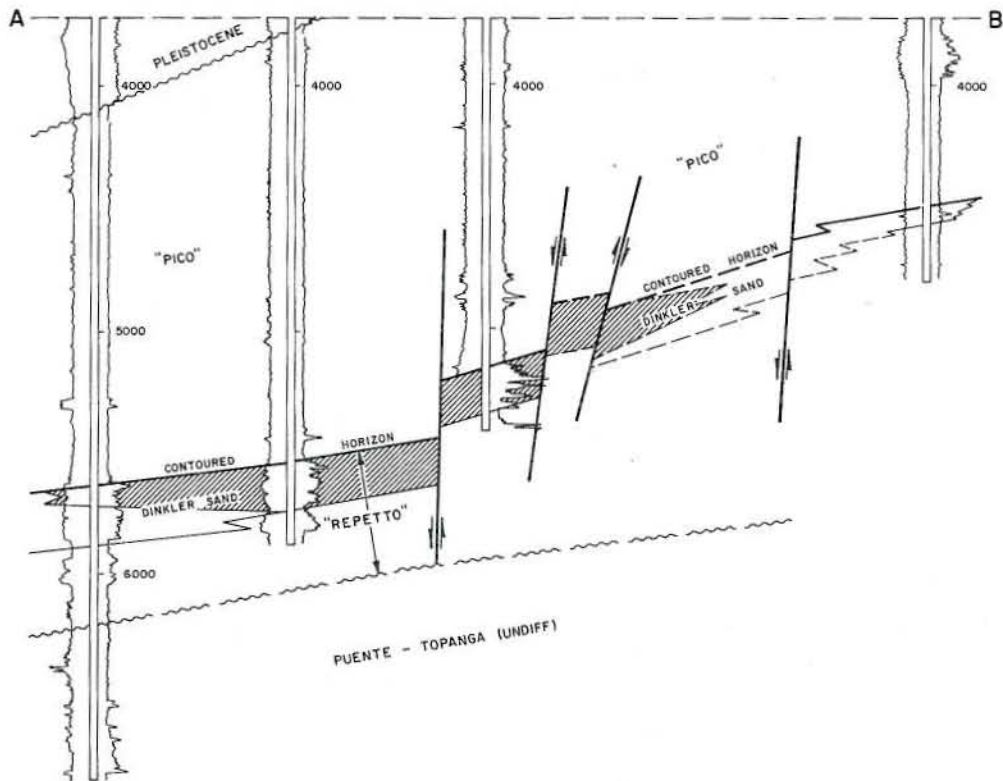
REFERENCES: Ybarra, R.A., and A.D. Stockton, Oak Canyon Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 44, No. 2 (1958).

OLIVE OIL FIELD



CONTOURS ON TOP OF DINKLER SAND

SCALE: 1" = 1200'



CALIFORNIA DIVISION OF OIL AND GAS

OLIVE OIL FIELD
Orange County

LOCATION: 2 miles east of Anaheim

TYPE OF TRAP: Faulted anticlinal nose

ELEVATION: 225

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Dinkler	Texaco Inc. "Olive Unit One" 1	The Texas Co. "Dinkler" 1	7 4S 9W	SB	94	18	Apr 1953

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Texaco Inc. "Ruff" 1	The Texas Co. "Ruff" 1	Apr 1954	1 4S 10W	SB	8,497	Puente-Topanga	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Dinkler	4,900	200	early Pliocene	"Repetto"	13 - 15	N.A.	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
53,039	20,314	42,378	50	8	1,623,799	1,129,278	184,861	1958	21	14	100

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 3,200

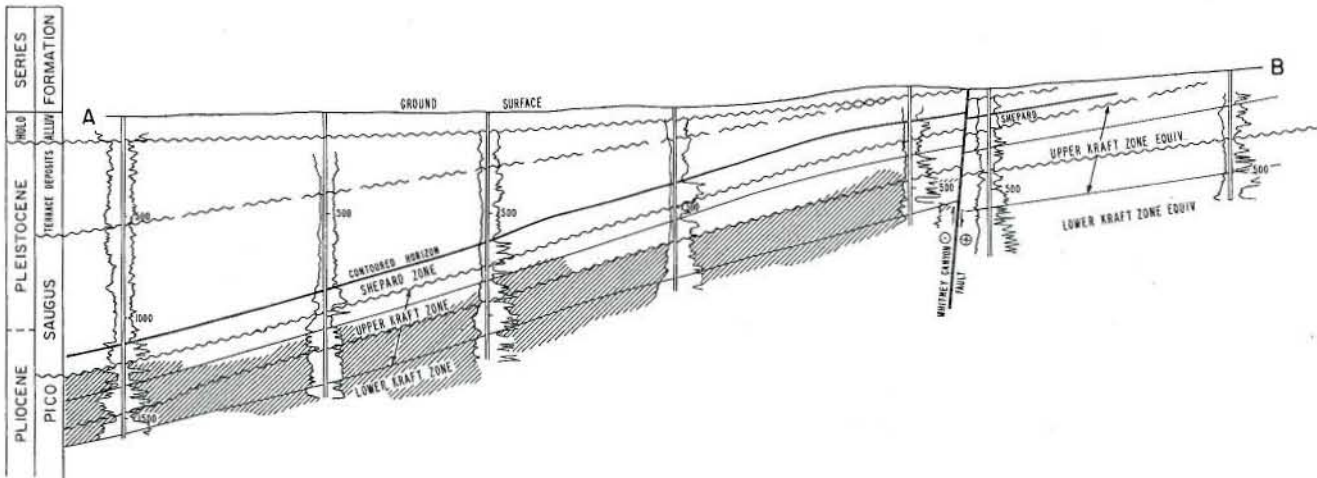
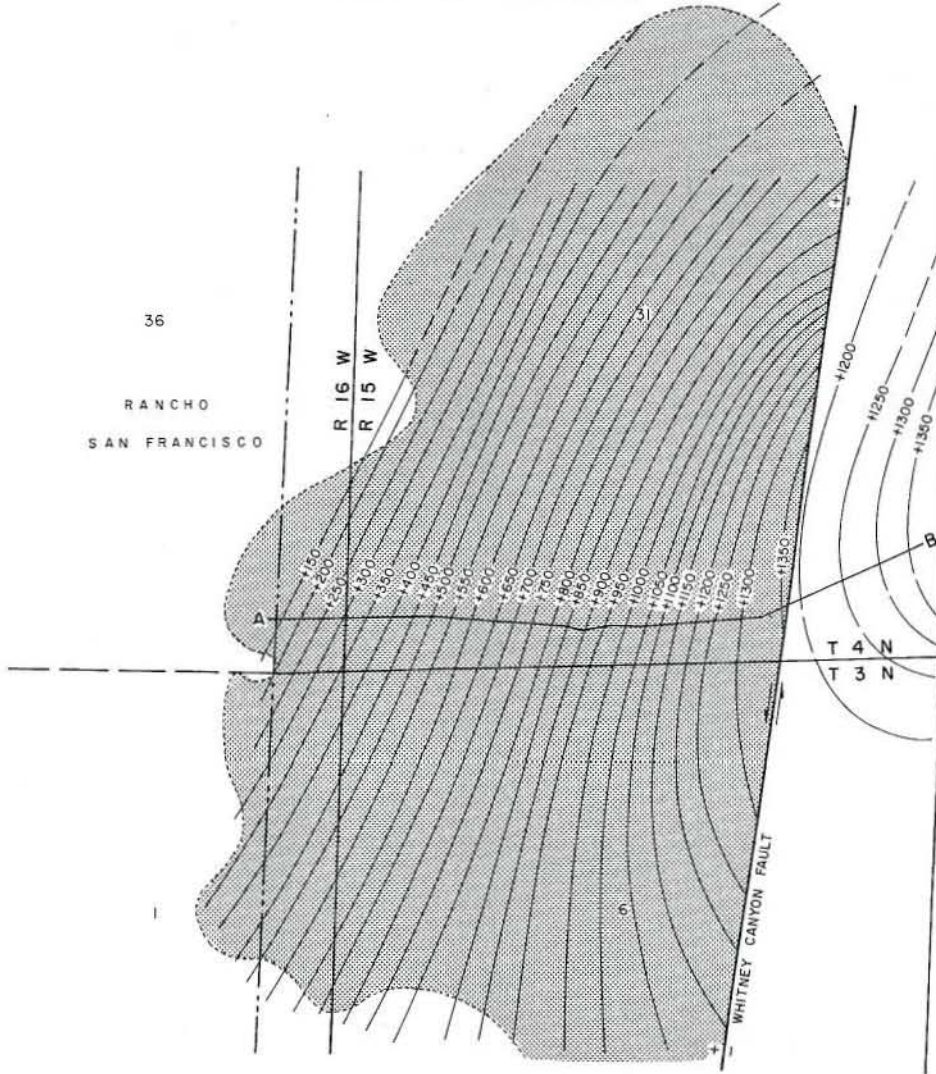
CURRENT CASING PROGRAM: 11 3/4" cem. 400; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Sewer system and water-disposal wells in other fields.

REMARKS:

REFERENCES: Gaede, V.F., Olive Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 44, No. 2 (1958).

PLACERITA OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

PLACERITA OIL FIELD

Los Angeles County

LOCATION: 25 miles northwest of Los Angeles

TYPE OF TRAP: Faulted homocline

ELEVATION: 1,625

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Shepard	Standard Oil Co. of Calif. "Placerita" 13	Standard Oil Co. of Calif. "Placerita" 13	6 3N 15W	SB	15	0	Apr 1951
Upper Kraft	Crestmont Oil Co. "York" 1	Equity Oil Co. "Daisy" 1	6 3N 15W	SB	N.A.*	N.A.	Jul 1920
Lower Kraft	Same as above	Same as above	6 3N 15W	SB	N.A.*	N.A.	Jul 1920

Remarks: * First reported production was 6 bbls. per day of oil in October 1925. No oil was produced from the field between 1933 and 1948; major field development occurred in April 1948, when Nelson-Phillips Oil Co. completed "Kraft" 1 (now Crown Central Petroleum Corp. "Kraft" 1) in the upper Kraft zone and produced 70 bbls. of oil per day in Sec. 31, T. 4 N., R. 15 W.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
R. A. Provost Assoc. "Protrana" 2	Same	Jul 1950	25 4N 16W	SB	3,653	Modelo	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Shepard	600	60	Pliocene	Saugus	12	100	I
Upper Kraft	800	200	Pliocene	Pico	11 - 17	100	I
Lower Kraft	1,700	400	Pliocene	Pico	18 - 25	(250)	I

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
282,209	0	4,615,704	640	141	40,188,447	6,039,151	5,785,256	1950	607	575	760

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1954	41,906,316	29

SPACING ACT: Applies

BASE OF FRESH WATER: 100 - 500

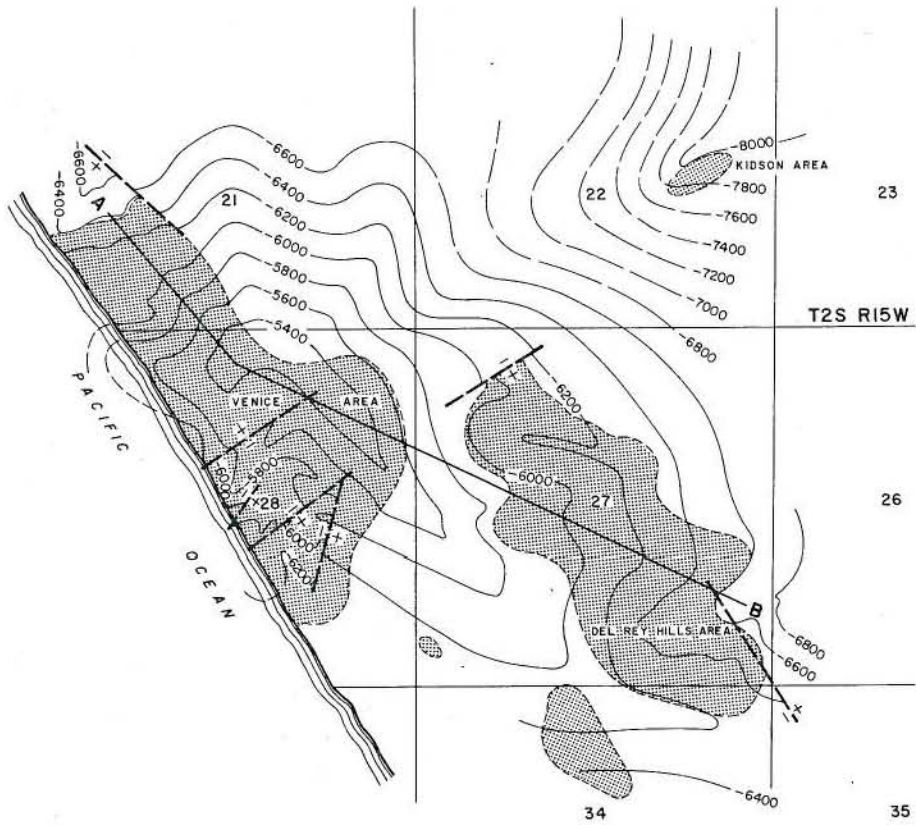
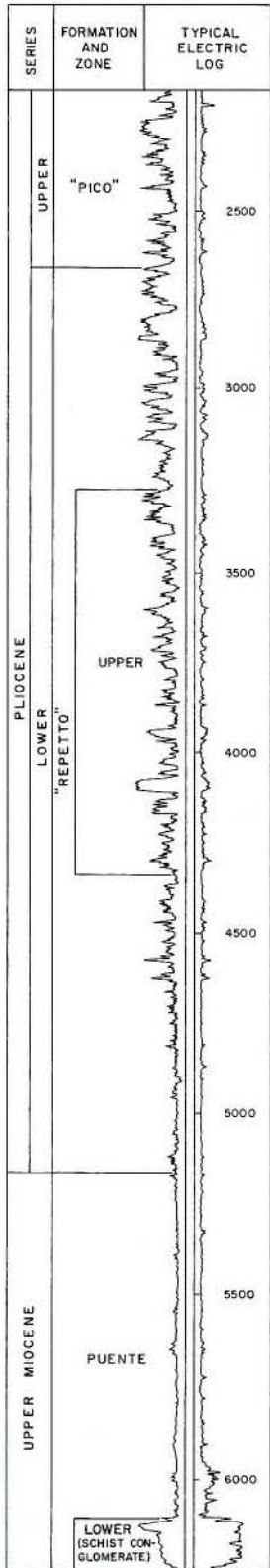
CURRENT CASING PROGRAM: 8 5/8" or 7" combination string landed through zone and cemented through ports above zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water is injected into water-flood or disposal wells; also some waste water is discharged into local drainage channels.

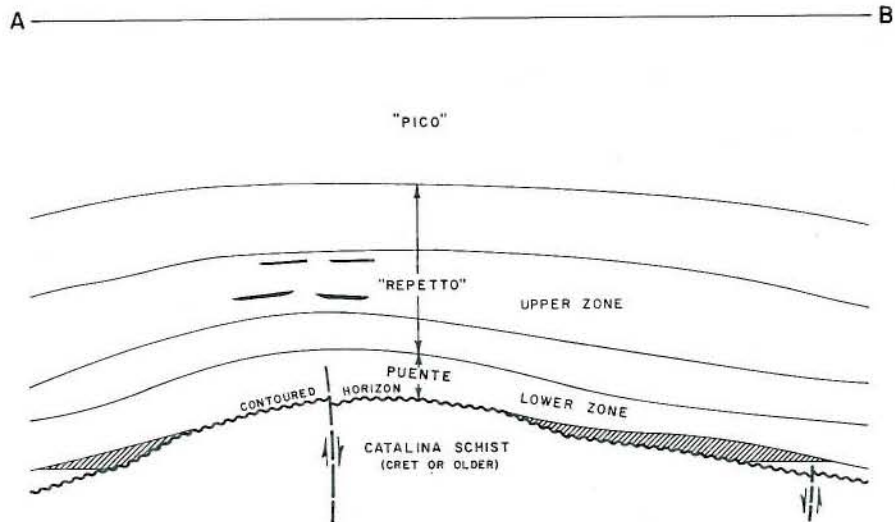
REMARKS: A cyclic-steam project was started in May 1964 and was terminated in 1971 after 3,184,619 bbls. of water in the form of steam had been injected. Two pilot fire-flood projects were started in 1964 and 1966; the first project was terminated in 1966 and the second was unsuccessful, also, but has not been officially terminated.

REFERENCES: Barton, C.L., and N.N. Sampson, Placerita Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 35, No. 2 (1949).
 Kew, W.S.W., Newhall Oil Field: Geologic Formations and Economic Development of the Oil and Gas Fields of California, State Div. of Mines Bull. 118, p. 415 (1945).
 Oakeshott, G.B., Geology of the Placerita Oil Field, Los Angeles County, California: California Journal of Mines and Geology Vol. 46, No. 1, pp. 43-80 (1950).
 Tudor, R.B., Recent Developments in Kraft-York Area of Placerita Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 1 (1962).
 Walling, R.W., Report on Newhall Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 20, No. 2 (1934).
 Winterer, E.L., and D.L. Durham, Geology of Southeastern Ventura Basin, Los Angeles County, Calif.: U. S. Geol. Survey Professional Paper 334-H (1962).

PLAYA DEL REY OIL FIELD



CONTOURS ON TOP OF CATALINA SCHIST



CALIFORNIA DIVISION OF OIL AND GAS

PLAYA DEL REY OIL FIELD

Los Angeles County

LOCATION: 15 miles southwest of downtown Los Angeles

TYPE OF TRAP: See areas

ELEVATION: See areas

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Upper Lower (Schist conglomerate)	Exxon Corp. "Robertson" 1 County of Los Angeles "Ohio RGC" 1	A. T. Jergins Trust "Robertson" 1 The Ohio Oil Co. "Recreation Gun Club" 1	21 2S 15W 21 2S 15W	SB SB	250 2,500	N.A. 1,500	Jun 1930 Dec 1929

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Edwin W. Pauley & Donald Frankel "Hughes" 1	Same	Dec 1954	22 2S 15W	SB	8,725	Catalina Schist	Cret or older

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
108,831	29,676	1,338,812	303	57	61,705,275	61,806,731	9,759,018	1931	323	269	600

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS:

REFERENCES: See areas

CALIFORNIA DIVISION OF OIL AND GAS

PLAYA DEL REY OIL FIELD

DEL REY HILLS AREA

Los Angeles County

LOCATION: See map sheet of Playa del Rey Oil Field

TYPE OF TRAP: Anticline over basement high; sand lenses and overlap.

ELEVATION: 150

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Lower	Southern California Gas Co. "Vidor" 1	Union Oil Co. of Calif. "King Vidor" 1	27 2S 15W	SB	625	N.A.	May 1931

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Southern California Gas Co. "Rite Lube" 1	Raymond J. Rassmussen "Ray" 1	Mar 1935	27 2S 15W	SB	7,054	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Lower	6,200	200	late Miocene	Puente	21 - 24	1,200	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
52,381	0	574,631	215	42	11,121,090	14,428,414	2,805,000	1935	82	75	248

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 700

CURRENT CASING PROGRAM: 16" cem. 700; 6 5/8" cem. above zone; 4 3/4" liner landed through zone.

METHOD OF WASTE DISPOSAL: Sewer system.

REMARKS: The Lower zone is being used by Southern Calif. Gas Co. for gas storage.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

PLAYA DEL REY OIL FIELD

KIDSON AREA (Abandoned)

Los Angeles County

LOCATION: See map sheet of Playa Del Rey Oil Field

TYPE OF TRAP: Sand lenses overlap onto basement high

ELEVATION: 10

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Schist conglomerate	Donald Frankel, Opr. "Kidson" 1-1	Bolsa Chica Oil Corp. "Kidson" 1-1	22 2S 15W	SB	69	500	Dec 1951

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Edwin W. Pauley & Donald Frankel "Hughes" 1	Same	Dec 1954	22 2S 15W	SB	8,725	Catalina Schist	Cret or older

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Schist conglomerate	7,400	15	late Miocene	Puente	30	1,200	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	17,434	37,250	8,617	1952	4	2	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 700

CURRENT CASING PROGRAM: 11 3/4" cem. 700; 7" cem. through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Area abandoned in 1956.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

PLAYA DEL REY OIL FIELD

VENICE AREA

Los Angeles County

LOCATION: See map sheet of Playa del Rey Oil Field

TYPE OF TRAP: Anticline over basement high; sand lenses and overlap.

ELEVATION: 10

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & W	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Upper	Exxon Corp. "Robertson" 1	A. T. Jergins Trust "Robertson" 1	21 2S 15W	SB	250	N.A.	Jun 1930
Lower	County of Los Angeles "Ohio RGC" 1	The Ohio Oil Co. "Recreation Gun Club" 1	21 2S 15W	SB	2,500	1,500	Dec 1929

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Calstar Petroleum Co. "V" 2	Star Petroleum Co. "V" 2	Apr 1930	21 2S 15W	SB	6,778	Catalina Schist	Cret or older

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu))	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Upper	4,000	100	early Pliocene	"Repetto"	20	500	IV
Lower	6,400	200	late Miocene	Puente	21 - 24	1,200	IV

PRODUCTION DATA (Jan. 1, 1974)

Oil (bbl)	1973 Production		1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
56,450	29,676	764,181	88	15	50,566,751	47,341,067	9,759,018	1951	257	192	342

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1971	176,051	1

SPACING ACT: Does not apply

BASE OF FRESH WATER: 700

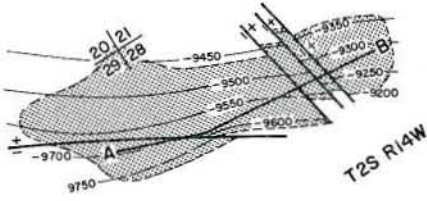
CURRENT CASING PROGRAM: 16" cem. 750; 6 5/8" cem. above zone; 4 3/4" landed through zone.

METHOD OF WASTE DISPOSAL: Sewer system.

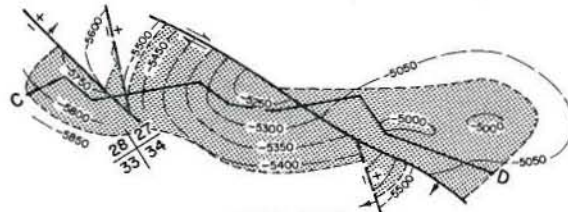
REMARKS:

REFERENCES: Barton, Cecil L., A Report of Playa del Rey Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields (1931-1932).
 Hodges, F.C., Gas Storage and Recent Developments in the Playa del Rey Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields (1944).
 Metzner, Loyde H., The Del Rey Hills Area of the Playa del Rey Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields (1935-1936).
 Riegler, John Jr., Petroleum Transactions, A.I.M.E. 1952.
 Riegler, John Jr., Gas Storage in the Playa del Rey Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 39 (1953).
 Riegler, John Jr., Underground Storage at Playa del Rey, Southern Calif. Gas Co. 1966.

POTRERO OIL FIELD

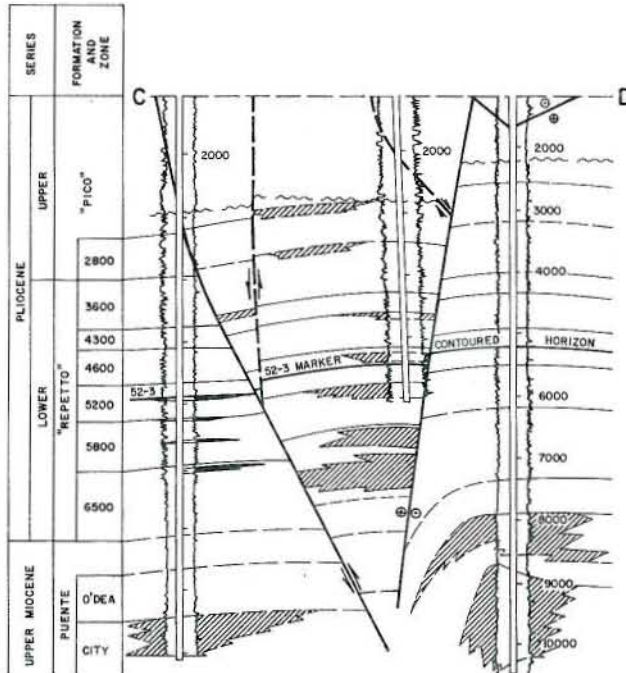
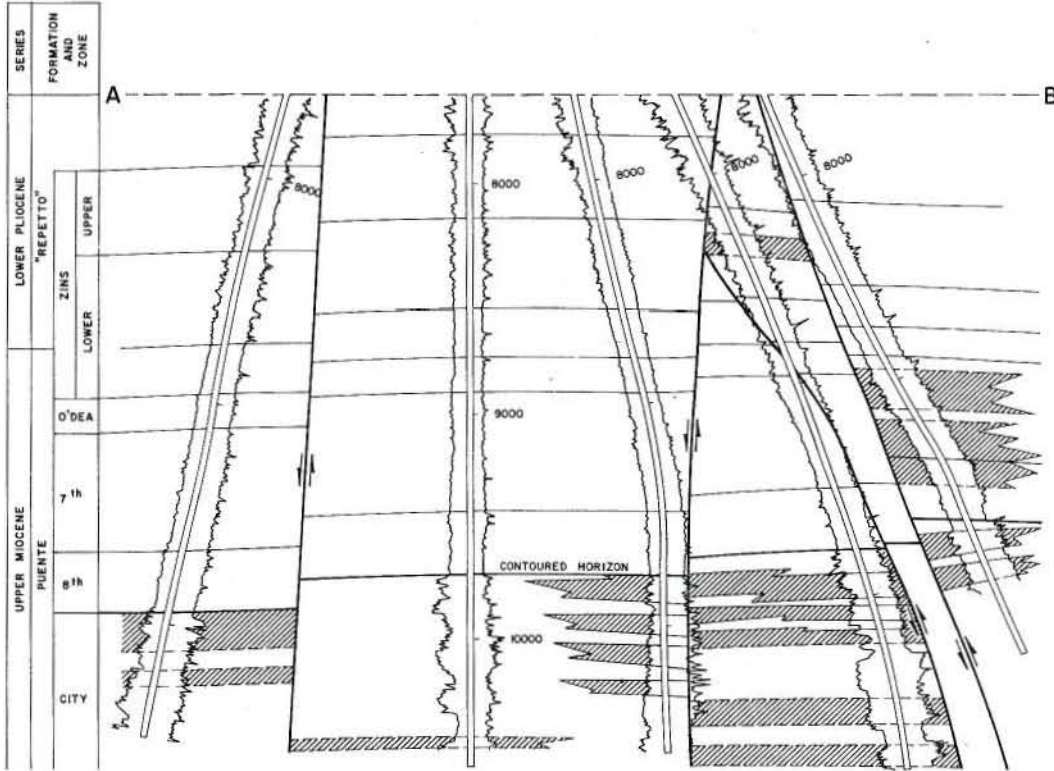


INGLEWOOD CITY AREA
CONTOURS ON TOP OF CITY ZONE



EAST AREA
CONTOURS ON 52-3 ELECTRIC LOG MARKER

SCALE: 1" = 2600'



CALIFORNIA DIVISION OF OIL AND GAS

POTRERO OIL FIELD

Los Angeles County

LOCATION: 9 miles southwest of downtown Los Angeles

TYPE OF TRAP: See areas

ELEVATION: 160

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
S,200	Getty Oil Co. "Cypress" 1	Associated Oil Co. "Cypress" 1	34 2S 14W	SB	15	N.A.	Feb 1928

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "Hardy-Community" 3	Same	Sep 1960	34 2S 14W	SB	12,932	Topanga	middle Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
147,865	172,666	324,161	161	15	13,650,852	69,775,769	707,164	1941	104	82	365

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: Wells are drilled directionally from small drillsites.

REFERENCES: Willis, R. and R.S. Ballantyne, Jr., Potrero Oil Field: Calif. Div. of Mines Bull. 118, p. 310-317 (1943).

CALIFORNIA DIVISION OF OIL AND GAS

POTRERO OIL FIELD

EAST AREA

Los Angeles County

LOCATION: See map sheet of Potrero Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 160

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & W	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
2,800	Crown Central Petroleum Corp. "Gascho" 1	Sunset Oil Co. "Gascho" 1	28 2S 14W	SB	350	N.A.	May 1929
3,600	Getty Oil Co. "Cypress" 3	Associated Oil Co. "Cypress" 3	34 2S 14W	SB	1,100	7,500	Dec 1928
4,300	G. E. Hutchinson & Associates No. 1	Sunset Pacific Oil Co. "Inglewood Comm." 3	28 2S 14W	SB	1,800	N.A.	Apr 1930
4,600	Getty Oil Co. "Cypress" 2	Associated Oil Co. "Cypress" 2	34 2S 14W	SB	1,049	N.A.	Apr 1928
5,200	Getty Oil Co. "Cypress" 1	Associated Oil Co. "Cypress" 1	34 2S 14W	SB	15	N.A.	Feb 1928
5,800	Beloil Corp., Ltd. "Fee" 2	Clyde Bell "Coffin-Maccoil-Beloil Fee" 2	28 2S 14W	SB	172	N.A.	Aug 1929
6,500	Exxon Corp. No. 2	Wilshire Annex Oil Co. No. 2	34 2S 14W	SB	1,096	N.A.	Feb 1935
O'Dea	Same as above	Same as above	34 2S 14W	SB	*	*	Feb 1935
City	Mobil Oil Corp. "Potrero" 14	Basin Oil Co. of Calif. "Potrero" 14	34 2S 14W	SB	180	113	Mar 1944

Remarks: * 6,500 & O'Dea zone production was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "Hardy-Community" 3	Same	Sep 1960	34 2S 14W	SB	12,932	Topanga	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class SOPE required
			Age	Formation			
2,800	2,800	150	late Pliocene	"Pico"	32 - 45	1,770	III
3,600	3,600	175	early Pliocene	"Repetto"	46 - 51	1,710	III
4,300	4,300	50	early Pliocene	"Repetto"	47	1,700	III
4,600	4,500	120	early Pliocene	"Repetto"	48	1,650	III
5,200	4,930	50	early Pliocene	"Repetto"	43	775	IV
5,800	5,500	50	early Pliocene	"Repetto"	47	1,250	IV
6,500	6,230	550	early Pliocene	"Repetto"	38 - 43	1,410	IV
O'Dea	7,800	600	late Miocene	Puente	59	800	IV
City	8,800	800	late Miocene	Puente	30 - 46	500	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
124,310	140,569	312,207	33	10	11,249,911	41,006,520	707,164	1941	85	66	200

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,500

CURRENT CASING PROGRAM: 11 3/4" cem. 1,000; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Sewer system.

REMARKS: All wells except for those in Sec. 34 are now abandoned.

REFERENCES: Johnson, R.A., East Area of Potrero Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 2 (1961).

CALIFORNIA DIVISION OF OIL AND GAS

POTRERO OIL FIELD

INGLEWOOD CITY AREA

Los Angeles County

LOCATION: See map sheet of Potrero Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 120

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Lower Zins	Mobil Oil Corp. "Community" 53	Basin Oil Co. of Calif. "Inglewood Community" 2-2	28 2S 14W	SB	32	1,400	Jan 1952
7th	Same as above	Same as above	28 2S 14W	SB	29	210	Apr 1949
8th	Same as above	Same as above	28 2S 14W	SB	*	*	Apr 1949
City	Mobil Oil Corp. "Standard Brick" 1	Basin Oil Co. of Calif. "Standard Brick" 1	28 2S 14W	SB	170	1,940	Oct 1946

Remarks: * 7th & 8th zone initial production was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	S & M	Depth (feet)	At total depth	
						Strata	Age
Mobil Oil Corp. "Community" 12	Basin Oil Co. of Calif. "Inglewood Community" 1-2	Sep 1948	28 2S 14W	SB	11,263	Topanga	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Lower Zins	8,170	90	early Pliocene	"Repetto"	28 - 51	N.A.	IV
7th	8,900	240	late Miocene	Puente	37 - 53	N.A.	IV
8th	9,475	100	late Miocene	Puente	37 - 53	440	IV
City	9,750	300	late Miocene	Puente	24 - 56	650	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
23,555	32,097	11,954	128	5	2,400,941	28,769,249	315,095	1949	19	16	165

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,500

CURRENT CASING PROGRAM: 11 3/4" cem. 1,050; 7" cem. above zone and across base of fresh-water sands; 4 3/4" liner landed through zone.

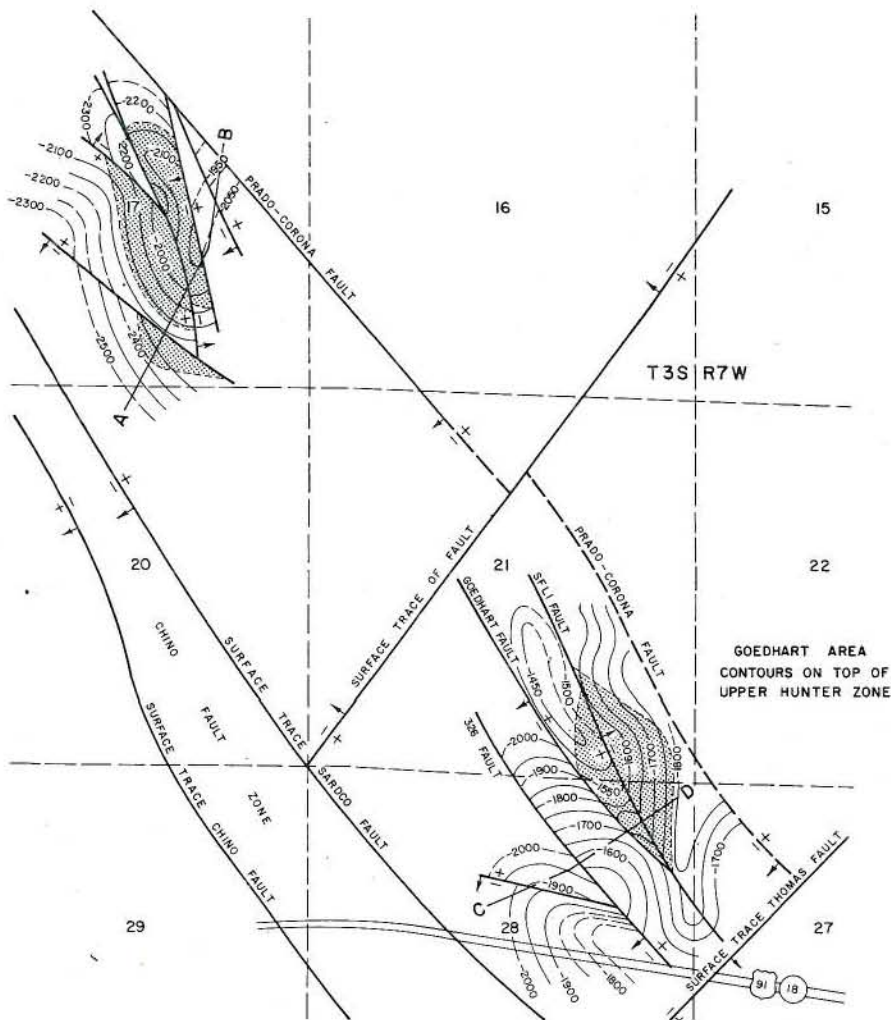
METHOD OF WASTE DISPOSAL: Sewer system.

REMARKS: Wells are directionally drilled.

REFERENCES: Crowder, R.E., Inglewood City Area of Potrero Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 44, No. 1 (1958).

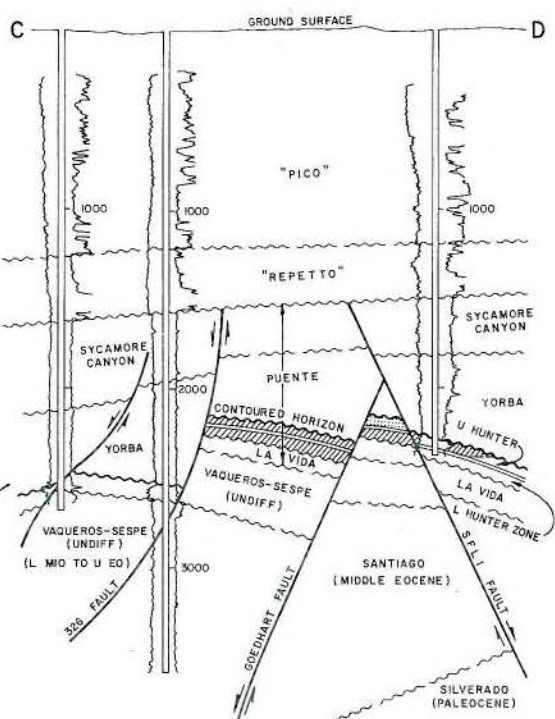
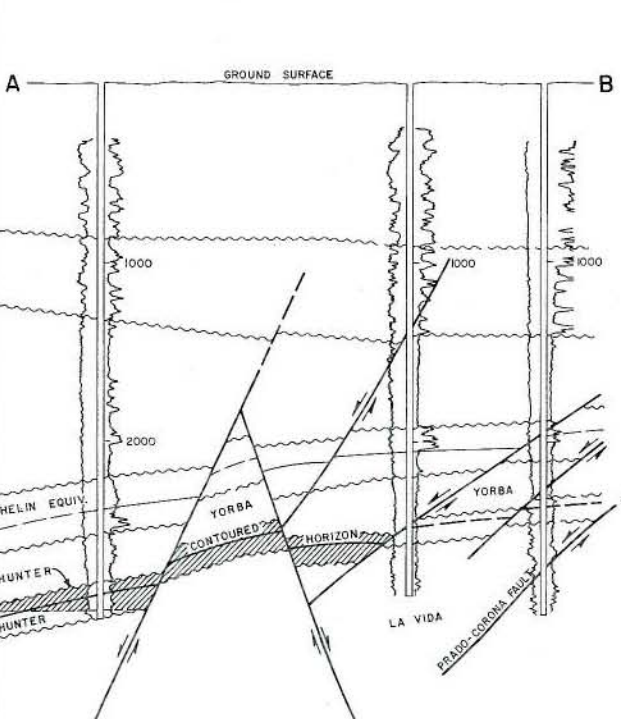
PRADO - CORONA OIL FIELD

SARDCO AREA
CONTOURS ON TOP OF
LOWER HUNTER ZONE



GOEDHART AREA
CONTOURS ON TOP OF
UPPER HUNTER ZONE

SERIES	FORMATION MEMBER	B ZONE
PLIOCENE	UPPER	"PICO"
	LOWER	"REPETTO"
UPPER MIOCENE	PUENTE	SYCAMORE CANYON
		MICHELIN EQUIV.
	YORBA	U HUNTER
		L HUNTER
		LA VIDA
		LA VIDA



CALIFORNIA DIVISION OF OIL AND GAS

PRADO-CORONA OIL FIELD
Riverside County

LOCATION: 4 miles northwest of the center of Corona

TYPE OF TRAP: See areas

ELEVATION: 550

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Upper Hunter	Casex Co. "Sardco" 1	Prado-Corona Co. and Dorial Corp. "Sardco" 1	17 3S 7W	SB	168	25	Sep 1966
Lower Hunter	Same as above	Same as above	17 3S 7W	SB	*	*	Sep 1966

Remarks: * Initial production was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Casex Co. "Gov." 165-1	Santa Fe Minerals, Inc. "Gov." 165-1	Nov 1970	17 3S 7W	SB	5,991	Ladd?	Cretaceous

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
56,011	16,678	6,840	215	13	416,797	91,788	116,297	1972	22	19	225

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: Most easterly production in the Los Angeles Basin.

REFERENCES: Durham, D.L., and R.F. Yerkes, Geology and Oil Resources of the Eastern Puente Hills Area, Southern California: U.S. Geol. Survey Prof. Paper 420-B (1964).
Gaede, V.F., Prado-Corona Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 55, No. 1 (1969).

CALIFORNIA DIVISION OF OIL AND GAS

PRADO-CORONA OIL FIELD

GOEDHART AREA

Riverside County

LOCATION: See map sheet of Prado-Corona Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 610

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Upper Hunter (gas)	H. H. & W. Exploration Co. "Goedhart" 1	Pacific Drilling Co. "Goedhart" 1	28 3S 7W	SB	0	1,215	Jan 1968
Upper Hunter	H. H. & W. Exploration Co. "Goedhart" 3	Pacific Drilling Co. "Goedhart" 3	28 3S 7W	SB	21	5	May 1968
Lower Hunter	H. H. & W. Exploration Co. "Goedhart" 1	Pacific Drilling Co. "Goedhart" 1	28 3S 7W	SB	12	0	Jan 1968

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
C. D. Draucker "Draucker" 1	Same	Sep 1969	28 3S 7W	SB	4,858	Silverado	Paleocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr./gal	Class BOPE required
			Age	Formation			
Upper Hunter (gas)	2,100	40	late Miocene	Puente	1,018	675	III
Upper Hunter	2,350	40	late Miocene	Puente	10 - 18	675	III
Lower Hunter	2,425	45	late Miocene	Puente	16	675	III

PRODUCTION DATA (Jan. 1, 1974) (Dry gas production not included - see Remarks)

Oil (bbl)	1973 Production		1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
16,813	0	3,686	130	6	143,369	0	39,644	1970	9	8	130

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,900

CURRENT CASING PROGRAM: 10 3/4" or 11 3/4" cem. 275; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water trucked to a Class I disposal dump in West Covina.

REMARKS: 1973 dry gas production 222,714 Mcf. from 5 producing wells; cumulative dry gas production 2,387,164; 5 wells drilled and completed; proved acreage (1973) 80, maximum 80.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

PRADO-CORONA OIL FIELD

SARDCO AREA

Riverside County

LOCATION: See map sheet of Prado-Corona Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 490

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Upper Hunter	Casex Co. "Sardco" 1	Prado-Corona and Dorial Corp. "Sardco" 1	17 3S 7W	SB	168	25	Sep 1966
Lower Hunter	Same as above	Same as above	17 3S 7W	SB	*	*	Sep 1966

Remarks: * Initial production was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Casex Co. "Gov." 165-1	Santa Fe Minerals, Inc. "Gov." 165-1	Nov 1970	17 3S 7W	SB	5,991	Ladd?	Cretaceous

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Upper Hunter	2,350	75	late Miocene	Puente	15	675	III
Lower Hunter	2,425	80	late Miocene	Puente	15	675	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
39,198	16,678	3,154	85	7	273,428	91,788	92,985	1972	13	11	95

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 2,000

CURRENT CASING PROGRAM: 8 5/8" cem. 300; 5 1/2" combination string landed through zone and cem. above zone or 10 3/4" cem. 300; 7" cem. through zone.

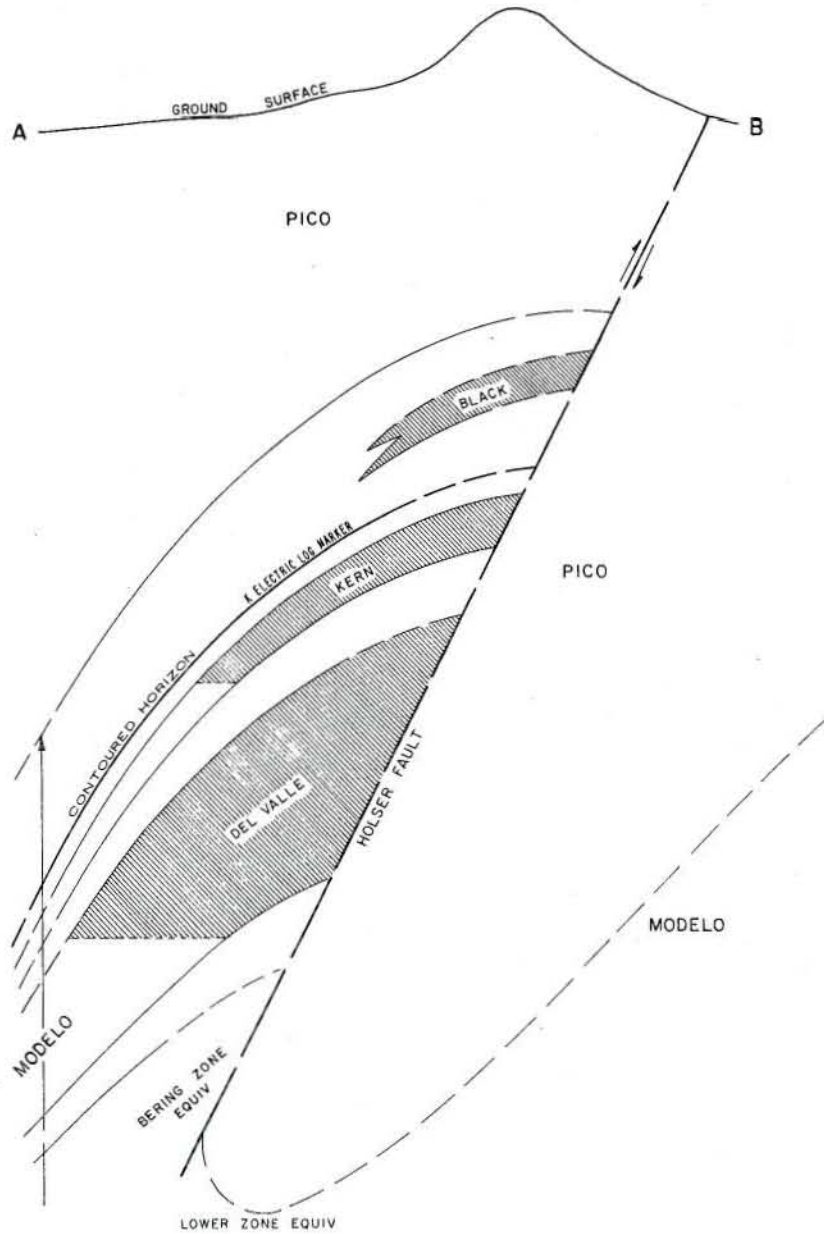
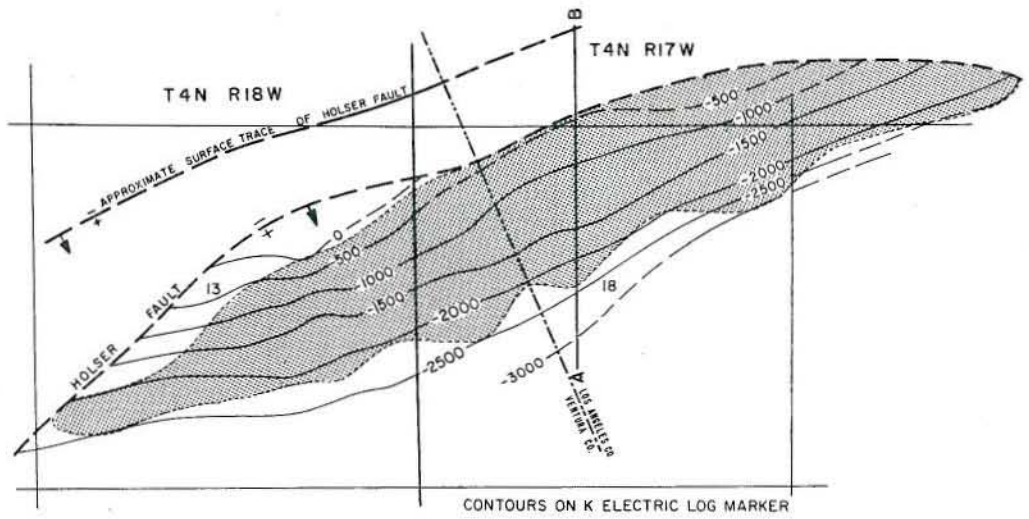
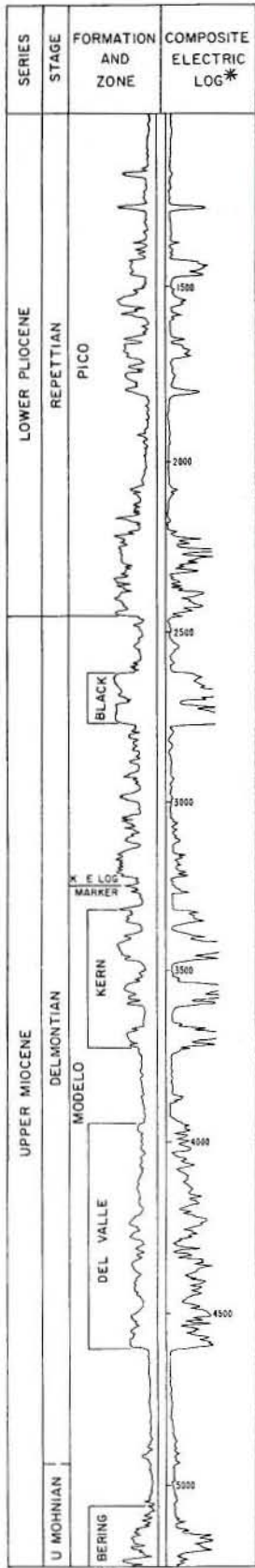
Base of fresh-water sands protected by cement behind casing.

METHOD OF WASTE DISPOSAL: Part of the waste water trucked to Class I disposal dump in West Covina.

REMARKS:

REFERENCES:

RAMONA OIL FIELD



*ABOVE HOLSER FAULT

CALIFORNIA DIVISION OF OIL AND GAS

RAMONA OIL FIELD
Los Angeles and Ventura Counties

LOCATION: 34 miles northeast of Ventura

TYPE OF TRAP: Faulted homocline

ELEVATION: 1,400 - 2,000

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Black	McFarland Energy, Inc. "Black" 102	Bankline Oil Co. "Black" 102	13 4N 18W	SB	120	70	Jun 1946
Kern	Texaco Inc. "Kern" 1	The Texas Co. "Kern" 1	18 4N 17W	SB	209	85	Apr 1945
Del Valló	Herley Kelley Co. "Orduno" 1	Jack Herley and Paul C. Kelley "Orduno" 1	18 4N 17W	SB	28	N.A.	Oct 1943
Bering	The Superior Oil Co. "Black" 14	Same as present	13 4N 18W	SB	120	N.A.	Mar 1974
Lower	The Superior Oil Co. "Black" 14	Same as present	13 4N 18W	SB	195	N.A.	Dec 1951

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
The Superior Oil Co. "Black" 15	Same	Nov 1952	13 4N 18W	SB	9,323	Modelo	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Black	2,500	150	late Miocene	Modelo	25 - 30	1,040	III
Kern	3,500	350	late Miocene	Modelo	15 - 31	990	III
Del Valle	4,500	1,100	late Miocene	Modelo	15 - 28	570	III
Bering	6,400	550	late Miocene	Modelo	19	N.A.	III
Lower	7,700	150	late Miocene	Modelo	19 - 22	550	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
186,424	446,551	91,373	590	96	19,346,489	37,031,412	2,048,370	1949	145	125	590

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 100 - 350

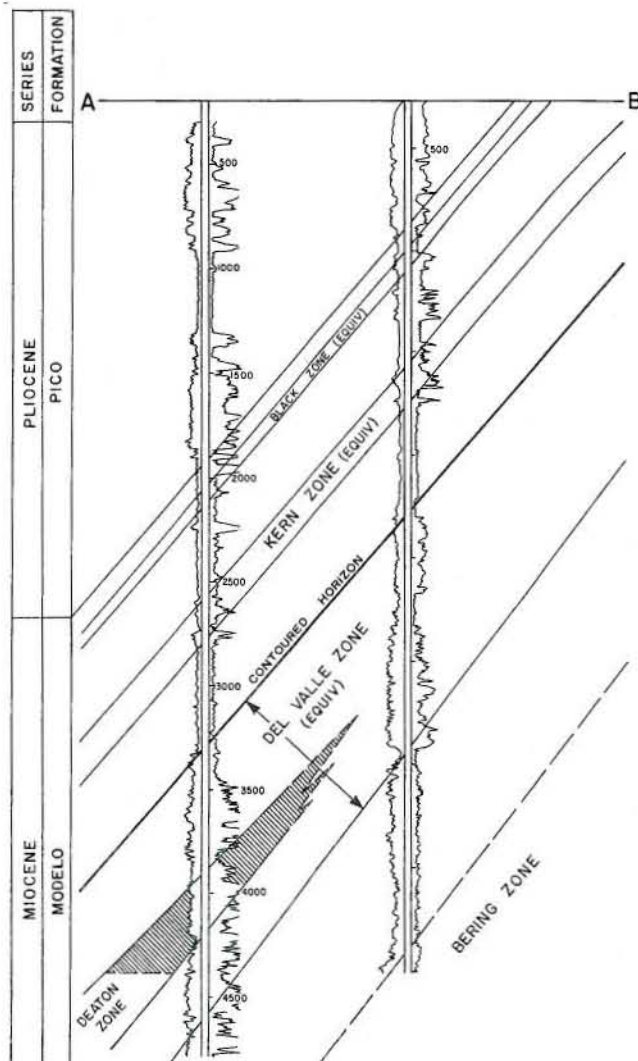
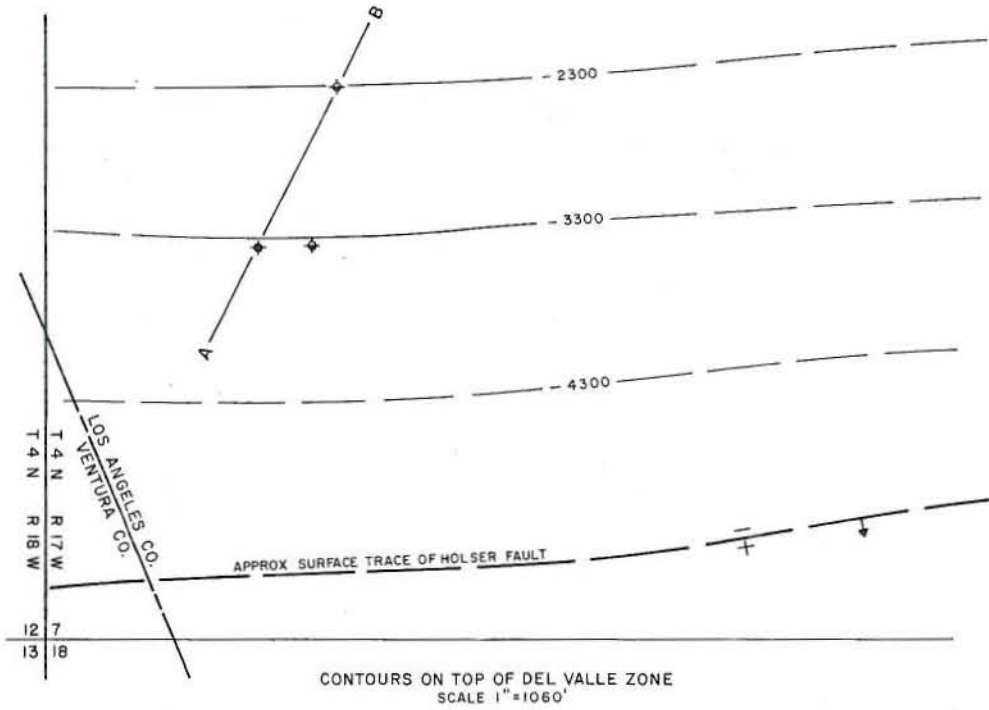
CURRENT CASING PROGRAM: 11 3/4" or 10 3/4" cem. 250 - 400; 7" cem. over zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: All waste water is injected into water-disposal wells.

REMARKS: Only one well produced from the Bering zone, and only two wells produced from the Lower zone. A pilot steam-cyclic project was attempted in 1965, when 3,264 equivalent bbls. were injected into one well.

REFERENCES: Driggs, J.L., and N.N. Sampson, Ramona Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 37, No. 1 (1951).

NORTH RAMONA OIL FIELD (Abandoned)



CALIFORNIA DIVISION OF OIL AND GAS

RAMONA, NORTH, OIL FIELD (Abandoned)

Los Angeles County

LOCATION: 34 miles northeast of Ventura

TYPE OF TRAP: Sand pinchout on homocline

ELEVATION: 1,360

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Deaton	Texaco Inc. "Deaton" 1	The Texas Co., "Deaton" 1	7 4N 17W	SB	34	0	Feb 1946

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Texaco Inc. "Deaton" 1	Same	Feb 1946	7 4N 17W	SB	4,802	Modelo	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Deaton	3,900	150	Miocene	Modelo	19	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	1,606	0	1,606	1946	3	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

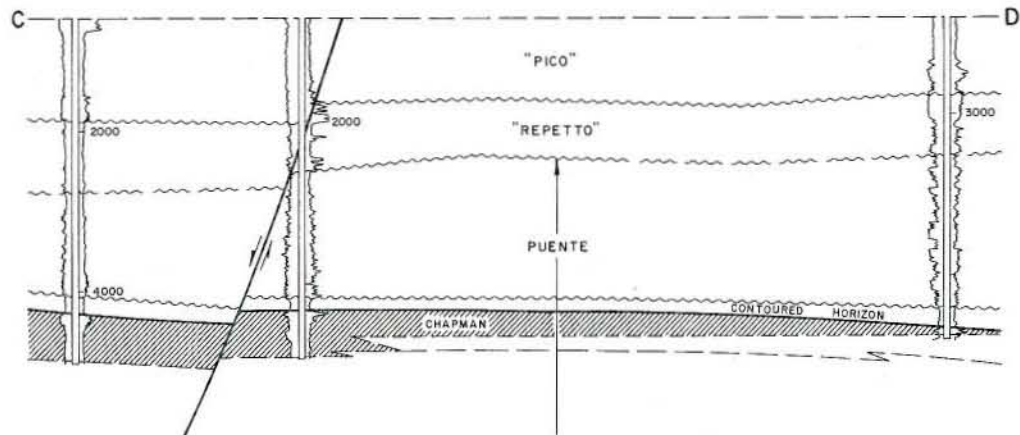
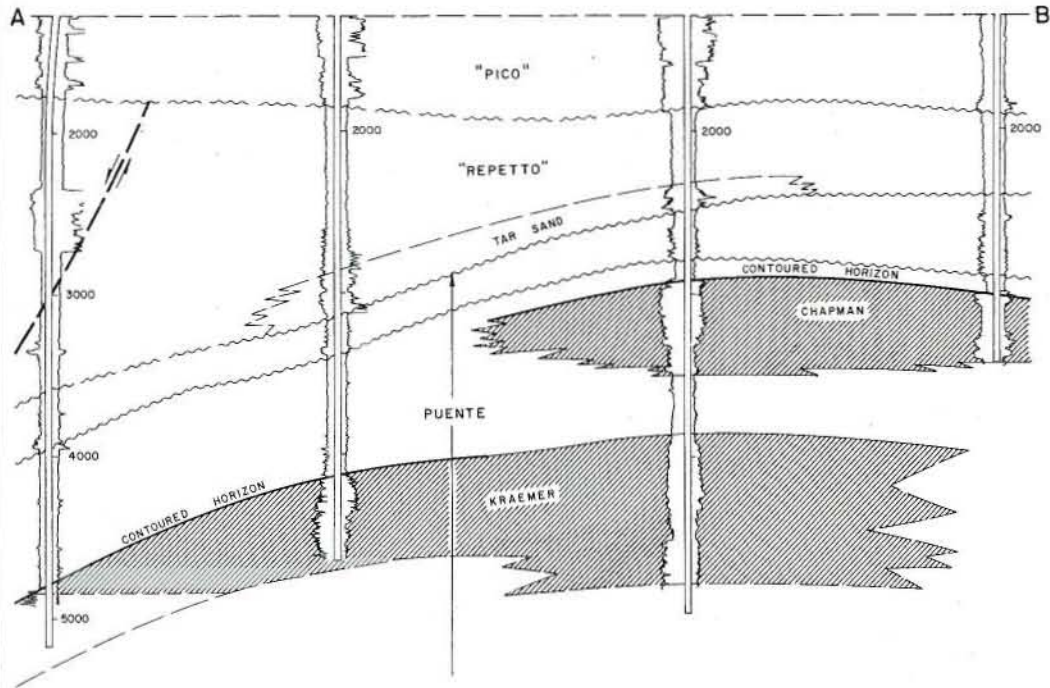
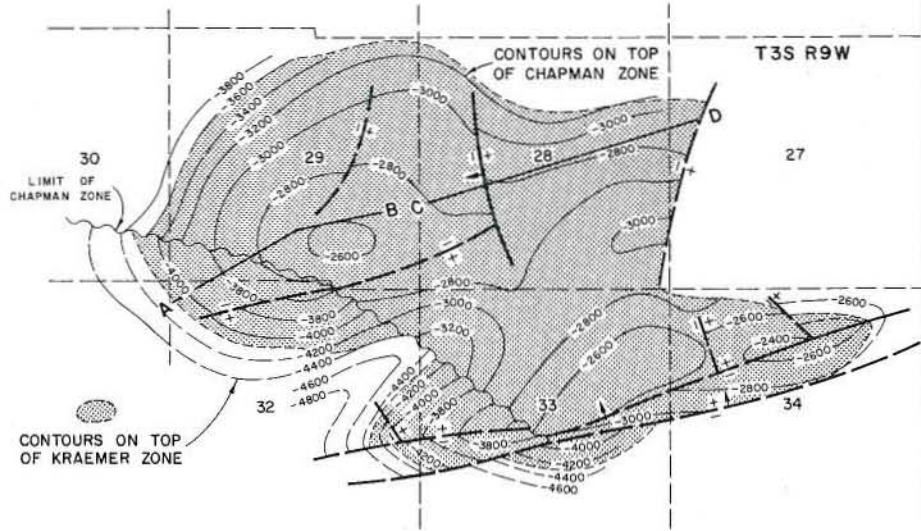
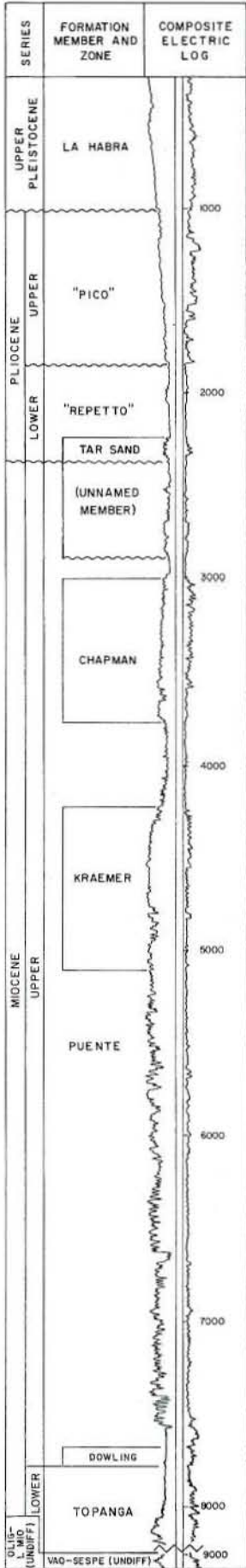
CURRENT CASING PROGRAM: 10 3/4" cem. 300; 7" combination string landed through zone and cemented through ports above zone.

METHOD OF WASTE DISPOSAL:

REMARKS: This one-well field was abandoned in March 1947. The last production from the field was in 1946.

REFERENCES:

RICHFIELD OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

RICHFIELD OIL FIELD

Orange County

LOCATION: 6 miles east of Fullerton

TYPE OF TRAP: Anticline

ELEVATION: 300

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & W	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Tar sand	The McCarthy Co. "Berkenstock" 1	Cadillac Oil Co. "Berkenstock" 1	29 3S 9W	SB	20	N.A.	Jul 1957
Chapman	Union Oil Co. of Calif. "Chapman" 1	Same as present	29 3S 9W	SB	1,732	N.A.	Mar 1919
Breen	Boswell Petroleum Co. "Breen" 2	J. Orville Seeple "Breen" 2	28 3S 9W	SB	650	3,500	Jul 1933
Kraemer	Standard Oil Co. of Calif. "Kraemer 2" 6	Same as present	29 3S 9W	SB	675	N.A.	Jun 1920
Dowling	Texaco Inc. "Dowling" 1	Same as present	31 3S 9W	SB	162	16	Aug 1956

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	S & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Chapman" 29	Same	Mar 1936	29 3S 9W	SB	10,496	Vaqueros-Sespe (undiff.)	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Tar sand	2,000	80	early Pliocene	"Repetto"	12	N.A.	II
Chapman	2,900	500	late Miocene	Puente	16 - 20	300	III
Breen	3,500	250	late Miocene	Puente	16 - 19	400	III
Kraemer	3,800	500	late Miocene	Puente	21 - 25	950	III
Dowling	7,950	200	late Miocene	Puente	21	N.A.	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,553,916	185,502	10,476,519	1,210	267	164,726,479	169,693,669	8,182,668	1922	710	621	1,610

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1944	155,925,397	51

SPACING ACT: Does not apply

BASE OF FRESH WATER: 800 - 3,200

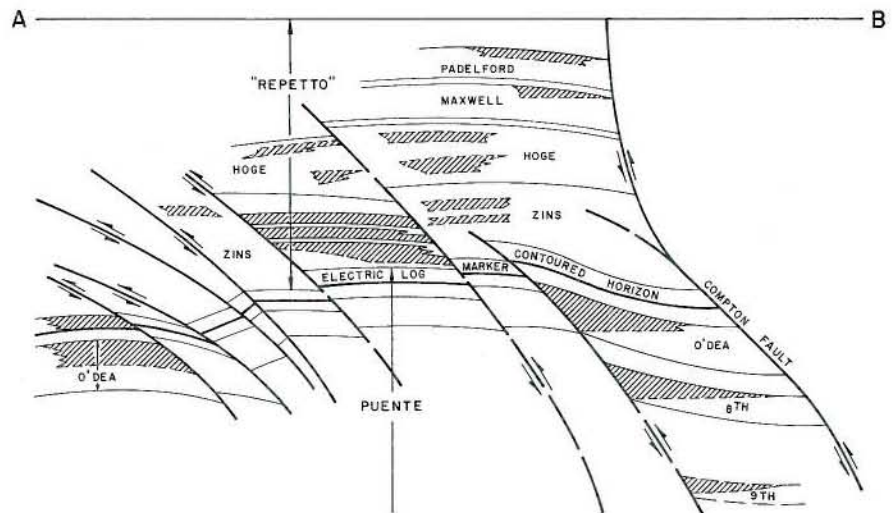
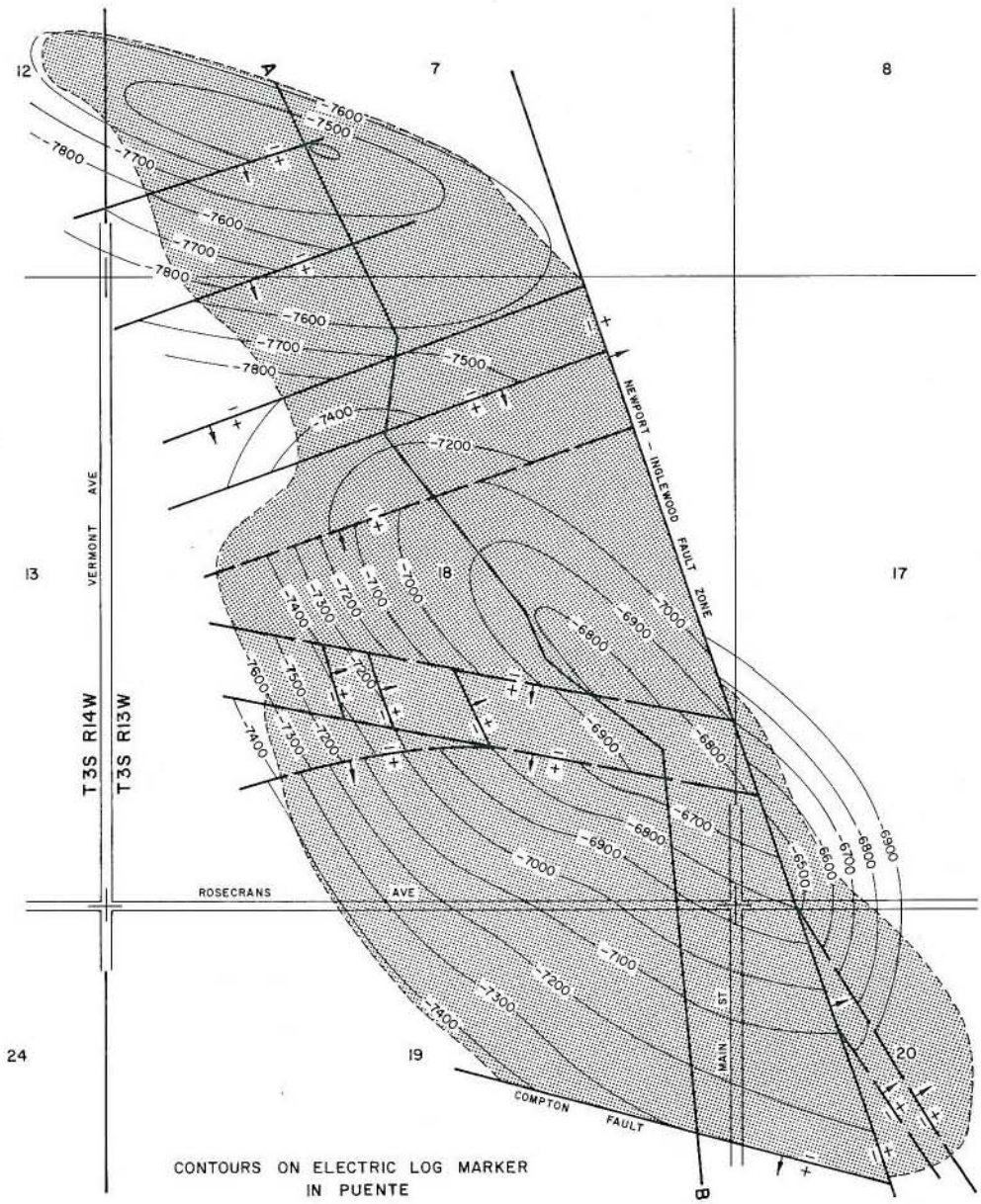
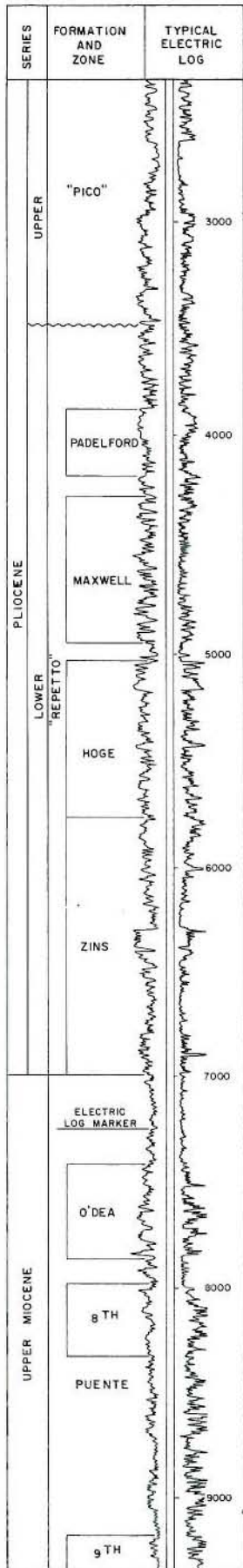
CURRENT CASING PROGRAM: 11 3/4" cem. 200; 8 5/8" cem. above zone and at base of fresh water; 6 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL: Water flood project.

REMARKS: This field was the first in California to use water flooding for secondary recovery. Union Oil Co. of Calif. started water flooding in the Chapman zone on March 29, 1944. A cyclic-steam project was started in 1964 and terminated in 1965 after injecting 29,950 equivalent bbls. into three wells.

REFERENCES: Ingram, W.L., Richfield Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 2 (1961).

ROSECRANS OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

ROSECRANS OIL FIELD
Los Angeles County

LOCATION: 10 miles south of downtown Los Angeles

TYPE OF TRAP: Faulted anticlines

ELEVATION: 90

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Padelford	Beren Corp. "Rosecrans" 1	Union Oil Co. of Calif. "Rosecrans" 1	19 3S 13W	SB	1,200	N.A.	Jan 1925
Maxwell	Union Oil Co. of Calif. "Howard Park" 9	Same as present	18 3S 13W	SB	550	N.A.	Feb 1925
Hoge	Union Oil Co. of Calif. "Howard Park" 1	Potter Oil Co. of Calif. "Howard Park" 1	18 3S 13W	SB	723	N.A.	May 1924
Zins	Sum Oil Co. "O'Dea" 14	Barnsdall Oil Co. "O'Dea" 14	18 3S 13W	SB	1,640	N.A.	Nov 1927
O'Dea	Sum Oil Co. "O'Dea" 10	Barnsdall Oil Co. "O'Dea" 10	18 3S 13W	SB	780	3,500	Mar 1937
8th	Gulf Oil Corp. "Universal-Trust" 14	Universal Consolidated Oil Co. "Universal Trust" 14	18 3S 13W	SB	243	225	Oct 1940
9th	Gulf Oil Corp. "Universal-Trust" 8	Universal Consolidated Oil Co. "Universal Trust" 8	18 3S 13W	SB	144	40	Mar 1940

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Beren Corp. "Rosecrans" 48	Union Oil Co. of Calif. "Rosecrans" 48	Jul 1947	19 3S 13W	SB	11,884	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Padelford	3,750	150	early Pliocene	"Repetto"	37	1,950	III
Maxwell	4,250	100	early Pliocene	"Repetto"	29 - 40	1,800	III
Hoge	4,820	250	early Pliocene	"Repetto"	32 - 40	1,700	IV
Zins	5,700	350	early Pliocene	"Repetto"	31 - 46	1,675	IV
O'Dea	7,200	270	late Miocene	Puente	31 - 36	1,710	IV
8th	8,200	150	late Miocene	Puente	29 - 36	1,550	IV
9th	9,100	100	late Miocene	Puente	28	1,400	IV

PRODUCTION DATA (Jan. 1, 1974)

Oil (bbl)	1973 Production		1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
410,529	612,962	1,296,333	408	69	76,521,391	159,124,577	7,726,383	1925	394	339	725

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1967	3,922,724	2

SPACING ACT: Does not apply

BASE OF FRESH WATER: 2,000 - 2,400

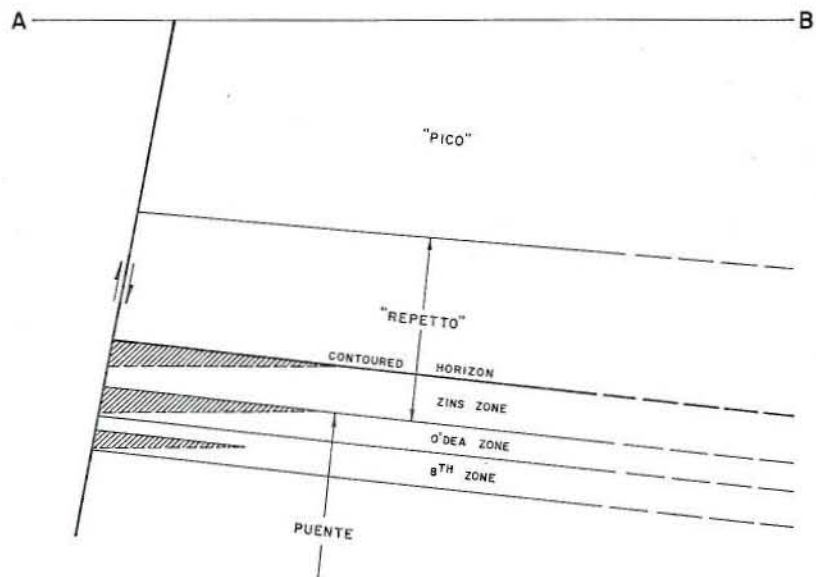
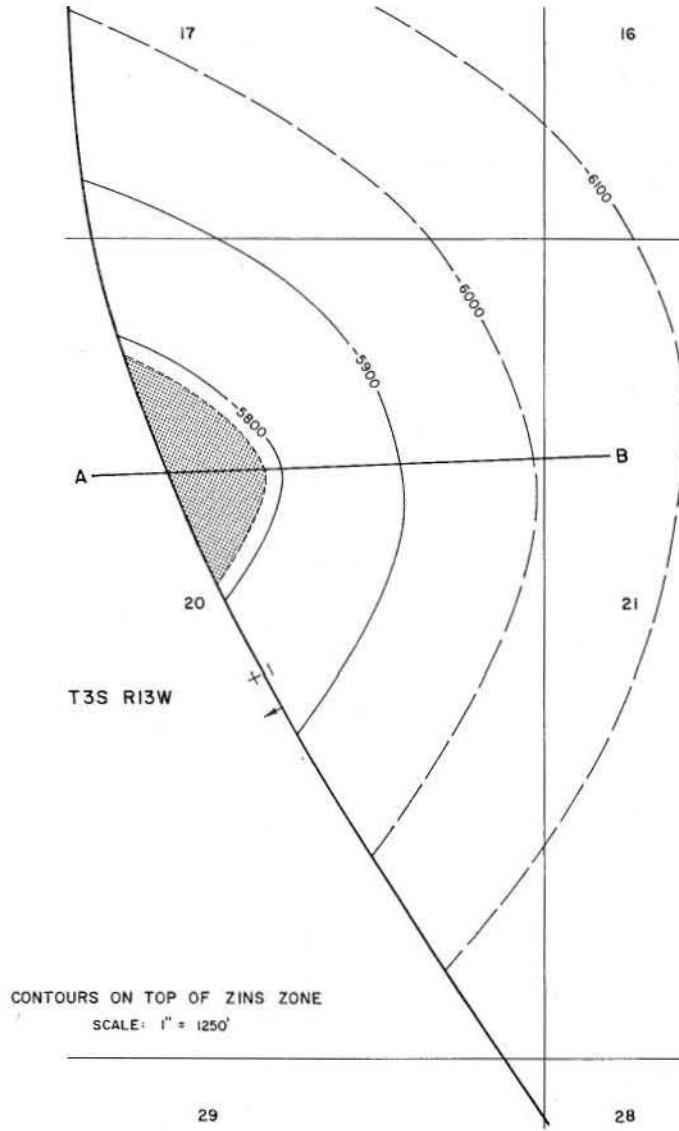
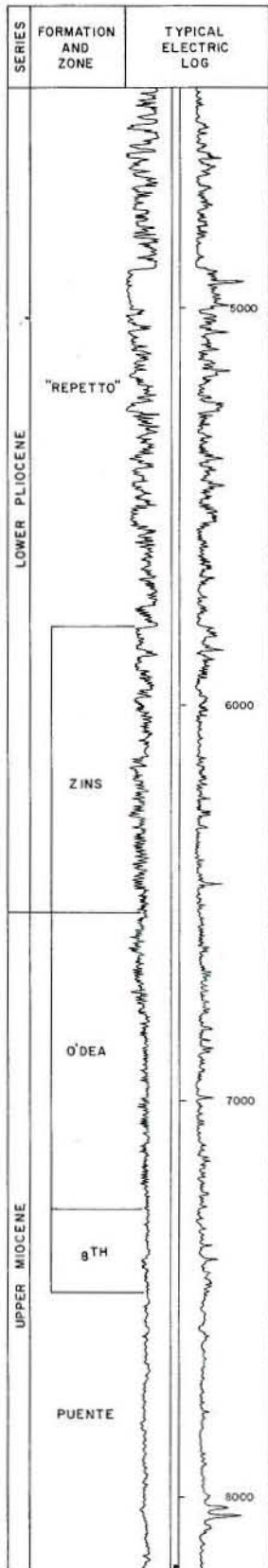
CURRENT CASING PROGRAM: 13 3/8" cem. 1,000; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is injected into the O'Dea zone.

REMARKS:

REFERENCES: Foster, J.F., Rosecrans and South Rosecrans Oil Fields: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 40, No. 2 (1954).

EAST ROSECRANS OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

ROSECRANS, EAST, OIL FIELD

Los Angeles County

LOCATION: 10 miles south of downtown Los Angeles

TYPE OF TRAP: Faulted nose

ELEVATION: 85

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Zins	Gardena Oil Co. "Bucher" 1	G. R. Nance "Bucher" 1	20 3S 13W	SB	373	500	Feb 1959
O'Dea	Same as above	Same as above	20 3S 13W	SB	*	*	Feb 1959
8th	Same as above	Same as above	20 3S 13W	SB	*	*	Feb 1959

Remarks: * Production from the Zins, O'Dea and 8th zone was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Gardena Oil Co. "Bucher" 1	G. R. Nance "Bucher" 1	Dec 1958	20 3S 13W	SB	8,200	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Zins	5,800	350	early Pliocene	"Repetto"	30	1,700	IV
O'Dea	6,800	550	late Miocene	Puente	30	1,700	IV
8th	7,500	180	late Miocene	Puente	30	1,700	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
4,670	1,910	729	20	2	140,471	139,940	23,635	1959	4	2	20

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 2,000 - 2,400

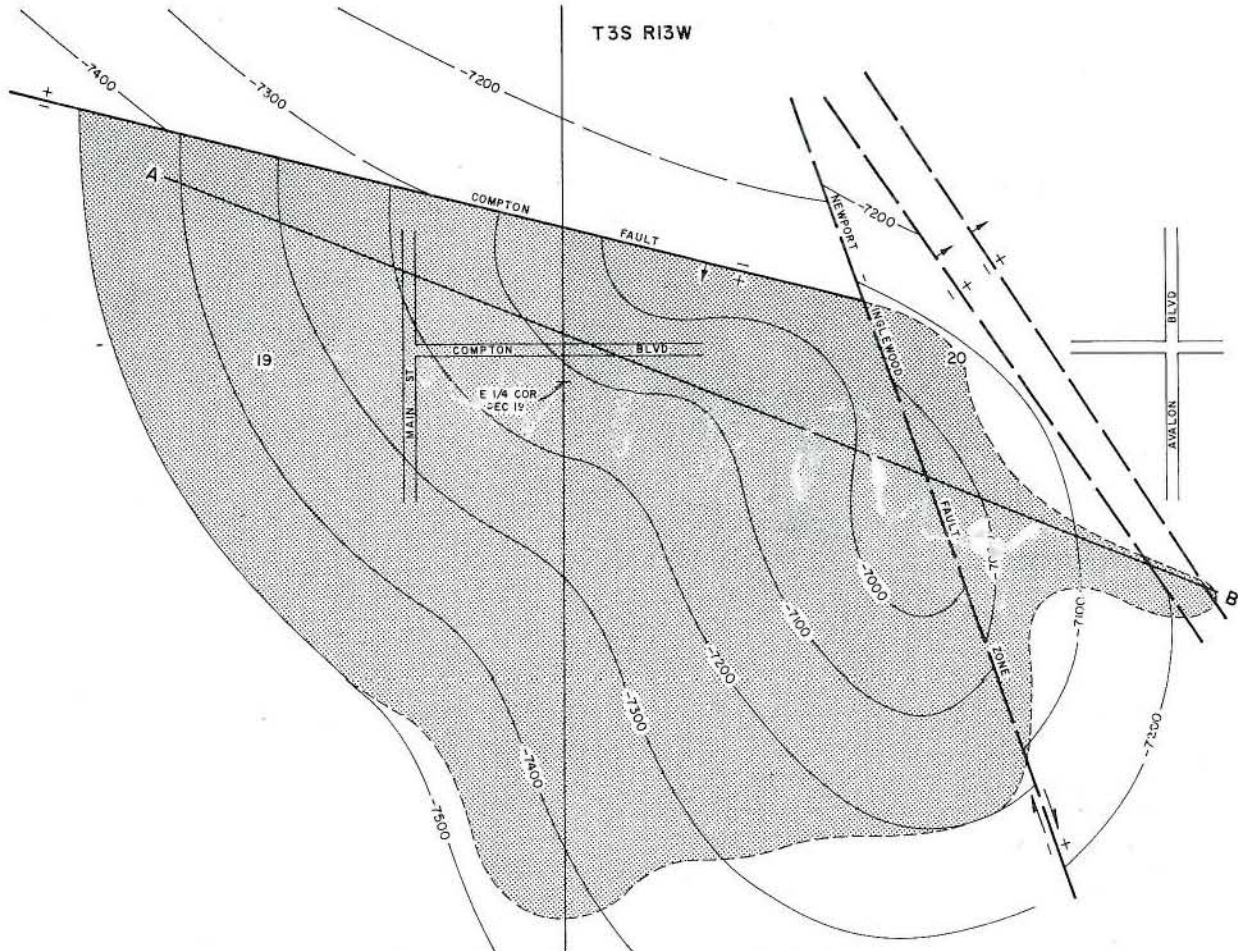
CURRENT CASING PROGRAM: 10 3/4" cem. 1,000; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Sewer system.

REMARKS:

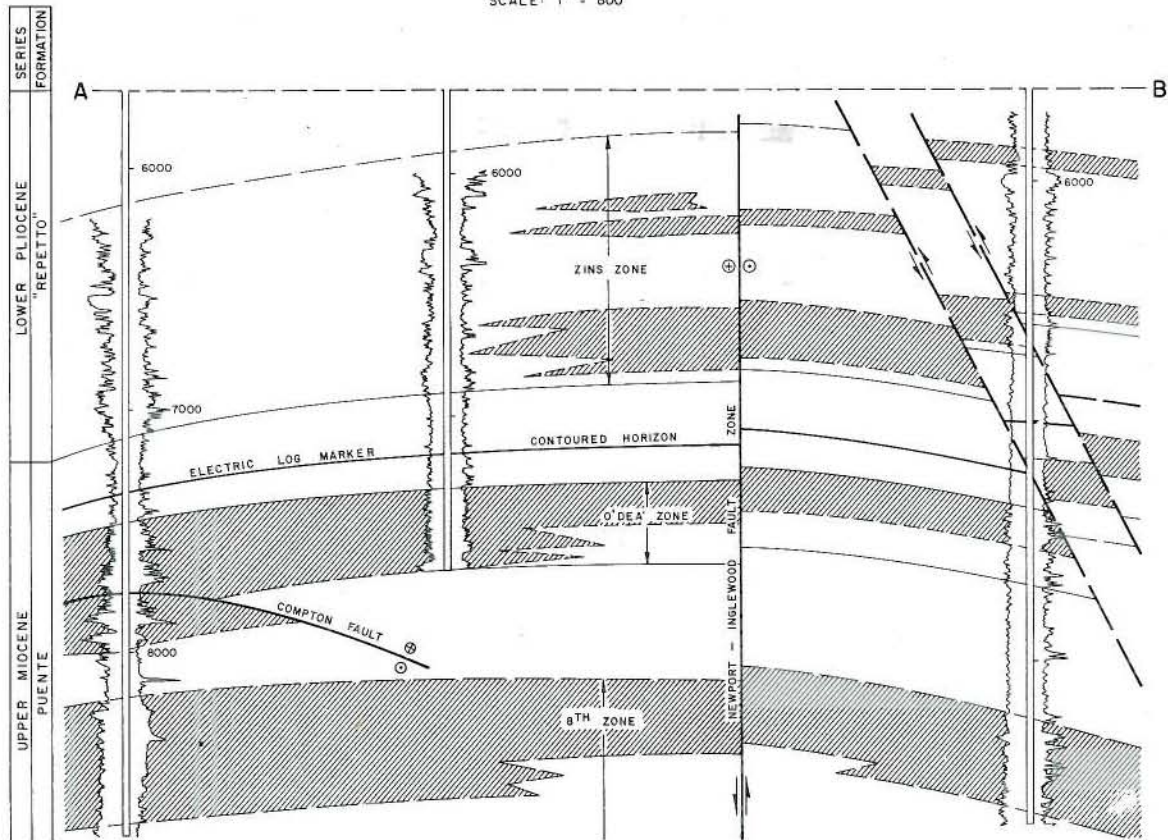
REFERENCES:

SOUTH ROSECRANS OIL FIELD



CONTOURS ON ELECTRIC LOG MARKER IN PUENTE

SCALE: 1" = 800'



CALIFORNIA DIVISION OF OIL AND GAS

ROSECRANS, SOUTH, OIL FIELD

Los Angeles County

LOCATION: 12 miles south of downtown Los Angeles

TYPE OF TRAP: Faulted anticlinal nose

ELEVATION: 90

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbi)	Gas (Mcf)	
Zins	Marmac Resources Co. "Reed" 1	Carlton Beal "Reed" 1	20 3S 13W	SB	35	2,500	Oct 1951
O'Dea	Belmont Oil Co. "Averill" 1	Howard Oil Associates "H.O." 1	20 3S 13W	SB	100	N.A.	Aug 1939
8th	Sun Oil Co., "Santa Fe Corp." 1	Barnsdall Oil Co., Santa Fe Corp." 1	20 3S 13W	SB	69	595	Feb 1940

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
American Pacific International, Inc. "Hatfield" 1	Apex Petroleum Corp., Ltd. "Hatfield" 1	Dec. 1939	20 3S 13W	SB	9,214	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Zins	6,200	250	early Pliocene	"Repetto"	30 - 46	1,690	IV
O'Dea	7,300	325	late Miocene	Puente	30 - 33	1,700	IV
8th	8,600	375	late Miocene	Puente	28 - 36	1,560	IV

PRODUCTION DATA (Jan. 1, 1974)

Oil (bbi)	1973 Production		1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
	Net gas (Mcf)	Water (bbi)			Oil (bbi)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
50,443	77,990	55,207	88	18	8,147,245	19,285,799	1,487,620	1940	47	45	195

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 2,000 - 2,400

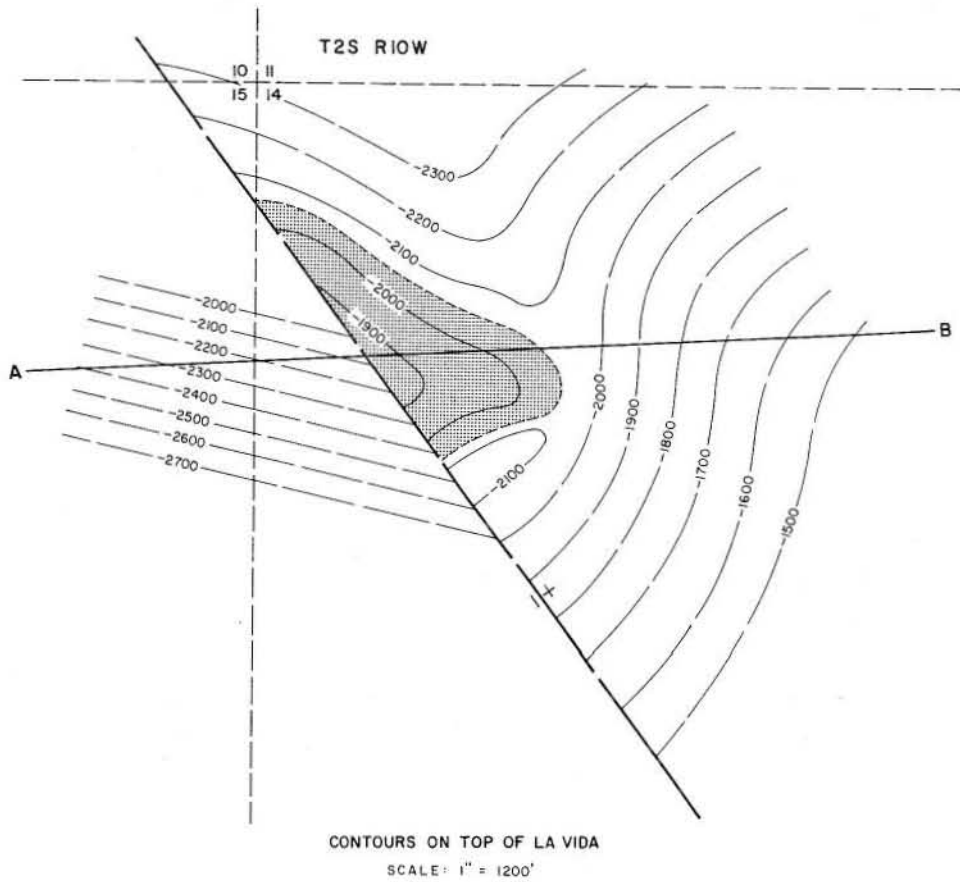
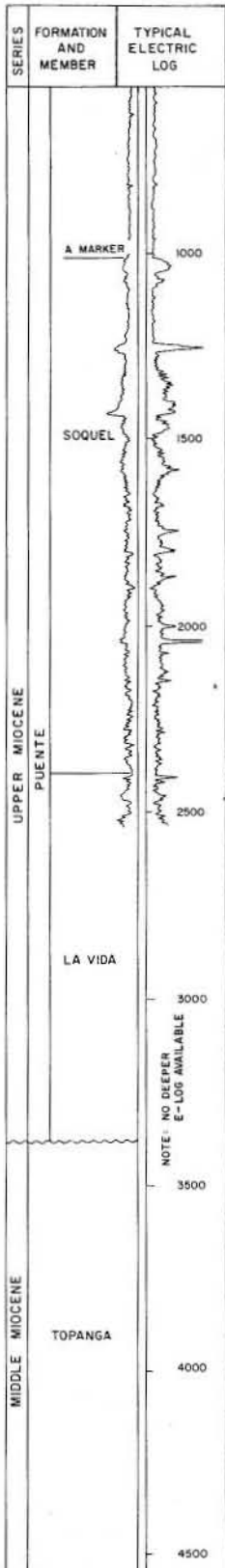
CURRENT CASING PROGRAM. 11 3/4" or 13 3/8" cem. 1,000; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone or 7" cem. through zone.

METHOD OF WASTE DISPOSAL: A small portion of the produced water is injected into the O'Dea zone of the Rosecrans field; most of it is cleaned and disposed of into the local sewer system.

REMARKS: The 9th zone is of doubtful commercial value. It is open to production in only one well in the field which also produces from the 8th zone.

REFERENCES: Foster, J.F., Rosecrans and South Rosecrans Oil Fields: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 40, No. 2 (1954).

ROWLAND OIL FIELD (Abandoned)



CALIFORNIA DIVISION OF OIL AND GAS

ROWLAND OIL FIELD (Abandoned)

Los Angeles County

LOCATION: 20 miles southeast of downtown Los Angeles

TYPE OF TRAP: Faulted anticlinal nose

ELEVATION: 610

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	Barry Oil Co., Inc. "Billy Rowland" 1	Commonwealth Oil Co. "Billy Rowland" 1	14 2S 10W	SB	8	0	Mar 1943
(Unnamed)	J. W. Dietzel "Rowland" 1	Western American Petroleum Co. 1	14 2S 10W	SB	24	0	Oct 1931

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
J. W. Dietzel "Rowland" 1	Western American Petroleum Co. No. 1	Jun 1930	14 2S 10W	SB	4,908	Topanga	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr gal	Class BOPE required
			Age	Formation			
(Unnamed)	2,382	35	late Miocene	Puente	20	N.A.	III
(Unnamed)	5,350	50	late Miocene	Puente	26	N.A.	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	1,885	0	800	1943	8	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 300

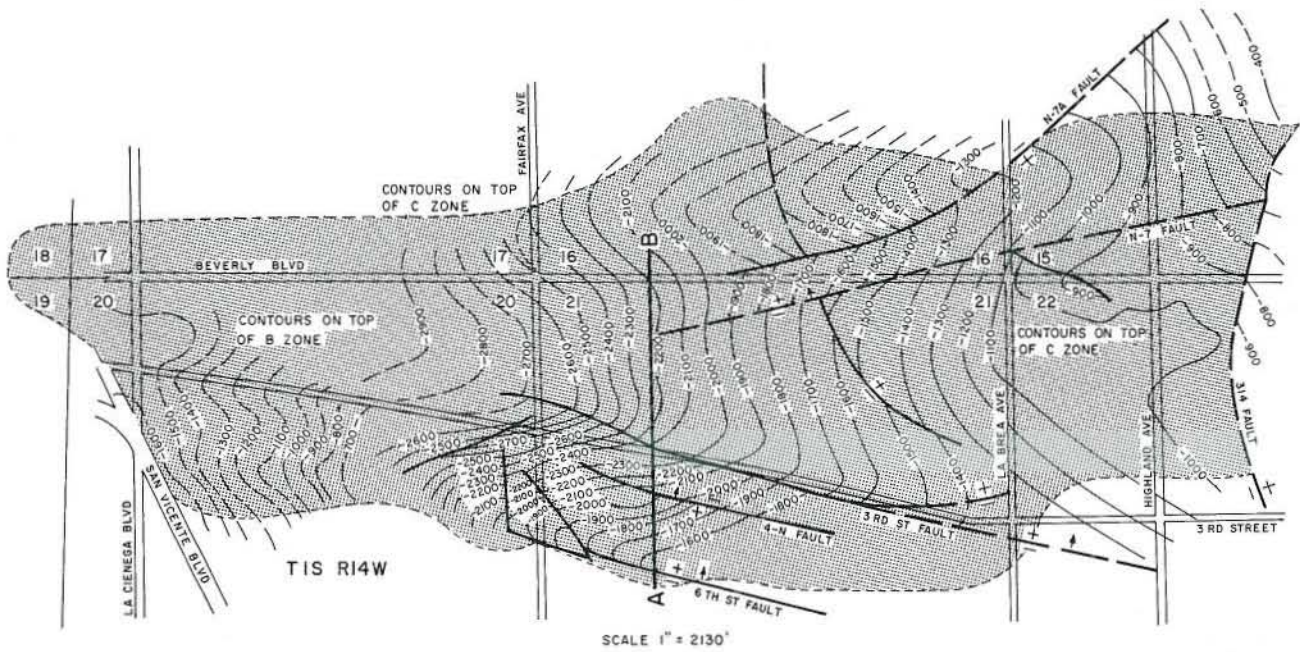
CURRENT CASING PROGRAM: 11 3/4" cem. 300; 8 5/8" cem. above zone; 6 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Last production was in 1945. Field abandoned in 1946.

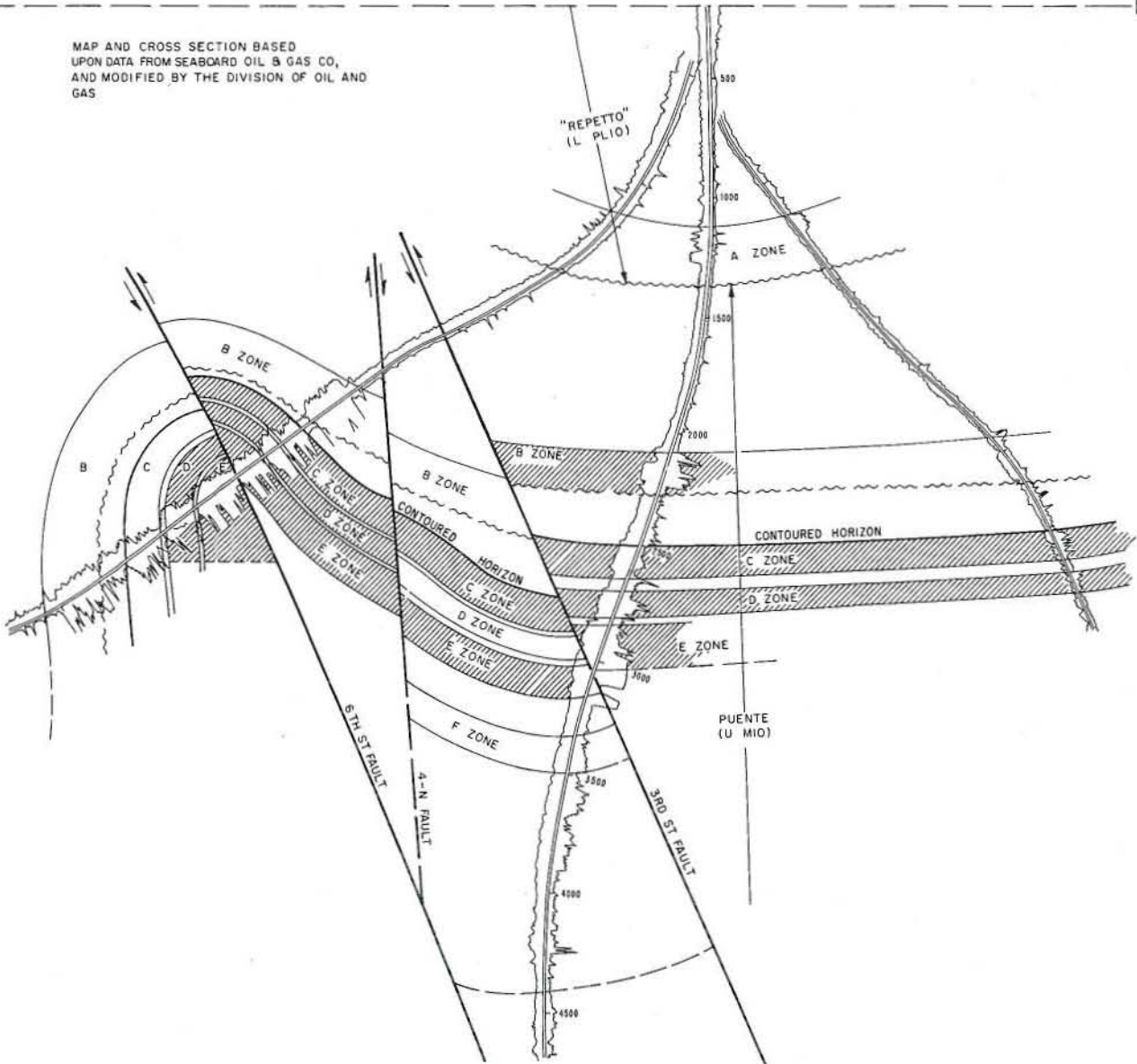
REFERENCES:

SALT LAKE OIL FIELD



A-----B

MAP AND CROSS SECTION BASED UPON DATA FROM SEABOARD OIL & GAS CO, AND MODIFIED BY THE DIVISION OF OIL AND GAS



CALIFORNIA DIVISION OF OIL AND GAS

SALT LAKE OIL FIELD

Los Angeles County

LOCATION: In the city of Los Angeles immediately east of Beverly Hills

TYPE OF TRAP: Faulted anticlinal noses; faulted homocline

ELEVATION: 200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbi)	Gas (Mcf)	
A	Salt Lake Oil Co. of Calif. well No. unknown	Same as present	N.A.	SB	N.A.	N.A.	1902
B	Operator and well No. unknown	Same as present	N.A.	SB	N.A.	N.A.	N.A.
C	Getty Oil Co. No. 1	Salt Lake Oil Co. of Calif. No. 1	20 1S 14W	SB	250	N.A.	Aug 1904
D	Seaboard Oil & Gas Co. "Gilmore" 1	Buttram Petroleum Co. "Gilmore" 1	2 1S 14W	SB	75	33	Mar 1961
E	Same as above	Same as above	2 1S 14W	SB	*	*	Mar 1961
F	Same as above	Same as above	2 1S 14W	SB	*	*	Mar 1961

Remarks: * D, E & F production commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Seaboard Oil & Gas Co. "U-93" 5	Jade Oil & Gas Co. "U-93" 5	Aug 1966	21 1S 14W	SB	10,446	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
A	1,000	200	early Pliocene	"Repetto"	14 - 18	N.A.	II
B	1,500	250	late Miocene	Puente	18	N.A.	II
C	2,300	275	late Miocene	Puente	9 - 22	420	III
D	2,650	200	late Miocene	Puente	14	N.A.	III
E	2,850	100	late Miocene	Puente	18	N.A.	III
F	3,300	100	late Miocene	Puente	20	N.A.	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbi)	Net gas (Mcf)	Water (bbi)			Oil (bbi)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
347,872	244,335	413,068	355	43	48,282,534	207,571,895	4,535,800	1908	574	424	1,165

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 250

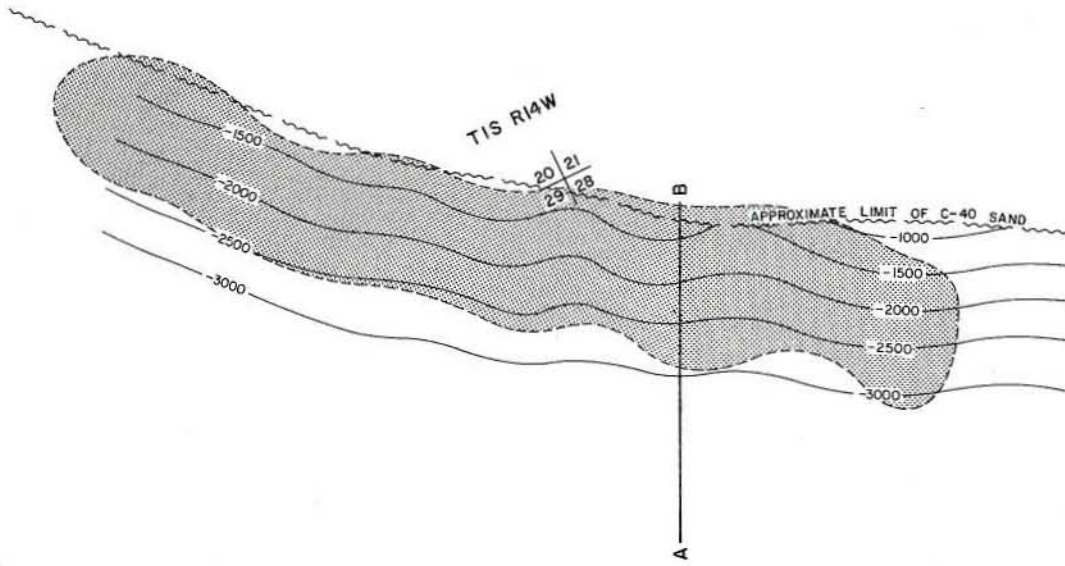
CURRENT CASING PROGRAM: 12 1/2" cem. 250; 8 5/8" cem. above zone; 6 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL: Sewer system.

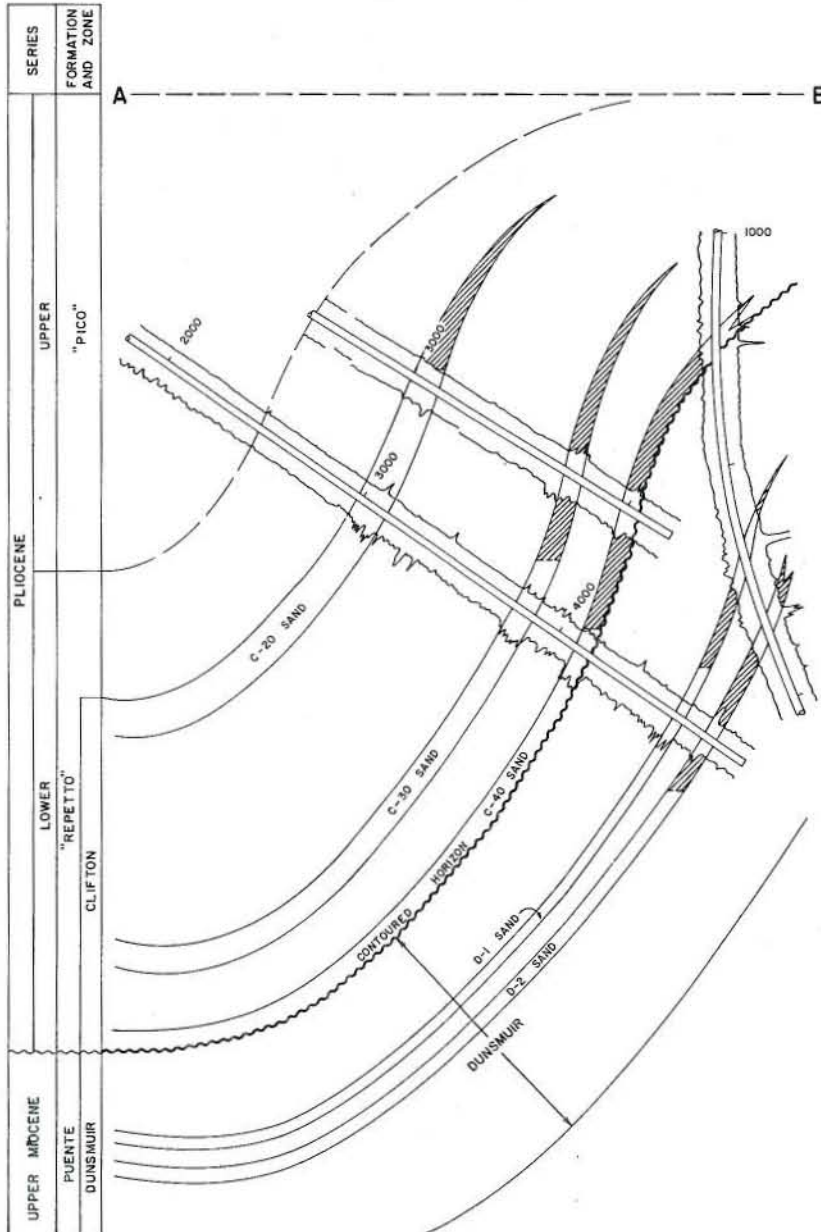
REMARKS: Recent development conducted from urban drillsites.

REFERENCES: Crowder, R.E., and R.A. Johnson, Recent Developments in Jade-Buttram Area of Salt Lake Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 49, No. 1 (1963).

SOUTH SALT LAKE OIL FIELD



CONTOURS ON BASE OF C-40 SAND
SCALE: 1" = 1200'



CALIFORNIA DIVISION OF OIL AND GAS

SALT LAKE, SOUTH, OIL FIELD

Los Angeles County

LOCATION: 6 miles west of downtown Los Angeles

TYPE OF TRAP: Pinchout on a homocline

ELEVATION: 155

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & W	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Clifton sands	Standard Oil Co. of Calif. P-65	Same as present	29 1S 14W	SB	30	67	Oct 1970
Dunsmuir sands	Standard Oil Co. of Calif. P-60	Same as present	29 1S 14W	SB	18	230	Mar 1970

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & W	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "Seibu Corehole" 1	Same	Jul 1966	29 1S 14W	SB	7,467	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Clifton sands	1,000	130	early Pliocene	"Repetto"	22	1,420	IV
Dunsmuir sands	4,575	60	late Miocene	Puente	26	1,600	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,078,517	407,261	729,780	175	15	3,484,688	1,433,580	1,536,107	1972	32	20	175

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 250

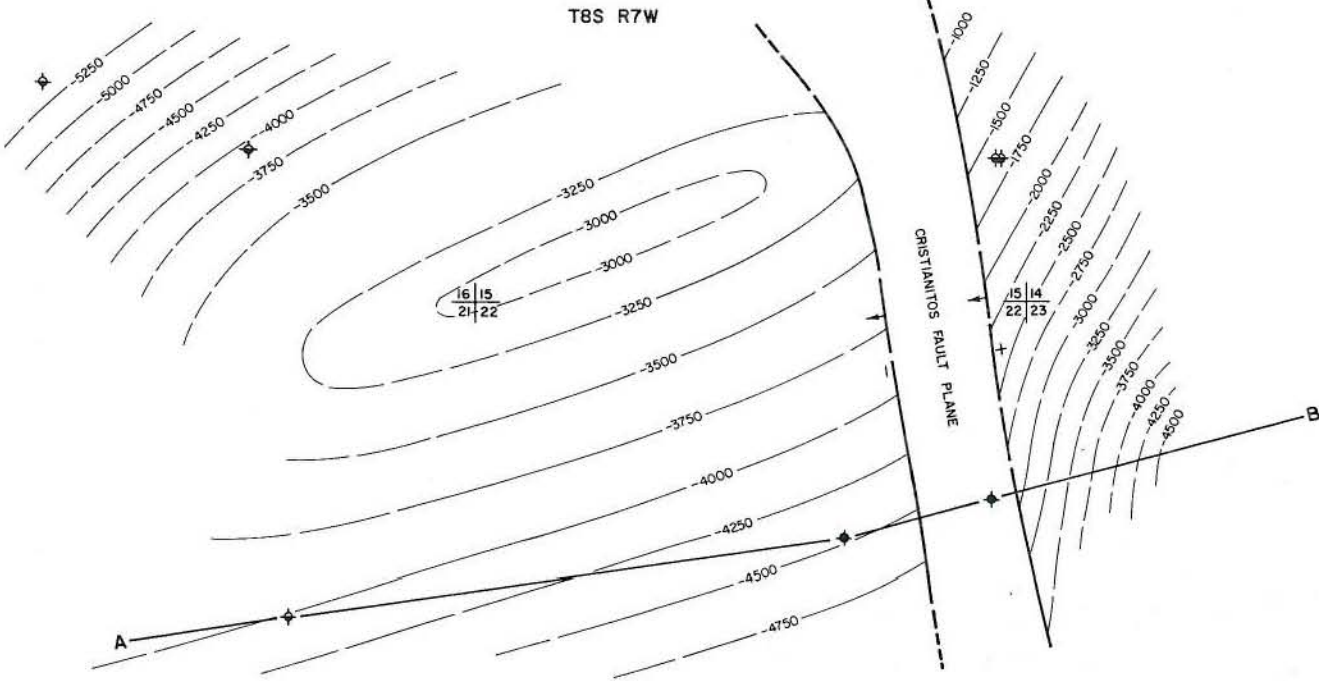
CURRENT CASING PROGRAM: 10 3/4" cem. 1,700; 7" cem. through zone or 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Sewer system

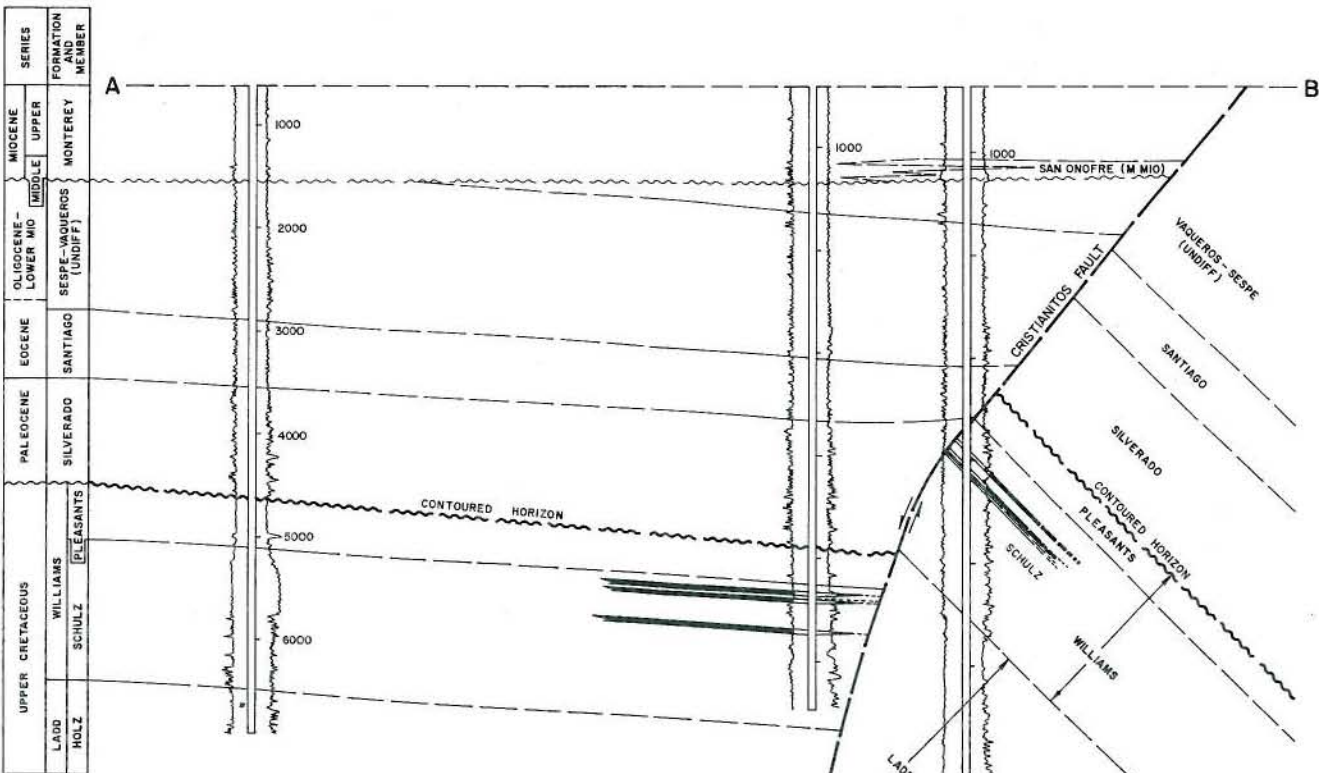
REMARKS: All wells directionally drilled from urban drillsites.

REFERENCES:

SAN CLEMENTE OIL FIELD (Abandoned)



CONTOURS ON TOP OF WILLIAMS
SCALE: 1" = 1800'



SERIES	MIOCENE		FORMATION AND MEMBER
	LOWER MIO	UPPER	
OLIGOCENE - LOWER MIO	Sespe-Vaqueros (Undiff)	Monterey	
Eocene	Santiago		
PALEOCENE	Silverado		
UPPER CRETACEOUS	Williams	Pleasant	
	Schulz		
	Ladd	Holz	

CALIFORNIA DIVISION OF OIL AND GAS

SAN CLEMENTE OIL FIELD (Abandoned)

Orange County

LOCATION: 60 miles southeast of downtown Los Angeles and 3 1/2 miles inland from the coast

TYPE OF TRAP: Lenticular sands on faulted anticline

ELEVATION: 400

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	Texaco Inc. "O'Neill Estate (NCT-1)" 1	The Texas Co. "O'Neill Estate (NCT-1)" 1	22 8S 7W	SB	14	6	Apr 1954

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Texaco Inc. "O'Neill Estate (NCT-1)" 1	The Texas Co. "O'Neill Estate (NCT-1)" 1	Dec 1953	22 8S 7W	SB	7,044	Ladd	Late Cret

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
(Unnamed)	5,350	100	Lt Cretaceous	Williams	45	N.A.	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	1,452	446	1,452	1954	4	2	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 300

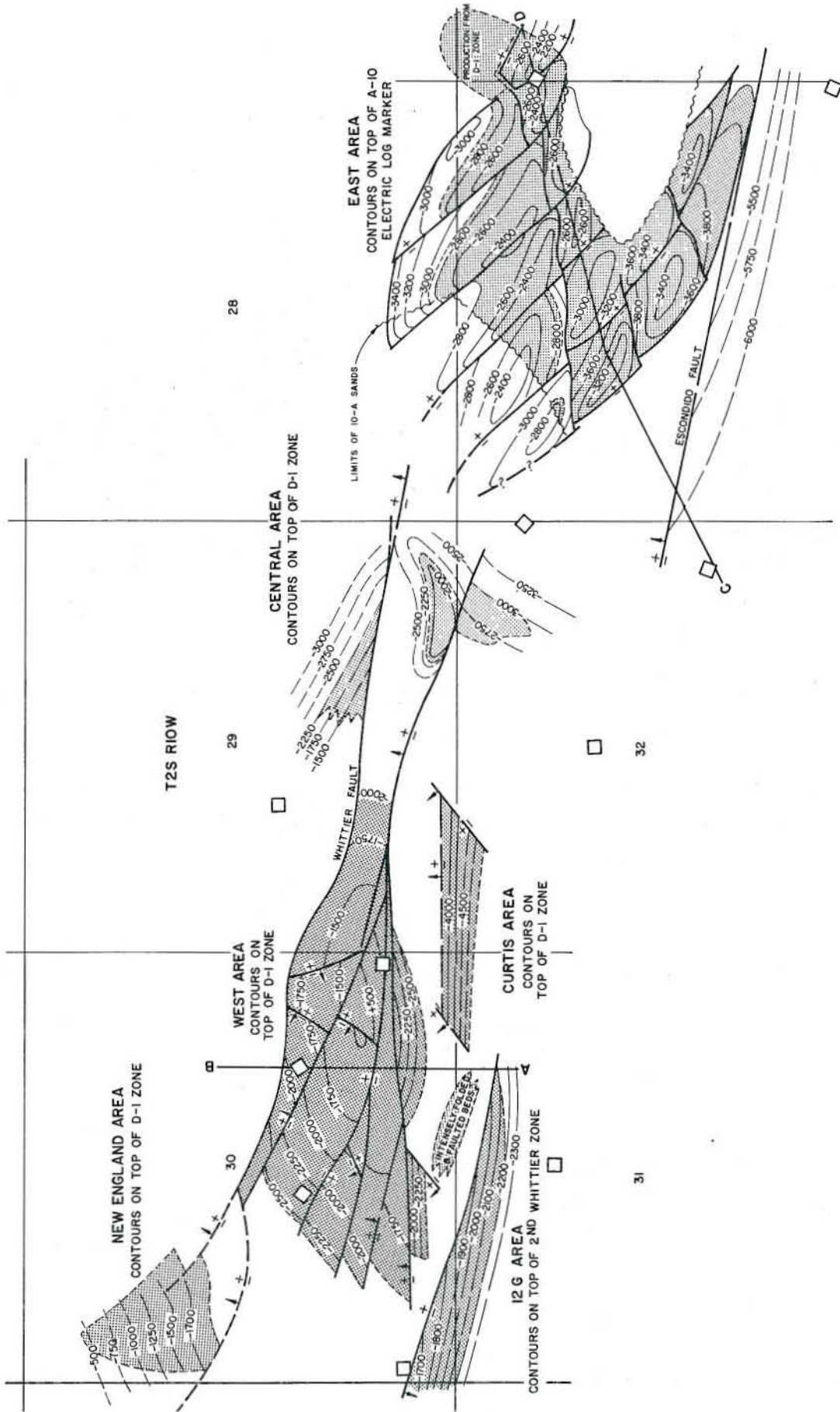
CURRENT CASING PROGRAM: 11 3/4" cem. 400; 7" cem. through zone.

METHOD OF WASTE DISPOSAL:

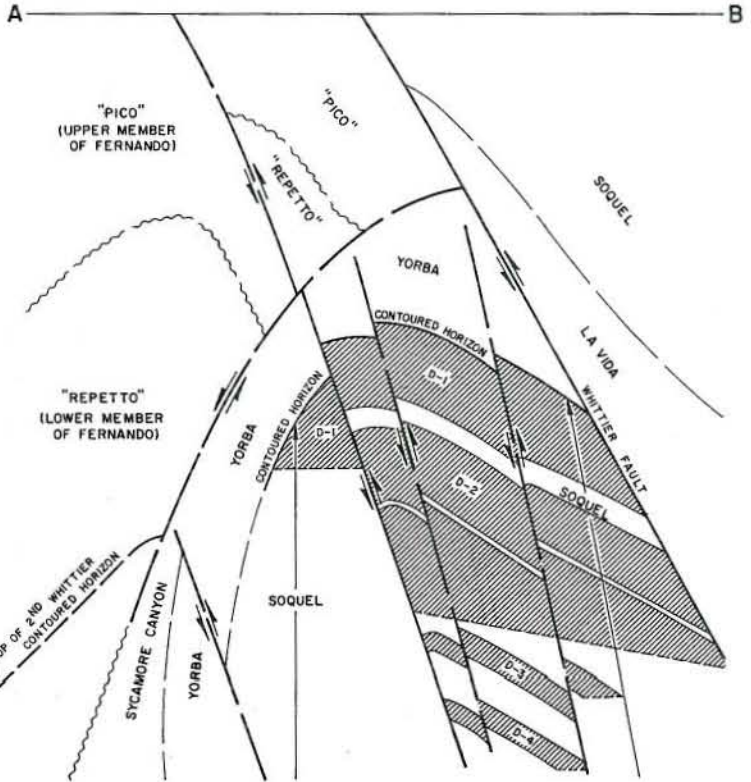
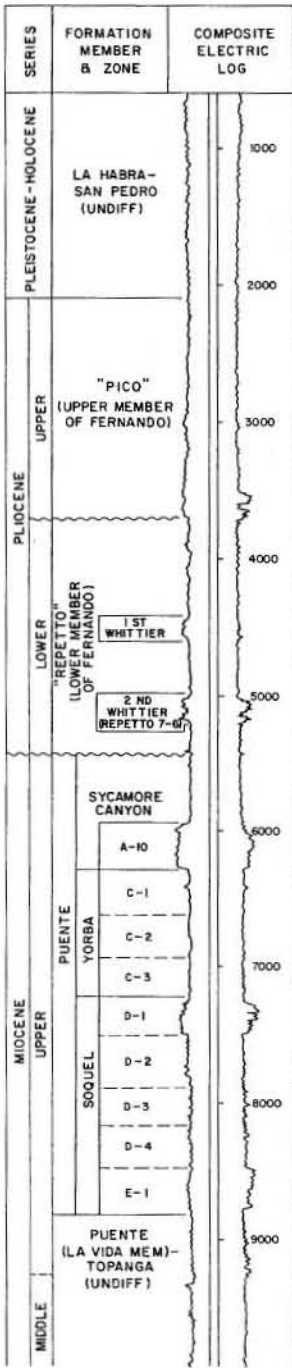
REMARKS: Last production was in 1954. Field abandoned in 1955.

REFERENCES: Lang, H.R., San Clemente Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 58, No. 1 (1972).

SANSINENA OIL FIELD



SANSINENA OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

SANSINENA OIL FIELD

Los Angeles County

LOCATION: 5 miles east of Whittier

TYPE OF TRAP: See areas

ELEVATION: 550 - 1,025

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
2nd Whittier	McFarland Energy, Inc. "Sansinena" 4	Union Oil Co. of Calif. "Sansinena" 4	30 2S 10W	SB	3	N.A.	May 1898

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Sansinena" 10 A 3	Same	Apr 1954	32 2S 10W	SB	9,586	Puente-Topanga (Undiff)	1t Mio - m Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
791,972	1,289,776	495,804	655	116	45,615,428	53,255,756	15,628,902	1956	228	210	675

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS:

REFERENCES: See areas

CALIFORNIA DIVISION OF OIL AND GAS

SANSINENA OIL FIELD

12-G AREA

Los Angeles County

LOCATION: See map sheet of Sansinena Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 650 - 850

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Pliocene	Rothschild Oil Co. "Nuckols" 1	Same as present	30 2S 10W	SB	195	N.A.	Feb 1952
C-3	Same as above	Same as above	30 2S 10W	SB	*	N.A.	Feb 1952
D-1	Same as above	Same as above	30 2S 10W	SB	*	N.A.	Feb 1952

Remarks: * Production from all zones commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Pacific Lighting Service Co. "Sansinena So. Pool" 12-G-3	Union Oil Co. of Calif. "Sansinena" 12-G-1	Feb 1955	31 2S 10W	SB	6,181	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
1st Whittier	1,800	300	early Pliocene	"Repetto"	17	N.A.	II
C-3	3,100	400	late Miocene	Puente	14	N.A.	III
D-1	4,700	200	late Miocene	Puente	22	1,200	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	15	0	40,820	0	1,527	1966	5	5	20

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 600

CURRENT CASING PROGRAM: 11 3/4" cem. 375; 7" combination string landed through zone, cemented above zone and across base of fresh water.

METHOD OF WASTE DISPOSAL: Shipped by pipeline to Fullerton Waste Water Disposal Co. in Fullerton.

REMARKS: This area has been idle since 1966.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

CENTRAL AREA

SANSINENA OIL FIELD

Los Angeles County

LOCATION: See map sheet of Sansinena Oil Field

TYPE OF TRAP: Faulted asymmetrical anticline

ELEVATION: 650 - 850

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
C-1	Union Oil Co. of Calif. "Sansinena" 3 B 41	Union Oil Co. of Calif. "Sansinena" 41	29 2S 10W	SB	160	N.A.	Sep 1951

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Sansinena" 11 B 6	Same	May 1955	33 2S 10W	SB	5,500	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
C-1	3,720	450	late Miocene	Puente	20 - 30	1,200	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
14,260	0	18,123	30	4	667,579	0	385	1956	15	15	35

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 600

CURRENT CASING PROGRAM: 11 3/4" cem. 375; 7" combination string landed through zone, cemented above zone and across the base of fresh water.

METHOD OF WASTE DISPOSAL: Shipped by pipeline to Fullerton Waste Water Disposal Co. in Fullerton.

REMARKS:

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

SANSINENA OIL FIELD

CURTIS AREA

Los Angeles County

LOCATION: See map sheet of Sansinena Oil Field

TYPE OF TRAP: Faulted asymmetrical anticline

ELEVATION: 700 - 1,000

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
D-1	McFarland Energy, Inc. "Sansinena" 11	Union Oil Co. of Calif. "Sansinena" 11	30 2S 10W	SB	81	6	Aug 1943
D-2	Same as above	Same as above	30 2S 10W	SB	*	*	Aug 1943

Remarks: * Production from both zones commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Sansinena" 5-A-74	Union Oil Co. of Calif. "Sansinena" 74	Nov 1952	30 2S 10W	SB	6,418	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
D-1	4,950	150	late Miocene	Puente	28	N.A.	IV
D-2	5,100	5,400	late Miocene	Puente	28	N.A.	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
31,682	26,939	7,946	35	10	1,198,418	980,171	171,066	1953	10	10	40

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 600

CURRENT CASING PROGRAM: 11 3/4" cem. 375; 7" combination string landed through zone, cemented above zone and across base of fresh water.

METHOD OF WASTE DISPOSAL: Shipped by pipeline to Fullerton Waste Water Disposal Co. in Fullerton.

REMARKS:

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

SANSINENA OIL FIELD

EAST AREA

Los Angeles County

LOCATION: See map sheet of Sansinena Oil Field

TYPE OF TRAP: Faulted anticlines; lenticular sands.

ELEVATION: 550 - 1,025

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbi)	Gas (Mcf)	
2nd Whittier	Union Oil Co. of Calif. "Sansinena" 9 A 3	Same as present	33 2S 10W	SB	9	13	Dec 1957
A-10	Union Oil Co. of Calif. "Sansinena" 9 B 1	Union Oil Co. of Calif. "Naranjal" 46-33	33 2S 10W	SB	182	73	May 1952
C-1	Union Oil Co. of Calif. "Sansinena" 9 B 6	Same as present	33 2S 10W	SB	556	385	Jun 1954
C-2	Union Oil Co. of Calif. "Sansinena" 8 B 3	Same as present	33 2S 10W	SB	52	54	Oct 1956
D-1	Union Oil Co. of Calif. "Sansinena" 8 B 2	Same as present	34 2S 10W	SB	122	132	Sep 1953

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Sansinena" 10 A 3	Same	Apr 1954	32 2S 10W	SB	9,586	Puente-Topanga (Undiff)	1t Mio - m Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu))	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
2nd Whittier	2,700	100	early Pliocene	"Repetto"	16	N.A.	II
A-10	4,200	200	late Miocene	Puente	30	1,200	IV
C-1	6,400	150	late Miocene	Puente	31	1,200	IV
C-2	3,600	75	late Miocene	Puente	28	1,200	III
D-1	4,700	150	late Miocene	Puente	28	1,200	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbi)	Net gas (Mcf)	Water (bbi)			Oil (bbi)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
148,706	396,122	188,192	260	20	14,397,892	19,587,494	2,209,769	1956	75	73	260

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbi; Gas, Mcf; Steam, bbi (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 600

CURRENT CASING PROGRAM: 11 3/4" cem. 375; 7" combination string landed through zone, cemented above zone and across base of fresh water.

METHOD OF WASTE DISPOSAL: Shipped by pipeline to Fullerton Waste Water Disposal Co. in Fullerton.

REMARKS: A water-flood project was started in 1964 and terminated in 1967 after injecting 3,328,991 bbls. into three wells.

REFERENCES: Ledingham, G.W., Jr., East Area of Sansinena Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 59, No. 1 (1974).

CALIFORNIA DIVISION OF OIL AND GAS

SANSINENA OIL FIELD

NEW ENGLAND AREA

Los Angeles County

LOCATION: See map sheet of Sansinena Oil Field

TYPE OF TRAP: Faulted asymmetrical anticline

ELEVATION: 650 - 850

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
1st Whittier	Walter P. Temple Oil Co. No. 1	Same as present	30 2S 10W	SB	N.A.	N.A.	1921
C-3	McFarland Energy, Inc. "Van" 1A	T. F. Vander Laan "Vander Laan" 1	30 2S 10W	SB	50	50	Apr 1954
D-1	Walter P. Temple Oil Co. No. 2	Same as present	30 2S 10W	SB	6	N.A.	Oct 1925
D-2	Same as above	Same as above	30 2S 10W	SB	*	N.A.	Oct 1925
D-3	Same as above	Same as above	30 2S 10W	SB	*	N.A.	Oct 1925
D-4	Same as above	Same as above	30 2S 10W	SB	*	N.A.	Oct 1925
E-1	McFarland Energy, Inc. "Reilly" 1	Hearn Co. "Reilly" 1	30 2S 10W	SB	50	15	Jan 1954

Remarks: * Initial production from D-1, D-2, D-3 and D-4 zones was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Walter P. Temple Oil Co. No. 2	Same	Feb 1922	30 2S 10W	SB	4,789	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
1st Whittier	1,760	100	early Pliocene	"Repetto"	17	N.A.	II
C-3	2,600	100	late Miocene	Puente	14	N.A.	II
D-1	2,900	300	late Miocene	Puente	22	N.A.	III
D-2	3,300	500	late Miocene	Puente	19 - 26	1,200	III
D-3	3,600	120	late Miocene	Puente	20	N.A.	III
D-4	3,700	110	late Miocene	Puente	30	N.A.	III
E-1	3,800	150	late Miocene	Puente	18	N.A.	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
16,658	0	2,756	45	6	297,522	74,601	83	1954	9	8	50

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 600

CURRENT CASING PROGRAM: 11 3/4" cem. 375; 7" combination string landed through zone, cemented above zone and across base of fresh water.

METHOD OF WASTE DISPOSAL: Shipped by pipeline to Fullerton Waste Water Disposal Co. in Fullerton.

REMARKS:

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

SANSINENA OIL FIELD

WEST AREA

Los Angeles County

LOCATION: See map sheet of Sansinena Oil Field

TYPE OF TRAP: Faulted asymmetrical anticline

ELEVATION: 650 - 850

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
2nd Whittier	McFarland Energy, Inc. "Sansinena" 4	Union Oil Co. of Calif. "Sansinena" 4	30 2S 10W	SB	3	N.A.	May 1898
C-3	McFarland Energy, Inc. "EDCO" 3	R. E. Bering "York" 3	30 2S 10W	SB	140	N.A.	Nov 1951
D-1	Union Oil Co. of Calif. "Sansinena" 1 B 15	Union Oil Co. of Calif. "Sansinena" 15	30 2S 10W	SB	102	N.A.	May 1945
D-2	Union Oil Co. of Calif. "Sansinena" 2 A 17	Union Oil Co. of Calif. "Sansinena" 17	30 2S 10W	SB	156	N.A.	Sep 1945
D-3	Union Oil Co. of Calif. "Sansinena" 1 B 18	Union Oil Co. of Calif. "Sansinena" 18	30 2S 10W	SB	1	0	Apr 1949
D-4	Union Oil Co. of Calif. "Sansinena" 1 B 20	Union Oil Co. of Calif. "Sansinena" 20	30 2S 10W	SB	27	30	Jul 1949

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Sansinena" 3 B 65	Union Oil Co. of Calif. "Sansinena" 65	Dec 1952	29 2S 10W	SB	8,357	Puente-Topanga (Undiff)	1t Mio - m Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
2nd Whittier	1,300	100	early Pliocene	"Repetto"	17	N.A.	II
C-3	2,100	100	late Miocene	Puente	14	N.A.	III
D-1	2,900	300	late Miocene	Puente	22	1,200	III
D-2	3,600	475	late Miocene	Puente	19 - 26	N.A.	III
D-3	4,500	120	late Miocene	Puente	20	N.A.	IV
D-4	5,200	110	late Miocene	Puente	30	N.A.	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
580,666	855,103	278,787	270	76	29,013,197	31,728,656	2,599,905	1953	114	99	270

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 600

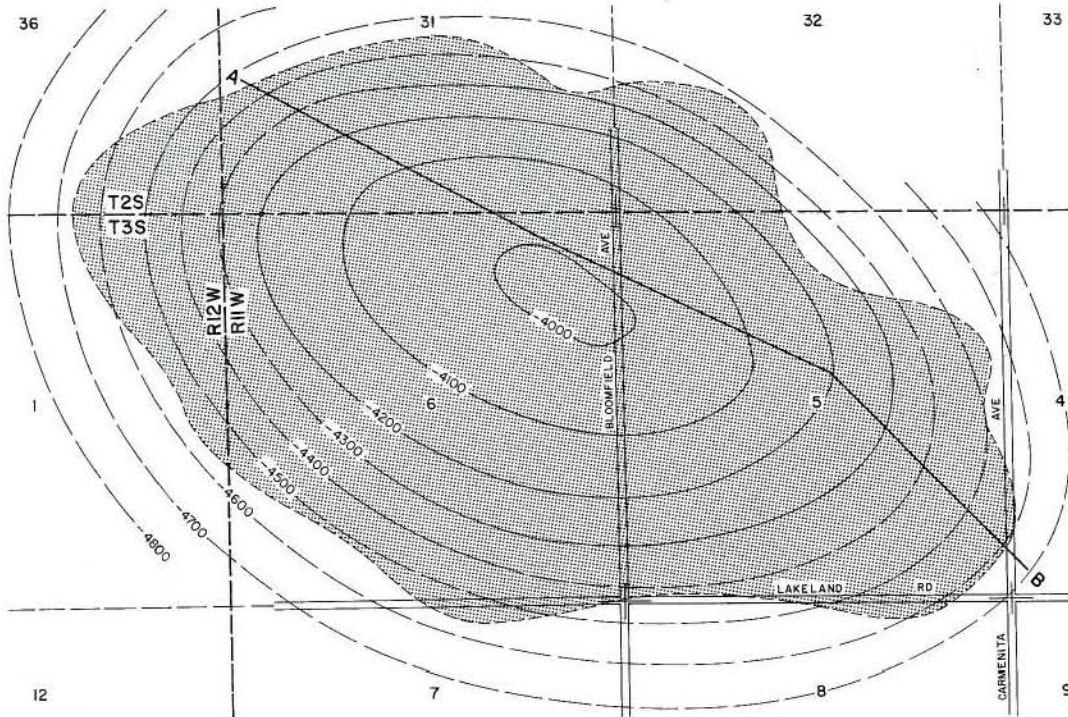
CURRENT CASING PROGRAM: 11 3/4" cem. 375; 7" combination string landed through zone, cemented above zone and across base of fresh water.

METHOD OF WASTE DISPOSAL: Shipped by pipeline to Fullerton Waste Water Disposal Co. in Fullerton.

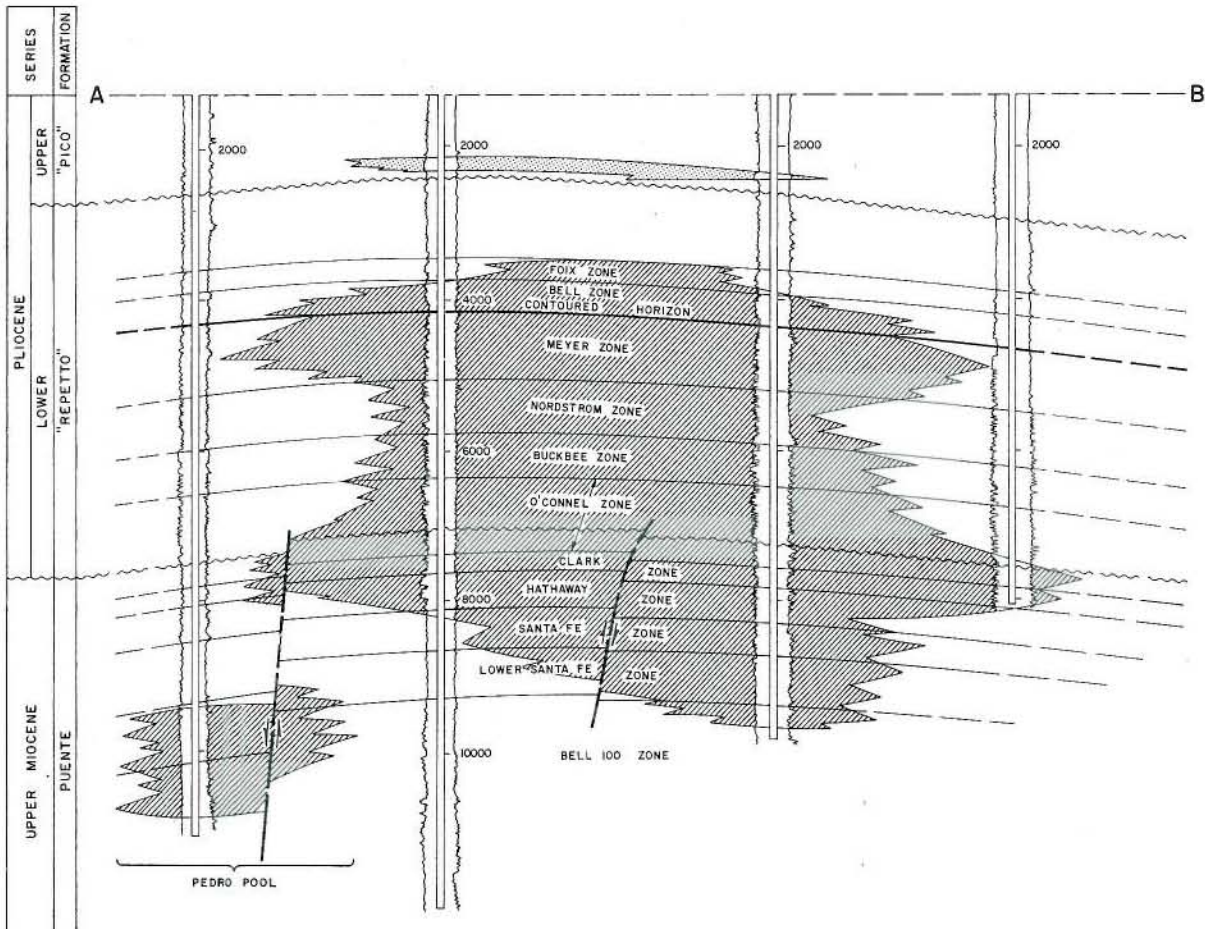
REMARKS: 6-A area incorporated into the West area in 1974.

REFERENCES:

SANTA FE SPRINGS OIL FIELD



CONTOURS ON TOP OF MEYER ZONE



CALIFORNIA DIVISION OF OIL AND GAS

SANTA FE SPRINGS OIL FIELD

Los Angeles County

LOCATION: 12 miles southeast of downtown Los Angeles

TYPE OF TRAP: Dome

ELEVATION: 150

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Gas zone	Mobil Oil Corp. "Santa Fe" 2	General Petroleum Corp. "Santa Fe" 2	5 3S 11W	SB	0	700,000	Jul 1922
Foix	Texaco Inc. "Foix" 1	Petroleum Midway Co., Ltd. "Foix" 1	6 3S 11W	SB	575	N.A.	May 1922
Bell	Union Oil Co. of Calif. "Bell" 1	Same as present	6 3S 11W	SB	2,588	N.A.	Nov 1921
Meyer	Union Oil Co. of Calif. "Meyer" 3	Same as present	4 3S 11W	SB	150	N.A.	Oct 1919
Nordstrom	Calstar Petroleum Co. "Star" 2	Star Petroleum Co. "Star" 2	6 3S 11W	SB	2,560	35	Nov 1928
Buckbee	Exxon Corp. "Wilshire Buckbee" 1	Wilshire Oil Co. "Wilshire Buckbee" 1	6 3S 11W	SB	2,000	N.A.	Jul 1928
O'Connell	Getty Oil Co. "S.F.S." 19	George F. Getty, Inc. "S.F.S." 19	6 3S 11W	SB	1,300	N.A.	Feb 1929
Clarke-Hathaway	Getty Oil Co. "Clarke" 2	Associated Oil Co. "Clarke" 2	1 3S 12W	SB	1,114	N.A.	Jun 1929
Santa Fe	Mobil Oil Corp. 724-S	General Petroleum Corp. "Santa Fe" 243	5 3S 11W	SB	1,187	1,240	Feb 1956
Bell 100	Mobil Oil Corp. 459-D	Union Oil Co. of Calif. "Bell" 100	6 3S 11W	SB	59	N.A.	Mar 1938

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Mobil Oil Corp. 428-F	Union Oil Co. of Calif. "Bell" 107	Mar 1949	6 3S 11W	SB	13,541	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Gas zone (abd)	2,000	35	late Pliocene	"Pico"	N.A.	200	II
Foix	3,580	180	early Pliocene	"Repetto"	28	250	II
Bell	3,900	300	early Pliocene	"Repetto"	31	325	II
Meyer	4,600	700	early Pliocene	"Repetto"	35	450	III
Nordstrom	5,400	500	early Pliocene	"Repetto"	35	650	IV
Buckbee	6,000	400	early Pliocene	"Repetto"	35	1,000	IV
O'Connell	6,700	700	early Pliocene	"Repetto" & Puente	34	1,450	IV
Clarke-Hathaway	7,400	600	late Miocene	Puente	33	1,700	IV
Santa Fe	8,200	900	late Miocene	Puente	34	900	IV
Bell 100	9,100	800	late Miocene	Puente	34	1,000	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
796,281	1,104,539	10,206,771	835	234	600,199,909	830,331,894	81,464,415	1923	1,295	1,176	1,480

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1962	8,847,870	13

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,000

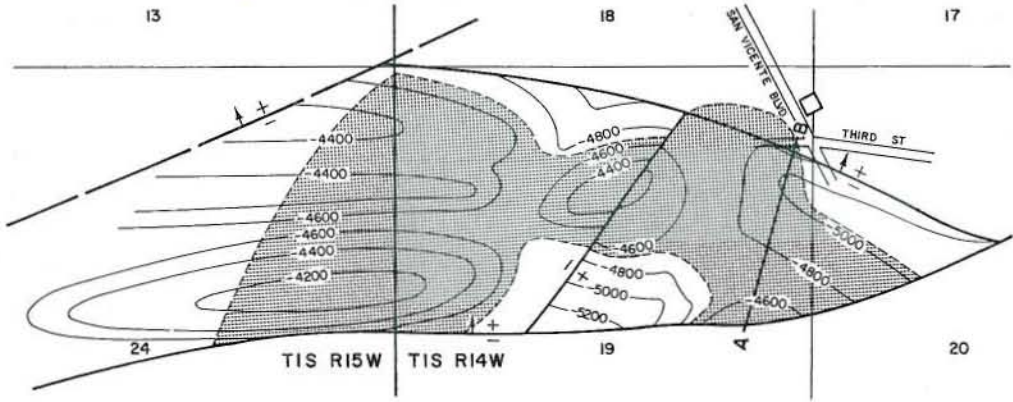
CURRENT CASING PROGRAM: 13 3/8" cem. 3,000; 9 5/8" or 7" cem. above zone; 6 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL: Water-flood project and some shipped by pipeline to neighboring fields for secondary recovery purposes.

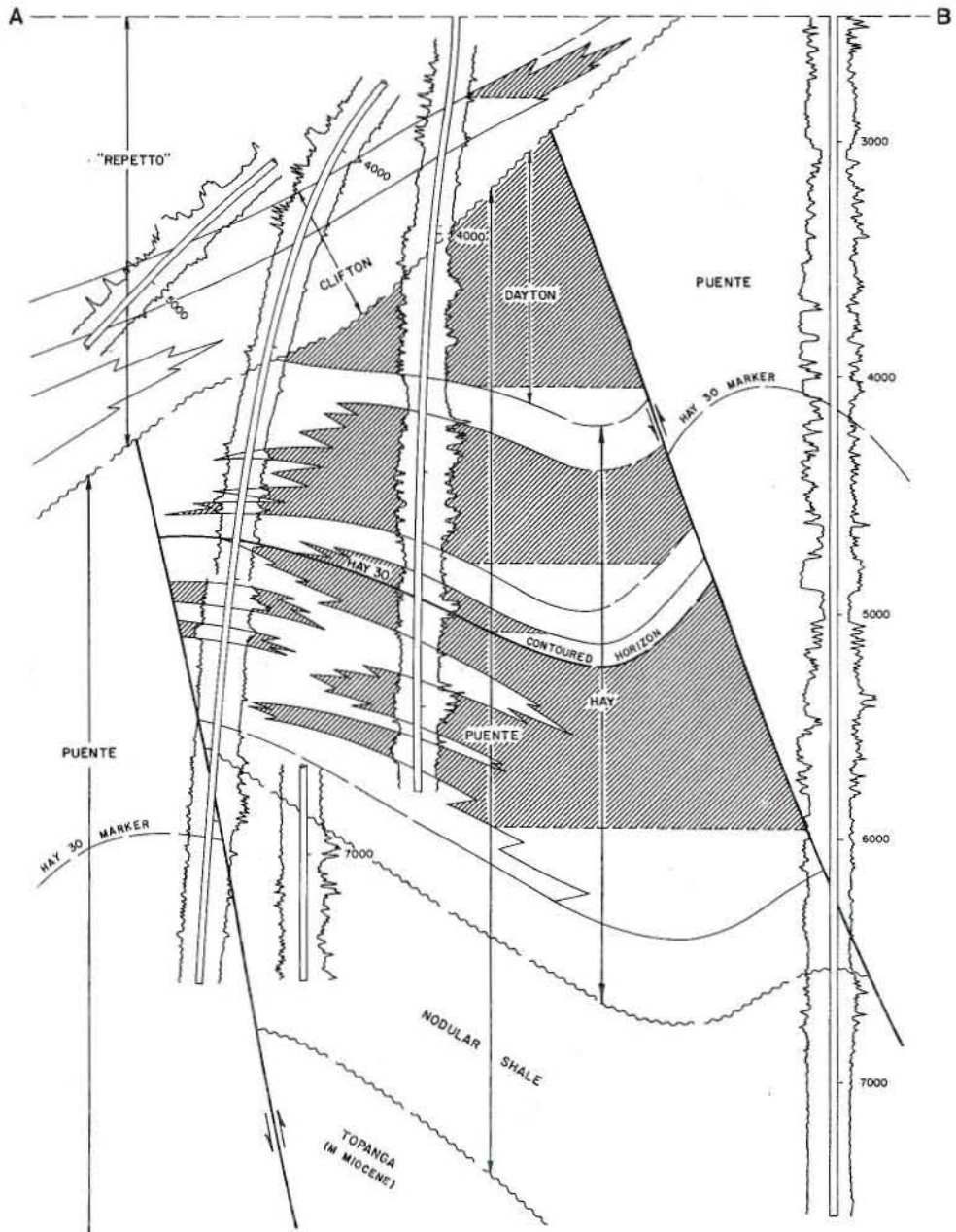
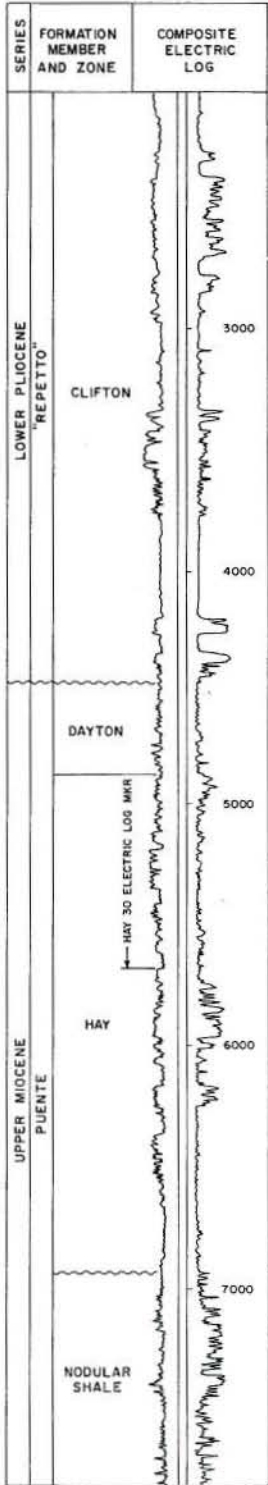
REMARKS:

REFERENCES: Ybarra, R.A., Recent Developments in the Santa Fe Springs Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 43, No. 2 (1957).

SAN VICENTE OIL FIELD



CONTOURS ON HAY 30 ELECTRIC LOG MARKER
SCALE: 1" = 240'



CALIFORNIA DIVISION OF OIL AND GAS

SAN VICENTE OIL FIELD

Los Angeles County

LOCATION: 8 miles west of downtown Los Angeles

TYPE OF TRAP: Faulted anticlines; lenticular sands

ELEVATION: 165

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Clifton	Standard Oil Co. of Calif. S-3	Standard Oil Co. of Calif. "Dorothy Hay Corehole" 2	20 1S 14W	SB	90	250	Oct 1968
Dayton	Same as above	Same as above	20 1S 14W	SB	*	*	Oct 1968
Hay	Same as above	Same as above	20 1S 14W	SB	*	*	Oct 1968

Remarks: * Production from all zones was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. S-39	Standard Oil Co. of Calif. S-38	Dec 1971	20 1S 14W	SB	14,076	Nodular shale	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu))	Salinity of zone water (gr gal)	Class BOPE required
			Age	Formation			
Clifton	2,000	1,000	early Pliocene	"Repetto"	17	1,420	IV
Dayton	3,200	1,000	late Miocene	Puente	22	1,600	IV
Hay	4,200	2,000	late Miocene	Puente	24	1,690	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,726,233	1,747,529	676,338	340	30	5,936,005	5,151,425	1,330,012	1972	45	37	340

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1970	2,625,073	1

SPACING ACT. Applies

BASE OF FRESH WATER: 250

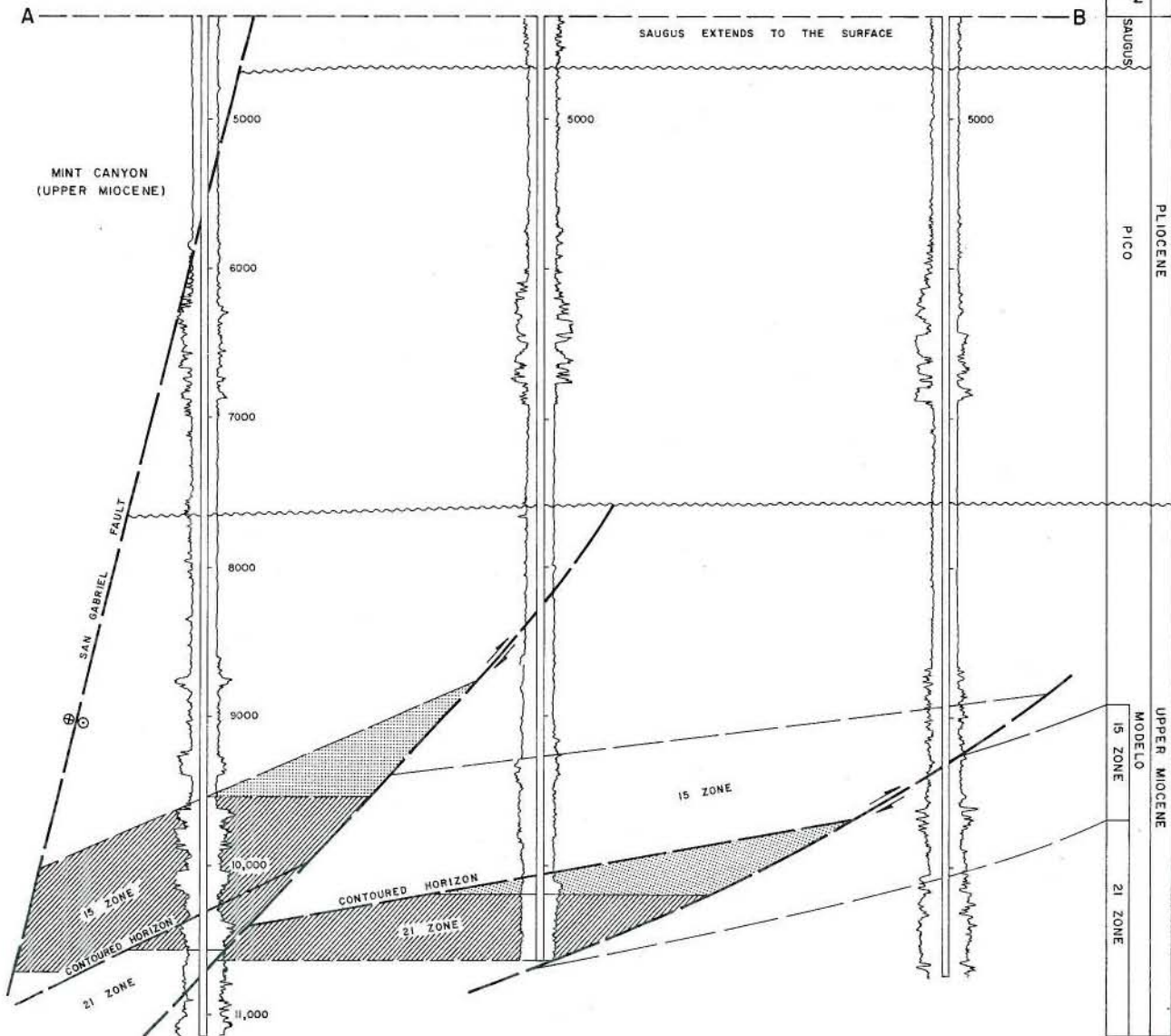
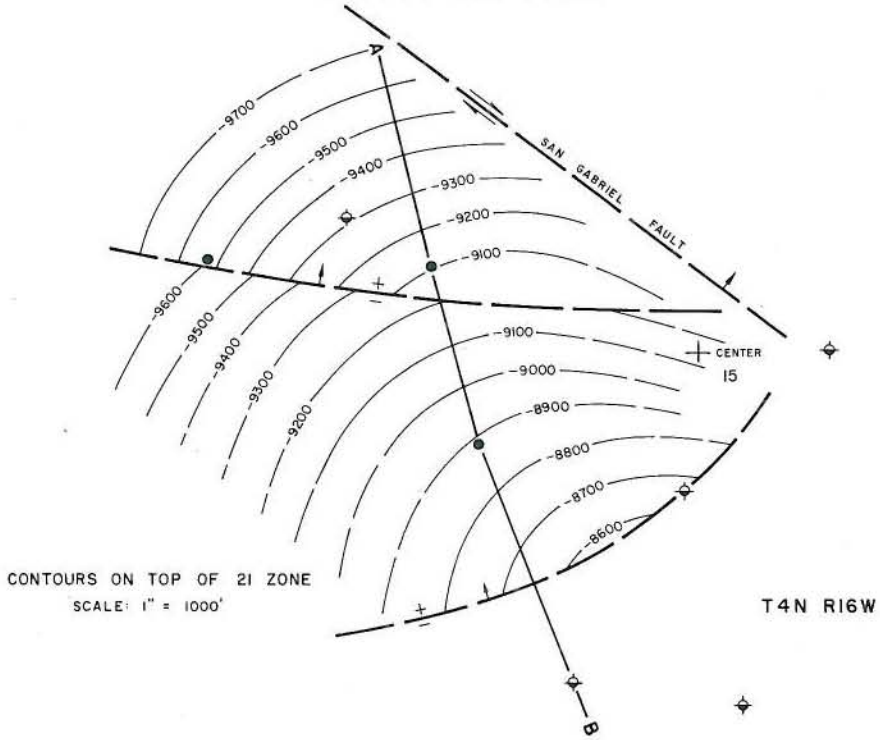
CURRENT CASING PROGRAM: 13 5/8" or 10 3/4" cem. 1,300 to 1,700; 8 5/8" or 7" cem. 3,000 to 7,200; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Shipped by pipeline to Inglewood oil field for water flooding.

REMARKS: All wells were directionally drilled from an urban drillsite.

REFERENCES:

SAUGUS OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

SAUGUS OIL FIELD
Los Angeles County

LOCATION: 31 miles northwest of Los Angeles

TYPE OF TRAP: Faulted anticlinal nose

ELEVATION: 1,200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
15	Thomas Oil Co. "N.L. & F." B-1	Union Oil Co. of Calif. "N.L. & F." 4	15 4N 16W	SB	54	22	Nov 1957
21	Thomas Oil Co. "N.L. & F." B-2	Union Oil Co. of Calif. "N.L. & F." B-2	15 4N 16W	SB	374	280	May 1958

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Thomas Oil Co. "N.L. & F." B-1	Union Oil Co. of Calif. "N.L. & F." 4	Jul 1957	15 4N 16W	SB	11,545	Modelo	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
15	9,500	200	late Miocene	Modelo	28	N.A.	III
21	10,000	250	late Miocene	Modelo	30	N.A.	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
2,557	0	11,942	40	1	495,910	783,570	74,556	1959	9	3	40

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 600

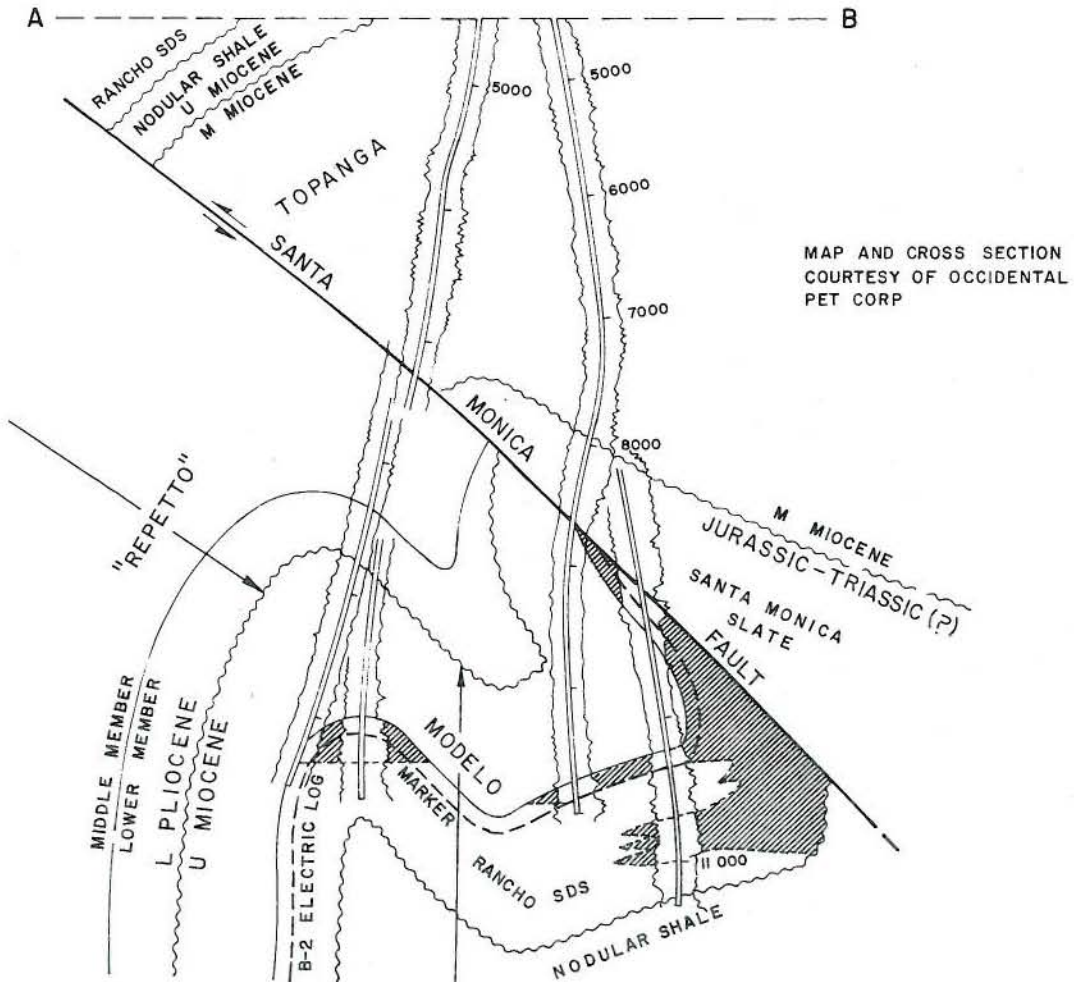
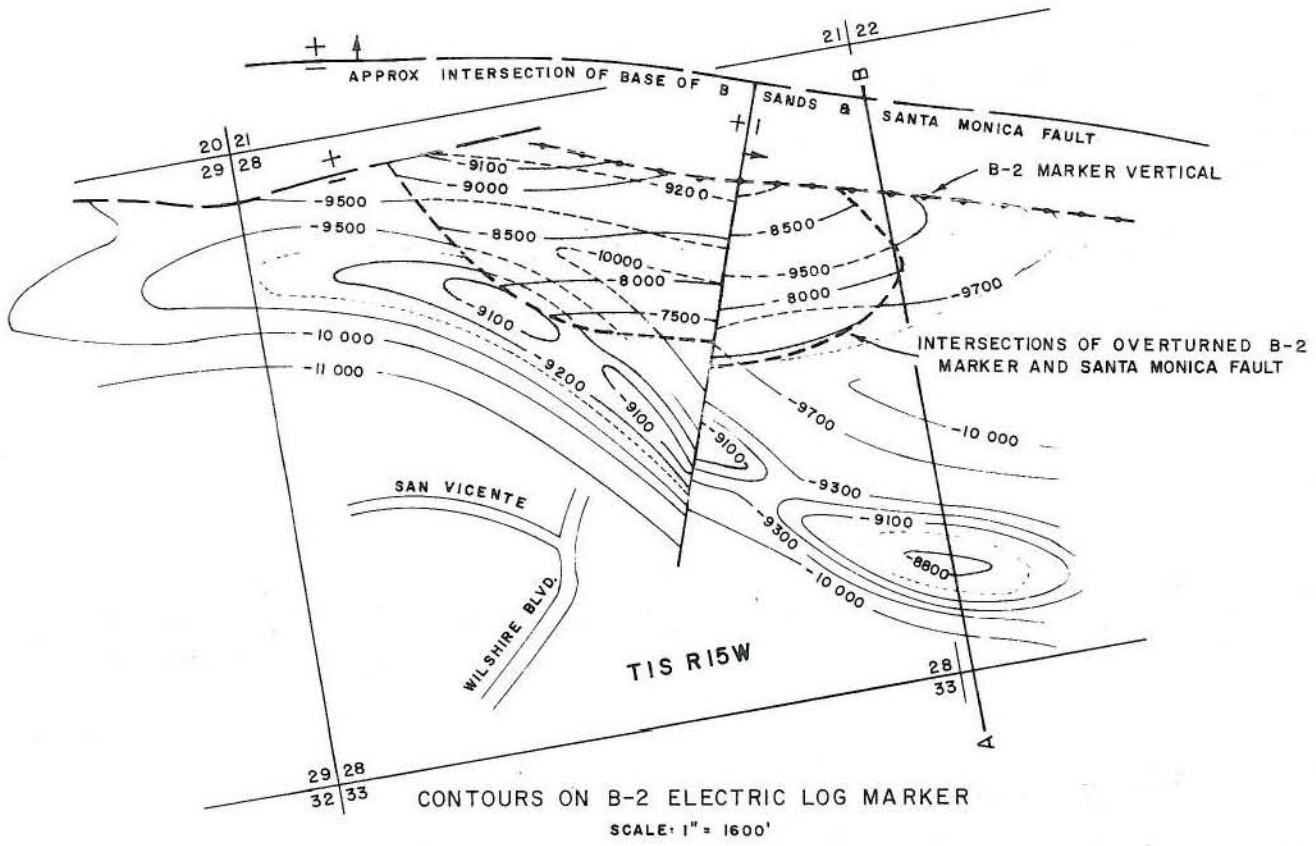
CURRENT CASING PROGRAM: 11 3/4" cem. 700 - 1,000; 5 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL: All waste water is injected into a disposal well.

REMARKS:

REFERENCES: Cordova, S., Saugus Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 2 (1962).

SAWTELLE OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

SAWTELLE OIL FIELD
Los Angeles County

LOCATION: 4 miles west of Beverly Hills

TYPE OF TRAP: Faulted anticlines

ELEVATION: 350

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Rancho	Occidental Petroleum Corp. "Dowlen-Federal" 1	Gulf Oil Corp. of Calif. "Dowlen-Federal" 1	28 1S 15W	SB	567	210	Aug 1965

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Occidental Petroleum Corp. "Sawtelle" 1	Occidental Petroleum Corp. "Dowlen-Federal" 3	Sep 1966	28 1S 15W	SB	11,322	Nodular shale	Late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr gal	Class BOPE required
			Age	Formation			
Rancho	9,500	500	Late Miocene	Modelo	19 - 28	1,230	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
545,714	593,006	192,712	200	11	7,641,324	7,142,620	1,508,312	1968	13	13	200

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 550

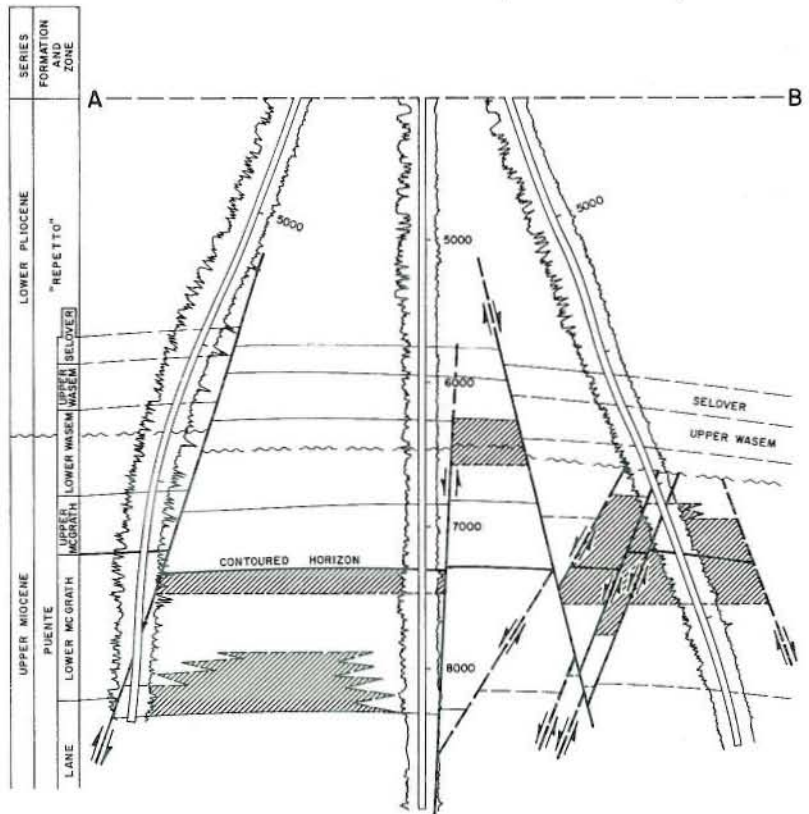
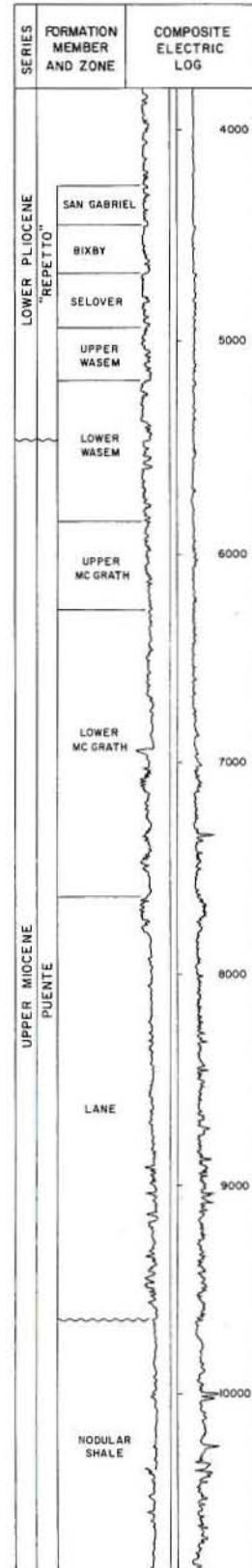
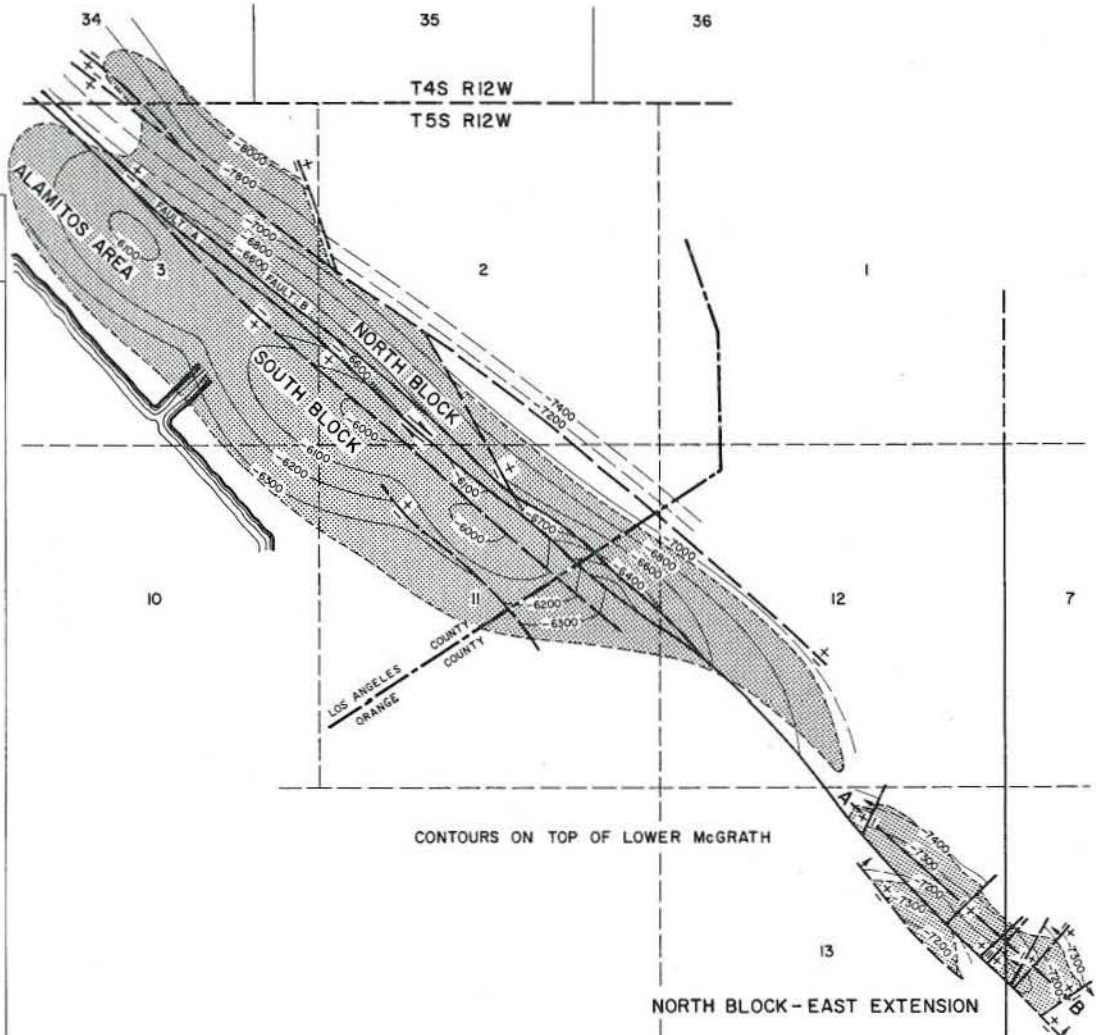
CURRENT CASING PROGRAM: 10 3/4" cem. 1,100; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is injected into a disposal well.

REMARKS:

REFERENCES:

SEAL BEACH OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

SEAL BEACH OIL FIELD
Los Angeles and Orange Counties

LOCATION: 3 miles southeast of downtown Long Beach

TYPE OF TRAP: See areas

ELEVATION: 30

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
San Gabriel	Shell Oil Co. "Bryant" 1	Same as present	11 SS 12W	SB	67	N.A.	Sep 1924

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	S & M	Depth (feet)	At total depth	
						Strata	Age
Continental Oil Co. "Bixby A" 62	Continental Oil Co. "Bixby" 62	Jun 1951	2 SS 12W	SB	12,162	Catalina Schist	Cret or older

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

Oil (bbl)	1973 Production		1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,349,046	1,042,929	6,377,837	610	187	186,713,439	200,718,524	16,500,771	1927	495	431	870

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: See areas

REFERENCES: Barnes, R.M., & G.H. Bowes, Seal Beach Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 16, No. 2 (1930).
Copp, W.W., & G.H. Bowes, Seal Beach Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 13, No. 3 (1927).

CALIFORNIA DIVISION OF OIL AND GAS

SEAL BEACH OIL FIELD

ALAMITOS AREA

Los Angeles County

LOCATION: See map sheet of Seal Beach Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 30

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Selover Wasem McGrath	Pan Western Petroleum Co. "Naples" 1	Petroleum Securities Co. "Naples" 1	3 5S 12W	SB	2,279	N.A.	Feb 1927
	Mobil Oil Corp. "Wasem" 7	General Petroleum Corp. of Calif. "Wasem" 7	3 5S 12W	SB	214	N.A.	Jun 1927
	KLM Oil Co. & LBT "McGrath" 18	Continental Oil Co. "McGrath & Selover" 18	3 5S 12W	SB	670	N.A.	Nov 1929

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Getty Oil Co. "Bryant" 8-A	Pacific Western Oil Corp. "Bryant" 8-A	May 1960	3 5S 12W	SB	9,942	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu))	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Selover	4,100	240	early Pliocene	"Repetto"	25 - 28	1,600	III
Wasem	4,600	900	early Plio-lt Mio	"Repetto"-Puente	28 - 32	1,500	III
McGrath	5,500	835	late Miocene	Puente	28	1,930	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
139,339	142,131	1,041,606	55	26	30,239,660	41,814,068	20,757	1927	168	138	110

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,800

CURRENT CASING PROGRAM: 11 3/4" cem. 600; 7" cem. above zone and across the base of fresh water; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Injection into Bixby zone.

REMARKS:

REFERENCES: See field sheet.

CALIFORNIA DIVISION OF OIL AND GAS

SEAL BEACH OIL FIELD

NORTH BLOCK AREA

Orange and Los Angeles Counties

LOCATION: See map sheet of Seal Beach Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 30

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
B (Gas)	Standard Oil Co. of Calif. "San Gabriel" 35	Same as present	11 5S 12W	SB	0	1,060	Jan 1969
San Gabriel	Shell Oil Co. "Bryant" 1	Same as present	11 5S 12W	SB	67	N.A.	Sep 1924
Bixby	Hellman Estate No. 4	Associated Oil "Hellman" 4	11 5S 12W	SB	1,110	N.A.	Aug 1927
Selover	Getty Oil Co. "Bryant" 21	Associated Oil "Bryant" 21	11 5S 12W	SB	1,170	N.A.	May 1927
Wasem	Same as above	Same as above	11 5S 12W	SB	*	N.A.	May 1927
McGrath	Getty Oil Co. "Bryant" 23	Tide Water Associated Oil Co. "Bryant" 23	11 5S 12W	SB	422	400	Nov 1944

Remarks: * Selover and Wasem production commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Shell Oil Co. "Bryant Four" 1	Same	Jul 1952	11 5S 12W	SB	10,992	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
B (Gas)	3,900	120	early Pliocene	"Repetto"	N.A.	N.A.	III
San Gabriel	2,610	40	early Pliocene	"Repetto"	20 - 27	1,800	III
Selover	3,470	120	early Pliocene	"Repetto"	20 - 27	1,600	III
Wasem	3,820	350	early Plio-lt Mio	"Repetto"-Puente	20 - 28	1,500	III
McGrath	6,500	550	late Miocene	Puente	26 - 34	1,930	IV

PRODUCTION DATA (Jan. 1, 19⁴⁴) (Dry gas production data not included--see remarks.)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
513,638	481,118	1,156,524	235	72	46,629,659	60,279,998	2,801,694	1949	147	127	330

STIMULATION DATA (Jan. 1, 19⁴⁴)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1961	10,975,767	6

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,800

CURRENT CASING PROGRAM: 11 3/4" cem. 600; 7" cem. above zone and across base of fresh water; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Water-flood project and disposal wells.

REMARKS: 1973 dry gas production 0 Mcf. from one idle well; cumulative dry gas production 200,584 Mcf. from one well; proved acreage (1973) 10, maximum 10.

REFERENCES: See field sheet.

CALIFORNIA DIVISION OF OIL AND GAS

SEAL BEACH OIL FIELD

NORTH BLOCK-EAST EXTENSION AREA

Orange County

LOCATION: See map sheet of Seal Beach Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 30

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Wasem McGrath	R.C.U. Operator "Alamitos" 18	Hancock Oil Co. "Alamitos" 18	13 5S 12W	SB	472	210	Jul 1956
	R.C.U. Operator "Alamitos" 1	Hancock Oil Co. "Alamitos" 1	13 5S 12W	SB	344	75	Dec 1954

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
R.C.U. Operator "Alamitos" 23	Hancock Oil Co. "Alamitos" 23	Nov 1956	13 5S 12W	SB	9,763	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Wasem McGrath	6,641	400	e Plio-lt Mio	"Repetto"-Puente	28	1,500	III
	8,100	600	late Miocene	Puente	27 - 33	1,500	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
155,806	90,226	523,005	140	17	7,803,577	7,571,503	946,403	1958	27	26	140

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,800

CURRENT CASING PROGRAM: 11 3/4" cem. 700; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone or 7" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water disposed into ocean during high tide. Future disposal will be through disposal wells into "Repetto" sands.

REMARKS:

REFERENCES: Ingram, W.L., North Block-East Extension of Seal Beach Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 52, No. 1 (1966).

CALIFORNIA DIVISION OF OIL AND GAS

SEAL BEACH OIL FIELD

SOUTH BLOCK AREA

Los Angeles and Orange Counties

LOCATION: See map sheet of Seal Beach Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 30

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Bixby	Continental Oil Co. "Bixby A" 2	Marland Oil Co. of Calif. "Bixby" 2	11 SS 12W	SB	1,853	N.A.	Aug 1926
Selover	Estate of Warren F. McGrath "McGrath" 1	Marland Oil Co. "McGrath & Selover" 1	10 SS 12W	SB	2,950	N.A.	Nov 1926
Wasem	Getty Oil Co. "Bryant" 1	Same as present	11 SS 12W	SB	1,224	N.A.	Jul 1929
McGrath	Getty Oil Co. "Bryant" 14	Associated Oil Co. "Bryant" 14	11 SS 12W	SB	650	850	Feb 1928
Lane	Continental Oil Co. "Bixby A" 62	Continental Oil Co. "Bixby" 62	2 SS 12W	SB	278	0	Feb 1952

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Continental Oil Co. "Bixby A" 62	Continental Oil Co. "Bixby" 62	Jun 1951	2 SS 12W	SB	12,162	Catalina Schist	Cret or older

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Bixby	4,100	115	early Pliocene	"Repetto"	21 - 25	1,800	III
Selover	4,100	200	early Pliocene	"Repetto"	24 - 28	1,600	III
Wasem	4,600	900	e Plio-lt Mio	"Repetto"-Puente	22 - 28	1,500	III
McGrath	5,500	800	late Miocene	Puente	25 - 33	1,950	IV
Lane	7,600	1,000	late Miocene	Puente	28 - 32	600	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
540,263	329,454	3,656,702	180	72	102,040,543	91,052,955	1,792,923	1936	153	140	290

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,800

CURRENT CASING PROGRAM: 11 3/4" cem. 600; 7" cem. above zone and across base of fresh water; 5 1/2" liner landed through zone.

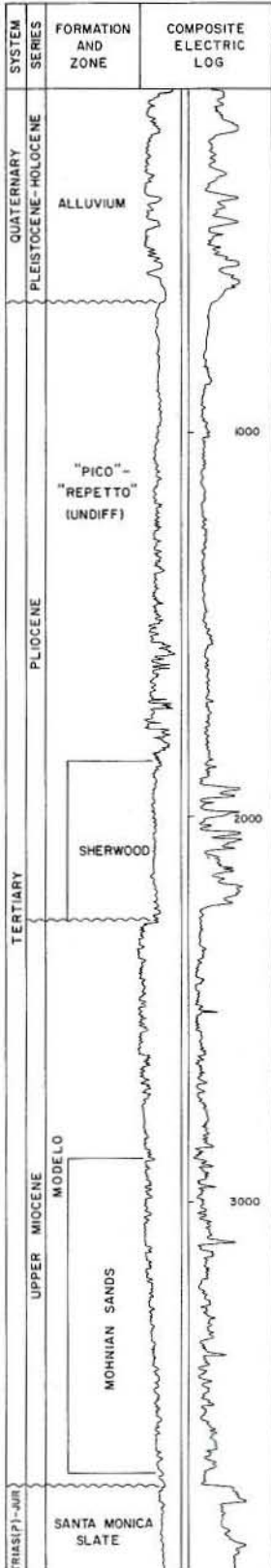
METHOD OF WASTE DISPOSAL: Injection into San Gabriel, Bixby, and Selover zones.

REMARKS:

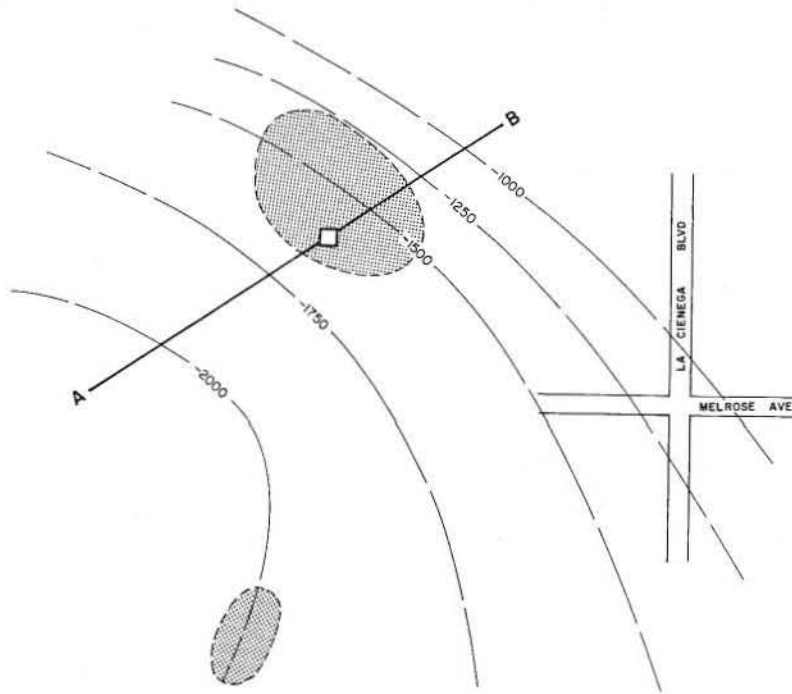
REFERENCES: See field sheet.

SHERMAN OIL FIELD (Abandoned)

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18 17

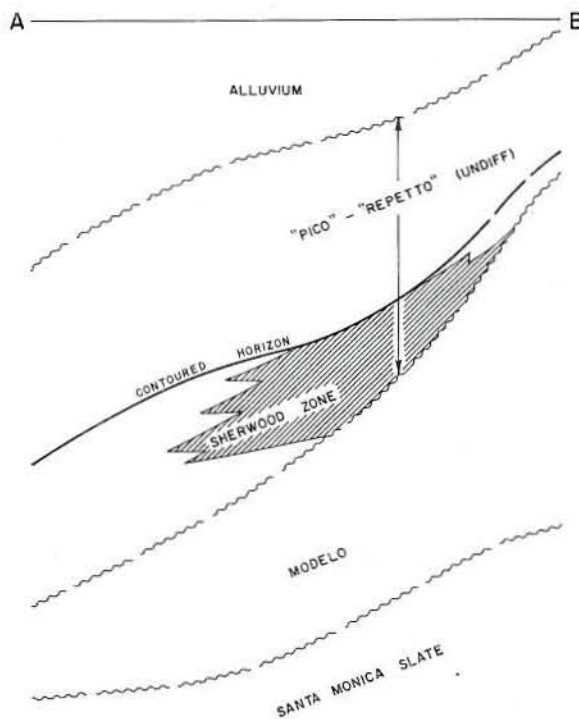


TIS R14W



CONTOURS ON TOP OF SHERWOOD ZONE

SCALE: 1" = 1000'



CALIFORNIA DIVISION OF OIL AND GAS

SHERMAN OIL FIELD (Abandoned)
Los Angeles County

LOCATION: 8 miles west of downtown Los Angeles

TYPE OF TRAP: Stratigraphic trap on a homocline

ELEVATION: 205

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sherwood Mohnian sands	Standard Oil Co. of Calif. "Arden P.E." 1	Same as present	18 1S 14W	SB	46	N.A.	Apr 1965
	Standard Oil Co. of Calif. "P.E. Arden" 3	Same as present	18 1S 14W	SB	31	25	Jun 1972

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "Laurel" 1B	Standard Oil Co. of Calif. "Laurel" 1A	May 1965	18 1S 14W	SB	6,496	Santa Monica Slate	Trias-Jur

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Sherwood Mohnian sands	1,650	350	early Pliocene	"Repetto"	23	650	III
	2,980	50	late Miocene	Modelo	22	700	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
7,006	3,738	3,234	0	2	92,992	50,356	14,292	1971	5	4	30

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 650

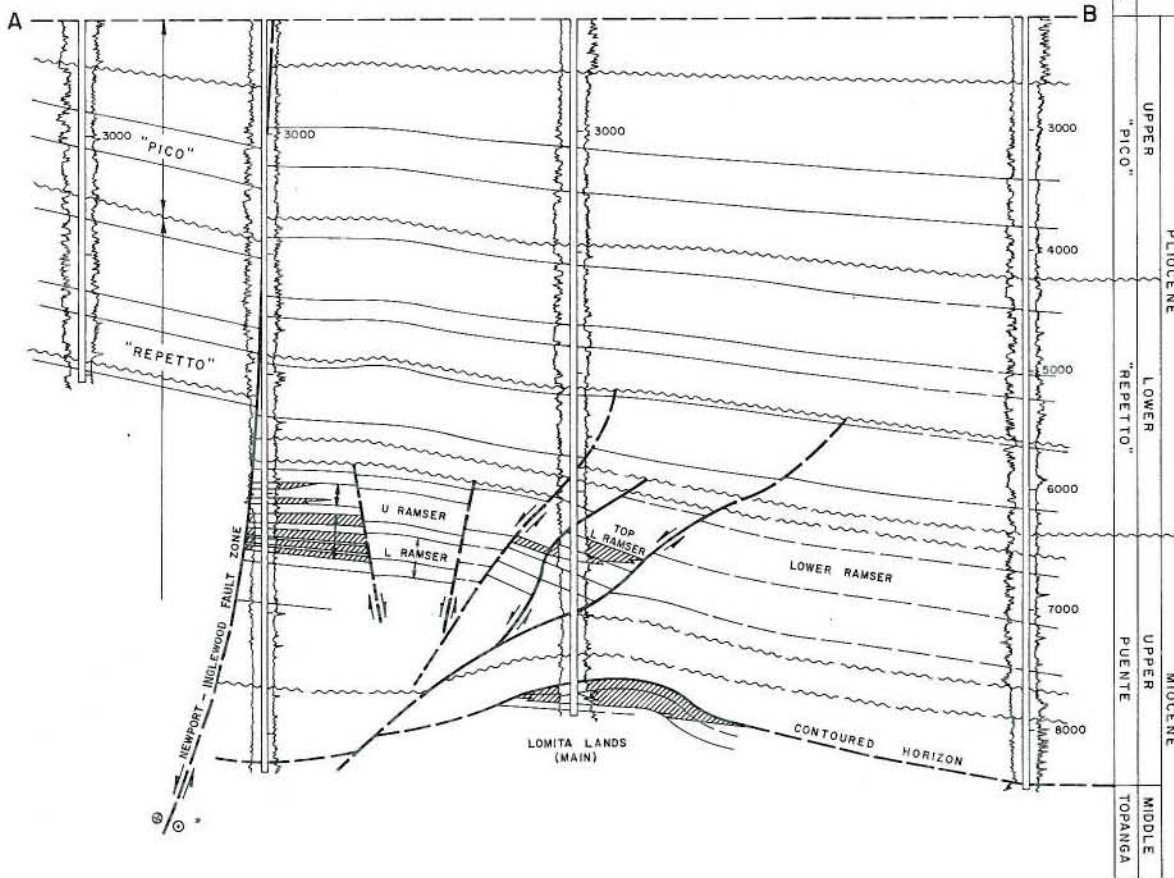
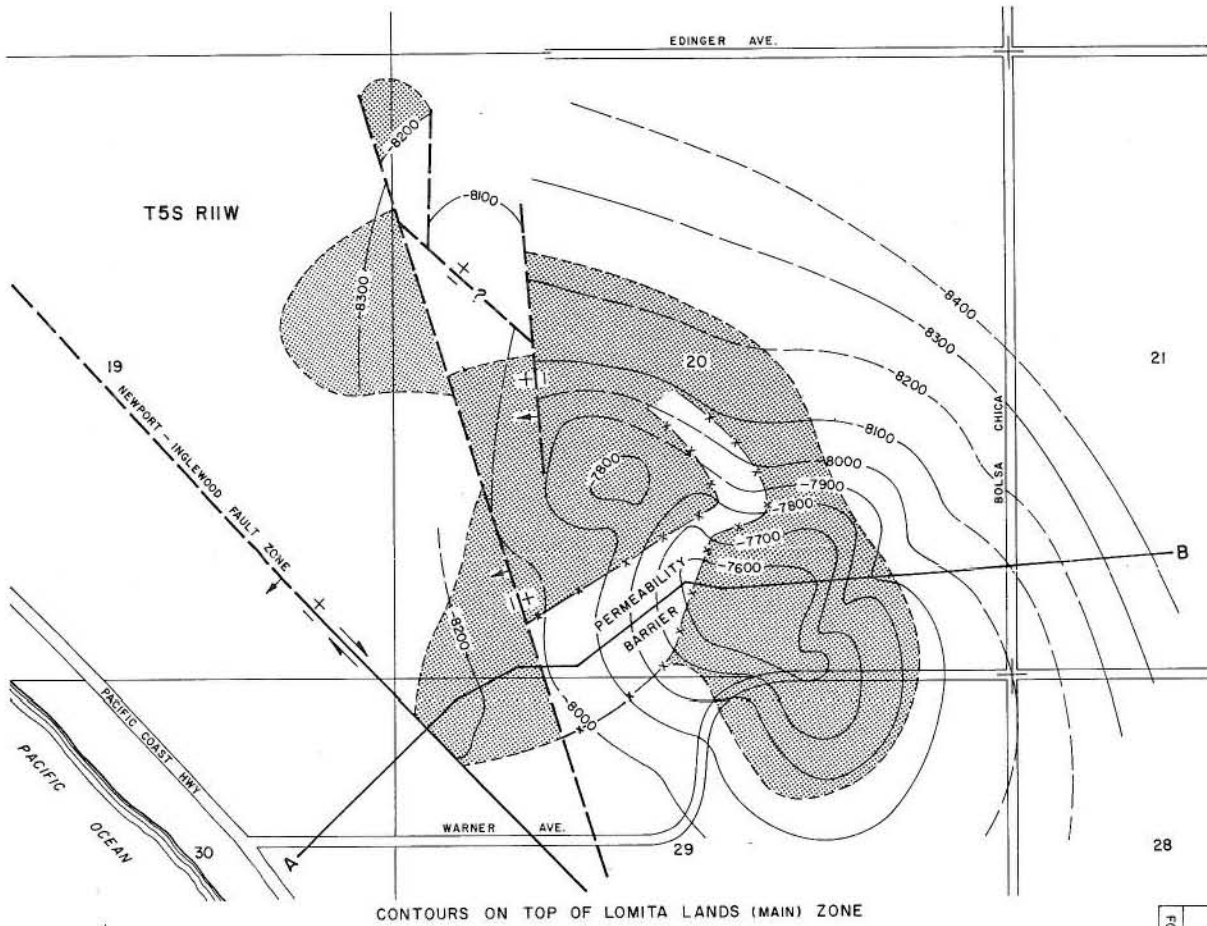
CURRENT CASING PROGRAM: 20" cem. 90; 13 3/8" cem. 850; 9 5/8" cem. above zone; 7" liner landed through zone.

METHOD OF WASTE DISPOSAL: Sewer system.

REMARKS: Last production was in June 1973; field abandoned in 1973. A pilot cyclic-steam project was conducted in 1965 when 1,440 bbls. of equivalent water was injected into one well.

REFERENCES:

SUNSET BEACH OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

SUNSET BEACH OIL FIELD

Orange County

LOCATION: 8 miles southeast of Long Beach

TYPE OF TRAP: Faulted anticline

ELEVATION: 35

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Upper Ramser	Huntington Harbour Corp. "Ramser" 1	Atlantic Oil Co. "Ramser" 1	29 5S 11W	SB	650	*200	Nov 1954
Lower Ramser	Huntington Harbour Corp. "F.A.F." 6-2	Bert Aston "Lonita" 1	19 5S 11W	SB	500	*150	Jun 1954
Lomita Lands	Huntington Harbour Corp. "Lomita" 1	Warren L. Meeker "Lomita Land" 1	20 5S 11W	SB	820	*150	Dec 1954

Remarks: * Average daily gas production for first 30 days.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Atlantic Oil Co. "B.A." 1	Same	Jan 1956	19 5S 11W	SB	9,550	Topanga (?)	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Upper Ramser	5,800	110	late Miocene	Puente	30	1,300	IV
Lower Ramser	6,250	100	late Miocene	Puente	29	1,300	IV
Lomita Lands (Main)	7,750	100	middle Miocene	Topanga	26 - 29	1,150	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
14,966	386	320,015	35	6	6,595,840	9,591,081	1,795,617	1955	117	95	265

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,850 - 2,850

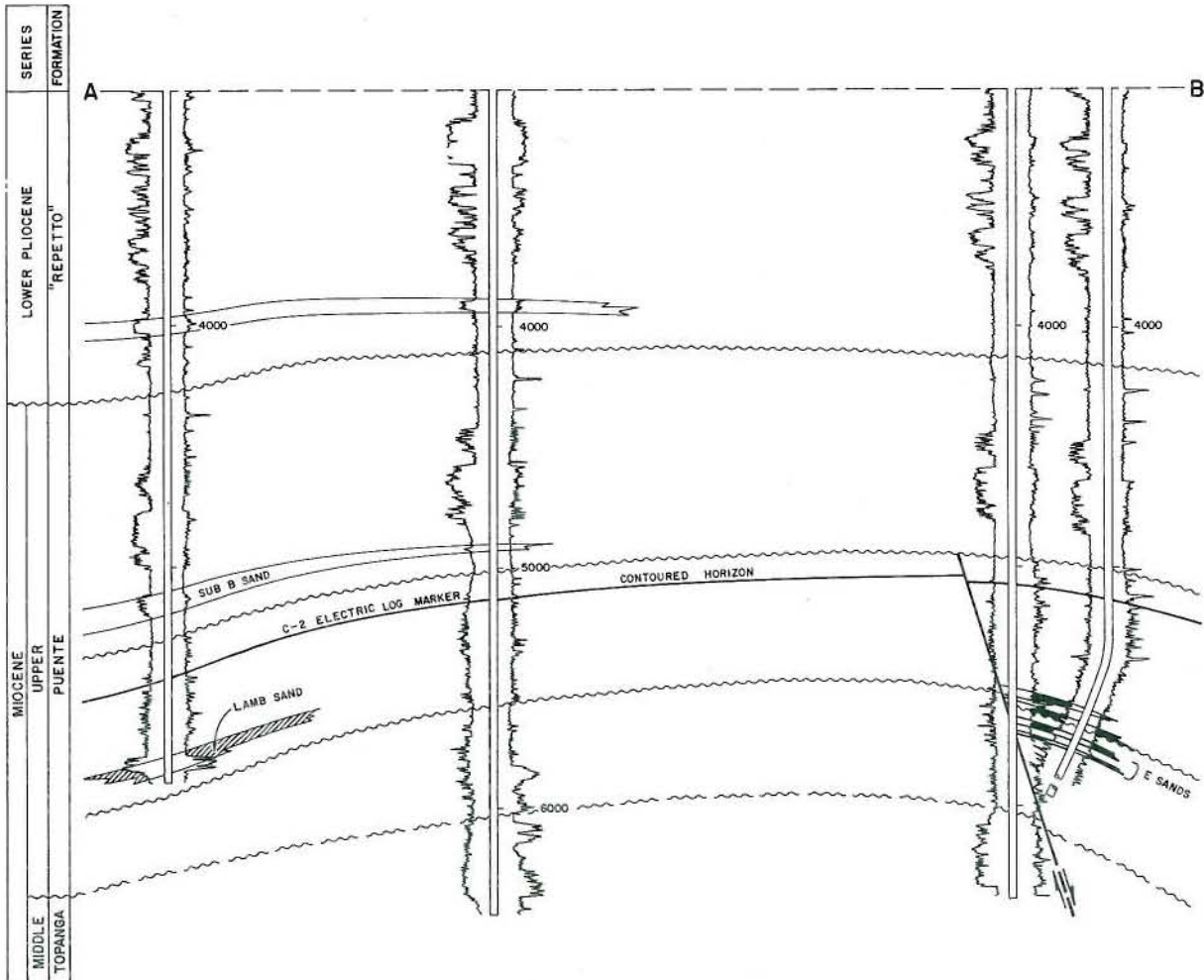
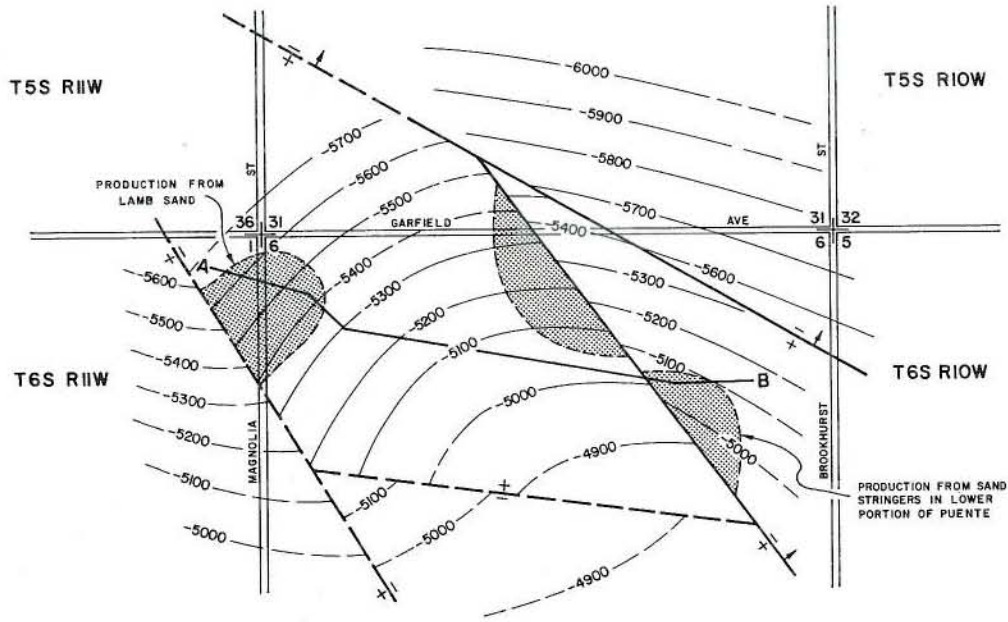
CURRENT CASING PROGRAM: 11 3/4" cem. 600 - 700; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Sewer system.

REMARKS:

REFERENCES: Allen, D.R., and G.C. Hazenbush, Sunset Beach Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 43, No. 2 (1957).

TALBERT OIL FIELD (Abandoned)



CALIFORNIA DIVISION OF OIL AND GAS

TALBERT OIL FIELD (Abandoned)

Orange County

LOCATION: 3 miles northeast of Huntington Beach

TYPE OF TRAP: Lenticular sands on faulted nose

ELEVATION: 15

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Lamb E sands	Getty Oil Co. "Lamb" 1 Coast Supply Co., Ltd. "Lamb" 51-6	Honolulu Oil Corp. "Lamb" 1 Shell Oil Co. "Lamb" 51-6	6 6S 10W	SB	54	8	Sep 1947
			6 6S 10W	SB	33	N.A.	Mar 1948

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Coast Supply Co., Ltd. "Lamb" 51-6	Shell Oil Co. "Lamb" 51-6	Jan 1948	6 6S 10W	SB	7,835	Topanga	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water (gr gal)	Class BOPE required
			Age	Formation			
Lamb E sands	5,400	100	late Miocene	Puente	19	830	IV
	5,700	100	late Miocene	Puente	19	830	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	126,275	4,481	28,537	1957	13	8	35

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,700 - 2,000

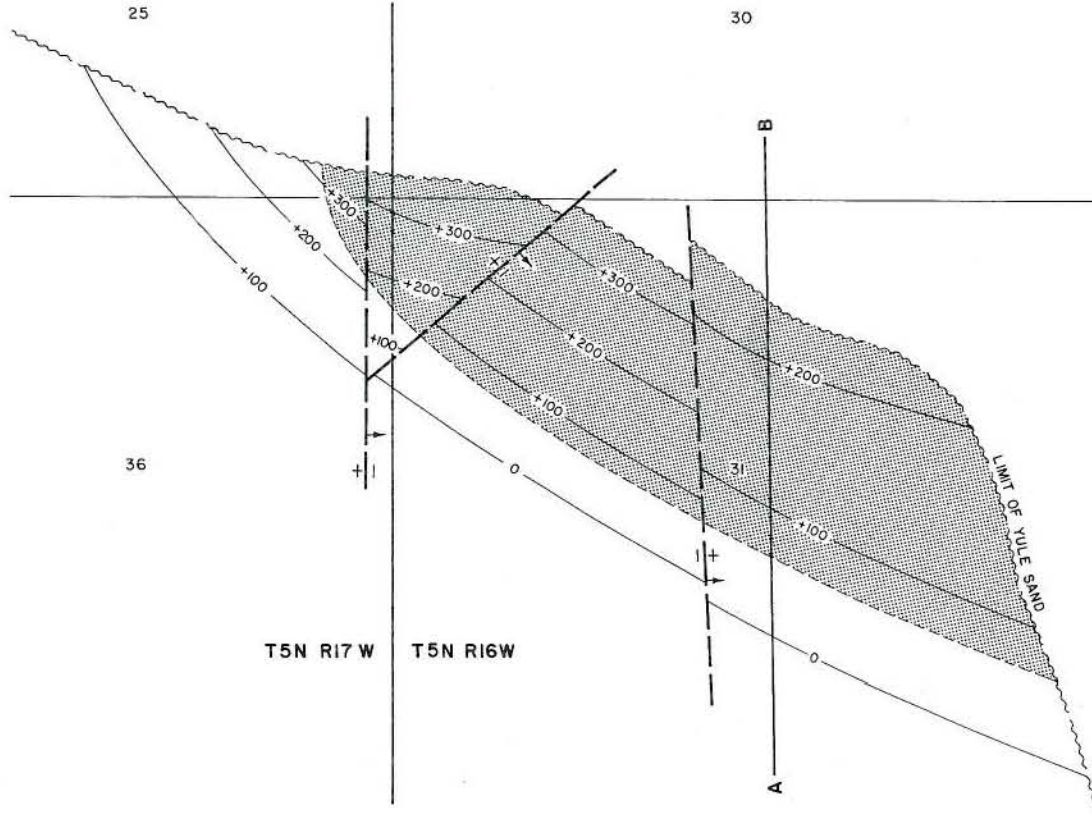
CURRENT CASING PROGRAM: 11 3/4" cem 300; 7" combination string landed through zone, cem. above zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

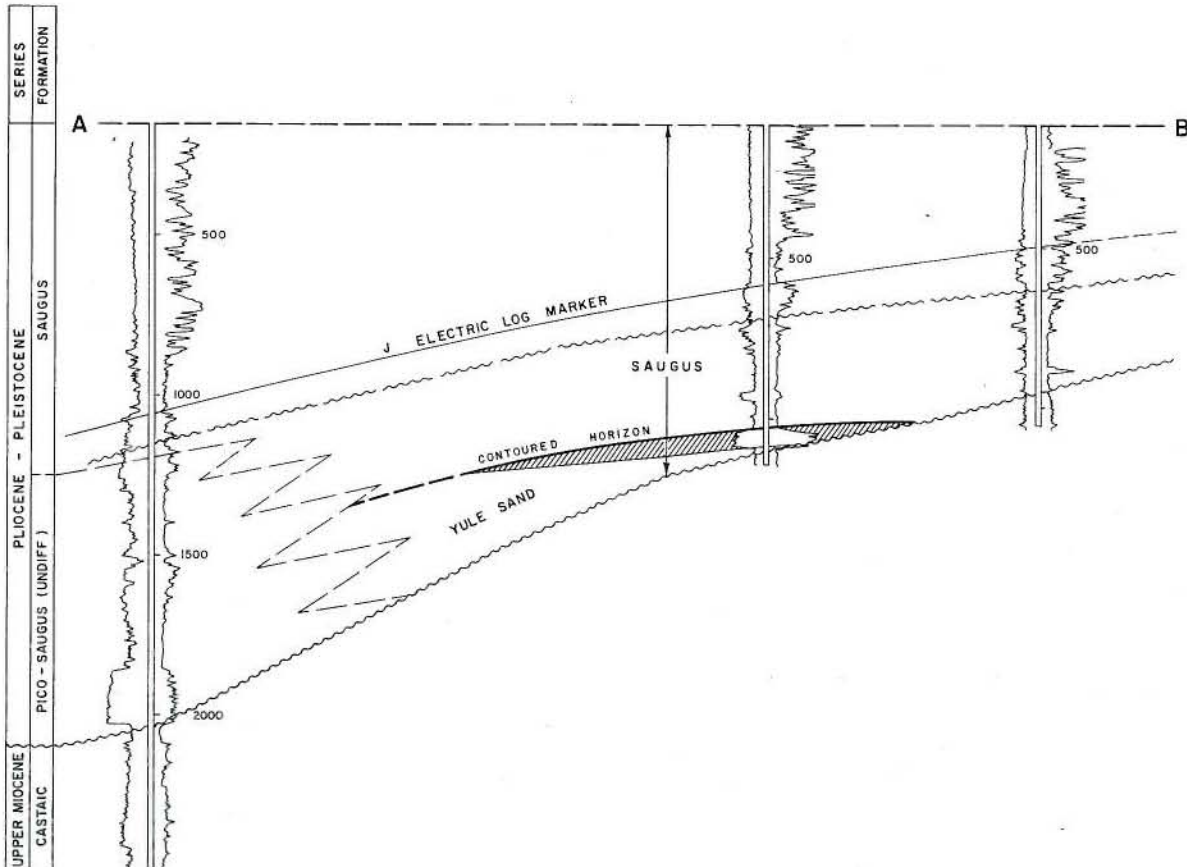
REMARKS: Last production in February 1963. Abandoned in April 1963.

REFERENCES: Loken, K.P., Talbert Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 49, No. 1 (1963).

TAPIA OIL FIELD



CONTOURS ON TOP OF YULE SAND
SCALE: 1" = 1000'



CALIFORNIA DIVISION OF OIL AND GAS

TAPIA OIL FIELD
Los Angeles County

LOCATION: 35 miles northwest of Los Angeles
TYPE OF TRAP: Sand overlap on faulted homocline
ELEVATION: 1,100 - 1,400

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Yule	Crown Central Pet. Corp. "Yule" 2	Intex Oil Co. "Yule" 2	31 5N 16W	SB	120	0	Aug 1957

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Texaco Inc. "Yule" 1	The Texas Co. "Yule" 1	Feb 1954	30 5N 16W	SB	6,010	Mint Canyon	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Yule	1,050	100	Pleistocene - Pliocene	Saugus	17	N.A.	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
20,511	0	39,046	150	9	1,080,914	0	118,015	1958	32	25	150

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 450 - 700

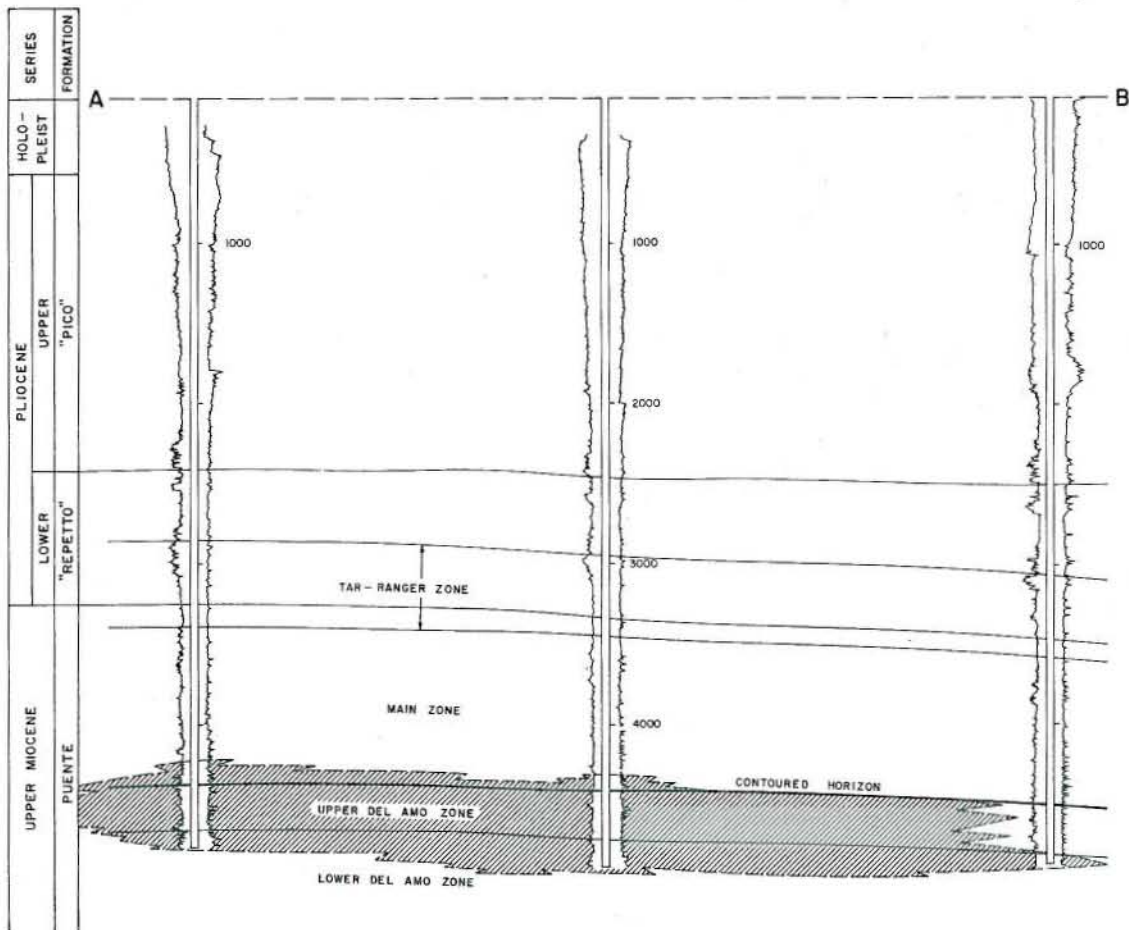
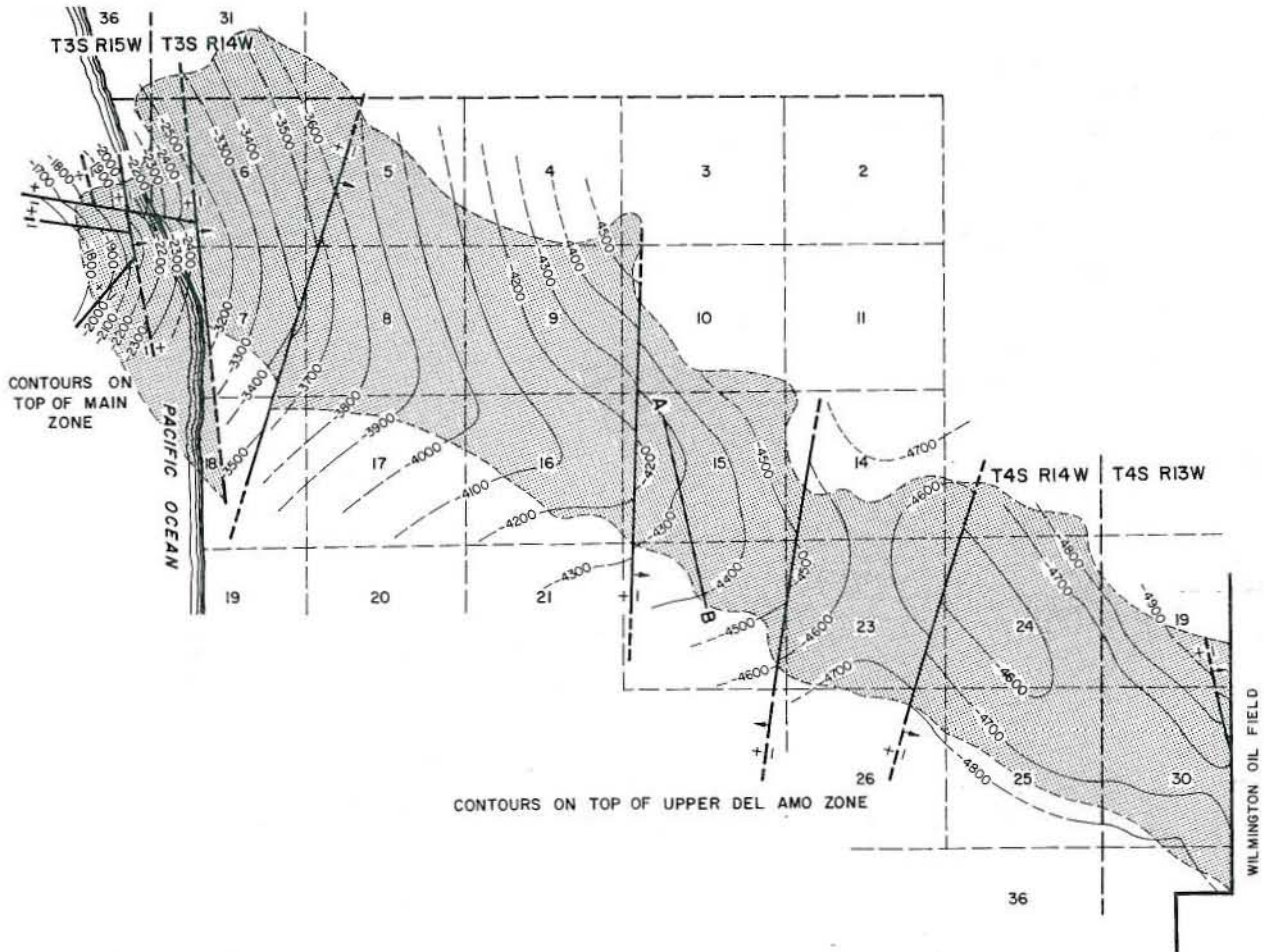
CURRENT CASING PROGRAM: 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Most waste water is injected into a water-disposal well; some is placed in percolation and evaporation sumps.

REMARKS:

REFERENCES: Crowell, J.C., Geology of the Ridge Basin Area, Los Angeles and Ventura Counties, Geology of Southern California; Calif. Div. of Mines Bull. 170, Vol. 2, Map Sheet No. 7 (1954).
 Dosch, M.W., and G.W. Beecroft, Tapia Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 45, No. 1 (1959).
 Kew, W.S., Geology and Oil Resources of a part of Los Angeles and Ventura Counties, Calif.: U.S. Geol. Survey Bull. 753 (1924).
 Miller, H., and R. Turner; Tapia Field: Geol. Society, Occasional Papers No. 1 (1959).
 Winterer, E.L. and D.L. Durham, Geology of Southeastern Ventura Basin, Los Angeles County, California: U.S. Geol. Survey Prof. Paper 334H (1962).

TORRANCE OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

TORRANCE OIL FIELD

Los Angeles County

LOCATION: 8 miles northwest of Long Beach

TYPE OF TRAP: See areas

ELEVATION: 85 (Onshore drillsite); -30 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Tar-Ranger	Great Lakes Properties "Del Amo" 1	Petroleum Development Co. "Redondo" 1	9 4S 14W	SB	300	N.A.	Jun 1922
Main	Same as above	Same as above	9 4S 14W	SB	*	N.A.	Jun 1922

Remarks: * Tar-Ranger and Main production was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
American Pacific International, Inc. "City of Redondo Beach" S-12	McCulloch Oil Corp., Inc. "City of Redondo Beach" S-12	Dec 1972	6 4S 14W	SB	8,313	Puente	late Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
2,602,595	833,642	10,108,557	4,338	364	178,458,261	124,525,361	16,369,214	1924	1,644	1,565	7,273

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: See areas

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

ONSHORE AREA

TORRANCE OIL FIELD

Los Angeles County

LOCATION: See map sheet of Torrance Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 85

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Tar-Ranger	Great Lakes Properties, Inc. "Del Amo" 1	Petroleum Development Co. "Redondo" 1	9 4S14W	SB	300	N.A.	Jun 1922
Main	Great Lakes Properties, Inc. "Del Amo" 1	Petroleum Development Co. "Redondo" 1	9 4S14W	SB	*	N.A.	Jun 1922
Del Amo	Great Lakes Properties, Inc. "Del Amo" 23	Chanslor-Canfield Midway Oil Co. "Del Amo" 23	16 4S14W	SB	107	N.A.	Aug 1936

Remarks: * Tar-Ranger and Main production was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Petroleum Midway Co. "Capital" 3	D & B Oil Co. "D & B" 3	Jan 1938	25 4S 14W	SB	6,070	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Tar-Ranger	2,800	50	early Pliocene	"Repetto"	14 - 24	1,800	III
Main	3,300	120	late Miocene	Puente	14 - 28	1,850	III
Del Amo	4,200	40	late Miocene	Puente	26 - 30	1,800	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
2,198,322	498,446	8,992,791	3,638	342	173,901,749	120,899,453	16,369,214	1924	1,601	1,523	6,573

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1950	68,828,642	43

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,550 - 1,770

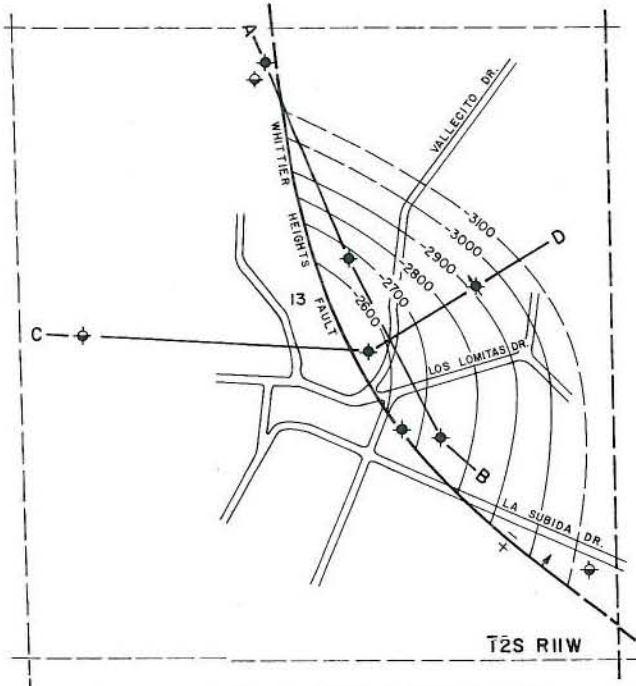
CURRENT CASING PROGRAM: 13 3/8" or 10 3/4" cem. 300; 8 5/8" or 7" cem. above zone and across base of fresh-water sands; 6 5/8" or 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Produced water is blended with fresh water for injection into Tar-Ranger and Main zones.

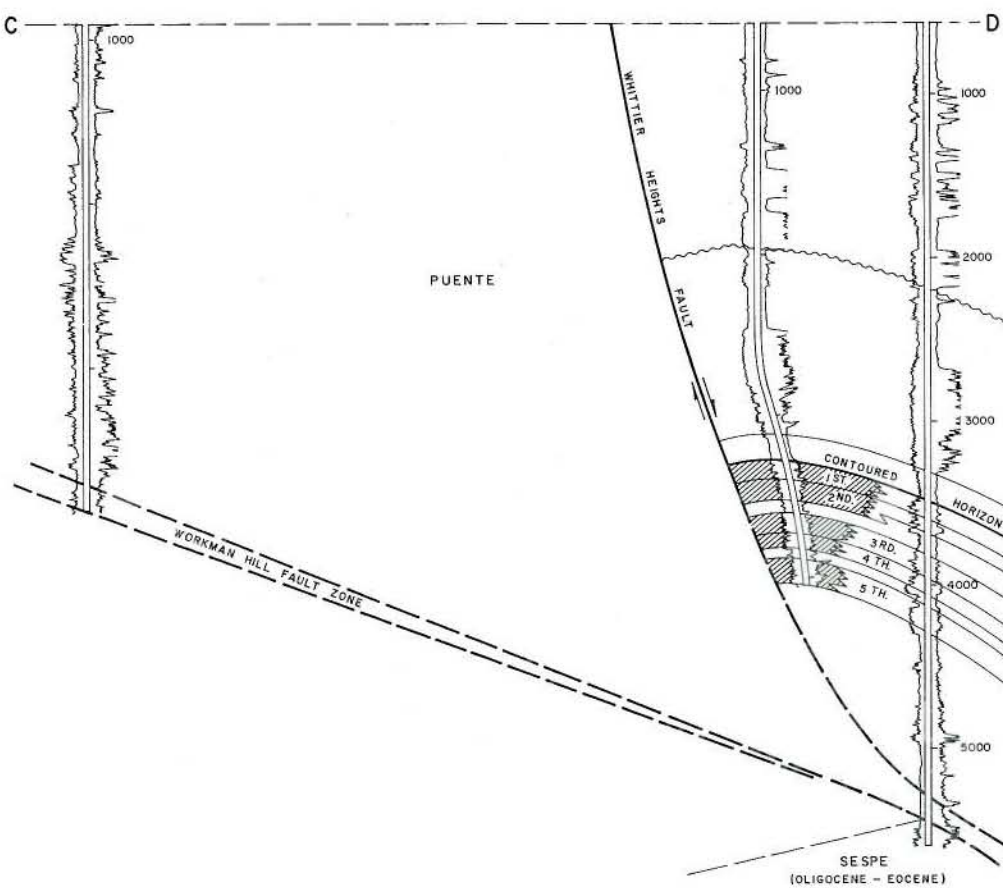
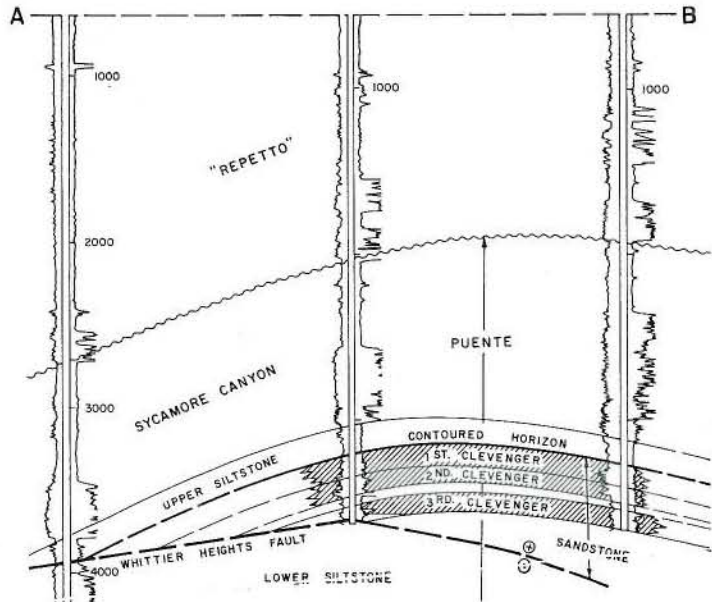
REMARKS: Several cyclic-steam projects were attempted in 1964 and 1965 when a total of 56,890 bbls. of water equivalent was injected into 6 wells.

REFERENCES: Crowder, R.E., Torrance Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 42, No. 2 (1956).
Crowder, R.E., Del Amo Zone of Torrance Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 51, No. 1 (1965).

TURNBULL OIL FIELD (Abandoned)



CONTOURS ON TOP OF FIRST CLEVINGER SAND



SERIES	FORMATION MEMBER	FORMATION MEMBER	FORMATION MEMBER
LOWER PLIOCENE	"REPETTO"		
UPPER MIOCENE	SYCAMORE CANYON	UPPER SILTSTONE	
	PUENTE	SANDSTONE	
		CLEVINGER	
			LOWER SILTSTONE

CALIFORNIA DIVISION OF OIL AND GAS

TURNBULL OIL FIELD (Abandoned)

Los Angeles County

LOCATION: 3 miles east of Whittier

TYPE OF TRAP: Faulted nose

ELEVATION: 550

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
1st Clevenger	Pacific Lighting Service Co. "Turnbull Community" 1	Continental Oil Co. "Turnbull Community" 1	13 2S 11W	SB	305	N.A.	Nov 1941
2nd Clevenger	Same as above	Same as above	13 2S 11W	SB	*	N.A.	Nov 1941
3rd Clevenger	Same as above	Same as above	13 2S 11W	SB	*	N.A.	Nov 1941
4th Clevenger	Pacific Lighting Service Co. "Turnbull Community" 4	Continental Oil Co. "Turnbull Community" 4	13 2S 11W	SB	240	N.A.	Dec 1942
5th Clevenger	Same as above	Same as above	13 2S 11W	SB	**	N.A.	Dec 1942

Remarks: * Production from 1st, 2nd and 3rd Clevenger zones commingled.
 ** Production from 4th and 5th Clevenger zones commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	Strata	
						Strata	Age
Pacific Lighting Service Co. "Turnbull Community" 3	Continental Oil Co. "Turnbull Community" 3	Apr 1942	13 2S 11W	SB	5,608	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water (gr gal)	Class BOPE required
			Age	Formation			
1st Clevenger	3,370	80	late Miocene	Puente	24	130	II
2nd Clevenger	3,550	120	late Miocene	Puente	24	150	III
3rd Clevenger	3,750	70	late Miocene	Puente	24	150	III
4th Clevenger	3,800	80	late Miocene	Puente	24	N.A.	III
5th Clevenger	3,950	60	late Miocene	Puente	24	N.A.	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		1973 Proved acreage
Oil (bbl)	Net gas (Mcf)	Water (tbb)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	765,770	582,160	122,379	1943	9	5	75

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 500

CURRENT CASING PROGRAM: 10 3/4" cem. 500; 7" cem. above zone; 5" liner landed through zone.

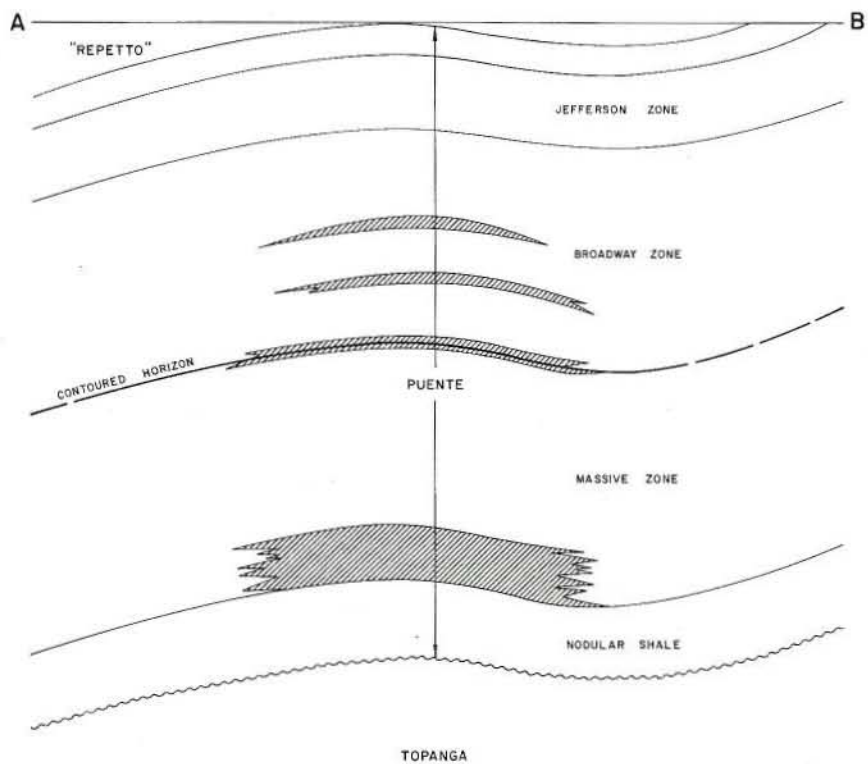
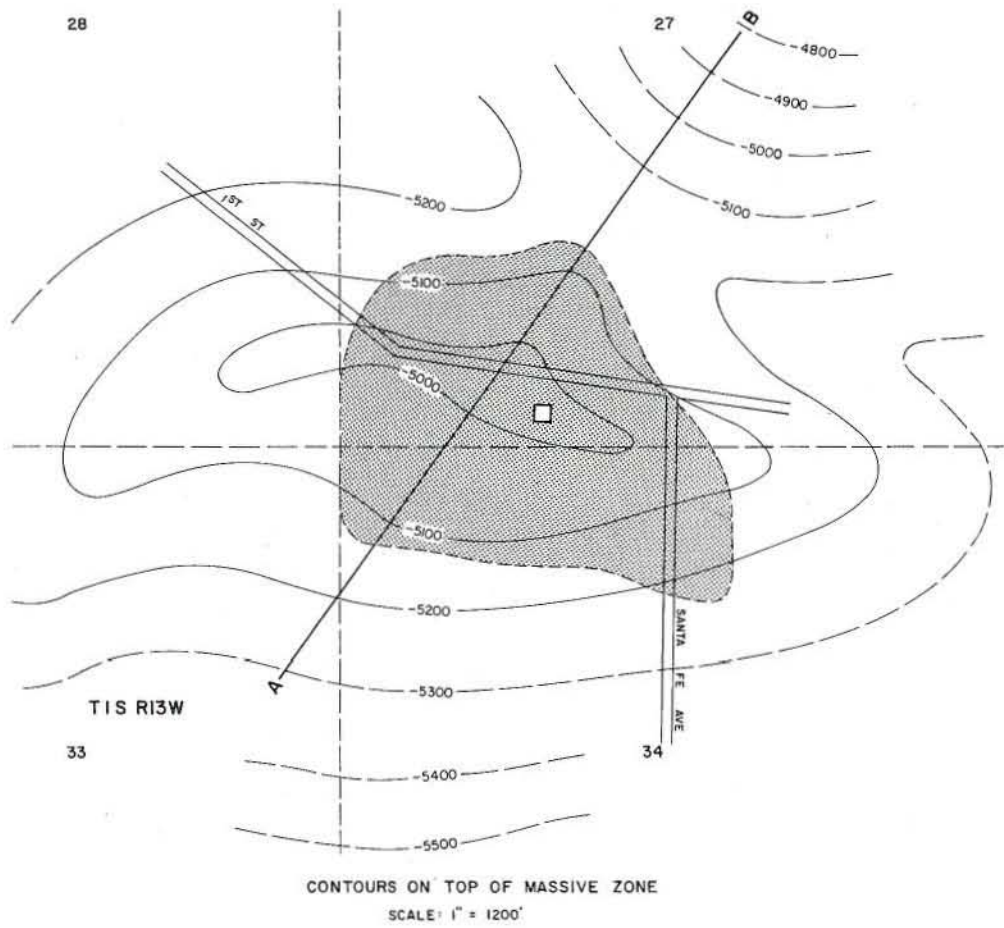
METHOD OF WASTE DISPOSAL:

REMARKS: Last production was in May 1965; field abandoned in 1965.

REFERENCES: Mofferd, M.G., Turnbull Oil Field; Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 2 (1962).

UNION STATION OIL FIELD

SERIES	FORMATION MEMBER & ZONE	TYPICAL ELECTRIC LOG
LOWER PIOCENE	"REPETTO"	
	JEFFERSON	
	BROADWAY	
MIOCENE UPPER	PUENTE	
	MASSIVE	
	NODULAR SHALE	
	TOPANGA	
MIDDLE	TOPANGA	



CALIFORNIA DIVISION OF OIL AND GAS

UNION STATION OIL FIELD

Los Angeles County

LOCATION: 1 mile southeast of downtown Los Angeles

TYPE OF TRAP: Anticline

ELEVATION: 260

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Broadway	Standard Oil Co. of Calif. "Garey" 1-C	Standard Oil Co. of Calif. "Challenge Creamery" 1	27 1S 13W	SB	268	830	Oct 1967
Massive	Same as above	Same as above	27 1S 13W	SB	105	71	Oct 1967

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "Garey" 4-A	Same	Sep 1968	27 1S 13W	SB	9,130	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Broadway	2,900	400	late Miocene	Puente	25 - 44	2,300	IV
Massive	5,100	850	late Miocene	Puente	42	2,400	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
102,907	262,602	62,889	90	6	919,432	2,963,591	263,170	1969	10	8	90

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
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SPACING ACT: Applies

BASE OF FRESH WATER: 600

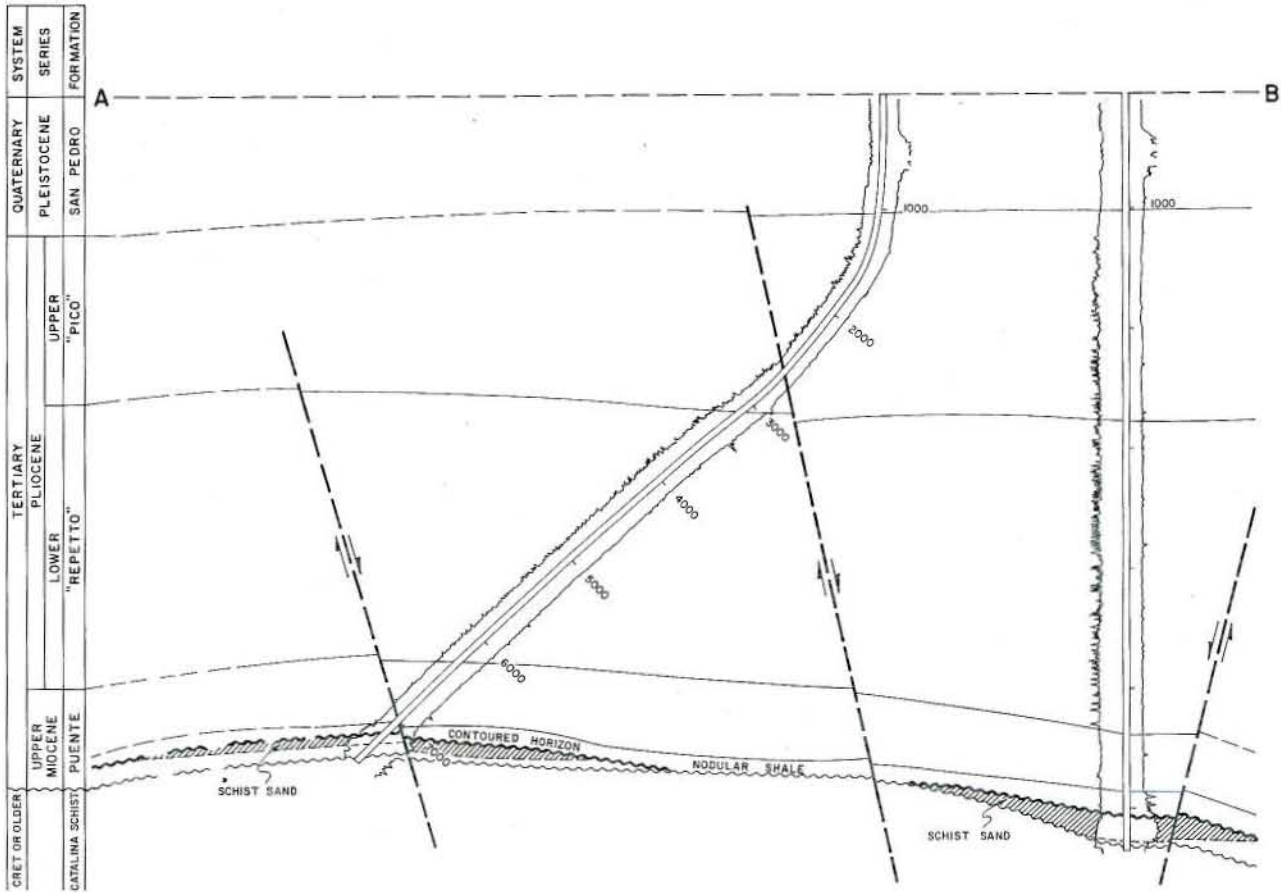
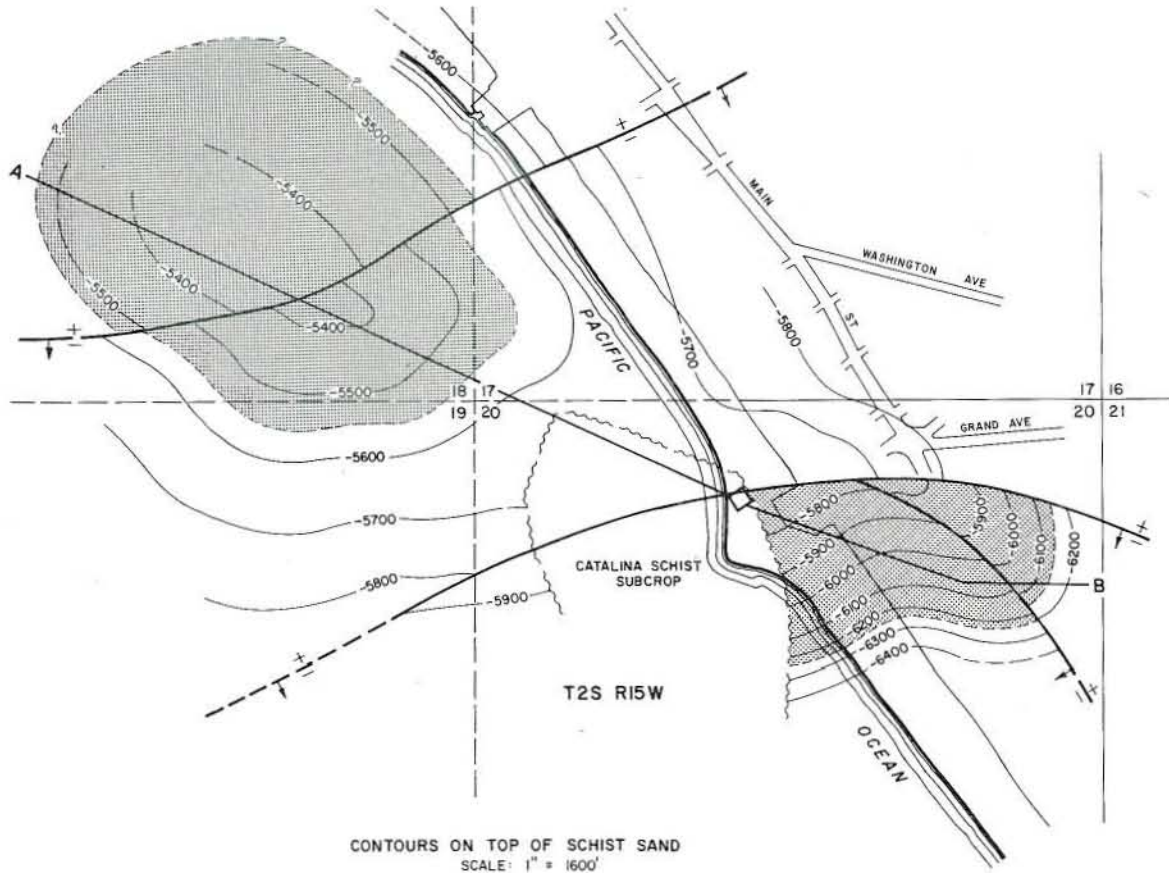
CURRENT CASING PROGRAM: 10 3/4" cem. 1,000; 7" cem. through zone.

METHOD OF WASTE DISPOSAL: Sewer system.

REMARKS:

REFERENCES:

VENICE BEACH OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

VENICE BEACH OIL FIELD

Los Angeles County

LOCATION: 14 miles southwest of downtown Los Angeles

TYPE OF TRAP: See areas

ELEVATION: 15

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Schist sand	Mobil Oil Corp. "Venice Beach Unit" 1	Mobil Oil Corp. "L. A. City 135" 1	20 2S 15W	SB	573	229	Mar 1966

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Mobil Oil Corp. "L. A. City 135" 2	Socony Mobil Oil Co., Inc. "L. A. City 135" 2	Mar 1966	20 2S 15W	SB	9,082	Catalina Schist	Cret or older

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
180,974	81,514	2,668,018	125	6	2,436,516	1,461,933	544,354	1968	13	10	125

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: See areas

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

VENICE BEACH OIL FIELD

ONSHORE AREA

Los Angeles County

LOCATION: See map sheet of Venice Beach Oil Field

TYPE OF TRAP: Faulted anticline over basement high, and lenticular sand

ELEVATION: 15

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Schist sand	Mobil Oil Corp. "Venice Beach Unit" 1	Mobil Oil Corp. "L. A. City 135" 1	20 2S 15W	SB	573	229	Mar 1966

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Mobil Oil Corp. "Venice Beach Unit" 3	Same	Apr 1967	20 2S 15W	SB	7,250	Catalina Schist	Cret or older

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Schist sand	6,000	100	late Miocene	Puente	22	550	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
35,581	22,646	565,119	45	2	490,682	332,544	61,379	1970	6	4	45

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 600 - 700

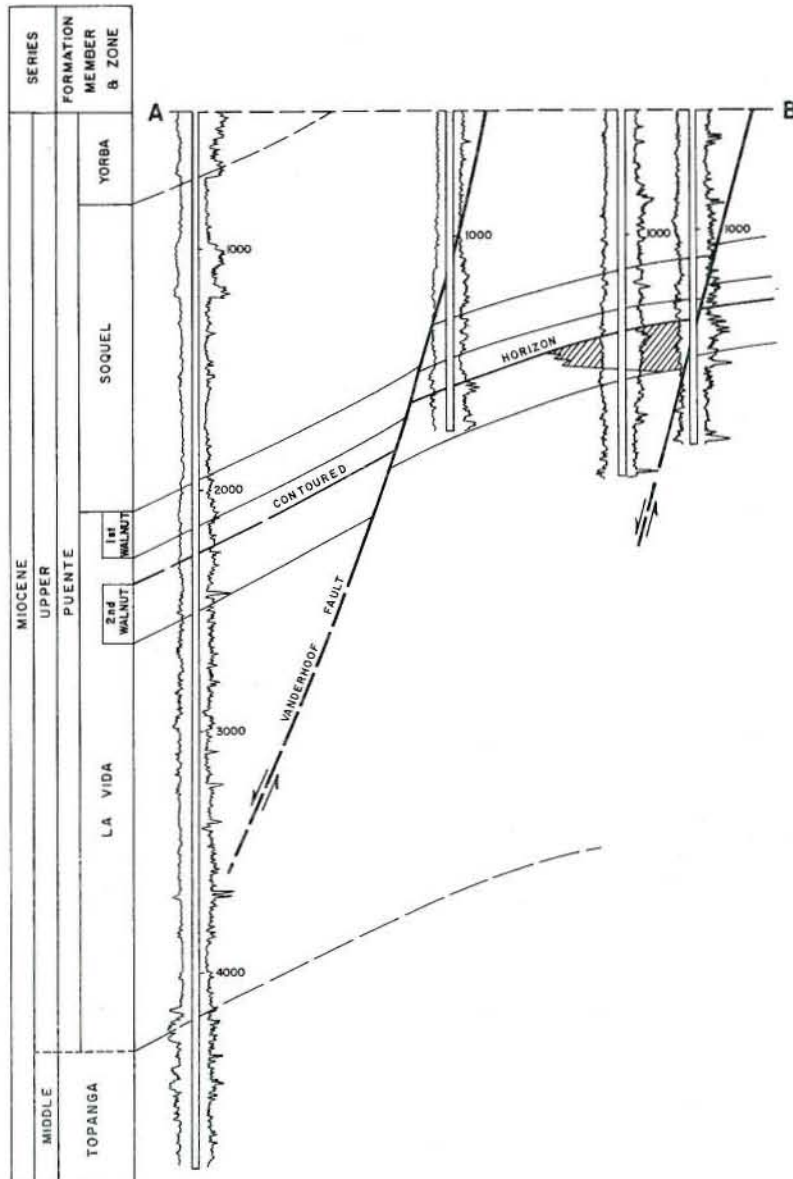
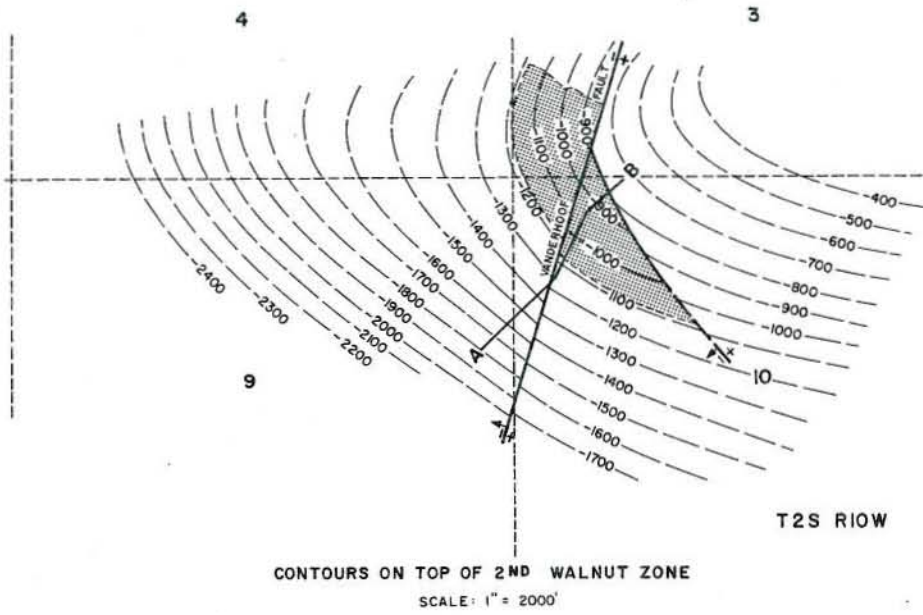
CURRENT CASING PROGRAM: 13 3/8" cem. 300; 10 3/4" cem. 1,900 and across base of fresh-water sands; 7" cem. through zone.

METHOD OF WASTE DISPOSAL: Disposal wells.

REMARKS:

REFERENCES:

WALNUT OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

WALNUT OIL FIELD
Los Angeles County

LOCATION: 7 miles northeast of Whittier

TYPE OF TRAP: Faulted nose

ELEVATION: 400 - 600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
1st Walnut	Donald W. Bunnell "Vanderhoof" 2	Hugh Allen Bardeen "Vanderhoof" 2	5 2S 10W	SB	117	N.A.	Aug 1951
2nd Walnut	Donald W. Bunnell "Lautenbach" 1	Hugh Allen Bardeen "Lautenbach" 1	10 2S 10W	SB	84	N.A.	Apr 1948

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
B. P. Exploration U.S.A. Inc. "Garnier" 1-B	St. Helens Petroleum Co., Ltd. "Garnier" 1-B	Mar 1922	3 2S 10W	SB	5,282	Topanga	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
1st Walnut	1,200	130	late Miocene	Puente	16	N.A.	II
2nd Walnut	1,400	180	late Miocene	Puente	16	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,045	0	50	20	1	67,702	0	6,053	1949	17	4	40

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 400

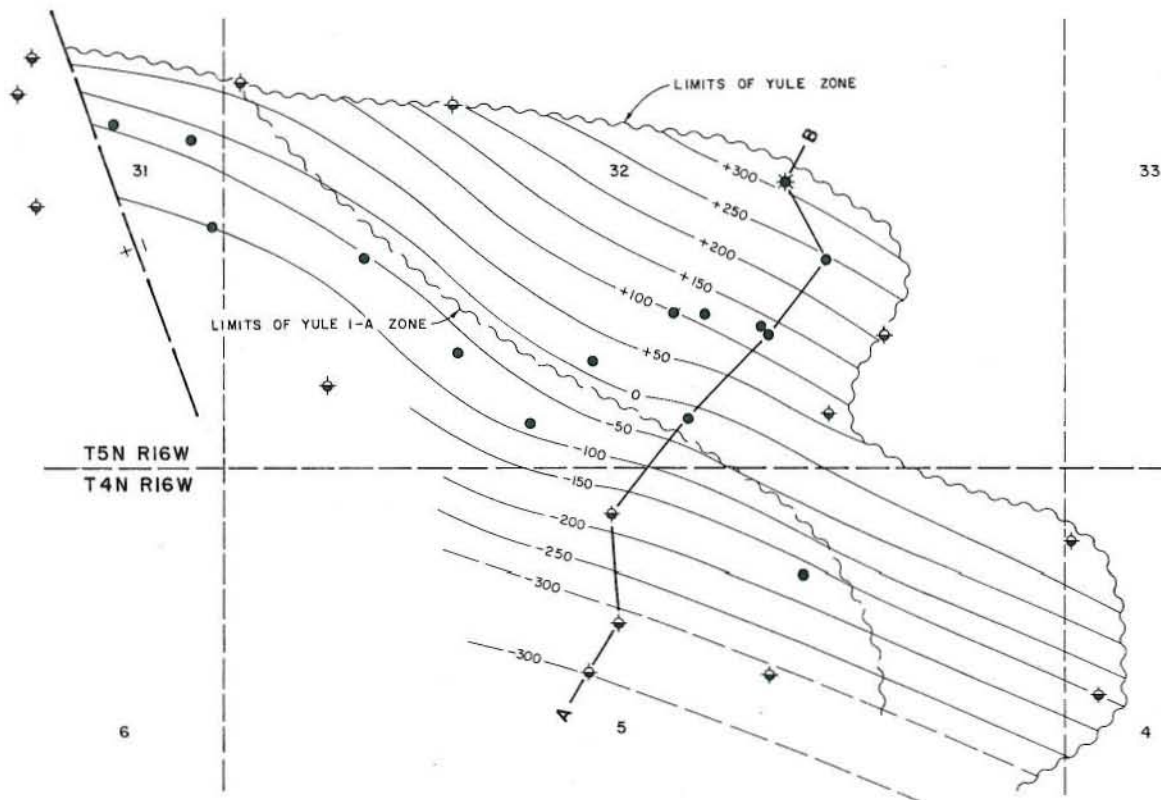
CURRENT CASING PROGRAM: 13 3/8" cem. 200; 8 5/8" cem. above zone and across base of fresh water; 6 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water disposed of through sewer system; also used for irrigation.

REMARKS:

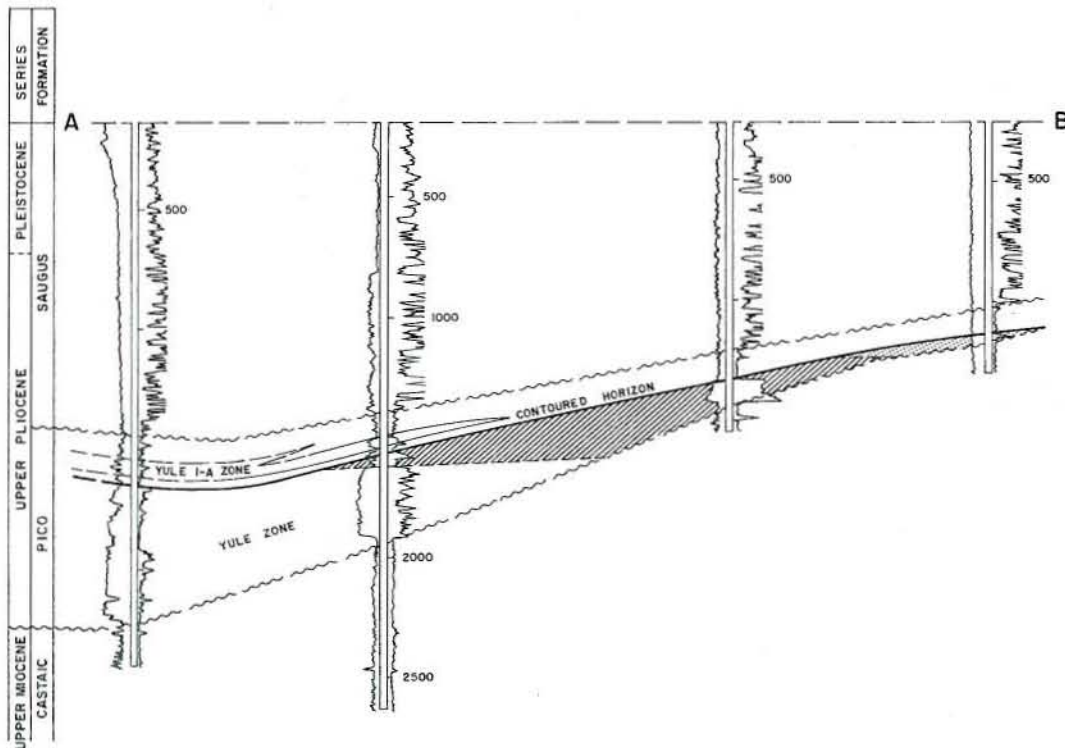
REFERENCES: Ingram, W.L., Walnut Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 2 (1960).

WAYSIDE CANYON OIL FIELD



CONTOURS ON TOP OF YULE ZONE

SCALE: 1" = 1200'



CALIFORNIA DIVISION OF OIL AND GAS

WAYSIDE CANYON OIL FIELD

Los Angeles County

LOCATION: 35 miles northwest of Los Angeles

TYPE OF TRAP: Sand pinchout and overlap on homocline

ELEVATION: 1,400 - 1,700

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Yule 1-A	Texaco Inc. "Wayside Canyon Unit" 22	Texaco Inc. "Honor Rancho 'A' (NCT-2)" 22	32 5N 16W	SB	33	-	Jan 1963
Yule	Same as above	Same as above	32 5N 16W	SB	26	-	Jun 1962

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Texaco Inc. "Honor Rancho 'A' (NCT-2)" 12	Same	Dec 1955	5 4N 16W	SB	2,658	Castaic	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Yule 1-A	1,500	25	Pliocene	Pico	22	760	II
Yule	1,600	100	Pliocene	Pico	22	760	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
49,539	0	138,431	100	8	2,155,539	0	559,816	1963	26	16	120

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,400

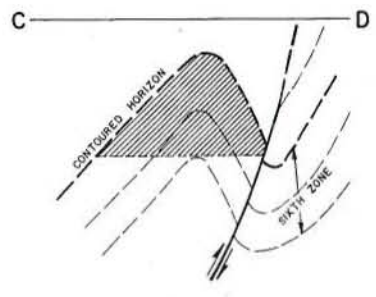
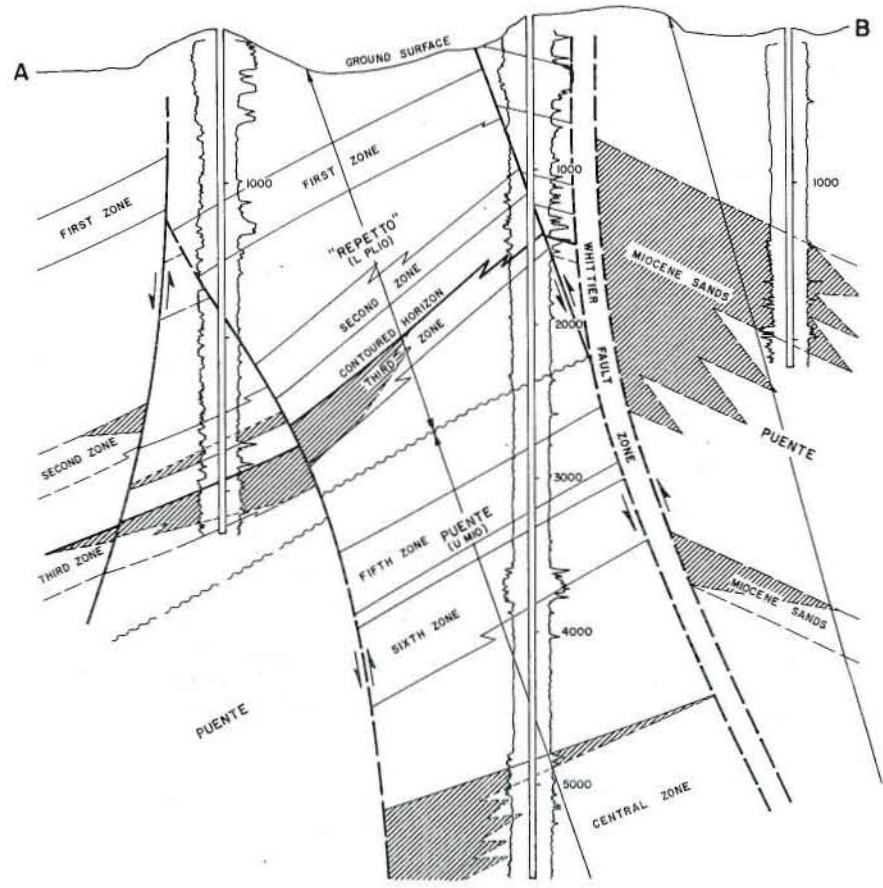
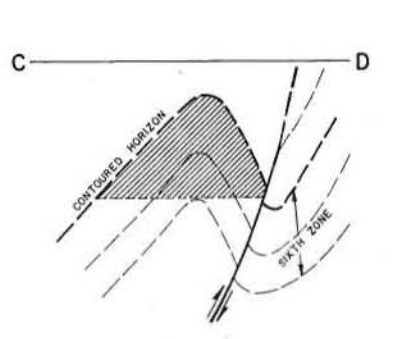
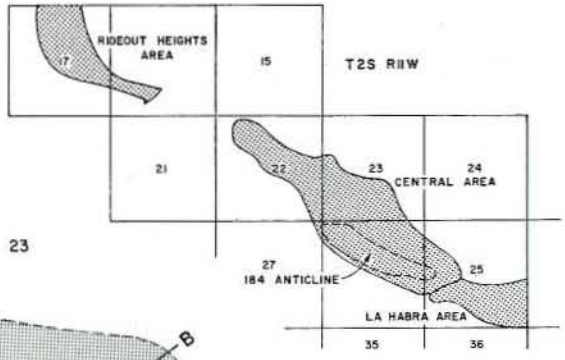
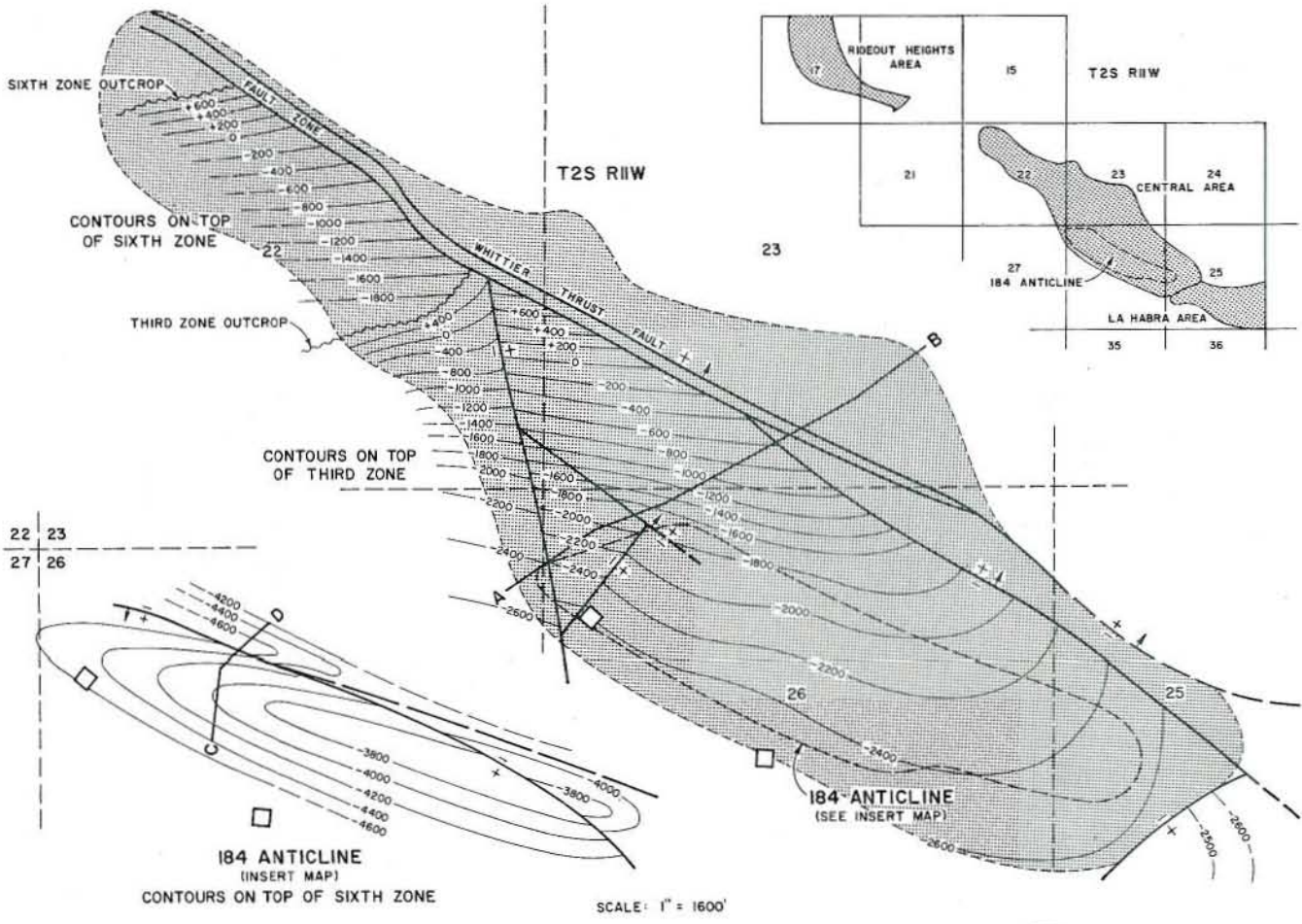
CURRENT CASING PROGRAM: 8 5/8" cem. above zone and across base of fresh-water sands; 5 1/2" or 4 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Water is injected into disposal wells.

REMARKS: A pilot gas-injection pressure-maintenance project was conducted in 1966; 31,945 Mcf. was injected into one well in the gas cap.

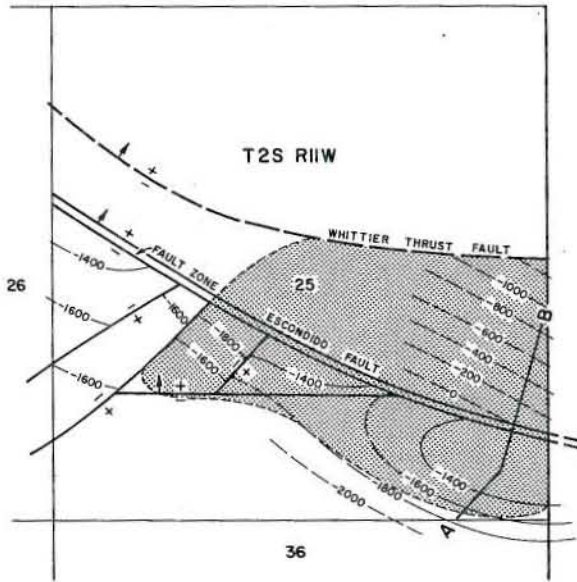
REFERENCES: Mefford, M.G., and R.A. Johnson, Wayside Canyon Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 53, No. 1 (1967).

WHITTIER OIL FIELD Central Area

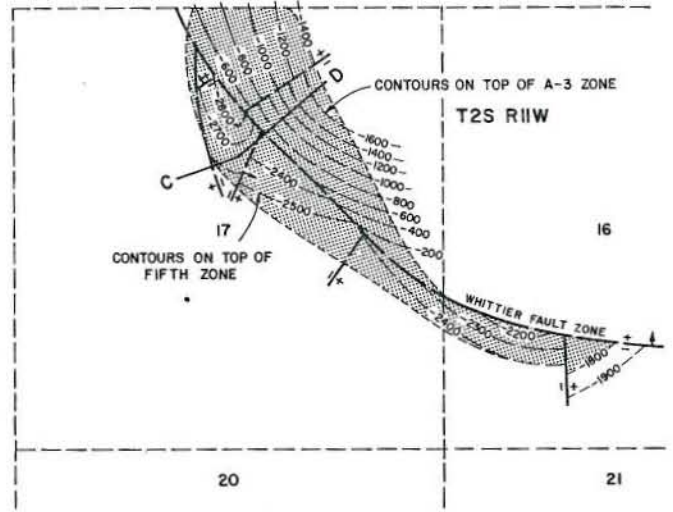


WHITTIER OIL FIELD

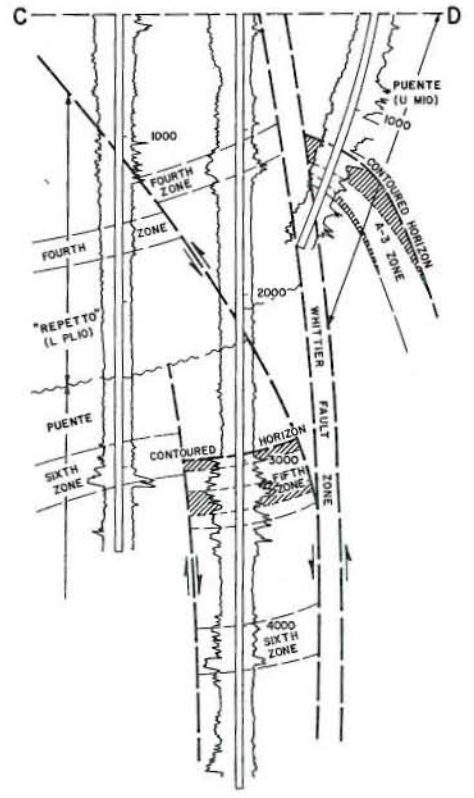
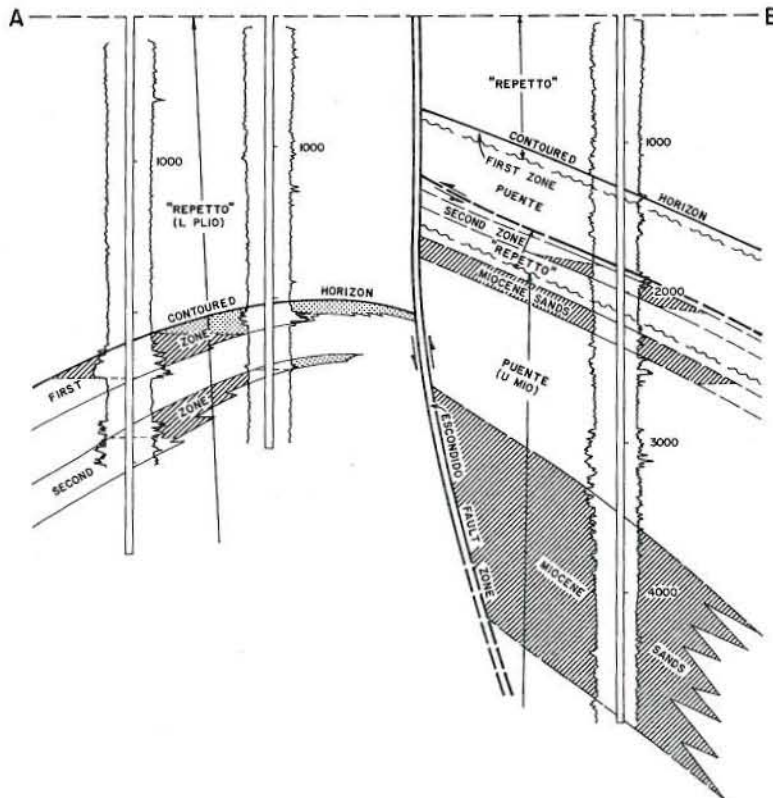
La Habra and Rideout Heights Areas



LA HABRA AREA
CONTOURS ON TOP OF FIRST ZONE



RIDEOUT HEIGHTS AREA
CONTOURS ON TOP OF A-3 ZONE
AND ON TOP OF FIFTH ZONE



CALIFORNIA DIVISION OF OIL AND GAS

WHITTIER OIL FIELD

Los Angeles County

LOCATION: 1 mile east of downtown Whittier

TYPE OF TRAP: See areas

ELEVATION: 300 - 975

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
3rd	Standard Oil Co. of Calif. "Central Fee" 1A	Central Oil Co. No. 1-A	23 2S 11W	SB	10	N.A.	Jul 1896

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "Murphy-Whittier" 101	Same	Feb 1961	26 2S 11W	SB	10,950	Puente	Late Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
802,586	1,137,436	7,593,155	880	195	41,805,145	40,061,821	1,102,457	1917	709	623	1,080

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS:

REFERENCES: Norris, B.B., Report on the Oil Fields on or Adjacent to the Whittier Fault: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 15, No. 4 (1930).

CALIFORNIA DIVISION OF OIL AND GAS

WHITTIER OIL FIELD

CENTRAL AREA

Los Angeles County

LOCATION: See map sheet of Whittier Oil Field

TYPE OF TRAP: Faulted homocline and anticline

ELEVATION: 400 - 975

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & W	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
1st	Standard Oil Co. of Calif. "Murphy-Whittier" 40	Same as present	26 2S 11W	SB	202	N.A.	Aug 1916
2nd	Standard Oil Co. of Calif. "Central Fee" 5B	Central Oil Co. No. 5-B	23 2S 11W	SB	100	N.A.	Apr 1904
3rd	Standard Oil Co. of Calif. "Central Fee" 1A	Central Oil Co. No. 1-A	23 2S 11W	SB	10	N.A.	Jul 1896
4th	Unknown	Same as present	N.A.	SB	N.A.	N.A.	N.A.
5th	Standard Oil Co. of Calif. "Home-Newlin" 3	Home Oil Co. No. 3	22 2S 11W	SB	60	N.A.	1898
6th	Unknown	Same as present	N.A.	SB	N.A.	N.A.	N.A.
6th (184 Anticline)	Standard Oil Co. of Calif. "Murphy-Whittier" 247	Same as present	26 2S 11W	SB	272	170	May 1964
Central	Standard Oil Co. of Calif. "Central Fee" 77	Same as present	23 2S 11W	SB	214	122	Sep 1953

Remarks: Oil in commercial quantities was also found in Miocene sands north of the Whittier thrust fault, but the discovery wells are not known because of lack of records.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & W	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "Murphy-Whittier" 101	Same	Feb 1961	26 2S 11W	SB	10,950	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
1st	900	75	early Pliocene	"Repetto"	18	300	II
2nd	1,300	100	early Pliocene	"Repetto"	18	335	II
3rd	1,600	200	early Pliocene	"Repetto"	14 - 19	220	III
4th	2,100	20	early Pliocene	"Repetto"	12 - 25	N.A.	III
5th	1,200	150	late Miocene	Puente	12 - 25	N.A.	III
6th	2,100	300	late Miocene	Puente	18	N.A.	III
6th (184 Anticline)	4,050	100	late Miocene	Puente	36	1,030	III
Central	2,800	200	late Miocene	Puente	32 - 35	N.A.	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
725,835	1,030,716	7,400,720	740	185	39,201,826	37,961,761	2,112,715	1966	618	571	875

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1961	63,528,330	24

SPACING ACT: Does not apply

BASE OF FRESH WATER: 0 - 1,250

CURRENT CASING PROGRAM: 11 3/4" cem. 100; 7" cem. above zone and across the base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is injected into disposal wells.

REMARKS:

REFERENCES: Gaede, V.F., Central Area of Whittier Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 50, No. 1 (1964).

CALIFORNIA DIVISION OF OIL AND GAS

WHITTIER OIL FIELD

LA HABRA AREA

Los Angeles County

LOCATION: See map sheet of Whittier Oil Field

TYPE OF TRAP: Faulted anticline and homocline

ELEVATION: 475 - 850

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
1st	Exxon Corp. "La Habra" 3	Fullerton Oil Co. No. 3	25 2S 11W	SB	N.A.	N.A.	Prior to 1918
2nd	Union Oil Co. of Calif. "Mineral Springs" 1 Same as above	Same as present	25 2S 11W	SB	10	N.A.	Oct 1912
3rd							
Miocene sands	Union Oil Co. of Calif. "Union Fullerton" 1	Union Oil Co. of Calif. "Union-Fullerton Fee" 1	25 2S 11W	SB	3	0	Jul 1947

Remarks: * Initial production from 2nd and 3rd zones was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Pacific Lighting Gas Supply Co. "La Habra Fee" 2	Union Oil Co. of Calif. "Monterey Fee" 2	Jun 1956	25 2S 11W	SB	7,289	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
1st	900	200	early Pliocene	"Repetto"	15 - 18	300	II
2nd	1,150	150	early Pliocene	"Repetto"	20	335	II
3rd	1,400	175	late Miocene	Puente	20	220	III
Miocene sands	3,600	900	late Miocene	Puente	25	N.A.	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
58,155	103,420	188,248	95	2	532,787	2,010,556	14,841	1943	27	19	115

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Cyclic steam	1964	41,617	5

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 11 3/4" cem. 100; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: 1st, 2nd, and 3rd zones are used for gas storage. Only one well produced from the Miocene sands.

REFERENCES: Gaede, V.F., La Habra Area of Whittier Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 51, No. 1 (1965).

CALIFORNIA DIVISION OF OIL AND GAS

WHITTIER OIL FIELD

RIDEOUT HEIGHTS AREA

Los Angeles County

LOCATION: See map sheet of Whittier Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 300 - 600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
5th A-3	E & E Production "Whitley" 1 Chem-Rex Corp. "Seward-Rideout" 2	C. W. Whitley No. 1 Petroleum Midway Co., Ltd. "Seward-Rideout" 2	17 2S 11W	SB	204	N.A.	Oct 1919
			17 2S 11W	SB	68	N.A.	Jul 1925

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Forster Oil Co. "Aeco-Pellissier" 1	AECO Corp. "Rideout Heights Community" 1	Nov 1955	17 2S 11W	SB	8,574	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
5th A-3	2,300	100	late Miocene	Puente	16 - 20	N.A.	III
	800	100	late Miocene	Puente	13 - 16	N.A.	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
18,596	3,300	4,187	45	8	2,070,532	89,504	46,757	1935	64	33	90

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

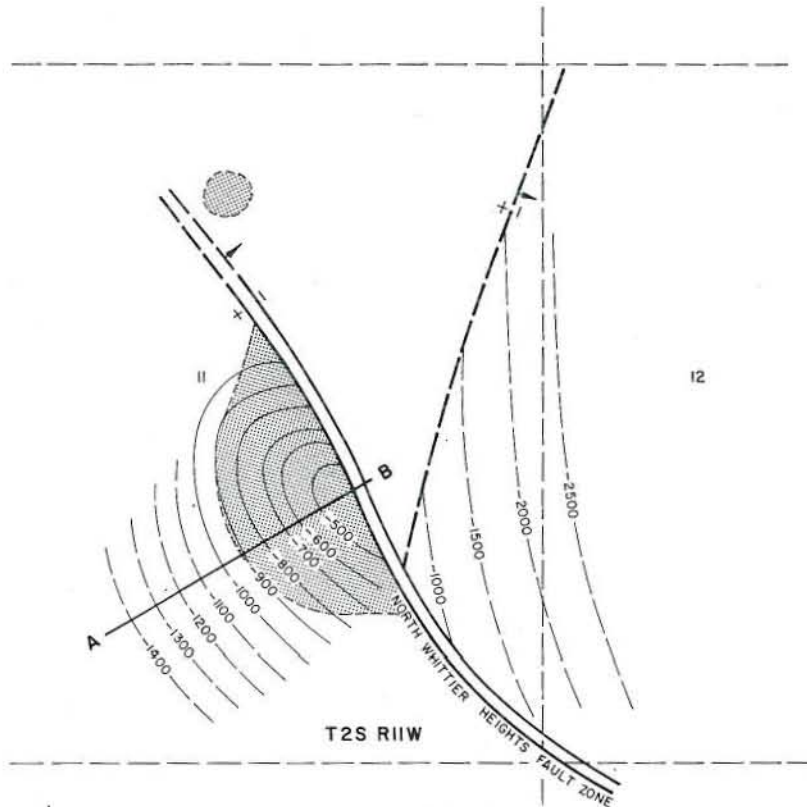
CURRENT CASING PROGRAM 11 3/4" cem. 100; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is injected into disposal wells.

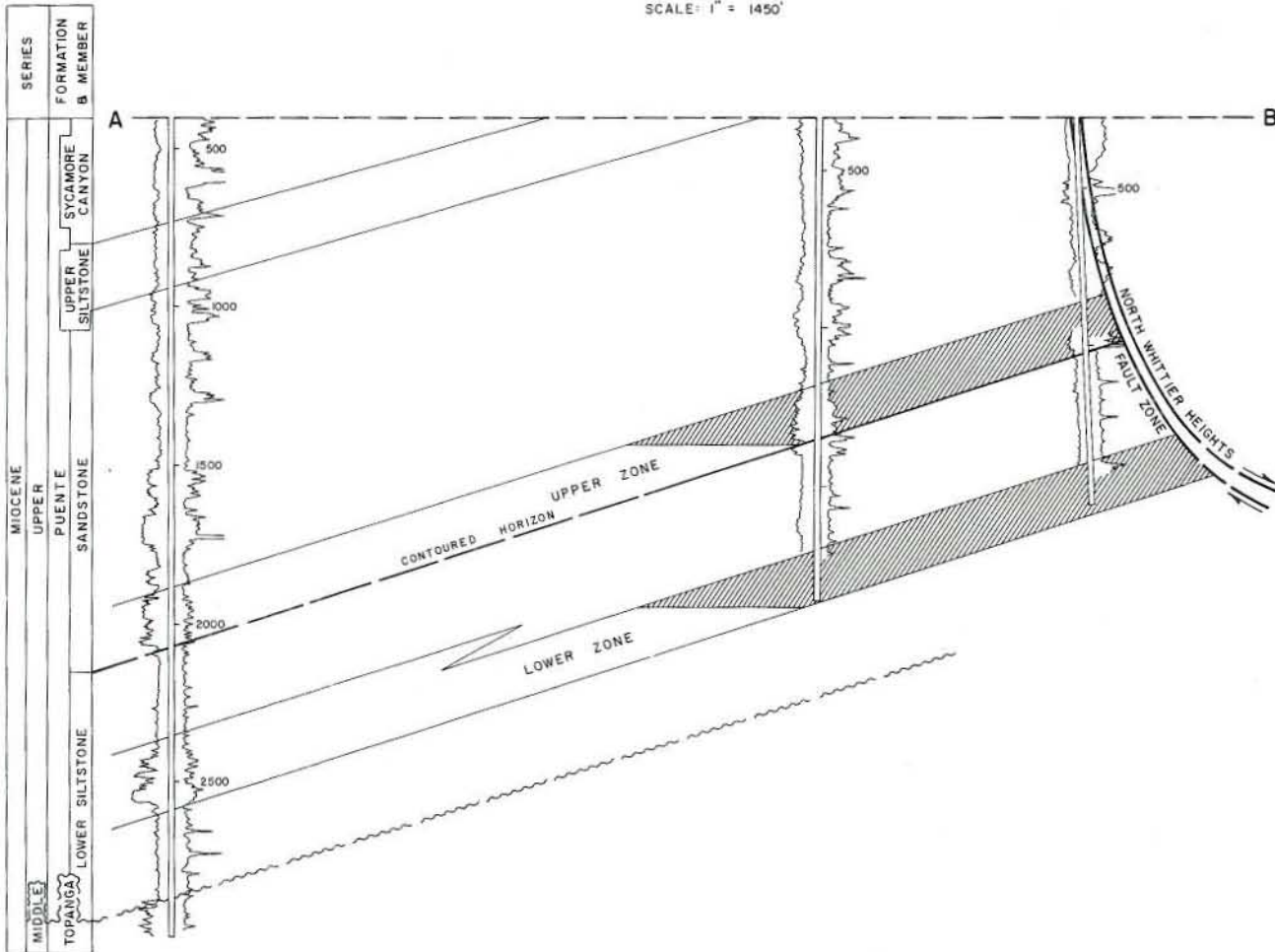
REMARKS:

REFERENCES: Ingram, W.L., Rideout Heights Area of Whittier Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 2 (1962).

NORTH WHITTIER HEIGHTS OIL FIELD (Abandoned)



CONTOURS ON TOP OF LOWER SILTSTONE
SCALE: 1" = 1450'



CALIFORNIA DIVISION OF OIL AND GAS

WHITTIER HEIGHTS, NORTH, OIL FIELD (Abandoned)

Los Angeles County

LOCATION: 3 miles northeast of Whittier

TYPE OF TRAP: Faulted nose

ELEVATION: 500 - 1,200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Upper	Olson & Gregg, Inc. "Pellisster" 1	Capitol Co. No. 2-1	11 2S 11W	SB	40	0	Jul 1944
Lower	Olson & Gregg, Inc. "Pellisster" 2	Capitol Co. No. 2-2	11 2S 11W	SB	15	0	Sep 1944

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Crown Central Petroleum Corp. "Baldwin" 1	Sunset Oil Co. "Baldwin" 1	Jul 1941	11 2S 11W	SB	4,680	Topanga	middle Mio.

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Upper	1,100	150	late Miocene	Puente	19	Fresh water	I
Lower	1,600	140	late Miocene	Puente	16	N.A.	I

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (tbb)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	84,812	83,525	8,327	1945	15	7	40

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 200 - 500

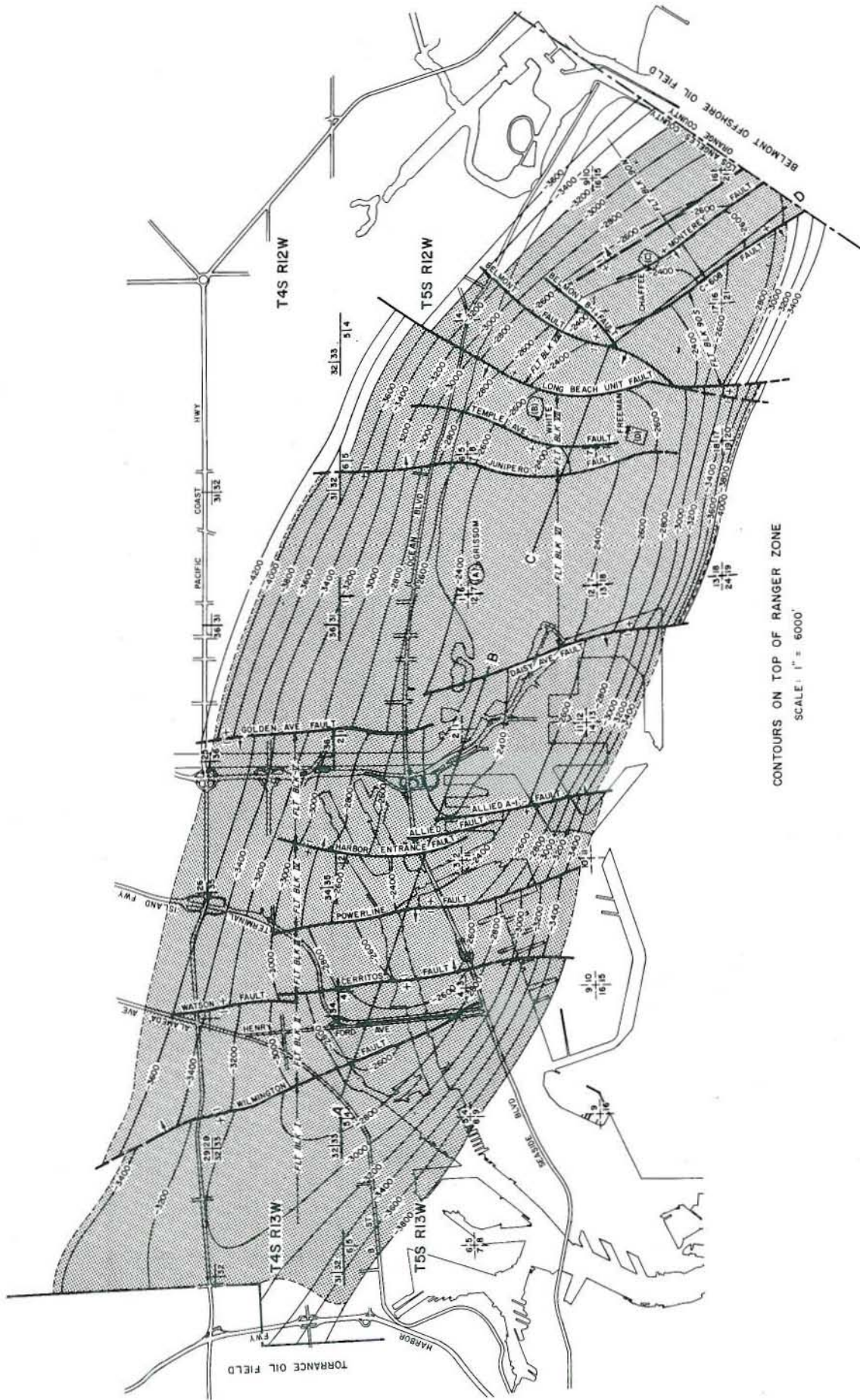
CURRENT CASING PROGRAM: 11 3/4" cem. 500; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

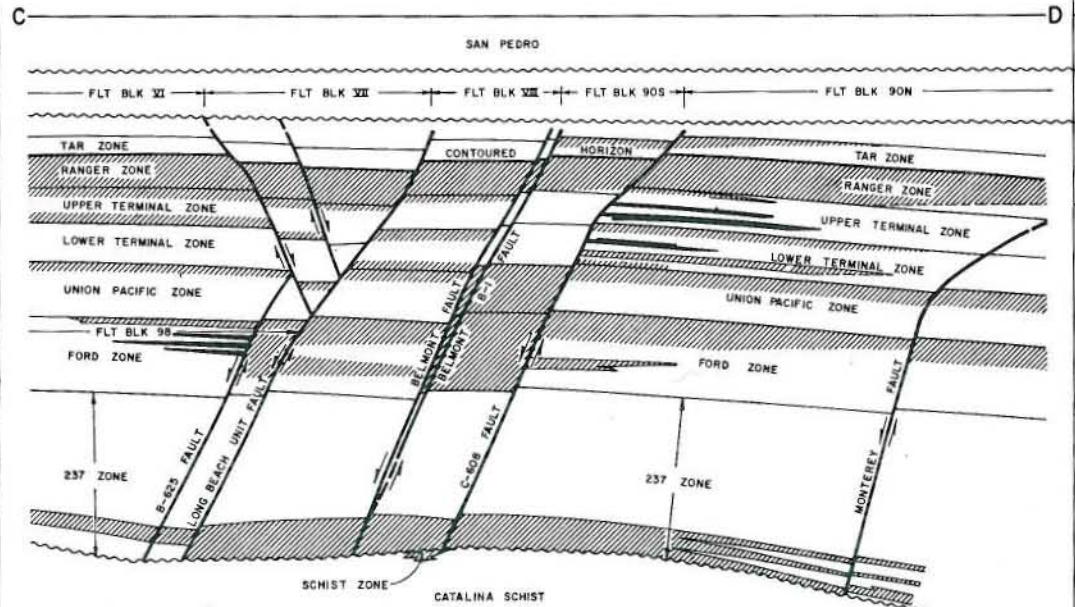
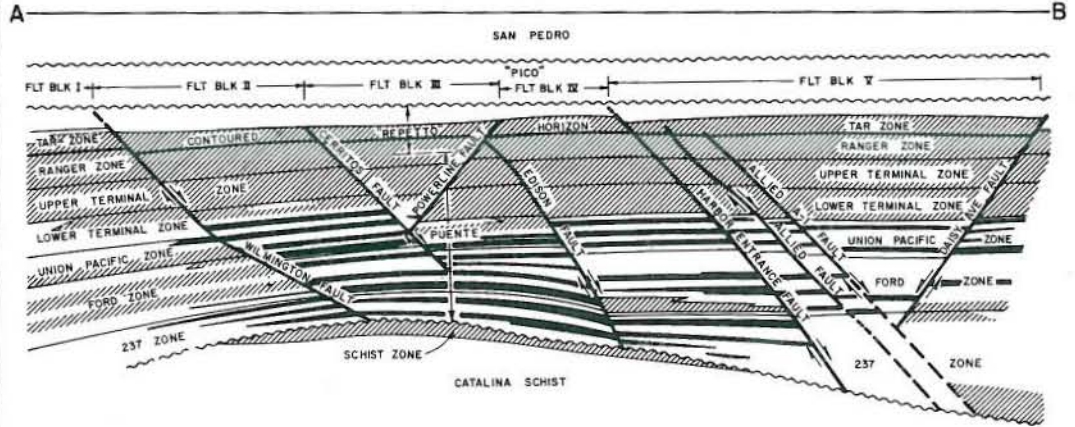
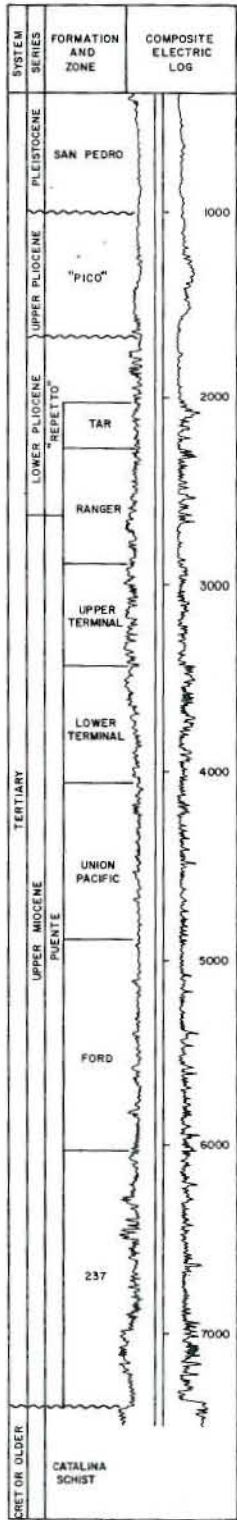
REMARKS: Last production was in January 1970; field abandoned in 1970.

REFERENCES: Hunter, W.J., North Whittier Heights Area of Los Angeles County: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 45, No. 1 (1959).

WILMINGTON OIL FIELD



WILMINGTON OIL FIELD



SYSTEM	SERIES	FORMATION
PLEISTOCENE	UPPER PLEISTOCENE	SAN PEDRO
	LOWER PLEISTOCENE	"REPETTO"
TERTIARY	UPPER MIOCENE	UNION PACIFIC
	UPPER MIOCENE	FORD
	UPPER MIOCENE	237
	UPPER MIOCENE	CATALINA SCHIST

CALIFORNIA DIVISION OF OIL AND GAS

WILMINGTON OIL FIELD
Los Angeles County

LOCATION: 20 miles south of downtown Los Angeles

TYPE OF TRAP: See areas

ELEVATION: -10 - +30 (all well locations are onshore or on man-made drilling islands)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Ranger	Decalta International Corp. "Watson A" 2	Ranger Petroleum Corp. "Watson" 2	29 4S 13W	SB	150	N.A.	Jan 1932

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Thums Long Beach Co. C-520 I	Same	Aug 1968	16 5S 12W	SB	12,383	Puente	late Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
66,928,315	14,725,890	331,255,993	13,775	2,291	1,617,052,967	996,277,845	81,809,162	1970	4,759	4,458	14,500

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1953	4,292,531,800	634
Cyclic steam	1964	12,444,619	537

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: This field has the largest water flood of its kind in the world. In 1973, a total of 459,415,245 barrels of water was injected into 634 wells. This is the only field in California being administered under the Subsidence Abatement Act. It currently leads all fields in California in annual production.

REFERENCES: Crown, W.J., Wilmington Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 26 (1941).
 Frame, R.G., Earthquake Damage, Its Cause and Prevention in the Wilmington Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 38, No. 1 (1952).
 Frame, R.G., A Review of Water Flooding in the Wilmington Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 43, No. 1 (1957).
 Huey, W.F., Subsidence and Repressuring in the Wilmington Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 50, No. 2 (1964).
 Murray-Aaron, E.R., and A. W. Pfeil, Recent Developments in the Wilmington Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 34, No. 2 (1948).
 Thomas, J.R., Extension of Wilmington Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 43, No. 1 (1957).
 van Wingen, N., Review of Wilmington Water Floods: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 1 (1962).
 Ybarra, R.A., and A.D. Stockton, Ford Pool of Fault Block 1, Wilmington Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 50, No. 1 (1964).

CALIFORNIA DIVISION OF OIL AND GAS

WILMINGTON OIL FIELD

ONSHORE AREA

Los Angeles County

LOCATION: See map sheet of Wilmington Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: -10 - +30

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Tar	Champlin Petroleum Co. UP 30 B	Union Pacific Railroad Co. "Union Pacific Offset Well" 30	33 4S 13W	SB	*639	*88	Jun 1937
Ranger	Decalta International Corp. "Watson A" 2	Ranger Petroleum Corp. "Watson" 2	29 4S 13W	SB	150	N.A.	Jan 1932
Upper Terminal	Mobil Oil Corp. "Terminal" 1	General Petroleum Corp. "Terminal" 1	4 5S 13W	SB	1,389	300	Dec 1936
Lower Terminal	Mobil Oil Corp. M 223 D	Superior Oil Co. "1960 Community" 1	2 5S 13W	SB	3,281	N.A.	Jan 1938
Union Pacific	Champlin Petroleum Co. "Union Pacific" 215	Union Pacific Railroad Co. "Union Pacific" 215	3 5S 13W	SB	232	173	Jan 1942
Ford	Exxon Corp. WTU-1470	Royalty Service Corp., Ltd. "Gilmore" 842-2	33 4S 13W	SB	307	250	Sep 1937
237	Long Beach Oil Development Co. "W" 97	Same as present	3 5S 13W	SB	614	63	Nov 1945
Schist	Same as above	Same as present	3 5S 13W	SB	417	85	Oct 1945

Remarks: * Production from Tar and Ranger commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Thums Long Beach Co. THX 2-1	Same	Apr 1967	35 4S 13W	SB	9,881	Puente	early Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu))	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Tar	2,200	120	early Pliocene	"Repetto"	12 - 15	1,800	III
Ranger	2,500	150	early Pliocene	"Repetto"-Puente	12 - 25	1,850	III
Upper Terminal	3,000	300	late Miocene	Puente	14 - 25	1,800	III
Lower Terminal	3,500	360	late Miocene	Puente	25 - 30	1,800	III
Union Pacific	4,000	125	late Miocene	Puente	25 - 32	2,000	III
Ford	4,550	300	late Miocene	Puente	28 - 32	1,500	III
237	5,550	200	late Miocene	Puente	28 - 32	1,400	III
Schist	5,850	15	Cret or older	Catalina Schist	28 - 32	1,000	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
19,402,028	2,088,078	154,052,057	6,895	1,343	870,929,956	579,602,630	34,021,599	1938	2,931	2,637	7,150

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1954	1,566,576,847	344
Cyclic steam	1964	*	*

* Onshore/offshore totals not separated. See field sheet.

SPACING ACT: Applies

BASE OF FRESH WATER: 1,600

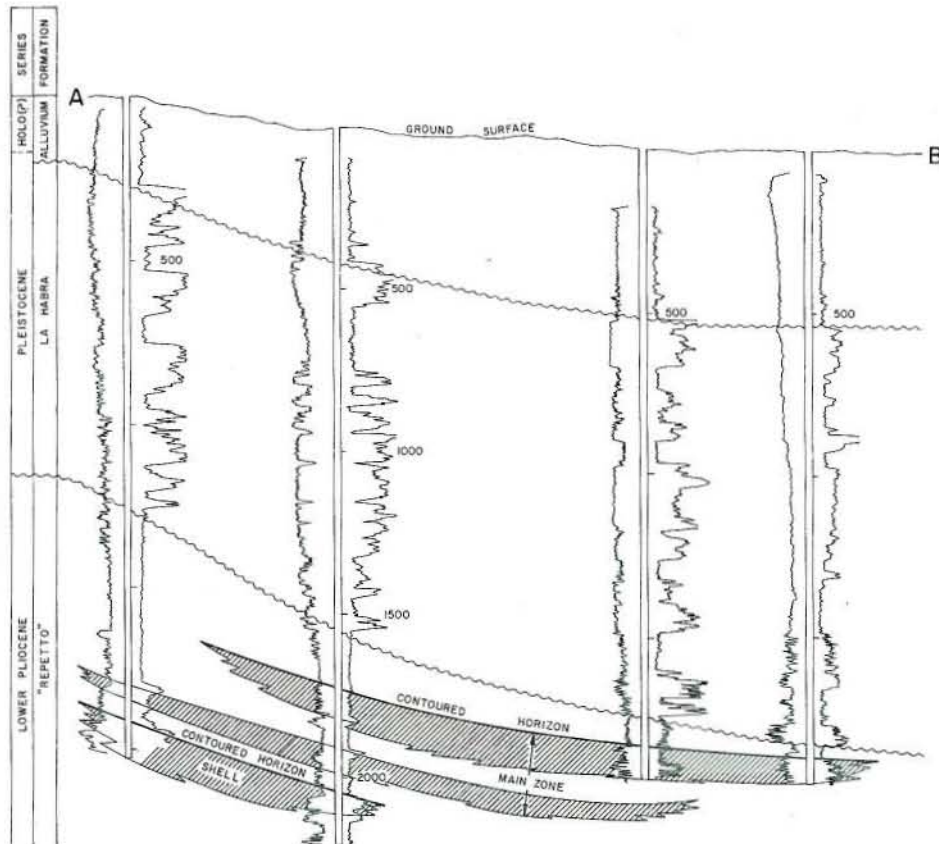
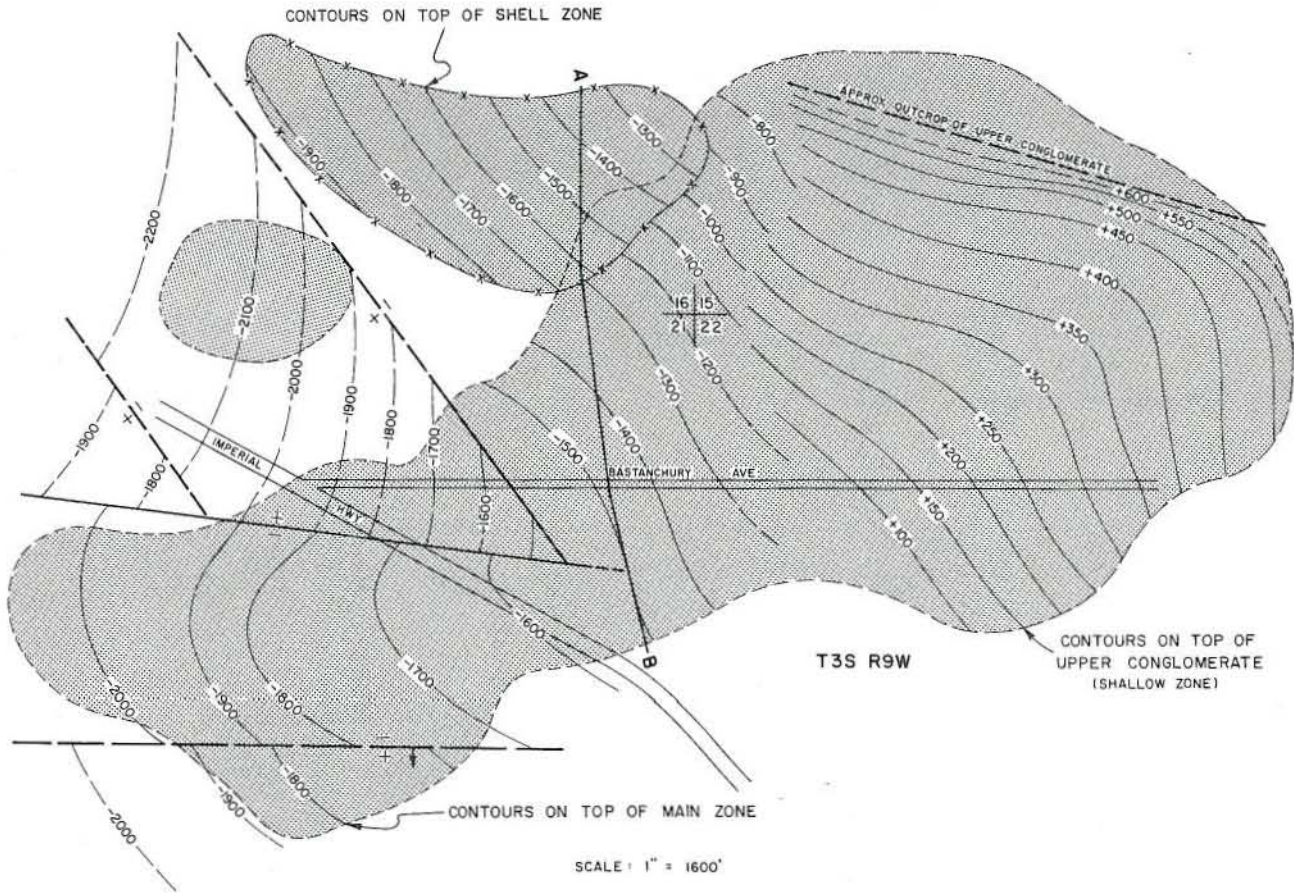
CURRENT CASING PROGRAM: 13 3/8" cem. 600 - 1,000; 8 5/8" cem. above zone and across base of fresh-water sands; 6 5/8" liner landed through zone and gravel packed. Older wells had annular space filled with special oil base material for bell hole protection against earthquake movement.

METHOD OF WASTE DISPOSAL: Water-Flood project into all zones except Schist. Some waste water is injected into shallow salt water aquifers.

REMARKS: A pilot steam-flood project was conducted in 1967 when 23,593 bbls. of water equivalent was injected into one well. A pilot polymer water-flood project was started in 1969 and was discontinued in 1972 after having injected approximately 18 million bbls. of water containing 1,326,760 lbs. of polymer.

REFERENCES: See field sheet.

YORBA LINDA OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

YORBA LINDA OIL FIELD
Orange County

LOCATION: 14 miles southeast of Whittier

TYPE OF TRAP: Lenticular sands on faulted homocline

ELEVATION: 400 - 650

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & W	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Shallow	Gulf Oil Corp. "Y.L.U.A." 1-A	Western Gulf Oil Co. "Y.L.U.A." 1-A	22 3S 9W	SB	18	0	Mar 1954
Main	Shell Oil Co. "P.E. Todd" 1	L. C. Simmel No. 1	22 3S 9W	SB	N.A.	N.A.	Jun 1930
Shell	Shell Oil Co. "O.L.C." E	Same as present	16 3S 9W	SB	87	N.A.	Nov 1937
Miocene Contact	Gulf Oil Corp. "Y.L.U.M." 2	Same as present	21 3S 9W	SB	63	0	Jul 1961

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	S & M	Depth (feet)	At total depth	
						Strata	Age
Harold C. Ramser "Y.J.O.G." 1	Western Gulf Oil Co. "Y. J. Orange Grove" 1	Jun 1954	21 3S 9W	SB	6,085	Puente	Late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Shallow	350	250	Pleistocene	La Habra	13	N.A.	I
Main	1,800	150	early Pliocene	"Repetto"	15	N.A.	II
Shell	2,000	125	early Pliocene	"Repetto"	19	N.A.	III
Miocene Contact	2,900	70	late Miocene	Puente	15	N.A.	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
3,932,117	11,455	19,844,875	630	479	46,262,802	1,879,678	3,576,736	1970	671	623	855

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Cyclic steam	1963	43,635,085	517
Steam flood	1964	8,217,873	19

SPACING ACT: Does not apply

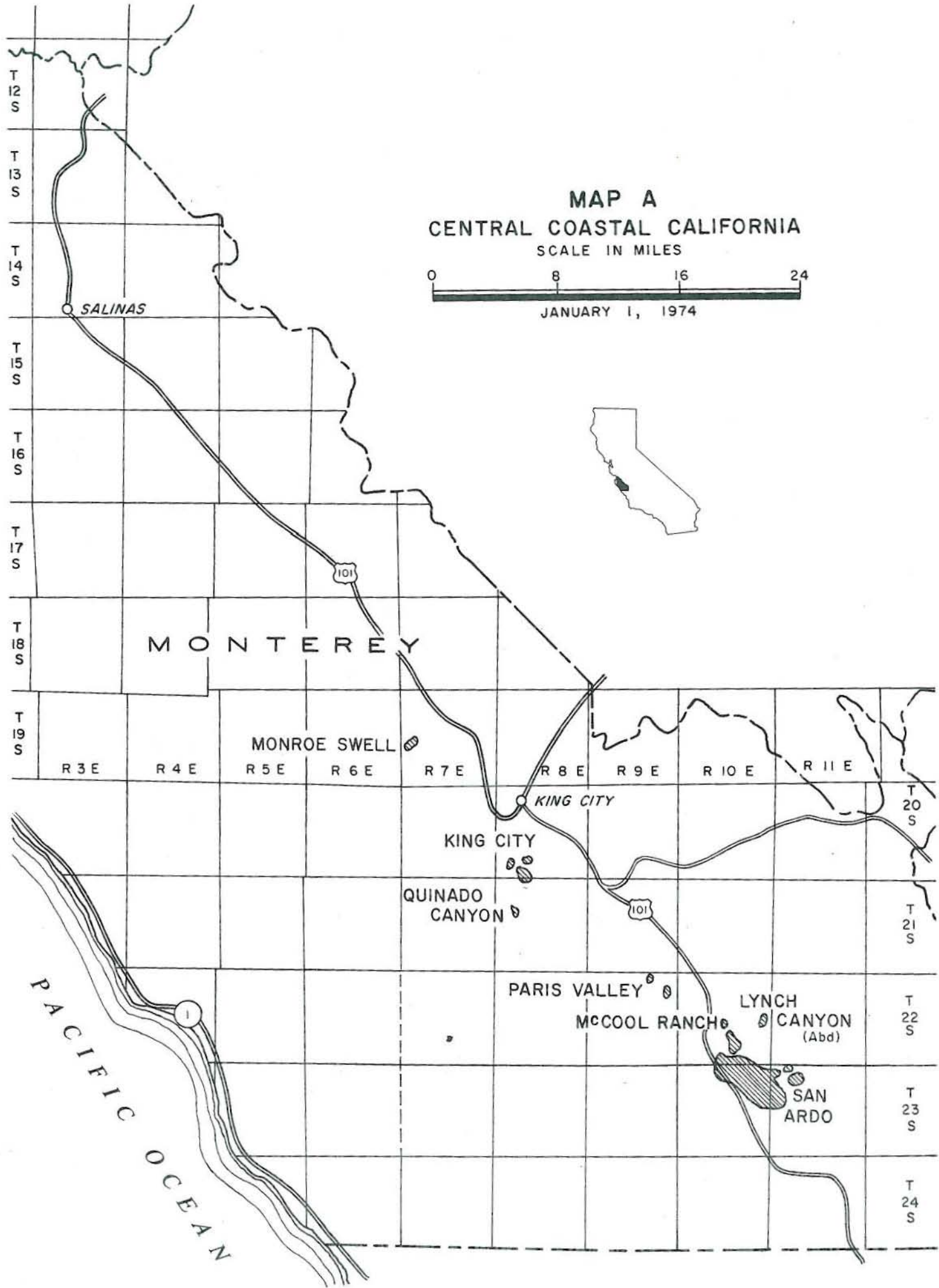
BASE OF FRESH WATER: 2,500

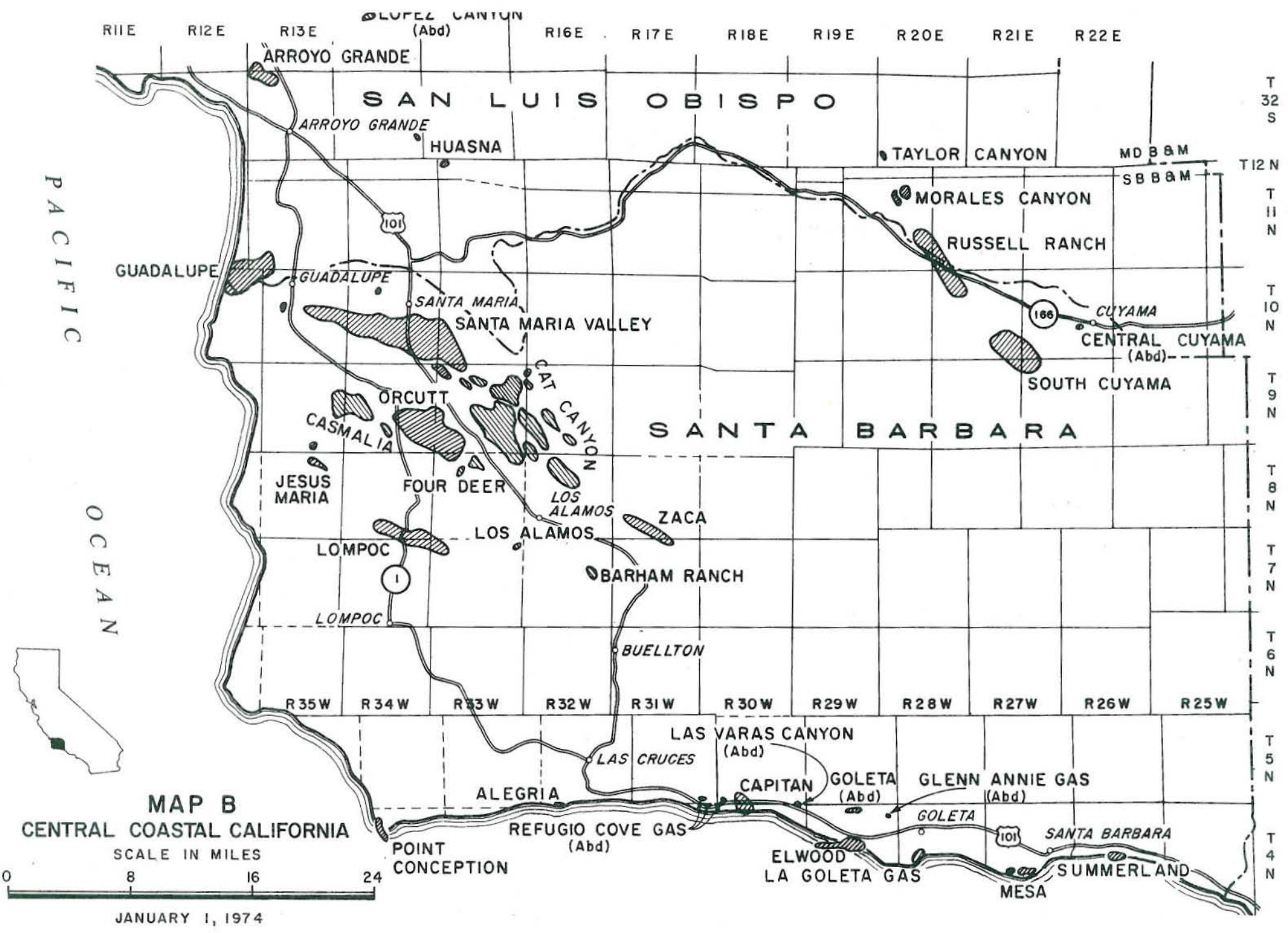
CURRENT CASING PROGRAM: Shallow zone: 8 5/8" combination string landed through zone and cemented above zone to the surface.
Deeper zones: 10 3/4" cem. 100; 7" combination string landed through zone and cemented above zone to the surface.

METHOD OF WASTE DISPOSAL: Produced waste water is reinjected into producing zones.

REMARKS:

REFERENCES: Barger, R.M., and V.F. Gaede, Yorba Linda Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 42, No. 2 (1956).



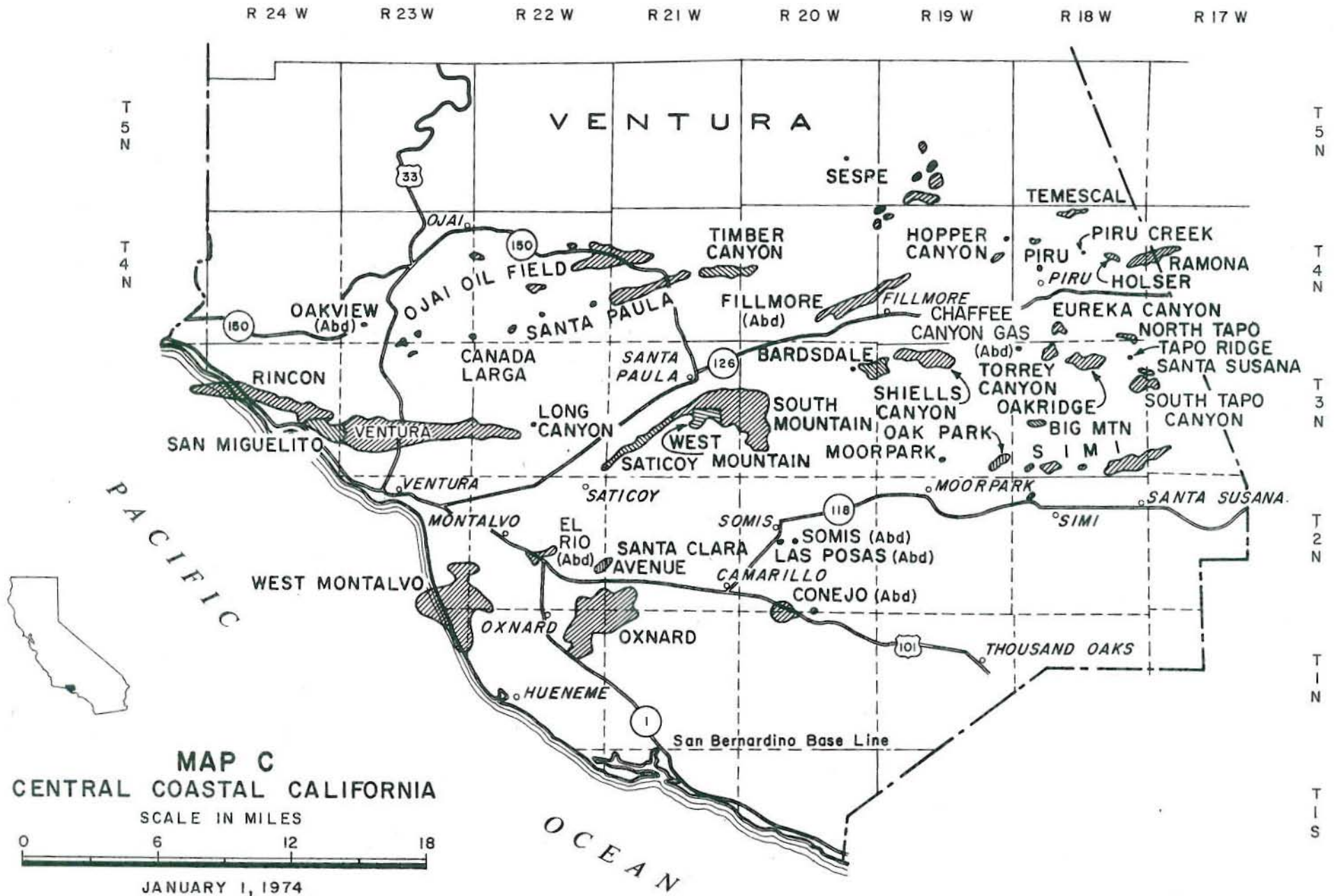


MAP B
CENTRAL COASTAL CALIFORNIA

SCALE IN MILES

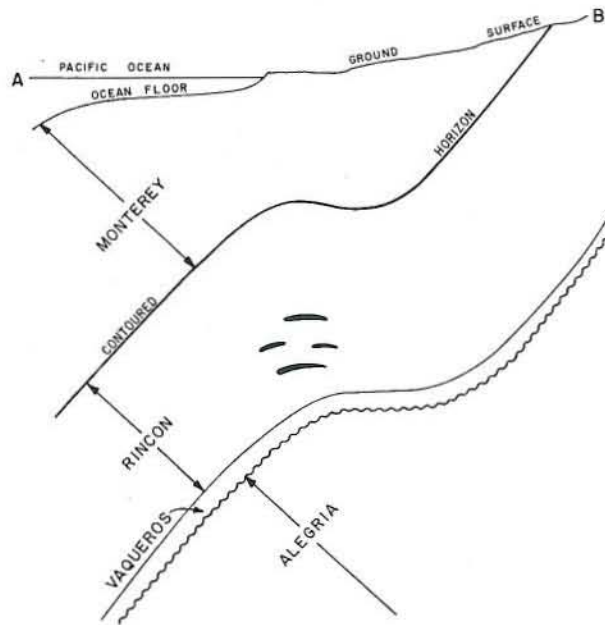
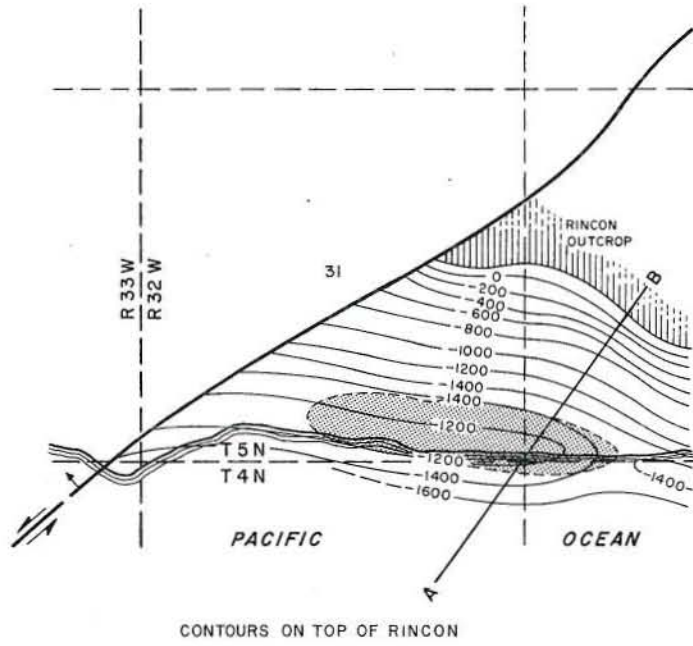
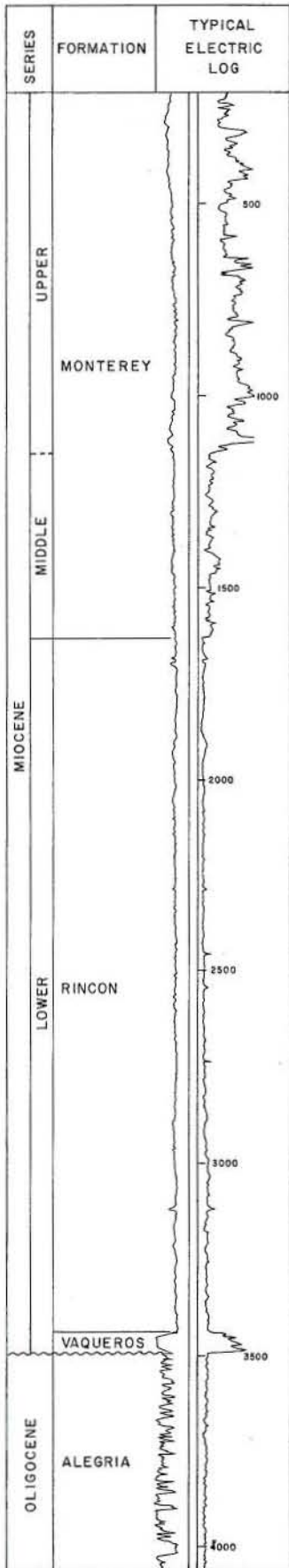


JANUARY 1, 1974



**CENTRAL COASTAL CALIFORNIA
MAPS AND DATA SHEETS**

ALEGRIA OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

ALEGRIA OIL FIELD
Santa Barbara County

LOCATION: 35 miles west of Santa Barbara

TYPE OF TRAP: Anticline

ELEVATION: 160

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Rincon	Cal-L Exploration Corp. "Alegria" 3	L.E. Broadhurst "Mercedes-Fox" 2	31 SN 32W	SB	112	0	Dec 1958

Remarks: No production reports were filed with the Division of Oil and Gas prior to November 1964.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Cal-L Exploration Corp. "Alegria" 2	Barnwell Drilling Co., Inc. "Hollister" 2	May 1962	31 SN 32W	SB	6,974	Sacate	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Rincon	2,700	1,100	Late Miocene	Rincon	22	1,800	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	30	0	7,362	12,929	3,398	1965	15	2	30

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 100

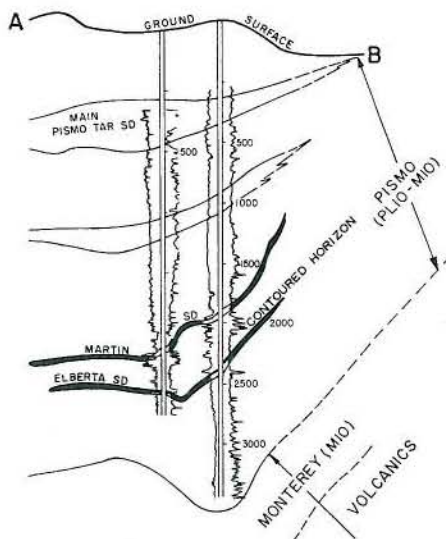
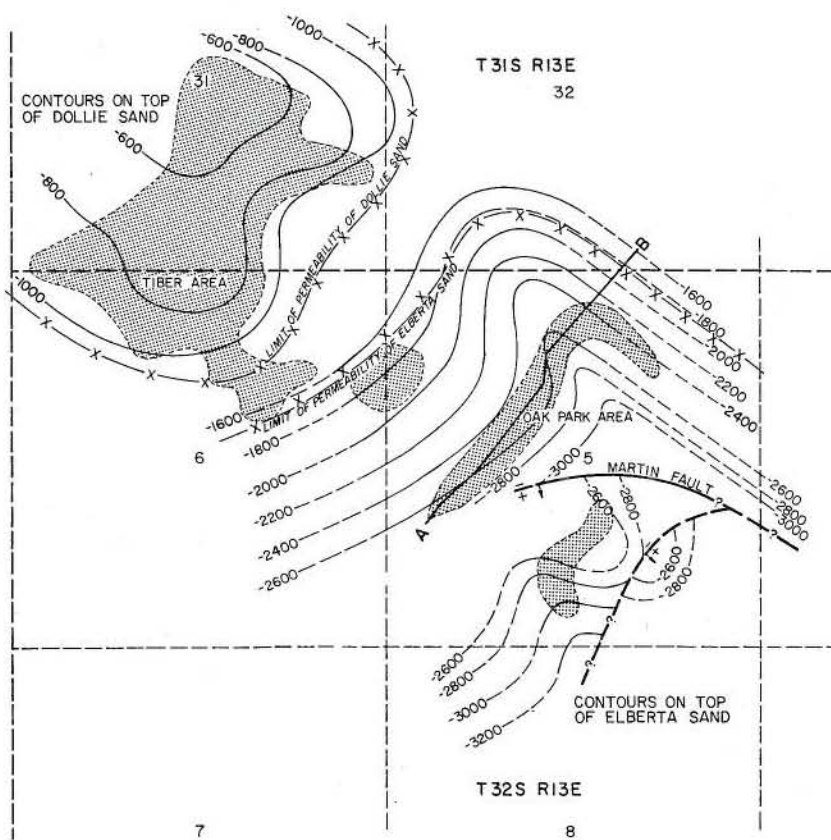
CURRENT CASING PROGRAM: 10 3/4" or 13 3/8" cem. 200; 8 5/8" cem. 2,000; 6 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL: Unlined sumps.

REMARKS: Several wells produced small amounts of oil for a few months initially; all wells have been shut-in since October 1969.

REFERENCES: Barton, C.L., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 51, No. 2 (1965).

ARROYO GRANDE OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

ARROYO GRANDE OIL FIELD

San Luis Obispo County

LOCATION: 18 miles northwest of Santa Maria

TYPE OF TRAP: See areas

ELEVATION: 100 - 600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Dollie	Mindevco, Inc. "Tiber" 1	Tiber Pacific Oil Co. "Tiber" 1	6 32S 13E	MD	N.A.	N.A.	Jul 1906

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
C. W. Colgrove "Elberta" 1-5	Same	Nov 1949	5 32S 13E	MD	10,142	Monterey	Miocene

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
47,610	0	239,144	410	23	3,420,508	32,364	170,438	1968	145	96	480

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS:

REFERENCES: Krueger, M.L., Arroyo Grande (Edna) Oil Field: Calif. Div. of Mines Bull. 118, p. 450 (1938).
 Lawrence, E.D., Arroyo Grande (Edna) Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 44, No. 1, p. 41 (1958).
 McLaughlin, R.P., and C.A. Waring, Petroleum Industry of California: Calif. Mining Bureau Bull. 69, p. 430 (1914).
 Vander Leek, L., Petroleum Resources of California: Calif. State Mining Bureau Bull. 89, p. 95 (1921).

CALIFORNIA DIVISION OF OIL AND GAS

OAK PARK AREA

ARROYO GRANDE OIL FIELD

San Luis Obispo County

LOCATION: See map sheet of Arroyo Grande Oil Field

TYPE OF TRAP: Faulted homocline on north limb of Pismo syncline

ELEVATION: 100 - 600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Martin Elberta	C. A. Maino, et al "Rauschenplat" 6 California Fuel Oil Co., Inc. 5	McKeon Drilling Co., Inc. "Elberta" 2 Elberta Oil Co. "Elberta" 1	5 32S 12E	MD	80	N.A.	May 1929 1930
			5 32S 12E	MD	N.A.	N.A.	

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
C. W. Colgrove "Elberta" 1-5	Same	Nov 1949	5 32S 13E	MD	10,142	Monterey	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Martin	2,890	50	early Pliocene - late Mio	Pismo	15	N.A.	None
Elberta	3,100	50	early Pliocene - late Mio	Pismo	14	1,125	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
6,450	0	485	90	4	N.A.	N.A.	N.A.	N.A.	29	14	110

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 700 - 1,200

CURRENT CASING PROGRAM: 8 7/8" or 7" cem. above zone and across base of fresh-water sands; 6 5/8" or 5" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is discharged into unlined sumps (sumps are being phased out).

REMARKS: The water in the Elberta sand contains 26 ppm boron and is unsuitable for irrigation.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

ARROYO GRANDE OIL FIELD

TIBER AREA

San Luis Obispo County

LOCATION: See map sheet of Arroyo Grande Oil Field

TYPE OF TRAP: Homocline on north limb of Pismo syncline

ELEVATION: 100 - 600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Dollie	Mindevco, Inc. "Tiber" 1	Tiber Pacific Oil Co. "Tiber" 1	6 32S 12E	MD	N.A.	N.A.	Jul 1906
Martin	Getty Oil Co. "Thompson" 1	San Luis Obispo Mutual Oil Co. "Mutual Well" 1	5 32S 13E	MD	N.A.	N.A.	Nov 1908
Elberta	Same as above	Same as above	5 32S 13E	MD	N.A.	N.A.	Nov 1908

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Mindevco, Inc. "Adams" 1	William C. McDuffie "Adams" 1	Jul 1944	31 31S 13E	MD	3,833	Monterey	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Dollie	750	300	early Pliocene - late Mio	Pismo	15	60	None
Martin	2,000	100	early Pliocene - late Mio	Pismo	13	N.A.	None
Elberta	2,500	100	early Pliocene - late Mio	Pismo	13	N.A.	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
41,160	0	238,659	320	19	N.A.	N.A.	N.A.	N.A.	116	82	370

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1949	595,030	5
Cyclic steam	1965	228,196	19
Fire flood	1964	197,500	1

SPACING ACT: Does not apply

BASE OF FRESH WATER: 700 - 1,200

CURRENT CASING PROGRAM: 8 7/8" or 7" cem. above zone and across base of fresh-water sands; 6 5/8" or 5" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is injected or disposed of into unlined sumps (sumps are being phased out).

REMARKS: Produced water from the Dollie zone has a high concentration of sodium bicarbonate.

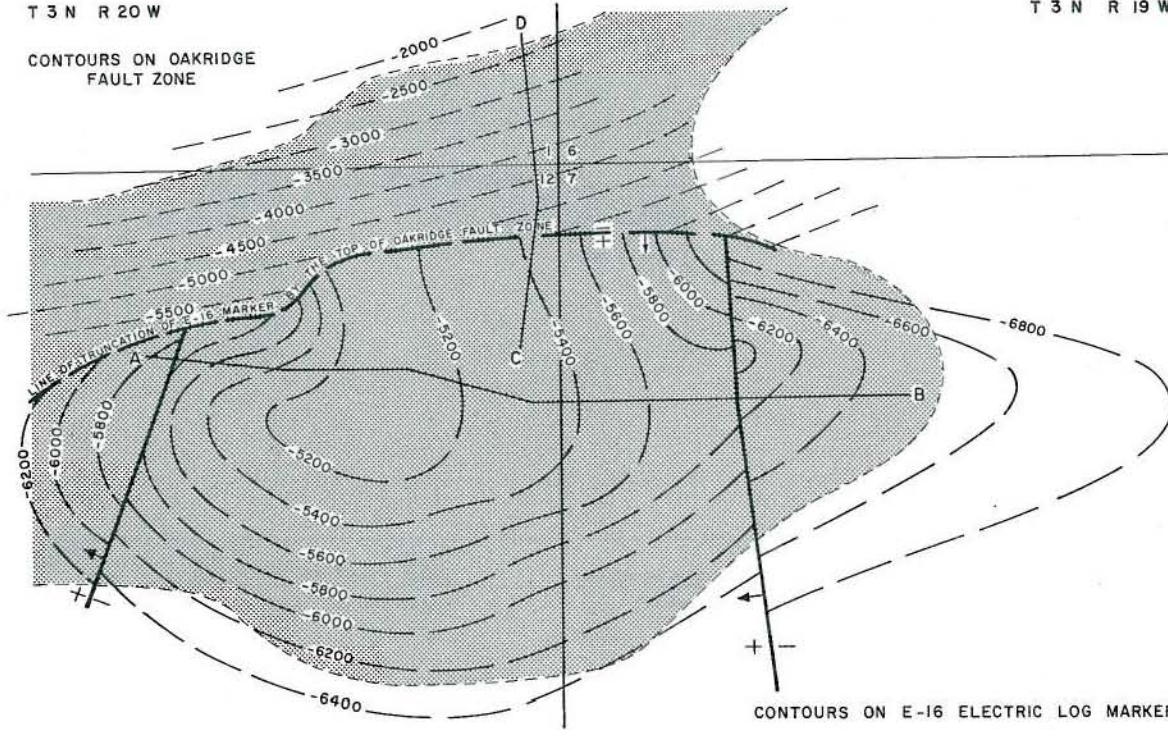
REFERENCES:

BARSDALE OIL FIELD

T 3 N R 20 W

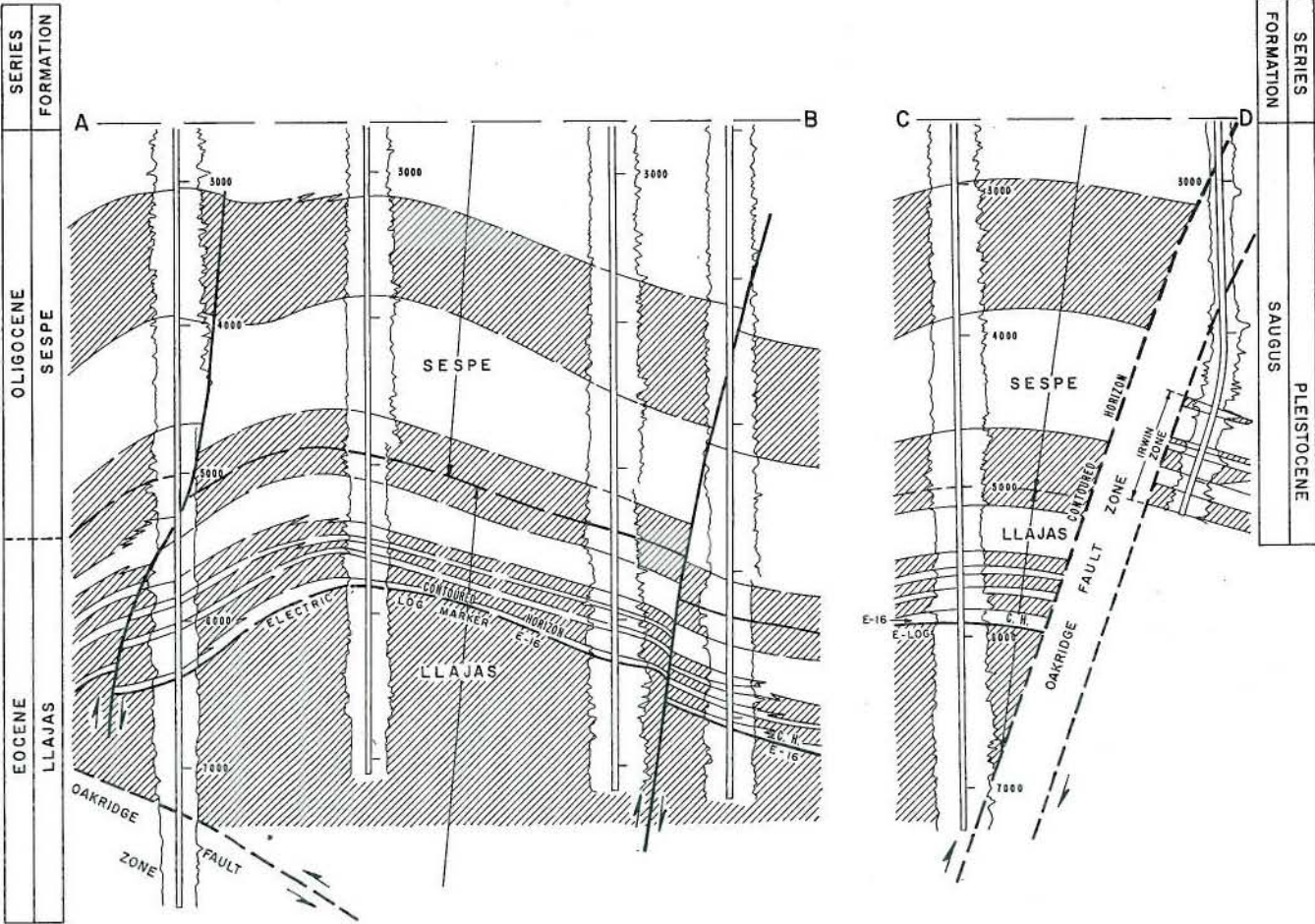
T 3 N R 19 W

CONTOURS ON OAKRIDGE FAULT ZONE



CONTOURS ON E-16 ELECTRIC LOG MARKER

SCALE 1" = 1200'



SERIES FORMATION	SERIES FORMATION
OLIGOCENE SESPE	PLEISTOCENE SAUGUS
EOCENE LLAJAS	

CALIFORNIA DIVISION OF OIL AND GAS

BARDSDALE OIL FIELD

Ventura County

LOCATION: 22 miles northeast of Ventura

TYPE OF TRAP: Faulted anticline

ELEVATION: 725

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sespe	Union Oil Co. of Calif. "Robertson" 2	Same as present	12 3N 20W	SB	25	N.A.	Mar 1892
Irwin	Union Oil Co. of Calif. "Irwin-Berylwood" 1	Same as present	12 3N 20W	SB	626	450	Sep 1956
Eocene	Union Oil Co. of Calif. "Pryden" 10	Same as present	12 3N 20W	SB	148	200	Dec 1936

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Irwin-Berylwood" 5	Same	Apr 1959	1 3N 20W	SB	16,457	Pico	Pliocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Sespe	2,000 - 4,000	1,300 - 2,100	Oligocene	Sespe	25	1,950	III
Irwin	5,500	600	Pleistocene	Saugus	29	300	III
Eocene	6,500	2,450	Eocene	Llajas	33	1,900	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
132,612	665,480	122,543	510	89	12,360,330	73,674,914	715,285	1951	198	159	590

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: None south of the Oakridge fault but 550' north of Oakridge fault.

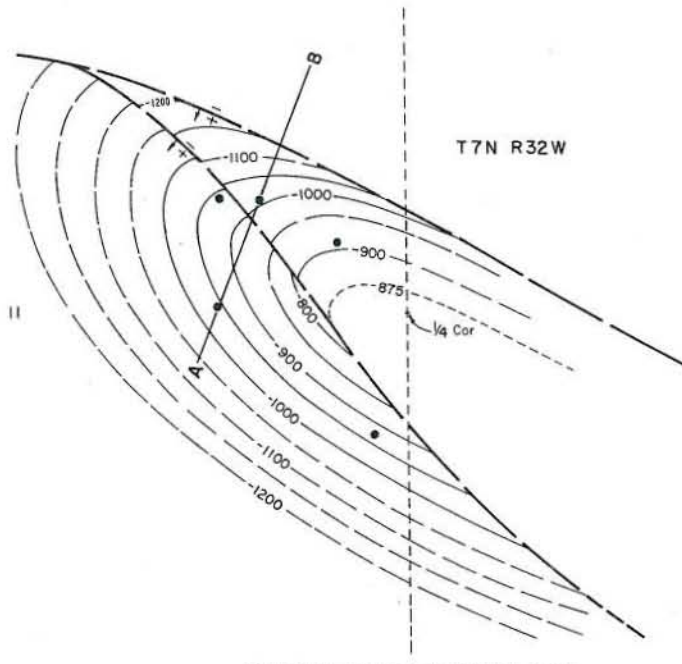
CURRENT CASING PROGRAM: 11 3/4" cem. 350; 7" cem. above zone; 5 1/2" liner landed through zone; or a 5 1/2" combination string landed through zone and cemented through ports above zone.

METHOD OF WASTE DISPOSAL: Waste water is transported by pipeline to the Shiells Canyon field water-flood project.

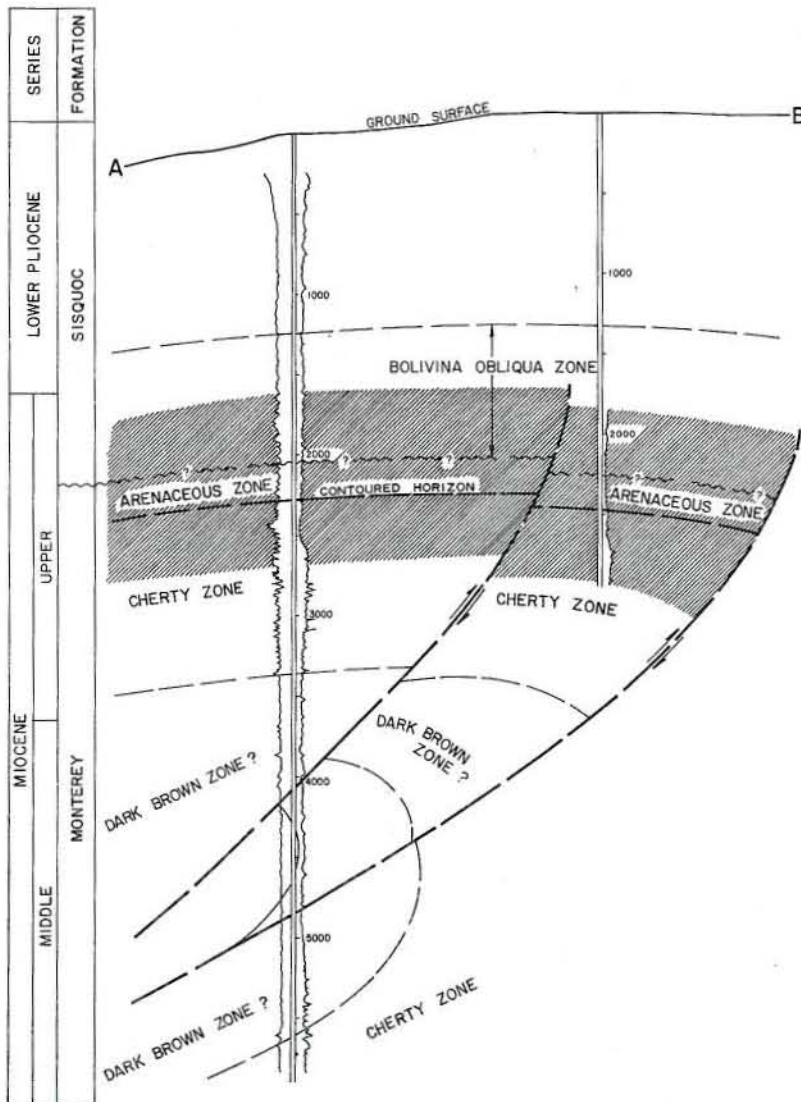
REMARKS:

REFERENCES: Godde, H.A., Oil Fields of Ventura County: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 10, No. 5 (1924).

BARHAM RANCH OIL FIELD



CONTOURS ON TOP OF CHERTY ZONE
SCALE: 1"=800'



CALIFORNIA DIVISION OF OIL AND GAS

BARHAM RANCH OIL FIELD
Santa Barbara County

LOCATION: 22 miles southeast of Santa Maria

TYPE OF TRAP: Faulted anticline

ELEVATION: 1,300

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Basal Sisquoc Arenaceous & Cherty	Barham Co. "Barham" 2	Whittier Associates "Barham" 2	11 7N 32W	SB	19	N.A.	Mar 1945
	Barham Co. "Barham" 1	Whittier Associates "Barham" 1	11 7N 32W	SB	8	N.A.	Oct 1943

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Barham Co. "Barham" 3	Whittier Associates "Barham" 3	May 1946	11 7N 32W	SB	6,860	Monterey	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (btu)	Salinity of zone water gr./gal.	Class BOPE required
			Age	Formation			
Basal Sisquoc Arenaceous & Cherty	1,400	500	late Miocene	Sisquoc	14	35	None
	2,800	200	late Miocene	Monterey	15	35	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
10,540	0	26,087	60	5	124,965	0	17,776	1965	5	5	60

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

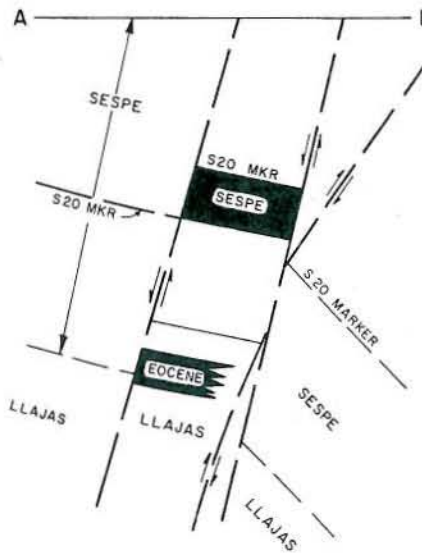
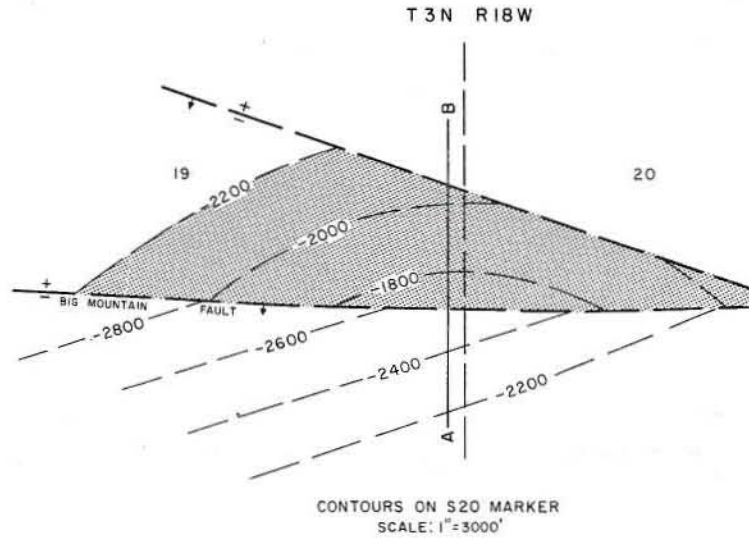
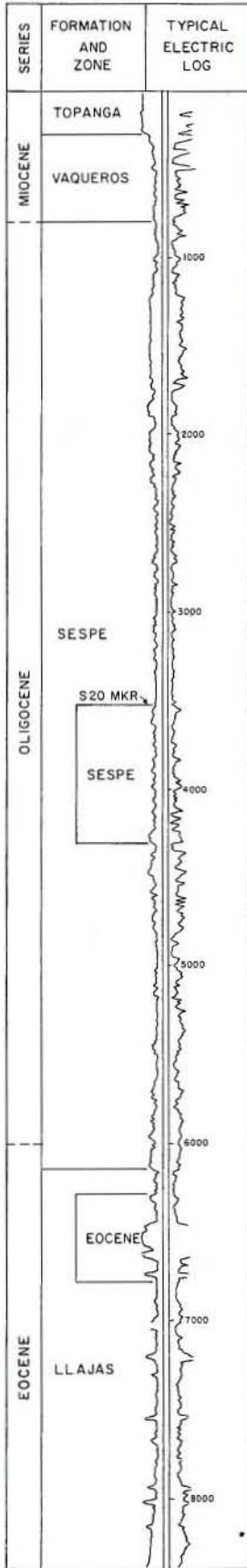
CURRENT CASING PROGRAM: 11 3/4" cem. from surface to between 300 to 2,800; 7" combination casing cem. above zone or 5" liner landed through zone.

METHOD OF WASTE DISPOSAL: Unlined sumps.

REMARKS: Lost circulation is a common drilling problem in this field and an attempt to drill with air had to be discontinued because of sloughing shale.

REFERENCES: Wilkinson, E.R., Barham Ranch Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 54, No. 1 (1968).

BIG MOUNTAIN OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

BIG MOUNTAIN OIL FIELD

Ventura County

LOCATION: 27 miles east of Ventura

TYPE OF TRAP: Faulted anticlinal nose

ELEVATION: 1,600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sespe	Union Oil Co. of Calif. "Union-Getty-Tapo-Simi" 2	Same as present	19 3N 18W	SB	150	170	Nov 1966
Eocene	Same as above	Same as present	19 3N 18W	SB	160	160	Nov 1966

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Big Mountain A" 1-19	Same	Sep 1971	19 3N 18W	SB	9,435	Llajas	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Sespe	3,595	976	Oligocene	Sespe	22	1,400	II
Eocene	6,200	700	Eocene	Llajas	30	1,600	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
68,920	97,821	21,894	70	5	670,564	752,134	158,428	1968	12	6	70

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1970	70,003	1

SPACING ACT: Applies

BASE OF FRESH WATER: None

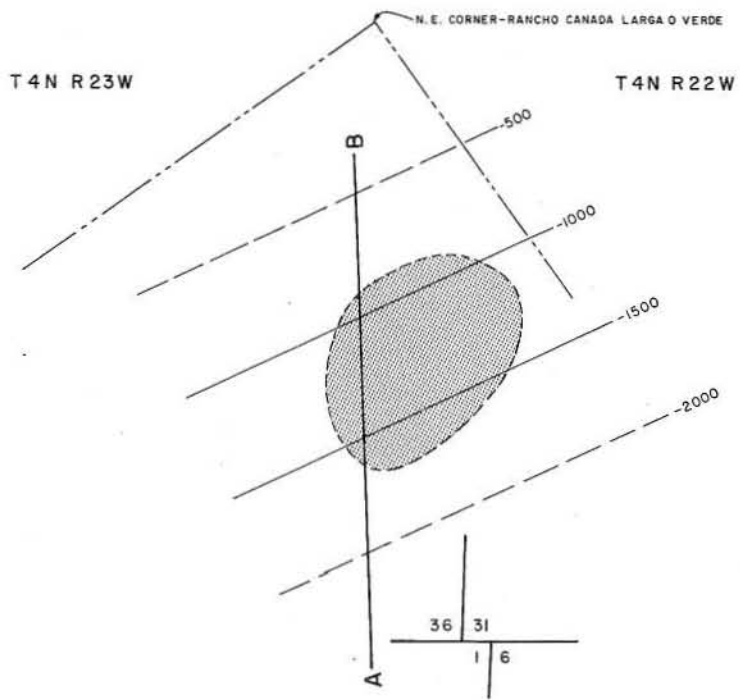
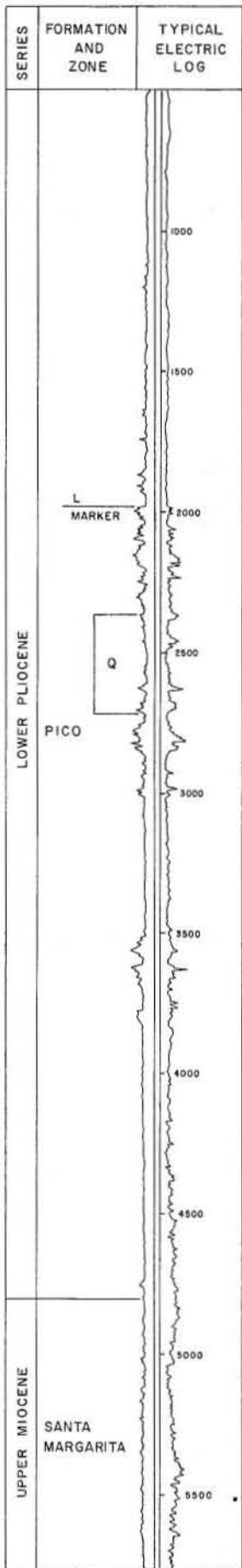
CURRENT CASING PROGRAM: 10 3/4" cem. 400 - 900; 7" cem. through zone.

METHOD OF WASTE DISPOSAL: Waste water is injected into water-flood well.

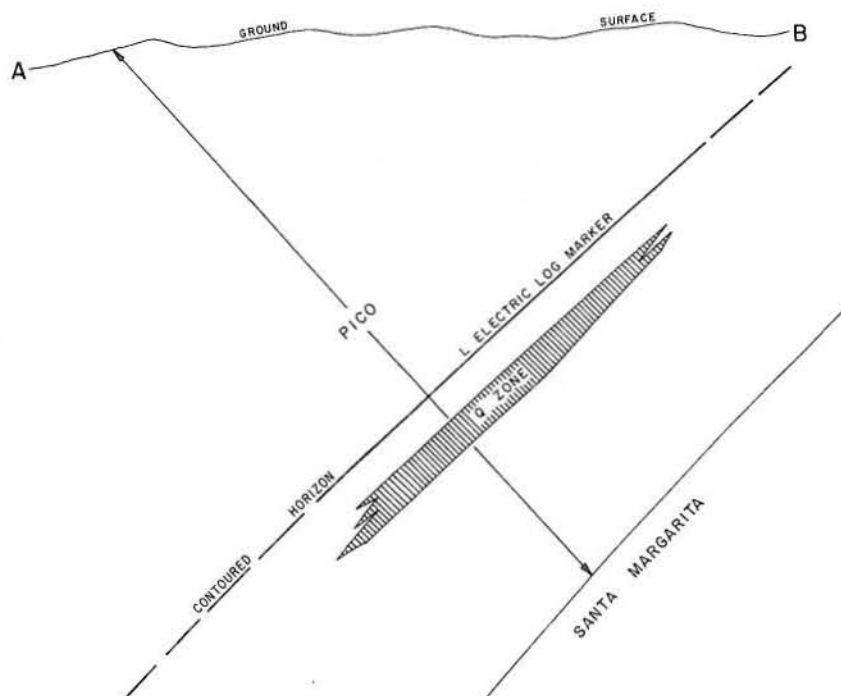
REMARKS:

REFERENCES:

CANADA LARGA OIL FIELD



CONTOURS ON L ELECTRIC LOG MARKER
SCALE 1" = 1050'



CALIFORNIA DIVISION OF OIL AND GAS

CANADA LARGA OIL FIELD
Ventura County

LOCATION: 8 miles north of Ventura
TYPE OF TRAP: Sand lens on homocline
ELEVATION: 975

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Q	R. E. Barrett "A.C.L." 1	Bell and Burden "A.C.L." 1	36 4N 23W	SB	128	N.A.	Jul 1955

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
R. E. Barrett "A.C.L." 1	Bell and Burden "A.C.L." 1	Jun 1955	36 4N 23W	SB	5,770	Santa Margarita	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Q	2,560	140	early Pliocene	Pico	25	935	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
2,138	0	198	40	3	83,468	76,361	7,473	1956	3	3	40

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 280

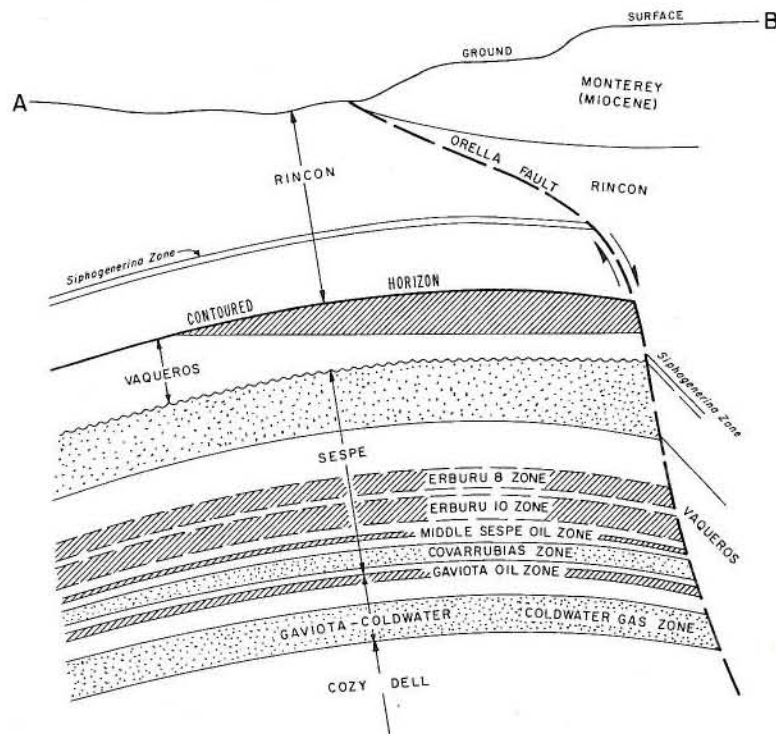
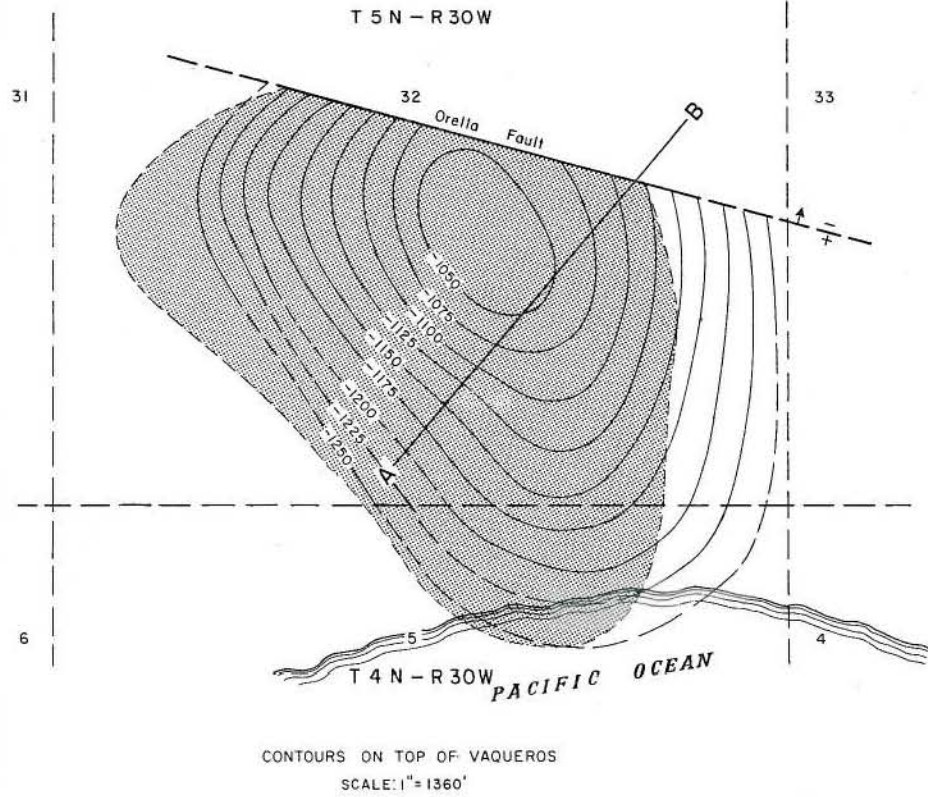
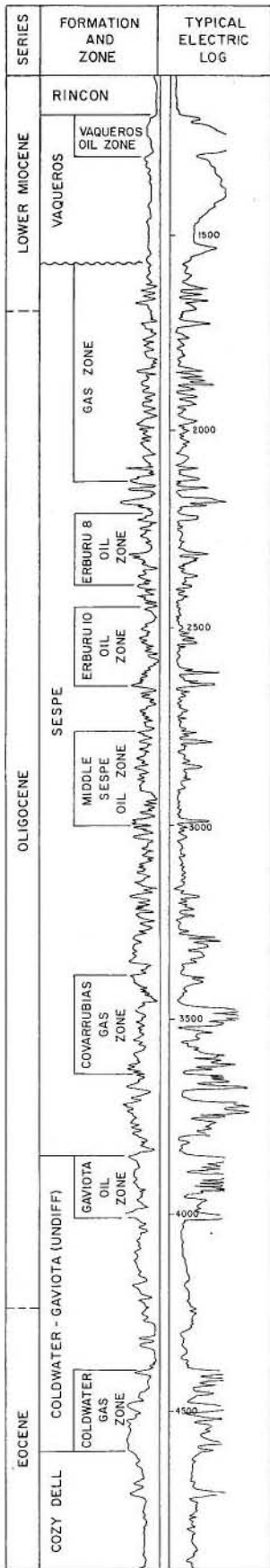
CURRENT CASING PROGRAM: 9 5/8" cem. 285; 5 1/2" combination string landed through zone and cemented through ports above zone.

METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps (to be phased out).

REMARKS:

REFERENCES:

CAPITAN OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

CAPITAN OIL FIELD
Santa Barbara County

LOCATION: 20 miles west of Santa Barbara

TYPE OF TRAP: Faulted dome

ELEVATION: 20 - 500

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Vaqueros	Shell Oil Co. "Erburu" 1	General Petroleum Corp. "Erburu" 1	5 4N 30W	SB	216	N.A.	Oct 1929

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Shell Oil Co. "Covarrubias 1" 51	Same	Jan 1955	32 5N 30W	SB	10,216	Sacate	Eocene

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974) Dry gas production data not included (See Onshore Area)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
47,993	3,294	1,677,967	260	25	19,298,985	12,553,401	1,178,521	1943	90	81	330

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: Offshore and onshore areas are on a single structure.

REFERENCES: Dibblee, T.W., Jr., Geology of Southwestern Santa Barbara County, California: Calif. Div. of Mines Bull. 150, p. 67 (1950).
Dolman, S.G., Capitan Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 24, No. 2 (1938).
Railroad Commission of the State of California, Capitan Oil Field: Case No. 4591, p. 201 (1941).

CALIFORNIA DIVISION OF OIL AND GAS

CAPITAN OIL FIELD

ONSHORE AREA

Santa Barbara County

LOCATION: See map sheet of Capitan Oil Field

TYPE OF TRAP: Faulted dome

ELEVATION: 75 - 500

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Vaqueros	Shell Oil Co. "Erburu" 1	General Petroleum Corp. "Erburu" 1	5 4N 30W	SB	216	N.A.	Oct 1929
Sespe (gas)	Shell Oil Co. "Erburu" 10	General Petroleum Corp. "Erburu" 10	32 5N 30W	SB	-	N.A.	May 1931
Erburu 8	Shell Oil Co. "Erburu" 8	General Petroleum Corp. "Erburu" 8	32 5N 30W	SB	241	N.A.	Jan 1931
Erburu 10	Shell Oil Co. "Erburu" 10	General Petroleum Corp. "Erburu" 10	32 5N 30W	SB	30	N.A.	Aug 1931
Middle Sespe	Shell Oil Co. "Covarrubias 1" 5	Same as present	32 5N 30W	SB	332	161	May 1935
Covarrubias (gas)	Shell Oil Co. "Covarrubias 1" 35	Same as present	32 5N 30W	SB	416	710	Feb 1945
Gaviota	Shell Oil Co. "Covarrubias 1" 35	Same as present	32 5N 30W	SB	*	*	Feb 1945
Coldwater (gas)	Shell Oil Co. "Covarrubias 1" 51	Same as present	32 5N 30W	SB	69	22,100	Jun 1955

Remarks: Well No. "Erburu" 10 blew out in May 1931 and the rig was destroyed. In June 1931, on a 17-hour production test, the well flowed gas at a daily rate of 5,500 Mcf.
* Covarrubias and Gaviota production commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Shell Oil Co. "Covarrubias 1" 51	Same	Jan 1955	32 5N 30W	SB	10,216	Sacate	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Vaqueros	1,100	100	early Miocene	Vaqueros	19	40	II
Sespe (gas)	1,600	650	Oligocene	Sespe	1,000	N.A.	III
Erburu 8	2,300	150	Oligocene	Sespe	41	230	III
Erburu 10	2,475	175	Oligocene	Sespe	44	230	III
Middle Sespe	2,750	250	Oligocene	Sespe	44	N.A.	III
Covarrubias (gas)	3,400	250	Oligocene	Sespe	1,000	700	III
Gaviota	3,850	150	Oligocene	Gaviota	44	N.A.	III
Coldwater (gas)	4,400	250	Eocene	Coldwater	1,000	N.A.	III

PRODUCTION DATA (Jan. 1, 1974) (Dry gas production data not included - see remarks)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
47,993	3,294	1,677,967	260	25	19,227,911	12,520,260	1,176,580	1943	83	79	310

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1961	5,505,195	10

SPACING ACT: Does not apply

BASE OF FRESH WATER: 150

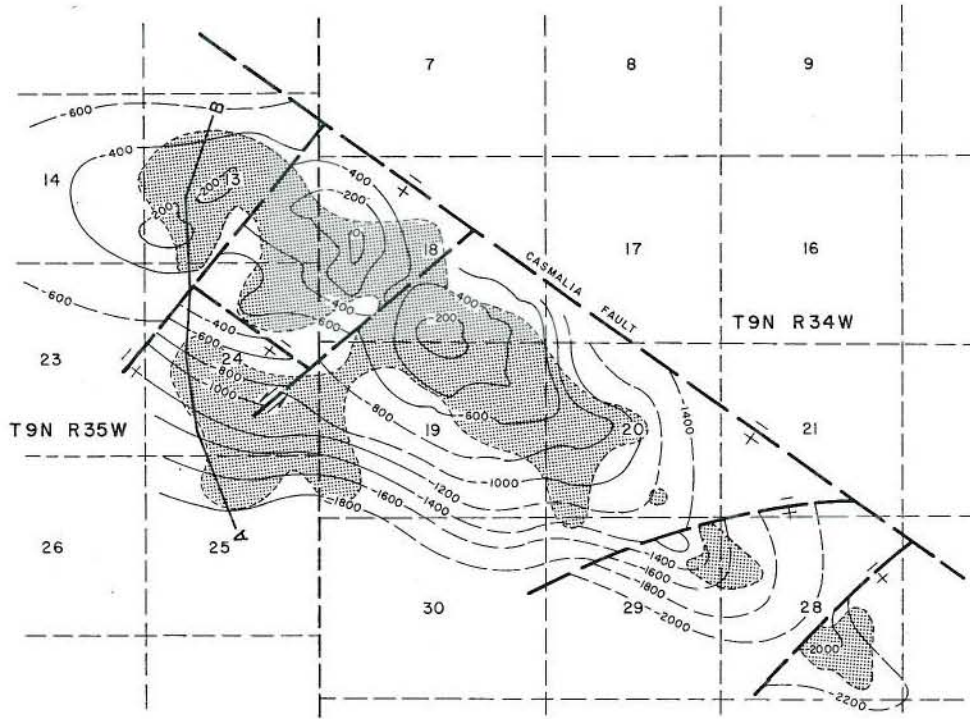
CURRENT CASING PROGRAM: 11 3/4" cem. 250; 13 3/8" or 8 5/8" cem. above zone; 6 5/8" or 5 3/4" liner landed through zone or 6 5/8" cem. through zone.

METHOD OF WASTE DISPOSAL: Waste water is used in the water-flood project.

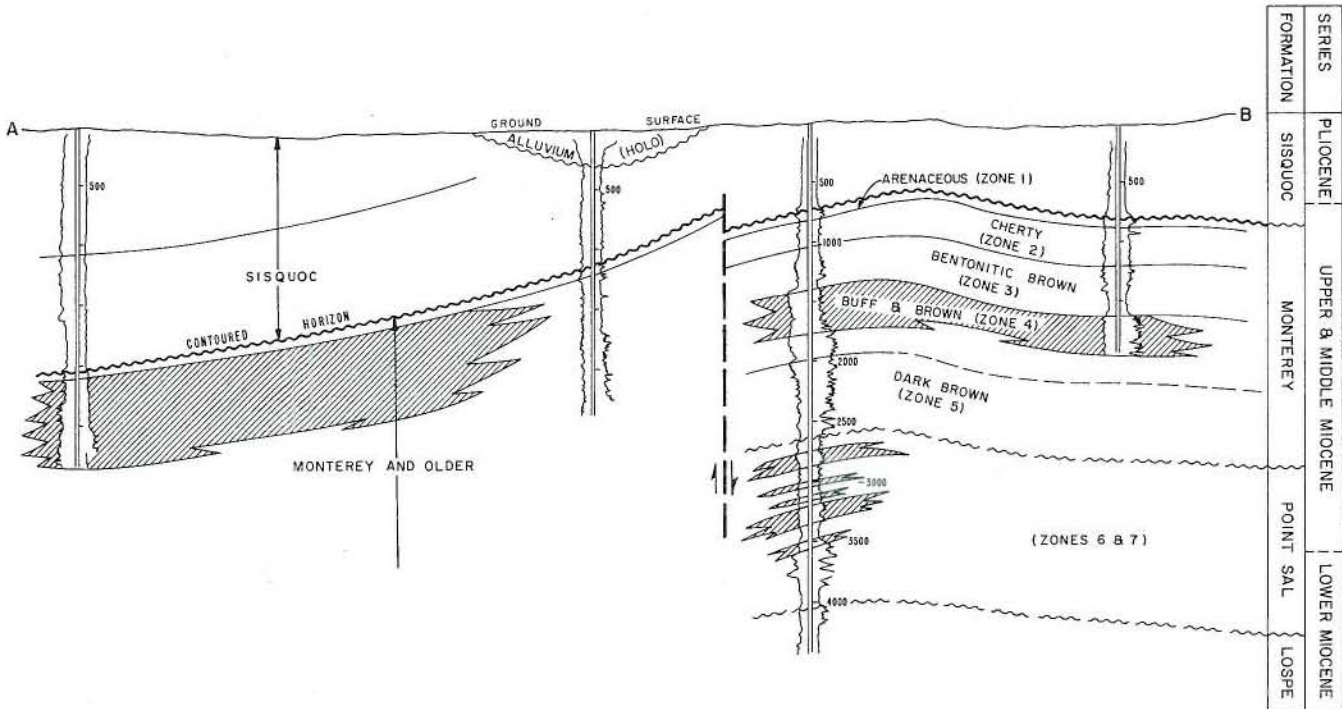
REMARKS: 1973 dry gas production 0 Mcf.; cumulative dry gas production 2,217,352 Mcf. plus 1,303 bbls. condensate, 2 wells drilled and completed; proved acreage (1973) 40, maximum 80.

REFERENCES: Dolman, S.G., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 15, No. 3 (1929).

CASMALIA OIL FIELD



CONTOURS ON TOP OF MONTEREY



CALIFORNIA DIVISION OF OIL AND GAS

CASMALIA OIL FIELD
Santa Barbara County

LOCATION: 8 miles south of Santa Maria

TYPE OF TRAP: Faulted asymmetrical anticline

ELEVATION: 500

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Monterey Point Sal Lospe	Kern Trading & Oil Co. "S.P." 1 Union Oil Co. of Calif. "Escolle" 1 Union Oil Co. of Calif. "Arellanes" 2	Same as present Pinalo Dome Oil Co. "Escolle" 1 Bel-Air Oil Co. "Arellanes" 2	24 9N 35W	SB	30	0	May 1905
			29 9N 34W	SB	N.A.	N.A.	Jan 1916
			13 9N 35W	SB	275	103	Apr 1946

Remarks: Several wells were probably drilled and produced at about the same time as "S.P." 1, but dates are not definite. Calif. Div. of Mines Bull. 170 shows field discovered in 1904.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Atlantic Richfield Co. "Soladino Fee" 52	Richfield Oil Corp. "Soladino Fee" 52	Aug 1949	18 9N 34W	SB	6,032	Lospe	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (btu)	Salinity of zone water gr. gal	Class BOPE required
			Age	Formation			
Monterey	700	1,275	Miocene	Monterey	8 - 23	400	II
Point Sal	2,750	500	Miocene	Point Sal	10	400	II
Lospe	3,953	345	Miocene	Lospe	22	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
698,492	431,406	8,315,992	2,090	94	30,932,250	10,189,303	1,468,400	1965	273	250	2,690

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Cyclic steam	1964	2,563,407	97

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

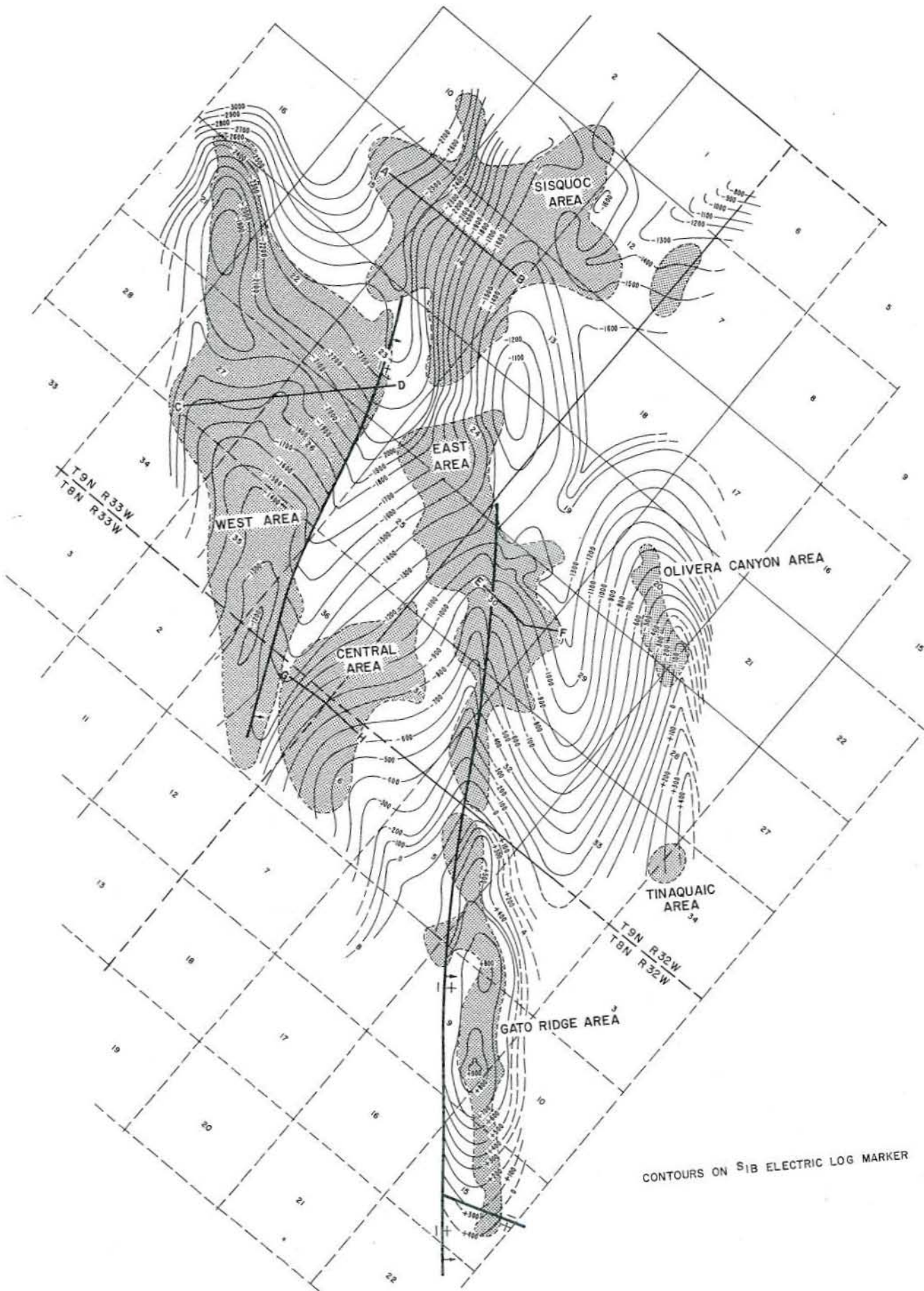
CURRENT CASING PROGRAM: 11 3/4" or 10 3/4" cem. above zone; 8 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is injected into disposal wells.

REMARKS:

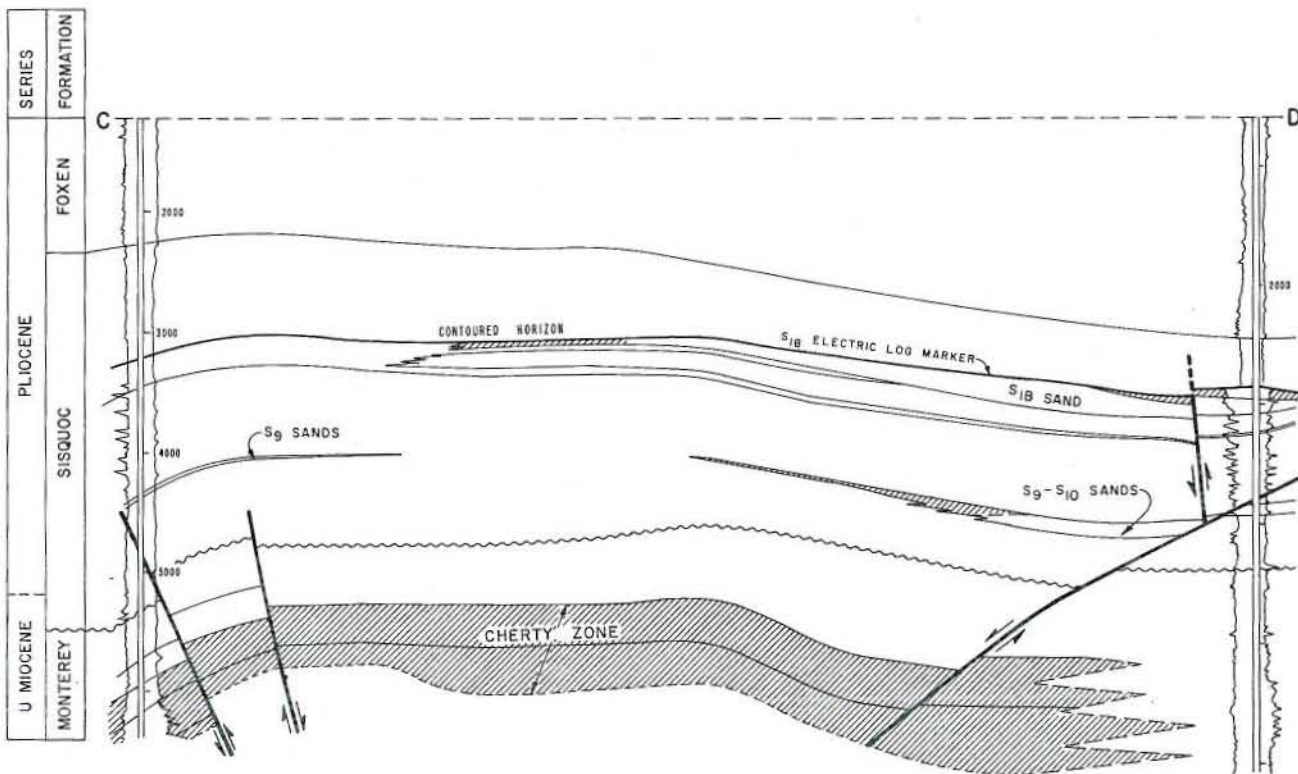
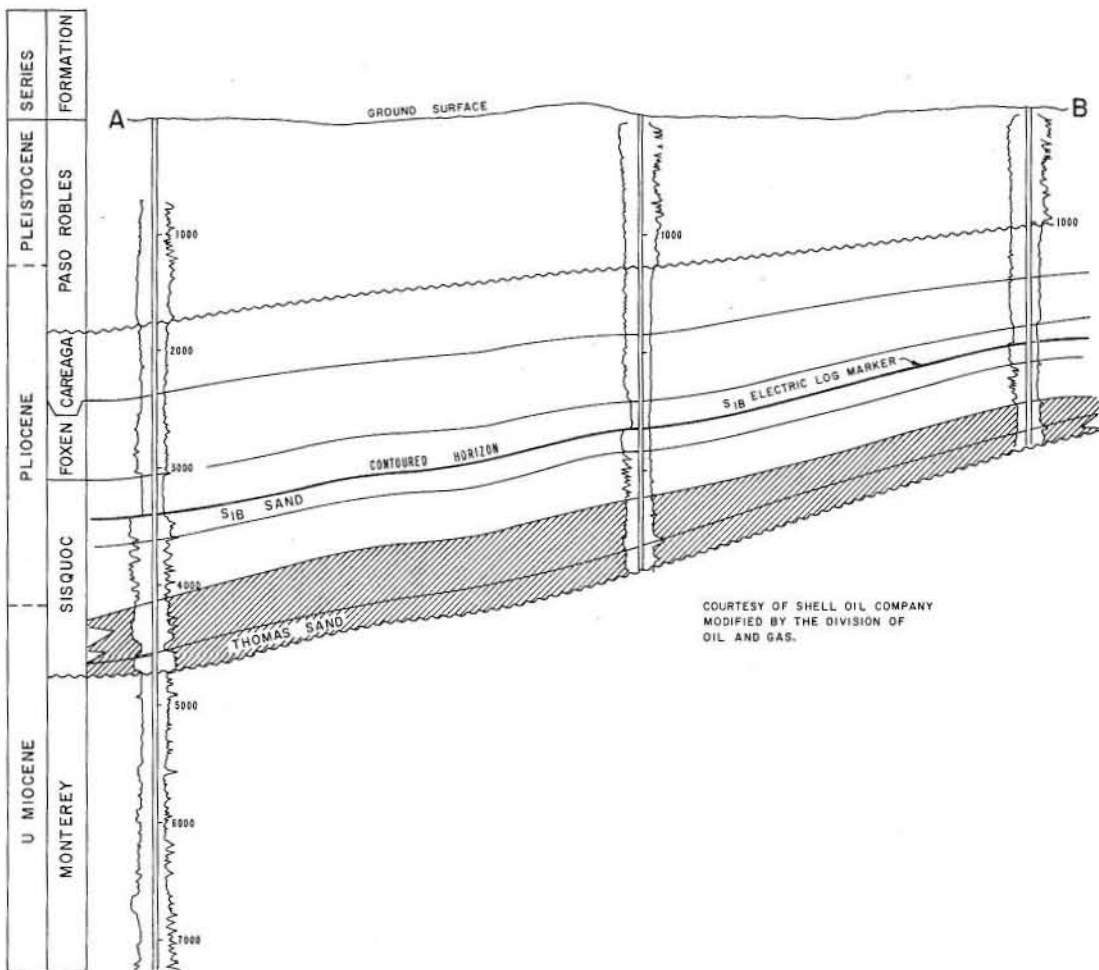
REFERENCES: Bell, H.W., Casmalia Oil Field: Calif. State Mining Bureau, Summary of Operations--Calif. Oil Fields, Vol. 5, No. 10, p. 10 (1920).
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Gore, F.D., Method of Handling Heavy Crude in the Casmalia Oil Field: Calif. State Mining Bureau, Summary of Operations--Calif. Oil Fields, Vol. 8, No. 6, p. 5 (1922).
Hamilton, F., Petroleum in Southern California: Calif. State Mining Bureau, Bull. No. 63, p. 342 (1913).
Porter, W.W., II, Casmalia Oil Field: Calif. State Div. of Mines, Bull. 118, p. 430 (1941).
Regan, L.J., Jr., and A.W. Hughes, Fractured Reservoirs of Santa Maria District, Calif.: Am. Assoc. Petroleum Geologists Bull. Vol. 33, No. 1, p. 32 (1949).
Woodring, W.P., and M.N. Bramlette, Geology and Paleontology of the Santa Maria District, Calif.: U.S. Geol. Survey Prof. Paper 222, p. 121 (1950).

CAT CANYON OIL FIELD



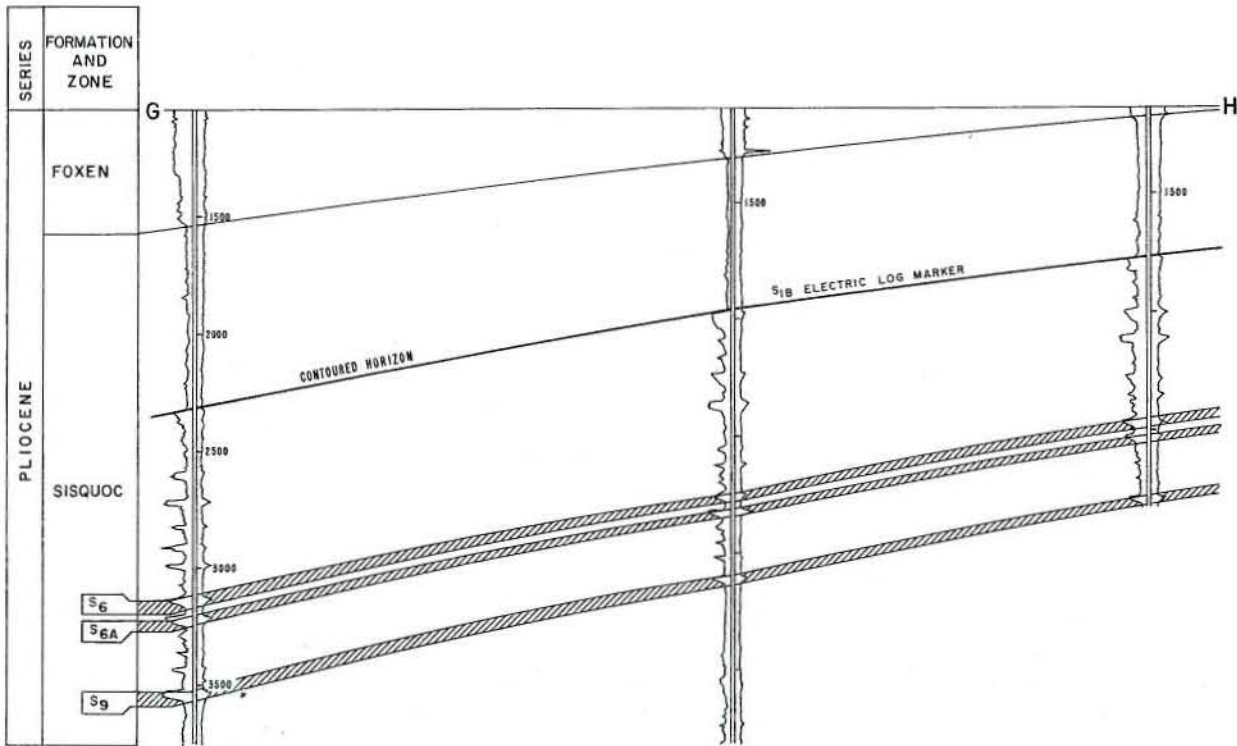
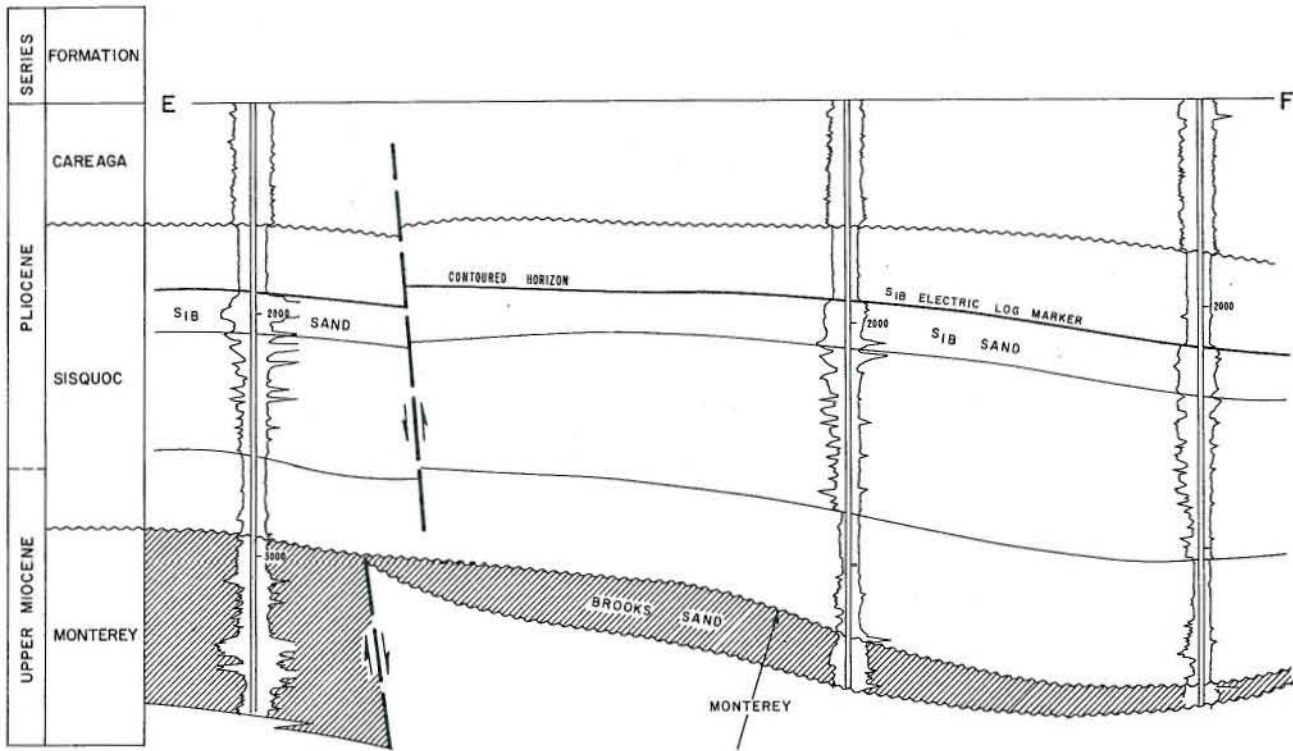
CAT CANYON OIL FIELD

Sisquoc Area and West Area



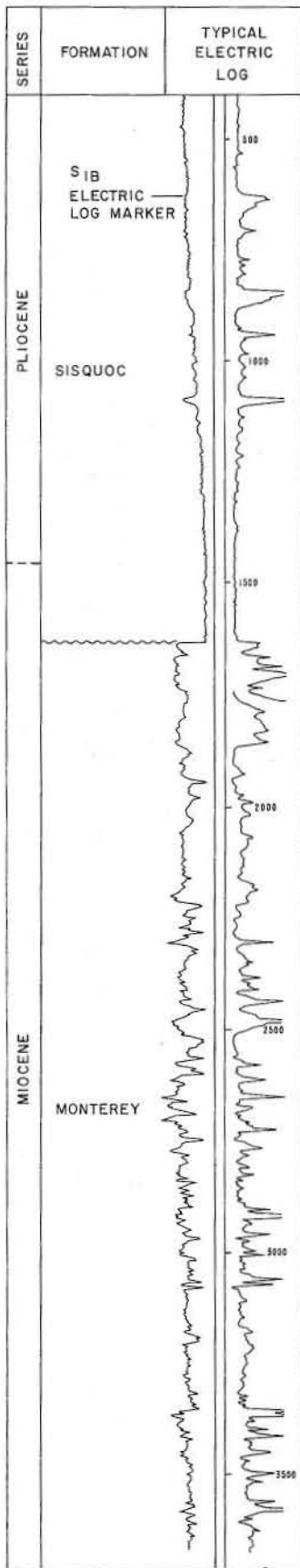
CAT CANYON OIL FIELD

East Area and Central Area

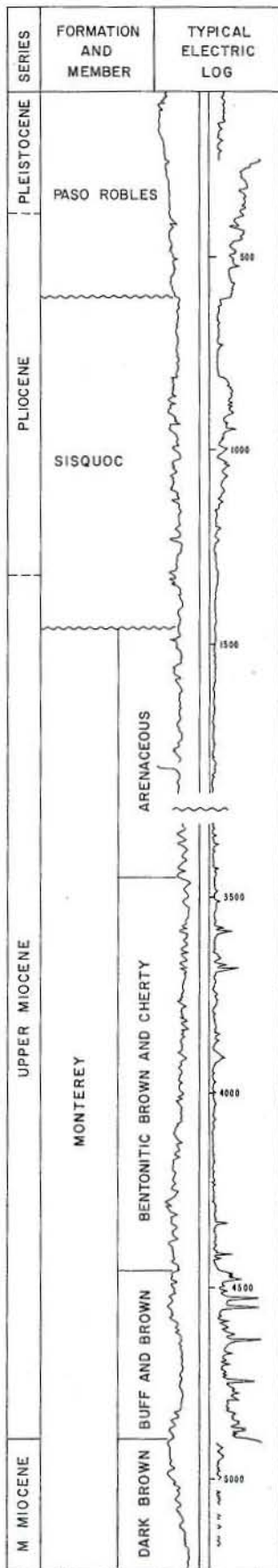


CAT CANYON OIL FIELD

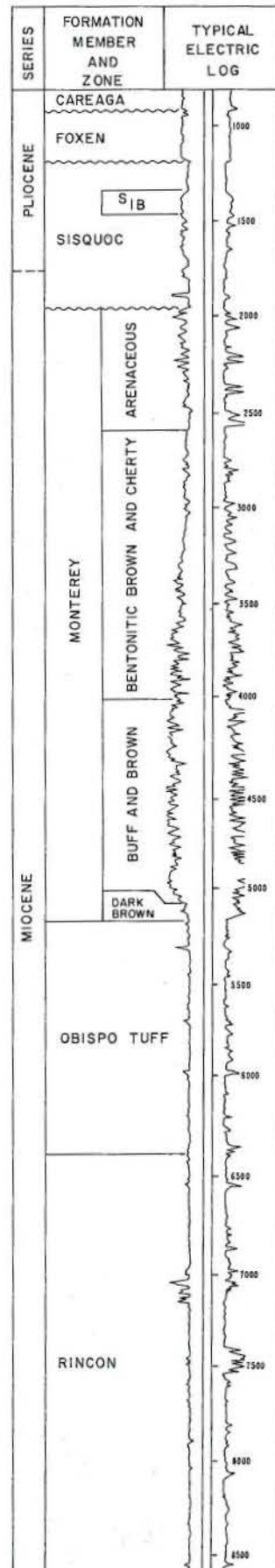
GATO RIDGE AREA



TINAQUAIC AREA



OLIVERA CANYON AREA



CALIFORNIA DIVISION OF OIL AND GAS

CAT CANYON OIL FIELD
Santa Barbara County

LOCATION: 8 miles southeast of Santa Maria

TYPE OF TRAP: See areas

ELEVATION: 700 - 1,400

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sisquoc	Union Oil Co. of Calif. "Palmer Stendel" (Old) 1	Palmer Union Oil Co. 1	26 9N 33W	SB	150	N.A.	1908

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Continental Oil Co. "McNee" 4	Union Oil Co. of Calif. "McNee" 4	Jul 1945	20 9N 32W	SB	9,001	Rincon	early Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
6,832,620	3,601,914	33,499,949	7,400	634	208,900,427	105,519,748	8,373,328	1953	1,334	1,174	8,160

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: Effective January 1, 1972, the Four Deer area of Cat Canyon oil field was classified as a separate field.

REFERENCES: Prutzman, P.W., Petroleum in Southern California: Calif. State Mining Bureau Bull. 63 (1912).
Woodring, W.P., and M.N. Bramlette, Geology and Paleontology of the Santa Maria District, California: U.S. Geol. Survey Prof. Paper 222, p. 120 (1950).

CALIFORNIA DIVISION OF OIL AND GAS

CAT CANYON OIL FIELD

CENTRAL AREA

Santa Barbara County

LOCATION: See map sheet of Cat Canyon Oil Field

TYPE OF TRAP: Sand pinchout on homocline

ELEVATION: 1,000

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sisquoc	Getty Oil Co. "Los Alamos" 32	Pacific Western Oil Corp. "Los Alamos" 32	6 8N 32W	SB	184	8	May 1956

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Getty Oil Co. "Los Alamos" 32	Pacific Western Oil Corp. "Los Alamos" 32	Feb 1956	6 8N 32W	SB	5,210	Monterey	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Sisquoc	2,800	45	Pliocene	Sisquoc	13	450	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
559,826	58,321	1,046,398	590	47	N.A.	N.A.	N.A.	N.A.	84	71	710

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1964	18,002,456	9
Cyclic steam	1963	1,180,231	15
Fire flood	1965	41,322	1

SPACING ACT: Applies

BASE OF FRESH WATER: 850

CURRENT CASING PROGRAM: 10 3/4" cem. 275; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is used in the water-flood project.

REMARKS: This area was formerly considered to be part of the West area.

REFERENCES: Bailey, Wm., C., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 42, No. 2, p. 93 (1956).

CALIFORNIA DIVISION OF OIL AND GAS

CAT CANYON OIL FIELD

EAST AREA

Santa Barbara County

LOCATION: See map sheet of Cat Canyon Oil Field

TYPE OF TRAP: Faulted homocline; lenticular sands,

ELEVATION: 900

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sisquoc	Getty Oil Co. "G.W.P." 44A	Slick-Moorman Production Co. 44A	24 9N 33W	SB	25	0	Jun 1953
Brooks	Robert G. Russell & Son "Field Fee" 1	Brooks Oil Co. 1	31 9N 32W	SB	150	0	1909
Monterey	Continental Oil Co. "Forster" 1-C	Slick-Moorman Production Co. "Palmer Stendel" 1-C	24 9N 33W	SB	*7	0	Oct 1953

Remarks: * Includes some oil produced from 40' of basal Sisquoc sand.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Husky Oil Co. of Delaware "Victory" 20	Palmer Union Oil Co. "Stendel" 20	Jul 1928	30 9N 32W	SB	7,200	Knoxville	Jurassic

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Sisquoc	3,000	250	Pliocene	Sisquoc	18	N.A.	I
Brooks	2,100	200	late Miocene	Monterey	10	425	I
Monterey	3,000	500	Miocene	Monterey	6	330	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
752,180	24,220	1,083,280	1,120	111	N.A.	N.A.	N.A.	N.A.	230	199	1,280

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Steam flood	1966	3,971,777	9
Cyclic steam	1964	2,672,691	77

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,000

CURRENT CASING PROGRAM: 10 3/4" cem. 300; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is injected into disposal wells.

REMARKS: East area data includes the Slick-Moorman area.

REFERENCES: Bailey, Wm. C., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 39, No. 2 (1953).
 Cross, R.K., East Cat Canyon Area of the Cat Canyon Oil Field: Calif. State Div. of Mines Bull. 118, p. 435 (1940).
 Prutzman, P.W., Petroleum in Southern California: Calif. State Mining Bureau Bull. 63, p. 379 (1912).
 Woodring, W.P., and M.N. Bramlette, Geology and Paleontology of the Santa Maria District, California: U.S. Geol. Survey Prof. Paper 222, p. 121 (1950).

CALIFORNIA DIVISION OF OIL AND GAS

CAT CANYON OIL FIELD
Santa Barbara County

GATO RIDGE AREA

LOCATION: See map sheet of Cat Canyon Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 1,400

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sisquoc	Union Oil Co. of Calif. "Union-Continental" 1	O.C. Field Gasoline Corp. "Continental" 1	4 8N 32W	SB	580	N.A.	Mar 1937
Buff and Brown	Pinal Dome Corp. No. T-2	Same as present	15 8N 32W	SB	50	0	Jan 1915

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Sun Oil Co. "Tognazzini" 1	Barnsdall Oil Co. of Calif. "Tognazzini" 1	Apr 1930	9 8N 32W	SB	6,510	Monterey	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Sisquoc	2,210	200	early Pliocene	Sisquoc	14	N.A.	II
Buff and Brown	3,800	300	Miocene	Monterey	13	330	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
475,885	688,958	1,504,465	690	66	N.A.	N.A.	N.A.	N.A.	114	94	740

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 10 3/4" cem. 300; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is injected into Monterey zone disposal wells.

REMARKS:

REFERENCES: Cross, R.K., Gato Ridge Area of Cat Canyon Oil Field: State Div. of Mines, Bull. 118, p. 438 (1940).
Dolman, S.G., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 17, No. 3, p. 34 (1931).
Woodring, W.P., and M.N. Bramlette, Geology and Paleontology of the Santa Maria District, California: U.S. Geol. Survey Prof. Paper 222, p. 121 (1950).

CALIFORNIA DIVISION OF OIL AND GAS

OLIVERA CANYON AREA

CAT CANYON OIL FIELD

Santa Barbara County

LOCATION: See map sheet of Cat Canyon Oil Field

TYPE OF TRAP: Anticline

ELEVATION: 800

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & V	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Cherty - Bentonitic Brown	Continental Oil Co. "McNee" 2	Union Oil Co. of Calif. "McNee" 2	20 9N 32W	SB	37	N.A.	Jun 1944
Buff and Brown	Same as above	Same as above	20 9N 32W	SB	*	N.A.	Jun 1944

Remarks: * Production commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Continental Oil Co. "McNee" 4	Union Oil Co. of Calif. "McNee" 4	Jul 1945	20 9N 32W	SB	9,001	Rincon	early Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Cherty - Bentonitic Brown	3,000	1,200	Miocene	Monterey	10	700	II
Buff and Brown	4,000	300	Miocene	Monterey	10	700	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
223,648	0	459,221	200	15	4,578,523	0	369,422	1953	37	23	210

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 600

CURRENT CASING PROGRAM: 13 3/8" cem. 720; 8 5/8" combination string landed through zone and cemented through ports above zone.

METHOD OF WASTE DISPOSAL: Waste water is injected into water-disposal wells.

REMARKS:

REFERENCES: Dolman, S.G., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 30, No. 2, p. 43 (1944).

CALIFORNIA DIVISION OF OIL AND GAS

CAT CANYON OIL FIELD

SISQUOC AREA

Santa Barbara County

LOCATION: See map sheet of Cat Canyon Oil Field

TYPE OF TRAP: Permeability barrier on west flank of anticline

ELEVATION: 700

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	S & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sisquoc	Husky Oil Co. of Del. "Goodwin" 1	Union Oil Co. of Calif. "Santa Maria Realty" 1	10 9N 33W	SB	69	0	Dec 1944
Thomas	Shell Oil Co. "Thomas" 88-X	M J M & M Oil Co. "Thomas" 88-X	15 9N 33W	SB	89	0	Nov 1954
Monterey	Husky Oil Co. of Del. "Goodwin" 1	Union Oil Co. of Calif. "Santa Maria Realty" 1	10 9N 33W	SB	*	0	Dec 1944

Remarks: * Production from Sisquoc and Monterey zones commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	S & M	Depth (feet)	At total depth	
						Strata	Age
Shell Oil Co. "Lloyd et al" 7	Same	Mar 1971	15 9N 33W	SB	7,860	Monterey	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Sisquoc	2,750	500	Pliocene	Sisquoc	10	50	II
Thomas	4,900	70	Miocene	Sisquoc	7	700	II
Monterey	4,000	500	Miocene	Monterey	9	610	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
3,305,917	396,492	3,472,015	1,970	231	N.A.	N.A.	N.A.	N.A.	401	374	2,190

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1963	1,404,573	2
Steam flood	1967	693,193	2
Cyclic steam	1963	10,675,132	289

SPACING ACT: Applies

BASE OF FRESH WATER: 2,000

CURRENT CASING PROGRAM: 10 3/4" cem. 60 or 9 5/8" cem. 400; 7" combination string landed through zone and cemented through ports above zone and across base of fresh-water sands; 7" cem. above zone to the surface; 5 1/2" liner hung through zone (Sisquoc).

METHOD OF WASTE DISPOSAL: Waste water is injected into disposal wells.

REMARKS: The Sisquoc area includes the Bradley Canyon area.

REFERENCES: Bailey, Wm. C., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 40, No. 2 (1954).

CALIFORNIA DIVISION OF OIL AND GAS

TINAQUAIC AREA

CAT CANYON OIL FIELD

Santa Barbara County

LOCATION: See map sheet of Cat Canyon Oil Field

TYPE OF TRAP: Anticline

ELEVATION: 1,020

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Monterey	Continental Oil Co. "Wickenden" 1	Four-Five-Six Oil Co. "Wickenden" 1	34 9N 32W	SB	90	0	Feb 1945

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Continental Oil Co. "Wickenden" 5	Same	Jun 1973	33 9N 32W	SB	5,250	Monterey	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Monterey	2,020 - 3,180	1,200 - 3,200	Miocene	Monterey	6	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
6,963	0	4,559	50	2	21,519	0	7,342	1948	7	3	50

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 380 - 600

CURRENT CASING PROGRAM: 13 3/8" cem. 200; 8 5/8" combination string landed through zone and cemented through ports above zone and across base of fresh-water sands; or 9 5/8" cem. 1,800; 7" liner landed through zone.

METHOD OF WASTE DISPOSAL: Water is transported to Olivera Canyon area for subsurface disposal.

REMARKS: No formal production reports were filed until July 1948. Cumulative production only includes oil that was reported since July 1948.

REFERENCES: Dolman, S.G., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 31, No. 2 (1945).

CALIFORNIA DIVISION OF OIL AND GAS

CAT CANYON OIL FIELD

WEST AREA

Santa Barbara County

LOCATION: See map sheet of Cat Canyon Oil Field

TYPE OF TRAP: Faulted anticline; sand pinchout

ELEVATION: 800 - 1,200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sisquoc (S _{1b})	Union Oil Co. of Calif. "Palmer Stendel" (Old) 1	Palmer Union Oil Co. 1	26 9N 33W	SB	150	N.A.	1908
Alexander (S ₉ -S ₁₀)	Standard Oil Co. of Calif. "Alexander" 164	Same as present	21 9N 33W	SB	366	N.A.	Mar 1953
Los Flores (Cherty)	Standard Oil Co. of Calif. "Los Flores" 1-1	Standard Oil Co. of Calif. "Los Flores Land and Oil Co. Standard" 1	27 9N 33W	SB	716	N.A.	Aug 1938

Remarks: Indications of oil in the Monterey Formation were noted as early as August 1918 in Pan American Pet. Inv. Corp. well No. 15A (now Getty Oil Co. "Los Alamos" 15-A).

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Bell" 106	Same	Sep 1951	35 9N 33W	SB	7,460	Monterey	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Sisquoc (S _{1b})	2,800	600	Pliocene	Sisquoc	17	1,330	II
Alexander (S ₉ -S ₁₀)	3,750	200	Pliocene	Sisquoc	23	1,200	II
Los Flores (Cherty)	6,000	1,500	Miocene	Monterey	15	400	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,508,201	2,433,923	25,930,011	2,780	162	N.A.	N.A.	N.A.	N.A.	461	410	2,980

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1954	120,032,572	70
Cyclic steam	1964	247,972	20

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,000

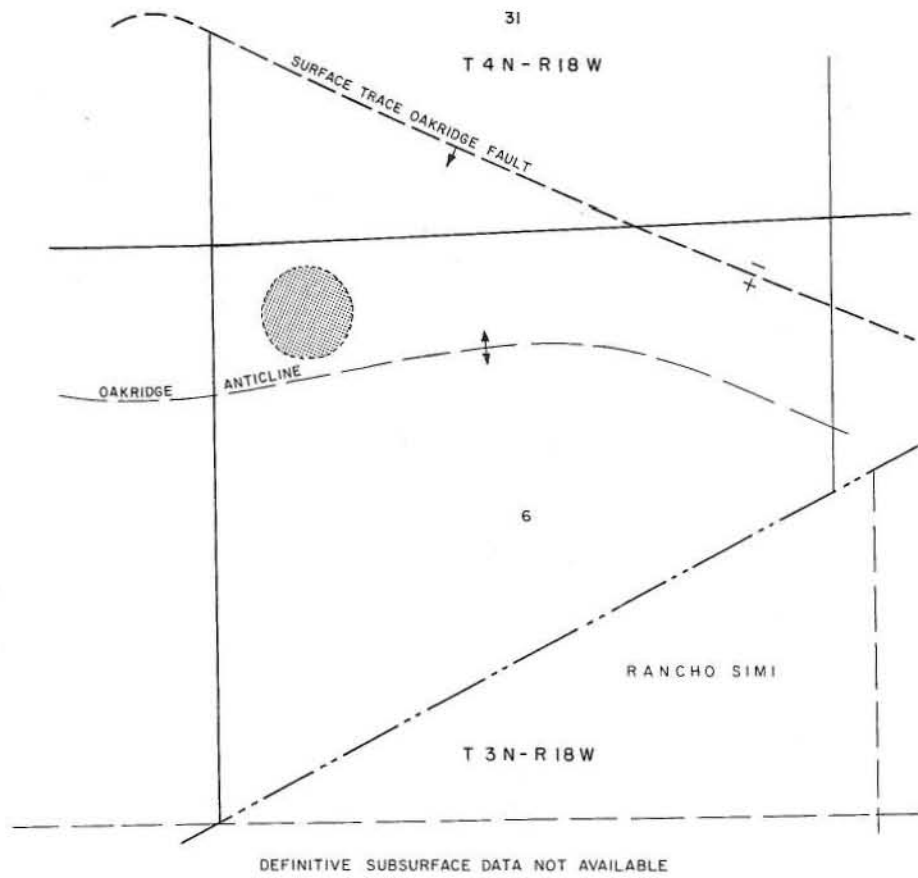
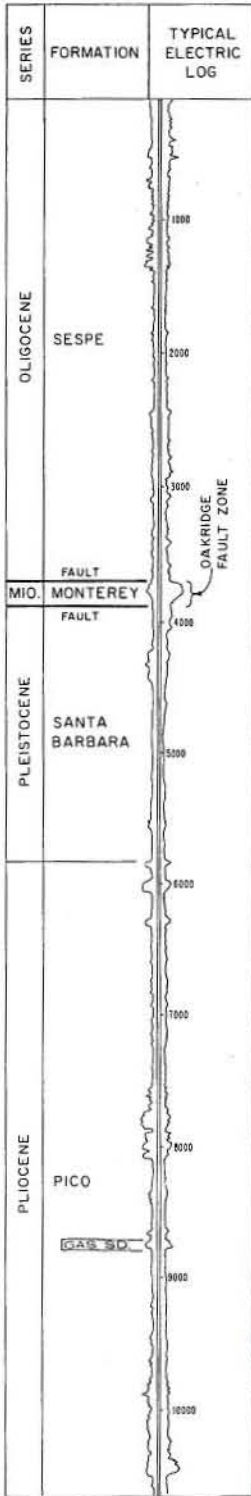
CURRENT CASING PROGRAM: 13 3/8" or 11 3/4" cem. 200 - 400; 8 5/8" or 7" cem. above zone and across base of fresh-water sands; 6 5/8" or 5 1/2" liner landed through zone; or 7" combination string landed through zone and cemented through ports above zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water is injected into water-disposal wells or is used in water-flood projects.

REMARKS:

REFERENCES: Huey, W.F., West Cat Canyon Area of Cat Canyon Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 40, No. 1 (1954).
 Manlove, C., West Cat Canyon Oil Field: Calif. State Div. of Mines Bull. 118, p. 432 (1938).
 Prutzman, P.W., Petroleum in Southern California: Calif. State Mining Bureau Bull. 63, p. 382 (1912).
 Regan, L.J. Jr., and A.W. Hughes, Fractured Reservoirs of Santa Maria District, California: Am. Assoc. Petroleum Geologists Bull., Vol. 33, No. 1, p. 32 (1949).
 Woodring, W.P., and M.N. Bramlette, Geology and Paleontology of the Santa Maria District, California: U.S. Geol. Survey Prof. Paper 222, p. 120 (1950).

CHAFFEE CANYON GAS FIELD (Abandoned)



SURFACE DATA AFTER WSW KEW

CALIFORNIA DIVISION OF OIL AND GAS

CHAFFEE CANYON GAS FIELD (Abandoned)

Ventura County

LOCATION: 27 miles northeast of Ventura

TYPE OF TRAP: Sand lens

ELEVATION: 1,510

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial production			Date of completion
					Daily (Mcf)	Flow pressure (psi)	Bean size (in)	
(Unnamed)	Gulf Oil Corp. "Hunter" 1	Western Gulf Oil Co. "Hunter" 1	6 3N 18W	SB	200	2,135	8/64	Feb 1957

Remarks: This well produced some condensate.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Gulf Oil Corp. "Hunter" 1	Western Gulf Oil Co. "Hunter" 1	Aug 1956	6 3N 18W	SB	10,601	Pico	Pliocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Gas (btu)	Salinity of zone water gr/gal	Original zone pressure (psi)	Class BOPE required
			Age	Formation				
(Unnamed)	8,712	43	Pliocene	Pico	N.A.	N.A.	3,630	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production		1973 Proved acreage	1973 Maximum number producing wells	Cumulative gas production (Mcf)	Peak gas production		Total number of wells		Maximum proved acreage
Net gas (Mcf)	Water (bbl)				(Mcf)	Year	Drilled	Completed	
0	0	0	0	10,820	10,820	1957	4	1	10

SPACING ACT: Applies

BASE OF FRESH WATER: 555

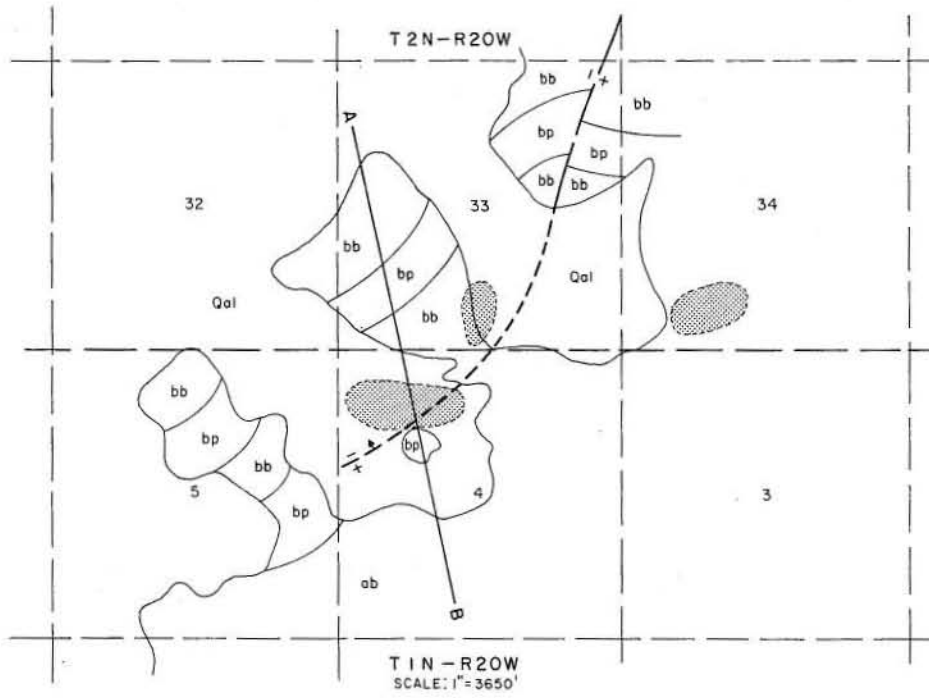
CURRENT CASING PROGRAM: 10 3/4" cem. 1,000; 7" cem. through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: The field was abandoned in August 1957.

REFERENCES:

CONEJO OIL FIELD (Abandoned)



SERIES	FORMATION AND ZONE
HOLO-CENE	ALLUVIUM OIL ZONE
MIOCENE	CONEJO VOLCANICS



CALIFORNIA DIVISION OF OIL AND GAS

CONEJO OIL FIELD (Abandoned)

Ventura County

LOCATION: 17 miles southeast of Ventura

TYPE OF TRAP: Tar seal

ELEVATION: 160

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	Union Oil Co. of Calif. "Calleguas" 1	Operator and well name unknown	33 2N 20W	SB	N.A.	N.A.	1892

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Atlantic Richfield Co. "Camarillo" 1	Richfield Oil Corp. "Camarillo" 1	Feb 1955	32 2N 20W	SB	11,002	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
(Unnamed)	150	90	Holocene	Alluvium	18	Fresh	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	110,083	12,000	2,095	1953	110+	N.A.	90

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 2,650

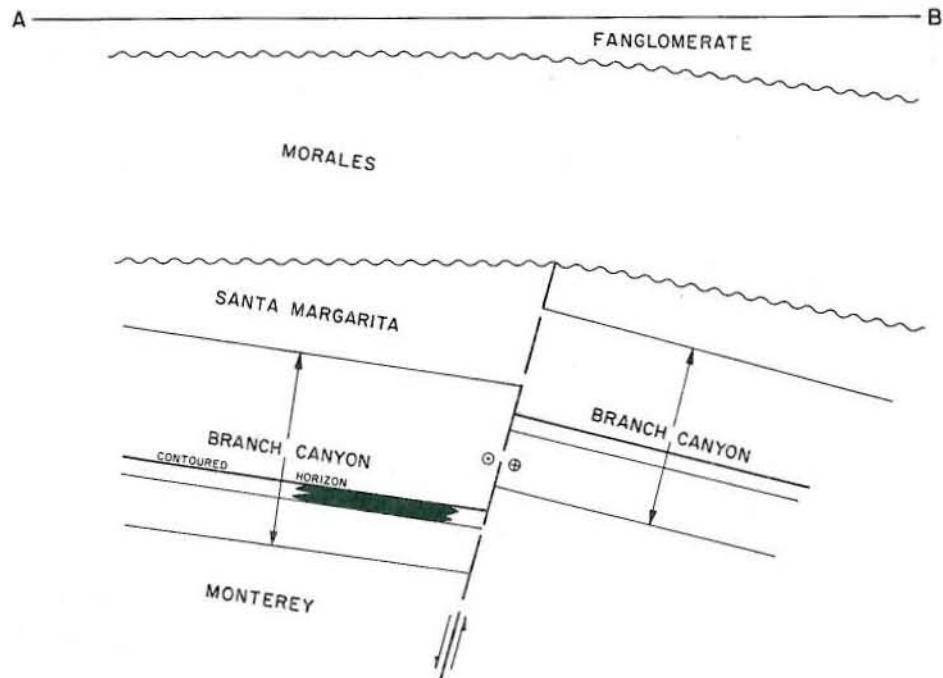
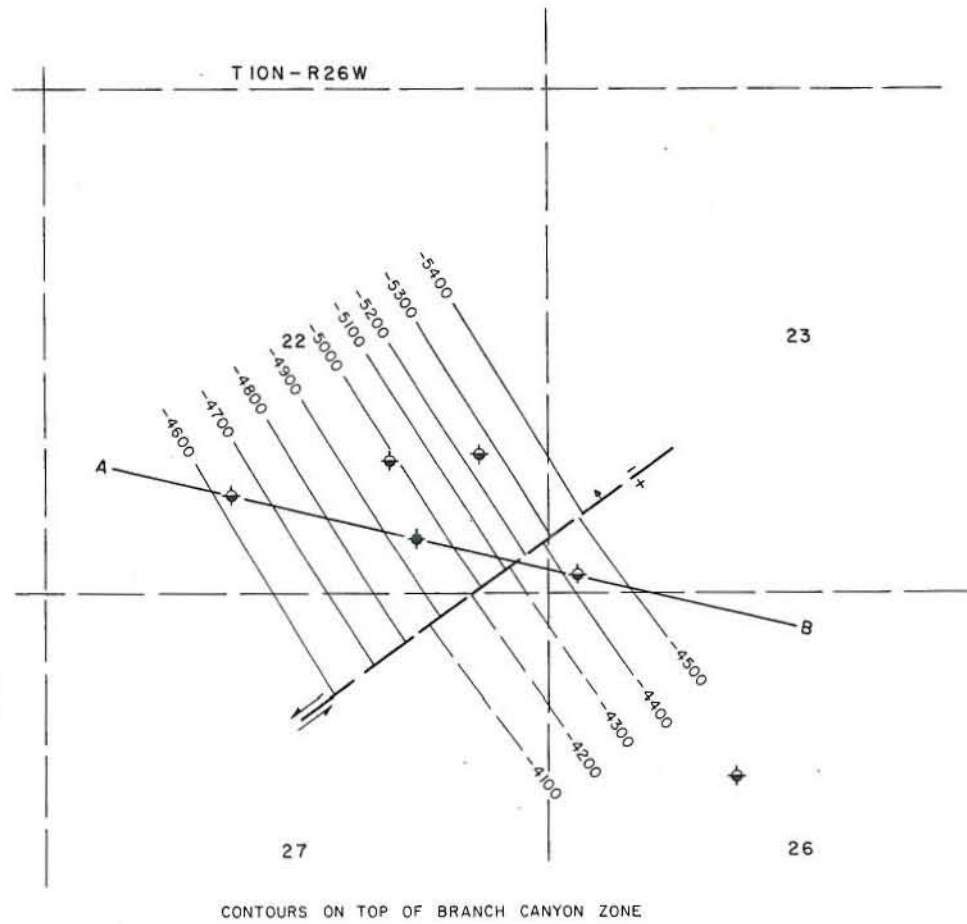
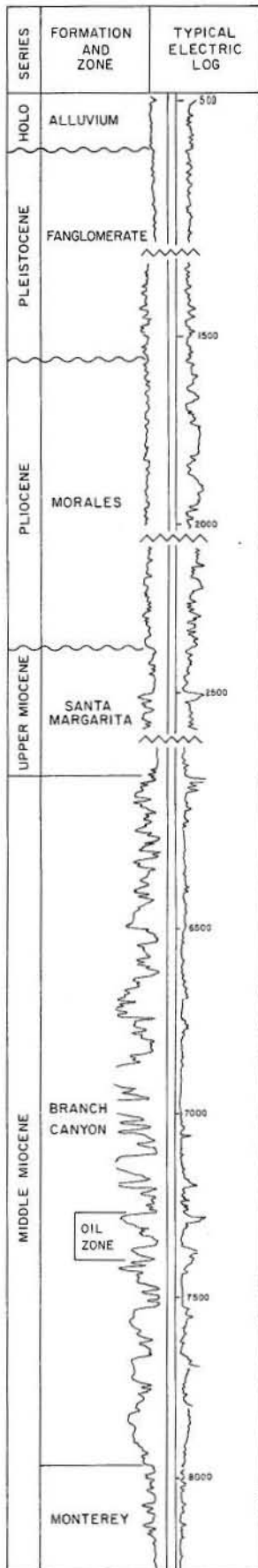
CURRENT CASING PROGRAM: 7" cem. above zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Early pumping was by windmill. Drilling was done by spring pole, cable tools, and rotary equipment. Field was abandoned in 1971.

REFERENCES: Renke, D.F., Geology of a Part of the Newbury Park Quadrangle, Ventura County: Unpublished M.A. Thesis, University of California at Los Angeles (1957).

CENTRAL CUYAMA OIL FIELD (Abandoned)



CALIFORNIA DIVISION OF OIL AND GAS

CUYAMA, CENTRAL, OIL FIELD (Abandoned)
 Santa Barbara County

LOCATION: 1 1/2 miles west of Cuyama

TYPE OF TRAP: Faulted homocline

ELEVATION: 2,225

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Branch Canyon	Atlantic Richfield Co. "Seaboard-Richfield-Kirschenmann" 78-22	Seaboard Oil Co. of Delaware "Seaboard-Richfield-Kirschenmann" 78-22	22 10N 26W	SB	131	N.A.	May 1951

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Atlantic Richfield Co. "Seaboard-Richfield-Kirschenmann" 78-22	Seaboard Oil Co. of Delaware "Seaboard-Richfield-Kirschenmann" 78-22	Feb 1951	22 10N 26W	SB	10,096	Vaqueros (Painted Rock)	early Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Branch Canyon	7,360	20	middle Miocene	Branch Canyon	46	1,200	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	33,026	12,446	6,752	1951	3	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 4,580

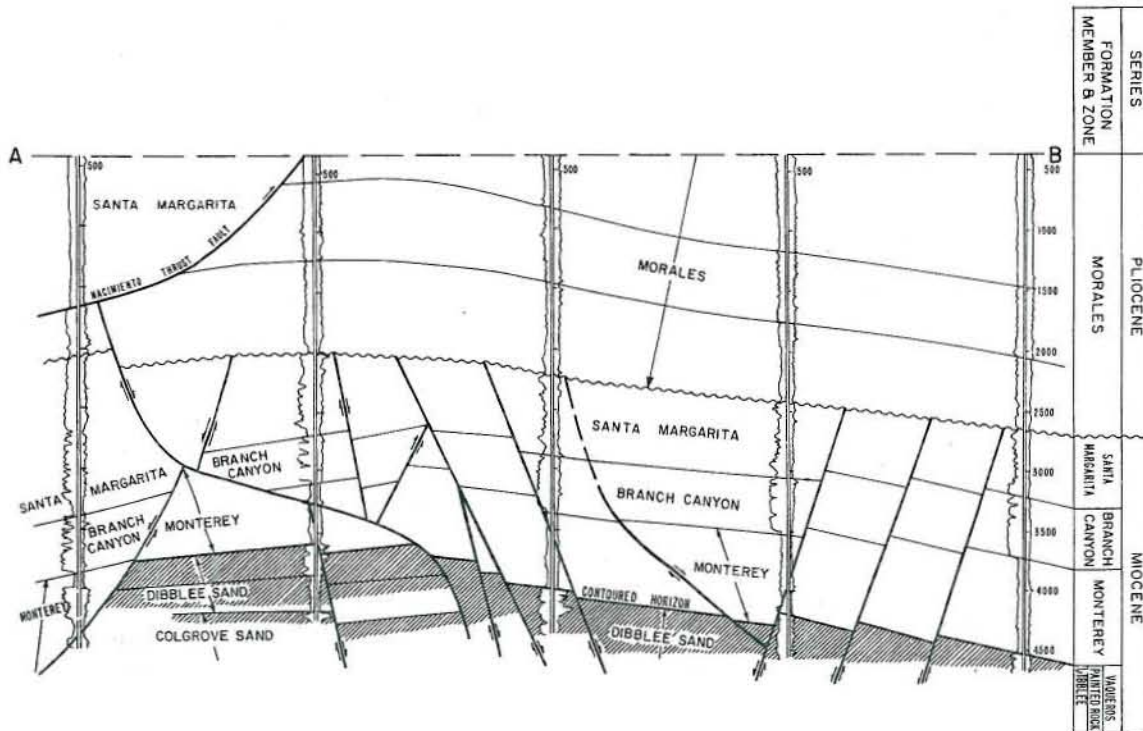
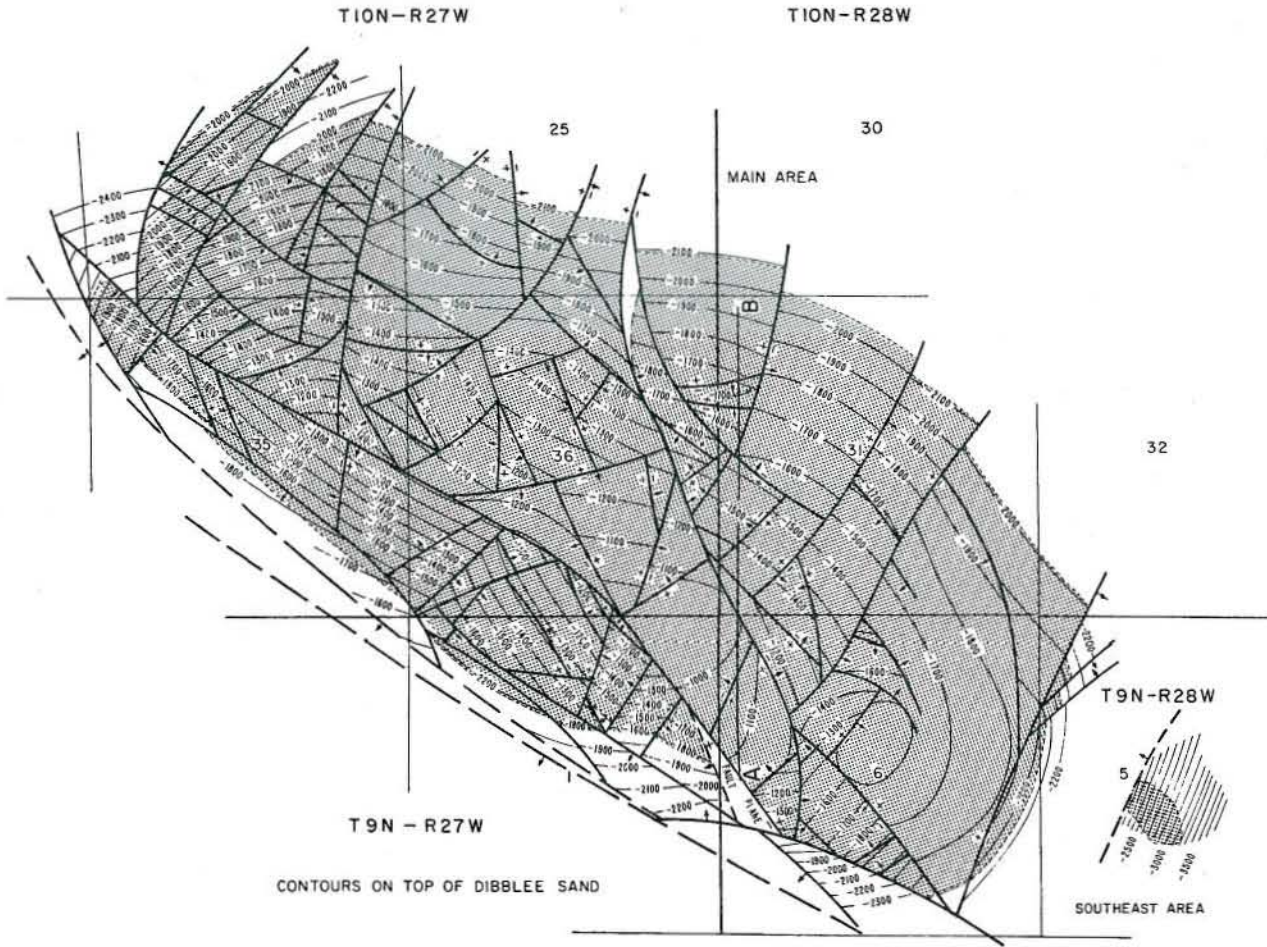
CURRENT CASING PROGRAM: 11 3/4" cem. 500; 7" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water disposed of in unlined sump.

REMARKS: Last production was in May 1958. Field abandoned October 1958.

REFERENCES: Dolman, S.G., Operations in District No. 3, 1951; Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 37, No. 2 (1951).

SOUTH CUYAMA OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

CUYAMA, SOUTH, OIL FIELD

Santa Barbara County

LOCATION: 41 miles east of Santa Maria

TYPE OF TRAP: See areas

ELEVATION: 2,400 - 3,050

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Dibblee	Atlantic Richfield Co., Opr. "S.C.U." 81-35	Richfield Oil Corp. "Homan A" 81-35	35 10N 27W	SB	525	175	May 1949

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Atlantic Richfield Co. "Cox" 44-5	Richfield Oil Corp. "Cox" 44-5	May 1951	5 9N 26W	SB	6,015	Vaqueros	early Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974) (Dry gas production data not included - see Main Area)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,626,829	5,305,471	11,208,237	2,210	141	207,142,141	209,006,818	14,116,035	1951	278	263	2,560

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: See areas

REFERENCES: Hill, M.L., S.A. Carlson, and T.W. Dibblee, Jr., Stratigraphy of Cuyama Valley-Caliente Range Area, California: Am. Assoc. Petroleum Geologists Bull., Vol. 42, No. 12, p. 2973 (1958).

Zulberti, J.L., South Cuyama Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 40, No. 1 (1954).

CALIFORNIA DIVISION OF OIL AND GAS

CUYAMA, SOUTH, OIL FIELD

MAIN AREA

Santa Barbara County

LOCATION: See map sheet of South Cuyama Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 2,400 - 3,050

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
52-1 (Gas) Dibblee Colgrove	Atlantic Richfield Co. "Hibberd" 52-1	Richfield Oil Corp. "Hibberd" 52-1	1 9N 27W	SB	0	4,913	Aug 1953
	Atlantic Richfield Co., Opr. "S.C.U." 81-35	Richfield Oil Corp. "Homan A" 81-35	35 10N 27W	SB	525	175	May 1949
	Atlantic Richfield Co., Opr. "H.U." 22-6	Richfield Oil Corp. "Hibberd" 22-6	6 9N 26W	SB	313	58	Nov 1950

Remarks: The gas zone was tested and shut in until June 1966. It produced for only 1 1/2 years thereafter and is presently shut in.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Atlantic Richfield Co. "Cox" 44-5	Richfield Oil Corp. "Cox" 44-5	May 1951	5 9N 26W	SB	6,015	Vaqueros	early Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
52-1 (Gas)	1,830	35	late Miocene	Santa Margarita	26	810	III
Dibblee	3,600	400	early Miocene	Vaqueros	33	910 - 1,120	III
Colgrove	4,300	120	early Miocene	Vaqueros	33	N.A.	III

PRODUCTION DATA (Jan. 1, 1974) (Dry gas production data not included - see remarks)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,626,829	5,305,471	11,208,237	2,200	141	207,032,987	208,975,194	14,078,749	1951	274	261	2,540

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1955	152,762,601	24

SPACING ACT: Applies

BASE OF FRESH WATER: 2,000

CURRENT CASING PROGRAM: 13 3/8" or 12 3/4" cem. 200; 8 5/8" cem. above zone and across base of fresh-water sands; 6 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is injected into water-flood wells.

REMARKS: Gas injection for pressure maintenance was started soon after the field was discovered. 1973 dry gas production 0 Mcf.; cumulative dry gas production 262,142; one well drilled and completed; proved acreage (1973) 40, maximum 40.

REFERENCES: Dolman, S.G., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 35, No. 2 (1949).

CALIFORNIA DIVISION OF OIL AND GAS

CUYAMA, SOUTH, OIL FIELD

SOUTHEAST AREA

Santa Barbara County

LOCATION: See map sheet of South Cuyama Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 2,700

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbi)	Gas (Mcf)	
Colgrove	Atlantic Richfield Co. "Cox" 35-5	Richfield Oil Corp. "Cox" 35-5	5 9N 26W	SB	199	370	Apr 1951

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Atlantic Richfield Co. "Cox" 35-5	Richfield Oil Corp. "Cox" 35-5	Feb 1951	5 9N 26W	SB	6,015	Vaqueros	early Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Colgrove	5,840	50	early Miocene	Vaqueros	37	535 - 3,000	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbi)	Net gas (Mcf)	Water (bbi)			Oil (bbi)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	10	0	109,154	31,624	41,536	1952	4	2	20

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative Injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 2,100

CURRENT CASING PROGRAM: 13 3/8" or 12 3/4" cem. 200; 8 5/8" cem. above zone and across base of fresh-water sands; 6 5/8" liner landed through zone.

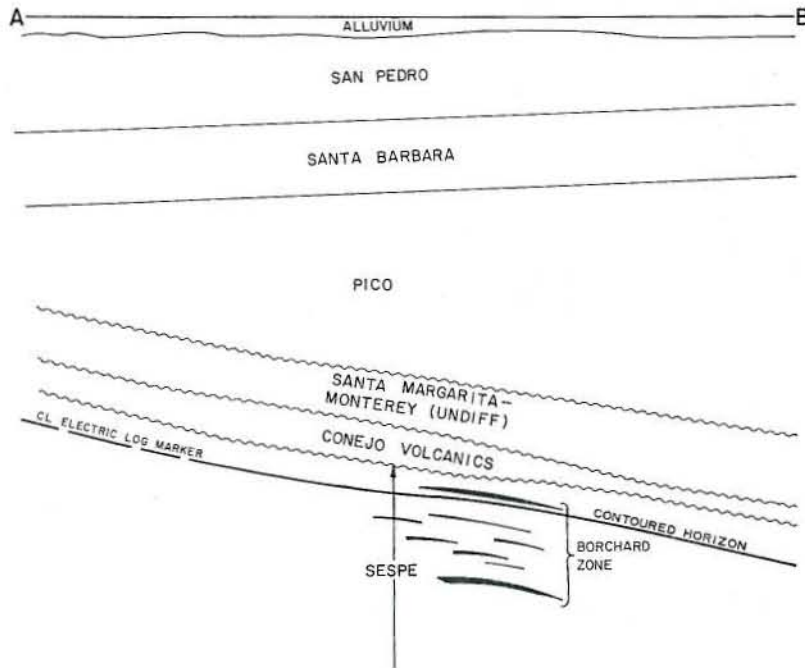
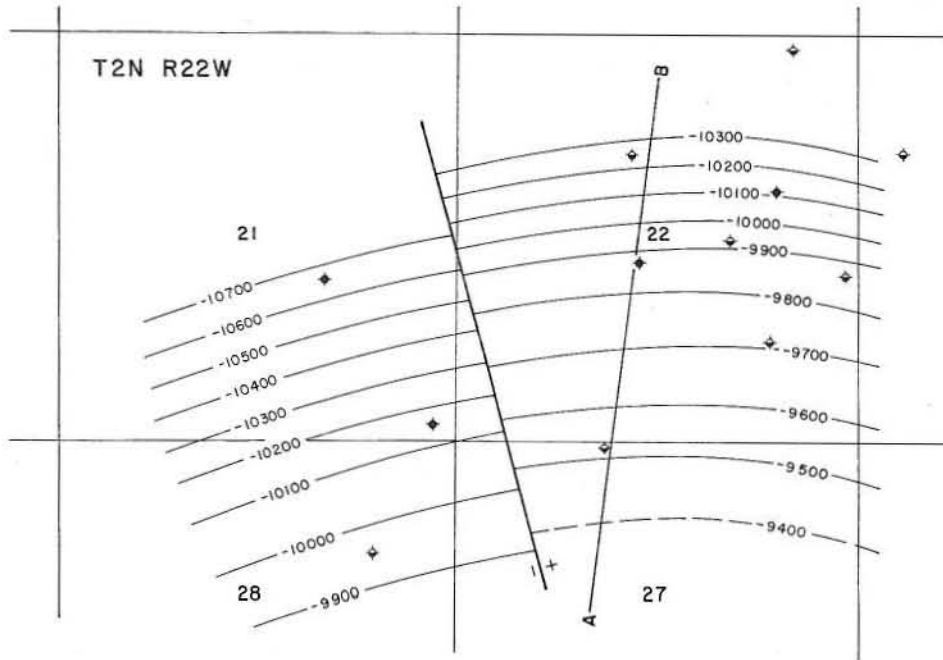
METHOD OF WASTE DISPOSAL: Waste water injected into disposal wells.

REMARKS: The zone was originally named Hibberd, but the name was later changed to Colgrove to agree with nomenclature in Russell Ranch oil field.

REFERENCES: Dolman, S.G., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 37, No. 2 (1951).

EL RIO OIL FIELD (Abandoned)

SERIES	FORMATION AND ZONE	TYPICAL ELECTRIC LOG
PLEISTOCENE	SAN PEDRO	
	SANTA BARBARA	
PLIOCENE	PICO	
MIOCENE	SANTA MARGARITA-MONTEREY (UNDIFF)	
	CONEJO VOLCANICS	
OLIGOCENE	SESPE	



CALIFORNIA DIVISION OF OIL AND GAS

EL RIO OIL FIELD (Abandoned)

Ventura County

LOCATION: 7 miles southeast of Ventura

TYPE OF TRAP: Permeability variations on a homocline

ELEVATION: 90

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Borchard	Standard Oil Co. of Calif. "H.O. Borchard" 1	Same as present	21 2N 22W	SB	338	220	Jan 1958

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "H.M. Borchard" 3-1	Same	Nov 1956	21 2N 22W	SB	15,022	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Borchard	11,000	300	Oligocene	Sespe	26 - 31	1,600	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	337,264	174,908	88,289	1960	12	4	40

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 2,200

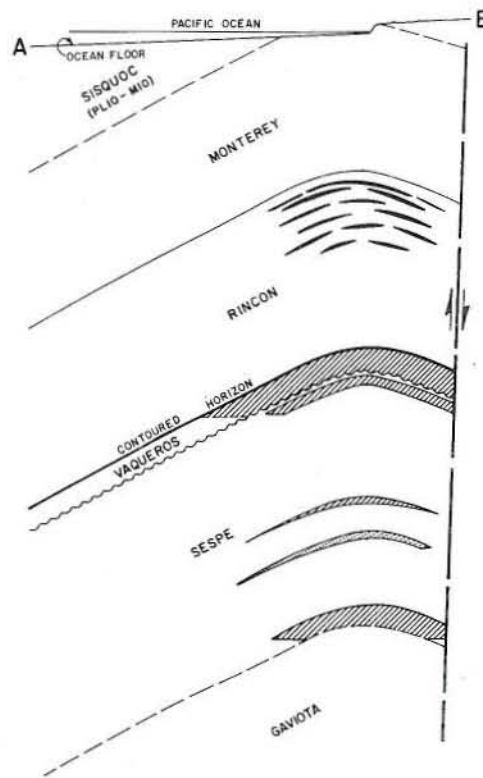
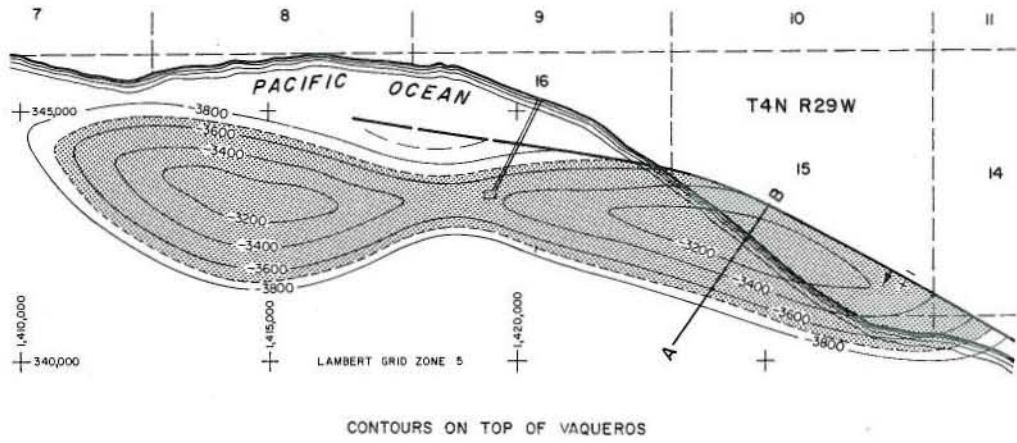
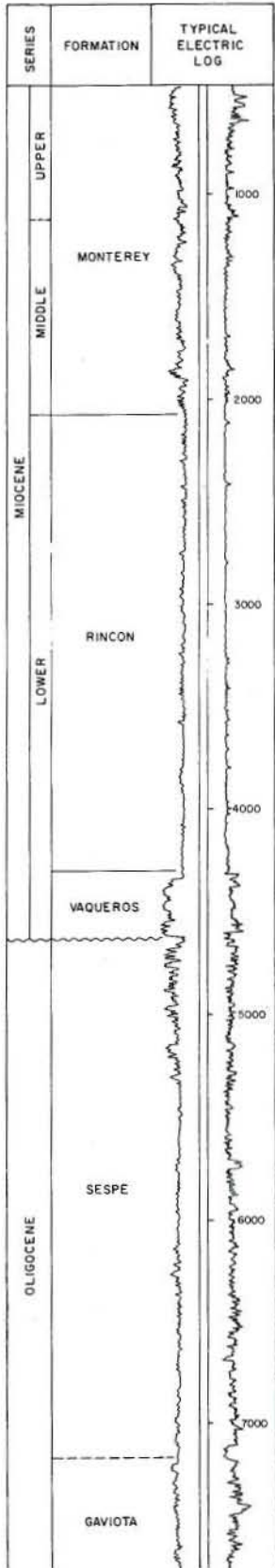
CURRENT CASING PROGRAM: 13 3/8" cem. 1,200; 7" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

REMARKS: The field last produced and was abandoned in 1971. Initial reservoir pressure was 5,000 psi; production decline rate was high. Production zone is equivalent to Colonia zone in West Montalvo field.

REFERENCES:

ELWOOD OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

ELWOOD OIL FIELD
Santa Barbara County

LOCATION: 14 miles west of Santa Barbara

TYPE OF TRAP: Anticline

ELEVATION: 50 (Onshore drillsites); -20 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Vaqueros	Sun Oil Co. "Luton-Bell" 1	Barnsdall Oil Co. of Calif. "Luton-Bell" 1	15 4N 29W	SB	1,755	750	Jul 1928

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Signal Oil and Gas Co. "State" 208-29X	Same	Sep 1968	17 4N 29W	SB	9,986	Cozy Dell	Eocene

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
58,895	395,349	1,014,733	190	12	103,257,502	96,199,882	14,617,742	1930	151	133	605

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: See areas.

BASE OF FRESH WATER: See areas.

CURRENT CASING PROGRAM: See areas.

METHOD OF WASTE DISPOSAL: See areas.

REMARKS: Gas zone production is commingled with that from other zones. Gas lift was used early in 1930. High pressure gas noted in the Monterey shale.

REFERENCES: Dolman, S.G., Elwood Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 16, No. 3 (1930).
Dolman, S.G., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 15, No. 3 (1929) and Vol. 16, No. 3 (1930).
Hill, M.L., Elwood Oil Field: State Div. of Mines Bull. 118, p. 380 (1943).
Railroad Commission of the State of California, Elwood Oil Field: Case No. 4591, p. 205 (1942).
Uren, L.C., 60-Foot Caissons Used for Rig Supports in Drilling Off-Shore Leases: National Petroleum News, June 18, 1930, p. 59.
Yerkes, R.F., H.C. Wagner, and K.A. Yenne, Petroleum Development in the Region of the Santa Barbara Channel: U.S. Geol. Survey Prof. Paper 679B, p. 19 (1969).

CALIFORNIA DIVISION OF OIL AND GAS

ELWOOD OIL FIELD

ONSHORE AREA (Abandoned)

Santa Barbara County

LOCATION: See map sheet of Elwood Oil Field

TYPE OF TRAP: Anticline

ELEVATION: 50

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Rincon	Sun Oil Co. "Luton-Bell" 18	Barnsdall Oil Co. of Calif. "Luton-Bell" 18	15 4N 29W	SB	154	620	Aug 1931
Vaqueros	Sun Oil Co. "Luton-Bell" 1	Barnsdall Oil Co. of Calif. "Luton-Bell" 1	15 4N 29W	SB	1,755	750	Jul 1928
Upper Sespe	Sun Oil Co. "Luton-Bell" 6	Barnsdall Oil Co. of Calif. "Luton-Bell" 6	15 4N 29W	SB	679	567	Oct 1935
Bell 14	Sun Oil Co. "Luton-Bell" 14	Barnsdall Oil Co. of Calif. "Luton-Bell" 14	15 4N 29W	SB	2,390	2,000	Oct 1931
Gas zone	Sun Oil Co. "Luton-Bell" 12	Barnsdall Oil Co. of Calif. "Luton-Bell" 12	15 4N 29W	SB	--	2,300	Jun 1936
Lower Sespe	Same as above	Same as above	15 4N 29W	SB	68	600	Jun 1936

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Sun Oil Co. "Luton-Bell" 12	Barnsdall Oil Co. of Calif. "Luton-Bell" 12	Nov 1936	15 4N 29W	SB	8,503	Cozy Dell	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Rincon	2,600	1,500	early Miocene	Rincon	26	2,000	II
Vaqueros	3,400	300	early Miocene	Vaqueros	38	1,200	II
Upper Sespe	3,700	100	Oligocene	Sespe	36	1,000	II
Bell 14	4,800	60	Oligocene	Sespe	42	1,000	II
Gas zone	5,200	100	Oligocene	Sespe	1,100	1,000	II
Lower Sespe	5,620	1,000	Oligocene	Sespe	34	1,000	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	26,874,285	30,512,441	8,305,221	1929	38	31	160

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

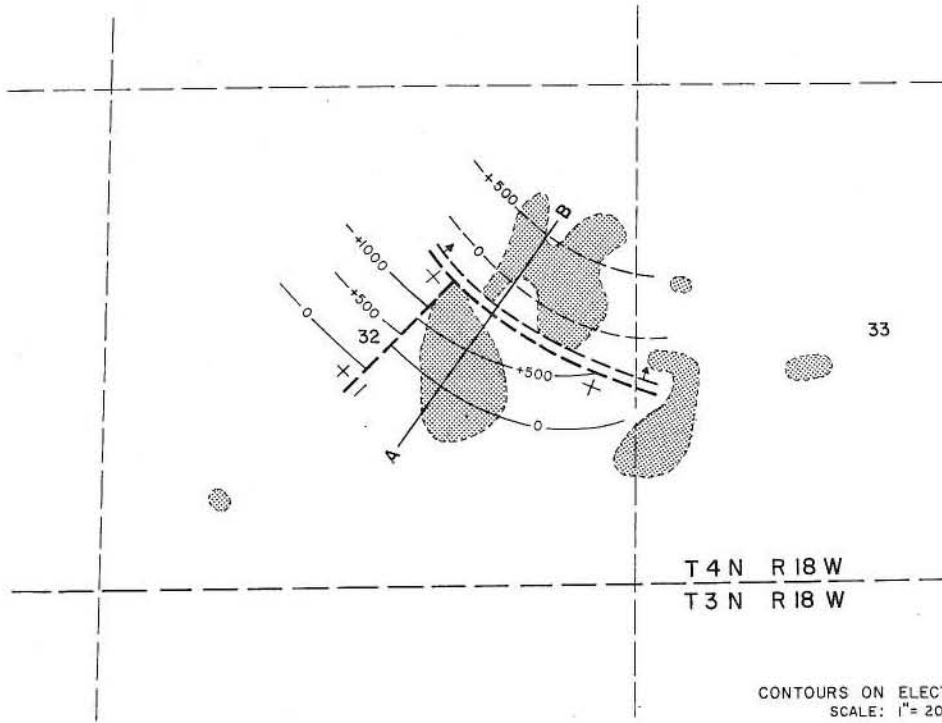
CURRENT CASING PROGRAM: 18 5/8" cem. 200 - 500; 13 3/8" or 10 3/4" cem. above zone; 6 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water was discharged into the ocean.

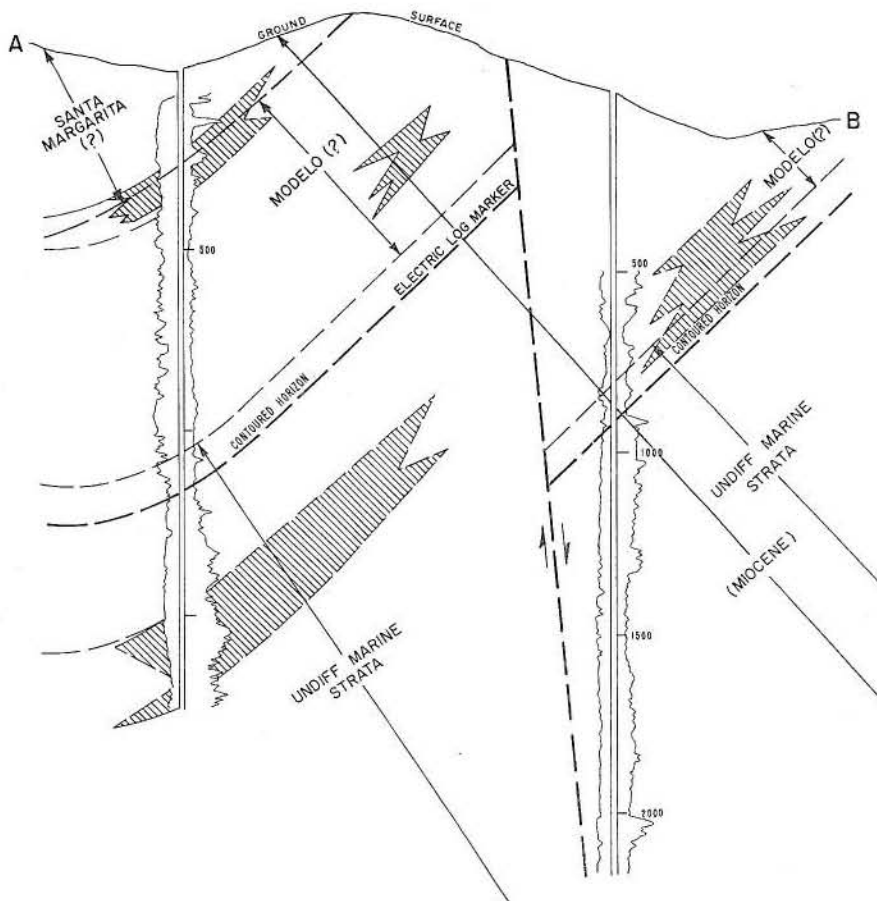
REMARKS: The area last produced and was abandoned in November 1971.

REFERENCES: McCabe, R.E., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 14, No. 8 (1928).

EUREKA CANYON OIL FIELD



MAP AND CROSS SECTION BASED ON DATA BY
MERCURY OIL CO. — MODIFIED BY THE
DIVISION OF OIL AND GAS



CALIFORNIA DIVISION OF OIL AND GAS

EUREKA CANYON OIL FIELD

Ventura County

LOCATION: 29 miles northeast of Ventura

TYPE OF TRAP: Lithofacies variations and tar seals on faulted homocline

ELEVATION: 1,000

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	Mercury Oil Co. No. 1	Eureka Oil Co. No. 1	32 4N 18W	SB	N.A.	N.A.	1893

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Mercury Oil Co. "Texaco Sloan" 1	The Texas Co. "Sloan" 1	Apr 1954	32 4N 18W	SB	10,038	Pico	Pliocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water g/gal	Class BOPE required
			Age	Formation			
(Unnamed)	250-1500	120	Miocene	Santa Margarita, Modelo, and older marine strata	23	60	I

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
19,890	342	38,788	80	4	448,514	52,962	19,890	1973	80	46	115

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,250

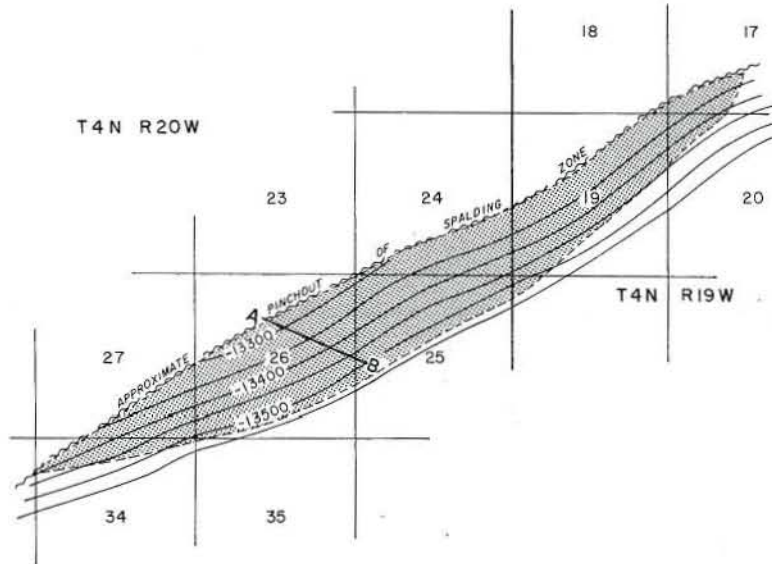
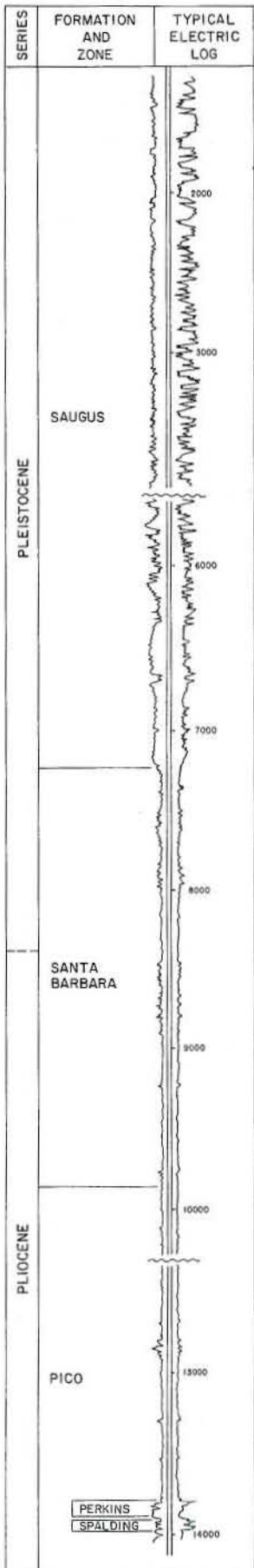
CURRENT CASING PROGRAM: 10 3/4" cem. 100; 7" cem. above zone and across base of fresh-water sands; 5" liner landed through zone.

METHOD OF WASTE DISPOSAL: All waste water is injected into a water-disposal well.

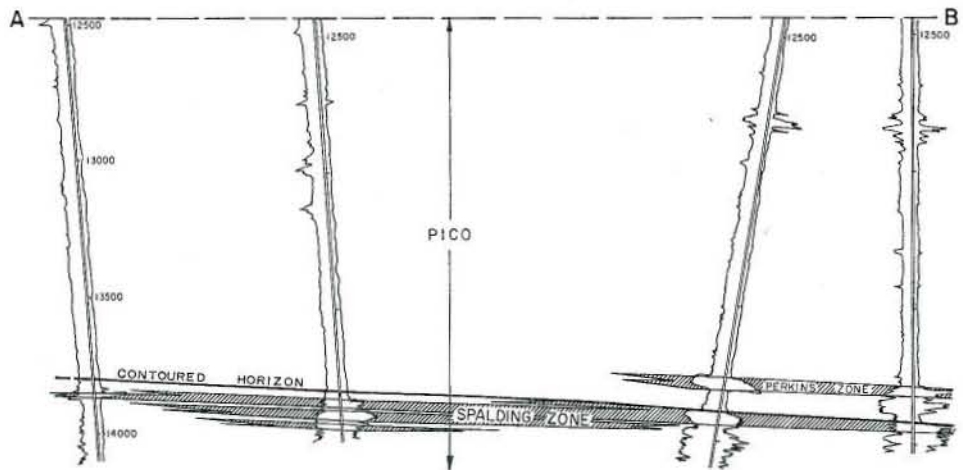
REMARKS:

REFERENCES:

FILLMORE OIL FIELD (Abandoned)



CONTOURS ON TOP OF SPALDING ZONE OR EQUIVALENT



CALIFORNIA DIVISION OF OIL AND GAS

FILLMORE OIL FIELD (Abandoned)

Ventura County

LOCATION: 20 miles northeast of Ventura

TYPE OF TRAP: Lithofacies variations on a homocline

ELEVATION: 450 - 1,650

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Perkins	Standard Oil Co. of Calif., Opr. "P" 2	Humble Oil and Refining Co. "Eddie E. Perkins et ux" 2	26 4N 20W	SB	493	500	Jan 1957
Spalding	Standard Oil Co. of Calif., Opr. "S" 1	Standard Oil Co. of Calif. "Sespe Ranch" 1	27 4N 20W	SB	450	350	Apr 1954

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif., Opr. "B" 1	Standard Oil Co. of Calif. "Burson" 1	Aug 1960	20 4N 19W	SB	15,454	Pico	Pliocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Perkins	14,250	50	Pliocene	Pico	35	600	IV
Spalding	14,550	80	Pliocene	Pico	32	250	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
16,003	22,678	6,485	890	2	12,596,546	19,643,063	2,513,264	1958	67	62	1,110

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 5,500

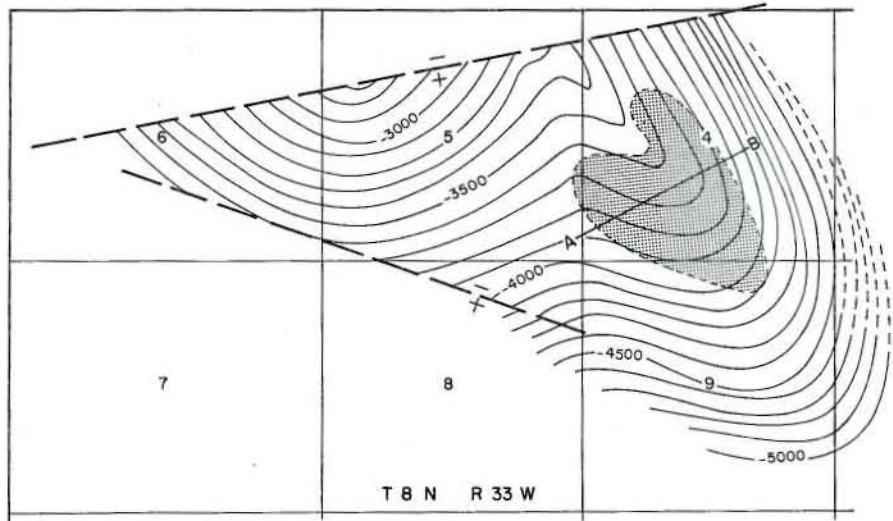
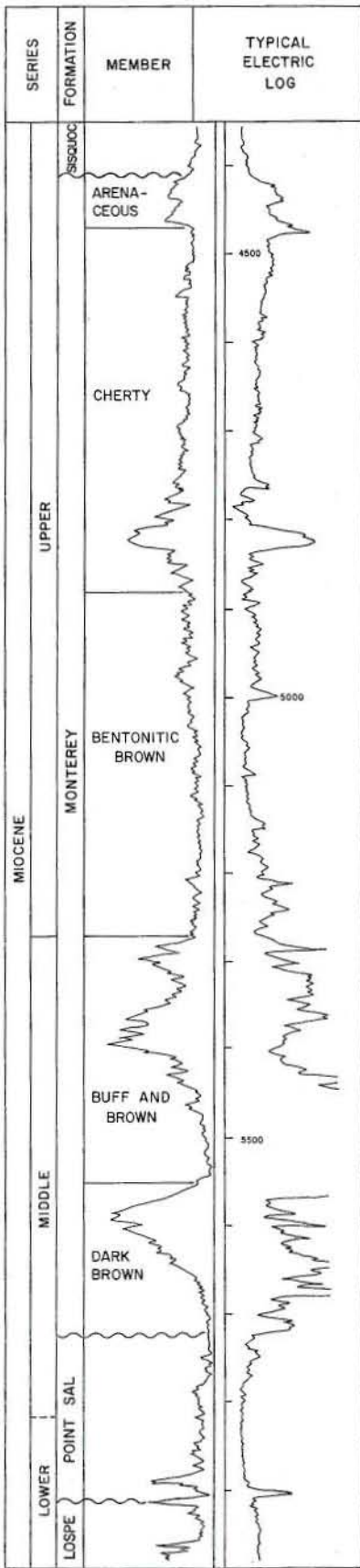
CURRENT CASING PROGRAM: 10 3/4" cem. 1,750; 7" or 5 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

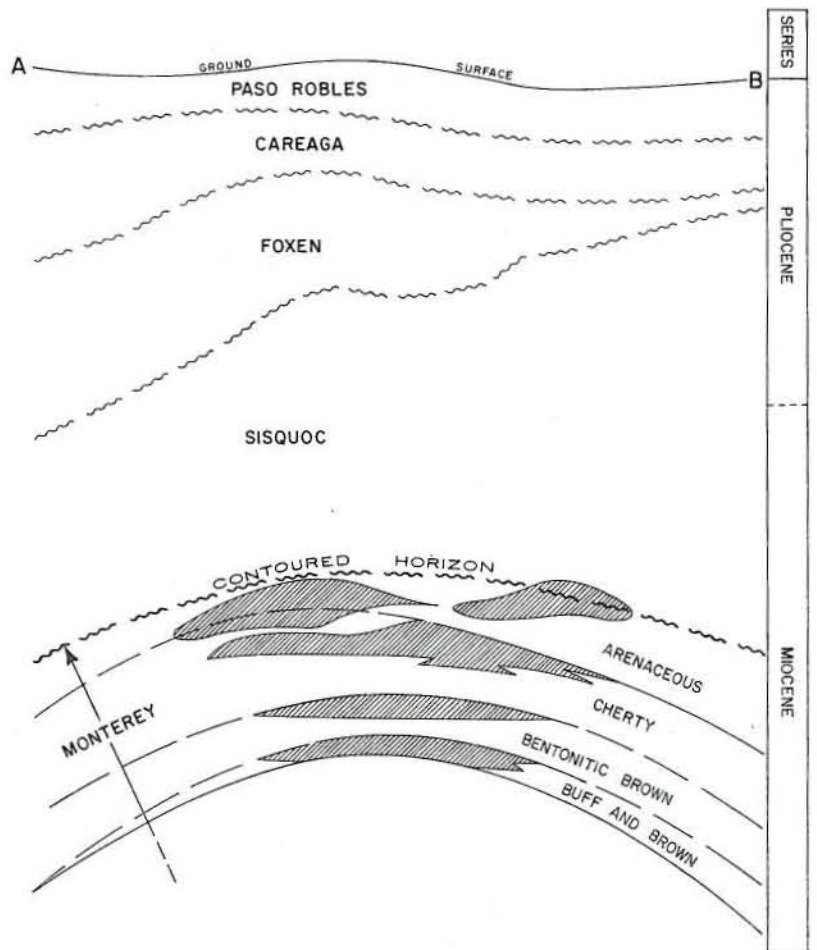
REMARKS: Field last produced and was abandoned during 1973. A pilot pressure maintenance project was started in 1967 and was terminated in 1970; 1,668,000 Mcf. of gas was injected into one well.

REFERENCES: Schultz, C.H., Fillmore Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 45, No. 1 (1959).

FOUR DEER OIL FIELD



CONTOURS ON TOP OF MONTEREY



CALIFORNIA DIVISION OF OIL AND GAS

FOUR DEER OIL FIELD
Santa Barbara County

LOCATION: 13 miles southeast of Santa Maria

TYPE OF TRAP: Faulted anticlinal nose; stratigraphic variations

ELEVATION: 800

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Arenaceous	Bonus International Corp. "Los Flores" 3	Sunray Oil Corp. "Los Flores" 3	4 8N 33W	SB	74	0	Sep 1947
Cherty	Bonus International Corp. "Los Flores" 5	Sunray Oil Corp. "Los Flores" 5	4 8N 33W	SB	94	0	Nov 1947
Bentonitic Brown	Bonus International Corp. "Los Flores" 1	Sunray Oil Corp. "Sunray Los Flores" 1	4 8N 33W	SB	319	170	Jun 1947
Buff and Brown	Same as above	Same as above	4 8N 33W	SB	*	*	Jun 1947

Remarks: * Bentonitic Brown and Buff and Brown production commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Sun Oil Company "Los Flores" 14	Sunray Oil Corp. "Los Flores" 14	Apr 1950	4 8N 33W	SB	6,044	Monterey	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Arenaceous	4,800	100	middle Miocene	Monterey	35	950	II
Cherty	5,000	80 - 400	middle Miocene	Monterey	30	950	II
Bentonitic Brown	5,600	80 - 350	middle Miocene	Monterey	27	950	II
Buff and Brown	5,900	250 - 600	middle Miocene	Monterey	27	950	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,157	0	1,500	140	1	1,055,369	2,252,739	248,493	1948	18	13	150

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1965	871,932	1

SPACING ACT: Applies

BASE OF FRESH WATER: 1,500

CURRENT CASING PROGRAM: 10 3/4" cem. 400; 7" landed through zone and cemented above zone and across base of fresh-water sands.

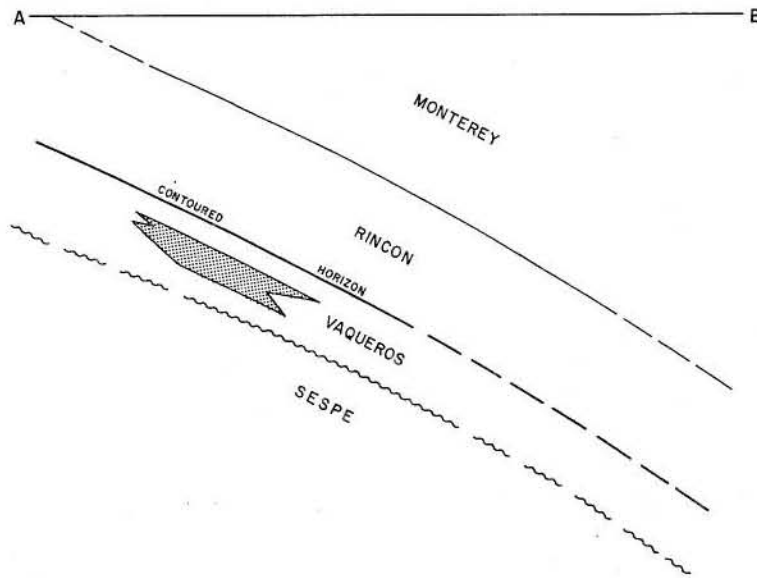
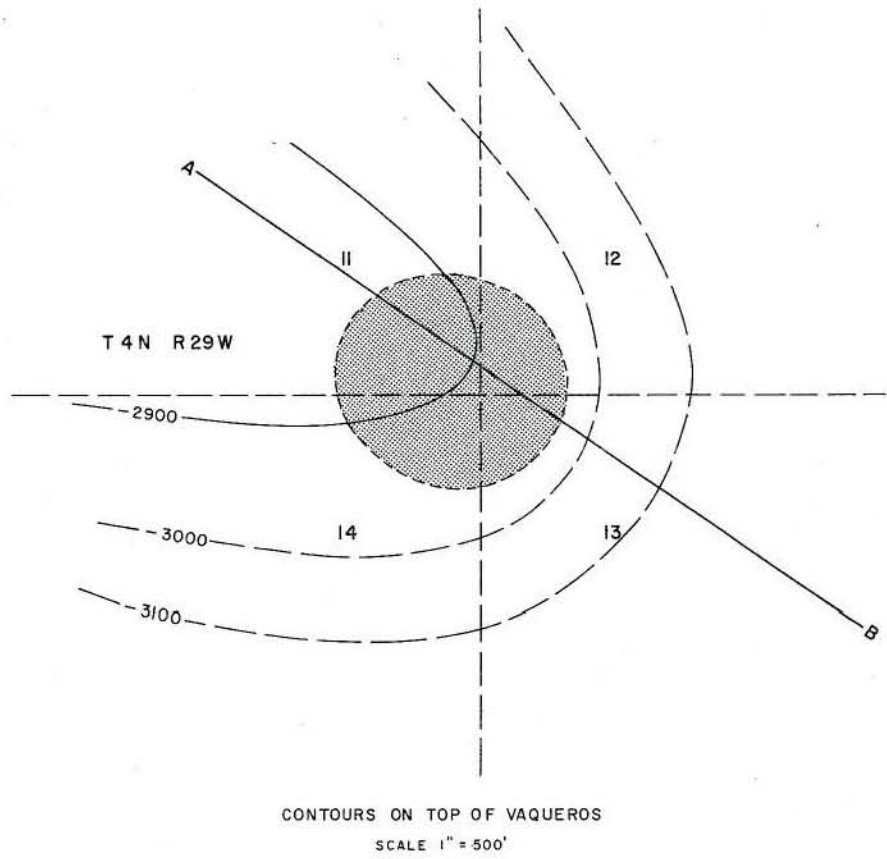
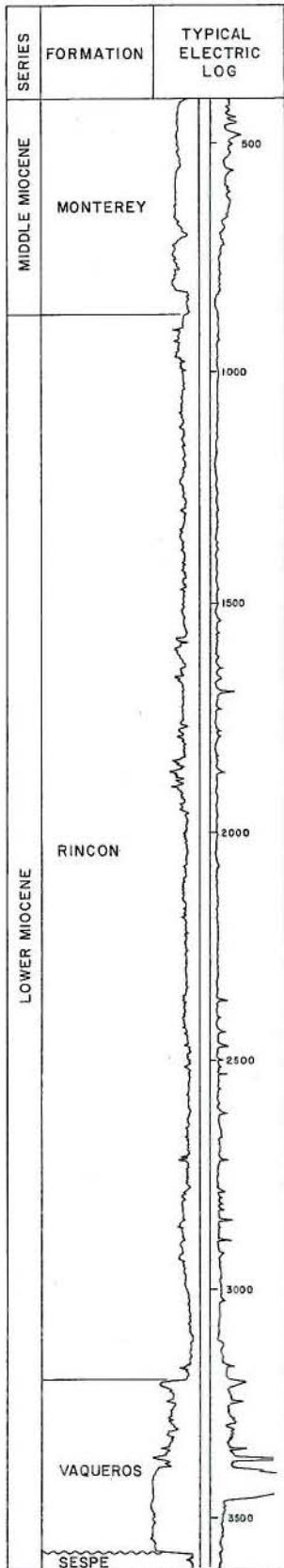
METHOD OF WASTE DISPOSAL: Waste water is shipped out of field for disposal.

REMARKS: Formerly an area of Cat Canyon oil field.

REFERENCES: Dolman, S.G., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 33, No. 2 (1947).

GLENN ANNIE GAS FIELD

(Abandoned)



CALIFORNIA DIVISION OF OIL AND GAS

GLEN ANNIE GAS FIELD (Abandoned)

Santa Barbara County

LOCATION: 12 miles west of Santa Barbara

TYPE OF TRAP: Sand lens on nose

ELEVATION: 110

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial production			Date of completion
					Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	
Vaqueros sand	Standard Oil Co. of Calif. "Roy Eaton et al" 1	Standard Oil of Calif. "Roy Eaton et al" 1	11 4N 29W	SB	2,167	150	32/64	Jul 1958

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Fire-Rice Drilling Co. "Harbel" 1	Same	Mar 1949	13 4N 29W	SB	3,731	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Gas (btu)	Salinity of zone water gr/gal	Original zone pressure (psi)	Class BOPE required
			Age	Formation				
Vaqueros sand	3,350	80	early Miocene	Vaqueros	1,000	175	400+	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production		1973 Proved acreage	1973 Maximum number producing wells	Cumulative gas production (Mcf)	Peak gas production		Total number of wells		Maximum proved acreage
Net gas (Mcf)	Water (bbl)				(Mcf)	Year	Drilled	Completed	
0	0	0	0	490,983	265,490	1959	3	1	40

SPACING ACT: Applies

BASE OF FRESH WATER: 800

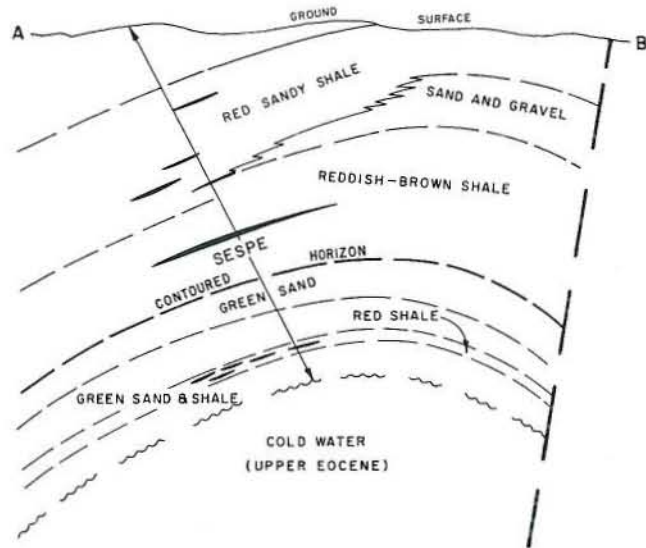
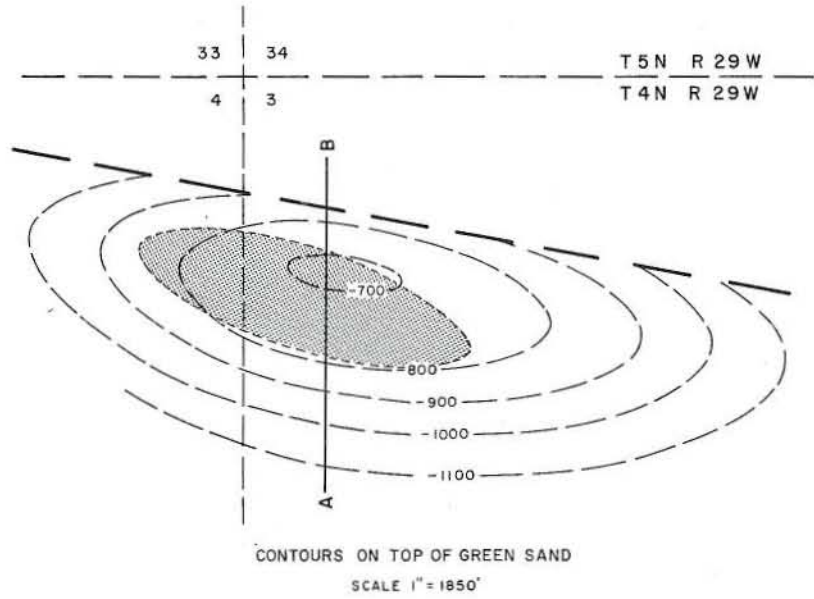
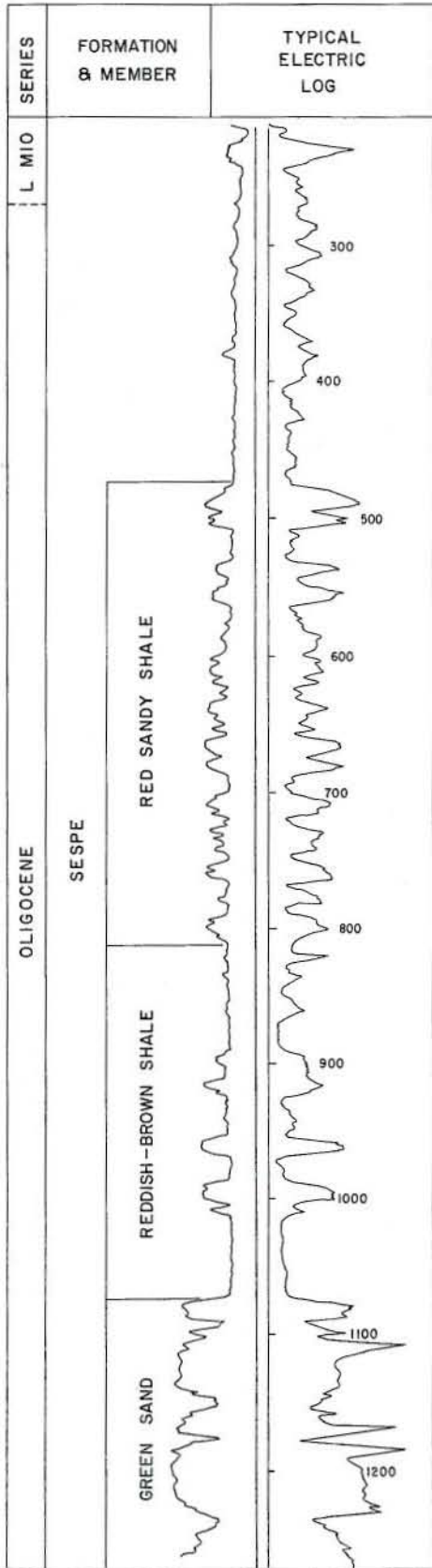
CURRENT CASING PROGRAM: 9 5/8" cem. 400; 5 1/2" landed through zone and cemented above zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

REMARKS: Last production was in March 1961. Field abandoned April 1961.

REFERENCES: Barton, C.L., Operations in District No. 3, 1958: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 44, No. 2 (1958).

GOLETA OIL FIELD (Abandoned)



CALIFORNIA DIVISION OF OIL AND GAS

GOLETA OIL FIELD (Abandoned)

Santa Barbara County

LOCATION: 13 miles west of Santa Barbara

TYPE OF TRAP: Anticline

ELEVATION: 300 - 550

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sespe	Miley Petroleum Corp., Ltd. "Goleta" 2	Miley Oil Co. "Goleta" 2	3 4N 29W	SB	362	N.A.	Feb 1927

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Miley Petroleum Corp., Ltd. "Goleta" 1	Miley Oil Co. No. 1	Oct 1926	3 4N 29W	SB	5,664	Meganos	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Red sandy shale	400	15	Oligocene	Sespe	40	30	None
Reddish brown shale	1,200	70	Oligocene	Sespe	43	30	II
Sespe sand	1,400	40	Oligocene	Sespe	43	40	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	140,281	56,000 (est.)	85,642	1927	18	8	50

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
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SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,400

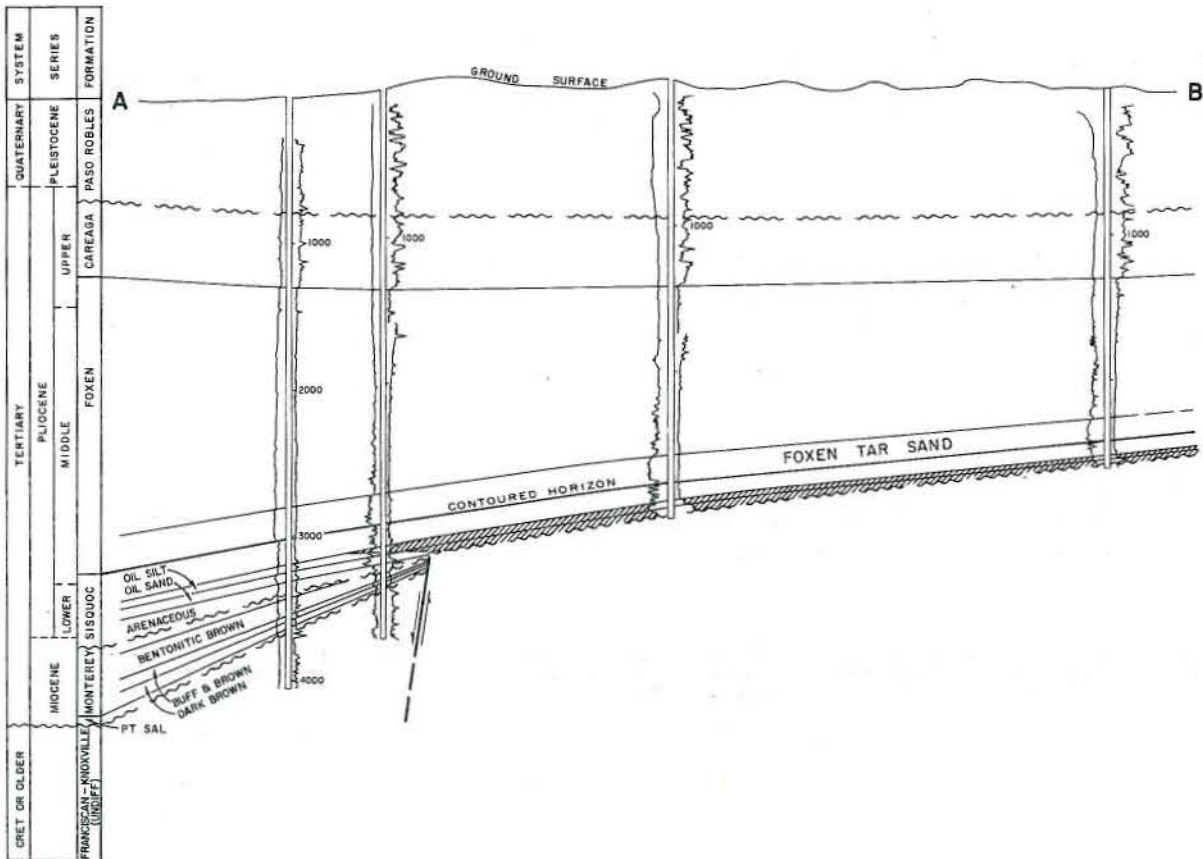
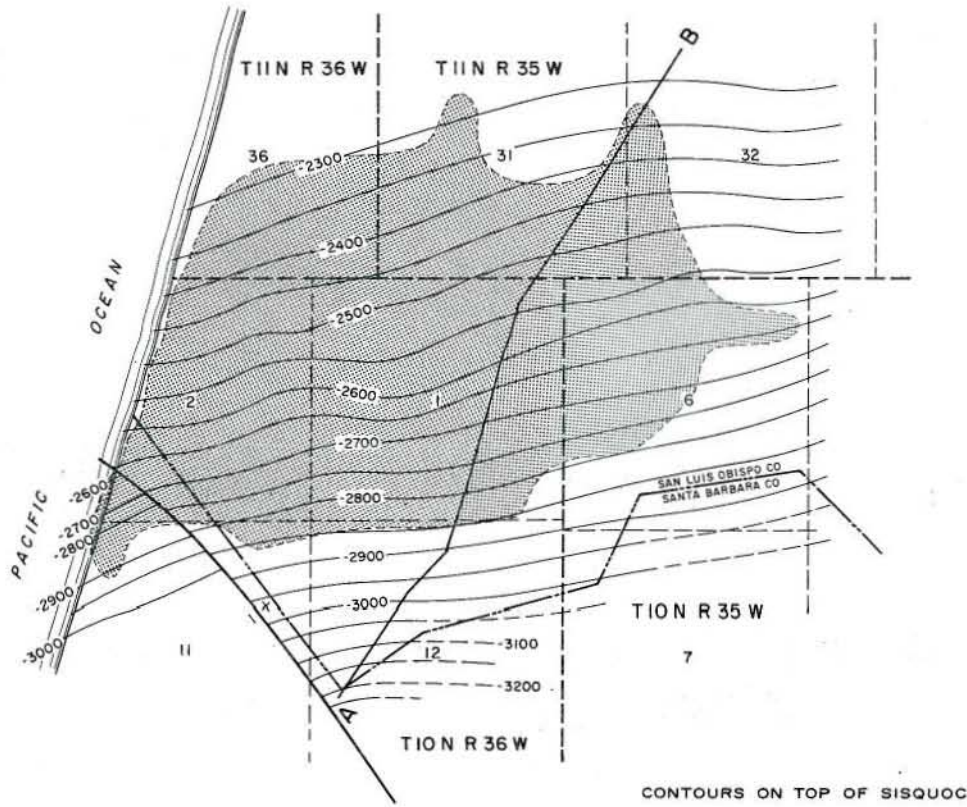
CURRENT CASING PROGRAM: 11" cem. 500; 8 1/4" cem. through zone and across base of fresh-water sands; some 4 3/4" liner completions.

METHOD OF WASTE DISPOSAL: Waste water disposed of in unlined sumps.

REMARKS: Rapid encroachment of water forced operators to abandon wells 18 months after the field was discovered. Water has high boron content. Last production was in August 1929. Field abandoned September 1953.

REFERENCES: Dolman, S., Goleta Oil Field: Unpublished report in the files of the Calif. Div. of Oil and Gas, District 3 (1931). McCabe, R.E., Operations in District 3, 1927: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 13, No. 8 (1927).

GUADALUPE OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

GUADALUPE OIL FIELD

San Luis Obispo and Santa Barbara Counties

LOCATION: 11 miles west of Santa Maria

TYPE OF TRAP: Faulted homocline

ELEVATION: 20 - 100

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sisquoc Monterey - Point Sal	Union Oil Co. of Calif. "LeRoy" 2 Base Maintenance Service, Inc. "Union Sugar" 37	Continental Oil Co. "LeRoy" 2 Union Oil Co. of Calif. "Union Sugar" 37	2 10N 36W 2 10N 36W	SB SB	35 126	N.A. 74	Jan 1948 Oct 1955

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Base Maintenance Service, Inc. "Union Sugar" 36	Union Oil Co. of Calif. "Union Sugar" 36	May 1951	11 10N 36W	SB	4,195	Knoxville	Jurassic

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Sisquoc Monterey - Point Sal	2,700	200	early Pliocene	Sisquoc	8 - 14	1,200	None
	3,000	200	middle Miocene	Monterey - Point Sal	12	1,400	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,453,403	1,085,077	1,084,121	1,770	96	20,509,629	13,563,428	1,703,102	1971	168	162	1,840

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1957	1,355,618	4
Cyclic steam	1964	9,387,747	48

SPACING ACT: Applies

BASE OF FRESH WATER: 1,200

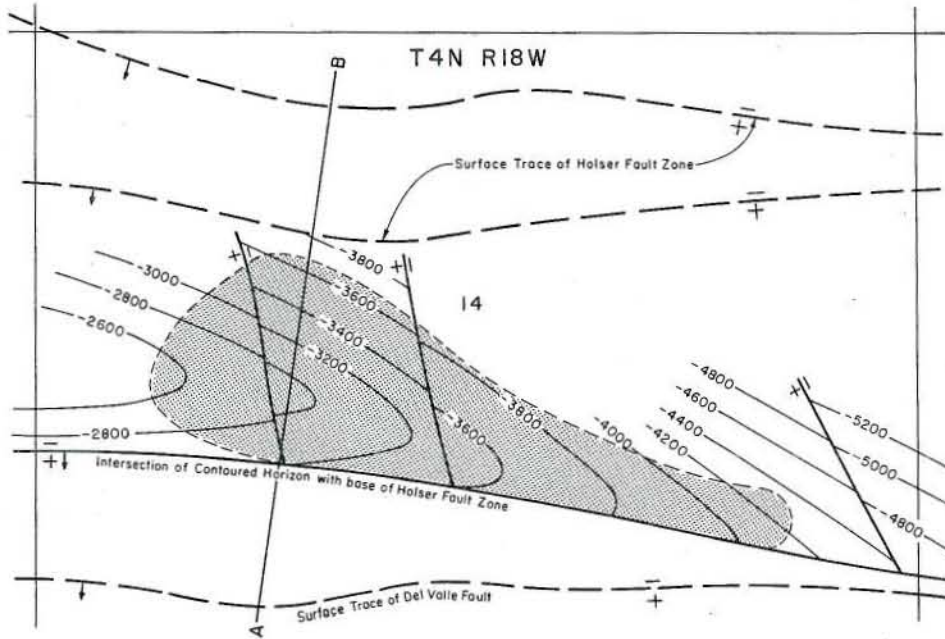
CURRENT CASING PROGRAM: 13 3/8" cem. 40; 8 5/8" cem. above zone and across base of fresh-water sands; 7" or 6 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL: Water is injected into disposal wells.

REMARKS:

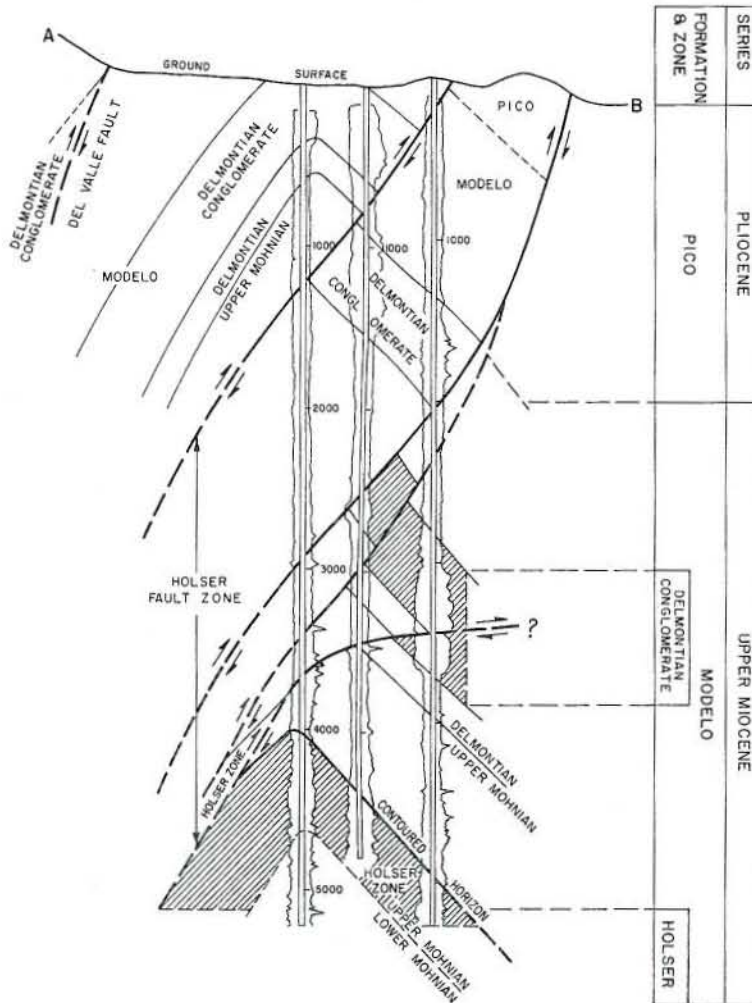
REFERENCES: Bailey, Wm. C., Operations in District No. 3: Calif. Div. of Oil and Gas, Resume of Operations--Calif. Oil Fields, Vol. 41, No. 2 (1955).
Lawrence, E.D., Guadalupe Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 50, No. 2 (1964).
Sea-water Intrusion: Pismo-Guadalupe Area: Dept. of Water Resources Bull. 65-3 (1970).

HOLSER OIL FIELD



CONTOURS ON TOP OF HOLSER ZONE

SCALE 1" = 1150'



CALIFORNIA DIVISION OF OIL AND GAS

HOLSER OIL FIELD

Ventura County

LOCATION: 32 miles northeast of Ventura

TYPE OF TRAP: Faulted anticline with permeability variations

ELEVATION: 1,050 - 1,850

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Conglomerate Holser	Fairfield Volunteer Pet. Co. "Holser" W-1 J. M. Jackson "Holser" 1	Waterflood Oil Co. "Holser" W-1 Continental Oil Co. "Holser" 1	14 4N 18W	SB	4	0	Aug 1954
			14 4N 18W	SB	124	N.A.	Aug 1942

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Fairfield Volunteer Pet. Co. E. F. Fairfield, Opr. "Holser" 2	Continental Oil Co. "Holser" 2	Dec. 1942	14 4N 18W	SB	8,147	Modelo	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (-API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Conglomerate Holser	1,000	450	late Miocene	Modelo	17	80	I
	4,450	400	late Miocene	Modelo	27	160	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
14,466	2,435	14,255	50	6	609,478	158,204	35,395	1953	20	9	60

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

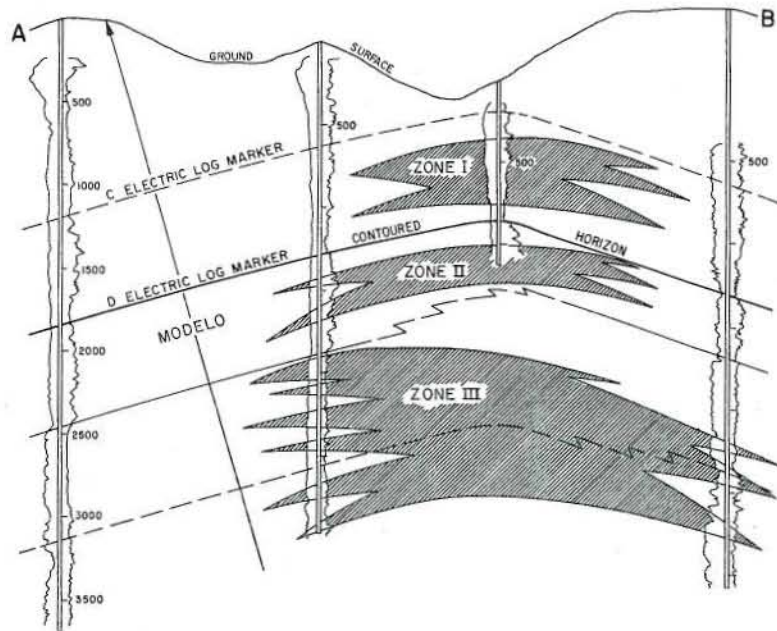
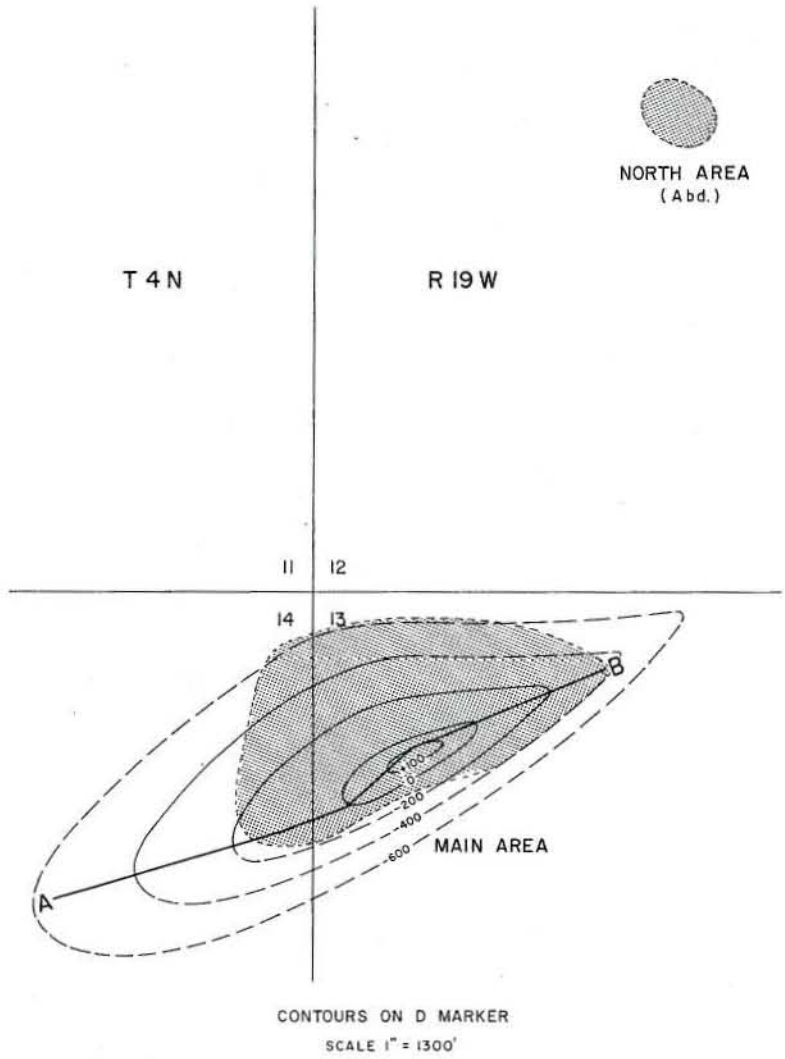
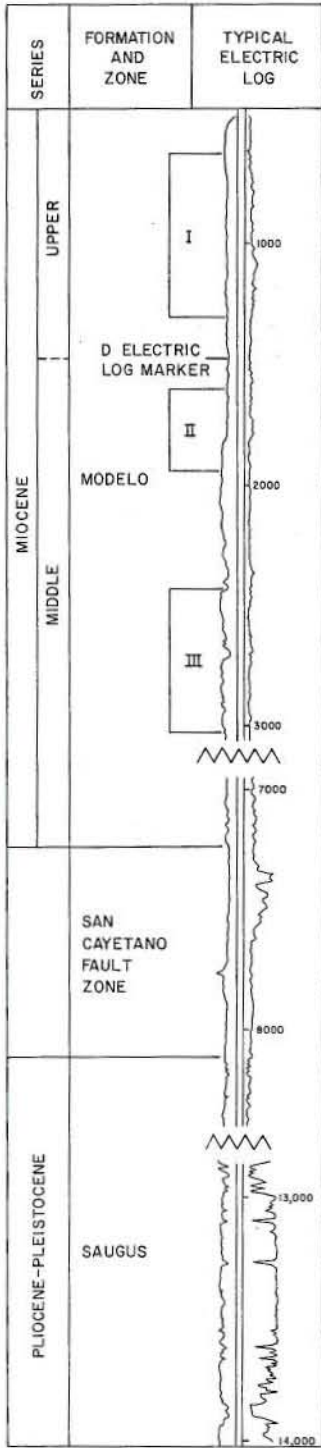
CURRENT CASING PROGRAM: 10 3/4" cem. 110; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Evaporation and percolation from unlined sumps.

REMARKS: The conglomerate zone has produced only 362 barrels of oil. All waters have a high concentration of total solids. Cyclic-steam operations were attempted in 1965 when a total of 770 bbls. of water equivalent was injected into three wells.

REFERENCES: Hardoin, J.L., Holser Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 2 (1960).

HOPPER CANYON OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

HOPPER CANYON OIL FIELD

Ventura County

LOCATION: 27 miles northeast of Ventura

TYPE OF TRAP: See areas

ELEVATION: 900 - 1,600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
I	Argo Petroleum Corp. No. 1	Buckhorn Oil & Transportation Co. No. 1	13 4N 19W	SB	*	*	1884

Remarks: * Produced 800 bbls. of 12° A.P.I. oil.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Argo Petroleum Corp. "Hopper Canyon" 14	McCulloch Oil Co. of Calif. "McCulloch Hopper Canyon Deep Unit" 1A	Apr 1967	13 4N 19W	SB	14,016	Saugus*	Pleis-Plio*

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
21,324	46,915	55,899	80	8	2,479,306	2,743,268	73,285	1946	66	36	145

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: Formerly an area of Piru field, designated a separate field January 1, 1955.

* Well penetrated about 8,000 feet of the Modelo Formation (Miocene) before passing through the San Cayetano fault and into the Saugus Formation.

REFERENCES: Dosch, M.W., Hopper Canyon Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 54, No. 1 (1968).
 Eldridge, G.H., and R. Arnold, the Santa Clara Valley, Puente Hills and Los Angeles Oil Districts, Southern California: U.S. Geol. Survey Bull. 309, p. 68-72 (1907).
 Jennings, Charles W., and Bennie W. Troxel, Geology of Southern California, Ventura Basin: Calif. Div. of Mines Bull. 170, p. 33 (1954).
 Kew, W.S.W., Geology and Oil Resources of a Part of Los Angeles and Ventura Counties: U.S. Geol. Survey Bull. 753, p. 55-60, 128-129 (1924).
 Prutzman, P.W., Petroleum in Southern California: Calif. State Mining Bureau Bull. 63, p. 117-122 (1913).
 Watts, W.L., Oil and Gas Yielding Formations of Los Angeles, Ventura and Santa Barbara Counties: Calif. State Mining Bureau Bull. 11, Figure G (1897).

CALIFORNIA DIVISION OF OIL AND GAS

HOPPER CANYON OIL FIELD

MAIN AREA

Ventura County

LOCATION: See map sheet of Hopper Canyon Oil Field

TYPE OF TRAP: Anticline

ELEVATION: 1,200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
I	Argo Petroleum Corp. No. 1	Buckhorn Oil and Transportation Co. No. 1	13 4N 19W	SB	*	*	1884
II	Argo Petroleum Corp. No. 1-B	Commander Oil Co., Inc. No. 1-B	13 4N 19W	SB	160	N.A.	Dec 1931
III	Same as above	Same as above	13 4N 19W	SB	**	N.A.	Dec 1931

Remarks: * Total production: 800 bbls. of 12° A.P.I. oil.
 ** Initial production from zones II and III was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Argo Petroleum Corp. "Hopper Canyon" 14	McCulloch Oil Co. of Calif. "McCulloch Hopper Canyon Deep Unit" 1A	Apr 1967	13 4N 19W	SB	14,016	Saugus	Pleis-Plio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
I	1,000	1,500	Miocene	Modelo	13 - 18	40*	III
II	1,700	1,500	Miocene	Modelo	30	100*	III
III	2,700	1,500	Miocene	Modelo	26 - 34	350*	III

* High concentrations of total solids.

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
21,324	46,915	55,899	80	8	2,379,306	2,743,268	73,285	1946	53	29	110

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 0 - 100

CURRENT CASING PROGRAM: 9 5/8" cem. 300; 5 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL: After January 1974, waste water will be injected into a water-disposal well.

REMARKS:

REFERENCES: See field sheet.

CALIFORNIA DIVISION OF OIL AND GAS

HOPPER CANYON OIL FIELD

NORTH AREA (Abandoned)

Ventura County

LOCATION: See map sheet of Hopper Canyon Oil Field

TYPE OF TRAP: Anticline

ELEVATION: 1,600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	Getty Oil Co. No. 2	Clark and Sherman Co. No. 2	12 4N 19W	SB	N.A.	N.A.	1889-90

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Getty Oil Co. No. 4	Clark and Sherman Co. No. 4	-	12 4N 19W	SB	1,000+	Modelo	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
(Unnamed)	660	N.A.	Miocene	Modelo	14	N.A.	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	100,000 (Estimated)	0	6,628 (Estimated)	1891	13	7	35

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 0 - 100

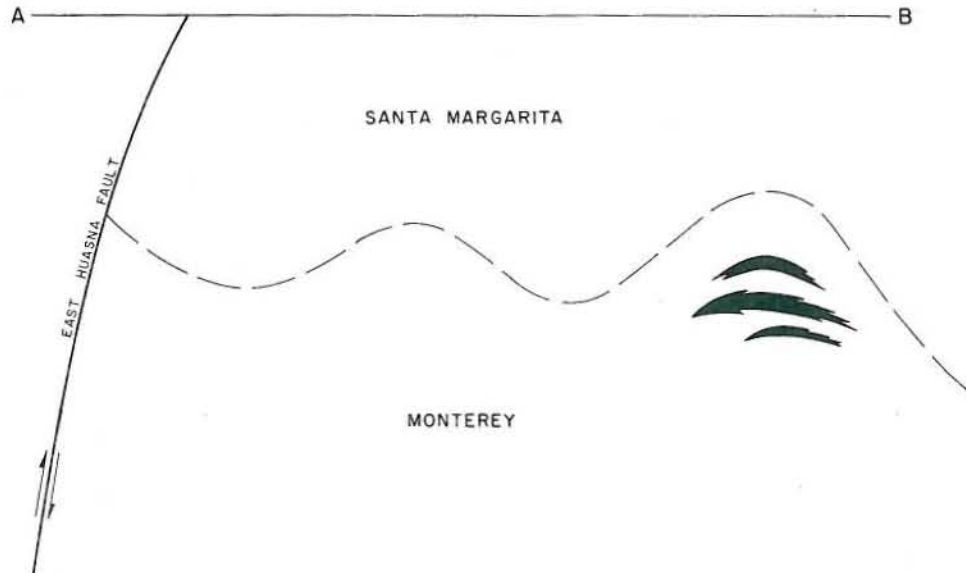
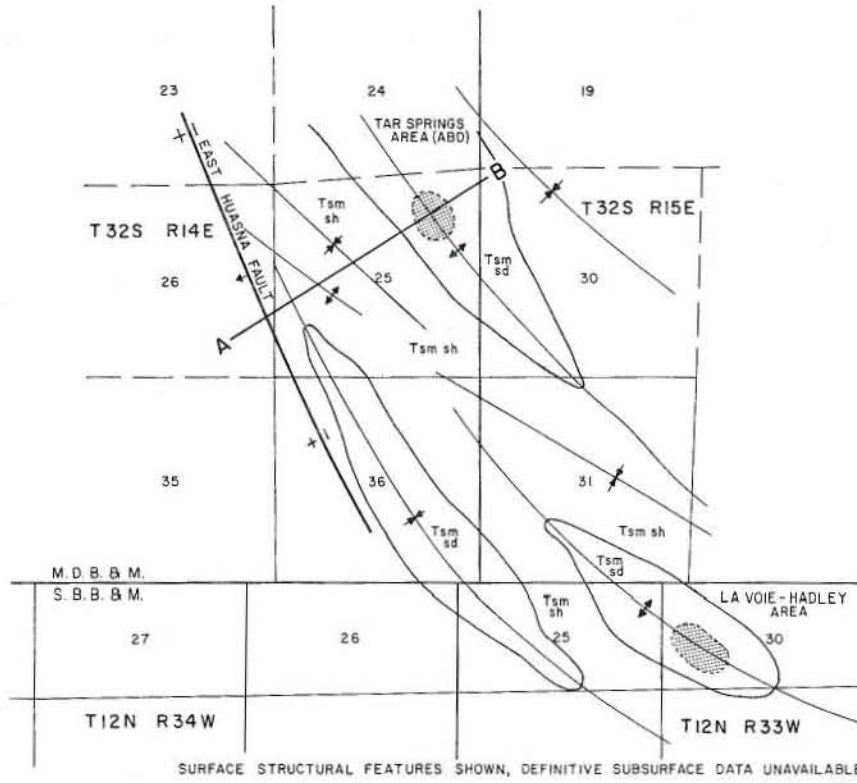
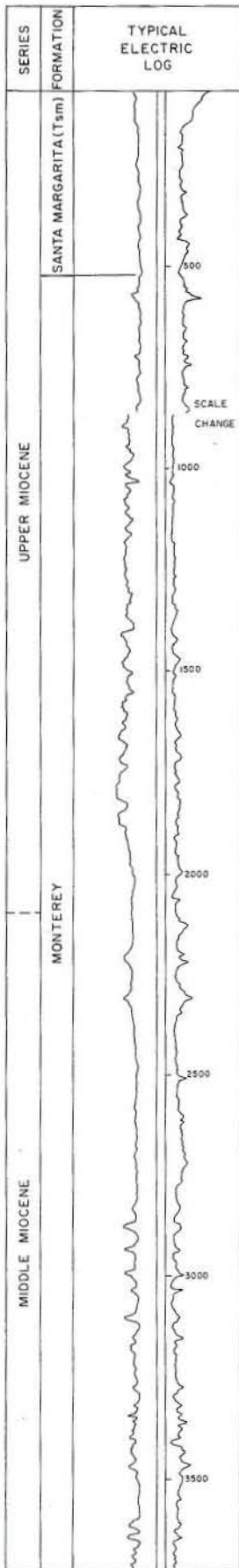
CURRENT CASING PROGRAM: 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Wells drilled prior to 1911, and production ceased in October 1922.

REFERENCES: See field sheet.

HUASNA OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

HUASNA OIL FIELD
San Luis Obispo County

LOCATION: 10 1/2 miles north of Santa Maria

TYPE OF TRAP: See Areas

ELEVATION: 1,070 - 1,670

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Fractured shale	Texas-Pacific Coal and Oil Co. "Trustees" 1	Trustees No. 1	25 32S 14E	MD	33	N.A.	Nov 1928

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
N. B. Hunt "Tar Springs" 1	Same	Sep 1953	25 32S 14E	MD	10,010	Vaqueros	early Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu))	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

Oil (bbl)	1973 Production		1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	40	0	31,262	0	17,757	1966	16	5	50

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS:

REFERENCES: Hall, C.A., Jr., Stratigraphy and Structure of Mesozoic and Cenozoic Rocks, Nipomo Quadrangle, Southern Coast Ranges, California: Geol. Soc. of Amer. Bull., Vol. 78, Plates 1 and 2 (1967).

CALIFORNIA DIVISION OF OIL AND GAS

HUASNA OIL FIELD

LaVOIE - HADLEY AREA

San Luis Obispo County

LOCATION: See map sheet of Huasna Oil Field

TYPE OF TRAP: Anticline

ELEVATION: 1,075 - 1,670

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Santa Margarita	Oil Securities, Inc. "LaVoie - Hadley" 0-1	Home-Stake Production Co. "LaVoie - Hadley" 0-1	30 12N 33W	SB	56	0	Jul 1965

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Verde Enterprises, Operator for Huasna Co. "Union-Dickes" 1	Same	May 1958	30 12N 33S	SB	7,753	Vaqueros	early Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Santa Margarita	750 - 1,560	500 - 1,300	late Miocene	Santa Margarita	9	N. A.	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	40	0	19,787	0	17,757	1966	7	4	40

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative Injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Cyclic steam	1965	85,386	5

SPACING ACT: Applies

BASE OF FRESH WATER: 500

CURRENT CASING PROGRAM: 10 3/4" or 7" cem. 600; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water was discharged into unlined sumps.

REMARKS: Wells must be steam-stimulated to produce. Area has been idle since April 1967.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

TAR SPRINGS AREA (Abandoned)

HUASNA OIL FIELD

San Luis Obispo County

LOCATION: See map sheet of Huasna Oil Field

TYPE OF TRAP: Anticline

ELEVATION: 1,070

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Fractured shale	Texas-Pacific Coal & Oil Co. "Trustees" 1	Trustees No. 1	25 32S 14E	MD	33	N.A.	Nov 1928

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
N. B. Hunt "Tar Springs" 1	Same	Sep 1953	25 32S 14E	MD	10,010	Vaqueros	early Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Fractured shale	2,085 - 3,015	110	middle Miocene	Monterey	18	N.A.	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	11,475	0	4,416	1929	9	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
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SPACING ACT: Does not apply

BASE OF FRESH WATER: 500

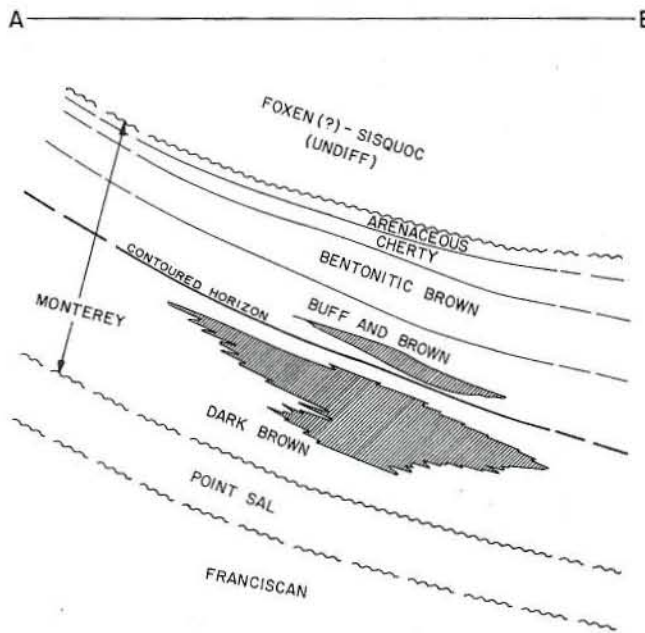
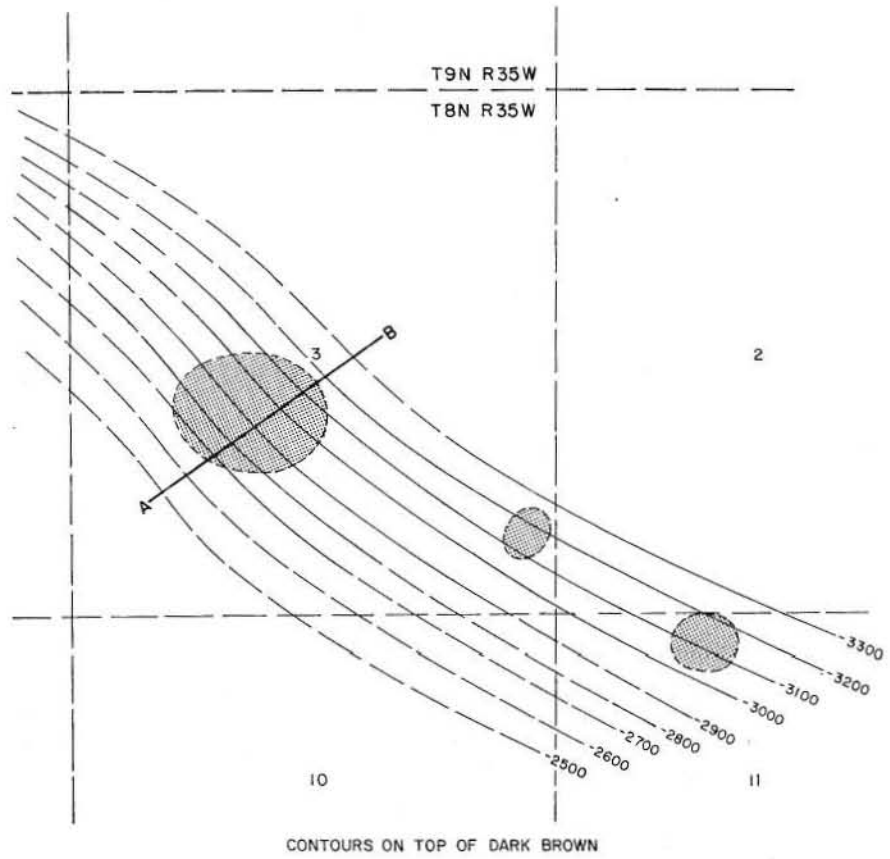
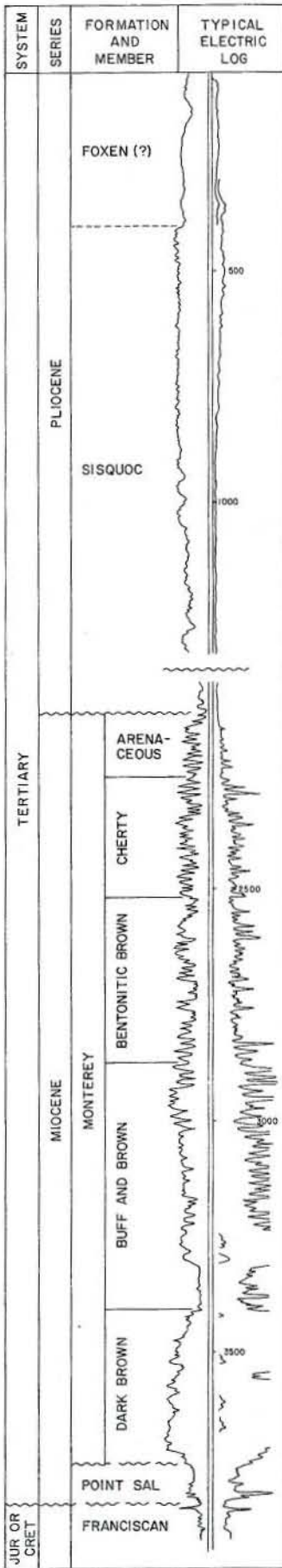
CURRENT CASING PROGRAM: 10 3/4" cem. 600; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water was disposed of in unlined sumps.

REMARKS: The one completed well was drilled by cable tool. Area was abandoned in November 1938.

REFERENCES: King, V.L., Huasna Area Development: Calif. Div. of Mines Bull. 118 (1943), Huasna Basin: A.A.P.G.- S.E.P.M. Annual Spring Field Trip, May 5, 1956.
McCabe, R.E., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 14, No. 8 (1928).
Tagliaferro, N.L., Geology of Huasna Area: Calif. Div. of Mines Bull. 118 (1943).

JESUS MARIA OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

JESUS MARIA OIL FIELD
Santa Barbara County

LOCATION: 7 miles northwest of Lompoc

TYPE OF TRAP: Homocline with permeability barriers

ELEVATION: 300

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Buff and Brown	Union Oil Co. of Calif. "Jesus Maria" 1	Same as present	34 9N 35W	SB	36	0	Oct 1948
Dark Brown	Union Oil Co. of Calif. "Jesus Maria" 4	Same as present	3 8N 35W	SB	301	0	Sep 1952

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Jesus Maria" 31-11	Same	Sep 1954	11 8N 35W	SB	4,125	Franciscan	Jurassic

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Buff and Brown	2,600	290	middle Miocene	Monterey	12	70	II
Dark Brown	2,900	500	middle Miocene	Monterey	11	130	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	60	0	147,669	5,376	64,440	1956	9	7	70

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

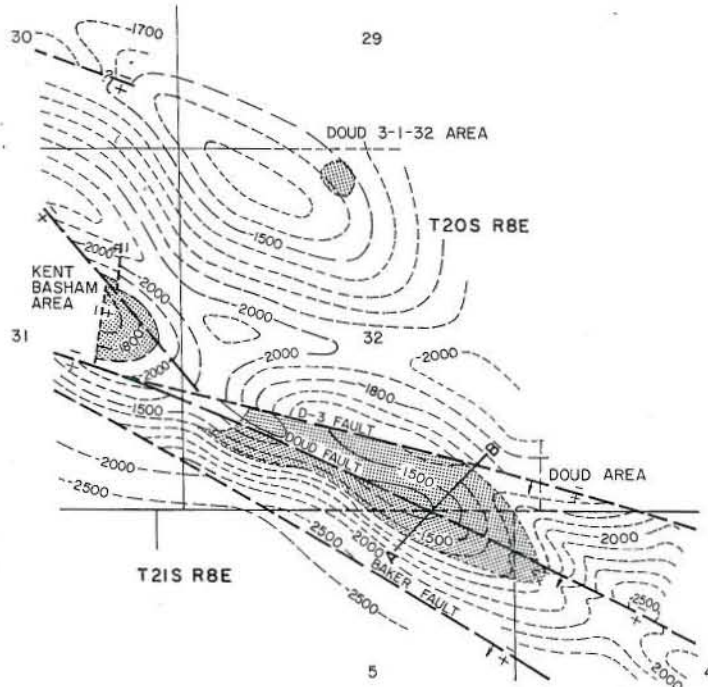
CURRENT CASING PROGRAM: 13 3/8" cem. 200; 8 5/8" combination string landed through zone and cem. through ports above zone.

METHOD OF WASTE DISPOSAL: None being produced.

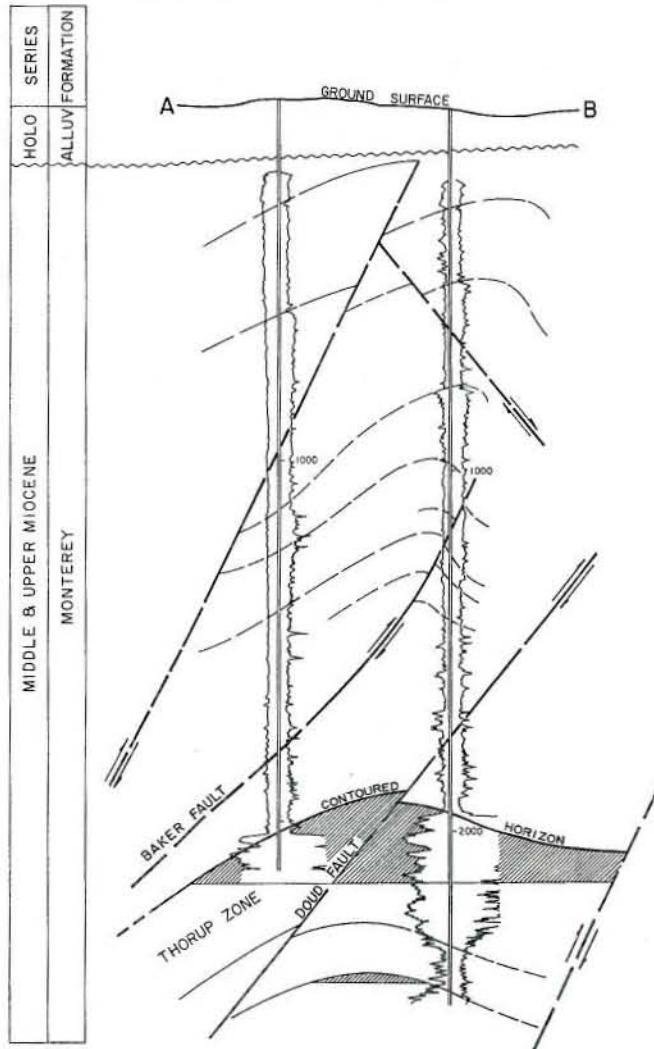
REMARKS: Field shut in since 1958.

REFERENCES: Bailey, Wm. C., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 38, No. 2 (1952).

KING CITY OIL FIELD



CONTOURS ON TOP OF THORUP ZONE



CALIFORNIA DIVISION OF OIL AND GAS

KING CITY OIL FIELD

Monterey County

LOCATION: 5 miles south of King City

TYPE OF TRAP: See areas

ELEVATION: See areas

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Thorup	J. M. Van Horn, Opr. "Thomas Doud Estate" 2	Richard R. Thorup, Opr. "Thomas Doud Estate" 2	32 20S 8E	MD	76	0	Dec 1959

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Time Petroleum Co. "Basham" 1	Same	Dec 1964	31 20S 8E	MD	3,378	Monterey	middle Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
80,681	0	1,873,697	150	18	1,553,700	61,800	174,680	1963	57	28	180

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: Applies

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS:

REFERENCES: Church, V.H., King City Oil Field: A.A.P.G. - S.E.P.M. Guidebook to the Geology of Salinas Valley and the San Andreas Fault (1963).
Hart, E.W., Mines and Mineral Resources of Monterey County, Calif.: Calif. Div. of Mines and Geology County Report No. 5 (1963).

CALIFORNIA DIVISION OF OIL AND GAS

KING CITY OIL FIELD

DOUD AREA

Monterey County

LOCATION: See map sheet of King City Oil Field

TYPE OF TRAP: Faulted dome

ELEVATION: 500

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Thorup	J. M. Van Horn, Opr. "Thomas Doud Estate" 2	Richard R. Thorup, Opr. "Thomas Doud Estate" 2	32 20S 8E	MD	76	0	Dec 1959

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Texaco Inc. "Currell" 1	The Texas Co. "Currell" 1	Sep 1946	4 21S 8E	MD	3,280	Monterey	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Thorup	2,000	100	middle Miocene	Monterey	16	500	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
80,681	0	1,875,697	120	18	1,446,616	61,800	157,340	1963	41	22	120

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 100 - 200

CURRENT CASING PROGRAM: 10 3/4" cem. 150 - 200; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is injected into disposal wells.

REMARKS:

REFERENCES: Barton, C.L., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 45, No. 2 (1959). See data sheet for field.

CALIFORNIA DIVISION OF OIL AND GAS

KING CITY OIL FIELD

DOUD 3-1-32 AREA

Monterey County

LOCATION: See map sheet of King City Oil Field

TYPE OF TRAP: Sand lens on a dome

ELEVATION: 420

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Thorup	Barnes Core Drilling Co. "Doud" 3-1-32	John H. Beach "Doud" 3-1-32	32 20S 8E	MD	10	0	Feb 1963

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
John H. Beach "Doud" 4-2-32	Same	Mar 1963	32 20S 8E	MD	2,142	Monterey	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Thorup	1,860	30	middle Miocene	Monterey	13	500	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	20	0	609	0	409	1963	7	2	20

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 240

CURRENT CASING PROGRAM: 10 3/4" or 8 5/8" cem. 150; 7" cem. above zone and across base of fresh water; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water disposed of in unlined sump.

REMARKS: Wells have been shut in since February 1966.

REFERENCES: See data sheet for field.

CALIFORNIA DIVISION OF OIL AND GAS

KING CITY OIL FIELD

KENT-BASHAM AREA

Monterey County

LOCATION: See map sheet of King City Oil Field

TYPE OF TRAP: Faulted nose

ELEVATION: 750

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Thorup	J. M. Van Horn, Opr. "B.C.B. Kent-Basham" 1-31	Pennant Operating Co. "B.C.B. Kent-Basham" 1-31	31 20S 8E	MD	126	0	Oct 1961

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	S & M	Depth (feet)	At total depth	
						Strata	Age
Time Petroleum Co. "Basham" 1	Same	Dec 1964	31 20S 8E	MD	3,378	Monterey	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Thorup	2,450	65	middle Miocene	Monterey	17	500	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	10	0	106,475	0	18,975	1962	9	4	40

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: Above 200

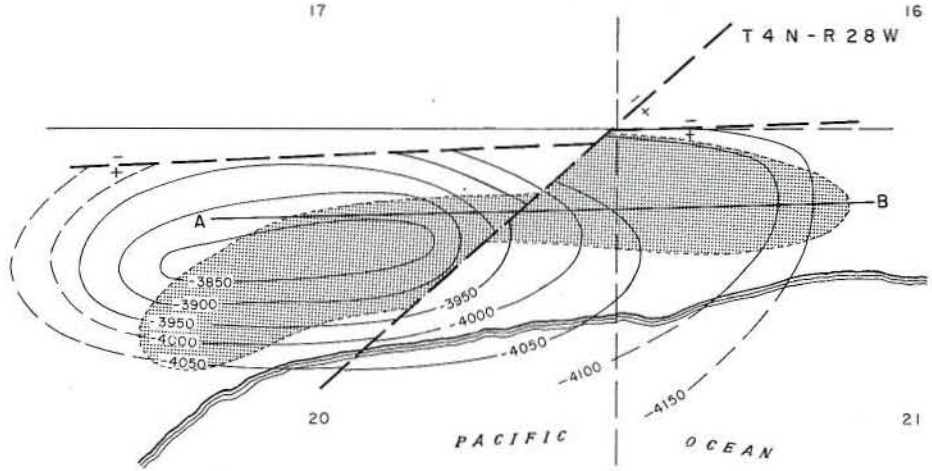
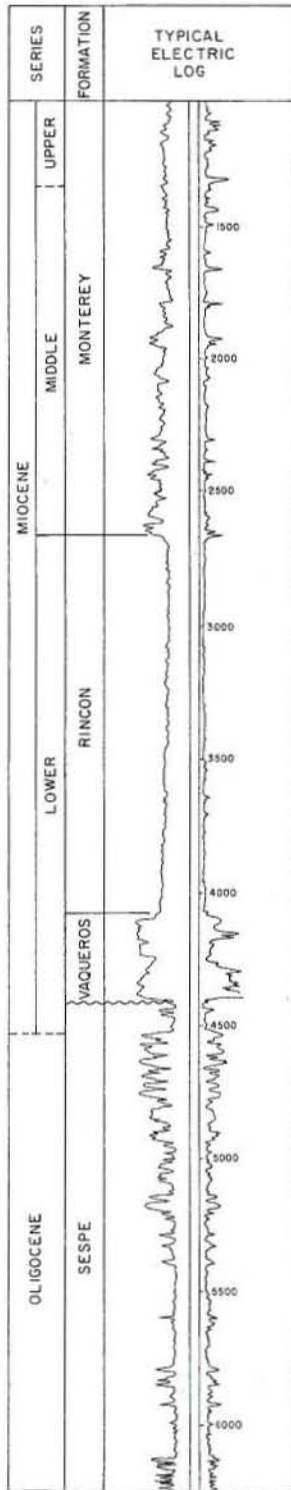
CURRENT CASING PROGRAM: 10 3/4" cem. 200; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Thorup zone is being used for disposal of waste water from the field.

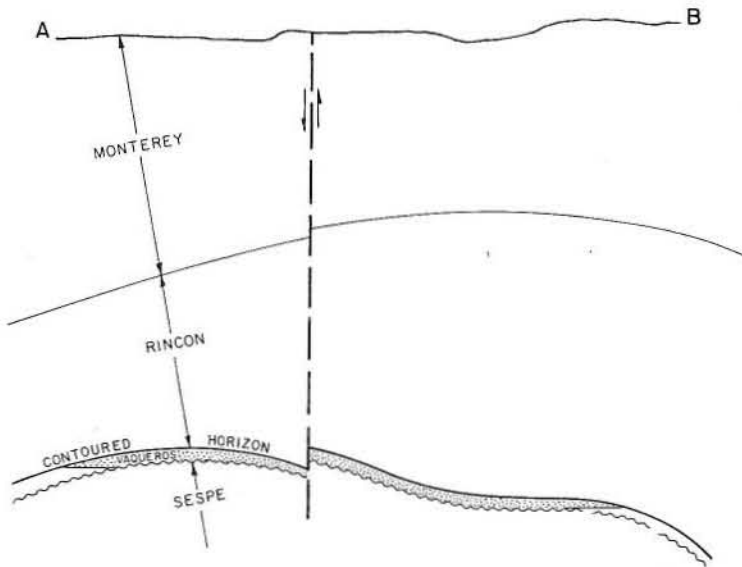
REMARKS: Last production was in July 1972.

REFERENCES: Barton, C.L., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 2 (1961). See data sheet for field.

LA GOLETA GAS FIELD



CONTOURS ON TOP OF VAQUEROS
SCALE: 1" = 1700'



CALIFORNIA DIVISION OF OIL AND GAS

LA GOLETA GAS FIELD
Santa Barbara County

LOCATION: 8 miles west of Santa Barbara

TYPE OF TRAP: Faulted dome

ELEVATION: 40

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial production			Date of completion
					Daily (Mcf)	Flow pressure (psi)	Bean size (in)	
Vaqueros	Pacific Lighting Service Co. "More" 1	General Petroleum Corp. of Calif. "More" 1	21 4N 28W	SB	58,000	525	1 1/2	Jul 1932

Remarks: The discovery well blew out in August 1929 at a depth of 4,533 and flowed at an estimated rate of 60,000 Mcf. per day. The well was brought under control shortly thereafter. It was later redrilled and was completed in July 1932.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Pacific Lighting Service Co. "More" 3	General Petroleum Corp. of Calif. "More" 3	Aug 1930	21 4N 28W	SB	6,912	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Gas (btu)	Salinity of zone water gr/gal	Original zone pressure (psi)	Class BOPE required
			Age	Formation				
Vaqueros	3,950	350	early Miocene	Vaqueros	1,000	20 - 300	1,910	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production		1973 Proved acreage	1973 Maximum number producing wells	Cumulative gas production (Mcf)	Peak gas production		Total number of wells		Maximum proved acreage
Net gas (Mcf)	Water (bbl)				(Mcf)	Year	Drilled	Completed	
14,884,328	0	280	13	44,653,983	*3,949,487	1934	28	16	280

* During 1972 and 1973 all gas withdrawn was charged to the reserve existing before gas storage commenced in 1941. The peak gas production figure applies to production prior to gas storage.

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

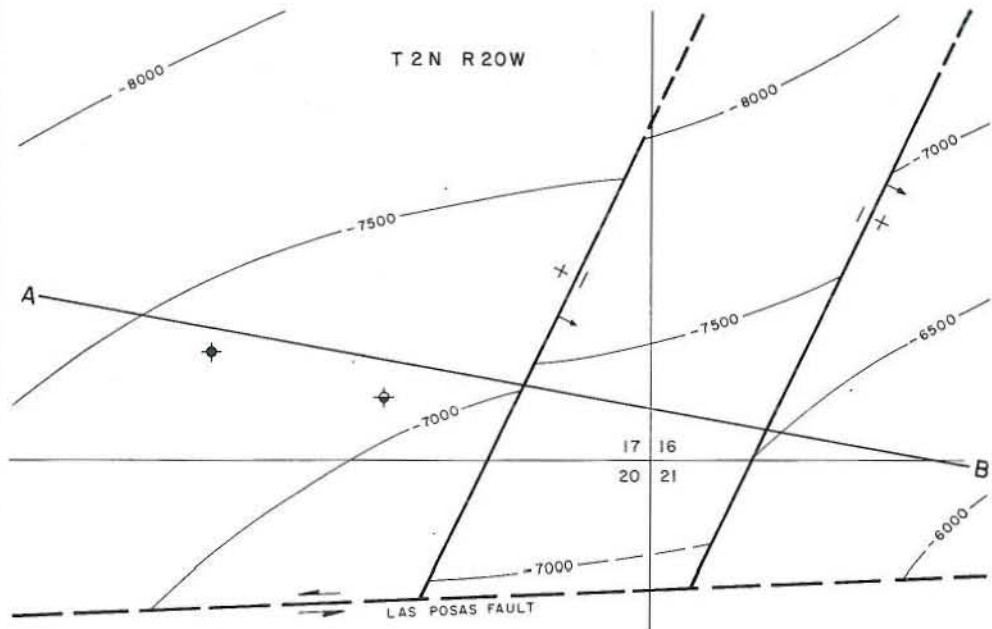
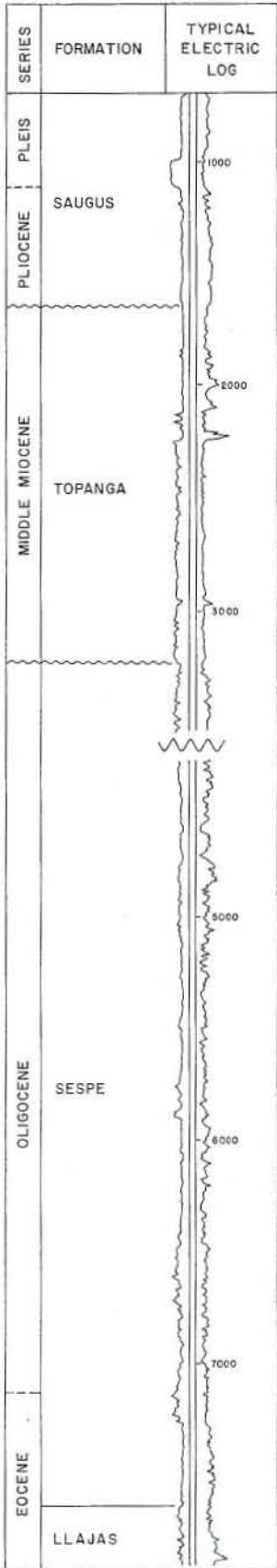
CURRENT CASING PROGRAM: 11 3/4" cem. 500; 8 5/8" cem. above zone; 6 5/8" or 4 3/4" liner landed through zone.

METHOD OF WASTE DISPOSAL:

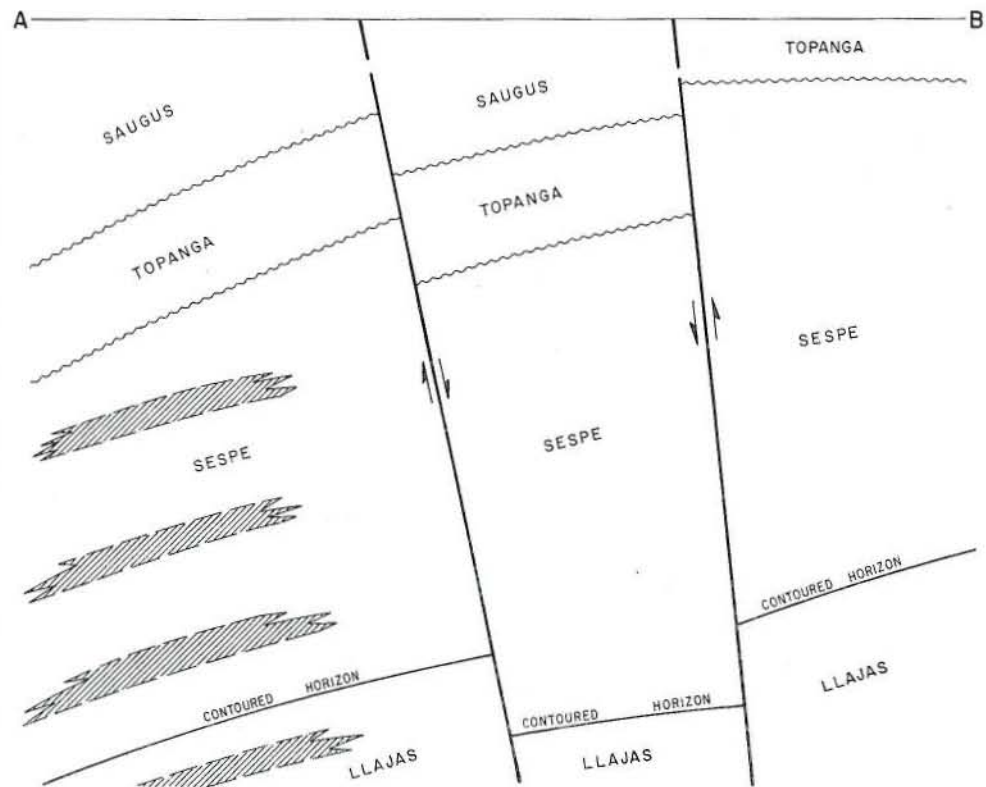
REMARKS: The field has also been known as More Ranch and has been used for gas storage since August 1941.

REFERENCES: Dolman, S.G., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 15, No. 3 (1929).
Swayze, R.O., La Goleta Gas Field: Calif. State Div. of Mines Bull. 118 (1943).
Railroad Commission of the State of California, La Goleta Gas Field: Case No. 4591 (1941).

LAS POSAS OIL FIELD (Abandoned)



CONTOURS ON TOP OF LLAJAS
SCALE 1" = 1200'



CALIFORNIA DIVISION OF OIL AND GAS

LAS POSAS OIL FIELD (Abandoned)

Ventura County

LOCATION: 15 miles east of Ventura

TYPE OF TRAP: Lenticular sand on a faulted homocline

ELEVATION: 255

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sespe - Eocene	Buttes Gas and Oil Co. "Buttes-Berylwood" 1	Buttes Gas and Oil Co. "Berylwood" 1	17 2N 20W	SB	306	N.A.	Mar 1967

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Buttes Gas and Oil Co. "Buttes-Berylwood" 1	Buttes Gas and Oil Co. "Berylwood" 1	Dec. 1966	17 2N 20W	SB	7,894	Llajas	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu))	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Sespe - Eocene	4,600	2,000	Oligocene - Eocene	Sespe - Llajas	14 - 21	1,400	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	5,870	0	5,420	1967	2	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: Applies

BASE OF FRESH WATER: 450

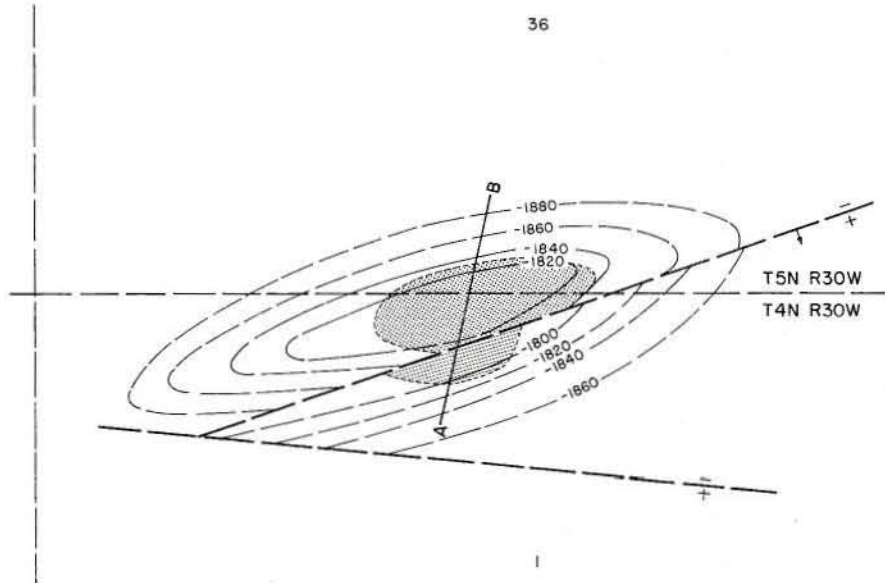
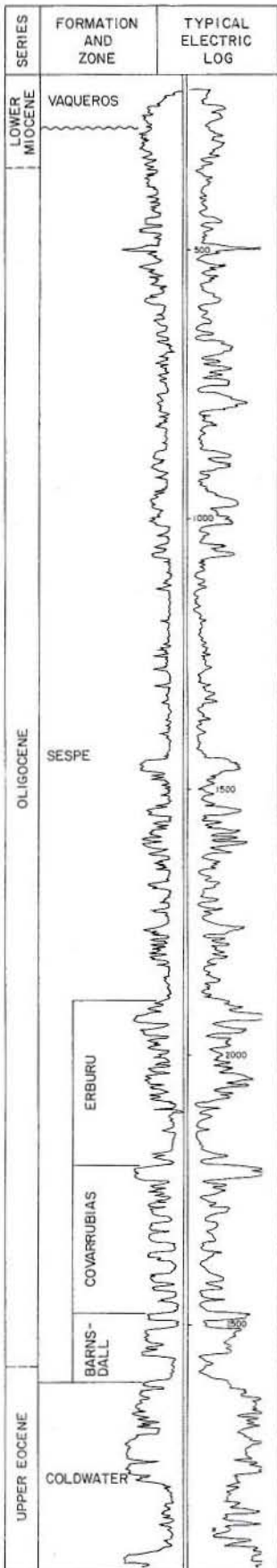
CURRENT CASING PROGRAM: 10 3/4" cem. 700; 7" cem. through zone.

METHOD OF WASTE DISPOSAL: Waste water was hauled to Oxnard disposal site.

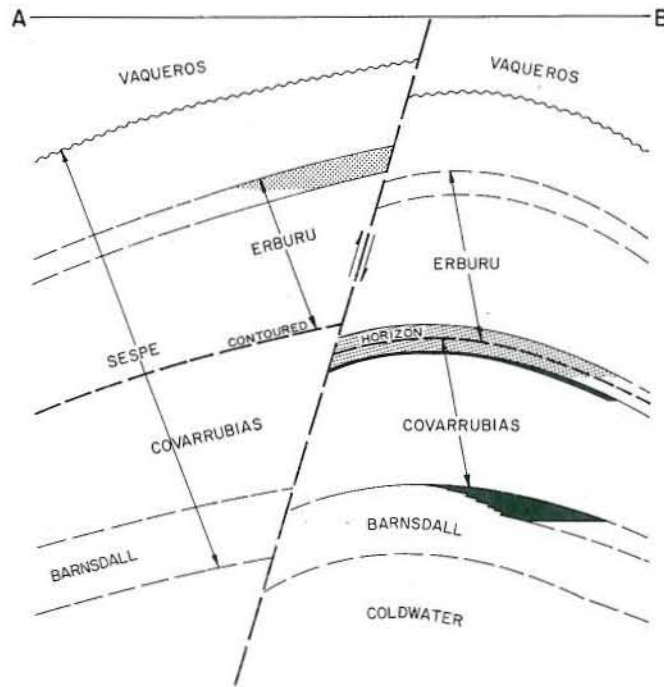
REMARKS: The last production from the field was in September 1968, and the field was abandoned in November 1971.

REFERENCES:

LAS VARAS CANYON OIL FIELD (Abandoned)



CONTOURS ON TOP OF COVARRUBIAS
SCALE: 1" = 1150'



CALIFORNIA DIVISION OF OIL AND GAS

LAS VARAS CANYON OIL FIELD (Abandoned)

Santa Barbara County

LOCATION: 17 miles west of Santa Barbara

TYPE OF TRAP: Faulted anticline

ELEVATION: 320 - 530

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Erburu (gas)	Harry S. Rothschild "Barnsdall" 2	Barnsdall Oil Co. of Calif. "Edwards" 2	1 4N 30W	SB	0	3,000	Dec 1927
Erburu	Harry S. Rothschild "Edwards" 1	Same as present	36 5N 30W	SB	2	2,960	Mar 1958
Covarrubias	Same as above	Same as above	36 5N 30W	SB	*	*	Mar 1958
Barnsdall	J. S. and A. M. Edwards "Barnsdall" 1	Barnsdall Oil Co. of Calif. "Edwards" 1	36 5N 30W	SB	500	N.A.	Oct 1927

Remarks: * Production from Erburu and Covarrubias commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Harry S. Rothschild "Edwards" 1	Same	Oct 1957	36 5N 30W	SB	2,949	Coldwater	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Erburu (gas)	1,800	100	Oligocene	Sespe	N.A.	N.A.	II
Erburu	2,180	50	Oligocene	Sespe	38	N.A.	II
Covarrubias	2,180	50	Oligocene	Sespe	38	N.A.	II
Barnsdall	2,450	50	Oligocene	Sespe	41	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	4,990	275,025	2,243	1928	8	4	20

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 250

CURRENT CASING PROGRAM: 11 3/4" cem. 200 - 400; 7" cem. through zone.

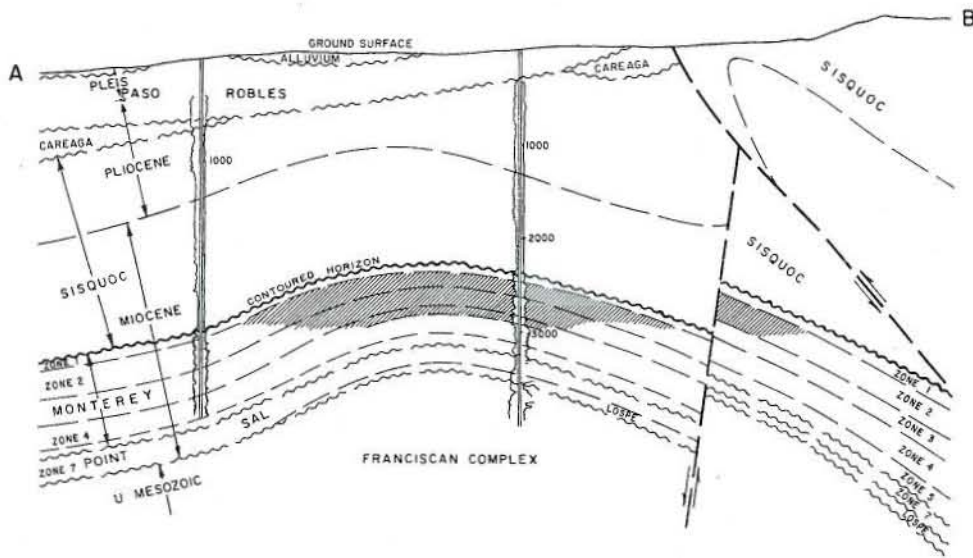
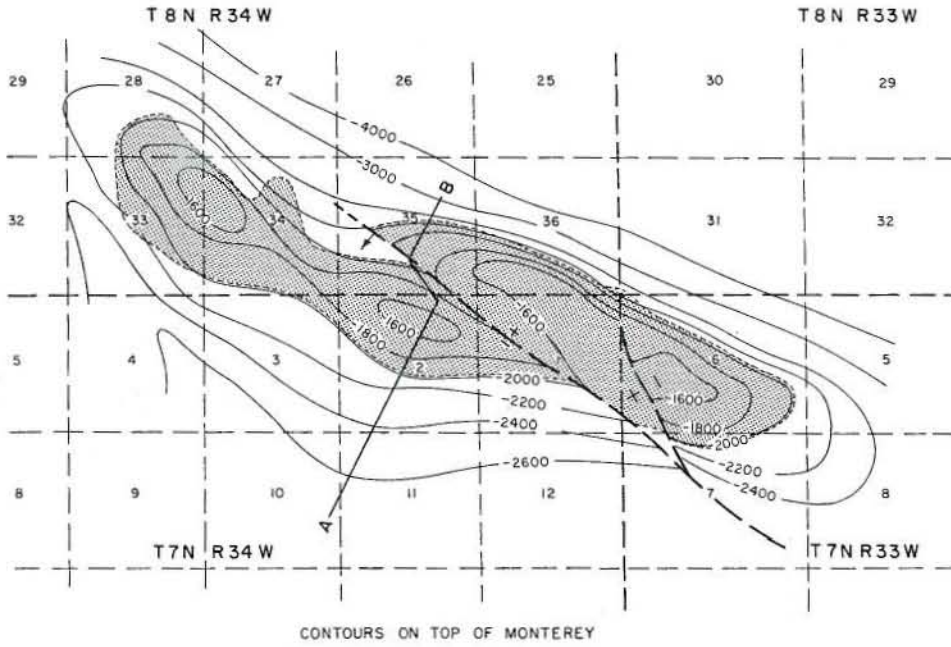
METHOD OF WASTE DISPOSAL:

REMARKS: Cumulative dry gas production: 12,000 Mcf. (estimated, gas production reports not required at the time of discovery).

Last production was in December 1959. Field abandoned January 1960. Early production was formerly included in Goleta Oil Field.

REFERENCES:

LOMPOC OIL FIELD



DATA ACCORDING TO AAPG CORRELATION SECTION ACROSS SANTA MARIA BASIN

CALIFORNIA DIVISION OF OIL AND GAS

LOMPOC OIL FIELD
Santa Barbara County

LOCATION: 6 miles north of Lompoc

TYPE OF TRAP: Faulted asymmetrical anticline

ELEVATION: 500 - 1,000

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Monterey	Union Oil Co. of Calif. "Hill" 1	Same as present	1 7N 34W	SB	225	N.A.	Feb 1903

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Mobil Oil Corp. "Los Alamos" 3	General Petroleum Corp. of Calif. "Los Alamos" 3	Sep 1945	31 8N 33W	SB	6,287	Franciscan	Cret or older

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Monterey	2,250	500	middle Miocene	Monterey	15 - 24	410	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
464,802	1,465,257	12,880,287	2,090	111	39,970,785	39,784,269	2,481,652	1951	180	155	2,290

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Gas injection	1929	1,543,578	9

SPACING ACT: Does not apply

BASE OF FRESH WATER: 400

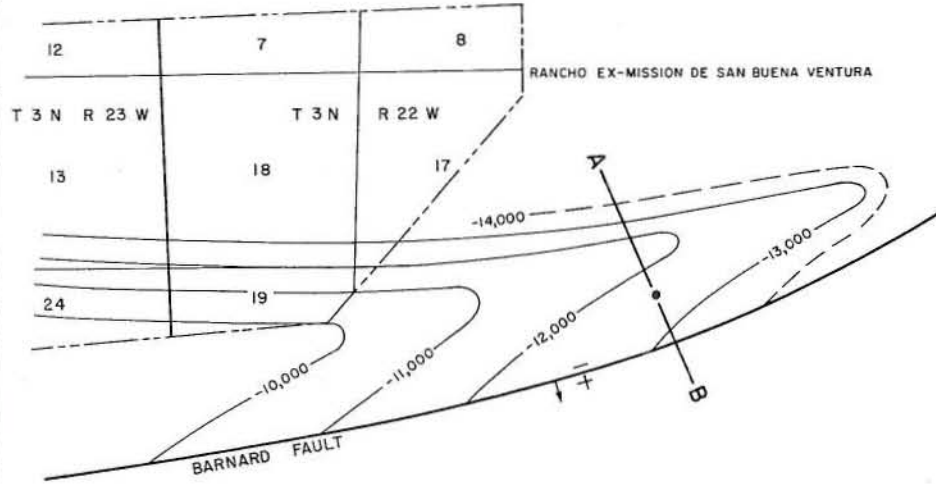
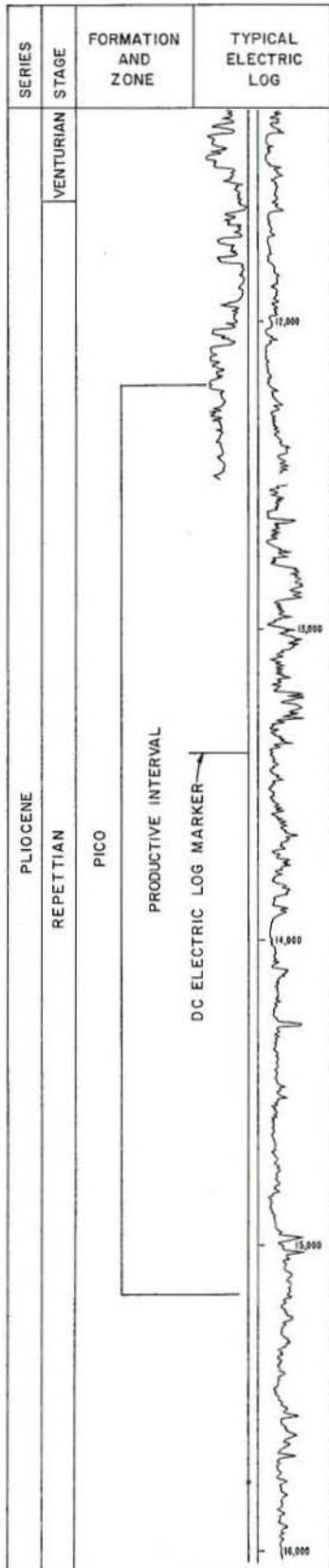
CURRENT CASING PROGRAM: 12 3/4" or 11 3/4" cem. 400; 8 5/8" cem. above zone; 6 5/8" or 5 1/2" liner landed through zone, or 7" combination string landed through zone and cemented above zone.

METHOD OF WASTE DISPOSAL: Waste water is injected into disposal wells.

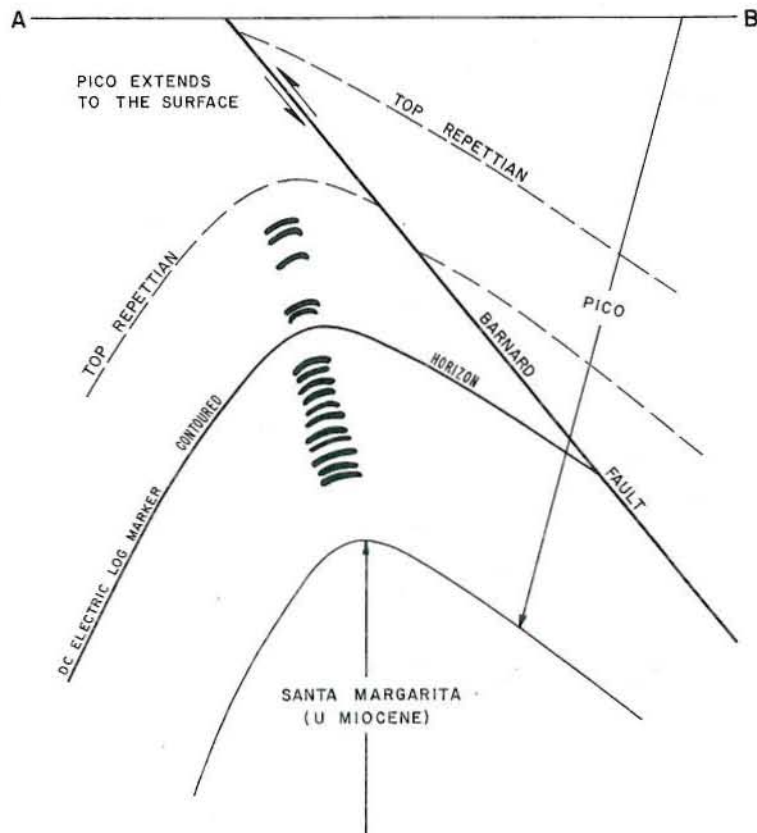
REMARKS:

REFERENCES: Arnold, R., and Robert Anderson, Geology and Oil Resources of the Santa Maria Oil District, Santa Barbara County, California: U.S. Geol. Survey Bull. 322 (1907).
Dibblee, T.W., Jr., Lompoc Oil Field: Calif. Div. of Mines Bull. 118, p. 427 (1941).
Dolman, S.G., Lompoc Oil Field, Santa Barbara County: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 17, No. 4 (1932).
Hodges, F.C., and A.M. Johnson, Subsurface Storage of Oil and Gas in the Brea-Olinda and Lompoc fields: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 17, No. 4 (1932).
Petroleum Potential of Santa Maria Province, California, in Future Petroleum Provinces of the United States--Their Geology and Potential: Am. Assoc. Petroleum Geologists Memoir 15, Vol. 1, p. 325 (1970).
Prutzman, Paul W., Petroleum in Southern California: Calif. State Mining Bureau Bull. 63, p. 345 (1913).
Regan, L.J., Jr., and A.W. Hughes, Fractured Reservoirs of Santa Maria District, Calif.: Am. Assoc. Petroleum Geologists Bull., Vol. 33, No. 1, p. 35 (1949).
Woodring, W.P., and M.N. Bramlette, Geology and Paleontology of the Santa Maria District, Calif.: U.S. Geol. Survey Prof. Paper 222, p. 119 (1950).

LONG CANYON OIL FIELD



CONTOURS ON DC ELECTRIC LOG MARKER
SCALE 1" = 5500'



CALIFORNIA DIVISION OF OIL AND GAS

LONG CANYON OIL FIELD

Ventura County

LOCATION: 7 miles northeast of Ventura

TYPE OF TRAP: Faulted anticline

ELEVATION: 1,228

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Pico	Lloyd Corp., Ltd. "Lloyd Corp." W.S. 4	Same as present	21 3N 22W	SB	40	75	Jun 1956

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Lloyd Corp., Ltd. "Lloyd Corp." W.S. 4	Same	Jul 1955	21 3N 22W	SB	16,343	Santa Margarita	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Pico	12,200 - 15,150	Thin sand stringers	Pliocene	Pico	32	900 - 1,100	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	10	0	17,154	38,685	6,047	1957	1	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,000

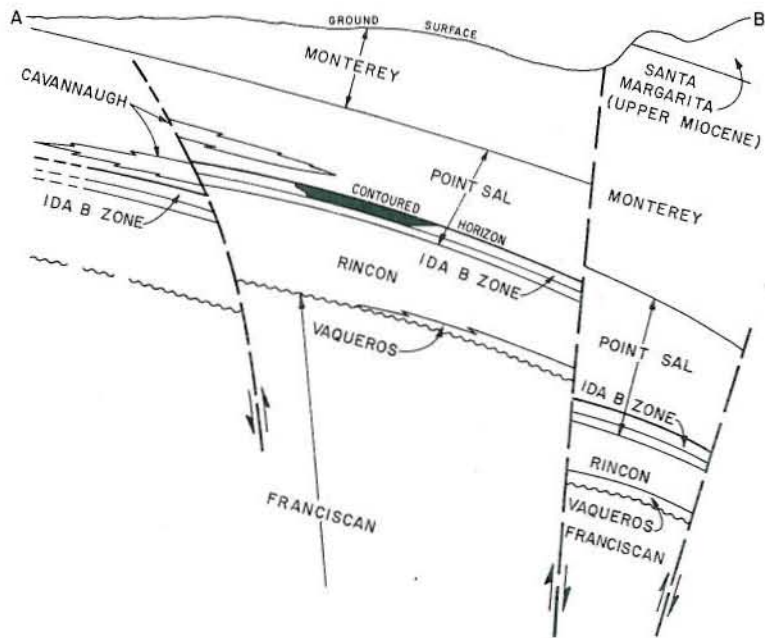
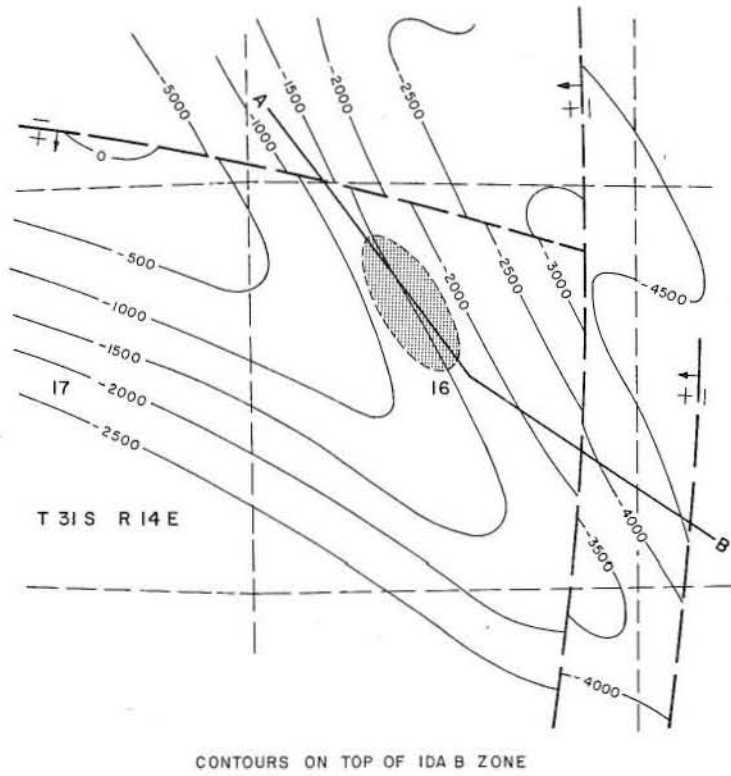
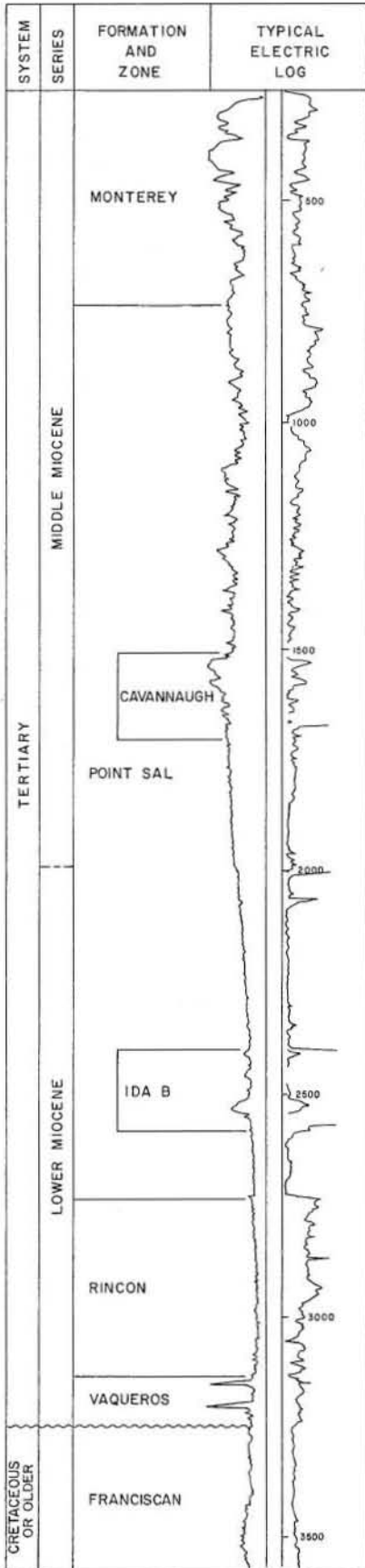
CURRENT CASING PROGRAM: 13 3/8" cem. 1,000; 7 5/8" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: A one-well field; last produced in June 1960.

REFERENCES: Jennings, C.W., and B.W. Troxel, Geologic Guide through the Ventura Basin and Adjacent Areas, Southern California: Calif. Div. of Mines Bull. 170, Geologic Guide No. 2, Map 18, p. 49-50 (1954).

LOPEZ CANYON OIL FIELD (Abandoned)



CALIFORNIA DIVISION OF OIL AND GAS

LOPEZ CANYON OIL FIELD (Abandoned)

San Luis Obispo County

LOCATION: 9 miles northeast of Arroyo Grande

TYPE OF TRAP: Faulted nose

ELEVATION: 1,100

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Ida B	Getty Oil Co. "Ida B" ONE	Joseph M. Gross "Ida B" ONE	16 31S 14E	MD	175	100	Aug 1963

Remarks: Initial production according to Conservation Committee of California Oil Producers discovery memorandum D-13-63.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Getty Oil Co. "U.S.L." 18-15	Tidewater Oil Co. "U.S.L." 18-15	Nov 1963	15 31S 14E	MD	7,437	Vaqueros	early Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Ida B	2,500	140	early Miocene	Point Sal	15	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	1,898	0	1,706	1963	6	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 500

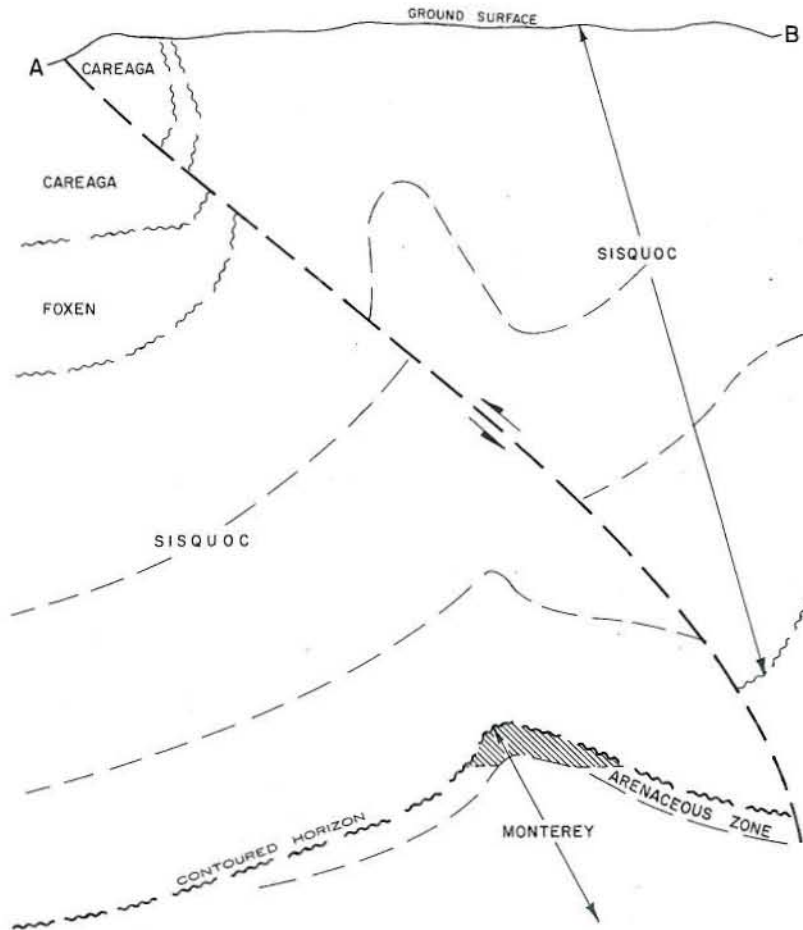
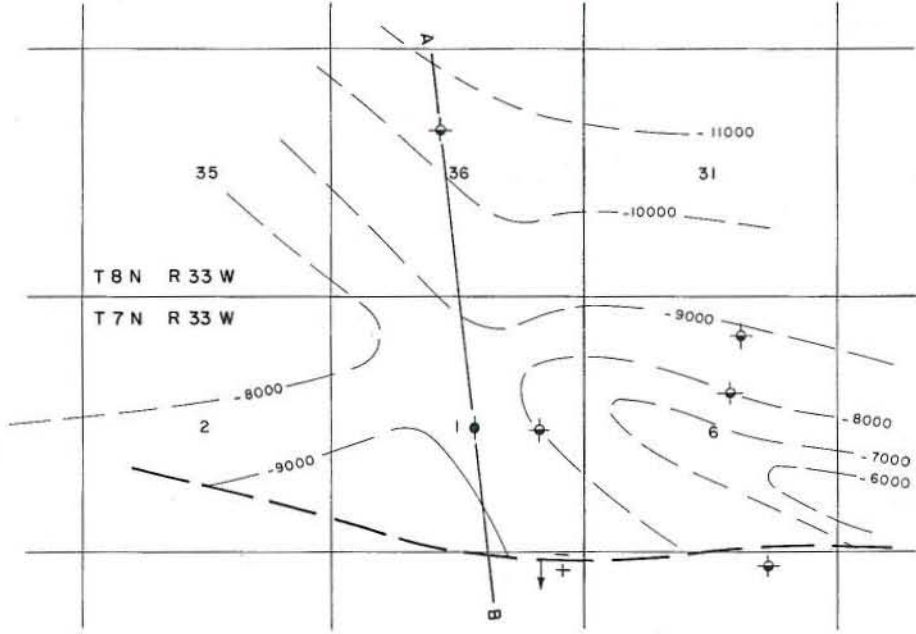
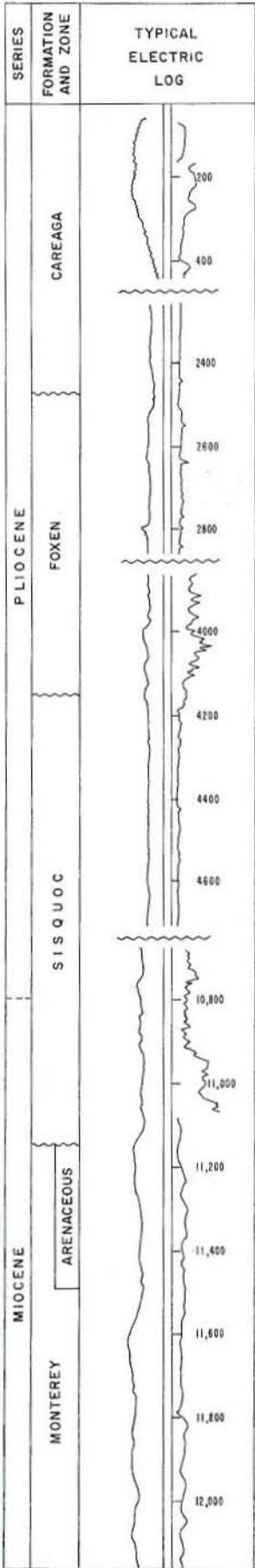
CURRENT CASING PROGRAM: 11 3/4" cem. 300; 7" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water disposed of in unlined sump or released into natural drainage channels.

REMARKS: The only producing well was abandoned in October 1965. The field is in the Lopez Dam recreational area. Last production was in May 1964.

REFERENCES: Barton, C.L., Operations in District No. 3, 1963: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 49, No. 2 (1963).

LOS ALAMOS OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

LOS ALAMOS OIL FIELD
Santa Barbara County

LOCATION: 18 miles southeast of Santa Maria

TYPE OF TRAP: Faulted anticline

ELEVATION: 1,200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Monterey	McCulloch Oil Corp. "Ferrero et al" 1-1	Same as present	1 7N 33W	SB	25	N.A.	Apr 1972

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
McCulloch Oil Corp. "Ferrero et al" 1-1	Same	Sep 1971	1 7N 33W	SB	10,231	Monterey	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Monterey	9,300	550	late Miocene	Monterey	34	350	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	10	0	3,294	0	3,294	1972	2	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

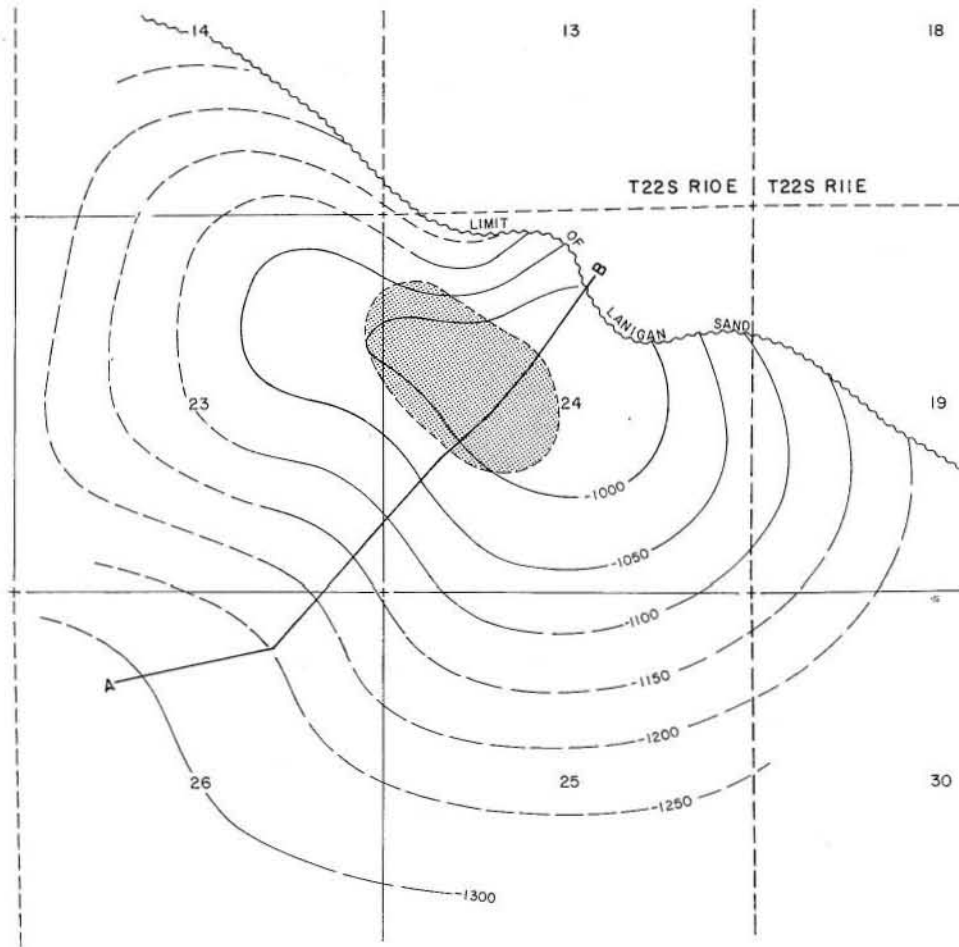
CURRENT CASING PROGRAM: 10 3/4" cem. 1,000; 7" cem. above zone; 4" liner landed through zone.

METHOD OF WASTE DISPOSAL:

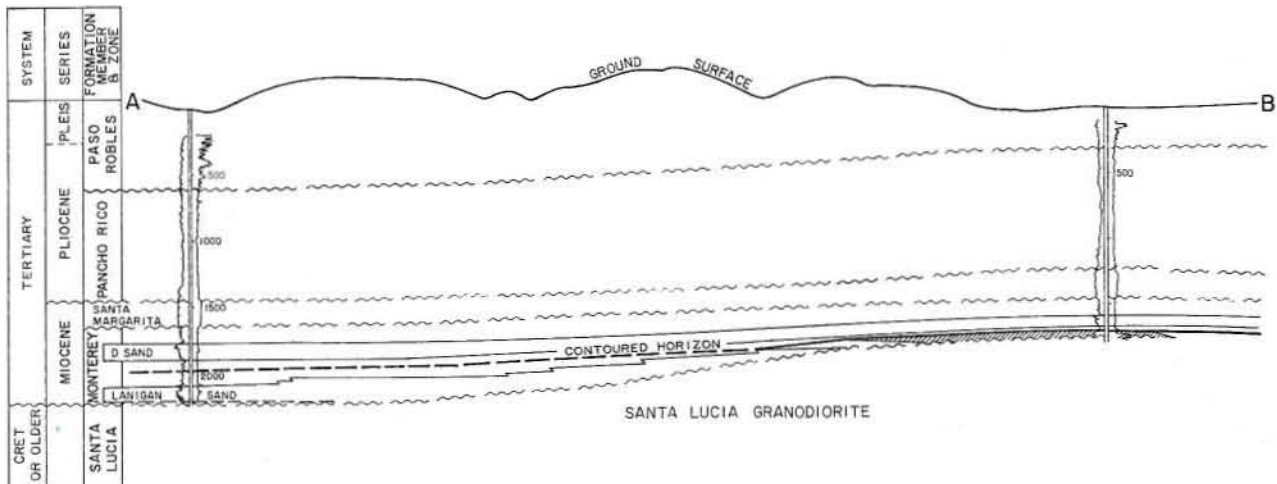
REMARKS: Well shut in.

REFERENCES: Woodring, W.P., and M.N. Bramlette, Geology and Paleontology of the Santa Maria District, California: U.S. Geol. Survey Prof. Paper 222, p. 125 (1950).
Zulberti, J.L., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 58, No. 2 (1972)

LYNCH CANYON OIL FIELD (Abandoned)



CONTOURS ON TOP OF LANIGAN SAND AND EQUIVALENT HORIZON



CALIFORNIA DIVISION OF OIL AND GAS

LYNCH CANYON OIL FIELD (Abandoned)

Monterey County

LOCATION: 17 miles southeast of King City

TYPE OF TRAP: Dome on basement high

ELEVATION: 800

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Lanigan	Texaco Inc. "Lanigan" 172	Moriqui Exploration Co. "Lanigan" 172	24 22S 10E	MD	41	0	Sep 1962

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Texaco Inc. "Lanigan Core Hole" 1	Same	Jan 1965	24 22S 10E	MD	2,385	Basement (granite)	Cretaceous

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Lanigan	1,800	55	middle Miocene	Monterey	10	N.A.	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	124,633	0	45,779	1964	22	13	140

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Cyclic steam	1964	229,407	10
Fire flood	1967	N.A.	1

SPACING ACT: Applies

BASE OF FRESH WATER: 400

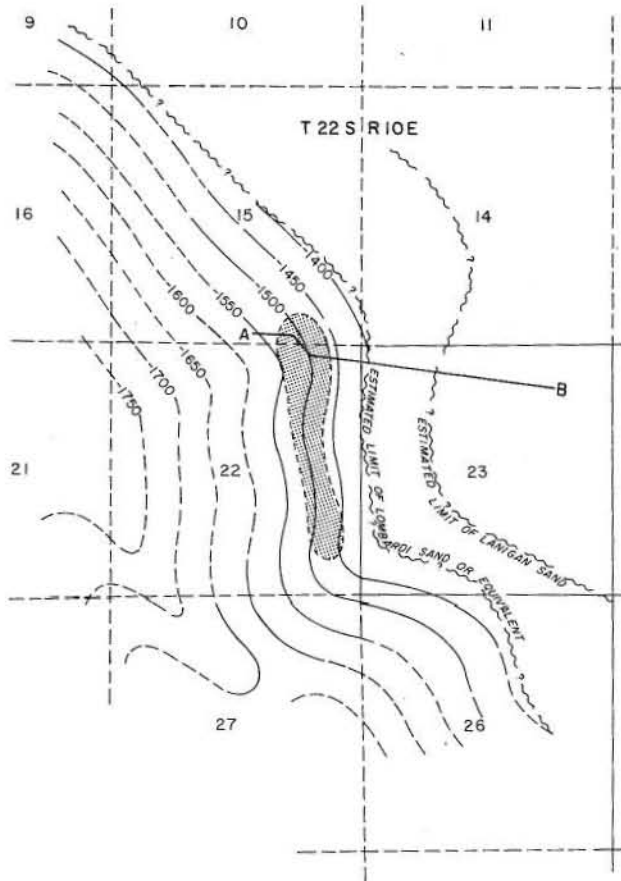
CURRENT CASING PROGRAM: 10 3/4" cem. 200; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

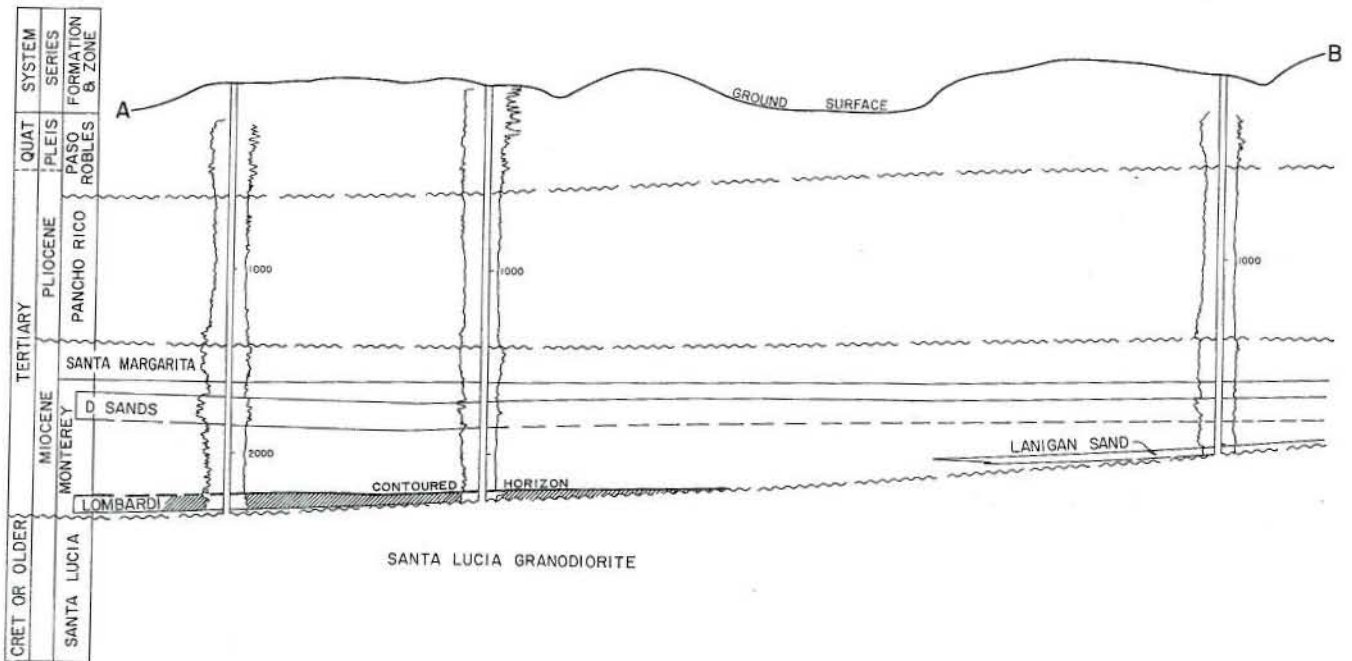
REMARKS: Bottom-hole heaters and cyclic-steam methods were used to produce the low-gravity, high-viscosity oil. Last production was in May 1967. Field abandoned May 1968.

REFERENCES: Gribi, E.A., Jr., Lynch Canyon Oil Field, Monterey County, Calif.: A.A.P.G. - S.E.P.M. Guidebook to the Geology of the Salinas Valley and the San Andreas Fault, p. 73 (1963).
 Hart, E.W., Mines and Mineral Resources of Monterey County, Calif.: Calif. Div. of Mines and Geology, County Report No. 5, p. 76 (1963).
 Wilkinson, E.R., Lynch Canyon Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 41, No. 1 (1964).

McCOOL RANCH OIL FIELD



CONTOURS ON TOP OF LOMBARDI SAND



SANTA LUCIA GRANODIORITE

CALIFORNIA DIVISION OF OIL AND GAS

McCOOL RANCH OIL FIELD

Monterey County

LOCATION: 2 miles southeast of San Ardo
 TYPE OF TRAP: Sands overlap onto basement
 ELEVATION: 600
 DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Lombardi	Tony Landino "Sinclair" 5	C. A. Luckey "Sinclair" 5	22 22S 10E	MD	62	0	Apr 1964

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Texaco Inc. "Brinan" 2	Same	Mar 1965	15 22S 10E	MD	2,332	Santa Lucia Granodiorite	Cret or older

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Lombardi	2,150	30	late Miocene	Monterey	12	350	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
750	0	9,000	70	1	109,831	0	34,144	1966	14	8	80

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 800

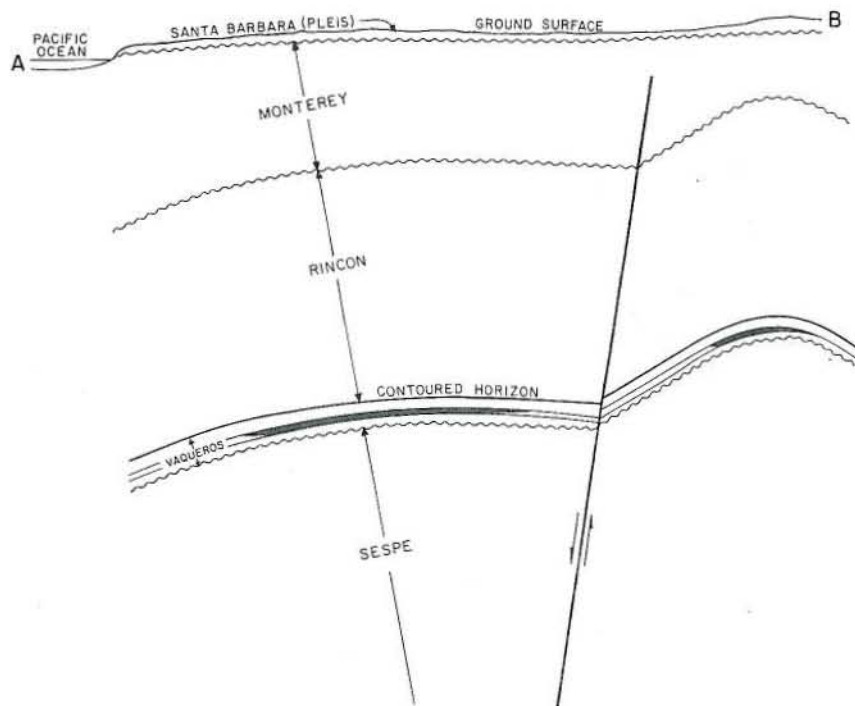
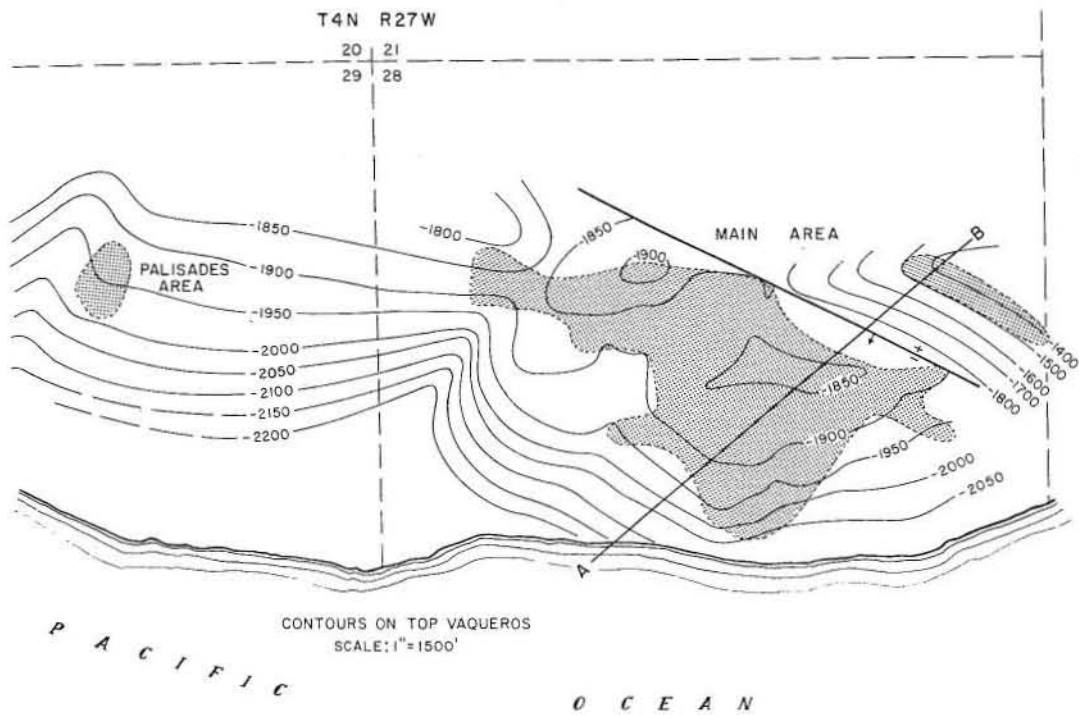
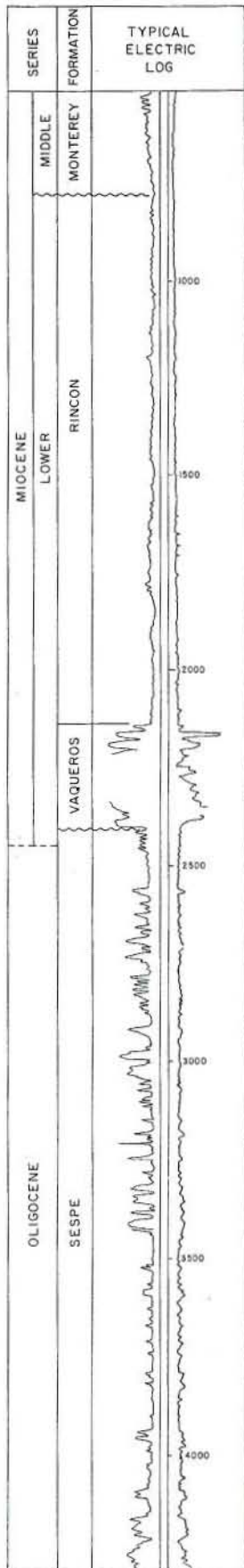
CURRENT CASING PROGRAM: 10 3/4" cem. 200; 7" cem. above zone and across base of fresh water; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Evaporation and percolation from unlined sumps (to be phased out).

REMARKS: A pilot water-flood project was started in 1967 and terminated in 1968 after having injected 1,565,282 bbls. into one well.

REFERENCES: Wilkinson, E.R., McCool Ranch Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 51, No. 2 (1965).

MESA OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

MESA OIL FIELD
Santa Barbara County

LOCATION: Within the city limits of Santa Barbara

TYPE OF TRAP: See areas

ELEVATION: 120 - 300

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Vaqueros	C. C. Loftin "Lomas" 1	Olympic Refining Co. "Lomas" 1	29 4N 27W	SB	500	N.A.	May 1929

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Trans-Oceanic Oil Corp. "Trans-Oceanic M'Divani" 8	Same	Aug 1948	28 4N 27W	SB	10,047	Sespe	Oligocene

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	10	0	3,725,116	7,547	1,112,333	1935	133	95	210

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL:

REMARKS: See areas

REFERENCES: Dibblee, T.W., Jr., Geology of the Central Santa Ynez Mountains, Santa Barbara County, Calif.: Calif. Div. of Mines and Geology Bull. 186, p. 85 (1966).
Doiman, S.G., Mesa Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 24, No. 2 (1938).

CALIFORNIA DIVISION OF OIL AND GAS

MAIN AREA

MESA OIL FIELD
Santa Barbara County

LOCATION: See map sheet of Mesa Oil Field

TYPE OF TRAP: Faulted terrace

ELEVATION: 120 - 300

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Vaqueros	Kenneth L. Switzer "Rogers" 1	Valemont Oil Co., Ltd. "Birdie Cline" 1	28 4N 27W	SB	198	N.A.	Sep 1930

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Trans-Oceanic Oil Corp. "Trans-Oceanic M'Divani" 8	Same	Aug 1948	28 4N 27W	SB	10,047	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Vaqueros	2,200	50	early Miocene	Vaqueros	18	1,063 - 1,163	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	10	0	3,704,207	7,547	1,112,333	1935	102	90	200

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 18 5/8" cem. 75; 8 5/8" or 6 5/8" cem. above zone; 6 5/8" or 4 3/4" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Main area also known as La Mesa area. Area is idle, last production in 1970.

REFERENCES: Dolman, S.G., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 16, No. 3, p. 47 (1930).

CALIFORNIA DIVISION OF OIL AND GAS

MESA OIL FIELD

PALISADES AREA (Abandoned)

Santa Barbara County

LOCATION: See map sheet of Mesa Oil Field

TYPE OF TRAP: Faulted terrace

ELEVATION: 170

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Vaqueros	C. C. Loftin "Lomas" 1	Olympic Refining Co. "Lomas" 1	29 4N 27W	SB	500	N.A.	May 1929

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Palisades Petroleum Corp. No. 1	Altadena Oil Co. No. 1	Jun 1929	29 9N 27W	SB	4,270	Vaqueros	early Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Vaqueros	2,150	60	early Miocene	Vaqueros	20	N.A.	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	20,909	N.A.	19,183	1929	31	5	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

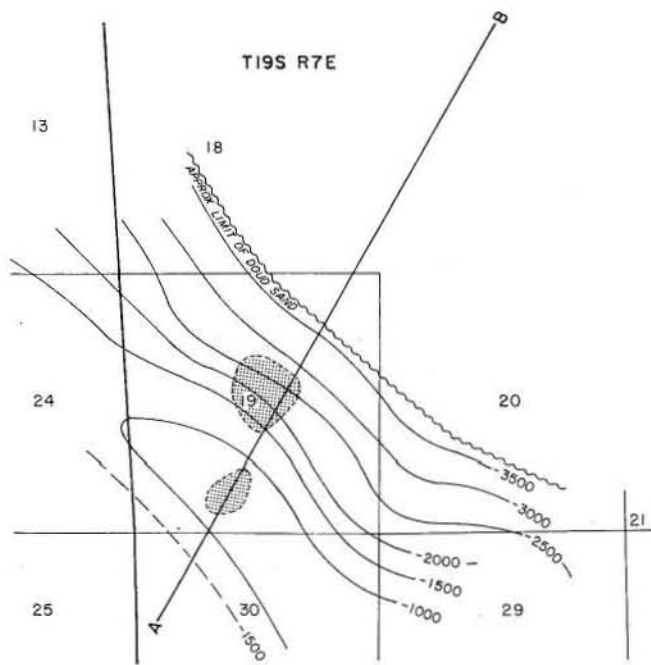
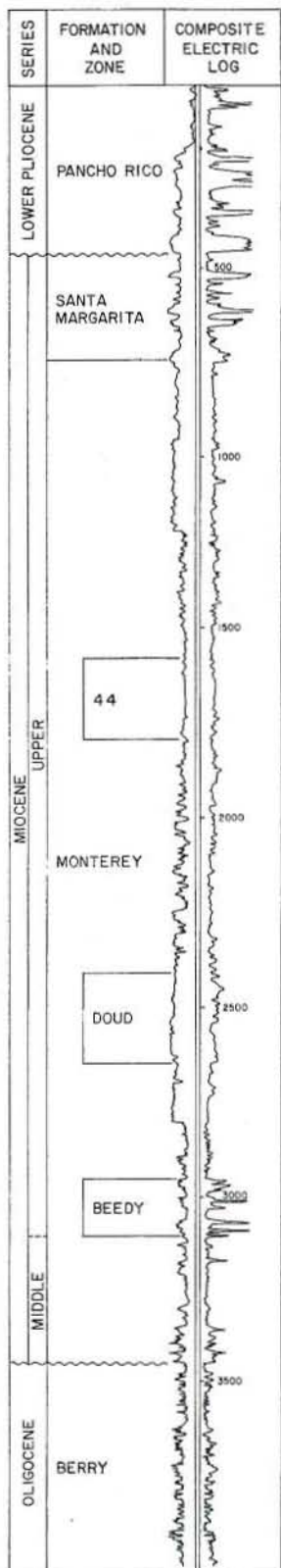
CURRENT CASING PROGRAM: 20" to 12 1/2" cem. 300; 13 3/8" to 8 5/8" cem. above zone; 6 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL:

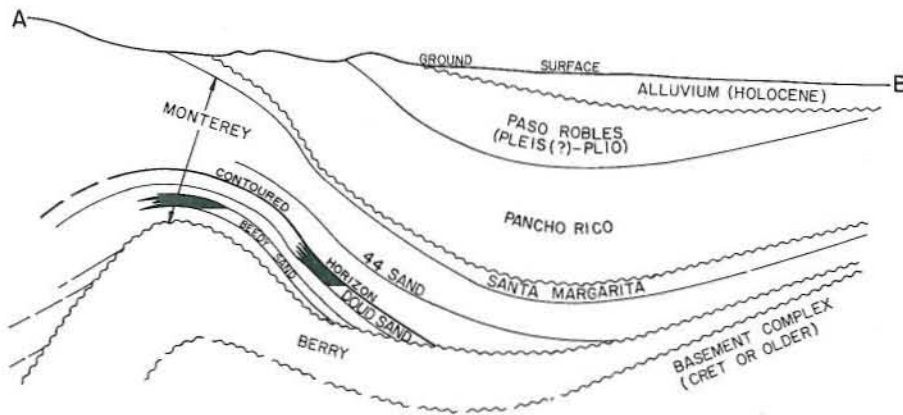
REMARKS: Last production was in June 1930; area was abandoned in March 1931.

REFERENCES: Dolman, S.G., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 15, No. 3, p. 53 (1929).

MONROE SWELL OIL FIELD



CONTOURS ON TOP OF DOUD SAND
SCALE: 1"=4000'



CALIFORNIA DIVISION OF OIL AND GAS

MONROE SWELL OIL FIELD

Monterey County

LOCATION: 8 miles northwest of King City

TYPE OF TRAP: Permeability barriers on anticlinal fold

ELEVATION: 1,000

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
44 Doud Beedy	Commercial Petro-Gas, Inc. "Burrison-Doud" 3	Westates Petroleum Co. "Doud" 44	19 19S 7E	MD	58	0	Nov 1960
	Commercial Petro-Gas, Inc. "Burrison-Doud" 1	Bandini Petroleum Co. "Doud" 54-X	19 19S 7E	MD	72	0	Feb 1959
	Texaco Inc. "Beedy (NCT-2)" 1	The Texas Co. "Beedy NCT-2" 1	19 19S 7E	MD	50	0	Jun 1949

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Texaco Inc. "Dunphy" 1	The Texas Co. "Dunphy" 1	Dec 1936	30 19S 7E	MD	4,759	Berry	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
44	2,000	200	late Miocene	Monterey	19	N.A.	II
Doud	2,900	200	late Miocene	Monterey	19	480	II
Beedy	3,200	150	late Miocene	Monterey	17	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
23,620	0	4,025	50	6	158,523	0	26,580	1972	21	7	50

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
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SPACING ACT: Applies

BASE OF FRESH WATER: 1,300

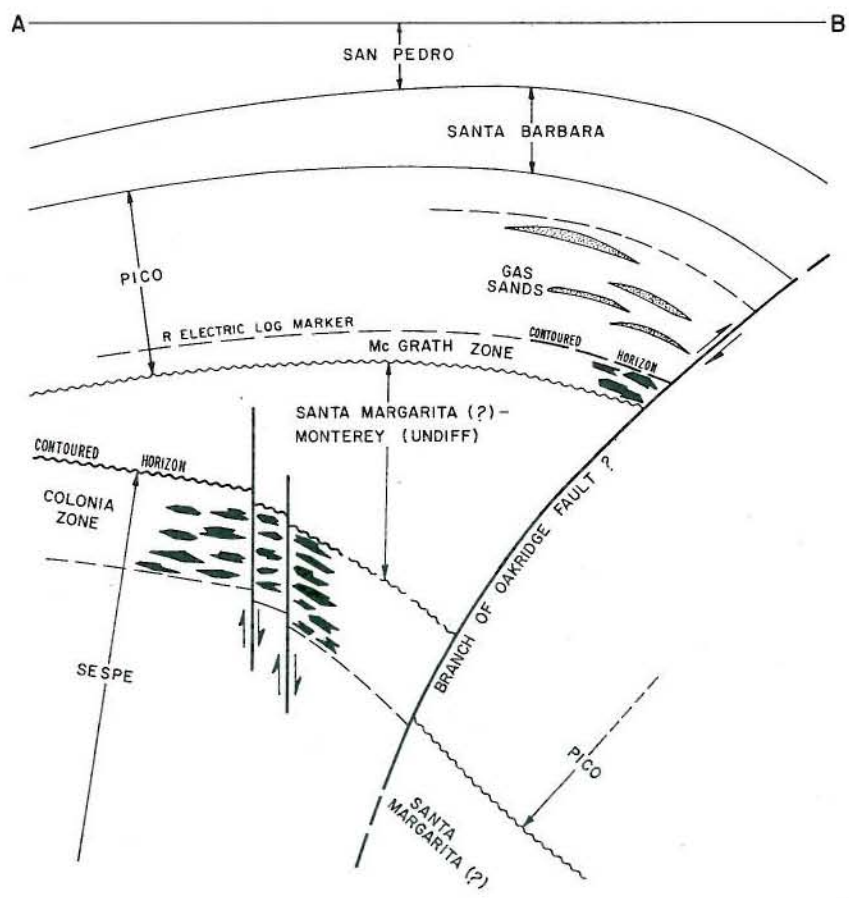
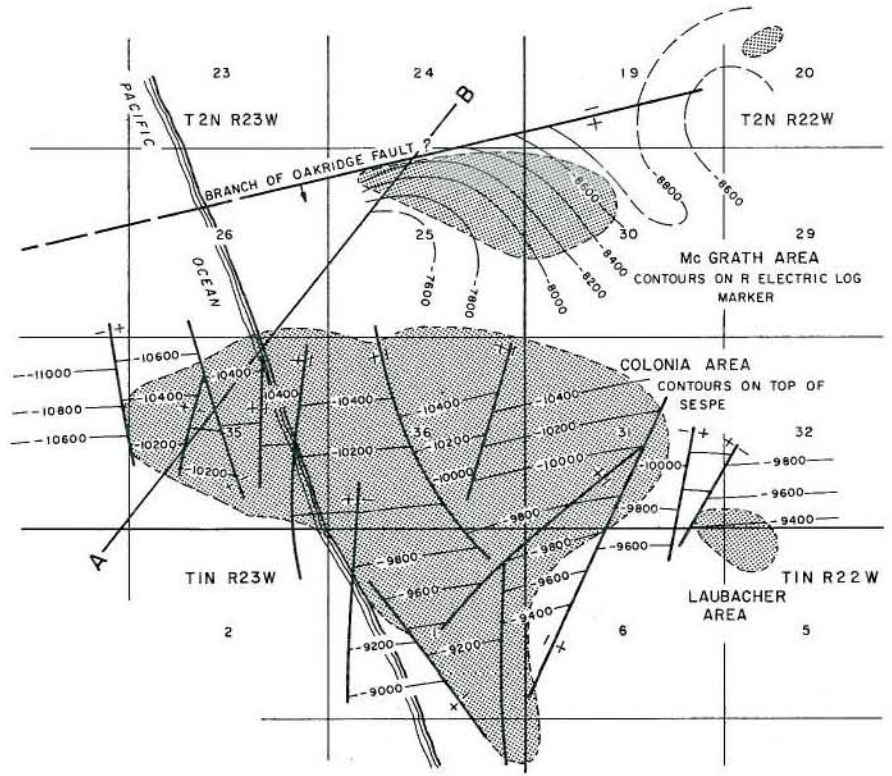
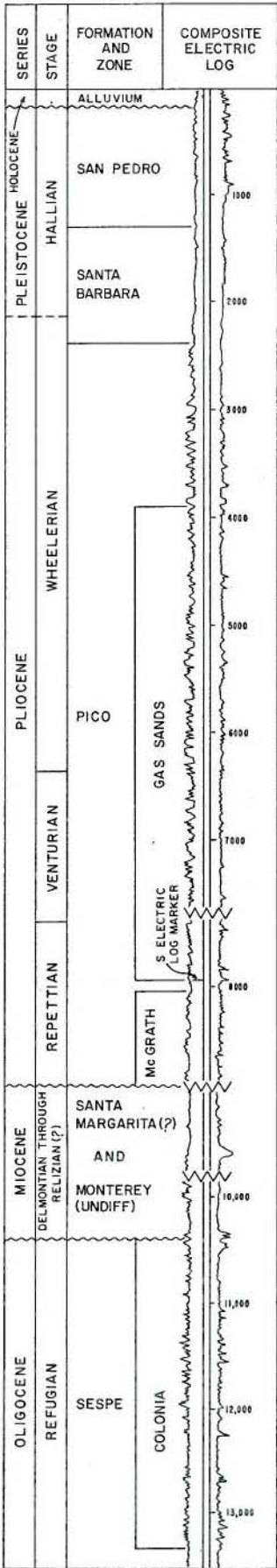
CURRENT CASING PROGRAM: 10 3/4" cem. 200; 7" cem. above zone and across base of fresh water; 5" liner landed through zone.

METHOD OF WASTE DISPOSAL: By evaporation from lined sump.

REMARKS: The field was abandoned in 1951 after having produced only 370 bbls. of oil and then reactivated in 1959. A pilot cyclic-steam project was attempted in 1965 when 2,055 bbls. of water equivalent was injected into two wells.

REFERENCES: Barton, C.L., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 45, No. 2 (1959).
 Gribi, E.A. Jr., Monroe Swell Oil Field, Monterey Co., Calif.: A.A.P.G. - S.E.P.M. Guidebook to the Geology of Salinas Valley and the San Andreas Fault (1963).
 Hart, E.W., Mines and Mineral Resources of Monterey Co., Calif.: Calif. Div. of Mines and Geology County Report No. 5, p. 76 (1963).

WEST MONTALVO OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

MONTALVO, WEST, OIL FIELD

Ventura County

LOCATION: 5 miles southeast of Ventura

TYPE OF TRAP: See areas

ELEVATION: 20 (Onshore drillsites); -250 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
McGrath	Standard Oil Co. of Calif. "McGrath 4" 2	Same as present	25 2N 23W	SB	154	1,420	Apr 1947

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "McGrath 4" 1212	Same	Dec 1956	35 2N 23W	SB	17,422	Sespe	Oligocene

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
707,341	2,044,578	927,050	1,760	57	33,513,975	30,038,914	2,869,327	1962	117	100	1,860

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: The first commercial dry gas in Ventura County was discovered in the McGrath area of the West Montalvo oil field in 1953.

REFERENCES: See areas

CALIFORNIA DIVISION OF OIL AND GAS

MONTALVO, WEST, OIL FIELD

ONSHORE

Ventura County

LOCATION: 5 miles southeast of Ventura

TYPE OF TRAP: Anticline; sand pinchout and faulting

ELEVATION: 20

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Pico gas sands	Standard Oil Co. of Calif. "McGrath 4" 73-17	Same as present	25 2N 23W	SB	0	2,860	Jan 1953
McGrath	Standard Oil Co. of Calif. "McGrath 4" 2	Same as present	25 2N 23W	SB	154	1,420	Apr 1947
Colonia	Standard Oil Co. of Calif. "McGrath 4" 148-12	Same as present	26 2N 23W	SB	191	30	Feb 1951

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "McGrath 4" 1212	Same	Dec 1956	35 2N 23W	SB	17,422	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Pico gas sands	6,000	4,000	Pliocene	Pico	1,010	400 - 1,000	III
McGrath	9,000	250	Pliocene	Pico	28	1,100	III
Colonia	11,500	2,500	Oligocene	Sespe	13 - 32	1,250	III

PRODUCTION DATA (Jan. 1, 1974) (Dry gas production data not included - see remarks)

1973 Production			1973 Proved acreage	Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
609,355	2,044,578	814,565	1,480	51	28,367,283	26,796,171	2,529,177	1962	101	89	1,580

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Gas injection for pressure maintenance	1956	6,717,650	4
Water Flood	1960	8,614,887	7

SPACING ACT: Applies

BASE OF FRESH WATER: 2,000

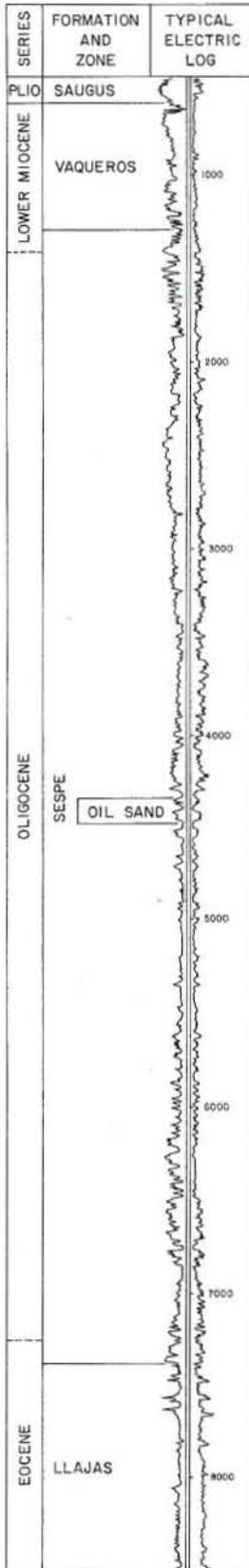
CURRENT CASING PROGRAM: 13 3/8" cem. 1,300; 7" or 5 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water is used in water-flood operations.

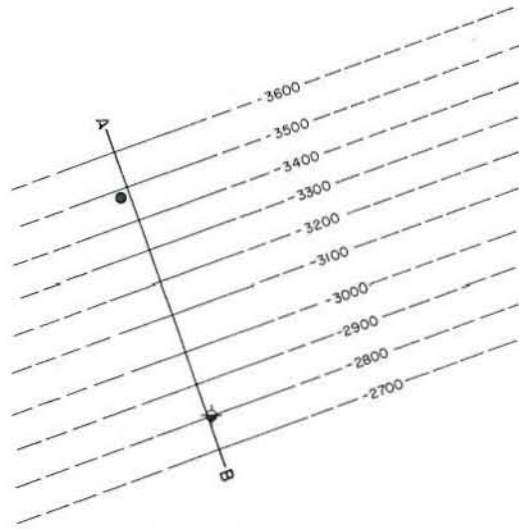
REMARKS: 1973 dry gas production 1,589,224 Mcf. from 6 producing wells; cumulative dry gas production 13,962,536 Mcf.; 7 wells were drilled for dry gas and 7 were completed; 1973 dry gas proved acreage 40; dry gas peak production 1,603,345 Mcf. in 1956.

REFERENCES: Hardoin, J.L., McGrath Area of West Montalvo Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 2 (1961).

MOORPARK OIL FIELD

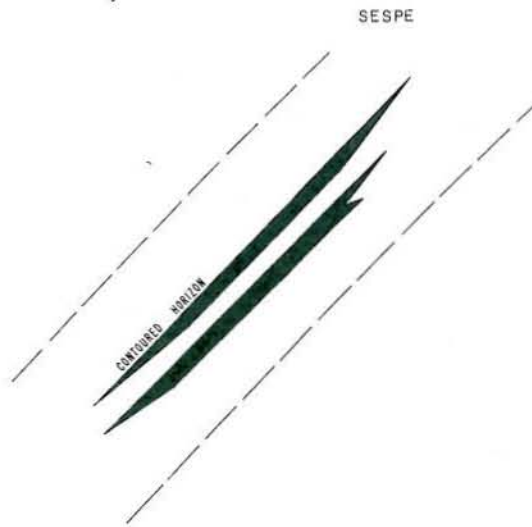


T3N R19W
33



CONTOURS ON TOP OF OIL SAND
SCALE: 1" = 400'

A ————— B



CALIFORNIA DIVISION OF OIL AND GAS

MOORPARK OIL FIELD

Ventura County

LOCATION: 23 miles east of Ventura

TYPE OF TRAP: Lithofacies variation on a homocline

ELEVATION: 850

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	E. H. Williams "Williams" 1-A	Robert S. Lytle 1 "Williams"	33 3N 19W	SB	60	50	Apr 1955

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
E. H. Williams "Williams" 1-A	Robert S. Lytle 1 "Williams"	Sep 1954	33 3N 19W	SB	8,500	Llajas	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
(Unnamed)	4,250	80	Oligocene	Sespe	25	N.A.	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
821	0	0	10	1	27,707	0	2,552	1955	5	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 600

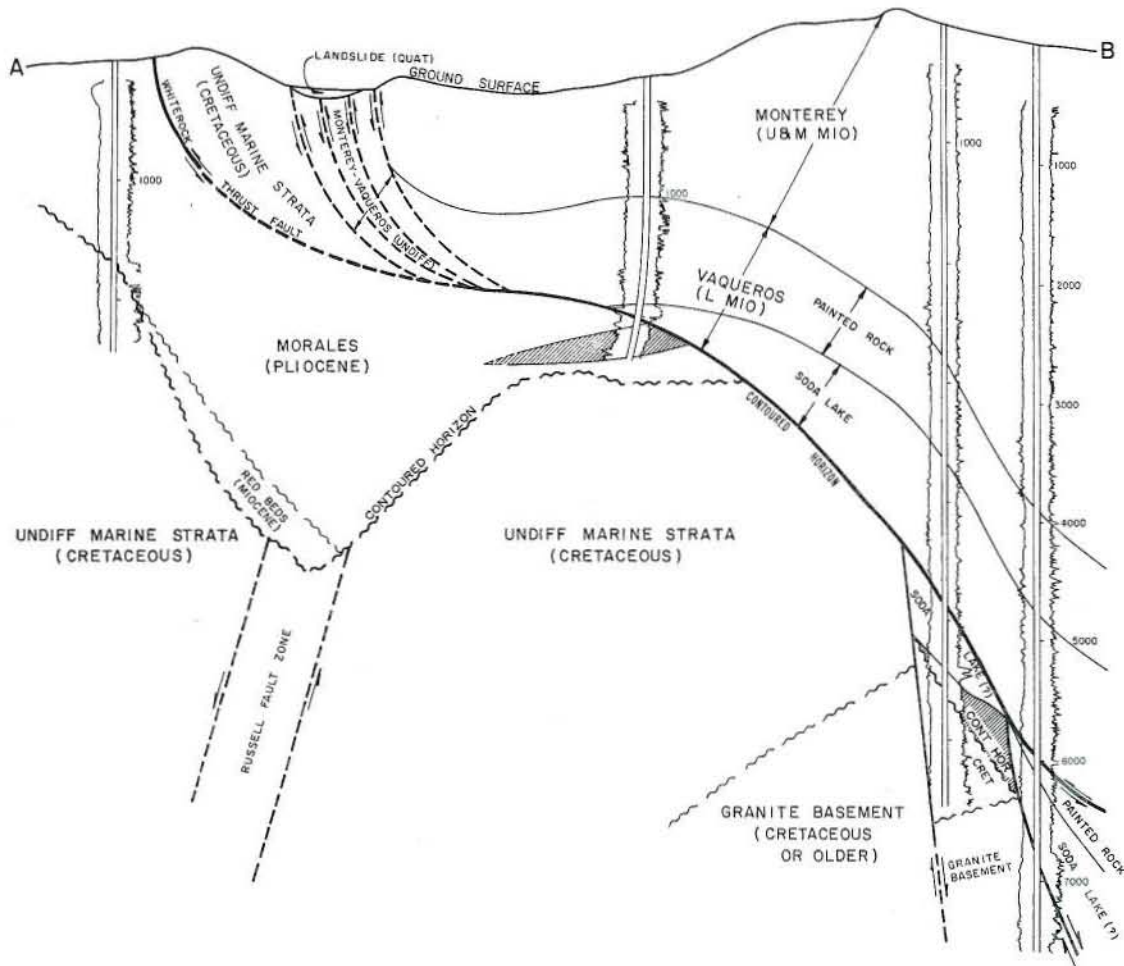
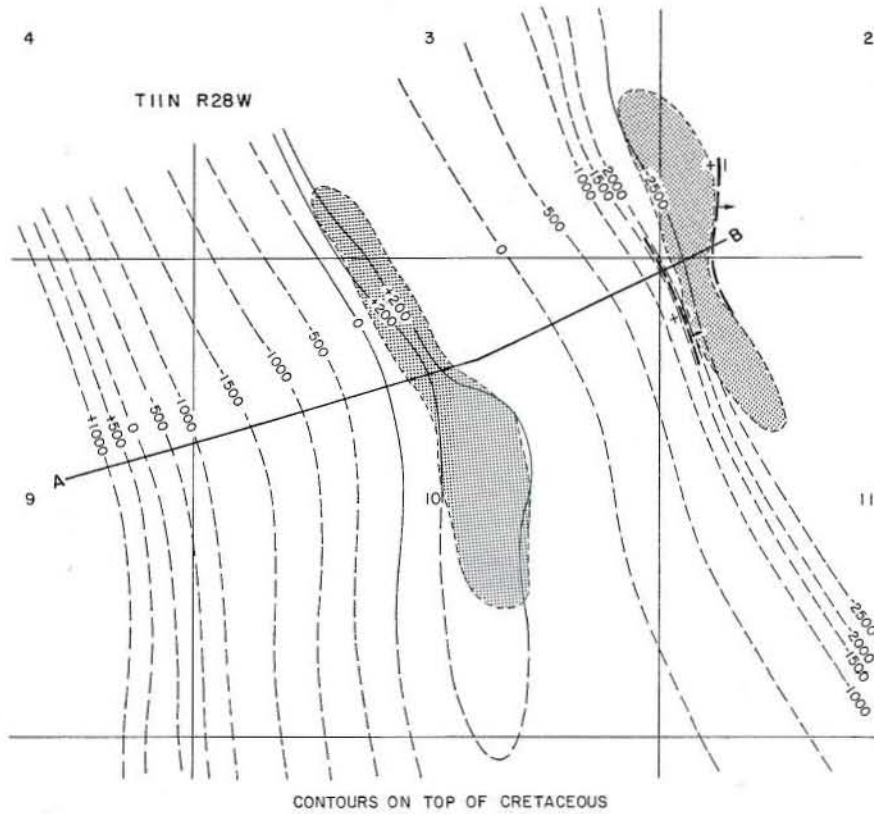
CURRENT CASING PROGRAM: 11 3/4" cem. 500; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: No water produced.

REMARKS:

REFERENCES:

MORALES CANYON OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

MORALES CANYON OIL FIELD

San Luis Obispo County

LOCATION: 35 miles northeasterly of Santa Maria

TYPE OF TRAP: Faulted asymmetrical anticline

ELEVATION: 1,800 - 3,600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Clayton	Alfred M. Hammerslough "Hancock-Oceanic" 65-10	The Hancock Oil Co. of Calif. "Hancock-Oceanic" 65-10	10 11N 28W	SB	68	12	May 1950
Government 18	The Superior Oil Co. "Government" 18-2	Same as present	2 11N 28W	SB	399	180	Apr 1950

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
The Superior Oil Co. "Government" 28-2	Same	May 1950	2 11N 28W	SB	7,576	Basement (Granite)	Jurassic (?)

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Clayton	1,900	100	early Pliocene	Morales	31	900	None
Government 18	5,800	400	early Miocene	Vaqueros	38	2,300	II

PRODUCTION DATA (Jan. 1, 1974)

Oil (bbl)	1973 Production		1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
8,795	1,894	35,707	120	3	2,368,299	1,763,406	410,332	1951	37	29	220

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1968	194,058	2

SPACING ACT: Applies

BASE OF FRESH WATER: 0 - 200

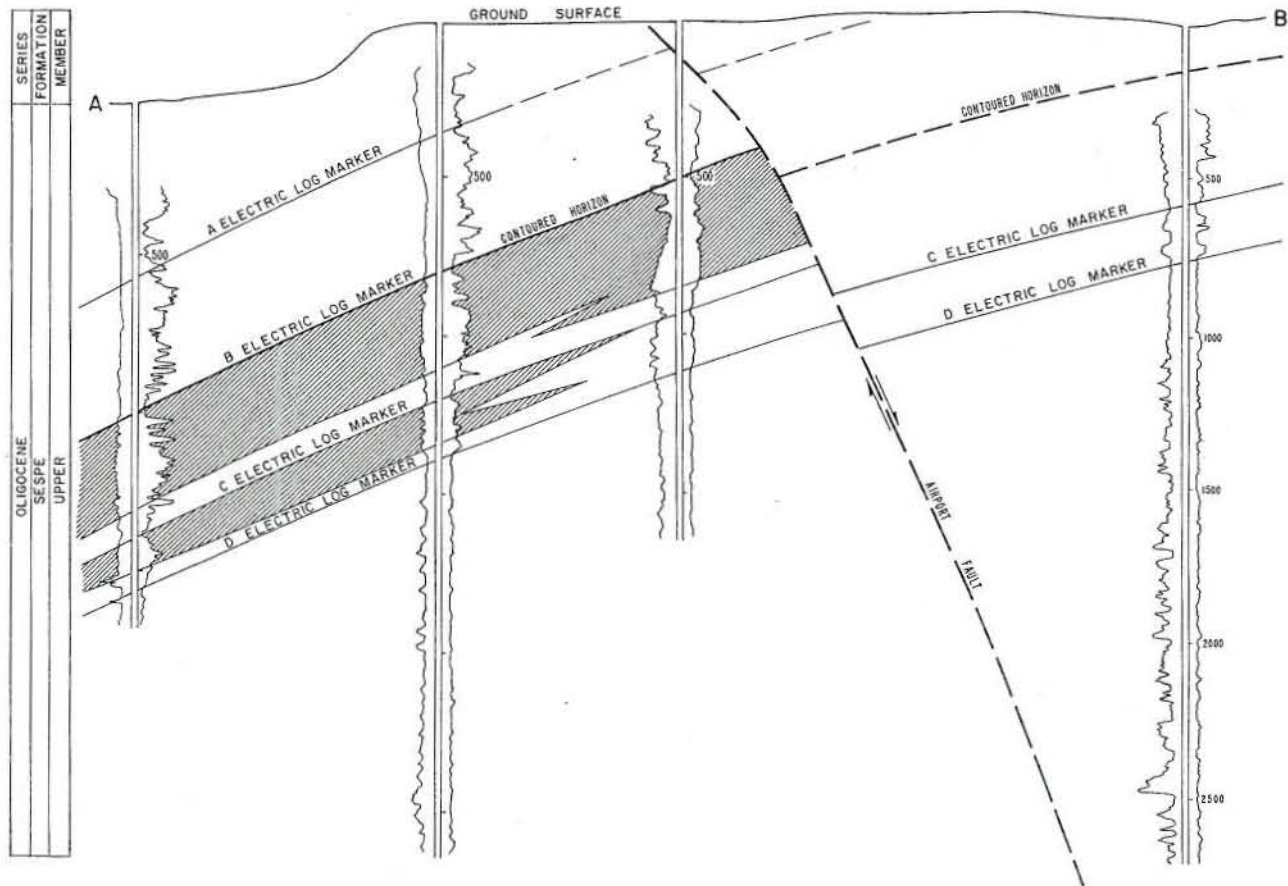
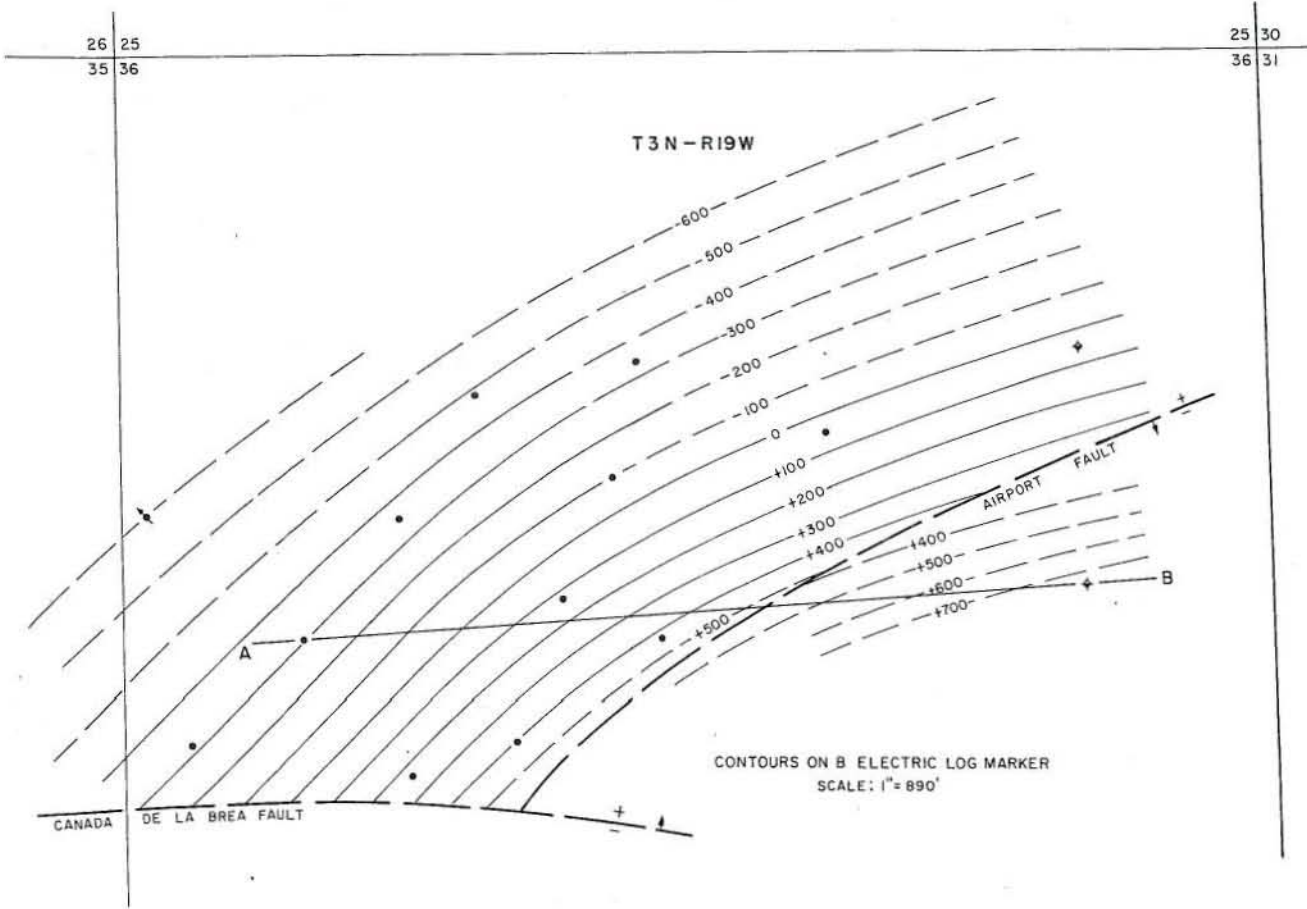
CURRENT CASING PROGRAM: 13 3/8", 11 3/4" or 10 3/4" cem. 500; 8 5/8" or 7" cem. above zone; 6 5/8" or 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is used for the water-flood project.

REMARKS:

REFERENCES: Dolman, S.G., Operations in District 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 36, No. 2 (1950).
 Hill, M.L., S.A. Carlson, and T.W. Dibblee, Jr., Stratigraphy of Cuyama Valley - Caliente Range Area, California: Am. Assoc. Petroleum Geologists Bull., Vol. 42, No. 12, p. 2973 (1958).
 Lawrence, E.D., Morales Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 2 (1960).

OAK PARK OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

OAK PARK OIL FIELD

Ventura County

LOCATION: 25 miles east of Ventura

TYPE OF TRAP: Faulted homocline; lithofacies variations

ELEVATION: 840

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sespe	Union Oil Co. of Calif. "Oak Park" 1	Union Oil Co. of Calif. "Union-Kay-Investment" 24-1	36 3N 19W	SB	81	15	Oct 1969

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Simi" 14	Same	Mar 1951	36 3N 19W	SB	5,240	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API or Gas (btu))	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Sespe	800 - 1,500	400	Oligocene	Sespe	22	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

Oil (bbl)	1973 Production		1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
78,162	19,235	47,140	100	11	315,023	72,109	101,211	1971	16	11	100

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1971	134,404	1

SPACING ACT: Applies

BASE OF FRESH WATER: 400

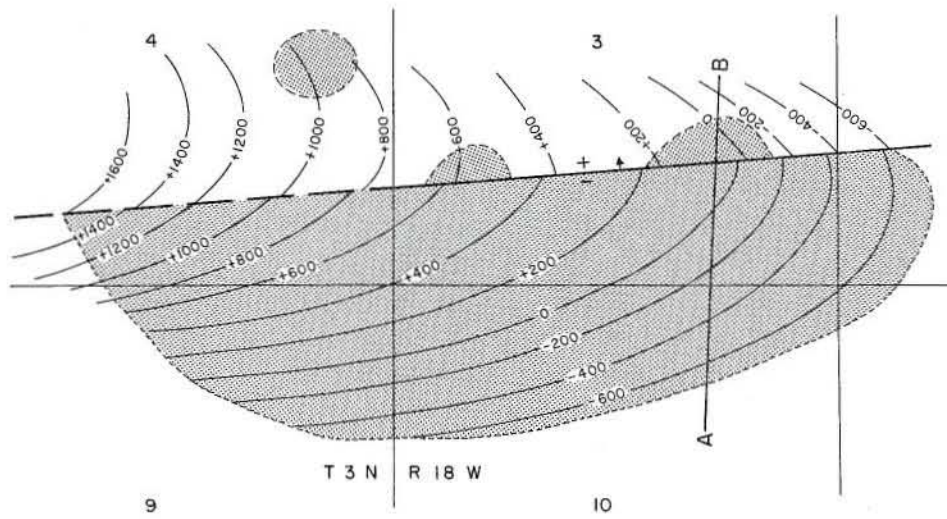
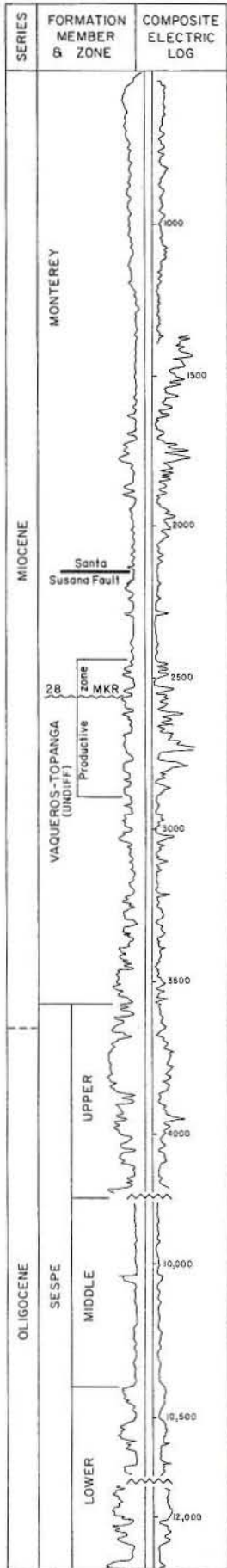
CURRENT CASING PROGRAM: 8 5/8" cem. 300; 5 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: All waste water is used in water-flood project.

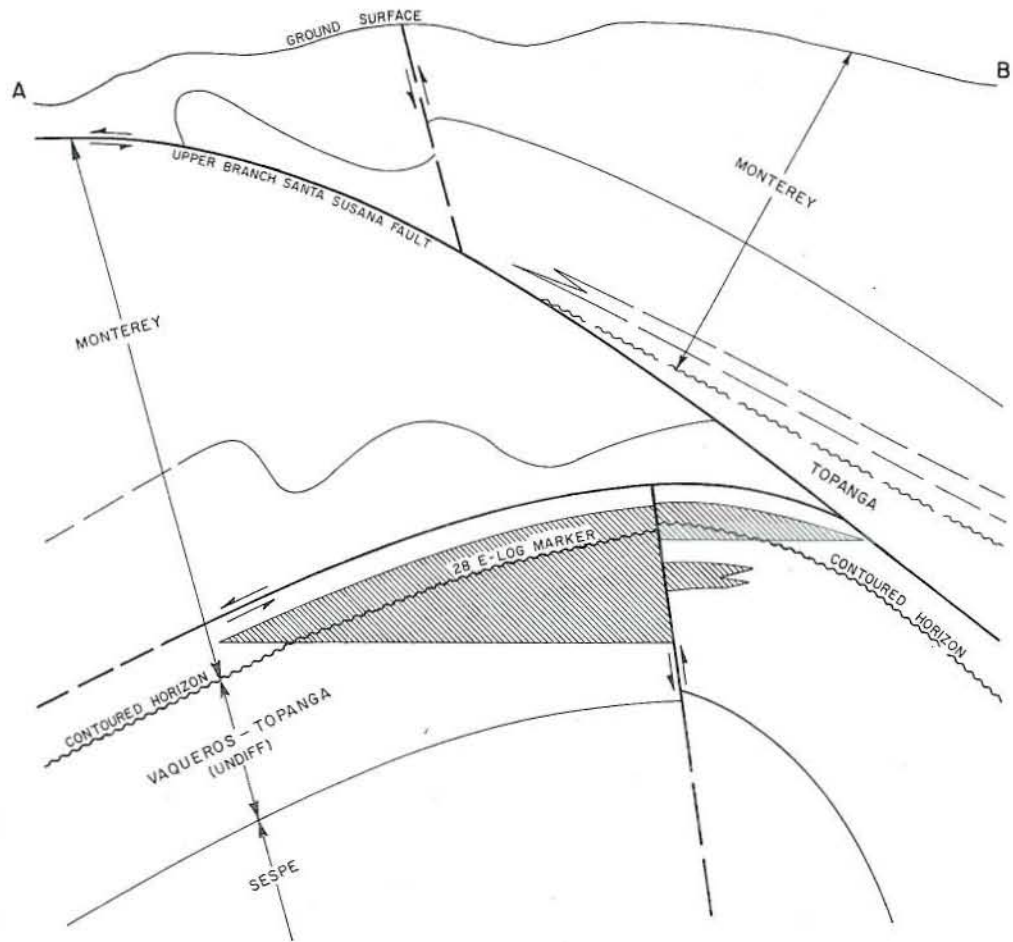
REMARKS:

REFERENCES: Bright, L.S., Oak Park Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 59, No. 1 (1973).

OAKRIDGE OIL FIELD



CONTOURS ON 28 ELECTRIC LOG MARKER
SCALE: 1" = 2250'



CALIFORNIA DIVISION OF OIL AND GAS

OAKRIDGE OIL FIELD

Ventura County

LOCATION: 30 miles northeast of Ventura

TYPE OF TRAP: Faulted anticlinal nose

ELEVATION: 2,400

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	Union Oil Co. of Calif. "Oakridge" 44-4	Same as present	4 3N 18W	SB	9	0	Jul 1955
(Unnamed)	Union Oil Co. of Calif. "Oakridge" 2-10	Same as present	10 3N 18W	SB	304	97	Aug 1952

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Oakridge" 1-3	Same	Jun 1952	3 3N 18W	SB	12,180	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
(Unnamed)	2,400	125	Miocene	Monterey	21	40	II
(Unnamed)	2,600	375	Miocene	Topanga - Vaqueros	21	40	II

PRODUCTION DATA (Jan. 1, 1974)

Oil (bbl)	1973 Production		1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
269,580	94,094	2,221,526	425	22	11,505,952	7,604,947	1,225,303	1953	61	54	475

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water Flood	1956	21,052,816	20

SPACING ACT: Applies

BASE OF FRESH WATER: None

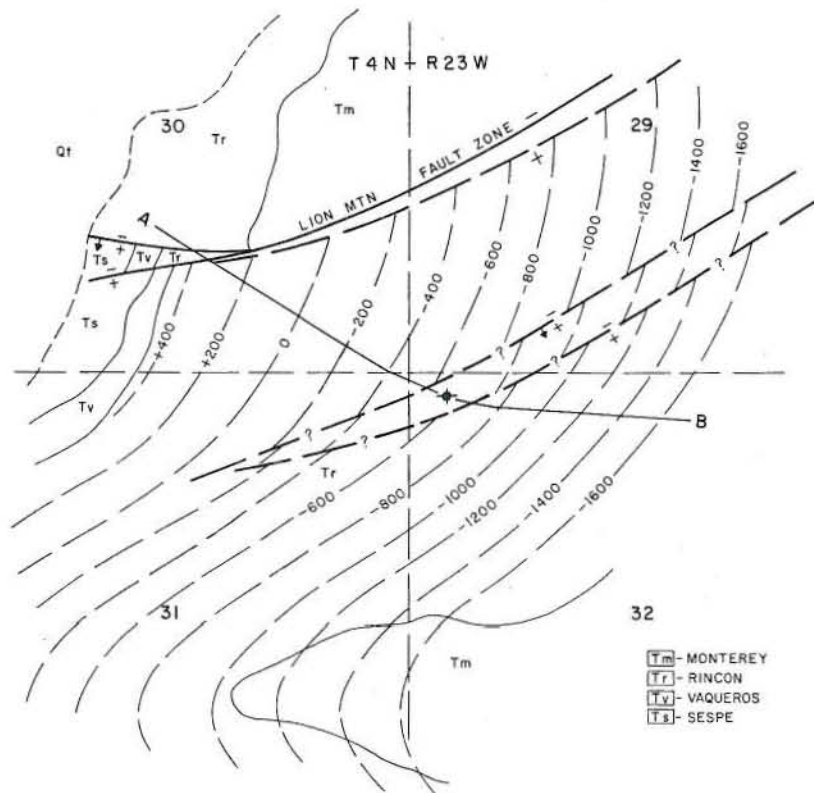
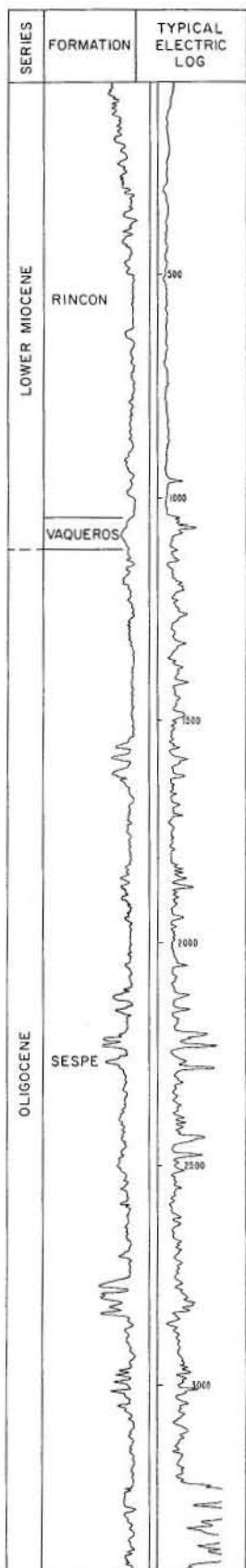
CURRENT CASING PROGRAM: 11 3/4" cem. 250 - 400; 7" combination string landed through zone and cemented through parts above zone.

METHOD OF WASTE DISPOSAL: Waste water is used in water-flood operations.

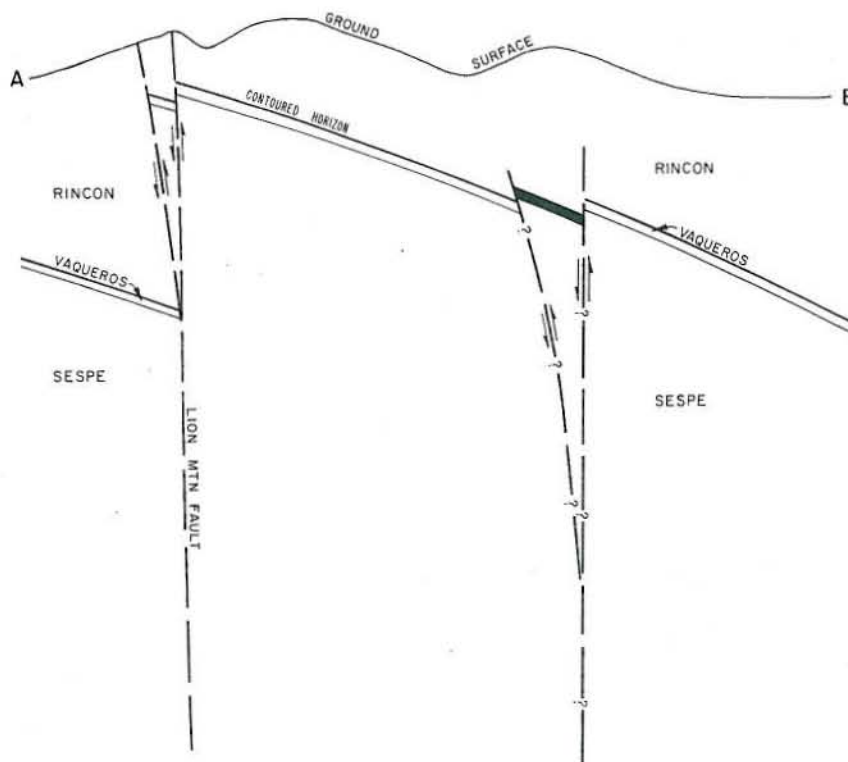
REMARKS: A cyclic-steam injection project was started in 1964 and was terminated after 32,121 bbls. of water in the form of steam was injected. Zone water contains a high concentration of bicarbonates.

REFERENCES: Schultz, C.H., Oakridge Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 41, No. 1 (1955).

OAKVIEW OIL FIELD (Abandoned)



SURFACE GEOLOGIC MAP AND
CONTOURS ON TOP OF VAQUEROS
SCALE: 1" = 2000'



CALIFORNIA DIVISION OF OIL AND GAS

OAKVIEW OIL FIELD (Abandoned)

Ventura County

LOCATION: 9 miles north of Ventura

TYPE OF TRAP: Faulted homocline

ELEVATION: 824

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Vaqueros	A. D. Rushing, Inc. "Newman" 1	Same as present	32 4N 23W	SB	15	0	Apr 1955

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
A. D. Rushing, Inc. "Newman" 2	Same	Jun 1955	32 4N 23W	SB	4,709	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Vaqueros	1,545	60	early Miocene	Vaqueros	34	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	726	0	726	1955	6	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 200

CURRENT CASING PROGRAM: 11 3/4" cem. 200; 7" cem. above zone; 5 1/2" liner landed through zone.

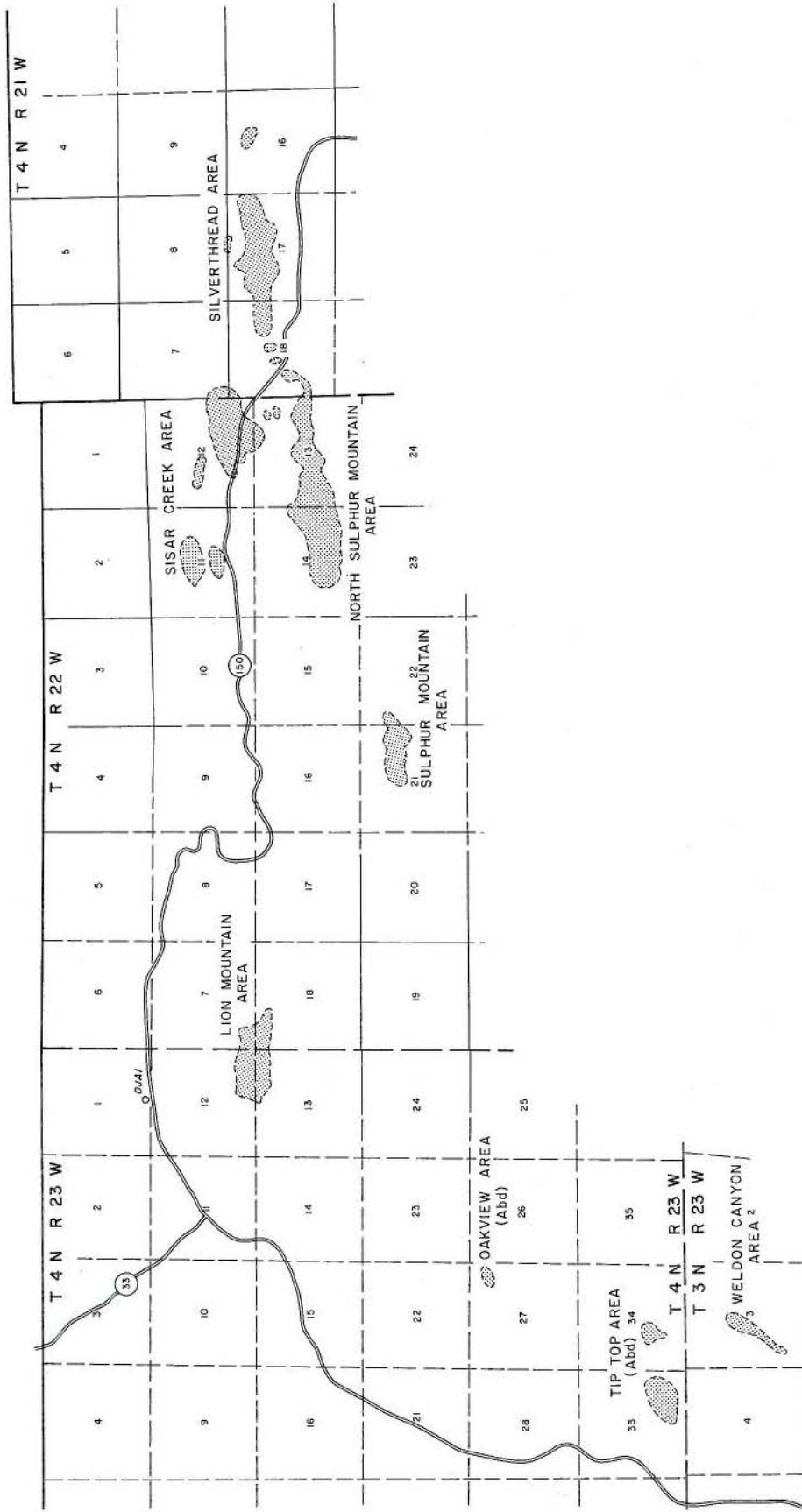
METHOD OF WASTE DISPOSAL:

REMARKS: One-well field, abandoned in September 1955.

REFERENCES:

OJAI OIL FIELD

Index Map



CALIFORNIA DIVISION OF OIL AND GAS

OJAI OIL FIELD

Ventura County

LOCATION: 12 miles northeast of Ventura

TYPE OF TRAP: See areas

ELEVATION: 600 - 3,000

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	Philadelphia Calif. Petroleum Co. "Ojai" 6	Same as present	18 4N 21W	SB	15	N.A.	1866

Remarks: This was the first oil well in California to produce on a commercial basis, although production records were never submitted to the State.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Argo Petroleum Corp. "Hillside" 3	Richfield Oil Corp. "Hillside" 1	Nov 1951	8 4N 21W	SB	9,221	Rincon	Miocene

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water (g/gal)	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,221,252	1,447,317	87,812	1,005	92	9,808,905	7,369,684	296,846	1953	322	240	1,300

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

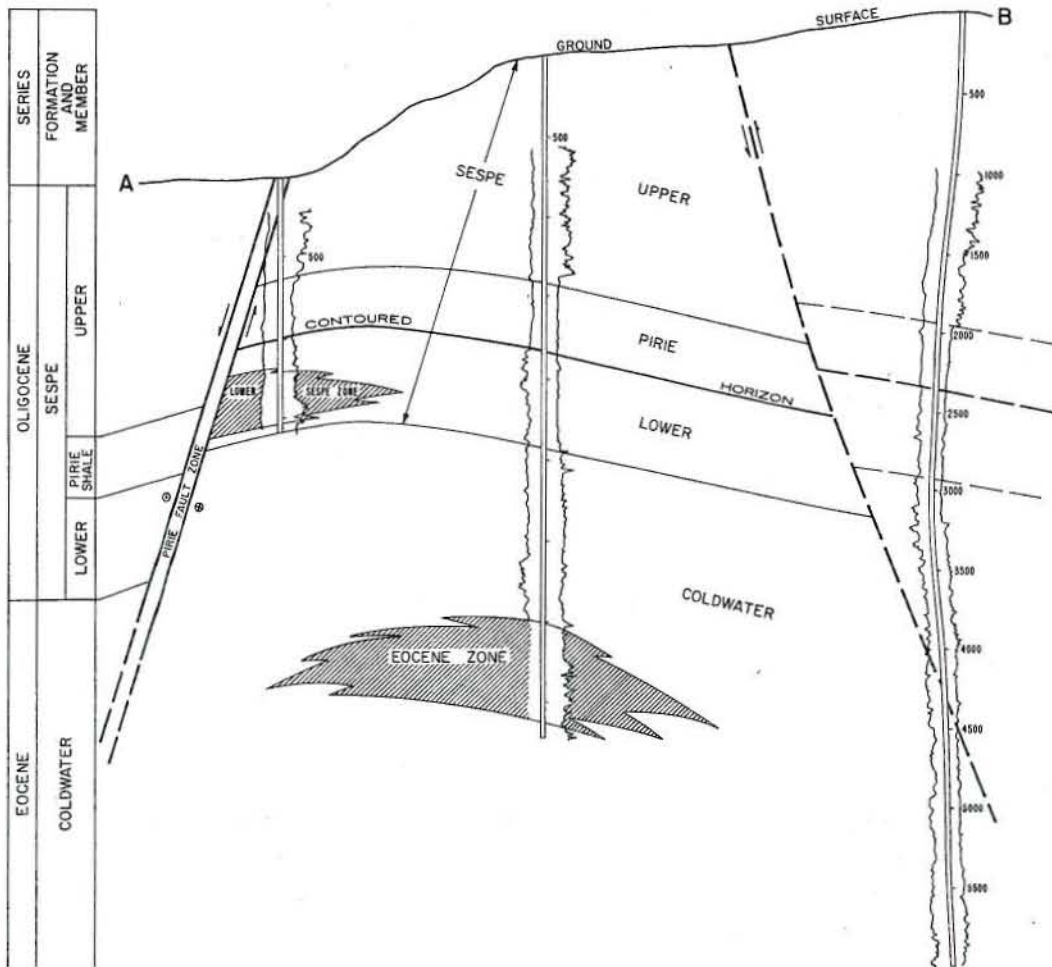
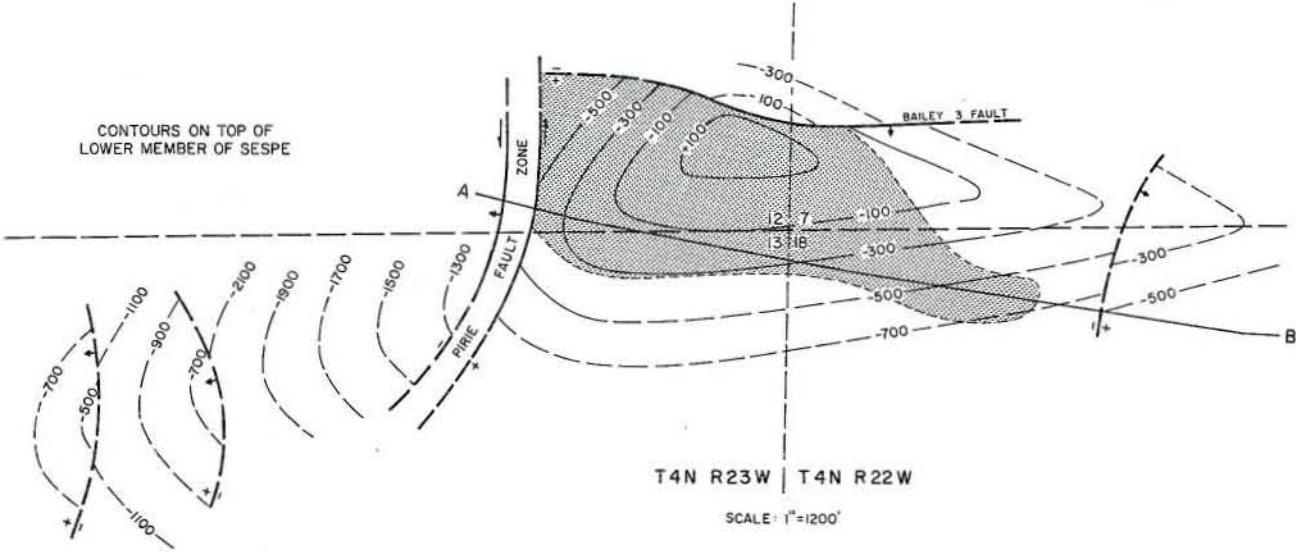
CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: Natural oil seeps occur in this field.

REFERENCES: Bramlette, M.N., The Monterey Formation of California and the Origin of its Siliceous Rocks: U. S. Geol. Survey, Prof. Paper 212 (1946).
 Cenozoic Correlation Section, Western Ventura Basin: in A.A.P.G. - S.E.P.M. - S.E.G. Guidebook, Joint Ann. Mtg., Los Angeles, California (1952).
 Corey, W.H., Tertiary Basins of Southern California: Geology of Southern California, Calif. Div. of Mines Bull. 170, Chap. III (1954).
 Fine, S.F., Geology and Occurrences of Oil in the Ojai-Santa Paula Area, Ventura County; Geology of Southern California: Calif. Div. of Mines Bull. 170, Map Sheet 28 (1954).
 Kleinpell, R.W., Miocene Stratigraphy of California, Geologic Formations and Economic Development of Oil and Gas Fields of California: Calif. Div. of Mines Bull. 118 (1943).
 Oakshott, G.B., M.D. Turner, and C.W. Jennings, Correlation Chart of Sedimentary Formations in Southern California: Calif. Div. of Mines Bull. 170, Chap. III, Plate I (1954).
 Putnam, W.C., Geology of the Ventura Region, California: Geol. Soc. of Am. Bull. 53 (1942).
 Reed, R.D., California's Record in the Geologic History of the World: Calif. Div. of Mines Bull. 118, Chap. V (1943).
 See areas.

OJAI OIL FIELD Lion Mountain Area



CALIFORNIA DIVISION OF OIL AND GAS

LION MOUNTAIN AREA

OJAI OIL FIELD

Ventura County

LOCATION: 11 miles north of Ventura

TYPE OF TRAP: Faulted anticline

ELEVATION: 600 - 1,800

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Lower Sespe Eocene	Ezra Taylor No. 2 W. Perry Barker "Theo. E. Hammond" 1	Same as present Humble Oil & Ref. Co. "Theo. E. Hammond" 1	12 4N 23W	SB	20	N.A.	1893
			18 4N 22W	SB	52	27	Jun 1949

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Exxon Corp. "Berylwood Inv. Co." B-1	Humble Oil & Ref. Co. "Berylwood Inv. Co." B-1	Jul 1949	18 4N 22W	SB	5,994	Coldwater	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Lower Sespe Eocene	1,200	400	Oligocene	Sespe	20	1,000	II
	3,550	650	late Eocene	Coldwater	29	980	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
8,329	1,260	4,054	50	8	415,644	213,680	22,290	1966	31	17	90

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 100

CURRENT CASING PROGRAM: 10 3/4" cem. from surface to 200 - 400; 7" cem. above zone; 5 1/2" liner landed through zone.

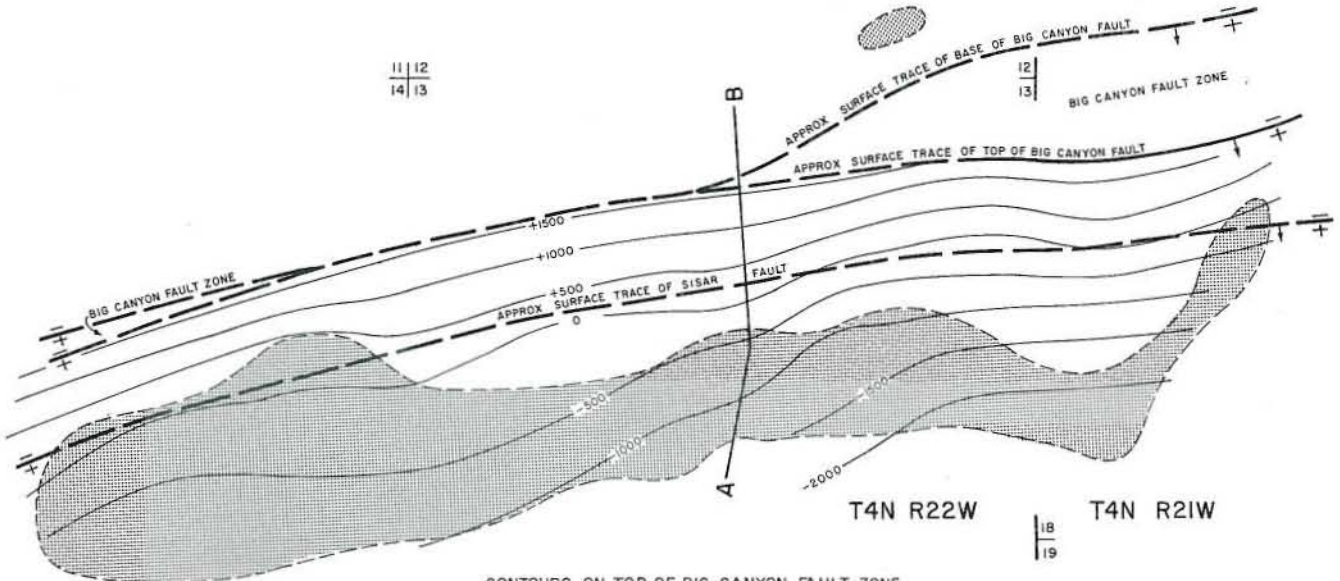
METHOD OF WASTE DISPOSAL: Evaporation sumps.

REMARKS: A pilot water-flood project was started in 1960 and discontinued in 1961 after having injected 2,000 bbls. into one well.

REFERENCES: Mitchell, W.S., Lion Mountain Area, Ojai Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 49, No. 1 (1963).

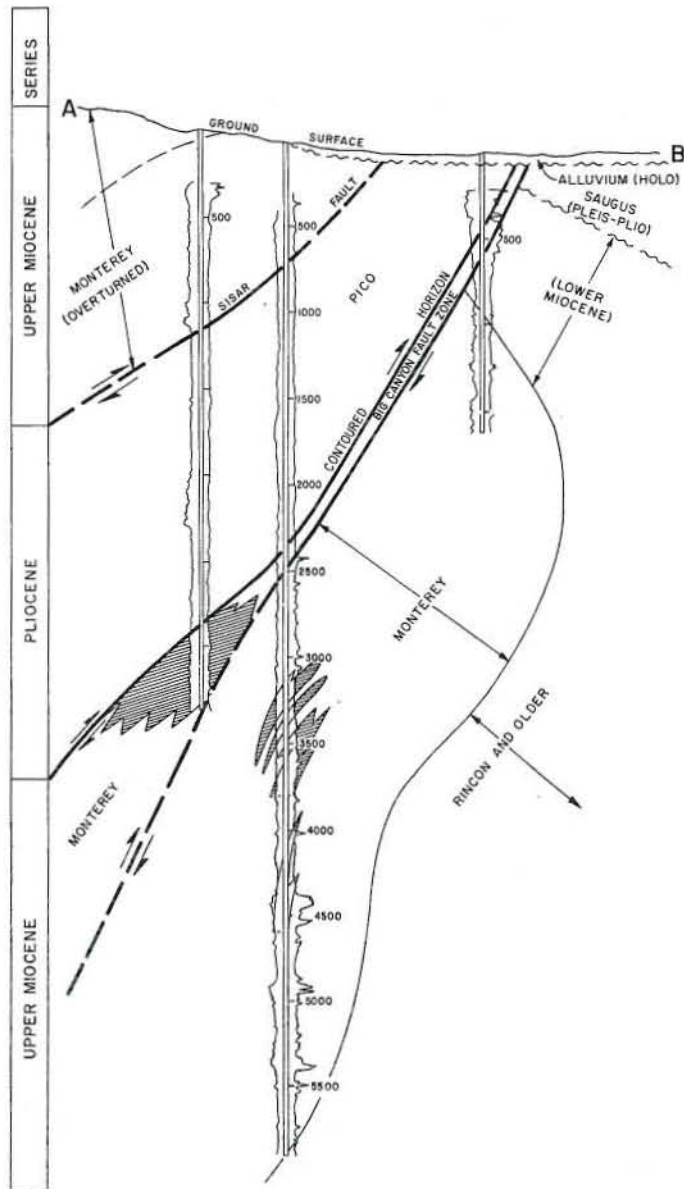
OJAI OIL FIELD

North Sulphur Mountain Area



CONTOURS ON TOP OF BIG CANYON FAULT ZONE

SCALE 1" = 1600'



CALIFORNIA DIVISION OF OIL AND GAS

OJAI OIL FIELD

SULPHUR MOUNTAIN, NORTH, AREA

Ventura County

LOCATION: See index map of Ojai Oil Field

TYPE OF TRAP: Fractured shale and lithofacies variations in faulted, homoclinal beds

ELEVATION: 2,000 - 3,000

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	Atlantic Richfield Co. "Ojai" 35	Bard Oil and Asphalt Co. "Ojai" 35	13 4N 22W	SB	50	N.A.	1912

Remarks: Oil was produced by an air lift method in early 1917.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Atlantic Richfield Co. "Ojai" 44	Richfield Oil Corp. "Ojai" 44	Dec 1941	13 4N 22W	SB	8,755	Monterey	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
(Unnamed)	3,150	1,850	Miocene	Monterey	21	800	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
68,001	167,724	10,433	375	19	2,794,956	4,222,899	194,217	1953	29	25	395

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 500

CURRENT CASING PROGRAM: 13 3/8" cem. 200; 8 5/8" cem. over zone and across the base of fresh water; 6 5/8" liner landed through zone.

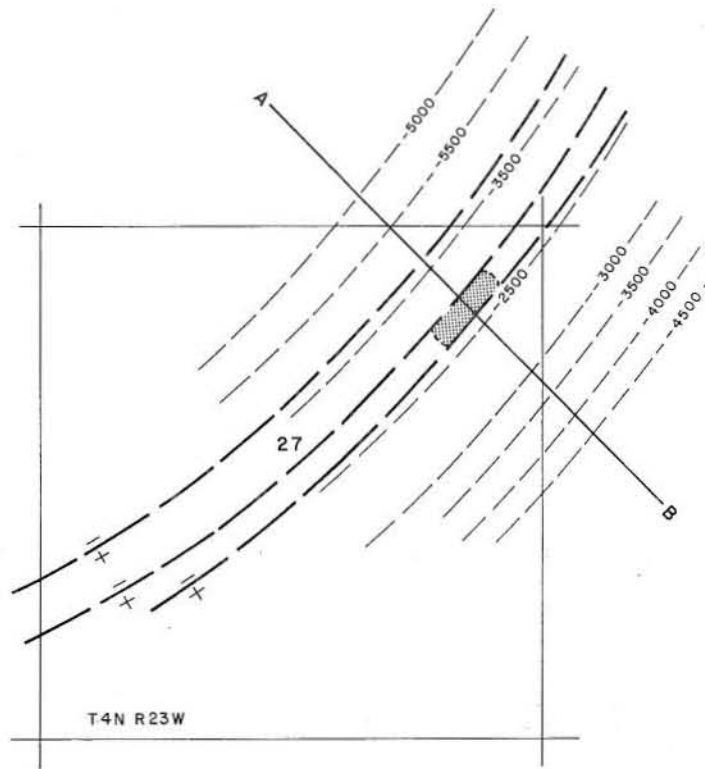
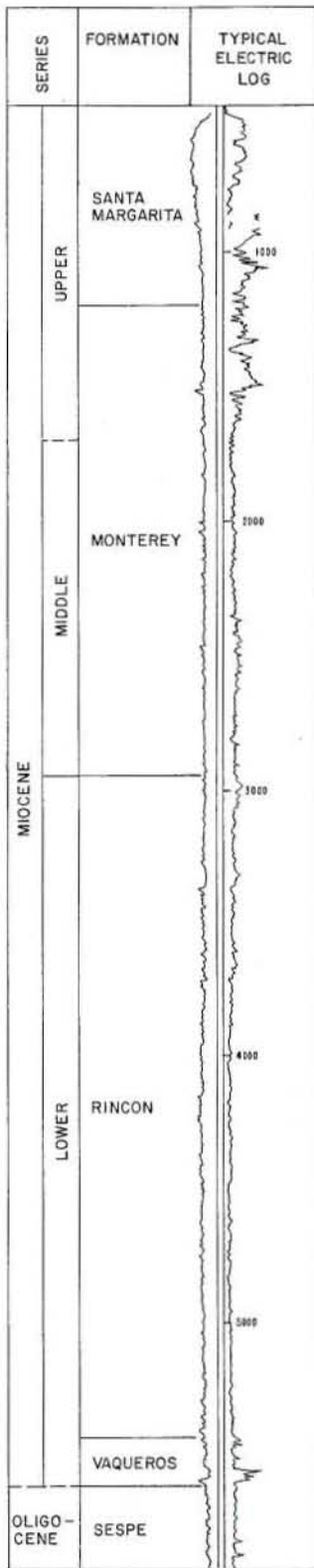
METHOD OF WASTE DISPOSAL: Waste water is injected into two disposal wells.

REMARKS: A total of 774,000 Mcf. of gas was injected into one well from 1948 to 1949 for pressure maintenance.

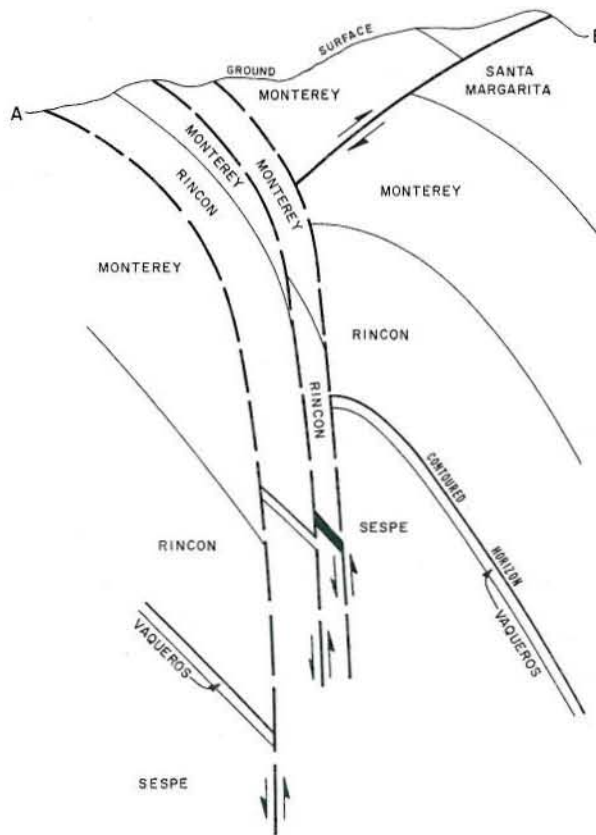
REFERENCES: Fine, S.F., North Sulphur Mountain Area, Ojai Oil Field: A.A.P.G. - S.E.P.M. - S.E.G. Guidebook, Joint Ann. Mtg., Los Angeles (1952).
 Mitchell, W.S., North Sulphur Mountain Area, Ojai Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 52, No. 2--Part 2 (1966).

OJAI OIL FIELD

Oakview Area (Abandoned)



CONTOURS ON TOP OF VAQUEROS



AFTER T L BAILEY

CALIFORNIA DIVISION OF OIL AND GAS

OJAI OIL FIELD

OAKVIEW AREA (Abandoned)

Ventura County

LOCATION: 8 miles north of Ventura

TYPE OF TRAP: Faulted homocline?

ELEVATION: 1,000

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Vaqueros	Argo Petroleum Corp. "Riva" 1	A. N. Macrate "Riva-Kosmon" 1	27 4N 23W	SB	8	0	Dec 1969

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
L. M. Lockhart "Macrate" 2	Same	Mar 1948	27 4N 23W	SB	5,914	Rincon	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Vaqueros	3,900	85	Miocene	Vaqueros	32	N.A.	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	191	0	191	1969	10	1	5

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

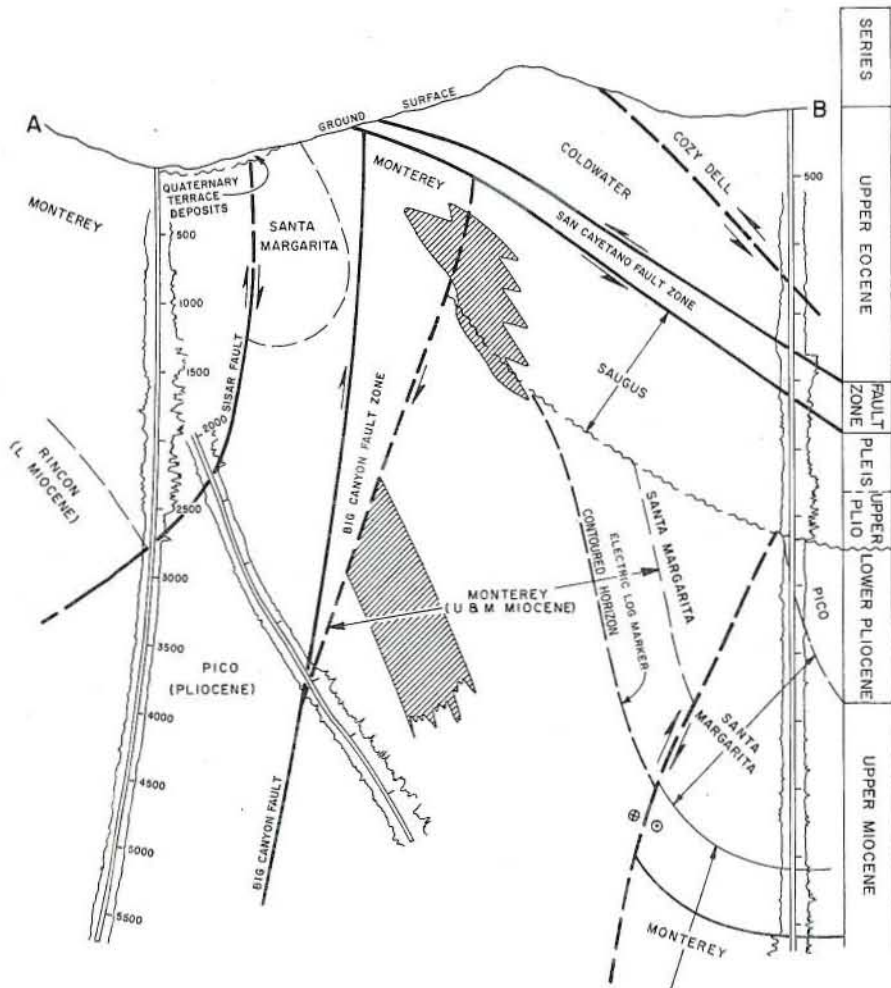
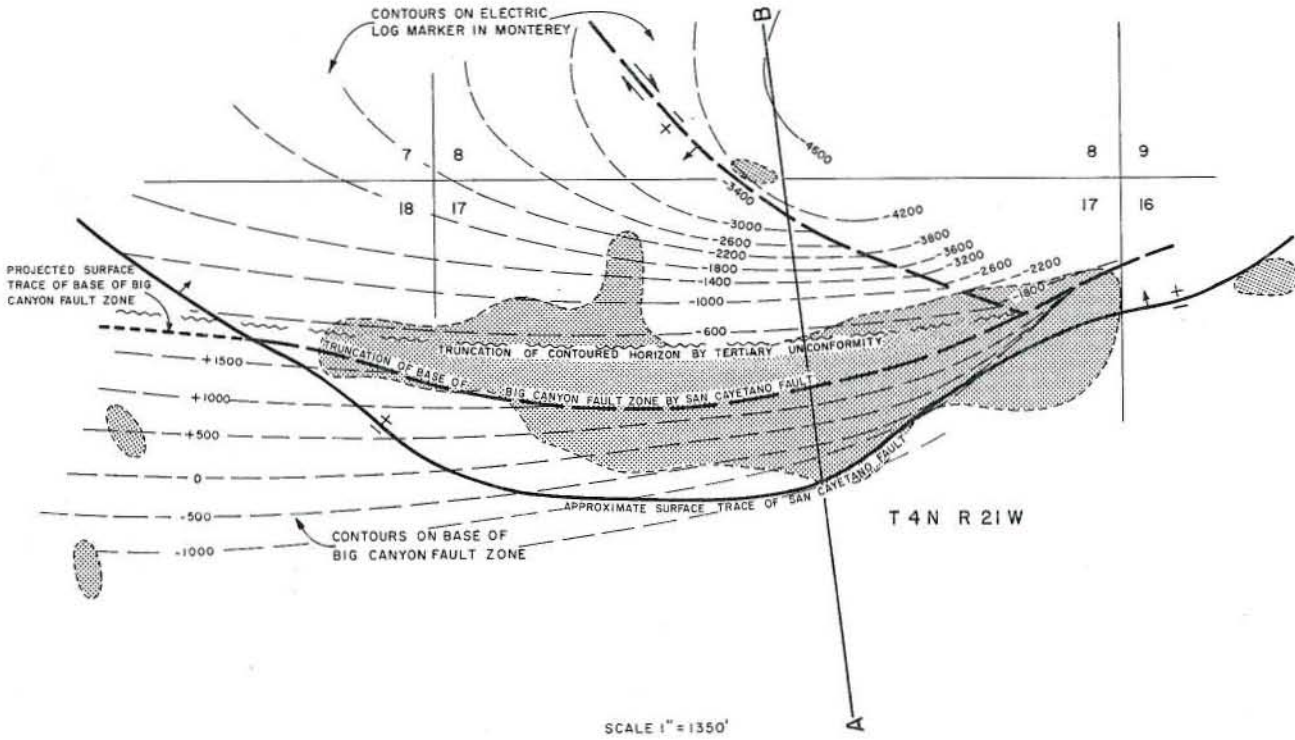
CURRENT CASING PROGRAM: 9 5/8" cem. 500; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Productivity of Vaqueros zone has been 1/2 to 2 bbls. of oil per day.

REFERENCES: See field sheet.

OJAI OIL FIELD Silverthread Area



CALIFORNIA DIVISION OF OIL AND GAS

OJAI OIL FIELD

SILVERTHREAD AREA

Ventura County

LOCATION: See index map of Ojai Oil Field

TYPE OF TRAP: Faulted homocline with lithofacies variations

ELEVATION: 1,620

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	Philadelphia Calif. Petroleum Co. "Ojai" 6	Same as present	18 4N 21W	SB	15	N.A.	1866

Remarks: This was the first oil well in California to produce on a commercial basis.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Argo Petroleum Corp. "Hillside" 3	Richfield Oil Corp. "Hillside" 1	Nov 1951	8 4N 21W	SB	9,221	Rincon	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
(Unnamed)	420	295	Pliocene - Miocene	Saugus - Monterey	22	100+	I
Miocene	4,000	500	Miocene	Monterey	27 - 36	1,120	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,101,486	1,258,886	60,977	310	31	3,442,548	2,069,575	1,101,486	1973	114	101	355

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1972	33,971	2

SPACING ACT: Does not apply

BASE OF FRESH WATER: 600

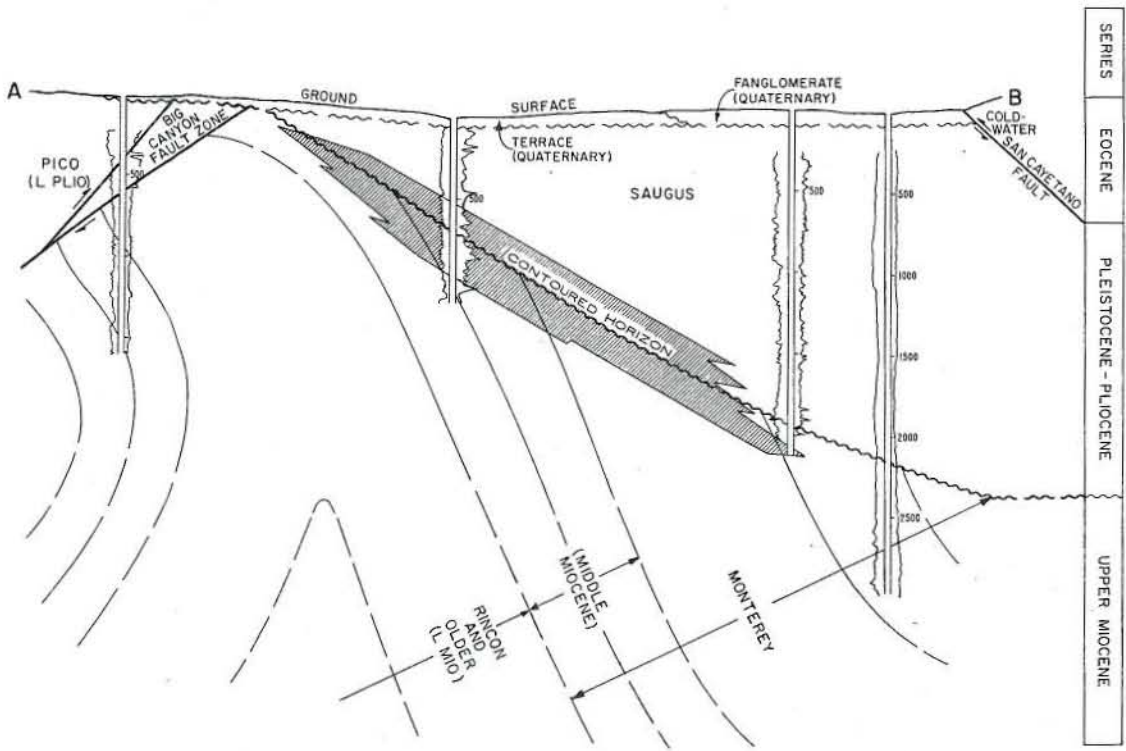
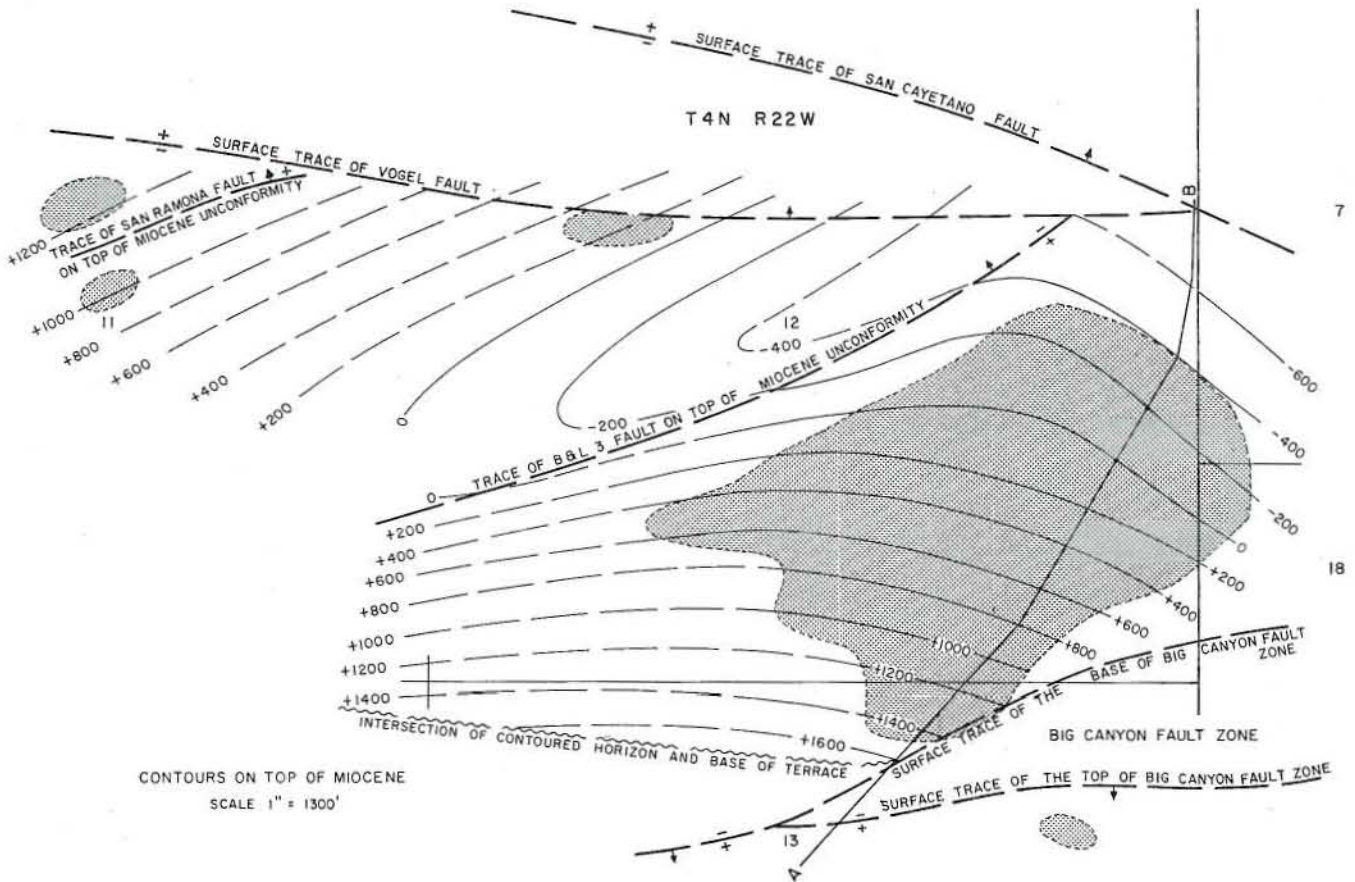
CURRENT CASING PROGRAM: 9 5/8" cem. 500; 7" cem. through zone and across the base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Injection into water-flood wells, evaporation ponds and surface spreading.

REMARKS: A pilot gas pressure maintenance project was conducted in 1972, when 54,268 Mcf. was injected into one well. A cyclic-steam project was conducted in 1966, when 2,886 bbls. of equivalent water was injected into one well.

REFERENCES: Mitchell, W.S., Silverthread Area of Ojai Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 54, No. 2--Part 2 (1968).
See field sheet.

OJAI OIL FIELD
Sisar Creek Area



SERIES
Eocene
Pleistocene - Pliocene
Upper Miocene

CALIFORNIA DIVISION OF OIL AND GAS

SISAR CREEK AREA

OJAI OIL FIELD

Ventura County

LOCATION: See index map of Ojai Oil Field

TYPE OF TRAP: Lithologic variations on homocline, and fractured shale below an unconformity

ELEVATION: 1,560

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	Atlantic Richfield Co. "Vogel" 3	Whidden Double Oil Co. No. 2	11 4N 22W	SB	N.A.*	N.A.	1900

Remarks: * This well was formerly in the Vogel area (abandoned). In 1903 the well was producing 8 bbls. per day of 22.5-degree gravity oil.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Ojai Oil Co. "B. & L." 3	Bankline Oil Co. "B. & L." D-1	Sep 1951	12 4N 22W	SB	7,922	Sespe (?)	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
(Unnamed)	750	350	Pleistocene - Miocene	Saugus - Monterey	14	500	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
19,973	0	11,326	190	25	2,037,735	343,900	69,400	1911	69	56	290

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 200

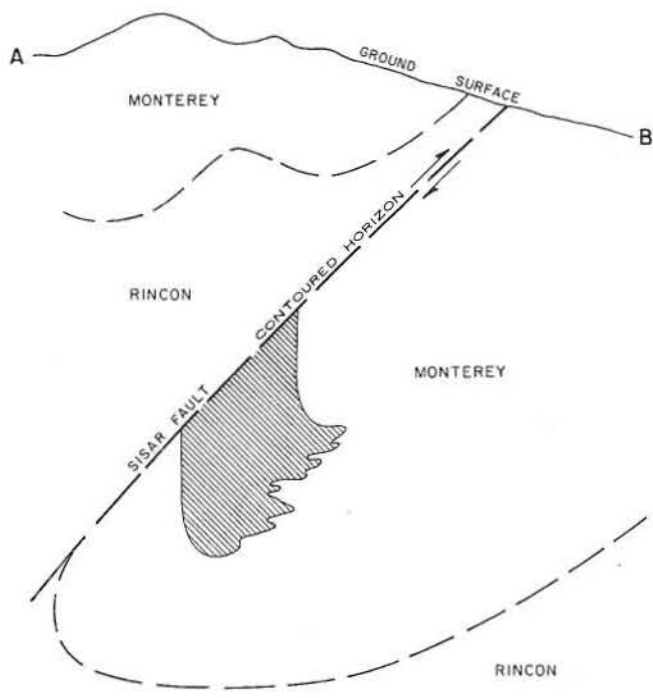
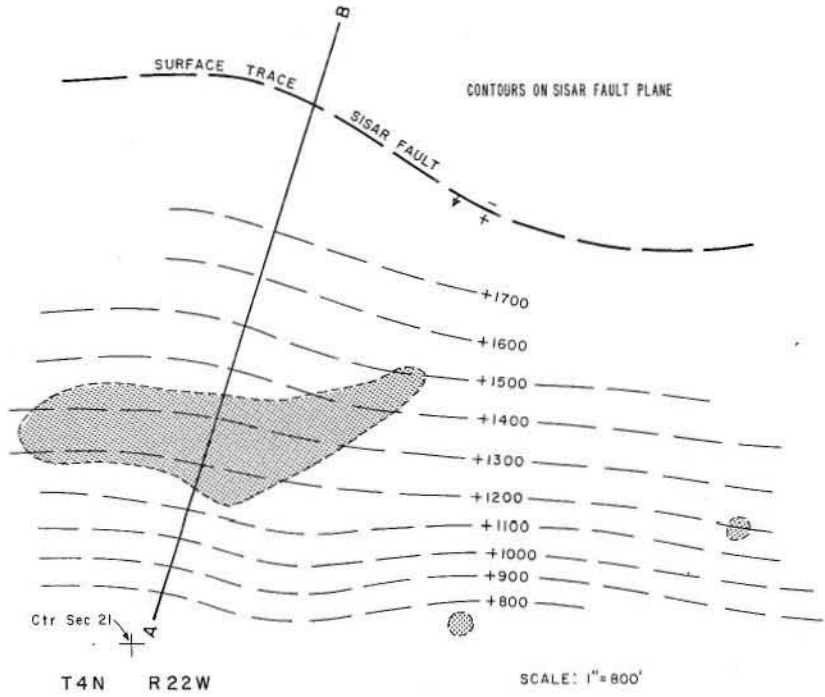
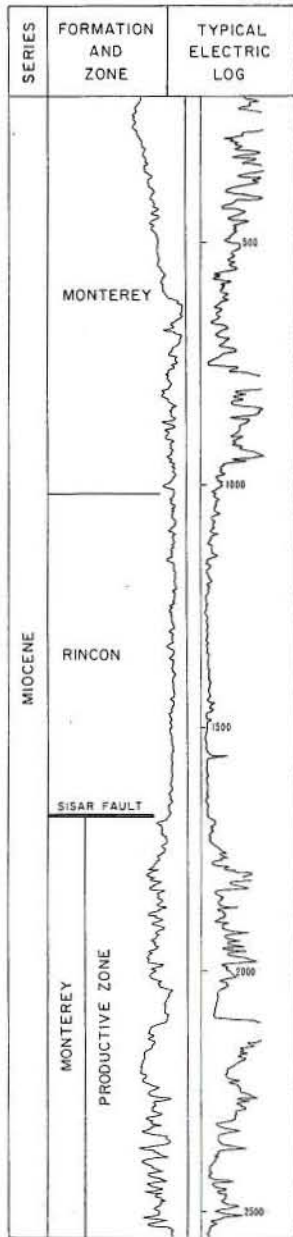
CURRENT CASING PROGRAM: 10 3/4" cem. 100; 6 5/8" combination string landed through zone and cemented through ports above zone and across the base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water is injected into water-disposal wells in Sisar Creek and North Sulphur Mountain areas.

REMARKS: The Sisar Creek area now includes the former "Vogel" area in Section 11. A pilot fire-flood project was started in 1957 and was terminated in 1960 after having injected an unknown amount of air into one well. Unsuccessful cyclic-steam attempts were tried in 1965 when 19,512 bbls. of equivalent water was injected into two wells.

REFERENCES: Bailey, T.L., Geology of Western Ventura Basin, Santa Barbara, Ventura and Los Angeles Counties, Calif.: Calif. Div. of Mines Bull. 170, Map Sheet 4 (1954).
 Bush, G.L., Geology of Upper Ojai Valley, Ventura County, Calif.: unpublished M.A. Thesis, University of Calif., Los Angeles (1956).
 Durham, J.W., The Marine Cenozoic of Southern Calif.: Calif. Div. of Mines Bull. 170, Chap. III (1954).
 Mitchell, W.S., Sisar Creek Area, Ojai Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 53, No. 2. See field sheet.

OJAI OIL FIELD Sulphur Mountain Area



CALIFORNIA DIVISION OF OIL AND GAS

SULPHUR MOUNTAIN AREA

OJAI OIL FIELD

Ventura County

LOCATION: See index map of Ojai Oil Field

TYPE OF TRAP: Fractured shale

ELEVATION: 2,700

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	Bradford & Geis "S.M.P." 1	Bradford & Geis, Trustees No. 1	21 4N 22W	SB	210	N.A.	Sep 1927

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Continental Oil Co. "S.M.P." 3	Same	May 1929	21 4N 22W	SB	6,569	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
(Unnamed)	1,450	450	Miocene	Monterey	16	700	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
5,139	1,200	166	60	7	276,241	58,806	23,211	1956	29	12	80

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 730

CURRENT CASING PROGRAM: 12 3/4" cem. 200; 8 5/8" cem. over zone and across the base of fresh water; 6 5/8" liner landed through the zone.

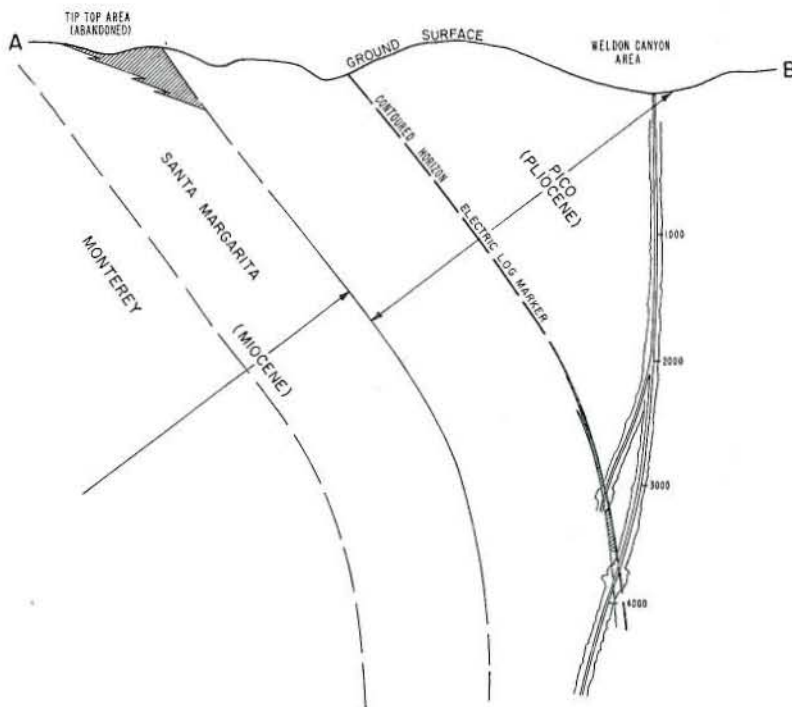
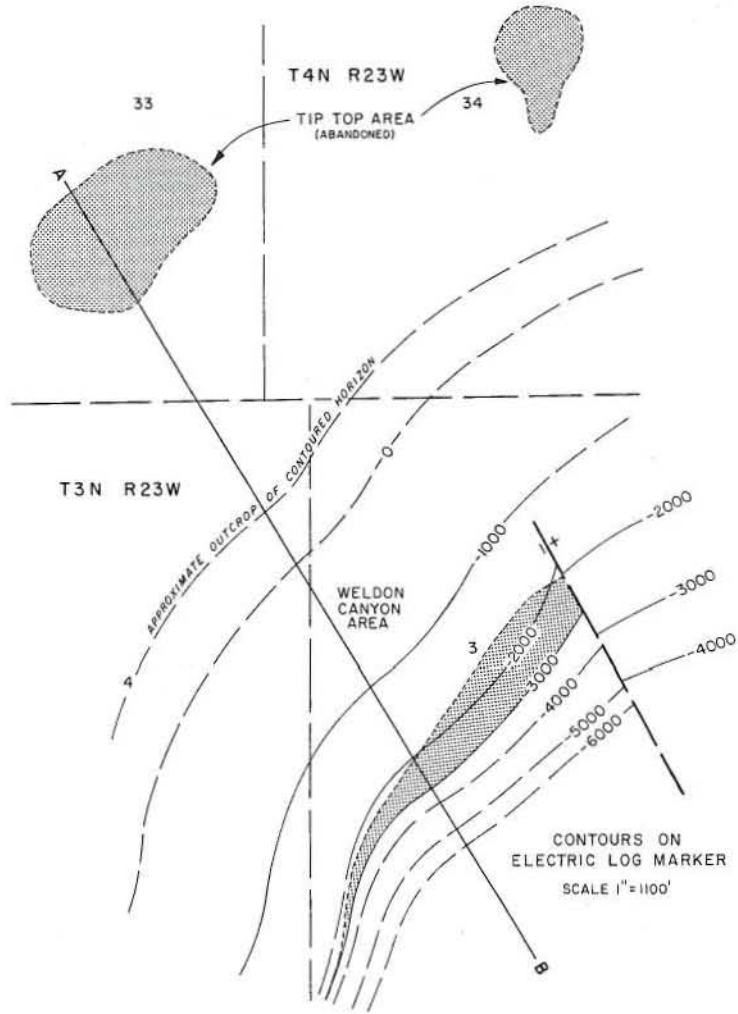
METHOD OF WASTE DISPOSAL: Evaporation ponds.

REMARKS: A cyclic-steam injection project was started in 1965 and was discontinued the same year after the injection of 6,723 bbls. of water equivalent.

REFERENCES: See field sheet.

OJAI OIL FIELD

Tip Top Area (Abandoned) & Weldon Canyon Area



CALIFORNIA DIVISION OF OIL AND GAS

OJAI OIL FIELD
Ventura County

TIP TOP AREA (Abandoned)

LOCATION: 8 miles north of Ventura

TYPE OF TRAP: Bituminous seal

ELEVATION: 750

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	E. L. Henthorn No. 1	New Mexico Oil Co. No. 1	33 4N 23W	SB	15	N.A.	Feb 1918

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
E. L. Henthorn No. 20	Calif. Ventura Oil Co. No. 1	Apr 1929	4 3N 23W	SB	5,518	Rincon	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
(Unnamed)	430	350	Miocene	Santa Margarita	23	300	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	231,655	66,510	6,729	1935	45	27	60

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 10" cem. above zone.

METHOD OF WASTE DISPOSAL:

REMARKS: The area was abandoned in 1971. The last production from the area was in 1964.

REFERENCES: Kapiow, E.J., The Tip Top Area of the Ojai Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 36, No. 2 (1950).

CALIFORNIA DIVISION OF OIL AND GAS

OJAI OIL FIELD

WELDON CANYON AREA

Ventura County

LOCATION: 7 miles north of Ventura

TYPE OF TRAP: Sand pinchout on a homocline

ELEVATION: 1,100

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	Union Oil Co. of Calif. "Weldon Canyon" 2	Union Oil Co. of Calif. "Ex-Mission Weldon Canyon Core Hole" 2	3 3N 23W	SB	133	44	Jun 1951

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Weldon Canyon" 1	Union Oil Co. of Calif. "Weldon Canyon Core Hole" 1	Apr 1951	3 3N 23W	SB	4,816	Pico	Pliocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
(Unnamed)	3,050	95	Pliocene	Pico	30	700	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
18,324	18,247	856	20	2	609,935	394,314	43,017	1954	4	2	20

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

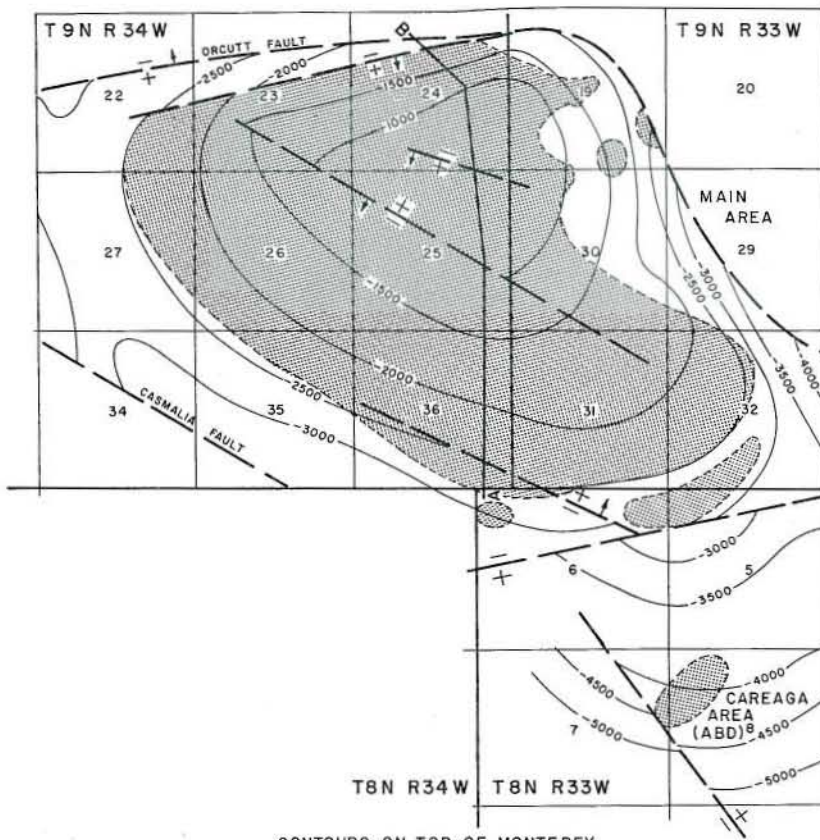
CURRENT CASING PROGRAM: 10 3/4" cem. 200; 7" combination string landed through the zone and cemented through ports above the zone.

METHOD OF WASTE DISPOSAL: Waste water is hauled to Ventura field where it is used in a water-flood project.

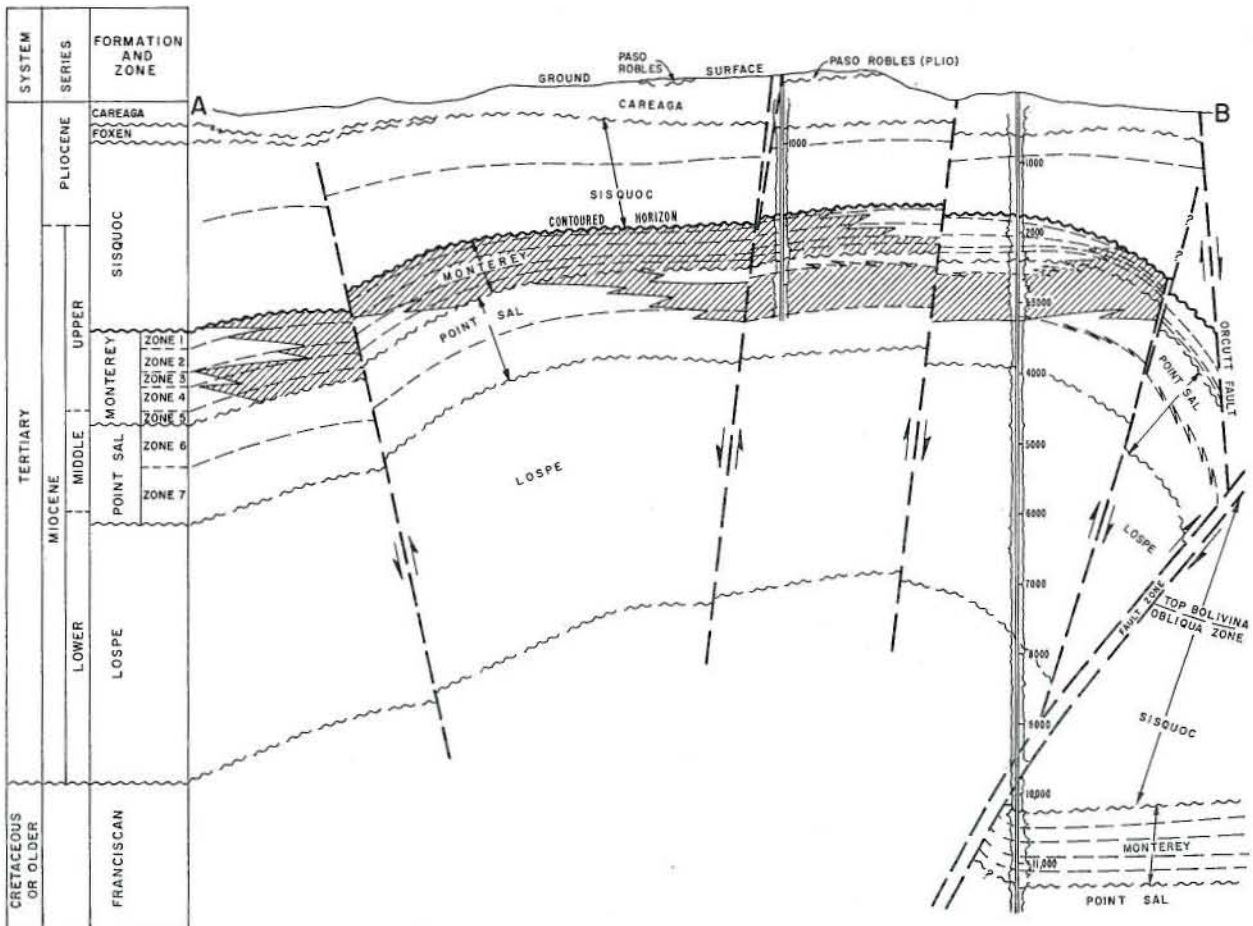
REMARKS:

REFERENCES:

ORCUTT OIL FIELD



CONTOURS ON TOP OF MONTEREY



CALIFORNIA DIVISION OF OIL AND GAS

ORCUTT OIL FIELD
Santa Barbara County

LOCATION: 9 miles south of Santa Maria

TYPE OF TRAP: See areas

ELEVATION: See areas

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Arenaceous	Shell Oil Co. "Careaga" 3	Western Union Oil Co. No. 3	31 9N 33W	SB	150	N.A.	Oct 1901

Remarks: See areas

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Dome" 18	Same	Apr 1952	24 9N 34W	SB	11,639	Point Sal	Miocene

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,970,730	1,188,254	24,116,567	3,660	183	147,008,866	267,167,040	8,675,685	1908	470	430	4,730

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1951	258,306,698	83

SPACING ACT: Does not apply

BASE OF FRESH WATER: 250

CURRENT CASING PROGRAM: 12 1/4" cem. 700; 8 5/8" cem. above zone; 6 5/8" or 4 3/4" perforated liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is used in water-flood project.

REMARKS: Field name was changed from Santa Maria to Orcutt effective January 1, 1947.

REFERENCES: See areas.

CALIFORNIA DIVISION OF OIL AND GAS

CAREAGA AREA (Abandoned)

ORCUTT OIL FIELD
Santa Barbara County

LOCATION: See map sheet of Orcutt Oil Field

TYPE OF TRAP: Faulted anticlinal nose

ELEVATION: 800

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Monterey	E. C. Arnold Oil Corp. "Arnold-Apache" 2	Same as present	8 8N 33W	SB	2	3	Sep 1937

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Gulf Oil Corp. "Careaga" 1	Western Gulf Oil Co. "Careaga" 1	Apr 1952	7 8N 33W	SB	7,280	Monterey	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Monterey	5,020	1,040	Miocene	Monterey	22 - 34	1,065	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	14,646	5,851	7,088	1938	5	3	30

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,250

CURRENT CASING PROGRAM: 10 3/4", 11 3/4" or 13" cem. 400; 7" landed through zone and cem. above zone and across base of fresh-water sands; or 7" cem. above zone and 5" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Last production was in February 1954; area abandoned in February 1954.

REFERENCES: Dolman, S.G., Operations in District No. 3, Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 23, No. 3 (1937).

CALIFORNIA DIVISION OF OIL AND GAS

ORCUTT OIL FIELD

MAIN AREA

Santa Barbara County

LOCATION: See map sheet of Orcutt Oil Field

TYPE OF TRAP: Faulted dome

ELEVATION: 1,000

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Arenaceous (1)	Shell Oil Co. "Careaga" 3	Western Union Oil Co. No. 3	31 9N 33W	SB	150	N.A.	Oct 1901
Cherty (2)	Shell Oil Co. "Careaga" 18	Western Union Oil Co. "Careaga" 18	31 9N 33W	SB	80	N.A.	May 1905
Bentonitic Brown (3)	Same as above	Same as above	31 9N 33W	SB	*	N.A.	May 1905
Buff and Brown (4)	Same as above	Same as above	31 9N 33W	SB	*	N.A.	May 1905
Dark Brown (5)	Same as above	Same as above	31 9N 33W	SB	*	N.A.	May 1905
Oil Sand (6)	Same as above	Same as above	31 9N 33W	SB	*	N.A.	May 1905
Siltstone & Shell (7)	Same as above	Same as above	31 9N 33W	SB	*	N.A.	May 1905

Remarks: Western Union Oil Co. 2 (now Shell Oil Co. "Careaga" 2) was the first well to discover oil in Orcutt field in 1901 but was subcommercial and was abandoned.

* Shell Oil Co. "Careaga" 18 had commingled production from the Monterey and Point Sal formations.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Dome" 18	Same	Apr 1952	24 9N 34W	SB	11,639	Point Sal	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Arenaceous (1)	1,700	175	Miocene	Monterey	14 - 17	800	II
Cherty (2)	1,850	175	Miocene	Monterey	14 - 17	800	II
Bentonitic Brown (3)	2,100	200	Miocene	Monterey	19 - 23	800	II
Buff and Brown (4)	2,300	200	Miocene	Monterey	19 - 23	800	II
Dark Brown (5)	2,500	200	Miocene	Monterey	19 - 23	800	II
Oil Sand (6)	2,700	300	Miocene	Point Sal	23 - 29	800	II
Siltstone & Shell (7)	3,000	300	Miocene	Point Sal	23 - 29	800	II

PRODUCTION DATA (Jan. 1, 1974)

Oil (bbl)	1973 Production		1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production Barrels	Year	Total number of wells		Maximum proved acreage
	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)			Drilled	Completed	
1,970,730	1,188,254	24,116,567	3,660	183	146,994,220	267,161,189	8,675,685	1908	465	427	4,700

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1951	258,306,698	83

SPACING ACT: Does not apply

BASE OF FRESH WATER: 250

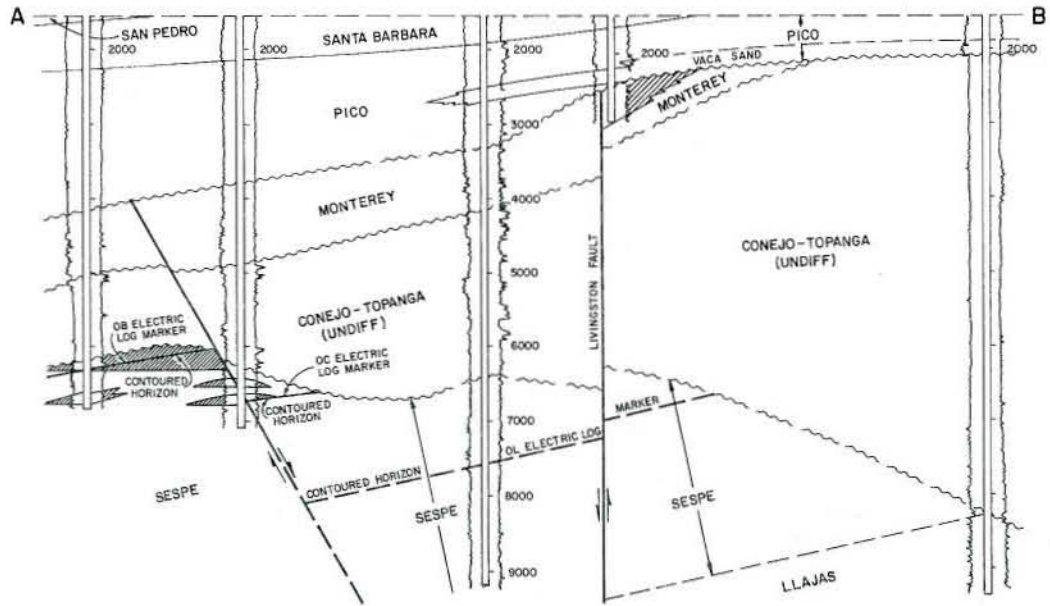
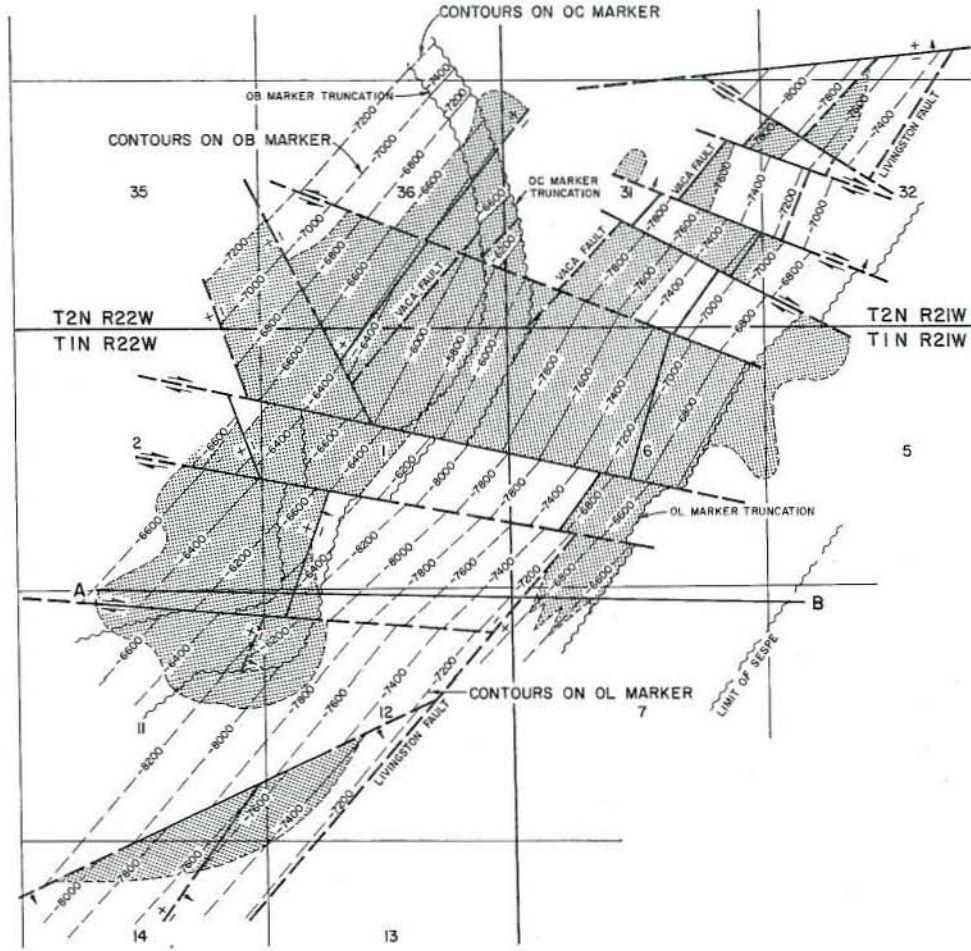
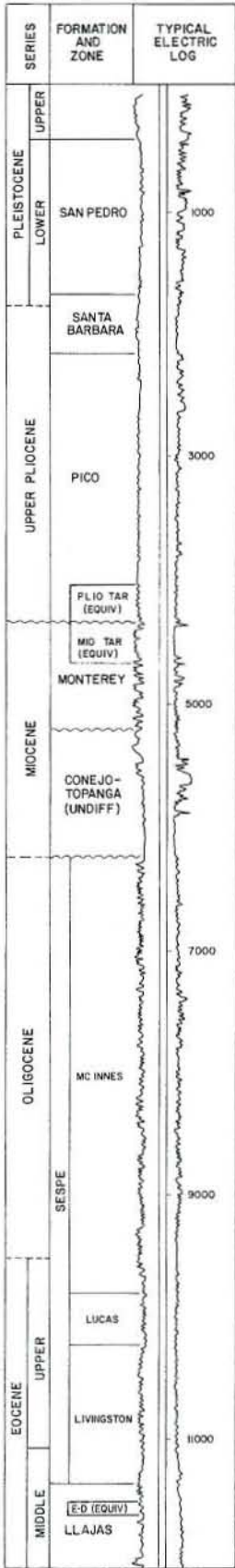
CURRENT CASING PROGRAM: 12 1/4" cem. 700; 8 5/8" cem. above zone; 6 5/8" or 4 3/4" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is used in water-flood project.

REMARKS: Early well and production history is not available.

REFERENCES: Arnold, R., and Robert Anderson, Geology and Oil Resources of the Santa Maria Oil District, Santa Barbara County, Calif.: U.S. Geol. Survey Bull. 322 (1907)
 Dreyer, F.E., Santa Maria (Orcutt) Oil Field: Calif. Div. of Mines Bull. 118, p. 431 (1940).
 Hamilton, F., Petroleum in Southern California: Calif. State Mining Bureau Bull. 65, p. 362 (1913).
 Correlation Section Across Santa Maria Basin, Am. Assoc. Petroleum Geologists (1959).
 Railroad Commission of the State of California, Santa Maria Oil Field: Case No. 4591, p. 214 (1941).
 Regan, L.J., and A.W. Hughes, Fractured Reservoirs of Santa Maria District, California: Am. Assoc. Petroleum Geologists Bull. Vol. 33, No. 1, p. 32 (1949).
 Woodring, W.P., and M.N. Bramlette, Geology and Paleontology of the Santa Maria District: U.S. Geol. Survey Prof. Paper 222, p. 119 (1950).

OXNARD OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

OXNARD OIL FIELD

Ventura County

LOCATION: 7 miles south of Ventura

TYPE OF TRAP: Faulted homocline; truncation beneath unconformity

ELEVATION: 60

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Pliocene Tar	Vaca Oil Exploration Co., Inc. No. 1	Same as present	5 1N 21W	SB	50	10	Jan 1937
Miocene Tar	Chase Production Co. "El Rio" 1	El Rio Oils (Canada) Limited "El Rio" 1	6 1N 21W	SB	90	20	May 1937
McInnes	Standard Oil Co. of Calif. "McInnes" 1	Same as present	6 1N 21W	SB	112	27	Jul 1953
Lucas	Standard Oil Co. of Calif. "Lucas" 1	Same as present	1 1N 22W	SB	30	10	May 1954
Livingston	Lloyd Corp. Ltd. "Lloyd Corp.- W.R. Livingston" 1	Same as present	31 2N 21W	SB	610	663	Mar 1954
E-D	Lloyd Corp. Ltd. "Lloyd Corp.- Vacca 2" 1	Same as present	32 2N 21W	SB	372	361	Jan 1959

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Lloyd Corp. Ltd. "Lloyd Corp.- W.R. Livingston" 4	Same	Jul 1955	31 2N 21W	SB	12,460	Llajas	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Pliocene Tar	1,850	300	Pliocene	Pico	8	1,300	II
Miocene Tar	2,800	400	Miocene	Monterey	13	1,300	II
McInnes	6,000	300	Oligocene	Sespe	26	1,400	III
Lucas	8,750	380	Eocene	Sespe	32	1,200	III
Livingston	9,000	450	Eocene	Sespe	31	1,400	III
E-D	10,200	110	Eocene	Llajas	36	1,800	III

PRODUCTION DATA (Jan. 1, 1974)

1972 Production			1972 Proved acreage	Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
386,268	457,803	1,541,022	1,550	85	33,997,133	20,814,462	3,195,253	1959	213	169	1,860

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Steam cyclic	1964	499,527	14

SPACING ACT: Applies

BASE OF FRESH WATER: 1,800

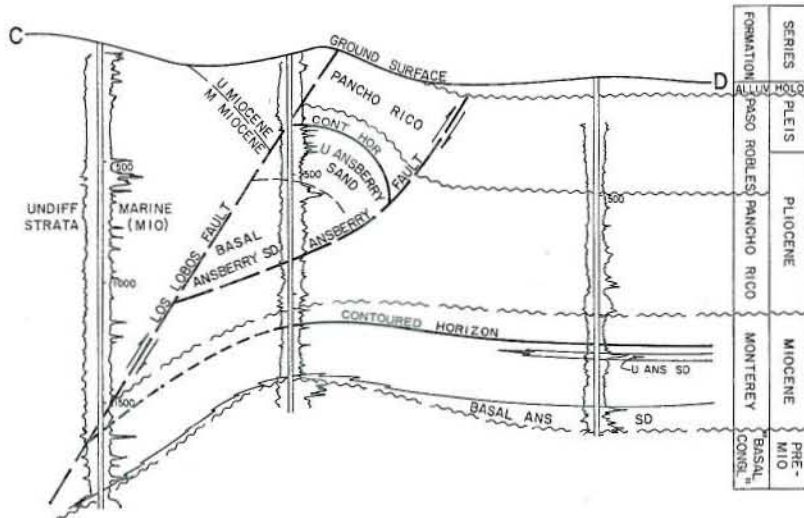
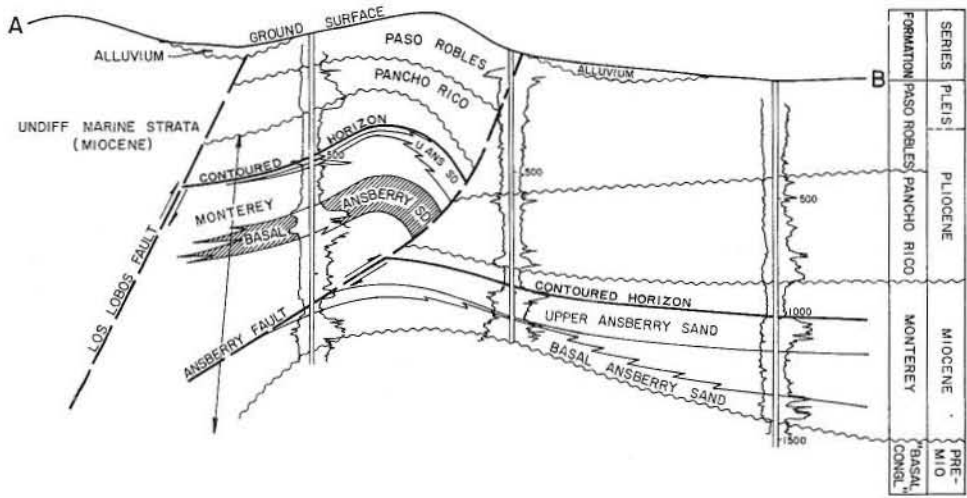
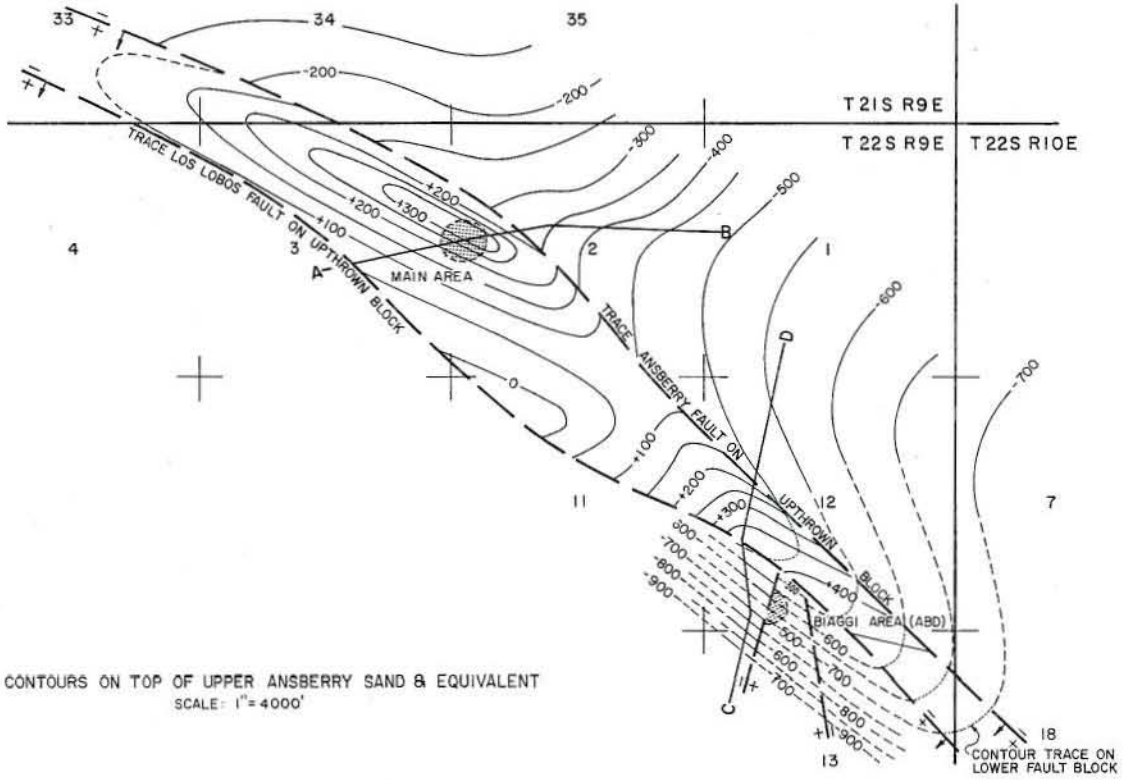
CURRENT CASING PROGRAM: 11 3/4" cem. 500 - 1,250; 7" cem. over zone and across base of fresh-water sands; 5 1/2" cem. liner.

METHOD OF WASTE DISPOSAL: Discharged to the Oxnard Drainage Ditch.

REMARKS: A water-flood project was started in 1963 and was terminated in 1966 after having injected 812,837 bbls. into two wells.

REFERENCES: Kaplow, E.J., Oxnard Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 44, No. 2 (1947).
 Dosch, M.W., and Mitchell, W.S., Oxnard Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 50, No. 1 (1964).
 Dosch, M.W., Pliocene Tar Sands in Oxnard Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 51, No. 2 (1965).

PARIS VALLEY OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

PARIS VALLEY OIL FIELD

Monterey County

LOCATION: 4 miles northwest of San Ardo

TYPE OF TRAP: See areas

ELEVATION: 600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Basal Ansberry	Texaco Inc. "Biaggi" 2	The Texas Co. "Paris Valley Anticline Core Hole" 1-12	12 22S 9E	MD	20	0	Aug 1948

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Petroleum Securities Co. "Aniotzbehere" 1	Same	Dec 1926	2 22S 9E	MD	2,655	"Basal Conglomerate"	Pliocene

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
160	0	5,010	10	1	10,158	0	3,177	1964	30	5	40

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: Applies

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: See areas

REFERENCES: See areas

CALIFORNIA DIVISION OF OIL AND GAS

PARIS VALLEY OIL FIELD

BIAGGI AREA (Abandoned)

Monterey County

LOCATION: See map sheet of Paris Valley Oil Field

TYPE OF TRAP: Anticline

ELEVATION: 600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Basal Ansberry	Texaco Inc. "Biaggi" 2	The Texas Co. "Paris Valley Anticline Core Hole" 1-12	12 22S 9E	MD	20	0	Aug 1948

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Occidental Petroleum Corp. "Hocker et al" 38X	Same	Dec 1963	12 22S 9E	MD	2,052	Basement (Schist)	Mesozoic

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Basal Ansberry	1,090	70	late Miocene	Monterey	13	1,760	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	316	0	316	1948	7	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 9 5/8" cem. 400; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: This area was originally known as Biaggi area of Monterey County, then Biaggi oil field. Last production was in September 1948. Field abandoned April 1954.

REFERENCES: Hallmark, F.O., Paris Valley and Biaggi Oil Fields: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 57, No. 1 (1971).

Hart, E.W., Mines and Mineral Resources of Monterey County, Calif.: Calif. Div. of Mines and Geology County Report No. 5 (1963).

CALIFORNIA DIVISION OF OIL AND GAS

PARIS VALLEY OIL FIELD

MAIN AREA

Monterey County

LOCATION: See map sheet of Paris Valley Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Basal Ansberry	Getty Oil Co. "M-A" 1	W. Frank Jones, Opr. "M-A" 1	2 22S 9E	MD	6	0	Sep 1958

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Petroleum Securities Co. "Aniotzbehere" 1	Same	Dec 1926	2 22S 9E	MD	2,655	"Basal Conglomerate"	Pliocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu))	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Basal Ansberry	710	80	late Miocene	Monterey	12	1,755	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
160	0	5,010	10	1	9,842	0	3,177	1964	23	4	30

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 300

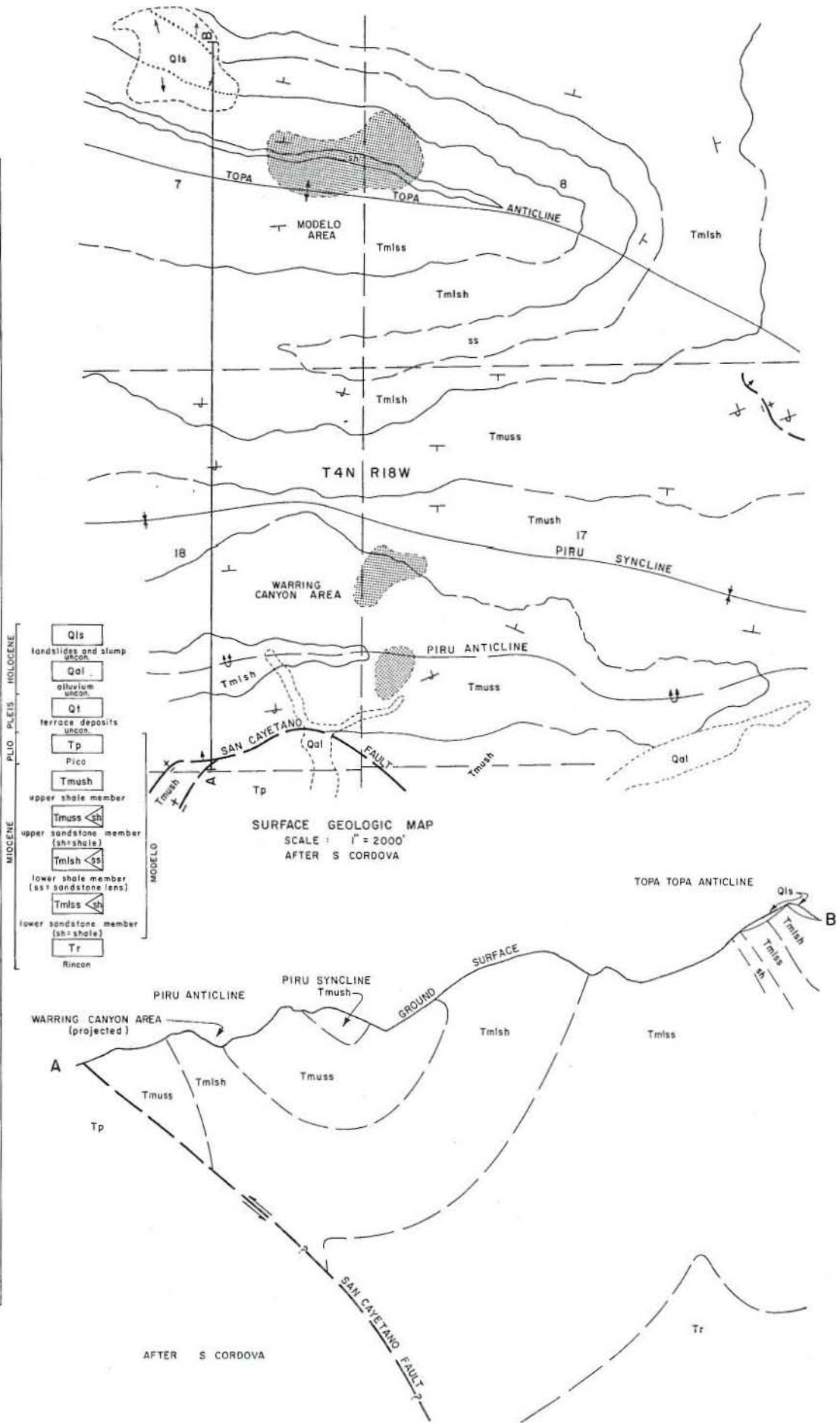
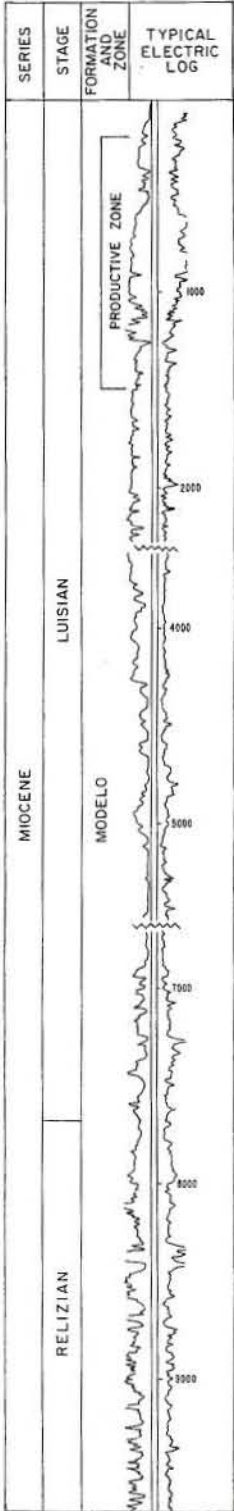
CURRENT CASING PROGRAM: 7" cem. above zone and across base of fresh water; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water disposed of in unlined sumps (to be phased out).

REMARKS: Bottom-hole heater necessary for production. A cyclic-steam project was started in 1962 and was discontinued in 1964 after having injected 119,413 bbls. of water equivalent into five wells. A pilot steam-flood project was started in 1963 and terminated in 1964 after having injected 45,898 bbls. of water equivalent into one well.

REFERENCES: Hallmark, F.O., Paris Valley and Biaggi Oil Fields: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 57, No. 1 (1971).
 Hart, E.W., Mines and Mineral Resources of Monterey County, Calif.: Calif. Div. of Mines and Geology County Report No. 5 (1963).
 Smith, F.E. Jr., Paris Valley Oil Field: A.A.P.G. - S.E.P.M. Guidebook to the Geology of Salinas Valley and the San Andreas Fault (1963).

PIRU OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

PIRU OIL FIELD

Ventura County

LOCATION: 28 miles northeast of Ventura

TYPE OF TRAP: See areas

ELEVATION: 1,100 - 2,400

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Modelo	Getty Oil Co. "Crocker Fee" 1	Modelo Oil Co. No. 1	8 4N 18W	SB	15	N.A.	1897

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Getty Oil Co. "Crocker Fee" 1-D	Pacific Western Oil Co. "Crocker Fee" 1-D	Jan 1945	7 4N 18W	SB	10,504	Modelo	Miocene

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
3,081	0	0	45	8	429,147	155,999	17,000 +	1911 ?	53	32	65

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS:

REFERENCES: Cordova, S., Geology of the Piru Area, Ventura County, Calif., Unpublished M.A. Thesis, University of Calif. at Los Angeles (1956).
 Eldridge, G.H., and R. Arnold, Santa Clara, Puente Hills, and Los Angeles Oil Districts, Southern Calif.: U.S. Geol. Survey Bull. 309 (1907).
 Kew, W.S.W., Geology and Oil Resources of a Part of Los Angeles and Ventura Counties, Calif.: U.S. Geol. Survey Bull. 753 (1924).

CALIFORNIA DIVISION OF OIL AND GAS

PIRU OIL FIELD

MODELO AREA

Ventura County

LOCATION: See map sheet of Piru Oil Field

TYPE OF TRAP: Anticline

ELEVATION: 1,600 - 2,400

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Modelo	Getty Oil Co. "Crocker Fee" 1	Modelo Oil Co. No. 1	8 4N 18W	SB	15	N.A.	1897

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Getty Oil Co. "Crocker Fee" 1-D	Pacific Western Oil Co. "Crocker Fee" 1-D	Jan 1945	7 4N 18W	SB	10,504	Modelo	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Modelo	900	320	Miocene	Modelo	26	Fresh *	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
3,081	0	0	45	8	419,320	152,249	** 9,785	1921	33	23	45

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,550

CURRENT CASING PROGRAM: 8 5/8" cem. above zone; 6 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL: Surface disposal.

REMARKS: * Zone waters are exceptionally high in bicarbonate concentration.

** No annual figures available for period 1897 - 1916. Estimated oil production for the period is 220,000 bbls.

REFERENCES: See field data sheet.

CALIFORNIA DIVISION OF OIL AND GAS

PIRU OIL FIELD

WARRING CANYON AREA

Ventura County

LOCATION: See map sheet of Piru Oil Field

TYPE OF TRAP: Stratigraphic traps on anticline

ELEVATION: 1,100 - 2,100

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Modelo	Santa Fe Petroleum Co. No. 1	Same as present	17 4N 18W	SB	12	N.A.	Sep 1921

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Srata	Age
Kenneth H. Hunter, Jr., Co. "Colonia" 1	Same	Jul 1960	17 4N 18W	SB	7,510	Pico	Pliocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Modelo	500	200	Miocene	Modelo	20	Fresh *	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	20	0	9,827	3,750	668	1924	20	9	20

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,550

CURRENT CASING PROGRAM: 8 5/8" cem. above zone; 6 5/8" liner landed through zone.

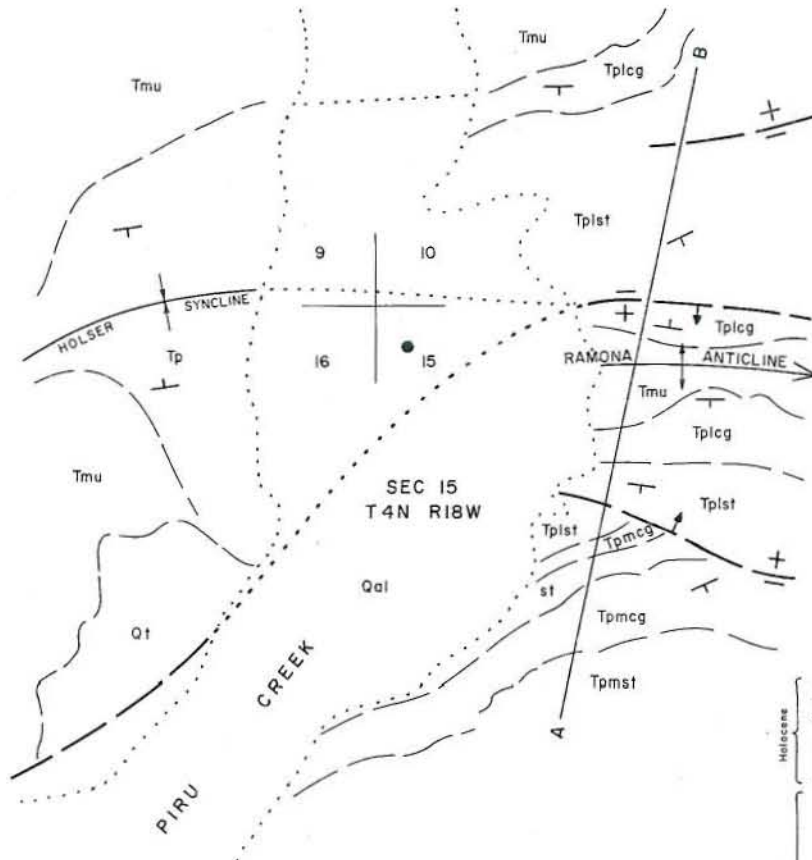
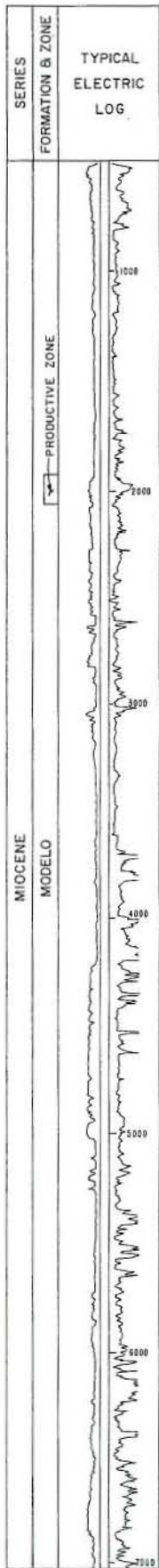
METHOD OF WASTE DISPOSAL:

REMARKS: Last production in 1927.

* Zone waters are exceptionally high in bicarbonate concentration.

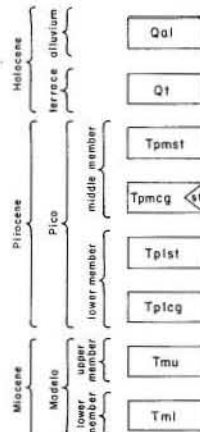
REFERENCES: See field data sheet.

PIRU CREEK OIL FIELD

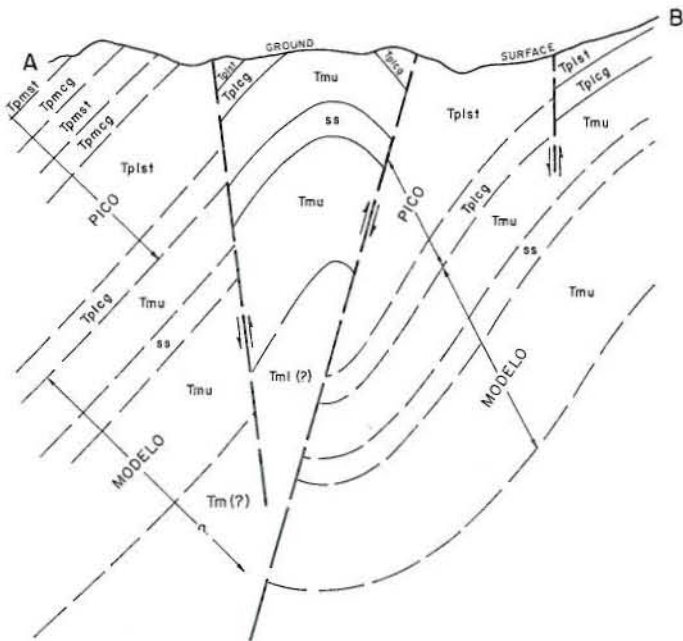


NOTE: SURFACE GEOLOGIC MAP FROM UNPUBLISHED UCLA THESES BY BB ROBINSON AND S CORDOVA

SCALE 1" = 2000'



st - siltstone
cg - conglomerate



CALIFORNIA DIVISION OF OIL AND GAS

PIRU CREEK OIL FIELD

Ventura County

LOCATION: 30 miles northeast of Ventura

TYPE OF TRAP: Faulted anticline

ELEVATION: 800

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	Getty Oil Co. "Temescal" 33	Same as present	15 4N 18W	SB	18	N.A.	Jun 1956

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	S & M	Depth (feet)	At total depth	
						Strata	Age
Getty Oil Co. "Temescal" 33	Same	May 1956	15 4N 18W	SB	7,002	Modelo (?)	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu))	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
(Unnamed)	2,000	100	middle Miocene	Modelo	15	430	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	3,916	3,512	1,068	1957	1	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 810

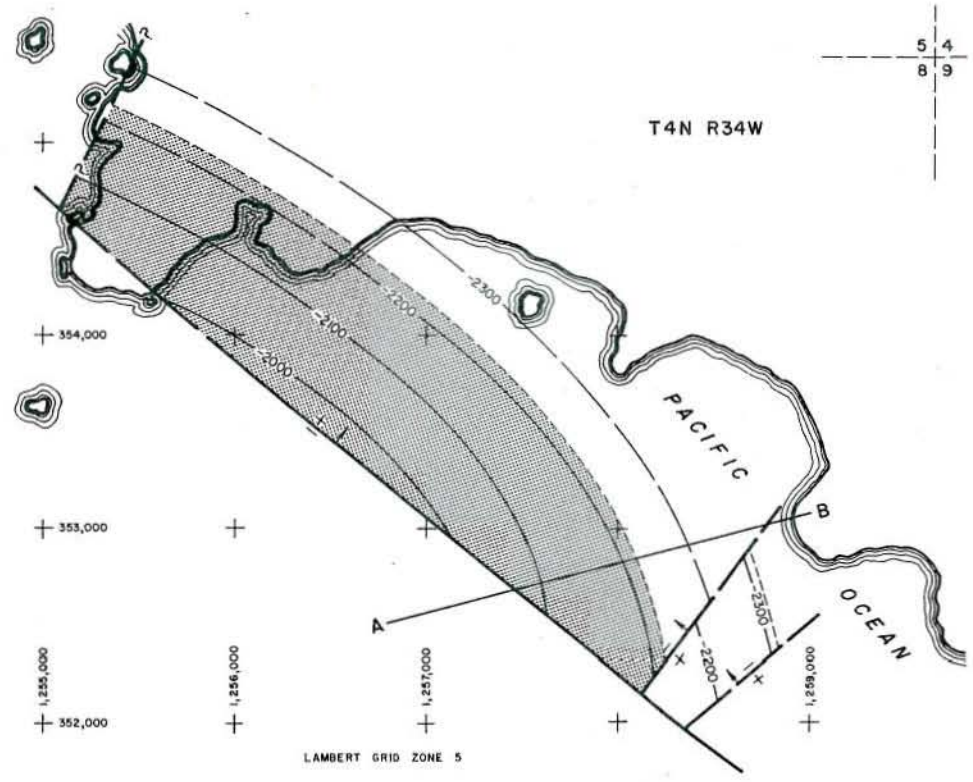
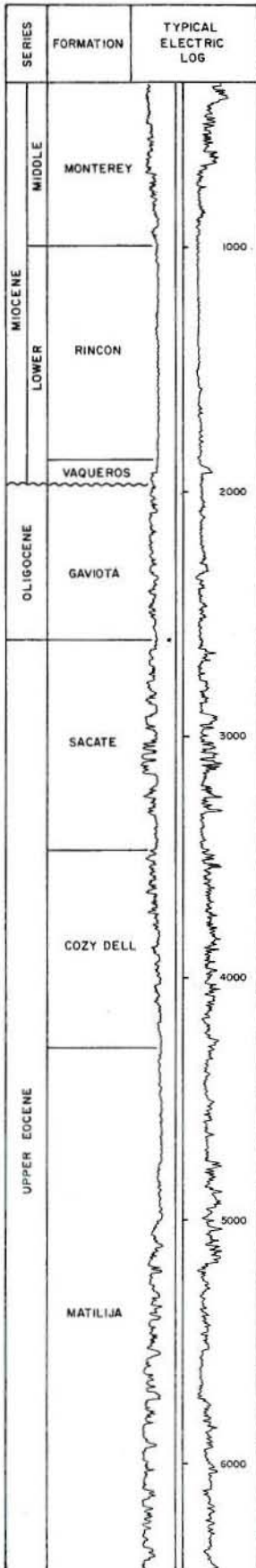
CURRENT CASING PROGRAM: 13 3/8" cem. 500; 9 5/8" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

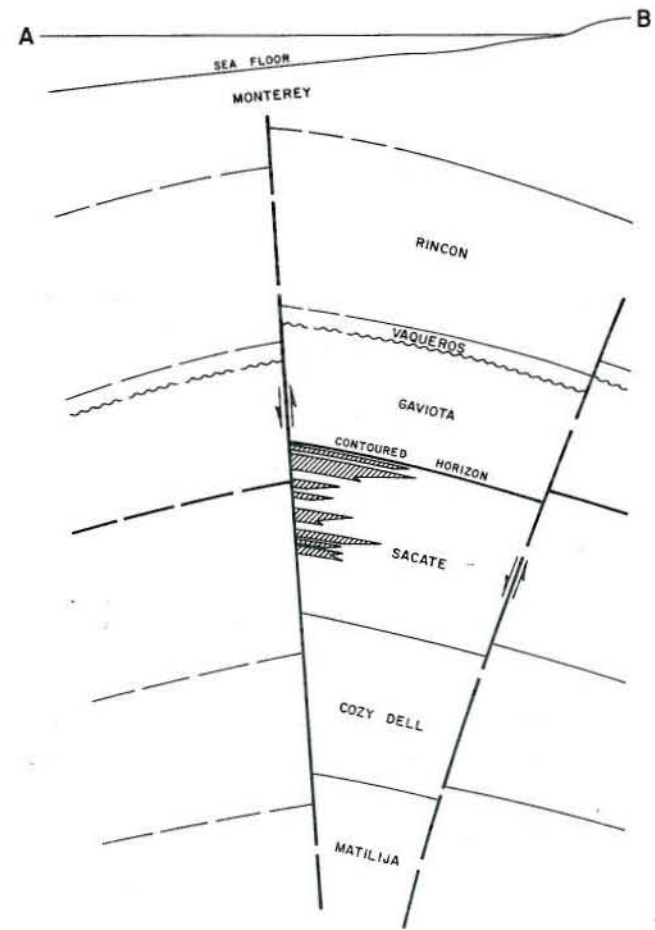
REMARKS: This is a one-well field and has been idle since 1960.

REFERENCES: Cordova, Simon, Geology of the Piru Area, Ventura County, Calif., unpublished M.A. Thesis, University of Calif. at Los Angeles (1956).
 Kew, W.S.W., Geology and Oil Resources of a Part of Los Angeles and Ventura Counties, Calif., U.S. Geol. Survey Bull. 753 (1924).
 Robinson, B.B., Geology of the Holser Canyon Area, Ventura County, Calif., unpublished M.A. Thesis (1956).

POINT CONCEPTION OIL FIELD



LAMBERT GRID ZONE 5
CONTOURS ON TOP OF SACATE



CALIFORNIA DIVISION OF OIL AND GAS

POINT CONCEPTION OIL FIELD

Santa Barbara County

LOCATION: 45 miles west of Santa Barbara

TYPE OF TRAP: See areas

ELEVATION: 160 (Onshore); -30 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sacate	Union Oil Co. of Calif. "State 2879" 10-6	Same as present	8 4N 34W	SB	64	N.A.	Feb 1965

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "State 2879" 5-6	Same	Aug 1963	16 4N 34W	SB	8,780	Matilija	It Eocene

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
136,772	50,438	596,672	50	3	721,348	279,992	175,289	1972	24	4	50

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: See areas

REFERENCES: Curran, J.F., K.B. Hall, and R.F. Herron, Geology, Oil Fields, and Future Petroleum Potential of Santa Barbara Channel Area, California: Am. Assoc. Petroleum Geologists Memoir 15, p. 192 (1971).

Yerkes, R.F., H.C. Wagner, and K.A. Yenne, Petroleum Development in the Region of the Santa Barbara Channel: U. S. Geol. Survey Prof. Paper 679-B, p. 20 (1969).

CALIFORNIA DIVISION OF OIL AND GAS

POINT CONCEPTION OIL FIELD

ONSHORE AREA

Santa Barbara County

LOCATION: See map sheet of Point Conception Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 160

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Gaviota - Sacate	Union Oil Co. of Calif. "Coast Guard" 1	Same as present	8 4N 34W	SB	65	50	Mar 1972

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Coast Guard" 1	Same	Jan 1972	8 4N 34W	SB	4,121	N.A.	N.A.

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Gaviota - Sacate	2,750	600	Oligocene - Eocene	Gaviota - Sacate	29	1,320	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
13,027	5,932	245,861	10	1	35,522	19,247	22,450	1972	1	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

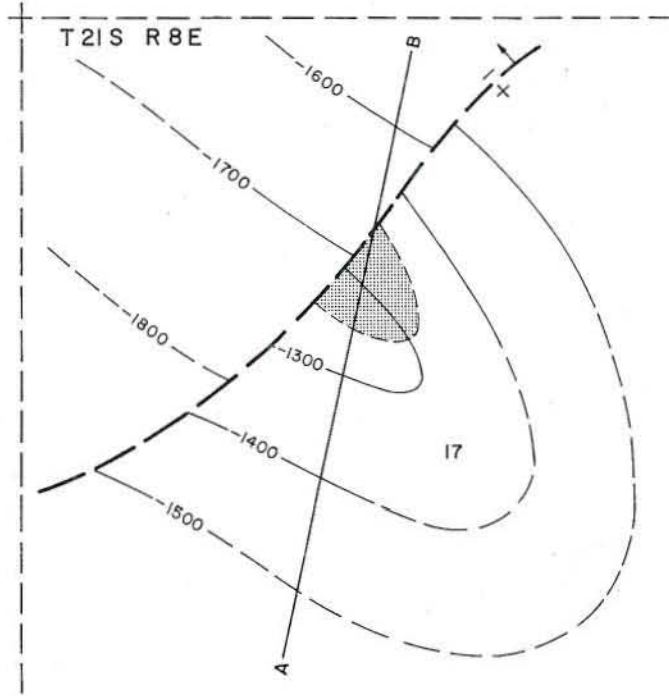
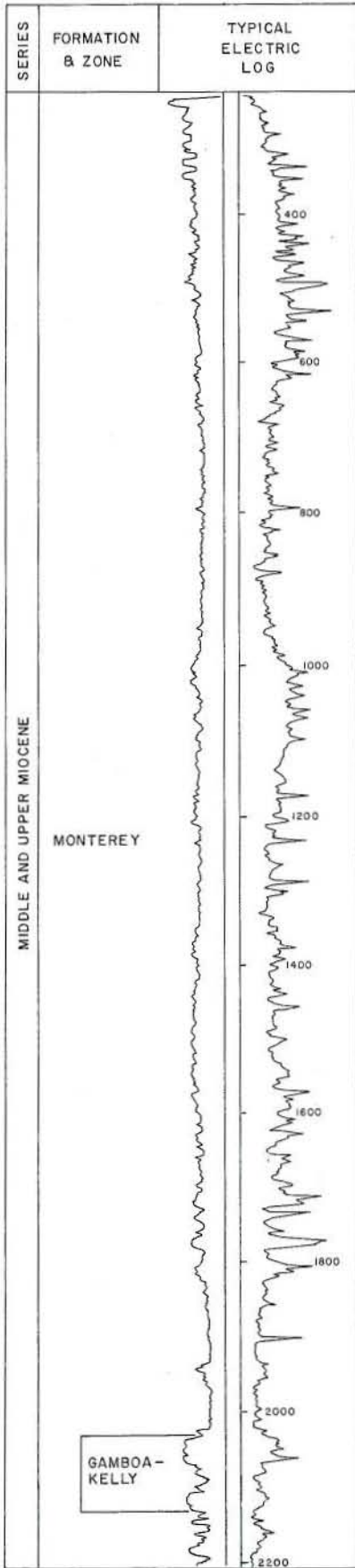
CURRENT CASING PROGRAM: 13 3/8" cem. 300; 10 3/4" cem. 1,100; 7" cem. through zone.

METHOD OF WASTE DISPOSAL: Produced water is injected into a disposal well.

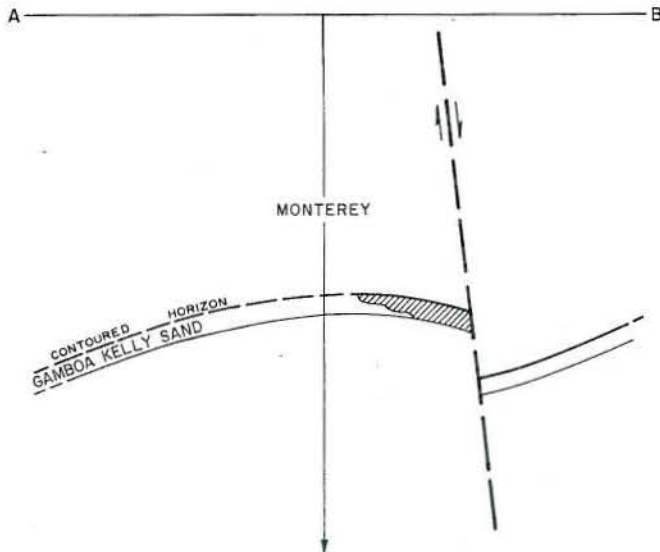
REMARKS:

REFERENCES: Zulberti, J.L., Operations in District No. 3: Calif. Div. of Oil and Gas--Summary of Operations, Vol. 58, No. 2 (1972).

QUINADO CANYON OIL FIELD



CONTOURS ON TOP OF GAMBOA KELLY SAND
SCALE 1" = 650'



CALIFORNIA DIVISION OF OIL AND GAS

QUINADO CANYON OIL FIELD
Monterey County

LOCATION: 7 miles south of King City

TYPE OF TRAP: Faulted nose

ELEVATION: 800

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Gamboa-Kelly	R. H. Beel Dev. Co. "Gamboa-Kelly" 1	Barron Kidd "Gamboa-Kelly" 1	17 21S 8E	MD	14	0	Apr 1963

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Barron Kidd "Gamboa-Kelly" 3	Same	Apr 1964	17 21S 8E	MD	3,004	Monterey	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Gamboa-Kelly	2,035	60	middle Miocene	Monterey	19	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
296	0	5,205	10	1	6,379	2,571	1,192	1964	6	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,800

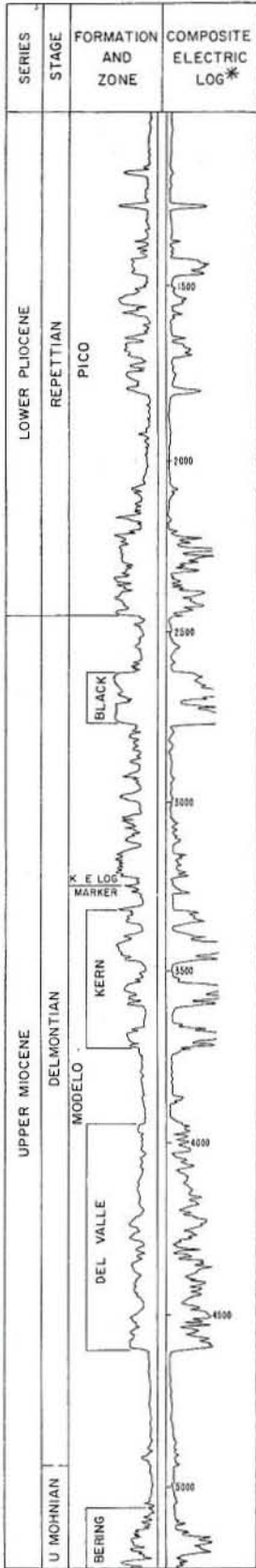
CURRENT CASING PROGRAM: 8 5/8" or 10 3/4" cem. 200 - 300; 5 1/2" cem. through zone and across base of fresh water.

METHOD OF WASTE DISPOSAL: Waste water disposed of in unlined sumps.

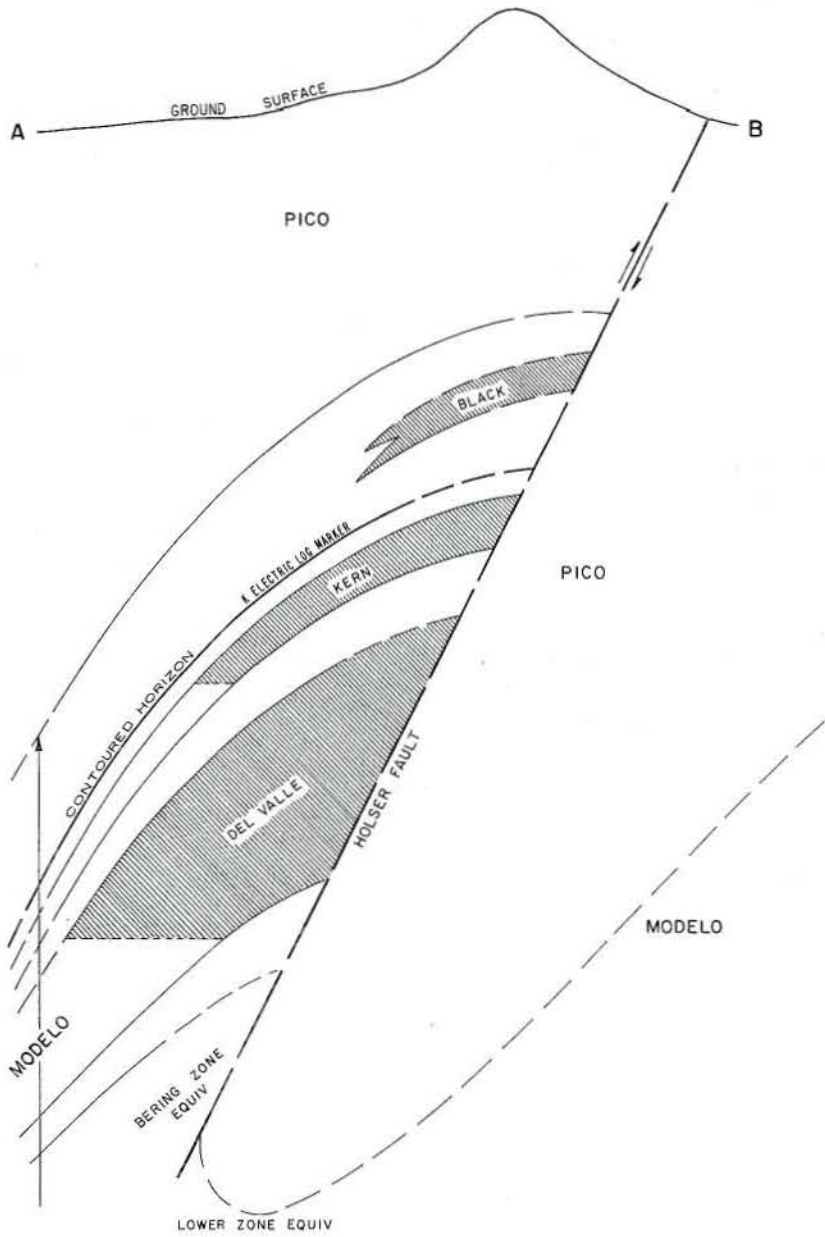
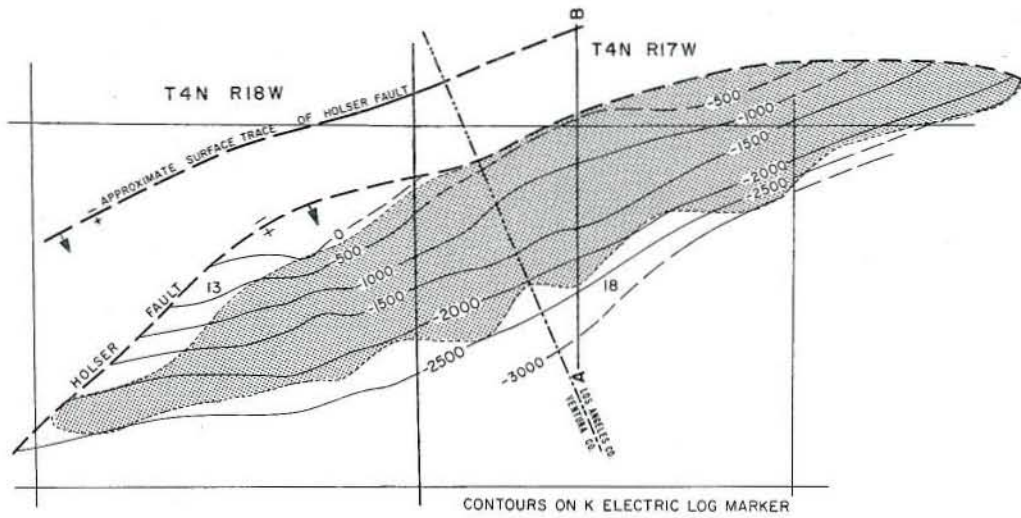
REMARKS:

REFERENCES:

RAMONA OIL FIELD



*ABOVE HOLSER FAULT



CALIFORNIA DIVISION OF OIL AND GAS

RAMONA OIL FIELD

Los Angeles and Ventura Counties

LOCATION: 34 miles northeast of Ventura

TYPE OF TRAP: Faulted homocline

ELEVATION: 1,400 - 2,000

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Black	McFarland Energy, Inc. "Black" 102	Bankline Oil Co. "Black" 102	13 4N 18W	SB	120	70	Jun 1946
Kern	Texaco Inc. "Kern" 1	The Texas Co. "Kern" 1	18 4N 17W	SB	209	85	Apr 1945
Del Valle	Herley Kelley Co. "Orduno" 1	Jack Herley and Paul C. Kelley "Orduno" 1	18 4N 17W	SB	28	N.A.	Oct 1943
Bering	The Superior Oil Co. "Black" 14	Same as present	13 4N 18W	SB	120	N.A.	Mar 1974
Lower	The Superior Oil Co. "Black" 14	Same as present	13 4N 18W	SB	195	N.A.	Dec 1951

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
The Superior Oil Co. "Black" 15	Same	Nov 1952	13 4N 18W	SB	9,323	Modelo	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Black	2,500	150	late Miocene	Modelo	25 - 30	1,040	III
Kern	3,500	350	late Miocene	Modelo	15 - 31	990	III
Del Valle	4,500	1,100	late Miocene	Modelo	15 - 28	570	III
Bering	6,400	550	late Miocene	Modelo	19	N.A.	III
Lower	7,700	150	late Miocene	Modelo	19 - 22	550	III

PRODUCTION DATA (Jan. 1, 1974)

1972 Production			1972 Proved acreage	1972 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
186,424	446,551	91,373	590	96	19,346,489	37,031,412	2,048,370	1949	145	125	590

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
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SPACING ACT: Applies

BASE OF FRESH WATER: 100 - 350

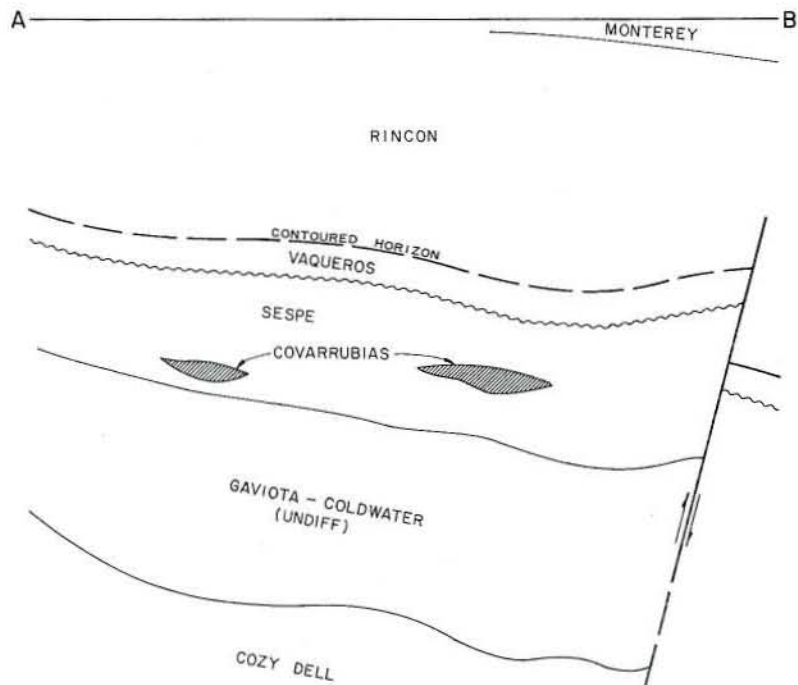
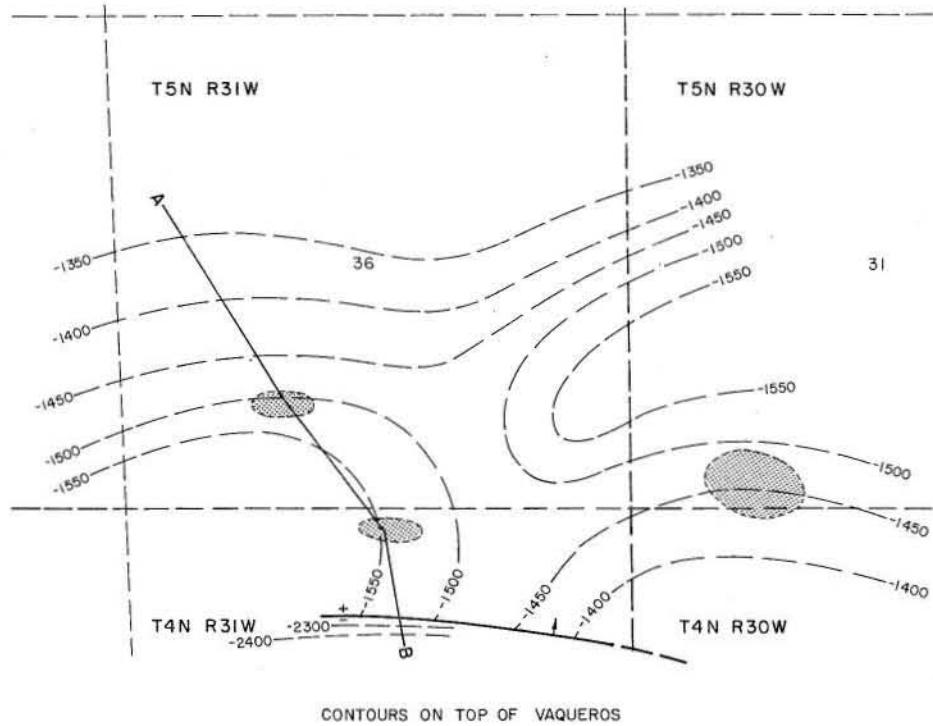
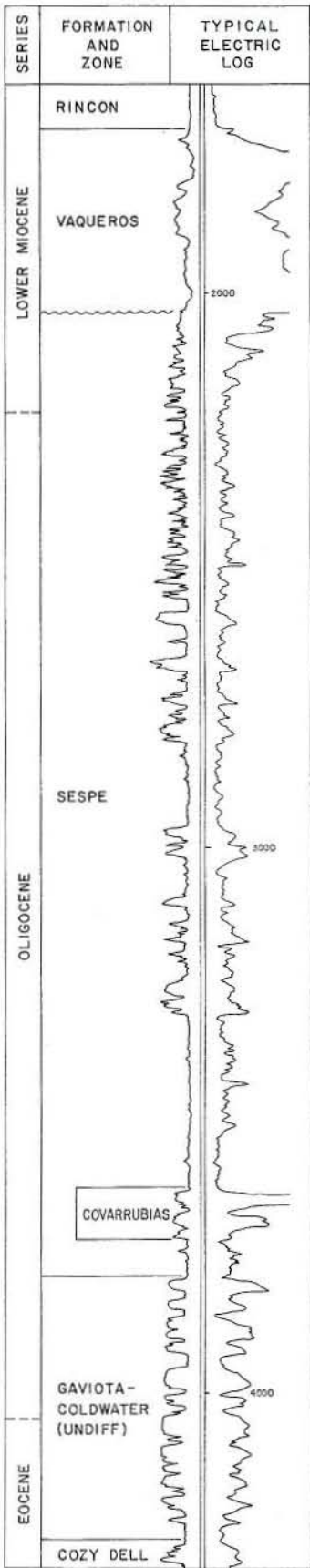
CURRENT CASING PROGRAM: 11 3/4" or 10 3/4" cem. 250 - 400; 7" cem. over zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: All waste water is injected into water-disposal wells.

REMARKS: Only one well produced from the Bering zone, and only two wells produced from the Lower zone. A pilot steam-cyclic project was attempted in 1965, when 3,264 equivalent bbls. were injected into one well.

REFERENCES: Driggs, J.L., and N.N. Sampson, Ramona Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 37, No. 1 (1951).

REFUGIO COVE GAS FIELD (Abandoned)



CALIFORNIA DIVISION OF OIL AND GAS

REFUGIO COVE GAS FIELD (Abandoned)

Santa Barbara County

LOCATION: 23 miles west of Santa Barbara

TYPE OF TRAP: Lenticular sands

ELEVATION: 15 - 745

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial production			Date of completion
					Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	
Covarrubias	Rothschild Oil Co. "Orella" 1	Same as present	31 5N 30W	SB	5,000	450	N.A.	Dec 1946

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Shell Oil Co. "Rutherford" 1	Same	Jan 1929	6 4N 30W	SB	6,184	Cozy Dell	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Gas (btu)	Salinity of zone water gr/gal	Original zone pressure (psi)	Class BOPE required
			Age	Formation				
Covarrubias	2,900	30	Oligocene	Sespe	1,100	120	N.A.	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production		1973 Proved acreage	1973 Maximum number producing wells	Cumulative gas production (Mcf)	Peak gas production		Total number of wells		Maximum proved acreage
Net gas (Mcf)	Water (bbl)				(Mcf)	Year	Drilled	Completed	
0	0	0	0	989,666	475,905	1959	18	3	90

Note: Also produced 3,193 bbls. of condensate.

SPACING ACT: Applies

BASE OF FRESH WATER: 0 - 300

CURRENT CASING PROGRAM: 11 3/4" or 9 5/8" cem. 200; 7" or 4 3/4" cem. through zone and across base of fresh-water sands.

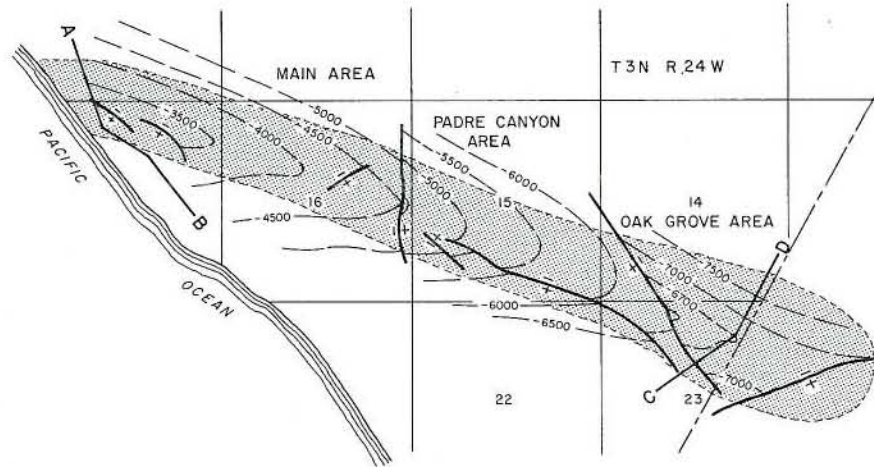
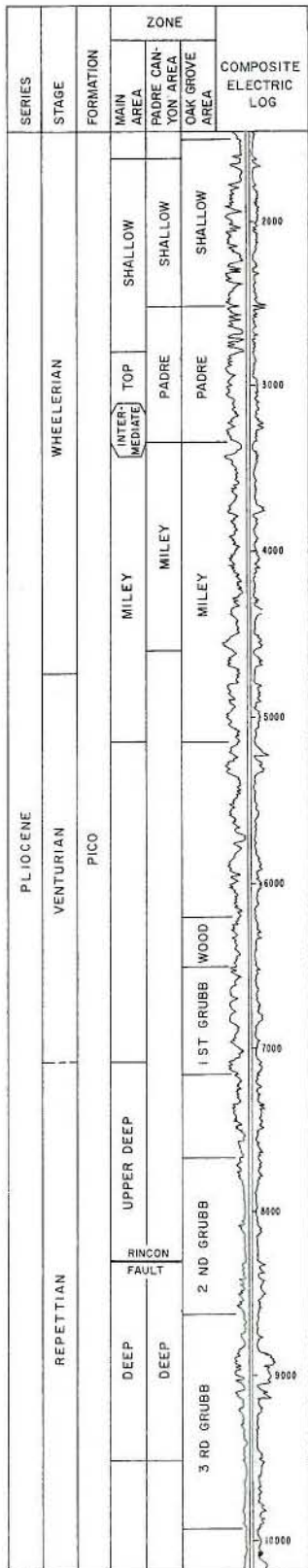
METHOD OF WASTE DISPOSAL:

REMARKS: Productive area in southwest corner of Sec. 31, T.5N., R.30W., was formerly known as Refugio area. Last production was in December 1961. Field abandoned May 1964.

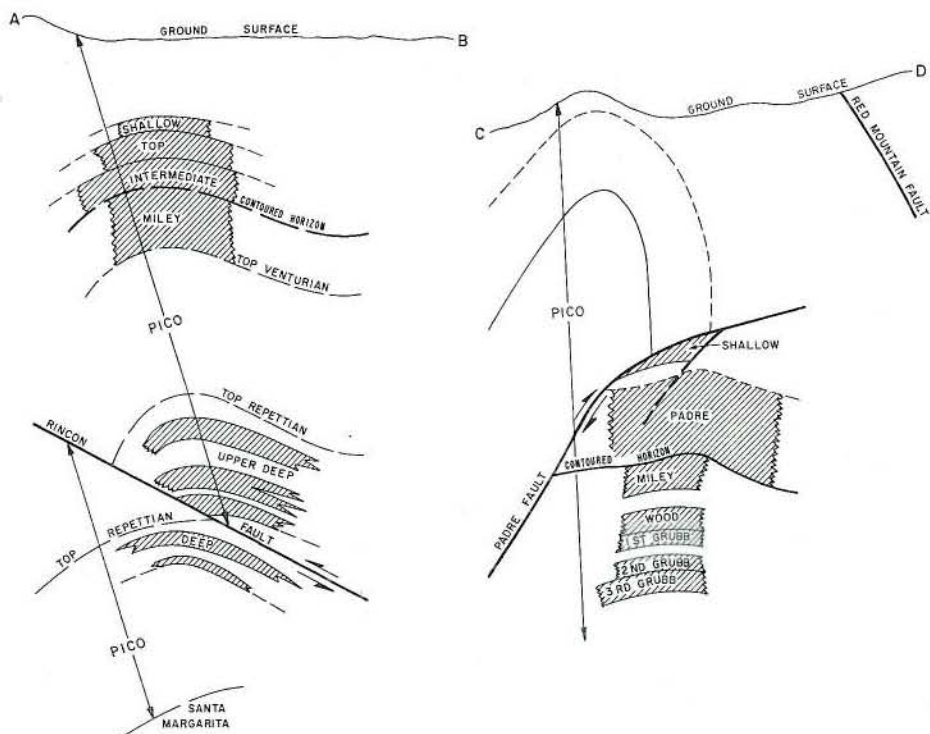
REFERENCES: Dolman, S.G., Operations in District No. 3, 1947: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 33, No. 2 (1947).

Kribbs, G.R., Capitan Oil Field: Cross-section of coastal fault block: Calif. Div. of Mines Bull. 118, p. 374 (1945).

RINCON OIL FIELD Onshore Area



CONTOURS ON TOP OF MILEY ZONE



CALIFORNIA DIVISION OF OIL AND GAS

RINCON OIL FIELD

Ventura County

LOCATION: 8 miles northwest of Ventura

TYPE OF TRAP: Faulted anticline; lenticular sands

ELEVATION: 50 - 1,300

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbi)	Gas (Mcf)	
Shallow and Top	Atlantic Richfield Co. "Hobson Fee" 3	Pan American Pet. Co. "Hobson Fee" 3	17 3N 24W	SB	328	N.A.	Dec 1927

Remarks: Production from both zones commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Continental Oil Co. "Grubb" 160	Same	Jul 1970	23 3N 24W	SB	15,878	Santa Margarita	late Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbi)	Net gas (Mcf)	Water (bbi)			Oil (bbi)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
3,453,707	3,770,175	5,808,031	1,560	247	90,922,609	144,331,948	4,001,633	1972	379	352	1,560

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS:

REFERENCES: Bailey, W.C., Rincon Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil and Gas Fields, Vol. 27, No. 1 (1941).

CALIFORNIA DIVISION OF OIL AND GAS

RINCON OIL FIELD

MAIN AREA

Ventura County

LOCATION: See field map of Rincon Oil Field

TYPE OF TRAP: Faulted anticline; lenticular sands

ELEVATION: 50 - 600

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Shallow	Atlantic Richfield Co. "Hobson Fee" 3	Pan American Pet. Co. "Hobson Fee" 3	17 3N 24W	SB	328	N.A.	Dec 1927
Top	Same as above	Same as above	17 3N 24W	SB	*	N.A.	Dec 1927
Intermediate	Chanslor-Western Oil & Development Co. "Hobson" B-2	Chanslor-Canfield Midway Oil Co. "Hobson" B-2	8 3N 24W	SB	418	N.A.	Nov 1929
Miley	Atlantic Richfield Co. "Hobson Fee" 2	Pan American Pet. Co. "Hobson Fee" 2	17 3N 24W	SB	107	N.A.	Jun 1928
Upper Deep	Atlantic Richfield Co. "Hobson" 1	Richfield Oil Co. of California "Miley-Hobson" 1	17 3N 24W	SB	N.A.	N.A.	Jul 1929
Deep	Atlantic Richfield Co. "Hobson Fee" 1	Pan American Pet. Co. "Hobson-Fee" 1	17 3N 24W	SB	222	N.A.	Jun 1929

Remarks: * Production from Shallow and Top zones commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Chanslor-Western Oil & Dev. Co. "Hobson" C-11	Chanslor-Canfield Midway Oil Co. "Hobson" C-11	Dec 1944	17 3N 24W	SB	14,155	Santa Margarita	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Shallow	3,200	400	Pliocene	Pico	30	1,500	III
Top	3,200	600	Pliocene	Pico	30	1,500	III
Intermediate	3,850	200	Pliocene	Pico	30	1,500	III
Miley	4,000	2,100	Pliocene	Pico	30	1,500	III
Upper Deep	5,550	2,200	Pliocene	Pico	26	950	III
Deep	7,800	2,600	Pliocene	Pico	26	950	IV

PRODUCTION DATA (Jan. 1, 1974) (See field sheet) *

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1961	6,598,393	13

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 11 3/4" cem. 600 - 1,000; 7" cem. over zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is used in water-flood projects.

REMARKS: * Production figures for areas are not available.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

RINCON OIL FIELD

OAK GROVE AREA

Ventura County

LOCATION: See field map of Rincon Oil Field

TYPE OF TRAP: Faulted anticline; lenticular sands

ELEVATION: 300 - 1,300

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Shallow	Chanslor-Western Oil & Dev. Co. "Hobson" A-2	Chanslor-Canfield Midway Oil Co. "Hobson" A-2	23 3N 24W	SB	88	210	Sep 1931
Padre	Same as above	Same as above	23 3N 24W	SB	*	*	Sep 1931
Miley	Same as above	Same as above	23 3N 24W	SR	*	*	Sep 1931
Wood	Continental Oil Co. "Grubb" 139	Continental Oil Co. "Grubb" 39-2	23 3N 24W	SB	258	154	Sep 1945
1st Grubb	Continental Oil Co. "Grubb" 102	Same as present	24 3N 24W	SB	269	169	May 1961
2nd Grubb	Continental Oil Co. "Grubb" 151	Continental Oil Co. "Grubb" 105	24 3N 24W	SB	891	900	Jul 1969
3rd Grubb	Same as above	Same as above	24 3N 24W	SB	**	**	Jul 1969

Remarks: * Production from Shallow, Padre and Miley zones commingled.
 ** Production from 2nd and 3rd Grubb zones commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Continental Oil Co. "Grubb" 160	Same	Jul 1970	23 3N 24W	SB	15,878	Santa Margarita	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Shallow	5,700	800	Pliocene	Pico	30	1,500	II
Padre	6,600	1,000	Pliocene	Pico	30	1,500	III
Miley	7,700	1,800	Pliocene	Pico	30	1,500	III
Wood	10,700	700	Pliocene	Pico	30	1,500	III
1st Grubb	10,900	1,000	Pliocene	Pico	28	1,500	III
2nd Grubb	11,900	1,100	Pliocene	Pico	28	950	IV
3rd Grubb	13,000	1,000	Pliocene	Pico	28	950	IV

PRODUCTION DATA (Jan. 1, 1974) (See field sheet) *

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1966	15,713,581	16

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 11 3/4" cem. 800 - 1,700; 7" cem. over zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is used in water-flood projects.

REMARKS: * Production figures for areas are not available.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

RINCON OIL FIELD

PADRE CANYON AREA

Ventura County

LOCATION: See field map of Rincon Oil Field

TYPE OF TRAP: Faulted anticline; lenticular sands

ELEVATION: 500 - 800

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Shallow	Continental Oil Co. "Hobson" 1	Same as present	15 3N 24W	SB	379	121	Mar 1936
Padre	Same as above	Same as present	15 3N 24W	SB	*	*	Mar 1936
Miley	Same as above	Same as present	15 3N 24W	SB	*	*	Mar 1936
Deep	Chanslor-Western Oil & Dev. Co. "Hobson" A-35	Same as present	15 3N 24W	SB	156	91	Oct 1953

Remarks: *Production from Shallow, Padre and Miley zones commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Continental Oil Co. "Conoco-M.P." 1	Same	Sep 1972	15 3N 24W	SB	15,336	Santa Margarita	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Shallow	3,700	800	Pliocene	Pico	30	1,500	III
Padre	4,500	1,000	Pliocene	Pico	30	1,500	III
Miley	5,600	500	Pliocene	Pico	30	1,500	III
Deep	10,800	1,100	Pliocene	Pico	26	950	IV

PRODUCTION DATA (Jan. 1, 1974) (See field sheet) *

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1965	854,339	2

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

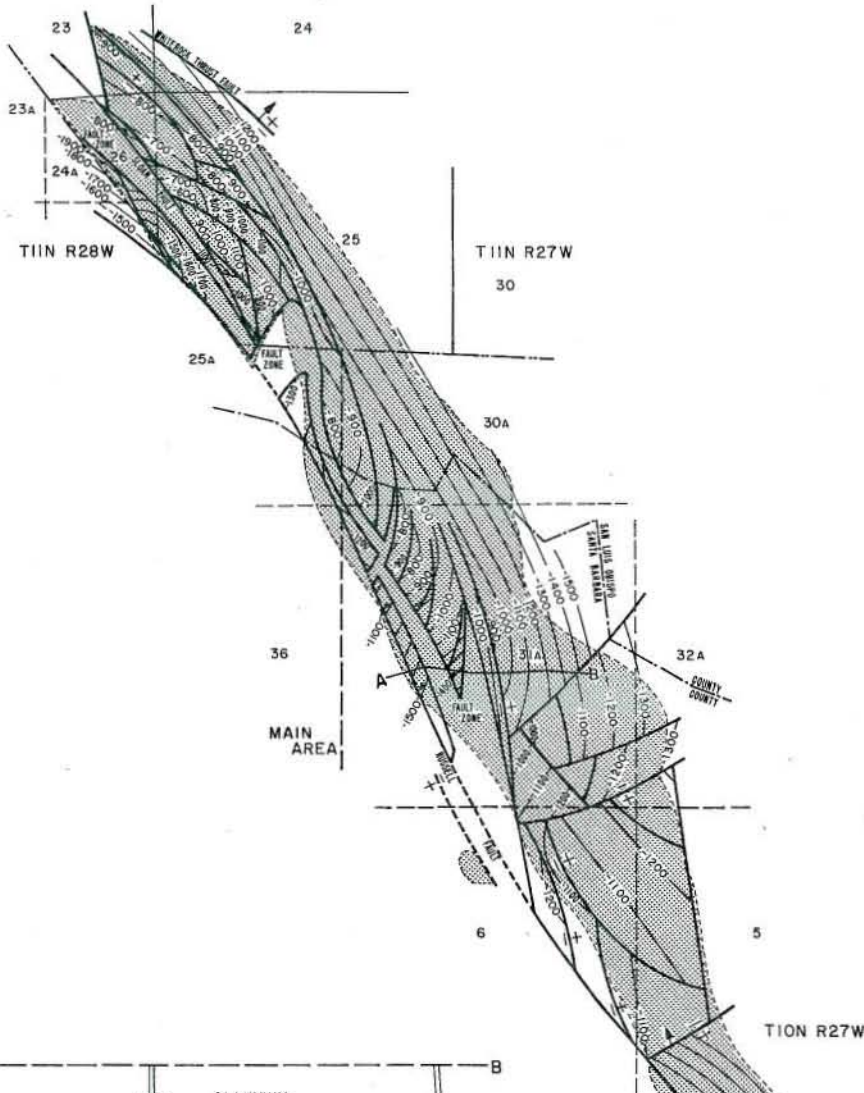
CURRENT CASING PROGRAM: 11 3/4" cem. 600 - 1,200; 7" cem. over zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Most of waste water is used in water-flood projects; some is injected into a water-disposal well.

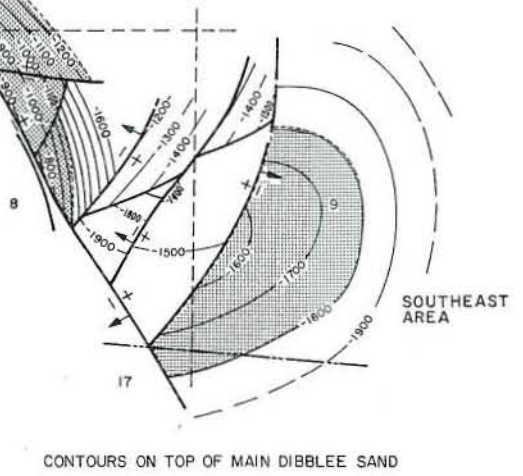
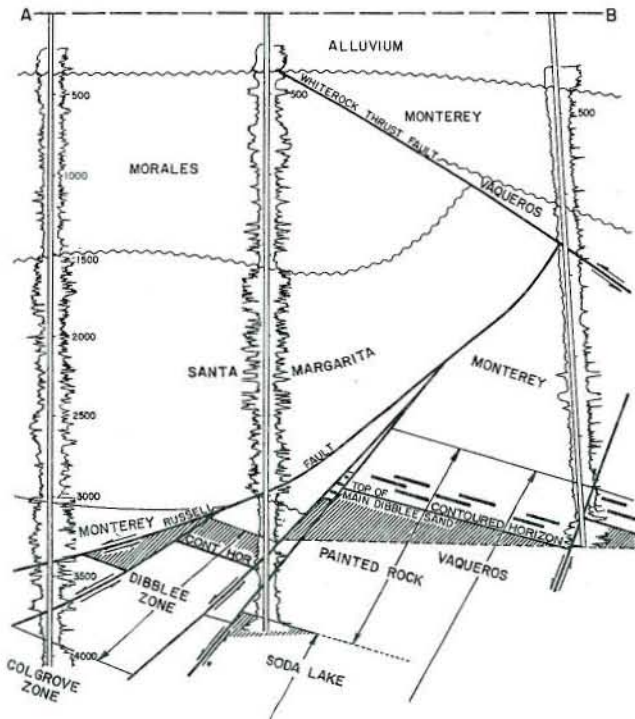
REMARKS: * Production figures for areas are not available.

REFERENCES:

RUSSELL RANCH OIL FIELD



SERIES	FORMATION MEMBER & ZONE	
HOLOCENE- PLEIS	ALLUVIUM & TERRACE DEPOSITS	
PLIOCENE	MORALES	
MIOCENE	UPPER SANTA MARGARITA	
	MIDDLE MONTEREY	
	LOWER	VAQUEROS
		PAINTED ROCK
	DIBBLEE	
	SODA LAKE	
	COLGROVE	



CONTOURS ON TOP OF MAIN DIBBLEE SAND

CALIFORNIA DIVISION OF OIL AND GAS

RUSSELL RANCH OIL FIELD

San Luis Obispo and Santa Barbara Counties

LOCATION: 36 miles east of Santa Maria

TYPE OF TRAP: See areas

ELEVATION: 1,700 - 2,200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Santa Margarita	Norris Oil Co. "Cuyama" 2	Same as present	25A 11N 27W	SB	190	10	Jan 1948

Remarks: Richfield Oil Corp. (now Atlantic Richfield Co.) completed well No. "Russell A" 28-5, Sec. 5, T. 10 N., R. 27 W., S.B.B.&M., in June 1948 flowing 351 bbl. per day of 38.2-degree gravity oil cutting 1.0 percent water from the Dibblee sand. Development and exploratory work of major economic impact followed the completion of this well.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Atlantic Richfield Co. "Sloan C" 82-26	Richfield Oil Corp. "Sloan C" 82-26	Aug 1955	26 11N 28W	SB	5,345	Undiff. marine	Cretaceous

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
334,548	774,561	4,059,911	1,230	115	64,584,610	42,396,325	7,929,497	1950	231	194	1,550

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: See areas

REFERENCES: Barger, R.M., and J.L. Zulberti, Russell Ranch Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 38, No. 2 (1952).
Hill, M.L., S.A. Carlson, and T.W. Dibblee, Jr., Stratigraphy of Cuyama Valley - Caliente Range Areas, California: Am. Assoc. Petroleum Geologists Bull., Vol. 42, No. 12, p. 2973 (1958).

CALIFORNIA DIVISION OF OIL AND GAS

RUSSELL RANCH OIL FIELD

MAIN AREA

San Luis Obispo and Santa Barbara Counties

LOCATION: See map sheet of Russell Ranch Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 1,700 - 2,200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Santa Margarita	Norris Oil Co. "Cuyama" 2	Same as present	25A 11N 27W	SB	190	10	Jan 1948
Dibblee	Atlantic Richfield Co., Opr. "R.R.U." 28-5	Richfield Oil Corp. "Russell" 1	5 10N 27W	SB	351	181	Jun 1948
Griggs-Dibblee	Norris Oil Co. "Norris-Cuyama" 3	F. C. Griggs and Associates "Norris Cuyama" 3	25A 11N 27W	SB	240	0	Oct 1949
Colgrove	Atlantic Richfield Co., Opr. "R.R.U." 18-30	Richfield Oil Corp. "F.R. Anderson" 18-30	30A 11N 27W	SB	568	N.A.	Feb 1949

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Atlantic Richfield Co. "Sloan C" 82-26	Richfield Oil Corp. "Sloan C" 82-26	Aug 1955	26 11N 28W	SB	5,345	Undiff. marine	Cretaceous

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Santa Margarita	2,500	200	late Miocene	Santa Margarita	25	800	None
Dibblee	2,800	350	early Miocene	Vaqueros	34	465 - 530	III
Griggs-Dibblee	3,400	150	early Miocene	Vaqueros	38	1,150 - 1,310	III
Colgrove	3,500	100	early Miocene	Vaqueros	35 - 40	535 - 1,450	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
332,038	738,997	4,047,176	1,140	114	63,953,466	39,516,846	7,929,497	1950	217	182	1,400

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1954	207,224,736	5
Fire flood	1971	2,138,962	2

SPACING ACT: Applies

BASE OF FRESH WATER: 1,000

CURRENT CASING PROGRAM: 13 3/8" cem. 250; 8 5/8" cem. over zone and across base of fresh-water sands; 6 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is injected into disposal and water-flood wells.

REMARKS: Gas injection for pressure maintenance was started soon after the field was discovered. A cyclic-steam project was begun in 1966 and discontinued in 1968 after having injected 45,547 bbls. of water equivalent into 6 wells.

REFERENCES: Dolman, S.G., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 34. No. 2 (1948).

CALIFORNIA DIVISION OF OIL AND GAS

RUSSELL RANCH OIL FIELD

SOUTHEAST AREA

Santa Barbara County

LOCATION: See map sheet of Russell Ranch Oil Field

TYPE OF TRAP: Faulted anticlinal nose

ELEVATION: 2,200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Dibblee	Atlantic Richfield Co. "Russell A" 15-9	Richfield Oil Corp. "Russell A" 15-9	9 10N 27W	SB	162	0	Nov 1952

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Atlantic Richfield Co. "Russell A" 23-9	Richfield Oil Corp. "Russell A" 23-9	Aug 1951	9 10N 27W	SB	5,085	Vaqueros	early Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Dibblee	3,600	70	early Miocene	Vaqueros	39	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
2,510	35,564	12,735	90	1	631,144	2,879,479	125,473	1954	14	12	150

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,100

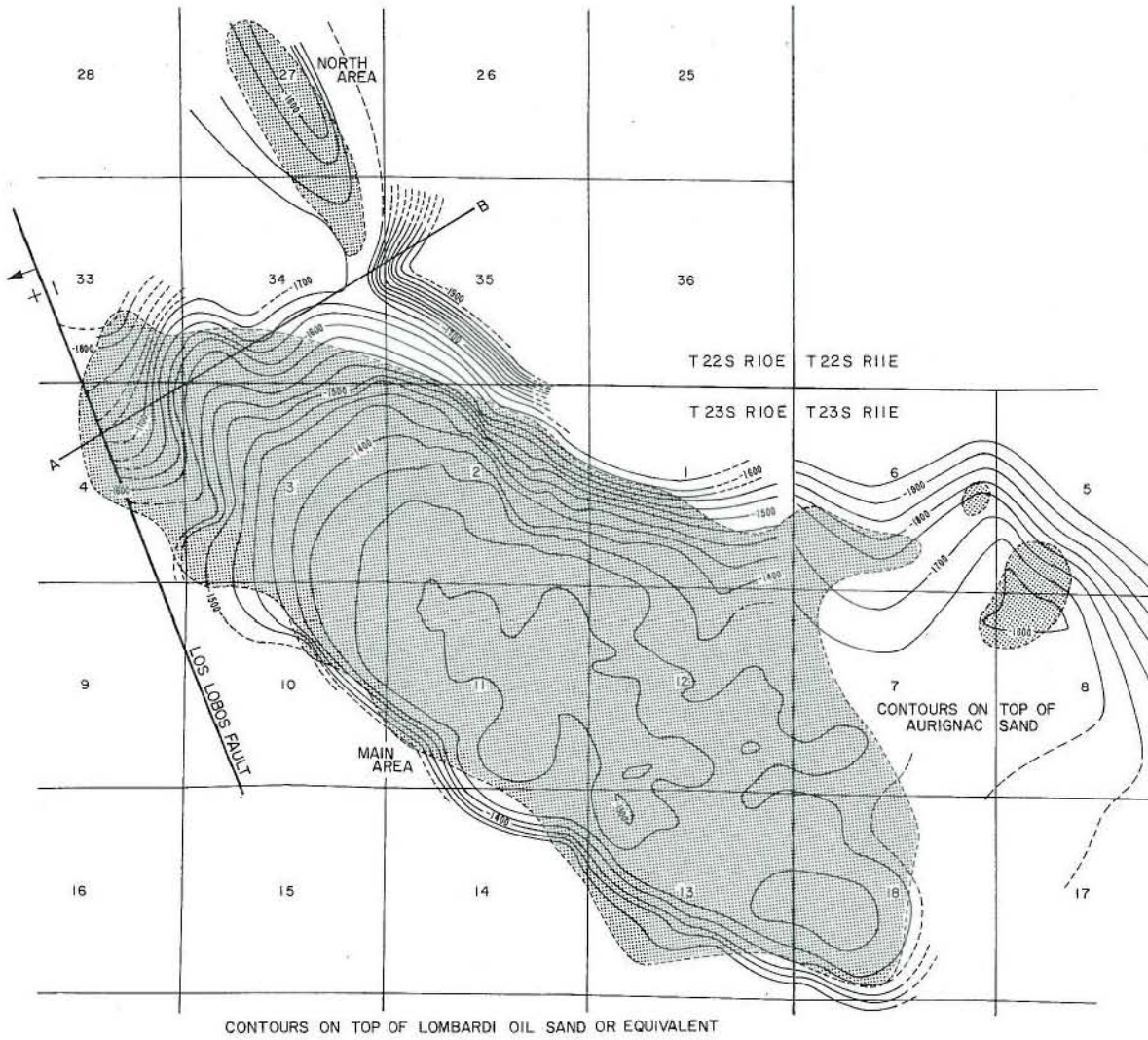
CURRENT CASING PROGRAM: 13 3/8", 12 3/4" or 11 3/4" cem. 250; 8 5/8" or 7" cem. above zone and across base of fresh-water sands; 6 5/8" or 5" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is injected into disposal wells.

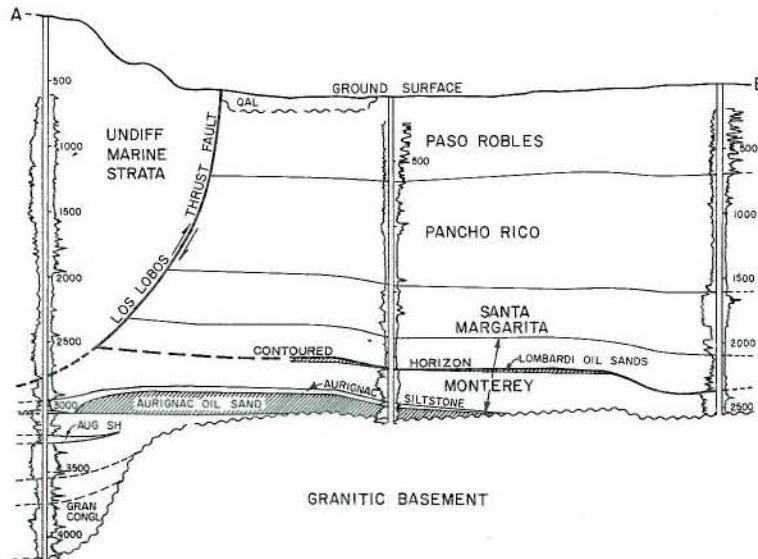
REMARKS:

REFERENCES: Bailey, Wm. C., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 38, No. 2 (1952).

SAN ARDO OIL FIELD



SYSTEM	SERIES	FORMATION	TYPICAL ELECTRIC LOG
TERTIARY	PLIOCENE	PASO ROBLES	
		PANCHO RICO	
	MIOCENE	SANTA MARGARITA	
		MONTEREY	
CRET OR OLDER		GRANITIC BASEMENT	



CALIFORNIA DIVISION OF OIL AND GAS

SAN ARDO OIL FIELD
Monterey County

LOCATION: 6 miles southeast of San Ardo

TYPE OF TRAP: See areas

ELEVATION: 500 - 800

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Lombardi Aurignac	Texaco Inc. "N.L.U." 1	The Texas Co. "Lombardi" 1	27 22S 10E	MD	155	0	Nov 1947
	Texaco Inc. "Aurignac (NCT-1)" 4	The Texas Co. "Aurignac (NCT-1)" 4	4 23S 10E	MD	152	0	Dec 1948

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Exxon Corp. "Aurignac" 1	Jergins Oil Co. "Aurignac" 1	Mar 1951	9 23S 10E	MD	4,341	Monterey	Miocene

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
12,570,997	492,726	69,650,782	4,400	885	261,330,121	70,974,807	18,184,267	1967	1,446	1,358	4,490

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: Applies

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: See areas

REFERENCES: See areas

Barger, R.M., and J. L. Zurberti, San Ardo Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 35, No. 2 (1949).
 Bradford, W.C., and E. D. Lawrence, San Ardo Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 42, No. 2 (1956).
 Colvin, R.G., San Ardo Oil Field, Monterey County, Calif.: A.A.P.G. - S.E.P.M. Guidebook to the Geology of Salinas Valley and the San Andreas Fault (1963).
 Hart, E.W., Mines and Mineral Resources of Monterey County, Calif.: Div. of Mines and Geology, County Report No. 5, p. 77 (1963).

CALIFORNIA DIVISION OF OIL AND GAS

SAN ARDO OIL FIELD

MAIN AREA

Monterey County

LOCATION: See map sheet of San Ardo Oil Field

TYPE OF TRAP: Anticline

ELEVATION: 500 - 800

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Lombardi (gas)	Mobil Oil Corp. "Orradre" 1-12	Jergins Oil Co. "Orradre" 1	12 23S 10E	MD	0	4,075	Jul 1948
Lombardi (oil)	Mobil Oil Corp. "Orradre" 15-12	Jergins Oil Co. "Orradre" 5	12 23S 10E	MD	125	3	Jul 1948
Aurignac	Texaco Inc. "Aurignac (NCT-1)" 4	The Texas Co. "Aurignac (NCT-1)" 4	4 23S 10E	MD	152	0	Dec 1948

Remarks: Initial production of well No. "Orradre" 1-12 was through a 32/64" bean.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Exxon Corp. "Aurignac" 1	Jergins Oil Co. "Aurignac" 1	Mar 1951	9 23S 10E	MD	4,341	Monterey	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Lombardi	2,000	150	late Miocene	Monterey	11	350	II
Aurignac	2,400	120	late Miocene	Monterey	13	100	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
12,568,373	492,726	69,226,559	4,320	884	261,027,243	70,974,807	18,112,807	1967	1,424	1,346	4,370

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Cyclic steam	1964	66,259,940	1,234
Fire flood	1959	N.A.	14
Steam flood	1965	76,695,536	97

SPACING ACT: Applies

BASE OF FRESH WATER: 1,100

CURRENT CASING PROGRAM: 11 3/4" cem. 200; 8 5/8" or 7" cem. above zone and across base of fresh-water sands; 6 5/8" or 5" liner landed through zone.

METHOD OF WASTE DISPOSAL: Injection into Santa Margarita, D, E, Lombardi and Aurignac sands.

REMARKS: The zone underlying the Lombardi in the eastern portion of the area was originally named Orradre. Subsequent development work showed Aurignac and Orradre to be one and the same zone. The Main area was originally divided into Aurignac area to the west, Campbell area and Superior area to the east. Santa Margarita sand pressure exceeds normal hydrostatic pressure.

REFERENCES: Dolman, S.G., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 34, No. 2 (1948). See data sheet for field.

CALIFORNIA DIVISION OF OIL AND GAS

SAN ARDO OIL FIELD

NORTH AREA

Monterey County

LOCATION: See map sheet of San Ardo Oil Field

TYPE OF TRAP: Permeability barrier on homocline

ELEVATION: 500

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Lombardi	Texaco Inc. "N.L.U." 1	The Texas Co. "Lombardi" 1	27 22S 10E	MD	155	0	Nov 1947

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
North American Oil Consolidated No. 1	Same	Jul 1947	34 22S 10E	MD	2,500	Basement (granite)	pre-Cret

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Lombardi	2,100	40	late Miocene	Monterey	10	350	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
2,624	0	424,223	80	1	302,878	0	71,460	1967	22	12	120

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Cyclic steam	1964	15,590	5

SPACING ACT: Applies

BASE OF FRESH WATER: 950

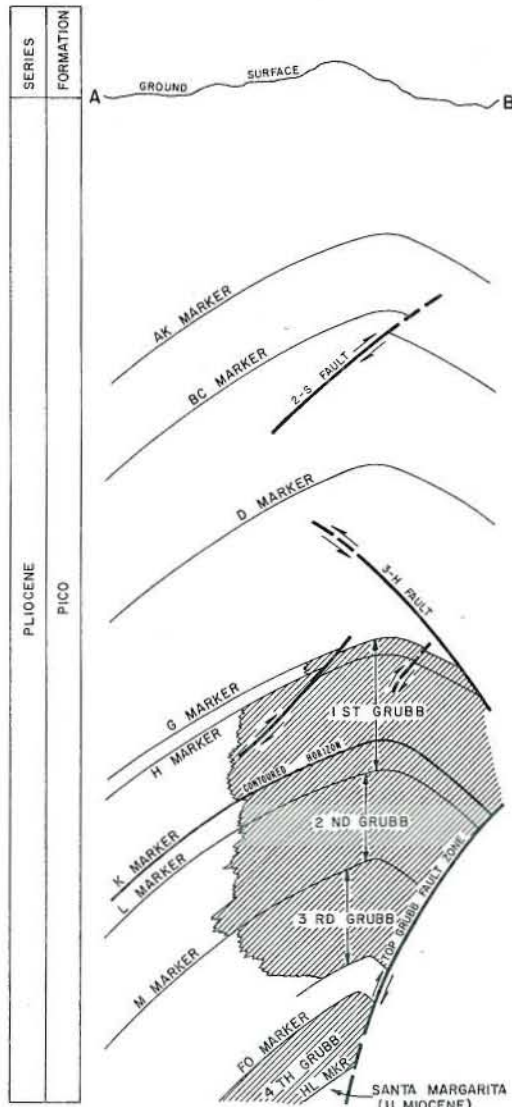
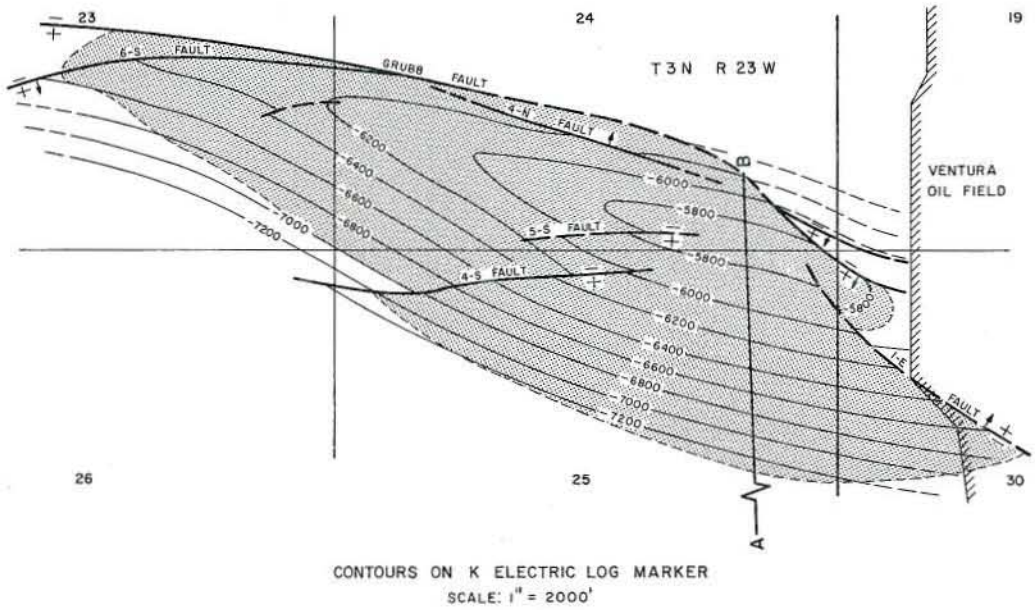
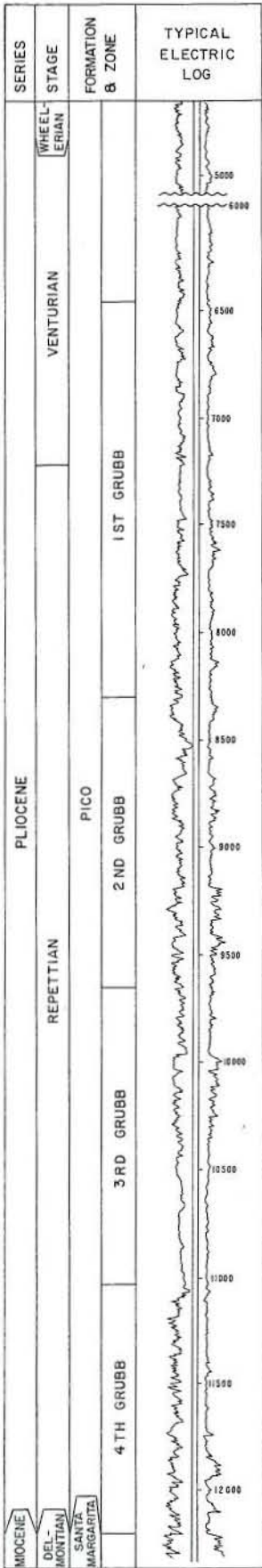
CURRENT CASING PROGRAM: 11 3/4" or 10 3/4" cem. 200; 8 5/8" or 7" cem. above zone and across base of fresh-water sands; 6 5/8" or 5" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is injected into disposal wells.

REMARKS: The North area was originally referred to as Lombardi or North Lombardi area. Santa Margarita sand pressure exceeds normal hydrostatic pressure. A fire-flood project was initiated in 1963 and was discontinued in 1967 after having injected an undetermined amount of air into one well.

REFERENCES: Dolman, S.G., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 33, No. 2 (1947). See data sheet for field.

SAN MIGUELITO OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

SAN MIGUELITO OIL FIELD

Ventura County

LOCATION: 4 miles northwest of Ventura

TYPE OF TRAP: Faulted anticline

ELEVATION: 270 - 1,130

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
1st Grubb	Continental Oil Co. "Grubb" 1	Same as present	23 3N 24W	SB	616	506	Nov 1931
2nd Grubb	Continental Oil Co. "Grubb" 31-2	Same as present	24 3N 24W	SB	1,538	1,600	Apr 1944
3rd Grubb	Continental Oil Co. "Grubb" 301	Continental Oil Co. "Grubb" 65-3	25 3N 24W	SB	1,311	1,157	Oct 1949
4th Grubb	Continental Oil Co. "Grubb" 350	Same as present	25 3N 24W	SB	610	303	Feb 1970

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Continental Oil Co. "Grubb" 355	Same	May 1973	30 3N 24W	SB	14,216	Santa Margarita	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
1st Grubb	5,600	1,220	Pliocene	Pico	31	1,400 - 1,600	II
2nd Grubb	7,300	1,000	Pliocene	Pico	31	1,400 - 1,600	III
3rd Grubb	8,600	1,100	Pliocene	Pico	31	1,400 - 1,600	III
4th Grubb	12,300	800	Pliocene	Pico	31	1,400 - 1,600	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,049,077	1,313,515	2,676,495	500	60	68,119,825	183,927,682	4,464,109	1951	198	193	500

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1955	52,839,651	40

SPACING AC: Applies

BASE OF FRESH WATER: None

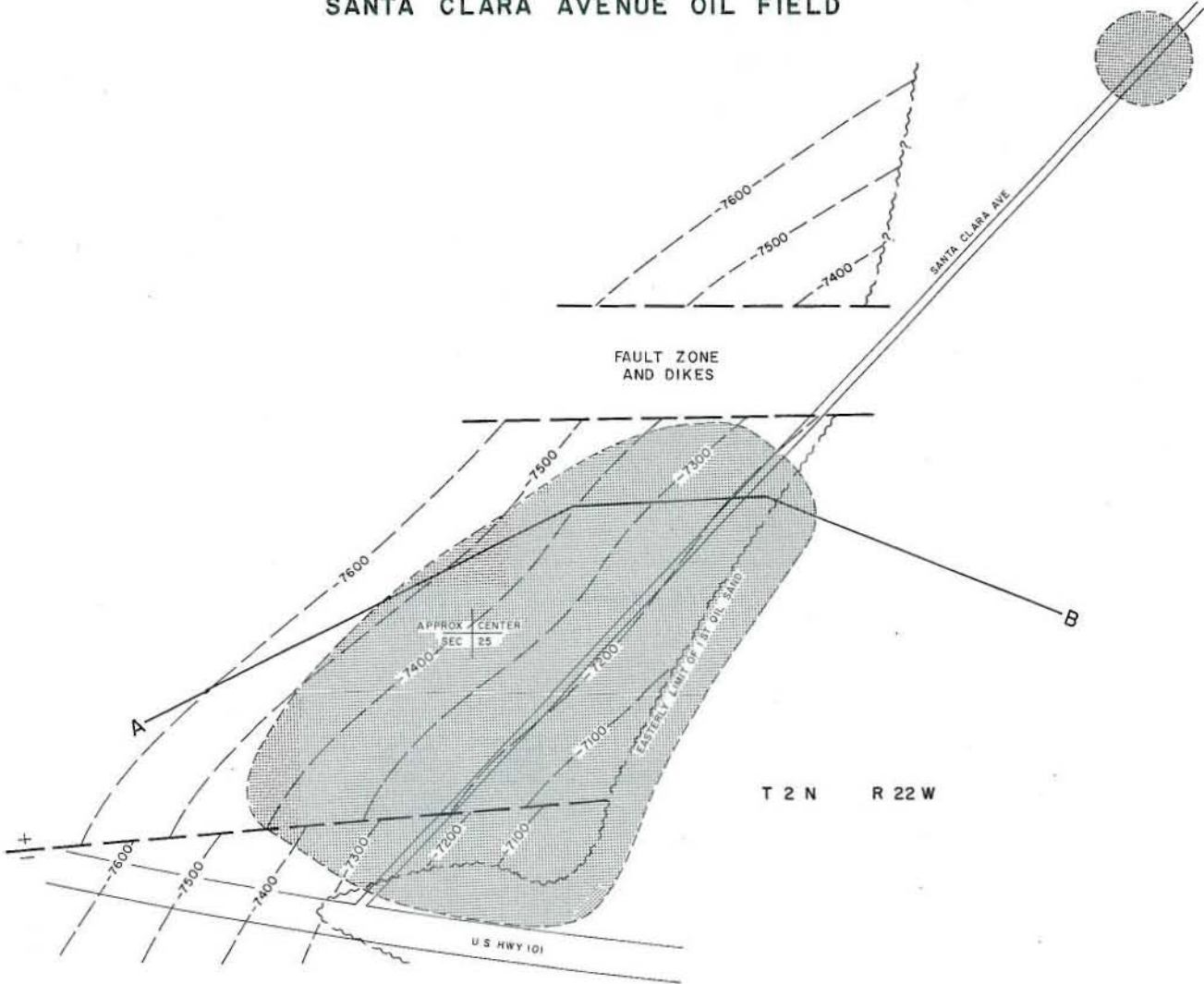
CURRENT CASING PROGRAM 11 3/4" cem. 800 - 1,500; 7" cem. over zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is used in water-flood projects.

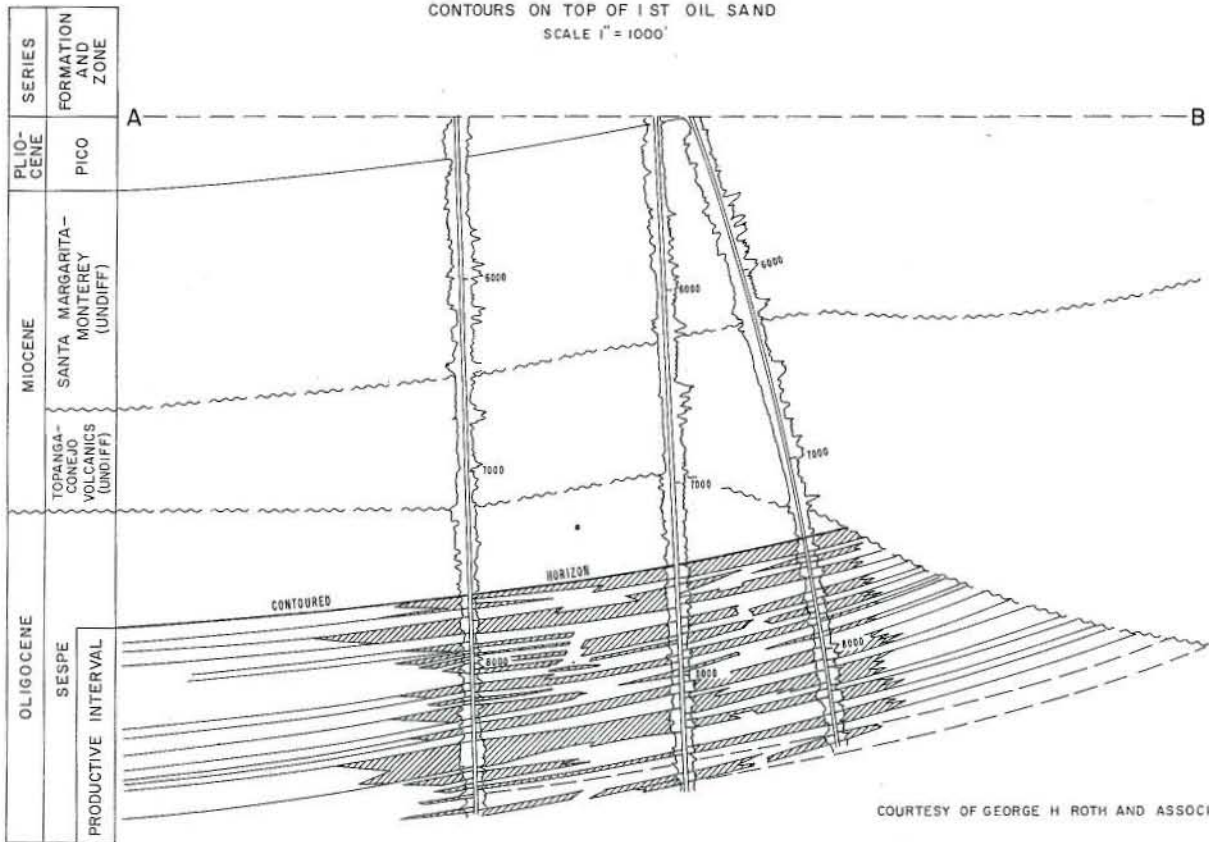
REMARKS:

REFERENCES: Glenn, W.E., A Study of Reservoir Performance of the First Grubb Pool, San Miguelito Field, Ventura County, California: Am. Inst. Min. Met. Eng., Petroleum Trans., Vol. 189, p. 243-260 (1950).
 Kaplow, E.J., San Miguelito Oil Field, Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 39, No. 2 (1953).
 McClellan, H.W., and R.R. Haines, San Miguelito Oil Field, Ventura County, California: Am. Assoc. Petroleum Geologists Bull., Vol. 35, p. 2542-2560 (1951).
 Natland, M.L., Pleistocene and Pliocene Stratigraphy of Southern California: Paper read before the Am. Assoc. Petroleum Geologists, Los Angeles, California, March 24-27, 1952. See also chart in Pacific Petroleum Geologist, Vol. 7, No. 2, p. 2 (1953).

SANTA CLARA AVENUE OIL FIELD



CONTOURS ON TOP OF 1ST OIL SAND
SCALE 1" = 1000'



CALIFORNIA DIVISION OF OIL AND GAS

SANTA CLARA AVENUE OIL FIELD

Ventura County

LOCATION: 9 miles southeast of Ventura

TYPE OF TRAP: Sands buttressed against an unconformity, with permeability variations

ELEVATION: 65

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sespe	Hunnicut & Camp Drilling Co. "Friedrich Unit 1" 1	McCulloch Oil Corp. "Friedrich Unit 1" 1	25 2N 22W	SB	427	150	Jan 1972

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Hunnicut & Camp Drilling Co. "Friedrich Unit 3" 2	Same	Aug 1973	25 2N 22W	SB	11,065	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Sespe	7,400 - 8,600	150	Oligocene	Sespe	26 - 30	1,800	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
318,111	135,031	36,666	60	5	505,528	211,442	318,111	1973	9	7	60

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,750

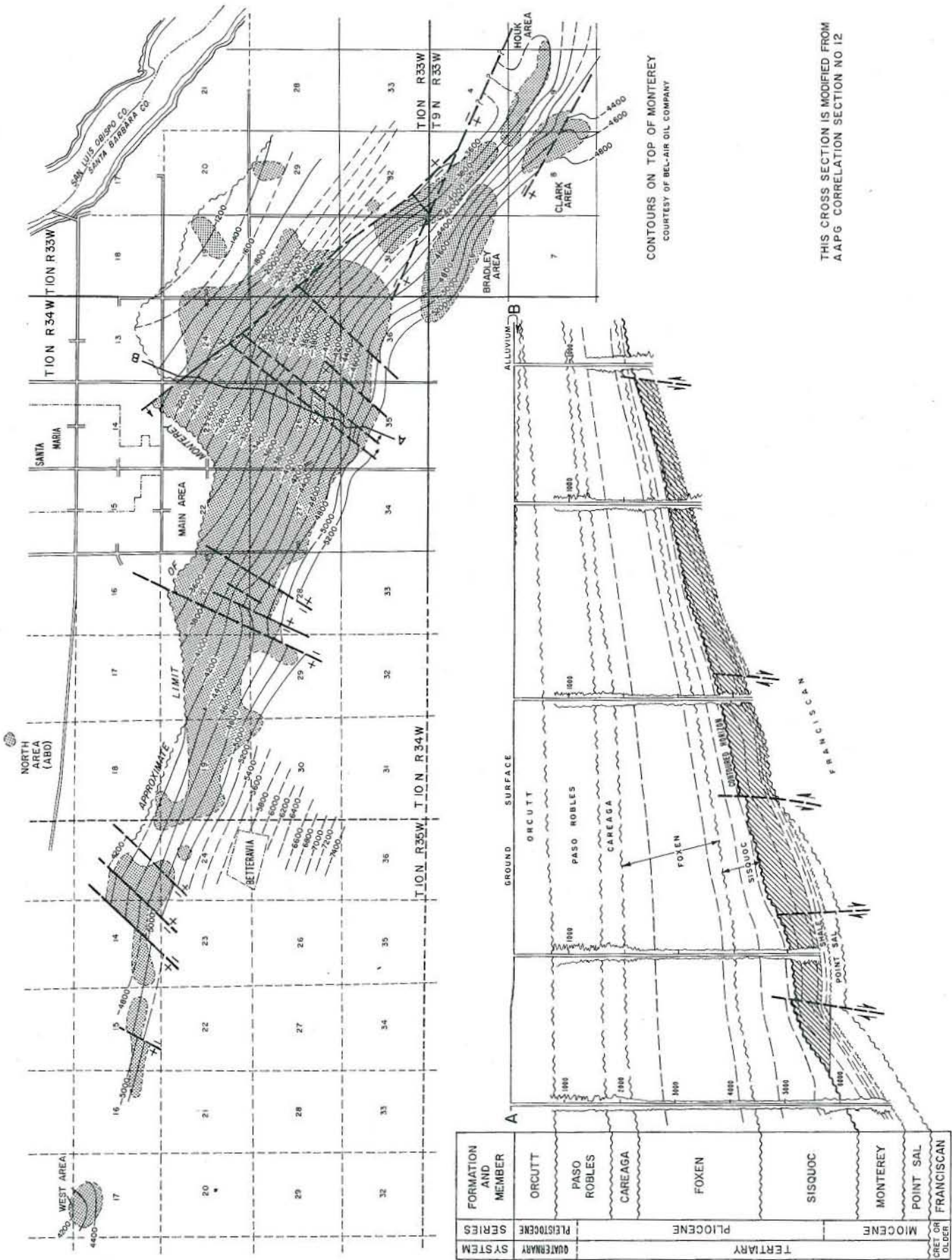
CURRENT CASING PROGRAM: 10 3/4" cem 1,200; 5 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water is trucked to and discharged into the Santa Clara waste-water disposal system near the town of Saticoy.

REMARKS:

REFERENCES:

SANTA MARIA VALLEY OIL FIELD



FORMATION AND MEMBER	SERIES	SYSTEM
ORCUTT	PLEISTOCENE	QUATERNARY
PASO ROBLES		
CAREAGA		
FOXEN	PLIOCENE	TERTIARY
SISQUOC		
MONTEREY	MIOCENE	
POINT SAL		
FRANCISCAN		

CONTOURS ON TOP OF MONTEREY
COURTESY OF BEL-AIR OIL COMPANY

THIS CROSS SECTION IS MODIFIED FROM
AAPG CORRELATION SECTION NO 12

CALIFORNIA DIVISION OF OIL AND GAS

SANTA MARIA VALLEY OIL FIELD

Santa Barbara County

LOCATION: 2 miles south of the central district of Santa Maria

TYPE OF TRAP: See areas

ELEVATION: See areas

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Foxen-Sisquoc	Union Oil Co. of Calif. "Moretti" 1-1	Same as present	24 10N 34W	SB	42	N.A.	Jul 1934

Remarks: Gilliland Oil & Land Co. "Lake View" 1, originally O. C. Field Gasoline Corp., "Norswing" 1, Sec. 8, T. 9 N., R. 33W., produced only 1,520 bbl. of oil in April 1932 from a 100-foot sand at S,035, probably Basal Sisquoc. The well remained idle for several years thereafter. Subsequent attempts to produce it were unsuccessful and it was abandoned.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Gilliland Oil & Land Co. "Bradley" 5-2	Western Gulf Oil Co. "Bradley B" 1	Aug 1930	5 9N 33W	SB	10,296	Point Sal	early Mio

PRODUCING ZONES See areas

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
3,470,353	4,268,208	8,988,065	5,510	185	155,746,278	211,608,326	13,464,517	1945	735	668	7,630

STIMULATION DATA (Jan. 1, 1974) See areas

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: See areas

REFERENCES: See areas

CALIFORNIA DIVISION OF OIL AND GAS

SANTA MARIA VALLEY OIL FIELD

BRADLEY AREA

Santa Barbara County

LOCATION: See map sheet of Santa Maria Valley Oil Field

TYPE OF TRAP: Fault trap on the north flank of the Santa Maria syncline

ELEVATION: 500

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbi)	Gas (Mcf)	
Basal Sisquoc	Shell Oil Co. "Shell-Standard-Bradley Lands Co." 3-3	Same as present	6 9N 33W	SB	530	N.A.	Sep 1972
Monterey	Shell Oil Co. "Shell-Standard-Bradley Lands Co." 3-1	Same as present	6 9N 33W	SB	237	N.A.	May 1972

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Shell Oil Co. "Shell-Standard-Blanckenburg" 1	Same	Sep 1973	1 9N 34W	SB	8,693	Lospe	Mio or older

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Basal Sisquoc	5,560	170	early Pliocene	Sisquoc	14 - 17	N.A.	III
Monterey	5,610	295	Miocene	Monterey	14	N.A.	III

Remarks: In this area, the Basal Sisquoc is sometimes referred to as the Santa Margarita.

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbi)	Net gas (Mcf)	Water (bbi)			Oil (bbi)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,860,835	1,409,472	618,445	500	21	1,962,948	1,455,938	1,860,835	1973	28	24	500

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 2,100

CURRENT CASING PROGRAM: 10 3/4" cem. 450; 7" cemented through zone and at base of fresh water; or 9 5/8" cem. 850; 7" combination string cemented above zone and at base of fresh water.

METHOD OF WASTE DISPOSAL: Waste water is used in water-flood project in the Main area.

REMARKS: Most completed wells have been directionally drilled from selected drillsites.

REFERENCES: Zulberti, J.L., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 59, No. 2 (1973).

CALIFORNIA DIVISION OF OIL AND GAS

SANTA MARIA VALLEY OIL FIELD

CLARK AREA

Santa Barbara County

LOCATION: See map sheet of Santa Maria Valley Oil Field

TYPE OF TRAP: Faulted homocline with stratigraphic variations

ELEVATION: 725

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sisquoc Monterey chert	Gilliland Oil & Land Co. "Edmonston" 118	Standard Oil Co. of Calif. "Edmonston" 118	9 9N 33W	SB	70	0	Sep 1970
	Gilliland Oil & Land Co. "Lake View" 76-A	Standard Oil Co. of Calif. "Lakeview Unit" 1	8 9N 33W	SB	205	0	Jul 1968

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Gilliland" 38-8	Same	Jun 1957	8 9N 33W	SB	10,055	Knoxville	Jurassic

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Sisquoc Monterey chert	5,035	575	early Pliocene	Sisquoc	8	N.A.	II
	6,725	850	Miocene	Monterey	9	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
360,928	0	659,729	160	12	2,378,921	0	686,495	1971	16	12	160

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,850

CURRENT CASING PROGRAM: 10 3/4" cem. 500; 7" landed through zone and cemented above zone and across base of fresh water.

METHOD OF WASTE DISPOSAL: Waste water is used in a water-flood project in the Houk area.

REMARKS: The Clark area was formerly included in Cat Canyon field.

REFERENCES: Barton, C.L., Operations in District No. 3, Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 54, No. 2--Part 1 (1968).

CALIFORNIA DIVISION OF OIL AND GAS

SANTA MARIA VALLEY OIL FIELD

HOUK AREA

Santa Barbara County

LOCATION: See map sheet of Santa Maria Valley Oil Field

TYPE OF TRAP: Faulted nose with stratigraphic variations

ELEVATION: 630

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Basal Sisquoc Monterey Chert	Gilliland Oil & Land Co. "Nicholson" 64-9	Standard Oil Co. of Calif. "Nicholson" 64-9	9 9N 33W	SB	10	0	Apr 1963
	Gilliland Oil & Land Co. "Gilliland Fee" 43-9	General Petroleum Corp. "Houk" 43-9	9 9N 33W	SB	227	0	Feb 1952

Remarks: The Basal Sisquoc zone was uneconomical to produce.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
A.F. & C.A. Fugler, Inc. "Fugler" 4-10	Standard Oil Co. of Calif. "Fugler" 4-10	May 1953	10 9N 33W	SB	7,934	Monterey	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Basal Sisquoc Monterey Chert	4,480	105	early Pliocene	Sisquoc	9	N.A.	II
	6,385	1,010	Miocene	Monterey	11	1,080	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
118,386	0	474,910	80	7	3,337,272	535,001	283,858	1971	15	12	120

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1972	9,475	1

SPACING ACT: Applies

BASE OF FRESH WATER: 1,800

CURRENT CASING PROGRAM: 13 3/8" cem. 700; 8 5/8" landed through zone and cemented above zone and across base of fresh water.

METHOD OF WASTE DISPOSAL: Waste water is used in the water-flood project.

REMARKS: The Houk area was originally part of the Santa Maria Valley field, later changed to Cat Canyon field. A pilot cyclic-steam project was attempted in 1965 when 4,770 bbls. of water equivalent was injected into one well.

REFERENCES: Bailey, W.C., Operations in District No. 3, Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 38, No. 2 (1952).

CALIFORNIA DIVISION OF OIL AND GAS

SANTA MARIA VALLEY OIL FIELD

MAIN AREA

Santa Barbara County

LOCATION: See map sheet of Santa Maria Valley Oil Field

TYPE OF TRAP: Faulted homocline on the north flank of the Santa Maria syncline

ELEVATION: 100 - 350

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & W	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Foxen-Sisquoc	Union Oil Co. of Calif. "Moretti" 1-1	Same as present	24 10N 34W	SB	42	N.A.	Jul 1934
Santa Margarita	Union Oil Co. of Calif., Opr. "SMVU Signal-Bradley" 3	Hancock and Bush "Bradley" 3	26 10N 34W	SB	720	N.A.	Oct 1938
Arenaceous	Same as above	Same as above	26 10N 34W	SB	*	N.A.	Oct 1938
Cherty	Union Oil Co. of Calif., Opr. "SMVU California Lands" 1	R. R. Bush Oil Co. "Hancock-Bush California Lands" 1	30 10N 34W	SB	500	N.A.	Jan 1937
Bentonitic Brown	Union Oil Co. of Calif., Opr. "SMVU Adam" 1	Union Oil Co. of Calif. "Adam" 1	24 10N 34W	SB	2,376	806	Mar 1936
Buff and Brown	Same as above	Same as above	24 10N 34W	SB	**	**	Mar 1936
Dark Brown	Same as above	Same as above	24 10N 34W	SB	**	**	Mar 1936
Oil Sand	Same as above	Same as above	24 10N 34W	SB	**	**	Mar 1936
Siltstone & Shell	Union Oil Co. of Calif. "Cook" 1	Same as present	30 10N 33W	SB	20	N.A.	Sep 1937

Remarks: * Initial production from Santa Margarita and Arenaceous zones was commingled.
 ** Initial production from Bentonitic Brown, Buff and Brown, Dark Brown and Oil Sand zones was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	S & M	Depth (feet)	At total depth	
						Strata	Age
Gilliland Oil & Land Co. "Bradley" 5-2	Western Gulf Oil Co. "Bradley B" 1	Aug 1930	5 9N 33W	SB	10,296	Point Sal	early Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Foxen-Sisquoc	2,000	200	Pliocene	Foxen-Sisquoc	17	N.A.	II
Santa Margarita	3,330	75	Miocene	Monterey	12 - 17	1,000	II
Arenaceous	3,360	180	Miocene	Monterey	12 - 17	1,250	II
Cherty	3,540	250	Miocene	Monterey	12 - 17	1,250	II
Bentonitic Brown	3,800	200	Miocene	Monterey	12 - 17	1,250	II
Buff and Brown	4,000	190	Miocene	Monterey	12 - 17	1,250	II
Dark Brown	4,190	140	Miocene	Monterey	12 - 17	1,250	II
Oil Sand	4,330	180	Miocene	Point Sal	16	1,250	II
Siltstone & Shell	4,520	1,850	Miocene	Point Sal	15	N.A.	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,103,593	2,852,514	7,197,843	4,660	140	147,663,050	209,421,978	13,464,517	1945	666	611	6,720

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1956	43,652,049	44

SPACING ACT: Applies

BASE OF FRESH WATER: 2,000

CURRENT CASING PROGRAM: 13 3/8" cem. 700; 8 5/8" or 7" cem. above zone and across base of fresh water; 6 5/8" or 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is used in water-flood wells.

REMARKS: A fire-flood project was started in 1964 and discontinued in 1966 after having injected an undetermined amount of air into one well. A cyclic-steam project was begun in 1965 and was terminated in 1969 after having injected 269,881 bbls. of water equivalent into a total of 14 wells. A steam-flood project was started in 1966 and was terminated in 1970 after having injected 218,851 bbls. of equivalent water into three wells.

REFERENCES: Canfield, C.R., Santa Maria Valley Oil Field: Calif. State Div. of Mines, Bull. 118, p. 440 (1939).

Canfield, C.R., Subsurface Stratigraphy of Santa Maria Valley Oil Field and Adjacent Parts of Santa Maria Valley, California: Am. Assoc. Petroleum Geologists Bull. Vol. 23, No. 1 (1939).

Correlation Section Across Santa Maria Basin: Am. Assoc. Petroleum Geologists (1959).

Frame, R., Santa Maria Valley Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 24, No. 2 (1938).

Porter, W.W., II, Santa Maria Valley--Another Great Field: Petroleum World, July 1937.

Regan, L.J., Jr., and A.W. Hughes, Fractured Reservoirs of Santa Maria District, California: Am. Assoc. Petroleum Geologists Bull. Vol. 33, No. 1, p. 32 (1949).

CALIFORNIA DIVISION OF OIL AND GAS

SANTA MARIA VALLEY OIL FIELD

NORTH AREA (Abandoned)

Santa Barbara County

LOCATION: See map sheet of Santa Maria Valley Oil Field

TYPE OF TRAP: Unknown

ELEVATION: 150

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Foxen	Signal Oil and Gas Co. "Souza" 1	Same as present	7 10N 34W	SB	92	0	Jun 1965

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Signal Oil and Gas Co. "Souza" 1	Same	May 1965	7 10N 34W	SB	2,594	Foxen	Pliocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Foxen	2,250	340	Pliocene	Foxen	13	N.A.	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	904	0	904	1965	1	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,450

CURRENT CASING PROGRAM: 13 3/8" cem. 200; 8 5/8" cem. 2,350 and across base of fresh-water sands; 7" liner landed through zone and gravel packed.

METHOD OF WASTE DISPOSAL:

REMARKS: Last production was in December 1965; area abandoned in July 1966. A pilot cyclic-steam project was attempted in 1965 when 26,834 bbls. of water equivalent was injected into one well.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

SANTA MARIA VALLEY OIL FIELD

WEST AREA

Santa Barbara County

LOCATION: See map sheet of Santa Maria Valley Oil Field

TYPE OF TRAP: Stratigraphic trap

ELEVATION: 120

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Foxen thru Knoxville	Mobil Oil Corp. "Mahoney" 1	General Petroleum Corp. "Mahoney" 1	9 10N 35W	SB	39	N.A.	Oct 1953

Remarks: Well No. "Mahoney" 1 produced only 1,177 bbls. of oil over a period of three months and was then abandoned.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
B. E. Conway "Union Sugar" 2-17	Signal Oil and Gas Co. "Union Sugar" 2	Jan 1965	17 10N 35W	SB	5,050	Knoxville	Jur-Cret

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Foxen	3,490	160	Pliocene	Foxen	14	N.A.	None
Sisquoc	3,610	280	early Pliocene	Sisquoc	19	1,435	II
Monterey	4,410	200	Miocene	Monterey	14	1,435	II
Knoxville	4,660	10 - 300	Jur-Cret	Knoxville	14	1,435	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
26,611	6,222	37,138	110	5	403,183	195,409	68,475	1965	9	8	120

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1966	99,093	1

SPACING ACT: Applies

BASE OF FRESH WATER: 1,750

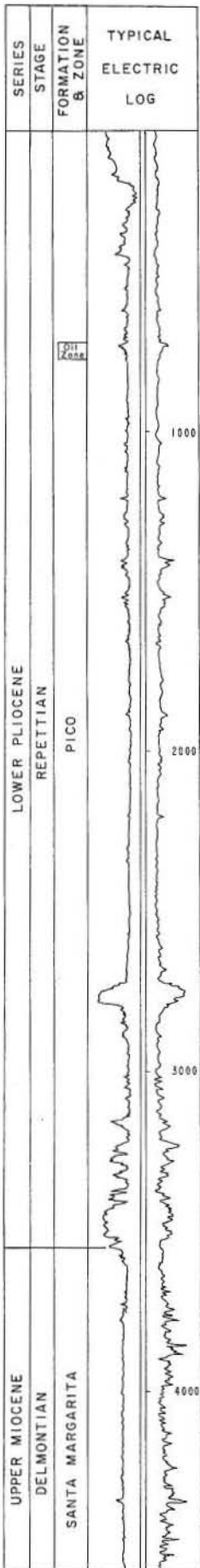
CURRENT CASING PROGRAM: 9 5/8" cem. 1,750; 6 5/8" landed through zone and cemented above zone.

METHOD OF WASTE DISPOSAL: Waste water is used in the water-flood project.

REMARKS: A pilot cyclic-steam project was started in 1965 and discontinued in 1966 after having injected 28,409 bbls. of water equivalent into one well.

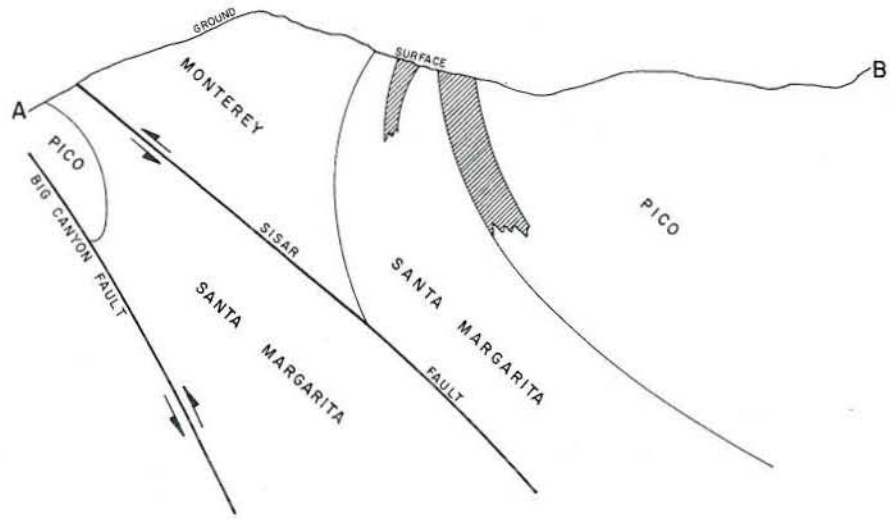
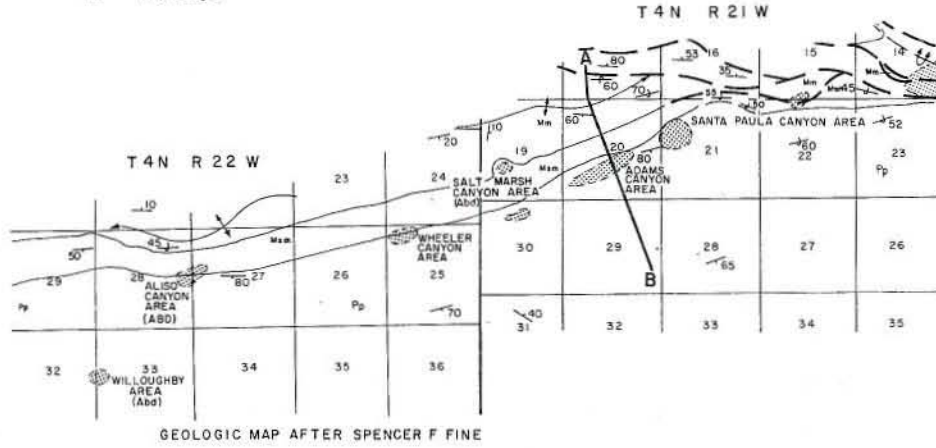
REFERENCES: Bailey, W.C., Operations in District No. 3, Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 40, No. 2 (1954).

SANTA PAULA OIL FIELD



SYMBOL FORMATION

Tp	Pico	}	Miocene
Tsm	Santa Margarita		
Tm	Monterey		



CALIFORNIA DIVISION OF OIL AND GAS

SANTA PAULA OIL FIELD

Ventura County

LOCATION: 12 miles northeast of Ventura

TYPE OF TRAP: Homocline with tar seal

ELEVATION: 1,175 - 1,325

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
(Unnamed)	Union Oil Co. of Calif.	Wheeler, Trask and Coleman Tunnel	25 4N 22W	SB	60	0	1861

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Ex-Mission" X-7	Same	Jun 1952	33 4N 22W	SB	9,327	Monterey	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
(Unnamed)	150 - 2,000	Thin sand stringers and fractured shale.	Pliocene & late Miocene	Pico & Santa Margarita	20 - 30 23 - 26	200 550	II III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
7,664	2,190	517	160	15	2,133,657	597,832	162,179	1888	183	115	355

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 0 - 1,000

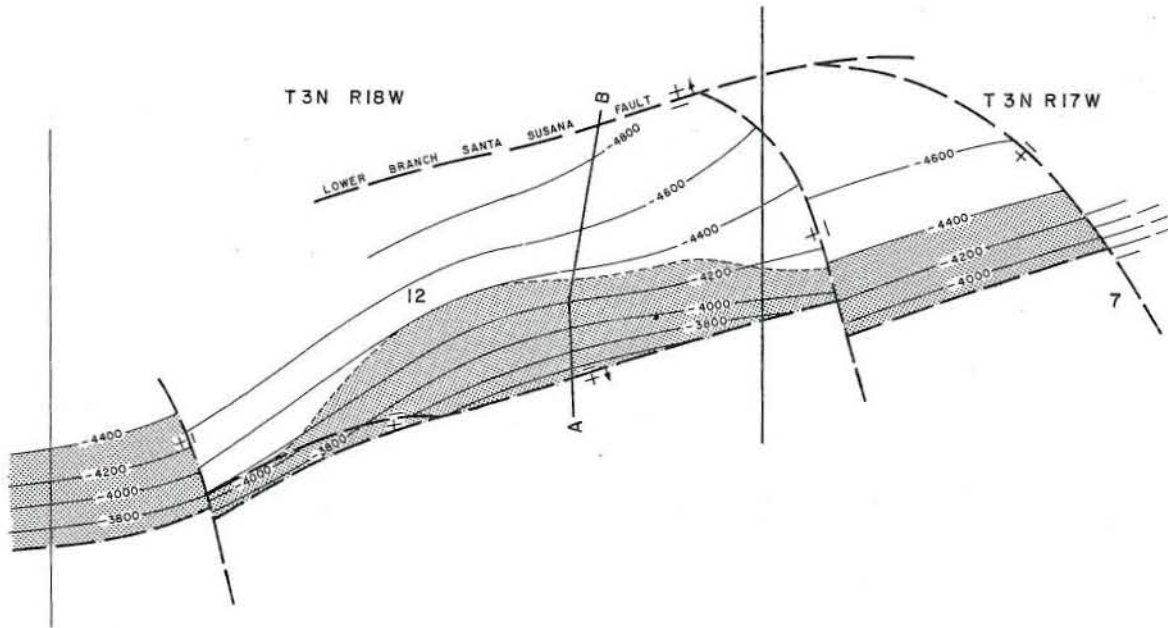
CURRENT CASING PROGRAM: 10 3/4" cem. 900; 7" cem through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps (to be phased out).

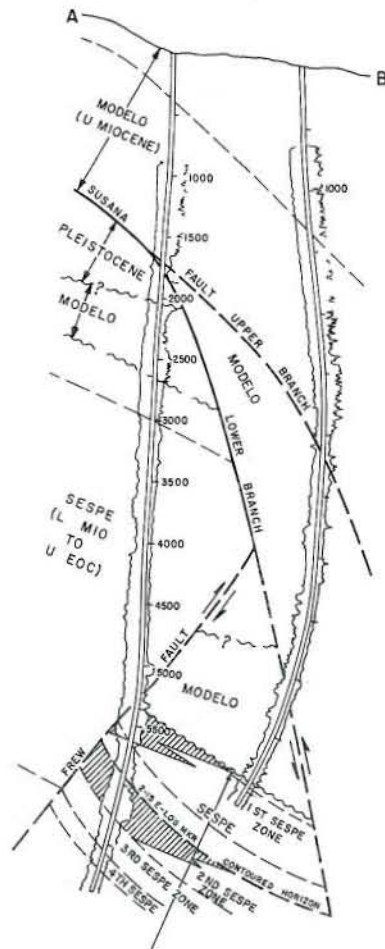
REMARKS: About 45 tunnels were dug in this field, a few of which are still capable of production. Most wells were drilled with cable tools.

REFERENCES: Fine, S.F., Geology and Occurrence of Oil in the Ojai-Santa Paula Area, Ventura, Calif., in Geol. of Southern Calif.: Div. of Mines Bull. 170, Map Sheet 28 (1954).

SANTA SUSANA OIL FIELD



COUNTOURS ON 2-15 ELECTRIC
LOG MARKER
SCALE 1" = 1420'



CALIFORNIA DIVISION OF OIL AND GAS

SANTA SUSANA OIL FIELD

Ventura County

LOCATION: 32 miles northeast of Ventura

TYPE OF TRAP: Faulted homocline

ELEVATION: 2,500

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
First Sespe Second & Third Sespe	Union Oil Co. of Calif. "Broadoaks" 102	Same as present	7 3N 17W	SB	64	22	Dec 1963
	Union Oil Co. of Calif. "Broadoaks" 101	Union Oil Co. of Calif. "Simi" 30	12 3N 18W	SB	336	173	Nov 1963

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Broadoaks" 119	Same	Apr 1971	7 3N 17W	SB	11,414	Undiff. marine strata	Paleocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
First Sespe Second & Third Sespe	5,500	150	Oligocene	Sespe	44	N.A.	III
	6,500	500	Oligocene	Sespe	38	1,100	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
243,545	658,035	291,136	250	14	6,003,895	3,670,474	1,060,656	1966	18	16	250

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Gas injection for pressure maintenance in Second & Third zones	1965	11,845,716	1

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 10 3/4" cem. 700; 7" or 5 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL: All waste water is injected into one water-disposal well.

REMARKS:

REFERENCES: Mitchell, W.S. and Michael Wolf, Santa Susana Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 57, No. 1 (1971).

CALIFORNIA DIVISION OF OIL AND GAS

SATICOY OIL FIELD

Ventura County

LOCATION: 9 miles east of Ventura

TYPE OF TRAP: Faulted homocline and sand pinchout

ELEVATION: 200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Upper F	Shell Oil Co. "Edwards" 3	Same as present	31 3N 21W	SB	883	440	Aug 1956
Lower F	Same as above	Same as present	31 3N 21W	SB	*	*	Aug 1956
G	Shell Oil Co. "S.P.S." 3	Same as present	29 3N 21W	SB	516	150	Sep 1955
H	Same as above	Same as present	29 3N 21W	SB	**	**	Sep 1955
I	Shell Oil Co. "S.P.S." 4	Same as present	29 3N 21W	SB	325	190	Jan 1956
J	Shell Oil Co. "S.P.S." 2	Same as present	29 3N 21W	SB	236	130	May 1955
K	Shell Oil Co. "S.P.S." 5	Same as present	29 3N 21W	SB	90	920	May 1956

Remarks: * Production from the Upper and Lower F zones was commingled.
 ** Production from the G and H zones was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Shell Oil Co. "Edwards" 13	Same	Dec 1957	30 3N 21W	SB	12,275	Santa Margarita	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
F	6,350	450	Pleistocene - Pliocene	Santa Barbara - Pico	34	1,000	III
G	7,300	250	Pliocene	Pico	34	1,000	III
H	7,830	185	Pliocene	Pico	34	1,000	III
I	8,250	110	Pliocene	Pico	34	1,000	III
J	8,570	35	Pliocene	Pico	34	1,000	III
K	9,035	425	Pliocene	Pico	34	1,000	III

PRODUCTION DATA (Jan. 1, 1974)

Oil (bbl)	1973 Production		1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
241,317	289,025	338,936	550	37	19,349,055	39,555,116	2,809,318	1958	98	94	640

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 400 - 1,500

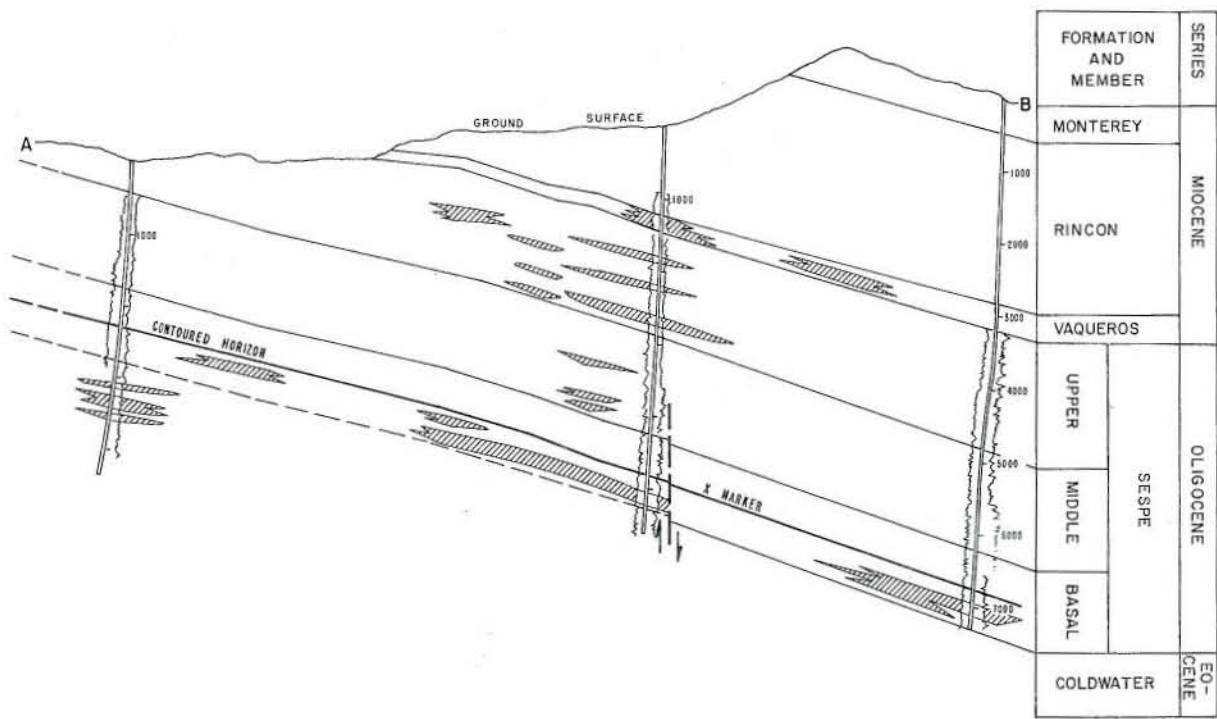
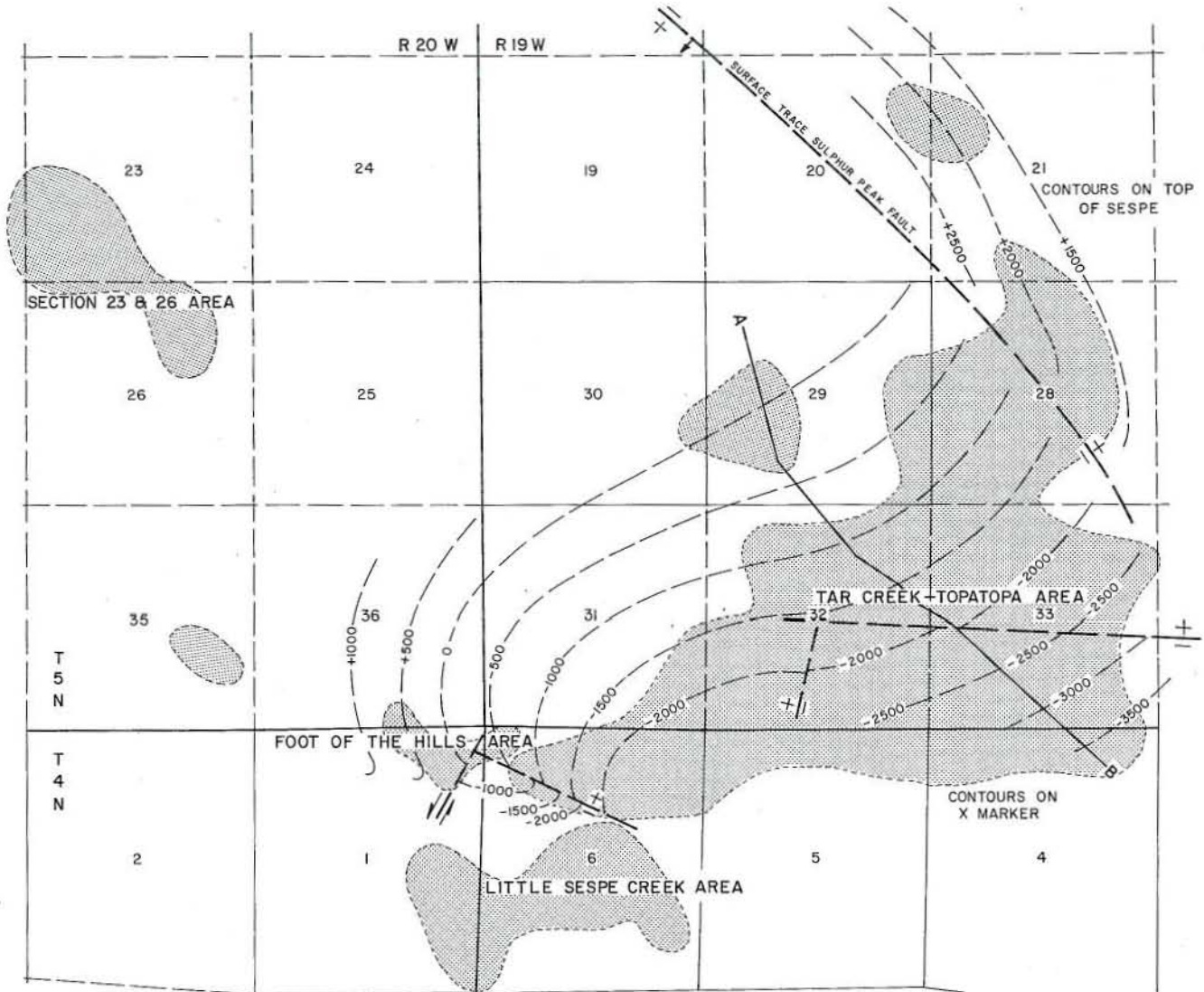
CURRENT CASING PROGRAM: 10 3/4" cem. 500; 5 1/2" combination string landed through zone and cemented through ports above zone and across base of fresh-water sands, or 5" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Most of the waste water is injected in a water-flood operation in nearby South Mountain field. The remainder is disposed of into the Oxnard City sewer system.

REMARKS: A total of 902,799 bbls. of water was injected into a pilot water-flood operation from 1963 to 1967.

REFERENCES: Schultz, C.H., Saticoy Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 1 (1960).

SESEPE OIL FIELD



FORMATION AND MEMBER	SERIES
MONTEREY	MIOCENE
RINCON	
VAQUEROS	
UPPER	OLIGOCENE
MIDDLE	
BASAL	
COLDWATER	EO-CENE

CALIFORNIA DIVISION OF OIL AND GAS

SESPE OIL FIELD

Ventura County

LOCATION: 26 miles northeast of Ventura

TYPE OF TRAP: See areas

ELEVATION: 900 - 2,700

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Rincon-Vaqueros	Westates Petroleum Co. "Cesapi" T.C. A	Union Oil Co. of Calif. "Tar Creek" 1	28 SN 19W	SB	185	N.A.	Jun 1887

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
H. A. Ivers "Ivers-Van Trees" 1	Western Gulf Oil Co. "Ivers-Van Trees" 1	Apr 1956	1 4N 20W	SB	13,126	Pico	Pliocene

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,131,276	1,632,293	231,875	1,835	172	17,715,372	15,066,503	2,577,676	1970	404	333	2,030

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: Does not apply

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: The nesting ground of the California condor is about one mile NE of the northeastern edge of the field.

REFERENCES: Bailey, Thomas L., Origin and Migration of Oil Into Sespe Redbeds, California: Am. Assoc. Petroleum Geologists Bull., Vol. 31, No. 11 (1947).
 Dosch, M.W., Sespe Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 53, No. 1 (1967).
 Eldridge, G.H., and R. Arnold, The Santa Clara Valley, Puente Hills and Los Angeles Oil Districts, Southern California: U.S. Geol. Survey Bull. 309, p. 51-63 (1907).
 Eschner, Stanford, Geology of the Central Part of the Fillmore Quadrangle, Ventura County, California: Unpublished M.A. Thesis on file University of California, Los Angeles Library.
 Johnson, Raymond Larry, The Geology of the Northeastern Quarter of Fillmore Quadrangle, M.A. Thesis on file University of California, Los Angeles Library.
 Kew, W.S.W., Geology and Oil Resources of a Part of Los Angeles and Ventura Counties: U.S. Geol. Survey Bull. 753, p. 121-133 (1924).
 Merrill, William R., Geology of the Sespe-Pine Mountain Area, Ventura County, California, Geology of Southern California: Calif. Div. of Mines Bull. 170, Map Sheet 3 (1954).
 Prutzman, R.W., Petroleum in Southern California: Calif. State Mining Bureau Bull. 63, p. 91-117 (1913).
 Watts, W.L., Oil and Gas Yielding Formations of Los Angeles, Ventura and Santa Barbara Counties: Calif. State Mining Bureau Bull. 11, p. 22-29 (1897).
 Watts, W.L., Oil and Gas Yielding Formations of California: Calif. State Mining Bureau Bull. 19, p. 83-95 (1900).

CALIFORNIA DIVISION OF OIL AND GAS

SESPE OIL FIELD

FOOT OF THE HILLS AREA

Ventura County

LOCATION: See map sheet of Sespe Oil Field

TYPE OF TRAP: Faulted anticlinal nose; stratigraphic variations; fractured shale

ELEVATION: 1,155

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & W	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Middle Sespe	Merchants Petroleum Co. No. 1	California Oil Co. "Razzle-Dazzle" 1	1 4N 20W	SB	N.A.	N.A.	1891
Basal Sespe	Merchants Petroleum Co. No. 4	Same as present	1 4N 20W	SB	320	N.A.	1935
Coldwater	Merchants Petroleum Co. "Nellie Bell" 10	Same as present	6 4N 19W	SB	20	30	Apr 1967

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Merchants Petroleum Co. "Nellie Bell" 10	Same	Feb 1967	6 4N 19W	SB	3,957	Coldwater	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Middle Sespe	600	45	Oligocene	Sespe	20	1,080	II
Basal Sespe	1,200	70	Oligocene	Sespe	22	1,080	II
Coldwater	3,390	315	Eocene	Coldwater	22	280	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
13,558	0	10,036	60	8	N.A.	0	N.A.	N.A.	28	15	70

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 0 - 100

CURRENT CASING PROGRAM: 9 5/8" cem. 400; 7" cem. through zone.

METHOD OF WASTE DISPOSAL: All waste water is injected into a water disposal well in the Foot of the Hills area.

REMARKS:

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

SESPE OIL FIELD

LITTLE SESPE CREEK AREA

Ventura County

LOCATION: See map sheet of Sespe Oil Field

TYPE OF TRAP: Faulted anticline; faulted syncline; stratigraphic variations

ELEVATION: 900

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Upper Sespe	H. A. Ivers "Kentuck" 1	Kentuck Oil Co. "Kentuck" 1	1 4N 20W	SB	15	N.A.	Oct 1889
Middle Sespe	Joseph W. Aidlin No. 10	Rusk and Johnson, Inc. No. 10	1 4N 20W	SB	15	N.A.	May 1936
Basal Sespe	Norris Oil Co. "Lynn" 5	Norris Oil Co. "Lynn" 5	6 4N 19W	SB	102	85	Feb 1970

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
H. A. Ivers "Ivers-Van Trees" 1	Western Gulf Oil Co. "Ivers-Van Trees" 1	Apr 1956	1 4N 20W	SB	13,126	Pico	Pliocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Upper Sespe	610	210	Oligocene	Sespe	28	100	II
Middle Sespe	2,360	370	Oligocene	Sespe	29	100	II
Basal Sespe	4,280	210	Oligocene	Sespe	31	750	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
40,220	8,594	1,288	140	17	N.A.	N.A.	123,721	1961	88	70	270

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 0 - 100

CURRENT CASING PROGRAM: 9 5/8" cem. 200 - 900; 7" cem. through zone.

METHOD OF WASTE DISPOSAL: All waste water is used in the Tar Creek-Topatopa area water-flood project.

REMARKS:

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

SESPE OIL FIELD

SECTION 23 AND 26 AREA

Ventura County

LOCATION: See map sheet of Sespe Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 1,500

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Coldwater	Big Sespe M.R.G. Oil Co. "Nathan" 1	Union Consolidated Oil Co. "Nathan" 1	23 5N 20W	SB	60	N.A.	1901

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Big Sespe M.R.G. Oil Co. "Nathan" 1	Pacific Supply Cooperative "Nathan" 1 *	Sep 1954	23 5N 20W	SB	4,014	Coldwater	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Coldwater	825	220	Eocene	Coldwater	12	200	11

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	45	0	N.A.	N.A.	10,846	1953	13	12	50

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 0 - 50

CURRENT CASING PROGRAM: 10 3/4" cem. 100; 8 5/8" 1d. at 450+; 6 5/8" inner string .

METHOD OF WASTE DISPOSAL:

REMARKS: Last production in 1958.

* The discovery well was deepened in 1954 by Pacific Supply Cooperative.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

SESPE OIL FIELD

TAR CREEK - TOPATOPIA AREA

Ventura County

LOCATION: See map sheet of Sespe Oil Field

TYPE OF TRAP: Faulted anticlinal nose; stratigraphic variations; fractured shale

ELEVATION: 2,700

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	S & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Rincon-Vaqueros	Westates Petroleum Co. "Cesapi" T.C. A	Union Oil Co. of Calif. "Tar Creek" 1	28 5N 19W	SB	185	N.A.	1887
Upper Sespe	Union Oil Co. of Calif. "Four Forks" 1	Union Oil Co. of Calif. "Four Forks" 1	32 5N 19W	SB	30	N.A.	1891
Middle Sespe	Westates Petroleum Co. "Phillips" 1	Frans Nelson and Co. "Frans Nelson" 1	29 5N 19W	SB	12	5	Apr 1942
Basal Sespe	Westates Pet. Co. "Tar Creek" 74-29	Colima Oil Co. No. 2	29 5N 19W	SB	8	N.A.	Feb 1938
Coldwater	Westates Pet. Co. "Anza-Mohawk" 25-29	Shell Oil Co. "Anza-Mohawk" 25-29	29 5N 19W	SB	33	20	Feb 1966

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	S & M	Depth (feet)	At total depth	
						Strata	Age
Westates Petroleum Co. "Orcutt" 83C-33	Shell Oil Co. "Orcutt" 83C-33	Jul 1967	33 5N 19W	SB	8,471	Coldwater	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Rincon-Vaqueros	900	200	Miocene	Rincon & Vaqueros	32	170	II
Upper Sespe	1,750	600	Oligocene	Sespe	28	270	II
Middle Sespe	2,550	300	Oligocene	Sespe	28	270	II
Basal Sespe	5,400	1,000	Oligocene	Sespe	31	270	III
Coldwater	4,650	300	Eocene	Coldwater	30	300	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,077,498	1,623,699	220,551	1,590	147	N.A.	N.A.	2,493,635	1970	275	236	1,640

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1962	2,682,753	8

SPACING ACT: Does not apply

BASE OF FRESH WATER: 0 - 100

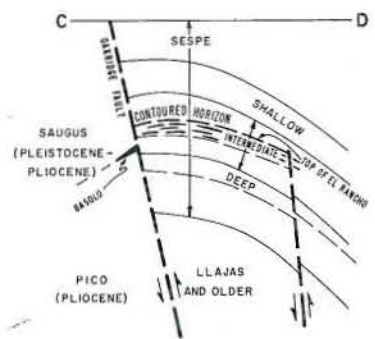
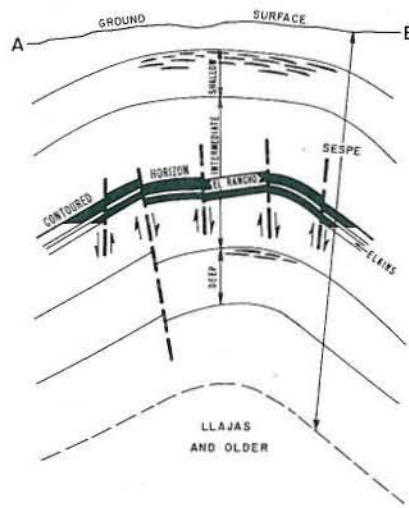
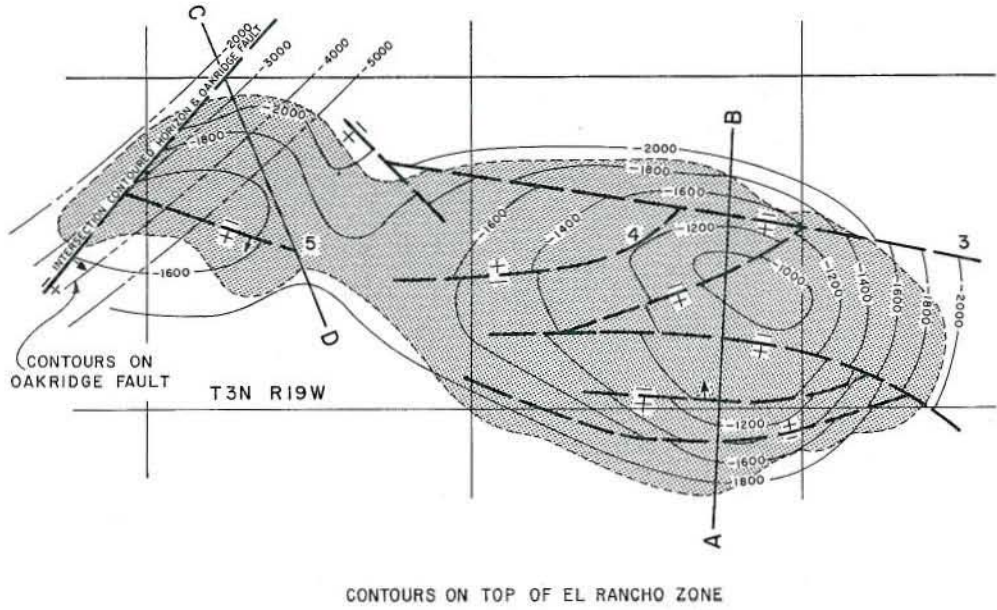
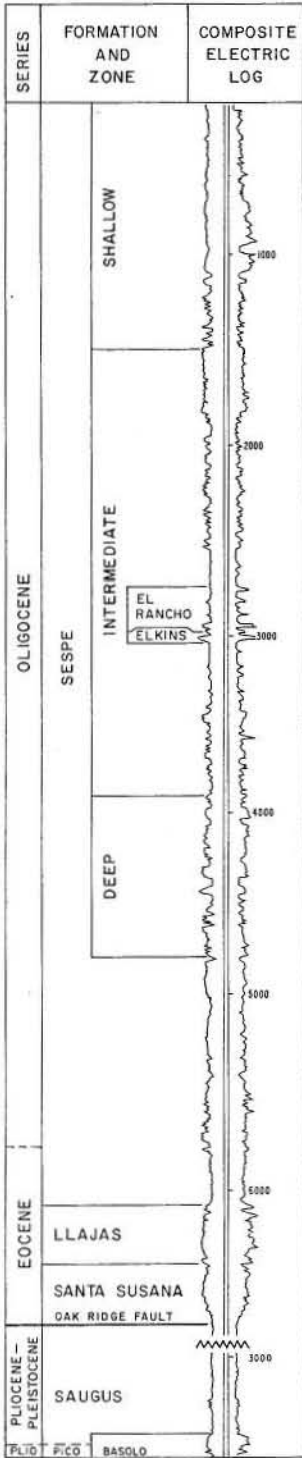
CURRENT CASING PROGRAM: 9 5/8" cem. 200 - 800; 7" to 4 1/2" cemented through zone.

METHOD OF WASTE DISPOSAL: All waste water is used in a water-flood project in this area.

REMARKS: Tar Creek and Topatopa were separate areas until they were combined in 1965.

REFERENCES:

SHIELLS CANYON OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

SHIELLS CANYON OIL FIELD

Ventura County

LOCATION: 24 miles northeast of Ventura

TYPE OF TRAP: Faulted anticline

ELEVATION: 600 - 1,300

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Basolo	Texaco Inc. "Basolo" 2	Harry C. Long, Operator "Basolo" 2-5	5 3N 19W	SB	46	8	Sep 1952
Shallow	Texaco Inc. "Shiells" 1	Montebello Oil Co. "Shiells" 1	4 3N 19W	SB	20	N.A.	Apr 1911
Intermediate	Texaco Inc. "Shiells" 23	Montebello Oil Co. "Shiells" 23	4 3N 19W	SB	20	N.A.	Jul 1912
Deep	Texaco Inc. "Shiells" 103	Montebello Oil Co. No. 103	4 3N 19W	SB	90	N.A.	Aug 1918
Eocene	Lobodo, Inc. "Elkins" 20	The Texas Co. "Elkins" 20	5 3N 19W	SB	125	540	Aug 1959

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Lobodo, Inc. "Elkins" 20	The Texas Co. "Elkins" 20	Mar 1959	5 3N 19W	SB	14,206	Pico	Pliocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Basolo	3,400	160	Pleistocene - Pliocene	Saugus - Pico	28	48 - 347	II
Shallow	1,000	650	Oligocene	Sespe	32	2,100	II
Intermediate:							
El Rancho	2,000	150	Oligocene	Sespe	32	2,100	II
Elkins	2,250	100	Oligocene	Sespe	32	2,100	II
Deep	4,300	1,000	Oligocene	Sespe	32	2,100	II
Eocene	6,600	450	Eocene	Llajas	31	250	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
386,802	121,639	1,194,105	965	75	22,707,077	43,626,478	624,735	1945	348	312	1,045

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1949	42,117,998	23
Steam flood	1973	112,451	1

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 11 3/4" or 10 3/4" cem. 200 - 800; 7" cem. through zone.

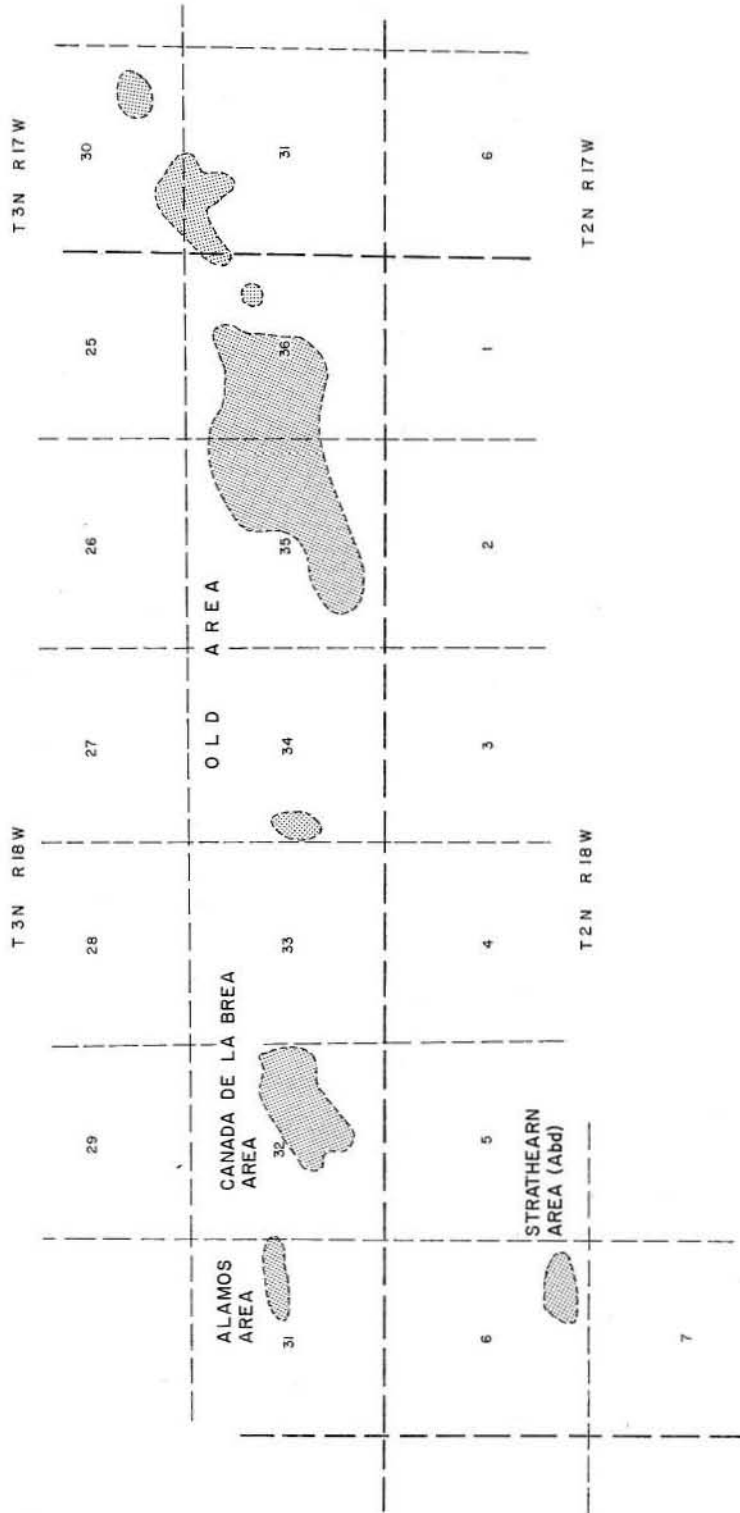
METHOD OF WASTE DISPOSAL: All waste water used in water-flood project.

REMARKS: Originally was Montebello Dome area of Bardsdale oil field, and was designated Shiells Canyon oil field on January 1, 1955. The 164 zone (1 well) is included in the Shallow zone.

REFERENCES: Bailey, Wm. C., Shiells Canyon Area of Bardsdale Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 31, No. 1 (1934).

SIMI OIL FIELD

Index Map



CALIFORNIA DIVISION OF OIL AND GAS

SIMI OIL FIELD

Ventura County

LOCATION: 30 miles east of Ventura

TYPE OF TRAP: See areas

ELEVATION: 745 - 1,375

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
N.A.	M. H. Marr "Marr Ranch" 11	Simi Oil Co. No. 11	30 3N 17W	SB	N.A.	N.A.	1901

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Getty Oil Co. "Pacific Western Marr" 1	Pacific Western Oil Corp. "Pacific Western Marr" 1	Apr 1952	36 3N 18W	SB	7,644	"Chico"	Cretaceous

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
39,024	14,375	37,564	280	60	3,586,175	1,425,338	127,561	1920	141	113	805

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

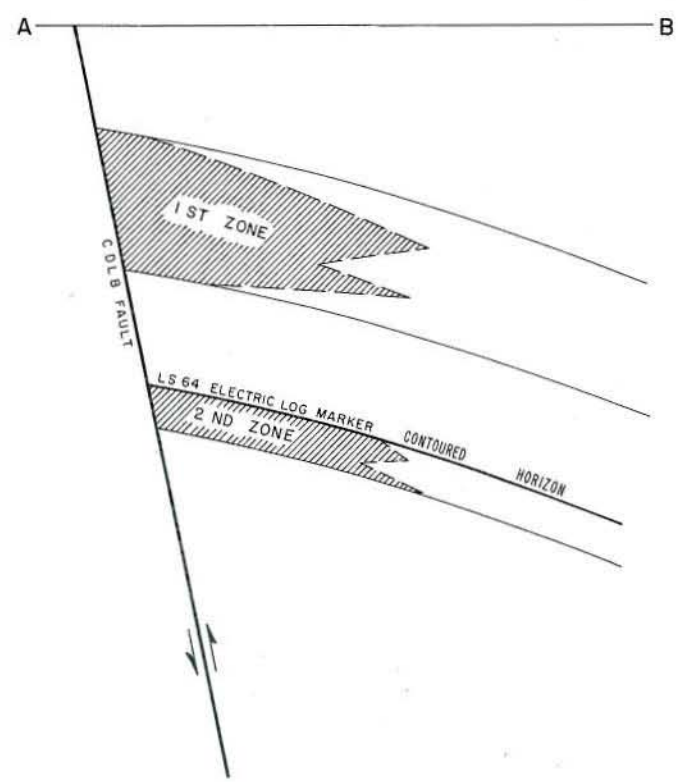
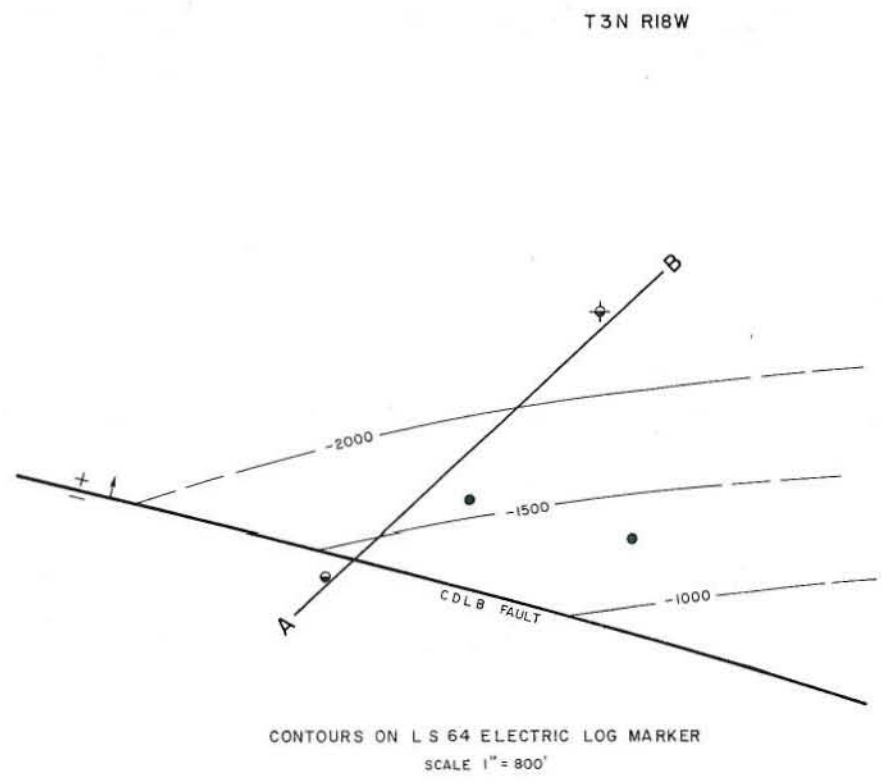
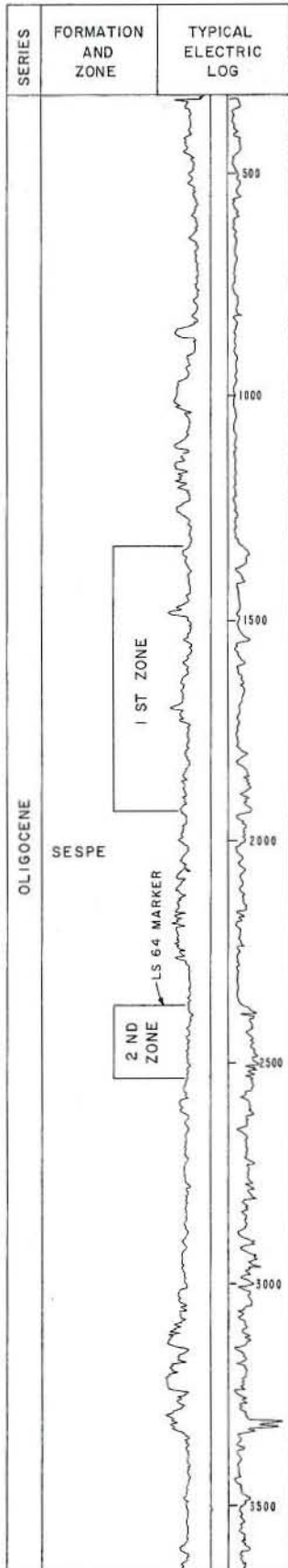
REMARKS: See areas

REFERENCES: See areas

SIMI OIL FIELD

Alamos Area

30 29
31 32



CALIFORNIA DIVISION OF OIL AND GAS

SIMI OIL FIELD

ALAMOS AREA

Ventura County

LOCATION: See index map of Simi Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 950

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
1st	Union Oil Co. of Calif. "Alamos" 3-31	Union Oil Co. of Calif. "Simi" 3-31	31 3N 18W	SB	65	12	Jan 1971
2nd	Same as above	Same as above	31 3N 18W	SB	*	*	Jan 1971

Remarks: * Initial production from the 1st and 2nd Sespe zones was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Alamos" 3-31	Union Oil Co. of Calif. "Simi" 3-31	Dec 1970	31 3N 18W	SB	4,000	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
1st	1,450	550	Oligocene	Sespe	19	1,200	II
2nd	2,450	140	Oligocene	Sespe	22	360	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
10,099	5,840	2,051	30	2	37,101	17,230	17,077	1971	5	4	30

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 100

CURRENT CASING PROGRAM: 8 5/8" cem. 350; 5 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL: All waste water is injected into disposal wells.

REMARKS:

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

CANADA DE LA BREA AREA

SIMI OIL FIELD

Ventura County

LOCATION: See index map of Simi Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 1,065

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & W	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sespe	Union Oil Co. of Calif. "Canada de la Brea" 1	Same as present	32 3N 18W	SB	40	N.A.	Jan 1910

Remarks: Old drillers' logs make no distinction between zones within Sespe.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & W	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Canada de la Brea" 15	Same	Jan 1951	32 3N 18W	SB	5,336	Santa Susana	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
1st (Upper)	650	220	Oligocene	Sespe	15	1,500	II
1st (Lower)	975	300	Oligocene	Sespe	17	1,710	II
2nd	1,600	325	Oligocene	Sespe	19	1,725	II
3rd	2,235	200	Oligocene	Sespe	20	1,744	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
17,340	8,535	32,000	130	11	876,326	312,097	41,470	1956	15	14	130

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 10 3/4" cem. 300; 7" cem. above zone; 5" liner landed through zone.

METHOD OF WASTE DISPOSAL: All waste water is injected into disposal wells.

REMARKS: A pilot cyclic-steam project was started in 1964 and terminated in the same year; 36,653 bbls. of water (in the form of steam) was injected into 2 wells. A pilot fire-flood project was started in 1973 and terminated in the same year.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

SIMI OIL FIELD
Ventura County

OLD AREA

LOCATION: See index map of Simi Oil Field

TYPE OF TRAP: Anticline

ELEVATION: 1,375

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
N.A.	M. H. Marr "Marr Ranch" 11	Simi Oil Co. No. 11	30 3N 17W	SB	N.A.	N.A.	1901

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Getty Oil Co. "Pacific Western Marr" 1	Pacific Western Oil Corp. "Pacific Western Marr" 1	Apr 1952	36 3N 18W	SB	7,644	"Chico"	Cretaceous

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
1st	100	70	Oligocene	Sespe	26	1,000	I
2nd	300	60	Oligocene	Sespe	28	1,000	I
Llajas	1,100	30	Eocene	Llajas	30	800	II
Santa Susana	2,100	400	Eocene	Santa Susana	32	500	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
11,585	0	3,513	120	47	2,659,829	1,095,987	94,345	1920	110	88	605

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,300. Waters are sulphurous.

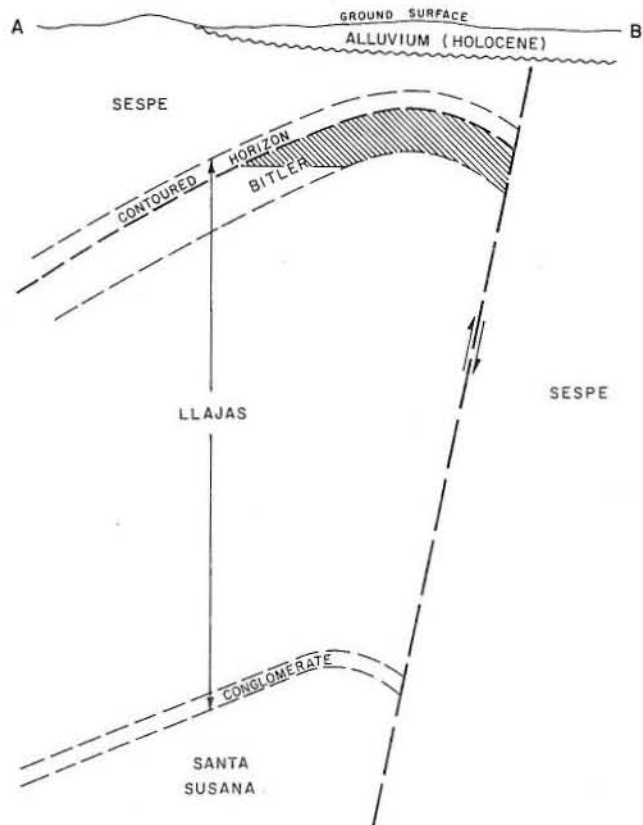
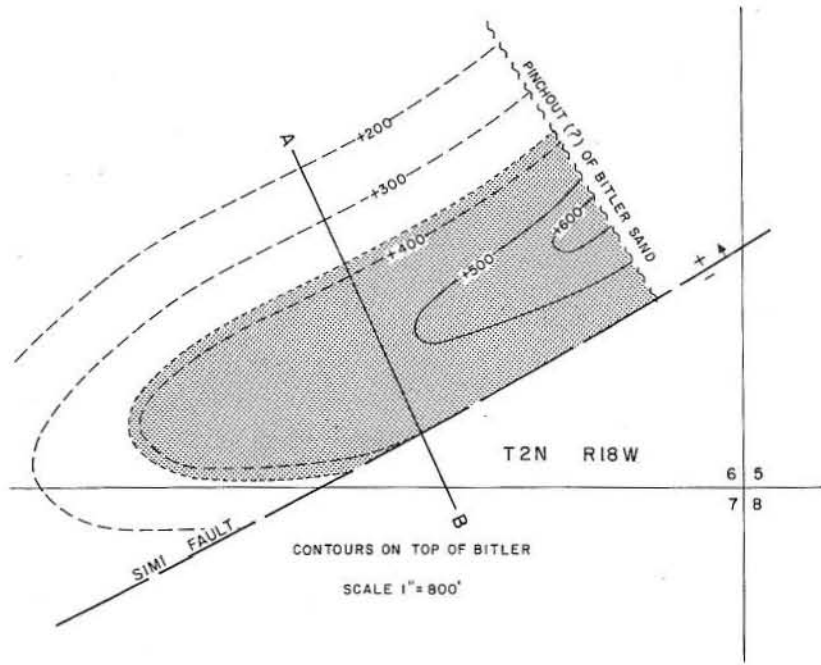
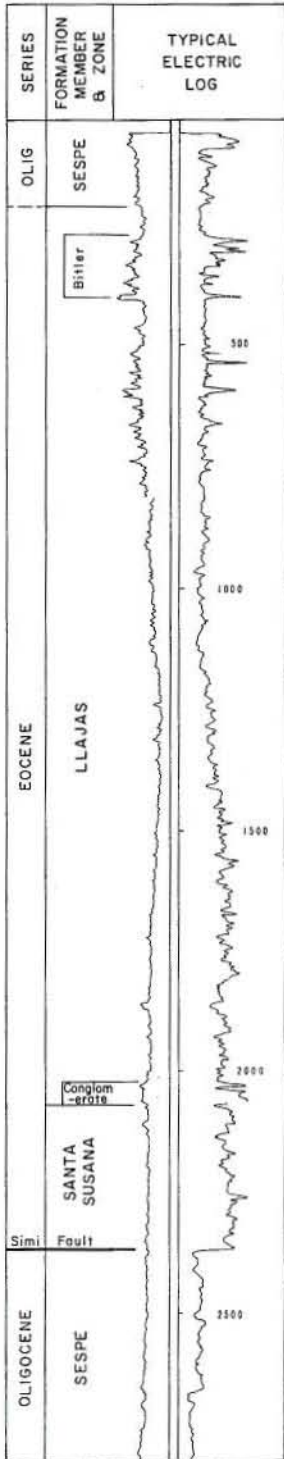
CURRENT CASING PROGRAM: 16" to 8 5/8" cem. 50 - 700; 8 5/8" to 6 5/8" cem. above zone and across base of fresh-water sands; 5 1/2" to 4 3/4" liner landed through zone.

METHOD OF WASTE DISPOSAL: All waste water is injected into a disposal well.

REMARKS:

REFERENCES: Godde, H.A., Oil Fields of Ventura County: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 10, No. 5 (1924).

SIMI OIL FIELD
Strathearn Area (abandoned)



AFTER GEO H ROTH & ASSOC

CALIFORNIA DIVISION OF OIL AND GAS

SIMI OIL FIELD

STRATHEARN AREA (Abandoned)

Ventura County

LOCATION: See index map of Simi Oil Field

TYPE OF TRAP: Stratigraphic variations on faulted anticlinal nose

ELEVATION: 745

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Bitler	Moreland Investment Co. "Strathearn" 1	Macson Oil Co. "Strathearn" 1	6 2N 18W	SB	5	0	Dec 1953

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Moreland Investment Co. "Strathearn" 1	Macson Oil Co. "Strathearn" 1	Oct 1953	6 2N 18W	SB	2,828	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Bitler	335	315	Eocene	Llajas	33	600	I

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	12,919	24	2,055	1956	11	6	40

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING AC: Does not apply

BASE OF FRESH WATER: 140

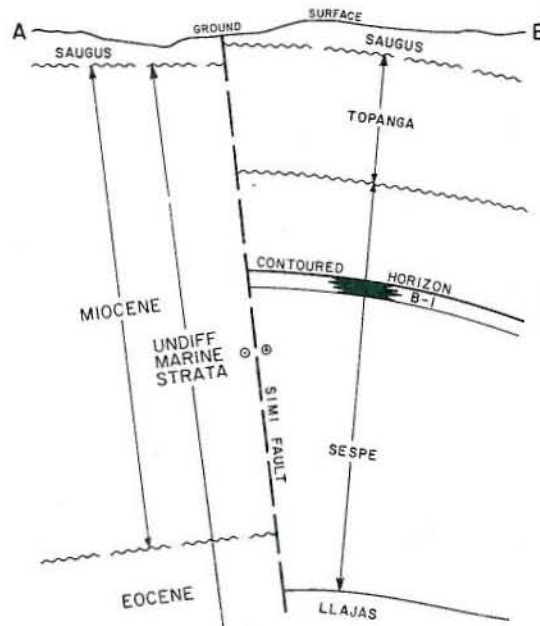
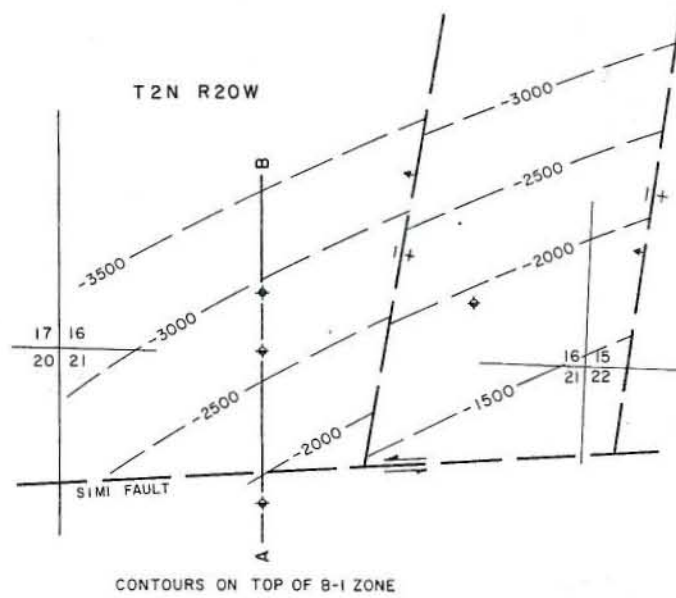
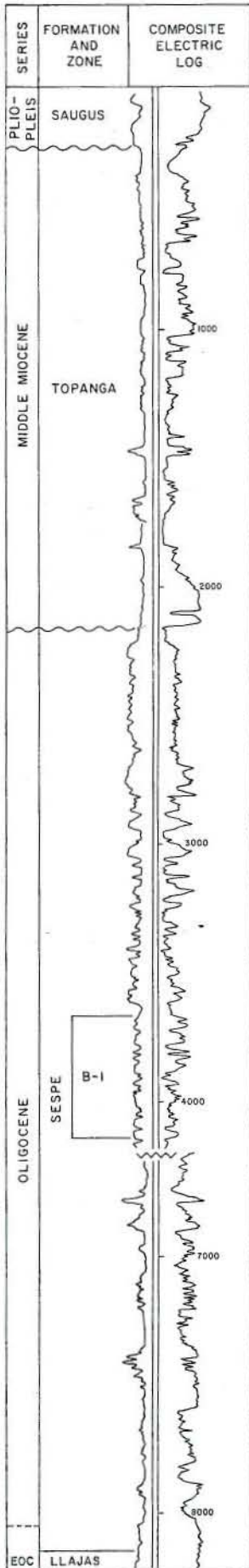
CURRENT CASING PROGRAM: 16" cem. 50; 6 5/8" to 8 5/8" cem. through zone and to the surface.

METHOD OF WASTE DISPOSAL:

REMARKS: The area was abandoned in 1973. The last production was in 1970.

REFERENCES:

SOMIS OIL FIELD (Abandoned)



CALIFORNIA DIVISION OF OIL AND GAS

SOMIS OIL FIELD (Abandoned)

Ventura County

LOCATION: 16 miles east of Ventura

TYPE OF TRAP: Permeability variations on homocline

ELEVATION: 690

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
B-1	Signal Oil and Gas Co. "Berylwood" 1	The Texas Co. "Berylwood" 1	16 2N 20W	SB	57	5	Mar 1955

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Texaco Inc. "Berylwood" 2	The Texas Co. "Berylwood" 2	Jun 1955	16 2N 20W	SB	8,190	Llajas	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
B-1	3,950	500	Oligocene	Sespe	16	980	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	2,088	805	2,088	1955	4	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 1,180 - 1,400

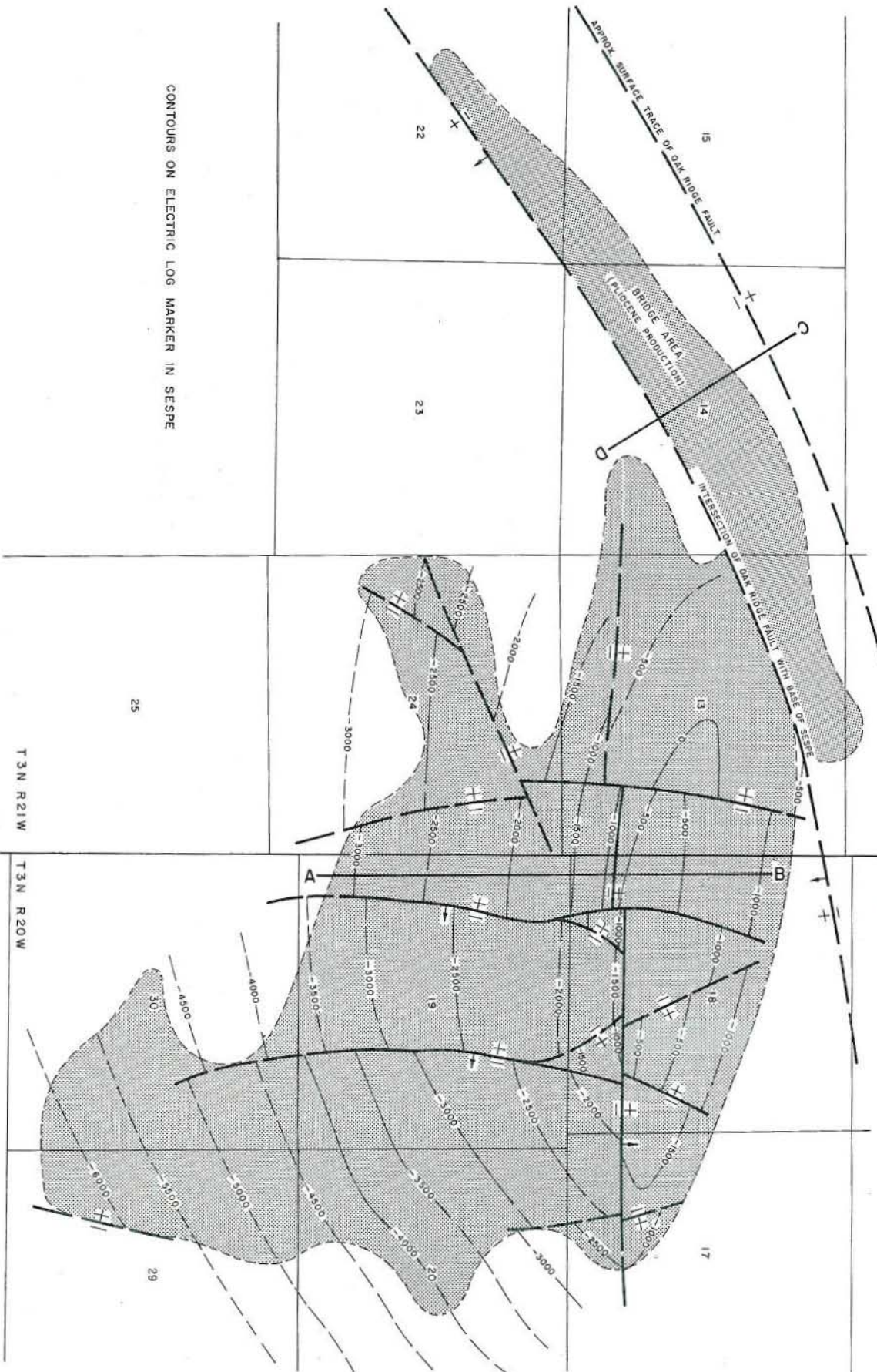
CURRENT CASING PROGRAM: 11 3/4" cem. 200 - 1,055; 7" cem. over zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

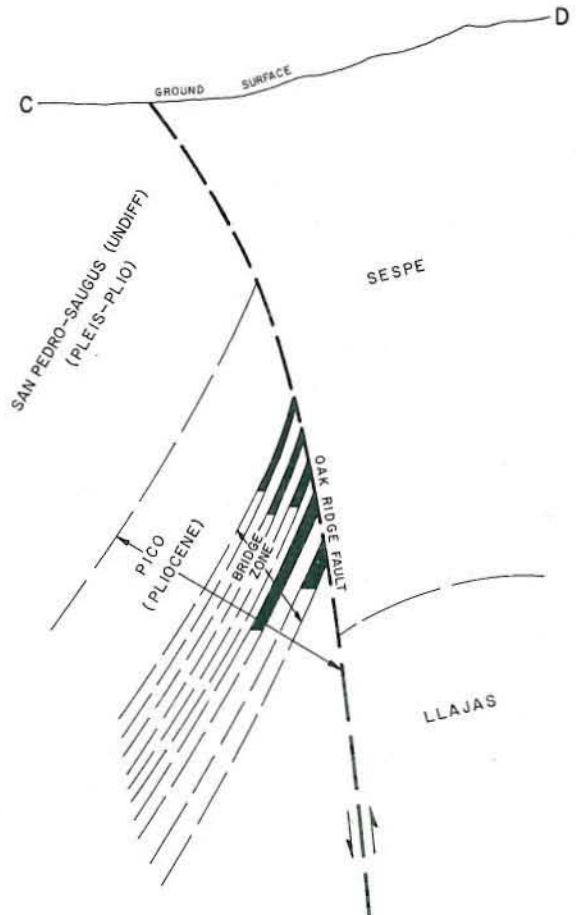
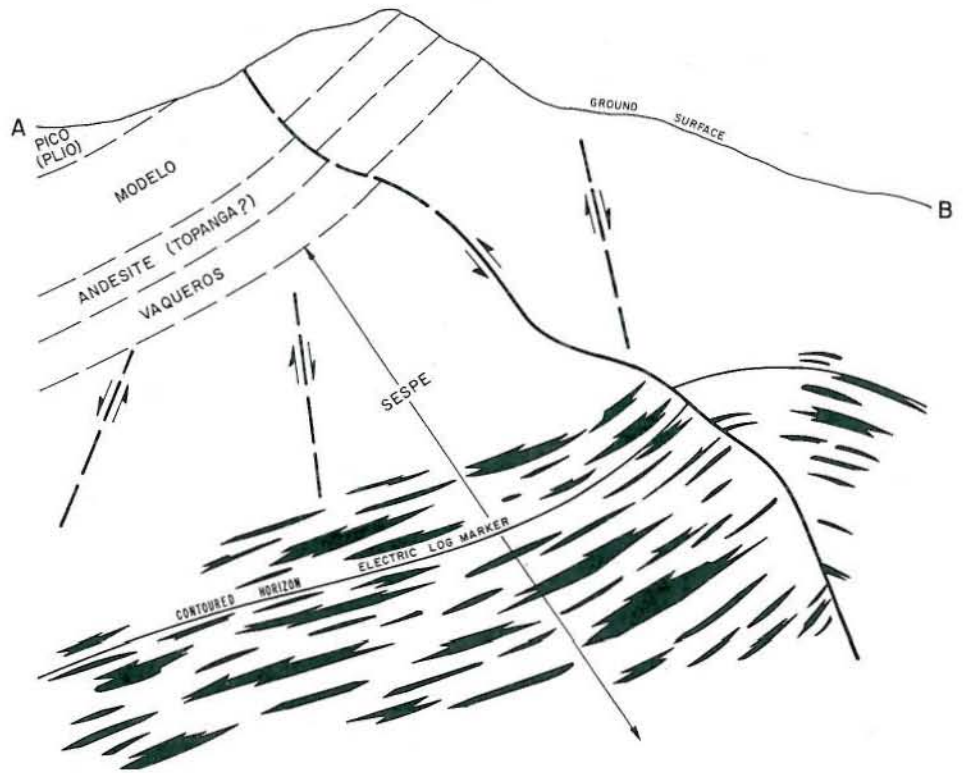
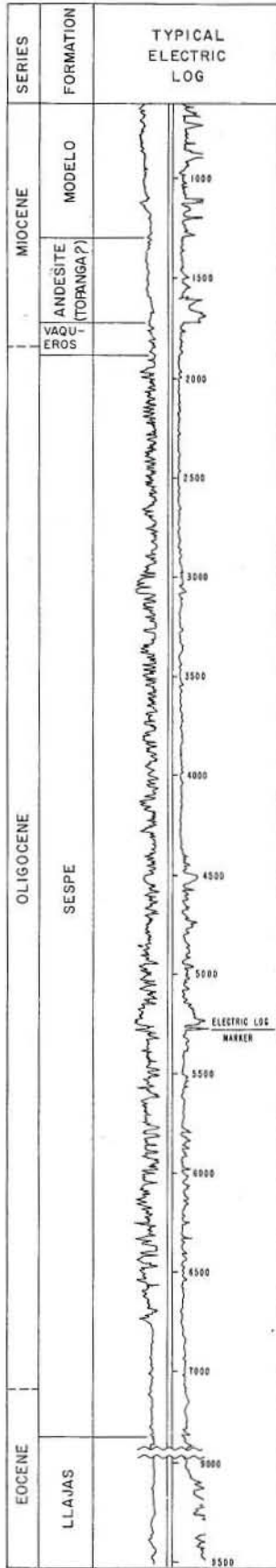
REMARKS: Field abandoned in May 1956.

REFERENCES:

SOUTH MOUNTAIN OIL FIELD



SOUTH MOUNTAIN OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

SOUTH MOUNTAIN OIL FIELD

Ventura County

LOCATION: 15 miles northeast of Ventura

TYPE OF TRAP: Faulted anticline with lithofacies variations

ELEVATION: 250 - 2,200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sespe Bridge	Texaco Inc. "South Mountain" 1	Oak Ridge Oil Co. "S.M." 1	13 3N 21W	SB	25	0	Apr 1916
	Texaco Inc. "T-U Richardson-Earl" 1	The Texas Co. "Richardson-Earl" 1	14 3N 21W	SB	205	248	Dec 1955

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Texaco Inc. "T-U Norman Richardson Heirs" 1	The Texas Co. "Texas-Union-Norman Richardson Heirs" 1	Apr 1957	14 3N 21W	SB	13,412	Pico	Pliocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Sespe	1,250 - 7,000	2,000	Oligocene	Sespe	22	915 - 2,090	III
Bridge	7,200	1,250	Pliocene	Pico	33	525	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,783,975	3,224,803	2,567,398	3,090	432	129,019,964	260,944,823	7,436,184	1959	604	572	3,210

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1956	10,655,169	8
Gas	1961	288,000	1

SPACING ACT: Does not apply

BASE OF FRESH WATER: None south of Oakridge fault and 1,650' north of Oakridge fault.

CURRENT CASING PROGRAM: Shallow Sespe: 8 5/8" cem. above zone; 5 1/2" perforated liner landed through zone. Deep Sespe: 11 3/4" cem. 315; 5 1/2" cem. through zone. Bridge pool: 10 3/4" cem. 750; 7" combination string landed through zone and cemented through ports above zone and below productive Sespe.

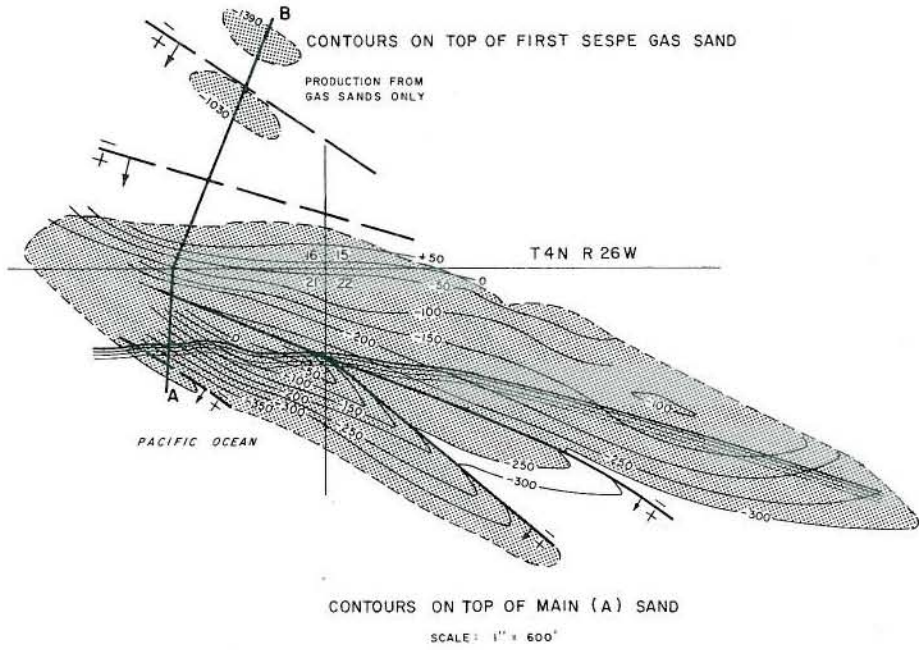
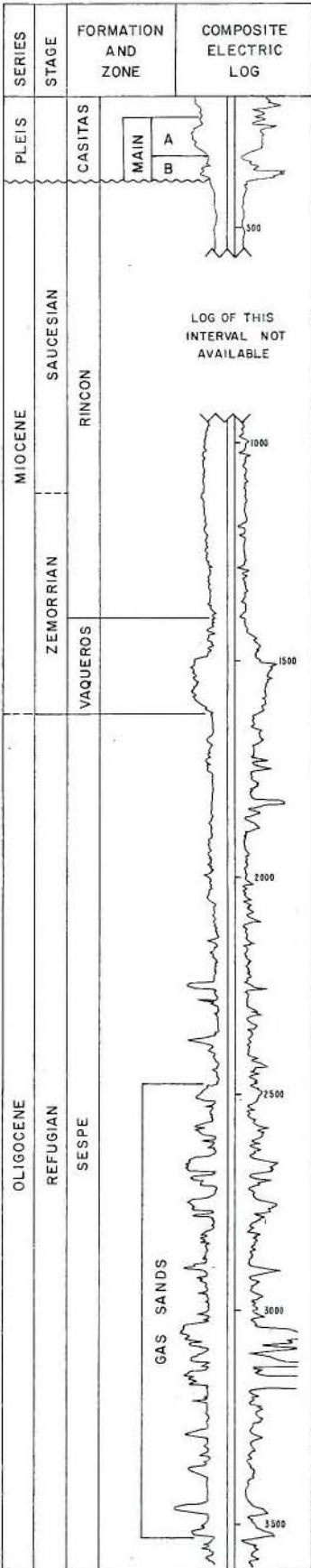
METHOD OF WASTE DISPOSAL: Waste water is injected into water-flood wells and disposal wells.

REMARKS: A cyclic-steam injection project and a steam flood were started in 1963 and 1964 and were discontinued in 1965 after the injection of 126,433 and 15,722 bbls. of water (in the form of steam), respectively.

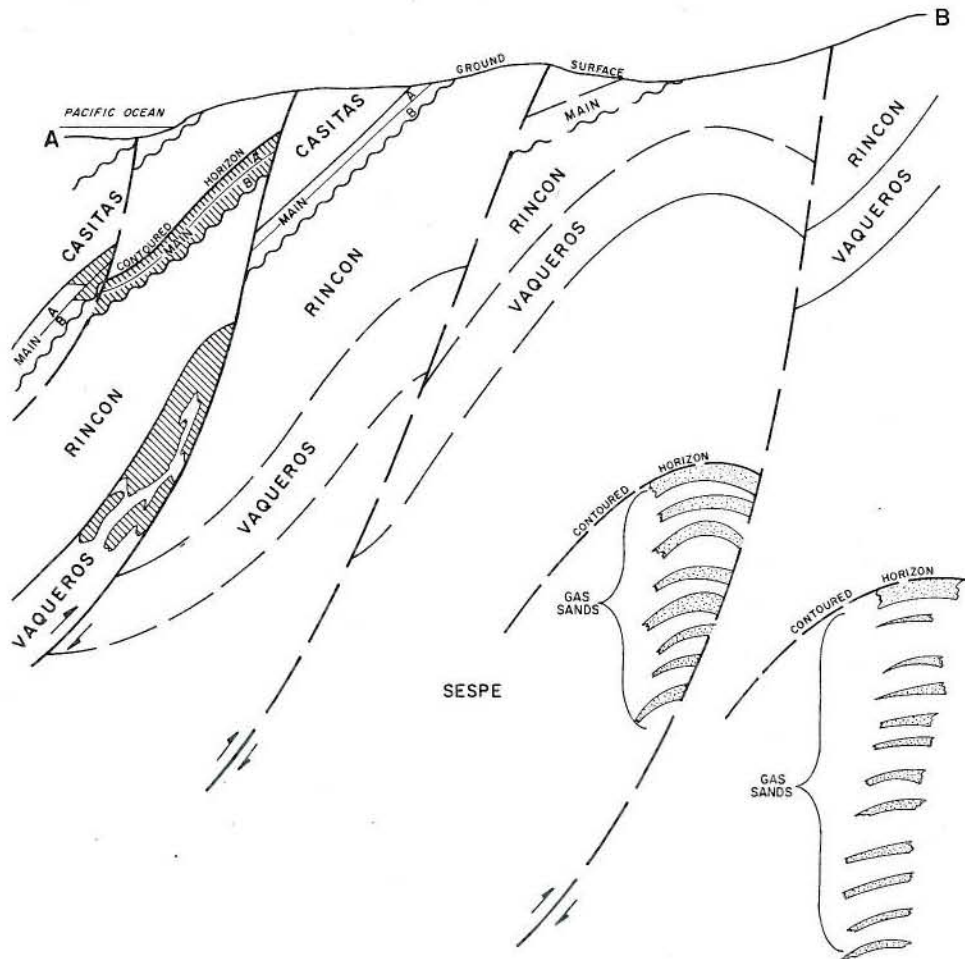
REFERENCES: Bailey, W.C., South Mountain Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 29, No. 2 (1943).
Godde, H.A., Oil Fields of Ventura County, Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 10, No. 5 (1924).

SUMMERLAND OIL FIELD

Old area



MAP AND CROSS SECTION BASED UPON DATA BY R. ARNOLD, AND MODIFIED BY THE DIVISION OF OIL AND GAS.



CALIFORNIA DIVISION OF OIL AND GAS

SUMMERLAND OIL FIELD
Santa Barbara County

ONSHORE AREA

LOCATION: 23 miles northwest of Ventura

TYPE OF TRAP: Faulted anticlines with stratigraphic variations

ELEVATION: 20

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Main	N.A.	N.A.	22 4N 26W	SB	0	0	Prior to 1894
Vaqueros	Russell L. Williams "Williams" 1	Lincoln Drilling Co. "Williams" 1	21 4N 26W	SB	190	1	Aug 1929
Sespe	Standard Oil Co. of Calif. "Williams" 1	Same as present	16 4N 26W	SB	0	4,353	Dec 1948

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "Ortega Community" 1	Same	May 1949	16 4N 26W	SB	5,987	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Main	140	100	Pleistocene	Casitas	7	0	None
Vaqueros	1,400	300	Miocene	Vaqueros	16	N.A.	III
Sespe (dry gas)	3,200	1,000	Oligocene	Sespe	N.A.	N.A.	IV

PRODUCTION DATA (Jan. 1, 1974) (Dry gas production data not included - see Remarks)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	10	0	3,224,458	0	80,830	1929	402	396	110

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 40

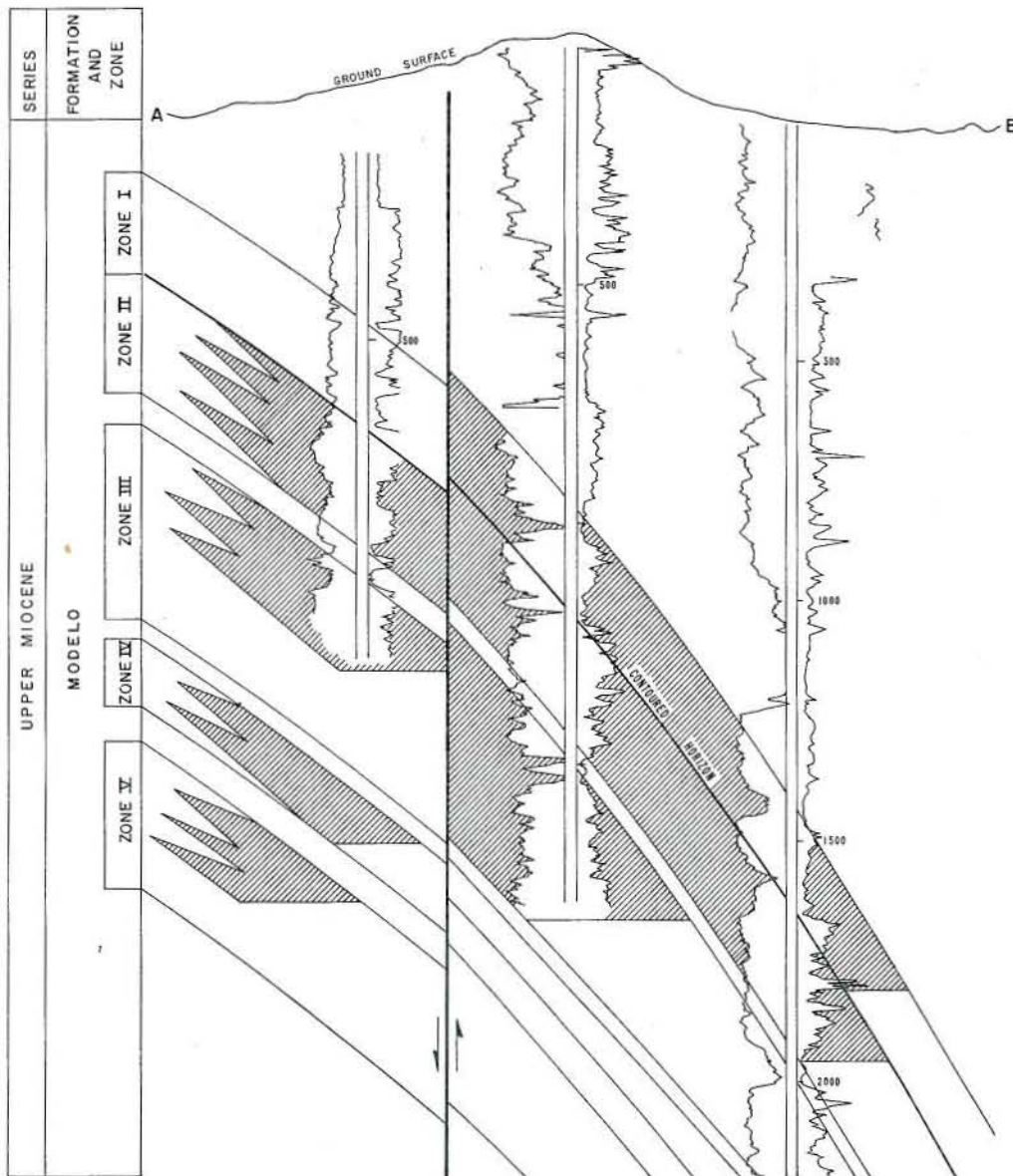
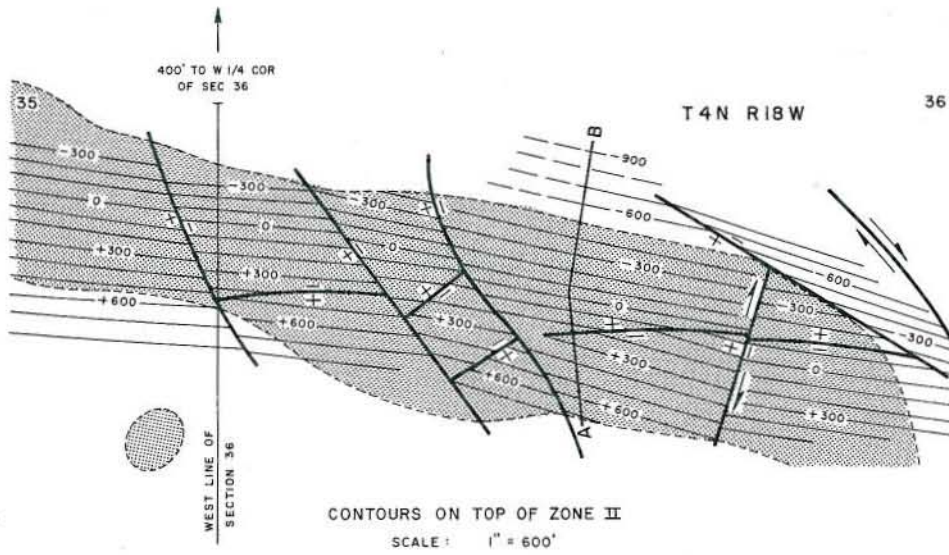
CURRENT CASING PROGRAM: 12 1/4" or 11 3/4" cem. above zone to surface; 8 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Two Sespe dry gas wells were completed; they were both abandoned by June 1955. Maximum proved dry gas acreage was 60, peak production \$37,624 Mcf. in 1949, cumulative production 1,704,062 Mcf. All oil wells in the onshore area have been abandoned except for eight that are currently idle. Some of the original old wells were dug by hand. The old production piers that formerly extended into the ocean are all gone.

REFERENCES: Arnold, Ralph, Geology and Oil Resources of the Summerland District: U.S. Geol. Survey Bull. 321 (1907).
Lian, Harold M., Geology of The Carpinteria District, Santa Barbara County, Calif. Div. of Mines Bull. 170, Geology of Southern California: Map Sheet 25 (1954).

NORTH TAPO OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

TAPO, NORTH, OIL FIELD
Ventura County

LOCATION: 33 miles northeast of Ventura

TYPE OF TRAP: Faulted homocline with sand pinchouts

ELEVATION: 1,360

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
N.A.	Thomas R. Bard well no. unknown	Same as present	36 4N 18W	SB	N.A.	N.A.	1882

Remarks: Information on zone-discovery wells is not available. The exact location of the Bard well is unknown.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Central Lease, Inc. "N.L. & F." 0-31	Western Gulf Oil Co. "N.L. & F." 1	Jan 1958	35 4N 18W	SB	9,512	Modelo	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
I	1,000	95	late Miocene	Modelo	23	300	I
II	1,200	120	late Miocene	Modelo	21	300	I
III	1,500	190	late Miocene	Modelo	18	400	I
IV	1,800	70	late Miocene	Modelo	N.A.	N.A.	I
V	2,000	150	late Miocene	Modelo	N.A.	N.A.	I

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
11,382	0	19,992	70	9	1,001,717	158,949	41,113	1954	58	46	135

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1951	6,139,421	1

SPACING ACT: Does not apply

BASE OF FRESH WATER: 0 - 400

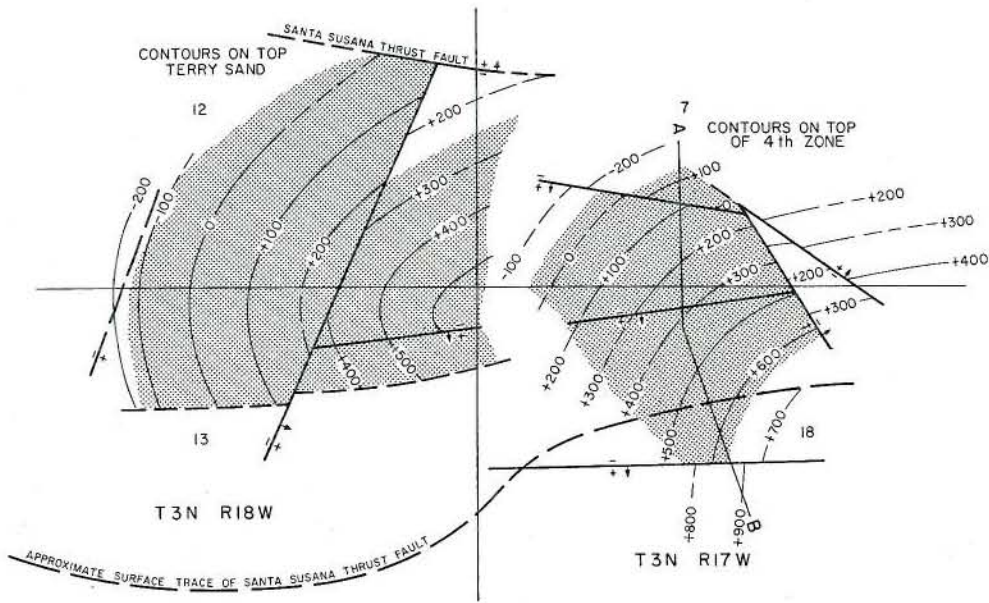
CURRENT CASING PROGRAM: 8 5/8" cem. 60; 6 5/8" ld. through zone and cemented through ports at top of oil sand and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: All waste water is injected into the water-flood well.

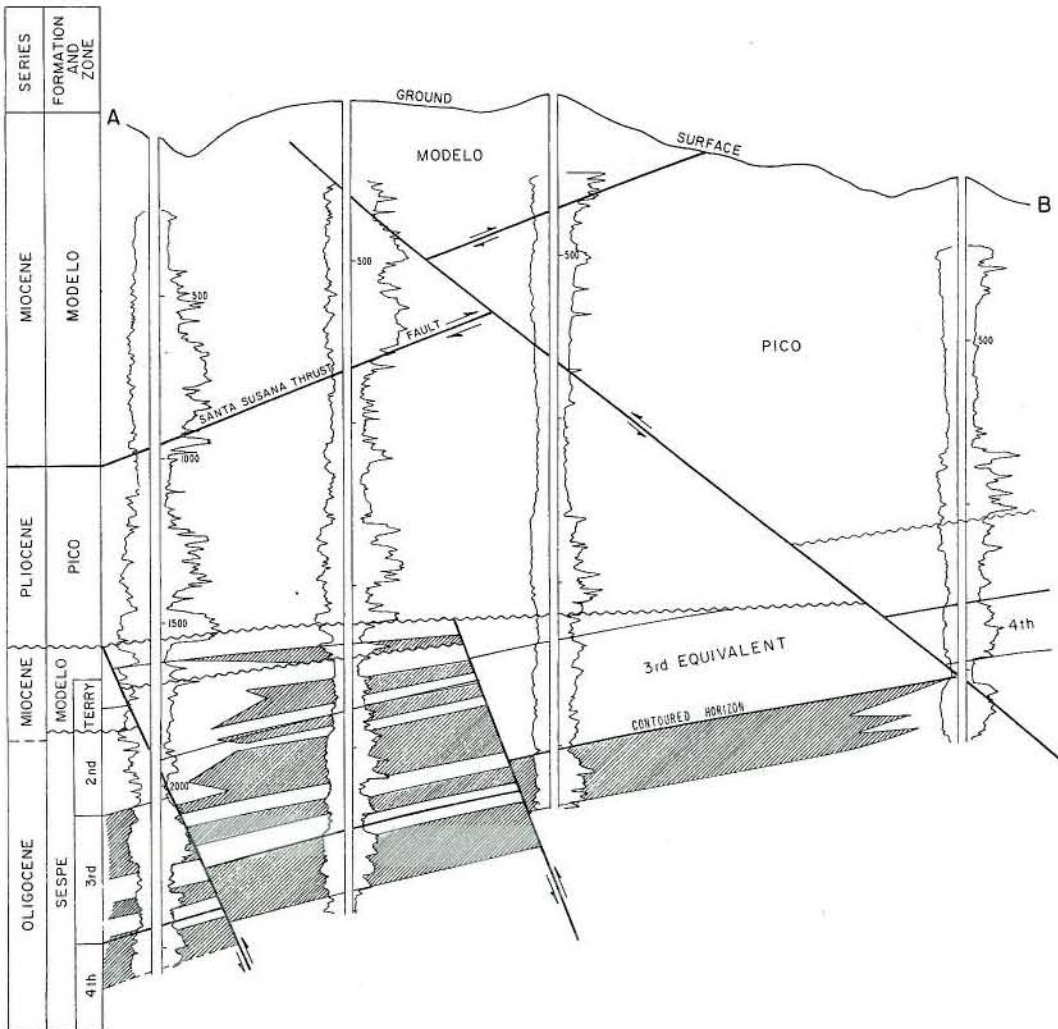
REMARKS:

REFERENCES:

SOUTH TAPO CANYON OIL FIELD



SCALE: 1" = 1600'



CALIFORNIA DIVISION OF OIL AND GAS

TAPO CANYON, SOUTH

Ventura County

LOCATION: 32 miles northeasterly of Ventura

TYPE OF TRAP: Faulted anticline

ELEVATION: 2,440

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Terry	Crown Central Petroleum Corp. "Tapo" 2	Terry and Jensen "Tapo" 2	13 3N 18W	SB	720	100	Feb 1953
2nd Sespe	Union Oil Co. of Calif. "South Tapo-Gillibrand" 11-7	Union Oil Co. of Calif. "Simi" 11-7	7 3N 18W	SB	99	411	Jul 1954
3rd Sespe	Same as above	Same as above	7 3N 18W	SB	*	*	Jul 1954
4th Sespe	Same as above	Same as above	7 3N 18W	SB	*	*	Jul 1954

Remarks: * Initial production from the 2nd, 3rd and 4th Sespe zones was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Havenstrite Oil Co. "Tapo" 1	Same	Jan 1949	13 3N 18W	SB	8,394	Llajas	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Terry	2,200	60	Miocene	Modelo	32	*90	II
2nd Sespe	1,800	70	Oligocene	Sespe	18	1,030	II
3rd Sespe	1,880	220	Oligocene	Sespe	18	1,030	II
4th Sespe	2,200	180	Oligocene	Sespe	18	1,030	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
40,260	509	140,374	210	14	4,332,509	1,905,031	905,009	1953	50	35	240

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

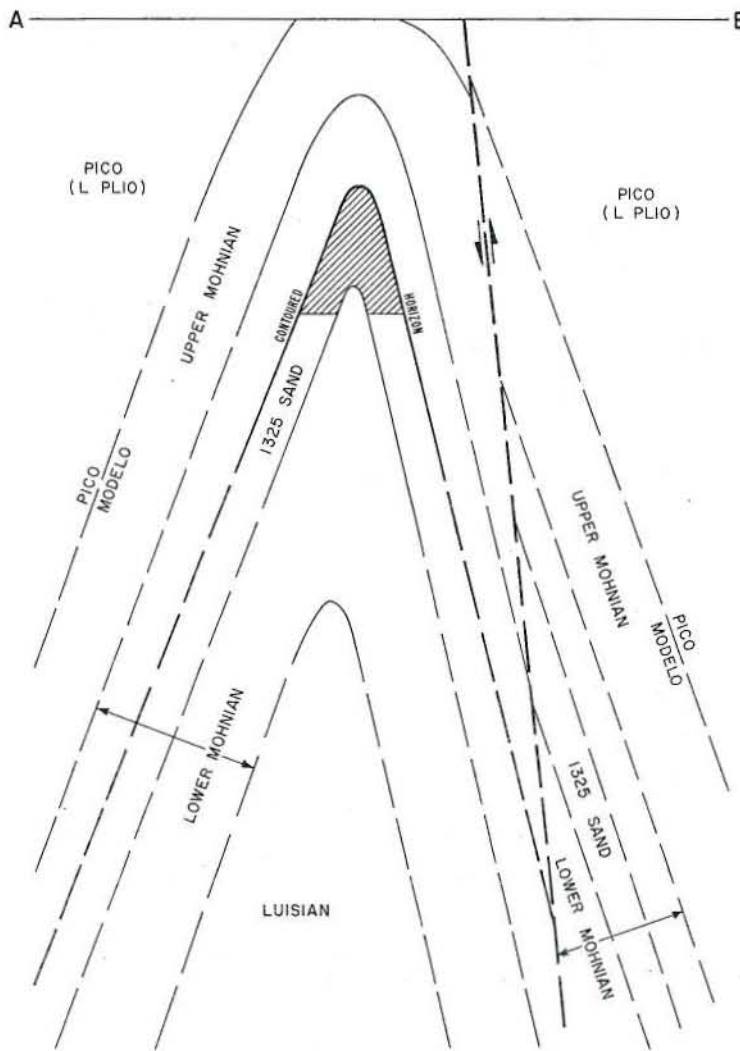
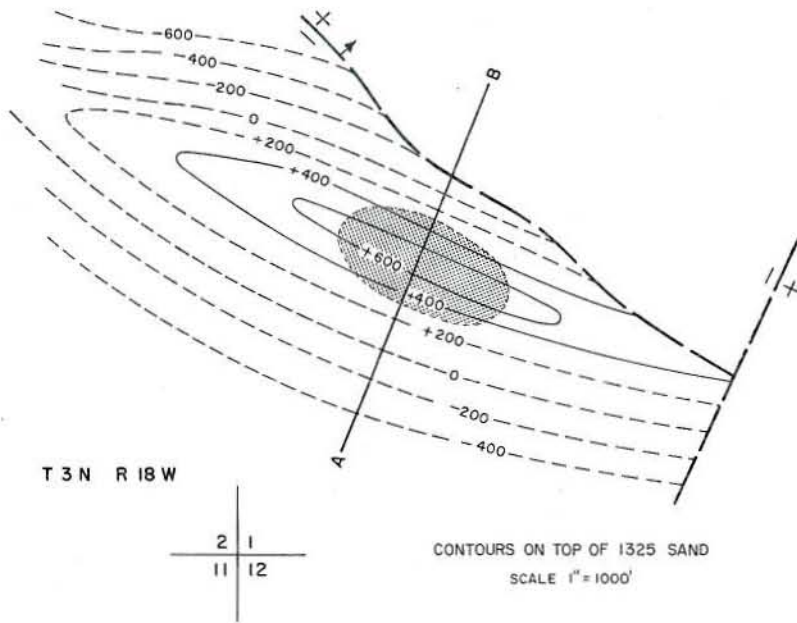
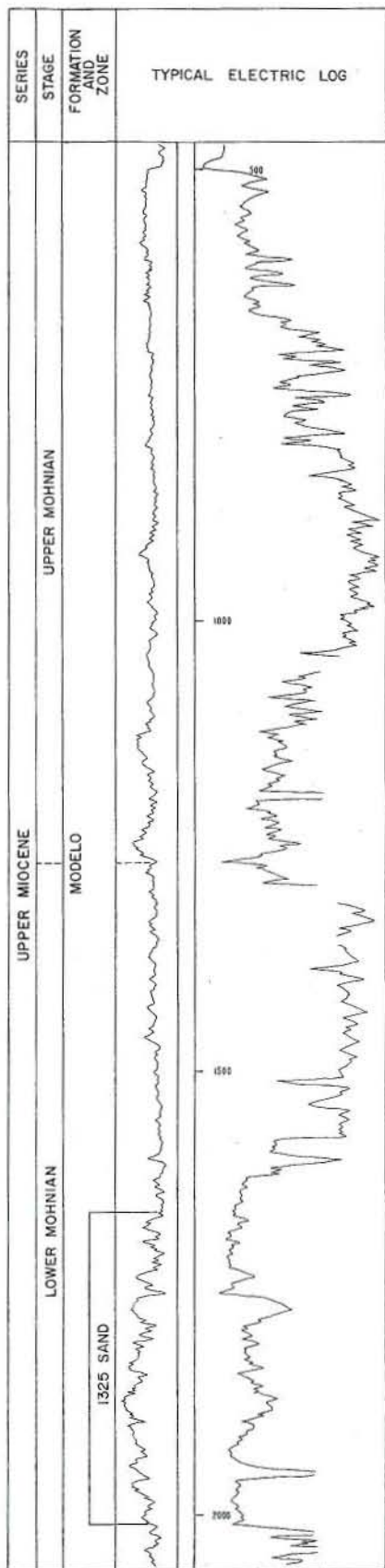
CURRENT CASING PROGRAM: 11 3/4" cem. 100; 7" combination string landed through zone and cemented through ports above zone.

METHOD OF WASTE DISPOSAL: All waste water is injected into a water-disposal well.

REMARKS: * Terry zone water is high in bicarbonates and total dissolved solids. A cyclic-steam project was started in 1964 and was discontinued in 1965 after the injection of 11,063 bbls. of water (in the form of steam).

REFERENCES: Hardoin, J.L., South Tapo Canyon Oil Field, Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 44, No. 1 (1958).

TAPO RIDGE OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

TAPO RIDGE OIL FIELD

Ventura County

LOCATION: 33 miles northeast of Ventura

TYPE OF TRAP: Anticline

ELEVATION: 2,080

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
1325 sand	Union Oil Co. of Calif. "Tapo Ridge" 27	Union Oil Co. of Calif. "Simi" 27	1 3N 18W	SB	21	0	Nov 1954

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Tapo Ridge" 27	Union Oil Co. of Calif. "Simi" 27	Oct 1954	1 3N 18W	SB	2,047	Modelo	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
1325 sand	1,750	160	late Miocene	Modelo	16.5	776+	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	10	0	51	0	51	1954	1	1	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 500

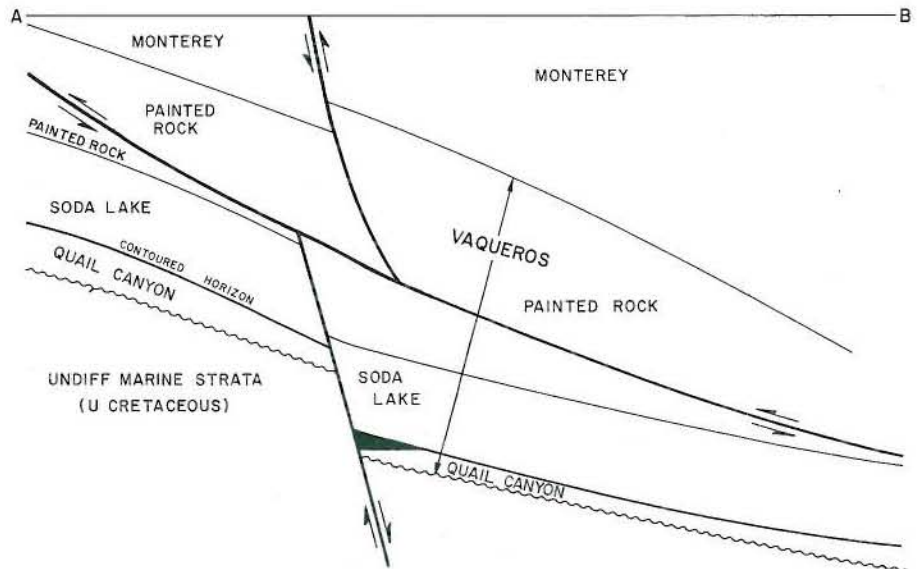
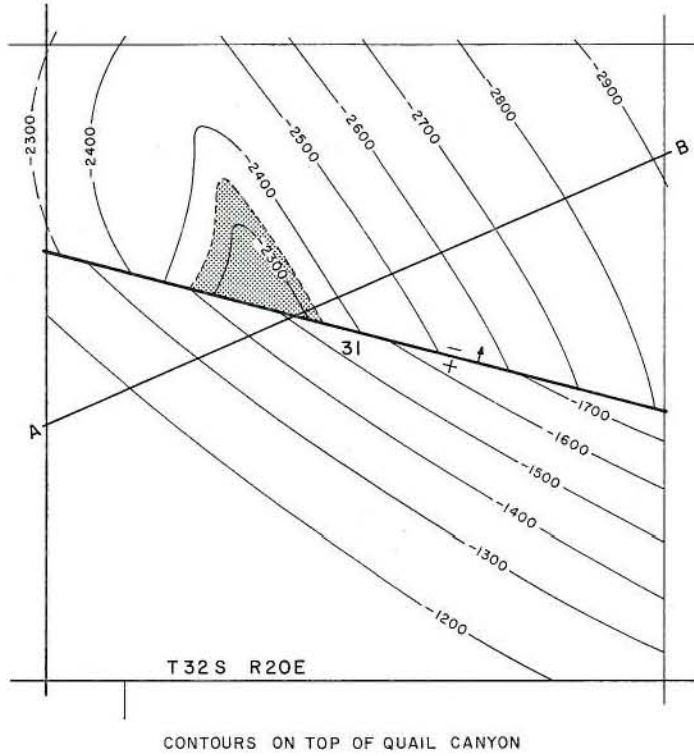
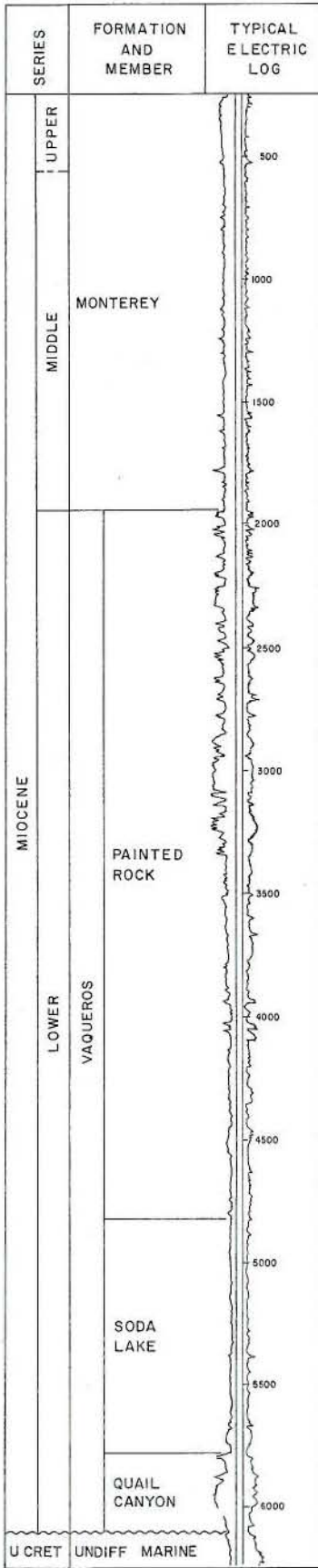
CURRENT CASING PROGRAM: 11 3/4" ccm. 500; 7" combination string landed through zone and cemented through ports above zone.

METHOD OF WASTE DISPOSAL: See remarks.

REMARKS: Well was shut in November 1954 and has not produced since that date.

REFERENCES: Kew, W.S., Geology and Oil Resources of a part of Los Angeles and Ventura Counties, Calif.: U.S. Geol. Survey Bull. 753 (1924).
Bailey, T.L., Geology of the Western Ventura Basin, Santa Barbara, Ventura and Los Angeles Counties, Geology of Southern California; Calif. Div. of Mines Bull. 170, Vol. 2, Map Sheet No. 4 (1954).

TAYLOR CANYON OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

TAYLOR CANYON OIL FIELD
San Luis Obispo County

LOCATION: 34 miles northeasterly of Santa Maria

TYPE OF TRAP: Faulted nose

ELEVATION: 3,200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Quail Canyon sand	Gustav A. Haussler III "Hancock-Bishop" 44-31	Hancock Oil Co. "Hancock-Bishop" 44-31	31 32S 20E	MD	217	150	Aug 1950

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Gulf Oil Corp. "Humble" 54-31	Universal Consolidated Oil Co. "Humble" 54-31	Feb 1951	31 32S 20E	MD	6,351	Basement (Granite)	Jurassic (?)

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Quail Canyon sand	5,620	200	early Miocene	Vaqueros	38	400	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,996	0	0	20	1	466,801	140,837	84,145	1951	6	2	20

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 0 - 200

CURRENT CASING PROGRAM: 11 3/4" cem 250; 7" cem. above zone; 5 1/2" liner landed through zone.

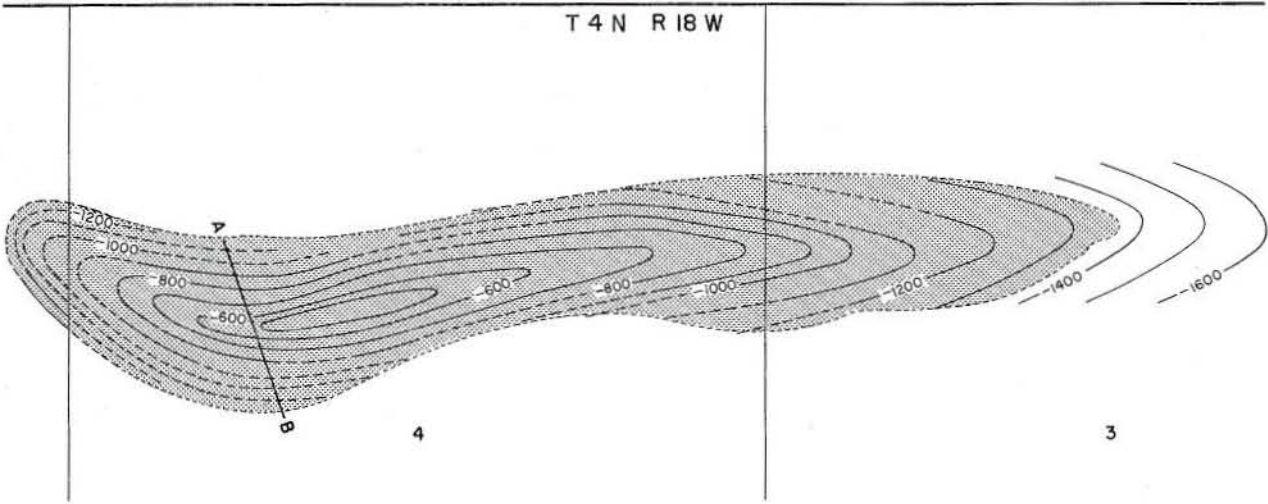
METHOD OF WASTE DISPOSAL: No water produced.

REMARKS:

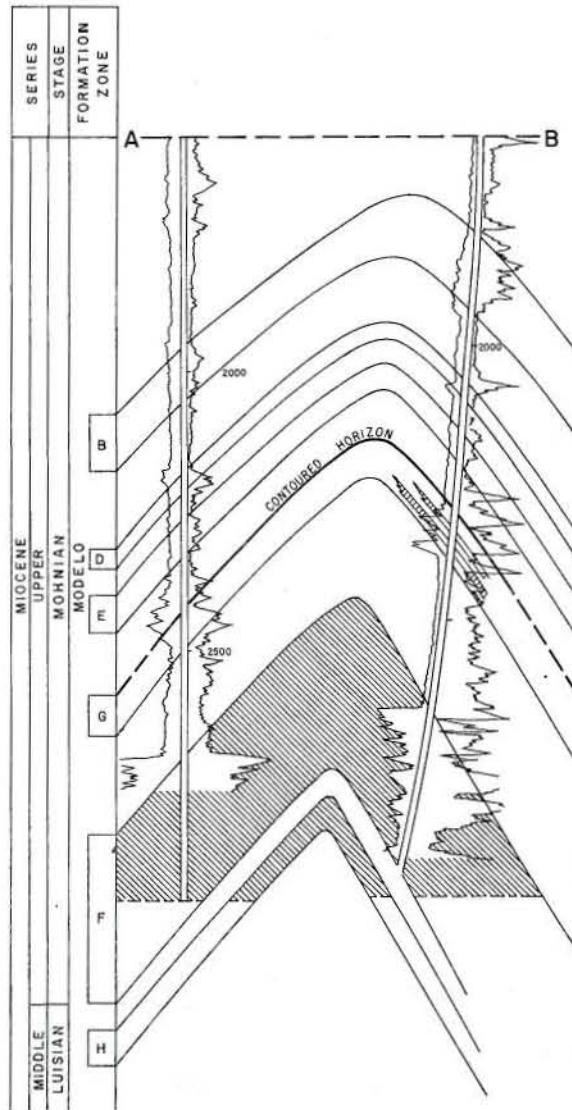
REFERENCES: Dolman, S.B., Operations in District 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 36, No. 2 (1950).
Hill, J.L., S.A. Carlson, and T.W. Dibblee, Jr., Stratigraphy of Cuyama Valley - Caliente Range Area, California: Am. Assoc. Petroleum Geologists Bull., Vol. 42, No. 12, p. 2973 (1958).

TEMESCAL OIL FIELD

T 5 N R 18 W
T 4 N R 18 W



CONTOURS ON TOP OF G ZONE
SCALE: 1" = 1300'



NOTE: MOHELO EXTENDS TO THE SURFACE

SERIES	STAGE	FORMATION	ZONE
MIOCENE			
UPPER			
MOHNIAN		MODELO	
		B	
		D	
		F	
		G	
		H	
MIDDLE			
LUISTIAN			
		H	

CALIFORNIA DIVISION OF OIL AND GAS

TEMESCAL OIL FIELD
Ventura County

LOCATION: 30 miles northeast of Ventura

TYPE OF TRAP: Anticline

ELEVATION: 700 - 2,400

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
G	Getty Oil Co. "Temescal" 1	B & L Oil Co. No. 1	4 4N 18W	SB	91	2,800	Apr 1926
F	Getty Oil Co. "Temescal" 3	Temescal Petroleum Co. "Landers" 3	3 4N 18W	SB	78	N.A.	Aug 1926
H	Getty Oil Co. "Temescal" 7	Pacific Western Oil Corp. "Temescal" 7	4 4N 18W	SB	127	N.A.	Jan 1937

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Getty Oil Co. "Temescal" 14	Pacific Western Oil Corp. "Temescal" 14	Feb 1943	4 4N 18W	SB	10,313	Modelo	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
G	2,200	40	Miocene	Modelo	22	250	III
F	2,600	300	Miocene	Modelo	22	250	III
H	2,950	60	Miocene	Modelo	22	250	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
61,991	17,247	326,125	150	15	6,695,899	5,395,230	329,449	1944	35	22	170

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1964	3,458,473	1

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

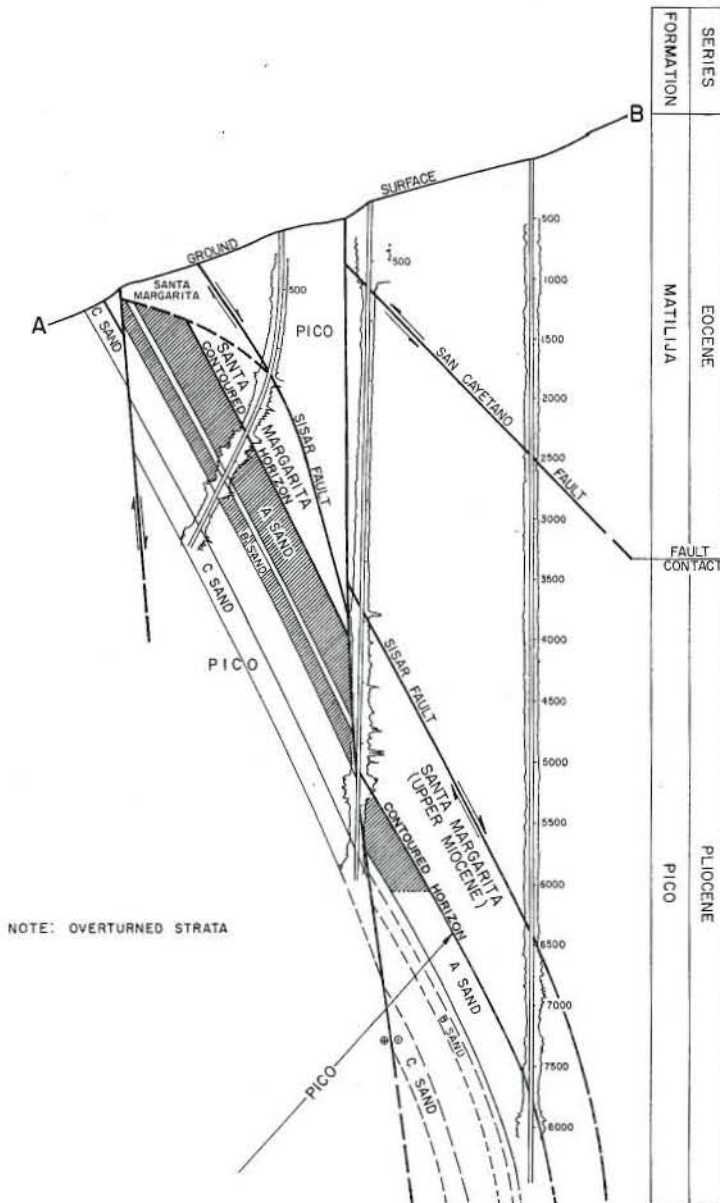
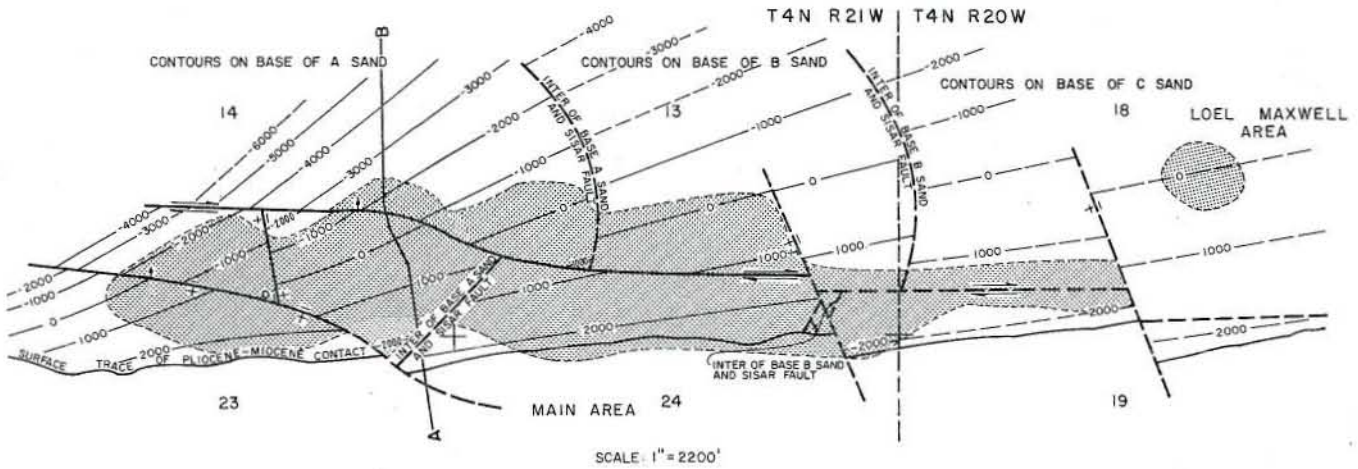
CURRENT CASING PROGRAM: 11 3/4" cem. 600; 7" cem. above F zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is used in water-flood operations.

REMARKS: All waters are low in salinity but high in sodium bicarbonate and solids.

REFERENCES: Schultz, C.H., Temescal Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 43, No. 2 (1957).

TIMBER CANYON OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

TIMBER CANYON OIL FIELD

Ventura County

LOCATION: 16 miles northeast of Ventura

TYPE OF TRAP: Faulted homocline

ELEVATION: 2,640

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Pico	Empire Oil Co. "Loma" 1	Loma Oil Co. No. 1	13 4N 21W	SB	N.A.	N.A.	1889

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
McFarland Energy, Inc. "Loel-Maxwell" 1	Richfield Oil Corp. "Loel-Maxwell" 1	Jul 1953	18 4N 20W	SB	9,028	"Santa Margarita"	late Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
98,908	286,398	37,418	280	25	4,970,100	8,146,537	306,942	1955	72	54	340

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: Does not apply

BASE OF FRESH WATER: 0 - 100

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: Designated as a field January 1, 1957; formerly a part of Santa Paula oil field.

REFERENCES: Bertholf, H.W., Timber Canyon Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 51, No. 1 (1965).
 Fine, S.F., Geology and Occurrences of Oil in the Ojai, Santa Paula Area, Ventura County, Geology of Southern Calif.: Calif. Div. of Mines Bull. 170, Map Sheet 28 (1954).
 McCulloch, T.R., Geology of the Timber Canyon Area, Ventura County: Unpublished M.A. Thesis on file at University of Calif., Los Angeles Library (1957).
 Natland, M.L., and W.T. Ruthwell, Jr., Fossil Foraminifera of the Los Angeles and Ventura Regions, Geology of Southern Calif.: Calif. Div. of Mines Bull. 170, p. 33-42 (1954).
 Prutzman, P.W., Petroleum in Southern California: Calif. State Mining Bureau Bull. 63, p. 50-89 (1913).

CALIFORNIA DIVISION OF OIL AND GAS

TIMBER CANYON OIL FIELD

LOEL-MAXWELL AREA

Ventura County

LOCATION: 17 miles northeast of Ventura

TYPE OF TRAP: Faulted homocline

ELEVATION: 2,626

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Loel-Maxwell	McFarland Energy, Inc. "Loel-Maxwell" 1	Richfield Oil Corp. "Loel-Maxwell" 1	18 4N 20W	SB	144	182	Jan 1954

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
McFarland Energy, Inc. "Loel-Maxwell" 1	Richfield Oil Corp. "Loel-Maxwell" 1	Jul 1953	18 4N 20W	SB	9,028	"Santa Margarita"	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Loel-Maxwell	8,000	500	late Miocene	"Santa Margarita"	37	425	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,282	80	247	10	1	76,039	112,080	11,773	1954	2	2	10

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 0 - 100

CURRENT CASING PROGRAM: 13 3/8" cem 800; 7" combination string landed through zone and cemented through ports above zone.

METHOD OF WASTE DISPOSAL: Surface disposal of waste water.

REMARKS:

REFERENCES: See field sheet.

CALIFORNIA DIVISION OF OIL AND GAS

TIMBER CANYON OIL FIELD

MAIN AREA

Ventura County

LOCATION: 15 miles northeast of Ventura

TYPE OF TRAP: Faulted homocline; tar seal

ELEVATION: 2,650

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Pico	Empire Oil Co. "Loma" 1	Loma Oil Co. 1	13 4N 21W	SB	N.A.	N.A.	1889

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Atlantic Richfield Co. "Atlas-Smith" 1	Richfield Oil Corp. "Atlas-Smith" 1	Aug 1952	14 4N 21W	SB	8,460	Pico	Pliocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Pico A	500 - 3,000	100	Pliocene	Pico	30	17	II
Pico B	500 - 3,000	55	Pliocene	Pico	36	80	II

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
97,626	286,318	37,171	270	24	4,894,061	8,034,457	297,000	1955	70	52	330

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 0 - 100

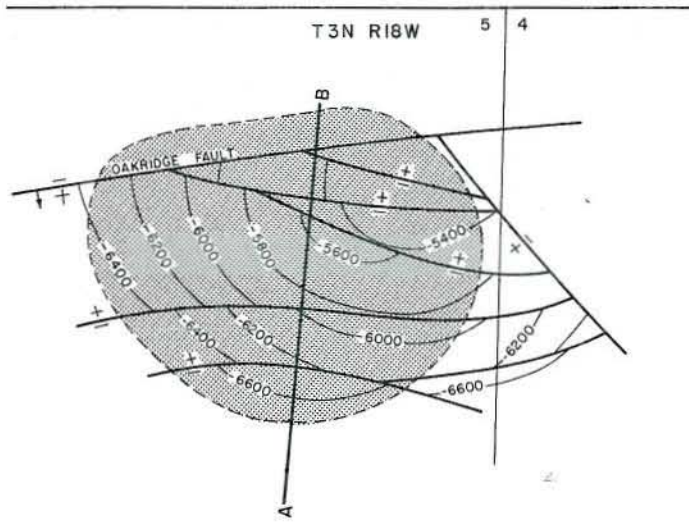
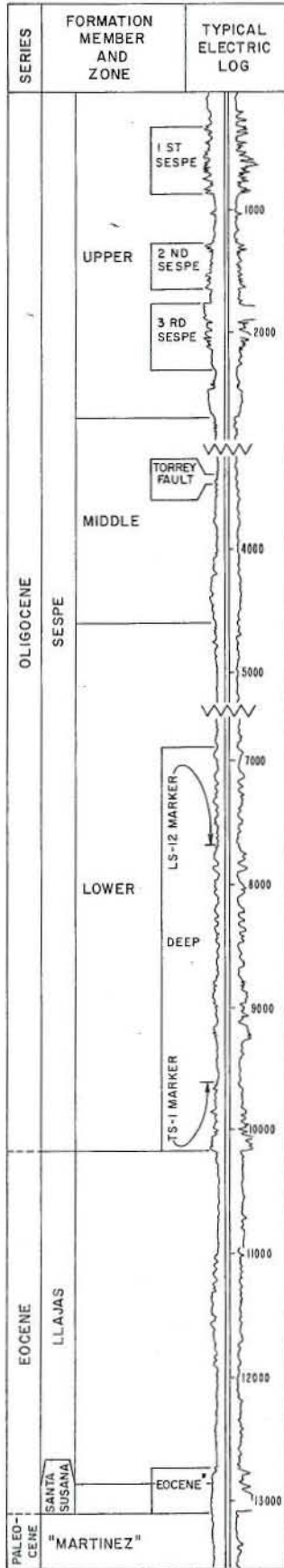
CURRENT CASING PROGRAM: 13 3/8" cem. 400; 7" combination string landed through zone and cemented through ports above zone.

METHOD OF WASTE DISPOSAL: All waste water is injected into a disposal well.

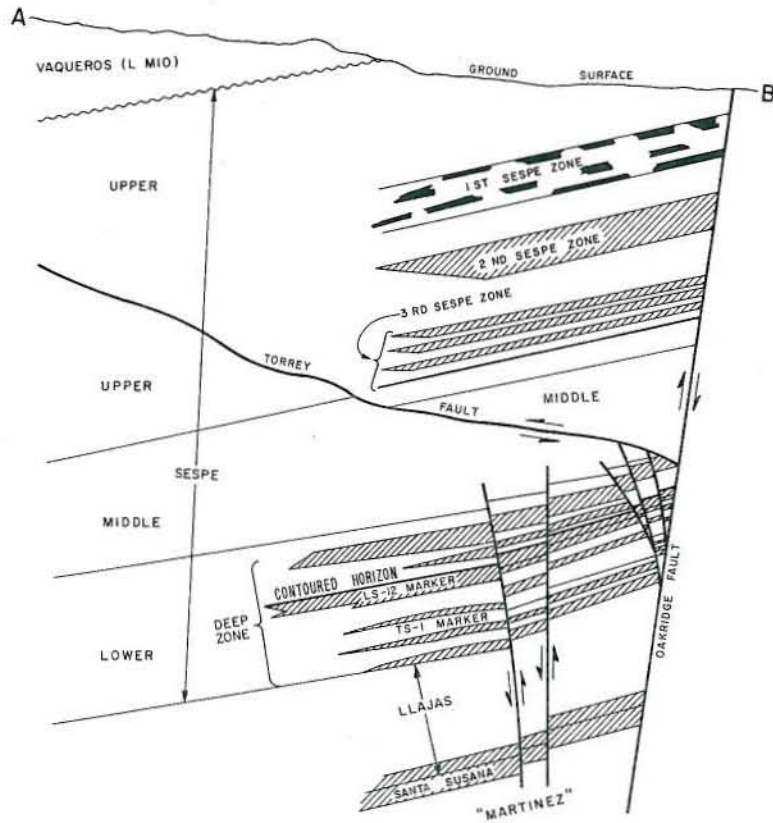
REMARKS:

REFERENCES: See field sheet.

TORREY CANYON OIL FIELD



CONTOURS ON LS 12 ELECTRIC LOG MARKER
SCALE 1" = 1800'



CALIFORNIA DIVISION OF OIL AND GAS

TORREY CANYON OIL FIELD

Ventura County

LOCATION: 28 miles northeast of Ventura

TYPE OF TRAP: Faulted dome

ELEVATION: 1,200 - 2,200

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
First Sespe	Union Oil Co. of Calif. "Torrey" 3	Same as present	5 3N 18W	SB	N.A.	N.A.	Nov 1889
Second Sespe	Union Oil Co. of Calif. "Torrey" 1	Same as present	5 3N 18W	SB	212	N.A.	Mar 1889
Third Sespe	Union Oil Co. of Calif. "Torrey" 5	Same as present	5 3N 18W	SB	50	N.A.	Jun 1890
Deep	Union Oil Co. of Calif. "Torrey" 83	Same as present	5 3N 18W	SB	549	163	May 1952
Eocene	Union Oil Co. of Calif. "Torrey" 92	Same as present	5 3N 18W	SB	117	N.A.	Sep 1953

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Torrey" 92	Same	Jan 1953	5 3N 18W	SB	14,989	Undiff. marine strata	Paleocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
First Sespe	1,800	600	Oligocene	Sespe	24	1,500	III
Second Sespe	1,500	400	Oligocene	Sespe	29	1,700	III
Third Sespe	2,000	500	Oligocene	Sespe	18 - 36	1,700	III
Deep	8,700	3,000	Oligocene	Sespe	18 - 36	1,700	III
Eocene	13,000	300	Eocene	Llajas and Santa Susana	29	1,800	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
243,780	481,171	91,582	260	41	18,253,460	18,678,873	1,301,802	1954	123	106	260

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1952	10,115,737	1
Gas injection for pressure maintenance	1948	39,117,112	4

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

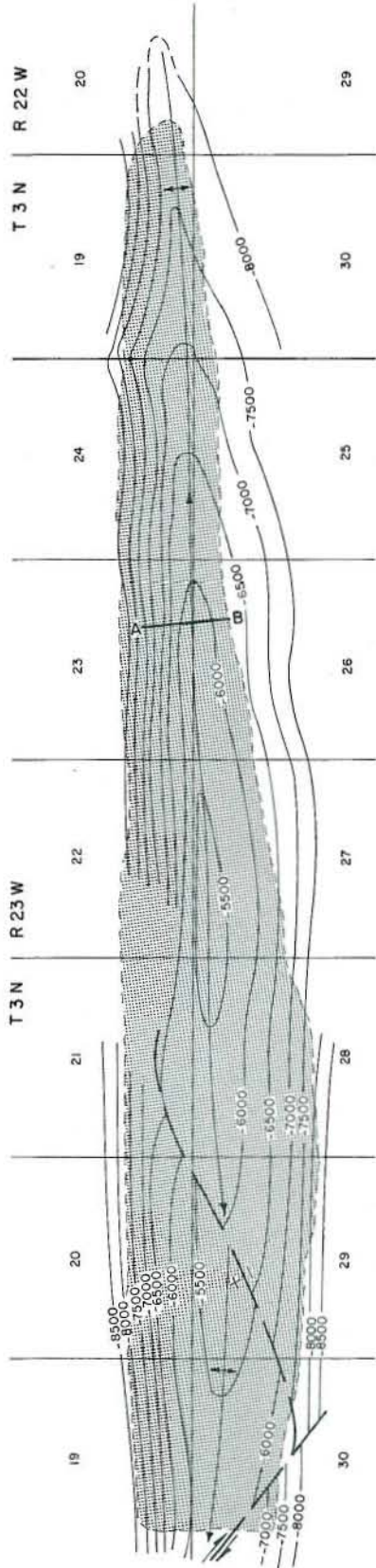
CURRENT CASING PROGRAM: First, Second, Third Sespe: 10 3/4" cem. 150; 7" cem. above zone; 5" liner landed through zone. Deep and Eocene: 13 3/8" cem. 1,400; 7" (or smaller) combination string landed through zone and cemented through ports above zone.

METHOD OF WASTE DISPOSAL: All waste water is used in water-flood projects.

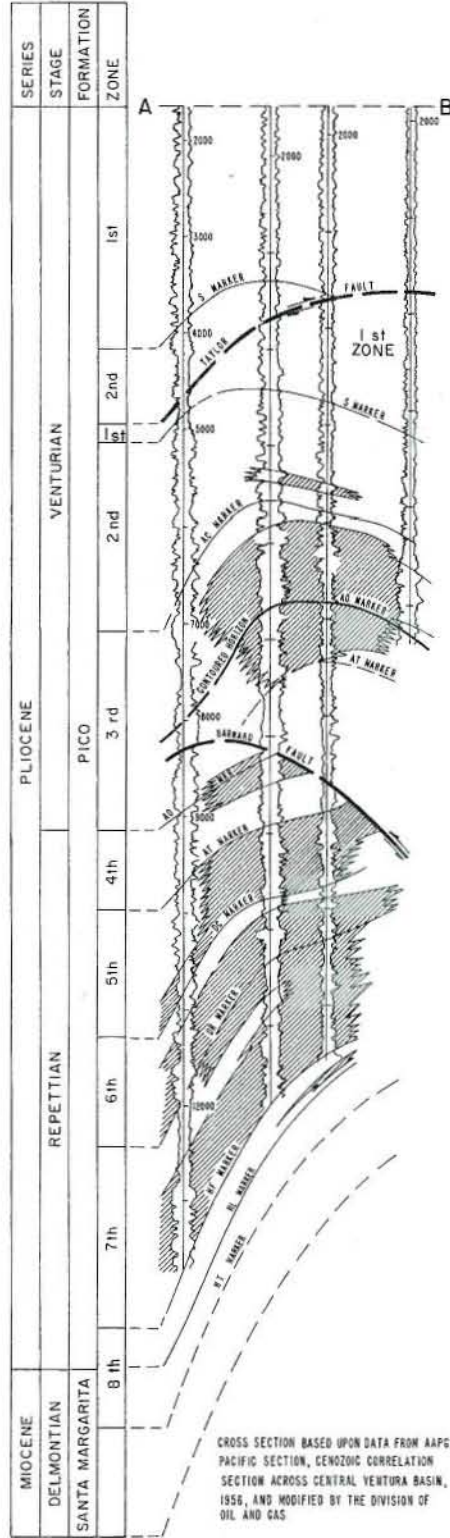
REMARKS:

REFERENCES: Prutzman, P.W., Petroleum in Southern California: Calif. State Mining Bureau Bull. 63 (1913).

VENTURA OIL FIELD



CONTOURS ON AO ELECTRIC LOG MARKER
SCALE 1" = 4800'
COURTESY OF SHELL OIL COMPANY AND PACIFIC SECTION, AMPC



CROSS SECTION BASED UPON DATA FROM AAPG,
PACIFIC SECTION, CENOZOIC CORRELATION
SECTION ACROSS CENTRAL VENTURA BASIN,
1956, AND MODIFIED BY THE DIVISION OF
OIL AND GAS

CALIFORNIA DIVISION OF OIL AND GAS

VENTURA OIL FIELD
Ventura County

LOCATION: 1 mile north of Ventura

TYPE OF TRAP: Faulted anticline

ELEVATION: 120 - 1,000

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
1st	Shell Oil Co. "Gosnell" 3	Same as present	28 3N 23W	SB	911	0	Mar 1922
2nd	Shell Oil Co. "Gosnell" 1	Same as present	28 3N 23W	SB	120	0	Mar 1919
3rd	Shell Oil Co. "Taylor" 5	Same as present	28 3N 23W	SB	560	0	Dec 1924
4th	Getty Oil Co. "Lloyd" 15	Associated Oil Co. "Lloyd" 15	27 3N 23W	SB	2,817	0	Sep 1925
5th	Getty Oil Co. "Lloyd" 58	Associated Oil Co. "Lloyd" 58	27 3N 23W	SB	883	0	Nov 1929
6th	Same as above	Same as above	27 3N 23W	SB	*	0	Nov 1929
7th	Shell Oil Co. "Gosnell" 35	Same as present	28 3N 23W	SB	1,600	1,355	Sep 1937
8th	Mobil Oil Corp. "Barnard" 31	General Petroleum Corp. "Barnard" 31	28 3N 23W	SB	1,160	890	Nov 1952

Remarks: * Production from the 5th and 6th zones commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Shell Oil Co. "Taylor" P.T. 653	Same	Apr 1973	21 3N 23W	SB	21,500	Monterey	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
1st	3,680	250	Pliocene	Pico	30	1,250	II
2nd	5,180	1,170	Pliocene	Pico	30	1,350	III
3rd	7,815	960	Pliocene	Pico	30	1,200	III
4th	9,150	650	Pliocene	Pico	29	1,300	III
5th	10,180	670	Pliocene	Pico	30	1,180	III
6th	10,580	650	Pliocene	Pico	30	1,200	III
7th	12,000	1,010	Pliocene	Pico	30	1,000	III
8th	12,010	870	Pliocene & late Mio	Pico & Santa Margarita	30	890	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
10,769,551	8,066,753	27,320,772	3,380	803	770,514,925	1,950,401,097	29,908,466	1953	1,460	1,291	3,480

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1956	378,669,725	205

SPACING ACT: Does not apply

BASE OF FRESH WATER: 250 - 750

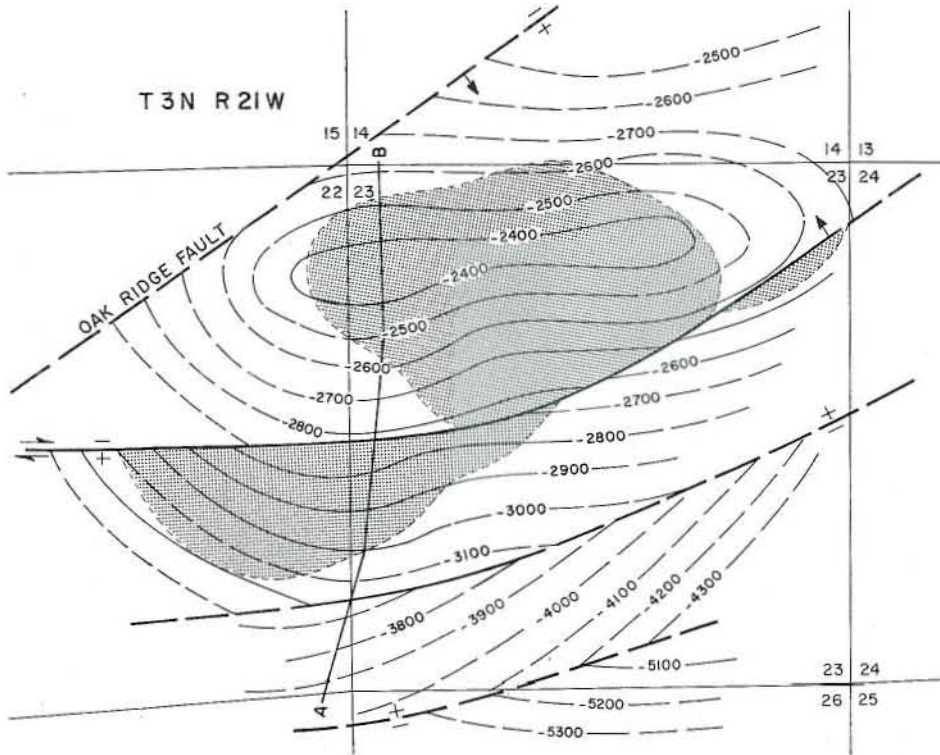
CURRENT CASING PROGRAM: 11 3/4" cem. 500 - 1,200; 7" cem. above zone; 5" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is used in water-flood operations.

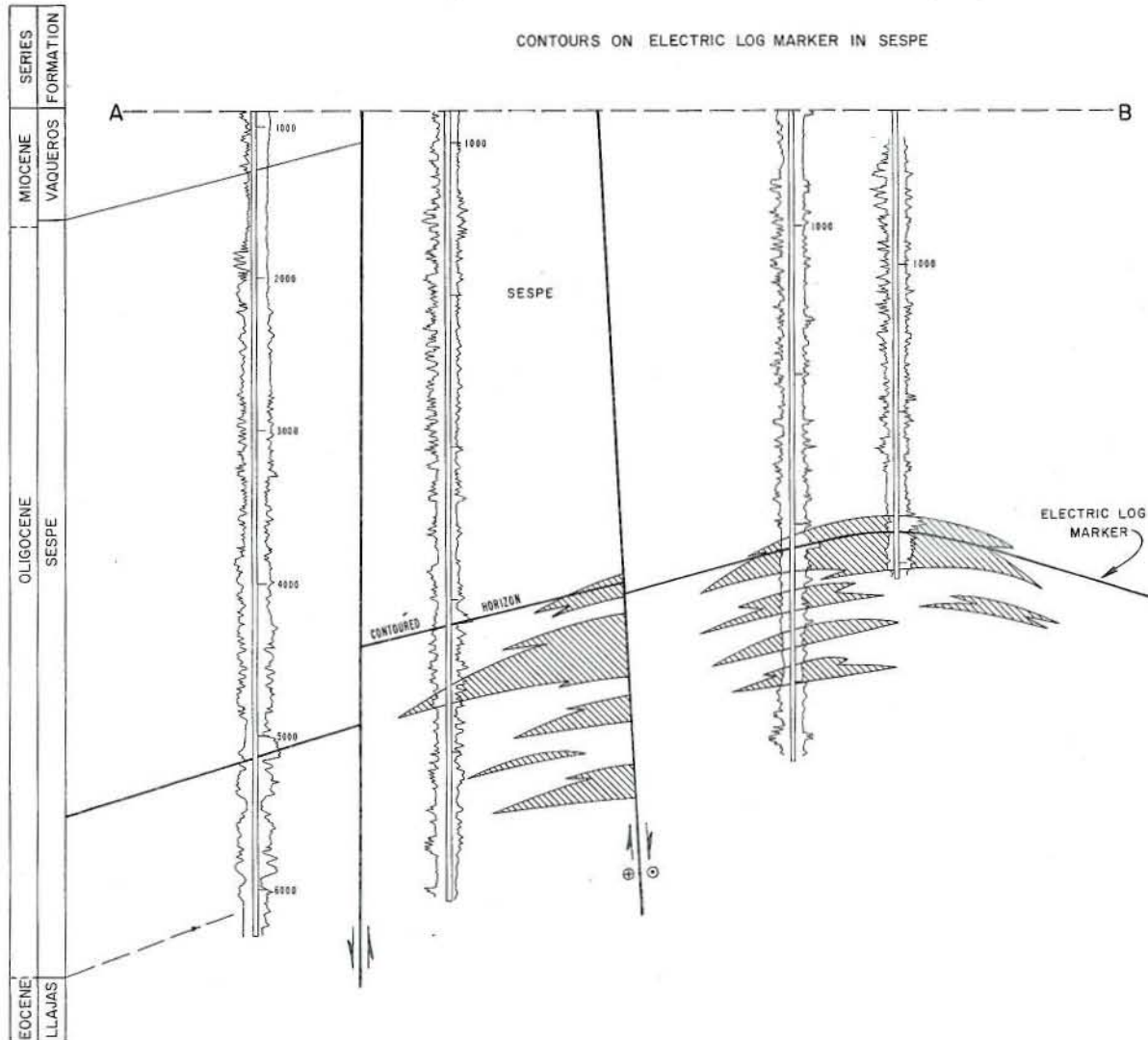
REMARKS: About 1903, seven gas wells were drilled to depths of 400 - 800 and produced gas for a utility company. No other information is available regarding these wells.

REFERENCES: Hacker, R.N., Ventura Avenue Oil Field: Am. Assoc. Petroleum Geologists, Pacific Section, 44th Annual Meeting and Field Trip, p. 22-29, (1969).

WEST MOUNTAIN OIL FIELD



CONTOURS ON ELECTRIC LOG MARKER IN SESPE



CALIFORNIA DIVISION OF OIL AND GAS

WEST MOUNTAIN OIL FIELD

Ventura County

LOCATION: 12 miles east of Ventura

TYPE OF TRAP: Lenticular sands on faulted anticline

ELEVATION: 1,100

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & W	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sespe	Union Oil Co. of Calif. "Converse" 1	F.E. Fairfield "West Mountain" 1	23 3N 21W	SB	80	N.A.	Jul 1946

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "Lemon" 2	Honolulu Oil Corp. Ltd. "Hobson" 1	Jun 1936	23 3N 21W	SB	6,744	Llajas	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Sespe	4,500	1,500	Oligocene	Sespe	20	2,000	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
54,893	72,208	31,720	310	23	3,301,949	2,500,869	350,526	1948	39	35	340

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACFT: Applies

BASE OF FRESH WATER: None

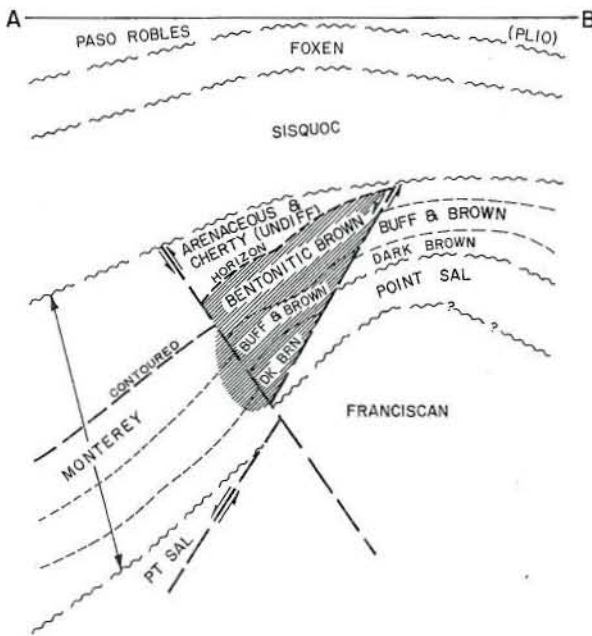
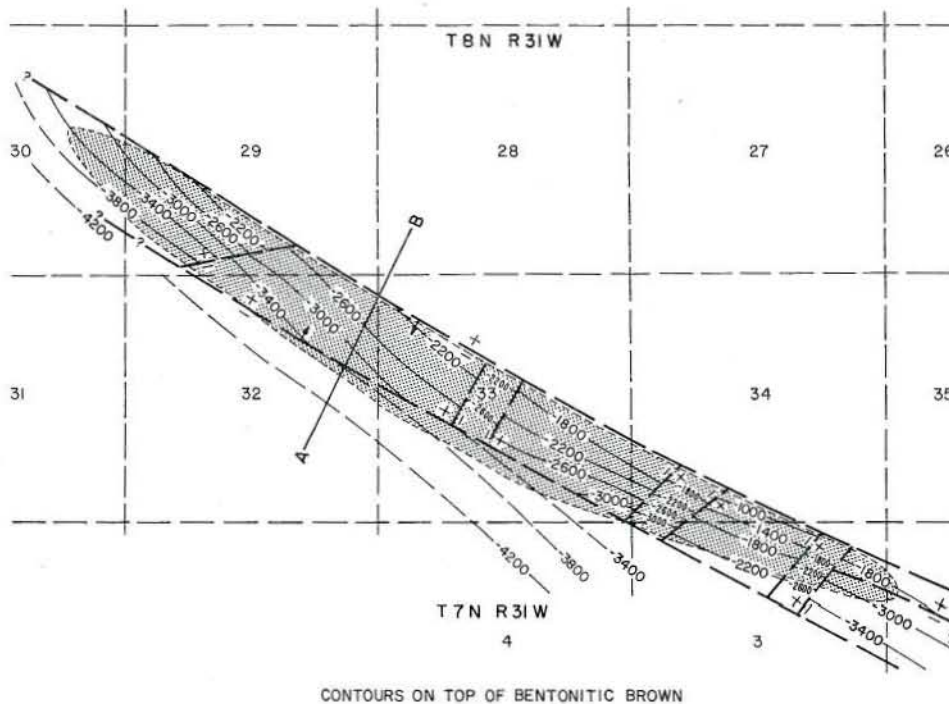
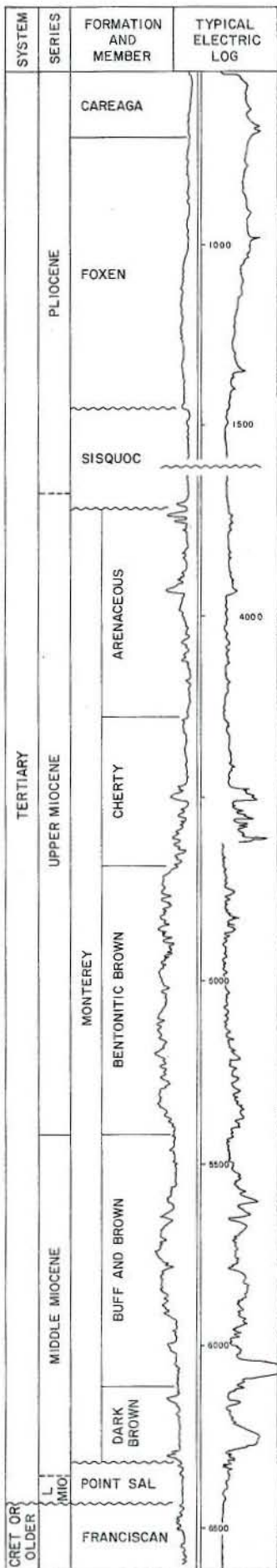
CURRENT CASING PROGRAM: 10 3/4" cem. 700; 7" cem. over zone; 5" liner.

METHOD OF WASTE DISPOSAL: Pipelined to Shell's Canyon field and injected into water-flood wells.

REMARKS:

REFERENCES: Bertholf, H.W., West Mountain Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 52, No. 1 (1966).

ZACA OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

ZACA OIL FIELD
Santa Barbara County

LOCATION: 22 miles southeast of Santa Maria

TYPE OF TRAP: Faulted homocline on south flank of anticline

ELEVATION: 1,100

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & W	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Monterey	Getty Oil Co. "Davis" 1	Tidewater Associated Oil Co. "Davis" 1	33 8N 31W	SB	94	0	Nov 1942

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & W	Depth (feet)	At total depth	
						Strata	Age
Getty Oil Co. "Luton" 113	Tidewater Associated Oil Co. "Luton" 113	Nov 1951	29 8N 31W	SB	6,685	Monterey	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Monterey	3,500	1,700	middle Miocene	Monterey	8	200	None

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
428,828	0	8,487,554	430	32	19,956,646	2,865,607	1,708,887	1954	50	45	490

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1953	114,082,976	6

SPACING ACT: Applies

BASE OF FRESH WATER: 1,400

CURRENT CASING PROGRAM: 13 3/8" cem. 700; 9 5/8" cem. above zone and across base of fresh-water sands; 7", 6" or 4 3/4" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is injected into disposal wells.

REMARKS: A cyclic-steam project was initiated in 1963 and terminated in 1965 after having injected 147,978 bbls. of water equivalent into 11 wells.

REFERENCES: Dibblee, T.W., Jr., Geology of Southwestern Santa Barbara County, California: Calif. Div. of Mines Bull. 150, p. 69 (1950).
 Dolman, S.G., Operations in District No. 3: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 28, No. 2, p. 61 (1942).
 Petroleum Potential of Santa Maria Province, California: in Future Petroleum Provinces of the United States - Their Geology and Potential, Am. Assoc. Petroleum Geologists Memoir 15, Vol. 1.
 Regan, L.J., and A.W. Hughes, Fractured Reservoirs of Santa Maria District, California: Am. Assoc. Petroleum Geologists Bull. 150, p. 69 (1950).



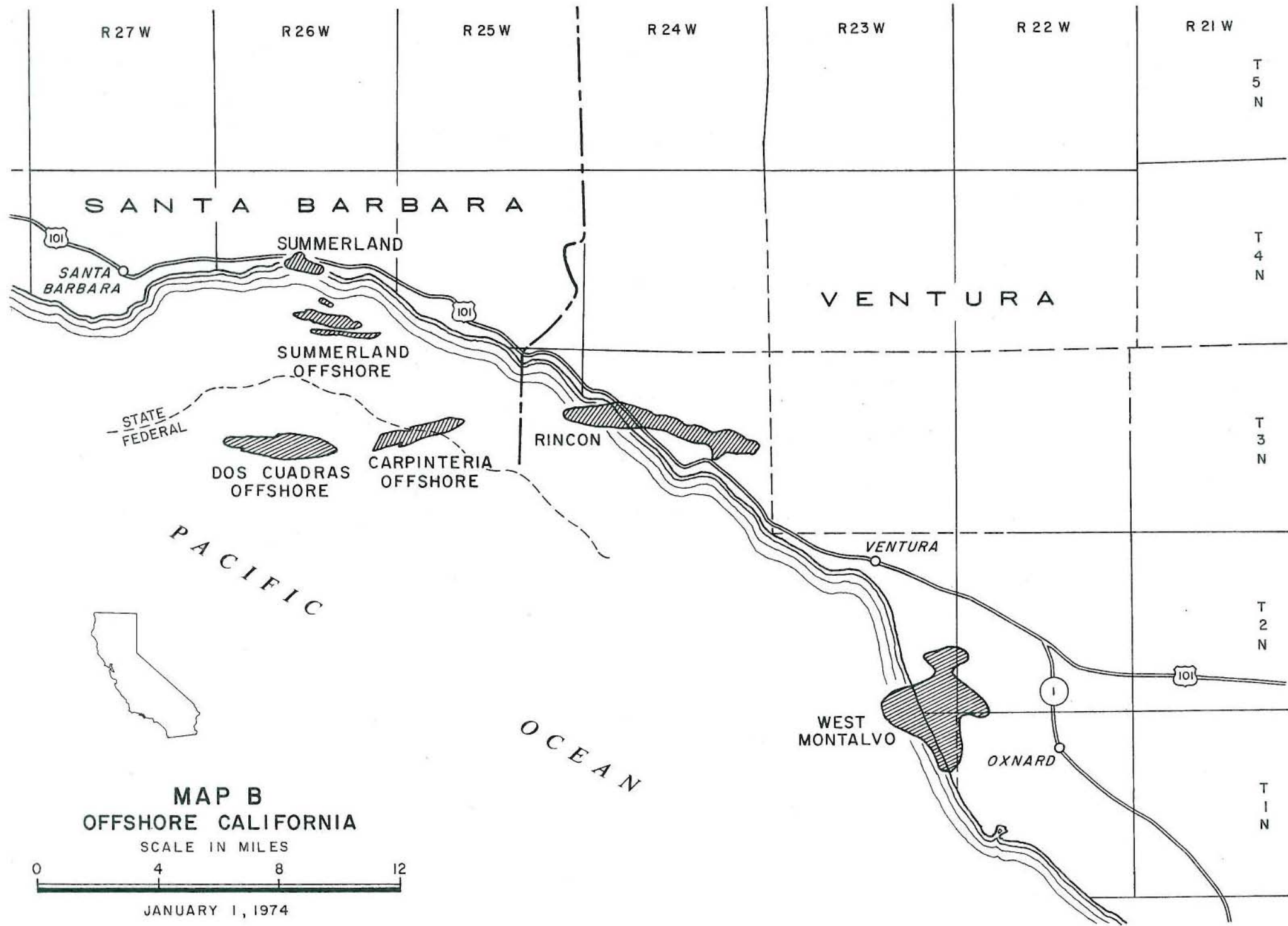
MAP A
OFFSHORE CALIFORNIA

SCALE IN MILES



JANUARY 1, 1974



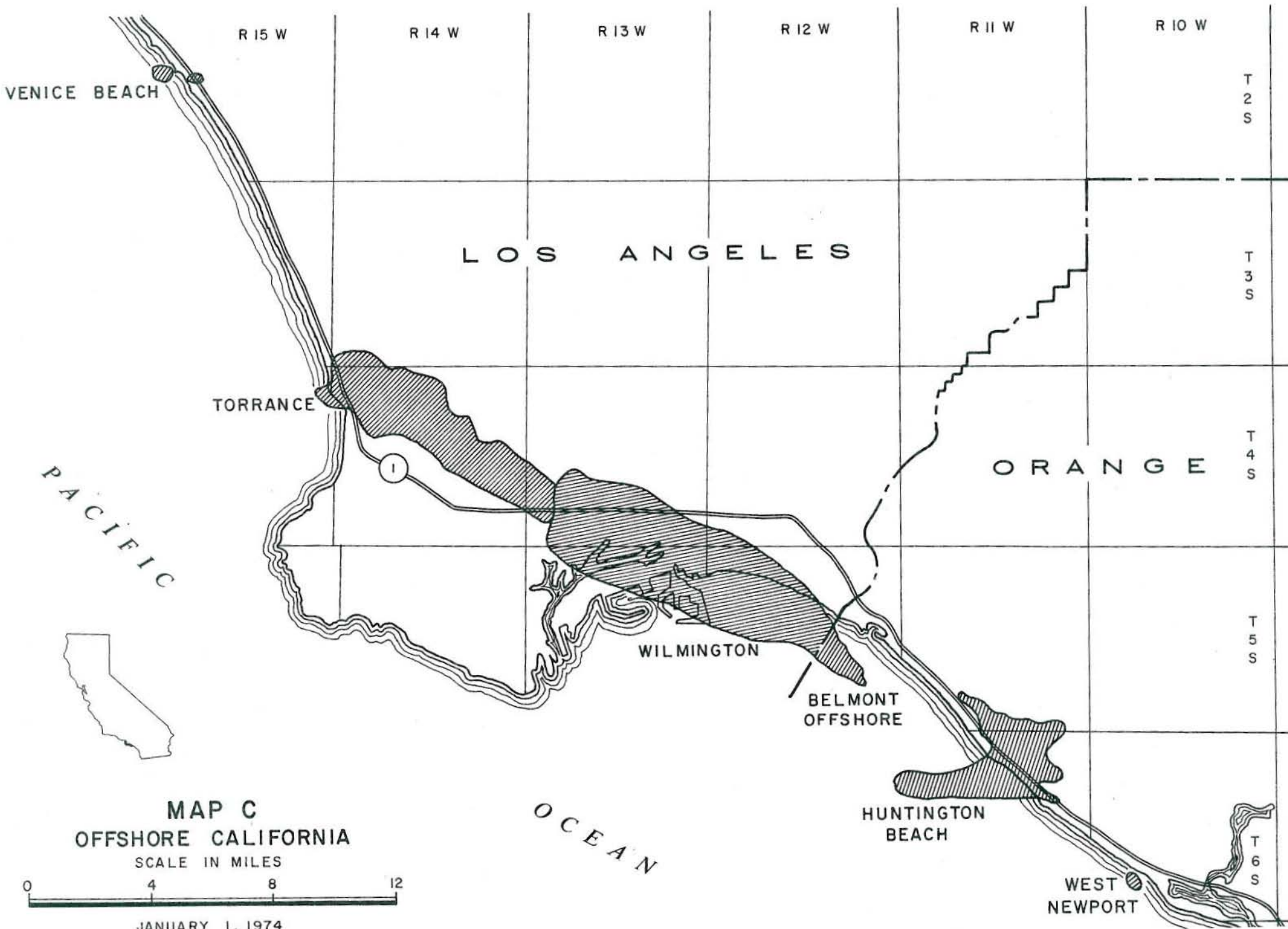


MAP B
OFFSHORE CALIFORNIA

SCALE IN MILES

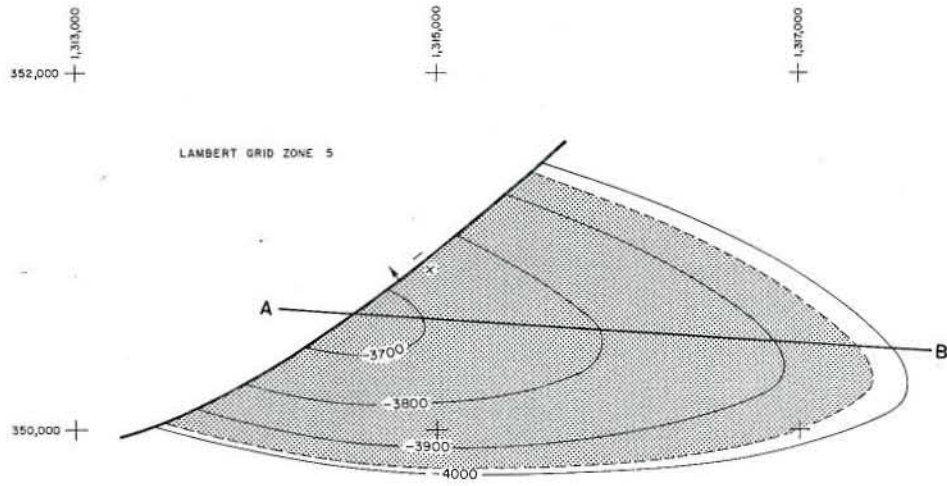
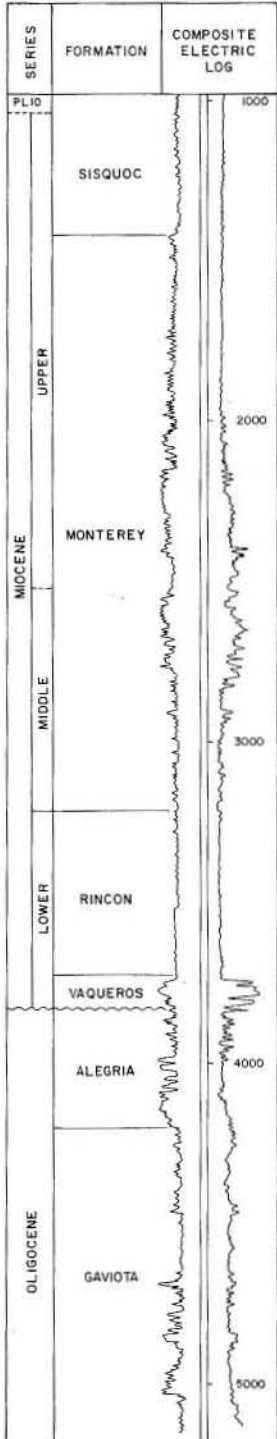


JANUARY 1, 1974

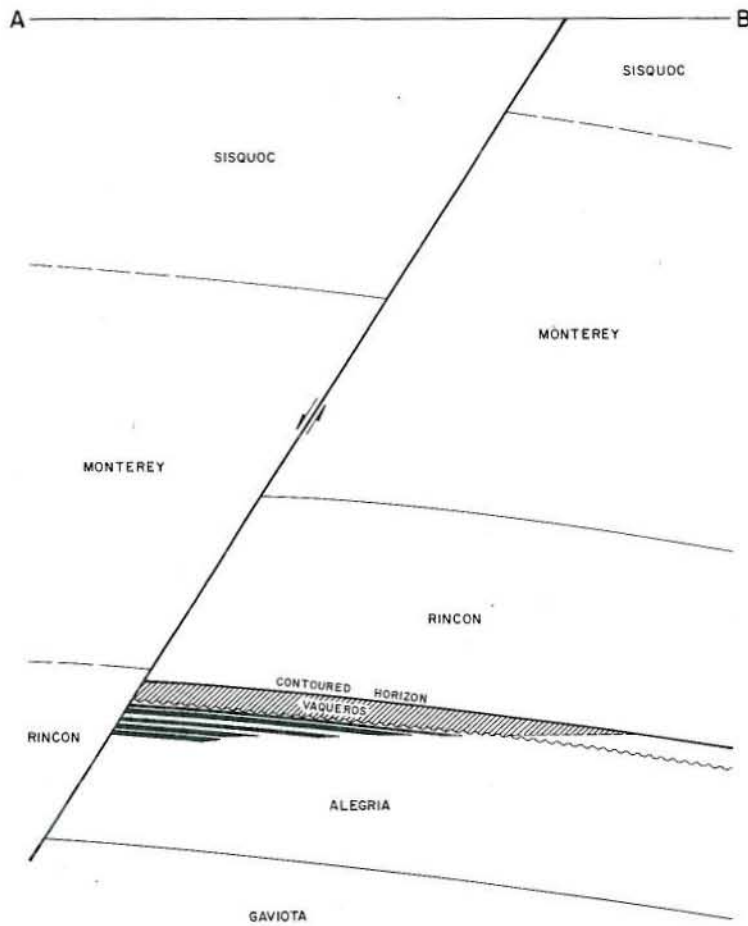


**OFFSHORE CALIFORNIA
MAPS AND DATA SHEETS**

ALEGRIA OFFSHORE OIL FIELD



CONTOURS ON TOP OF VAQUEROS



CALIFORNIA DIVISION OF OIL AND GAS

ALEGRIA OFFSHORE OIL FIELD

Santa Barbara County

LOCATION: 35 miles west of Santa Barbara

TYPE OF TRAP: Faulted anticline

ELEVATION: -130 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Lambert Coord. (10)	Grid Zone	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Vaqueros	Atlantic Richfield Co. "State 2793" 1	Richfield Oil Corp. "State 2793" 1	X - 1,315 Y - 351	5	110	1,900	Mar 1962
Alegria	Same as above	Same as above			*	*	

Remarks: * Production from Vaqueros and Alegria zones is commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Lambert Coord. (10)	Grid Zone	Depth (feet)	At total depth	
						Strata	Age
Atlantic Richfield Co. "State 2793" 1	Richfield Oil Corp. "State 2793" 1	Mar 1962	X - 1,315 Y - 351	5	6,010	Gaviota	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Vaqueros	3,800	170	early Miocene	Vaqueros	1,160	1,130	IV
Alegria	4,000	110	Oligocene	Alegria	45	1,750	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
42,428	163,877	6,060	20	1	385,386	3,164,437	77,033	1970	11	1	20

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 20" cem. 211; 13 3/8" cem. 1,150; 8 5/8" cem. through upper zone; 6 5/8" liner landed through lower zone.

METHOD OF WASTE DISPOSAL: Water is piped to shore, hauled to Elwood, cleaned and disposed of into the ocean.

REMARKS: Wells were drilled from floating vessels; the producing well was completed on the ocean floor.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

BELMONT OFFSHORE OIL FIELD

Orange County

LOCATION: 5 miles southeast of Long Beach

TYPE OF TRAP: See areas

ELEVATION: 20 (Onshore drillsite); -40 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Ranger	Exxon Corp. "State PRC 186" 1	*Gilco, Inc. "State" 1	11 5S 12W	SB	5	2,000	Jul 1947

Remarks: * Directionally drilled from onshore drillsite.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Projected Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Exxon Corp. "State PRC 186" 210	*Marine Exploration Co. "State" 2	Mar 1948	11 5S 12W	SB	12,131	Puente	late Mio

* Directionally drilled from onshore drillsite.

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1974) (Dry gas production data not included; see old area.)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
2,217,722	367,213	1,513,322	760	77	36,681,822	30,437,563	4,295,682	1968	140	130	760

STIMULATION DATA (Jan. 1, 1974) (See areas)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas

BASE OF FRESH WATER: See areas

CURRENT CASING PROGRAM: See areas

METHOD OF WASTE DISPOSAL: See areas

REMARKS: Two wells were directionally drilled from an onshore location but all subsequent producing wells were drilled from man-made islands located 1-1/2 miles from shore. This field is on a continuation of the Wilmington field structure. The deepest vertical well in the field, Standard Oil Co. of Calif. "Surfside" 317 (now "State 3095" 317), Sec. 22, was drilled in April 1966 to 11,695 feet and was bottomed in the late Miocene Puente Formation.

REFERENCES: See areas

CALIFORNIA DIVISION OF OIL AND GAS

BELMONT OFFSHORE OIL FIELD

OLD AREA

Orange County

LOCATION: 5 miles southeast of Long Beach

TYPE OF TRAP: Faulted anticline

ELEVATION: 20 (Onshore drillsite); -42 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Ranger	Exxon Corp. "State PRC 186" 1	*Gilco, Inc. "State" 1	11 5S 12W	SB	5	2,000	Jul 1947
Upper Terminal	Exxon Corp. "State PRC 186" 125	Humble Oil & Refining Co. "Monterey-Texas State" 125	22 5S 12W	SB	412	0	Sep 1961
Union Pacific-Ford	Exxon Corp. "State PRC 186" 210	*Marine Exploration Co. "State" 2	11 5S 12W	SB	41	0	Nov 1948

Remarks: Under the classification shown in Div. of Oil and Gas, published production statistics, the upper, intermediate and lower zones correspond to the Ranger, Upper Terminal and Union Pacific-Ford zones, respectively.
 * Directionally drilled from onshore drillsite.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Exxon Corp. "State PRC 186" 210	*Marine Exploration Co. "State" 2	Mar 1948	11 5S 12W	SB	12,131	Puente	late Mio

* Directionally drilled from onshore drillsite.

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Ranger	2,950	100	early Pliocene - late Mio	"Repetto" - Puente	16 - 27	2,000	IV
U. Terminal	4,000	25	late Miocene	Puente	23 - 29	N.A.	V
Union Pacific-Ford	5,500	250	late Miocene	Puente	23 - 29	N.A.	V

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
746,701	268,870	426,225	335	36	16,561,539	18,366,487	1,052,099	1966	56	56	335

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1959	16,184,154	*7

* One well directionally drilled from onshore drillsite.

SPACING ACT: Applies

BASE OF FRESH WATER: 1,900

CURRENT CASING PROGRAM: 10 3/4" cem. at 1,000; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water shipped to an onshore site and injected into a water-flood well.

REMARKS: All but two wells were drilled from Monterey Island. Dry gas was produced from two wells completed in the Upper Ranger zone; cumulative production was 3,645,417 Mcf. when the wells were shut-in during 1970. The deepest vertical well in the area, Monterey Oil Co. "Monterey-Texas State" 3 (now Exxon Corp. "State PRC 186" 3), Sec. 22, was drilled in May 1954 to 10,162 feet and was bottomed in the late Miocene Puente Formation.

REFERENCES: Frame, R.G., California Offshore Petroleum Development: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 2 (1960).

CALIFORNIA DIVISION OF OIL AND GAS

BELMONT OFFSHORE OIL FIELD

SURFSIDE AREA

Orange County

LOCATION: 5 miles southeast of Long Beach

TYPE OF TRAP: Faulted anticline

ELEVATION: -35 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Lambert Coord.	Grid Zone	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Ranger	Standard Oil Co. of Calif. "State 3095" 209	Standard Oil Co. of Calif. "Surfside" 209	569,845N 1,433,460E	6	*248	85	Nov 1965
Upper Terminal	Standard Oil Co. of Calif. "State 3095" 318	Standard Oil Co. of Calif. "Surfside 3095" 318	569,791N 1,433,501E	6	516	181	Sep 1965
Lower Terminal	Standard Oil Co. of Calif. "State 3095" 226	Standard Oil Co. of Calif. "Surfside" 226	569,791N 1,433,443E	6	**464	168	Dec 1965
Union Pacific	Standard Oil Co. of Calif. "State 3095" 113	Standard Oil Co. of Calif. "Surfside 3095" 113	569,827N 1,433,448E	6	50	N.A.	Oct 1965
Ford	Same as above	Same as above	569,827N 1,433,448E	6	50	N.A.	Oct 1965

Remarks: * Production from Ranger and Upper Terminal commingled.
 ** Production from Upper and Lower Terminal commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Lambert Coord.	Grid Zone	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "State 3095" 317	Standard Oil Co. of Calif. "Surfside" 317	Apr 1966	569,796N 1,433,502E	6	11,695	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Ranger	3,700	50	early Plio - late Mio	"Repetto" and Puente	21 - 26	1,800	V
Upper Terminal	4,000	300	late Miocene	Puente	23 - 29	1,800	V
Lower Terminal	4,800	50	late Miocene	Puente	23 - 29	1,800	V
Union Pacific	5,400	200	late Miocene	Puente	25 - 28	1,400	V
Ford	6,100	75	late Miocene	Puente	25 - 28	1,600	V

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,471,021	98,343	1,087,097	425	41	20,120,283	12,071,076	3,615,984	1968	84	74	425

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1966	26,096,098	18

SPACING ACT: Applies

BASE OF FRESH WATER: 2,100

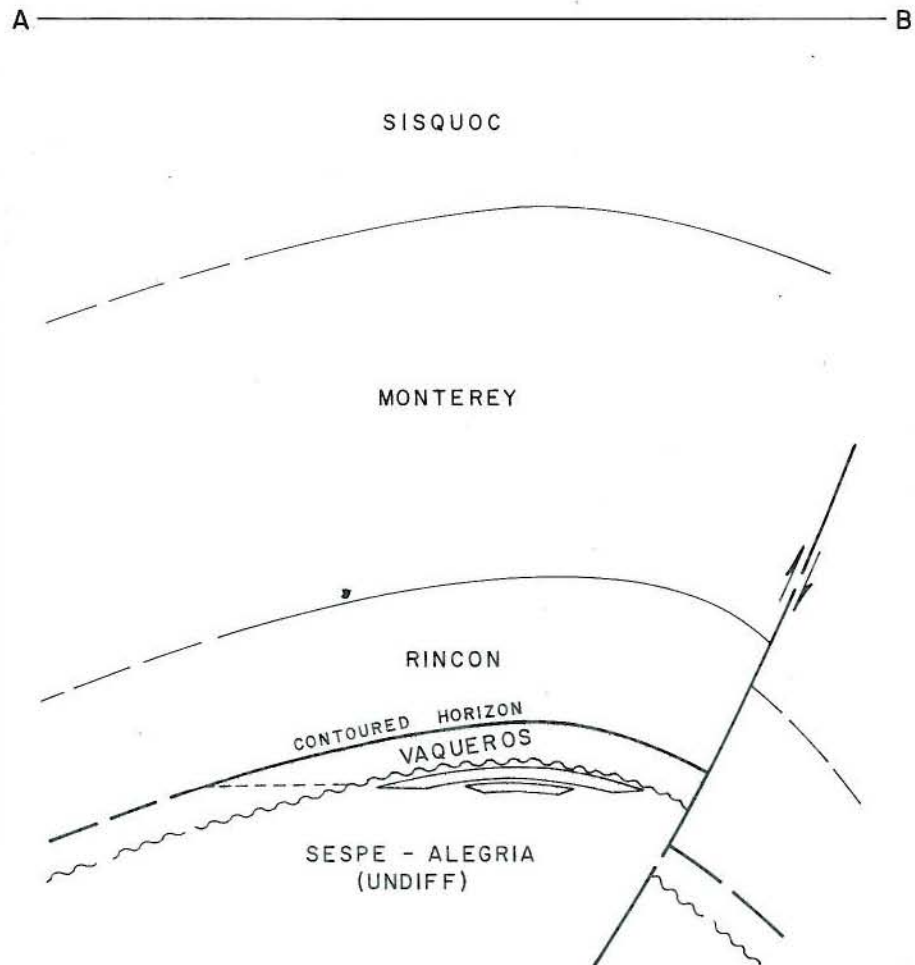
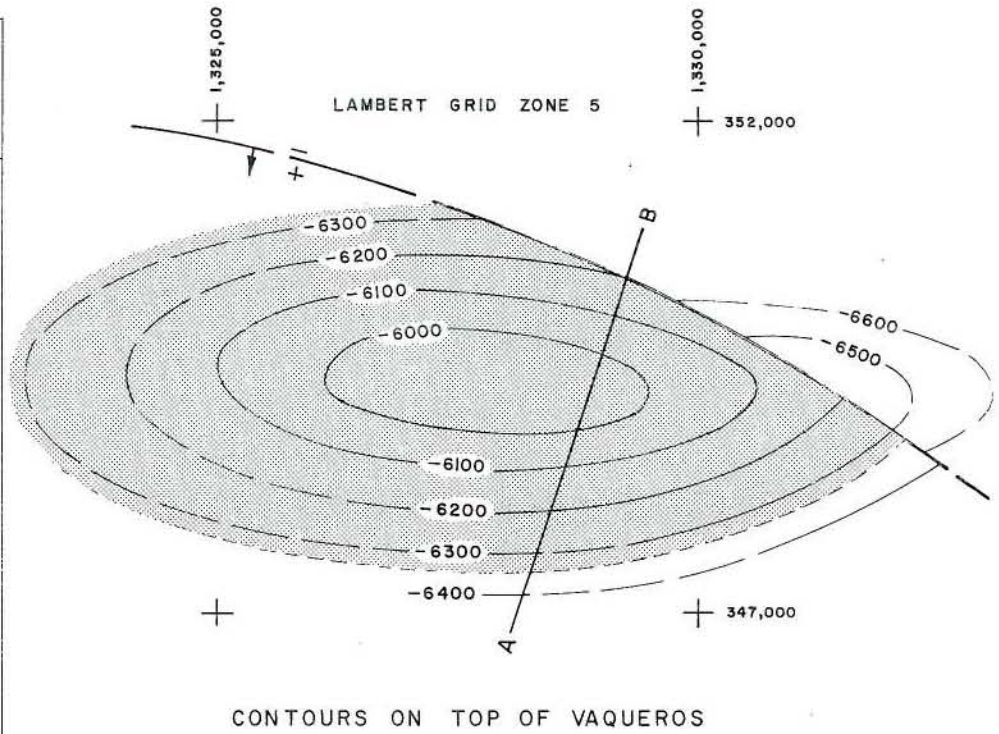
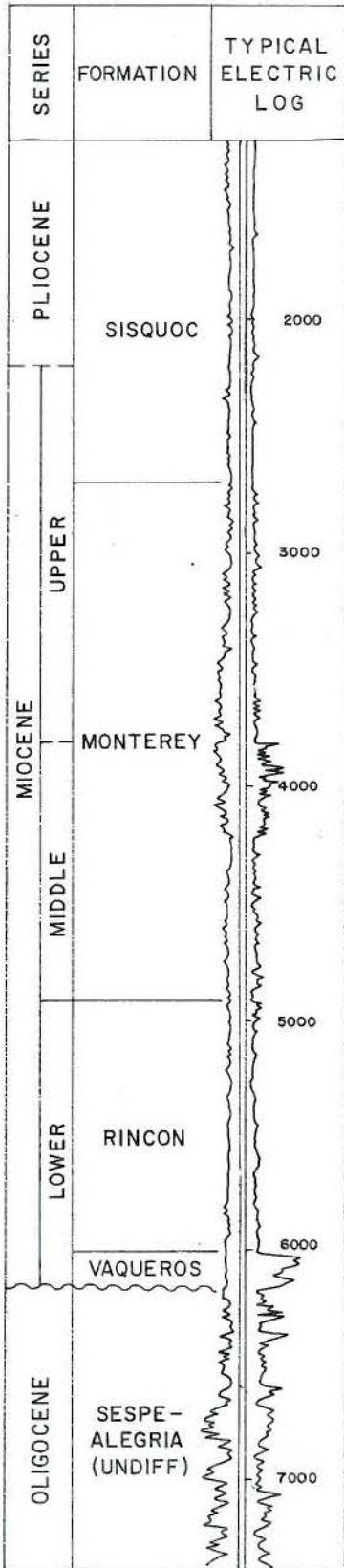
CURRENT CASING PROGRAM: 20" cem. 100; 11 3/4" cem. at 2,200; 7" cem. over zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is shipped to an onshore site, treated and discharged into the ocean via San Gabriel River channel.

REMARKS: All completed wells were drilled from Island Esther.

REFERENCES:

CALIENTE OFFSHORE GAS FIELD



CALIFORNIA DIVISION OF OIL AND GAS

CALIENTE OFFSHORE GAS FIELD

Santa Barbara County

LOCATION: 32 miles west of Santa Barbara

TYPE OF TRAP: Faulted anticline

ELEVATION: -240 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Lambert Coord. (10) ³	Grid Zone	Initial production			Date of completion
					Daily (Mcf)	Flow pressure (psi)	Bean size (in)	
Vaqueros	Standard Oil Co. of Calif. "SSGS 2199" 401A	Same as present	X - 1,332 Y - 351	5	2,700	1,625	40/64	Nov 1962
Sespe-Alegria	Standard Oil Co. of Calif. "SSGS 2894" 1	Same as present	X - 1,328 Y - 349	5	3,000	1,895	36/64	Feb 1973

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Lambert Coord (10) ³	Grid Zone	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "SSGS 2199" 101	Same	Apr 1961	X - 1,332 Y - 349	5	7,912	Gaviota	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Gas (btu)	Salinity of zone water gr/gal	Original zone pressure (psi)	Class BOPE required
			Age	Formation				
Vaqueros	6,200	200	early Miocene	Vaqueros	1,160	1,200	2,975	IV
Sespe-Alegria	6,400	75	Oligocene	Sespe-Alegria	*			

* Production is commingled.

PRODUCTION DATA (Jan. 1, 1974)

1973 Production		1973 Proved acreage	1973 Maximum number producing wells	Cumulative gas production (Mcf)	Peak gas production		Total number of wells		Maximum proved acreage
Net gas (Mcf)	Water (tbb)				(Mcf)	Year	Drilled	Completed	
1,473,332	186,089	140	2	30,157,830	4,284,901	1967	14	3	140

SPACING ACT: Applies

BASE OF FRESH WATER: None

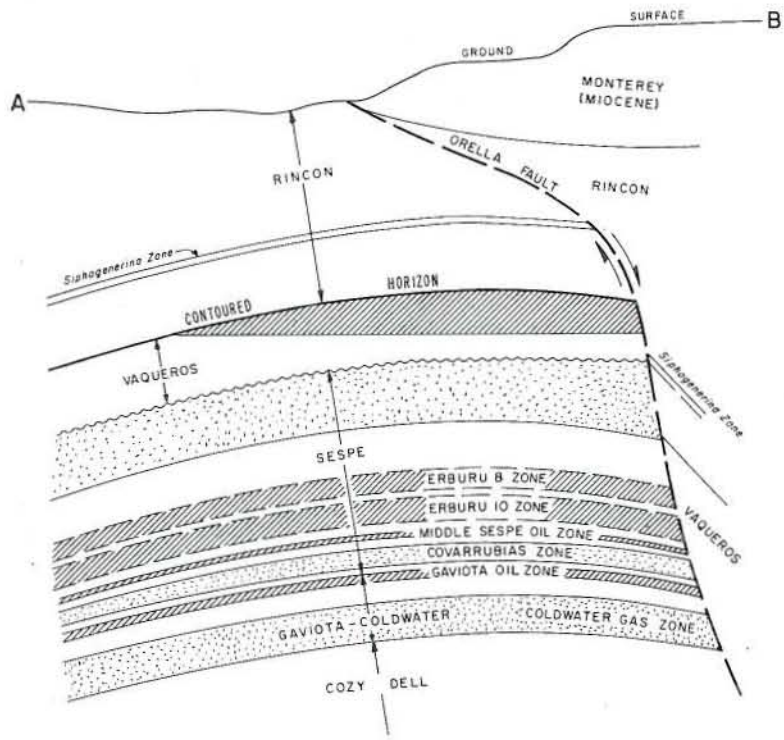
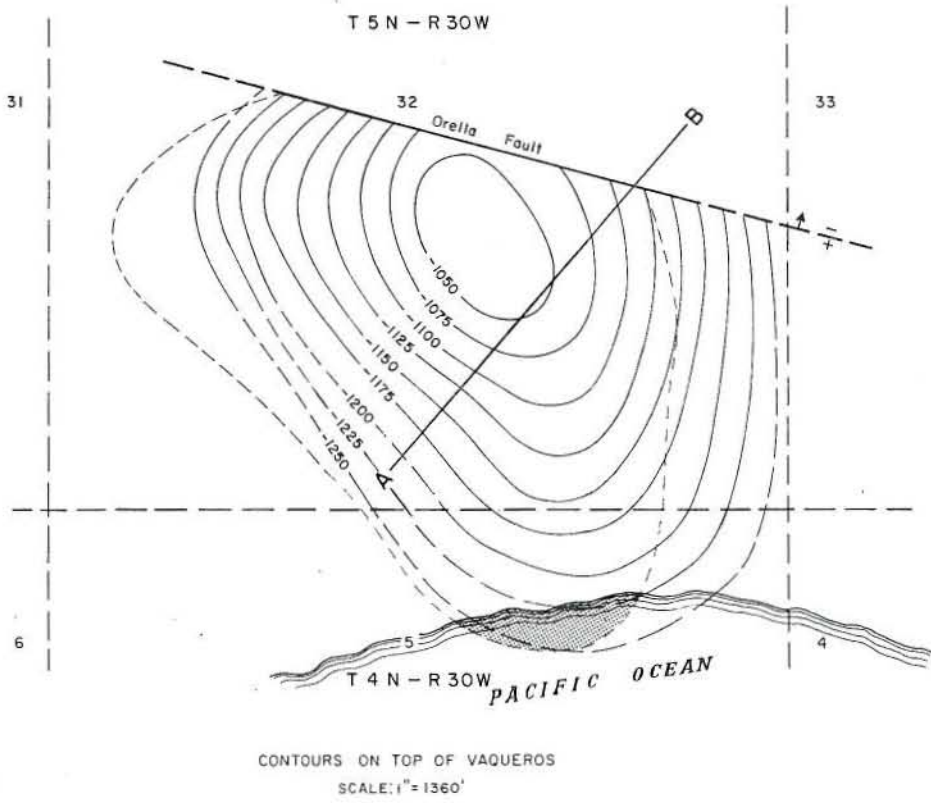
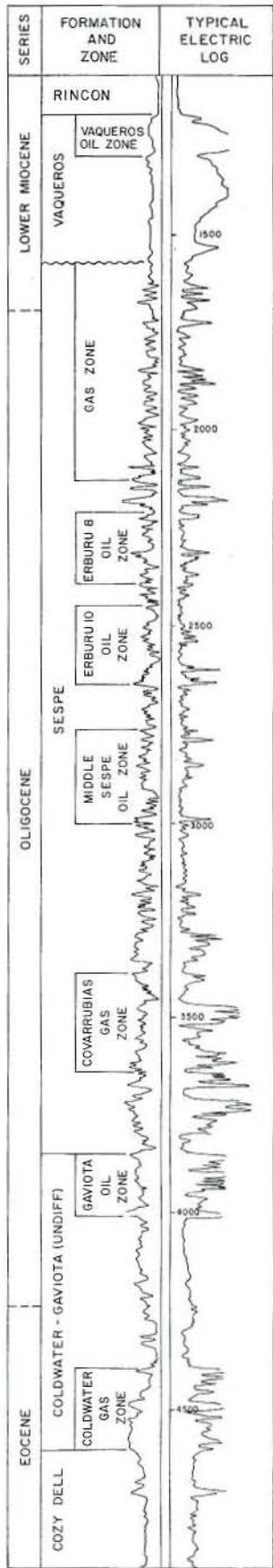
CURRENT CASING PROGRAM: 30" cem. 350; 10 3/4" cem. ocean floor to 1,020 - 2,020; 7" cem. 5,800; 5" liner cem. through zone.

METHOD OF WASTE DISPOSAL: Produced water is injected into a disposal well in Molino gas field.

REMARKS: Wells were drilled from vessels; producing wells were completed on the ocean floor.

REFERENCES:

CAPITAN OIL FIELD Offshore Area



CALIFORNIA DIVISION OF OIL AND GAS

CAPITAN OIL FIELD

OFFSHORE AREA (Abandoned)

Santa Barbara County

LOCATION: See map sheet of Capitan Oil Field

TYPE OF TRAP: Faulted dome

ELEVATION: 20

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Vaqueros	H. J. Montgomery 170-1	Oakburn Drilling Co. 170-1	5 4N 30W	SB	75	N.A.	Feb 1930
Erburu 8	B. D. Owens "P.R.C." 773-5	Oakburn Drilling Co. 169-1	5 4N 30W	SB	39	N.A.	Sep 1932
Erburu 10	Same as above	Same as above	5 4N 30W	SB	*	N.A.	Sep 1932

Remarks: * Production from the Erburu 8 and Erburu 10 zones was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Mobil Oil Corp. "State 2991" 2B	Socony Mobil Oil Co., Inc. "State 2991" 2	Oct 1965	4 4N 30W	SB	6,761	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Vaqueros	1,250	100	early Miocene	Vaqueros	16	40	III
Erburu 8	2,260	125	Oligocene	Sespe	43	230	III
Erburu 10	2,600	75	Oligocene	Sespe	43	230	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	71,074	33,141	5,826	1934	7	2	20

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: 150

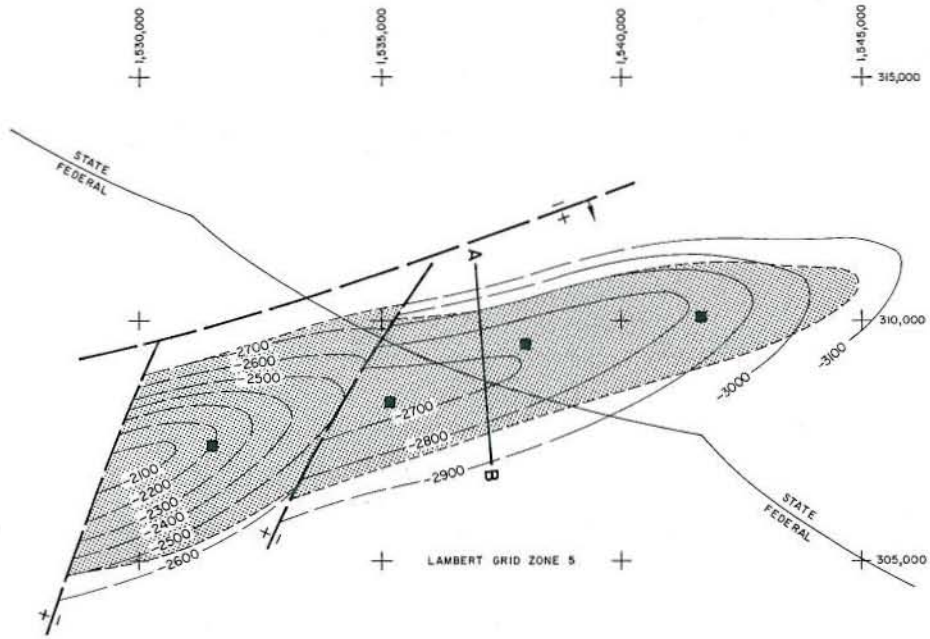
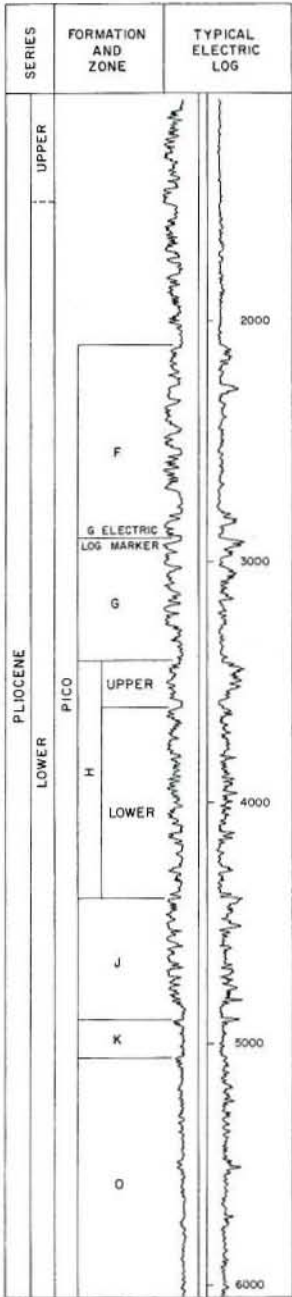
CURRENT CASING PROGRAM: 16" cem. 200; 9" cem. 760; 6 5/8" cem. through zone.

METHOD OF WASTE DISPOSAL:

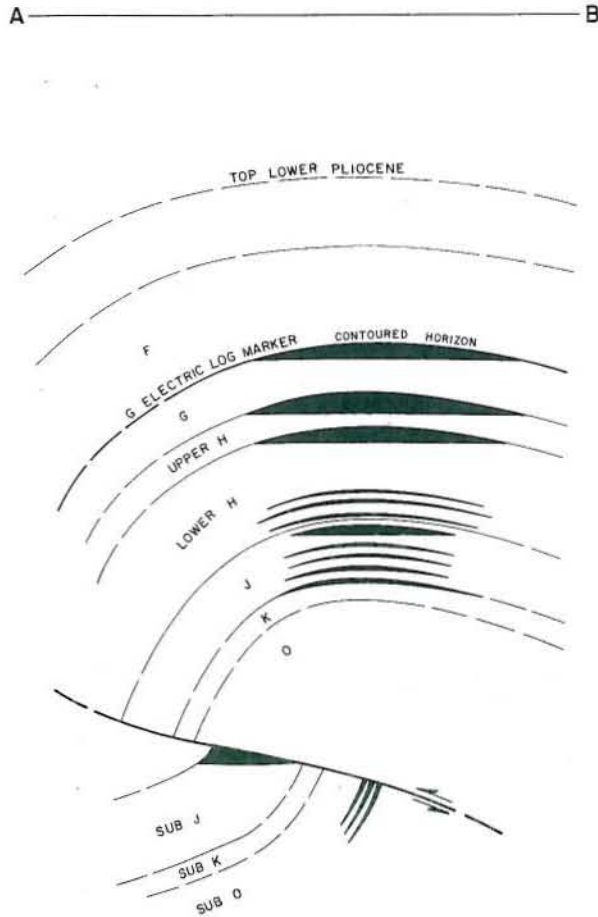
REMARKS: Wells were drilled from onshore sites. Last produced September 1958.

REFERENCES:

CARPINTERIA OFFSHORE OIL FIELD



CONTOURS ON G ELECTRIC LOG MARKER



CALIFORNIA DIVISION OF OIL AND GAS

CARPINTERIA OFFSHORE OIL FIELD

Santa Barbara County

LOCATION: 10 miles southeast of Santa Barbara

TYPE OF TRAP: Faulted anticline

ELEVATION: -120 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Lambert Coord. (10) ³	Grid Zone	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Pico	Standard Oil Co. of Calif. "SACS 3150" 1	Standard Oil Co. of Calif. "SRCS 3150" 1	X - 1,538 Y - 310	5	213	85	Feb 1966
Subthrust Pico	Standard Oil Co. of Calif. "SACS 3150" 25-A	Same as present	X - 1,542 Y - 310	5	62	156	Feb 1967

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Lambert Coord. (10) ³	Grid Zone	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "SACS 3150" 9	Same	Apr 1966	X - 1,538 Y - 309	5	14,552	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Pico	3,000	1,650	early Pliocene	Pico	19 - 31	930	IV
Subthrust Pico	5,100	350	early Pliocene	Pico	33	930	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,605,028	2,476,623	3,754,034	215	58	19,220,127	15,215,381	10,435,543	1969	90	66	215

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

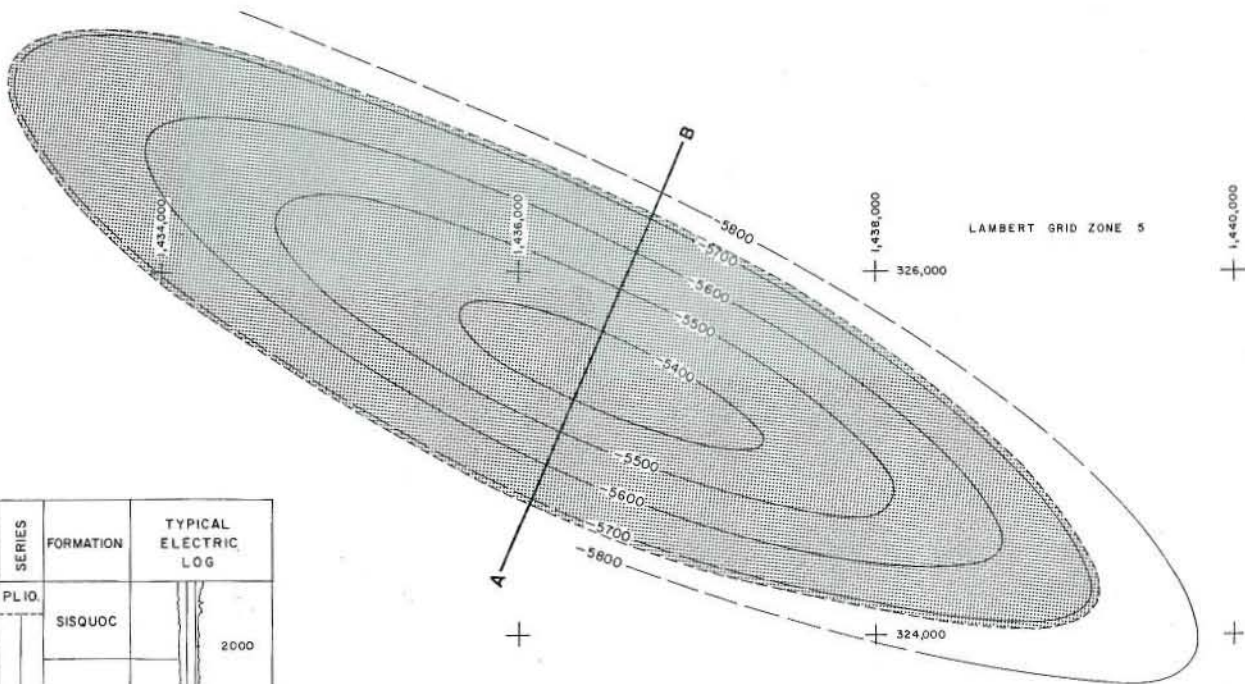
CURRENT CASING PROGRAM: 18" cem. 400; 13 3/8" or 10 3/4" cem. 1,000; 8 5/8" or 7" cem. through zone.

METHOD OF WASTE DISPOSAL: Shipped to shore for processing and then disposed of into ocean.

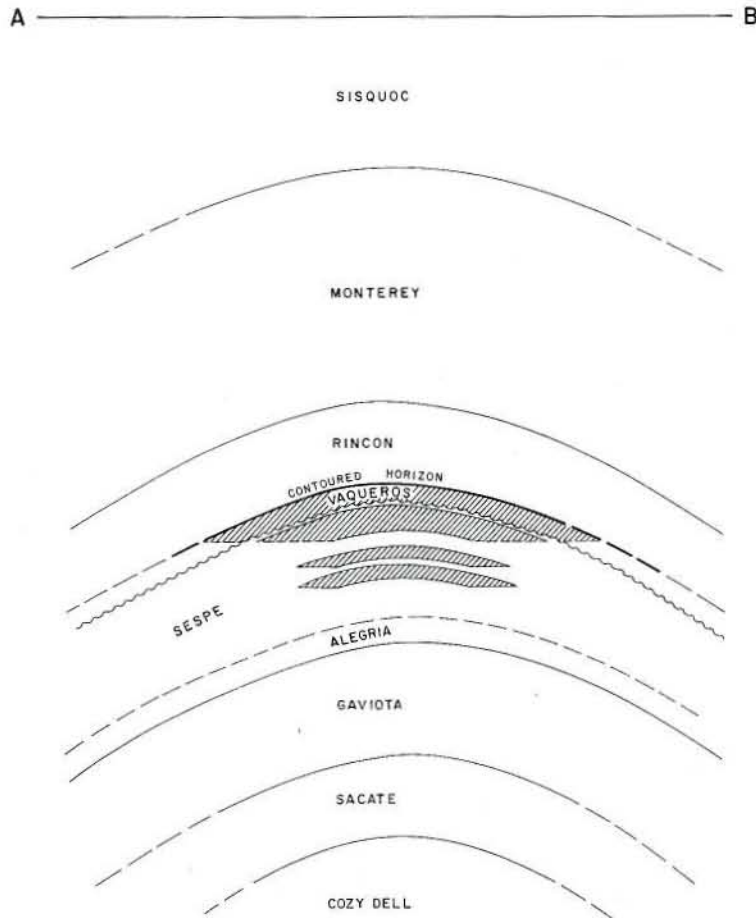
REMARKS: Field straddles the State-Federal boundary. Wells were drilled from State Platforms Heidi and Hope and Federal Platforms Hogan and Houchin. First production from Federal leases was in 1968.

REFERENCES:

COAL OIL POINT OFFSHORE OIL FIELD



CONTOURS ON TOP OF VAQUEROS



CALIFORNIA DIVISION OF OIL AND GAS

COAL OIL POINT OFFSHORE OIL FIELD

Santa Barbara County

LOCATION: 12 miles southwest of Santa Barbara

TYPE OF TRAP: Anticline

ELEVATION: -215 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Lambert Coord. (10) ³	Grid Zone	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Vaqueros	Atlantic Richfield Co. "R-H-S State 308" 3	Richfield Oil Corp. "Richfield-Honolulu-Signal State 308" 3	X - 1,437 Y - 325	5	20	725	Jul 1961
Sespe	Same as above	Same as above		5	*	*	Jul 1961

Remarks: * Production from Vaqueros and Sespe zones is commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Lambert Coord. (10) ³	Grid Zone	Depth (feet)	At total depth	
						Strata	Age
Atlantic Richfield Co. "State 308" 4	Richfield Oil Corp. "State 308" 4	Jun 1964	X - 1,438 Y - 325	5	8,795	Cozy Dell	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Vaqueros	5,450	50	early Miocene	Vaqueros	29 - 30	1,010	IV
Sespe	5,600	350	Oligocene	Sespe	29 - 30	1,010	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
28,535	60,808	117,376	40	2	1,261,957	3,097,594	232,136	1966	10	3	100

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 13 3/8" cem. 750; 9 5/8" cem. 4,200; 7" cem. through zone.

METHOD OF WASTE DISPOSAL: Produced water is injected into the Vaqueros zone.

REMARKS: Wells were drilled from floating barges; producing wells were completed on the ocean floor.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

CONCEPTION OFFSHORE OIL FIELD

Santa Barbara County

LOCATION: 4 miles southeast of Point Conception

TYPE OF TRAP: Faulted anticline

ELEVATION: -150 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Lambert Coord. (10)	Grid Zone	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Vaqueros	Phillips Petroleum Co. "State 2207" 15	Same as present	X - 1,278 Y - 348	5	1,338	582	Jul 1961
Alegria	Phillips Petroleum Co. "State 2207" 12	Same as present	X - 1,278 Y - 348	5	1,435	695	May 1961
Gaviota	Phillips Petroleum Co. "State 2207" 4	Same as present	X - 1,278 Y - 348	5	146	60	Apr 1961

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Lambert Coord. (10)	Grid Zone	Depth (feet)	At total depth	
						Strata	Age
Phillips Petroleum Co. "State 2207" 36	Same	Jun 1964	X - 1,278 Y - 348	5	10,707*	Alegria	Oligocene

*Drilled depth (directionally drilled well)

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Vaqueros	4,600	30	early Miocene	Vaqueros	32 - 42	1,200	IV
Alegria	3,000	250	Oligocene	Alegria	32 - 42	1,200	IV
Gaviota	4,400	100	Oligocene	Gaviota	32 - 42	1,200	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
38,953	18,365	239,283	195	3	20,933,349	12,325,906	5,001,722	1964	103	44	330

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

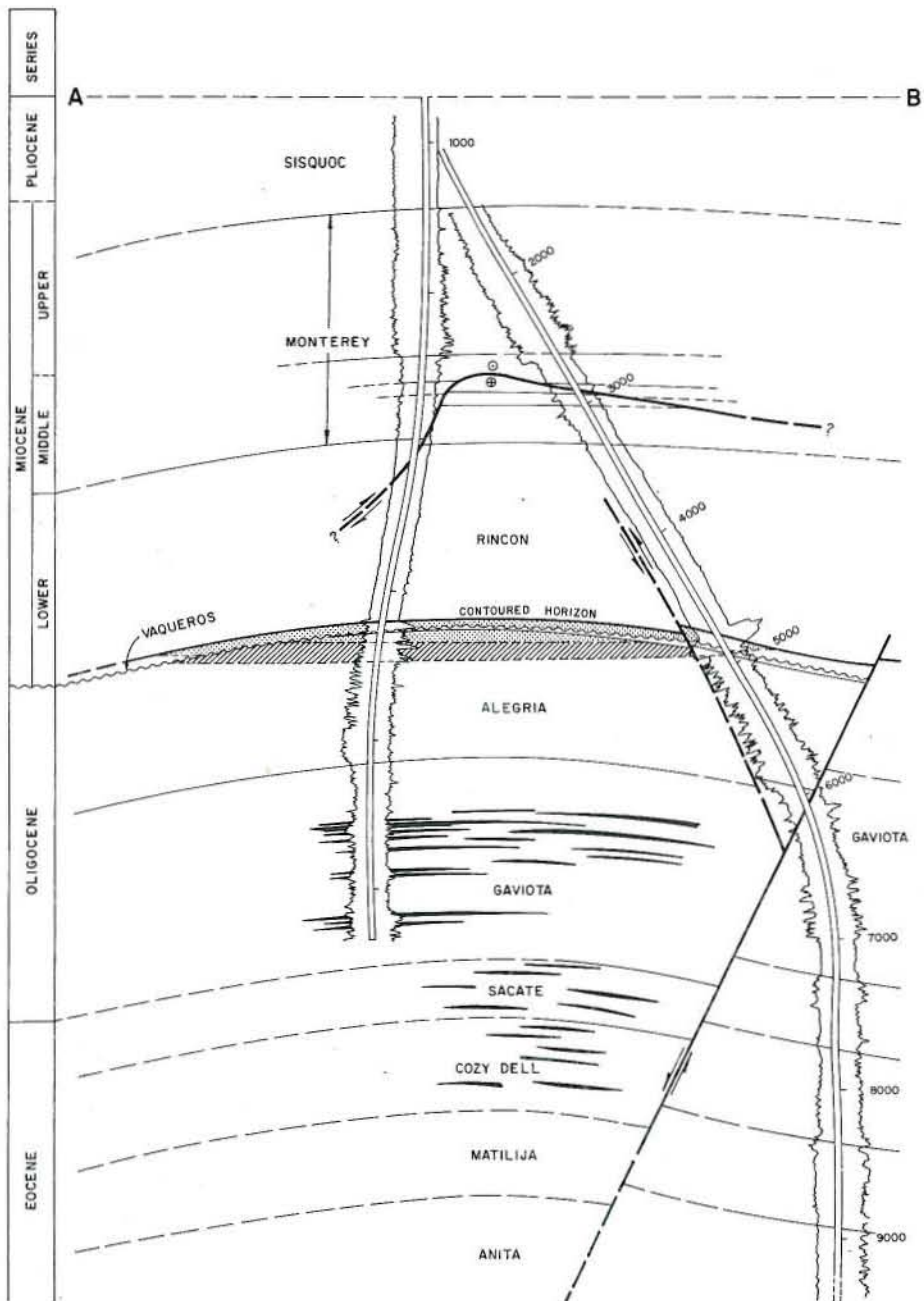
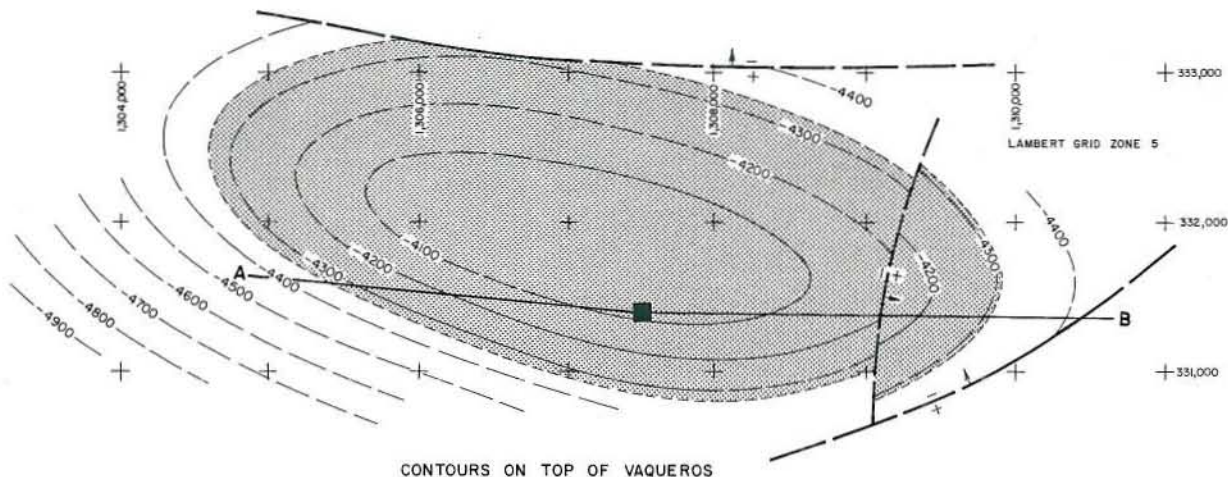
CURRENT CASING PROGRAM: 10 3/4" cem. 220; 8 5/8" cem. 800; 5 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL: The field is shut in pending issuance of permits for an onshore water-injection, disposal program.

REMARKS: Wells were drilled from Platforms Harry and Herman. All wells on Harry were abandoned during 1973.

REFERENCES:

CUARTA OFFSHORE OIL FEILD



CALIFORNIA DIVISION OF OIL AND GAS

CUARTA OFFSHORE OIL FIELD

Santa Barbara County

LOCATION: 36 miles west of Santa Barbara

TYPE OF TRAP: Anticline

ELEVATION: -95 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Lambert Coord. (10) ³	Grid Zone	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Vaqueros	Texaco Inc., "Anita" 1	Texaco Inc., "Texaco-Monterey 2206.1" 1	X - 1,309 Y - 353	5	0	2,120	Jan 1959
Alegria	Texaco Inc., "Anita" 2	Texaco Inc., "Texaco-Monterey P.R.C. 2206.1" 2	X - 1,309 Y - 353	5	6,750	12,480	Apr 1959
Gaviota	Texaco Inc., "Anita" 4	Texaco Inc., "Texaco-Monterey P.R.C. 2206.1" 4	X - 1,307 Y - 351	5	57	825	Mar 1961
Sacate	Texaco Inc., "Anita" 8	Texaco Inc., "State 2206.1" 8	X - 1,307 Y - 351	5	25	670	Nov 1961
Cozy Dell	Same as above	Same as above			*	*	

Remarks: "Anita" 1 and 2 were drilled from a floating vessel and were suspended after cementing casing through the zones tested for production.
* Production from Sacate and Cozy Dell zones is commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Lambert Coord. (10) ³	Grid Zone	Depth (feet)	At total depth	
						Strata	Age
Texaco Inc., "Anita" 5	Texaco Inc., "Texaco-Monterey P.R.C. 2206.1" 5	Oct 1960	X - 1,307 Y - 351	5	9,476	Anita	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Vaqueros	4,020	50	early Miocene	Vaqueros	1,090	1,300	IV
Alegria	4,080	150	Oligocene	Alegria	28 - 38	1,300	IV
Gaviota	5,300	250	Oligocene	Gaviota	32 - 55	1,050	IV
Sacate	6,500	150	Eocene	Sacate	28 - 36	1,100	IV
Cozy Dell	6,900	150	Eocene	Cozy Dell	33 - 36	3,300	IV

PRODUCTION DATA (Jan. 1, 1974) (Dry gas production not included - see remarks)

Oil (bbl)	1973 Production		1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	120	0	612,806	6,765,001	189,067	1962	55	11	120

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

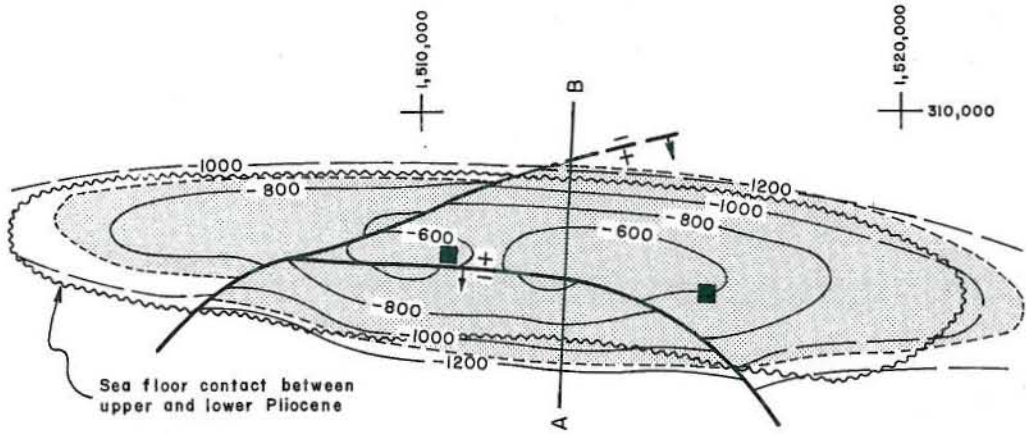
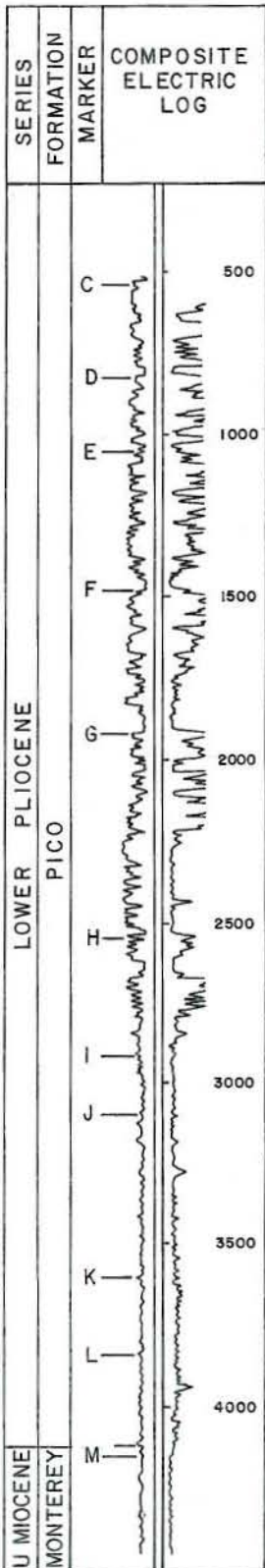
CURRENT CASING PROGRAM: 20" cem. 360; 11 3/4" cem. 1,000; 7" cem. through zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Wells are shut in awaiting approval of onshore disposal project.

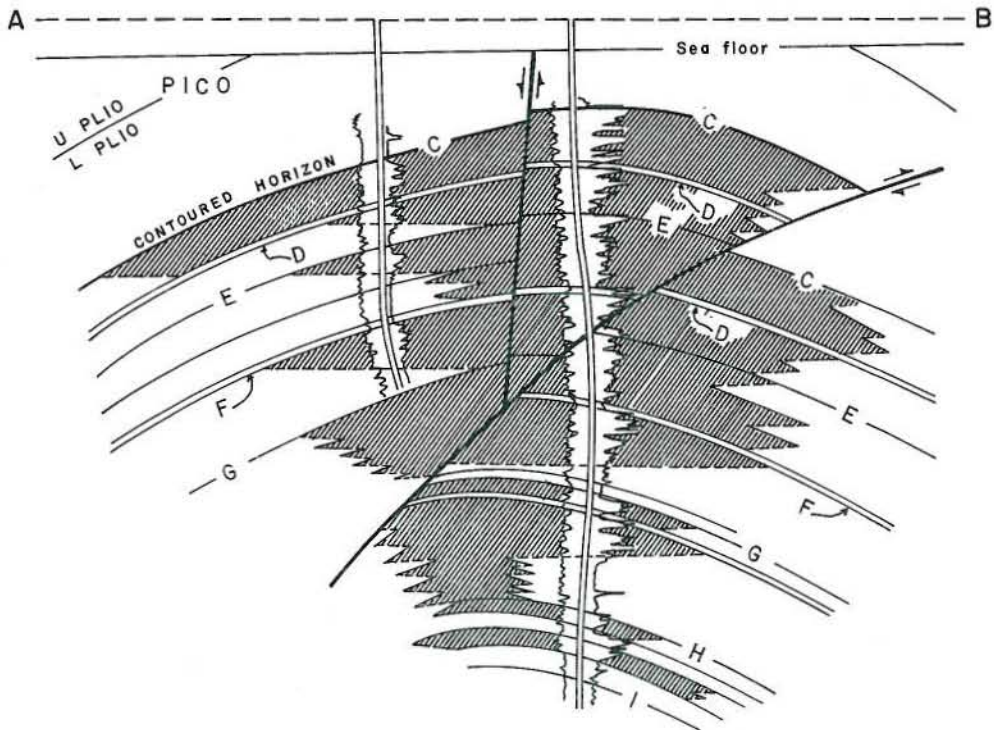
REMARKS: Producing wells were drilled from Platform Helen. Dry gas was not produced during 1973; cumulative production as of January 1, 1974 is 12,002,465 Mcf.; the two dry gas wells were dually completed with oil zones; maximum dry gas proved acreage as of December 31, 1973 was 120; peak dry gas production (1963) 3,274,299 Mcf.

REFERENCES: Cordova, S., Cuarta Offshore Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 58, No. 1 (1972).

DOS CUADRAS OFFSHORE OIL FIELD
(FEDERAL OUTER CONTINENTAL SHELF)



LAMBERT GRID ZONE 5
CONTOURS ON C ELECTRIC LOG MARKER



CALIFORNIA DIVISION OF OIL AND GAS

DOS CUADRAS OFFSHORE OIL FIELD

Santa Barbara County
(Federal Outer Continental Shelf)

LOCATION: 7 miles southeast of Santa Barbara

TYPE OF TRAP: Faulted anticline

ELEVATION: -190 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Lambert Coord. (10) ³	Grid Zone	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Pico	Union Oil Co. of Calif. A-20	Same as present	X - 1,513 Y - 307	5	1,710	485	Mar 1969
Monterey	Union Oil Co. of Calif. B-22	Same as present	X - 1,511 Y - 307	5	155	265	Jul 1972

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Lambert Coord (10) ³	Grid Zone	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. No. 1	Same	Mar 1968	X - 1,515 Y - 317	5	13,292	Monterey	Miocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Pico	2,300	745	early Pliocene	Pico	21 - 27	990 - 1,285	*
Monterey	9,500	46	middle Miocene	Monterey	34	1,200	*

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
16,590,524	7,684,483	9,130,036	1,200	129	87,349,761	44,723,356	27,752,972	1971	147	135	1,200

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1971	1,201,639	1

SPACING ACT: *

BASE OF FRESH WATER: None

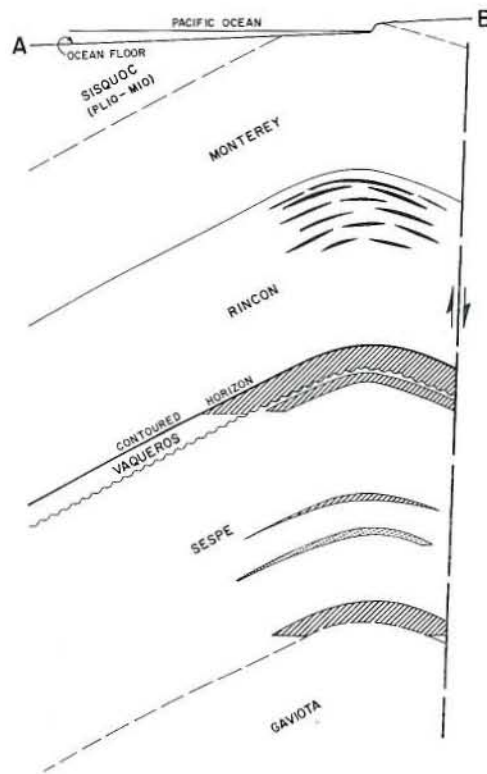
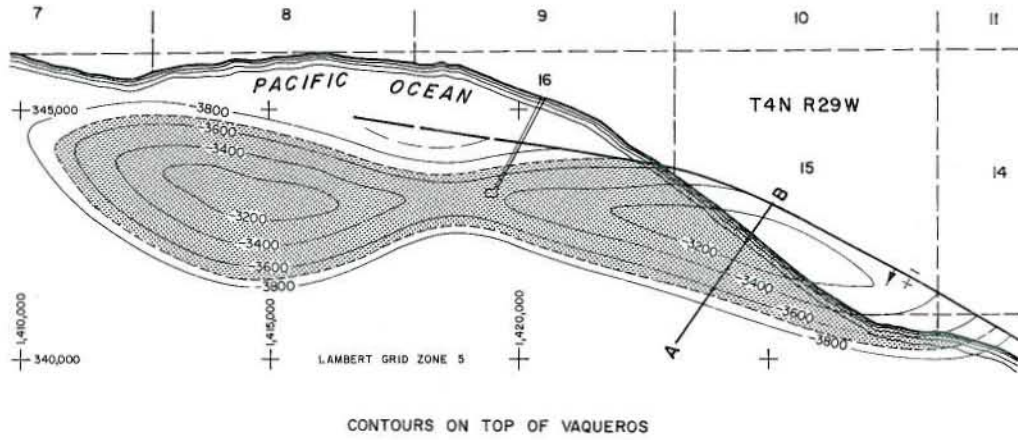
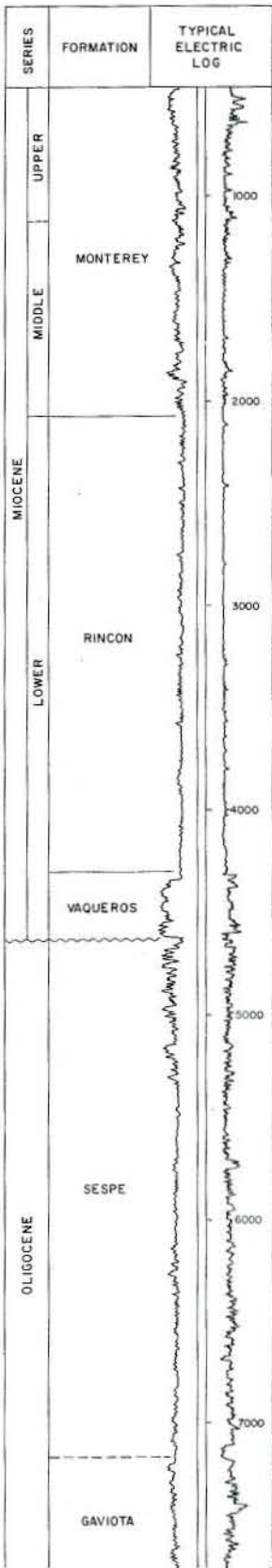
CURRENT CASING PROGRAM: 16" cem. 100; 13 3/8" cem. 300; 10 3/4" cem. 1,200; 7" cem. above zone; 5 1/2" liner landed through zone and gravel packed.

METHOD OF WASTE DISPOSAL: Produced water is injected into Pico sands.

REMARKS: * This field is in federal waters and is under the jurisdiction of the Dept. of the Interior, U.S. Geol. Survey.

REFERENCES: McCulloh, J.H., Geologic Characteristics of the Dos Cuadras Offshore Field: U.S. Geol. Survey Prof. Paper 679-C.
Adams, Maurice V., Report on Water Injectivity Test, Lease OCS-P 0241, Well No. B-49-I, Dos Cuadras Field, Santa Barbara Channel, Off California:
U.S. Geol. Survey Cir. 687 (1973).

ELWOOD OIL FIELD Offshore Area



CALIFORNIA DIVISION OF OIL AND GAS

ELWOOD OIL FIELD

OFFSHORE AREA

Santa Barbara County

LOCATION: See map sheet of Elwood Oil Field

TYPE OF TRAP: Anticline

ELEVATION: 25 (Onshore drillsites); -20 (Ocean Floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Rincon Vaqueros	Getty Oil Co. 92-2	Pacific Western Oil Corp. 92-2	16 4N 29W	SB	132	N.A.	Apr 1938
	Sun Oil Co. 94-1	Barnsdall Oil Co. of Calif. "Tideland Permit" 94-1	22 4N 29W	SB	2,557	N.A.	Nov 1929
Upper Sespe	Sun Oil Co. 88-10	Barnsdall Oil Co. of Calif. 88-10	15 4N 29W	SB	1,059	550	May 1935
Bell 14	Getty Oil Co. 92-12	Pacific Western Oil Co. 92-12	16 4N 29W	SB	454	N.A.	Aug 1934
Gas zone	Getty Oil Co. 90-9	Honolulu Oil Corp., Ltd. 90-9	15 4N 29W	SB	36	1,010	May 1936
Lower Sespe	Same as above	Same as above	15 4N 29W	SB	*	*	May 1936

Remarks: * Production from Gas zone and Lower Sespe zone was commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Signal Oil and Gas Co. "State" 208-29X	Same	Sep 1968	17 4N 29W	SB	9,986	Cozy Dell	Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Rincon	2,100	900	Miocene	Rincon	26	2,000	III
Vaqueros	3,400	320	early Miocene	Vaqueros	38	1,200	III
Upper Sespe	3,700	100	Oligocene	Sespe	36	1,000	III
Bell 14	4,500	60	Oligocene	Sespe	42	1,000	IV
Gas zone	5,200	100	Oligocene	Sespe	1,100	1,000	IV
Lower Sespe	5,620	250	Oligocene	Sespe	34	1,000	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
58,895	395,349	1,014,733	190	12	76,383,217	65,687,441	7,769,859	1931	113	102	445

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Gas injection	1964	1,656,069	N.A.

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

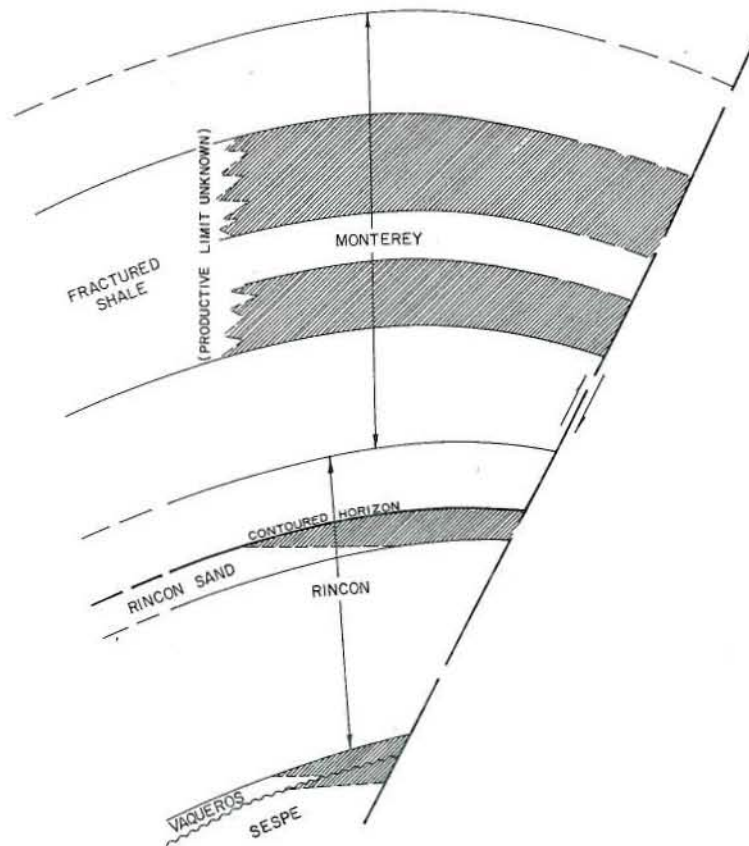
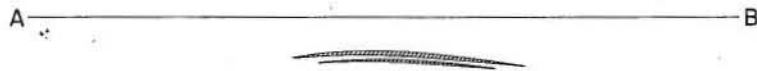
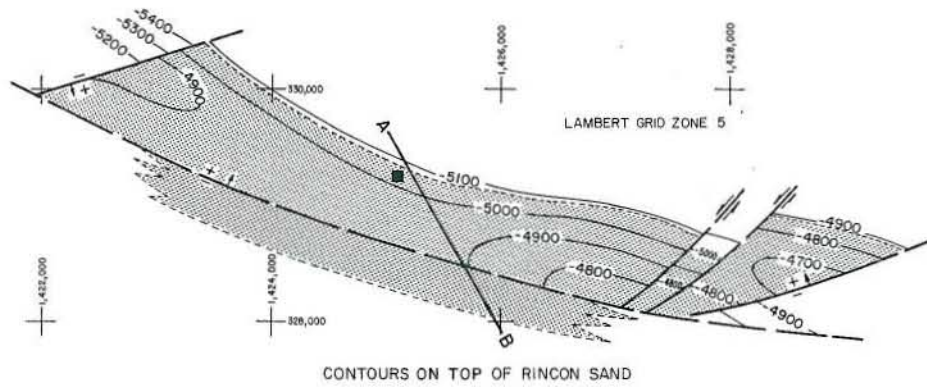
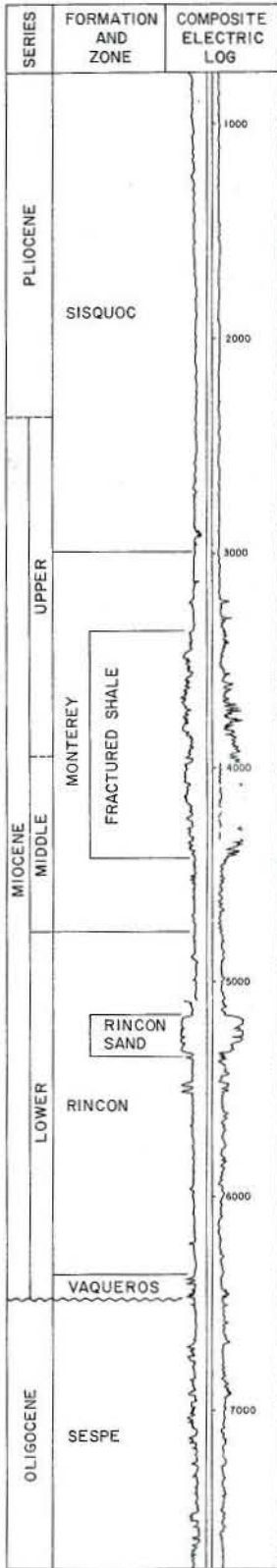
CURRENT CASING PROGRAM: 12 3/4" cem. 450; 8 5/8" cem. above zone; 6 5/8" liner landed through zone or 6 5/8" cem. through zone.

METHOD OF WASTE DISPOSAL: Produced water is injected into depleted oil sands.

REMARKS: The Rincon zone consists of fractured shale.

REFERENCES: Frame, R.G., California Offshore Petroleum Development: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 2 (1961).

SOUTH ELWOOD OFFSHORE OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

ELWOOD, SOUTH, OFFSHORE OIL FIELD

Santa Barbara County

LOCATION: 14 miles southwest of Santa Barbara

TYPE OF TRAP: Faulted anticline

ELEVATION: -210 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Lambert Coord. (10) ³	Grid Zone	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sisquoc	Atlantic Richfield Co. "AMES 3120" 7	Same as present	X - 1,425 Y - 329	5	15	50	Jul 1969
Monterey	Atlantic Richfield Co. "AMES 3120" 8	Same as present	X - 1,425 Y - 329	5	110	60	May 1969
Rincon	Atlantic Richfield Co. "State 3242" 1	Richfield Oil Corp. "State 3242" 1	X - 1,427 Y - 328	5	1,120	270	Jul 1965
Vaqueros	Atlantic Richfield Co. "AMES 3242" 3	Richfield Oil Corp. "AMES 3242" 3	X - 1,425 Y - 327	5	525	45	Jan 1967
Sespe	Same as above	Same as above			145	10	Jan 1967

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Lambert Coord (10) ³	Grid Zone	Depth (feet)	At total depth	
						Strata	Age
Atlantic Richfield Co. "AMES 3120" 7	Same	Nov 1967	X - 1,425 Y - 329	5	10,073	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Sisquoc	1,350	10	Pliocene	Sisquoc	25 - 34	N.A.	III
Monterey	3,350	500	Miocene	Monterey	25 - 34	2,590	IV
Rincon	5,000	150	early Miocene	Rincon	32	1,250	IV
Vaqueros	5,900	60	early Miocene	Vaqueros	33	1,250	IV
Sespe	6,000	150	Oligocene	Sespe	33	1,250	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
1,176,111	66,495	181,638	95	10	7,513,849	7,708,847	1,929,085	1968	31	11	95

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1971	3,808,655	2

SPACING ACT: Applies

BASE OF FRESH WATER: None

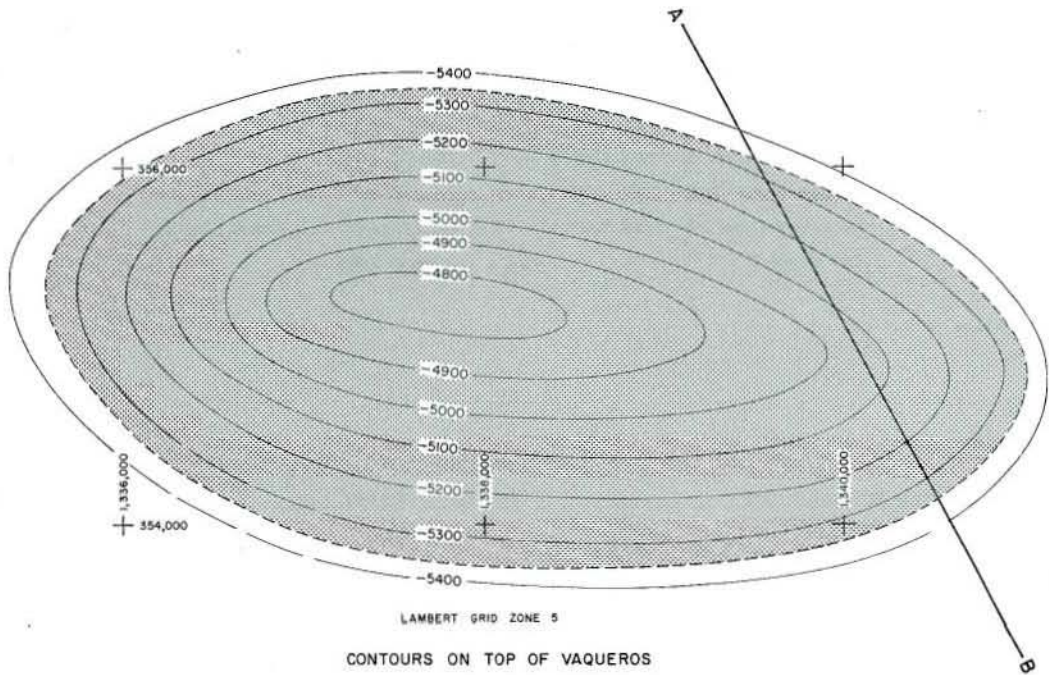
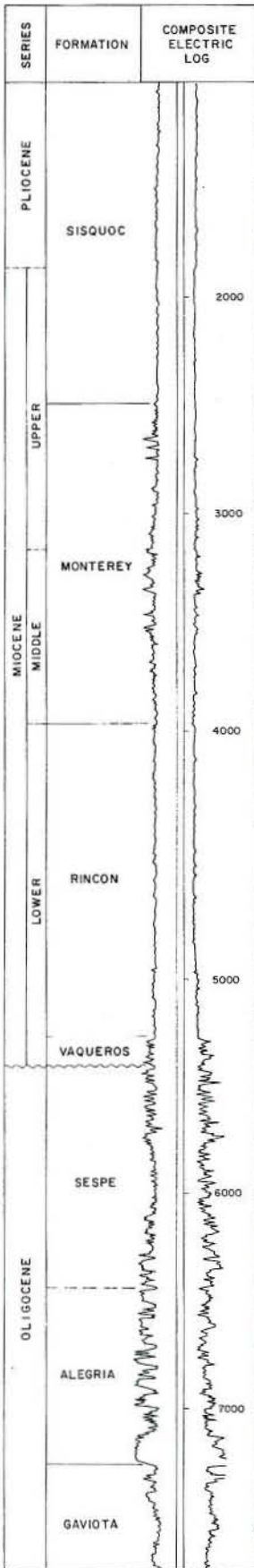
CURRENT CASING PROGRAM: 20" cem. 250; 10 3/4" or 13 3/8" cem. 1,020 or 1,350; 5 1/2", 7" or 8 5/8" cem. through zone.

METHOD OF WASTE DISPOSAL: Produced water is piped to shore, cleaned and disposed of into the ocean.

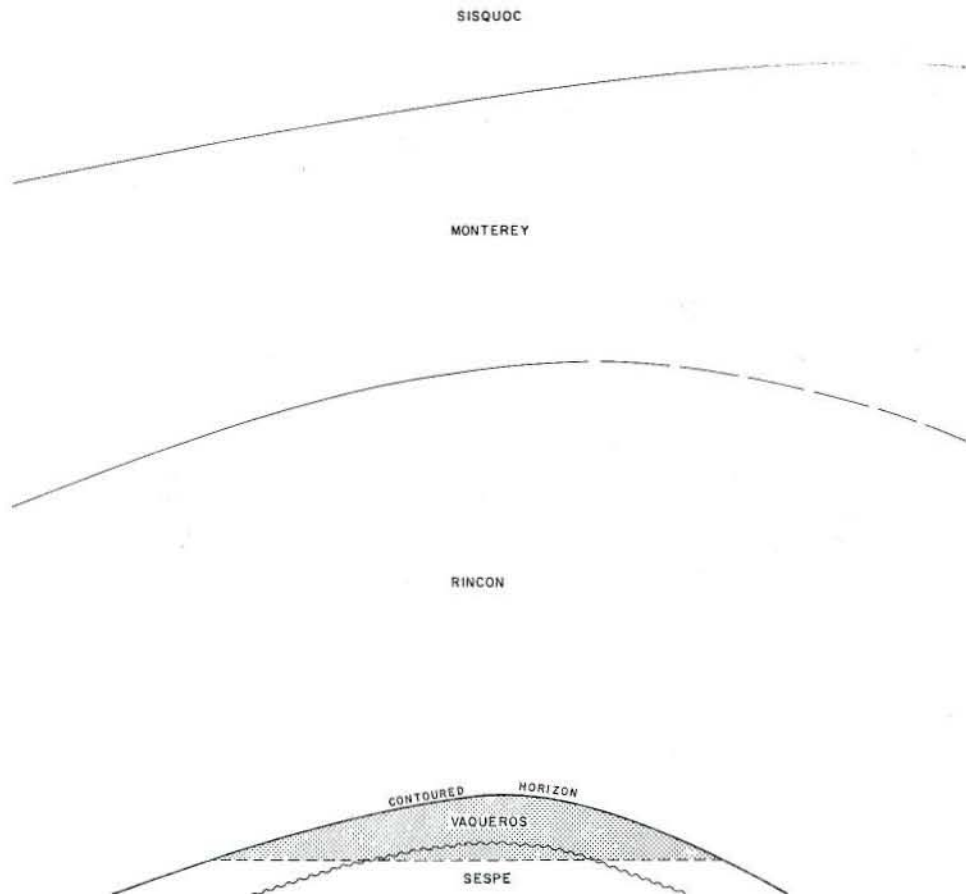
REMARKS: Wells drilled from Platform Holly.

REFERENCES:

GAVIOTA OFFSHORE GAS FIELD



A ————— B



CALIFORNIA DIVISION OF OIL AND GAS

GAVIOTA OFFSHORE GAS FIELD
Santa Barbara County

LOCATION: 30 miles west of Santa Barbara

TYPE OF TRAP: Anticline

ELEVATION: 90 (Onshore drill site); -175 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial production			Date of completion
					Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	
Vaqueros-Sespe	Standard Oil Co. of Calif. "SGS 2199" 4	Standard Oil Co. of Calif. - "Standard-Humble-Gaviota State" 4	2 4N 32W	SB	1,080*	65	3/4	Jul 1960

Remarks: The field's commercial potential was first discovered in November 1958 by Standard Oil Co. of Calif. "Standard-Humble-Gaviota State" 1 (now "SGS 2199" 1) which was tested at a rate of 3,000 Mcf. of gas per day and 125 bbbls. per day of condensate with a flow pressure of 1,250 psi and has since been suspended.
* Initial production also includes 270 barrels per day of condensate.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "SGS 2199" 6	Standard Oil Co. of Calif. "Standard-Humble-Gaviota State" 6	Oct 1960	35 5N 32W	SB	10,380	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Gas (btu)	Salinity of zone water gr/gal	Original zone pressure (psi)	Class BOPE required
			Age	Formation				
Vaqueros-Sespe	5,100	500	Oligocene	Sespe	1,190	1,200	2,400	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production		1973 Proved acreage	1973 Maximum number producing wells	Cumulative gas production (Mcf)	Peak gas production		Total number of wells		Maximum proved acreage
Net gas (Mcf)	Water (bbl)				(Mcf)	Year	Drilled	Completed	
397,786	253,301	140	140	69,778,023	8,994,473	1964	28	3	140

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 13 3/8" cem. 1,500; 6 5/8" cem. through zone.

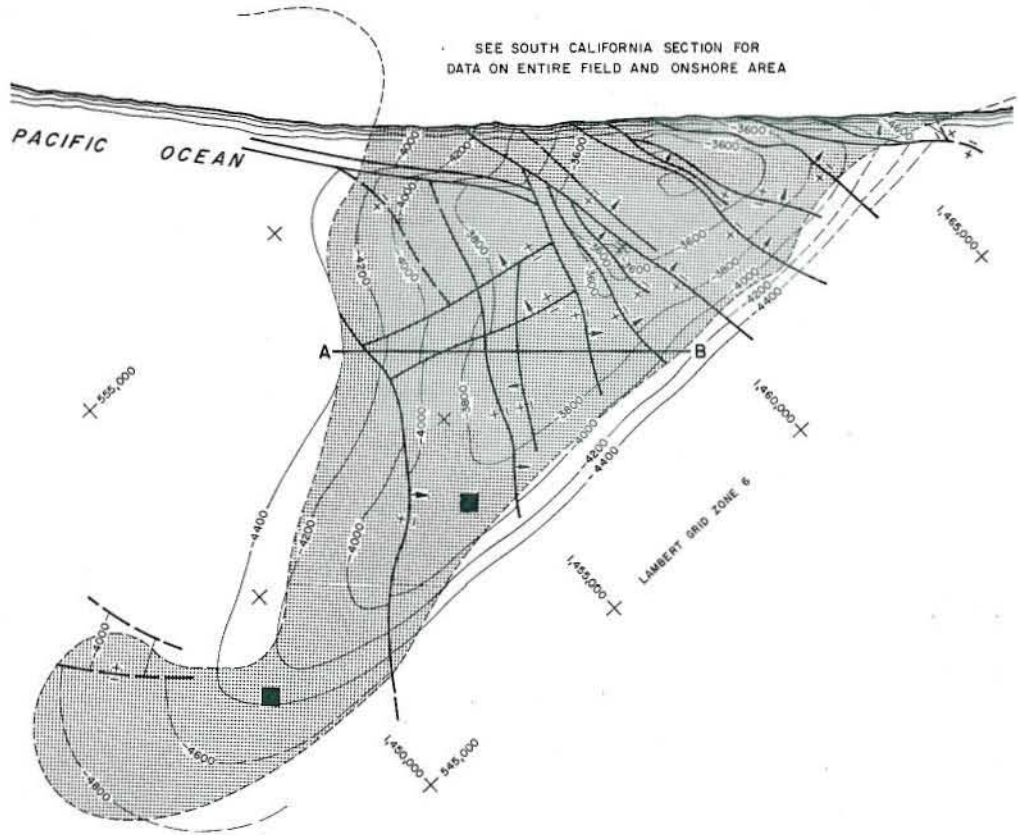
METHOD OF WASTE DISPOSAL: Produced water is injected into the depleted Vaqueros gas zone at Molino gas field.

REMARKS: Wells are directionally drilled from onshore sites.

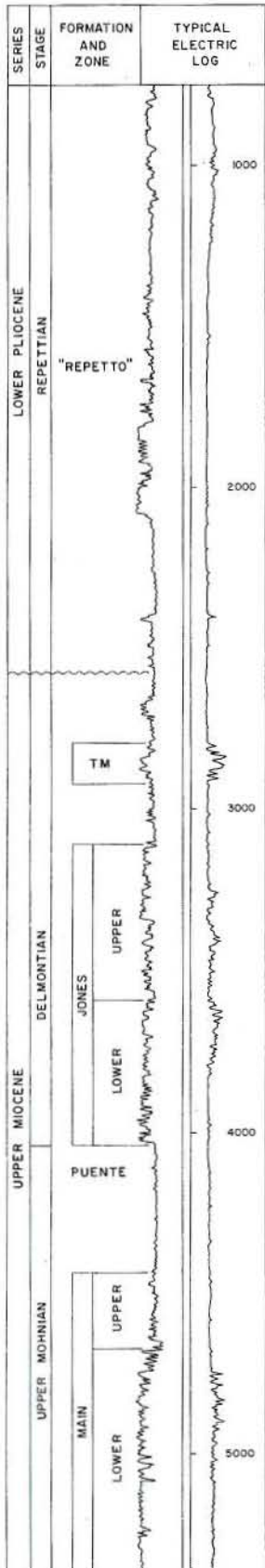
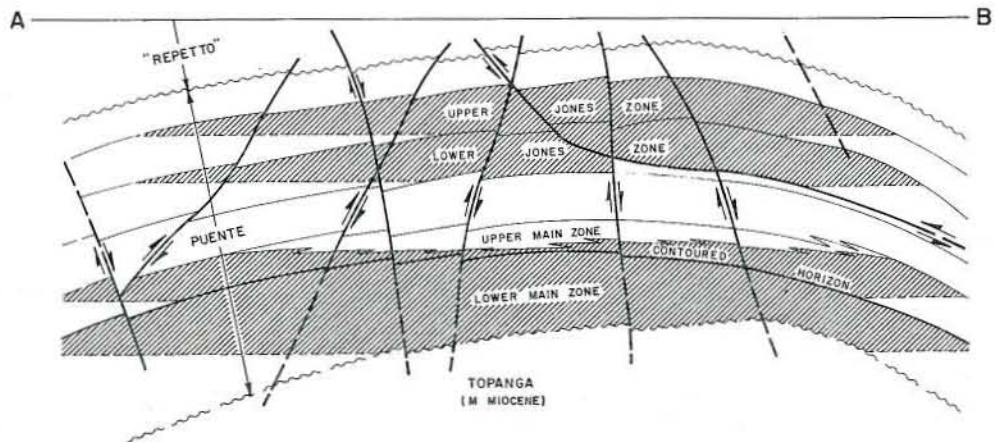
REFERENCES:

HUNTINGTON BEACH OIL FIELD Offshore Area

SEE SOUTH CALIFORNIA SECTION FOR
DATA ON ENTIRE FIELD AND ONSHORE AREA



CONTOURS ON TOP OF LOWER MAIN ZONE



CALIFORNIA DIVISION OF OIL AND GAS

HUNTINGTON BEACH OIL FIELD

OFFSHORE AREA

Orange County

LOCATION: One mile west of Huntington Beach

TYPE OF TRAP: Faulted anticline

ELEVATION: 45 (Onshore drillsite); -50 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
TM	Burmah Oil and Gas Co. "State PRC 425" J-309	Signal Oil and Gas Co. "Signal-Hancock-State 425.1" J-309	8 6S 11W	SB	68	0	Apr 1964
Upper Jones	Burmah Oil and Gas Co. "State PRC 920" 16	Wilshire Oil Co. "H.B." 16	10 6S 11W	SB	828	0	Nov 1933
Lower Jones	Same as above	Same as above	10 6S 11W	SB	828	0	Nov 1933
Upper Main	Burmah Oil and Gas Co. "State PRC 1331" 1	The Superior Oil Co. "Babbitt" 1	10 6S 11W	SB	346	0	May 1930
Lower Main	Same as above	Same as above	10 6S 11W	SB	346	0	May 1930

Remarks: "H.B." 16 had a commingled initial production. The Jones and Main zones were discovered from townlot drillsites by trespass wells.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Burmah Oil and Gas Co. "State PRC 426" 143	Signal Oil and Gas Co. "State 426" 143	Aug 1956	33 5S 11W	SB	12,236	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
TM	2,200	125	late Miocene	Puente	11 - 13	N.A.	III
Upper Jones	2,400	200	late Miocene	Puente	18	1,665	III
Lower Jones	2,850	200	late Miocene	Puente	19	1,735	III
Upper Main	3,600	250	late Miocene	Puente	22	1,600	III
Lower Main	3,800	450	late Miocene	Puente	22	1,430	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
16,050,382	2,286,543	76,464,118	2,345	332	417,381,730	283,497,372	16,692,650	1972	703	686	2,365

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1959	676,733,273	108
Cyclic steam	1964	2,222,450	70

SPACING ACT: Does not apply

BASE OF FRESH WATER: 500

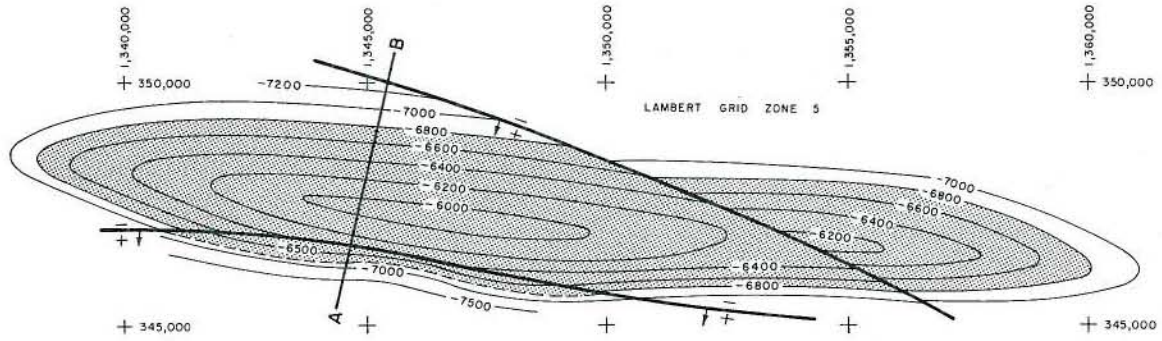
CURRENT CASING PROGRAM: 11 3/4" cem. 500 - 600; 8 5/8" or 7" cem. over zone; 6 5/8" or 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is used for secondary-recovery projects or disposed of by commercial disposal companies.

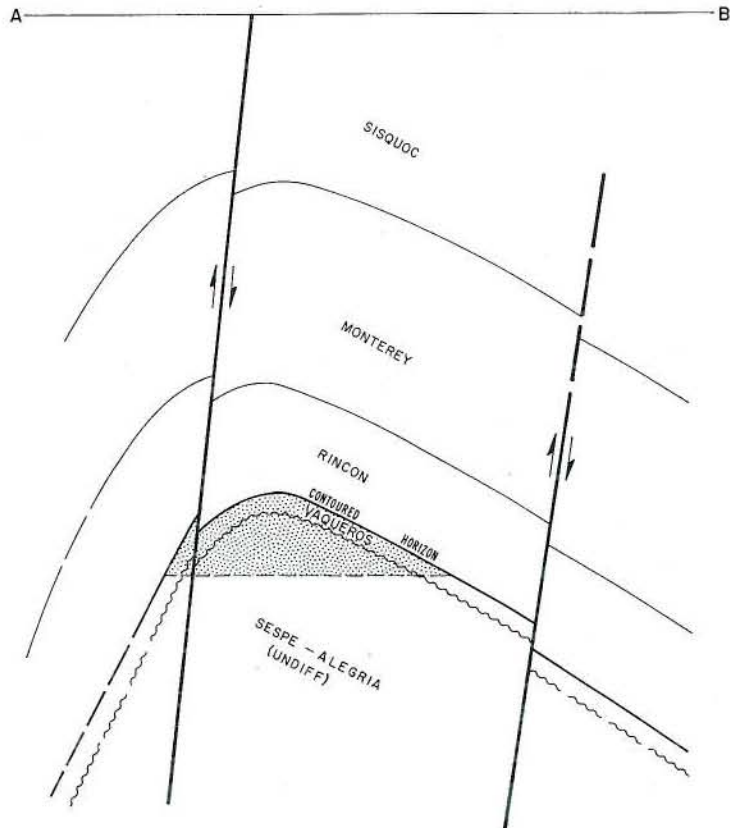
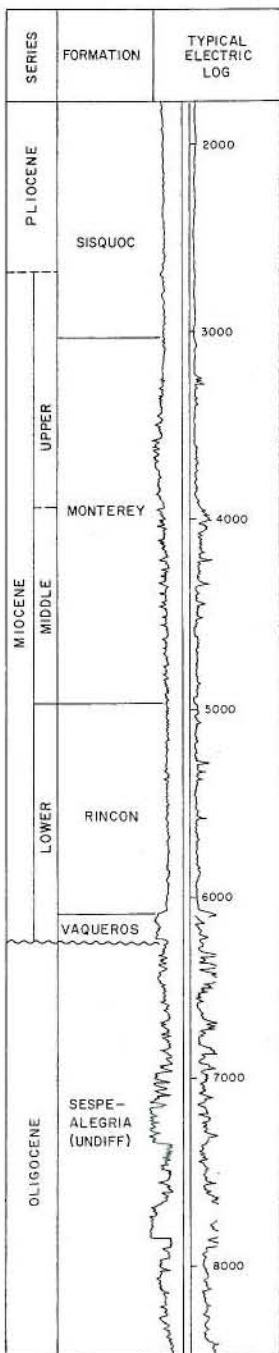
REMARKS: Wells are directionally drilled from onshore, and from Platforms Eva and Emmy.

REFERENCES: Frame, R.C., California Offshore Petroleum Development: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 2 (1960).
Murray-Aaron, E.R., Tidelands Pools of Huntington Beach Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 33, No. 1 (1947).

MOLINO OFFSHORE GAS FIELD



CONTOURS ON TOP OF VAQUEROS



CALIFORNIA DIVISION OF OIL AND GAS

MOLINO OFFSHORE GAS FIELD

Santa Barbara County

LOCATION: 30 miles west of Santa Barbara

TYPE OF TRAP: Faulted anticline

ELEVATION: -235 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Lambert Coord. (10) ³	Grid Zone	Initial production			Date of completion
					Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	
Vaqueros	Shell Oil Co. "SSMS 2920" 1	Shell Oil Co. "C.H." 8-502	X - 1,351 Y - 347	5	7,400	70	32/64	Oct 1962
Sespe	Same as above	Same as above	X - 1,351 Y - 347	5	4,490	35	32/64	Oct 1962

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Lambert Coord. (10) ³	Grid Zone	Depth (feet)	At total depth	
						Strata	Age
Phillips Petroleum Co. "State 2933" 3	Same	Aug 1964	X - 1,351 Y - 347	5	8,732	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Gas (btu)	Salinity of zone water gr/gal	Original zone pressure (psi)	Class BOPE required
			Age	Formation				
Vaqueros	6,200	140	early Miocene	Vaqueros	1,071 - 1,137	955	3,105	IV
Sespe-Alegria	6,400	250	Oligocene	Sespe-Alegria	*			

* Production from Vaqueros and Sespe zones is commingled.

PRODUCTION DATA (Jan. 1, 1974) (Condensate production is shown under remarks below)

1973 Production		1973 Proved acreage	1973 Maximum number producing wells	Cumulative gas production (Mcf)	Peak gas production		Total number of wells		Maximum proved acreage
Net gas (Mcf)	Water (bbl)				(Mcf)	Year	Drilled	Completed	
7,799,612	98,546	960	7	215,042,193	30,576,437	1967	53	11	1,130

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 16" cem. 400; 8 5/8" or 10 3/4" cem. 2,700; 5 1/2" or 7 5/8" cem. through zone.

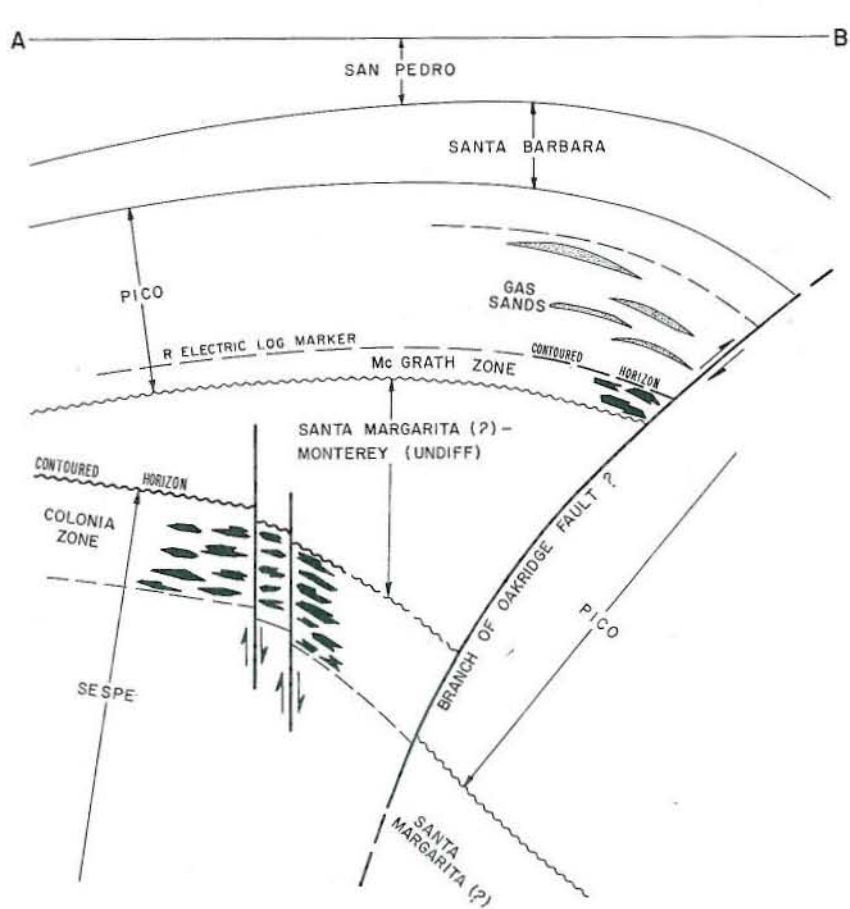
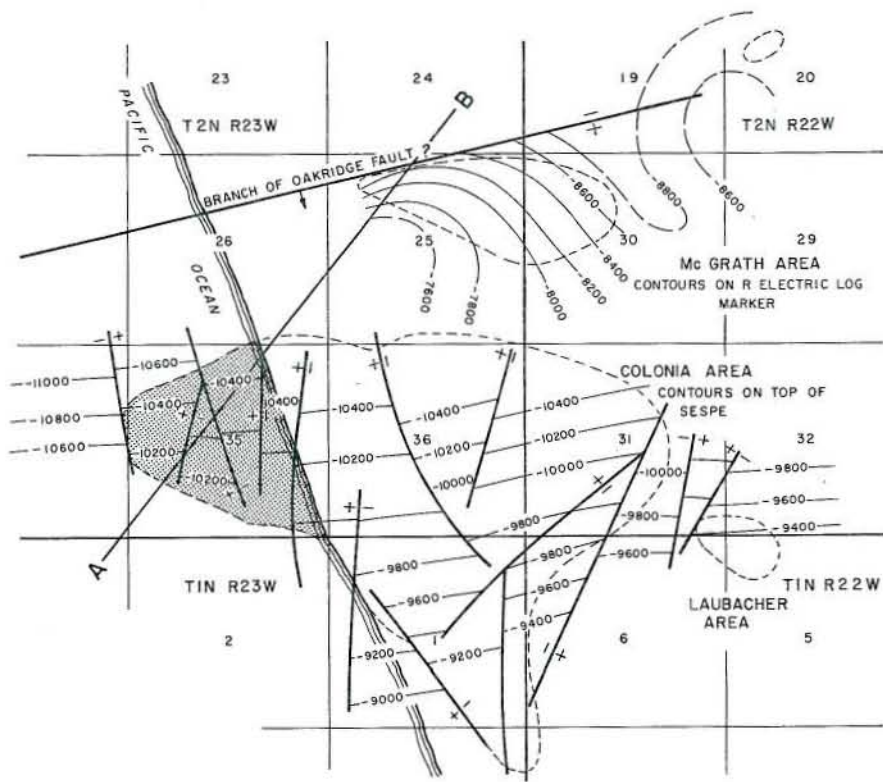
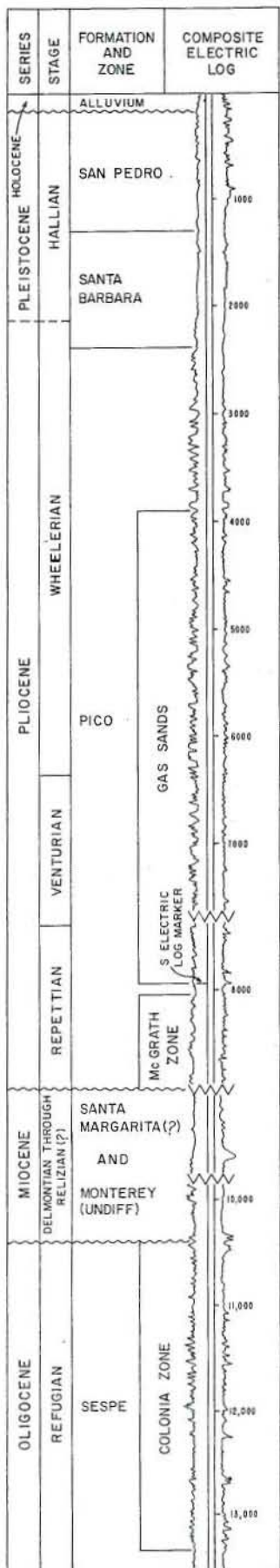
METHOD OF WASTE DISPOSAL: Some of the produced water is injected into the Vaqueros zone and the remainder is piped to shore, cleaned and disposed of into the ocean.

REMARKS: Wells were drilled from floating vessels; producing wells were completed on the ocean floor.

Condensate production during 1973 was 102,122 bbls.; cumulative condensate production is 4,391,471 bbls.; peak production (1966) 789,008 bbls.

REFERENCES:

WEST MONTALVO OIL FIELD Offshore Area



CALIFORNIA DIVISION OF OIL AND GAS

MONTALVO, WEST, OIL FIELD

OFFSHORE AREA

Ventura County

LOCATION: 4 miles south of Ventura

TYPE OF TRAP: Faulted homocline

ELEVATION: 16 (Onshore drillsite); -250 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Colonia	Standard Oil Co. of Calif. "State" C-1A	Standard Oil Co. of Calif. "State" C-1	35 2N 23W	SB	304	85	Jun 1953

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "State" B-6	Same	Feb 1957	26 2N 23W	SB	14,850	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Colonia	11,500	2,500	Oligocene	Sespe	13 - 32	1,250	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
97,986	0	112,485	280	6	5,146,692	3,242,743	608,693	1958	13	11	280

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
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SPACING ACT: Applies

BASE OF FRESH WATER: 1,100 - 1,600

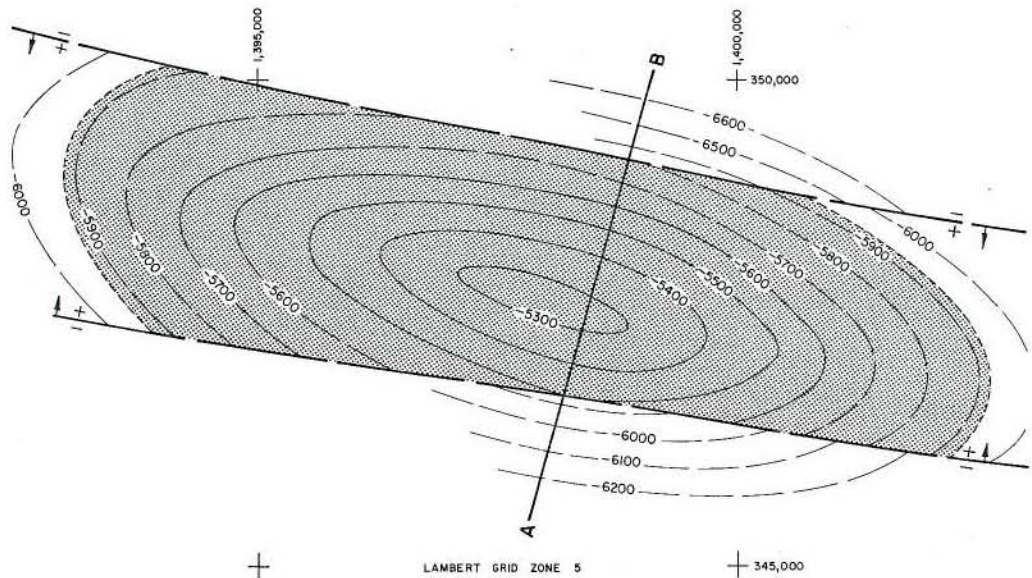
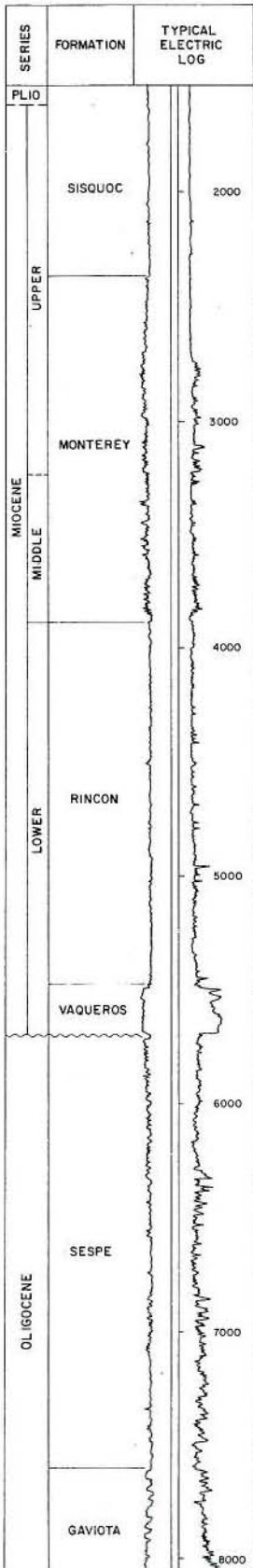
CURRENT CASING PROGRAM: 13 3/8" cem. 1,300; 7" cem. 11,000 and across base of fresh-water sands; 5" landed or 7" cem. through zone.

METHOD OF WASTE DISPOSAL: Waste water is used for water-flood operations in other areas.

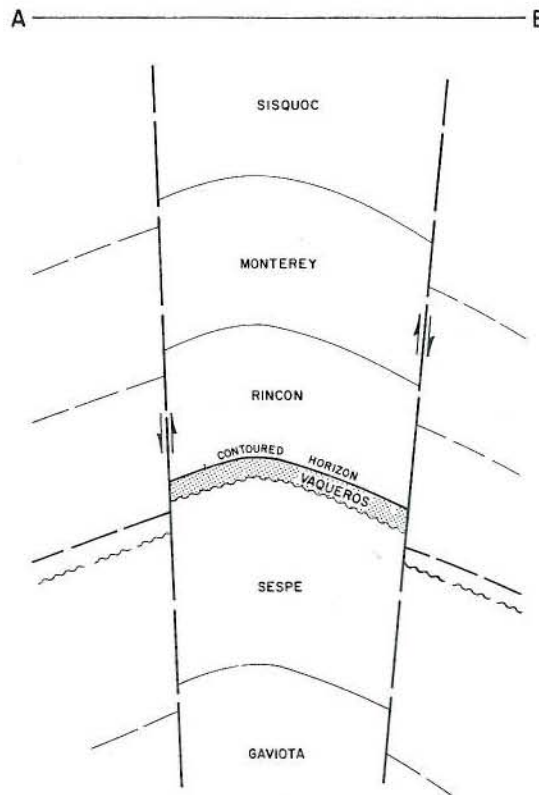
REMARKS: Wells directionally drilled from onshore sites.

REFERENCES:

NAPLES OFFSHORE GAS FIELD (Abandoned)



LAMBERT GRID ZONE 5
CONTOURS ON TOP OF VAQUEROS



CALIFORNIA DIVISION OF OIL AND GAS

NAPLES OFFSHORE GAS FIELD (Abandoned)

Santa Barbara County

LOCATION: 18 miles west of Santa Barbara

TYPE OF TRAP: Faulted anticline

ELEVATION: -130 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial production			Date of completion
					Daily (Mcf)	Flow pressure (psi)	Bean size (in)	
Vaqueros	Phillips Petroleum Co. "State 2205" 5	Phillips Petroleum Co. "Phillips Petroleum Company-Pauley et al State 2205" 5	2 4N 30W	SB	5,150	1,285	19/64	Sep 1960

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Phillips Petroleum Co. "State 2205" 8	Same	Dec 1960	2 4N 30W	SB	9,915	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Gas (btu)	Salinity of zone water gr/gal	Original zone pressure (psi)	Class BOPE required
			Age	Formation				
Vaqueros	8,870	100	early Miocene	Vaqueros	1,158	600	1,797	V

PRODUCTION DATA (Jan. 1, 1974)

1973 Production		1973 Proved acreage	1973 Maximum number producing wells	Cumulative gas production (Mcf)	Peak gas production		Total number of wells		Maximum proved acreage
Net gas (Mcf)	Water (bbl)				(Mcf)	Year	Drilled	Completed	
0	0	0	0	20,814,928	7,628,456	1965	12	4	450

SPACING ACT: Applies

BASE OF FRESH WATER: None

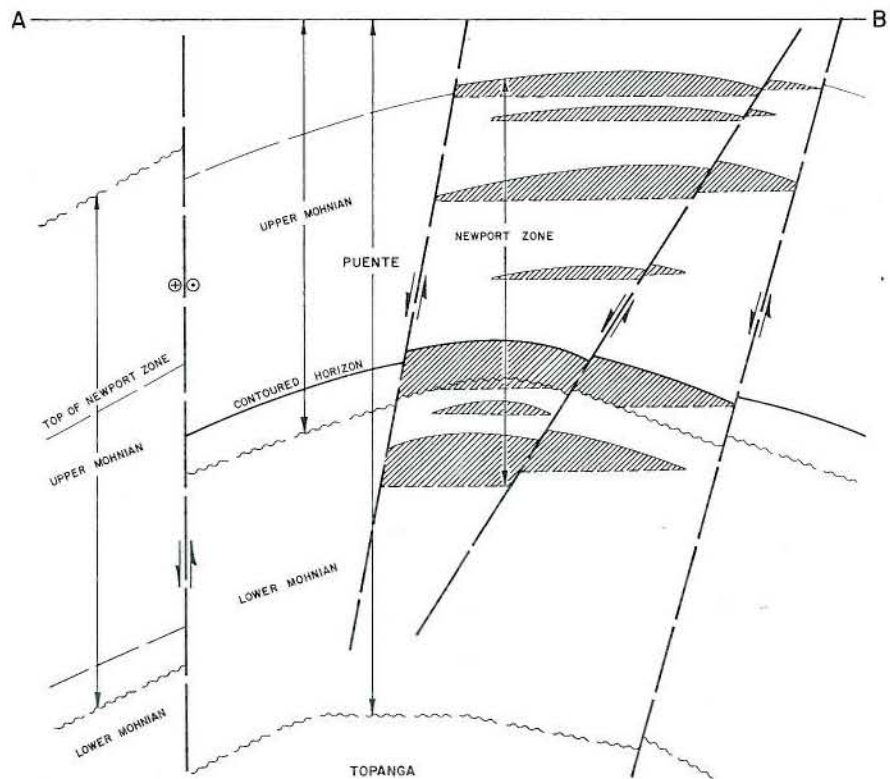
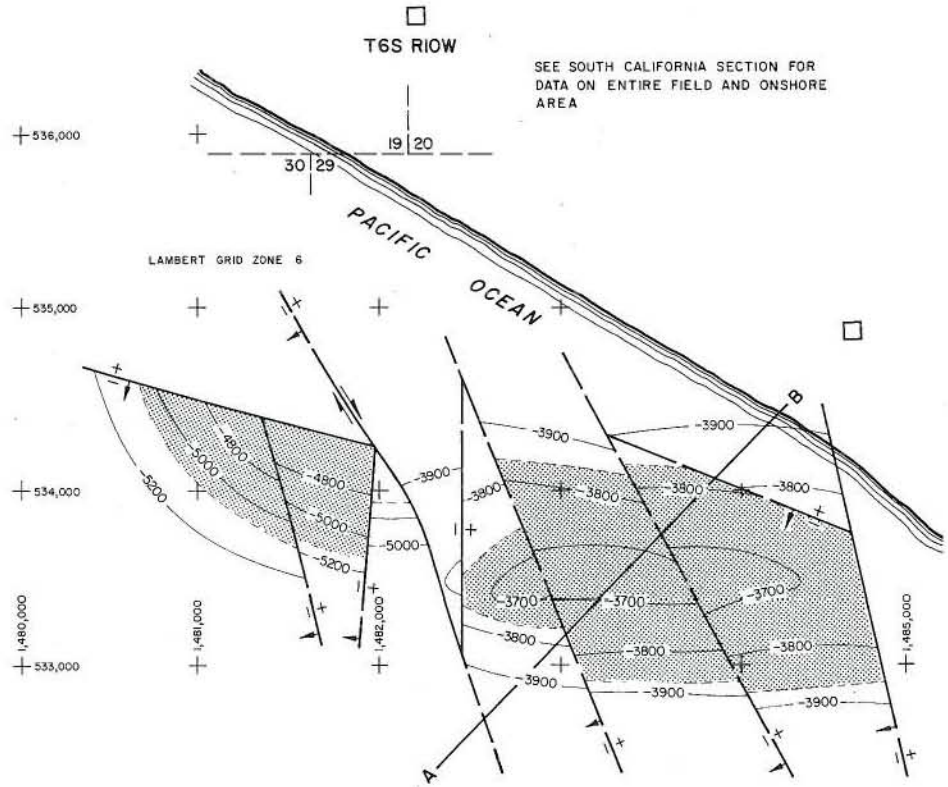
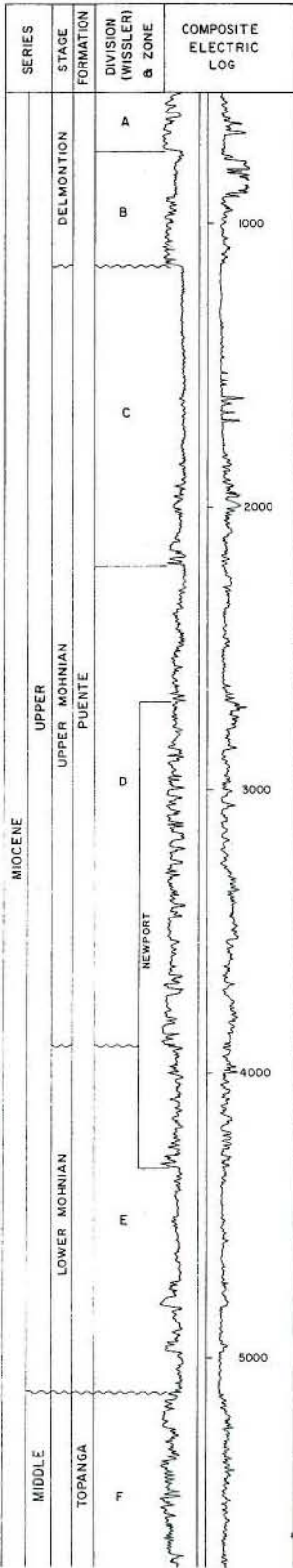
CURRENT CASING PROGRAM: 16" cem. 200; 10 3/4" cem. 1,600; 7" or 5 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Cumulative production of condensate is 4,062,197 bbls.; produced wells were drilled from onshore sites. Abandoned July, 1968.

REFERENCES:

WEST NEWPORT OIL FIELD Offshore Area



CALIFORNIA DIVISION OF OIL AND GAS

NEWPORT, WEST, OIL FIELD

OFFSHORE AREA

Orange County

LOCATION: 1 1/2 miles west of Newport Beach

TYPE OF TRAP: Faulted anticline

ELEVATION: 10 (Onshore drillsites)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Newport	Armstrong Petroleum Corp. "Newport Beach" 1	Monterey Oil Co. "Newport Beach" 1	29 6S 10W	SB	70	10	Dec 1953

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Exxon Corp. "State 1549" 1	Monterey Oil Co. "State 1549" 1	Oct 1955	19 6S 10W	SB	8,711	Topanga	middle Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Newport	3,750	470	late Miocene	Puente	19	1,010 - 1,900	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
118,243	37,156	106,354	80	15	3,810,903	1,233,718	352,539	1957	16	14	80

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 11 3/8" cem. 300 - 500; 7" cem. 3,000 - 6,000; 5 1/2" liner landed through zone.

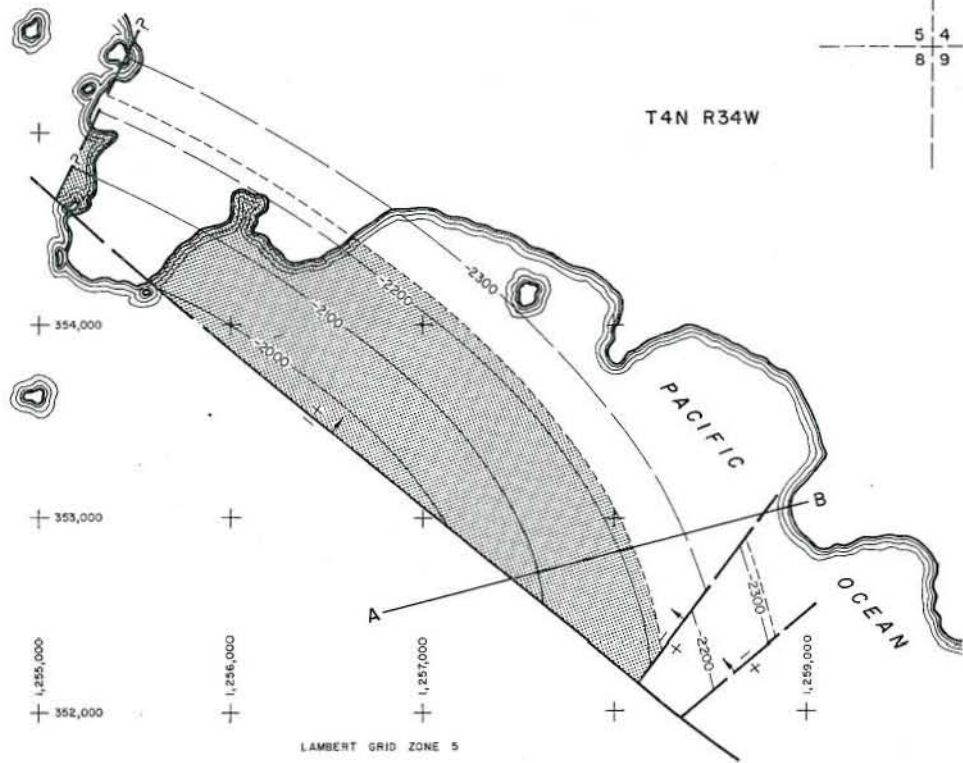
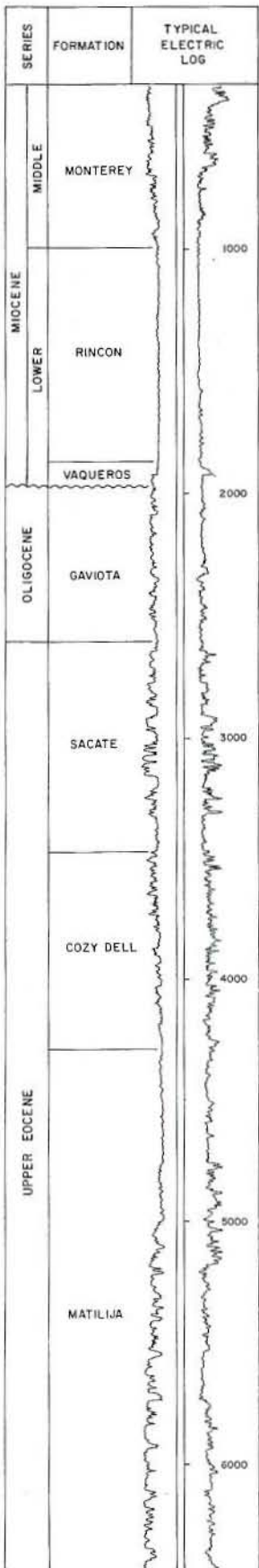
METHOD OF WASTE DISPOSAL: Waste water disposed of through sewer system.

REMARKS: All producing wells were drilled from two onshore drillsites.

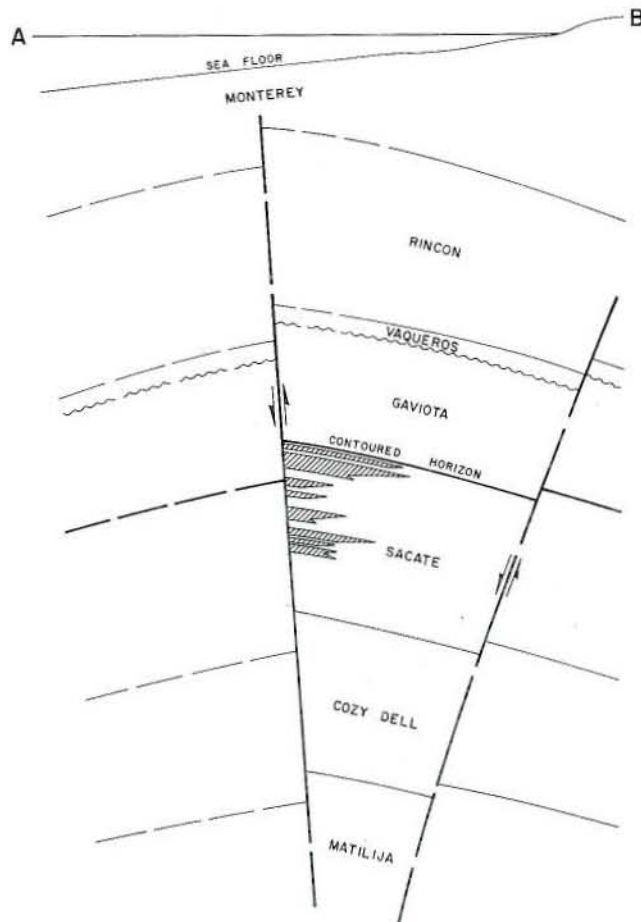
REFERENCES: Hunter, A.L. and D.R. Allen, Recent Developments in West Newport Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 42, No. 2 (1956).

POINT CONCEPTION OIL FIELD

Offshore area



CONTOURS ON TOP OF SACATE



CALIFORNIA DIVISION OF OIL AND GAS

OFFSHORE AREA

POINT CONCEPTION OIL FIELD

Santa Barbara County

LOCATION: See map sheet of Point Conception Oil Field

TYPE OF TRAP: Anticline

ELEVATION: 160 (Onshore drillsites); -30 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Sacate	Union Oil Co. of Calif. "State 2879" 10-6	Same as present	S 4N 34W	SB	64	N.A.	Feb 1965

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif. "State 2879" 5-6	Same	Aug 1963	16 4N 34W	SB	8,780	Matilija	1t Eocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Sacate	2,800	500	Eocene	Sacate	32	1,320	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
123,700	44,506	350,811	40	2	685,826	260,745	153,617	1970	23	3	40

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 280

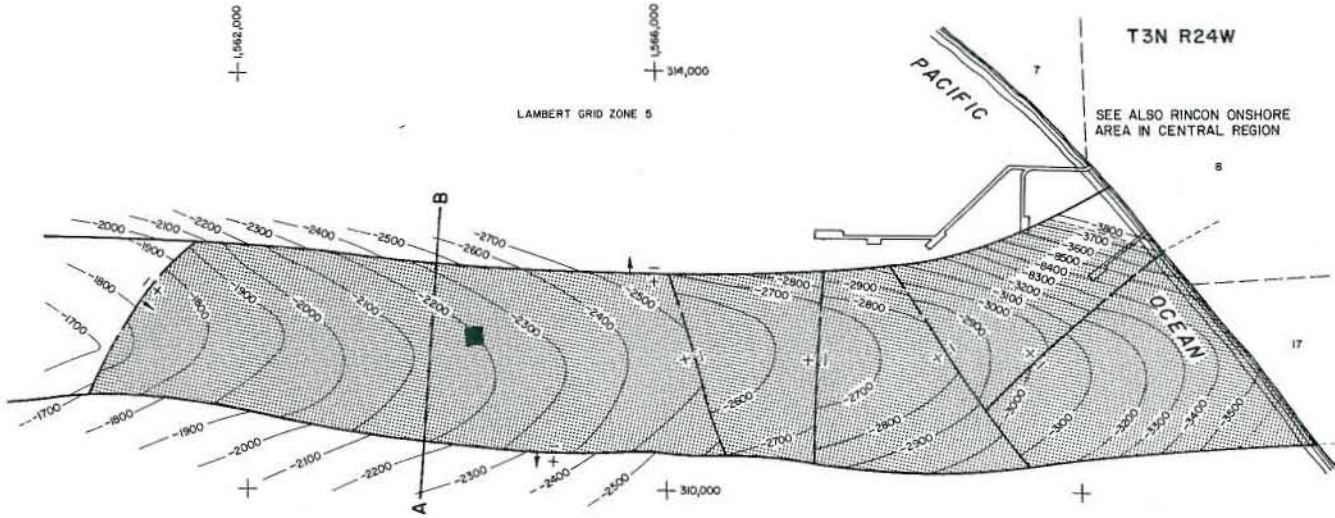
CURRENT CASING PROGRAM: 16" cem. 300; 10 3/4" cem. 1,200; 7" cem. through zone.

METHOD OF WASTE DISPOSAL: Produced water is injected into disposal well.

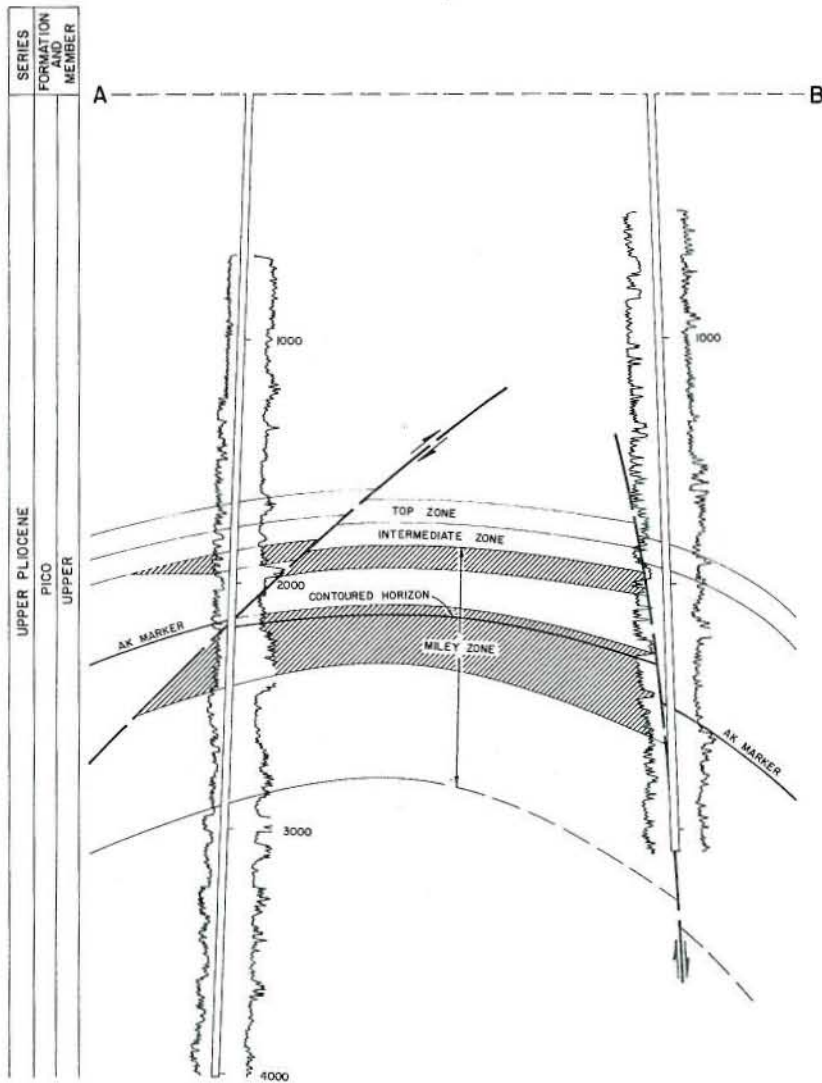
REMARKS: Wells are drilled from onshore sites. This area was originally included in Conception Offshore oil field.

REFERENCES: Barton, C.L., Operations in District No. 3: Calif. Div. of Oil and Gas--Summary of Operations, Vol. 51, No. 2 (1965).

RINCON OIL FIELD Offshore Area



CONTOURS ON AK MARKER (TOP OF THIRD MILEY SAND)



SERIES FORMATION AND MEMBER
UPPER PLOCENE
PICO
UPPER

CALIFORNIA DIVISION OF OIL AND GAS

RINCON OIL FIELD

OFFSHORE AREA

Ventura County

LOCATION: 7 miles northwest of Ventura

TYPE OF TRAP: Faulted anticline

ELEVATION: 15 (Onshore drillsite); -45 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Miley	Atlantic Richfield Co. "Hobson State" 1	Chanslor-Canfield Midway Oil Co. "State" 1	17 3N 24W	SB	608	0	Mar 1928

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "State 3184" 3	Same	Aug 1967	22 3N 24W	SB	17,590	Santa Margarita	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Miley	2,100	800	Pliocene	Pico	25 - 30	1,500	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
586,567	310,398	1,091,191	550	80	28,932,833	30,853,481	1,271,457	1960	153	130	550

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1965	12,761,745	16

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

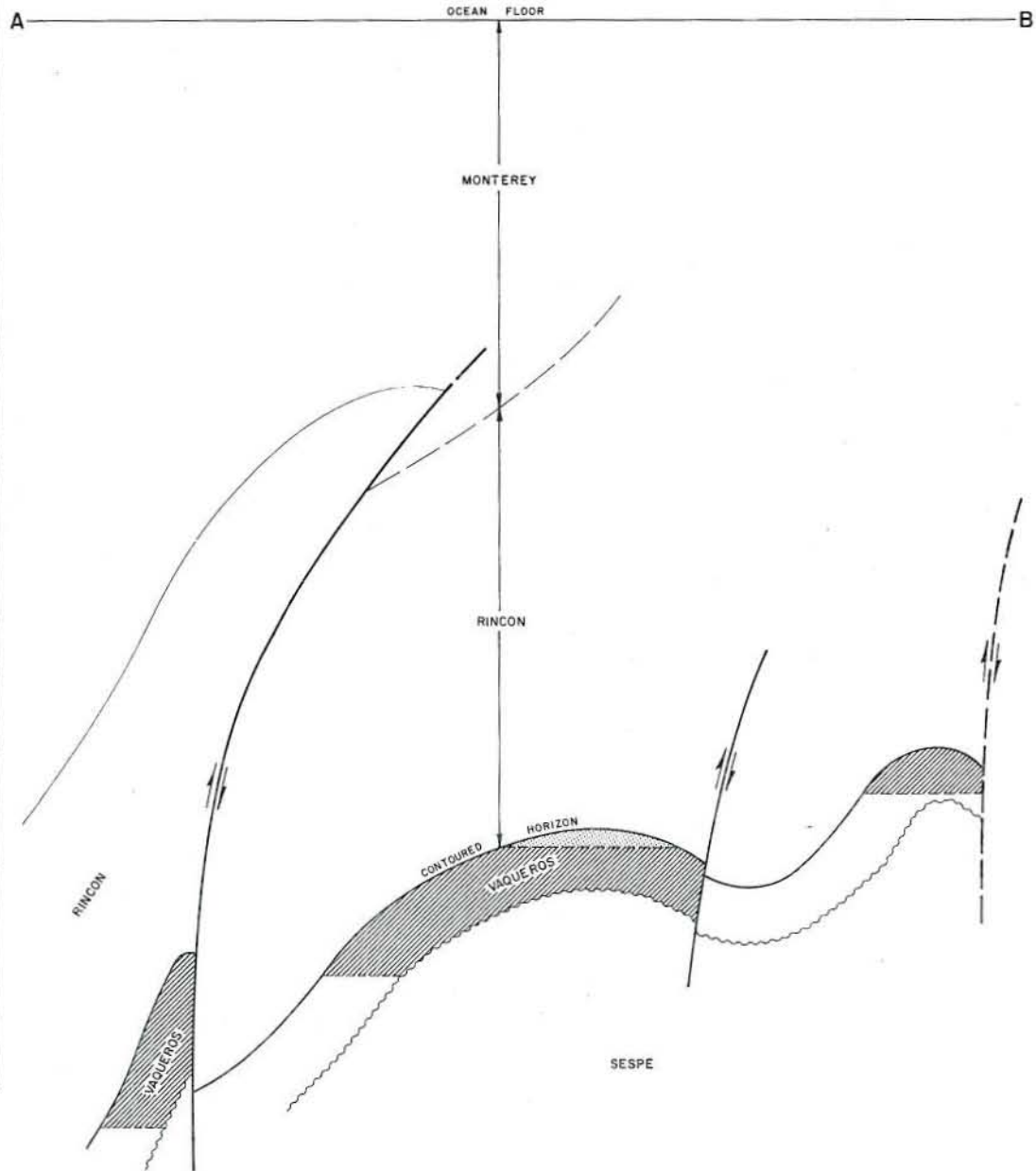
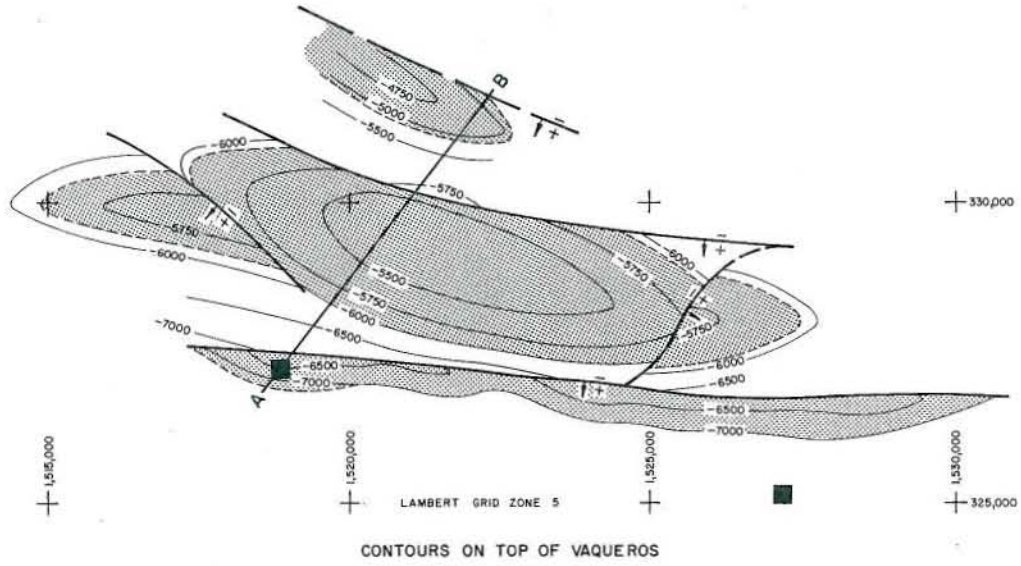
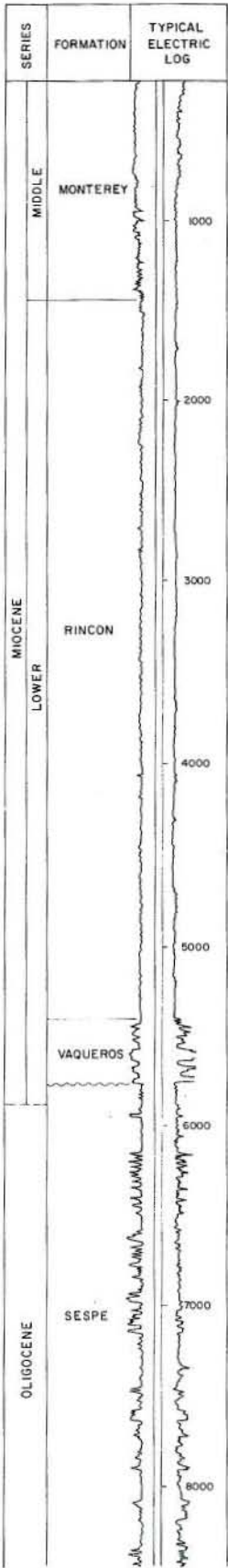
CURRENT CASING PROGRAM: 13 3/8" cem. 300; 8 5/8" cem. over zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water injected into water-flood wells.

REMARKS: Wells were originally drilled from piers; later wells were directionally drilled from onshore and from an artificial island.

REFERENCES: Frame, R.C., California Offshore Petroleum Development: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 2 (1960).

SUMMERLAND OFFSHORE OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

SUMMERLAND OFFSHORE OIL FIELD

Santa Barbara County

LOCATION: 6 miles southeast of Santa Barbara

TYPE OF TRAP: Faulted anticlines

ELEVATION: -100 (ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Lambert Coord (10) ³	Grid Zone	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Vaqueros	Standard Oil Co. of Calif. "SHSS 1824" 1A	Standard Oil Co. of Calif. "Standard-Humble Summerland State" 1	X - 1527 Y - 325	5	720	513	Nov 1958

Remarks: Standard Oil Co. of Calif. initially discovered the zone in well "SHSS 1824 CH" 1 with formation tests on April 1, 1957. However, the well, which was drilled from a barge, was abandoned in May 1957.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Lambert Coord (10) ³	Grid Zone	Depth (feet)	At total depth	
						Strata	Age
Standard Oil Co. of Calif. "SHSS 1824" 26	Standard Oil Co. of Calif. "Standard-Humble Summerland State" 24	Feb 1961	X - 1527 Y - 325	5	12,133	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Vaqueros	6,500	250 - 500	early Miocene	Vaqueros	29 - 60	1,300	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
259,957	1,662,610	604,216	830	21	24,012,558	82,371,168	3,792,551	1964	55	49	830

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 10 3/4" cem. 2,000; 7" cem. through zone.

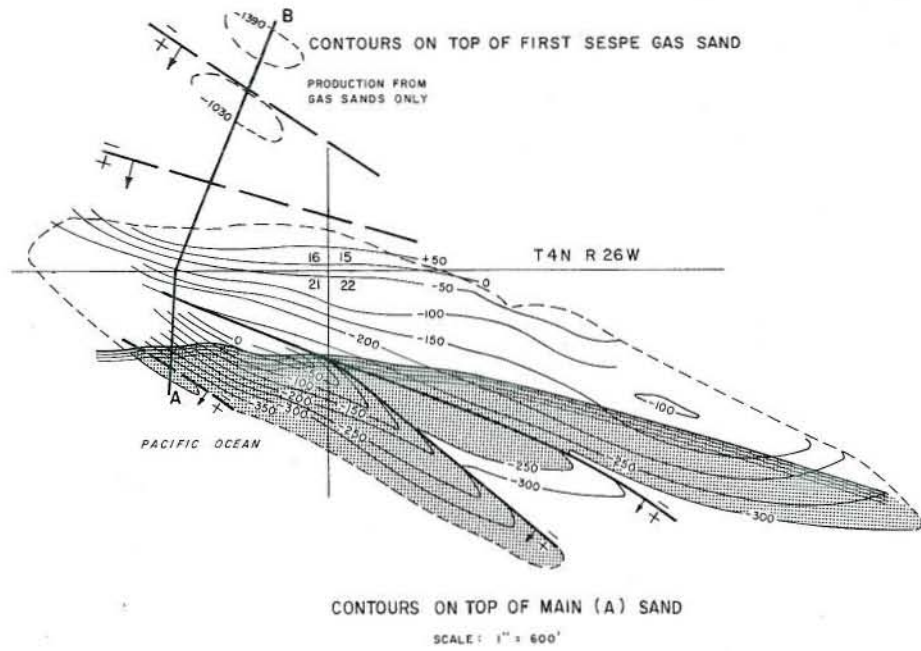
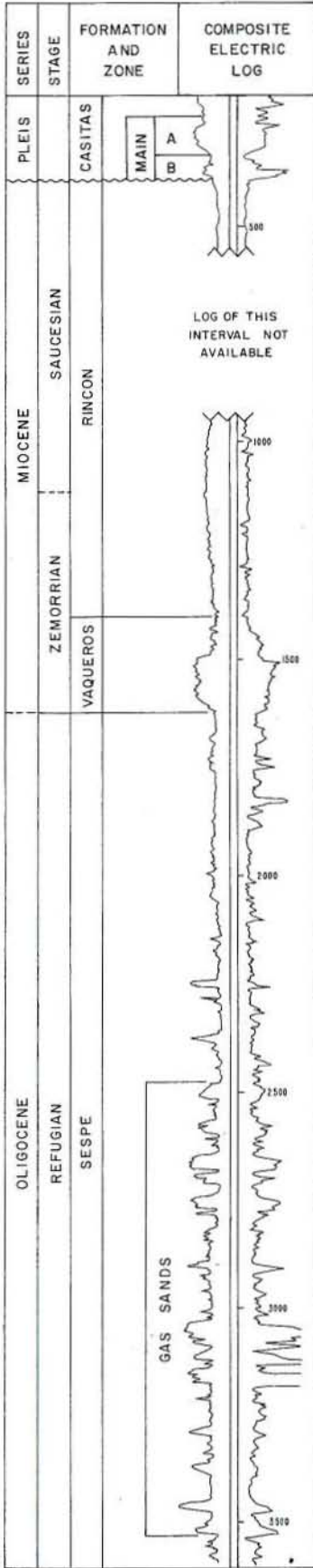
METHOD OF WASTE DISPOSAL: Produced water is shipped to shore, cleaned and disposed of in the ocean.

REMARKS: Two producing wells were completed on the ocean floor; all others are on either Platform Hazel or Hilda. Hazel was the first platform installed in California waters that was constructed in a shipyard and towed to the site.

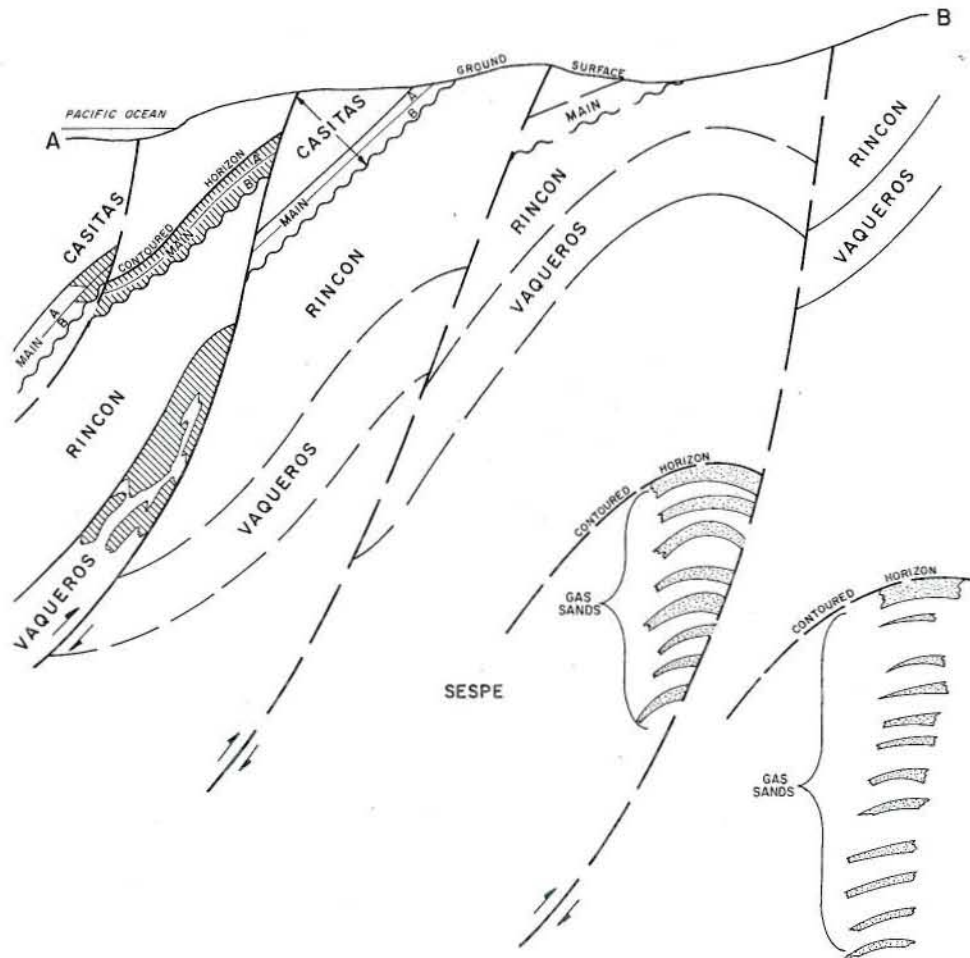
REFERENCES:

SUMMERLAND OIL FIELD

Old Offshore Area



MAP AND CROSS SECTION BASED UPON DATA BY R. ARNOLD, AND MODIFIED BY THE DIVISION OF OIL AND GAS.



CALIFORNIA DIVISION OF OIL AND GAS

SUMMERLAND OIL FIELD

OFFSHORE AREA (old)

Santa Barbara County

LOCATION: 4 miles east of Santa Barbara

TYPE OF TRAP: Faulted anticlines

ELEVATION: -15 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Main Vaqueros	Operator name and well number unknown Russell L. Williams "State Lease No. 16 Getty" 1	H. L. Williams, well number unknown George F. Getty "State Lease No. 16 Getty" 1	N.A. 21 4N 26W	SB SB	N.A. 68	N.A. N.A.	1896 Dec 1929

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Getty Oil Co. "Seaside-State" 1	Tidewater Oil Co. "Seaside-State" 1	Jun 1957	22 4N 26W	SB	6,191	Sespe	Oligocene

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (+API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Main Vaqueros	220	100	Pleistocene	Casitas	7	N.A.	II
	1,400	300	early Miocene	Vaqueros	16	N.A.	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	304,683	N.A.	N.A.	N.A.	200+	200+	58

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

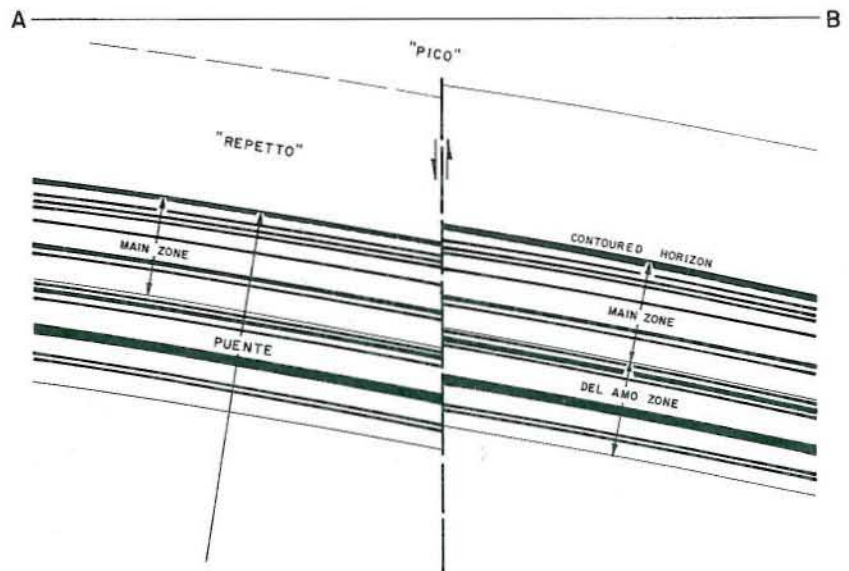
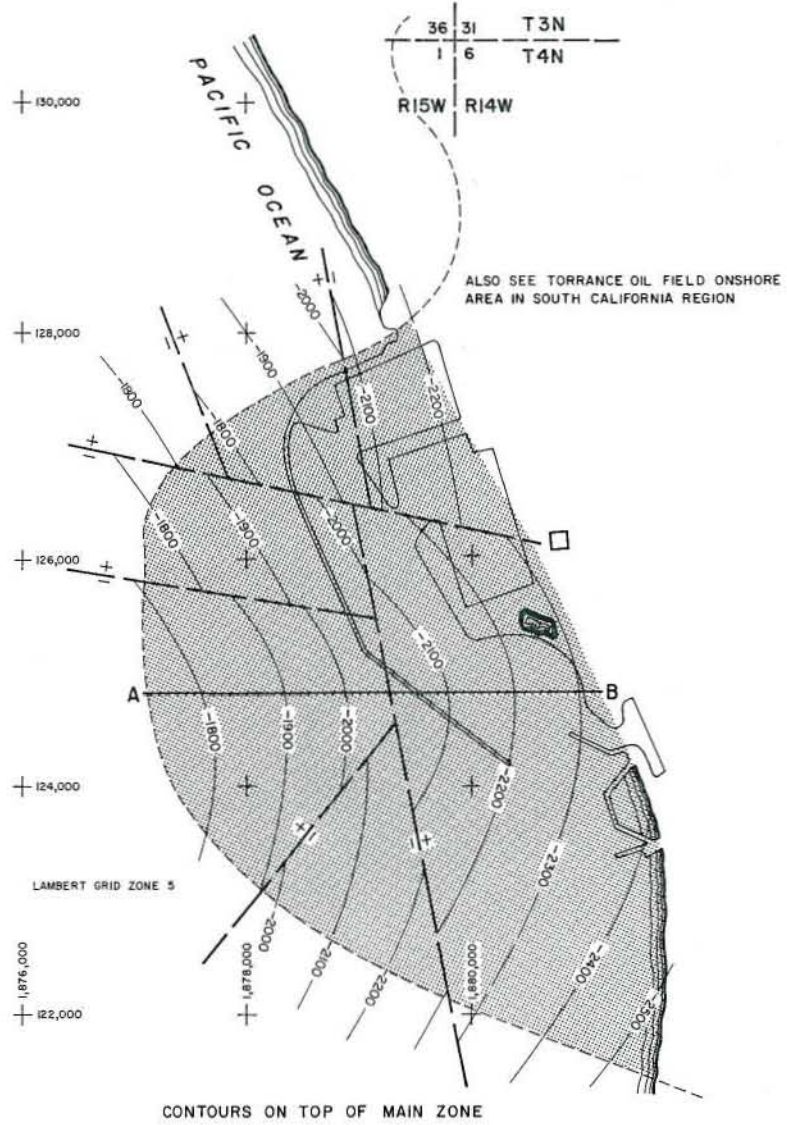
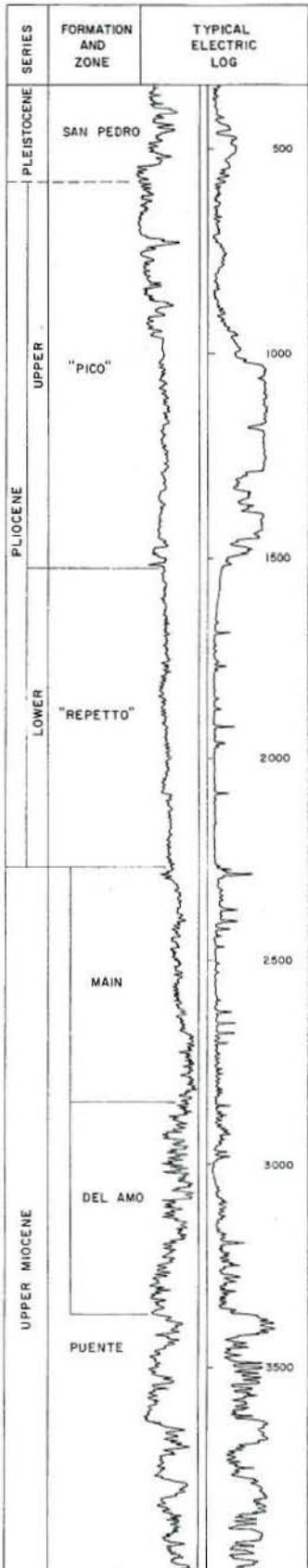
CURRENT CASING PROGRAM: Main Zone: 8" cem. above zone; 5 1/2" liner landed through zone. Vaqueros Zone: 16" cem. 100; 11" cem. above zone; 8" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: This is the first offshore oil field in California and possibly in the world. The last production from this field was in 1940.

REFERENCES: Arnold, Ralph, Geology & Resources of the Summerland District, Santa Barbara County, California: U.S. Geol. Survey Bull. 321 (1907).
Dibblee, T.W., Jr., Geology of the Central Santa Ynez Mountains, Santa Barbara County, Calif.: Calif. Div. of Mines and Geology Bull. 186, p. 88 (1966).

TORRANCE OIL FIELD Offshore Area



CALIFORNIA DIVISION OF OIL AND GAS

TORRANCE OIL FIELD

OFFSHORE AREA

Los Angeles County

LOCATION: Adjacent to Redondo Beach

TYPE OF TRAP: Faulted anticline

ELEVATION: 15 (Onshore drillsite); -30 (Ocean floor)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Main	American Pacific International, Inc. "City of Redondo Beach" 2	Signal Oil and Gas Co. "City of Redondo Beach" 2	6 4S 14W	SB	194	19	May 1956
Del Amo	American Pacific International, Inc. "City of Redondo Beach" 1	Signal Oil and Gas Co. "City of Redondo Beach" 1	6 4S 14W	SB	162	29	Apr 1956

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
American Pacific International, Inc. "City of Redondo Beach" S-12	McCulloch Oil Corp., Inc. "City of Redondo Beach" S-12	Dec 1972	6 4S 14W	SB	8,313	Puente	late Mio

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu))	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Main	2,100	65	late Miocene	Puente	14 - 28	1,600	IV
Del Amo	2,600	70	late Miocene	Puente	26 - 30	1,600	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
404,273	335,196	1,115,766	700	22	4,556,512	3,625,908	857,170	1958	43	42	700

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 13 3/8" cem. 550; 8 5/8" cem. above zone; 6 5/8" or 5 1/2" liner landed through zone.

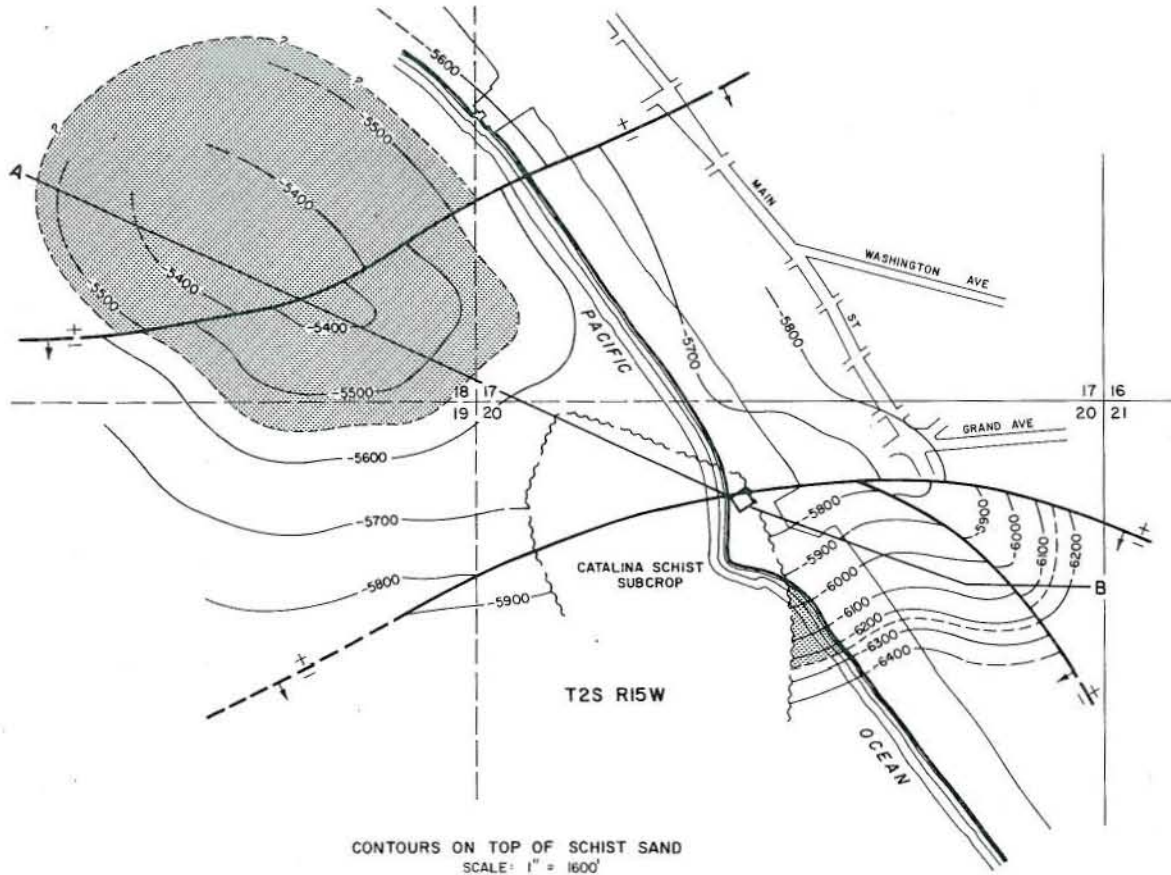
METHOD OF WASTE DISPOSAL: Waste water disposed of through sewer system.

REMARKS: All completed wells were drilled from one onshore drillsite.

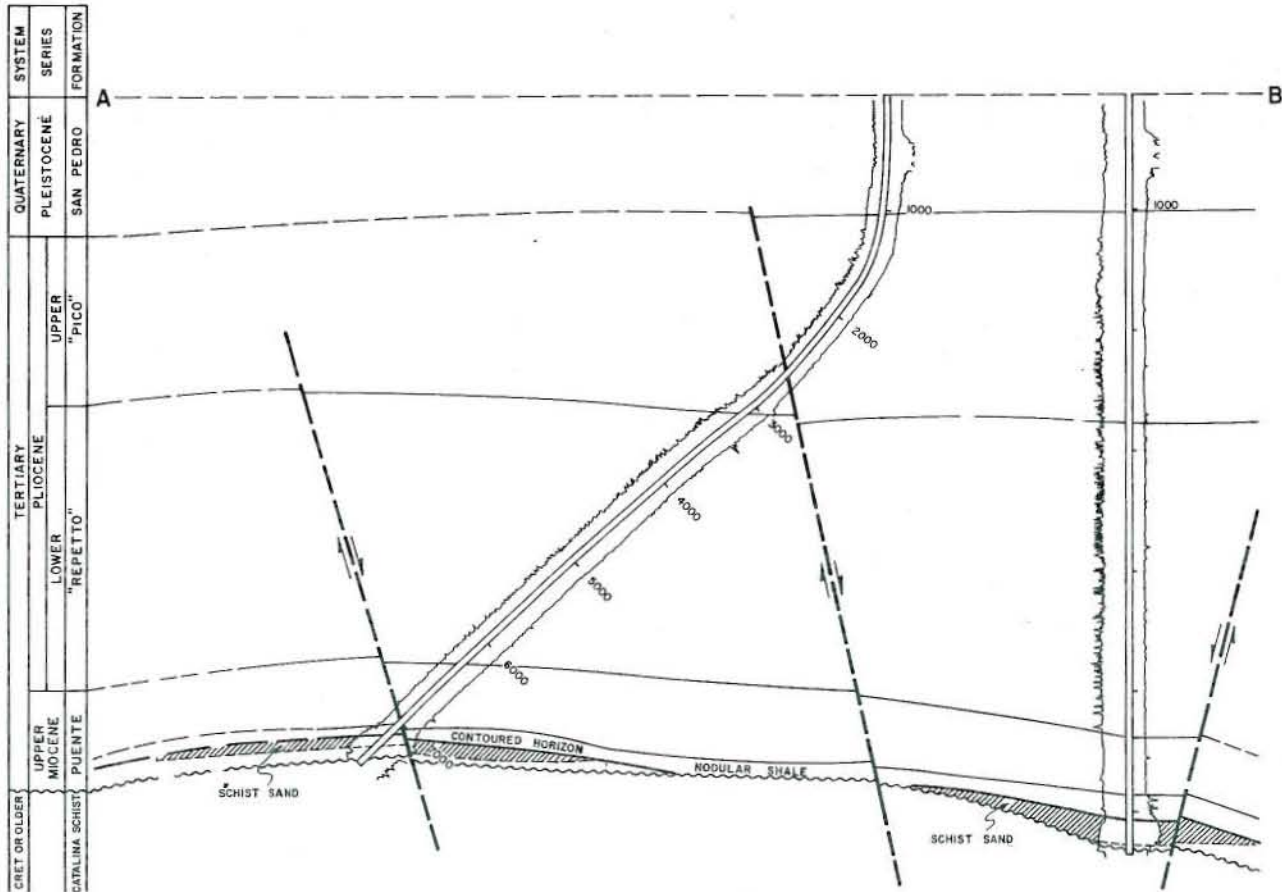
REFERENCES: Crowder, R.E., Torrance Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 42, No. 2 (1956).
Crowder, R.E., Del Amo Zone of Torrance Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 51, No. 1 (1965).
Frame, R.C., California Offshore Petroleum Development: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 2 (1960).

VENICE BEACH OIL FIELD

Offshore Area



CONTOURS ON TOP OF SCHIST SAND
SCALE: 1" = 1600'



CALIFORNIA DIVISION OF OIL AND GAS

VENICE BEACH OIL FIELD

OFFSHORE AREA

Los Angeles County

LOCATION: See map sheet of Venice Beach Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 15

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Schist sand	Mobil Oil Corp. "L. A. City 135" 3	Socony Mobil Oil Co., Inc. "L. A. City 135" 3	20 2S 15W	SB	355	280	Aug 1966

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Mobil Oil Corp. "L. A. City 135" 9	Socony Mobil Oil Co., Inc. "L. A. City 135" 9	May 1967	20 2S 15W	SB	7,552	Catalina Schist	Cret or older

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (lb/cu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Schist sand	5,450	80	Late Miocene	Puente	22	550	IV

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
145,393	58,868	2,102,899	80	4	1,945,834	1,129,389	455,162	1968	7	6	80

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
--			

SPACING ACT: Applies

BASE OF FRESH WATER: 600 - 700

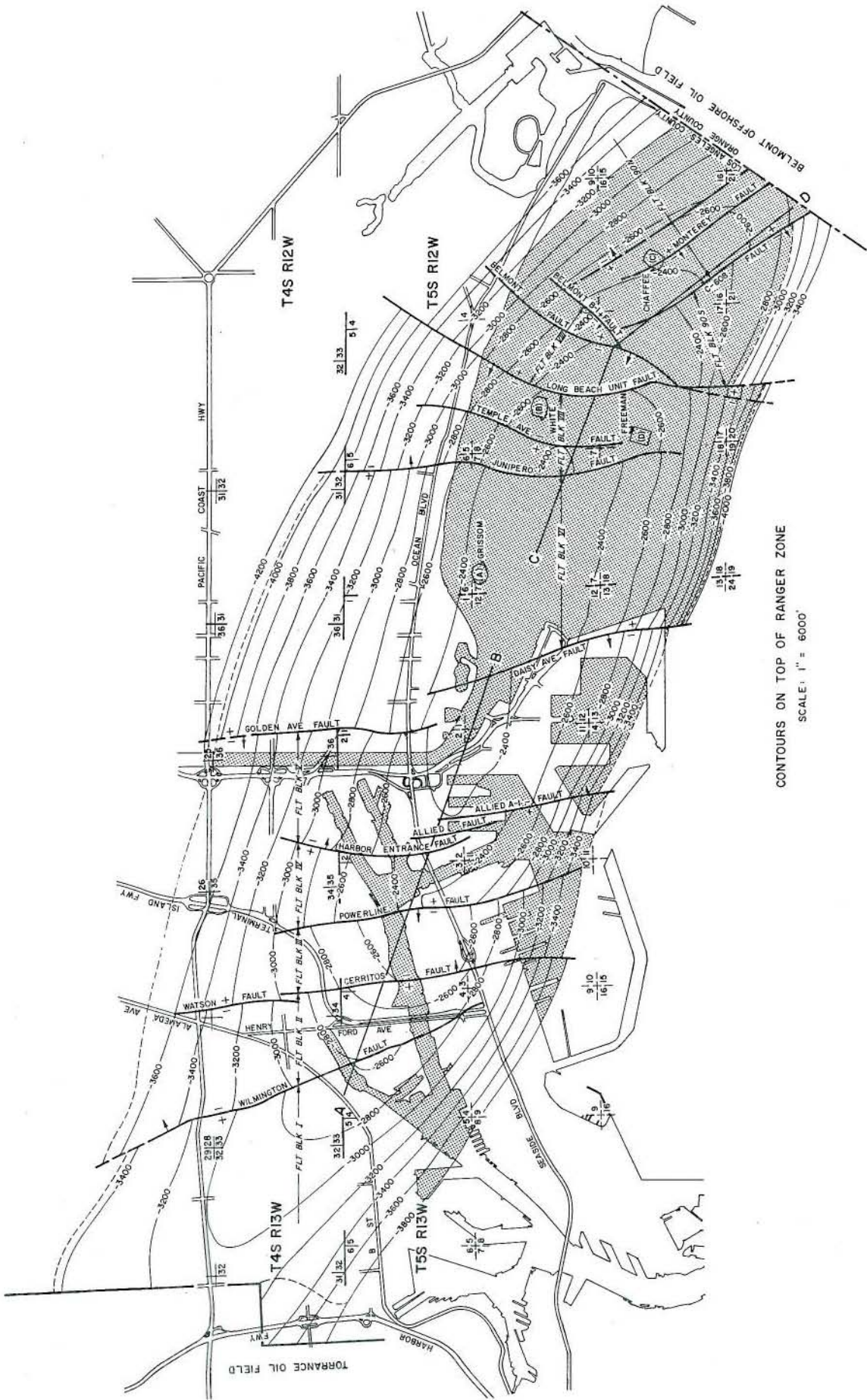
CURRENT CASING PROGRAM: 13 3/8" cem. 300; 10 3/4" cem. 1,900 and across base of fresh-water sands; 7" cem. through zone.

METHOD OF WASTE DISPOSAL: Disposal wells.

REMARKS: All wells are directionally drilled from onshore drillsite.

REFERENCES:

WILMINGTON OIL FIELD Offshore Area



CONTOURS ON TOP OF RANGER ZONE
SCALE: 1" = 6000'

CALIFORNIA DIVISION OF OIL AND GAS

WILMINGTON OIL FIELD

OFFSHORE AREA

Los Angeles County

LOCATION: See map sheet of Wilmington Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: -10 - +30 (all well locations are onshore or on man-made drilling islands)

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Tar	Long Beach Oil Development Co. "X" 14	Same as present	2 SS 13W	SB	91	103	Mar 1943
Ranger	Long Beach Oil Development Co. "X" 6	Same as present	2 SS 13W	SB	287	482	May 1939
Upper Terminal	Same as above	Same as present	2 SS 13W	SB	*	*	May 1939
Lower Terminal	Same as above	Same as present	2 SS 13W	SB	*	*	May 1939
Union Pacific	Long Beach Oil Development Co. "W" 155	Same as present	3 SS 13W	SB	1,290	390	Mar 1947
Ford	Long Beach Oil Development Co. "W" 98	Same as present	3 SS 13W	SB	385	225	Jun 1945
237	Same as above	Same as present	3 SS 13W	SB	**	**	Jun 1945
Schist	Same as above	Same as present	3 SS 13W	SB	**	**	Jun 1945

Remarks: * Production from Ranger, Upper Terminal and Lower Terminal commingled.
 ** Production from Ford, 237 and Schist commingled.

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Thums Long Beach Co. C-520 I	Same	Aug 1968	16 SS 12W	SB	12,383*	Puente	late Mio

*Drilled depth (directionally drilled well)

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Tar	2,200	120	early Pliocene	"Repetto"	12 - 15	1,800	III
Ranger	2,500	150	e Plio-lt Mio	"Repetto"-Puente	12 - 25	1,850	III
Upper Terminal	3,000	300	late Miocene	Puente	14 - 25	1,800	III
Lower Terminal	3,500	360	late Miocene	Puente	25 - 30	1,800	III
Union Pacific	4,000	125	late Miocene	Puente	25 - 32	2,000	III
Ford	4,550	300	late Miocene	Puente	28 - 32	1,500	III
237	5,550	200	late Miocene	Puente	28 - 32	1,400	III
Schist	5,850	15	Cret or older	Catalina Schist	28 - 32	1,000	III

PRODUCTION DATA (Jan. 1, 1974)

1973 Production			1973 Proved acreage	1973 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
47,526,287	12,637,812	177,203,936	6,880	948	746,123,011	416,675,215	64,775,754	1969	1,828	1,821	7,350

STIMULATION DATA (Jan. 1, 1974)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1953	2,725,954,953	290
Cyclic steam	1965		

* Onshore/offshore totals not separated. See field sheet.

SPACING ACT: Applies

BASE OF FRESH WATER: 1,600

CURRENT CASING PROGRAM: 13 3/8" cem. 200 or 300; 8 5/8" cem. above zone and across base of fresh-water sands; 6 5/8" liner landed through zone and gravel packed. Older wells had annular space filled with special oil base material for bell hole protection against earthquake movement.

METHOD OF WASTE DISPOSAL: Water-flood project into all zones except Schist.

REMARKS:

REFERENCES: