

STATE OF CALIFORNIA RONALD REAGAN, Governor

THE RESOURCES AGENCY N. B. LIVERMORE, JR., Secretary for Resources

DEPARTMENT OF CONSERVATION RAY B. HUNTER, Director

DIVISION OF OIL AND GAS

J. F. MATTHEWS, JR. STATE OIL AND GAS SUPERVISOR 1416 9th Street Sacramento, California 95814

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CALIFORNIA OIL AND GAS FIELDS

VOLUME 1 North and East Central California

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HOW TO USE THIS VOLUME

Volume I consists of oil and gas field maps and data sheets arranged alphabetically by the API regions North California and East Central 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, North Coles Levee will be found listed as Coles Levee, North, 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 maps and statistical data for all fields in the API regions of North California and East Central 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 planned 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.

This volume was prepared under the supervision of Raymond V. Rothermel, Publications Officer. George J. Borkovich, Northern Region Staff Engineer, coordinated the project, and Simon Cordova, Woodland staff engineer, was the editor of geologic names. Division of Oil and Gas Northern Region engineers in the Bakersfield, Coalinga, Woodland and Santa Maria offices participated in the preparation of the maps and data sheets and other personnel did the drafting, layout, and typing, therefore individual recognition would not be practical here. Contributions by companies and individuals not employed by the division are credited on those map sheets involved.

MAJOR OCCURRENCES OF OIL AND GAS

SAN JOAQUIN VALLEY

Oil and associated wet gas occur largely in the Miocene and Pliocene, with lesser quantities in the Eocene and Pleistocene Series, and very minor quantities in the Oligocene, Jurassic and Cretaceous Systems. Dry gas occurrence is minor, being found primarily in the Pliocene, Eocene and Upper Cretaceous.

SACRAMENTO VALLEY AND OTHER NORTHERN CALIFORNIA BASINS

Dry gas occurs largely in the Eocene, Paleocene and Upper Cretaceous, with a lesser amount in the Pliocene and Miocene Series. Oil, which is very minor, occurs in Pliocene, Miocene, Eocene, Paleocene, and Upper Cretaceous strata.

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 needed 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 and is representative of the stratigraphy of a particular oil or gas field. Sections removed are shown by the symbol "

Note: Some typical or composite logs may be taken from 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 placed on the contour map.
- By shading (see legend) on contour map. Shading is also used on cross sections to indicate productive zones.

Productive area, as shown on contour maps, is the *maximum* productive area as of January 1, 1973. Productive area shown on index maps is generalized.

Contour map - Depth datum is sea level.

•	Drilling
\$	Drilling - idle
\$	Abandoned - dry hole
•	Producing - oil
•	ldle - oil
+	Abandoned - oil
*	Producing - gas
*	ldle - gas
举	Abandoned - gas
ø	Water disposal
ø	Oil well converted to water disposal
₩ ×	Intersection of bore-hole and contoured horizon
	Productive area
	Contour line (good control)
	Contour line (poor control)
	Axis of anticline
 	Axis of syncline
	Fault
	Possible fault
-	Fault dip direction
+ 1	Fault movement (+ up, — down)
11	Fault movement (lateral)

Cross section legend:



Oil zones

____}

Gas zones

iv



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 - Division of Oil and Gas blowout prevention equipment class requirements, copies of which are available from any Division of Oil and Gas office. However, 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 5 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
Н	Humboldt
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

V

cemented
not available
not applicable
Abandoned
Holocene
Pleistocene
Pliocene
Miocene
Oligocene
Eocene
Paleocene
Cretaceous
Jurassic
early
middle
late
undifferentiated

 $\ensuremath{^{\ast}}\xspace{\text{Capitals}}$ are used for system age, lower case for series age.













NORTH CALIFORNIA MAPS AND DATA SHEETS





LOCATION: 4 miles northeast of Princeton
ELEVATION: 85

DISCOVERY DATA

					Init			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.&M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
Capay	Buttes Resources Co. "Afton Community 2"	Richfield Oil Corp. "Afton Community 2" 1	34 19N 1W	MD	485	640	11/64	Nov. 1949
Afton	Buttes Resources Co. "Afton Community 1" 1	Richfield Oil Corp. "Afton Community I" 1	34 19N 1W	MD	5,700	550	5/8	Feb. 1944

Remarks:

DEEPEST WELL DATA

		Date			Total depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B.& M.		Strata	Age
Atlantic Richfield Co. "ROCO-Afton Community" 66-34	Richfield Oil Corp. "ROCO-Afton Community" 66-34	June 1962	34 19N 1W	MD	8,992	Basement (quartz diorite)	pre-Lt. Cret.

PRODUCING ZONES

	Average Average net Geologic Heating value Salinity of O depth thickness of gas zone water	Original zone						
Zone	(feet)	(feet)	Age	Formation	(Btu)	(ppm)	pressure (psi)	required III B 2M
Capay Afton	1,830 2,650	30 25	Eocene Late Cretaceous	Capay Kione	770 770	26,400 26,400	800 1,225	

PRODUCTION DATA

1976 Production		1977	1976	1976	Peak gas production		Total number of wells		Maximum
Net gas (Mcf)	Water (bbl)	Proved acreage	Maximum number producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	. Drilled	Completed	proved acreage
2,118	0	140	2	4,770,583	821,134	1949	8	2	160

SPACING ACT: Applies

BASE OF FRESH WATER: 1,300

CURRENT CASING PROGRAM: 10 3/4" cem. 550; 4 1/2" cem. through zone and across base of freshwater sands.

REMARKS: Commercial gas deliveries began in December 1947.

REFERENCES: None

January 1978



JANUARY 1978

LOCATION: 3 miles northeast of Princeton ELEVATION: 75

DISCOVERY DATA

					Initial production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8.&M.	Daily (Mcf)	Flow pressure (psi)	e Bean size (inches)	Date of completion
(Unnamed)	Shell Oil Co. "Cecil" 1-9	Same	9 18N 1W	MD	9,600	1,100	N.A.	Nov. 1975

Remarks:

DEEPEST WELL DATA

		Date			Total depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B.& M.		Strata	Age	
Shell Oil Co. "Cecil" 1-9	Same	Oct. 1975	9 18N 1W	MD	3,740	Forbes	Late Cret.	

PRODUCING ZONES

	Average	Average net	(Seologic	Heating value	Salinity of	Original zone	Class BOPE
Zone	depth (feet)	thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	pressure (psi)	required
(Unnamed)	2,735	15	Late Cretaceous	Kione	778	N.A.	1,200	III B 2M

PRODUCTION DATA

1976 Production		1977	1976	1976	Peak gas production		Total number of wells		Maximum
Net gas (Mcl)	Water (bbi)		Maximum number producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage
0	0	40	0	0	See Remarks		2	1	40

SPACING ACT: Applies

BASE OF FRESH WATER: 1,300

CURRENT CASING PROGRAM: 8 5/8" cem. 1,400; 5 1/2" cem. through zone. REMARKS: Commercial gas deliveries have not yet begun.

REFERENCES: None

January 1978

ANGEL SLOUGH GAS FIELD (Abandoned)



1973

LOCATION: 10 miles southeast of Williams

TYPE OF TRAP: Lenticular sands on anticline and syncline

ELEVATION: 180

DISCOVERY DATA

					Initial production			
	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion		
(Sand stringers)	Gulf Oil Corp. "Arbuckle Unit C" 1	Western Gulf Oil Co. "Arbuckle Unit C" 1	3 13N 2W	MD	7,780	1,245	1/2	Feb 1957

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	I depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Occidental Pet. Corp. "Arbuckle Section 4 Unit" I	Same	Apr 1960	4 13N 2W	MD	12,007	Venado (?)	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		1	Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
(Sand stringers)	4,430 - 7,150	5 - 90 per stringer	Lt Cretaceous	Forbes	980 - 1,010	520 - 1,250	2,200 - 4,800	*IV or V

* Depends on location and depth of well.

PRODUCTION DATA (Jan. 1, 1973)

1972 Proc	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas proc	duction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbi)	acreage	producing wells	production (McI)	(Mcf)	Year	Drilled	Completed	acreage
1,358,456	11,799	3,575	26	58,777,183	8,622,237	1961	57	38	5,255

SPACING ACT: Applies

BASE OF FRESH WATER 1,250

CURRENT CASING PROGRAM 16" or 13 3/8" cem. 300; 9 5/8" or 8 5/8" cem. 2,800 and across base of fresh-water sands; 5 1/2" or 4 1/2" cem. through zones.

METHOD OF WASTE DISPOSAL: Most of water is hauled by truck to Gulf Oil Corp. West Grimes Gas field disposal well. Waste water sumps are used for some low water volume producers. REMARKS: Commercial gas deliveries began in March 1958. Most of the gas-sand stringers have been given local names by operators.

REFERENCES: Huey, W.F., Arbuckle Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 43, No. 2 (1957).





LOCATION: 2 miles southeast of Artois and 6 miles northeast of Willows

TYPE OF TRAP: Sand lens on a homocline

ELEVATION: 155

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DISCOVERY DATA

					Init	ion		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in)	Date of completion
(unnamed)	Sun Oil Co. "Sunray-McCulloch-Coast Expl. Von Bargen" 1	Sunray Mid-Continent Oil Co. "Sunray- McCulloch-Coast Expl. Von Bargen" 1	11 20N 3W	MD	1,275	1,500	3/8	Nov 1959

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	B & M		Strata	Age
Sun Oil Co. "Sunray-McCulloch-Coast Expl. Von Bargen" 1	Sunray Mid-Continent Oil Co. "Sunray- McCulloch-Coast Expl. Von Bargen" 1	Oct 1959	11 20N 3W	MD	7,447	Guinda	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
(unnamed)	5,885	20	Lt Cretaceous	Forbes	1,007	1,000	3,870	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas prod	Peak gas production		Total number of wells	
let gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mci)	(Mcf)	Year	Drilled	Completed	acreage
20,412	23	40	1	304,474	106,156	1967	2	1	40

SPACING ACT: Applies

BASE OF FRESH WATER: 2,100

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

METHOD OF WASTE DISPOSAL: Waste water is collected in tanks and hauled to Mobil Oil Co. disposal well in Willows-Beehive Bend field. REMARKS: Commercial gas deliveries began in December 1966.

REFERENCES:









Colusa and Glenn Counties

LOCATION: 2 miles west of Princeton

TYPE OF TRAP: Anticline; lenticular sands; sand pinchouts

ELEVATION: 75

1

DISCOVERY DATA

					Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Torres	Exxon Corp. "Manuel S. Torres, et ux B-1" 2	Humble Oil & Rfg. Co. "Manuel S. Torres, et ux B-1" 2 -	12 18N 2W	MD	3,100	1,080	26/64	Oct 1958
McGowan	Same as above	Same as above	12 18N 2W	MD	1,750	825	31/64	Oct 1958
Porter	Exxon Corp. "Bounde Creek Opr. Unit 1" 1	Humble Oil & Rfg. Co. "Mamie H. Porter et al" 2	13 18N 2W	MD	3,980	2,125	19/64	Sep 1956
G	B.B.B. Oil Enterprises "McHatton" 1	Same as present	1 18N 2W	MD	1,848	2,100	3/16	Sep 1959
			9					

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	I depth '
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Exxon Corp. "Bounde Creek Opr. Unit 1" 1	Humble Oil & Rfg. Co. "Mamie H. Porter et al"	Jun 1956	13 18N 2W	MD	7,529	Guinda	Late Cret

PRODUCING ZONES

Zone	depth (feet)	thickness (feet)	Age	Formation	Car Inc. A	zone water	Original zone	Class BOPE
	(feet)			Formation	Gas (btu)	gr/gal	pressure (psi)	required
Torres	2,840	30	Eocene	Princeton Gorge fill	995	N.A.	1,300	IV
McGowan	4,990	80	Lt Cretaceous	Forbes	990	465	3,600	IV
Porter	5,450	265	Lt Cretaceous	Forbes	990	550	3,810 - 4,905	IV
G	6,965	35	Lt Cretaceous	Guinda	N.A.	N.A.	5,450	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas proc	ak gas production Total number of			Maximum proved
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
395,119	13,368	310	2	12,059,695	2,654,168	1959	15	7	440

SPACING ACT: Applies

BASE OF FRESH WATER: 1,800

CURRENT CASING PROGRAM 13 3/8" cem. 350; 8 5/8" cem. 3,500 and across base of fresh-water sands; 5 1/2" or 4 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL The water is hauled by truck to Mobil Oil Corp. disposal well in Willows-Beehive Bend Gas Field.

REMARKS: Commercial gas deliveries began in January 1958. Sudden increased pressure gradients are encountered in drilling below 5,000, requiring mud weight as high as 135 lb. per cu. ft.

REFERENCES: Bruce, D.D., Bpunde Creek Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 45, No. 1 (1959).



CONTOURS ON BASE OF SECOND MASSIVE SAND



LOCATION: 2 miles west of Brentwood

TYPE OF TRAP: Faulted homocline truncated by gorge; sand pinchout

ELEVATION: 110 - 325

DISCOVERY DATA

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				-				i daily action		070502
Zone	Present operator and well name	Original operator and well name	Sec	. т. а	& R.	8 & M	Oil (bbl)	Gas (Mcf)		ite of pletion
Prewett Heidorn (gas) Ginochio (gas) Williamson (gas) First Massive Second Massive Third Massive	Shell Oil Co. "Williamson" 31-4 Shell Oil Co. "Heidorn" 4-4 Shell Oil Co. "Ginochio" 2-9 Shell Oil Co. "Ginochio-Shellenberger" 4-9 Same as above Shell Oil Co. "Ridell" 4-10 The Termo Co. "Ginochio" 1	Same as present Same as present Shell Oil Co. "Ginochio" 4-9 Same as above Same as present R.F. Oakes, F.W. Combs, et al "Ginochio" 1	4 9 9 9 10 15	1N 1N 1N 1N 1N	2E 2E 2E 2E 2E	1.	142 0 0 50 260 *0	1,160 3,900 540 670 4,960	Jul Aug Jul Jul Jan	1962 1962 1962 1963

Remarks: * Well was deepened in 1964 and recompleted as an oil well in the same zone; initial daily production: 240 bbl. oil, 350 Mcf gas.

DEEPEST WELL DATA

		Date	1 B		Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Shell Oil Co. "Heidorn" 2-4	Same	Sep 1961	4 1N 2E	MD	11,472	E Zone (Goudkoff)	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Seologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Prewett	3,770	80	Paleocene	Martinez	39	165	IV
Heidorn (gas)	3,520	34	Paleocene	Martinez	1,175	525	IV
Ginochio (gas)	3,530	43	Paleocene	Martinez	1,175	785	IV
Williamson (gas)	3,570	20	Paleocene	Martinez	1,175	N.A.	IV
First Massive	3,600	250	Paleocene	Martinez	39	60	IV
Second Massive	3,770	95	Paleocene	Martinez	39	25	IV
Third Massive	4,025	180	Lt Cretaceous	Moreno	39	100	IV
		1 110560		10000000000000000000000000000000000000		1000	
	1			0			

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Remarks)

	1972 Production		1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
329,931	2,486,733	2,214,136	910	42	5,923,440	31,952,672	1,094,843	1964	80	59	910

STIMULATION DATA (Jan. 1, 1973)

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: 7,080

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

METHOD OF WASTE DISPOSAL: Waste water is treated then released into natural drainage channels and sumps.

REMARKS: Figure given for base of fresh water pertains to deepest fresh-water aquifer; some salt-water sands are found above 7,080. 1972 dry gas production 470,171 Mcf from 7 producing wells; cumulative dry gas production 8,016,374 Mcf. 11 dry gas wells were completed. 1972 condensate production 9,953 bbl.; cumulative condensate production 50,906 bbl.

REFERENCES: Sullivan, J.C., Brentwood Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 49, No. 2 (1963).



LOCATION: 8 miles southeast of Arbuckle

TYPE OF TRAP: Lenticular sandstones

ELEVATION: 37

DISCOVERY DATA

					Initial production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
(unnamed sand stringers)	Gulf Oil Corp. "Wilkins Unit A" 1	Western Gulf Oil Co. "F. J. Strain" 1	14 13N 1W	MD	2,450	1,800	9/16	Jan 1960
	1	1		1 1		1	I	l.

Remarks:

DEEPEST WELL DATA

		Date		-	Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Gulf Oil Corp. "Wilkins Unit C" 1	Gulf Oil Corp. of Calif. "Wilkins Unit C" 1	Jan 1961	24 13N 1W	MD	11,678	Funks (?)	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	1	Geologic		Salinity of zone water	Original zone	Class BOPE
 Zone 	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
(unnamed sand stringers)	7,850 - 8,510	10 - 30 per stringer	Lt Cretaceous	Forbes	1,015	900	4,120 - 5,950	IV

1972 Production		1972 Production 1972 1972 Control 1972 Proved Maximum number Control 1972 Control 1		Cumulative gas	Peak gas prot	Peak gas production		Total number of wells	
Net gas (Mcf)	Water (bbl)	acreage	producing wells		(Mcf)	Year	Drilled	Completed	proved acreage
322,800	2,008	800	5	8,841,352	1,553,025	1962	11	7	1,120

SPACING ACT: Applies

BASE OF FRESH WATER: 1,950

CURRENT CASING PROGRAM: 13 3/8" cem 350; 8 5/8" cem 3,500; 5 1/2" cem through zones.

METHOD OF WASTE DISPOSAL: Waste water is hauled to Gulf Oil Corp. waste water disposal well in West Grimes Gas field.

REMARKS: Commercial gas deliveries began in December 1961.

REFERENCES: Hunter, William J., Buckeye Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 1 (1962).







LOCATION: 22 miles southwest of Sacramento TYPE OF TRAP: Faulted anticline

THE OF TRAFT Failted ancientie

ELEVATION: 25

DISCOVERY DATA

					Initial production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in)	Date of completion
Zimmerman	Amerada Hess Corp., Unit Oper. "BG2U" 901	Amerada Petroleum Corp., Oper. "Zimmerman" 1	29 6N 2E	MD	3,890	2,250	9/32	Aug 1961
Bunker	Amerada Hess Corp., Unit Oper. "BGZU" 701	G.E. Kadane & Sons "Main Prairie Gas Unit A" 1	20 6N 2E	MD	3,425	2,250	1/4	Jun 1960

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M	(feet)	Strata	Age
Amerada Hess Corp., Unit Oper. "BGZU" 702	G.E. Kadane & Sons "Maine Prairie Gas Unit A"	Jan 1962	19 6N 2E	MD	10,098	Winters	Lt Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
Zimmerman Bunker	6,780 6,845	15 25	Paleocene Paleocene	Martinez Martinez	1,075 1,075	4 2	2,930 2,975	IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas proc	fuction	Total num	Total number of wells	
Net gas (Mcf)		acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
3,073,729	6,704	810	8	53,141,694	10,457,830	1963	22	10	850

SPACING ACT: Applies

BASE OF FRESH WATER: 2,500 - 3,100

CURRENT CASING PROGRAM: 9 5/8" or 7" cem. 600; 4 1/2" cem. through zones and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:Disposal into sumps at well sites.

REMARKS: Commercial gas deliveries began in October 1961. 1972 condensate production 11,256 bbl.; cumulative condensate production 233,716 bbl.

REFERENCES: Hunter, W.J., Bunker Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 1 (1961).





LOCATION: 3 miles east of Colusa

TYPE OF TRAP: Dome; lenticular sands

ELEVATION: 60

DISCOVERY DATA

					Ini	tial producti	ion	1	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion	
1,000-foot Zone	General Crude Oil Co., Oper. "Capital Co. Delta Farms" 3	G.E. Kadane & Sons "Capital Co. Delta Farms" 3	23 16N 1W	MD	387	475	3/16	Aug 1962	
1,600-foot Zone	General Crude Oil Co., Oper. "Capital Co. Delta Farms" 2	G.E. Kadane & Sons "Capital Co. Delta Farms" 2	23 16N 1W	MD	226	691	1/8	Aug 1962	
1,950-foot Zone	General Crude Oil Co., Oper. "Capital Co. Delta Farms" 4	G.E. Kadane & Sons "Capital Co. Delta Farms" 4	22 16N 1W	MD	1,885	790	5/16	Aug 1963	
2,000-foot Zone	General Crude Oil Co., Oper. "Capital Co. Delta Farms" 1	G.E. Kadane & Sons "Capital Co. Delta Farms" 1	23 16N 1W	MD	1,170	760	1/4	Jul 1962	
2,600-foot Zone	Same as above	Same as above	23 16N 1W	MD	1,078	700	1/4	Jul 1962	
2,650-foot Zone	General Crude Oil Co., Oper. "Standard Belle Fletcher" 1	Occidental Petroleum Corp. "Standard- Belle Fletcher et al" 1	23 16N 1W	MD	1,580	1,030	1/4	Sep 1962	

Remarks:

DEEPEST WELL DATA

	Original operator and well name				Depth	At tota	d depth
Present operator and well name			Sec. T. & R.	8 & M		Strata	Age
General Crude Oil Co., Oper. "Capital Co. Delta Farms" 1	G.E. Kadane & Sons "Capital Co. Delta Farms" 1	Jun 1962	23 16N 1W	MD	6,998	Forbes (?)	late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
1,000-foot Zone	1,015	10	Eocene	Domengine - Ione (Undiff)	907	composite sample	460	IV
1,600-foot Zone	1,600	20	Lt Cretaceous	Kione	926	410 g/g	735	IV
1,950-foot Zone	1,950	20	Lt Cretaceous	Kione	1,000		930	IV
2,000-foot Zone	2,000	80	Lt Cretaceous	Kione	829		935	IV
2,600-foot Zone	2,600	20	Lt Cretaceous	Kione	824		N.A.	IV
2,650-foot Zone	2,650	15	Lt Cretaceous	Kione	807		1,220	IV
			Contrast in contrast, consiste and		,*1200.00			

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas prod	luction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	acreage	AND STATES AND A CONTRACT OF A	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
524,081	1,771	210	5	4,302,994	604,197	1967	6	5	210

SPACING ACT: Applies

BASE OF FRESH WATER: 400

CURRENT CASING PROGRAM: 7" cem, 600; 4 1/2" cem. through zones.

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

REMARKS: Commercial gas deliveries began in October 1964.

REFERENCES: Hunter, W.J., Butte Sink Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 49, No. 2 (1963).



OUT GAS FIELD

LOCATION: 4 miles east of Colusa

TYPE OF TRAP: Faulted nose; lenticular sands

ELEVATION: 66

DISCOVERY DATA

					Ini	tial product	lon	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Fletcher	General Crude Oil Co., Oper. "Belle Fletcher Hirst" 1	Humble Oil & Refining Co. "Belle Fletcher"	35 16N 1W	MD	478	635	3/16	Oct 1955
(Unnamed sand stringers)	Atlantic Oil Co. "Tarke" l	Atlantic Oil Co. "Standard-Occidental- Tarke" 1	36 16N 1W	MD	1,700	800	5/16	Sep 1962

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Atlantic Oil Co. "Scott-Straub" 1	Same	Aug 1963	1 15N 1W	MD	8,042	G zone	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	(Seologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gat	pressure (psi)	required
Fletcher (Unnamed sand stringers)	1,815 5,700 - 7,270	35 6 - 80 per stringer	Lt Cretaceous Lt Cretaceous	Kione Forbes	970 930 - 990	N.A. 135 - 1,300	835 3,250 - 5,000	IV IV

PRODUCTION DATA (1an. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum proved
Net gas (Mcf)	Water (bbl)	acreage	producing wells production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage	
332,413	147	400	4	2,920,862	1,553,025	1962	13	5	560

SPACING ACT: Applies

BASE OF FRESH WATER: 200

CURRENT CASING PROGRAM: Fletcher zone: 7" cem. 500; 4 1/2" cem. 2,000. Forbes zone: 13 3/8" cem. 350; 8 5/8" cem. 3,500; 4 1/2" cem. through zone. METHOD OF WASTE DISPOSAL: Waste water is hauled to Atlantic Oil Company's waste-water injection well in Grimes Gas field. REMARKS: Commercial gas deliveries began in November 1964.

REFERENCES:

CACHE SLOUGH GAS FIELD (Abandoned)






CACHE SLOUGH GAS FIELD (Abandoned) Solano County

LOCATION: 3 miles north of Rio Vista

TYPE OF TRAP: Faulted nose

ELEVATION: 7

DISCOVERY DATA

					Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M MD MD	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Midland	Standard Oil Co. of Calif. "Calif. Packing Corp." 2	Same as present	6 4N 3E	MD	14,867	1,697	. 5/8	0.035010.535555593
(unnamed)	Standard Oil Co. of Calif. "Peter Cook" 12	Same as present	6 4N 3E	MD	3,850 [.]	1,811	5/16	Jul 1960

Remarks:

DEEPEST WELL DATA

		Date		L	Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Standard Oil Co. of Calif. "Peter Cook" 12	Same	Jun 1960	6 4N 3E	MD	7,730	Starkey	Late Cret

PRODUCING ZONES

7	Average depth			Geologic		Salinity of zone water Original zo		Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Midland (unnamed)	4,730 5,335	35 5	Eocene Eocene - Paleocene	Meganos Meganos - Martinez	1,000 937	1,050 890	2,120 2,235	IV IV

PRODUCTION DATA (1an, 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas prod	Peak gas production		Total number of wells	
Net gas (Mcf)	Water (bbl) acreage producing wells production (Mcf)		(Mcf)	Year	Drilled	Completed	proved		
0	0	0	0	11,553,705	2,558,328	1948	9	7	300

SPACING ACT: Applies

BASE OF FRESH WATER: 2,000 - 2,300

CURRENT CASING PROGRAM: 9 5/8" cem 600; 5 1/2" cem through zones, and across base of fresh-water sands. METHOD OF WASTE DISPOSAL:

REMARK5: Commercial gas deliveries began in December 1947 and ceased in October 1962.

REFERENCES:







LOCATION: 4 miles southwest of Chico

TYPE OF TRAP: Lenticular sand

ELEVATION: 142

DISCOVERY DATA

			1		Flow	Deen	1
Present operator and well name	Original operator and well name		B & M	Daily (Mcf)	pressure (psi)	Bean size (in.)	Date of completion
es Gas & Oil Co. "Estes" l	Richfield Oil Corp. "Chico" 1	17 21N 1E	MD	2,070	1,470	17/64	Jan 1944
	es Gas & Oil Co. "Estes" l	es Gas & Oil Co. "Estes" 1 Richfield Oil Corp. "Chico" 1	es Gas & Oil Co. "Estes" 1 Richfield Oil Corp. "Chico" 1 17 21N 1E	es Gas & Oil Co. "Estes" 1 Richfield Oil Corp. "Chico" 1 17 21N 1E MD	Present operator and well name Original operator and well name Sec. T. & R. B & M (Mcf) es Gas & Oil Co. "Estes" 1 Richfield Oil Corp. "Chico" 1 17 21N 1E MD 2,070	Present operator and well name Original operator and well name Sec. T. & R. B & M (Mcf) (psi) es Gas & Oil Co. "Estes" 1 Richfield Oil Corp. "Chico" 1 17 21N 1E MD 2,070 1,470	Present operator and well name Original operator and well name Sec. T. & R. B & M (Mcf) (psi) (in) es Gas & Oil Co. "Estes" 1 Richfield Oil Corp. "Chico" 1 17 21N 1E MD 2,070 1,470 17/64

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Same as discovery well	Same	Aug 1943	17 21N 1E	MD	7,005	Basement	pre-Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	(Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Chico	4,365	20	Lt Cretaceous	Forbes	865	N.A.	N.A.	IV
							l l	

PRODUCTION DATA (Jan. 1, 1973) 1972 Proved acreage 1972 Maximum number producing wells Maximum proved acreage 1972 Production Peak gas production Total number of wells Cumulative gas production (Mcf) Net gas (Mcf) (Mcf) Year Drilled Completed Water (bbl) 1947 1,534,067 221,381 15,259 0 160 1 3 1 160

SPACING ACT: Applies

BASE OF FRESH WATER: 1,400

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

METHOD OF WASTE DISPOSAL:

REMARKS:

REFERENCES:





LOCATION: 12 miles southwest of Sacramento
ELEVATION: 1

DISCOVERY DATA

					Initial production		ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.& M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
Pollock Forbes	Occidental Pet. Corp. "Pollock Unit" 1 Occidental Pet. Corp. "Sherman Unit" 5	Same Same	5 6N 4E 32 7N 4E	MD MD	14,300 1,122	1,110 2,110	3/4 10/64	July 1963 June 1966

Remarks:

DEEPEST WELL DATA

		Date			Total depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B.& M.		Strata	Age
Union Oil Co. of Calif. "Union-Dow Standard Community 1" 1	Same	Jan. 1962	31 7N 4E	MD	12,235	Dobbins	Late Cret.

PRODUCING ZONES

	Average	Average net thickness (feet)	Geologic		Heating value	Salinity of zone water	Original zone	Class BOPE
Zone	depth (feet)		Age	Formation	of gas (Btu)	(ppm)	pressure (psi)	required
Pollock Forbes	7,450 11,100	20 50	Late Cretaceous Late Cretaceous	Winters Forbes	930 894	12,200 11,500	3,350 5,110	III B 3M III B 5M

PRODUCTION DATA

1976 Production		1977	1976 Maximum number	1976	Peak gas production		Total numb	per of wells	Maximum
Net gas (Mcf)	Water (bbl)	Proved acreage	producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage
41,863	46	150	2	2,488,330	686,595	1966	14	6	480

SPACING ACT: Applies

BASE OF FRESH WATER: 2,100

CURRENT CASING PROGRAM: Winters Formation: 9 5/8" cem. 900; 5 1/2" cem. through zone and across base of freshwater sands. Forbes Formation: 9 5/8" cem. 1,500; 5 1/2" cem. through zone and across base of freshwater sands. REMARKS: Commercial gas deliveries began in January 1966.

REFERENCES: Lorshbough, A. L., Clarksburg Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 55, No. 1 (1969).

COMPTON LANDING GAS FIELD



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CONTOURS ON TOP OF MAIN CARTER SAND



LOCATION: 5 miles south of Princeton ELEVATION: 80

DISCOVERY DATA

			1.1.1		Init	tial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.&M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
Upper Carter	Exxon Corp. "Carter" 1	Honolulu Oil Corp. "Honolulu-Humble Carter" 1	7 17N 1W	MD	1,470	800	20/64	Nov. 1955
Catfish	Gulf Oil Corp. "Rheem-Hammer" 1	Universal Consolidated Oil Co. "Rheem- Hammer" 1	5 17N 1W	Second 1	5,130	1 1997/2000	32/64	Sep. 1960
Lower Carter	Exxon Corp. "Carter" 1	Honolulu Oil Corp. "Honolulu-Humble Carter" 1	7 17N 1W	MD	1,650	\$60	20/64	Nov. 1955
Tuttle	Exxon Corp. "Tuttle Unit 1" 1	Honolulu Oil Corp. "Honolulu-Humble Tuttle Unit" 1	12 17N 2W	MD	1,400	1.1.1.2.5.3	16/64	July 1955
(Unnamed)	Exxon Corp. "Carter" 2	Humble Oil & Rfg. Co. "Carter" 2	18 17N 1W	MD	1,270	800	13/64	July 1963

Remarks:

DEEPEST WELL DATA

		Date			Total depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B.& M		Strata	Age
Aminoil USA, Inc. "Forry" 1	Signal Oil & Gas Co. "Forry" 1	Dec. 1971	30 17N 1W	MD	10,777	Venado	Late Cret.

PRODUCING ZONES

	Average	Average net Geologic thickness		Heating value	Salinity of	Original zone	0	
Zone	depth (feet)	(feet)	Age	Formation	of gas (Btu)	zone water (ppm)	pressure (psi)	Class BOPE required
Upper Carter Catfish Lower Carter Tattle (Unnamed)	2,020 2,310 2,190 2,550 6,260	40 20 60 40 15	Late Cretaceous Late Cretaceous Late Cretaceous Late Cretaceous Late Cretaceous	Kione Kione Kione Forbes	810 N.A. 810 920 800	12,000 17,600 12,000 12,000 12,000	860 980 950 1,015 4,450	III B 2M III B 2M III B 2M III B 2M III B 2M III B 5M

PRODUCTION DATA

1976 Pro:	duction	1977	1976	C	Peak gas produc	ction	Total numi	Total number of wells	
Net gas (Mcl)	Water (bbl)	Proved acreage	Maximum number producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage
61,016	1	130	1	8,134,474	1,089,651	1960	25	11	440

SPACING ACT: Applies

BASE OF FRESH WATER: 1,300

CURRENT CASING PROGRAM: Kione Formation: 9 5/8" cem. 600; 5 1/2" cem. through zone and across base of freshwater sands. Forbes Formation: 13 3/8" cem. 600; 9 5/8" cem. 3,000; 5 1/2" cem. through zone. REMARKS: Commercial gas deliveries began in September 1957.

REFERENCES: Bruce, D. D., Compton Landing Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 44, No. 2 (1958).

SOUTH COMPTON LANDING GAS FIELD



JANUARY 1978

LOCATION: 6 miles southwest of Princeton ELEVATION: 70

DISCOVERY DATA

					Ini			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.&M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
(Unnamed) (Unnamed)	Shell Oil Co. "Transamerica" 1-22 Same	Same Same	22 17N 2W 22 17N 2W		N.A. 405	N.A. 1,150	N.A. N.A.	Jan. 1976 Jan. 1976

Remarks:

DEEPEST WELL DATA

,	Date				At tota	l depth
Original operator and well name	started	Sec. T. & R.	B.& M.		Strata	Age
Same	Dec. 1975	22 17N 2W	MD	3,900	Forbes	Late Cret.
	Same	Original operator and well name Date Same Dec. 1975	Original operator and well name Date Started Sec. T. & R. Same Dec. 1975 22 17N 2W	Date Date Started Sec. T. & R. B. & M. Same Dec. 1975 22 17N 2W MD	Date Date Started Sec. T. & R. B. & M. (feet) Same Dec. 1975 22 17N 2W M0 3.900	Original operator and well name Date Sec. T. & R. B. & M. (feet) Strata

PRODUCING ZONES

	Average	Average net	0	Seologic	Heating value	Salinity of	Original zone	-
Zone	depth (feet)	thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	pressure (psi)	Class BOPE required
(Unnamed) (Unnamed)	2,600 2,850	50 15	Late Cretaceous Late Cretaceous	Kione Kione	N.A. 757	N.A. N.A.	N.A. 1,270	III B 2M III B 2M

PRODUCTION DATA

1976 Pro	duction	1977	1976 Maximum number	1976	Peak gas production		Total number of wells		Maximum
Net gas (Mcf)	Water (bbl)	Proved acreage	producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage
0	0	40	0	0	See Remarks		1	1	40

SPACING ACT: Applies

BASE OF FRESH WATER: 1,600

CURRENT CASING PROGRAM: 8 5/8" ccm. 1,200'; 5 1/2" ccm. through zone and across base of freshwater sands. REMARKS: Commercial gas deliveries began in September 1977.

REFERENCES: None





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CONTOURS ON TOP OF DOMENGINE SAND



UNDIFF MARINE STRATA

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LOCATION: 1 mile north of Concord

ELEVATION: 120

DISCOVERY DATA

					Initial production			m	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8.& M.	Daily (Mcf)	Flow pressure (psi)		Date of completion	
Nortonville Domengine (Unnamed)	Getty Oil Co. "Concord Unit 2" 1 Chevron U.S.A. Inc. "Boylan" 1 Chevron U.S.A. Inc. "Boylan" 1	Tidewater Oil Co. "Concord Unit 2" 1 Standard Oil Co. of Calif. "Boylan" 1 Standard Oil Co. of Calif. "Boylan" 1	24 2N 2W 24 2N 2W 24 2N 2W 24 2N 2W	MD	2,000 1,950 2,725	540 724 780	24/64 19/64 3/8	Dec. 1963	

Remarks:

DEEPEST WELL DATA

		Date			Total depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B. & M.	(feet)	Strata	Age
Chevron U.S.A. Inc. "Boylan" 1	Standard Oil Co. of Calif. "Boylan" 1	Nov. 1962	24 2N 2W	MD	4,442	G or H zone (Goudkoff)	Late Cret.

PRODUCING ZONES

	Average	Average net	G	eologic	Heating value	Salinity of	Original zone	0
Zone	depth (feet)	thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	pressure (psi)	Class BOPE required
Nortonville Domengine (Unnamed)	1,650 1,900 2,208	20 17 90	Eocene Eocene Late Cretaceous	Nortonville Domengine Undiff. marine strata	1,000 990 980	N.A. 2,910 11,810	825 1,240 1,200	III B 2M III B 2M III B 2M

PRODUCTION DATA

1976 Production		1977	1976	1976	Peak gas production Total number of wells		Maximum		
Net gas (Mcf)	Water (bbi)	Proved acreage	Maximum number producing wells	Cumulative gas production (Mcf)	(Mof)	Year	Drilled	Completed	proved acreage
0	0	0	0	3,068,869	938,823	1964	8	4	160

SPACING ACT: Applies

BASE OF FRESH WATER: Above 500

CURRENT CASING PROGRAM: 10 3/4" or 8 5/8" cem. 500 to 900; 7" to 4 1/2" cem. through zone.

REMARKS: Commercial gas deliveries began in March 1963. The field was abandoned in September 1969.

REFERENCES: None



JANUARY 1978

LOCATION: 6 miles east of Woodland

ELEVATION: 19

DISCOVERY DATA

					Init	tial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.&M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
(Unnamed) (Unnamed) 5-1 S-3 (Unnamed)	Shell Oil Co. "I.O.C." 15-1 Shell Oil Co. "Natomas I.O.C." 1 Atlantic Oil Co. "I.O.C." 2 Same Chanslor-Western Oil & Dev. Co. "ARCO- W.F.L." 1	Same Same Same Same Westates Pet. Co. "ARCO-W.F.L." 1	15 9N 3E 9 9N 3E 8 9N 3E 8 9N 3E 1 9N 2E	MD MD MD MD	6,250 5,310 3,200 3,400 5,000	1,040 1,110 1,425 1,500 1,675	1/2 Var. 21/64 21/64 3/8	July 1973 June 1973 July 1972 July 1972 June 1975

Remarks:

DEEPEST WELL DATA

	Original operator and well name Starter				Total depth	At tota	l depth
Present operator and well name			Sec. T. & R.	B.& M.		Strata	Age
Buttes Resources Co. "Humble-Investment Opr. Inc." 2	Buttes Gas & Oil Co. "Humble-Investment Opr. Inc." 2	Sep. 1965	1 9N 2E	MD	6,700	Kione	Late Cret.

PRODUCING ZONES

	Average depth	Average net	G	eologic	Heating value	Salinity of	Original zone	01
Zone	(feet)	thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	pressure (psi)	Class BOPE required
(Unnamed) (Unnamed) S-1 S-3 (Unnamed)	2,900 3,000 3,600 4,210 5,160	20 30 30 20 10	Eocene-Paleocene Eocene-Paleocene Late Cretaceous Late Cretaceous Late Cretaceous	Meganos-Martinez Meganos-Martinez Starkey Starkey Winters	770 764 860 720 N.A.	N.A. N.A. N.A. N.A. N.A.	1,390 1,340 1,720 1,860 2,320	III B 2M III B 2M III B 2M III B 2M III B 3M

PRODUCTION DATA

1976 Production		1977	1976	1976	Peak gas production Total number of wells		per of wells	Maximum	
Net gas (Mcf)	Water (bbl)	Proved acreage	Maximum number producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage
3,215,662	5,883	2,180	20	9,300,151	3,824,342	1975	57	31	2,180

SPACING ACT: Applies

BASE OF FRESH WATER: 2,200-2,600

CURRENT CASING PROGRAM: 8 5/8" cem. 500-600; 4 1/2" cem. through zone and across base of freshwater sands.

REMARKS: Commercial gas deliveries began in December 1973.

REFERENCES: None



LOCATION: 1 mile northeast of Corning

TYPE OF TRAP: Anticline

ELEVATION: 250

DISCOVERY DATA

			1 1	Init	ial product	non		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Corning sands	The Superior Oil Co. "Saldubehere" 1	Same as present	12 24N 3W	MD	17,676	380	1	Oct 1944

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age	
Same as discovery well	Same	May 1944	12 24N 3W	MD	9,225	Yolo	Late Cret	

PRODUCING ZONES

7000	Average depth	Average net thickness	Geologic		-	Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Corning sands	980- 1,450	5 - 120 per sand bed	post-Eocene	Undiff. nonmarine strata	760	290 - 820	415 - 645	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total num	Total number of wells	
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage
0	0	0	0	7,975,443	1,349,947	1955	24	14	660

SPACING ACT: Applies

BASE OF FRESH WATER: 1,000

CURRENT CASING PROGRAM. 10 3/4" cem 500; 7" combination string landed through zone, and cem through ports above the zone and across the base of the fresh-water sands. METHOD OF WASTE DISPOSAL

REMARKS: Commercial gas deliveries began in July 1954. The field was abandoned in July 1971.

REFERENCES:

SOUTH CORNING GAS FIELD (Abandoned)





LOCATION: 2 miles southeast of Corning

ELEVATION: 225

DISCOVERY DATA

					Init	ial product		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.&M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
A-2 A	Buttes Resources Co. "Saldubehere" A-2 Buttes Resources Co. "Saldubehere - Buttes" A	Buttes Gas & Oil Co. "Saldubehere" A-2 The Buttes Oilfields, Inc. "Saldubehere - Buttes" A	25 24N 3W 25 24N 3W		2,000 1,955	340 635	1/2 3/8	May 1957 Feb. 1951
A-5	Buttes Resources Co. "Saldubehere" A-5	Buttes Gas & Oil Co. "Saldubehere" A-5	36 24N 3W	MD	2,995	880	3/8	Sep. 1959
	8							

Remarks:

DEEPEST WELL DATA

		Date			Total depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B. & M.		Strata	Age
Northern Counties Petroleum Co. "Ewers Mooney" 1	Same	Aug. 1934	25 24N 3W	MD	8,253	Sites	Late Cret.

PRODUCING ZONES

	Average depth	Average net thickness	thickness				Geologic		Heating value of gas	Salinity of	Original zone	Class BOPE
Zone	depth (feet)	thickness (feet)	Age	Formation	(Btu)	zone water (ppm)	pressure (psi)	required				
A-2	1,185	10	post-Eocene	Undiff, nonmarine strata	870	N.A.	520	III B 2M				
A	1,560	15	post-Eccene	Undiff. nonmarine strata	870	N.A.	680	III B 2M				
A-5	2,340	20	Late Cretaceous	Kione	940	N.A.	1,010	III B 2M				
				1								

PRODUCTION DATA

1976 Proc	1976 Production		1976	1976	Peak gas production		Total number of wells		Maximum
Net gas (Mcf)	Water (bbl)	Proved acreage	Maximum number producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage
0	0	0	0	1,256,799	218,595	1956	10	4	80

SPACING ACT: Applies

BASE OF FRESH WATER: 1,100

CURRENT CASING PROGRAM: 9 5/8" cem. 500; 5 1/2" cem. through zones and across base of freshwater sands.

REMARKS: Commercial gas deliveries began in July 1954 and ceased in August 1971. The field was abandoned in August 1972.

REFERENCES: None

CROSSROADS GAS FIELD



MARCH 1978

LOCATION: 2 miles east of Woodland ELEVATION: 40

DISCOVERY DATA

					Initial production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.&M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
S-3 (Unnamed)	Chevron U.S.A. Inc. "Amstar" 1 Same	Standard Oil Co. of Calif. "Amstar" 1 Same	22 10N 2E 22 10N 2E		2,000 2,600	1,628 1,710	1/2 1/2	May 1976 May 1976

Remarks:

DEEPEST WELL DATA

		Date			Total depth	At tota	il depth
Present operator and well name	Original operator and well name		Sec. T. & R.	B.& M.		Strata	Age
Chevron U.S.A. Inc. "U.C. Regents" 1	Standard Oil Co. of Calif. "U.C. Regents" 1	Dec. 1976	22 10N 2E	MD	6,154	Winters	Late Cret.

PRODUCING ZONES

	Average	Average net thickness (feet)					ieologic	Heating value	Salinity of zone water	Original zone pressure	Class BOPE
Zone	depth (feet)		Age	Formation	of gas (Btu)	(ppm)	(psi)	required			
S-3 (Unnamed)	4,150 4,985	35 20	Late Cretaceous Late Cretaceous	Starkey Winters	N.A. N.A.	N.A. N.A.	2,050 2,440	III B 3M III B 3M			

PRODUCTION DATA

1976 Proc	duction	1977	1976	1976	Peak gas production		Total number of wells		Maximum
Net gas (Mcf)	Water (bbl)	Proved acreage	Maximum number producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage
0	0	830	0	0	See Remarks		10	8	830

SPACING ACT: Applies

BASE OF FRESH WATER: 2,500

CURRENT CASING PROGRAM: 9 5/8" cem. 1,000; 5 1/2" cem. through zones and across base of freshwater sands.

REMARKS: Commercial gas deliveries began in September 1977.

REFERENCES: None



JANUARY 1978

LOCATION: 2 miles southeast of Davis

ELEVATION: 40

DISCOVERY DATA

					Initial production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.& M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
(Unnamed) (Unnamed) (Unnamed)	Anacapa Oil Corp. "Anacapa Jones" 1 Anacapa Oil Corp. "Hamel-Nishi" 1 Phillips Petroleum Co. "Beltrami A" 1	Joseph M. Thomas "Anacapa Jones" 1 Same Same	35 8N 2E 22 8N 2E 25 8N 2E	MD MD MD	891 2,010 6,269	N.A. 2,125 1,780	N.A. 1/2 3/8	Nov. 1977 Oct. 1973 Apr. 1965

Remarks: * Date of recompletion; originally completed in the Winters Formation.

DEEPEST WELL DATA

		Date			Total depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B.& M.		Strata	Age
Phillips Petroleum Co. "Beltrami A" 1	Same	Mar. 1965	25 8N 2E	MD	9,207	Forbes	Late Cret.

PRODUCING ZONES

	Average	Average net	G	eologic	Heating value	Salinity of	Original zone	Class BOPE
Zone	depth (feet)	thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	pressure (psi)	required
Unnamed) Unnamed) Unnamed)	3,535 6,130 6,450	5 9 15	Eocene Late Cretaceous Late Cretaceous	Domengine Starkey Winters	N.A. 871 925	N.A. 12,670 12,980	930 2,850 2,910	III B 2M III B 3M III B 5M

PRODUCTION DATA

1976 Proc	duction	1977	1976 Maximum number	1976 Cumulative gas	Peak gas production		Peak gas production Total number of wells		Maximum
Net gas (Mcf)	Water (bbl)	Proved acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage
161,136	1,806	230	4	1,834,277	432,204	1973	17	5	290

SPACING ACT: Applies

BASE OF FRESH WATER: 2,600-3,100

CURRENT CASING PROGRAM: 8 5/8" cem. 700-1,000; 4 1/2" cem. through zone and across base of freshwater sands.

REMARKS: Commercial gas deliveries began in December 1966. The field was abandoned in April 1971 and reactivated in July 1972.

REFERENCES: None

DENVERTON CREEK GAS FIELD





CONTOURS ON TOP OF MCCORMICK SAND



LOCATION: 2 miles northwest of Denverton, 6 miles east of Fairfield

TYPE OF TRAP: Faulted nose

ELEVATION: 35

DISCOVERY DATA

					In	tial produc	tion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Martinez	Getty Oil Co. "A. Peterson" 1	Honolulu Oil Corp. "A. Peterson" 1	25 5N 1W	MD	1,110	750	14/64	Aug 1948

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total of	lepth
Present operator and well name	Original operator and well name started		Sec. T. & R.	B & M		Strata	Age
Getty Oil Co. "McCormack Estate" 1	Honolulu Oil Corp. "McCormack Estate" 1	Apr 1948	36 5N 1W	MD	3,001	Undiff. Marine	Late Cret

PRODUCING ZONES

	Average depth	Average net	Average net Geologic		Geologic		Salinity of zone water			Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required		
Martinez	1,425	25	Paleocene	Martinez	N.A.	180	873	IV		
				-						

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum proved
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	0	0	231,525	99,910	1950	4	1	40

SPACING ACT: Applies

BASE OF FRESH WATER: 100 - 900

CURRENT CASING PROGRAM: 13 3/8" cem. 500; 8 5/8" cem.1,625; 5 1/2" cem.through zone.

METHOD OF WASTE DISPOSAL.

REMARKS: The field was abandoned in 1953.

REFERENCES:

DENVERTON CREEK GAS FIELD





CONTOURS ON TOP OF MCCORMICK SAND



LOCATION: 10 miles northwest of Rio Vista

TYPE OF TRAP: Faulted nose; sand pinchouts

ELEVATION: 85

DISCOVERY DATA

					Init	Initial production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Anderson - Wagenet Denverton (Heidorn)	Mobil Oil Corp. "Lambie" 1 Occidental Petroleum Corp. "Mobil- Signal" 1	Same as present :	9 4N 1E 4 4N 1E		158 4,947	2,650 1,600	1/2 20/64	
(Unnamed)	Mobil Oil Corp. "Trojan Powder Co." 1	Same as present	33 5N 1E	MD	1,285	2,110	14/64	Oct 1966

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Mobil Oil Corp. "Trojan Powder Co." 1	Same	Aug 1966	33 5N 1E	MD	11,209	Winters	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	Geologic			Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Anderson-Wagenet Denverton (Heidorn) (Unnamed)	8,585 8,930 9,890	15 35 30	Paleocene Paleocene Lt Cretaceous	Martinez Martinez Starkey	1,045 1,045 1,070	90 240 - 1,990 580	3,730 4,680 4,800	IV V V

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum proved
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
1,141	13	60	1	711,736	225,706	1970	6	3	160

SPACING ACT: Applies

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

CURRENT CASING PROGRAM: 13 3/8" cem. 300; 9 5/8" cem. 2,000; 5 1/2" cem. through zone and across base of fresh-water sands. METHOD OF WASTE DISPOSAL:

REMARKS: Commercial gas deliveries began in March 1967. 1972 condensate production 98 bbl.; cumulative condensate production 2,788 bbl.

REFERENCES:

DIXON GAS FIELD (Abandoned)





CONTOURS ON TOP OF MAIN WINTERS



LOCATION: 5 miles north of Dixon

TYPE OF TRAP: Faulted homocline

ELEVATION: 90

DISCOVERY DATA

					Ini	tial producti	on	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Dutra 1st Main 3rd Main	Q.R. Grenfell & Son "Dutra et al" 1 Same as above Same as above	S.M. Reynolds Oper. "Dutra et al" 1 Same as above Same as above	23 8N 1E 23 8N 1E 23 8N 1E 23 8N 1E	MD	8,420	1,780	28/64	Jun 1963

Remarks: Production from the three zones was commingled. During a back-pressure test in June 1963, gas was produced as follows: Dutra zone: 5,000 Mcf per day, 2,140 psi flow pressure, 5/16" bean. 1st and 3rd Main zones (commingled): 4,880 Mcf per day, 2,100 psi flow pressure, 5/16" bean.

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Cameron Oil Co. "Burroughs" 1	Same	Jun 1963	23 8N 1E	MD	7,912	Winters	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	Geologic			Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Dutra Ist Main 3rd Main	5,860 5,950 6,150	10 15 10	Lt Cretaceous Lt Cretaceous Lt Cretaceous	Winters Winters Winters	870 865 865	1',000 610 610	2,685 2,670 2,760	IV IV IV

PRODUCTION DATA (Line 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum proved
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	0	0	636,502	226,023	1964	6	1	80

SPACING ACT: Applies

BASE OF FRESH WATER: 2,700

CURRENT CASING PROGRAM: 10 3/4" to 8 5/8" cem. 500; 4 1/2" cem. through zones and across base of fresh-water sands. METHOD OF WASTE DISPOSAL:

REMARKS: Commercial gas deliveries began in June 1964. The producing well was abandoned in January 1971.

REFERENCES:



Yolo County

LOCATION: 12 miles northwest of Woodland

TYPE OF TRAP: Sand pinchout and angular unconformity on faulted nose

ELEVATION: 135

DISCOVERY DATA

					Ini	tial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
1-3 Hermle DuBois Lederer	Texaco Inc. "Dunnigan Unit One" 3 Texaco Inc. "Dunnigan Unit One" 1 Texaco Inc. "Dunnigan Unit One" 1 Gas Properties, Inc. "Universal Richey, et al" 1	The Texas Co. "Dunnigan Unit One" 3 The Texas Co. "Hermle" 1 The Texas Co. "Hermle" 1 Artnell Co. "Universal Richey, et al" 1	27 11N 1W 22 11N 1W 22 11N 1W 22 11N 1W 35 11N 1W	MD MD	A5,000 B3,030 C _{2,250}	N.A.	28/64 3/8 5/16	1.21

Remarks: A Formation test in August 1947. First commercial production from this zone: The Texas Co. (now Texaco Inc.) "Dunnigan Unit One" 6, Sec. 27, T. 11N., R. 1W., M.D.B.&M., completed in Sep 1950; initial daily production 1,500 Mcf, flow pressure 960 psi, 1/4-inch bean. B Production from Hermle and DuBois zones commingled. C 20 bbl. of 48 degree gravity condensate was also produced.

DEEPEST WELL DATA

	Original operator and well name Starte				Depth	At tota	l depth
Present operator and well name			started Sec. T. & R.			Strata	Age
Hunnicutt & Camp Drilling Co. "A.M. Richie" 1	Standard Oil Co. of Calif. "A.M. Richie" 1	Apr 1961	36 11N 1W	MD	9,500	Forbes	Late Cret

PRODUCING ZONES

	Average depth	Average net Geologic		Geologic		Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
1-3 Hermle DuBois Lederer	2,450 2,465 2,650 8,400	40 65 30 15	Lt Cretaceous Lt Cretaceous Lt Cretaceous Lt Cretaceous	Winters Winters Winters Forbes	970 970 970 1,035	320 340 480 N.A.	1,040 1,060 1,080 5,005	IV IV IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum proved
let gas (Mcf)	Water (bbl)	acreage	producing wells	production (McD)	(Mcf)	Year	Drilled	Completed	acreage
34,341	0	160	1	10,372,228	1,441,810	1952	40	17	1,300

SPACING ACT: Applies

BASE OF FRESH WATER: 1,750

CURRENT CASING PROGRAM: 9 5/8" cem. 500 to 1,000; 5 1/2" cem. through zones and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

REMARKS: Commercial gas deliveries began in January 1950. No condensate production during 1972; cumulative condensate production 808 bbl.

REFERENCES: Corwin, C.H., Dunnigan Hills Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 37, No. 2 (1951).



CONTOURS ON TOP OF DONOHOE SANDSTONE



LOCATION: 8 miles southwest of Chico

TYPE OF TRAP: Faulted anticline

ELEVATION: 120

DISCOVERY DATA

					Init	al producti	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Donohoe	Standard Oil Co. of Calif. "Donohoe Fee" 1	Standard Oil Co. of Calif. "Donohoe Fee" 1	6 20N 1E	MD	10,937	824	7/8	Jul 1946

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	il depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Standard Oil Co. of Calif. "Donohoe Fee" 1	Same	May 1946	6 20N 1E	MD	6,000	Guinda	Late Cret

PRODUCING ZONES

	Average depth	Average net Geologic		Salinity of zone water	Original zone	Class BOPE		
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
onohoe	2,130	35	Eocene	Capay	720	1,320	970	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total num	ber of wells	Maximum proved
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
1,703,625	41	1,790	5	23,317,886	1,703,625	1972	7	7	1,790

SPACING ACT: Applies

BASE OF FRESH WATER: 1,150

CURRENT CASING PROGRAM: 9 5/8" cem.1,400; 5 1/2" cem.through zone.

METHOD OF WASTE DISPOSAL

REMARKS: Commercial gas deliveries began in October 1949. Low calorific value of gas is due to high nitrogen content.

REFERENCES: Weddle, J.R., Durham Gas Field: Calif. Div. of Oll and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 2 (1962).



CONTOURS ON TOP OF B-III SAND



LOCATION: 11 miles southeast of Rio Vista and 2 miles east of Oakley TYPE OF TRAP: Faulted anticline; sand pinchouts; truncation by a gorge ELEVATION: 10

DISCOVERY DATA

							Ini	tial producti	on	
Zone	Present operator and well name	Original operator and well name	Sec.	T. &	R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Anderson	Signal Oil and Gas Co., Unit Oper. "Tract 3" 3-3	Signal Oil and Gas Co. "Signal-Burroughs"	20	2N	3E	MD	3,470	1,205	21/64	Mar 196
B-I	Signal Oil and Gas Co., Unit Oper. "Tract 2" 2-1	Gulf Oil Corp. of Calif. "Gulf-Union Delta Properties Unit A" 1	17	2N	3E	MD	2,415	2,260	14/64	Mar 196
B-11	Signal Oil and Gas Co., Unit Oper. "Tract 3" 3-3	Signal Oil and Gas Co. "Signal-Burroughs"	20	2N	3E	MD	4,730	2,191	18/64	Mar 196
B-III	Signal Oil and Gas Co., Unit Oper. "Tract 3" 3-1	Signal 0il and Gas Co. "Signal-Burroughs"	20	2N	3E	MD	9,700	2,200	26/64	Oct 196
Second Massive	Occidental Petroleum Corp. "Oakley Unit Four" 2	Same as present	32	2N	3E	MD	1,280	1,435	12/64	Oct 196

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Signal Oil and Gas Co., Oper. "Tract 1" 1-7	Union Oil Co. of Calif. "U.S.GDelta Properties" 7	Jan 1972	17 2N 3E	MD	13,000	Winters	Late Cret

PRODUCING ZONES

	Average	Average net thickness		Geologic		Salinity of	Original zone	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required	
Anderson	7,000	50	Paleocene	Martinez	1,060	10	3,161	IV	
B-1	7,200	50	Paleocene	Martinez	1,060	19	3,257	IV	
8-11	7,300	50	Paleocene	Martinez	1,065	25	3,281	IV	
B-111	7,400	95	Paleocene	Martinez	1,070	270	3,317	IV	
Second Massive	8,100	15	Paleocene	Martinez	1,060	76	3,505	IV	
			1			-			

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas pro	duction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
6,370,442	41,721	2,340	25	89,877,306	23,170,081	1966	39	36	2,360

SPACING ACT: Applies

BASE OF FRESH WATER: 800

CURRENT CASING PROGRAM: 10 3/4" cem. 800; 7" or 5 1/2" cem. through gas zones.

METHOD OF #ASTE DISPOSAL: Waste water is treated and flows into a local drainage system.

REMARKS: Commercial gas deliveries began in May 1965. 1972 condensate production 7,452 bbl; cumulative condensate production 182,574 with a maximum production of 60,592 bbls in 1966. Condensate is produced from all zones.

REFERENCES: Hunter, W.J., Dutch Slough Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 50, No. 2 (1964).

FAIRFIELD KNOLLS GAS FIELD



LOCATION: 8 miles southwest of Woodland

TYPE OF TRAP Sand overlap onto erosional surface on flank of faulted anticline; lenticular sands.

ELEVATION 100

DISCOVERY DATA

				10000	Init	tial product	100	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Hooper	Standard Oil Co. of Calif. "E.E. Hooper"	Same as present	32 9N 1E	1.1.1	13,000	720	1/2	Nov 1937
(Unnamed)	Supreme Oil and Gas Corp. "Corcoran" 1	Franco Western Oil Co. "Corcoran" 33-4	33 9N 1E	MD	2,930	1,900	1/4	Apr 1964
	1	,	1		5	1		

Remarks:

DEEPEST WELL DATA

		Date					Deoth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec.	T. & R	2	5 & M	(feet)	Strata	Age
Supreme Oil & Gas Corp. "Corcoran" 1	Francó Western Oil Co. "Corcoran" 33-4	Mar 1964	33	9N 1	E	MD	7,069	Sacramento	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	Geologic			Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
Hooper (Unnamed)	3,625 5,040	25 5	Eocene Lt Cretaceous	Capay Winters	N.A. 880 - 930	670 840	1,610 2,280	IV IV
						+		

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas proc	duction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbi)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	160	0	2,582,027	357,826	1951	7	4	400

SPACING ACT: Applies

BASE OF FRESH WATER: 2,500

CURRENT CASING PROGRAM: 9 5/8" cem. 1,000; 5 1/2" cem. through zones and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

REMARKS: Formerly known as Plainfield Ridge Gas field. Commercial gas deliveries began in September 1943. The field was abandoned in 1954 and was reactivated in April 1964 when the deeper zone was discovered.

REFERENCES: Kirby, J.M., Fairfield Knolls Gas Field in Geologic Formations and Economic Development of the Oil and Gas Fields of Calif.: Calif. Div. of Mines Bull. 118, p. 599, 600 (1943).


LOCATION: 9 miles south of Sacramento ELEVATION: 25

DISCOVERY DATA

					Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.& M.	Daily (Mcf)	Flow pressure (psi)	Bean size (inches)	Date of completion
Sims (Unnamed)	Chevron U.S.A. Inc. "Sims Community" 1 McCulloch Oil Corp. "McCulloch- Occidental Sims et al" 1	Standard Oil Co. of Calif. "Sims Community" 1 Same	19 7N 5E 20 7N 5E		9,784 17,300	1,582	1/2	May 1952 May 1962

Remarks:

DEEPEST WELL DATA

		Date			Total deoth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B.& M.		Strata	Age
Chevron U.S.A. Inc. "Sims Community" 2	Standard Oil Co. of Calif. "Sims Community" 2	Nov. 1952	18 7N 5E	MD	9,419	Basement	pre-Lt. Cret.

PRODUCING ZONES

	Average	Average net thickness			Heating value	Salinity of	Original zone	Class BOPE
Zone	depth (feet)	(feet)	Age	Formation	of gas (Btu)	zone water (ppm)	pressure (psi)	required
Sims (Unnamed)	5,780 8,040	20 50	Late Cretaceous Late Cretaceous	Winters Guinda (?)	910 735	N.A. 22,100	2,710 3,600	III B 3M III B 3M

PRODUCTION DATA

1976 Pro	duction	1977	1976	1976	Peak gas produ	iction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	Proved acreage	Maximum number producing wells	Cumulative gas production (Mcf)	(McI)	Year	Drilled	Completed	proved acreage
29,838	38	0	0	2,646,870	614,927	1953	6	2	120

SPACING ACT: Applies

BASE OF FRESH WATER: 650-1,450

CURRENT CASING PROGRAM: 9 5/8" cem. 900; 5 1/2" cem. through zone and across base of freshwater sands.

REMARKS: Commercial gas deliveries began in January 1953. The field was abandoned in 1977.

REFERENCES: None

January 1978



STARKEY

WINTERS

LOCATION: 10 miles northeast of Woodland ELEVATION: 25 DISCOVERY DATA	es northeast of	f Woodland									
Zone	Prese	Present operator and well name	well name	Original operator	Original operator and well name	Sec 1. & R		Daily Coally Chech	Flow E pressure	tion Bean size Date of finches) completion	ate of militari
(Unnamed)	B. Pete Jach	. Pete Jackson "Deseret Farms" 2	Farms ¹ 2	Same		22 11N 5E			006	N.A. Oct	0ct. 1976
Remarks:											
DEEPEST WELL DATA							-	Total	10112	At total danth	
Present o	Present operator and well name	tme	Original	Original operator and well name	Date	Sec. T. & R.	R. B.&M.	(feet)	Strata		Age
Centura Inc. "Deseret Farms" 3 PRODUCING ZONES	eret Farms" 3		Same		Nov. 1977	27 11N 3E	9		Winters	Late	Late Cret.
	Average	Average net		Geologic	Heating		nity of	Original 26		Tank and	
Zone	(feet)	(feet)	Age	Formation	(Btu)	_	zone water (ppm)	(bsi)		required	
· (Unnamed)		25	Eocene-Paleocene	Meganos-Martinez			N.A.	1,000	000 III B 2M	ZM	
PRODUCTION DATA											
1976 Pro	Production	1977 Proved	1976 Maximum number	1976 Cumulative gas	Peak gas production	uction	Tota	number	wells	Maximum proved	mn
Net gas (Mcf)	Water (bbl)	acreage	producing wells		(Mcf)	Year	Drilled	-	Completed	acres	de na
0	0	40	0	0	See Remarks	;		2	I		40

SPACING ACT: Applies

BASE OF FRESH WATER: 1,400

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

REMARKS: Commercial gas deliveries have not yet begun.

REFERENCES: None

January 1978

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FREEMONT LANDING CAS FIELD (FRMG) Yolo County (County)

CALIFORNIA DIVISION OF OIL AND GAS





CONTOURS ON TOP OF 2 ND TRACY SAND

GROUND SURFACE - B A UNDIFF NONMARINE STRATA STOCKTON FAULT ZONE NORTONVILL DOMENGINE CAPAY MORENO MORENO CONTOURED HORIZON UNDIFF UPPER CRETACEOUS STRATA TRACY SANDS TRACY SANDS E SHALE LATHROP SANDS LATHROP SANDS E SHALE

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FRENCH CAMP GAS FIELD San Joaquin County

LOCATION: 4 miles south of Stockton

TYPE OF TRAP: Faulted nose; lenticular sands

ELEVATION 25

DISCOVERY DATA

(

							Init	ial producti	ion	
Zone	Present operator and well name	Original operator and well name	Sec	T. 8	kR.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (In.)	Date of completion
2nd Tracy	Laymac Corp. "Reynolds & Carver-West" 1	Ferguson & Bosworth "Reynolds & Carver- West" 1	- 26	1N	6E	MD	*7,550	1,250	1/2	Mar 1967
3rd Tracy	Same as above	Same as above	26	1N	6E	MD		•	•	Mar 1967
Lathrop	Laymac Corp. "Reynolds & Carver-Dulay" 1	Ferguson & Bosworth "Reynolds & Carver- Dulay" 1	26	1N	6E	MD	8,300	1,300	1/2	Oct 1967

Remarks: * Commingled production from the 2nd and 3rd Tracy zones.

DEEPEST WELL DATA

		Date			Depth	At total o	lepth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Laymac Corp. "Reynolds & Carver-West" 1	Ferguson & Bosworth "Reynolds & Carver-West"1	Feb 1967	26 1N 6E	MD	8,750	Lathrop sands	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
2nd Tracy	5,000	30	Lt Cretaceous	Panoche	760	800	2,320	IV
3rd Tracy	5,308	17	Lt Cretaceous	Panoche	770	800	2,420	IV
Lathrop	6,925	45	Lt Cretaceous	Panoche	830	1,410	4,990	v
					1 1			
					1 1			
							1 1	
			÷	4				

PRODUCTION DATA (Jan. 1, 1973)

1972 Proc	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas proc	Juction	Total num	ber of wells	Maximur
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
354,146	10,375	400	3	3,274,878	2,101,502	1970	6	3	400

SPACING ACT: Applies

BASE OF FRESH WATER: 100

CURRENT CASING PROGRAM: 9 5/8" cem. 900; 5 1/2" cem. through zones.

METHOD OF WASTE DISPOSAL: Disposal into sumps.

REMARKS: Commercial gas deliveries began in October 1969.

REFERENCES:



CONTOURS ON TOP OF DOMENGINE



GALT GAS FIELD San Joaquin County

LOCATION: 5 1/2 miles north of Lodi

TYPE OF TRAP: Faulted anticline

ELEVATION: 73

DISCOVERY DATA

					Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Domengine (unnamed)	Amerada Hess Corp., Opr. "Community" 1-1 Capitol Oil Corp. "Macrate-Dresden" 1	Bankline Oil Co. "Community 1" 1 Same as present	1 4N 6E 8 4N 7E	MD MD	7,765 1,295	692 926	3/4 1/4	Apr 1943 Nov 1970

Remarks:

DEEPEST WELL DATA

		Date					Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec.	T. & I	R.	B & M		Strata	Age
Amerada Hess Corp., Opr. "Community" 1-1	Bankline Oil Co. "Community 1" 1	Mar 1943	1	4N (6E	MD	5,765	Basement (gneiss)	pre-Late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Domengine (unnamed)	2,330 2,433	15 5	Eocene Eocene	Domengine Domengine	680 752	230 N.A.	1,004 936	IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Proc	luction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas prod	uction	Total num	ber of wells	Maximum proved
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	50	0	3,061,115	261,063	1956	13	4	140

SPACING ACT: Applies

BASE OF FRESH WATER: 1,850

CURRENT CASING PROGRAM: 7" to 9 5/8" cem 500; 4 1/2" or 5 1/2" cem through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

REMARKS: Commercial gas deliveries began in October 1946.

REFERENCES: Huey, W. F., Galt Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 43, No. 1 (1957).



GRAND ISLAND GAS FIELD Sacramento County

LOCATION: 7 miles north of Isleton

TYPE OF TRAP: Sand pinchouts on faulted nose

ELEVATION: minus 8 DISCOVERY DATA

				_	Init	Initial production	u	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R. B& #	B&	A (Mcf)	Flow pressure (psi)	Bean size (in)	Date of completion
(Unnamed)	Amerada Hess Corp. "Garin GU" 1	Amerada Petroleum Corp. "Garin Gas Unit" 29 5N 4E MD 2,780	29 SN 41	R.	2,78(1,730 1	1/4	1/4 Aug 1960
(Unnamed)	Amerada Hess Corp. "C.W. Clarke Co." 1	Amerada Petroleum Corp. "Clarke Co." 1 28 5N 4E MD	28 5N 41	Ð	1,300	1,300 1,850	3/16	3/16 Nov 1960
				_				

Remarks:

DEEPEST WELL DATA

Original operator and well name started Set. T. & R. B & M (feet) Stata Age a Petroleum Corp. "Garin Gas Unit" 1 Jul 1960 29 5N 4E NU 6,565 Starkey Late Cret				Date				Denth	At total depth	epth
. "Garin Gau		Original operator and well name	1000	started	Sec. T	. & R.	B&M	(feet)	Strata	Age
	Ame	. "Garin Gau	nit" 1	Jul 1960	29 5	N 4E	QN	6,565	Starkey	Late Cret

Age Formation Gas (btu) conc watch Unitant some Eo Paleo Meganos-Martinez 975 580 2,010 Eo Paleo Meganos-Martinez 975 670 2,220		Average	Average net	+	Geologic		Salinity of	Original areas	Class BOPF
4,672 5 Eo Pagenos-Martinez 975 580 2,010 5,071 5 Eo Paleo Meganos-Martinez 975 670 2,220	Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
	(Unnamed) (Unnamed)	4,672 5,071	in in	Eo - Paleo Eo - Paleo	Meganos-Martinez Meganos-Martinez		580 670	2,010	IV
2									

PRODUCTION DATA (Jan. 1, 1973)

preducing wells preduction (Mcf) Year Drilled Completed a 1,028 1,028 1,028 4 2	1972 Pro	duction	1972 Proved	Mavimum number	Cumulative cas	Peak gas prov	duction	Total num	ber of wells	Maximum
160 0 1,692 1,028 1969 4	it gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
	0	0	160	0	1,692	1,028	1969	4	2	160

SPACING ACT: Applies

BASE OF FRESH WATER: 2,000

CURRENT CASING PROGRAM: 11 3/4" to 8 5/8" cem. 600; 7" or 5 1/2" cem. through zones and across base of fresh-water sands. METHOD OF WASTE DISPOSAL: REMARKS. Wells are on an island and are not connected to a sales line. All gas produced has been blown to air during tests.

REFERENCES:





1

LOCATION: 4 miles southwest of Sacramento

TYPE OF TRAP: Faulted erosional remnant; sand onlap

ELEVATION: 10

DISCOVERY DATA

					Ini	tial producti	noi	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Markley Gorge sandstone	Shoshone Oil Co. "Greens Lake Unit 1" 1	The Superior Oil Co. "Greens Lake Unit" 1-1	19 8N 4E	MD	1,097	760	1/4	Jun 1969
Meganos-Martinez	Shoshone Oil Co. "Greens Lake Unit 1" 3	The Superior Oil Co. "Greens Lake Unit" 1-3	20 8N 4E	MD	6,959	1,202	1/2	Apr 1970

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Shoshone Oil Co. "Greens Lake Unit 1" 2	The Superior 0il Co. "Greens Lake Unit" 1-2	Aug 1969	19 8N 4E	MD	5,200	Starkey	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
Markley Gorge sandstone	3,200	40	Eocene	Markley Gorge fill	820	N.A.	1,440	IV
Meganos-Martinez	3,200	110	Eo-Paleocene	Meganos-Martinez	840	N.A.	1,460	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Pro	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas prod	luction	Total num	iber of wells	Maximum
let gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	220	0	0	0		11	2	220

SPACING ACT: Applies

BASE OF FRESH WATER: 2,000

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

METHOD OF WASTE DISPOSAL:

REMARKS: Wells are shut in pending installation of pipeline.

REFERENCES: Curtin, R.F., Greens Lake Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 58, No. 1 (1972).



LOCATION: 11 miles west of Yuba City

TYPE OF TRAP: Lenticular sands on faulted homocline

ELEVATION: 40

DISCOVERY DATA

					Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
(Sand stringers)	Mobil Oil Corp. "Grimes Operating Unit 7" 2	Cameron Oil Co. "Cameron-Armstrong" 1	7 14N 1E	MD	2,820	1,040	3/8	Jan 1960
4								6

Remarks:

DEEPEST WELL DATA

		Date		1	Depth	At tota	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Mobil Oil Corp. "Grimes Operating Unit 7" 3	Cameron Oil Co. "Grimes Operating Unit 7" 3	Mar 1962	7 14N 1E	MD	9,425	Forbes	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	(Seologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
(Sand stringers)	4,900 - 8,800	1 - 50 per stringer	Lt Cretaceous	Forbes	975 - 1,000	400 - 1,300	2,780 - 6,000	IV (V below 7,000)

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum proved
Net gas (Mcf)	Water (bbi)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
23,204,298	81,116	12,050	77	285,454,186	33,023,637	1966	125	93	13,670

SPACING ACT: Applies

BASE OF FRESH WATER: 1,100

CURRENT CASING PROGRAM: 13 3/8" cem. 300; 9 5/8" cem. 3,000 and across base of fresh-water sands; 5 1/2" cem. through zones.

METHOD OF WASTE DISPOSAL: In 1972, 54,572 bb1. of waste water was injected into two disposal wells; disposal into sumps.

REMARKS: Commercial gas deliveries began in December 1961. Abnormally high pressure gradient at depth. Many of the gas-sand stringers have been given local names by operators.

REFERENCES:

WEST GRIMES GAS FIELD





LOCATION: 29 miles northwest of Woodland

TYPE OF TRAP: Lenticular sands on faulted homocline

ELEVATION: 55

DISCOVERY DATA

					Initial production			1
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.		Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
(Unnamed sand stringers)	Occidental Petroleum Corp. "Sachreiter" 1	Same as present	4 14N 1W	MD	14,730	2,300	3/4	Dec 1960

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth	
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Getty Oil Co. "Balsdon" 2	Tidewater Oil Co. "Balsdon" 2	Sep 1962	22 14N 1W	MD	9,585	Forbes	Lt Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
(Unnamed sand stringers)	6,050 - 7,850	5 - 35 per stringer	Lt Cretaceous	Forbes	970 - 1,010	945 - 1,480	3,055 - 5,425	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Proc	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum
Net gas (Mcf)	Water (bbi)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
1,561,325	1,753	2,560	16	35,890,226	5,921,389	1964	26	20	3,200

SPACING ACT: Applies

BASE OF FRESH WATER: 1,400 - 2,450

CURRENT CASING PROGRAM: 9 5/8" cem. 1,800 - 2,900; 7" to 3 1/2" cem. through zones.

METHOD OF WASTE DISPOSAL: Waste water is injected into water disposal well within the field.

REMARKS: Commercial gas deliveries began in December 1961.

REFERENCES: Beecroft, G.W., West Grimes Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 48, No. 2 (1962).



San Mateo County

LOCATION: 24 miles south of San Francisco

TYPE OF TRAP: Anticline; lenticular sands; possible fault traps ELEVATION: 200 - 450

DISCOVERY DATA

					Initia produ	1.000	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
(Unnamed sand beds)	(Probably one of J. Berger's wells)	Same as present	15 6S 5W	MD	N.A.	N.A.	1890

Remarks:

DEEPEST WELL DATA

			Date	Date				Depth	At total	depth
	Present operator and well name	Original operator and well name	started	Sec.	T. &	R.	8 & M		Strata	Age
Exxon Corp.	"Cowell" 1	Wilshire Oil Co., Inc. "Cowell" 1	Aug 1937	21	65	5W	MD	7,982	Purisima (?)	Plio (?)

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
(Unnamed sand beds)	800 - 3,100	N.A.	Pliocene	Purisima	45	N.A.	, ,
h)							

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total number of wells		Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	5	0	42,043	20,000	N.A.	N.A.	*40	*14	155

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
225			
	1		

SPACING ACT: Does not apply

BASE OF FRESH WATER: 100

CURRENT CASING PROGRAM: 9 5/8" cem. 300; 5 1/2" combination string landed through zone and cem. through ports above zone.

METHOD OF WASTE DISPOSAL:

REMARKS: * Some old wells may not have been counted.

REFERENCES: Crandall, R.R., Half Moon Bay District in Geologic Formations and Economic Development of the Oil and Gas Fields of Calif.: Calif. Div. of Mines Bull. 118, p. 478-480 (1943).



(Abandoned)



LOCATION: 3 miles northwest of Pittsburg

TYPE OF TRAP: Faulted anticline

ELEVATION: 15

DISCOVERY DATA

					Initial production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Domengine	Standard Oil Co. of Calif. "Honker Community" 1-A	Same as present	25 3N 1W	MD	3,200	.2,229	1 1/4	Apr 1944

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age	
Standard Oil Co. of Calif. "A.O. Stewart" 1	Same	Aug 1943	25 3N 1W	MD	8,728	Undiff. marine strata	Late Cret	

PRODUCING ZONES

	Average depth	Average net thickness	Geologic			Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
Domengine	6,500	180	Eocene	Domengine	1,040	720	3,200	IV
				e.				
			1		1		1 1	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total num	Maximum proved	
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (McI)	(Mcf)	Year	Drilled	Completed	acreage
- 0	0	.0	0	300,788	277,436	1947	5	2	20

SPACING ACT: Applies

BASE OF FRESH WATER: 150

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

METHOD OF #ASTE DISPOSAL:

REMARKS: Commercial gas deliveries began in January 1947. The field was abandoned in November 1949.

REFERENCES:

HOSPITAL NOSE GAS FIELD (Abandoned)



35

LOCATION: 3 miles southeast of Livermore ELEVATION: 895

DISCOVERY DATA

					Ini			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.&M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
Wente	Texaco Inc. "Hancock-Signal (NCT-1) Wente" l	The Texas Co. "Hancock-Signal (NCT-1) Wente" 1	27 3S 2E	MD	150	500	1/8	Apr. 1952

Remarks:

DEEPEST WELL DATA

		Date			Total depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B.& M.		Strata	Age
Same as discovery well	Same	Feb. 1952	27 3S 2E	MD	7,062	Panoche	Late Cret.

PRODUCING ZONES

	Average	Average net	G	eologic	Heating value	Salinity of	Original zone	Class BOPE
Zone	depth (feet)	thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	pressure (psi)	required
Wente	5,070	110	Late Cretaceous	Panoche	1,285	514	1,610	III B 2M

PRODUCTION DATA

1976 Pro	1976 Production		1976 Production		1976	1976	Peak gas produ	ction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	Proved acreage	Maximum number producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage		
0	0	0	0	14,183	9,424	1954	2	1	40		

SPACING ACT: Applies

BASE OF FRESH WATER: 1,500

CURRENT CASING PROGRAM: 11 3/4" cem. 500; 5 1/2" cem. through zone and across base of freshwater sands.

REMARKS: Commercial gas deliveries began in November 1952. The field was abandoned in June 1956.

REFERENCES: None

January 1978





WINTERS

4

-B

JANUARY 1978

LOCATION: 3 miles east of Knights Landing ELEVATION: 23

DISCOVERY DATA

			Sec. T. & R.		Initial production			
Zone	Present operator and well name	Original operator and well name		B.&M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
S-1	The Dow Chemical Co. "Anderson Farms" 1	Same	16 11N 3E	ND	1,400	940	16/64	Aug. 1976

Remarks:

DEEPEST WELL DATA

		Date			Total depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8. & M.		Strata	Age
The Dow Chemical Co. "Anderson Farms" 1	Same	July 1976	16 11N 3E	MD	4,232	Winters	Late Cret.

PRODUCING ZONES

	Average	Average net	G	eologic	Heating value	Salinity of	Original zone	Class BOPE
Zone	depth (feet)	thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	pressure (psi)	required
S-1	2,400	15	Late Cretaceous	Starkey	831	N.A.	1,060	III B 2M

PRODUCTION DATA

1976 Production		1977 Proved	1972	1976	Peak gas production		Peak gas production		Peak gas production		Total numb	per of wells	Maximum
Net gas (Mcf)	Water (bbl)	acreage	Maximum number producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage				
0	0	40	0	G	See Remarks		2	1	40				

SPACING ACT: Applies

BASE OF FRESH WATER: 1,000

CURRENT CASING PROGRAM: 7" cem. 500; 4 1/2" cem. through zone and across base of freshwater sands.

REMARKS: Commercial gas deliveries have not yet begun.

REFERENCES: None

January 1978





CONTOURS ON TOP OF DOMENGINE



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KIRBY HILL GAS FIELD Solano County

LOCATION: 8 miles southeast of Fairfield

TYPE OF TRAP: Faulted anticline

ELEVATION: 2 - 310

DISCOVERY DATA

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							Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec	. т	& R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Markley	Standard Oil Co. of Calif. "Kirby Community" 10	Same as present	24	4N	1W	MD	238	95		Jul 1972
Nortonville	Sinco Oil Corp. "Wagenet" 1	Shell Oil Co. "Wagenet" 1	24	4N	1W	MD	1,090	693	1/4	Aug 1947
Domengine	Sinco Oil Corp. "Lambie" 1-A	Shell Oil Co. "Lambie" 1-A	25	4N	1W	MD	3,980	650	1/2	Jan 1945
Martinez	Sinco Oil Corp. "Lambie" 2	Shell Oil Co. "Lambie" 2	30	4N	1E	MD	14,400	1,641	5/8	Mar 1945
(Unnamed)	Sinco Oil Corp. "Lambie" 5	Shell Oil Co. "Lambie" 5	25	4N	1W	MD	4,720	807	1/2	Feb 1948
						1		1.1.1		

Remarks:

DEEPEST WELL DATA

	+	Date			Depth	At total d	lepth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Sinco Oil Corp. "Lambie" 6	Shell Oil Co. "Lambie" 6	Jun 1947	30 4N 1E	MD	7,897	Undiff. marine	Late Cret

PRODUCING ZONES

	Average	Average net thickness		Geologic		Salinity of	Original zone	Class BOPE
Zone	depth (feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
Markley	1,100	30	Eocene	Markley	990	480	250	IV
Nortonville	1,250 - 2,250	35	Eocene	Nortonville	985	115 - 825	1,160	IV
Domengine	1,550 - 2,850	130	Eocene	Domengine	995	55 - 980	1,195	IV
Martinez	2,850 - 5,400	150	Paleocene	Martinez	990	450 - 860	2,205	IV
(Unnamed)	5,425	40	Late Cret	Undiff. marine strata	980	250 - 400	3,915	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Pro	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas prod	luction	Total num	ber of wells	Maximum
Vet gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
462,175	2,103	730	6	52,239,635	3,715,880	1949	27	15	830

SPACING ACT: Applies

BASE OF FRESH WATER: 250 - 1,800

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

METHOD OF WASTE DISPOSAL: Surface disposal in sumps at the well sites.

REMARKS: Abnormally high pressures were encountered at depth. Commercial gas deliveries began in November 1946.

REFERENCES: Frame, R.G., Preliminary Report on Kirby Hill Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 35, No. 1 (1949).

NORTH KIRBY HILL GAS FIELD

(Abandoned)





CONTOURS ON TOP OF MEGANOS SAND



LOCATION: 7 miles southeast of Fairfield

TYPE OF TRAP: Faulted nose; sand pinchout

ELEVATION: 16

DISCOVERY DATA

					Ini	tial product	on	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Meganos Martinez	Longden Petroleum Co. "Unit B" 1 Longden Petroleum Co. "Unit A" 1	Shell Oil Co. "Unit B" 1 Shell Oil Co. "Unit A" 1	7 4N 1E 6 4N 1E		5,000 4,640	385 1,420	3/4 3/8	Jul 1953 Feb 1954

Remarks:

DEEPEST WELL DATA

		Date					Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec	. T. 8	k R.	8 &		Strata	Age
Shell Oil Co. "Stewart" 1	Same	May 1961	7	4N	1E	MD	9,667	F Zone (Goudkoff)	late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Meganos Martinez	3,510 4,260	40 20	Eocene Paleocene	Meganos Martinez	980 1,025	320 970 - 1,400	1,695 1,650	IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Pro	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas pro	duction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbi)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	0	0	187,461	184,294	1956	6	2	100

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 10 3/4" cem. 500; 5 1/2" cem. through zones.

METHOD OF WASTE DISPOSAL:

REMARKS: Commercial gas deliveries began in March 1956. The field was abandoned in March 1957.

REFERENCES:

KIRK GAS FIELD







LOCATION: 9 miles northeast of Dunnigan

TYPE OF TRAP: Lenticular sands

ELEVATION: 40

DISCOVERY DATA

					In	tial product	tion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
(Unnamed sand stringers)	Gulf Oil Corp. "Goff-Erdman Unit A" I	Western Gulf Oil Co. "Goff-Erdman Unit A" 1	15 13N 1E	MD	3,037	1,150	18/64	Oct 1960

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	B & M		Strata	Age
Gulf Oil Corp. "Goff-Erdman Unit A" 1	Western Gulf Oil Co. "Goff-Erdman Unit A" 1	Sep 1960	15 13N 1E	MD	9,522	Guinda	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Seologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
(Unnamed sand stringers)	7,330 - 8,710	15 - 95 per stringer	Lt Cretaceous	Forbes	783 - 1,015	655 - 1,050	3,750 - 5,750	IV
							-	

PRODUCTION DATA (Jan. 1, 1973)

1972 Pro	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas proc	duction	Total num	ber of wells	Maximum proved
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
276,493	4,639	960	5	4,571,541	1,018,815	1963	14	10	1,560

SPACING ACT: Applies

BASE OF FRESH WATER 1,950

CURRENT CASING PROGRAM: 13 3/8" cem. 350; 8 5/8" cem. 3,500; 5 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL: Waste water is hauled to West Grimes Gas Field and injected into Gulf Oil Corp. disposal well.

REMARKS: Commercial gas deliveries began in December 1961.

REFERENCES: Hunter, W.J., Kirk Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 1 (1962).







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KIRKWOOD GAS FIELD

CALIFORNIA DIVISION OF OIL AND GAS

LOCATION: 8 miles north of Orland

TYPE OF TRAP: Lenticular sands on faulted nose

ELEVATION: 300

DISCOVERY DATA

	Forbes		(Sand stringers)	Zone	
3	James W. Morgan "James W, Morgan et al" 1 Humble Oil & Rfg, Co, "James W, Morgan et al" 1	Franwin Oil and Gas Co. "Morgan" 2	Franwin Oil and Gas Co. "Junkin" 1	Present operator and well name	
	Humble Oil & Rfg. Co. "James W. Morgan et al" 1	W.S. Payne, Jr., Opr. "James W. Morgan et al" 2	W.S. Payne, Jr., Opr. "Junkin" 1	Original operator and well name	
	9 23N 3W MD	8 23N 3W MD	5 23N 3W	Sec. T. & R. B & M	
	Ð	MD	M	8 8	
	1,120	3,280	4,550	Daily (Mcf)	Init
	750	640	750	Flow pressure (psi)	Initial production
	1/2	25/64	1/2	Bean size (in.)	Ion
	1/2 Dec 1958	25/64 May 1960	1/2 Jul 1960	Date of completion	

Remarks:

		Date		Depth	At total d	lepth
Present operator and well name	Original operator and well name	started	Sec. T. & R. B & A	fieet)	Strata	Age
Sun Oil Co. "Tucker-Gay" 1	Sunray DX Oil Co. "Tucker-Gay" 1	May 1964 10 23N	10 23N 3N MD	5.000	Dobbins	Late Cret

	Average	Average net		Geologic		Salinity of	Pulsies and	Clace ROPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
(Sand stringers)	2,400	25	Eocene	Undiff. marine	1,005	120	1,080	١٧
Kione	2,430	40	Lt Cretaceous	strata Kione	1,010	130	1,020	IV
Forbes	4,020	30	Lt Cretaceous	Forbes	1,010	N.A.	1,970	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Pro	duction	Proved	Maximum number	Cumulative gas	Peak gas pro	duction	Total nun	iber of wells	
et gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acrea
582,023	105	1,360	8	8,047,793	1,496,884	1962	29	16	1,

SPACING ACT: Applies

BASE OF FRESH WATER: 2,000

CURRENT CASING PROGRAM: 8 5/8" or 7" cem. 1,000; 4 1/2" cem. through zones and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Disposal of waste water into sumps.

REMARKS: Commercial gas deliveries began in May 1961. Some of the Eccene sand stringers have been given local names by the operators.

REFERENCES: Beecroft, G.W., Kirkwood Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 50, No. 1 (1964).

Tehama County





LOCATION: 11 miles southwest of Palo Alto TYPE OF TRAP: See areas ELEVATION: 200 - 840

DISCOVERY DATA

						I daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Costa	Pacific-Western Apache Petroleum Co. "Carter Lane" 2	Neaves Petroleum Developments "Neaves-Union Oil-Lane" 3	17 75 4W	MD	100	15	Dec 1956
		1	1		- 3		

Remarks:

DEEPEST WELL DATA

		Date		1.1.1	Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Neaves Petroleum Developments "Neaves-Union Oil Co. Lane" 1	Same	May 1956	16 7S 4W	MD	4,271	Butano	Eocene

PRODUCING ZONES (See areas)

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

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	production	Peak oil prod	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrets	Year	Drilled	Completed	acreage
15,600	639	127,410	120	9	1,112,326	132,778	178,184	1957	54	23	135

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mc ² ; 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 Main Area.

MAIN AREA

LOCATION: See map sheet of La Honda Oil Field

TYPE OF TRAP: Anticline; sand overlap or pinchout

ELEVATION: 200 - 840

DISCOVERY DATA

								al daily uction	
Zone	Present operator and well name	Original operator and well name	Sec	. т. а	. R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Burns	Neaves Petroleum Developments "Neaves-La Honda" 8	Same as present	17	75	4W	MD	17	N.A.	May 1958
Costa	Pacific-Western Apache Petroleum Co. "Carter Lane" 2	Neaves Petroleum Developments "Neaves-Union Oil-Lane" 3	17	75	4W	MD	100	15	Dec 1956
			1						1

DEEPEST WELL DATA

Remarks:

		Date				Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T.	& R.	8 & M		Strata	Age
Neaves Petroleum Developments "Neaves-Union Oil Co. Lane" 1	Same	May 1956	16 7S	4W	MD	4,271	Butano	Eocene

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Burns Costa	1,120 1,660 - 2,740	30 60	Pliocene Eocene	Purisima Butano	24 32 - 40	N.A. 1,150	

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximur
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
6,638	639	48,162	70	4	733,063	93,947	178,184	1957	27	11	70

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 150

CURRENT CASING PROGRAM: 10 3/4" cem. 300 - 500; 5 1/2" combination string landed through zone and cem. through ports above zone.

METHOD OF WASTE DISPOSAL: In 1972 all waste water was injected into a water disposal well.

REMARKS:

REFERENCES: Fothergill, H.L., La Honda Oil Field, Calif. in Geologic Guide to the Gas and Oil Fields of Northern Calif.: Calif. Div. of Mines and Geology Bull. 181, p. 221, 222 (1962).

CALIFORNIA DIVISION OF OIL AND GAS SOUTH AREA

LOCATION: See map sheet of La Honda Oil Field

TYPE OF TRAP: Anticline; sand overlap or pinchout

ELEVATION: 565 - 815

DISCOVERY DATA

							daily oction	
Zone	Present operator and well name	Original operator and well name	Sec. T. &	R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Burns	Pacific-Western Apache Petroleum Co. "Burns" 1	Neaves Petroleum Developments "Neaves-Union- Burns" 1	21 7S	4W	MD	25	N.A.	Jul 1959
Costa	Pacific-Western Apache Petroleum Co. "Burns" 14	Neaves Petroleum Developments "Neaves-Union Burns" 14	2 1 7S	4W	MD	30	N.A.	Jan 1961

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth	
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Pacific-Western Apache Pet. Co. "Burns- Texaco" 1	Neaves Pet. Developments "Neaves-Texaco Burns" 1	Mar 1960	22 7S 4W	MD	4,015	Butano	Eocene

PRODUCING ZONES

	Average depth	Average net thickness (feet)		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE required
Zone	(feet)		 Age 	Formation	Gas (btu)	gr/gal	
Burns Costa	1,400 2,500	75 30	Pliocene Eocene	Purisima Butano	16 31	2,400 N.A.	11 111
					-		

PRODUCTION DATA (Jan. J, 1973)

1972 Production		2 Production 1972 1972 Proved Average number			Cumulative production		Peak oil production		Total number of wells		Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
8,962	0	79,248	50	5	379,263	38,831	95,717	1960	27	12	65

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 150

CURRENT CASING PROGRAM: 10 3/4" cem. 300 - 500; 5 1/2" combination string landed through zone and cem. through ports above zone. METHOD OF WASTE DISPOSAL: In 1972 all waste water was injected into a water disposal well.

REMARKS:

REFERENCES





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9
LARKIN, WEST, GAS FIELD (Abandoned) Glenn County

LOCATION: 5 miles northwest of Princeton TYPE OF TRAP: Lenticular sand on a nose ELEVATION: 95

DISCOVERY DATA

					Ini	ion		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
(Unnamed)	Gulf Oil Corp. "Capital Company" 1	Gene Reid Drilling, Inc. "Capital" 1	5 18N 2W	MD	1,000	650	16/64	Dec 1955

Remarks: Initial production data are from drillstem test during completion work.

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Same as discovery well	Same	Oct 1955	5 18N 2W	MD	5,993	Forbes	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	Geologic			Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
(Unnamed)	5,933	18	Lt Cretaceous	Forbes	N.A.	N.A.	3,040	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas proc	duction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	acreage		(Mcf)	Year	Drilled	Completed	acreage	
0	0	0	0	3,340	3,340	1957	1	1	40

SPACING ACT: Applies

BASE OF FRESH WATER: 1,600

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

METHOD OF WASTE DISPOSAL:

REMARKS: Originally named the Willow Creek Gas area. No commercial gas sales were made; all gas produced was used to provide fuel to drill Gulf Oil Corp. "Capital Company" 2, Sec. 8, T. 18N., R. 2W. The field was abandoned in May 1958.





LOCATION: 6 miles southwest of Stockton

TYPE OF TRAP: Faulted anticline; lenticular sands

ELEVATION: 17

DISCOVERY DATA

al						Initial production			
Zone	Present operator and well name	Original operator and well name	Sec. T	. & R.	8 & N	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Azevedo	Occidental Petroleum Corp. "Lathrop Unit B" 10	Occidental Petroleum Corp. "Lathrop Unit B" 10	7 1	S 6E	MD	2,225	1,465	1/4	Dec 1971
Upper Tracy	Same as above	Same as above	7 1	S 6E	MD	150	430	1/8	Dec 1971
Lower Tracy	Occidental Petroleum Corp. "Lathrop Unit C" 1	Same as present	7 1	S 6E	MD	A 540	160	3/8	Jan 1962
3600 Lb.	Occidental Petroleum Corp. "Lathrop Unit B" 5	Same as present	7 1	5 6E	MD	4,580	1,990	5/16	Aug 1962
3700 Lb.	Occidental Petroleum Corp. "Lathrop Unit A" 1	Same as present	5 1	S 6E	MD	11,740	1,600	3/4	Oct 1961
3800 Lb.	Occidental Petroleum Corp. "Lathrop Unit B" 2	Same as present	8 1	S 6E	MD	12,830	2,205	1/2	Feb 1962
3900 Lb.	Occidental Petroleum Corp. "Lathrop Unit C" 2	Occidental Petroleum Corp. "Lathrop Unit C" 2	6 1	S 6E	MD	B14,500	2,510	1/2	Jun 1962
4000 Lb.	Same as above	Same as above	6 1	S 6E	MD		57.8.715372	0.00	
4200 Lb.	Occidental Petroleum Corp. "Lathrop Unit B" 1	Same as present	5 1	S 6E	MD	C _{21,800}	1,730	3/4	Dec 1961
4300 Lb.	Occidental Petroleum Corp. "Lathrop Unit C" 2	Same as present	6 1	S 6E	MD	6,080	1,900	3/8	Jun 1962
4400 Lb.	Occidental Petroleum Corp. "Lathrop Unit B" 1	Same as present	5 1	5 6E	MD	C _{21,800}	1,730	3/4	Dec 1961
4600 Lb.	Occidental Petroleum Corp. "Mobil Parcel Z" 1	Same as present	1 1	S SE	MD	4,280	1,900	5/16	Dec 1962

Remarks: A Results of open-hole test; zone not open to production. B Commingled production from 3900 Lb. and 4000 Lb. zones. C Commingled production from 4200 Lb. and 4400 Lb. zones.

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name		Sec. T. & R.	B & M	(feet)	Strata	Age
Occidental Petroleum Corp. "Lathrop Unit B" 5 .	Same	Feb 1962	7 1S 6E	MD	12,787	G-1 Zone (Goudkoff)	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	1	Geologic		Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
Azevedo	3,950	75	Lt Cretaceous	Moreno	920	990	1,920	IV
Upper Tracy	4,747	75	Lt Cretaceous	Panoche	N.A.	N.A.	2,240	IV
Lower Tracy	6,295	50	Lt Cretaceous	Panoche	1,000	N.A.	2,810	IV
3600 Lb.	6,906	75	Lt Cretaceous	Panoche	960	820	3,610	IV
5700 Lb.	7,194	550	Lt Cretaceous	Panoche	880	1,200	3,730	IV
5800 Lb.	7,651	320	Lt Cretaceous	Panoche	880	1,420	3,850	IV
5900 Lb.	7,948	140	Lt Cretaceous	Panoche	865	1,120	3,940	IV
1000 Lb.	8,090	185	Lt Cretaceous	Panoche	865	1,515	4,040	IV
4200 Lb.	8,341	130	Lt Cretaceous	Panoche	825	915	4,210	IV
4300 Lb.	8,422	105	Lt Cretaceous	Panoche	830	625	4,240	IV

PRODUCTION DATA (Ian. 1, 1973)

1972 Pro	1972 Production		1972 Maximum number	Cumulative gas	Peak gas pro	duction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	Proved acreage		production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
33,199,970	55,966	2,330	24	221,933,630	33,199,970	1972	37	26	2,330

SPACING ACT: Applies

BASE OF FRESH WATER: 500

CURRENT CASING PROGRAM: 11 3/4" or 9 5/8" cem. 1,000; 7 5/8" or 5 1/2" cem. through zones.

METHOD OF WASTE DISPOSAL: Disposal of waste water into sumps.

REMARKS Commercial gas deliveries began in January 1963.

REFERENCES: Park, W.H., Lathrop Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 2 (1962). Teitsworth, R.A., Geology and Development of the Lathrop Gas Field, San Joaquin Co., Calif. in Selected Papers Presented to San Joaquin Geological Society, Vol. 2, p. 19-29 (1964).

LATHROP SOUTHEAST GAS FIELD (Abandoned)



14

LOCATION: 8 miles south of Stockton

TYPE OF TRAP: Faulted nose with sand pinchout

ELEVATION: 28

DISCOVERY DATA

			Sheer a		In	tial product	ion	1.
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Lathrop	E.B. Towne, Oper. "Southeast Lathrop Unit A" 1	Same as present	14 15 6E	MD	2,350	1,490	1/4	Nov 1967

Remarks:

DEEPEST WELL DATA

		Date		1	Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R	B& N		Strata	Age
E.B. Towne, Oper. "Southeast Lathrop Unit A"	Same	Jan 1968	14 1S 6	e MD	9,680	Panoche	Late Cret

PRODUCING ZONES

	Average depth	age Average net th thickness t) (feet)	(Geologic		Salinity of	Original zone	Class BOPE
Zone	(feet)		Age	Formation	Gas (btu)	zone water gr/gai	pressure (psi)	required
Lathrop	7,110	82	Lt Cretaceous	Panoche	1,010	1,530	3,670	IV
				17	*			

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas proc	luction	Total num	ber of wells	Maximum
let gas (Mcf)	Water (bbl)	acreage		(Mcf)	Year	Drilled	Completed	acreage	
0	0	0	0	98,469	66,258	1969	4	1	40

SPACING ACT: Applies

BASE OF FRESH WATER: Above 900

- CURRENT CASING PROGRAM: 7" cem. 900; 4 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Commercial gas deliveries began in July 1969. The field was abandoned in November 1971.

LIBERTY CUT GAS FIELD (Abandoned)



LOCATION: 22 miles southwest of Sacramento

TYPE OF TRAP: Nose truncated by gorge; lenticular sands

ELEVATION: 2

DISCOVERY DATA

					Init	ial product		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
(Unnamed) Fahn	Arcady Oil Co. "Fahn" 4 Arcady Oil Co. "Fahn" 1	Same as present Same as present	9 5N 3E 9 5N 3E	MD MD	1,000 2,000.	1,100 1,500	14/64 12/64	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	d depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Arcady Oil Co. "Fahn" 5	Same	Aug 1956	8 5N 3E	MD	6,463	Starkey	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
(Unnamed) Fahn	4,060 4,130	10 15	Eocene Eocene	Nortonville Domengine	996 996	580 580	1,770 1,820	IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		duction 1972 1972 Proved Maximum number Cumulative gas		Cumulative cas	Peak gas production		Total num	Maximum proved	
Net gas (Mcf)	Water (bbl)	acreage	producing wells production (McI)	(Mcf)	Year	Drilled	Completed	acreage	
0	0	0	0	179,030	114,677	1957	9	4	190

SPACING ACT. Applies

BASE OF FRESH WATER: 2,600

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

METHOD OF WASTE DISPOSAL:

REMARKS: Gas production was commingled from both the Fahn zone and unnamed sand stringers in the Nortonville Formation. Commercial gas deliveries began in June 1957. The field was abandoned in Oct. 1965.



CONTOURS ON TOP OF MIDLAND SAND



Solano County

LOCATION: 6 miles north of Rio Vista

TYPE OF TRAP: Faulted noses truncated by gorge

ELEVATION: 10

DISCOVERY DATA

					Ini	Initial production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Midland	Reserve Oil and Gas Co. "Liberty Farms - Reynolds" 2	Same as present	19 5N 3E	MD	3,900	1,400	3/8	Dec 1960

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Texaco Inc. "Emigh" 1	Same	Mar 1962	30 SN 3E	MD	6,771	Starkey	Lt Cret

PRODUCING ZONES

	Average depth	Average net thickness				Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Midland	4,725	30	Eocene	Meganos	990	460	2,020	IV
,								

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas pro	duction	Total num	ber of wells	Maximum proved
Net gas (Mcf)	Water (bbl)	acreage		production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
1,147,817	1,084	295	4	25,173,760	4,948,162	1963	17	12	690

SPACING ACT: Applies

BASE OF FRESH WATER: 2,500 - 3,350

CURRENT CASING PROGRAM: 10 3/4" to 7" cem. 500 - 600; 4 1/2" cem. through zone and across base of fresh-water sands.

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

REMARKS: Commercial gas deliveries began in August 1961.

REFERENCES: Beecroft, G.W., Liberty Island Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 41, No. 1 (1961).







LOCATION: 4 miles northwest of Rio Vista

TYPE OF TRAP: Faulted anticline

ELEVATION: 10

DISCOVERY DATA

							Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.		R	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date o completi
(Unnamed sand stringers)	Amerada Hess Corp., Oper. "ARPE" 1	Amerada Petroleum Corp. "Richfield - Petersen" 1	34	5N	2E	MD	1,370	1,720	3/16	Jun 19
McCormick	Amerada Hess Corp., Oper. "ARPE" 1	Amerada Petroleum Corp. "Richfield - Petersen" 1	34	5N	2E	MD	3,120	2,440		Mar 19
Estate	Amerada Hess Corp., Oper. "M.W. Church" 6	Amerada Petroleum Corp. "Church" 6	2	4N	2E	MD	1,925	2,900	3/4	Nov 19
1st Starkey	Amerada Hess Corp., Oper. "M.W. Church" 5	Amerada Petroleum Corp. "Church" 5	2	4N	2E	MD	3,100	2,640	•	Jan 19
2nd Starkey	Signal Oil and Gas Co. "Petersen Estate Unit" 1	Signal Oil and Gas Co. "Petersen Estate Unit" 1	34	5N	2E	MD	4,500	2,300	20/64	Dec 19
Petersen	Amerada Hess Corp., Oper. "Union-Pet. Est." 1	Amerada Petroleum Corp. "Petersen" 1	3	4N	2E	MD	8,860	2,570	3/8	Nov 19
K-1	Amerada Hess Corp., Oper. "Union - Robinson" 1	Amerada Petroleum Corp. "Union - Robinson" 1	4	4N	2E	MD	2,340	1,440	1/4	Jul 19
First Winters	Signal Oil and Gas Co. "Church" 2	Same as present	1	4N	2E	MD	4,650	2,640	18/64	Jun 19

Remarks: * Test unit with adjustable choke.

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Standard Oil Co. of Calif. "Peter Cook" 16	Same	Jan 1964	10 4N 2E	MD	15,050	Forbes	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	(Geologic		Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
(Unnamed sand stringers)	6,820	25	Paleocene	Martinez	1,080	50	N.A.	IV
McCormick	6,975	82	Paleocene	Martinez	1,080	1,240	3,120	IV
Estate	5,480 - 8,360	59	Paleocene	Martinez	1,075	985	2,330 - 3,640	IV IV
1st Starkey	8,700	47	Lt Cretaceous	Starkey	1,070	1,160	4,070	IV
2nd Starkey	9,025	65	Lt Cretaceous	Starkey	1,080	900	4,350	IV IV
Petersen	7,665 - 9,940	60	Lt Cretaceous	Starkey	1,080	990	3,330 - 4,630	IV
K-1	10,228	94	Lt Cretaceous	Starkey	1,070	995	4,650	IV IV
First Winters	9,130	25	Lt Cretaceous	Winters	1,080	80	4,320	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas pro	duction	Tetal nun	iber of wells	Maximum
Net gas (Mcf)	Water (bbl)	acreage	producing wells		(Mcf)	Year	Drilled	Completed	acreage
12,070,574	196,276	2,350	23	71,116,082	16,065,898	1971	42	28	2,390

SPACING ACT: Applies

BASE OF FRESH WATER: 2,500 - 3,000

CURRENT CASING PROGRAM: 10 3/4" cem. 700 - 1,200; 7" or 5 1/2" cem. through zones and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water is treated and then disposed into a local drainage system or sumps at well sites.

REMARKS: Possible productive intervals in the Domengine and Bunker sands have never been tested. Commercial gas deliveries began in October 1964. 1972 condensate production 66,733 bb1.; cumulative condensate production 371,519 bb1.

LIVERMORE OIL FIELD





LOCATION: 4 miles east of Livermore

TYPE OF TRAP: Faulted nose

ELEVATION: 575 - 960

DISCOVERY DATA

								I daily uction	
Zone	Present operator and well name	Original operator and well name	Sec	. Т. I	& R.	8 & M	OII (bbl)	Gas (Mcf)	Date of completion
Greenville	Hershey Oil Corp. "Greenville Investment Group" 1	McCulloch Oil Corp. of Calif. "Greenville Investment Group" 1	7	35	3Ē	MD	397	N.A.	Jan 1967
(Unnamed)	E.C. Brown, Operator "Lupin" 2	Same as present	8	35	3E	MD	40	N.A.	Oct 1967

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Hershey Oil Corp. "Nissen" 3	McCulloch Oil Corp. of Calif. "Nissen" 3	Sep 1967	7 3S 3E	MD	6,819	Moreno (?)	Late Cret

PRODUCING ZONES

	Average - depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Greenville	880 - 2,000	40 - 250 .	late Miocene	Cierbo	25 - 29	200 - 550	111
(Unnamed)	5,300	25	Eocene	Tesla	36	550	III

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prode	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
121,434	0	21,842	65	7	771,466	0	161,829	1969	32	10	90

STIMULATION DATA (Jan. 1, 1973)

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: 10 3/4" or 9 5/8" cem. 300 - 600; 7" or 5 1/2" cem. above zone; 5 1/2" or 4 1/2" liner landed through zone. METHOD OF WASTE DISPOSAL: All waste water was injected during 1972 into one water disposal well.

REMARKS: Production from the Tesla formation was minor. One well was completed in this formation and it was abandoned in March 1969.



FUNKS

LOCATION: 11 miles east of Willows

TYPE OF TRAP: Faulted anticline; lenticular sands

ELEVATION: 110

DISCOVERY DATA

				Init	ial producti	00	
Present operator and well name	Original operator and well name	Sec. T. & R	. B&M	Daily (Mcf)	Flow pressure (psi)	Bean size (in)	Date of completion
Sacramento Natural Gas Co. "Parrott Investment Co." 1-A	Sacramento Oil and Gas Co. "Parrott Investment Co." 1-A	Contraction of the		3,300	605	1/2	Dec 1961
Exxon Corp. "Parrott Investment Co." 2	Humble Oil & Rfg. Co. "Parrott Investment Co." 2	4 19N 1	MD	A4,030	1,160	3/8	Nov 1954
Same as above	Same as above	4 19N 1	MD	-	1		
Dal Petroleum Co. "Parrott Investment Co." 1-A	Sacramento Oil and Gas Co. "Parrott Investment Co." 1	33 20N 1	W MD	^B 4,000	1,170	3/8	Oct 1961
	Sacramento Natural Gas Co. "Parrott Investment Co." 1-A Exxon Corp. "Parrott Investment Co." 2 Same as above Dal Petroleum Co. "Parrott Investment	Sacramento Natural Gas Co. "Parrott Investment Co." 1-A Sacramento Oil and Gas Co. "Parrott Investment Co." 1-A Exxon Corp. "Parrott Investment Co." 2 Humble Oil & Rfg. Co. "Parrott Investment Co." 2 Same as above Dal Petroleum Co. "Parrott Investment Sacramento Oil and Gas Co. "Parrott Investment Co." 2	Sacramento Natural Gas Co. "Parrott Investment Co." 1-A Sacramento Oil and Gas Co. "Parrott 33 20N 10 Exxon Corp. "Parrott Investment Co." 2 Humble Oil & Rfg. Co. "Parrott Investment Co." 2 1-A Same as above Dal Petroleum Co. "Parrott Investment Sacramento Oil and Gas Co. "Parrott Investment 4 19N 10	Sacramento Natural Gas Co. "Parrott Investment Co." 1-A Sacramento Oil and Gas Co. "Parrott 33 20N 1W MD Exxon Corp. "Parrott Investment Co." 2 Humble Oil § Rfg. Co. "Parrott Investment 4 19N 1W MD Same as above Dal Petroleum Co. "Parrott Investment Sacramento Oil and Gas Co. "Parrott 33 20N 1W MD	Present operator and well name Original operator and well name Sec. T. & R. B & M (Mcf) Sacramento Natural Gas Co. "Parrott Sacramento Oil and Gas Co. "Parrott 33 20N NM MD 3,500 Investment Co." 1-A Investment Co." 1-A Humble Oil & Rfg. Co. "Parrott Investment 4 19N NM A4,030 Same as above Same as above Same as above Same as above 4 19N NM B4,000	Present operator and well name Original operator and well name Sec. T. & R. B & M Daily (Mcf) pressure (psi) Sacramento Natural Gas Co. "Parrott Sacramento Oil and Gas Co. "Parrott 33 20N lW MD 3,300 605 Investment Co." 1-A Investment Co." 1-A Humble Oil & Rfg. Co. "Parrott Investment 4 19N lW MD 4,000 1,160 Same as above Dal Petroleum Co. "Parrott Investment Same as above Sacramento Oil and Gas Co. "Parrott 33 20N lW MD 8,000 1,170	Present operator and well name Original operator and well name Sec. T. & R. B & M Daily (Mp) pressure size (m) Sacramento Natural Gas Co. "Parrott Sacramento Oil and Gas Co. "Parrott 33 20N 1W MD 3,300 605 1/2 Investment Co." 1-A Investment Co." 1-A Humble Oil & Rfg. Co. "Parrott Investment 4 19N 1W MD A4,030 1,160 3/8 Same as above Same as above Same as above Sane as above 300 1W MD B4,000 1,170 3/8

Remarks: A $$\rm Production\ from\ Sannar\ and\ Estes\ zones\ commingled\ in\ discovery\ well.} B $$ Open-hole\ formation\ test.$

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	B & M		Strata	Age
Mobil Oil Corp. "Llano Seco" 1	General Petroleum Corp. "Llano Seco" 1	Sep 1946	33 20N 1W	MD	8,306	Funks	Late Cret

PRODUCING ZONES

Age Form cene Undiff.m strata Cretaceous Kione		zone water gr/ga1 480	Original zone pressure (psi) 740+	Class BOPE required IV
strata		480	740+	IV
Cratacaous Viona				
CICCUCCOUS NIOHO	960	240	1,494	IV
Cretaceous Kione	960	240	1,762	IV
Cretaceous Forbes	975	480	2,086 - 2,686	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Proc	luction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas proc	luction	Total num	ber of wells	Maximum proved
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (McI)	(Mcf)	Year	Drilled	Completed	acreage
29,039	0	180	3	5,385,828	1,207,199	1957	38	17	655

SPACING ACT: Applies

BASE OF FRESH WATER: 1,300

CURRENT CASING PROGRAM: 10 3/4" to 8 5/8" cem. 600; 5 1/2" to 4 1/2" cem. through zones and across base of fresh-water sands. METHOD OF WASTE DISPOSAL:

REMARKS: Commercial gas deliveries began in July 1957. Only a trace amount of waste water is produced.



LODI GAS FIELD

CONTOURS ON TOP OF DOMENGINE



LOCATION: 5 miles northeast of Lodi

TYPE OF TRAP: Anticline

ELEVATION: 90

DISCOVERY DATA

					Ini	tial producti	noi	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Domengine Midland	Amerada Hess Corp., Unit Oper. "LGZU" 101 Amerada Hess Corp., Unit Oper. "LGZU" 301	Amerada Petroleum Corp. "Community 9" 1 Amerada Petroleum Corp. "Community 15" 1	9 4N 7E 15 4N 7E		7,222 2,800	355 906	1/2 3/8	Apr 1943 Mar 1953

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Amerada Hess Corp., Unit Oper. "LGZU D" 201	Amerada Petroleum Corp. "Community 10" 1	May 1943	10 4N 7E	MD	4,495	Basement	pre-Lt Cret

PRODUCING ZONES

			Salinity of	Original zone	Class BOPE			
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
Domengine Midland	2,280 2,515	25 35	Eocene Eocene	Domengine Meganos	750 700	110 200	987 1,093	IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas pro	as production Total num		ber of wells	Maximum proved
vet gas (Mcf)	Water (bbl)	acreage		Year	Drilled	Completed	acreage		
0	0	0	0	23,204,145	1,301,472	1947	13	6	1,450

SPACING ACT: Applies

BASE OF FRESH WATER: 1,700

CURRENT CASING PROGRAM: 7" to 9 5/8" cem. 500; 4 1/2" or 5 1/2" cem. through zones and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: After June 1969, all produced water was injected into disposal well.

REMARKS: Commercial gas deliveries began in October 1946 and ceased in January 1971. The field was abandoned in March 1972.

REFERENCES: Huey, W.F., Lodi Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 43, No. 1 (1957).



CONTOURS ON TOP OF DOMENGINE SAND



LOCATION: 1 mile south of Port Chicago

TYPE OF TRAP: Faulted anticline; faulted noses

ELEVATION: 217 - 573

DISCOVERY DATA

						Init	ial product	ion	
Present operator and well name	Original operator and well name	Sec	. т. а	k R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Shell Oil Co. "Ginochio" 1-18	McCulloch Oil Corp. of Calif. "McCulloch- Macson-Ginochio" 1	18	2N	1W	MD	1,500	425	3/8	Jun 1959
Same as above	Same as above	18	2N	1W	MD	1,590	425	24/64	May 1958
Standard Oil Co. of Calif. "C.C.C.W.D." 1	Same as present	13	2N	2₩	MD	690	820	3/16	Apr 1962
	Shell Oil Co. "Ginochio" 1-18 Same as above	Shell Oil Co. "Ginochio" 1-18 McCulloch Oil Corp. of Calif. "McCulloch- Macson-Ginochio" 1 Same as above Same as above	Shell Oil Co. "Ginochio" 1-18 McCulloch Oil Corp. of Calif. "McCulloch- Macson-Ginochio" 1 18 Same as above 18	Shell Oil Co. "Ginochio" 1-18 McCulloch Oil Corp. of Calif. "McCulloch- Macson-Ginochio" 1 18 2N Same as above Same as above 18 2N	Shell Oil Co. "Ginochio" 1-18 McCulloch Oil Corp. of Calif. "McCulloch- Macson-Ginochio" 1 18 2N 1W Same as above Same as above 18 2N 1W	Shell Oil Co. "Ginochio" 1-18 McCulloch Oil Corp. of Calif. "McCulloch- Macson-Ginochio" 1 18 2N 1W MD Same as above Same as above 18 2N 1W MD	Present operator and well name Original operator and well name Sec. T. & R. B & M Daily (Mcf) Shell Oil Co. "Ginochio" 1-18 McCulloch Oil Corp. of Calif. "McCulloch- Macson-Ginochio" 1 18 N M MD 1,500 Same as above Same as above 18 2N 1W MD 1,590	Present operator and well name Original operator and well name Sec. T. & R. B & M Daily Dressure (Mcf) Flow pressure (Mcf) Shell Oil Co. "Ginochio" 1-18 McCulloch 0il Corp. of Calif. "McCulloch- Macson-Ginochio" 1 18 2N 1W MD 1,500 425 Same as above 18 2N 1W MD 1,590 425	Present operator and well name Original operator and well name Sec. T. & R. B & M Daily (Mct) pressure (psi) size (msi) Shell 0il Co. "Ginochio" 1-18 McCulloch 0il Corp. of Calif. "McCulloch- Macson-Ginochio" 1 18 2N 1W D 1,500 425 3/8 Same as above 18 2N 1W MD 1,590 425 24/64

Remarks:

DEEPEST WELL DATA

		Date started Sec. T. & R. B & M (feet) Strata		depth			
Present operator and well name	Original operator and well name		Sec. T. & R.	B &		Strata	Age
Shell Oil Co. "Ginochio" 3-7	McCulloch Oil Corp. of Calif. "McCulloch- Ginochio" 3	Dec 1961	7 2N 1	W MD	6,941	Undiff. marine	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness			Geologic.		Salinity of	Original zone	Class BOPE			
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	Gas (btu)	Gas (btu)	Gas (btu)		zone water gr/gal	pressure (psi)	required
Nortonville	1,500 - 4,300	40	Eocene	Nortonville	1,020	N.A.	650 - 1,665	IV				
Domengine	1,800 - 4,000	150	Eocene	Domengine	1,020	630	650 - 1,760	IV				
Upper Cretaceous	2,800	10	Lt Cretaceous	Undiff. marine strata	975	N.A.	1,570	IV				

PRODUCTION DATA (Jan. I. 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas proc	duction	tion Total number of wells		Maximum proved
Net gas (Mcf)	Water (bbl)	Proved acreage	producing wells	production (Mcf)	(Mcf)	(Mcf) Year		Completed	acreage
1,266,604	12,386	310	7	31,686,759	5,033,197	1961	21	10	360

SPACING ACT: Applies

BASE OF FRESH WATER: 150 - 1,000

CURRENT CASING PROGRAM: 10 3/4" cem. 500; 5 1/2" cem. through gas zones and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Percolation and evaporation sumps.

REMARKS: Commercial gas deliveries began in November 1958. One well was completed in the Upper Cretaceous zone; it was abandoned in December 1962.

REFERENCES: Matthews, J.F. Jr., Los Medanos Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 49, No. 1 (1963).

MAINE PRAIRIE GAS FIELD



LOCATION: 13 miles south of Davis

TYPE OF TRAP: Faulted anticline truncated by gorge

ELEVATION: 20

DISCOVERY DATA

						Init	al product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. &	R. 1	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Domengine	S.M. Reynolds, Oper. "Amerada-Brigantino"	Same as present	15 6N	2E	MD	2,560	1,600	1/4	Jul 1966
Wineman	Amerada Hess Corp. "WZU" 4	Amerada Petroleum Corp. "I. & L. Wineman" 1	26 6N	2E	MD	19,000	1,760	3/4	Mar 1945
(Unnamed)	Amerada Hess Corp, "Peters" 1	Amerada Petroleum Corp. "Peters" 1	10 5N	2E	MD	2,420	1,470	10/64	Jan 1960
Peters	Amerada Hess Corp. "Peters" 3	Amerada Petroleum Corp. "Peters" 3	3 5N	2E	MD	2,140	2,420	13/64	Jul 1956
Bunker	Amerada Hess Corp. "I. & L. Wineman" 2	Amerada Petroleum Corp. "I. & L. Wineman" 2	27 6N	2E	MD	*11,500	1,850	3/8	Oct 1951
НĘТ	Amerada Hess Corp. "H. & T." 2	Amerada Petroleum Corp. "H. & T." 2	2 5N	2E	MD	5,200	2,090	5/16	Dec 1951

Remarks: * Initial production data are from casing tests made before the well was completed in the Wineman zone.

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M	(feet)	Strata	Age
E.C. Brown, Oper. "Signal-Hamberger" 1	Same	May 1970	36 6N 2E	MD	9,291	Winters	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	Geologic			Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Domengine	4,148	6	Eocene	Domengine	1,005	N.A.	1,790	1V
Wineman	4,740	40	Eocene	Meganos	1,020	350	2,135	IV
(Unnamed)	5,935	20	Eocene	Meganos	1,075	40	2,595	IV
Peters	6,440	90	Eo - Paleo	Meganos - Martin- ez (undiff)	1,065	1,000	2,880	IV
Bunker	5,740	25	Paleocene	Martinez	1,080	4	2,860	IV
ΗŞΤ	6,160	25	Lt Cretaceous	Starkey	1,080	845	2,695	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Total number of wells		Maximum proved
Net gas (Mcf)	Water (bb1)	acreage	producing wells	production (Mcf)		Year	Driffed	Completed	acreage		
6,128,109	8,193	2,010	15	94,622,561	8,924,860	1971	43	28	2,270		

SPACING ACT: Applies

BASE OF FRESH WATER: 2,700

CURRENT CASING PROGRAM: 9 5/8" or 8 5/8" cem. 600; 5 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Disposal into sumps at well sites.

REMARKS: Formerly known as the Duck Slough Gas area. Commercial gas deliveries began in July 1947. 1972 condensate production 7,671 bb1.; cumulative condensate production 139,002 bb1.



CONTOURS ON TOP OF DOBBINS SHALE



LOCATION: 3 miles northwest of Orland

TYPE OF TRAP: Lenticular sands on faulted nose

ELEVATION: 300

DISCOVERY DATA

					Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
(Unnamed)	Exxon Corp. "H-T Malton Unit 9" 1	Humble Oil & Rfg. Co. "H-T Malton Unit 9"	5 22N 3W	MD	A _{1,070}	690	1/4	Jan 1969
Kione	Exxon Corp. "H-T Malton Unit 6" 1	Humble Oil & Rfg. Co. "H-T Malton Unit 6"	32 23N 3W	MD	1,500	730	12/64	Dec 1966
(Unnamed sand stringers)	Exxon Corp. "H-T Malton Unit 1" 1	Humble Oil & Rfg. Co. "Malton Operating Unit 1" 1	5 22N 3W	MD	^B 1,740 1,250	1,480 750	17/64 3/8	Oct 1964

Remarks: A Commingled with Kione production. B Dual completion of two intervals within the Forbes formation.

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Bender Oil Operations "Bryan" 1	Same	Jul 1957	33 23N 3W	MD	6,692	Guinda	Late Cret

PRODUCING ZONES

Average	Average net	Average net Geologic thickness (feet) Age Formation			Salinity of	Original gran	Class BOPE
(feet)				Gas (btu)		pressure (psi)	required
1,900	10	Eocene	Undiff. marinė strata	C _{N.A.}	C N.A.	760	IV
2,000	50	Lt Cretaceous	Kione	1,010	1,050	860	IV
3,250 - 4,950	1 - 40 per stringer	Lt Cretaceous	Forbes	1,010	1,260	1,580 - 2,940	IV IV
	depth (feet) 1,900 2,000 3,250 -	depth (feet) thickness (feet) 1,900 10 2,000 50 3,250 1 - 40 per	depth (feet) thickness (feet) Age 1,900 10 Eocene 2,000 50 Lt Cretaceous 3,250 - 1 - 40 per Lt Cretaceous	depth (feet) thickness (feet) Generation 1,900 10 Eocene Undiff. marine strata 2,000 50 Lt Cretaceous Kione 3,250 - 1 - 40 per Lt Cretaceous Forbes	depth thickness Age Formation (feet) (feet) Age Formation Gas (btu) 1,900 10 Eocene Undiff, marine strata C N.A. 2,000 50 Lt Cretaceous Kione 1,010 3,250 - 1 - 40 per Lt Cretaceous Forbes 1,010	depth (feet) thickness (feet) Age (feet) Formation Strata Gas (btu) zone water gr/gal 1,900 10 Eocene Undiff. marine strata C N.A. C N.A. 2,000 50 Lt Cretaceous Kione 1,010 1,050 3,250 - 1 - 40 per Lt Cretaceous Forbes 1,010 1,250	depth (feet) thickness (feet) Age (feet) Formation (feet) Gas (btu) zone water gr/gal Original zone pressure (psi) 1,900 10 Eocene Undiff. marine strata C N.A. C N.A. 760 2,000 50 Lt Cretaceous Kione 1,010 1,050 860 3,250 - 1 - 40 per Lt Cretaceous Forbes 1,010 1,250 1,580 -

C Commingled with Kione production

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas pro	Peak gas production		ber of wells	Maximum proved
Net gas (Mcf)	Water (bbl)	acreage		Year	Drilled	Completed	acreage		
8,796,345	8,355	7,440	47	30,815,509	8,796,345	1972	70	50	7,440

SPACING ACT: Applies

BASE OF FRESH WATER: 1,500 - 1,800

CURRENT CASING PROGRAM: 8 5/8" to 7" cem. 1,000; 5 1/2" or 4 1/2" cem. through zones and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Most waste water hauled by truck to water disposal well at Willows-Beehive Bend Gas field; disposal of minor amounts into sumps. REMARKS: Commercial gas deliveries began in December 1966. Abnormally high pressure gradient at depth.

MCDONALD ISLAND GAS FIELD



LOCATION: 11 miles west of Stockton

TYPE OF TRAP: Faulted anticline

ELEVATION: 2

DISCOVERY DATA

					Init	ial product	on	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
McDonald Island	Pacific Gas and Electric Co. "McDonald Island Farms" 1	Standard Oil Co. of Calif. "McDonald Island Farms" 1	25 2N 4E	MD	26,650	2,080	3/4	May 1936

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total d	lepth
Present operator and well name	Original operator and well name		Sec. T. & R.	B & M		Strata	Age
Union Oil Co. of Calif. "McDonald Island" 1	Same	Sep 1963	24 2N 4E	MD	12,502	Undiff. marine	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
McDonald Island	5,220	45	Eocene	Meganos	960	690	2,350	IV
			-					
			× ·					

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas pro	Peak gas production Total number of wells		Total number of wells		I number of wells	
Net gas (Mcf)	Water (bbl)	acreage		(Mcf)	Year	Drilled	Completed	proved acreage			
15,062,989	0	1,440	19	166,465,396	15,062,989	1972	39	24	1,560		

SPACING ACT: Applies

BASE OF FRESH WATER: 50 - 100

CURRENT CASING PROGRAM: 13 3/8" cem. 600 to 1,000; 8 5/8" cem. through zone.

METHOD OF WASTE DISPOSAL

REMARKS: Commercial gas deliveries began in April 1937. Pacific Gas and Electric Co. acquired the field in Docember 1958 and converted it to gas storage in August 1959.

REFERENCES: Knox, G.L., McDonald Island Gas Field in Geologic Formations and Economic Development of the Oil and Gas Fields of Calif.: Calif. Div. of Mines Bull. 118, p. 588-590 (1943).
Railroad Commission of the State of Calif. and Calif. Div. of Oil and Gas, McDonald Gas Field in Estimate of the Natural Gas Reserves of the State of Calif. as of January 1, 1941: Case No. 4591, Special Study No. S-258, p. 242-244 (1942).







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LOCATION: 16 miles south of Stockton

TYPE OF TRAP: Anticline; faulted nose

ELEVATION: 30

DISCOVERY DATA

				-	I In	itial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R	. B&N	Daily (Mcf)	Flow pressure (psi)	Bean size (in)	Date of completion
Blewett	Great Basins Pet. Co. "Signet-Perrin" 33-25	Same as present	25 25 6	E MD	6,020	1,725	3/8	May 1960
Tracy	Great Basins Pet. Co. "Signet-Whiting" 66-23	Same as present	23 25 6	E MD	2,740	775	3/8	May 1960
E	Great Basins Pet. Co. "McMullin" SX	Great Basins Pet, Co. "Occidental- McMullin" 5-X	24 2S 6	E MD	5,200	2,260	5/16	Jun 1963
				1	1			1

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	il depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Great Basins Pet. Co. "Occidental-Whiting" 66X-23	Same	May 1962	23 2S 6E	MD	9,988	Panoche	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	(Seologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Blewett	4,525	2 - 30 per sand stringer	Lt Cretaceous	Panoche	895	600	, 2,415	IN
Tracy	6,005	2 = 15 per sand stringer	Lt Cretaceous	Panoche	895	460	2,900	IV
E	7,200	3 - 30 per sand stringer	Lt Cretaceous	Panoche	870	700 - 1,360	3,625 - 4,120	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas proc	luction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbi)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
1,394,620	14,187	2,430	21	56,629,400	10,790,606	1965	41	30	3,030

SPACING ACT. Applies

BASE OF FRESH WATER: Above 500

CURRENT CASING PROGRAM. 7" cem. 800; 4 1/2" cem. through zone.

METHOD OF #ASTE DISPOSAL: Surface disposal by evaporation from sumps at well locations.

REMARKS: Dual completions from the Blewett and Tracy zones are common. Gas production from sand stringers in the lower portion of the "Ragged Valley" is often commingled with Tracy zone production and considered part of the zone.

REFERENCES: Humter, W.J., and G.W. Beecroft, McMullin Ranch Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 2 (1960).





STARKEY

CONTOURED HORIZON

COURTLAND SDS

LOCATION: 5 miles south of Clarksburg

TYPE OF TRAP: Sand pinchout

ELEVATION: 9

DISCOVERY DATA

					Init	tial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Courtland sands	Union Oil Co. of Calif. "Greene Unit" 2	Same	21 6N 4E	MD	6,000	2,600	16/64	Apr 1966

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Union Oil Co. of Calif. "Greene Unit" 2	Same	Apr 1966	21 6N 4E	MD	8,000	Winters	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Courtland sands	7,400	15	Lt Cretaceous	Winters	930	180	3,450	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Pro	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
223,834	19,421	80	1	624,765	388,931	1971	1	1	80

SPACING ACT: Applies

BASE OF FRESH WATER: 1,600

CURRENT CASING PROGRAM: 9 5/8" cem 800; 5 1/2" cem through zone and across base of fresh water sands.

METHOD OF WASTE DISPOSAL: Water is trucked to disposal site.

REMARKS: Gas is sold locally to Newhall Land and Farming Co. for use in an alfalfa dryer.





LOCATION: 9 miles south of Davis

TYPE OF TRAP: See Areas

ELEVATION: 30

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DISCOVERY DATA

Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
ada Hess Corp. "Millar Comm." l	Amerada Petroleum Corp. "Starkey Fee" 1	2 6N 2E	MD	22,570	1,715	3/8	Aug 1944
a					Present operator and well name Original operator and well name Sec. T. & R. B & M (Mcf)	Present operator and well name Original operator and well name Sec. T. & R. B & M (Mcf) (psi)	Present operator and well name Original operator and well name Sec. T. & R. B & M Daily pressure size (Mcf) (psi) (in.)

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Same as discovery well	Same	Feb 1943	2 6N 2E	MD	9,434	Winters	Late Cret

PRODUCING ZONES (See areas)

	Average depth	Average net thickness	Geo	logic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
						1.00		
	1							

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas pro	duction	Total num	ber of wells	Maximum proved
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (McI)	(Mcf)	Year	Drilled	Completed	acreage
5,277,940	19,207	2,365	22	26,427,874	5,277,940	1972	81	40	2,725

SPACING ACT: See areas.

BASE OF FRESH WATER: See areas.

CURRENT CASING PROGRAM: See areas.

METHOD OF WASTE DISPOSAL: See areas.

REMARKS: Millar Gas field was originally known as Dixon Gas area. 1972 condensate production 11 bbl.; cumulative condensate production 90 bbl. (all from the West Area).

MAIN AREA

LOCATION: See map sheet of Millar Gas Field

TYPE OF TRAP: Faulted homocline; faulted noses

ELEVATION: 30

DISCOVERY DATA

Original operator and well name Same as present Amerada Petroleum Corp. "Starkey Fee" 1 Amerada Petroleum Corp. "Starkey Fee" 1	10	. T. 6 6N 6N	2E	B&M MD	Daily (Mcf) *2,350	Flow pressure (psi) 1,560	Bean size (in.) 1/4	Date of completion Sep 1965
Amerada Petroleum Corp. "Starkey Fee" 1					*2,350	1,560	1/4	Sep 1965
	2	6N						
Amerada Petroleum Corn, "Starkey Fee" 1			2E	MD	240	1,075	1/4	Jul 1960
	2	6N	2E	MD	22,570	1,715	3/8	Aug 1944
E.C. Brown, Opr. "Signal-Amerada- Brigantino" 1	13	6N	2E	MD	4,000	3,060	17/64	Sep 1969
- Same as present	35	7N	2E	MD	510	1,160	5/16	Apr 1971
1	Brigantino" 1	Brigantino" 1	Brigantino" 1	Brigantino" 1	Brigantino" 1	Brigantino" 1	Brigantino" 1	Brigantino" 1

Remarks: * Commingled production from Domengine and Nortonville zones.

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	B & M		Strata	Age
Amerada Hess Corp. "Millar Comm." 1	Amerada Petroleum Corp. "Starkey Fee" 1	Feb 1943	2 6N 2E	MD	9,434	Winters	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
Nortonville	3,875	8	Eocene	Nortonville	990	N.A.	1,520	IV
Domengine	4,000	10	Eocene	Domengine	990	210	1,780	IV
Midland	4,585	40	Eocene	Meganos	965	400	2,075	IV
Winters	7,070 - 7,970	35	Lt Cretaceous	Winters	850	610	3,400 - 3,705	IV
Lower Winters	8,245	14	Lt Cretaceous	Winters	825	N.A.	3,795	IV
				1				
				1				
			4					

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas pro	fuction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bb1)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
4,741,398	18,975	1,925	19	24,869,977	4,741,398	1972	74	34	2,285

SPACING ACT: Applies

BASE OF FRESH WATER: 3,200

CURRENT CASING PROGRAM: 8 5/8" cem. 800; 5 1/2" or 4 1/2" cem. through zones and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Disposal into sumps at well sites.

REMARKS: Commercial gas deliveries began in July 1947.

WEST AREA

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LOCATION. See map sheet of Millar Gas Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 30

DISCOVERY DATA

							101	tial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec	. T. J	& R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Campbell Ranch	Amerada Hess Corp., Opr. "Campbell Ranch"	The Termo Co. "Amerada-Campbell" 1	4	6N	2E	MD	2,900	1,930	14/64	Oct 1967
Bunker Starkey	V.R. Smith, Opr. "AT & T" 3 V.R. Smith, Opr. "AT & T" 2	Same as present Same as present	*29 *29			MD MD	7,970 9,160	1,600 1,830	7/16 7/16	
*										

Remarks: * Well directionally drilled to Sec. 32, T. 7N., R. 2E.

DEEPEST WELL DATA

		Date					Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.		B & M		Strata	Age	
V.R. Smith, Opr. "Brady" 1	Same	Dec 1972	29	7N	2E	MD	9,110	Winters	Late Cret

PRODUCING ZONES

		Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE
	Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Campbell Bunker Starkey	Ranch	5,290 5,350 5,665	40 65 75	Eo - Paleo Paleocene Lt Cretaceous	Meganos-Martinez Meganos-Martinez Starkey	980 960 980	10 N.A. N.A.	2,340 2,400 2,555	IV IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
536,542	232	440	3	1,557,897	536,542	1972	7	6	440

SPACING ACT: Applies

BASE OF FRESH WATER: 2,900

CURRENT CASING PROGRAM: 8 5/8" cem. 800; 5 1/2" or 4 1/2" cem. through zones and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Disposal into sumps.

REMARKS: Commercial gas deliveries began in August 1968. 1972 condensate production 11 bbl.; cumulative condensate production 90 bbl.

MULLIGAN HILL GAS FIELD (Abandoned)



LOCATION: 5 miles southwest of Pittsburg

TYPE OF TRAP: Faulted homocline

ELEVATION: 690 - 1,207

DISCOVERY DATA

Zone				B&M	Initial production			
	Present operator and well name	Original operator and well name	Sec. T. & R.		Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Domengine silt Domengine sand	Occidental Petroleum Corp. "Keller Estate" 1 Same as above	Occidental Petroleum Corp. "Keller Estate" 1 Same as above	35 2N 1W 35 2N 1W		1,040	300	1/2	Nov 1961

Remarks: Commingled production from Domengine silt and Domengine sand.

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age	
Same as discovery well	Same	Oct 1961	35 2N 1W	MD	4,965	G-2 zone (Goudkoff)	Late Cret	

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic			Salinity of	Original zone	Class BOPE
			Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
Domengine silt Domengine sand	1,640 1,735	5 30	Eocene Eocene	Domengine Domengine	985	N.A. N.A.	490	IV IV
				×				

PRODUCTION DATA (jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum
Net gas (Mcf)	Water (bbi)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	0	0	123,576	45,183	1967	5	1	40

SPACING ACT: Applies

BASE OF FRESH WATER: Above 500

CURRENT CASING PROGRAM: 9 5/8" or 8 5/8" cem. 500; 5 1/2" or 4 1/2" cem. through zones.

METHOD OF WASTE DISPOSAL:

REMARKS: Commercial gas deliveries began in January 1963. The field was abandoned in October 1968.


LOCATION: 4 miles northwest of Pleasant Grove

TYPE OF TRAP: Faulted nose

ELEVATION: 55

DISCOVERY DATA

					Ini	itial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	6 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Osterli	Delcalta International Corp. "Osterli" 1	Sacramento Oil and Gas Co. "Osterli" l	5 11N 4E	MD	5,200	355	3/4	Jul 1961

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name star		Sec. T. & R.	B&M		Strata	Age
Delcalta International Corp. "Osterli" 3	Bolsa Chica Oil Corp. "Osterli" 1	Mar 1962	31 12N 4E	MD	6,786	Basement	pre-Late Cret

.

PRODUCING ZONES

	Average depth	Average net thickness				Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Österli	5,700	15	Lt Cretaceous	Guinda	220	N.A.	2,525	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum
let gas (Mcf)	Water (bbl)	acreage	producing wells	production (McI)	(Mcf)	Year	Drilled	Completed	acreage
0	0	160	0	0	0		3	1	160

SPACING ACT: Applies

BASE OF FRESH WATER: 2,500

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

METHOD OF WASTE DISPOSAL

REMARKS: Gas is 78.0% nitrogen and 22.0% methane. Field has never produced commercially, and the only completed well is shut in.

OAKLEY GAS FIELD





PANOCHE

LOCATION: 2 miles southeast of Oakley

TYPE OF TRAP: Faulted nose with truncation by gorge

ELEVATION: 20

DISCOVERY DATA

						1 1	Ini	itial producti	00	
Zone	Present operator and well name	Original operator and well name			& R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
B-III 2nd Massive (?)	Occidental Petroleum Corp. "Machado".1 Continental Oil Co. "Conoco-Lane 12" 1	Same as present Same as present	30 12				3,162 1,050	1,226 3,225	5/8 27/64	Sep 1962 Nov 1972
	5	* +					-			

1.

Remarks:

DEEPEST WELL DATA

		Date					Depth	At total depth		
Present operator and well name	Original operator and well name	started		8 & M		Strata	Age			
Occidental Petroleum Corp. "Machado" 1	Same	Aug 1962	30	2N	3E	MD	11,607	Panoche	Late Cret	

PRODUCING ZONES

	Average depth	Average net thickness	Geologic			Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
B-III 2nd Massive (?)	7,822 7,447	60 45	Paleocene Paleocene	Martinez Martinez	1,060 1,062	410 1,170	3,080 3,515	IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	40	0	15,108	15,108	1967	5	2	120

SPACING ACT: Applies

BASE OF FRESH WATER: Above 800

CURRENT CASING PROGRAM: 10 3/4" to 8 5/8" cem. 800 to 1,000; 5 1/2" cem. through zones.

METHOD OF WASTE DISPOSAL:

REMARKS: The field was abandoned in April 1968 and reactivated in November 1972.

REFERENCES:

.



LOCATION: 20 miles north of Santa Cruz TYPE OF TRAP: Faulted nose

ELEVATION: 1,240 DISCOVERY DATA

					Initia prod		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Tony Costa	Ivan J. Vojvoda, Operator "Costa" 2 Ivan J. Vojvoda, Operator "Costa" 1	Union Oil Co. of Calif. "Richfield-Costa" 2 Union Oil Co. of Calif. "Richfield-Costa" 1		MD MD	*24 107	474 42	Mar 1956 Oct 1955

Remarks: *Commingled with production from Costa zone.

DEEPEST WELL DATA

		Date			Depth	At total depth	
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Union Oil Co. of Calif. "Richfield-Costa" 4	Same	Apr 1956	14 8S 3W	MD	5,112	Butano	Eocene

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required
Tony Costa	1,860 2,090	55 120	Eocene Eocene	Butano Butano	, 41 , 41	1,480 1,480	II II

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbi)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrets	Year	Drilled	Completed	acreage
1,298	106	508	20	1	81,909	68,350	14,744	1956	6	2	20

STIMULATION DATA (Jan. 1, 1973)

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" or 10 3/4" cem. 250 ; 7" combination string landed through oil zone and cemented through ports above the zone. METHOD OF WASTE DISPOSAL: Waste water hauled by truck to disposal site.

REMARKS:



LOCATION: 11 miles southwest of Chico ELEVATION: 155

DISCOVERY DATA

					Init	ial product	noi	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.&M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
Knight	The Superior Oil Co. "Knight" 1	Same	13 21N 2W	MD	5,040	1,075	24/64	Aug. 1943

Remarks:

DEEPEST WELL DATA

	Date			Total	At lots	il depth
Original operator and well name	started	Sec. T. & R.	B.&M.		Strata	Age
Same	July 1943	13 21N 2W	MD	6,346	Guinda	Late Cret.
			Original operator and well name started Sec. T. & R.	Original operator and well name started Sec. T. & R. B.&M.	Original operator and well name Date started Sec. T. & R. B. & M. (feet)	Original operator and well name Date started Sec. T. & R. B.&M. (feet) Strata

PRODUCING ZONES

	Average	Average net	G	eologic	Heating value	Salinity of	Original zone	Class BOPE	
Zone Knight	depth (feet)	thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	pressure (psi)	required	
Knight	3,660	13	Late Cretaceous	Kione	910	15,400	1,615	III B 2M	

PRODUCTION DATA

1976 Pro	duction	1977	1976	1976	Peak gas produ	ction	Total numb	per of wells	Maximum
Net gas (Mcf)	Water (bbi)	Proved acreage	Maximum number producing wells	Cumulative gas	(Mcf)	Year	Drilled	Completed	acreage
59,790	25,130	240	1	9,828,552	1,034,566	1947	3	2	300

SPACING ACT: Applies

BASE OF FRESH WATER: 1,200

CURRENT CASING PROGRAM: 9 5/8" cem. 500, 5 1/2" cem. through zone and across base of freshwater sands.

REMARKS: Commercial gas deliveries began in January 1945.

REFERENCES: None

January 1978

ORLAND GAS FIELD



DECEMBER 1977

LOCATION: 3 miles northeast of Orland ELEVATION: 220

DISCOVERY DATA

				Init	ial product	ion	
Present operator and well name	Original operator and well name	Sec. T. & R.	0.&M.	Daily (Mcf)			Date of completion
Oxy Petroleum, Inc. "Morrissey" 1-12 Same	Same Same	12 22N 3W 12 22N 3W	MD MD	1,300 1,160	1,150 1,260		May 1975 May 1975
	Oxy Petroleum, Inc. "Morrissey" 1-12	Oxy Petroleum, Inc. "Morrissey" 1-12 Same	Oxy Petroleum, Inc. "Morrissey" 1-12 Same 12 22N 3W	Oxy Petroleum, Inc. "Morrissey" 1-12 Same 12 22N 3W MD	Present operator and well name Original operator and well name Sec. T. & R. B.&M. Daily (Mcf) 0xy Petroleum, Inc. "Morrissey" 1-12 Same 12 22N 3W MD 1,300	Present operator and well name Original operator and well name Sec. T. & R. B.&M Flow pressure (Mcf) Flow pressure 0xy Petroleum, Inc. "Morrissey" 1-12. Same 12 22N 3W MD 1,300 1,150	Present operator and well name Original operator and well name Sec. T. & R. B.&M Daily (Mcf) pressure (psi) size (inches) 0xy Petroleum, Inc. "Morrissey" 1-12 Same 12 22N 3W MD 1,300 1,150 16/64

Remarks:

DEEPEST WELL DATA

		Date			Total depth	At tota	depth
Present operator and well name	Original operator and well name		Sec. T. & R.	B. & M.		Strata	Age
Oxy Petroleum, Inc. "Morrissey" 1-12	Same	Apr. 1975	12 22N 3W	MD	5,711	Forbes	Late Cret.

PRODUCING ZONES

	Average	Average net	G	eologic	Heating value	Salinity of	Original zone	Class BOPE
Zone (feet Innamed) 2,8	(feet)	thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	pressure (psi)	required
(Unnamed) (Unnamed)	2,880 3,010	10 20	Late Cretaceous Late Cretaceous	Kione Kione	925 928	84,000 N.A.	1,350 1,400	III B 2M III B 2M

PRODUCTION DATA

1976 Pro	duction	1977	1976	1976	Peak gas pro	duction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	Proved acreage	Maximum number producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage
0	0	100	0	0	See Remarks		4	2	100

SPACING ACT: Applies

BASE OF FRESH WATER: 1,700

CURRENT CASING PROGRAM: 8 5/8" cem. 800; 5 1/2" cem. through zone and across base of freshwater sands.

REMARKS: Commercial gas deliveries have not yet begun.

REFERENCES: None

January 1978



CONTOURS ON TOP OF PERKINS LAKE SANDS



LOCATION: 12 miles northeast of Willows

TYPE OF TRAP: Lenticular sands and overlap

ELEVATION: 115

DISCOVERY DATA

					Ini	itial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Perkins Lake	Exxon Corp. "Parrott Investment Company" B-1	Humble Oil & Refining Co. "Parrott Investment Company" B-1	16 20N 1W	MD	4,060	975	3/8	Sep 1955

Remarks:

DEEPEST WELL DATA

			Date			Depth	At tot	al depth
	Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Exxon Corp.	"Parrott Investment Co." B-6	Humble Oil and Ref. Co. "Parrott Investment Co." B-6	May 1956	16 20N 1W	MD	6,500	Guinda	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Perkins Lake	3,400	10 - 130 per sand bed	Eocene	Princeton Gorge Fill	950	250	1,575 - 1,600	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total num	Total number of wells	
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
1,004,872	0	440	4	29,952,882	2,841,396	1960	10	5	440

SPACING ACT: Applies

BASE OF FRESH WATER: 1,500

CURRENT CASING PROGRAM: 7" cem. 500; 4 1/2" cem. through zones and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

REMARKS: Commercial gas deliveries began in December 1965.

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REFERENCES: Harding, T.P., Perkins Lake Gas Field, Calif. Calif. Div. of Mines Bull. 181, p. 103-105 (1962). Lorshbough, A.L., Perkins Lake Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 57, No. 1 (1971).



LOCATION: 4 miles east of Petaluma

TYPE OF TRAP: Faulted anticline; lenticular sands

ELEVATION: 150 - 360

DISCOVERY DATA

								I daily uction	
Zone	Present operator and well name	Original operator and well name	Sec	. т. а	k R.	B & M	Oil (bbi)	Gas (Mcf)	Date of completion
Upper Gas Oil Lower Gas	 B.C.R. & F. Oil & Gas Corp. "Golden Gate" 3 Herbert N. Witt & Assoc. No. 2 B.C.R. & F. Oil & Gas Corp. "Petaluma Community 5" 1 	Golden Gate Gas & Oil Dev. Co. "Golden Gate" 3 Herbert N. Witt No. 2 Trico Oil & Gas Co. "Miller" 1	30 19 30	5N 5N 5N	6W	MD MD MD	0 12 0		*May 1958 May 1926 Aug 1941

Remarks: * Drilled and suspended in 1953; reworked in 1958.

DEEPEST WELL DATA

		Date			Depth	At total d	lepth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Shell Oil Co. "Murphy" 1	Shell Co. of Calif. "Murphy" 1	Jun 1926	19 5N 6W	MD	6,385	Franciscan (?)	late Meso

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Upper Gas Oil Lower Gas	670 920 1,240	20 25 20	Pliocene Pliocene Pliocene	Petaluma Petaluma Petaluma	1,010 20 1,010 - 1,170	270 N.A. 270	IV IV IV

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Remarks)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	5	0	13,157	0	1,508	1951	12	2	. 10

STIMULATION DATA (Jan. 1, 1973)

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" to 9 5/8" cem. 200; 5 1/2" to 4 1/2" cem. through zones.

METHOD OF WASTE DISPOSAL: Surface disposal of waste water.

REMARKS: 1972 dry gas production, 4,044 Mcf from 4 producing wells; cumulative dry gas production 1,118,869 Mcf. 18 wells were drilled for dry gas and 9 wells were completed. 1972 proved dry gas acreage, 80; maximum proved dry gas acreage, 95. Commercial gas deliveries began in August 1942. Peak production year was 1956 with 136,004 Mcf.

REFERENCES: Johnson, F.A., Petaluma Region in Geol. Formations & Economic Dev. of the Oil and Gas Fields of Calif: Calif. Div. of Mines Bull. 118, p. 622-627 (1943).

PETROLIA OIL FIELD (Abandoned)











LOCATION: 30 miles south of Eureka

TYPE OF TRAP: Sand pinchouts on homocline

ELEVATION: 800 - 1,400

DISCOVERY DATA

.

					prod	I daily uction	Date of
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	completion
(Unnamed)	West Coast Oil Corp. "West Coast" 1	Same as present	16 1S 2W		30	N.A.	Oct 1953
		-					

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Bo-Peep Eureka Oil Co. "Bo-Peep" 1	Same	Sep 1965	21 1S 2W	H	3,281	N.A.	Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
(Unnamed)	1,570	90	Cretaceous	Capetown	46	N.A.	IV
			1				

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	production	Peak oil prode	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	350	0	140	1954	10	2	10

STIMULATION DATA (Jan. 1, 1973)

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: 40

CURRENT CASING PROGRAM: 10 3/4" cem. 500; 7" cem. through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: This field is about four miles northwest of California's first oil production (circa 1865).

PINOLE POINT OIL FIELD



LOCATION: 3 miles west of Pinole

TYPE OF TRAP: Faulted nose

ELEVATION: 30

DISCOVERY DATA

						daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbi)	Gas (Mcf)	Date of completion
Upper Lower	Standard Oil Co. of Calif. "Bethlehem" 2-R Bethlehem Steel Corp. "Bethlehem" 1	Same as present Standard Oil Co. of Calif. "Bethlehem" 1	19 2N 4W 19 2N 4W	MD MD	6 112	N.A. 299	Dec 1969 Jun 1969

Remarks: Production from the Upper zone was not commercial. Well No. "Bethlehem" 2-R was abandoned in February 1972 after having been shut in since December 1969.

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Bethlehem Steel Corp. "Bethlehem" 1	Standard Oil Co. of Calif. "Bethlehem" 1	Jan 1969	19 2N 4W	MD	9,997	Briones	late Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required	
Upper Lower	4,350 6,400	75 70	Pliocene late Miocene	Orinda Neroly	11 41	N.A. 851	- IV IV	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil produ	Peak oil production Total num		ber of wells	Maximum
OII (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrets	Year	Dritted	Completed	acreage
1,668	5	1,700	10	1	10,007	31,520	\$,575	1969	2	2	20

STIMULATION DATA (Jan. 1, 1973)

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: 9 5/8" cem. 1,500; 5 1/2" cem. through zones.

METHOD OF WASTE DISPOSAL: Surface disposal of waste water.

REMARKS:



Yolo County

LOCATION: 5 miles southwest of Woodland

TYPE OF TRAP: Sand pinchout on faulted homocline

ELEVATION: 97

DISCOVERY DATA

					Initial produ		ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
(Unnamed)	Supreme Oil and Gas Corp. "Supreme-Bell" 1	Supreme Oil and Gas Corp. "R.M. Bell Community" 1	9 9N 1E	MD	782	920	3/16	Sep 1967

Remarks: The well was originally drilled and abandoned by D.C. Basolo, Jr.

DEEPEST WELL DATA

		Date				Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec.	T. &	R.	8 & M		Strata	Age
Same as discovery well	D.C. Basolo, Jr. "R.M. Bell Community" 1	Sep 1960	9	9N	1E	MD	5,070	Winters	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness (feet)	Geologic			Salinity of	Original zone	Class BOPE
Zone	(feet)		Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
(Unnamed)	4,430	4	Lt Cretaceous	Winters	915	N.A.	1,585	IV

PRODUCTION DATA (1an. 1, 1973)

1972 Production		tion 1972 1972 Proved Maximum number Cumulative gas		Cumulative gas	Peak gas production		Total num	Maximum proved	
Net gas (Mcf)	Water (bbl)	acreage	producing wells	and the sector of the sector o	(Mcf)	Year	Drilled	Completed	acreage
0	0	40	0	0	0		1	1	40

SPACING ACT: Applies

BASE OF FRESH WATER: 2,500

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

METHOD OF WASTE DISPOSAL:

REMARKS: 2 7/8" casing was cemented through the zone in the discovery well; however, this is not a common completion practice. The well has been shut in since completion.



CONTOURS ON TOP OF WINTERS



Yolo County

LOCATION: 14 miles southwest of Woodland

TYPE OF TRAP: Erosional truncation of sands on homocline

ELEVATION: 185

DISCOVERY DATA

					Init	itial production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Rominger Peters	Westates Petroleum Co. "A.H. Rominger" 1 Pacific Gas and Electric Co. "Pleasant Creek Unit 3" 1	The Ohio Oil Co. "A.H. Rominger" 1 Shell Oil Co. "Pleasant Creek Unit 3" 1	4 8N 1W 8 8N 1W		5,250 9,550	1,390 510	1/2	Jun 1953 Dec 1948

Remarks:

DEEPEST WELL DATA

		Date				Depth	At total depth		
Present operator and well name	Original operator and well name		Sec.	T. &	R.	B & M		Strata	Age
The Divide Ridge Oil Co. No. 1	Same	Jul 1925	8	8N	1W	MD	5,006	Forbes (?)	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	(ieologic		Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
Rominger Peters	3,700 2,800	25 30	Lt Cretaceous Lt Cretaceous	Winters Winters	990 990	N.A. N.A.	1,670 1,270	IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas proc	luction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	acreage			(Mcf)	Year	Drilled	Completed	acreage
658,304	0	220	2	4,532,726	1,021,466	1952	17	6	220

SPACING ACT: Applies

BASE OF FRESH WATER: 1,700 - 2,700

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

METHOD OF WASTE DISPOSAL:

REMARKS: Commercial gas deliveries began in April 1951. Northeast portion of Pleasant Creek Gas field was also known as Chickahominy Gas field. Pacific Gas and Electric Company acquired the wells that are productive from the Peters sand in 1958 and converted them to gas storage in April 1960.

REFERENCES: Hunter, G.W., Pleasant Creek Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 41, No. 1 (1955).



POPPY RIDGE GAS FIELD Sacramento County

LOCATION: 14 miles southeast of Sacramento

TYPE OF TRAP: Lenticular sand

ELEVATION: 40

DISCOVERY DATA

					Initial produ		ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Atkinson	Milon L. Johnston "Atkinson" 1	Same as present	10 6N 5E	MD	4,500	2,575	17/64	Mar 1962
		1			į. –			-

Remarks: Initial production data from completion test of well.

DEEPEST WELL DATA

		Date				1.	Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec.	T. 8	R.	B&N		Strata	Age
Milon L. Johnston "Jillson" 1	Same	Aug 1962	9	6N	5E	MD	8,118	Basement	pre-Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	(Geologic		Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
Atkinson	7,270	9	Lt Cretaceous	Forbes	735	N.A.	3,220	IV
								ũ.

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		roduction 1972 1972 Proved Maximum number Cumulative gas		Peak gas production		Total num	Maximum		
Net gas (Mcf)	Water (bbl)	acreage	res	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	40	0	0			2	1	40

SPACING ACT: Applies

BASE OF FRESH WATER: 1,700

CURRENT CASING PROGRAM: 9 5/8" cem. 800; 4 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

REMARKS: The well is shut in.

POTRERO HILLS GAS FIELD (Abandoned)



POTRERO HILLS GAS FIELD (Abandoned)

Solano County

LOCATION: 5 miles southeast of Fairfield

TYPE OF TRAP: Faulted nose

ELEVATION: 100 - 360

DISCOVERY DATA

					Initial production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion	
Potrero	Atlantic Richfield Co. "Potrero Hills" 1	Richfield Oil Corp. "Potrero Hills" 1	10 4N 1W	MD	1,500	1,050	1/4	Dec 1938

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total o	depth
Present operator and well name	Original operator and well name		Sec. T. & R.	B & M		Strata	Age
McCulloch Oil Corp. "McCulloch-Macson Scally Unit" 1	McCulloch Oil Exploration Co. of Calif., Inc. "McCulloch-Macson Scally Unit" 1	Apr 1959	10 4N 1W	MD	9,020	Undiff. marine	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness				Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
otrero	3,245	6	Lt Cretaceous	Undiff. marine strata	970	340	1,420	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Production 1972 Proved M		1972 Iaximum number Cumulative gas		Peak gas production		Total number of wells		
Net gas (Mcf)	Water (bbl)	acreage		production (Mcf)	(Mcf)	Year	Drilled	Completed	proved	
0	0	0	0	21,542	20,042	1942	5	1	40	

SPACING ACT: Applies

BASE OF FRESH WATER: 1,100

CURRENT CASING PROGRAM: 9 5/8" cem. 1,000; 5 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

REMARKS: Commercial gas deliveries began in October 1942. The well was produced for 3 months and was abandoned in April 1943.

REFERENCES: Tolman, F.B., Potrero Hills Gas Field, in Geologic Formations and Economic Development of the Oil and Gas Fields of Calif.: Calif. Div. of Mines Bull. 118, p. 595 - 598 (1943).



LOCATION: 12 miles north of Colusa
ELEVATION: 70

DISCOVERY DATA

					Init			
Zone	Present operator and well name	Original operator and well name	Sec. T. & F.	B.& M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
Wild Goose	Rheem Calif. Land Co. "Southam" 1	Richard S. Rheem, Opr. "Southam" 1	25 18N 2W	MD	2,850	940	3/8	Dec. 1953

Remarks:

DEEPEST WELL DATA

		Date			Total depth	At tota	I depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B.& M.		Strata	Age
Intex Oil Co. "Capitol" 1-30	Same	July 1966	30 18N 1W	MD	7,703	Dobbins	Late Cret.

PRODUCING ZONES

	Average	Average net	Geologic		Heating value	Salinity of	Original zone	Class BOPE
Zone	depth (feet)	thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	pressure (psi)	required
Wild Goose	2,170	110	Late Cretaceous	Kione	980	N.A.	1,015	III B 2M

PRODUCTION DATA

1976 Proc	duction	1977	1976	1976	Peak gas production		Total number of wells		Maximum
Net gas (Mcf)	Water (bbl)	Proved acreage	Maximum number producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage
91,143	0	290	3	9,036,228	881,744	1956	14	4	320

SPACING ACT: Applies

BASE OF FRESH WATER: 1,800

CURRENT CASING PROGRAM: 10 3/4" cem. 650; 5 1/2" cem. through zone and across base of freshwater sands.

REMARKS: Commercial gas deliveries began in August 1955.

REFERENCES: Bruce, Donald D., Princeton Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 45, No. 1 (1959).



MARCH 1978

LOCATION: 5 miles southeast of Davis ELEVATION: 26

DISCOVERY DATA

					Init	ial product	tion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.&M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
S-4 Dunn Cowell	Shell Oil Co. "Glide" 1-3 Anacapa Oil Corp. "Sumpf-Williams-Dunn" 1 Shell Oil Co. "Shoshone Cowell" 1	Same Same Same	3 7N 3E 29 8N 3E 34 8N 3E	MD MD MD	2,080 1,600 970	2,050 2,050 2,550	1/2	Nov. 1973 Apr, 1974 June 1973

Remarks:

DEEPEST WELL DATA

	Date				At tota	l depth
Original operator and well name	started	Sec. T. & R.	B.& M.		Strata	Age
Same	Jan. 1974	33 8N 3E	MD	7,545	Winters	Late Cret.
		and the second	Original operator and well name started Sec. T. & R.	Original operator and well name started Sec. T. & R. B. & M.	Original operator and well name started Sec. T. & R. B. & M. (feet)	Original operator and well name Date started Sec. T. & R. B. & M. (feet) Strata

PRODUCING ZONES

	Average depth				Salinity of	Original zone	Class BOPE		
Zone	(feet)	(feet)	Age	Formation	+ (Btu)	zone water (ppm)	pressure (psi)	required	
S-4 Dunn Cowell	5,550 6,210 6,500	50 20 60	Late Cretaceous Late Cretaceous Late Cretaceous	Starkey Winters Winters	900 890 910	N.A. N.A. N.A.	2,420 2,710 2,995	III B 3M III B 3M III B 3M	

PRODUCTION DATA

1976 Proc	luction	1977	1976	1976	Peak gas produ	ction	Total numb	er of wells	Maximum
Net gas (Mcf)	Water (bbl)	Proved acreage	Maximum number producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
3,875,386	10	720	8	7,408,083	3,875,386	1976	13	9	720

SPACING ACT: Applies

BASE OF FRESH WATER: 2,000-2,500

CURRENT CASING PROGRAM: 8 5/8" cem. 1,000-1,500; 5 1/2" cem. through zone and across base of freshwater sands.

REMARKS: Commercial gas deliveries began in December 1974.

REFERENCES: None

January 1978





LOCATION: 7 miles northeast of Orland

TYPE OF TRAP: Lenticular sands on faulted anticline

ELEVATION: 200

DISCOVERY DATA

					Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Moda Kione (Unnamed sand stringers)	G.E. Kadane & Sons "Moda A" 54-10 The Termo Co. "Moda A Unit" 3 The Termo Co. "Rancho Capay Unit 1" 1	General Petroleum Corp. "Moda A" 54-10 Trico Oil and Gas Co. "Moda A Unit" 3 Trico Oil and Gas Co. "Rancho Capay Unit" 1	10 22N 2W	MD MD MD	5,800 730 4,000	390 1,000 1,400		Aug 1959 *Jun 1966 Aug 1962

Remarks: * Originally completed in a Forbes sand stringer in May 1964; plugged back and recompleted in the Kione.

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
The Termo Co. "Rancho Capay Unit 1" 1	Trico Oil and Gas Co. "Rancho Capay Unit" 1	Aug 1962	4 22N 2W	MD	6,035	Dobbins	Late Cret

PRODUCING ZONES

Average	Average net	Geologic			Salinity of	Outstant menn	Class BOPE
(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
1,710	20	post-Eocene	Undiff. nonmarine strata	860	N.A.	660	IV
2,580	10	Lt Cretaceous	Kione	950	N.A.	1,120	IV
4,540 - 5,000	1 - 30 per stringer	Lt Cretaceous	Forbes	1,000	N.A.	2,405 - 2,705	IV
	depth (feet) 1,710 2,580 4,540 - 5,000	depth (feet) thickness (feet) 1,710 20 2,580 10 4,540 - 1 - 30 per 5,000	depth (feet) thickness (feet) Age 1,710 20 post-Eocene 2,580 10 Lt Cretaceous 4,540 - 1 - 30 per Lt Cretaceous 5,000 stringer	depth (feet) thickness (feet) Age Formation 1,710 20 post-Eocene Undiff. nonmarine strata 2,580 10 Lt Cretaceous Kione 4,540 - 1 - 30 per Lt Cretaceous Forbes 5,000 stringer Lt Cretaceous Forbes	depth (feet) thickness (feet) Age Formation post-Eocene Gas (btu) 1,710 20 post-Eocene Undiff. nonmarine strata 860 2,580 10 Lt Cretaceous Kione 950 4,540 - 1 - 30 per 5,000 Lt Cretaceous Forbes 1,000	depth (feet) thickness (feet) Georgic (feet) zone water gr/gal 1,710 20 post-Eocene Undiff. nonmarine strata Gas (btu) gr/gal 2,580 10 Lt Cretaceous Kione 950 N.A. 4,540 - 1 - 30 per Lt Cretaceous Forbes 1,000 N.A.	depth (feet) thickness (feet) Age Formation (feet) Age Formation (feet) Cas (btu) zone water gr/gal Original zone pressure (psi) 1,710 20 post-Eocene Undiff. nonmarine strata 860 N.A. 660 2,580 10 Lt Cretaceous Kione 950 N.A. 1,120 4,540 - 1 - 30 per 5,000 Lt Cretaceous Forbes 1,000 N.A. 2,405 -

PRODUCTION DATA (Jan. 1, 1973)

1972 Pro	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas prot	duction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbi)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
187,973	57	400	3	1,960,481	246,336	1967	10	6	440

SPACING ACT: Applies

BASE OF FRESH WATER: 1,200

.

CURRENT CASING PROGRAM: 9 5/8" cem. 600; 5 1/2" cem. through zones and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Sumps at well sites.

REMARKS: Commercial gas deliveries began in March 1961.

REFERENCES: Land, P.E., Rancho Capay Gas Field: Calif. Div. of Oil and Gas, Summary of Operations - Calif. Oil Fields, Vol. 56, No. 1 (1970).

RED BANK CREEK GAS FIELD (Abandoned)



32	33	
+	1 1	
_i	T27N R3W	
1	1 T26N R3W	
5	4	
+	*	
8	9	
17		

DEFINITIVE DATA UNAVAILABLE

LOCATION: 4 miles southeast of Red Bluff

TYPE OF TRAP: Lenticular sand

ELEVATION: 304

DISCOVERY DATA

					Ini	tial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
(Unnamed)	Red Bluff Associates "Goff" 1	Kenyon C. Sills, Oper., Inc. "Goff" 1	4 26N 3W	MD	1,040	1,227	3/16	Aug 1964

Remarks: The well was originally drilled and abandoned by Humble Oil & Refining Co. (now Exxon Corp.).

DEEPEST WELL DATA

		Date			Depth	At tota	i depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B&M		Strata	Age
Same as discovery well	Humble Oil & Refining Co. "Henry James Goff, et ux" 1	Jul 1960	4 26N 3W	MD	5,800	Dobbins	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	(Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
(Unnamed)	4,158	8	Lt Cretaceous	Forbes	900	N.A.	2,040	IV
				1	1 1			
				1				

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total num	Maximum proved	
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (McI)	(Mcf)	Year	Drilled	Completed	acreage
0	0	0	0	19,076	9,767	1965	1	1	40

SPACING ACT: Applies

BASE OF FRESH WATER: 2,650

CURRENT CASING PROGRAM: 8 5/8" or 7" cem. 500; 4 1/2" cem. through zone and across base of fresh-water sands. (See Remarks)

METHOD OF WASTE DISPOSAL.

REMARKS: Commercial gas deliveries began in December 1965. The field was abandoned in March 1972. 2 7/8" casing was cemented through the zone in the producing well, but this is not common practice in this area.





LOCATION: 5 miles northeast of Orland

ELEVATION: 250

DISCOVERY DATA

					Initial production			1
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.& M.	Daily (Mcf)	Flow pressure (psi)	Bean size (inches)	Date of completion
(Unnamed sand stringers)	McCulloch Oil & Gas Corp. "Nellie P. Walker Unit" 2	Sunray DX Oil Co. "Nellie P. Walker Unit" 2	24 23N 3W	MD	*3,385 1,400 1,330	970 880 835	3/8 1/4 1/4	May 1964
(Unnamed sand stringers)	Sun Oil Co. "George S. Reid Unit" 1	Sunray DX Oil Co. "George S. Reid Unit" 1	13 23N 3W	MD	3,230	1,290	5/16	May 1963

Remarks: * Triple completion (three strings of 2 7/8" tubing cemented in hole).

DEEPEST WELL DATA

		Date started		B.& M.	Total depth (feet)	At total depth		
Present operator and well name	Original operator and well name		Sec. T. & R.			Strata	Age	
Sun Oil Co, "Victor Ranch" 4	Sunray DX Oil Co. "Victor Ranch" 4	May 1965	7 23N 2W	MD	12,175	Venado -	Late Cret.	

PRODUCING ZONES

Zone	Average depth (feet)	Average net			Heating value	Salinity of	Original zone	Class BOPE
		thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	(psi)	required
(Unnamed sand stringers)	2,000-2,660	5-40 per stringer	Late Cretaceous	Kione	870-965	10,100	970-1,270	III B 2M
(Unnamed sand stringers)	4,250- 5,500	5-30 per stringer	Late Cretaceous	Forbes	988-1,016	16,600- 23,800	2,260-3,140	III B 3M

PRODUCTION DATA

1976 Production		1977	1977	1976	Peak gas production		Total num	Maximum	
Net gas (Mcf)	Water (bbl)	Proved acreage	Maximum number producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage
973, 537	10,047	2,720	16	18,854,377	2,637,249	1967	32	19	2,800

SPACING ACT: Applies

BASE OF FRESH WATER: 1,450-1,700

CURRENT CASING PROGRAM: Kione Formation: 9 5/8" cem. 600; 4 1/2" cem. through gas zones and across base of freshwater sands. Forbes Formation: 9 5/8" cem. 1,100; 4 1/2" cem. through gas zones and across base of freshwater sands. REMARKS: Commercial gas deliveries began in May 1964.

REFERENCES: Hill, F. L., Rice Creek Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 56, No. 1 (1970).



JULY 1977
LOCATION: 10 miles northeast of Woodland

ELEVATION: 20

DISCOVERY DATA

					Initial production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8.& M.	Daily (Mcf)	Daily pressure		Date of completion
(Unnamed)	Shell Oil Co. "Jesus-Maria" l	Same	4 10N 3E	MD	3, 394	915	24/64	July 1972

Remarks:

DEEPEST WELL DATA

		Date			Total depth	At tota	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	B.& M.		Strata	Age
Shell Oil Co. "Jesus-Maria" 1	Same	June 1972	4 10N 3E	MD	4,504	Sacramento Shale	Late Cret.

PRODUCING ZONES

	Average	Average net	G	eologic	Heating value	Salinity of	Original zone	Class BOPE
Zone	depth (feet)	thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	(psi)	required
(Unnamed)	2,470	50	Eocene-Paleocene	Meganos-Martinez	864-884	N.A.	1,275	III B 2M

PRODUCTION DATA

1976 Pro	duction	1977	1976	1976	Peak gas production		Total numb	er of wells	Maximum	
Net gas (Mcf)	Water (bbl)	Proved acreage	Maximum number producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage	
0	0	160	0	0	See Remarks		3	3	160	

SPACING ACT: Applies

BASE OF FRESH WATER: 1,000

CURRENT CASING PROGRAM: 8 5/8" or 7" cem. 500; 5 1/2" or 4 1/2" cem. through zone and across base of freshwater sands.

REMARKS: Commercial gas deliveries began in January 1977.

REFERENCES: None



CONTOURS ON TOP OF DOMENGINE MAIN SAND



LOCATION: Surrounding Rio Vista; 30 miles southwest of Sacramento

TYPE OF TRAP: Faulted dome; lenticular sands

ELEVATION: 50

DISCOVERY DATA

							Init	al producti	00	
Zone	Present operator and well name	Original operator and well name	Sec	. T. (5 R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Nortonville	Texaco Inc. "Brannan Isl. Unit" 2	The Texas Co. "Huth Unit" 2	28	4N	3E	MD	190	N.A.	N.A.	Sep 195
Emigh	Amerada Hess Corp., Unit Opr. "RVGU" 55	Amerada Pet. Corp. of Calif. "Emigh" 1	26	4N	2E	MD	8,750	1,375	1/2	Jun 193
Capay stringers	Union Oil Co. of Calif. "Gardiner" 1	D.D. Feldman "Gardiner" 1	35	4N	3E	MD	3,010	1,670	1/4	May 194
Hamilton	Amerada Hess Corp., Unit Opr. "RVGU" 62	Amerada Pet. Corp. of Calif. "M. Hamilton"	26	4N	2E	MD	*4,160	290	3/4	Nov 193
Midland	Amerada Hess Corp., Unit Opr. "RVGU" 17	Standard Oil Co. of Calif. "Midland Fee" 5	4	3N	38	MD	*5,700	N.A.	N.A.	Jun 194
M-5	Same as above	Same as above	4	3N	3E		13,340	1,635	5/8	Aug 194
Anderson	Amerada Hess Corp., Unit Opr. "RVGU" 32	Standard Oil Co. of Calif. "Perry Ander- son" H-6	36	4N	2E	MD	11,700	2,145	1/2	
Martinez stringers	Standard Oil Co. of Calif. "Perry Anderson" 11	Standard Oil Co. of Calif. "Perry Anderson" 11	35	4N	2E	MD	4,250	1,810	3/8	Oct 196
McCormick	Same as above	Same as above	35	4N	2E	MD	5,330	1,925	3/8	Oct 196
Petersen	Amerada Hess Corp. "E. Drouin" 8	Amerada Petroleum Corp. "Drouin" 8	23	4N	2E	MD	400	125	3/8	Apr 196

Remarks: * Open-hole formation test.

DEEPEST WELL DATA

		Date		<u>.</u>	Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age.
Standard Oil Co. of Calif. "Peter Cook" 15	Same	May 1964	8 4N 3E	MD	15,050	Forbes	Late Cret

	Average depth	Average net thickness	1	Geologic		Salinity of	Ortelant	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	Original zone pressure (psi)	required
Nortonville	3,700 - 4,200	25	Eocene	Nortonville	1,010	N.A.	1,230	IV
Emigh	3,800 - 4,300	40 - 315	Eocene	Domengine	1,000 - 1,050	360 - 550	1,715 -	IV
Capay stringers	4,500 - 5,100	20 - 40 per stringer	Eocene	Capay	1,050 - 1,070	500 - 910	1,930	IV
Hamilton	5,300	90	Eocene	Meganos	1,060	900 - 1,100	2,415	IV
Midland	4,500	40 - 140	Eocene	Meganos	1,000 - 1,055	810	2,060	IV IV
M-5	5,050	10	Paleocene	Martinez	990	660	2,210	IV
Anderson Martinez stringers	5,750 5,800 -	45 30 - 120	Paleocene	Martinez	1,070	800 - 1,100	2,550	IV
Marcinez scringers	6,900	per stringer	Paleocene	Martinez	1,065	900	2,865	IV
McCormick	6,500 - 7,600	50	Paleocene	Martinez	1,060	610 - 885	2,930	IV IV
Petersen	9,650	55	Lt Creatceous	Starkey	1,080	450	4,860	v
PRODUCTION DATA (J	an. 1, 1973)							
1972 Productio	n	1972 Mari	1972 Cur	Peak	gas production	Total number of	wells Maximum	1

1972 Pro	duction	Proved	Maximum number	Cumulative gas	Peak gas pro	Peak gas production		iber of wells	proved
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
71,398,805	135,959	23,130	159	2,768,030,190	159,577,428	1945	298	248	24,590

SPACING ACT: Applies

BASE OF FRESH WATER: 1,900 - 2,900

CURRENT CASING PROGRAM: 9 5/8" cem. 600 - 1,000; 5 1/2" cem. through zones and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water hauled by truck to disposal site; disposal of some waste water into sumps.

- REMARKS: Commercial gas deliveries began in September 1937. 1972 condensate production 46,310 bbl.; cumulative condensate production 1,157,976 bbl. Effective January 1965, most of the field was unitized, with Amerada Hess Petroleum Corp. acting as unit operator.
- REFERENCES: Burroughs, Ernest, Rio Vista Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 53, No. 2 Part 2 (1967). Burroughs, Ernest, G.W. Beecroft, and R.M. Barger, Rio Vista Gas Field: Am. Assoc. Petroleum Geologists, Memoir No. 9, p. 93-101 (1968). Corwin, C.H., Rio Vista Gas Field, Isleton Area: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 39, No. 1 (1953). Frame, R.G., Rio Vista Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 39, No. 1 (1953). Railroad Commission of the State of Calif. and Calif. Div. of Oil and Gas, Rio Vista Gas Field in Estimate of Natural Gas Reserves of the State of Calif.: Case No. 4591, Special Study No. S-258, p. 245-251 (1942). Soper, E.K., Rio Vista Gas Field in Geologic Formations and Economic Development of the Oil and Gas Fields of Calif.: Calif. Div. of Mines Bull. 118, p. 591-594 (1943).







LOCATION: 5 miles east of Antioch

TYPE OF TRAP: Homocline truncated by gorge; lenticular sands; compaction flexure

ELEVATION: 17

DISCOVERY DATA

							Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec	:. T. I	& R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in)	Date of completion
Hamilton	Great Yellowstone Corp. "Massoni- DeMartini" 1	Same as present	26	2N	2E	MD	1,645	1,470	15/64	Jun 1968
Dal Porto	Gulf Oil Corp. "Sesnon-Gulf" 1	Helm Co. & Robt. Sumpf "Sesnon-Gulf" 1	24	2N	2E	MD	17,000	1,830	5/8	Dec 1964
Romiti	Great Yellowstone Corp. "Turner" 1	Same as present	26	2N	2E	MD	3,590	1,750	20/64	Jan 1968
First Massive	Great Yellowstone Corp. "Romiti" 1	Same as present	26	2N	2E	MD	3,190	1,910	18/64	Jun 1968
									e 3	
								÷	<u>.</u>	

Remarks:

DEEPEST WELL DATA

	Date					Depth	At total d	lepth
Present operator and well name	Original operator and well name	started	Sec.	T. & R	B&M	(feet)	Strata	Age
Gulf Oil Corp. "Porter Sesnon" 1	Gulf Oil Corp. of Calif. "Porter Sesnon" 1	Jul 1963	25	2N 2	E MD	9,018	Undiff. marine	Late Cret

PRODUCING ZONES

	Average depth	Average net Geologic		Salinity of	Original zone	Class BOPE		
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
Hamilton Dal Porto Romiti First Massive	5,015 5,450 5,540 5,660	30 40 25 60	Eocene Paleocene Paleocene Paleocene	Meganos Martinez Martinez Martinez	1,060 1,020 1,020 1,100	N.A. 280 N.A. 410	2,220 2,500 2,500 2,520	*IV or V IV or V IV or V IV or V

* BOPE Class depends on location of well.

PRODUCTION DATA (Jan. 1, 1973)

1972 Pro	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas proc	Peak gas production Total number of wells		Total number of wells	
Net gas (Mcf)	Water (bbl)	acreage		(Mcf)	Year	Drilled	Completed	acreage	
1,479,384	22,032	600	7	4,998,749	1,648,021	1971	18	9	700

SPACING ACT: Applies .

BASE OF FRESH WATER: 250

CURRENT CASING PROGRAM: 9 5/8" or 8 5/8" cem. 850; 5 1/2" or 4 1/2" cem. through zones.

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

REMARKS: Commercial gas deliveries began in December 1966. 1972 condensate production 3,382 bbl.; cumulative condensate production 11,105 bbl.

REFERENCES: Williams, P.A., River Break Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 58, No. 1 (1972).



COURTESY OF UNION OIL COMPANY OF CALIFORNIA





1

LOCATION: 3 miles north of Port Chicago ELEVATION: Sea level

DISCOVERY DATA

					Init	ial product	ion	
Zone	Present operator and well name	name Original operator and well name		B.&M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
Suisun Domengine	Chevron U.S.A. Inc. "Ryer" 1 Same	Standard Oil Co. of Calif. "S.O. Opr Ryer" 1 Same	30 3N 1W 30 3N 1W		3,875 11,545	1,305	1/2	July 1967 July 1967

Remarks:

DEEPEST WELL DATA

		Date			Total depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B.& M.		Strata	Age
Chevron U.S.A. Inc. "Ryer" 1	Standard Oil Co. of Calif. "S.O. Opr Ryer" 1	Aug. 1966	30 3N 1W	MD	8,942	Martinez	Paleocene

PRODUCING ZONES

Average		Average net		Geologic	Heating value	Salinity of	Original zone	0000	
Zone	depth (feet)	thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	pressure (psi)	Class BOPE required	
Suisun Domengine	4,470 4,750	60 200	Eocene Eocene	Nortonville Domengine	1,070 1,100	N.A. N.A.	2,410 2,405	III B 3M III B 3M	
2 ×									

PRODUCTION DATA

1976 Proc	fuction	1977	1976	1976	Peak gas production		Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	Proved acreage	Maximum number producing wells		(Mcf)	Year	Drilled	Completed	proved acreage
8,318,372	2,835	400	5	86,536,658	13,437,832	1973	8	7	40

SPACING ACT: Applies

BASE OF FRESH WATER: 1,100

CURRENT CASING PROGRAM: 22" to 14" driven or cem. 40-300; 10 3/4" cem. 1,100-1,500; 7" or 5 1/2" cem. through zone.

REMARKS: The wells are directionally drilled, with two producing wells on two platforms and three producing wells on Ryer Island. Commercial gas deliveries began in October 1968. 1976 condensate production 9,739 bbl; cumulative condensate production 118,139 bbl.

REFERENCES: None

LOCATION: 3 miles north of Port Chicago

TYPE OF TRAP: Anticline

ELEVATION: 0

DISCOVERY DATA

					Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R	. B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Suisun	Standard Oil Co. of Calif. "Ryer" 1	Standard Oil Co. of Calif. "S.O. Opr Ryer" 1	30 3N 1	W MD	3,875	1,305	1/2	10.125.02510000
Domengine	Same as above	Same as above	30 3N 11	N MD	11,545	1,725	1/2	Jul 1967

Remarks:

DEEPEST WELL DATA

		Date					Depth	At total depth	
Present operator and well name	Original operator and well name	started	Sec.	T. & I	₹.	B & M		Strata	Age
Same as discovery well	Same	Aug 1966	30	3N	1W	MD	8,942	Martinez	Paleocene

PRODUCING ZONES

	Average depth	Average net thickness	Geologic			Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Suisun Domengine	4,470 4,750	60 200	Eocene Eocene	Nortonville Domengine	1,070 1,100	7	2,410 2,405	IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas pro	duction	Total num	ber of wells	Maximum proved
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
11,500,048	3,382	400	б	42,970,756	11,500,048	1972	7	6	400

SPACING ACT: Applies

BASE OF FRESH WATER: 1,100

CURRENT CASING PROGRAM: 22" to 14" driven or cem. 40 - 300; 10 3/4" cem. 1,000 - 1,500; 7" or 5 1/2" cem. through zone.

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

REMARKS: The wells are directionally drilled, with three producing wells on two platforms and three producing wells on Ryer Island. Commercial gas deliveries began in October 1968. 1972 condensate production 22,248 bbl.; cumulative condensate production 56,730 bbl.

LOCATION: 6 miles southwest of Stockton

TYPE OF TRAP: Anticline

ELEVATION: Sea level

DISCOVERY DATA

					Ini	tial product		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure {psi}	Bean size (in.)	Date of completion
McDonald Island	Arcady Oil Co. "Woods Community 2" 1	Standard Oil Co. of Calif. "Woods Community 2" 1	23 1N 5E	MD	5,610	1,765	3/8	Aug 1942

Remarks:

DEEPEST WELL DATA

		Original operator and well name Date Started			Depth	At total depth	
Present operator and well name	Original operator and well name		Sec. T. & R.	B & M		Strata	Age
Standard Oil Co. of Calif. "Woods Community" 2-5	Same	Feb 1962	26 1N 5E	MD	11,426	Panoche	Lt Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
McDonald Island	5,250	10	Eocene	Meganos	955	300 - 700	2,340	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		2 Production 1972 1972 Proved Maximum number Cumulative gas		Peak gas production		Total num	Maximum proved		
Net gas (Mcf)	Water (bbl)	acreage		production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
457,496	1,194	100	3	26,990,717	3,237,588	1960	35	17	1,580

.

SPACING ACT: Applies

BASE OF FRESH WATER: 75

CURRENT CASING PROGRAM: 9 5/8" cem. 500; 5 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL: Waste water injected into two water disposal wells.

REMARKS: The northwest portion of the field was formerly known as the Whiskey Slough area. Commercial gas deliveries began in October 1942.

REFERENCES: Huey, W.F., Roberts Island Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 44, No. 1 (1958).

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Sacramento, Sutter, and Yolo Counties (County)

LOCATION: 10 miles northwest of Sacramento

ELEVATION: 20

DISCOVERY DATA

					Ini			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.&M.	Daily (Mcf)	Flow pressure (psi)	Bean size (inches)	Date of completion
Moreno S-1 S-2 S-3	Shell Oil Co. "Silva-Betts" 1-25 Shell Oil Co. "Sacramento Airport" 1-19 Shell Oil Co. "Sacramento Airport" 1-30 Shell Oil Co. "Sacramento Airport" 2-24	Same Same Same Same	25 10N 3E 19 10N 4E 25 10N 3E 24 10N 3E	MD MD MD MD	235 195 210 170	1,000 1,080 1,180 1,250	N.A. N.A. N.A. N.A.	Nov. 1973 Nov. 1974 May 1974 Jan, 1974

Remarks:

DEEPEST WELL DATA

		depth	A 104	al depth
Sec. T. & R.	B.& M.		Strata	Age
6 10N 4E	MD	4,500	Forbes	Late Cret.
÷			Sec. T. & R. B. & M. depth (feet) 6 10N 4E MD 4,500	Sec. T. & R. B. & M. (feet) Strata

PRODUCING ZONES

:t	Average	Average net	G	eologic	Heating value	Salinity of	Original zone	City DODE
Zone	depth (feet)	thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	(psi)	Class BOPE required
Moreno S-1 S-2 S-3	2,200 2,600 2,775 2,900	23 12 12 15	Eocene-Paleocene Late Cretaceous Late Cretaceous Late Cretaceous	Meganos-Martinez Starkey Starkey Starkey	851 611 852 827	N.A. N.A. N.A. N.A.	1,080 1,200 1,250 1,330	III B 2M III B 2M III B 2M III B 2M

PRODUCTION DATA

1976 Pro	duction	1977	1976 Maximum number	1976	Peak gas pro	Peak gas production		ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	Proved acreage	producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage
0	0	1,620	0	0	See Remarks		21	16	1,620

SPACING ACT: Applies

BASE OF FRESH WATER: 1,400-1,700

CURRENT CASING PROGRAM: 8 5/8" cem. 900; 5 1/2" cem. through zone and across base of freshwater sands.

REMARKS: Commercial gas deliveries began in January 1977.

REFERENCES: None

SACRAMENTO BY-PASS GAS FIELD



LOCATION: 6 miles west of Sacramento

TYPE OF TRAP: Permeability barrier on a homocline

ELEVATION: 22

DISCOVERY DATA

		Initial produc					ion		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion	
Swanston	Supreme Oil and Gas Corp. "Swanston" 1	Phillips Petroleum Co. "Swanston" 1	26 9N 3E	MD	1,150	760	1/4	Nov 1961	
			1						

Remarks:

DEEPEST WELL DATA

		Date					Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec.	T. &	R.	B & M		Strata	Age
Same as discovery well	Same	Sep 1961	26	9N	3E	MD	11,194	Dobbins	Lt Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	Gas (btu)	gr/gal	pressure (psi)	required
Swanston	2,160	8	post-Eocene	Undiff. nonmarine strata	850	N.A.	925	IV	

PRODUCTION DATA (Jan. 1, 1973)

1972 Pro	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas pro	duction	Total number of wells		Maximum proved
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	40	0	2,179	1,201	1967	3	1	40

SPACING ACT: Applies

BASE OF FRESH WATER: 2,100

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

METHOD OF WASTE DISPOSAL:

REMARKS: The well produced gas from December 1967 to April 1968 and is now shut in.



SARGENT OIL FIELD Santa Clara County

LOCATION: 6 miles south of Gilroy

TYPE OF TRAP: Faulted anticline

ELEVATION: 400

DISCOVERY DATA

						daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Tar Purisima 1st Monterey 2nd Monterey 3rd Monterey	Sargent Oil Co. No. 1 Same as above Same as above Same as above Same as above	Watsonville Oil Co. No. 1 Same as above Same as above Same as above Same as above	36 11S 3E 36 11S 3E 36 11S 3E 36 11S 3E 36 11S 3E	MD MD MD	*40	N.A. N.A. N.A. N.A. N.A.	1906 1906 1906 1906 1906

Remarks: * Combined production for all zones.

DEEPEST WELL DATA

		Date			Depth	At tota	il depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Occidental Petroleum Corp. "Sargent" 1	Same	Oct 1967	36 11S 3E	MD	6,972	N.A.	Miocene

PRODUCING ZONES

	Average depth	(feet) Age Formation Gas (btu) gr/gal 75 Pliocene (?) Purisima (?) 10 120 N 130 Pliocene (?) Purisima (?) 16 120 N 50 Miocene (?) Monterey (?) 17 60 N 50 Miocene (?) Monterey (?) 17 60 N					Class BOPE
Zone	(feet)		required				
Tar	300	75	Pliocene (?)	Purisima (?)	10	120	None
Purisima	600	130	Pliocene (?)	Purisima (?)	16	120	None
1st Monterey	850	50	Miocene (?)	Monterey (?)	17	60	None
2nd Monterey	1,000	50	Miocene (?)	Monterey (?)	17	60	None
3rd Monterey	1,100	30	Miocene (?)	Monterey (?)	17	60	None
			1				
	1 1						

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative p	ative production Peak oil production Tota		k oil production Total number of wells		Maximum proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	10	0	788,651	275,070	63,780	1909	33	15	70

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Does not apply

BASE OF FRESH WATER: 200

CURRENT CASING PROGRAM: 8 5/8" cem. above objective zone; 5 3/4" liner landed through zone.

METHOD OF WASTE DISPOSAL: Sumps,

REMARK5: As early as 1861, oil was refined from asphaltum taken from "tar springs" in the vicinity of the field. Exploratory wells were drilled as early as 1886. Artesian salt water flow was reported at 1,615. A blowout was reported in one well at 1,082. The last oil production was in 1968.

REFERENCES: Allen, J.E., Geology of the San Juan Bautista Quadrangle, Calif. Calif. Div. of Mines Bull. 133, p. 73-74 (1946). Calif. State Mining Bureau Bull. 69, p. 470 & 506 (1914). Davis, F.F., Mines and Mineral Resources of Santa Clara County Calif.: Calif. Div. of Mines, Calif. Journal of Mines and Geology Vol. 50, No. 2, p. 383-385 (1954). Michelin, James, Sargent Oil Field: Calif. Div. of Mines Bull. 118, p. 23, 77, 79, and 475 (1943).





CONTOURS ON TOP OF K-4 SAND



LOCATION: 9 miles southeast of Davis

TYPE OF TRAP: Faulted noses

ELEVATION: 10

DISCOVERY DATA

			1				Ini	tial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec	. T.	& R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
K-4	Signal Oil and Gas Co. "H & C - Glide Colby" 4	Same as present	29	7N	3E	MD	4,850	2,414	20/64	A REAL PROPERTY OF
Glide	Signal Oil and Gas Co. "H & C - Glide Colby" l	Hunnicutt & Camp Drilling Co. "Glide - Colby" 1	29	7N	3E	MD	4,950	2,225	20/64	Feb 1968

Remarks:

DEEPEST WELL DATA

		Date					Depth	At tot	al depth
Present operator and well name	 Original operator and well name 	started	Sec	. T. I	& R.	B&M		Strata	Age
Signal Oil and Gas Co. "H & C - Glide" 1	Same	Nov 1971	17	7N	3E	MD	9,400	Forbes	Late Cret

PRODUCING ZONES

depth	Average	thickness zone wa	Salinity of	Original zone	Class BOPE				
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required	
K-4 Glide	6,280 7,050	30 10	Lt Cretaceous Lt Cretaceous	Starkey Winters	860 840	N.A. 655	2,865 3,355	IV IV	

*

1972 Pro	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas prot	iuction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
1,806,406	594	890	- 7	4,625,090	1,806,406	1972	16	9	890

SPACING ACT: Applies

BASE OF FRESH WATER: 2,500

CURRENT CASING PROGRAM: 8 5/8" or 7" cem. 900; 5 1/2" or 4 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Percolation and evaporation sumps.

REMARKS: Commercial gas deliveries began in January 1970.





LOCATION: 10 miles east of Princeton

TYPE OF TRAP: Faulted anticline

ELEVATION: 85

DISCOVERY DATA

					In	tial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Schohr	Exxon Corp. "Elna B. Schohr" 1	Humble Oil & Refining Co. "Elna B. Schohr" 1	23 18N 1E	MD	5,073	800	1/2	Mar 1957

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Exxon Corp. "Elna B. Schohr" 2	Humble Oil & Refining Co. "Elna B. Schohr" 2	May 1957	14 18N 1E	MD	5,830	Basement	pre-Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	G	eologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age Formation		Gas (btu)	gr/gal	pressure (psi)	required
Schohr	2,570	15	Late Cretaceous	Kione	840	250	1,220	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total num	iber of wells	Maximum proved
Net gas (Mcf)	Water (bbi)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	0	0	2,112,993	754,974	1960	8	4	360

SPACING ACT: Applies

BASE OF FRESH WATER: 1,200

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

METHOD OF WASTE DISPOSAL:

REMARKS: Commercial gas deliveries began in December 1959. The field was abandoned in March 1970.



CONTOURS ON TOP OF ANDERSON SAND



Contra Costa, Sacramento, and Solano Counties

LOCATION: 5 miles northeast of Antioch

ELEVATION: 10

DISCOVERY DATA

							Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec	. T. &	R.	8.& M.	Daily (Mcf)	Flow pressure (psi)	Bean size (inches)	Date of completion
Nortonville Hamilton Anderson	Q. R. Grenfell & Son "Dozier-Pressley" 2 Occidental Pet. Corp. "Reynolds Unit One" 1 Aminoil USA, Inc. "Upham" 1	Same Occidental Pet.Corp. "F. H. Reynolds" 1 Same	16 35 27	3N 3N 3N		MÐ	1,248 2,297 5,770	1,540 1,835 2,163	3/16 1/4 21/64	July 1970 Apr. 1966 Sep. 1965

Remarks: Anderson zone initially yielded 19 bbl condensate (40% water cut); Hamilton zone yielded trace amounts of condensate.

DEEPEST WELL DATA

		Date			Total depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B.& M.		Strata	Age
Occidental Petroleum Corp. "Upham" 1	Same	Oct. 1962	34 3N 2E	MD	12,067	D zone (Goudkoff)	Late Cret.

PRODUCING ZONES

	Average	Average net		Geologic	Heating value	Salinity of	Original zone	Class BOPE
Zone	depth (feet)	thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	pressure (psi)	required
Nortonville Hamilton Anderson	4,770 5,750 6,100	7 75 50	Eocene Eocene Paleocene	Nortonville Meganos Martinez	985 1,016 1,028	N.A. 1,810 10,000	1,874 2,591 3,112	III B 2M III B 3M III B 3M

PRODUCTION DATA

1976 Prod	luction	1977	1976	1976	Peak gas produ	as production Total number of wells		Total number of wells		
Net gas (Mcf)	Water (bbi)	Proved acreage	Maximum number producing wells	Cumulative gas production (Mcf)	(Mcf) Year		Drilled	Completed	proved acreage	
841,742	157,511	1,100	6	28,647,159	6,166,271	1966	29	17	1,660	

SPACING ACT: Applies

BASE OF FRESH WATER: 800

CURRENT CASING PROGRAM: 8 5/8" cem. 900; 5 1/2" cem. through zone.

REMARKS: Commercial gas deliveries began in October 1967. 1976 condensate production 1,832 bbl; cumulative condensate production 92,337 bbl.

REFERENCES: Ditzler, C. C., Sherman Island Gas Field, in Selected Papers Presented to San Joaquin Geological Society, Vol. 4, p. 21-25 (1972).



LOCATION: 10 miles north of Colusa ELEVATION: 73

DISCOVERY DATA

					Ini	tial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.& M.	Daily (Mcl)	Flow pressure (psi)		Date of completion
(Unnamed)	Shell Oil Co. "Thousand Acre Ranch 1" 1	Same	1 17N 2W	MD	13,000	N.A.	N.A.	July 1976

Remarks:

DEEPEST WELL DATA

		Date			Total depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B.& M.		Strata	Age
Shell Oil Co. "Thousand Acre Ranch 1" 1	Same	June 1976	1 17N 2W	MD	4,085	Forbes	Late Cret.

PRODUCING ZONES

	Average	Average net	G	eologic	Heating value	Salinity of	Original zone	Class BOPE
Zone	depth (feet)	thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	pressure (psi)	required
(Unnamed)	2,490	20	Late Cretaceous	Kione	928	N.A.	1,110	III B 2M

PRODUCTION DATA

1976 Proc	duction	1977	1976	1976	Peak gas pro	Peak gas production Total number of wells		Total number of wells	
Net gas (Mcf)	Water (bbl)	Proved acreage	Maximum number producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage
0	0	40	0	0	See Remarks		1	1	40

SPACING ACT: Applies

BASE OF FRESH WATER: 1,900

CURRENT CASING PROGRAM: 8 5/8" cem. 1,400; 5 1/2" cem. through zone and across base of freshwater sands.

REMARKS: Commercial gas deliveries have not yet begun.

REFERENCES: None



MAPCH 1978

LOCATION: 3 miles northeast of Woodland ELEVATION: 55

DISCOVERY DATA

					Init	ial product	tion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.& M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
S-3 (Unnamed)	The Dow Chemical Co. "Unit 485" 1 The Dow Chemical Co. "Wauhab" 1	Same Same	9 10N 2E 9 10N 2E	MD MD	1,380 4,020	1,550	3/16 20/64	

Remarks:

DEEPEST WELL DATA

	Date				At tota	l depth
Original operator and well name	started	Sec. T. & R.	B.& M.		Strata	Age
Same	June 1976	9 10N 2E	MD	6,271	Winters	Late Cret.
			Original operator and well name started Sec. T. & R.	Original operator and well name started Sec. T. & R. B.& M.	Original operator and well name Date started Sec. T. & R. B. & M. (feet)	Original operator and well name Started Sec. T. & R. B. & M. (feet)

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Heating value of gas	Salinity of zone water	Original zone	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	(Btu)	(ppm)	pressure (psi)	required	
S-3 (Unnaned)	4,080 4,930	30 15	Late Cretaceous Late Cretaceous	Starkey Winters	N.A. N.A.	N.A. N.A.	1,780 2,240	III B 3M III B 3M	

PRODUCTION DATA

1976 Production		1977 Proved	1977 Maximum number	1976	Peak gas production		Total number of wells		Maximum
Net gas (Mcf)	Water (bbl)	acreage	producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	160	0	0	See Remarks		3	3	160

SPACING ACT: Applies

BASE OF FRESH WATER: 2,400

CURRENT CASING PROGRAM: 7" cem. 650; 4 1/2" cem. through zones and across base of freshwater sands.

REMARKS: Commercial gas deliveries have not yet begun.

REFERENCES: None



LOCATION: 14 miles east of Vallejo

TYPE OF TRAP: Faulted anticline

ELEVATION: 15

DISCOVERY DATA

						Init	al product	ion	
Present operator and well name	Original operator and well name	See	. т.	& R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
General Crude Oil Co., Opr. "Standard- Suisun Comm." 10	G.E. Kadane & Sons "Suisun Community" 10-B	31			MD	835	225	3/8	Aug 1959
Standard Oil Co. of Calif. "Suisun Community" 3	Same as present	5	3N	1W	MD				10 57.000
Standard Oil Co. of Calif. "Suisun Community" 3	Same as present	5	3N	1W	MD				
Standard Oil Co. of Calif. "Suisun Community" 12	Same as present	4	3N	1W	MD	2,620	760	3/8	Oct 1961
	General Crude Oil Co., Opr. "Standard- Suisun Comm." 10 Standard Oil Co. of Calif. "Suisun Community" 3 Standard Oil Co. of Calif. "Suisun Community" 3 Standard Oil Co. of Calif. "Suisun	General Crude 0il Co., Opr. "Standard- Suisun Comm." 10 G.E. Kadane & Sons "Suisun Community" 10-B Standard 0il Co. of Calif. "Suisun Community" 3 Same as present Standard 0il Co. of Calif. "Suisun Community" 3 Same as present Standard 0il Co. of Calif. "Suisun Standard 0il Co. of Calif. "Suisun Standard 0il Co. of Calif. "Suisun Same as present	General Crude Oil Co., Opr. "Standard- Suisun Comm." 10 G.E. Kadane & Sons "Suisun Community" 31 Standard Oil Co. of Calif. "Suisun Community" 3 Same as present 5 Standard Oil Co. of Calif. "Suisun Community" 3 Same as present 5 Standard Oil Co. of Calif. "Suisun Community" 3 Same as present 5 Standard Oil Co. of Calif. "Suisun Same as present 5	General Crude 0il Co., Opr. "Standard- Suisun Comm." 10 G.E. Kadane & Sons "Suisun Community" 31 4N Standard 0il Co. of Calif. "Suisun Community" 3 Same as present 5 3N Standard 0il Co. of Calif. "Suisun Community" 3 Same as present 5 3N Standard 0il Co. of Calif. "Suisun Community" 3 Same as present 5 3N Standard 0il Co. of Calif. "Suisun Same as present 5 3N Standard 0il Co. of Calif. "Suisun Same as present 5 3N	General Crude Oil Co., Opr. "Standard- Suisun Comm." 10 G.E. Kadane & Sons "Suisun Community" 31 4N 1W Standard Oil Co. of Calif. "Suisun Community" 3 Same as present 5 3N 1W Standard Oil Co. of Calif. "Suisun Community" 3 Same as present 5 3N 1W Standard Oil Co. of Calif. "Suisun Standard Oil Co. of Calif. "Suisun Same as present 5 3N 1W Standard Oil Co. of Calif. "Suisun Same as present 5 3N 1W	General Crude Oil Co., Opr. "Standard- Suisun Comm." 10 G.E. Kadane & Sons "Suisun Community" 31 4N 1W MD Standard Oil Co. of Calif. "Suisun Community" 3 Same as present 5 3N 1W MD Standard Oil Co. of Calif. "Suisun Community" 3 Same as present 5 3N 1W MD Standard Oil Co. of Calif. "Suisun Standard Oil Co. of Calif. "Suisun Same as present 5 3N 1W MD Standard Oil Co. of Calif. "Suisun Same as present 4 3N 1W MD	Present operator and well name Original operator and well name Sec. T. & R. B & M Daily (Mcf) General Crude Oil Co., Opr. "Standard- Suisun Community" 10 G.E. Kadane & Sons "Suisun Community" 31 4N MD 835 Standard Oil Co. of Calif. "Suisun Community" 3 Same as present 5 3N NM 7,350 Standard Oil Co. of Calif. "Suisun Community" 3 Same as present 5 3N NM D,675 Standard Oil Co. of Calif. "Suisun Standard Oil Co. of Calif. "Suisun Same as present 4 3N NM 2,620	Present operator and well nameOriginal operator and well nameSec. T. & R.B & MDaily pressure pressure pressure (Act)Flow pressure pressure (Act)General Crude Oil Co., Opr. "Standard- Suisun Comm." 10G. E. Kadane & Sons "Suisun Community"31 4N 1WMD835225Standard Oil Co. of Calif. "Suisun Community" 3Same as present5 3N 1WMD7,3501,320Standard Oil Co. of Calif. "Suisun Community" 3Same as present5 3N 1WMD5,6751,025Standard Oil Co. of Calif. "SuisunSame as present4 3N 1WMD2,620760	Present operator and well nameOriginal operator and well nameSec. T. & R.B & MDaily (Mcf)pressure (fin)Size (fin)General Crude 0il Co., Opr. "Standard- Suisun Comm." 10G.E. Kadane & Sons "Suisun Community"31 4N 1WMD8352253/8Standard 0il Co. of Calif. "SuisunSame as present5 3N 1WMD7,3501,3201/2Standard 0il Co. of Calif. "SuisunSame as present5 3N 1WMD5,6751,0251/2Community" 3Standard 0il Co. of Calif. "SuisunSame as present4 3N 1WMD2,6207603/8

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name		Sec. T. & R.	B & M		Strata	Age
Standard Oil Co. of Calif. "Suisun Community" 16	Same	Apr 1964	4 3N 1W	MD	8,898	G-2 Zone (Goudkoff)	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	Geologic			Salinity of zone water Original zone		Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
(Unnamed) Suisun Domengine Wagenet	975 3,650 4,150 4,650	25 175 65 80	Pliocene Eocene Eocene Paleocene	Sonoma Volcanics Nortonville Domengine Martinez	1,020 1,040 1,040 1,048	45 250 - 960 390 - 990 760	420 1,610 1,800 2,070	IV IV IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Pro	fuction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas proc	Peak gas production Total number of wells		ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	acreage			(Mcf)	Year	Drilled	Completed	acreage
2,504,899	14,873	450	11	78,509,033	6,166,271	1966	22	16	720

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 9 5/8" cem. 500 - 1,000; 5 1/2" cem. through zones.

METHOD OF WASTE DISPOSAL: Disposal into sumps at well sites.

REMARKS: Commercial gas deliveries began in February 1947. 1972 condensate production 191 bb1.; cumulative condensate production 27,687 bb1.

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FORBES

3000 Ş UPPER CRETACEOUS 4000 FORBES --16000



Sutter County

LOCATION: 11 miles northwest of Yuba City

TYPE OF TRAP: Lenticular sands on a faulted nose and homocline adjacent to a volcanic plug

ELEVATION: 65 - 635

DISCOVERY DATA

					Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
(Unnamed sand Stringers	Buttes Gas & Oil Co. "Buttes" 1	The Buttes Oilfields, Inc. "Buttes" 1	35 16N 1E	MD .	3,060	N.A.	N.A.	Feb 1933

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	B&M		Strata	Age
Buttes Gas & Oil Co. "Buttes" 14	Same	Jul 1958	12 15N 1E	MD	7,868	Basement	pre-Lt Cret

PRODUCING ZONES

	Average depth	Average net thickness	(Geologic		Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
(Unnamed sand stringers)	2,100 - 6,000	1 - 60 per stringer	Lt Cretaceous	Forbes	905 - 1,020	210 - 1,830	1,500 - 4,300	IV
					(w)			

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	d Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum proved
let gas (Mcf)	Water (bbi)	acreage			(Mcf)	Year	Drilled	Completed	acreage
7,583,495	45,752	8,520	52	123,244,379	15,201,294	1965	78	65	9,010

SPACING ACT: Applies

BASE OF FRESH WATER: 2,000

CURRENT CASING PROGRAM. 9 5/8" cem. 1,000 - 1,500; 5 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL. In 1972 all of the waste water was injected into a disposal well.

REMARKS: Formerly known as Marysville Buttes Gas Field. Commercial gas deliveries began in November 1938.

REFERENCES: Hunter, G.W., Marysville Buttes Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 41, No. 1 (1955). Railroad Commission of the State of Calif. and Calif. Div. of Oil and Gas, Marysville Buttes Gas Field in Estimate of the Natural Gas Reserves of the State of Calif. as of January 1, 1941: Case No. 4591, Special Study No. S-258, p. 236-241 (1942).



LOCATION: 9 miles northwest of Yuba City

TYPE OF TRAP: See Areas

ELEVATION: 40 - 500

DISCOVERY DATA

					Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
(Unnamed)	Buttes Gas & Oil Co. "Sutter Community A" 1	Richfield Oil Corp. "Sutter Community A"	8 15N 2E	MD	280	900	1/8	Aug 1952

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Atlantic Oil Co. "Sutter Unit K" 1	Same	Dec 1961	30 15N 2E	MD	7,925	Guinda	Late Cret

PRODUCING ZONES (See areas)

	Average depth	Average net thickness	Geo	ologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)		Gas (btu)	gr/gal	pressure (psi)	required		

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	acreage		production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
4,975,956	23,449	3,320	26	61,564,860	6,185,931	1966	55	32	3,400

SPACING ACT: Applies

BASE OF FRESH WATER: See areas.

CURRENT CASING PROGRAM: See areas.

METHOD OF WASTE DISPOSAL: See areas.

REMARKS: Commercial gas deliveries began in June 1953.

MAIN AREA

LOCATION: See map sheet of Sutter City Gas Field

TYPE OF TRAP: Faulted anticline; faulted noses; lenticular sands

ELEVATION: 40 - 500

DISCOVERY DATA

				Init	ial product	ion	
Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Buttes Gas & Oil Co. "Sutter Community A" 1	Same as present	8 15N - 2E	MD	655		25/64	Jun 1964*
Same as above	Richfield Oil Corp. "Sutter Community A"	8 15N 2E	MD	280	900	1/8	Aug 1952
	Buttes Gas & Oil Co. "Sutter Community A" 1	Buttes Gas & Oil Co. "Sutter Community Same as present A" 1	Buttes Gas & Oil Co. "Sutter Community Same as present 8 15N 2E A" 1	Buttes Gas & Oil Co. "Sutter Community Same as present 8 15N 2E MD A" 1	Present operator and well name Original operator and well name Sec. T. & R. B & M Daily (Mcf) Buttes Gas & Oil Co. "Sutter Community Same as present 8 15N 2E MD 655	Present operator and well name Original operator and well name Sec. T. & R. B & M Daily (Mcf) Flow pressure (psi) Buttes Gas & Oil Co. "Sutter Community A" 1 Same as present 8 15N 2E MD 655 190	Present operator and well name Original operator and well name Sec. T. & R. B & M Daily (Mcf) pressure (psi) size (in) Buttes Gas § 011 Co. "Sutter Community A" 1 Same as present 8 15N 2E MD 655 190 25/64

Remarks: * Date of recompletion; originally completed in Kione.

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Buttes Gas & Oil Co. Butte Community B" 6	Richfield Oil Corp. "Butte Community B" 6	Nov 1952	7 15N 2E	MD	5,084	*Rhyolite	Plio or Pleis
		•		t e		* Intruded in Cretaceous	nto Upper Forbes formatio

PRODUCING ZONES

	Average depth	Average net thickness	(Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
(Unnamed)	1,440	30	Lt Cretaceous	Starkey-Winters (Undiff.)	N.A.	N.A.	650	IV
Kione	1,700	140	Lt Cretaceous	Kione	920	130	800	IV
181			1	1	l: 0		1 1	

PRODUCTION	DATA	(Ian.	1,	1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas pro	Peak gas production Total number		Total number of wells	
Net gas (Mcf)	Water (bbl)		producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
1,143,867	12,813	400	* 8	16,869,934	2,062,265	1958	24	11	400

SPACING ACT: Applies

BASE OF FRESH WATER: 1,200 - 1,700

CURRENT CASING PROGRAM: 8 5/8" cem. 500 or 9 5/8" cem. 1,500 (depending on objective zone); 5 1/2" or 4 1/2" cem. through zones. Base of fresh water protected by cement behind casing. METHOD OF WASTE DISPOSAL: Waste water is hauled by truck to Sutter Buttes Gas field and injected into disposal well. Disposal of small quantities of water into sumps. REMARKS: Commercial gas deliveries began in June 1953.

SOUTH AREA

LOCATION: See map sheet of Sutter City Gas Field

TYPE OF TRAP: Lenticular sands on faulted homocline

ELEVATION: 50

DISCOVERY DATA

					Init	ial product	ол	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & N	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
(Unnamed sand stringers) G Zone	Atlantic Oil Co. "Epperson" I Atlantic Oil Co. "Epperson" 2	Same as present	19 15N 2E 20 15N 2E		A 2,000 8,000 B 6,000	2,000	27/64	
0 2016	Atlantic off to. Epperson 2	Same as present	20 ISN 2E	MU	¥ 8,000	1,800	25/64	Sep 1961

Remarks: A Dually completed from two intervals in the Forbes formation. B Commingled Forbes and G-zone production

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age	
Atlantic Oil Co. "Sutter Unit K" 1	Same	Dec 1961	30 15N 2E	MD	7,925	Guinda	Late Cret	

PRODUCING ZONES

Avera	Average	Average net thickness	Geologic			Salinity of zone water	Original zone	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required	
(Unnamed sand stringers)	3,950 - 6,830	3 - 50 per stringer	Lt Cretaceous	Forbes	749 - 1,019	127 - 1,300	2,040 - 3,500	IV	
G Zone	6,160 - 6,620	5 - 20 per stringer	Lt Cretaceous	Dobbins	1,000 (est)	N.A.	3,210	IV	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production Total number		Total number of wells		Maximum
Net gas (Mcf)	Water (bbl)	acreage		production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
3,832,089	10,636	2,920	18	44,694,926	5,787,788	1966	31	21	3,000

SPACING ACT: Applies

BASE OF FRESH WATER: above 1,000

CURRENT CASING PROGRAM: 16" cem. 300; 9 5/8" cem. 2,500 or 8 5/8" cem. 1,500 and across base of fresh-water sands; 5 1/2" or 4 1/2" cem. through zones. METHOD OF WASTE DISPOSAL: Waste water is hauled by truck to Sutter Buttes Gas field and injected into disposal well. Disposal of small quantities of water into sumps. REMARKS: Commercial gas deliveries began in June 1962.



LOCATION: 6 miles southeast of Colusa

TYPE OF TRAP: Lenticular sands on nose

ELEVATION: 60

DISCOVERY DATA

					Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
(Unnamed) Kione	A Exxon Corp. "O.P. Davis" B-1 Buttes Gas & Oil Co. "Buttes-RX Unit 23"	Humble Oil & Rfg. Co. "O.P. Davis" B-1 Alpine Oil Co., Inc. "RX Unit" 1	14 15N 1W 23 15N 1W		1,810 3,800	560 600	3/8 1/2	Sep 1956 Feb 1970
(Unnamed sand stringers)	Exxon Corp. "O.P. Davis" B-2	Humble Oil & Rfg. Co. "O.P. Davis" B-2	26 15N 1W	MD	B 950 2,730	975 1,000	19/64 24/64	Apr 1962

Remarks: A B Dually completed from separate intervals in the Forbes formation.

DEEPEST WELL DATA

		Date			Depth	At total depth	
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Exxon Corp. "O.P. Davis" B-6	Humble Oil & Rfg. Co. "O.P. Davis" B-6	Jun 1962	22 15N 1W	MD	10,014	Dobbins	Late Cret

PRODUCING ZONES

Average	Average net		Geologic		Salinity of	Original zone	Class BOPE	
(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required	
1,480	25	post-Eocene	Undiff. nonmarine strata	810	N.A.	N.A.	IV	
2,750	40	Lt Cretaceous	Kione	930	N.A.	1,180	IV	
4,734 - 7,370	4 - 40 per stringer	Lt Cretaceous	Forbes	980 - 1,010	1,100 - 1,940	2,860 - 5,720	IV - V	
						24		
	depth (feet) 1,480 2,750 4,734 -	depth (feet) thickness (feet) 1,480 25 2,750 40 4,734 4 - 40 per	depth (feet) thickness (feet) Age 1,480 25 post-Eocene 2,750 40 Lt Cretaceous 4,734 4 40 per Lt Cretaceous	depth (feet) thickness (feet) Setupic 1,480 25 post-Eccene Undiff. nonmarine strata 2,750 40 Lt Cretaceous Kione 4,734 - 4 - 40 per Lt Cretaceous Forbes	depth (feet) thickness (feet) Age Formation Gas (btu) 1,480 25 post-Eccene Undiff. nonmarine strata 810 2,750 40 Lt Cretaceous Kione 930 4,754 - 4 - 40 per Lt Cretaceous Forbes 980 - 1,010	depth (feet) thickness (feet) Generation (feet) Generation (feet) zone water gr/gal 1,480 25 post-Eocene Undiff. nonmarine strata 810 N.A. 2,750 40 Lt Cretaceous Kione 930 N.A. 4,734 - 4 - 40 per Lt Cretaceous Forbes 980 - 1,010 1,100 -	depth (feet) thickness (feet) Age Formation Gas (btu) zone water gr/gal Original zone pressure (psi) 1,480 25 post-Eocene Undiff. nonmarine strata 810 N.A. N.A. 2,750 40 Lt Cretaceous Kione 930 N.A. 1,180 4,734 - 4 - 40 per Lt Cretaceous Forbes 980 - 1,010 1,100 - 2,580 -	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum
Net gas (Mcf)	Water (bbl)	acreage		production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
1,501,097	18,218	1,710	7	14,255,455	2,099,421	1968	15	11	1,710

SPACING ACT: Applies

BASE OF FRESH WATER: 750

CURRENT CASING PROGRAM: 13 3/8" cem. 350; 9 5/8" cem. 3,000 and across base of fresh-water sands; 5 1/2" or 4 1/2" cem. through zones.

METHOD OF WASTE DISPOSAL Disposal into sumps.

REMARKS: Several wells were completed with multiple strings of 2 7/8" tubing instead of 5 1/2" or 4 1/2" casing. Commercial gas deliveries began in January 1963.
SYCAMORE SLOUGH GAS FIELD (Abandoned)



SYCAMORE SLOUGH GAS FIELD (Abandoned) Yolo County

LOCATION: 13 miles northwest of Woodland

TYPE OF TRAP: Anticline

ELEVATION. 35

DISCOVERY DATA

					Initial produc		on	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Reclamation	Signal Oil and Gas Co. "Signal-Monterey- Reclamation" 1	Same as present	20 12N 1E	MD	4,200	1,100	1/2	Oct 1953

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name		Sec. T. & R	. B&		Strata	Age	
Same as discovery well	Same	Sep 1953	20 12N 1	E MD	5,500	Forbes	Late Cret	

PRODUCING ZONES

	Average depth	Average net thickness	Geologic .			Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Reclamation	3,720	25	Lt Cretaceous	Starkey	1,010	230	1,650	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas prov	duction	Total num	ber of wells	Maximum proved
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (McI)	(Mcf)	Year	Drilled	Completed	acreage
0	0	0	0	714,277	181,114	1957	6	3	160

SPACING ACT: Applies

BASE OF FRESH WATER: 2,100

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

REMARKS: Commercial gas deliveries began in August 1956. The field was abandoned in March 1966.

REFERENCES:



TABLE BLUFF GAS FIELD (Abandoned) Humboldt County

LOCATION: 9 miles southwest of Eureka

TYPE OF TRAP: Faulted anticline; lenticular sands

ELEVATION: 210 - 460

DISCOVERY DATA

					Initial production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
(Unnamed sand stringers)	Zephyr Oil Co. "Leon Oro Blanco" T-2	Same as present	6 3N 1W	н	1,500	650	13/32	Jul 1960

Remarks:

DEEPEST WELL DATA

		Date				Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T	. & R.	B& M		Strata	Age
Texaco Inc. "Eureka" 1	The Texas Co. "Eureka" 1	Nov 1934	1 3	N 2W	н	6,133	Yager	Early Cret

PRODUCING ZONES

	Average depth	Average net thickness				Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
(Unnamed sand stringers)	2,100 - 4,775	1 - 40 per stringer	Pliocene	Rio Dell	1,035	N.A.	550 - 1,500	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		72 Production 1972 1972 Proved Maximum number Cumulative gas		Peak gas production		Total num	Maximum		
Net gas (Mcf)	Water (bbl)	acreage	producting wells production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage	
0	0	0	0	108,924	43,219	1962	17	5	320

SPACING ACT: Applies

BASE OF FRESH WATER: 700 - 1,000

CURRENT CASING PROGRAM: 9 5/8" cem. 600; 5 1/2" cem. through zones and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

REMARKS: Commercial gas deliveries began in August 1962. The field was abandoned in December 1968.

REFERENCES:



THORNTON GAS FIELD

Sacramento and San Joaquin Counties

LOCATION: 23 miles south of Sacramento

TYPE OF TRAP: Anticline; lenticular sands

ELEVATION: 20

DISCOVERY DATA

					Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B& ₩	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
(Unnamed) A	Sage Oil Co., Inc. "Goodfellow-Capital" 1	Amerada Pet. Corp. "Goodfellow-Capital Co." 1	26 5N 5E	MD	810	640	1/4	^B May 1970
(Unnamed) A Capital	Sage Oil Co., Inc. "A.W. Goodfellow" 1 Amerada Hess Corp., Opr. "Capital Co." 1	Amerada Pet. Corp. "Goodfellow" 1 Amerada Pet. Corp. "Capital Co." 1	25 5N 5E 36 5N 5E	MD MD	900 6,900	1,000 805	5/16 3/8	B _{May} 1961 Jul 1943

Remarks: A Locally referred to as Deadhorse sand stringers. B Date of recompletion; originally completed in Capital zone.

DEEPEST WELL DATA

		Date					Depth	At total o	depth
Present operator and well name	Original operator and well name		Sec.	Sec. T. & R		B & M	(feet)	Strata	Age
Amerada Hess Corp., Unit Opr. "Capital Co." 6	Amerada Pet. Corp. "Capital Co." 6	Jun 1963	27	5N	5E	MD	10,214	Granitic base-	pre-Lt Cret

PRODUCING ZONES

Average	Average net thickness (feet)	thickness	thickness		Geologic		Salinity of	Original some	Class BOPE
(feet)		Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required		
2,315	25	Eocene	Markley - Nortonville	N.A.	N.A.	750	٢v		
2,580	15	Eocene	Markley - Nortonville		N.A.	1,130	IV		
3,300	30	Eocene	Meganos	960	550	1,500	IV		
	depth (feet) 2,315	depth thickness (feet) (feet) 2,315 25 2,580 15	depth (feet) thickness (feet) Age 2,315 25 Eocene 2,580 15 Eocene	depth (feet) thickness (feet) Geologic 2,315 25 Eocene Markley - Nortonville 2,580 15 Eocene Markley - Nortonville	depth thickness Age Formation Gas (btu) 2,315 25 Eocene Markley - N.A. 2,580 15 Eocene Markley - 985 Nortonville Nortonville 985 15	depth (feet) thickness (feet) Age Formation Gas (btu) zone water gr/gal 2,315 25 Eocene Markley - Nortonville N.A. N.A. 2,580 15 Eocene Markley - Nortonville 985 N.A.	depth (feet) thickness (feet) Age Formation Gas (btu) zone water gr/gal Original zone pressure (psi) 2,315 25 Eocene Markley - Nortonville N.A. N.A. 750 2,580 15 Eocene Markley - Nortonville 985 N.A. 1,130		

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 1972 Proved Maximum number Cumulative gas		Peak gas production		Total num	Maximum proved		
let gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
124,987	54,462	1,340	3	53,535,963	4,063,765	1957	21	14	3,160

SPACING ACT: Applies

BASE OF FRESH WATER: 600

CURRENT CASING PROGRAM: 9 5/8" cem. 600; 5 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL: Disposal of waste water into sumps.

REMARKS: Commercial gas deliveries began in December 1946.

REFERENCES: Loken, K.P., Thornton Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 43, No. 1 (1957).



Sacramento and San Joaquin Counties

LOCATION: 22 miles south of Sacramento; 7 miles east of Rio Vista

TYPE OF TRAP: Faulted anticline; lenticular sands; truncation by gorge

ELEVATION: 16

DISCOVERY DATA

							Init	ial producti	on	
Zone	Present operator and well name	Original operator and well name	Sec.	T. 8	k R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Burchell	Brazos Oil and Gas Co. "Burchell et al Unit" 1	Same as present	1	4N	4E	MD	700	825	12/64	Aug 1961
Deadhorse	Texaco Inc. "Wilson-McCall" 1	Texaco Inc. "Wilson-McCall" 2	1	4N	4E	MD	6,140	1,025	1/2	Aug 1959
Nortonville stringers	Union Oil Co, of Calif. "Walnut Grove Unit A" 2	Brazos Oil and Gas Co., Opr. "Walnut Grove Unit A" 2	36	5N	4E	MD	1,550	1,025	1/4	May 1960
Domengine	Standard Oil Co. of Calif. "McCormack- Williamson" 15	Same as present	36	5N	4E	MD	2,170	605	3/8	Jun 1964
Capay stringers	Texaco Inc. "Cowell Foundation" 2	Same as present	31	5N	5E	MD	1,100	1,230	3/16	Mar 1961
Meganos Gorge	Standard Oil Co. of Calif. "McCormack- Williamson" 4	Same as present	36	5N	4E	MD	2,125	1,600	1/4	May 1959
Midland	Standard Oil Co. of Calif. "McCormack- Williamson" 1	E.L. Doheny, Opr., "McCormack-Williamson" 1	30	51	5E	MD	1,750	1,135	1/4	Jul 1956
Grove	Union Oil Co. of Calif. "Walnut Grove Unit A" 1	Brazos Oil and Gas Co. Opr. "Walnut Grove Unit A" 1	35	5N	4E	MD	2,350	1,410	16/64	May 1966
(Unnamed)	Union Oil Co. of Calif. "Unit Line Well"	Same as present	26	5N	4E	MD	1,100	1,500	3/16	Nov 1970
Fong	Union Oil Co. of Calif. "Unit Line Well"	Same as present	26	5N	4E	MD	3,065	1,450	12/64	Oct 1967
Mealer	Union Oil Co, of Calif. "Walnut Grove Unit A" 1	Brazos Oil and Gas Co. Opr. "Walnut Grove Unit A" 1	35	5N	4E	MD	2,400	1,580	1/4	Jul 1958
(Sand stringers)	Union Oil Co. of Calif. "Locke Unit 1" 1	Brazos Oil and Gas Co. Opr. "Locke Unit 1" 1	26	5N	4E	MD	2,100	2,465	12/64	Jul 1959

		Date					Depth	At tota	l depth
Present operator and well name					c. T. & R.			Strata	Age
Standard Oil Co. of Calif. "McCormack- Williamson" 9	Same	Jul 1961	25	5N	4E	MD	12,628	Basement (granite)	pre-Lt Cret
PRODUCING ZONES									

	Average depth	Average net thickness		Geologic		Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
Burchell	2,410	6	post-Eocene	Undiff. nonmarine strata	N.A.	135 g/g	1,100 (est)	IV
Deadhorse	2,810	30	Eocene	Markley	1,000	500	1,285	IV
Nortonville stringers	2,980	3 - 6 per stringer	Eocene	Nortonville	1,000	350	1,400	IV IV
Domengine	2,880	25	Eocene	Domengine	970	N.A.	1,390	IV
Capay stringers	3,280	3 per stringer	Eocene	Capay	1,000	N.A.	1,420	IV IV
Meganos Gorge	3,680	15	Eocene	Meganos Gorge fill	N.A.	N.A.	1,540	IV
Midland	3,560	60	Eocene	Meganos	955 - 980	670	1,620	IV IV IV
Grove	4,060	10	Eo - Paleo	Meganos-Martinez	970	N.A.	1,790	IV
(Unnamed)	4,130	25	Eo - Paleo	Meganos-Martinez	950 - 980	N.A.	1,810	IV
Fong	4,240	35	Eo - Paleo	Meganos-Martinez	955	N.A.	1,815	IV
Mealer	4,420	25	Eo - Paleo	Meganos-Martinez	940 - 980	N.A.	2,010	IV IV
(Sand stringers)	7,460 - 8,300	10 - 30 per stringer	Cretaceous	Winters	920	525 - 1,565	3,550 - 3,900	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum proved		
Net gas (Mcf)	Water (bbl)	acreage			producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
2,564,352	25,631	2,190	13	113,290,176	15,486,111	1964	76	53	3,310		

SPACING ACT: Applies

BASE OF FRESH WATER: 800 - 1,300

CURRENT CASING PROGRAM: 13 3/8" to 7" cem. 500 to 1,500; 8 5/8" or 7" cem. 2,000 to 3,000 (depending on depth of well); 7" to 4 1/2" cem. through zone. Base of fresh waters protected by cement behind casing. METHOD OF WASTE DISPOSAL: Waste water hauled by truck to disposal site.

REMARKS: Commercial gas deliveries began in June 1958. Some of the gas-sand stringers in the Winters formation have been given local names by the operators.

REFERENCES: Silcox, J.H., West Thornton and Walnut Grove Gas Fields, Calif., in Geologic Guide to the Gas and Oil Fields of Northern California: Calif. Div. of Mines and Geology Bull. 181, p. 140-148 (1962).





LOCATION: 9 miles southwest of Yuba City ELEVATION: 45

DISCOVERY DATA

		Original operator and well name			Init			
Zone	Present operator and well name		Sec. T. & R.	B.& M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
(Unnamed sand stringers)	T. A. Atkinson, Opr. "Atlantic-Giusti" 1	Same	17 14N 2E	MD	*150 8,580	2,540 2,480	N.A. 21/64	

Remarks: * Well was dually completed in two intervals in the Forbes.

DEEPEST WELL DATA

	Date			Total	At total depth		
Original operator and well name		Sec. T. & R.	B. & M.		Strata	Age	
Same	Dec. 1963	20 14N 2E	MD	7,542	Guinda	Late Cret.	
	Same	Same Dec. 1963	Original operator and well name started Sec. T. & R. Same Dec. 1963 20 14N 2E	Original operator and well name started Sec. T. & R. B. & M. Same Dec. 1963 20 14N 2E MD	Date Date Original operator and well name Sec. T. & R. B. & M. depth (feet) Same Dec. 1963 20 14N 2E MD 7.542	Original operator and well name Date started Sec. T. & R. Sec. T. & R. B. & M. B. & M. depth (feet) Art total Strata Same Dec. 1963 20 14N 2E MD 7,542 Guinda	

PRODUCING ZONES

	Average	Average net thickness (feet)	Geologic		Heating value	Salinity of	Original zone pressure	Class BOPE
Zone	depth (feet)		Age	Formation	of gas (Btu)	zone water (ppm)	(psi)	required
(Unnamed sand stringers)	5,800- 6,300	2-15 per stringer	Late Cretaceous	Forbes	925-1,000	16,400- 18,100	3,350	III B 3M

PRODUCTION DATA

1976 Proc	duction	1977	1976	1976	Peak gas production		Total number of wells		Maximum
Net gas (Mcf)	Water (bbl)	Proved acreage	Maximum number producing wells	Cumulative gas production (Mcf)	· (Mcf)	Year	Drilled	Completed	proved acreage
819,528	3,179 .	640	3	12,023,116	1,006,041	1968	8	4	640

SPACING ACT: Applies

BASE OF FRESH WATER: 600

CURRENT CASING PROGRAM: 13 3/8" cem. 300; 9 5/8" cem. 2,500; 5 1/2" or 4 1/2" cem. through zones.

REMARKS: Commercial gas deliveries began in April 1963.

REFERENCES: Weddle, J. R., Tisdale Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 54, No. 2, Part 2 (1968).





JANUARY 1978

LOCATION: 4 miles northeast of Davis

ELEVATION: 31

DISCOVERY DATA

					Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.& M.	Daily (Mcf)	Flow pressure (psi)	Bean size (inches)	Date of completion
(Unnamed)	Atlantic Oil Co. "Purves" 1	Same	10 8N 3E	MD	5,100	1,175	28/64	Aug. 1969
(Unnamed)	Getty Oil Co. "I.O.C." 3	Same	34 9N 3E	MD	4,100	840	30/64	Oct. 1968
S-1	Getty Oil Co. "I.O.C. Unit" 1	Same	27 9N 3E	MD	3,400	500	1/2	Aug. 1968
S-2	Getty Oil Co. "Reavis and Baker" 1	Tidewater Oil Co. "Reavis and Baker" 1	33 9N 3E	MD	5,360	1,110	1/2	May 1967
S-3	Getty Oil Co. "I.O.C." 2	Getty Oil Co. "Investment Operating Corp." 2	33 9N 3E	MD	1,400	425	24/64	May 1968
S-4	Same	Same	33 9N 3E	MD	2,000	620	24/64	May 1968
S-5	Same	Same	33 9N 3E	MD	2,400	750	24/64	May 1968
(Unnamed)	Atlantic Oil Co. "Oil Leases" 1	Same	4 8N 3E	MD	4,420	1,850	5/16	July 1972

Remarks:

DEEPEST WELL DATA

		Date			Total depth	At total depth	
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B. & M.		Strata	Age
Getty Dil Co. "I.O.C." 2	Getty Oil Co. "Investment Operating Corp." 2	Apr. 1968	33 9N 3E	MD	7,000	Forbes	Late Cret.

PRODUCING ZONES

	Average	Average net thickness	Geologic		Heating value	Salinity of	Original zone	Class BOPE
Zone	depth (feet)	(feet)	Age	Formation	Of gas (Btu)	zone water (ppm)	pressure (psi)	required
(Unnamed)	3,100	30	Eocene-Paleocene	Meganos-Martinez	890	N.A.	1,430	III B 2M
(Unnamed)	3,200	60	Eocene-Paleocene	Meganos-Martinez	890	N.A.	1,420	III B 2M
S-1	3,600	40	Late Cretaceous	Starkey	890	6,160	1,580	III B 2M
S-2	4,000	15	Late Cretaceous	Starkey	900	N.A.	1,750	III B 2M
S-3	4,350	40	Late Cretaceous	Starkey	890	N.A.	1,920	III B 2M
5-4	4,430	55	Late Cretaceous	Starkey	890	N.A.	1,950	III B 2M
S-5	4,720	35	Late Cretaceous	Starkey	840	9,160	2,040	III B 2M
(Unnamed)	5,440	20	Late Cretaceous	Winters	695-905	N.A.	2,180	III B 3M

PRODUCTION DATA

1976 Production		1977	1976 Maximum number	1976	Peak gas production		Total number of wells		Maximum
Net gas (Mcf)	Water (bbl)	Proved acreage	producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage
11,485,228	156,983	2,505	38	51,856,848	11,912,060	1975	93	57	2,975

SPACING ACT: Applies

BASE OF FRESH WATER: 2,100-2,500

CURRENT CASING PROGRAM: 9 5/8" or 8 5/8" cem. 500-1,000; 5 1/2" or 4 1/2" cem. through zone and across base of freshwater sands.

REMARKS: Commercial gas deliveries began in May 1968. The 695-Btu heating value in unnamed zone of Winters Formation is due to high nitrogen content.

REFERENCES: Williams, P. A., Todhunters Lake Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 56, No. 1 (1970).

TOMPKINS HILL GAS FIELD



1973

Humboldt County

LOCATION: 12 miles south of Eureka

TYPE OF TRAP: Anticline; lenticular sands

ELEVATION: 480 - 950

DISCOVERY DATA

			All and the second second		Init	ial product	on	1
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
(Unnamed sand stringers)	Texaco Inc. "Tompkins Hill Unit Plan" 2	The Texas Co. "Eureka" 2	22 3N 1W	Н	1,400	1,100	13/64	Sep 1937

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name		Sec. T. & R.	B&M		Strata	Age
Texaco Inc. "Holmes-Eureka" 3	The Texas Co. "Holmes-Eureka" 3	Jun 1946	22 3N 1W	н	7,852	Yager	early Cret

PRODUCING ZONES

	Average depth	Average net thickness	Geologic			Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gai	pressure (psi)	required
(Unnamed sand stringers)	2,100 - 5,800	1 - 50 per stringer	m Pliccene	Rio Dell	1,035	630 - 1,320	890 - 2,450	ıv

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas proc	duction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
3,668,947	9,574	1,270	26	56,119,658	3,668,947	1972	38	30	1,440

SPACING ACT: Applies

BASE OF FRESH WATER: 1,400 - 1,900

1

CURRENT CASING PROGRAM: 13 3/8" cem. 300; 8 5/8" cem. 1,500; 4 1/2" cem. through gas zones.

METHOD OF WASTE DISPOSAL: Percolation and evaporation sumps.

REMARKS: Formerly known as Eureka Gas Field. Commercial gas deliveries began in November 1938.

REFERENCES: Eureka Gas Field in Estimate of the Natural Gas Reserves of the State of Calif. as of Jan. 1, 1941: Railroad Commission of the State of Calif. and Dept. of Natural Resources Div. of Oil and Gas, Case No. 4591, Special Study No. 5-258, p. 233-235 (1942). Ogle, B.A., Geology of Eel River Valley Area, Humboldt Co., Calif.: Calif. Div. of Mines Bull. 164, p. 79 (1953).



CONTOURS ON TOP OF TRACY SAND



LOCATION: 1/2 mile north of Tracy ELEVATION: 35

DISCOVERY DATA

					Initial production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.& M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
Tracy	Amerada Hess Corp. "F.D.L." 2	Amerada Petroleum Corp. "F.D.L." 2	15 25 5E	MD	35,000	1,400	1 1/2	Aug. 1935

Remarks:

DEEPEST WELL DATA

		Date			Total depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B. & M.		Strata	Age
Amerada Hess Corp. "Tracy Community 1" 1	Amerada Petroleum Corp. "Tracy Community 1"	Feb. 1964	15 2S 5E	MD	13,832	F zone (Goudkoff)	Late Cret.

PRODUCING ZONES

	Average	Average net	Geologic		Heating value	Salinity of zone water	Original zone	Class BOPE
Zone	depth (feet)	thickness (feet)	Age	Formation	of gas (Btu)	(ppm)	pressure (psi)	required
Tracy	3,900	40	Late Cretaceous	Panoche	930	6,850-8,560	1,854	III B 2M

PRODUCTION DATA

1976 Production		1977	1976	1976	Peak gas produ	ction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	Proved Maximum number Cumulative gas acreage producing wells production (Mcf) (Mcf) Year	Drilled	Completed	proved acreage				
0	0	40	0	13,775,969	3,012,083	1936	19	7	350

SPACING ACT: Applies

BASE OF FRESH WATER: 1,200

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

REMARKS: First commercial gas field in Northern California, and first field in California to produce gas commercially from a Cretaceous zone. Commercial gas deliveries began in September 1935. The field was abandoned in November 1964 and reactivated in November 1977.

REFERENCES: Beckwith, H. T., Tracy Gas Field: Calif. Div. of Mines Bull. 118, p. 586-587 (1943). Humter, G. W., Tracy Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 43, No. 1 (1957).



LOCATION: 3 miles south of Davis

ELEVATION: 40

DISCOVERY DATA

					Initial production		tion	n	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.& M.	Daily (Mcf)	Flow pressure (psi)		Date of completion Mar. 1974	
(Unnamed) (Unnamed)	Capitol Oil Corp. "Hamel-Thomas" 1 Capitol Oil Corp. "Hamel-Thomas" 1	Same Same	34 8N 2E 34 8N 2E	MD MD	3,267 3,161	2,130 2,070	1/4 1/4	Mar. 1974 Mar. 1974	

Remarks:

DEEPEST WELL DATA

		Date			Total depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8.& M.		Strata	Age	
Capitol 0il Corp. "Hamel-Thomas" 2	Same	Apr. 1974	34 8N 2E	MD	8,051	Winters	Late Cret.	

PRODUCING ZONES

	Average	Average net thickness (feet)	Geologic		Heating value	Salinity of	Original zone	Class BOPE
Zone	depth (feet)		Age	Formation	of gas (Btu)	zone water (ppm)	pressure (psi)	required
(Unnamed) (Unnamed)	6,050 6,560	20 7	Late Cretaceous Late Cretaceous	Starkey Winters	873 852	N.A. N.A.	2,550 2,810	III B 3M III B 3M

PRODUCTION DATA

1976 Production					Peak gas production		Total numb	Maximum	
Net gas (Mcf)	Water (bbl)	Proved acreage		Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
1,437,548	60,649	230	4	1,437,548	1,437,548	1976	5	4	230

SPACING ACT: Applies

BASE OF FRESH WATER: 3,000

CURRENT CASING PROGRAM: 8 5/8" cem. 700; 4 1/2" cem. through zone and across base of freshwater sands.

REMARKS: Commercial gas deliveries began in January 1976.

REFERENCES: None



LOCATION: 10 miles southwest of Stockton ELEVATION: Sea level

DISCOVERY DATA

					Initial production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.&M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
(Unnamed)	Union Oil Co. of Calif. "Sonol Securities" 1-A	Same	10 1S 5E	MD	4,450	3,300	1/4	Feb. 1972

Remarks:

DEEPEST WELL DATA

		Date			Total depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B.& M.		Strata	Age	
Union Oil Co. of Calif. "Sonol Securities" 7	Same	Nov. 1973	10 1S 5E	MD	12,527	E Zone (Goudkoff)	Late Cret.	

PRODUCING ZONES

	Average	Average net			Heating value	Salinity of	Original zone	Class BOPE
Zone	depth (feet)	thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	pressure (psi)	required
(Unnamed)	9,700	150	Late Cretaceous	Winters	870	39,900	5,040	III B SM
				1				

PRODUCTION DATA

1976 Proc	1976 Production				1976			Total numb	Maximum	
Net gas (Mcf)	Water (bbl)	Proved acreage	Maximum number producing wells			Year	Drilled Completed		proved acreage	
19,665,780	44,939	1,590	14	19,795,180	19,665,780	1976	22	14	1,590	

SPACING ACT: Applies

BASE OF FRESH WATER: 300

CURRENT CASING PROGRAM: 13 3/8" cem. 600; 9 5/8" cem. 5,800; 5 1/2" cem. through zone.

REMARKS: Commercial gas deliveries began in January 1976.

REFERENCES: None



LOCATION: 3 miles north of Pittsburg

TYPE OF TRAP: Faulted nose

ELEVATION: 15

DISCOVERY DATA

					Initial produc		ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Nortonville Domengine	Standard Oil Co. of Calif. "Feykert" l Same as above	Standard Oil Co. of Calif. "Feykert" I Same as above	32 3N 1E	MD	1,665	1,110	1/4	Jun 1968
		2						

Remarks: Production comingled from both zones.

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Same as discovery well	Same	Jul 1967	32 3N 1E	MD	11,040	Starkey	Lt Cret

PRODUCING ZONES

	Average	Average Average net Geologic				Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age Formation Gas (btu)		Gas (btu)	gr/gal	pressure (psi)	required
Nortonville Domengine	6,760 6,800	10 150	Eocene Eocene	Nortonville Domengine	N.A. 1,035	N.A. 600	N.A. 3,000	IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	ive gas Peak gas production		Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbi)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
1,731,445	11,363	180	4	4,348,927	1,731,445	1972	5	4	180

SPACING ACT: Applies

BASE OF FRESH WATER: Above 250

CURRENT CASING PROGRAM: 10 3/4" or 9 5/8" cem. 1,500 and 7" or 4 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL: Sumps at separator sites.

REMARKS: Commercial gas deliveries began in April 1969. 1972 condensate production 7,926 bbl; cumulative condensate production 22,830 bbl;

REFERENCES:



CONTOURS ON TOP OF BLEWETT 2 SAND



VERNALIS GAS FIELD

San Joaquin and Stanislaus Counties

LOCATION: 9 miles southeast of Tracy

TYPE OF TRAP: Faulted anticline; lenticular sands

ELEVATION: 75

DISCOVERY DATA

							Init	Initial production		
Zone	Present operator and well name	Original operator and well name			. R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in)	Date of completion
Banta	Great Basins Pet. Co. "Vernalis Unit 1" 26-14	Porter Sesnon, et al "Sesnon-Vernalis Unit 1" 26-14	14	35	6E	MD	4,900	850	1/2	Sep 1959
Azevedo	Great Basins Pet. Co. "T.L.W." 13-23	Porter Sesnon, et al "Sesnon-T.L.W." 13-23	23	35	6E	MD -	*795 370	1,440 1,020	3/16 1/8	
Blewett	Standard Oil Co. of Calif. "Blewett Comm." 1	Same as present	25	35	6E	MD	9,700	1,140	5/8	Jan 1941
"Ragged Valley Silt"	Great Basins Pet. Co. "Mohawk-Boltzen- Hunter Unit 4" 63-16	Porter Sesnon, et al "Mohawk-Boltzen- Hunter Unit 4" 63-16	16	3S	6E	MD	1,110	1,000	1/4	10000000000000
Tracy	Great Basins Pet. Co. "Mohawk-Boltzen- Hunter" 76-16	Porter Sesnon, et al "Mohawk-Boltzen- Hunter" 76-16	16	35	6E	MD	5,500	950	1/2	Jul 1959

Remarks: * Former Blewett zone well, recompleted in January 1959 as a dual producer from two intervals in the Azevedo zone.

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
W.E. Strangman "Navarra" 1	Inter-American Resources Dev. Co. "Navarra" 1	Dec 1965	29 3S 6E	MD	11,602	F Zone (Goudkoff)	Late Cret

PRODUCING ZONES

	Average depth		Average net thickness	0	Seologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required	
Banta Azevedo Blewett "Ragged Valley Silt" Tracy	3,000 3,600 3,800 4,650 4,925	25 40 80 40 10	Miocene Lt Cretaceous Lt Cretaceous Lt Cretaceous Lt Cretaceous	Valley Springs Moreno Panoche Panoche Panoche	930 920 920 920 915	125 30 - 200 30 - 200 30 - 200 30 - 200 30 - 200	1,425 1,680 1,765 2,110 2,220	IV IV IV IV IV	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	Maximum number Cumulative gas		Peak gas production		Total num	Maximum	
Net gas (Mcf)	Water (bbl)	acreage	producing wells		(Mcf)	Year	Drilled	Completed	acreage
2,175,348	4,571	3,600	27	80,276,282	8,273,021	1962	67	38	4,030

SPACING ACT: Applies

BASE OF FRESH WATER: 800 - 1,050

CURRENT CASING PROGRAM: 9 5/8" or 8 5/8" cem. 1,000; 5 1/2" or 4 1/2" cem. through zones.

METHOD OF WASTE DISPOSAL: Disposal into sumps at well sites.

REMARKS Commercial gas deliveries began in May 1942.

REFERENCES: Hill, F.L., Vernalis Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 48, No. 2 (1962).

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(Abandoned)



LOCATION: 10 miles southeast of Tracy

TYPE OF TRAP: Lenticular sand on a homocline

ELEVATION: 225

DISCOVERY DATA

			91-18 - Street - St	1000	Initial production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
"Ragged Valley"	Porter Sesnon, et al "Sesnon-Vernalis" 22-5	Same as present	5 4S 6E	MD	530	340	1/4	Aug 1959
		7.E.						

Remarks:

. DEEPEST WELL DATA

		Date					Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec.	T. &	R.	B&M		Strata	Age
Occidental Petroleum Corp. "Raspo" 1	Same	Aug 1961	6	4S	6E	MD	6,628	lower Tracy	Lt Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
"Ragged Valley"	4,560	4	Lt Cretaceous	Panoche	870	N.A.	2,090	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Pro	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production Total number of wells		tive gas Peak gas production Total number	Total number of wells		Maximum
let gas (Mcf)	Water (bbl)	acreage	producing wells		(Mcf)	Year	Drilled	Completed	acreage	
0	0	0	0	12,063	11,283	1960	3	1	20	

SPACING ACT: Applies

BASE OF FRESH WATER: 2,600

CURRENT CASING PROGRAM: 9 5/8" cem. 600; 5 1/2" or 4 1/2" cem. through zones and across base of fresh-water sands. METHOD OF WASTE DISPOSAL:

REMARKS: Commercial gas deliveries began in April 1960. The well was abandoned in March 1961.

REFERENCES:





Sutter County

LOCATION: 6 miles northeast of Colusa

TYPE OF TRAP: Faulted nose with lenticular sands

ELEVATION: 60 - 285

DISCOVERY DATA

					Ini	tial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
(Unnamed sand stringers)	Occidental Pet. Corp. "Standard-Browning" I	Occidental Pet. Corp. "Standard" 1	19 16N 1E	MD	2,271	1,275	15/64	Apr 1961

Remarks:

DEEPEST WELL DATA

	*	Date			Depth	At total	depth
Present operator and well name	Original operator and well name		Sec. T. & R.	B & M		Strata	Age
Occidental Pet. Corp. "Standard-Browning" 2	Same	Apr 1961	20 16N 1E	MD	8,097	G zone (Goudkoff)	Late Cret

PRODUCING ZONES

	Average Average net Geologic					Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	et) (feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
(Unnamed sand stringers)	4,260 - 6,500	8 - 50 per stringer	Lt Cretaceous	Forbes	975 - 1,005	N.A.	1,930 - 4,380	īv

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum proved
let gas (Mcf)	Water (bbl)		production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage	
0	0	0	0	659,960	351,120	1963	. 14	5	960

SPACING ACT: Applies

BASE OF FRESH WATER: 2,200

CURRENT CASING PROGRAM: 9 5/8" cem. 2,000; 5 1/2" cem. through zones and across base of fresh water sands.

METHOD OF WASTE DISPOSAL:

REMARKS: Commercial gas deliveries began in August 1962. The field was abandoned in May 1970.

REFERENCES: Hluza, A.G., West Butte Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 2 (1962).

WILD GOOSE GAS FIELD









LOCATION: 10 miles northwest of Colusa

TYPE OF TRAP: Dome

ELEVATION: 65

DISCOVERY DATA

			1		Initial production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Hangtown (Sub Capay) Upper Wild Goose	Exxon Corp. "Wild Goose Gas Unit 1" 6 Exxon Corp. "Wild Goose Gas Unit 1" 4	Humble Oil & Rfg. Co. "Wild Goose" 6 Honolulu Oil Corp. "Honolulu-Humble Wild Goose" 4	17 17N 1E 17 17N 1E	MD	4,000 7,340	940 880	24/64 36/64	Jul 1953
Afton Lower Wild Goose	Exxon Corp. "Wild Goose Gas Unit 1" 6 Exxon Corp. "Wild Goose Gas Unit 1" 1	Humble Oil & Rfg. Co. "Wild Goose" 6 Honolulu Oil Corp. "Honolulu-Humble Wild Goose" 1	17 17N 1E 17 17N 1E		*4,840 4,020			Sep 1963 Aug 1951

Remarks: * Commingled production from Afton and Upper Wild Goose. Honolulu Oil Corp. tested this zone in open hole at a maximum rate of 2,980 Mcf per day in "Honolulu-Humble Tule Goose" 1 (now Exxon Corp. "Wild Goose Gas Unit 1" 7) during July 1952.

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Exxon Corp. "Wild Goose Gas Unit 1" 11	Humble Oil & Rfg. Co. "Wild Goose Country Club" 7	Aug 1967	18 17N 1E	MD	7,004	Dobbins	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Hangtown (Sub Capay)	2,400	10	Lt Cretaceous	Kione	N.A.	N.A.	1,105	IV
Upper Wild Goose	2,500	200	Lt Cretaceous	Kione	800	1,780 - 3,250	1,200 - 1,310	IV
Afton	2,850	30	Lt Cretaceous	Kione	N.A.	N.A.	1,335	IV
Lower Wild Goose	2,900	250	Lt Cretaceous	Kione	805	1,800 - 2,650	1,345 - 1,500	IV

PRODUCTION DATA (Ian. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas pro	Peak gas production Total number		Total number of wells	
Net gas (Mcf)	Water (bbl)	acreage		production (Mcf)	(Mcf)	Year	Drilled	Completed	proved
1,382,761	0	340	9	99,229,200	8,248,811	1961	16	11	360

SPACING ACT: Applies

BASE OF FRESH WATER: 1,050

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

METHOD OF WASTE DISPOSAL: Water is injected into Exxon Corp. disposal well.

REMARKS: Commercial gas deliveries began in November 1951.

REFERENCES: Hunter, G.W., Wild Goose Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 41, No. 1 (1955).



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LOCATION: 8 miles east of Martinez

ELEVATION: 425-775

DISCOVERY DATA

					Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.& M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
Nortonville Domengine	The Termo Co. "Faria Unit" 2 The Termo Co. "Faria Unit" 1	Trico Oil and Gas Co. "Faria Unit" 2 Trico Oil and Gas Co. "Faria Unit" 1	21 2N 1W 21 2N 1W	MD MD	1,500 4,300	310 290	3/8 3/4	

Remarks:

DEEPEST WELL DATA

		Date			Total depth	At total d	lepth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B.& M.		Strata	Age
The Termo Co. "Neustaedter" 1 -	Trico Oil and Gas Co. "Neustaedter" 1	Aug. 1959	16 2N 1W	MD	5,483	Undiff. marine	Late Cret.

PRODUCING ZONES

Average	Average net		Geologic	Heating value	Salinity of	Original zone	Class BOPE
(feet)	(feet)	Age	Formation	(Btu)	(ppm)	(psi)	required
1,500-3,100	35	Eocene	Nortonville	1,000	N.A.	530- 1,335	III B 2M
1,800	50	Eocene	Domengine	1,020	N.A.	650	III B 2M
				4			
	depth (feet) 1,500- 3,100	depth (feet) thickness (feet) 1,500- 3,100 35	depth thickness depth (feet) Age 1,500- 35 Eocene	depth (feet) thickness (feet) Age Formation 1,500- 3,100 35 Eocene Nortonville	depth (feet) thickness (feet) Age Formation of gas (Btu) 1,500- 3,100 35 Eocene Nortonville 1,000 1,800 50 Eocene Domengine 1,020	depth (feet)thicknessAgeFormationof gas (Btu)zone water (ppm)1,500- 3,10035EoceneNortonville1,000N.A.1,80050EoceneDomengine1,020N.A.	depth (feet)thicknessJordanof gas (Btu)zone water (ppm)pressure (psi)1,500- 3,10035EoceneNortonville1,000N.A.530- 1,3351,80050EoceneDomengine1,020N.A.650

PRODUCTION DATA

1976 Production		1977	1976 Maximum number	1976	Peak gas production		Total number of wells		Maximum
Net gas (Mcf)	Water (bbi)	Proved acreage	producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage
14,739	0	85	2	2,880,052	263,347	1967	12	6	85

SPACING ACT: Applies

BASE OF FRESH WATER: 150

CURRENT CASING PROGRAM: 9 5/8" cem. 500; 5 1/2" cem. through zones.

REMARKS: Commercial gas deliveries began in April 1960.

REFERENCES: Matthews, J. F., Jr., Willow Pass Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 49, No. 1 (1963).







LOCATION: 3 miles north of Davis ELEVATION: 50

DISCOVERY DATA

					Ini	tial product	lion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.& M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
S-3 S-4 S-5 Winters	Shell Oil Co. "Schuder" 1-32 Shell Oil Co. "Stephens" 1-28 Shell Oil Co. "Staib" 1-31 Shell Oil Co. "Schuder" 2-32	Same Same Same Same	32 9N 2E 28 9N 2E 31 9N 2E 32 9N 2E	MD MD MD MD	1,020 1,580 1,260 375	1,750 N.A. N.A. 1,000	N.A. N.A. N.A. N.A.	Oct. 1974 June 1976 Sept. 1976 June 1975

Remarks:

DEEPEST WELL DATA

	pth
Strata	Age
Winters	Late Cret.

PRODUCING ZONES

	Average depth	Average net	(Seologic	Heating value	Salinity of	Original zone	Class BOPE
Zone	(feet)	thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	prèssure (psi)	required
5-3 5-4 %inters	4,670 4,770 5,150 5,990	30 15 15 10	Late Cretaceous Late Cretaceous Late Cretaceous Late Cretaceous	Starkey Starkey Starkey Winters	890-902 N.A. N.A. 900	N.A. N.A. N.A. 5,040	2,050 2,120 2,200 2,530	III B 3M III B 3M III B 3M III B 3M III B 3M

PRODUCTION DATA

1976 Pro	duction	1977	1976 Maximum number	1976	Peak gas production		Total number of wells		Maximum
Net gas (Mcf)	Water (bbl)	Proved acreage	producing wells	Cumulative gas production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage
0	0	1,600	0	0	See Remarks		9	8	1,600

SPACING ACT: Applies

BASE OF FRESH WATER: 2,800

CURRENT CASING PROGRAM: 8 5/8" cem. 800; 5 1/2" cem. through zone and across base of freshwater sands.

REMARKS: Commercial gas deliveries began in February 1977.

REFERENCES: None





LOCATION: 7 miles east of Willows

ELEVATION: 105

DISCOVERY DATA

					Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.& M.	Daily (Mcf)	Flow pressure (psi)	Bean size (inches)	Date of completion
(Unnamed)	Sun Oil Co. "Huffmaster" 1	Sunray Mid-Continent Oil Co. "Huffmaster" 1	24 19N 2W		3,035	855	19/64	Sep. 1956*
(Unnamed sand stringers)	Teal Petroleum Co. "Transamerica" 71-18	The Ohio Oil Co. "E.E. Willard" 1-A	18 20N 2W	MD	5,355	515	21/32	Aug. 1938
(Unnamed sand stringers)	Rheem Calif. Land Co. "Zumwalt" 1-63	Richard S. Rheem, Opr. "Zumwalt" 1-63	2 19N 2W	MD	5,000	2,050		Sep. 1954
(Unnamed) (Unnamed)	Mobil Oil Corp. "Miner-Jones" 5 Mobil Oil Corp. "Wolcott Capital" 1	General Pet. Corp. "Miner-Jones" 5 General Pet. Corp. "Wolcott Capital Unit" 1	34 20N 2W 13 19N 2W		7,000 280	1,210 1,080		Mar. 1958 Mar. 1955

Remarks: * Date of recompletion; originally completed in Kione sands.

DEEPEST WELL DATA

		Date			Total depth	At tota	il depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B.& M.		Strata	Age
Sun Oil Co. "Sunray-General Petroleum Whyler-Wolcott Unit" 1	Sunray Oil Corp. "Sunray-General Petroleum Whyler-Wolcott Unit" 1	May 1955	11 19N 2W	MD	10,807	Basement	pre-Late Cret

PRODUCING ZONES

	Average	Average net	Geologic		Heating value	Salinity of	Original zone	Class BOPE	
Zone	depth (feet)	thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	pressure (psi)	required	
(Unnamed)	2,045	25	Eocene	Princeton Gorge fill	990	1,710	955	III B 2M	
(Unnamed sand stringers)	1,930- 3,650	10-80 per stringer	Late Cretaceous	Kione	990	4,960- 18,400	900-1,705	III B 3M	
(Unnamed sand stringers)	4,420-6,400	3-60 per stringer	Late Cretaceous	Forbes	980	1,200-	2,200-4,200	III B 3M III B 5M	
(Unnamed)	6,700	30	Late Cretaceous	Dobbins	N.A.	N.A.	4,440	III B 5M	
(Unnamed)	7,275	70	Late Cretaceous	Guinda	980	N.A.	1,800	III B 5M	

PRODUCTION DATA

1976 Production		1977	1976	1976	Peak gas produ	ction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)		Maximum number Cumulative gas producing wells production (Mcf)	(Mcf)	Year	Drilled	Completed	proved acreage	
6,801,592	58,310	9,560	65	291,355,077	29,202,019	1959	199	126	13,320

SPACING ACT: Applies

BASE OF FRESH WATER: 850-1,500

CURRENT CASING PROGRAM: Princeton Gorge fill: 8 5/8" cem. 500; 5 1/2" cem. through zone and across base of freshwater sands. Kione Formation: 8 5/8" cem. 500; 5 1/2" cem. through zone and across base of freshwater sands. Forbes Formation (upper): 8 5/8" cem. 800; 5 1/2" cem. through zone and across base of freshwater sands. Forbes (lower), Dobbins and Guinda Formations: 9 5/8" cem. 1,500; 5 1/2" cem. through zone.

REMARKS:

The Ohio Oil Co. well No. "E.E. Willard" 1 (now operated by Transamerica Development Co.) blew out in January 1938 while operator was preparing to pull drill pipe from 4,505'. A large crater formed in which the derrick and equipment were lost. The well blew gas and water for 23 days. Commercial gas deliveries began in March 1944. Many of the gas-sand stringers in the Kione and Forbes Formations have been given local names by operators.

REFERENCES:

Barger, R. M. and J. C. Sullivan, Willows-Beehive Bend Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 52, No. 2, Part 2 (1966).
WINCHESTER LAKE GAS FIELD



COURTESY OF PHILLIP S. KISTLER

LOCATION: 8 miles southwest of central Sacramento
ELEVATION: 5

DISCOVERY DATA

					Ini	tial product	tion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B.&M.	Daily (Mcf)	Flow pressure (psi)		Date of completion
Kirtlan Sand Winchester Sand Dwyer Sand Bunker Sand	Atlantic Oil Co. "Kirtlan" 1 Atlantic Oil Co. "Winchester Lake" 2 Atlantic Oil Co. "Dwyer" 1 Atlantic Oil Co. "Kirtlan" 4	Same Same Same Same	9 7N 4E 17 7N 4E 9 7N 4E 16 7N 4E	MD MD MD MD	3,670 1,070 3,682 1,108	1,110 1,250 1,115 1,292	3/8 3/16 3/8 3/16	Aug. 1975 Aug. 1973 Dec. 1974 Feb. 1976

Remarks:

DEEPEST WELL DATA

		Date Total depth		At total depth			
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B.& M.		Strata	Age
Atlantic Oil Co. "Dwyer" 1	Same	Nov. 1974	9 7N 4E	MD	7,200	Winters	Late Cret.

PRODUCING ZONES

	Average	Average net	G	eologic	Heating value	Salinity of	Original zone	Class BOPE
Zone	depth (feet)	thickness (feet)	Age	Formation	of gas (Btu)	zone water (ppm)	pressure (psi)	required
Kirtlan Sand	3,150	10	Eccene-Paleccene	Meganos-Martinez	886	N.A.	1,380	III B 2M
Winchester Sand	3,320	15	Eocene-Paleocene	Meganos-Martinez	873	N.A.	1,460	III B 2M
Dwyer Sand	3,380	10	Eocene-Paleocene	Meganos-Martinez	N.A.	N.A.	1,430	III B 2M
Bunker Sand	3,680	10	Eocene-Paleocene	Meganos-Martinez	920	N.A.	1,500	III B 2M
							40 m	

PRODUCTION DATA

1976 Production		1977	1976	1976	Peak gas production		Total number of wells		Maximum proved acreage	
Net gas (Mcf)	Water (bbi)	Proved acreage	Maximum number Cumulative gas producing wells production (Mcf) (Mcf) Year Dri	Drilled	Completed					
0	0	480	0	0	See Remarks		8	7	. 480	

4

SPACING ACT: Applies

BASE OF FRESH WATER: 1,800

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

REMARKS: Commercial gas deliveries have not yet begun.

REFERENCES: Kistler, Philip S., Winchester Lake Gas Field in Technical Program Preprints: Pacific Sections A.A.P.G.-S.E.G. 52nd Annual Meeting, Bakersfield, California, April 20-23, 1977.



CONTOURS ON TOP OF MCCUNE SAND



LOCATION: 3 miles east of Winters

TYPE OF TRAP: Sand pinchout on faulted homocline

ELEVATION: 110

DISCOVERY DATA

				1	Initial production		Date of completion Feb 1946 Sep 1946 Sep 1959	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R	. 8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	
McCune Unit Unit Oil Zone	Shell Oil Co. "McCune" 1 Albert A. Rembold "Winters Unit 1" 1 Texaco Inc. "McCune" 1	Same as present Shell Oil Co. "Winters Unit 1" 1 Texaco Inc. "McCune Core Hole" 1		E MD E MD E MD	12,500 A3,060 B8,321	1,626 1,953 1,513	1/2 1/4 1/2	Sep 1946

Remarks: A Commingled production from McCune and Unit zones. ^B Texaco Inc. "McCune" 1 was completed as a gas well but when connected to a sales line began flowing 29 degree gravity oil. The average production during May 1960 was 79 barrels of oil and 512 Mcf of gas per day.

DEEPEST WELL DATA

		Date		-	Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Albert A. Rembold "Winters Unit 2" 1	Shell Oil Co. "Winters Unit 2" 1	Aug 1946	18 8N 1E	MD	8,493	Forbes	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Seologic		Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
McCune Unit Unit Oil Zone	4,850 4,920 5,585	20 5 5	Lt Cretaceous Lt Cretaceous Lt Cretaceous	Winters Winters Winters	850 - 925 865 N.A.	N.A. N.A. N.A.	2,107 2,489 2,489	IV IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumutative gas	Peak gas proc	luction	Total num	ber of wells	Maximum proved
Net gas (Mcf)	Water (bbl)	Proved acreage	producing wells	production (McI)	(Mcf)	Year	Drilled	Completed	acreage
165,897	194	440	6	35,049,132	2,325,158	1963	33	17	870

SPACING ACT: Applies

BASE OF FRESH WATER: 2,400

CURRENT CASING PROGRAM: 10 3/4" or 9 5/8" cem. 500; 5 1/2" cem. through zones and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Shell 0il Co. operated a waste-water injection well from 1951 to 1965, when it was abandoned. Current disposal practice is by evaporation from pits at each well site.

REMARKS: Commercial gas deliveries began in January 1949. Texaco Inc. "McCune" 1 was the first commercial oil well in the Sacramento Valley and was the only oil well in the field; it was abandoned in March 1966. Cumulative oil production is 18,560 barrels, with a peak production of 9,865 barrels in 1960.

REFERENCES: Hunter, G.W., Winters Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 42, No. 2 (1956).



LOCATION: 2 miles northwest of Woodland

TYPE OF TRAP: Sand lenses and pinchouts on a faulted nose

ELEVATION: 90

DISCOVERY DATA

					Ini	tial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	
Oliver Hermle	Atlantic Oil Co. "Shell-Oliver" 1 Jesse Roney "Hermle" 1	Same as present Atlantic Oil Co. "Shell-Hermle" l	24 10N 1E 24 10N 1E	MD MD	2,296 8,639	1,279 1,816	18/64 30/64	Sep 1962 Oct 1962

Remarks: Both bean sizes were estimated. Wells tested through orifice meters.

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name		Sec. T. & R.	B & M		Strata	Age
Atlantic Oil Co. "Shell-Oliver" 1	Same	Aug 1962	24 10N 1E	MD	11,007	Forbes	Late Cret

PRODUCING ZONES

10 million (10 million)	Average depth	Average net thickness	Geologic			Salinity of zone water	Original zone	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	Gas (btu)	gr/gal	pressure (psi)	required
Oliver Hermle	3,988 4,730 - 5,130	32 15	Lt Cretaceous Lt Cretaceous	Starkey Winters	920 900 - 930	N.A. 1,200	1,765 2,100	IV IV	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum
let gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf) Year	Drilled	Completed	acreage	
92,651	56	460	3	2,483,719	461,757	1966	8	5	700

SPACING ACT: Applies

BASE OF FRESH WATER: 3,100

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

METHOD OF WASTE DISPOSAL:

REMARKS: Commercial gas deliveries began in January 1965.

REFERENCES: Beecroft, G.W., Woodland Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 52, No. 1 (1966).



LOCATION: 10 miles northwest of Woodland

TYPE OF TRAP: Sand lenses

ELEVATION: 53

DISCOVERY DATA

					In	itial product	on	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
(Unnamed sand stringers)	Argo Petroleum Corp. "Hermle" 1	Kenyon C. Sills, Oper., Inc. "Hermle" 1	15 11N 1E	MD	1,318	1,500	1/8	Sep 1967
	8							

Remarks: Discovery well originally drilled and abandoned as well No. "Albert H. Hermle et ux" 1, a stratigraphic test by Humble Oil & Refining Co. (now Exxon Corp.). Kenyon C. Sills, Oper., Inc. acquired the well, cleaned out to 4,700 feet and completed it to production.

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	B & M		Strata	Age
Argo Petroleum Corp. "Hermle" 1	Humble Oil & Refining Co. "Albert H. Hermle et ux" 1	Oct 1958	15 11N 1E	MD	5,756	Kione	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE	
Zone (feet)		(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required	
(Unnamed sand stringers)	4,530	7 per stringer	Lt Cretaceous	Winters	1 959	N.A.	1,622	īv	
				1					

PRODUCTION DATA (Jan. 1, 1973)

1972 Pro	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas prod	uction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
• 0	0	40	0	0			2	1	40

SPACING ACT: Applies

BASE OF FRESH WATER: 1,900

CURRENT CASING PROGRAM: 8 5/8" to 7" cem. 500; 4 1/2" cem. through zone and across base of fresh-water sands (see Remarks). METHOD OF WASTE DISPOSAL:

REMARKS: 2 7/8" casing was cemented through zone in discovery well, but this is not common practice in this area. The well is shut in.

REFERENCES:

















EAST CENTRAL CALIFORNIA MAPS AND DATA SHEETS







LOCATION: 7 miles east of Bakersfield

TYPE OF TRAP: Faulted anticline; lenticular sands

ELEVATION: 850

DISCOVERY DATA

						al daily fuction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Olcese	Samson Resources Co. "Southern Pacific" 3615	Amerada Petroleum Corp. "Southern Pacific" 36-15	15 29S 29E	MD	80	N.A.	Jul 1944
Jewett	Samson Resources Co. "Southern Pacific" 815	Amerada Petroleum Corp. "Southern Pacific" 8-15	15 29S 29E	MD	182	N.A.	Nov 1944

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	5 & M		Strata	Age
Standard Oil Co. of Calif. Well No. 63	Same	Jun 1967	21 295 29E	MD	4,890	Basement	Jurassic

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation Gas (btu) gr/gal		required	
Olcese Jewett	2,300 3,500	700 30	, early Miocene early Miocene	Olcese Freeman - Jewett	13 39	90 270	None None

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prodi	uction	Total num	ber of wells	Maximum
Oil (bb1)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
163,847	0	3,304,377	295	28	5,598,634	232,653	458,488	1947	51	38	315

STIMULATION DATA (Jan. 1, 1973)

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	29,238,392	1
	1		

SPACING ACT: Applies

BASE OF FRESH WATER: 850

CURRENT CASING PROGRAM: Olcese: 7" cem. 2,300; 5 1/2" liner landed through zone. Jewett: 5 1/2" cem. 3,700.

METHOD OF WASTE DISPOSAL: Major portion used in water-flood operations.

REMARKS: Olcese and Jewett zone water boron contents are 8.2 and 14.7 ppm, respectively.

REFERENCES: Bailey, W.C., Ant Hill Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 33, No. 2 (1947).





LOCATION: 34 miles northwest of Taft TYPE OF TRAP: See areas ELEVATION: 850

DISCOVERY DATA

						al daily luction	- ageneration
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Agua	Shell Oil Co. "Williams" 45-6	Shell Oil Co. Inc. "Williams" 45-6	6 28S 20E	MD	700	N.A.	May 1942
				-		i in	

Remarks:

DEEPEST WELL DATA

		Date		1	Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	5 & M		Strata	Age
Shell Oil Co. "Shell-Intex-Voigt" 33-4	Same	Jul 1953	4 28S 20E	MD	11,500	Santos	early Mio

PRODUCING ZONES (See areas)

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

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included-see Williams Area and Nepple Area-Gas)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total number of wells		Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wetts	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
233,193	21,977	1,908,043	480	64	13,165,751	7,459,907	757,109	1943	131	80	480

STIMULATION DATA (Jan. 1, 1973)

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: See areas METHOD OF WASTE DISPOSAL: See areas REMARKS:

REFERENCES:

HOPKINS AREA

ANTELOPE HILLS OIL FIELD

Kern County

LOCATION: See map sheet of Antelope Hills Oil Field

TYPE OF TRAP: Localized permeability on a broad anticline

ELEVATION: 830

DISCOVERY DATA

Zone						al daily luction	Data at
	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Phacoides Point of Rocks	Shell Oil Co. "Hopkins A" 62X-31 Shell Oil Co. "Hopkins A" 57X-31	Shell Oil Co. Inc. "Hopkins A" 62X-31 Shell Oil Co. Inc. "Hopkins Fee" 57X-31	31 275 20E 31 275 20E		33 31	N.A. N.A.	Jan 1952 Jun 1944
	· ·						

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total d	epth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Shell Oil Co. "Hopkins Fee" 72X-31	Sane	Jan 1951	31 27S 20E	MD	3,501	Point of Rocks	late Eo

PRODUCING ZONES

	Average depth	Average net thickness	G	ieologic	Dil gravity (*API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required
Phacoides	2,400 - 3,400	15	early Miocene.	Temblor	31	N.A.	None
Point of Rocks	2,000 - 2,500	30 - 100	late Eocene	Kreyenhagen	17	865	None
				-			

Υ.

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil production		Total number of wells		Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbi)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
5,451	0	1,591	70	4	426,008	0	48,064	1952	21	7	70

STIMULATION DATA (Jan. 1, 1973)

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

×.

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 5 1/2" combination string landed through zone and cemented through ports above zone.

METHOD OF WASTE DISPOSAL: Unlined sumps.

REMARKS:

REFERENCES: Lorshbough, A.C., Antelope Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 2 (1961).

NEPPLE AREA GAS (Abandoned)

LOCATION: See map sheet of Antelope Hills Oil Field

TYPE OF TRAP: Faulted anticlinal nose

ELEVATION: 800

DISCOVERY DATA

					Ini	tial product	lion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Etchegoin	Estate of Edward A. Nepple, W.A. MacMull- en, Trustee "Nepple Custodian" 5-84	Edward Nepple "Nepple Custodian" 5-84	5 28S 20E	MD	1,620	140	48/64	Sep 1955
7								ł .

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B&M		Strata	Age	
Shell Oil Co. "Shell-Intex-Voigt" 33-4	Same	Jul 1953	4 28S 20E	MD	11,500	Santos	early Mio	
·						4		

PRODUCING ZONES

Average	Average net		Geologic			Original rose	Class BOPE
(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
1,000	40	Pliocene	Etchegoin	995	2,900	323	11
	91						
	depth (feet)	depth thickness (feet) (feet)	depth thickness (feet) (feet) Age	depth thickness (feet) (feet) Age Formation	depth thickness George Groups George	depth (feet) thickness (feet) Age Formation Gas (btu) zone water gr/gal 1,000 40 Pliocene Etchegoin 995 2,900	depth (feet) thickness (feet) Age Formation Gas (btu) zone water gr/gal Original zone pressure (psi) 1,000 40 Pliocene Etchegoin 995 2,900 323

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas pro	Peak gas production Tot		Total number of wells	
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	proved
0	0	0	0	403,053	123,102	1956	15	5	40

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 7" cem. through zone.

METHOD OF WASTE DISPOSAL: No water produced.

REMARKS: Last production in 1963. Area abandoned in 1965.

REFERENCES: Lorshbough, A.L., Antelope Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 2 (1961).

WILLIAMS AREA

LOCATION: See map sheet of Antelope Hills Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 870

DISCOVERY DATA

						luction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Upper	Shell Oil Co. "Williams" 505-6	Same as present	6 28S 20E	MD	144	N.A.	Jun 1971
IA (or 67-6) gas zone	Shell Oil Co. "Williams" 67-6	Shell Oil Co. Inc. "Williams" 67-6	6 28S 20E	MD	N.A.	300	Jun 1942
Button Bed (IB or 23-6)	Shell Oil Co. "Williams" 23-6	Shell Oil Co. Inc. "Williams" 23-6	6 28S 20E	MD	85	N.A.	Sep 1942
Agua (IIB or 45-6)	Shell Oil Co. "Williams" 45-6	Shell Oil Co. Inc. "Williams" 45-6	6 28S 20E	MD	700	N.A.	May 1942
						1. Z	

Remarks: Upper zone initial daily oil production was after steam stimulation.

DEEPEST WELL DATA

		Date			Depth	At total d	lepth
Present operator and well name	Original operator and well name		Sec. T. & R.	3 & M		Strata	Age
Shell Oil Co. "Voigt Three" 1	Shell Oil Co. Inc. "Voight Three" 1	Aug 1936	5 28S 20E	MD	4,854	Point of Rocks	late Eo

PRODUCING ZONES

	Average depth	Average net thickness	G	eologic	Oil gravity (*API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required
Upper	845 - 1,400	10 - 80	Pleistocene	Tulare	12	45	None
IA gas zone	1,900	20	middle Miocene	Monterey	900	415	II
Button Bed	2,100	80	middle Miocene	Temblor	17	244	11
Agua	2,300	70 - 170	early Miocene	Temblor	17	150	11
	1	1					

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included -- see Remarks)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prode	uction	Total num	ber of wells	Maximum proved
Oil (bb1)	'Net gas (Mcf)	Water (bbi)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
227,742	21,977	1,906,452	410	60	12,739,743	7,459,907	757,109	1943	100	73	410

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: None

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

METHOD OF WASTE DISPOSAL: Evaporation from unlined sumps and injection into a disposal well.

REMARKS: Two dry gas zone wells were drilled and completed. The 1972 dry gas production was 22,281 Mcf; cumulative dry gas production was 338,586 Mcf.

REFERENCES: Lorshbough, A.L., Antelope Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 2 (1961). Moodward, W.T., Antelope Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 28, No. 2 (1942).

Autor dates 1





Kern County

LOCATION: 38 miles northwest of Taft

TYPE OF TRAP: Sand truncation and overlap on a faulted homocline

ELEVATION: 800

DISCOVERY DATA

						daily uction	2000
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Button Bed II A Agua Point of Rocks	Shell Oil Co. "Hopkins B" 63X-23 Same as above Same as above Getty Oil Co. "Shale Point Unit" 31-15	Shell Oil Co. "Hopkins B" 63X-23 Same as above Same as above Tidewater Oil Co. "Shale Point Unit" 31-15	23 27S 19E 23 27S 19E 23 27S 19E 23 27S 19E 15 27S 19E	MD MD	500 N.A. N.A. 6	0 N.A. N.A. 0	Jun 1950 Jun 1950 Jun 1950 Mar 1965

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Shell Oil Co. "Hopkins B" 55X-23	Same	Nov 1953	23 275 19E	MD	6,000	Kreyenhagen	late Eo

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE	
Zone (feet)		(feet)	Age	Formation	Gas (btu)	gr/gal	required	
Button Bed II A Agua Point of Rocks	2,340 2,360 2,380 1,545	15 5 100 30	m Miocene e Miocene e Miocene lt Eocene	Temblor Temblor Temblor Kreyenhagen	16 15 15 16	950 950 1,090 490	11 11 11 11	

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum
Oit (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
32,696	9,490	818,700	280	18	3,179,727	672,787	557,526	1952	42	24	290

STIMULATION DATA (Jan. 1, 1973)

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" cem. 2,300; 6 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL: Percolation and evaporation from unlined sumps.

REMARKS: A cyclic-steam operation was initiated in November 1970 and terminated after 33,681 bbls. of water (in the form of steam) were injected.

REFERENCES: Armbruster, E., North Antelope Hills Field: AAPG-SEPM-SEG Guidebook, Joint Annual Meeting, Los Angeles, 1952, pp. 211-213. Bruce, D.D., North Antelope Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 42, No. 2 (1956).

ANTELOPE PLAINS GAS FIELD (Abandoned)









LOCATION: 38 miles northwest of Taft

TYPE OF TRAP: Lithofacies change

ELEVATION: 850

DISCOVERY DATA

					lni	itial produc	tion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
8th Eocene sand	Tesoro Petroleum Corp. "Bolton" 83	Independent Exploration Co. "Bolton" 83	27 275 19E	MD	1,390		14/64	Jun 1949
				ł.				

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Tesoro Petroleum Corp. "Bolton" 83	Independent Exploration Co. "Bolton" 83	Feb 1949	27 27S 19E	MD	4,313	N.A.	pre-Paleoc

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
8th Eocene sand	3,200	35	Eocene	Kreyenhagen	1,040	550	1,470	111

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum
Net gas (Mcf)	Water (bbl)	acreage	producing wells		(Mcf)	Year	Drilled	Completed	acreage
0	0	0	0	35,376	30,655	1949	3	1	10

SPACING ACT: Applies

BASE OF FRESH WATER: 200

CURRENT CASING PROGRAM: 11 3/4" cem. 200; 7" cem. through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Abandoned in August 1950. A small amount of condensate was recovered.

.

REFERENCES:

ASPHALTO OIL FIELD



Kern County

LOCATION: 12 miles northwest of Taft

TYPE OF TRAP: Anticline; lensing; angular unconformity

ELEVATION: 950

DISCOVERY DATA

						Conservation 1
Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Crown Central Petroleum Corp. "Mason" 2	Western Oil Fields Corp. No. 2	6 31S 23E	MD	153	N.A.	Jul 1923
W.T. Woodward and American Placers Inc. "Flickenger" 1	MacDonald, Burns and Norris "Flickenger" 1	36 30S 22E	MD	1.58		Oct 1944
General Crude Oil Co., Opr. "Standard Oil Co." 18	E.A. Bender, Opr. "Standard Oil Co." 18	23 30S 22E	MD	312	825	Dec 1962
Bob Ferguson Independent No. 32X-36	Same as present	36 30S 22E	MD	110	43	Jan 1967
Standard Oil Co. of Calif. No. 545	Same as present	25 30S 22E	MD	446	1,756	Nov 1967
	Crown Central Petroleum Corp. "Mason" 2 W.T. Woodward and American Placers Inc. "Flickenger" 1 General Crude Oil Co., Opr. "Standard Oil Co." 18 Bob Ferguson Independent No. 32X-36	Crown Central Petroleum Corp. "Mason" 2 W.T. Woodward and American Placers Inc. "Flickenger" 1 General Crude Oil Co., Opr. "Standard Oil Co." 18 Bob Ferguson Independent No. 32X-36 Same as present Western Oil Fields Corp. No. 2 MacDonald, Burns and Norris "Flickenger" 1 E.A. Bender, Opr. "Standard Oil Co." 18 Same as present	Crown Central Petroleum Corp. "Mason" 2Western Oil Fields Corp. No. 26 31S 23EW.T. Woodward and American Placers Inc. "Flickenger" 1MacDonald, Burns and Norris "Flickenger" 136 30S 22E"General Crude Oil Co., Opr. "Standard Oil Co." 18E.A. Bender, Opr. "Standard Oil Co." 1823 30S 22EBob Ferguson Independent No. 32X-36Same as present36 30S 22E	Crown Central Petroleum Corp. "Mason" 2 Western Oil Fields Corp. No. 2 6 31S 23E MD W.T. Woodward and American Placers Inc. "Flickenger" 1 36 30S 22E MD "Flickenger" 1 General Crude Oil Co., Opr. "Standard Oil Co." E.A. Bender, Opr. "Standard Oil Co." 18 23 30S 22E MD 18 Bob Ferguson Independent No. 32X-36 Same as present 36 30S 22E MD	Present operator and well name Original operator and well name Sec. T. & R. B & M prod (bb) Crown Central Petroleum Corp. "Mason" 2 W.T. Woodward and American Placers Inc. "Flickenger" 1 General Crude Oil Co., Opr. "Standard Oil Co." Western Oil Fields Corp. No. 2 MacDonald, Burns and Norris "Flickenger" 1 General Crude Oil Co., Opr. "Standard Oil Co." 6 31S 23E MD MD 153 50 Bob Ferguson Independent No. 32X-36 Same as present 36 30S 22E MD 110	Present operator and well name Original operator and well name Set. T. & R. B & M (bb) (Witch) Crown Central Petroleum Corp. "Mason" 2 Western Oil Fields Corp. No. 2 6 315 23E MD 153 N.A. W.T. Woodward and American Placers Inc. MacDonald, Burns and Norris "Flickenger" 1 36 305 22E MD 50 5,795 "Flickenger" 1 General Crude Oil Co., Opr. "Standard Oil Co." E.A. Bender, Opr. "Standard Oil Co." 18 23 30S 22E MD 312 825 18 Bob Ferguson Independent No. 32X-36 Same as present 36 30S 22E MD 110 43

Remarks:

DEEPEST WELL DATA

	2 A	Date			Depth	At total d	epth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Standard Oil Co. of Calif. No. 532	Same	May 1968	25 305 22E	MD	13,455	Point of Rocks	late Eo

PRODUCING ZONES

	Average depth	Average net thickness	0	Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Egchegoin Olig Stevens Antelope Shale Carneros	3,050 4,825 5,660 7,550 8,510	15 20 165 200 200	Pliocene late Miocene late Miocene late Miocene early Miocene	Etchegoin Monterey Monterey Temblor	19 30 - 75 36 36 35	N.A. N.A. 1,270 N.A. N.A.	11 111 111 111 111 111 1V
				8			

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	Average number	Cumulative production		Peak oil production		Total number of wells		Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
929,642	5,729,498	4,955,511	830	58	28,851,621	51,799,060	5,202,894	1964	110	85	890

STIMULATION DATA (Jan. 1, 1973)

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 except for NW 1/4 of Sec. 6, T. 31S., R. 23E.

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM. Miocene zones: 10 3/4" cem. 500; 7" or 5" cemented through zone.

METHOD OF WASTE DISPOSAL: Unlined sumps.

REMARKS: Asphalto Oil Field derives its name from mining activities predating the turn of the century. Asphalt and viscous oil was recovered from surface outcrops, pits and shallow wells.

REFERENCES: Anderson, D.N., Stevens Pool of Asphalto 0il Field: Calif. Div. of 0il and Gas, Summary of Operations--Calif. Oil Fields, Vol. 49, No. 1 (1963).

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CONTOURS ON TOP OF LOWER SANTOS



LOCATION: 43 miles northwest of Taft TYPE OF TRAP: Permeability barrier on an anticlinal nose

ELEVATION: 625 DISCOVERY DATA

						al daily uction		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion	
Bloemer	Getty Oil Co. "O.L.C." 1	Same as present	31 26S 20E	MD	231	50	Mar 1968	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Getty Oil Co. "S & G Gump" 1	Same	Nov 1967	30 26S 20E	MD	11,998	Oceanic	Oligocene

PRODUCING ZONES

	Average depth	Average net thickness	0	ieologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Bloemer	11,100	60	early Miocene	Temblor	29	850	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total number of wells		proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
43,111	15,334	0	80	2	293,433	73,135	75,116	1968	4	3	120

STIMULATION DATA (Jan. 1, 1973)

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. 3,000; 7" cem. above zone; 5" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS:

REFERENCES: Miller, H.J., Beer Nose Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 57, No. 1 (1971).

BELGIAN ANTICLINE OIL FIELD Index Map



Kern County

LOCATION: 18 miles northwest of Taft

TYPE OF TRAP: See areas

ELEVATION: 1,400 - 2,800

DISCOVERY DATA

					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Oceanic	Texaco Inc. "Westpet NCT One" 77-29	The Texas Co. "Westpet" 1	29 30S 22E	MD	140	2,230	Oct 1946
	1			È e	ŝ	1	1

Remarks:

DEEPEST WELL DATA

		Date		8 & M	Depth (feet)	At total depth	
Present operator and well name	Original operator and well name	started	Sec. T. & R.			Strata	Age
Getty Oil Co. "Midway-McKittrick A" 22-30	Pacific Western Oil Corp. "Midway-McKittrick A" 22-30	Feb 1953	30 30S 22E	MD	10,867	Canoas	late Eo

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geol	ogic	Oil gravity (*API) or	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation	Gas (btu)		
			+				
	1						

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Northwest Area)

1972 Production		1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total number of wells		Maximum	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage		Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
569,699	1,970,496	1,050,294	1,760	113	42,367,268	135,213,547	4,227,066	1956	342	246	2,050

STIMULATION DATA (Jan. 1, 1973)

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.



CONTOURS ON BASE OF MIDCENE



BELGIAN ANTICLINE OIL FIELD Main Area
MAIN AREA

Kern County

LOCATION: See index map of Belgian Anticline Oil Field

TYPE OF TRAP: Anticline with complex faulting

ELEVATION: 1,400 - 1,800

DISCOVERY DATA

						al daily duction	00000-200
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Phacoides Oceanic Point of Rocks	Texaco Inc. "Westpet Unit One" 26-29 Texaco Inc. "Westpet NCT One" 77-29 Texaco Inc. "Tulare NCT One" 28-28	The Texas Co. "Westpet Unit One" 26-29 The Texas Co. "Westpet" 1 The Texas Co. "Tulare NCT One" 28-28	29 30S 22E 29 30S 22E 28 30S 22E	MD	214 140 38	130 2,230 480	Sep 1947 Oct 1946 May 1947

Remarks:

DEEPEST WELL DATA

	Original operator and well name				Depth	At tota	l depth
Present operator and well name			Sec. T. & R.	8 & M		Strata	Age
Setty Oil Co. "Midway-McKittrick A" 22-30	Pacific Western Oil Corp. "Midway-McKittrick A" 22-30	Feb 1953	30 30S 22E	MD	10,867	Canoas	late Eo

PRODUCING ZONES

thickness (feet) 15	Age	Formation	- (°API) or Gas (btu)	zone water	Class BOPE	
10			das totas	gr/gal	required	
15	early Miocene	Temblor	37	775	IV	
0 - 150	Oligocene	Tumey	35	680	IV	
300	late Eocene	Kreyenhagen	34	100 - 1,050	IV	
400	late Eocene	Kreyenhagen	60	100 - 1,050	IV	
300	late Eocene	Kreyenhagen	33	100 - 1,050	IV	
	300 400	300 late Eocene 400 late Eocene	300 late Eocene Kreyenhagen 400 late Eocene Kreyenhagen	300 late Eocene Kreyenhagen 34 400 late Eocene Kreyenhagen 60	300 late Eocene Kreyenhagen 34 100 - 1,050 400 late Eocene Kreyenhagen 60 100 - 1,050	

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PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total num	ber of wells	Maximur	
Oil (bbl)	Net gas (Mcf)	Water (bbi)	acreage		Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
422,100	1,449,259	506,879	1,020	70	26,487,395	106,734,721	3,336,160	1953	188	137	1,20

STIMULATION DATA (Jan. 1, 1973)

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: Present only at extreme western end at about 1,200' in fractured shale.

CURRENT CASING PROGRAM: 11 3/4" cem. 500; 7" or 5 1/2" cem. through zone and across base of fresh waters.

METHOD OF WASTE DISPOSAL: Unlined sumps. .

REMARKS: A pilot water flood was started in 1965 and discontinued in 1967 after injecting 1,084,823 barrels of water into the Second Point of Rocks sand.

REFERENCES: Dunwoody, J.A., Belgian Anticline Oil Field, Southeast Portion: Pacific Sections AAPG-SEG-SEPM 1968 Guidebook, Geology and Oil Fields Westside Southern San Joaquin Valley, p. 80-81. Hewitt, R.L., and C.W. Porter, Belgian Anticline Field: AAPG-SEPM-SEG Guidebook Joint Ann. Mtg., Los Angeles, 1952, p. 239-240. Park, W.H., P.E. Land, and D.D. Bruce, Belgian Anticline Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 43, No. 1 (1957).





NORTHWEST AREA

LOCATION: See index map of Belgian Anticline Oil Field

TYPE OF TRAP: Anticline with complex faulting

ELEVATION: 1,750 - 2,800

DISCOVERY DATA

						al daily fuction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Carneros Phacoides "Phacoides" - Oceanic Point of Rocks	Quality Oil Corp. "Anderson" 1 Shell Oil Co. "Snow" 36-7 A.J. West,Operator "Anderson" 4 The Superior Oil Co. "Forbes" 1	Bender-Stansbury-Webb "Anderson" 1 Union Oil Co. of Calif. "Hancock" 36-7 Moriqui Exploration Co. "Anderson" 4 Same as present	15 30S 21E 7 30S 21E 15 30S 21E 21 30S 21E	MD MD	330 824 57	200 4,450 100 318	Oct 1951 Jan 1954 Mar 1953 Feb 1955

Remarks: The "Phacoides" is a basal Miocene grit locally in contact with the Oceanic. In the discovery well the original completion was in the "Phacoides".

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Union Oil Co. of Calif. "A-M Willow Springs" 46X-9	Same	Jan 1969	9 30S 21E	MD	8,742	Kreyenhagen	late Eo

PRODUCING ZONES

	Average depth	Average net thickness	(Seologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Carneros	4,600	12	early Miocene	Temblor	33	N.A.	III
Phacoides	1,400	55	early Miocene	Temblor	10 - 22	700	III
"Phacoides" - Oceanic	2,050	175	e Mio - Olig	Temblor - Tumey	38	1,000	III
First Point of Rocks	2,600	300	late Eocene	Kreyenhagen	32	1,070	IV
Second Point of Rocks	3,500	200	late Eocene	Kreyenhagen	43	1,070	IV
Third Point of Rocks	4,000	300	late Eocene	Kreyenhagen	29 - 39	1,070	IV

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Remarks)

1972 Production			1972 Proved	1972 Average number	Cumulative p	Cumulative production Peak oil production		uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
147,599	521,237	543,415	740	43	15,879,873	28,478,826	1,785,566	1955	154	109	850

STIMULATION DATA (Jan. 1, 1973)

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 - 2,900

CURRENT CASING PROGRAM: 11 3/4" cem. 600; 7" cem. above zone and across base of fresh water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: By discharge into drainage toward McKittrick Valley.

REMARKS: 1972 dry gas production is 453,623 Mcf from 12 producing wells. Cumulative production is 13,986,107 Mcf.

REFERENCES: Land, P.E., Johe Ranch and Maddux Ranch Gas Areas; Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 45, No. 1

(1959).
Northwest Belgian Anticline: Pacific Sections AAPG-SEG-SEPM 1968 Guidebook, Geology and Oil Fields Westside Southern San Joaquin Valley, p. 78-79.
Park, W.H., P.E. Land, & D.D. Bruce, Belgian Anticline Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 43, No. 1 (1957).



BELLEVUE OIL FIELD

Kern County

LOCATION: 8 miles west of Bakersfield TYPE OF TRAP: See areas ELEVATION: 360

DISCOVERY DATA

Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bb!)	Gas (Mcf)	Date of completion
The Superior 0il Company "Houghton" 36-35	Same as present	35 295 26E	MD	1,900	2,850	May 1944
					Present operator and well name Original operator and well name Sec. T. & R. B & M (bb)	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age	
The Superior Oil Company "K.C.L." 12	Same	Nov 1938	3 30S 26E	MD	13,131	Kreyenhagen	late Eo	

PRODUCING ZONES (See areas)

	Average depth	Average net thickness	Geo	ologic	Oil gravity (*API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water . gr/gal	required
	1						

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction Total number of wells		iber of wells	Maximum proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
67,009	171,633	237,418	180	11	4,280,910	4,020,888	328,881	1952	44	18	230

STIMULATION DATA (Jan. 1, 1973)

Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
	and the second sec	Date - Water, bbl; Gas, Mcf;

SPACING ACT: See areas.

BASE OF FRESH WATER: See areas.

CURRENT CASING PROGRAM: See areas.

METHOD OF WASTE DISPOSAL: See areas.

REMARKS: As of Jan. 1, 1973 unlined sumps are not allowed in Bellevue Oil Field.

REFERENCES: See areas.

MAIN AREA

LOCATION: See map sheet of Bellevue Oil Field

TYPE OF TRAP: Faulted homocline and permeability barriers

ELEVATION: 360

DISCOVERY DATA

					Initial produ		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Stevens	The Superior Oil Company "Houghton" 36-35	Same as present	35 295 26E	MD	1,900	2,850	May 1944
	р						

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
The Superior Oil Company "K.C.L." 12	Same	Nov 1938	3 30S 26E	MD	13,131	Kreyenhagen	late Eo

PRODUCING ZONES

	Average	Average Average net depth thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Stevens	6,400 to 8,700	thin stringers to 100'	late Miocene	Fruitvale	35	1,950	111

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production			1972 Average number	Cumulative production		Peak oil prod	Peak oil production		ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	Proved acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
63,210	144,318	237,303	170	10	4,183,090	3,820,105	328,881	1952	34	15	210

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 1,600 in westernmost portion and 3,200 in northeastern portion.

CURRENT CASING PROGRAM: 9 5/8" cem. 750; 5 1/2" cem. through zone and across base of fresh water sands.

METHOD OF WASTE DISPOSAL: Maste water is disposed of by injection into the Etchegoin below the base of fresh-water sands.

REMARKS:

REFERENCES. Sullivan, J.C., Bellevue Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 45, No. 1 (1959).

NORTH AREA (Abandoned)

Kern County

LOCATION: See map sheet of Bellevue Oil Field

TYPE OF TRAP: Permeability variation on a regional homocline

ELEVATION: 375

DISCOVERY DATA

Zone						at daily uction	Date of completion
	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	
Stevens	Humble Oil & Rfg. Co. "Homer A. Sledge et al" 1	Atlantic Oil Co. "Atlantic-Humble-Sledge et al" 1	35 295 26E	MD	180	N.A.	Sep 1959
		1					1

Remarks:

DEEPEST WELL DATA

humble Oil & Rfg. Co. "Homer A. Sledge et Same		Date	Date		Depth	At total depth		
Present operator and well name	· Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age	
Humble Oil & Rfg. Co. "Homer A. Sledge et al" 2	Same	Nov 1959	35 295 26E	MD	7,400	Fruitvale	late Mio	

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Stevens	6,720	35	late Miocene	Fruitvale	33	N.A.	111

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative production Peak oil production		ction Total nu		ber of wells	Maximum proved		
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	22,173	13,109	16,370	1959	4	1	10

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 3,370

. CURRENT CASING PROGRAM: 9 5/8" cem. 700; 5 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

REMARKS: Area abandoned Dec. 1960.

.

REFERENCES: Sullivan, J.C., Bellevue Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 45, No. 1 (1959).

SOUTH AREA

LOCATION: See map sheet of Bellevue Oil Field

TYPE OF TRAP: Faulted homocline and restricted lateral permeability

ELEVATION: 355

DISCOVERY DATA

						al daily fuction	Date of completion
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	
Stevens	Standard Oil Co. of Calif. "K.C.L. 61" 52X-10	Same as present	10 30S 26E	MD	161	1,250	Apr 1965

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Standard Oil Co. of Calif. "K.C.L. 61" 52X-10	Same	Mar 1965	10 30S 26E	MD	10,082	Fruitvale	Miocene

PRODUCING ZONES

	Average depth	Average net thickness (feet)		Geologic	Oil gravity (*API) or	Salinity of	Class BOPE
Zone	(feet)		Age	Formation	Gas (btu)	zone water gr/gal	required
Stevens	7,400	25	late Miocene	Fruitvale	36	1,670	111

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
3,799	27,315	115	10	1	75,647	187,674	26,069	1965	6	2	10

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 1,900

CURRENT CASING PROGRAM: 10 3/4" cem. 750; 5 1/2" cem. through zone and across base of fresh water sands.

METHOD OF WASTE DISPOSAL:

REMARKS:

REFERENCES:

WEST BELLEVUE OIL FIELD



LOCATION: 10 miles west of Bakersfield

TYPE OF TRAP: Lithofacies changes on a faulted homocline

ELEVATION: 340

DISCOVERY DATA

Zone					Initial daily production		
	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
U Stevens - Clark U Stevens - 82 Lower Stevens	The Superior Oil Co. "Wesco-Clark" 44-33 Ancora Verde Corp. 82-32 G.E. Kadane & Sons "Rudnick" 1	Same as present The Superior Oil Co. No. 82-32 Occidental Petroleum Corp. "Rudnick" 1	33 29S 26E 32 29S 26E 28 29S 26E	MD	96 138 108	115 64 N.A.	Feb 1957 Dec 1957 Mar 1969

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age	
The Superior Oil Co. "Wesco-Clark" 44-33	Same	Dec 1956	33 29S 26E	MD	9,675	Fruitvale	late Mio	

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
U Stevens - Clark U Stevens - 82 Lower Stevens	7,740 7,830 8,750 - 9,100	20 5 35	late Miocene late Miocene late Miocene	Fruitvale Fruitvale Fruitvale	35 28 32	1,460 N.A. N.A.	III III IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative production Peak oil production		uction	Total num	ber of wells	Maximun		
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
40,348	16,841	470,708	125	6	3,160,214	1,920,209	402,093	1959	26	12	165

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 2,400

CURRENT CASING PROGRAM: 9 5/8" cem. 800; 5 1/2" cem. through zone and across base of fresh water sands.

METHOD OF WASTE DISPOSAL: All waste water is disposed of by injection into the Etchegoin below base of fresh water sands.

REMARKS: Stevens sands are undifferentiated for statistical purposes.

REFERENCES Sullivan, J.C., West Bellevue Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 44, No. 1 (1958).



LOCATION: 34 miles northwest of Taft

TYPE OF TRAP: Anticline

ELEVATION: 650

DISCOVERY DATA

					Initial daily production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & N	Oil (bbl)	Gas (Mcf)	Date of completion	
Tulare-Etchegoin Fractured Shale Temblor Carneros R Sand (Agua) Bloemer & Belridge 64 Y Sand	Union Oil Co. of Calif. "Gibson" 1 Belridge Oil Co. "M.M." 1 Belridge Oil Co. No. 15 Belridge Oil Co. No. 26-27 Belridge Oil Co. Nor. No. 1 Belridge Oil Co. Opr. No. 64-27 Belridge Oil Co. No. 47-27	Same as present Mannell-Minor Petroleum Co. "M.M." 1 Same as present Same as present Tide Water Associated Oil Co. No. 1 Belridge Oil Co. No. 64-27 Same as present	36 27S 20E 35 27S 20E 26 27S 20E 27 27S 20E 21 27S 20E 27 27S 20E 27 27S 20E 27 27S 20E	MD MD MD MD MD	3,014 668	2,160 N.A.	Jun 1966 Sep 1939 Jun 1932	

Remarks: * Not known, first recorded production was 18 barrels of oil per day in December 1915.

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name		Sec. T. & R.	5 & M		Strata	Age	
Belridge Oil Co. Opr. No. 55-26	Belridge Oil Co. No. 55-26	Mar 1941	26 27S 20E	MD	10,800	Kreyenhagen	lt Eocene	

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE	
Zone	(feet)	(feet)	Age •	Formation	Gas (btu)	gr/gal	required	
Tulare-Etchegoin	600	100	Pleis - Plio	Tulare-Etchegoin	13	1,200	None	
Fractured Shale	3,500	400	It Miocene	Monterey	10 - 32	2,190	II	
Temblor	5,000	500	m Miocene	Temblor	40	2,350	IV	
Carneros	6,700	80	e Miocene	Temblor	39	N.A.	IV	
R Sand (Agua)	7,100	150	e Miocene	Temblor	52	N.A.	1V	
Bloemer	7,500	80	e Miocene	Temblor	30 - 50	1,240	IV	
Belridge 64	7,700	400	e Miocene	Temblor	30 - 50	1,170	IV	
Y Sand	8,550	75	Oligocene	Tumey	32	490	IV	

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative	production	Peak oil prode	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
345,963	1,296,895	1,379,467	2,060	84	68,869,284	524,624,812	5,664,371	1937	272	237	2,070

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Cyclic steam Gas injection for pressure maintenance	1964 1938	347,844 450,710,619	29 10

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: Shallow: 7" cem. above zone; 5 1/2" liner landed through zone. Temblor-Oceanic: 11 3/4" cem. 1,000; 7" cem. above zone; 5 1/2" liner landed through zone. METHOD OF WASTE DISPOSAL: Evaporation and percolation from unlined sumps.

REMARKS: A water flood was started in 1955 in Belridge 64 zone and discontinued in 1959. Cumulative injection totals 402,557 bbls. In the production statistics by pools: Tulare-Etchegoin and Fractured Shale zones are combined as the Shallow pool; Bloemer zone is combined with the Belridge 64 pool; Carneros zone is combined with the R Sand pool.

REFERENCES: Bailey, W.C., North Belridge Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 24, No. 3 (1939).
Boezinger, H., The Minor Oil Fields of Kern County, Part 2, Belridge and North Belridge Oil Fields: Calif. State Mining Bureau, Summary of Operations-Calif. Oil Fields, Vol. 10, No. 1 (July 1924).
North Belridge Oil Field: AAPG-SEG-SEPM Guidebook, Geology and Oil Fields, West Side Southern San Joaquin Valley (1968) p. 60-61.
Preston, H.M., Report on North Belridge Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 18, No. 1 (1932).
Wharton, J.B., Belridge Oil Field: Calif. Div. of Mines, Bull. 118 (1943).
Williams, R.N., Jr., Recent Developments in the North Belridge Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Oil Fields, Vol. 21, No. 4 (1936).

SOUTH BELRIDGE OIL FIELD



LOCATION: 27 miles northwest of Taft

TYPE OF TRAP: Anticline with minor faulting; permeability variations on a homocline

ELEVATION: 600

DISCOVERY DATA

						al daily luction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Tulare Etchegoin Belridge Diatomite Fractured Shale	Belridge Oil Co. No. 101 K & K Oil Co. "Hopkins Fee II" 21 Belridge Oil Co. No. 101 Belridge Oil Co. No. 196	Same as present Union 011 Co. "Hopkins" 21-10 Same as present Same as present	33 285 21E 10 295 21E 33 285 21E 34 285 21E	MD MD	100 171 100 18	N.A. N.A. N.A. N.A.	Apr 1911 Mar 1943 Apr 1911 Mar 1914

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	5 & M		Strata	Age
Belridge Oil Co. No. 62W-33	Same	Nov 1945	33 285 21E	MD	14,104	Oceanic	Oligocene

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (°API) or	Salinity of	Class BOPE	
	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required	
Tulare Etchegoin Belridge Diatomite Fractured Shale	400 1,500 1,100 2,100	400 50 100 900	Pleistocene Pliocene lt Miocene lt Miocene	Tulare Etchegoin Monterey Monterey	14 13 25 28 - 32	250 - 1,000 1,450 1,520 1,440	None None None None	

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	iction	Total num	ber of wells	Maximum proved
Oil (bb1)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
8,684,131	141,127	49,098,489	8,850	2,290	179,354,525	19,617,092	9,208,919	1971	3,829	3,632	8,900

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date - started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Air injection for fire flood	1964	N.A.	9
Cyclic-steam Steam flood	1964 1963	24,191,262 63,270,581	1,131 180

SPACING ACT: Applies

BASE OF FRESH WATER: None

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

METHOD OF WASTE DISPOSAL: Evaporation and percolation from unlined sumps into the Tulare formation. Also, 13,590,988 bbl. were injected during 1972 into 5 water disposal wells. REMARKS: In March 1956 air injection began in an experimental thermal recovery project. This project was terminated in November 1957.

REFERENCES: Barger, R.M., South Belridge Thermal Recovery Experiment: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 44, No. 2 (1958). McCabe, R.E., The Minor Oil Fields of Kern County: Calif. State Mining Bureau, Summary of Operations--Calif. Oil Fields, Vol. 10, No. 1 (1924). Ritzius, D.E., South Belridge Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 36, No. 1 (1950).



San Benito County

LOCATION: 15 miles northeast of King City

TYPE OF TRAP: Complex fault traps in San Andreas fault zone

ELEVATION: 1,700

DISCOVERY DATA

×						al daily fuction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
O'Connor	P.M. Scrivner "O'Connor" 1	W.W. Holmes, Opr. "O'Connor" 1	33 175 9E	MD	52	N.A.	May 1952
	X						
			l.	1			
	÷			12			

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Bitterwater Development Co. "Wilrich-Rudolph"	Wilrich Development Co. "Wilrich-Rudolph" 1	Jan 1956	4 18S 9E	MD	5,667	Granite	Jur (?)

PRODUCING ZONES

	Average depth	Average net Geologic Oil gravity thickness (*API) or		Oil gravity	Salinity of zone water	Class BOPE	
Zone (fe	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
O'Connor	1,400	450	late Miocene	Bickmore Canyon Arkose	26	950	111

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
5,122	0	414	70	6	206,100	0	24,795	1953	23	12	70

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 130

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

METHOD OF WASTE DISPOSAL: Waste water averages one barrel per day and is disposed of by percolation and evaporation.

REMARKS:

REFERENCES: Gribi, E.A. Jr., Bitterwater Oil Field: Guidebook to Geology of the Salinas Valley and San Andreas Fault, A.A.P.G. - S.E.P.M. Annual Field . Trip, p. 74-75 (1963). BLACKWELLS CORNER OIL FIELD





Kern County

LOCATION: 45 miles northwest of Taft

TYPE OF TRAP: Permeability barrier on an anticlinal nose

ELEVATION: 700

DISCOVERY DATA

4			4			al daily uction	100000
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oll (bbl)	Gas (Mcf)	Date of completion
Devilwater Agus Grit	General Crude Oil Co. Oper. "Occidental" 10 General Crude Oil Co. Oper. "Occidental" 3 General Crude Oil Co. Oper. "Occidental" 5	Etienne Lang "Occidental" 10-N.W. 30 Etienne Lang "Occidental" 3-N.W. 30 Etienne Lang "Occidental" 5-N.W. 30	30 265 19E 30 265 19E 30 265 19E	MD	20 50 30	N.A. N.A. N.A.	Jun 1944 Dec 1943 Aug 1944

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	il depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
The Superior Oil Co. "O.L.C." 7	Same	Jul 1954	30 26S 19E	MD	3,224	Tumey	Oligocene

PRODUCING ZONES

	Average depth	Average net thickness	G	eologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Devilwater Agua Grit	700 1,300 1,400	25 85 5	middle Miocene early Miocene early Miocene	Temblor Temblor Temblor	13 14 14	N.A. 790 790	None None None

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative pr	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
15,659	0	111,178	240	18	813,907	90,521	81,106	1946	63	38	250

STIMULATION DATA (Jan. 1, 1973)

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: 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps.

REMARKS: Formerly known as Shale Hills Area.

REFERENCES: Karmelich, F.J., Blackwells Corner Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 37, No. 2 (1951).



LOCATION: 20 miles west of Bakersfield

TYPE OF TRAP: Anticline; lithofacies variations

ELEVATION: 300

DISCOVERY DATA

						al daily luction	-
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
2nd Mya (gas)	Texaco Inc. "Brandt" 1	Same as present	8 29S 24E	MD	0	250	Feb 1961
Root (gas)	Texaco Inc. "H.J. Brandt Fee" 1	Same as present	8 29S 24E	MD	0	2,000	Jun 1965
4-23 (gas)	Texaco Inc. "Bowerbank" 4-23	Union Oil Co. "Bowerbank" 4-23	23 29S 24E	MD	0	850	Nov 1958
Espee (gas)	Texaco Inc. "Bowerbank V" 47-15	The Texas Co. "S.P." 47-15	15 29S 24E	MD	0	11,605	Jan 1942
Sub Scalez (gas)	Texaco Inc. "Bowerbank" 4-23	Union Oil Co. "Bowerbank" 4-23	23 29S 24E	MD	0	932	Feb 1942
Sub Mulinia (gas)	Same as above	Same as above	23 29S 24E	MD	0	332	Feb 1942
Stevens (oil)	Occidental Petroleum Corp. "KCL" 1-23	Same as present	23 29S 24E	MD	60	357	Jul 1965

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total d	lepth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Occidental Petroleum Corp. "Root" 1	Same	Feb 1966	9 29S 24E	MD	15,396	Freeman-Jewett	early Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
2nd Mya (gas)	3,140	4	Pliocene	San Joaquin	1,020	1,800	III
Root (gas)	4,000	4	Pliocene	San Joaquin	1,020	1,800	III
4-23 (gas)	4,200	20	Pliocene	San Joaquin	1,020	1,800	III
Espee (gas)	4,300	10	Pliocene	San Joaquin	1,020	1,800	III
Sub Scalez (gas)	4,600	22	Pliocene	San Joaquin	1,020	1,800	III
Sub Mulinia (gas)	4,700	5	Pliocene	Etchegoin	1,020	1,800	III
Stevens (oil)	10,620	165	late Miocene	Monterey	32	1,500	IV
	1 1						

PRODUCTION DATA (Jan. 1, 1973) (Dry gas zones only - see Remarks for oil zone production data)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbi)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	155,157	224	80	3	0	13,707,379	862,308	1944	51	25	1,480

STIMULATION DATA (Jan. 1, 1973)

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

METHOD OF WASTE DISPOSAL

REMARKS: Formerly known as Bowerbank Gas Field. The only well completed in the Stevens oil pool was abandoned in 1966. Cumulative production totaled 5,472 bbls. of oil and 2,050 Mcf of gas.

REFERENCES Crowder, R.E., Bowerbank Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 41, No. 1 (1955).

BOWERBANK OIL FIELD

Kern County





CONTOURS ON TOP OF ETCHEGOIN







BUENA VISTA OIL FIELD Kern County

LOCATION: 3 miles northeast of Taft

TYPE OF TRAP: See areas

ELEVATION: 470 - 1,300

DISCOVERY DATA

						daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	011 (10d)	Gas (Mcf)	Date of completion
Top 0il	Getty Oil Co. No. 1	Honolulu Consolidated Oil Co. No. 1	10 32S 24E	MD	125	N.A.	Feb 1910

Remarks: The discovery well blew out after penetrating a sand in the Mya zone, and an estimated 900,000 Mcf of gas was blown (escaped) to the atmosphere before drilling was resumed.

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Getty Oil Co. No. 25-P	Honolulu Oil Corp. No. 25-P	1940	10 32S 24E	MD	14,622	Santos	early Mio

PRODUCING ZONES (See areas)

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

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Buena Vista Hills Area)

	1972 Production	GALLAN	1972 Proved	1972 Average number	Cumulative	production	Peak oil prod	uction	Total number of wells		Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
4,745,202	12,940,122	13,317,174	15,000	1,135	606,851,368	871,912,404	19,254,174	1925	2,760	2,568	16,810

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

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: See areas.

METHOD OF WASTE DISPOSAL: See areas.

REMARKS: From the time of discovery until January 1, 1958, production from the Buena Vista oil field was included as part of the Midway-Sunset oil field.

REFERENCES: Borkovich, G.J., Buena Vista Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 44, No. 2 (1958). Howard, P.J., Report on Buena Vista Hills, a Portion of the Midway-Sunset Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 20, No. 4 (1935).

TYPE OF TRAP: Permeability variations on the flank of an anticline

ELEVATION: 470 - 1,000

DISCOVERY DATA

Zone						1 daily action	
	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	011 (bb1)	Gas (Mcf)	Date of completion
Above Scalez (AS) Sub Scalez one (SS1) Sub Scalez two (SS2) Mulinia		Boston Pacific Oil Co. 1-C Same as above Same as above Same as present	32 315 24E 32 315 24E 32 315 24E 32 315 24E N.A.	MD	3,000 N.A. N.A. N.A.	N.A. N.A. N.A. N.A.	Jun 1912 Jun 1912 Jun 1912 N.A.

Remarks: Production from the Above Scalez, Sub Scalez one, and Sub Scalex two was commingled in the discovery well.

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Mobil Oil Corp. "B.V.A." 1	General Petroleum Corp. "B.V.A." 1	Apr 1939	1 32S 24E	MD	11,886	Antelope	late Mio

PRODUCING ZONES

Zone	Average depth	Average net thickness			Oil gravity (°API) or	Salinity of zone water	Class BOPE
	(feet)	(feet)	Aye	Formation	Gas (btu)	gr/gal	required
Above Scalez (AS) Sub Scalez one (SSI) Sub Scalez two (SS2) Mulinia	4,200 4,000 4,050 4,300	15 20 15 10	Pliocene Pliocene Pliocene Pliocene	San Joaquin San Joaquin San Joaquin Etchegoin	18 to 28	1,900 1,900 1,900 2,090	None None None None

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil prode	Peak oil production Total number of wells		Total number of wells	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
442,605	109,397	1,872,855	3,580	139	123,784,391	58,135,220	9,044,059	1925	603	559	4,840

STIMULATION DATA (Jan. 1, 1973)

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Subsurface injection; transported by pipeline to Buena Vista Hills area to cooperative evaporation and percolation sumps located near westerly edge of field.
REMARKS: A gas injection project which was started in 1928 was discontinued in 1931 because it wasn't successful. A total of 401,499 Mcf was injected into 10 wells near the upper edge of the reservoir. A water flood project was started in 1962 and discontinued in 1966 after the injection of 890,107 bbls. of water

REFERENCES:

Kern County

BUENA VISTA HILLS AREA

LOCATION: See map sheet of Buena Vista Oil Field

TYPE OF TRAP: Asymmetrical anticline; permeability variations; fractured shale

ELEVATION: 670 - 1,300

DISCOVERY	DATA

Zone						I daily uction	
	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	011	Gas (Mcf)	Date of completion
Mya (Gas)	Getty Oil Co. No. 1	Honolulu Consolidated Oil Co. No. 1	10 32S 24E	MD	0	12,000+	Aug 1909
Top Oil (Sub Scalez)	Getty Oil Co. No. 1	Honolulu Consolidated Oil Co. No. 1	10 32S 24E	MD	125	N.A.	Feb 1910
Sub-Mulinia, Wilhelm, Gusher, & Calitroleum	Operator name and well number unknown	Same as present	N.A.	MD	N.A.	N.A.	N.A.
99-9D	Standard Oil Co. of Calif. No. 99	Same as present	9 325 24E	MD	281	293	Nov 1949
27-B (E sands)	Standard Oil Co. of Calif. No. 358	Standard Oil Co. of Calif. No. 54	27 31S 23E	MD	624	238	Mar 1944
Calidon (Gas)	Getty Oil Co. "Calidon" 101	Tidewater Oil Co. "Calidon" 101	19 31S 23E	MD	22	2,960	Jun 1966
Antelope Shale	Getty Oil Co., Opr. No. 9D-502	Standard Oil Co. of Calif. No. 503	9 32S 24E	MD	170	300	Mar 1952
555 Stevens	Atlantic Richfield Co. Opr. "555 S.Z. Unit" 555	Tidewater Oil Co. "Tidewater-Richfield" 555	20 31S 23E	MD	400	1,741	Nov 1953

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	3 & M		Strata	Age
Getty Oil Co. No. 25P	Honolulu Oil Corp. No. 25-P	Jun 1940	10 32S 24E	MD	14,622	Santos	early Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of	Class BOPE
	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required
Mya (Gas)	1,800	several thin sands	Pliocene	San Joaquin	1,025	590	111
Top Oil (Sub-Scalez)	2,300	30	Pliocene	San Joaquin	19	2,060	III
Sub-Mulinia	2,400	20	Pliocene	Etchegoin		2,340	III
Wilhelm	2,500	65	Pliocene	Etchegoin	to	1,990	III
Gusher	2,600	50	Pliocene	Etchegoin	11423	1,990	III
Calitroleum	2,900	120	Pliocene	Etchegoin		1,930	111
99-90	3,100	30	Pliocene	Etchegoin	36	1,570	111
27B (E sands)	3,500	50	Pliocene	Etchegoin	23 - 33	1,830	III
Calidon (Gas)	3,800	50	Plio and Mio	Etchegoin and Monterey	1,013	700	IV
Antelope Shale	4,200	900	late Miocene	Monterey	26 - 34	1,490	IV
555 Stevens	5,300	300	late Miocene	Monterey	26 - 32	1,390	IV

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Remarks)

	1972 Production		1972 Proved	1972 Average number	Cumulative	production	Peak oil prod	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
4,302,597	12,830,725	11,444,319	11,420	996	483,066,977	813,777,184	15,782,189	1947	2,157	2,009	11,970

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mc ² ; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water Flood Gas injection for pressure maintenance	1954 1927	41,770,161 142,312,310	63 15

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 10 3/4" cem. 200 - 700; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Subsurface injection; percolation and evaporation from cooperative disposal sumps in western part of area.

REMARKS: 1972 dry gas production 846,468 Mcf from 26 producing wells; cumulative dry gas production 81,433,815 Mcf; 51 wells were drilled for dry gas and all were completed; proved acreage as of December 31, 1972, 1,310,maximum 2,160; peak production (1919) 8,443,943 Mcf. Commercial gas deliveries began in 1911.

REFERENCES:

Kern County



CONTOURS ON TOP OF MELURE



LOCATION: 19 miles southwest of Fresno

TYPE OF TRAP: Lenticular sands on a homocline

ELEVATION: 200

DISCOVERY DATA

						al daily uction	1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)-	Date of completion
Zilch	Lee Gibson Oil Co."Burrel" 68-35	General Pet. Corp. of Calif. "Burrel" 68-35	35 16S 18E	MD	178	N.A.	Oct 1943

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total d	epth
Present operator and well name	Original operator and well name		Sec. T. & R.	3 & M		Strata	Age
Mobil Oil Corp. "Burrel" 1	General Pet. Corp. of Calif. "Burrel" 1	Jun 1941	2 17S 18E	MD	9,400	Brown Mountain	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Satinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Zilch	6,500	15	early Miocene	Zilch	28 - 32	2,390	111

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
10,540	76	331,815	20	1	1,417,871	2,181,457	202,422	1950	26	12	210

STIMULATION DATA (Jan. 1, 1973)

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: 9 5/8" cem 500; 5 1/2" cem 6,700.

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

REMARKS:

REFERENCES: Sullivan, John C., Burrel Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 46, No. 2 (1960).





Fresno County

LOCATION: 20 miles southwest of Fresno TYPE OF TRAP: Lenticular sands on a homocline ELEVATION: 205 DISCOVERY DATA

						I daily uction	-
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Zilch	Occidental Pet. Corp. "Burrel Ranch (NCT-1)" 1	The Texas Co. "Burrel Ranch (NCT-1)" 1	12 17S 18E	MD	115	37	May 1955

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total d	epth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Norris Oil Co. "Union Central Life" 55X	Carr & Wrath "Union Central Life" 55X	Mar 1959	7 17S 19E	MD	8,300	Brown Mountain	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	0	Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Zilch	6,700	10	early Miocene	Zilch	27 - 35	2,680	111
						*	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972	1972 Average number	Cumulative production		Peak oil production		Total num	Total number of wells		
Oil (bbl)	Net gas (Mcf)	Water (bbl)	Proved acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	proved
13,913	6,919	181,745	70	3	1,071,298	572,679	169,034	1961	27	14	19

STIMULATION DATA (Jan. 1, 1973)

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: 1,30- - 1,900

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

METHOD OF WASTE DISPOSAL All water is injected.

REMARKS:

REFERENCES: Sullivan, J.C., Southeast Burrel Oil Field: Calif. Div. of Oil and Cas, Summary of Operations -- Calif. Oil Fields, Vol. 47, No. 1 (1961).



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LOCATION: 30 miles northwest of Bakersfield

TYPE OF TRAP: Anticline with lenticular sands

ELEVATION: 300

DISCOVERY DATA

					In	tial produc	tion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
San Joaquin Gas Zones	Texaco Inc. "Kern" 1-A	Milham Expl. Co. "Kern" 1-A	8 28S 23E	MD	5,242		28/64	Aug 1927

Remarks: Milham Exploration Co. well No. "Kern" 1, Sec. 8, T. 28S., R. 23E., blew out at 3,323' on Nov. 3, 1926. For two days the well blew at an extimated rate of 40,000 Mcf/d. of gas. Sand bridged off the hole killing the well, leaving a crater 80 feet in diameter and 70 feet in depth.

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Mobil Oil Corp. "Bravo" 1	Same	Dec 1970	17 28S 23E	MD	15,450	Antelope	late Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi) required		
San Joaquin Gas Zones	2,300 - 3,200	15	Pliocene	San Joaquin	985	1,100	and the second se	111	
			1		_				

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas pro	Peak gas production Total number of wells		Total number of wells	
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
599	4	40	1	38,331,438	4,323,685	1935	58	44	2,200

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,200

CURRENT CASING PROGRAM: 9 5/8" cem. 700; 5 1/2" cem. through zone and across base of fresh water sands.

METHOD OF WASTE DISPOSAL.

REMARKS:

REFERENCES: Kaplow, E.J., Gas Fields of Southern San Joaquin Valley: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 24, No. 1 (1938). Musser, E.H., Buttonwillow Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 15, No. 3 (1930).



LOCATION: 13 miles west of Bakersfield

TYPE OF TRAP: Faulted anticlinal nose with lateral permeability changes ELEVATION: 335

DISCOVERY DATA

					Initial daily production		Date of
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Upper Stevens	Mobil Oil Corp. "KCL-Calder" 38-23	General Petroleum Corp. "KCL-Calder" 38-23	23 295 25E	MD	128	175	May 1949
		1	1				1

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Same as discovery well	Same	Oct 1948	23 29S 25E	MD	12,733	Vedder	e Miocene

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE		
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	al required		
Upper Stevens	8,785	25	late Miocene	Fruitvale	35	1,450	IV		

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total number of wells		Maximus
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
5,495	7,386	550	50	1	461,011	545,969	52,175	1950	9	4	7

STIMULATION DATA (Jan. 1, 1973)

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. 1,000; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS:

REFERENCES: Weddle, J.R., Calders Corner Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 48, No. 1 (1960).



LOCATION: 18 miles south of Fresno TYPE OF TRAP: Lenticular sand on a homocline

ELEVATION: 230

DISCOVERY DATA

					Initial daily production		Data of
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	011 (bb1)	Gas (Mcf)	Date of completion
Camden	Lebow-Radin "Coleman Community" 1	Elmer C. von Glahn "Coleman Community" 1	8 17S 20E	MD	80	N.A.	Jun 1951
	1	1				ļ,	

Remarks:

DEEPEST WELL DATA

		Date	ate l		Depth	At total depth	
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Lebow-Radin "Coleman Community" 1	Elmer C. von Glahn "Coleman Community" 1	May 1951	8 17S 20E	MD	7,602	Moreno	Late Cret

PRODUCING ZONES

Zone (feet)		Average net thickness	0	ieologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
	(feet)	Age	Formation	Gas (btu)	gr/gai	required	
Camden	6,120	17	early Miocene	Zilch	33	N.A.	111

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
3,944	4,100	19	20	2	255,395	346,707	45,651	1952	19	7	90

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STIMULATION DATA (Jan. 1, 1973)

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" cem 500; 7" cem 6,100; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: The small volume of water produced is disposed on the lease by evaporation.

REMARKS:

REFERENCES:




LOCATION: 14 miles southwest of Bakersfield

TYPE OF TRAP: Anticline; lithofacies variations

ELEVATION: 325

DISCOVERY DATA

						al daily Juction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	OII (bbi)	Gas (Mcf)	Date of completion
Pliocene Gas Sands Upper Stevens Lower Stevens	Shell Oil Co. "KCL" 23X-14 Marathon Oil Co. "KCL-E" 3 Marathon Oil Co. "KCL-E" 24	Shell Oil Co. "Canal KCL A" 23X-14 The Ohio Oil Co. "KCL-E" 3 Standard Oil Co. of Calif. "KCL" 384-14	14 305 25E 14 305 25E 14 305 25E 14 305 25E	MD		2,235 1,700 278	Mar 1960 Nov 1937 Dec 1964

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age	
Shell Oil Co. "Canal A" 44-14	Same	Jun 1941	14 30S 25E	MD	13,400	Vedder	early Mio	

PRODUCING ZONES

	Average depth	Average net thickness (feet)		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)		Age	Formation	Gas (btu)	gr/gal	required
Pliocene Gas Sands	3,100 - 5,900	thin stringers	Pliocene	San Joaquin & Etchegoin	N.A.	N.A.	111
Upper Stevens	8,000	100	It Miocene	Fruitvale	35	390 - 800	111
Lower Stevens	9,400	80	lt Miocene	Fruitvale	35	N.A.	IV
					1 1		
	1 1					927	
	1 1				k (1		

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Remarks)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total number of wells		Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drifled	Completed	acreage
341,978	201,595	1,034,250	460	11	24,689,362	25,682,051	2,033,795	1940	51	47	780

STIMULATION DATA (Jan, 1, 1973)

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	26,471,416	7

SPACING ACT: Applies

BASE OF FRESH WATER 2,000

CURRENT CASING PROGRAM: 10 3/4" cem. 1,000; 5 1/2" cem. through zone.

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

REMARKS: Field has one water flood source well. Gas was injected into the Upper Stevens pool for pressure maintenance. Cumulative injection from 1941 to 1959 totaled 55,630,000 Mcf. No 1972 dry gas production; cumulative dry gas production 1,301,878 Mcf; 3 wells were drilled for dry gas and 3 were completed.

REFERENCES: Walling, R.W., Canal and Strand Oil Fields: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 24, No. 4 (1939).



LOWER MIDCENE FREEMAN-JEWETT

CONTOURS ON N ELECTRIC LOG MARKER





CANFIELD RANCH OIL FIELD

LOCATION: 10 miles southwest of Bakersfield

TYPE OF TRAP: See areas

ELEVATION: 360

DIRCOURDE	10. X 10. X
DISCOVERY	DATA

					Initia prod	al daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bb1)	Gas (Mcf)	Date of completion
Stevens	Tenneco West, Inc. No. 56	Standard Oil Co. of Calif. "K.C.L. 15" 1	27 30S 26E	MD	250	N.A.	Jan 1938
			ļ				1

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Standard Oil Co. of Calif. "KCL" 64-34	Same	Jul 1966	34 305 26E	MD	16,322	Vedder	early Mio

PRODUCING ZONES (See areas)

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

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative p	Cumulative production Peak oil production Total num		Total number of wells		Maximum proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
669,330	576,774	1,850,886	1,735	83	26,383,033	26,813,190	2,370,798	1961	196	134	2,015

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
: 1 8			

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.

EAST GOSFORD AREA

LOCATION: See map sheet of Canfield Ranch Oil Field TYPE OF TRAP: Faulted homocline with lenticular sands ELEVATION: 365

DISCOVERY DATA

						al daily luction	in the second
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Stevens	Signal Oil and Gas Co. "K.C.L." 83-23	The Hancock Oil Co. of Calif. "K.C.L." 83-23	23 30S 26E	MD	352	142	Feb 1949

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	I depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Gulf Oil Corp. "Union-Statex-K.C.L." 1-V-13	Universal Consolidated Oil Co. "Union-Statex- K.C.L." 1-V-13	Feb 1960	13 30S 26E	MD	14,073	Vedder	early Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone (feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required	
Stevens	7,900 - 9,800	thin stringers up to 100' thick	late Miocene	Fruitvale	33	1,340	IV

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
383,515	314,532	1,478,400	1,190	55	19,810,011	21,316,979	2,047,945	1959	103	86	1,36

STIMULATION DATA (Jan. 1, 1973)

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: 2,600

CURRENT CASING PROGRAM 9 5/8" cem. 1,000; 5 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL: 1,459,553 bb1, of waste water was injected during 1972 into 3 disposal wells open to Etchegoin below the base of fresh water. REMARKS:

REFERENCES: Matthews, J.F., Jr., Canfield Ranch Oil Field: Calif. Div. of Oil and Gas, Summary of Operations+-Calif. Oil Fields, Vol. 44, No. 2 (1958).

SOUTH GOSFORD AREA

LOCATION: See map sheet of Canfield Ranch Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 340

DISCOVERY DATA

					Initia prod	l daily uction	1.334 V/32
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Stevens	Tenneco West, Inc. "Coulter" 34	Universal Consolidated Oil Co. "KCY-Coulter" 34-25	25 30S 26E	MD	528		Mar 1961

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Tenneco West, Inc. "Coulter" 34	Universal Consolidated Oil Co. "KCY-Coulter" 34-25	Feb 1961	25 30S 26E	MD	10,656	Fruitvale	late Mio

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone (feet)		(feet)	Age	Formation	Gas (btu)	gr/gal	required
Stevens	7,950 - 10,150	100	late Miocene	Fruitvale	34	770	IV

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
223,064	131,701	149,233	410	18	5,177,633	3,673,985	859,864	1962	45	26	410

STIMULATION DATA (Jan. 1, 1973)

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: 2,600

CURRENT CASING PROGRAM: 9 5/8" cem. 1,000; 5 1/2" cem. through productive zone.

METHOD OF WASTE DISPOSAL: 137,224 bb1, of waste water was injected during 1972 into one disposal well open to Etchegoin below base of fresh water. REMARKS:

REFERENCES: Barnes, J.A., South Gosford Area of Canfield Ranch Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 2 (1962).

WEST GOSFORD AREA

Kern County

LOCATION: See map sheet of Canfield Ranch Oil Field TYPE OF TRAP: Faulted homocline ELEVATION: 360 DISCOVERY DATA

			1	prod	uction	-
Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbi)	Gas (Mcf)	Date of completion
Getty Oil Co. "KCL" 44-22	Tidewater Associated Oil Co. "KCL" 44-22	22 30S 26E	MD	143	N.A.	Aug 1944
					Present operator and well name Original operator and well name Sec. T. & R. B & M (bbi)	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name		Sec. T. & R.	3 & M		Strata	Age
Gulf Oil Corp. "Mobil-KCL" 31-22	Universal Consolidated Oil Co. "Mobil-KCL" 31-22	Feb 1962	22 30S 26E	MD	10,355	Fruitvale	late Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone (feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required	
Stevens	7,900	150	late Miocene	Fruitvale	28	1,330	IV

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prodi	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bb!)	acreage	producing wells	Oil (bbt)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
13,019	13,995	86,427	10	1	274,402	253,411	29,726	1946	11	6	50

STIMULATION DATA (Jan. 1, 1973)

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: 2,600

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

METHOD OF WASTE DISPOSAL. Waste water is transported to South Gosford Area and injected into a water disposal well.

REMARKS:

REFERENCES: Matthews, J.F., Jr., Canfield Ranch Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 44, No. 2 (1958).

OLD AREA

LOCATION: See map sheet of Canfield Ranch Oil Field

TYPE OF TRAP: Faulted anticlinal nose with stratigraphic variations

ELEVATION: 330

DISCOVERY DATA

						al daily luction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Stevens	Tenneco West, Inc. No. 56	Standard Oil Co. of Calif. "K.C.L. 15" 1	27 30S 26E	MD	250	N.A.	Jan 1938
							ļ

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Standard Oil Co. of Calif. "KCL" 64-34	Same	Jul 1966	34 305 26E	MD	16,322	Vedder	early Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE	
Zone	(feet)	(feet)		Age	Formation	Gas (btu)	gr/gal	required
Stevens	8,100	50	late Miocene	Fruitvale	28	1,290	IV	
			- :					

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
41,686	35,692	125,535	115	8	967,246	1,335,721	90,767	1964	27	12	135

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 2,600

CURRENT CASING PROGRAM: 11 3/4" cem. 900; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is transported to South Gosford Area and Ten Section Oil Field where it is injected.

REMARKS:

REFERENCES: Matthews, J.F., Jr., Canfield Ranch Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 44, No. 2 (1958).

OLD RIVER AREA

4

LOCATION: See map sheet of Canfield Ranch Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 340

DISCOVERY DATA

					uction	i warne
Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
The Superior Oil Co. "KCL" 51-36	Same as present	36 30S 26E	MD	123	91	Dec 1953
	7					
		The Superior Oil Co. "KCL" 51-36 Same as present	The Superior Oil Co. "KCL" 51-36 Same as present 36 30S 26E	The Superior Oil Co. "KCL" 51-36 Same as present 36 308 26E MD	Present operator and well name Original operator and well name Sec. T. & R. B & M Oil (bb) The Superior Oil Co. "KCL" 51-36 Same as present 36 30S 26E MD 123	The Superior Oil Co. "KCL" 51-36 Same as present 36 30S 26E MD 123 91

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Standard Oil Co. of Calif. "KCL" 73-35	Same	Mar 1965	35 30S 26E	MD	10,980	Fruitvale	late Mio

PRODUCING ZONES

	Average depth	Average net thickness	-	Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Stevens	8,100	15	late Miocene	Fruitvale	36	1,200	IV

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	action	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
8,046	80,854	11,291	10	1	153,741	233,094	34,400	1954	10	. 4	60

STIMULATION DATA (Jan. 1, 1973)

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: 9 5/8" cem. 900; 5 1/2" cem. through zone.

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METHOD OF WASTE DISPOSAL: Waste water is transported to South Gosford Area and injected into a water disposal well.

REMARKS:

REFERENCES: Matthews, J.F., Jr., Canfield Ranch Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 44, No. 2 (1958).





LOCATION: 22 miles north of Coalinga

TYPE OF TRAP: Sand pinchout on an anticlinal nose

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ELEVATION: 350

DISCOVERY DATA

					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Gatchell	Texaco Inc. "S.P." 1	The Texas Co. "S.P." 1	23 175 15E	MD	32	350	Jul 1940

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Standard Oil Co. of Calif. "Giffen, Inc., et al" 67	Same	Sep 1968	14 17S 15E	MD	14,471	Joaquin Ridge	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	(feet) Age Formation		Gas (btu)	gr/gai	required
Gatchell	9,300	90	Eocene	Lodo	49 - 58	N.A.	IV
				1	1 1		

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production Total nu		Total number of wells		Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	40,171	800,707	21,286	1953	12	2	20

STIMULATION DATA (Jan. 1, 1973)

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 - 2,900

CURRENT CASING PROGRAM: 10 3/4" cem. 1,000; 5 1/2" cem. 9,500 and across base of fresh water sands.

METHOD OF WASTE DISPOSAL:

REMARKS: The last producing well was abandoned during 1956.

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REFERENCES: Hill, F.L., Cantua Creek Area of Presno County: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 1 (1960).





CAPITOLA PARK OIL FIELD

LOCATION: 9 miles south of Taft TYPE OF TRAP: Anticline ELEVATION: 1,570 DISCOVERY DATA

	e				Initial daily production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion	
Media	Lynn Hall, Jr. "Bell-Potter" 1	Pauley Petroleum Inc. "Bell-Potter" 1	26 11N 24W	SB	54	N.A.	Jul 1960	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Signal Oil and Gas Co. "Orloff" 1	Bankline Oil Co. "Orloff" 1	Nov 1930	26 11N 24W	SB	5,051	Temblor	early Mio

PRODUCING ZONES

	Average depth	Average net thickness	0	Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age .	Formation	Gas (btu)	gr/gal	required
Media	650	50	early Miocene	Temblor	26	N.A.	None .

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative p	Cumulative production		Peak oil production Total number of wells		ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
629	0	611	20	1	11,360	4,908	2,985	1962	6	2	20

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: None

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

METHOD OF WASTE DISPOSAL:

REMARKS: The discovery well was drilled through the producing zone utilizing air as the circulating medium.

REFERENCES:



. GOUDKOFF ASSEMBLAGE ZONE



CONTOURS ON TOP OF PANOCHE



LOCATION: 35 miles northwest of Coalinga

TYPE OF TRAP: Lithofacies change

ELEVATION: 410

DISCOVERY DATA

					Ini	tial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Jergins	Exxon Corp. "Cheney Ranch" 1	Jergins Oil Co. "Cheney Ranch" 1	29 14S 13E	MD	170	20	1/2	Jul 1940

Remarks:

DEEPEST WELL DATA

	Date			Death	At total depth	
Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Same	Nov 1950	31 14S 13E	MD	10,357	Panoche	Lt Cret
			Original operator and well name started Sec. T. & R.	Original operator and well name started Sec. T. & R. B & M	Original operator and well name started Sec. T. & R. B & M (feet)	Original operator and well name Started Sec. T. & R. B & M (feet) Strata

PRODUCING ZONES

	Average depth	Average net thickness	Geologic			Salinity of zone water	Original zone	Class BOPE
	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Jergins	7,000	200	Lt Cretaceous	Moreno	1,170	N.A.	2,650	IV
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				1	1 1			

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas proc	duction	Total num	ber of wells	Maximum
let gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	0	0	309,325	75,696	1941	9	6	10

SPACING ACT: Applies

BASE OF FRESH WATER: 1,200 - 1,600

CURRENT CASING PROGRAM: 9" cem. 1,700; 5 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Originally this field was classified as an oil field with 2 producers. Last production from the field was during 1951, and the field was officially abandoned in 1964. The field was reactivated in 1972 and reclassified as a gas field effective January 1, 1972. The cumulative production of condensate amounted to 12,459 barrels. Five new wells have been drilled, four of which have been completed as potential gas producers, but are currently shut in awaiting the installation of a pipeline. Proved acreage has not been assigned to the new wells pending production. REFERENCES:







Kern County

LOCATION: 28 miles northwest of Taft

TYPE OF TRAP: Faulted homocline with lateral permeability variations

1

ELEVATION: 900

DISCOVERY DATA

					Initia prod	al daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	OII (bbi)	Gas (Mcf)	Date of completion
Etchegoin	Pyramid Oil Co. No. 5	Max L. Pray No. 1	1 29S 20E	MD	12	N.A.	Mar 1927

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age	
Mericle Oil Co., Fred Luke, Receiver "Mitchel" 35-4	Standard Oil Co. of Calif. "S.OBacon et al" 24-35	Mar 1966	35 28S 20E	MD	6,540	McDonald	m Miocene	

PRODUCING ZONES

Zone	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Etchegoin	900	35	Pliocene	Etchegoin	12	1,000	None

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 1972 Cumulative production		roduction	Peak oil prod	uction	Total num	Maximum proved			
Oil (bbl)	Net gas (Mcf)	Water (bbl)		producing wells		Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
6,634	0	86,605	270	11	249,499	5	68,401	1970	66	54	290

STIMULATION DATA (Jan. 1, 1973)

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: 7" or 5 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL: Percolation and evaporation sumps.

REMARKS: Separated from Temblor Ranch field Jan. 1, 1946. A cyclic steam-injection project was active from 1967 to 1971. A total of 230,373 bbls. of water, in the form of steam, was injected into 26 wells. In some wells the upper portion of the Belridge diatomite has been included in the overall productive interval. Boron contents as high as 50 ppm. have been reported in the waste water.

REFERENCES: Weddle, J.R., Chico-Martinez Oil Field; Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 54, No. 1 (1968).

CHOWCHILLA GAS FIELD



Madera County

LOCATION: 12 miles west of Chowchilla

TYPE OF TRAP: Anticlinal nose; lenticular sands on anticlinal nose ELEVATION: 150

ELEVATION. 150

DISCOVERY DATA

and the second se					Ini	tial product	tion	
Zone	Present operator and well name	- Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Zilch (Upper)	Chowchilla Gas Co. "Chowchilla" 2	The Pure Oil Co. "Chowchilla" 2	8 10S 14E	MD	1,100	860	N.A.	Feb 1936
Zilch (1-20)	Chowchilla Gas Co. "Redman-Stone" 1-20	Tide Water Associated Oil Co. "Redman- Stone" 1-20	20 10S 14E	10.00	7,000	680	40/64	Feb 1953
Cretaceous	Chowchilla Gas Co. "Chowchilla" 1	The Pure Oil Co. "Chowchilla" 1	7 10S 14E	MD	18,000	525	57/64	Apr 1935
						1		
						1		1 A A
							1	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B&M		Strata	Age	
Chowchilla Gas Co, "Chowchilla" 1	The Pure Oil Co. "Chowchilla" 1	May 1934	7 10S 14E	MD	8,399	Bašement (granite)	Late Jur	

PRODUCING ZONES

	Average depth	Average net thickness	(Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Zilch (Upper) Zilch (1-20) Cretaceous	2,700 2,830 8,000	15 35 50	early Miocene early Miocene Lt Cretaceous	Zilch Zilch Panoche	950 950 435	850 850 1,700	1,000 1,140 2,800	IV IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas prod	luction	Total num	iber of wells	Maximum proved
Net gas (Mcf)	Water (bbi)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
2,405,830	0	200	2	9,051,277	2,405,830	1972	34	14	370

SPACING ACT: Applies

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

CURRENT CASING PROGRAM: 9 5/8" cem 900; 5 1/2" cem 8,200 (Cretaceous completions).

METHOD OF WASTE DISPOSAL:

REMARKS: Sustained production was not obtained from the Cretaceous pool until 1969 when a plant was installed to raise the low btu gas up to utility standards. All production since 1962 has been from the Cretaceous zone. The two Zilch intervals are shut in because they are noncommercial.

REFERENCES: Hodges, F.C., Chowchilla Gas Area: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 29, No. 2 (1943). Hunter, G.W., Chowchilla Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 44, No. 2 (1958).

CIENAGA CANYON OIL FIELD (Abandoned)



Kern County

LOCATION: 21 miles southeast of Taft	
TYPE OF TRAP: Anticline	
ELEVATION: 1,200	
DISCOVERY DATA	

						al daily luction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	OII (bbl)	Gas (Mcf)	Date of completion
Vaqueros	Mobil Oil Corp. No. 1	Springs Co. "Bell & Wrightsman" 1	29 11N 23W	SB	12	N.A.	Oct 1926

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Tenneco Oil Co. "Pioneer Unit" 1-28	Same	Jul 1971	28 11N 23W	SB	12,523	Vaqueros	e Miocene

PRODUCING ZONES

	Average depth	Average net thickness	0	ieologic	Oil gravity (-API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age Formation		Gas (btu)	gr/gal	required
Vaqueros	4,030	750	early Miocene	Vaqueros	33	2,090	111

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prode	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oit (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	2,159	0	1,168	1927	3	1	10

STIMULATION DATA (Jan. 1, 1973)

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. 2,000; 7 5/8" cem. through zone.

METHOD OF WASTE DISPOSAL:

REMARKS Separated from Midway-Sunset field on Jan. 1, 1958. Field abandoned December 1943.

REFERENCES: Pack, R.W., The Sunset-Midway Oil Field California: U.S. Geol. Survey Professional Paper 116 (1920).





CONTOURS ON TOP OF KREYENHAGEN



LOCATION: Immediately north and west of Coalinga

TYPE OF TRAP: Asymmetrical anticline; stratigraphic variations and tar seals on asymmetrical anticline

ELEVATION: 600 - 1,200

DISCOVERY DATA

						al daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Etchegoin - Temblor (Westside)	The Confidence Oil Co. No. 2	Same as present	31 19S 15E	MD	20	N.A.	1900
Temblor (Eastside)	Standard Oil Co. of Calif. No. 1	Independence Oil Co.	28 19S 15E	MD	N.A.	N.A.	1900
Eocene	E.B. Hougham, Opr. No. 1	White Creek Oil Co. No. 1	2 215 14E	MD	N.A.	N.A.	1912
Cretaceous (Oil City)	Coast Range Oil Co.	Same as present	20 19S 15E	MD	10	N.A.	1890
						A.:	,

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Shell 0il Co. 363X	Same	Apr 1952	15 19S 15E	MD	10,414	Alcalde	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	G	eologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Etchegoin - Temblor (Westside)	500 - 3,500	200	Pliocene, m & e Miocene	Etchegoin - Temblor	11 - 18	175	None
Temblor (Eastside)	700 - 4,600	250	m & e Miocene	Temblor	12 - 30	80	None
Eocene	0 - 2,500	100	Eocene - Paleoc	Domengine, Lodo & Martinez	29	N.A.	11
Cretaceous (0il City)	700	140	Lt Cretaceous	Moreno	33 - 40	N.A.	None

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative	production	Peak oil produ	ction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
7,698,511	507,393	39,634,017	19,258	2,221	623,351,173	225,499,711	19,500,000	1912	4,885	4,568	20,216

STIMULATION DATA (Jan. 1, 1973)

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	150,382,808	146
Steam flood	1961	31,859,286	88
Steam cyclic	1962	33,986,670	1,104

SPACING ACT: Does not apply

BASE OF FRESH WATER: 0 - 1,300

CURRENT CASING PROGRAM: Tembior (Eastside): 7" cem 800 - 4,300; 5 1/2" liner landed through zone. Tembior (Westside): 7" cem 500 - 2,500. Eocene: 7" cem 600 - 1,000. METHOD OF WASTE DISPOSAL: Eight disposal wells (9,931,700 bbl, in 1972) and numerous evaporative sumps.

REMARKS: Major development started after the discovery of the Temblor pools in 1900. Much of the early drilling in the Eastside and Oil City areas was near the numerous oil seeps and tar sand outcrops.

REFERENCES: Arnold, Ralph and Robert Anderson, The Geology and Oil Resources of the Coalinga District, Calif.: U.S. Geol. Survey Bull. 398 (1910). Kaplow, E.J., Coalinga Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 31, No. 2 (1945).

EAST COALINGA EXTENSION OIL FIELD



LOCATION: 7 miles northeast of Coalinga TYPE OF TRAP: See areas ELEVATION: 650 - 900

DISCOVERY DATA

						I daily oction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Gatchell	Union Oil Co. of Calif. Opr. No. 1	Petroleum Securities Co. "Gatchell" 2	18 20S 16E	MD	4,776	N.A.	Jul 1938

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Standard Oil Co. of Calif. "Hyde" 54	Same	Jul 1966	6 19S 16E	MD	9,654	Lodo	Eocene

PRODUCING ZONES (See areas)

1100	Average depth	Average net thickness	Geo	logic	Oil gravity (*API) or	Salinity of zone water	Class BOPE required
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative	production	Peak oil prod	uction	Total num	ber of wells	Maximum proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
4,006,639	2,480,045	11,715,782	2,695	78	461,454,045	288,377,899	24,727,863	1944	299	270	4,550

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

SPACING ACT: See areas.

BASE OF FRESH WATER: See areas.

CURRENT CASING PROGRAM See areas.

METHOD OF WASTE DISPOSAL: See areas.

REMARKS: For most of the Gatchell zone's productive life, it has been operated as two separate pools, the Coalinga Nose and the Northeast Extension, because the structural saddle dividing the two areas was flooded early in the life of the field. The Northeast Area has been shut-in since 1966.

REFERENCES: Kaplow, E. J., East Coalings Extension Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 28, No. 1 (1942)

COALINGA NOSE AREA

LOCATION: See map sheet of East Coalinga Extension Oil Field

TYPE OF TRAP: Permeability trap on Coalings anticline.

ELEVATION: 700 - 900

DISCOVERY DATA

					Initial daily production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbi)	Gas (Mcf)	Date of completion	
Vaqueros Gatchell	Union Oil Co. of Calif., Opr. No. 86V Union Oil Co. of Calif., Opr. No. 1	Los Nietos Co., Opr. No. 86V Petroleum Securities Co. "Gatchell" 2	18 205 16E 18 205 16E		1,068 4,776		May 1952 Jul 1938	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age	
Lloyd A. Harnish, Opr. "Guijarral Service Company" 65-30F	Same	Mar 1955	30 20S 16E	MD	9,653	Lodo	Eocene	

PRODUCING ZONES

	Average depth	Average net thickness (feet)		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)		Age	Formation	Gas (btu)	gr/gal	required
Vaqueros Gatchell	6,400 7,400- 8,000	25 0-625	early Miocene Eocene	Vaqueros Lodo	34 - 38 24 - 33	825 25	IV IV

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative	production	Peak oil prod	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
4,006,639	2,480,045	11,715,782	2,695	78	425,394,476	176,962,274	20,798,072	1944	213	194	3,160

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Gas injection	1950	214,970,744	22

SPACING ACT: Applies

BASE OF FRESH WATER: 2,100

CURRENT CASING PROGRAM: 10 3/4" cem 600; 7" cem above the zone; 5 1/2" liner landed through the zone.

METHOD OF WASTE DISPOSAL: Water disposal is by means of evaporation and percolation ponds.

REMARKS. From 1957 to 1964, 14,904,447 bbls. of water were injected as part of a water flood. The Coalinga Nose Area has been operated under court order since 1953 as the result of a gas wastage suit. The Vaqueros pool was abandoned during 1961.

REFERENCES:

LOCATION: See map sheet of East Coalinga Extension Oil Field TYPE OF TRAP: Permeability barrier on the Coalinga Anticline ELEVATION: 650

DISCOVERY DATA

					produ	I daily uction	0.000
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Gatchell	Standard Oil of Calif., Opr. "SPL" 7-17	Amerada Petroleum Corp. "SPL" 7-17	17 195 16E	MD	4,230	14,200	Apr 1939
Remarks:			1				6

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age	
Standard Oil Co. of Calif. "Hyde" 54	Same	Jul 1966	6 19S 16E	MD	9,654	Lodo	Eocene	

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Gatchell	8,000	210	Eocene	Lodo	32	30	IV
			1		1		

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative ;	production	Peak oil prod	uction	Total num	ber of wells	Maximum	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	36,059,569	111,415,625	4,085,325	1943	86	76	1,390

STIMULATION DATA (Jan. 1, 19*3)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 2,100

CURRENT CASING PROGRAM: 13 3/8" or 11 3/4" cem 600; 7" cem above the zone; 5" liner landed through the zone.

METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps.

REMARKS: This area was abandoned during 1972, except for two wells that are used for observation. The cumulative gas injected was 36,761,693 Mcf; the cumulative water injected was 250,433 bbls. Maximum number of injection wells was three, two gas and one water.

REFERENCES:







Kern County

LOCATION: 13 miles northeast of Taft

TYPE OF TRAP: Anticline with lithofacies variations

ELEVATION: 300

DISCOVERY DATA

					Initial daily production		Date of
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	(bbl)	Gas (Mcf)	completion
Gas Zone Stevens Point of Rocks (abd)	Atlantic Richfield Co. "K.C.L." 1-28 Atlantic Richfield Co. "Coles Levee A" 32-32 Atlantic Richfield Co. "Coles Levee A" 67-29	Richfield Oil Corp. "K.C.L." 1-G-28 Richfield Oil Corp. "Tupman-Western" 1 Richfield Oil Corp. "Coles Levee A" 67-29	28 305 25E 32 305 25E 29 305 25E	MD	805	11,800 18,000 1,750	Nov 1938

Remarks:

DEEPEST WELL DATA

	Original operator and well name Starte				Depth	At total depth	
Present operator and well name			Sec. T. & R.	8 & M		Strata	Age
Atlantic Richfield Co. "Coles Levee A" 67-29	Richfield Oil Corp. "Coles Levee A" 67-29	Oct 1952	29 30S 25E	MD	17,895	Basement	Jurassic

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of	Class BOPE
Zone	(feet)		Age	Formation	Gas (btu)	zone water gr/gal	required
Gas Zone Stevens	5,325 8,000 - 9,650	35 45 - 230	Pliocene lt Miocene	Etchegoin Monterey	1,020 33 - 49	610 1,290	III IV
Point of Rocks (abd)	17,500	350	1t Eocene	Kreyenhagen	57	350	IV

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Remarks)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total num	Total number of wells	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Dritled	Completed	acreage
881,700	6,773,376	2,364,504	3,580	123	138,311,394	229,110,762	6,235,768	1949	222	200	3,700

STIMULATION DATA (Jan. 1, 1973)

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	123,557,467	73

SPACING ACT: Applies

BASE OF FRESH WATER: 1,200

CURRENT CASING PROGRAM: Stevens: 11 3/4" cem. 1,100; 7" cem. above zone; 5 1/2" liner landed through zone. Dry gas zone: 10 3/4" cem. 1,100; 5 1/2" cem. through zone. METHOD OF WASTE DISPOSAL: Waste water is used in water flood operations.

REMARKS: 1972 dry gas production 63,986 Mcf from one producing well; cumulative dry gas production 11,099,305 Mcf; 4 wells were drilled for dry gas and 3 were completed; 1972 dry gas proved acreage 80; dry gas peak production 1,829,786 Mcf in 1945. A total of 861,279,000 Mcf of gas was injected into a maximum of 8 wells in a pressure maintenance project begun in 1942 and terminated in 1971.

REFERENCES: Hardoin, J.L., North Coles Levee Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 2 (1962).







Kern County

LOCATION: 12 miles northeast of Taft

TYPE OF TRAP: Anticline with lithofacies variations

ELEVATION: 300

DISCOVERY DATA

					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbi)	Gas (Mcf)	Date of completion
4th Mya Gas Zone (abd)	Marathon Oil Co. "KCL-F" 71-10	The Ohio Oil Co. "KCL-F" 71-10	10 31S 25E	MD	0	3,380	Aug 1957
Etchegoin Gas Zone Stevens	Tenneco West Inc., No. 9 Marathon Oil Co., Oper. "SCLU" 74-10	Standard Oil Co. of Calif. "KCL Lease 20" 9 The Ohio Oil Co. "KCL-F" 1	9 31S 25E 10 31S 25E			5,160 5,600	May 1941 Nov 1938
			1.4				

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Standard Oil Co. of Calif. "KCL Lease 20" 13	Same	Jul 1943	5 31S 25E	MD	16,246	Media	early Mio

PRODUCING ZONES

	Average depth	Average net thickness	0	Geologic	Oil gravity (*API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required
4th Mya Gas Zone (abd)	4,200	200	Pliocene	San Joaquin	1,030	N.A.	111
Etchegoin Gas Zone	5,120	35	Pliocene	Etchegoin	1,020	1,160	III
Stevens	9,600 - 9,900	50 - 300	early Miocene	Monterey	30 - 56	1,240	IV

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Remarks)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total num	Total number of wells	
Oil (bbl)	Net gas (Mcf)	Water (bbi)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	proved
609,916	8,694,393	116,556	3,270	52	49,075,191	159,140,427	2,601,030	1947	93	86	3,340

STIMULATION DATA (Jan. 1, 1973)

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	1945	589,582,036	16

SPACING ACT: Applies

BASE OF FRESH WATER: 1,700

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

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

REMARKS: 1972 dry gas production 614,303 Mcf from one producing well; cumulative dry gas production 35,830,856; peak production (1943) 3,556,466 Mcf: 15 wells were drilled for dry gas and 6 wells were completed.

REFERENCES: Dosch, M.W., South Coles Levee Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 48, No. 2 (1962).

COMANCHE POINT OIL FIELD





LOCATION: 20 miles southeast of Bakersfield

TYPE OF TRAP: Faulted anticlinal nose and variable permeability

ELEVATION: 900

DISCOVERY DATA

Zone					Initial daily production			
	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion	
Santa Margarita	Seaboard Oil & Gas Co. "Gould" 1	Horace Steele and L.C. Gould "Gould" 1	32 12N 18W	SB	25	N.A.	Oct 1947	
	1		1			1	ļ.	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name start		Sec. T. & R.	B & M		Strata	Age	
Gene Reid Exploration Co. "G.B. Finch & Associates" 1	G.B. Finch & Associates No. 1	Feb 1948	29 12N 18W	SB	4,000	Basement	Jur (?)	

PRODUCING ZONES

Zone	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gai	required
Santa Margarita	650	100	late Miocene	Santa Margarita	14	15	None
				e			

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Production		1972 Production 1972 1972 Cumulative production			roduction	Peak oil produ	uction	Total num	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage		Oil (bbl)	Gas (Mcf)	Barreis	Year	Drilled	Completed	acreage
3,535	0	19,774	50	8	155,361	25	10,687	1951	55	18	50

STIMULATION DATA (Jan. 1, 1973)

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: 750

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

METHOD OF WASTE DISPOSAL: After January 1, 1973, disposal of produced water into unlined sumps will not be permitted.

REMARKS: Boron content of produced water ranges from 1.6 to 2.9 ppm.

REFERENCES: Kasline, F.E., Tejon Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 39, No. 1 (1953).



LOCATION: 21 miles northwest of Taft

TYPE OF TRAP: See areas

ELEVATION: 700 - 1,350

DISCOVERY DATA

					Initia prod	uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	1iO (1dd)	Gas (Mcf)	Date of completion
Tulare	Sun Oil Co. "Old" 1	Nacirema Oil Co. No. 1	6 305 22E	MD	50	N.A.	Nov 1909

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total d	epth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
The Superior Oil Co., Opr. "Cymric Unit" 1	The Superior Oil Co. "Cymric Unit" 1	Feb 1953	22 29S 21E	MD	12,022	Point of Rocks	late Eo

PRODUCING ZONES (See Areas)

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

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Production		1972 Production 1972 1972 C Proved Average number C		Cumulative p	Cumulative production		uction	Total number of wells		Maximum
Oil (bbl)	Net gas (Mcf)	Water (bb1)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage	
3,442,918	1,925,361	25,593,750	4,340	726	125,301,572	100,582,416	9,165,571	1948	1,464	1,197	4,550	

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

SPACING ACT: See areas.

BASE OF FRESH WATER: See areas.

CURRENT CASING PROGRAM: See areas.

METHOD OF WASTE DISPOSAL: See areas.

REMARKS: This field was administratively separated from McKittrick Oil Field on January 1, 1947.

REFERENCES: Anderson, D.N. and P.E. Land, Cymric 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 CYMRIC FLANK AREA

LOCATION: See index map of Cymric Oil Field -

TYPE OF TRAP: Anticline with major faulting

ELEVATION: 750

DISCOVERY DATA

						I daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oit (bbi)	Gas (Mcf)	Date of completion
Carneros Phacoides	Standard Oil Co. of Calif. No. 512 Standard Oil Co. of Calif. No. 534	Same as present Same as present	9 30S 22E 9 30S 22E		1,188		Mar 1966 Aug 1967

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age	
Standard Oil Co. of Calif. No. 512	Same	Dec 1966	9 30S 22E	MD	11,847	Kreyenhagen	late Eo	

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required
Carneros Phacoides	8,600 10,145	250 50	early Miocene early Miocene	Temblor Temblor	33 - 39 33	360 560	IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	Cumulative production Peak oil production Total number of v		Total number of wells		Maximum proved		
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
61,135	155,060	15,245	150	4	1,341,606	5,362,412	584,473	1968	11	8	150

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mc ⁻ ; Steam, bbl (water equivalent)	Maximum number of wells used for injection
	1		

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 9 5/8" cem. 1,600; 5 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps,

REMARKS:

REFERENCES: Hardoin, J.L., Cymric Flank Area of Cymric Oil Field: Calif. Div. of Oil and Cas, Summary of Operations--Calif. Oil Fields, Vol. 54, No. 2 (1968).

MCKITTRICK FRONT AREA

LOCATION: See index map of Cymric Oil Field

TYPE OF TRAP: Faulted anticlines

ELEVATION: 850

DISCOVERY DATA

						d daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbi)	Gas (Mcf)	Date of completion
Tulare (Amnicola) Olig (Reef Ridge) Carneros Phacoides Oceanic	Sum Oil Co. "Old" 1 Mobil Oil Corp. "McKittrick Fee" 1 Standard Oil Co. of Calif. No. 536 Same as above Same as above	Nacirema Oil Co. No. 1 Standard Oil Co. "McKittrick" 2 Standard Oil Co. of Calif. No. 536 Same as above Same as above	6 305 22E 8 30S 22E 6 30S 22E 6 30S 22E 6 30S 22E	MD MD MD	50 50 907 906 890	N.A. N.A. 1,195 825 540	Aug 1965

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Mobil Oil Corp, "McKittrick Fee" S-2	Standard Oil Co. of Calif. "Franco Western" S-2	Nov 1969	6 30S 22E	MD	9,510	Tumey	Oligocene

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required	
Tulare (Amnicola) Olig (Reef Ridge) Carneros Phacoides Oceanic	1,200 2,250 5,560 7,870 8,570	125 150 65 175 140	Pleistocene late Miocene early Miocene early Miocene Oligocene	Tulare Monterey Temblor Temblor Tumey	13 12 - 20 33 33 31 - 52	100 1,050 1,250 700 600	None None III IV IV	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total numb	ber of wells	Maximum	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
1,671,294	776,944	13,503,169	1,360	290	34,537,558	13,456,265	3,277,440	1966	486	447	1,380

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mc'; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Cyclic-steam	1963	10,463,199	287

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM. For Tulare or Reef Ridge: 8 5/8" cem. above zone, 6 5/8" liner landed through zone. For Carneros and deeper: 11 3/4" cem. 1,050; 7" cem. through zones. NETHOD 0F %ASTE DISPOSAL: Evaporation and percolation sumps.

REMARKS: A water flood project was started in the Amnicola sand of McKittrick Front area in December 1966 and terminated the following year after 247,715 bbls. of water was injected.

REFERENCES: Weddle, J.R., Carneros, Phacoides, and Oceanic Pools, McKittrick Front Area of Cymric Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 52, No. 2 (1966).

Kern County





1-Y AREA

TYPE OF TRAP: Faulted anticlinal nose

ELEVATION: 950

DISCOVERY DATA

						daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bb1)	Gas (Mcf)	Date of completion
1st McKittrick (Olig)	Estate of Frank Rice Short "Williams" 1	The Hall-Baker Co. "Williams" 1	2 30S 21E	MD	0	1,750	Feb 1939
2nd McKittrick	Public Petroleum "Williams" 3	Same as present	2 30S 21E	MD	0	700	Apr 1953

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Standard Oil Co. of Calif. "F&B-CWOD" 572	Same	Dec 1965	3 30S 21E	MD	11,795	Kreyenhagen	late Eo

PRODUCING ZONES

.

Zone	Average depth	Average net thickness (feet)		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
	(feet)		Age	Formation	Gas (btu)	gr/gal	required
1st McKittrick (Olig)	1,100	100	late Miocene	Monterey	14	500	III
2nd McKittrick	1,230	210	late Miocene	Monterey	14	500	III

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
11,577	292,156	350,642	90	9	180,821	4,476,256	41,241	1968	31	18	110

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mc'; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Cyclic-steam	1967	206,470	13
	1	1	

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 10 3/4" cem. 200; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL. Evaporation and percolation sumps.

REMARKS: The first reported oil production was in 1953. The produced gas has a heat value of 960 btu.

REFERENCES:



CONTOURS ON TOP OF PHACOIDES



SALT CREEK MAIN AREA

Kern County

LOCATION: See index map of Cymric Oil Field

TYPE OF TRAP: Faulted anticlinal nose

ELEVATION: 950

DISCOVERY	DATA	

						daily	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbi)	Gas (Mcf)	Date of completion
Etchegoin Carneros Phacoides	Tesoro Petroleum Corp. "Temblor" 1 Tesoro Petroleum Corp., Opr. "Temblor" 2 Carneros Oil Co. "Anderson-Community" 3	Independent Exploration Co. "Temblor" 1 Independent Exploration Co. "Temblor" 2 Same as present	17 296 21E 17 295 21E 19 298 21E	MD	23 430 96	N.A. 45 N.A.	Jan 1946 Mar 1946 Jun 1949

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total d	epth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Tesoro Petroleum Corp., Opr. "R.H. Anderson Two" 1	Texaco Inc. "T-U Anderson" 1	Jan 1966	20 295 21E	MD	4,200	Point of Rocks	late Eo

PRODUCING ZONES

	Average depth	Average net thickness	0	Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Etchegoin Carneros	650 1,500 - 2,400	60 150	Pliocene early Miocene	Etchegoin Temblor	· 13 17	1,070 700 - 1,090	None III
Phacoides	2,200	150	early Miocene	Temblor	22	1,370	111

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
377,270	36,859	508,726	450	56	25,308,664	4,820,031	2,314,275	1947	146	94	480

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mci; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Gas injection for pressure maintenance	1948	20,216,109	7

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 10 3/4" cem. 250; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps.

REMARKS:

REFERENCES:

SALT CREEK WEST AREA

LOCATION: See index map of Cymric Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 1,350

DISCOVERY DATA

						uction		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion	
Phacoides	Edco Oil Co. "Anderson" 2	Ferguson & Bosworth "Anderson" 2	19 29S 21E	MD	20	N.A.	Jul 1951	
							1	
	1	1		1		1	1	

Remarks:

DEEPEST WELL DATA

*		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Miller & York "Merritt" 1	Same	Apr 1947	29 29S 21E	MD	5,005	Phacoides	early Mio

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Phacoides	500	100	early Miocene	Temblor	22	1,500	None

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total number of wells		Maximum	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
2,300	0	2,208	30	5	212,217	0	39,375	1953	37	9	3

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: None

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

METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps.

REMARKS:

REFERENCES: Borkovich, G.J., West Salt Creek Area of Cymric Oil Field; Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 45, No. 2 (1959).

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SHEEP SPRINGS AREA

TYPE OF TRAP: Two anticlinal noses; sand pinchout on the flank of a faulted anticline

ELEVATION: 900

DISCOV	ERY	DATA

					Initial daily production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbi)	Gas (Mcf)	Date of completion	
Etchegoin (54-21) Carneros Phacoides Oceanic	Henry Quandt "Kendon" 1 Killingsworth Limited Partnership #1 "Sheep Springs" 2 Tesoro Potroleum Corp. "Cymric" M34 E.A. Bender, Opr. "Sheep Springs" 8	Ozena Oil Co. "Kendon" 1 Rothschild-Bender Oil Operations "Sheep Springs" 2 Intex Oil Co. "Cymric" 34 Rothschild-Bender Oil Operations "Sheep Springs" 8	27 295 21E 17 295 21E 21 295 21E 17 295 21E 17 295 21E	MD MD	15 388 62 *0	N.A. 40 1,100 2,000	Aug 1952	

Remarks: * During August 1947 production included oil (250 b/d oil and 2,000 to 5,000 Mcf gas). The Oceanic discovery well blew out prior to completion; 110 lb. mud was used to kill well. After completion shut-in pressure was 2,000 psi at the surface.

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age	
Los Nietos Co. "Richardson" 77X-7	Same	Jan 1950	7 29S 21E	MD	10,129	Kreyenhagen	late Eo	

PRODUCING ZONES

	Average depth	Average net thickness	0	Geologic	Oil gravity (*API) or	Salinity of	Class BOPE											
Zone	(feet)	(feet)			Age	Age	Age	Age	Age	and the second se		Age	Age	Age	Age	Age	gr/gal	required
Etchegoin (54-21) Carneros Phacoides Oceanic	2,450 3,400 4,600 4,700	75 150 35 50	Pliocene early Miocene early Miocene Oligocene	Etchegoin Temblor Temblor Tumey	16 23 33 41	1,100 600 1,300 1,000	II III III III											

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number Cumulat		roduction	Peak oil production		Total number of wells		Maximum proved	
Oil (bbl)	Net gas (Mcf)	Water (bb1)	acreage		Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
115,220	215,723	530,068	630	78	5,212,495	5,528,318	532,444	1948	172	114	730

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: Miocene & Oligocene: 10 3/4" cem. 500; 7" cem. above zone; 5 1/2" liner landed through zone. Pliocene: 10 3/4" cem. 250; 7" cem. above zone; 5 1/2" liner landed through zone. METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps.

REMARKS:

REFERENCES:

CYMRIC OIL FIELD Kern County





WELPORT AREA

LOCATION: See index map of Cymric Oil Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 700

DISCOVERY DATA

				Initial daily production			
Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbi)	Gas (Mcf)	Date of completion	
Victory Oil Co. No. 20	H.S. Williams Oil Co. No. 20			106	N.A.	Apr 1916	
	Same as present	26 29S 21E	MD	40	N.A.	Nov 1945	
Union Oil Co. of Calif. "Anderson" 45-26	Same as present	26 29S 21E	MD	883	685	Jul 1945	
Standard Oil Co. of Calif. "Weston" 382	Same as present	27 29S 21E	MD	290	60	Jan 1956	
Standard Oil Co. of Calif, "Weston" 271	Same as present	27 29S 21E	MD	312	65	Nov 1946	
Tesoro Petroleum Corp. "Oceanic" 1	Independent Exploration Co. "Oceanic" 1	22 29S 21E	MD	956	500	Oct 1945	
The Superior Oil Co. "Woody" 77-22	Same as present	22 29S 21E	MD	60	4,000	Mar 1946	
1							
	Victory Oil Co. No. 20 Union Oil Co. of Calif. "Anderson" 56-26 Union Oil Co. of Calif. "Anderson" 45-26 Standard Oil Co. of Calif. "Weston" 382 Standard Oil Co. of Calif. "Weston" 271 Tesoro Petroleum Corp. "Oceanic" 1	Victory Oil Co. No. 20 H.S. Williams Oil Co. No. 20 Union Oil Co. of Calif. "Anderson" 56-26 Same as present Union Oil Co. of Calif. "Anderson" 45-26 Same as present Standard Oil Co. of Calif. "Weston" 382 Same as present Standard Oil Co. of Calif. "Weston" 271 Same as present Tesoro Petroleum Corp. "Oceanic" 1 Independent Exploration Co. "Oceanic" 1	Victory Oil Co. No. 20 H.S. Williams Oil Co. No. 20 26 29S 21E Union Oil Co. of Calif. "Anderson" 56-26 Same as present 26 29S 21E Union Oil Co. of Calif. "Anderson" 45-26 Same as present 26 29S 21E Standard Oil Co. of Calif. "Weston" 382 Same as present 26 29S 21E Standard Oil Co. of Calif. "Weston" 271 Same as present 27 29S 21E Tesoro Petroleum Corp. "Oceanic" 1 Independent Exploration Co. "Oceanic" 1 22 29S 21E	Victory Oil Co. No. 20H.S. Williams Oil Co. No. 2026 29S 21EMDUnion Oil Co. of Calif. "Anderson" 56-26Same as present26 29S 21EMDUnion Oil Co. of Calif. "Anderson" 45-26Same as present26 29S 21EMDStandard Oil Co. of Calif. "Weston" 382Same as present27 29S 21EMDStandard Oil Co. of Calif. "Weston" 271Same as present27 29S 21EMDTesoro Petroleum Corp. "Oceanic" 1Independent Exploration Co. "Oceanic" 122 29S 21EMD	Present operator and well name Original operator and well name Sec. T. & R. B & M [0] Victory Oil Co. No. 20 H.S. Williams Oil Co. No. 20 26 295 21E MD 106 Union Oil Co. of Calif. "Anderson" 56-26 Same as present 26 295 21E MD 40 Union Oil Co. of Calif. "Anderson" 45-26 Same as present 26 295 21E MD 40 Standard Oil Co. of Calif. "Weston" 382 Same as present 26 295 21E MD 833 Standard Oil Co. of Calif. "Weston" 382 Same as present 27 295 21E MD 290 Standard Oil Co. of Calif. "Weston" 271 Same as present 27 295 21E MD 312 Tesoro Petroleum Corp. "Oceanic" 1 Independent Exploration Co. "Oceanic" 1 22 295 21E MD 356	Present operator and well name Original operator and well name production Victory Oil Co. No. 20 H.S. Williams Oil Co. No. 20 26 29S 21E MD 106 N.A. Union Oil Co. of Calif. "Anderson" 56-26 Same as present 26 29S 21E MD 40 N.A. Union 0il Co. of Calif. "Anderson" 45-26 Same as present 26 29S 21E MD 40 N.A. Standard 0il Co. of Calif. "Weston" 382 Same as present 27 29S 21E MD 290 60 Standard 0il Co. of Calif. "Weston" 271 Same as present 27 29S 21E MD 312 65 Tesoro Petroleum Corp. "Oceanic" 1 Independent Exploration Co. "Oceanic" 1 22 29S 21E MD 32 65	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth			
Present operator and well name			Sec. T. & R.	8 & M		Strata	Age		
The Superior Oil Co., Opr. "Cymric Unit!" 1	The Superior Oil Co. "Cymric Unit" 1	Feb 1953	22 29S 21E	MD	12,022	Point of Rocks	late Eo		

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required	
Tulare (Amnicola)	1,000	50 - 450	Pleistocene	Tulare	13	290	None	
Etchegoin	3,400	80	Pliocene	Etchegoin	28	1,200	III	
Carneros	4,150	100	early Miocene	Temblor	31	1,280	III	
Agua	3,400	85	early Miocene	Temblor	31	1,250	III	
Phacoides	4,300	300	early Midcene	Temblor	33	880	III	
Oceanic	4,900	150	Oligocene	Tumey	37	1,100	III	
Point of Rocks	5,400	300	late Eocene	Kreyenhagen	48	1,250	IV	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total number of wells		Maximum proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)		producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
1,204,122	448,619	10,683,692	1,630	284	58,508,211	66,939,134	2,047,583	1961	581	507	1,670

STIMULATION DATA (Jan, 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mc'; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Cyclic-steam	1964	5,380,864	204
			2

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: Pliocene: 8 5/8" cem. above zone; 6 5/8" liner landed through zone. Miocene and deeper: 11 3/4" cem. 550; 7" cem. above zone; 5 1/2" liner landed through zone. METHOD OF WASTE DISPOSAL: Evaporation and percolation from unlined sumps.

REMARKS: A pilot fire flood was started in Tulare sand (Amnicola) and discontinued in 1967. A steam flood project was started in the Tulare zone in 1968 and terminated after 65,255 bbls. of water in the form of steam was injected. Mercury is associated with oil and gas production from Phacoides, Oceanic, and Point of Rocks sands in isolated fault blocks. Production from the Etchegoin is commingled in a few wells with that from the underlying Antelope. REFERENCES:



DEER CREEK OIL FIELD Tulare County

LOCATION: 6 miles south of Porterville

TYPE OF TRAP: Permeability variations on a homocline

ELEVATION: 475

DISCOVERY DATA

					Initial daily production			
Zone P	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion	
Santa Margarita	McGreevy and Neary "Rhoads" 1	McGreevy-Neary Oil Co. "Rhoads" 1	22 22S 27E	MD	62	N.A.	Dec 1953	

Remarks: In 1930 a subcommercial well was completed, in Sec. 22, by Campbell Oil Co. (now Congress Petroleum Co.). The average rate for this well,over a period of time, was 1 barrel per day of oil and 60 barrels per day of water.

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Hub Oil Co. No. 1	Same	Dec 1924	27 22S 27E	MD	1,488	Granite	Lt Jur (?)

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Santa Margarita	715	20	late Miocene	Santa Margarita	16	20 - 140	None

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	tion Peak oil production		Total number of wells		Maximum proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
40,867	0	1,632,419	100	24	937,547	0	63,848	1955	65	37	125

STIMULATION DATA (Jan. 1, 1973)

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

METHOD OF WASTE DISPOSAL: After January 1, 1973, disposal of produced water into unlined sumps will not be permitted.

•REMARKS: Boron concentration of produced water ranges from 2.4 to 5.1 ppm.

REFERENCES: Weddle, J.R., Deer Creek Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 44, No. 1 (1958).



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Tulare County

LOCATION: 2 miles southwest of Porterville

TYPE OF TRAP: Permeability variations on an anticline

ELEVATION: 445

DISCOVERY DATA

	5				Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	OII (bbi)	Gas (Mcf)	Date of completion
Main Sand	T. Jack Bennington, Inc. "Bastian" 10-2	Garner-Lange "Bastian" 10-2	10 22S 27E	MD	10	0	Nov 1961
Remarks:		1				l	

DEEPEST WELL DATA

		Date			Depth	At tota	il depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Garner-Lange "Bastian" 10-1	Same	Jul 1961	10 22S 27E	MD	1,022	Granite	Late Jur(?)

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Main Sand	790	25	lt Miocene	Santa Margarita	12	N.A.	None

PRODUCTION DATA (Ian. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	action	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	1,243	0	540	1962	7	1	

STIMULATION DATA (Jan. 1, 1973)

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. 7" cem, above zone; 5 1/2" liner landed through zone. METHOD OF WASTE DISPOSAL:

REMARKS: The only producing well in the field was abandoned in February 1971.

REFERENCES:



LOCATION: 51 miles northwest of Taft

TYPE OF TRAP: See areas

ELEVATION: 600

DISCOVERY DATA

						al daily uction	1.12110-001
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Santos, Salt Creek, Tumey, Point of Rocks	Operator name and well number unknown	Same as present	25 255 18F or 26	MD	N.A.	N.A.	N.A.

Remarks:

DEEPEST WELL DATA

	Date			Death	At total d	epth
Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Carlton Beal and Associates "Kalloch" 56-11	Aug 1953	11 25S 18E	MD	7,801	Point of Rocks	lt Eocene
			Original operator and well name started Sec. T. & R.	Original operator and well name started Sec. T. & R. B & M	Original operator and well name started Sec. T. & R. B & M (feet)	Original operator and well name started Sec. T. & R. B & M (feet) Strata

PRODUCING ZONES (See areas)

	Average depth	Average net thickness	Ge	ologic	Oil gravity (*API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required
	1				1 1		

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
51,217	31,502	398,985	780	47	2,975,948	4,347,199	344,537	1956	330	203	970

STIMULATION DATA (Jan. 1, 1973)

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

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.



DEVILS DEN OIL FIELD Alferitz Area (Southern Part)



SCALE 1" = 2000'



ALFERITZ AREA

LOCATION: See index map of Devils Den Oil Field

TYPE OF TRAP: Anticline with major faulting; permeability variations; fractured shale

ELEVATION: 650

						al daily '	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Escudo Carneros - Agua Tumey Point of Rocks (N) Point of Rocks (S) "Avenal"	Gilliland Oil & Land Co. "Alferitz" 15 Gilliland Oil & Land Co. "Alferitz" 3 Gilliland Oil & Land Co. "Alferitz" 1 Gilliland Oil & Land Co. "Dagany Gap Unit" 6 Gilliland Oil & Land Co. "Strode" 2 Gilliland Oil & Land Co. "Dagany Gap Unit" 25	Gilliland Oil Co. and C.O. Davis "Alferitz" 15 Gibson Oil Co. Inc. "Alferitz" 3 Standard Oil Co. of Calif. "Alferitz" 1 Gilliland Oil Co. and H.F. Ahmanson "Miller" 1 Gilliland Oil Co. and C.O. Davis "Strode" 2 Gilliland Oil Co. "Bandini - U.C." 1	14 255 18E 14 255 18E 14 255 18E 3 255 18E 15 255 18E 3 255 18E 3 255 18E	MD MD MD MD	520 10 60 165 180 164	N.A. 9 N.A. 500 N.A.	Aug 1952 Oct 1938 Jun 1931 Apr 1954 Sep 1953 Apr 1956

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total d	epth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Gilliland Oil & Land Co. "Kalloch" 56-11	Carlton Beal and Associates "Kalloch" 56-11	Aug 1953	11 25S 18E	MD	7,801	Point of Rocks	lt Eocene

PRODUCING ZONES

	Average	Average Average net Geologic Oil gravity depth thickness (*API) or		Oil gravity	Salinity of zone water	Class BOPE		
Zone (feet)		(feet)	Age	Formation	Gas (btu)	gr/gal	required	
Escudo	1,100	100	lt Miocene	Monterey	15	N.A.	None	
Carneros - Agua	1,350	150	e Miocene	Temblor	15	N.A.	II	
Tumey	2,000	500	Oligocene	Tumey	18 - 32	650	11	
Point of Rocks (N)	1,200 - 1,700	400	Eocene	Kreyenhagen	23 - 41	480	111	
Point of Rocks (S)	2,100 - 3,200	175	Eocene	Kreyenhagen	23 - 34	480	111	
"Avenal"	4,200	200	Eocene	Kreyenhagen	40 - 48	N.A.	111	
	1		1					

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prodi	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
39,245	31,502	392,795	400	23	2,521,475	4,347,014	293,167	1956	116	70	48

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Southern portion: does not apply. Northern portion: applies

BASE OF FRESH WATER: Southern portion: none. Northern portion: 300.

CURRENT CASING PROGRAM: 10 3/4" cem. 400; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Evaporation and percolation from unlined sumps.

REMARKS: A cyclic-steam injection project was started in the Escudo and Point of Rocks zone in November 1964 and terminated after 22,627 bbls. was injected.

REFERENCES: Ritzius, D.E., Alferitz Area of Devils Den Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 43, No. 1 (1957).



BATES AREA

LOCATION: See index map of Devils Den Oil Field

TYPE OF TRAP: Permeability variation on a regional homocline

ELEVATION: 500

DISCOVERY DATA

						I daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Bates	Jacalitos Petroleum Co, "Bates Estates" 1-1	Kenmac Oil Co. "Bates Estates" 27X-20	20 25S 19E	MD	50	N.A.	Jun 1954
	1					2	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth.
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Chanslor-Western Oil and Development Co. "Bates" 2	Chanslor-Canfield Midway Oil Co. "Bates" 2	Jul 1944	20 25S 19E	MD	9,181		early Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Bates	1,600	60	Pliocene	Jacalitos	25	N.A.	None

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximu	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells Oil (bbl) Gas (Mcf) Barrels	Barrels	Year	Drilled	Completed	acreage		
8,118	0	1,143	140	9	293,294	0	49,086	1956	50	15	15

STIMULATION DATA (Jan. 1, 1973)

SPACING ACT: Applies

BASE OF FRESH WATER: 600

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

METHOD OF WASTE DISPOSAL:

.REMARKS:

REFERENCES: Lorshbough, A.L., Bates Area of Devils Den Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 44, No. 1 (1958).

DEVILS DEN OIL FIELD Old Area



Kern County

LOCATION: See index map of Devils Den Oil Field TYPE OF TRAP: Angular unconformity; fractured shale

ELEVATION: 550

DISCOVERY DATA

					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Santos	Operators name and well number unknown	Operators name and well number unknown	25 25S 18E or 26	MD	N.A.	N.A.	N.A.
Salt Creek	Same as above	Same as above	25 25S 18E or 26	MD	N.A.	N.A.	N.A.
Tuney	Same as above	Same as above	25 25S 18E or 26	MD	N.A.	N.A.	N.A.
Point of Rocks	Same as above	Same as above	25 25S 18E or 26	MD	N.A.	N.A.	N.A.
							1

Remarks: The first well is believed to have been completed in 1901.

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age	
Signal Oil and Gas Co. "Hancock-M.J.M.&M C.C.M.O." 34-24	Hancock 011 Co. "Hancock-M.J.M.&MC.C.M.O." 34-24	Jun 1954	24 25S 18E	MD	4,836	Point of Rocks	1t Eocene	

PRODUCING ZONES

	Average depth	Average net thickness	(Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE required	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal		
Santos Salt Creek Tumey Point of Rocks	200 200 500 600	50 260 300 200	early Miocene early Miocene Oligocene Eocene	Temblor Temblor Tumey Kreyenhagen	14 19 16 18	N.A. N.A. N.A. 420	None None None None	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prode	uction	Total num	ber of wells	Maximum	
Oil (bbl)	Net gas (Mcf)	Water (bb1)	acreage			Year	Drilled	Completed	acreage		
3,854	0	5,047	240	15	161,179	185	11,602	1966	164	118	340

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM 5" cem. above zone, no liner.

METHOD OF WASTE DISPOSAL: Evaporation and percolation from unlined sumps.

REMARKS: A cyclic-steam injection project was started in September 1956 and terminated after 13,800 bbls. was injected. A steam-flood project was started in February 1966 and terminated after 37,700 bbls. was injected.

REFERENCES: Van Couvering, Martin, and H.B. Allen, Devils Den Oil Field: Calif. Div. of Mines, Bull. 118 (1943).





LOCATION: 30 miles southeast of Coalinga

TYPE OF TRAP: Anticline; lithofacies variations on anticline ELEVATION: 210

DISCOVERY	DATA

Zone					Initial production			
	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Tulare	Jacalitos Petroleum Co. "S.P." 1-13	Mohawk Pet. Corp. and Jacalitos Pet. Co. "S.P." 1-13	13 23S 19E	MD	1,920	396	7/16	Jan 1957
1200 sand	R. H. Anderson and C. C. Friend No. 1	Dudley Ridge Oil Co., Ltd. No. 1	12 235 19E	MD	28,000	480	N.A.	May 1929
		1.0						

Remarks: The San Joaquin zone discovery well blew in during May 1929 and remained out of control for ten days. During this time the estimated maximum daily productive rate was 30,000 Mcf.

DEEPEST WELL DATA

		Date			Depth	At total depth	
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Occidental Petroleum Corp. "Howe" 1	Same	Apr 1966	2 23S 19E	MD	15,797	Kreyenhagen	Eocene

PRODUCING ZONES

	Average depth	Average net thickness	Geologic			Salinity of	Original zone	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required	
Tulare 1200 sand	1,100 1,280	20 20		Tulare San Joaquin	1,040 N.A.	375 N.A.	440 N.A.	III IV	

PRODUCTION	DATA (Ia	1 1973)	

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	0	0	4,866,331	731,843	1960	36	17	750

SPACING ACT: Does not apply

BASE OF FRESH WATER: 450

CURRENT CASING PROGRAM: 5 1/2" cem 250; 2 7/8" cem 1,300.

METHOD OF WASTE DISPOSAL:

REMARKS: The last producing well in the field was abandoned during 1965.

REFERENCES: Corwin, C. H., Dudley Ridge Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 1 (1960).



Kern County

LOCATION: 20 miles north of Bakersfield

TYPE OF TRAP: Faulted homocline with permeability barrier

ELEVATION: 870

DISCOVERY DATA

				Initia	al daily luction	
Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Shell Oil Co. "Smith" 56X-11	Same as present	11 26S 27E	MD	185	N.A.	Sep 1941
Sec. 2						
	-					l,
					Present operator and well name Original operator and well name Sec. T. & R. B & M (bb)	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age	
Shell Oil Co. "Smith Cairns" 2	Same	Oct 1941	11 26S 27E	MD	2,491	Vedder	early Mio	

PRODUCING ZONES

	Average depth	Average net thickness	G	eologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Vedder	2,340	75	early Miocene	Vedder	15	35	None

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total number of wells		Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	35,369	0	15,988	1942	11	2	20

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
	4		

SPACING ACT: Applies

BASE OF FRESH WATER: 1,300

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:

REMARKS: The last oil well in the field was abandoned in 1952.

REFERENCES:

EDISON OIL FIELD INDEX MAP



LOCATION: 8 miles southeast of Bakersfield

TYPE OF TRAP: See areas

ELEVATION: 475 - 750

Zone					Initial daily production		
	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Fruitvale and Nozu	Don M. Cook "Seale 5" 5	General Petroleum Corp. of Calif. "Kerwin" 1	5 30S 29E	MD	65	N.A.	Jul 192

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Standard Oil Co. of Calif. "Jeppi Camp" 55	Same	Feb 1954	8 30S 29E	MD	6,545	Vedder	early Mio

PRODUCING ZONES (See areas)

Average	Average net thickness	Ge	ologic	Oil gravity	Salinity of	Class BOPE
(feet)	(feet)	Age	Formation	Gas (btu)	gr/gai	required
				1		
	depth	depth thickness	depth thickness	depth thickness	depth thickness (*API) or	depth thickness congre (*API) or zone water

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	ulative production Peak oil production		Total number of wells		Maximum		
Oil (bbl)	Net gas (Mcf)	Water (bbl)		producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
1,340,547	691,234	11,092,864	5,860	529	111,303,983	65,602,991	6,652,054	1953	1,286	1,043	7,335

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

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.

EDISON OIL FIELD Edison Groves Area





EDISON GROVES AREA

LOCATION: See index map of Edison Oil Field

TYPE OF TRAP: Facies change on a faulted homocline

ELEVATION: 550 - 750

DISCOVERY DATA

						al daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Chanac Olcese	G.A. Henry "DLK" 1A William K. Barker & Associates "Shields-Arms" 72-32	A.M. Dunn "DLK" 1A Richfield Oil Corp. "Shields-Arms" 1	28 295 29E 32 295 29E		20 239	N.A. N.A.	Oct 1953 Dec 1950
							1
	6						

Remarks:

DEEPEST WELL DATA

	Original operator and well name sta			1	Deoth	At total depth	
Present operator and well name			Sec. T. & R.	8 & M		Strata	Age
William K. Barker & Assoc. "Shields-Arms" 71-32	Richfield Oil Corp. "Shields-Arms" 71-32	Feb 1951	32 29S 29E	MD	5,591	Schist	Late Jur (?)

PRODUCING ZONES

	Average depth	Average net thickness	1	Seologic	Oil gravity (*API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required
Chanac Olcese	1,130 3,450	30 100	late Miocene early Miocene	Chanac Olcese	16 13	N.A. 740	None II

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total number of wells		production Total number of wells		Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage		Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage		
50,256	7,526	1,032,300	390	45	2,012,132	197,798	162,783	1956	70	56	410		

STIMULATION DATA (Jan. 1, 1973)

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	118,166		17	

SPACING ACT: Applies

BASE OF FRESH WATER: 1,350

CURRENT CASING PROGRAM: Chanac: 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. Olcese: 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: 959,599 bbl. of waste water was injected during 1972 into one disposal well.

REFERENCES: Matthews, J.F. Jr., Edison Groves Area of Edison Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 41, No. 2 (1955).

Kern County

EDISON OIL FIELD Jeppi Area



JEPPI AREA

LOCATION: See index map of Edison Oil Field

TYPE OF TRAP: Faulted anticlinal nose with permeability variations

ELEVATION: 480

DISCOVERY	DATA
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			-			al daily luction	Data of
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oit (bbl)	Gas (Mcf)	Date of completion
Jeppi, Santa Margarita Jewett, Pyramid Hill, Vedder	Atlantic Oil Co. "MJM & M-Jeppi" 1 Standard Oil Co. of Calif. "Jeppi Camp" 76-8	First National Finance Corp. "DeMille-First National-Jeppi" 1 Crown Drilling Co. "Jeppi Camp" 76-8	17 305 29E 8 305 29E		500 330	75 N.A.	Feb 1948 Dec 1952

Remarks:

DEEPEST WELL DATA

					Depth	At total depth	
Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	3 & M		Strata	Age
Standard Oil Co. of Calif. "Jeppi Camp" 55	Same	Feb 1954	8 30S 29E	MD	6,545	Vedder	early Mio

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (°API) or	Salinity of	Class 80PE
Zone (feet)			Age	Formation	Gas (btu)	gr/gal	required
Jeppi Santa Margarita Jewett Pyramid Hill Vedder	3,300 3,500 5,900 5,950 6,040	80 30 20 45 20	e Pliocene late Miocene early Miocene early Miocene early Miocene	Chanac Santa Margarita Freeman-Jewett Freeman-Jewett Vedder	22 20 40 38 40	20 N.A. 950 1,040 600	None None III III III

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative production Peak oil producti		uction	Total num	ber of wells	Maximun proved		
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
28,432	29,770	136,635	525	20	5,511,009	11,454,045	801,408	1955	121	91	685

STIMULATION DATA (Jan. 1, 1973)

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: 3,000

CURRENT CASING PROGRAM: Late Miocene and above: 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone. Early Miocene: 11 3/4" cem. 600; 5 1/2" cem. through zone and across base of fresh-water sands. METHOD OF WASIE DISPOSAL: Evaporation and percolation from sumps on marine outcrops east of field.

REMARKS: Produced waters contain from 7 to 8 ppm boron.

REFERENCES: White, J.L., Jeppi Area of Edison Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 41, No. 2 (1955).

Kern County





CONTOURS ON TOP OF BASEMENT COMPLEX



LOCATION: See index map of Edison Oil Field

TYPE OF TRAP: Truncations and permeability variations on a regional homocline

ELEVATION: 650

DISCOVERY DATA

Zone					Initial daily production		-
	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Kern River - Chanac Santa Margarita Wicker Nozu, Freeman - Jewett, Walker Schist	Exxon Corp. "Duff" 2 Exxon Corp. "McCowan A Fee" 6 Exxon Corp. "McCowan A Fee" 3 Exxon Corp. "Duff" 3 Emjayco "Brockman" 3	L.C. Osborne "Duff" 2 A.T. Jergins Trust "McCowan 13A" 6 Jergins Oil Co. "NcCowan 13A" 3 Monterey Exploration Co. "Duff" 3 H.H. Magee "Brockman" 3	15 305 29E 13 305 29E 13 305 29E 15 305 29E 13 305 29E	MD MD MD	20 300 500 510 340	N.A. N.A. N.A. N.A.	Nov 1931 Jun 1936 Mar 1945 May 1934 Jun 1945

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age	
Trico Industries, Inc. "Grayson" 45-10	Golden Bear Oil Co. "Grayson" 45-10	Dec 1949	10 30S 29E	MD	5,375	Basement	Late Jur	

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	(Seologic	Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			
Kern River - Chanac	750 - 4,200	450	Plio - 1t Mio	Kern River-Chanac	14 - 22	4	None
Santa Margarita	400 - 4,400	15 - 70	late Miocene	Santa Margarita	22	5	None
Wicker	1,500 - 2,500	20 - 105	late Miocene	Fruitvale	16	10	None
Nozu	3,000	55	m Miocene	Round Mountain	20 - 29	6	111
Freeman-Jewett	3,100	65	early Miocene	Freeman-Jewett	16 - 29		III
Walker	2,900	120	Oligocene	Walker	20	5	111
Schist	1,200 - 4,500	360	Jurassic	Schist	21	5	111

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total number of wells		Maximum
Oil (bb1)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
667,272	140,323	6,324,861	1,950	220	66,116,647	12,377,373	4,669,587	1946	463	377	2,525

STIMULATION DATA (Jan. 1, 1973)

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	1,594,312	86

SPACING ACT: Applies

BASE OF FRESH WATER: 1,700

CURRENT CASING PROGRAM: 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.

NETHOD OF WASTE DISPOSAL Evaporation and percolation from sumps on marine outcrops east of field.

REMARKS: A water flood of the Freeman-Jewett zone was begun in 1964 and terminated after 982,378 bbls. was injected.

REFERENCES: Barnes, J.A., Main Area of Edison Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 52, No. 2 (1966). Kasline, F.E., Edison Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 26 (1941).

EDISON OIL FIELD




PORTALS - FAIRFAX AREA

LOCATION: See index map of Edison Oil Field

TYPE OF TRAP: Channel sands on a faulted homocline; sand pinchout

ELEVATION: 475

DISCOVERY DATA

					Initial daily production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion	
Wicker Fruitvale and Nozu	J.H. Siemon "Edison-Seale-5" 1 Don M. Cook "Seale 5" 5	Lee Oil Co. Inc. "Edison-Seale-5" 1 General Pet. Corp. of Calif. "Kerwin" 1	5 30S 29E 5 30S 29E		100 65	18 N.A.	Nov 1934 Jul 1928	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Gulf Oil Corp. "Cohn Estate" 1	Western Gulf Oil Co. "Cohn Estate" 1	Oct 1944	3 30S 28E	MD	6,278	Wicker	m & lt Mio

PRODUCING ZONES

	Average depth	Average net thickness	G	eologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Wicker Nozu	4,200 4,100	60 50	m & lt Miocene m Miocene	Fruitvale Round Mountain	19 15	20 300	None None

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative production Peak oil production Total number of well		Cumulative production Peak oil production		ber of wells	Maximum		
Oil (bb1)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
56,037	200	55,054	455	43	3,565,069	422,769	229,087	1953	. 111	79	660

STIMULATION DATA (Jan. 1, 1973)

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: 3,000

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: Evaporation and percolation from sumps on marine outcrops east of field.

REMARKS: A water flood of the Wicker zone was begun in May 1963 and terminated after a total of 221,796 bbls. was injected.

REFERENCES: Matthews, J.F. Jr., Portals - Fairfax Area of Edison Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 42, No. 2 (1956).





RACE TRACK HILL AREA

LOCATION: See index map of Edison Oil Field

TYPE OF TRAP: Anticline with major faulting

ELEVATION: 500

DISCOVERY DATA

					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Chanac Santa Margarita Wicker	Camtex Industries Inc. "Cohn" 8-34 E.H. Jackson Oil Co. "S-P" 4 Casa Oil Assoc. Inc. "Berry-Farms" 48X-4	M. Barratt & Ernest W. Bysshe Jr. "Cohn" & Gus Pongratz "S-P" 4 General Pet. Corp. "Berry-Farms" 48X-4	34 29S 29E 3 30S 29E 4 30S 29E	MD MD	21 14 241	N.A. N.A. 145	Nov 1954 Mar 1953 Nov 1952 Oct 1947
Nozu Jewett, Pyramid Hill Vedder	Pyramid Oil Co. "Portals-Berry" 66-4 Mobil Oil Corp. "Portals 1" 53-3	The British-American Oil Prod. Co. and Capital Co. "Portals-Berry" 66-4 The British-American Oil Prod. Co. "Portals" 53-3	4 30S 29E 3 30S 29E		60 256	N.A. 345	Sep 1944

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M	(feet)	Strata	Age
Casa Oil Assoc. Inc. "Berry Farms" 18-4	General Pet. Corp. "Berry Farms" 18-4	Mar 1953	4 30S 29E	MD	5,500	Vedder	early Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)			gr/gal	required	
Chanac	1,070	150	late Miocene	Chanac	15	10	None
Santa Margarita	1,830	40	late Miocene	Santa Margarita	13	10	None
Wicker	3,200	130	late Miocene	Fruitvale	14	20	None
Nozu	3,260	200	m Miocene	Round Mountain	16	10	II
lewett	4,570	50	e Miocene	Freeman-Jewett	41	80	III
Pyramid Hill	4,620	100	e Miocene	Freeman-Jewett	42	70	III
Vedder	4,730	100	e Miocene	Vedder	41	60	III
						1	

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prode	uction	Total number of wells		Maximum	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bb1)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage	
274,739	128,298	2,914,829	1,310	93	15,794,473	36,309,897	1,435,912	1953	250	207	1,565	

STIMULATION DATA (Jan. 1, 1973)

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	731,785	55
		1	

SPACING ACT: Applies

BASE OF FRESH WATER: 3,200

CURRENT CASING PROGRAM: Late Miocene: 7" casing cem. above zone; 5 1/2" liner landed through zone. Middle and early Miocene: 11 3/4" cem. 500; 5 1/2" cem. through zone and across base of fresh-water sands. METHOD OF WASTE DISPOSAL: Evaporation and percolation from sumps on marine outcrops east of field.

REMARKS: Zone waters average 7.5 ppm boron. A water flood of the Pyramid Hill zone was begun in 1963 and terminated after 790,831 bbls. was injected.

REFERENCES: Sullivan, J.C., Race Track Hill Area of Edison Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 41, No. 2 (1955).

EDISON OIL FIELD

Kern County



WEST AREA

LOCATION: See index map of Edison Oil Field

TYPE OF TRAP: Permeability variations on a faulted homocline

ELEVATION: 500

DISCOVERY DATA

			ANONES		Initial daily production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion	
Chanac	Jim Riley "Bauer" 1	Bauer Oil Co. "Bauer" 1	21 30S 29E	MD	150	N.A.	Nov 1935	
Santa Margarita	Jim Riley "21-Community" 3	Wood-Callahan Oil Co. "21-Community" 3	21 30S 29E	MD	180	N.A.	Nov 1937	
Nozu	Jim Riley "21-Community" 5	Shell Oil Co. "Community" 1	21 30S 29E	MD	166	N.A.	May 1935	
Porter	Pyramid Oil Co. "Porter" 28-3	Calif. Exploration Co. & Macmillan Petroleum Corp. "Porter" 28-3	28 30S 29E	MD	49	2,100	May 1951	
Freeman-Jewett	Standard Oil Co. of Calif. "Macson-Bloemer" 44-21	Western Gulf Oil Co. 44-21 "Macson-Bloemer"	21 30S 29E	MD	24	1,254	Jan 1957	
Pyramid Hill, Vedder	Rothschild Oil Co. "Cohn-Estate" 3	Same as present	21 30S 29E	MD	653	500	Aug 1969	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
J. Ainslie Bell, Opr. "Archibald" 68	Same	Feb 1970	20 30S 29E	MD	7,458	Walker	Olig &/or Eo

PRODUCING ZONES

	Average depth	Average net thickness	(Seologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required	
Chanac	3,200	200	late Miocene	Chanac	23	fresh	None	
Santa Margarita	4,000	200	late Miocene	Santa Margarita	19	35	None	
Nozu	4,500	75	m Miocene	Round Mountain	20	50	II	
Porter	4,400	100	m Miocene	Olcese	20	60	II	
Freeman-Jewett	4,700	100	early Miocene	Freeman-Jewett	40	150	111	
Pyramid Hill, Vedder	5,300	300	early Miocene	Freeman-Jewett, Vedder	42	250	111	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil prode	uction	Total num	ber of wells	Maximum proved
OII (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
263,811	385,117	629,185	1,230	108	18,304,653	4,841,109	1,313,911	1952	271	233	1,490

STIMULATION DATA (Jan. 1, 1973)

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: 4,000

CURRENT CASING PROGRAM Middle Miocene and above: 7" cem, above zone and across base of fresh-water sands; 5 1/2" liner landed through zone. Early Miocene: 11 3/4" cem, 500; 7" or 5 1/2" cem, through zone and across base of fresh-water sands. METHOD OF WASTE DISPOSAL: Evaporation and percolation from sumps on marine outcrops east of field and in other sumps in the area after chemical treatment to remove boron. REMARKS:

REFERENCES: Shea, D.N., West Area of Edison Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 51, No. 1 (1965). Sullwold, H.H. Jr., Geology of West Edison Oil Field: A.A.P.G. Bull. Vol. 39, No. 4, p. 797-820 (1953).

EDISON OIL FIELD

Kern County

NORTHEAST EDISON OIL FIELD



в

LOCATION: 11 miles east of Bakersfield

TYPE OF TRAP: Permeability variation on a homocline

ELEVATION: 850 - 1,050

DISCOVERY DATA

			9		' Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Chanac	Bell-Western Oil Co. "S.P.B." 2C	Woodward Oil Co., Ltd. "S.P." 2	31 29S 30E	MD	48	N.A.	Apr 1935
	1					l.	1

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tol	al depth	
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age	
Atlantic Richfield Co. "S.P. 15" 1	Richfield Oil Corp. "S.P. 15" 1	Aug 1945	31 29S 30E	MD	5,264	Basement	Late Jur	

PRODUCING ZONES

	Average depth	thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Chanac	350	• 120	Pliocene	Chanac	12	N.A.	None
							2

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrets	Year	Drilled	Completed	acreage
0	0	0	35	0	17,128	0	6,506	1969	28	10	40

STIMULATION DATA (Jan. 1, 1973)

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; 6 5/8" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: A cyclic-steam injection project was started in 1968 and was terminated after 26,259 bbls. of water in the form of steam was injected,

REFERENCES:



CONTOURS ON P ELECTRIC LOG MARKER

ELK HILLS OIL FIELD



LOCATION: 10 miles north of Taft

TYPE OF TRAP: Anticlines; lithofacies changes

ELEVATION: 300 - 1,500

DISCOVERY DATA

								al daily luction	-
Zone	Present operator and well name	Original operator and well name			R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Mya (gas)	Unit Operation Naval Petroleum Reserve No. 1, Standard Oil Co. of Calif., Operator No. 5X-36R	Standard Oil Co. of Calif. "Hay" 5	36 3	05 2	23E	MD	0	33,000	May 1919
Upper A	Unit Operation Naval Petroleum Reserve No. 1, Standard Oil Co. of Calif., Operator No. 1-26R	Associated Oil Co. No. 1	26 3	OS 2	23E	MD	15	N.A.	Jun 1911
Olig	Unit Operation Naval Petroleum Reserve No. 1, Standard Oil Co. of Calif., Operator No. 362-30R	Same as present	30 3	ios 2	23E	MD	0	В	N.A.
Stevens	Unit Operation Naval Petroleum Reserve No. 1, Standard Oil Co. of Calif., Operator No. 5-342-315	Standard Oil Co. of Calif, No. 42	31 3	0S 2	24E	MD	1,284	1,039	Aug 1941
Carneros	Unit Operation Naval Petroleum Reserve No. 1, Standard Oil Co. of Calif., Operator No. 555-30R	Unit Operation Naval Petroleum Reserve No. 1, Standard Oil Co. of Calif., Operator No. X-55-30R	30 3	ios 2	23E	MD	230	1,680	Jan 1952

Remarks: ^A Includes Scalez, Mulinia, Bittium, Wilhelm-Gusher, and Calitroleum sands. ^B Not tested in this well. Potential is 1,000 Mcf per day.

DEEPEST WELL DATA

	Present operator and well name Date Depth		At total	depth			
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M	(feet)	Strata	Age
Unit Operation Naval Petroleum Reserve No. 1, Standard Oil Co. of Calif., Oper. No. 555-30R	Unit Operation Naval Petroleum Reserve No. 1, Standard Oil Co. of Calif., Oper. No. X-55-30R		30 30S 23E	MD	12,856	Upper Santos	early Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required	
Mya (gas)	2,300	50	Pliocene	San Joaquin	1,015	2,780	III	
Scalez	2,400	80	Pliocene	San Joaquin	18	2,100	See Remarks	
Mulinia	2,700	55	Pliocene	Etchegoin		1,900	See Remarks	
Bittium	2,850	20	Pliocene	Etchegoin	to	2,000	See Remarks	
Wilhelm-Gusher	3,000	60	Pliocene	Etchegoin		1,700	See Remarks	
Calitroleum	3,200	22	Pliocene	Etchegoin	40	N.A.	See Remarks	
Dlig	5,000	15	late Miocene	Monterey		1,500	111	
Stevens	6,500	800	late Miocene	Monterey	35	1,200	IV	
Carneros	9,300	200	early Miocene	Temblor	50	750	IV	

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Remarks)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production Total n		Total num	Total number of wells	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	proved acreage
776,469	13,380	7,647,760	18,590	119	281,627,730	169,552,289	17,990,462	1921	1,238	1,149	19,770

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative Injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood Gas injection for repressur- ing	1957 1945	50,953,625 33,714,948	4 5

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: Upper zones: 10 3/4" cem. 200; 7" cem. above zone; 5 1/2" liner landed through zone. Lower zones: 10 3/4" cem. 900; 7" cem. above zone; 5 1/2" liner landed through zone. METHOD OF WASTE DISPOSAL: Percolation and evaporation sumps located on outcrop of early Tulare; injection in water flood projects.

REMARKS: BOPE not required for development wells, except in areas where shallow gas zones are present, then Class III is required. No dry gas production in 1972; cumulative dry gas production 98,499,119 Mcf; peak production (1947) 3,317,692 Mcf; 11 dry gas wells were completed.

REFERENCES: Lorshbough, A.L., Western Portion of Elk Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 53, No. 1 (1967).
McLaughlin, R.P., Natural Gas Development in the Elk Hills, Kern County, Calif.: Calif. State Mining Bureau, Summary of Operations--Calif. Oil Fields, Vol. 4, May (1919).
Roberts, D.C., Fossil Markers of Midway-Sunset-Elk Hills Region in Kern County, Calif.: Calif. State Mining Bureau, Summary of Operations--Calif. Oil Fields, Vol. 20, Apr (1926).
Saunders, L.W., Recent Developments in the East End of the Elk Hills Oil Field: Calif. State Mining Bureau, Summary of Operations--Calif. Oil Fields, Vol. 10, May (1925).
Thoms, C.C. and F.M. Swith, Notes on Elk Hills Oil Field: Calif. State Mining Bureau, Summary of Operations--Calif. 01 (1921).



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LOCATION: 8 miles west of Bakersfield

'TYPE OF TRAP: Pinchouts of sands laterally and updip on an anticlinal nose.

ELEVATION: 350

DISCOVERY DATA

Zone					Initial daily production		
	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Harbaugh 64 28-22 Brandt 11 83-28	William P. Hicks, Operator "Harbaugh" 64 Standard Oil Co. of Calif. "KCL 55" 28-22 Standard Oil Co. of Calif. "Brandt" 11-27 Standard Oil Co. of Calif. "KCL 55" 83-28	Same as present Standard Oil Co. of Calif. "KCL" 28-22 Same as present Standard Oil Co. of Calif. "KCL" 83-28	27 295 26E 22 295 26E 27 295 26E 28 295 26E	MD MD	3 360 374 201	0 5,500 315 189	Feb 1965 Nov 1963 Jul 1964 Mar 1964

Remarks: All four producing sands are in the Stevens member of Fruitvale formation.

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Standard Oil Co. of Calif. "KCL 55" 28-22	Standard Oil Co. of Calif. "KCL" 28-22	Oct 1963	22 29S 26E	MD	9,147	Fruitvale	late Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Harbaugh 64 28-22 Brandt 11 83-28	6,750 7,000 7,150 7,350	5 - 100 5 10	late Miocene late Miocene late Miocene late Miocene	Fruitvale Fruitvale Fruitvale Fruitvale	29 34 32 35	N.A. 1,450 N.A. N.A.	III III III III

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil prode	eak oil production		ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing welts	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
26,201	29,981	12,497	30	2	1,180,615	4,042,106	363,102	1964	16	9	90

STIMULATION DATA (Jan. 1, 1973)

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: 3,000

CURRENT CASING PROGRAM: 9 5/8" cem. 750; 5 1/2" cem. through zone, and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water is trucked to Greeley field for injection into a subsurface disposal system.

REMARKS: The field is being operated under State Oil and Gas Supervisor Order No. 64-1 as modified by the District Oil and Gas Commissioners.

REFERENCES: Hluza, A.G., English Colony Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 50, No. 2 (1964).





LOCATION: 30 miles southwest of Fresno, 26 miles northeast of Coalinga

TYPE OF TRAP: Permeability variations and unconformity on a faulted homocline

ELEVATION: 225

DISCOVERY DATA

					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Eocene	Jayhawk Expl., Inc. "Air-Way Farms" 58-21	U.S. Smelting Refining & Mining Co. "Air-Way Farms" 58-21	21 17S 17E	MD	120	777	Mar 1966

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Western Continental Operating Co. "Everts" 72-20	Same	Sep 1963	20 17S 17E	MD	10,500	Panoche	Late Cret

÷.

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Eocene	9,150	40	Eocene	Lodo	31 - 41	N.A.	IV -

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total number of wells		Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
12,714	16,949	640	70	2	162,457	327,244	42,552	1967	9	3	70

STIMULATION DATA (Jan. 1, 1973)

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 - 1,500

CURRENT CASING PROGRAM: 9 5/8" cem. 1,500; 5 1/2" cem. 9,250.

METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps.

REMARKS:

REFERENCES: Hill, F.L., Five Points Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 54, No. 1 (1968).

FRUITVALE OIL FIELD



SANTA MARGARITA

Kern County

LOCATION: 1 mile west of Bakersfield TYPE OF TRAP: See areas ELEVATION: 400

DISCOVERY DATA

					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Fairhaven	Gulf Oil Corp. "KCL-B" 1	Pacific Eastern Production Co. "Fruitvale" 1	21 29S 27E	MD	170	N.A.	Feb 1928

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Signal Oil and Gas Co. "KCL" 33-34	Same	Nov 1955	34 29S 27E	MD	11,577	Granite	Lt Jur (?)

PRODUCING ZONES (See areas)

-

Average	Average net thickness	Geo	Geologic			Class BOPE
(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
	depth	depth thickness	depth thickness	depth thickness devlogic	depth thickness (*API) or	depth thickness debugt (*API) or zone water

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
1,049,215	368,907	7,716,909	2,785	354	100,222,118	35,010,099	3,587,093	1954	721	609	3,580

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.

NETHOD OF WASTE DISPOSAL: See areas.

REMARKS:

REFERENCES: See areas.

CALLOWAY AREA

TYPE OF TRAP: Faulted homocline

ELEVATION: 400

DISCOVERY DATA

						al daily luction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
40-7 42-0	Union Oil Co. of Calif. "KCL" 26-17	Same as present	17 295 27E	MD	87	72	Sep 1957

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	il depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Texaco Inc. "Camp-West-Lowe" 1	The Texas Co. "Camp-West-Lowe" 1	May 1938	7 29S 27E	MD	10,154	Granite	Lt Jur (?)

PRODUCING ZONES

	Average depth	Average net thickness		Geologic Oil gravity (*API) or		Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
40-7 42-0	4,050 4,150	12 24	late Miocene late Miocene	Chanac Chanac	N.A. 16 - 24	N.A. N.A.	II II

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
37,043	17,138	845,633	150	10	1,396,864	488,926	237,396	1960	34	20	190

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 3,000

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: 823,680 bbl. of waste water was injected during 1972 into one disposal well. REMARKS:

REFERENCES: Hluza, A.G., Calloway Area of Fruitvale Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 2 (1961).

GREENACRES AREA

LOCATION: See map sheet of Fruitvale Oil Field

TYPE OF TRAP: Permeability barriers

ELEVATION: 400

DISCOVERY DATA

						al daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Lerdo Chanac	Reed and Billington "Billington" 1 Reed and Billington "Billington" 2	C.W. Teater "Billington" 1 Trico Oil and Gas Co. "Billington" 2	19 295 27E 19 295 27E		117 33	N.A. N.A.	Dec 1953 Mar 1954

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Buttes Gas & Oil Co. "Denic Community" 1	Same	Jan 1964	19 29S 27E	MD	9,772	Vedder	early Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Lerdo Chanac	4,300 4,400	60 30	Pliocene late Miocene	Etchegoin Chanac	20 19	N.A. N.A.	11 11

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	Cumulative production Peak oil production Total number of wells		Total number of wells				
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	proved acreage
0	0	0	0	0	38,741	0	6,390	1954	7	3	20

STIMULATION DATA (Jan. 1, 1973)

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: 3,500

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:

REMARKS: The last producing well was abandoned November 1969.

REFERENCES:

FRUITVALE OIL FIELD Kern County

MAIN AREA

TYPE OF TRAP: Faulted homocline with permeability variations

ELEVATION: 400 DISCOVERY DATA

						uction	2-3-3
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Fairhaven Mason-Parker Martin Santa Margarita	Signal Oil and Gas Co. "Dixie Lee" 2 Gulf Oil Corp. "KCL-B" 1 Michigan Oil Co. "KCL" 5-2	Dixie Lee Oil Co. No. 2 Pacific Eastern Production Co. "Fruitvale" 1 Standard Oil Co. of Calif. "KCL-5" 2	23 295 27E 21 295 27E 24 295 27E	MD	160 170 68	N.A. N.A. N.A.	Mar 193 Feb 192 Dec 192
	ж.						
			1				

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Signal Oil and Gas Co. "KCL" 33-34	Same	Nov 1955	34 29S 27E	MD	11,577	Granite	Lt Jur (?)

PRODUCING ZONES

	(feet)	thickness (feet)	Age		(*API) or	zone water	Class BOPE
Fairhaven		(feet)	Age	Formation	Gas (btu)	gr/gat	required
	3,000	50	Pliocene	Etchegoin	17	15	II
lason-Parker	3,100	170	Pliocene	Chanac	18	N.A.	II
Martin	3,250	190	Pliocene	Chanac	22	15	11
Jpper Kernco	3,400	150	Pliocene	Chanac	22	370	II
Aiddle Kernco	3,600	210	Pliocene	Chanac	18	215	II
Lower Kernco	3,800	380	late Miocene	Chanac	15	N.A.	II
Santa Margarita	4,500	75	late Miocene	Santa Margarita	23)	135	II
			Consection rectanger	and the second sec		100.000 C	

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prode	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
1,012,172	351,769	6,871,276	2,635	344	98,786,513	34,521,173	3,580,703	1954	680	586	3,370

STIMULATION DATA (Jan. 1, 1973)

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	9,712,859	4

SPACING ACT: Does not apply

BASE OF FRESH WATER: 3,000

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: 5,929,832 bbl. of waste water was injected during 1972 into 5 disposal wells. REMARKS:

REFERENCES: Hluza, A.G., Main Area of Fruitvale Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 51, No. 2 (1965).

Kern County





LOCATION: 20 miles northwest of Bakersfield

TYPE OF TRAP: Anticline

ELEVATION: 300

DISCOVERY DATA

				101	tial product	ion	
Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Golden Bear Oil Co. "K.C.L." 26X-10	Same as present	10 28S 24E	MD	1,960	1,280	1/4	Feb 1959
Golden Bear Oil Co. "Garrison City Unit C.W.O.D." 1	Same as present	4 28S 24E	MD	3,040	2,210	1/4	Feb 1959
Golden Bear Oil Co. "Garrison City Unit Mitchell" 1	Same as present	9 28S 24E	MD	1,990	2,200	3/16	Dec 1958
	Golden Bear Oil Co. "K.C.L." 26X-10 Golden Bear Oil Co. "Garrison City Unit C.W.O.D." 1 Golden Bear Oil Co. "Garrison City Unit	Golden Bear Oil Co. "K.C.L." 26X-10 Golden Bear Oil Co. "Garrison City Unit C.W.O.D." 1 Golden Bear Oil Co. "Garrison City Unit Same as present Same as present Same as present	Golden Bear Oil Co. "K.C.L." 26X-10 Same as present 10 285 24E Golden Bear Oil Co. "Garrison City Unit C.W.O.D." 1 Same as present 4 285 24E Golden Bear Oil Co. "Garrison City Unit Golden Bear Oil Co. "Garrison City Unit Same as present 9 285 24E	Golden Bear Oil Co. "K.C.L." 26X-10 Same as present 10 28S 24E MD Golden Bear Oil Co. "Garrison City Unit C.W.O.D." 1 Same as present 4 28S 24E MD Golden Bear Oil Co. "Garrison City Unit Golden Bear Oil Co. "Garrison City Unit Same as present 9 28S 24E MD	Present operator and well name Original operator and well name Set. T. & R. B & M Daily (Mcf) Golden Bear Oil Co. "K.C.L." 26X-10 Golden Bear Oil Co. "Garrison City Unit C.W.O.D." 1 Same as present 10 285 24E MD 1,960 Golden Bear Oil Co. "Garrison City Unit C.W.O.B." 1 Same as present 4 285 24E MD 3,040 Golden Bear Oil Co. "Garrison City Unit C.W.O.B." 1 Same as present 9 285 24E MD 1,990	Present operator and well name Original operator and well name Sec. T. & R. B & M Daily Daily Daily Daily (Mcf) Flow pressure (Mcf) Golden Bear Oil Co. "K.C.L." 26X-10 Same as present 10 28S 24E MD 1,960 1,280 Golden Bear Oil Co. "Garrison City Unit C.W.O.D." 1 Same as present 4 28S 24E MD 3,040 2,210 Golden Bear Oil Co. "Garrison City Unit Same as present 9 28S 24E MD 1,990 2,200	Present operator and well name Original operator and well name Sec. T. & R. B & M Daily Daily Daily (ra) Flow pressure (rs) Bean pressure (rs) Bean pressure (rs) Flow pressure (rs) Bean pressure (rs) Bean pressure (rs) Flow pressure (rs) Bean pressure (rs) <

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Mobil Oil Corp. "S.P.L." 51-15	General Petroleum Corp. of Calif. "S.P.L." 51-15	Sep 1941	15 28S 24E	MD	14,252	Vedder	early Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Atwell Island Mulinia Mitchel	3,450 4,500 5,970	10 15 25	Pliocene Pliocene Pliocene	San Joaquin Etchegoin Etchegoin	1,010 1,020 1,040	N.A. N.A. 1,500	1,280 2,240 2,250	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas pro	luction	Peak gas production Total num		Maximum
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	0	0	2,622,314	464,118	1959	14	5	800

SPACING ACT: Applies

BASE OF FRESH WATER: 1,550

CURRENT CASING PROGRAM 9 5/8" cem. 600; 5 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL

REMARKS: The last producing well was abandoned in 1969.

REFERENCES: Land, P.E., Garrison City Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 45, No. 2 (1959).

GILL RANCH GAS FIELD



LOCATION: 25 miles northwest of Fresno

TYPE OF TRAP: Anticline with major faulting

ELEVATION: 185

DISCOVERY DATA

					Ini	tial produc	tion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in)	Date of completion
Eocene Cretaceous	Texaco Inc. "Gill" 58-16 Same as above	The Texas Co. "Gill" 38-16 Same as above	16 13S 16E 16 13S 16E		11,000 4,258	825 1,874	43/64 5/16	Apr 1943 Sep 1956
		1			1.00			1

Remarks:

DEEPEST WELL DATA

		- Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Texaco Inc. "Gill" 38-16	The Texas Co. "Gill" 38-16	Dec 1943	16 13S 16E	MD	9,154	Basement (serpentine)	Late Jur

PRODUCING ZONES

Average	Average net		Geologic		Salinity of	Original room	Class BOPE	
(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required	
4,430	45	Eocene	Kreyenhagen & Domengine	935	1,500	1,775	IV	
5,630	40	Lt Cretaceous	Moreno & Panoche	N.A.	1,210	2,245	IV	
•								
	depth (feet) 4,430 5,630	depth (feet) thickness (feet) 4,430 45 5,630 40	depth thickness Age (feet) 4,430 45 Eocene 5,630 40 Lt Cretaceous	depth (feet) thickness (feet) Get Nync 4,430 45 Eocene Kreyenhagen & Domengine 5,630 40 Lt Cretaceous Moreno & Panoche	depth (feet) thickness (feet) Age Formation Gas (btu) 4,430 45 Eocene Kreyenhagen & Domengine 935 5,630 40 Lt Cretaceous Moreno & Panoche N.A.	depth (feet) thickness (feet) Generation (feet) Zone water gr/gal 4,430 45 Eocene Kreyenhagen & 935 1,500 5,630 40 Lt Cretaceous Moreno & Panoche N.A. 1,210	depth (feet) thickness (feet) Age Formation Gas (btu) zone water gr/gal Original zone pressure (psi) 4,430 45 Eocene Kreyenhagen & Domengine 935 1,500 1,775 5,630 40 Lt Cretaceous Moreno & Panoche N.A. 1,210 2,245	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas proc	luction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage		
680,575	62,519	945	11	57,515,655	2,781,135	1949	29	22	945		

SPACING ACT: Applies

BASE OF FRESH WATER: 700

CURRENT CASING PROGRAM 9 5/8" cem 800; 4 1/2" cem 4,500 - 5,800.

METHOD OF WASTE DISPOSAL: All water is injected.

REMARKS: Sands included in the Eocene productive zone are the Nortonville, Main and Green (Domengine). Sands included in the Cretaceous productive zone are the Moreno "14-20", Panoche "21-20" and First Panoche.

REFERENCES: Loken, K.P., Gill Ranch Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 45, No. 1 (1959).

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GONYER ANTICLINE OIL FIELD (Abandoned)

Kern County

LOCATION: 5 miles southwest of Taft TYPE OF TRAP: Faulted anticline ELEVATION: 2,900 DISCOVERY DATA

						al daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Gonyer .	Crown Central Petroleum Corp. "Gonyer U.S.L."	Continental Oil Co. "Gonyer U.S.L." 1	32 32S 23E	MD	42	55	Oct 1956

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Shell Oil Co. "Gonyer" 1	Same	Dec 1929	32 32S 23E	MD	4,134	Media	early Mio

PRODUCING ZONES

	Average depth	Average net thickness		Seologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE	
Zone	(feet)	feet) (feet) Age 1,700 450 early Miocene		Formation	Gas (btu)	gr/gal	required	
Gonyer	1,700	450	early Miocene	Temblor	12	N.A.	11	
						1		

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Production 1972 1972 Proved Average number		Cumulative p	Cumulative production		uction	Total number of wells		Maximum proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	2,502	3,975	1,816	1957	6	2	10

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: None

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

METHOD OF WASTE DISPOSAL:

REMARKS: Produced commercially only after sand was fractured. Field was abandoned August 1962.

REFERENCES:



LOCATION: 16 miles west of Bakersfield

TYPE OF TRAP: Faulted homocline; permeability variations

ELEVATION: 310

DISCOVERY DATA

						al daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbi)	Gas (Mcf)	Date of completion
Upper Stevens	Texaco Inc. "KCL Goosloo" 1	The Texas Co. "KCL Goosloo" 1	20 295 25E	MD	45	70	Jan 1952

Remarks:

DEEPEST WELL DATA

Present operator and well name Original operato		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Occidental Petroleum Corp. "Texaco-SP" 15-21	Same	Sep 1965	21 29S 25E	MD	10,648	Fruitvale	late Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Upper Stevens	9,500 - 10,000	30 - 130	late Miocene	Fruitvale	36 - 42	1,390	IV
	1 1			1		1	

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Production 1972 1972 Cumulative production				roduction	Peak oil produ	iction	Total num	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
60,998	65,455	265,814	70	4	76,518	87,308	60,998	1972	9	5	80

STIMULATION DATA (Jan. 1, 1973)

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: Applies

BASE OF FRESH WATER: 2,250

CURRENT CASING PROGRAM: 9 5/8" cem. 1,000; 5 1/2" combination string landed through zone and cem. through ports above zone and across base of freshwater sands. METHOD OF WASTE DISPOSAL: Water is trucked to Greeley field for disposal in subsurface project.

REMARKS: Field abandoned December 1952. Reactivated September 1971.

REFERENCES:



Kern County

LOCATION: 10 miles west of Bakersfield

TYPE OF TRAP: Faulted anticline

ELEVATION: 335

DISCOVERY DATA

					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Stevens Olcese 12-21	Standard Oil Co. of Calif. "KCL 63" 81-19 Tenneco West, Inc. 115	Standard Oil Co. of Calif. "K.C. 11" 1 Standard Oil Co. of Calif. "K.C.L. Lease 12" 21	19 29S 23E 7 29S 26E		2,456 192	1,390 N.A.	Dec 1936 Feb 1949
Rio Bravo - Vedder	Standard Oil Co. of Calif. "KCL 63" 12-20	Standard Oil Co. of Calif. "K.C. 11" 2	20 295 23E	MD	3,456	3,090	Jun 1938

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Standard Oil Co. of Calif. "KCL Lease 12" 6	Standard Oil Co. of Calif. "K.C. 12" 6	Dec 1938	30 295 26E	MD	13,666	Basement (gabbro)	Lt Jur (?)

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Stevens Olcese 12-21 Rio Bravo - Vedder	7,300 10,530 11,300	175 150 100	late Miocene early Miocene early Miocene	Fruitvale Jewett Vødder	36 34 36	1,380 1,900 980	IV IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative ;	Cumulative production Peak oil production		Total num	ber of wells	Maximum	
Oil (bbl)	Net gas (Mcf)	Water (bbi)	acreage		Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
775,868	472,361	2,433,406	1,780	36	106,634,915	96,821,859	5,210,434	1944	174	138	2,240

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood Gas injection for pressure maintenance	1952 1948	45,668,252 85,637,745	73

SPACING ACT: Applies

BASE OF FRESH WATER: 2,400

CURRENT CASING PROGRAM: 13 3/8" cem. 1,200; 7" cem. above zone; 5" liner landed through zone.

METHOD OF WASTE DISPOSAL: All waste water was injected during 1972 into water flood and water disposal wells.

REMARKS: Rio Bravo - Vedder zone has been operated under unit agreement since 1947.

REFERENCES: Updike, F.H., Greeley Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 27 (1941). Welge, E.A., Olcese 12-21 Pool of Greeley Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 56, No. 1 (1970).



LOCATION: 6 - 10 miles east of Coalinga TYPE OF TRAP: See areas ELEVATION: 480 - 680 DISCOVERY DATA

					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Leda	Sun Oil Co. "Fred Smith" 88-34	Barnsdall Oil Co. "Fred Smith" 1	34 20S 16E	MD	827	610	Sep 1948
		>					

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age -	
Union Oil Co. of Calif., Opr. "Polvadero Unit" 42-1	Los Nietos Co., "Webster" 42-1	Aug 1955	1 21S 16E	MD	11,650	Moreno	Late Cret	

PRODUCING ZONES (See areas)

	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
	1						

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil production		Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage		Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
177,191	456,510	202,463	1,520	18	49,143,322	75,785,906	5,414,429	1950	220	187	2,515

STIMULATION DATA (Jan. 1, 1973)

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: See areas







Fresno County

LOCATION: See index map of Guijarral Hills Oil Field

TYPE OF TRAP: Permeability variations on the Coalinga anticline

ELEVATION: 630

DISCOVERY DA	TA
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or and well name Sec. T. & R.		Oil	Gas	Date of
	Boxm	(bbl)	(Mcf)	completion
Smith" A76-34 34 20S 16E	MD	533	267	Apr 1955
son" A 73-34-2 34 20S 16E	MD	423	265	Apr 1949
. "Spieler" 27-26 26 20S 16E	MD	1,300	937	Jan 1954
d Smith" 1 34 205 16E	MD	827	610	Sep 1948
lison" E53-34F 34 205 16E	MD	1,565	725	May 1957
	MD	1,176	645	Nov 1962
	son" A 73-34-2 34 20S 16E . "Spieler" 27-26 26 20S 16E d Smith" 1 34 20S 16E lison" E53-34F 34 20S 16E	son" A 73-34-2 34 20S 16E MD . "Spieler" 27-26 26 20S 16E MD d Smith" 1 34 20S 16E MD lison" E53-34F 34 20S 16E MD	son" A 73-34-2 34 20S 16E MD 423 "Spieler" 27-26 26 20S 16E MD 1,300 d Smith" 1 34 20S 16E MD 827 lison" E53-34F 34 20S 16E MD 1,565	son" A 73-34-2 34 20S 16E MD 423 265 ."Spieler" 27-26 26 20S 16E MD 1,300 937 d Smith" 1 34 20S 16E MD 827 610 lison" E53-34F 34 20S 16E MD 1,565 725

Remarks:

DEEPEST WELL DATA

	*	Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Sun Oil Co. "Dessel" 41-2	Barnsdall Oil Co. "Dessel" 41-2-19	Feb 1950	2 21S 16E	MD	11,441	Moreno	Late Cret

PRODUCING ZONES

Average	Average net	(Seologic			Class BOPE
		Formation	Gas (btu)	gr/gal	required	
7,900	20	early Miocene	Temblor	34 - 37	460	111
8,100	50	early Miocene	Temblor	36 - 38	2,830	III
8,500	150	early Miocene	Vaqueros	35 - 38	1,255	111
8,700	200	early Miocene	Vagueros	33 - 37	1,550	III
10,200	150	Eocene	Lodo	27 - 33	140	IV
10,500	50	Eocene	Lodo	27 - 29	190	IV
- A CATE AND						
			1			
	depth (feet) 7,900 8,100 8,500 8,500 8,700 10,200	depth (feet) thickness (feet) 7,900 20 8,100 50 8,500 150 8,700 200 10,200 150	depth (feet) thickness (feet) Age 7,900 20 early Miocene 8,100 50 early Miocene 8,500 150 early Miocene 8,700 200 early Miocene 10,200 150 Eocene	depth (feet) thickness (feet) Age Formation 7,900 20 early Miocene Temblor 8,100 50 early Miocene Temblor 8,500 150 early Miocene Vaqueros 8,700 200 early Miocene Vaqueros 10,200 150 Eocene Lodo	depth thickness Age Formation (*AP1) or 7,900 20 early Miocene Temblor 34 - 37 8,100 50 early Miocene Temblor 36 - 38 8,500 150 early Miocene Vaqueros 35 - 38 8,700 200 early Miocene Vaqueros 35 - 37 10,200 150 Eocene Lodo 27 - 33 10,500 50 Eocene Lodo 27 - 29	depth thickness Getologic (rAPI) or Gas (btu) zone water gr/gat 7,900 20 early Miocene Temblor 34 - 37 460 8,100 50 early Miocene Temblor 36 - 58 2,830 8,500 150 early Miocene Temblor 35 - 58 1,255 8,700 200 early Miocene Vaqueros 35 - 37 1,550 10,200 150 Eocene Lodo 27 - 33 140 10,500 50 Eocene Lodo 27 - 29 190

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil produ	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbi)	acreage	producing wells	Oil (bb!)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
151,861	380,299	200,868	920	14	42,308,232	66,294,058	5,414,429	1950	158	144	1,790

STIMULATION DATA (Jan. 1, 1973)

SPACING ACT: Applies

BASE OF FRESH WATER: 2,000 - 2,500

CURRENT CASING PROGRAM Temblor: 10 5/8" cem.500; 5 1/2" cem.through zone. Leds and Gatchell: 10 5/8" cem.500; 7" cem.8,500 - 10,300; 5 1/2" liner landed through zone. METHOD OF WASTE DISPOSAL: Evaporative sumps.

REMARKS The Allison pool has been shut in since 1970. Between 1957 and 1966 23,966,997 Mcf of gas was injected in the North Leda pool to maintain reservoir pressure.

REFERENCES: Hunter, G.W., Guijarral Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 37, No. 1 (1951). Sullivan, J.C., Guijarral Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 2 (1962).

.



ARROYO

LOCATION: See index map of Guijarral Hills Oil Field TYPE OF TRAP: Sand pinchout

ELEVATION: 490

DISCOVERY DATA

						I daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Leda	Leda Petroleum Co. "Guijarral Service Co." 24X-22F	Same as present	22 20S 16E	MD	24	205	Jun 1960

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name		Sec. T. & R.	3 & M		Strata	Age
Standard Oil Co. of Calif. "Guijarral Service Co." 51-22F	Same as present	Nov 1952	22 205 16E	MD	10,421	Arroyo Hondo	Eocene

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
eda	8,400	25	early Miocene	Vaqueros	35 - 38	1,430	111

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil produ	ction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
4,714	2,820	58	50	1	283,624	375,681	79,673	1962	11	8	125

STIMULATION DATA (Jan. 1, 1973)

ed Steam, bbl (water equivalent)	number of wells used for injection
÷	
	Steam, but (water equivalent)

SPACING ACT: Applies

BASE OF FRESH WATER: 2,100

CURRENT CASING PROGRAM: 9 5/8" cem. 500; 5 1/2" cem.8,500, selectively perforated.

METHOD OF WASTE DISPOSAL:

REMARKS:

REFERENCES: Sullivan, J.C., Guijarral Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 2 (1962).


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POLVADERO AREA

LOCATION: See index map of Guijarral Hills Oil Field

TYPE OF TRAP: Permeability barriers on the Coalinga anticline

ELEVATION: 530

DISCOVERY DATA

						I daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Sanger Bourdieu	The Superior Oil Co. "Sanger" 4-1 Union Oil Co. of Calif., Opr. "Polvadero Unit" 55-1	Same as present Los Nietos Co. "Bourdieu" 55-1	1 21S 16E 1 21S 16E			N.A. 1,370	May 1953 Feb 1955

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	3 & M		Strata	Age
Union Oil Co. of Calif., Opr. "Polvadero Unit" 42-1	Los Nietos Co., "Webster" 42-1	Aug 1955	1 21S 16E	MD	11,650	Moreno	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Sanger Bourdieu	8,350 10,700	20 250	early Miocene Eocene	Temblor Lodo	28 - 33 27 - 33	460 405	III IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	Cumulative production Peak oil production Total number of wells		Cumulative production		Total number of wells		
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	proved acreage
20,616	73,391	1,537	550	3	5,799,042	8,572,345	1,145,258	1956	37	31	560

STIMULATION DATA (Jan. 1, 1973)

started	- Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	number of wells used for injection
	1	
	slarted	started Steam, bbl (water equivalent)

SPACING ACT: Applies

BASE OF FRESH WATER 2,500 - 2,800

CURRENT CASING PROGRAM: 11 3/4" cem. 500; 7" combination string landed through zone and cem through ports above zone (Bourdieu completions). METHOD OF WASTE DISPOSAL:

REMARKS: Sanger pool has been shut in since 1959. Between 1959 and 1962 a total of 38,368,483 gallons of nonindigenous propane was injected in a miscible-phase flood of the Bourdieu pool. A total of 17,761,082 Mcf of dry gas was injected in conjunction with the propane and as a separate pressure maintenance project.

REFERENCES: Sullivan, J.C., Guijarral Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 2 (1962).

GUIJARRAL HILLS OIL FIELD

GUIJARRAL HILLS OIL FIELD West Area



CONTOURS ON TOP OF LEDA SAND



WEST AREA

LOCATION: See index map of Guijarral Hills Oil Field TYPE OF TRAP: Sand pinch out on the Coalinga anticline ELEVATION: 600 DISCOVERY DATA

					Initia produ	l daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Leda	Lloyd A. Harnish, Opr. 73	Same	32 205 16E	MD	1,390	585	Oct 1953

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total of	iepth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M	(feet)	Strata	Age
Sam B. Herndon, Opr. "Herndon" 3	Same	Sep 1961	4 21S 16E	MD	10,755	Gatchell sand	Eocene

PRODUCING ZONES

	Average depth	Average net thickness	G	ieologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Leda	8,330	30	early Miocene	Vaqueros	35 - 38	1,200	111

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative p	Cumulative production Peak oil production Total number of w		Total number of wel		Maximum	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	752,424	543,822	425,008	1954	14	4	4

STIMULATION DATA (Jan, 1, 1973)

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: 10 5/8" cem. 500; 7" cem. 8,300; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: The West Area has been shut in since 1966.

REFERENCES: Sullivan, J.C., Guijarral Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 2 (1962).

GUIJARRAL HILLS OIL FIELD

Fresno County

HANFORD OIL FIELD (Abandoned)



LOCATION: 6 miles east of Hanford TYPE OF TRAP: Lenticular sand on a homocline ELEVATION: 245 DISCOVERY DATA

	4					daily uction	10000
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Zilch	Albercalif Petroleums Ltd. "Hanford" 1	Goshen Syndicate "Drummond-Union" 2	36 185 22E	MD	125	N.A.	Jul 1950

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth			
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age		
Continental Oil Co. "Drummond" 1	Same	Sep 1942	36 18S 22E	MD	7,897	Basement (hornblende gabbro)	Late Jur		

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Zilch	5,250	8	early Miocene	Zilch	18	N.A.	111
					- n.		

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	oction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	3,582	0	3,223	1950	7	1	10

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 1,200

CURRENT CASING PROGRAM: 9 5/8" cem. 500; 5 1/2" cem. 5,300 and across base of fresh water sands.

METHOD OF WASTE DISPOSAL

REMARKS: Last production from the field was during 1951 and the only producing well was abandoned in 1953.

REFERENCES:





Kings County

LOCATION: 42 miles southeast of Coalinga

TYPE OF TRAP: Anticline; lenticular sands on an anticline

ELEVATION: 200

DISCOVERY DATA

					Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
First Mya Atwell Island	Pennant Operating Co., Opr. "Harvester" 1 Transco Oil Co. "SLF" 2-11	Shell Oil Co. "Harvester Unit 1" 1 Pennant Operating Co. "SLF" 2-11	11 23S 21E 11 23S 21E		4,150 1,000	805 1490	1/2 14/64	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Trico Oil and Gas Co. "von Glahn" 2-1	Harry H. Magee, Opr. "von Glahn" 2-1	May 1945	2 235 21E	MD	5,005	Etchegoin	Pliocene

٠

PRODUCING ZONES

	Average depth	Average net thickness	Geologic			Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Age Formation Gas (btu)		gr/gal	pressure (psi)	required
First Mya Atwell Island	2,800 3,750	6 10	Pliocene Pliocene	San Joaquin San Joaquin	1,030 N.A.	N.A. N.A.	1,150 1,690	III

PRODUCTION DATA (Jan. 1, 1973)

1972 Prod	luction	1972 1972 Proved Maximum number Cumulative gas				uction	ction Total number of wells		
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
260,323	2,730	300	4	8,832,865	2,286,643	1968	36	22	710

SPACING ACT: Applies

BASE OF FRESH WATER: 380

CURRENT CASING PROGRAM: 7" cem 400, 2 7/8" cem 2,800 - 3,900.

METHOD OF WASTE DISPOSAL:

REMARKS: The major period of development followed the completion in March 1959 of Beach, Church & Bell well No. "Southlake Farms" 1-13, Sec. 13 (now Transco Oil Co. "SLF" 1-13).

REFERENCES: Hill, F. L., Harvester Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 50, No. 1 (1964).

HELM OIL FIELD



Fresno County

LOCATION: 22 miles southwest of Fresno

TYPE OF TRAP: Faulted anticline; lenticular sands

ELEVATION: 200

DISCOVERY DATA

						anorona -
Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Samson Resources Co. "Helm Unit" 31-34	Amerada Petroleum Corp. "Clover" 31-34	34 16S 17E	MD	242	3,845	Oct 1941
Same as above	Same as above	34 16S 17E	MD	96	2,950	Oct 1941
	-					1
	Samson Resources Co. "Helm Unit" 31-34	Samson Resources Co. "Helm Unit" 31-34 Amerada Petroleum Corp. "Clover" 31-34	Samson Resources Co. "Helm Unit" 31-34 Amerada Petroleum Corp. "Clover" 31-34 34 165 17E	Samson Resources Co. "Helm Unit" 31-34 Amerada Petroleum Corp. "Clover" 31-34 34 16S 17E MD	Present operator and well name Original operator and well name Sec. T. & R. B & M Original (bb) Samson Resources Co. "Helm Unit" 31-34 Amerada Petroleum Corp. "Clover" 31-34 34 165 17E MD 242	Samson Resources Co. "Helm Unit" 31-34 Amerada Petroleum Corp. "Clover" 31-34 34 16S 17E MD 242 3,845

Remarks:

DEEPEST WELL DATA

		Date	-		Depth	At tota	il depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Midhurst Oil Corp. "Noble" 11-6	Nordon Corp. Limited "Noble" 11-6	Jul 1962	6 17S 18E	MD	12,424	Basement (schist)	Lt Jur

PRODUCING ZONES

	Average depth	Average net thickness		Seologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Zilch Eocene	6,800 8,170	20 50	early Miocene Eocene, Paleocene & Lt Cret	Zilch Kreyenhagen, Domengine,, Martinez & Moreno	32 - 65 29 - 61	2,380 1,000	III IV

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prodi	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
373,256	409,098	6,430,715	2,645	47	28,786,026	76,732,944	2,364,759	1946	253	189	4,855

STIMULATION DATA (Jan. 1, 1973)

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: 1,300 - 1,700

CURRENT CASING PROGRAM: 10 3/4" cem 500; 5 1/2" cem 6,800 - 8,400.

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

REMARKS: Between 1961 and 1964, a total of 513,590 bbls. of water was injected in a water-flood project of the Eocene pool. Sands included in the Eocene zone are the Nortonville (Eocene), Domengine (Eocene), Truman (Eocene), Weyant (Paleocene), Wheatville (U Cretaceous), Noble (U Cretaceous) and Sub-Noble (U Cretaceous). Waters from the Truman sand have an average salinity of 545 gr/gal.

REFERENCES: Frame, R. G., Helm Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 36, No. 1 (1950).









HOLLISTER OIL FIELD

LOCATION: 2 miles northwest of Hollister

TYPE OF TRAP: See areas

ELEVATION: 150 - 900

DISCOVERY DATA

		C				d daily uction	1000
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Franciscan	Trico Oil & Gas Co. "O'Connell" l	Jack Herley, Opr. "O'Connell" 1	- 4 12S 4E	MD	30	5	Aug 1950

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Trico Oil & Gas Co. "O'Connell" 1	The Texas Company "O'Connell" 1	Jul 1951	14 125 4E	MD	7,418	Franciscan	Late Jur

PRODUCING ZONES (See areas)

Average	Average net	Geologic . Age Formation		Geologic .		Oil gravity	Salinity of	Class BOPE
(feet)	(feet)			Gas (btu)	gr/gal	required		
		1	1					
		3						
	Average depth	Average Average net depth thickness	Average Average net Geo depth thickness	Average Average net Geologic	Average Average net Geologic Oil gravity depth thickness (*API) or	Average Average net Geologic Oil gravity Salinity of thickness (*API) or zone water		

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Flint Hills Area)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bb()	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	10	0	8,753	0	2,478	1957	29	4	50

STIMULATION DATA (Jan. 1, 1973)

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: No oil production from the field since 1958.

REFERENCES: Wilkinson, E.R., Hollister Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 49, No. 1 (1963). Wilkinson, E.R., Hollister Field in 1967 Guidebook, Gabilan Range and Adjacent San Andreas: Pacific Section, Am. Assoc. Pet. Geologists. Wilson, I.F., Geology of the San Benito Quadrangle, California: Calif. Journal of Mines and Geology, Vol. 39, No. 2 (1946).

FLINT HILLS AREA

LOCATION: See field sheet

TYPE OF TRAP: Sand lenses pinching out along flanks of minor folds

ELEVATION: 150 - 900

DISCOVERY DATA

						al daily luction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Purisima (Gas) Purisima (Oil) Franciscan	Petrolex, Inc. "Ferry-Morris" 2 Petrolex, Inc. "Justo" 1 Trico Oil & Gas Co. "Breen" 1	Balken-Krug "Ferry-Morris" 2 Same as present Tide Water Associated Oil Co. "Breen" 1	28 12S 5E	MD MD MD	0 10 13	734 0 N.A.	Jan 1953 Jul 1956 Jul 1957

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name		Sec. T. & R.	3 & M		Strata	Age
Trico Oil & Gas Co. "O'Connell" 1	The Texas Co. "O'Connell" 1	Jul 1951	14 125 4E	MD	7,418	Franciscan	Late Jur

PRODUCING ZONES

	Average depth	Average net thickness	G	eologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Purisima (Gas)	1,000 - 3,500	35	Pliocene	Purisima	1,010	180 - 375	111
Purisima (Oil)	5,480	10	Pliocene	Purisima	36	N.A.	111
Franciscan	3,970	60	Late Jurassic	Franciscan	25	325	111

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Remarks)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	iber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	10	0	2,357	0	2,022	1957	20	2	30

STIMULATION DATA (Jan. 1, 1973)

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 - 400

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

METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps.

REMARKS: No dry gas production in 1972; cumulative dry gas production 7,560,410 Mcf; 15 dry gas wells were completed on a maximum of 650 proved acres.

REFERENCES: See field sheet.

LOMERIAS AREA (Abandoned)

LOCATION: See field map

TYPE OF TRAP: Faulted anticline

ELEVATION: 150 - 900

DISCOVERY DATA

						al daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	011 (bbl)	Gas (Mcf)	Date of completion
Franciscan	Trico Oil & Gas Co. "O'Connell" 1	Jack Herley, Opr. "O'Connell" 1	4 12S 4E	MD	30	5	Aug 1950

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	il depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Petroleum Midway Co., Ltd. 1	Same	Jan 1925	10 12S 4E	MD	5,200	Purisima	Pliocene

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required	
Franciscan	2,000	60	Late Jurassic	Franciscan	23	325	111	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number			production Peak oil produ		Total num	ber of wells	proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oit (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	. 0	6,396	0	2,052	1952	9	2	20

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 100 - 400

CURRENT CASING PROGRAM: 11 3/4" cem. 500; 7" combination string landed through zone and cem. through ports above the zone. METHOD OF WASTE DISPOSAL: Percolation and evaporation sumps.

REMARKS: The producing zone may include a thin Cretaceous conglomerate as well as fractured Franciscan strata.

REFERENCES: See field sheet.



LOCATION: 3 miles south of Coalinga

TYPE OF TRAP: Faulted asymmetrical anticline and permeability variations within the producing sands

ELEVATION: 700 - 1,600

DISCOVERY DATA

						al daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Temblor	Humble Oil & Rfg. Co. "Calif. Central" 33	Wilshire Annex Oil Co. No. 33-26E	26 21S 15E	MD	90	N.A.	Oct 1941

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name		Sec. T. & R.	5 & N		Strata	Age
Standard Oil Co. of Calif. No. 65 *Deepened in 1969 to 6,502	Same	*Mar 1948	21 215 158	MD	6,502	Joaquin Ridge	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	(Seologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Upper Temblor Lower Temblor	3,400 3,700	170 160	early Miocene early Miocene	Temblor Temblor	31 - 39 31 - 41	580 510	None None

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximur proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
105,491	86,330	150,036	2,280	45	21,020,041	25,015,420	2,293,014	1949	205	160	2,67

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 0 - 550

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

METHOD OF WASTE DISPOSAL: Water is allowed to percolate into sediments containing saline waters.

REMARKS: A water flood stimulation project was started in 1966 and terminated in 1971; 1,056,811 bbls. of water was injected during that time in 3 wells.

REFERENCES: Hunter, G.W., Jacalitos Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 36, No. 2 (1950).





TYPE OF TRAP: Permeability variations on a regional homocline

ELEVATION: 750

DISCOVERY DATA

						al daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Pyramid Hill Cantleberry	McWood Corp. "Quinn" 1 Pacific Oil and Gas Development Corp. "Cantleberry" 72	Ross O. Nelson "R.O.N." 1 Same as present	13 255 27E 22 255 27E		3 65	N.A. N.A.	Jan 1964 Jul 1946
	4	39.5	1	1		1	1

Remarks:

DEEPEST WELL DATA

	1	Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Morton & Sons "Quinn" 1-16	Same	Feb 1949	16 25S 27E	MD	3,317	Basement (Granite)	Late Jur

PRODUCING ZONES

	Average depth	Average net thickness	0	Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required	
Pyramid Hill Cantleberry Sands	1,705 2,750	130 30 - 80	early Miocene early Miocene	Jewett Vedder	14 14	N.A. 10	None None	
					_	5		

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
70,588	0	1,093,289	275	32	1,513,504	0	139,460	1967	88	44	310

STIMULATION DATA (Jan. 1, 1973)

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: 350

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: Evaporation and percolation sumps; subsurface disposal project became operative in 1973. REMARKS:

REFERENCES: Hluza, A.G., Jasmin Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 44, No. 2 (1958).



CONTOURS ON TOP OF FAMOSO SAND



Kern County

LOCATION: 28 miles north of Bakersfield

TYPE OF TRAP: Lenticular sand on an anticline

ELEVATION: 575

DISCOVERY DATA

Zone						daily uction	Date of completion
	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	
Famoso	Pacific Oil & Gas Development Corp., "W.G.O Unit A" 53-30	Same as present	30 25S 27E	MD	15	N.A.	Apr 1959

Remarks:

DEEPEST WELL DATA

		Date		1000	Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age	
Pacific Oil & Gas Development Corp. "W.G.O Unit A" 52-30	Same	Mar 1959	30 25S 27E	MD	4,415	Famoso	Eo 4/or Olig	

PRODUCING ZONES

	Average depth	Average net thickness (feet)	1	Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE	
Zone	(feet)		Age	Formation	Gas (btu)	gr/gal	required	
Famoso	4,200	30	Eo &/or Olig	Walker	22	N.A.	None	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil produ	action	Total num	ber of wells	Maximur
Oll (bbl)	Net gas (Mcf)	Water (bbl)	acreage		Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
1,447	0	2,506	40	2	61,008	0	14,759	1962	7	4	4

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 750

CURRENT CASING PROGRAM: 7" cem. above zone and across base of fresh-water sands; 5" liner landed through zone.

METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps.

REMARKS: This field has the only known oil production from Famoso sand.

REFERENCES: Shea, D.N., West Jasmin Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 50, No. 1 (1964).



LOCATION: 31 miles northwest of Bakersfield

TYPE OF TRAP: Anticline

ELEVATION: 260

DISCOVERY DATA

Zone					Initial daily production		
	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bb1)	Gas (Mcf)	Date of completion
Fractured shale	Texaco Inc. "Breen" 1	The Texas Co. "Breen" 1	14 28S 23E		69	224	Jul 1956

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name		Sec. T. & R.	3 & M		Strata	Age	
Same as discovery well	Same	Feb 1956	14 285 23E	MD	13,732	Stevens	late Mio	

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (°API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required
Fractured shale	11,250	900	late Miocene	Monterey	35	1,200	v

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative p	ulative production Peak oil production		ction	Total number of wells		Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bb1)	acreage		Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
2,871	2,562	7,912	10	1	112,718	216,864	14,646	1957	1	1	10

STIMULATION DATA (Jan. 1, 1973)

SPACING ACT: Applies

BASE OF FRESH WATER: 1,500

CURRENT CASING PROGRAM: 13 3/8" cem. 1,200; 5 1/2" cem. through zone,

METHOD OF WASTE DISPOSAL: Waste water is trucked to an adjacent field for subsurface disposal.

REMARKS:

REFERENCES:



Kern County

LOCATION: 6 miles northeast of Bakersfield

TYPE OF TRAP: Faulted homocline

ELEVATION: 800

DISCOVERY DATA

Zone					Initia prod	daily uction	
	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	OII (bbl)	Gas (Mcf)	Date of completion
Transition Santa Margarita	Shell Oil Co. "Afana" l Gulf Oil Corp. "Needham-Bloemer" 15	Same as present Oceanic Oil Co. "Needham-Bloemer" 1	18 29S 29E 7 29S 29E		18 90	N.A. N.A.	Feb 1944 Sep 1947
	3						
Remarks:			,	•			,

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Kernview Oil Co. "Muir" 13	Gene Reid Exploration Co. "Muir" 13	Feb 1949	18 29S 29E	MD	5,425	Vedder	early Mio

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Transition	740 - 1,350	30 - 80	late Miocene	Transition	14	5	None
Santa Margarita	950	55	late Miocene	Santa Margarita	14	5	None

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
216,477	0	3,365,718	670	131	9,410,522	0	845,373	1949	214	166	690

STIMULATION DATA (Jan. 1, 1973)

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	3,701,855	124
	1		

SPACING ACT: Applies

BASE OF FRESH WATER: 950

CURRENT CASING PROGRAM: 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 in disposal wells (808,148 bbls. in 1972), steam injection wells, and in unlined sumps where water quality meets Div. of Oil and Gas standards. REMARKS:

REFERENCES: Corwin, C.H., Kern Bluff Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 36, No. 1 (1950).

KERN FRONT OIL FIELD





LOCATION: 5 miles northwest of Bakersfield

TYPE OF TRAP: Permeability variations on a faulted homocline

ELEVATION: 750

DISCOVERY DATA

						al daily luction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	OH (bbl)	Gas (Mcf)	Date of completion
Etchegoin Chanac	Standard Oil Co. of Calif. No. 1 Standard Oil Co. of Calif. No. 1	Same as present Same as present	15 285 27E 27 285 27E		10 190	N.A. N.A.	1912 Aug 1914

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	3 & M		Strata	Age
Atlantic Richfield Co. "Kramer" 1	Richfield Oil Corp. "Kramer" 1	Sep 1941	34 28S 27E	MD	7,738	Basement (slate)	Late Jur

PRODUCING ZONES

,	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE	
Zone (feet)		(feet)	Age	Formation	Gas (btu)	gr/gal	required	
Etchegoin Chanac	2,265 2,320	70 250	Pliocene late Miocene	Etchegoin Chanac	14 15	N.A. 5	None None	

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
3,148,559	293,008	25,578,898	5,000	852	128,591,808	14,667,840	4,535,059	1929	1,322	1,206	5,055

STIMULATION DATA (Jan. 1, 1973)

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	14,142,183	478

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,300

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

METHOD OF WASTE DISPOSAL: Unlined sumps.

REMARKS: A steam displacement project was started in the Kern River - Chanac zone in 1966 and terminated after 99,587 bbls. was injected.

REFERENCES: Brooks, T.J., Kern Front Oil Field, A.A.P.G., S.E.P.M., S.E.G., Guidebook Joint Annual Meeting, Los Angeles, Calif., 1952, p. 159-161. Park, W.H., Kern Front Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 51, No. 1 (1965).



LOCATION: 5 miles north of Bakersfield

TYPE OF TRAP: Permeability variations on a homocline

ELEVATION: 400 - 1,000

DISCOVERY DATA

							I daily uction	
Zone	Present operator and well name		Original operator and well name	Sec. T. & R.	B& N	Oil (bbl)	Gas (Mcf)	Date of completion
Kern River China Zone	Elwood Brothers (no name well) Westates Petroleum Co. "KCL" 1	,	Same as present Horace Steele and L.C. Gould "KCL" 1	3 29S 28E 8 29S 28E		N.A. 50	N.A. 0	1899 Sep 1947
					Ι.			

Remarks: The discovery well was dug by hand in the spring of 1899 on what is now Chanslor-Western Oil Development Co. property. "Gassy vapors" caused the well to be abandoned without a test of its commercial possibilities. In June 1899 McWhorter Bros. drilled the first commercial well 400 feet north of the discovery well.

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Standard Oil Co. of Calif. "KCL 26" 1-11	Same	Oct 1948	9 29S 28E	MD	6,986	Granite	Jurassic

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (°API) or	Salinity of zone water	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required	
Kern River China Zone	900 1,300	700 100 - 500	late Pliocene late Pliocene	Kern River Kern River	13 13	5 40	None None	

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
27,154,427	4,165	188,121,732	9,535	4,526	576,511,857	2,599,678	27,154,427	1972	7,942	6,978	9,850

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	numb	er of wells pr injection
Cyclic-steam	1961	300,849,501	٢	5,215
Steam flood	1962	189,380,134		780

SPACING ACT: 'Does not apply

BASE OF FRESH WATER: 2,500

CURRENT CASING PROGRAM: 6 5/8" cem. through zone.

METHOD OF WASTE DISPOSAL: Waste water is injected into the Santa Margarita and Vedder, 12,143,578 bbls. in 1972. Waste water is also used in steam generation. The balance of the water is of a suitable enough quality that it is allowed to enter percolation ponds, irrigation canals, & the Kern Riven REMARKS:

REFERENCES: Crowder, R.E., Kern River Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 38, No. 2 (1952).

KERNSUMNER OIL FIELD

SERIES

MIDCENE

(Abandoned)



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LOCATION: 3 miles south of Bakersfield

TYPE OF TRAP: Permeability variations on an anticlinal nose

ELEVATION: 360

DISCOVERY DATA

					Initia	I daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oif (bbi)	Gas (Mcf)	Date of completion
Wicker Gorge Fill	Petroleum Investment Co. "P.I. Unit" 1-16X	Signal Oil & Gas Co. "Signal Unit" 1-16X	20 30S 28E	MD	61	44	Jun 1961

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Occidental Petroleum Corp. "Garrone" 1	Same	May 1963	20 30S 28E	MD	15,000	Vedder	early Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity ("API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Wicker Gorge Fill	10,530	50	m Miocene	Wicker Gorge Fill	29	N.A.	IV

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production	Sec	1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	8,103	3,416	4,070	1961	4 .	1	10

STIMULATION DATA (Jan. 1, 1973)

project started Stea	bbl (water equivalent) used for injectio
-	

SPACING ACT: Applies

BASE OF FRESH WATER: 3,875

CURRENT CASING PROGRAM: 10 3/4" com. 1,100; 7" com. through zone and across base of fresh-water sands. METHOD OF #ASTE DISPOSAL:

REMARKS: One well field. Abandoned 1963.

REFERENCES:



Kings County

LOCATION: 26 miles southeast of Coalinga

TYPE OF TRAP: Unknown

ELEVATION: 185

DISCOVERY DATA

					Initia	daily daily	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Vaqueros - Kreyenhagen	McCulloch Oil Corp. "Davis Transamerica Dev. Co." 1	Same as present	9 225 19E	MD	3,600	500	Aug 1971

Remarks: On Jan. 7, 1971, while being drilled at 14,181', the well nearly blew-out but the "kick" was kept under control by the operator. Subsequently, the drill pipe became stuck necessitating a redrill. The well was redrilled to a total depth of 15,894 in the Lodo formation. However, the zone that caused the "kick" was apparently missing in the redrill. The well was once again plugged back and redrilled to a depth of 14,338 and completed to production from the Vaqueros and Kreyenhagen formations.

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	5 & M		Strata	Age
Same as discovery well	Same	Oct 1970	9 225 19E	MD	15,894	Lodo	Eocene

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gai	required
Vaqueros - Kreyenhagen	12,800	1,300	early Mio - Obig - Eo	Vaqueros - Kreyenhagen	26	850	v

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prode	uction	Total num	ber of wells	Maximum
Dil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
14,422	15,690	83,121	80	1	21,454	19,947	14,422	1972	2	1	80

STIMULATION DATA (Jan. 1, 1973)

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: 13 3/8" cem. 3,500; 7" cem. 13,500; 4 1/2" liner landed or cem. through the producing zone.

METHOD OF WASTE DISPOSAL: Method of hauling water by vacuum truck thirty miles to approved disposal site has proved uneconomical and the only producing well has been shut in. Future plans are to drill or convert a well for use as a disposal well. REMARKS:

REFERENCES:

KETTLEMAN MIDDLE DOME OIL FIELD



Kings County

LOCATION: 28 miles sourtheast of Coalinga

TYPE OF TRAP: Anticline; fractured shale

ELEVATION: 400 - 750

DISCOVERY DATA

						I daily uction	200 70
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Etchegoin - Jacalitos	U.S. Natural Resources, Inc. "Downing 30" 1	Bolsa Chica Oil Corp. "Downing" 1	30 23S 19E	MD	7	N.A.	Nov 1926
Temblor	Petroleum Securities Co. "Burbank" 1	Same as present	30 23S 19E			34,000	
Kreyenhagen McAdams	Middle Dome Corp. No. 38-19V Middle Dome Corp. No. 73-30V	Standard Oil Co. of Calif., Opr. No. 38-19V Bolsa Chica Oil Corp. No. 73	19 235 19E 30 235 19E		563		Jan 1956 Jan 1948
							-

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth	
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Middle Dome Corp. No. 38-19V	Standard Oil Co. of Calif., Opr. No. 38-19V	Jan 1954	19 23S 19E	MD	13,076	McAdams	Eocene

PRODUCING ZONES

	Average depth	Average net thickness (feet)	G	eologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE required
Zone	(feet)		Age	Formation	Gas (btu)	gr/gal	
Etchegoin - Jacalitos	2,700	30	Pliocene	Etchegoin - Jacalitos	11	2,190	None
Temblor	7,700	250	early Miocene	Temblor	51 - 60	2,040	IV
Kreyenhagen	10,700	1,200	Eocene & Oligocene (?)	Kreyenhagen	34 - 44	735	IV
McAdams	12,000	200	Eocene	Lodo	43 - 49	515	IV
PICAGADOS	12,000	200	LOCENE	1000	45 - 45	515	

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prodi	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbi)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
10,296	14,666	1,052	130	2	1,303,983	23,915,814	151,978	1933	18	9	250

STIMULATION DATA (Jan. 1, 1973)

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 1,000; 13 3/8" cem 5,400; 9 5/8" cem 7,200; 7" cem above zone; 4 3/4" liner landed through zone.

METHOD OF WASTE DISPOSAL: Water is allowed to percolate into sediments containing saline waters.

REMARKS: A total of 3,474 barrels of oil was produced by the two Etchegoin - Jacalitos zone wells prior to the abandonment of the pool in 1929. The Kreyenhagen zone is mainly a fractured shale reservoir.

REFERENCES: Arnold, Ralph and Robert Anderson, The Geology and Oil Resources of the Coalinga District, Calif.: U.S. Geol. Survey Bull.398 (1910). Hill, F.L., Kettleman Middle Dome Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 51, No. 1 (1965). Woodring, W.P., Ralph Stewart, and R.W. Richards, Geology of the Kettleman Hills Oil Field, Calif.: U.S. Geol. Survey Prof. Paper 195 (1940).

KETTLEMAN NORTH DOME OIL FIELD


Fresno and Kings Counties

LOCATION: 16 miles southeast of Coalinga

TYPE OF TRAP: Asymmetrical anticline; permeability barriers of major importance in the Vaqueros and Lower McAdams pools

ELEVATION: 600 - 1,350

		DATA	DISCOVERY
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					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Temblor	Standard Oil Co. of Calif., Opr. No. 88	Milham Exploration Co. "Elliott" 1	2 22S 17E	MD	3,670	80,000	Nov 1928
Vaqueros	Standard Oil Co. of Calif., Opr. No. T & V 85	Kettleman North Dome Association No. 85	34 21S 17E	MD	560	881	Sep 1938
Kreyenhagen	Standard Oil Co. of Calif., Opr. No. K 333	Standard Oil Co. of Calif., Opr. No. 533	21 22S 18E	MD	0	19	Jul 1957
Upper McAdams	Standard Oil Co. of Calif., Opr. No. E 4	Kettleman North Dome Association No. 4	18 21S 17E	MD	840	1,172	Feb 1938
Lower McAdams	Standard Oil Co. of Calif., Opr. No. DE 36	Standard Oil Co. of Calif., Opr. No. 36	20 21S 17E	MD	740	5,000	Oct 1940

Remarks: During October 1928, while drilling at 7,108', the Temblor discovery well blew in and was partially out of control for three years. The prominent surface expression of the Kettleman Hills structure was noted as potentially oil productive by early Geologists and nine wells were drilled along the structural trend prior to 1910. Discovery was delayed until equipment was developed capable of drilling to the depths necessary to penetrate the hydrocarbon bearing measures. The Lower McAdams initial production was estimated because the discovery well also produced from the Upper McAdams zone.

DEEPEST WELL DATA

		Date	4		Depth	At total o	lepth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Standard Oil Co. of Calif., Opr. No. E 423	Standard Oil Co. of Calif., Opr. No. 423	Sep 1954	34 21S 17E	MD	15,693	Joaquin Ridge	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	(Geologic	Oll gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Temblor	6,000 - 6,800	1,500	early Miocene	Temblor	28 - 60	1,930	IV
Vaqueros	8,000 - 8,800	200	early Miocene	Vâqueros	31 - 42	1,725	IV
Kreyenhagen	8,900 - 9,700	900	Oligocene & Eocene	Kreyenhagen	30 - 32	1,550	IV
Upper McAdams	9,200 - 10,500	400	Eocene	Lodo	27 - 55	360	IV
Lower McAdams	10,900 - 11,700	450	Eocene	Lodo	27 - 40	415	IV

PRODUCTION DATA (Lan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative	production	Peak oil prod	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
844,362	17,778,062	5,046,707	13,085	146	450,992,006	2,830,781,969	29,156,462	1936	565	516	13,690

STIMULATION DATA (Jan, 1, 1975)

	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	3,553,848	5

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM. Northern portion: 11 3/4" cem 800; 7" cem 7,000 - 10,000; 5 1/2" liner landed through zone. Central and Southern portion: 13 3/8" cem 400; 9 5/8" cem 6,300; 7" cem 7,000 - 10,000; 5 1/2" liner landed through zone. METHOD OF WASTE DISPOSAL: Major portion of water is injected. Balance is allowed to percolate into sediments containing saline waters.

REMARKS: The Kreyenhagen zone is a fractured shale reservoir. As of Dec. 31, 1972, this field has the largest cumulative production of gas in the State. Between 1938 and 1969 a total of 696,060,081 Mcf of gas was injected in the Temblor and Vaqueros pools to maintain reservoir pressure. Between 1962 and 1967 a total of 90,488,093 gal. of propane and 1,390,015 Mcf of dry gas was injected in a miscible-phase flood of the Lower McAdams pool. A water flood was initiated in the Vaqueros pool during 1967 and a total of 303,959 bbls was injected until the project terminated in 1969. REFERENCES: Arnold, Ralph and Robert Anderson, The Geology and Oil Resources of the Coalinga District, Calif.: U.S. Geol. Survey Bull. 398 (1910). Sullivan, J.C., Kettleman North Dome Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 52, No. 1 (1966). Woodring, W.P., Ralph Stewart, and R.W. Richards, Geology of the Kettleman Hills Oil Field, Calif.: U.S. Geol. Survey Prof. Paper 195 (1940).



LOCATION: 13 miles southeast of Coalinga

TYPE OF TRAP: Permeability variation within zone and tar seals on a regional homocline

ELEVATION: 1,400 - 1,600

DISCOVERY DATA

					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Temblor (includes McLure)	Elmer C. von Glahn "Oceanside" 1	Thomas Petroleum Corp. 1	33 22S 16E	MD	5	N.A.	May 1949

Remarks: Interest was first attracted to the area by the numerous oil seeps.

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	3 & M		Strata	Age
Taft Well Drilling Co. No. 1	Same	May 1935	33 22S 16E	MD	5,005	Avenal	Eocene

PRODUCING ZONES

	Average depth	Average net thickness	G	icologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Temblor (includes McLure)	450	130	m ξ e Miocene	Temblor	16	N.A.	None
				-			

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prodi	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	60	0	1,896	0	1,596	1965	19	8	70

STIMULATION DATA (Jan. 1, 1975)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 0 - 100

CURRENT CASING PROGRAM: 7" cem. 450; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: A second period of development followed the completion in July 1965 of Santa Fe Drilling Co. well No. "Kreyenhagen" 1 (now Carl E. Kreyenhagen), Sec. 33, T. 22S., R. 16E. Cumulative production prior to July 1965 was 300 barrels of oil. The field has been shut in since December 1965. During 1965, 4,493 barrels of water was injected in steam cyclic operations. In 1970 Getty Oil Co. drilled a well outside the limits of the field, in Sec. 28, to a total depth of 5,916, bottoming in the Panoche. REFERENCES: Arnold, Ralph and Robert Anderson, The Geology and Oil Resources of the Coalinga District, California: U.S. Geol. Survey Bull, 398 (1910). Stewart, Ralph, Geology of Reef Ridge Coalinga District, California: U.S. Geol. Survey Prof. Paper 205-C (1946).







Kern County

LOCATION: 17 miles southwest of Bakersfield

TYPE OF TRAP: Permeability barrier on a faulted homocline

ELEVATION: 325

DISCOVERY DATA

					Initia	uction	1.12-11-1
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Stevens	Tenneco West, Inc. No. 15	Tidewater Oil Co. "K.C.L." 15-2	2 315 26E	MD	117	82	Jan 1960

2.1

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Tenneco West, Inc. No. 86	Tidewater Oil Co. "K.C.L." 86-3	Oct 1959	3 31S 26E	MD	12,517	Stevens	late Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Satinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gai	required
Stevens	8,900	120	late Miocene	Fruitvale	33	130	111

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
4,360	0	2,031	40	2	132,472	193,613	34,296	1960	7	4	50

STIMULATION DATA (Jan. 1, 1973)

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: 3,000

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: Evaporation and percolation sumps; subsurface disposal project became operative in 1973. REMARKS:

REFERENCES: Hluza, A.G., Lakeside Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 49, No. 1 (1963).

SOUTH LAKESIDE OIL FIELD (Abandoned)



CONTOURS ON N ELECTRIC LOG MARKER



LOCATION: 13 miles southwest of Bakersfield

TYPE OF TRAP: Lithofacies change on homocline

ELEVATION: 325

DISCOVERY DATA

					Initia prod	I daily uction	and the second
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Upper Stevens	Atlantic Richfield Co. "KCL O" 18-14	Richfield Oil Corp. "KCL O" 18-14	14 31S 26E	MD	30	30	Mar 1960

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3& M		Strata	Age
Same as discovery well	Same	Dec 1959	14 31S 26E	MD	12,033	Fruitvale	late Mio

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Upper Stevens	10,880	70	late Miocene	Fruitvale	29	400	IV
							20

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	. Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	2,661	1,963	2,661	1960	1	1	-

STIMULATION DATA (Jan. 1, 1973)

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. 1,100; 7" cem. above-zone and across base of fresh-water sands; 5 1/2" liner landed through zone. METHOD OF WASTE DISPOSAL:

REMARKS: The only producing well was abandoned in August 1960.





Kern County

LOCATION: 14 miles southeast of Taft

TYPE OF TRAP: Lithofacies change on homocline

ELEVATION: 950

DISCOVERY DATA

						1 daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Etchegoin Reef Ridge	Tenneco West, Inc. No. 18 Atlantic Richfield Co. "San Emidio A" 27-20	Richfield Oil Corp. "San Emidio A" 18-21 Richfield Oil Corp. "San Emidio A" 27-20	21 11N 22W 20 11N 22W		206 218	N.A. 491	Jul 1952 Dec 1953

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Tenneco West, Inc. "CWOD" 85	Richfield 0il Corp. "L.L.U." 85-20	May 1954	20 11N 22W	SB	10,414	Antelope	late Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Etchegoin Reef Ridge	7,500 6,500	15 150	Pliocene late Miocene	Etchegoin Monterey	17 25	1,200 1,650	III III

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	production -	Peak oil produ	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	· Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
6,902	1,268	23,315	90	. 2	2,768,690	1,256,110	439,786	1955	33	21	290

STIMULATION DATA (Jan. 1, 1973)

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: 4,500

CURRENT CASING PROGRAM: 12 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: Evaporation and percolation from unlined sumps.

REMARKS: The Reef Ridge zone was abandoned in 1967. A water flood was conducted in the Etchegoin zone from 1957 to 1965. Cumulative injection was 1,855,555 bbls. of water. In the Reef Ridge zone 1,310,000 Mcf of gas was injected for pressure maintenance.

REFERENCES: Ritzius, D.E., Los Lobos Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 40, No. 2 (1954).



LOCATION: 45 miles northwest of Bakersfield

TYPE OF TRAP: Anticline; lithofacies variations; fractured shale

ELEVATION: 450

						daily action	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Tulare Etchegoin Cahn Carneros	Mobil Oil Corp. "Lost Hills Two" 45 Gulf Oil Corp. No. 1 Standard Oil Co. of Calif. "Cahn" 9 Standard Oil Co. of Calif. No. 16	Lost Hills Development Co. D-4 Martin and Dudley No. 1 Standard Oil Co. "Cahn" 9 Same as present	19 26S 21E 30 26S 21E 9 27S 21E 29 26S 21E	MD MD	*60 176 60 53	N.A. N.A. N.A. 32	Dec 1915 Jul 1910 Aug 1913 Jun 1953

Remarks: Oil discovery was made in a well being drilled for water. * Both Tulare and Etchegoin zones open.

DEEPEST WELL DATA

		Date	1		Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Mobil Oil Corp. "Williamson" 33-11	General Petroleum Corp. "Williamson" 33-11	May 1949	11 26S 20E	MD	11,553	Moreno	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required
Tulare Etchegoin Cahn Carneros	200 1,000 4,900 6,020	100 300 1,500 50	Pleistocene Pliocene late Miocene early Miocene	Tulare Etchegoin Monterey Temblor	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	150 1,400 1,700 1,100	None None II IV

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative	production	Peak oil prod	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
2,367,220	2,485,615	8,368,197	3,950	1,097	114,595,062	113,257,513	2,782,314	1948	1,537	1,481	4,110

STIMULATION DATA (Jan. 1, 1973)

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	20,595,589	2
Cyclic-steam	1964	3,787,854	40
Air injection for a fire flood	1961	N.A.	5

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: Tulare & Etchegoin zones: 5 1/2" comb. string cem. through ports above zone. Carneros zone: 16" cem. 500; 9 5/8" cem. 4,500; 7" cem. above zone; 5 1/2" liner landed through zone. Cahn zone: 10 3/4" cem. 200; 7" cem. above zone; 5 1/2" liner landed through zone. METHOD OF WASTE DISPOSAL: Percolation and evaporation from sumps located on Tulare outcrops on west flank of structure; injection into water flood and disposal wells.

REMARKS: Abnormally high pressure and temperature salt water is frequently encountered in the Temblor formation. Cahn zone is a fractured shale reservoir.

REFERENCES: Hardoin, J.L., Cahn Pool of Lost Hills Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 49, No. 2 (1963). Lorshbough, A.L., W-3 Zone Unit of Lost Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 50, No. 2 (1964). McCabe, R.E., Lost Hills Oil Field: Tenth Annual Report of the State Oil and Gas Supervisor of California, Vol. 10, No. 1 (1924).





McDONALD

FIELD

LOCATION: 65 miles northwest of Bakersfield

TYPE OF TRAP: Permeability variations on an asymmetrical anticlinal nose ELEVATION: 350

DISCOVERY DATA

				10.5		al daily luction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcí)	Date of completion
Saunders	Atlantic Oil Co. "Seaboard-Saunders" 63-29	Union Oil Co. of Calif. "Seaboard-Saunders" 63-29	29 25N 20E	MD	11	N.A.	Jun 1954
Farnsworth	Getty Oil Co. "Farnsworth" 14-17	Tide Water Associated Oil Co. "Farnsworth" 14-17	17 25N 20E	MD	36	14	Apr 1953
Overal1	Texaco Inc. "Overall" 2	The Texas Co. "Overall" 2	33 25N 20E	MD	30	N.A.	Aug 1954
					-		

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Getty Oil Co. No. 1	Associated Oil Co. No. 1	Jan 1920	20 25N 20E	MD	3,602	Monterey	late Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (°API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required
Saunders Farnsworth Overall	2,400 2,735 2,200	100 35 800	Pliocene late Miocene late Miocene	Etchegoin Monterey Monterey	24 28 20	N.A. 2,250 2,250	11 11 11

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
4,742	0	20,110	20	3	131,425	39,445	13,602	1955	14	5	50

STIMULATION DATA (Jan. 1, 1973)

 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: Evaporation and percolation sumps.

REMARKS:

REFERENCES: Hardoin, J.L., Northwest Lost Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 53, No. 2 - Part 2 (1967).

Mc CLUNG OIL FIELD



LOCATION: 10 miles southwest of Bakersfield

TYPE OF TRAP: Faulted homocline with permeability variations

ELEVATION: 360

DISCOVERY DATA

				production		n	
Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion	
Miller & York Oil Operations "K.C.L. G" 1	Continental Oil Co. "K.C.L. G" 1	4 30S 26E	MD	228	N.A.	Sep 1943	
						-	
			Miller & York Oil Operations "K.C.L. G" 1 Continental Oil Co. "K.C.L. G" 1 4 305 26E	Miller & York Oil Operations "K.C.L. G" 1 Continental Oil Co. "K.C.L. G" 1 4 30S 26E MD	Present operator and well name Original operator and well name Sec. T. & R. B & M Original operator and well name Difference Original operator and well name Difference Original operator and well name Difference Difference	Miller & York Oil Operations "K.C.L. G" 1 Continental Oil Co. "K.C.L. G" 1 4 30S 26E MD 228 N.A.	

Remarks:

DEEPEST WELL DATA

		Date		ř – 1	Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age	
Same as discovery well	Same	Jun 1943	4 30S 26E	MD	8,134	Fruitvale	late Mio	

PRODUCING ZONES

	Average depth	Average net thickness (feet)		Geologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)		Age	Formation	Gas (btu)	gr/gal	required
Stevens	7,450	30	late Miocene	Fruitvale	31	1,410	111
						-	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
914	. 0	30,000	10	- 1	145,526	181,766	47,524	1944	7	3	3

STIMULATION DATA (Jan. 1, 1973)

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: 2,300

CURRENT CASING PROGRAM 9 5/8" cem. 500; 5 1/2" cem. through zone and across base of fresh-water zones. METHOD OF WASTE DISPOSAL During 1972 all of the waste water was injected into one disposal well open to the Etchegoin. REMARKS: Field was abandoned in 1951 and reactivated in 1967.

REFERENCES: Sullivan, J.C., West Bellevue Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 44, No. 1 (1958), p. 47.





P. Statut della

Maximum

LOCATION: 33 miles northwest of Taft

TYPE OF TRAP: Complexly-faulted plunging anticline

ELEVATION: 1,000

DISCOVERY DATA	
Zone	Present operator and wal

Theta (2nd Devilwat- er), D-1, Layman 101, 6th Sand	Present operator and well name rise Oil Co. No. 3-21 perior Oil Co. "Theta" 54-20	Original operator and well name Same as present Same as present	21 3	T. & R.	MD	0H (bbl)	Gas (Mcf)	Date of completion Feb 1953
Theta (2nd Devilwat- er), D-1, Layman 101, 6th Sand						10	0	Eab 1057
				8S 20E	MD	75	õ	Sep 1955
Tolco (7th Devil- water) Texaco	Inc. "Tolco (NCT-1)" 1	The Texas Co. "Tolco (NCT-1)" 1	20 3	85 201	MD	142	0	Sep 1951
Layman Two Laymac	Corp. "Intex-Layman" 2	Intex Oil Co. "Layman" 2	18 2	28S 20H	MD	25		May 1948
	Corp. "Mohawk Layman One" H-1	Honolulu Oil Corp. "Honolulu-Wilshire-Layman"	18	285 201	E MD	185	40	Mar 1947
2A Laynac	Corp. "Layman Unit" 40	Same as present	18	285 208	E MD	18	6	May 1968
	Corp. "Layman Two" H-3	Wilshire Oil Co. Inc. "Layman" 3	18 2	8S 20E	MD	30	0	Apr 1946
	Corp. "San Joaquin-Layman" 1	Williams Brothers Oil Co. "Layman" 1	12 2	8S 19H	MD	40	0	Jul 1945
	rise Oil Co. No. 3-21	Seaboard Oil Co. "Seaboard-Bandini" 3-21	21 2	85 201	MD	112	N.A.	Apr 1947
	Corp. "Layman One" H-5	Honolulu Oil Corp. "Layman One" 5	18 3	8S 201	MD	66	0	Feb 1948

DEEPEST WELL DATA

		Date			Denth	oth At total depth		
t operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age	
8-21	Texaco Seaboard Inc. No. 58-21	Feb 1948	21 28S 20E	MD	9,467	Phacoides	early Mio	
-	- An and the second			operator and well name Original operator and well name started Sec. T. & R.	operator and well name Original operator and well name started Sec. T. & R. B & M	operator and well name Original operator and well name started Sec. T. & R. B & M (feet)	operator and well name Date Date Date Depth Date Sec. T. & R. B & M (feet) Strata	

PRODUCING ZONES

	Average depth	Average net thickness	0	Geologic	Oil gravity (*API) or	Salinity of	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required	
Fractured shale	500	1,000	late Miocene	Monterey	13	N.A.	None	
Theta (2nd Devil- water)	2,100	30	m Miocene	Monterey	21	260	None	
D-1	1,200	60	m Miocene	Monterey	19	N.A.	None	
Layman 101	1,400	100	m Miocene	Monterey	19	N.A.	None	
6th Sand	1,500	40	m Miocene	Monterey	23	N.A.	None	
Tolco (7th Devil- water)	2,600	80	m Miocene	Monterey	20	140	None	
Layman Two	1,500	35	m Miocene	Monterey	24	N.A.	None	
Button Bed	2.200	90 20	m Miocene	Temblor	30	30	11	
2A	2,600		early Miocene	Temblor	24	N.A.	II	1
Agua	2,600	100	early Miocene	Temblor	25	40	11	
Phacoides	1,308	50	early Miocene	Temblor	20	360	II	
Oceanic	8,000	60	Oligocene	Tumey	38	N.A.	III	
Point of Rocks PRODUCTION DATA (J	an. 1, 1973)	140	late Eocene	Kreyenhagen	38	130	111	1
	Production		1972 1	972	Cumulative production	Pe	k oil production	Total number

	1972 Production			Average number	Cumulative p	roduction	Peak oil prodi	action	I otal num	ber of wells	proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	Proved acreage	producing wells	Oil (bbi)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
706,394	820,077	1,369,647	550	64	13,296,928	9,475,911	565,406	1957	186	109	620

STIMULATION DATA (Jan. 1, 1973)

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	1,932,883	8

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: Wells not needing BOPE: 8 5/8" cem. above zone; 6 5/8" liner landed through zone. Wells requiring BOPE: 11 3/4" cem. 150 - 800; 7" cem. through zone. METHOD OF WASTE DISPOSAL: Evaporation and percolation from unlined sumps; injection in water flood wells.

REMARKS: The major part of the f eld has been under unit operation since 1960. A total of 2,352,000 Mcf of gas was injected in repressuring projects from 1953 to 1966.

REFERENCES: Ferguson, G.C., McDonald Anticline Oil Field, AAPG-SEPM-SEG Guidebook, Joint Annual Meeting, Los Angeles, 1952. Ritzius, D.E., McDonald Anticline Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 40, No. 1 (1954).



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Kern County

LOCATION: 14 miles northwest of Taft TYPE OF TRAP: See Areas ELEVATION: 850 - 1,500

DISCOVERY DATA

						al daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Tulare	Operator name and well number unknown	Same as present	N.A.	MD	N.A.	N.A.	N.A.

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total d	epth
Present operator and well name	Original operator and well name		Sec. T. & R.	3 & M		Strata	Age
Standard Oil Co. of Calif., Opr. "Jacobson" 572R	Standard Oil Co. of Calif. "Jacobson" 572	Jan 1965	18 30S 22E	MD	10,864	Point of Rocks	late Eo

PRODUCING ZONES (See areas)

....

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

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Northeast Area)

1972 Production		1972 Proved	1972 Average number	Cumulative	production	Peak oil prod	uction	Total num	ber of wells	Maximum proved	
Oil (bbl)	Net gas (Mcf)	Water (bbi)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
8,642,029	10,652,584	16,007,113	3,290	927	192,393,692	148,134,024	11,425,935	1966	1,597	1,420	3,370

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

SPACING ACT: See areas.

BASE OF FRESH WATER: See areas.

CURRENT CASING PROGRAM See areas.

METHOD OF WASTE DISPOSAL: See areas.

REMARKS: In the early 1860's pits and test holes were dug into bituminous outcrops from which asphaltum was bailed. Beginning in 1887 several shallow low volume oil wells were drilled. Circa 1896 Klondike Oil Co. brought in the "Shamrock" well, a 1,300 barrels-of-oil-per-day gusher.

1

REFERENCES: See areas.

MAIN AREA

LOCATION: See map sheet of McKittrick Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 1,150 - 1,500

DISCOVERY DATA

						I daily oction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & N	Oil (bbl)	Gas (Mcf)	Date of completion
Tulare Olig Basal Reef Ridge Stevens	Operator name and well number unknown Getty Oil Co. "Shawrock" 1 Estate of Frank Rice Short "Tulare" 2 Rothschild Oil Co. "SP" 3	Same as present Klondike Oil Co. "Shamrock" 1 Harry H. Magee, Opr. "Tulare" 2 Same as present	N.A. 19 308 22E 20 308 22E 21 305 22E		N.A. 1,300 4 280	N.A. N.A. 0 N.A.	-N.A. about 1896 Feb 1944 Jan 1964

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Occidental Petroleum Corp. "Standard-Gabriel" 556X-12Y	J. Ainslie Bell, Opr. "Standard-Gabriel" 556X-12Y	Feb 1966	12 30S 21E	MD	9,492	Media	early Mio

PRODUCING ZONES

	Average depth	Average net	Average net Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Tulare Dlig Basal Reef Ridge Stevens	500 800 1,500 2,000 - 4,750	300 300 400 175	Pleistocene late Miocene late Miocene late Miocene	Tulare Monterey Monterey Monterey	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	50 450 530 1,200	None None None III

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bb1)	acreage	producing wells	Oil (661)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
5,436,614	634,289	11,725,032	1,370	650	149,730,817	28,592,313	5,807,360	1909	1,206	1,074	1,440

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcl; Steam, bbl (water équivalent)	Maximum number of wells used for injection
Cyclic-steam	1962	34,806,835	716

SPACING ACT: Does not apply

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: Stevens zone wells: 10 3/4" ccm. 500; 7" ccm. above zone; 5 1/2" liner landed through zone. Other zones: 8 5/8" or 7" ccm. above zone; 6 5/8" or 5 1/2" liner landed through zone. METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps; injection wells.

REMARKS: Lost circulation often experienced while drilling through depleted portions of Olig zone. A steam flood project started in 1965 was discontinued in 1968 after the injection of 1,246,184 bbls. of water (in the form of steam). A great number of vertebrate fossils of Pleistocene age have been recovered by a research group from University of Calif. in excavations of brea outcrops in Sec. 29, T. 30S., R. 22E.

REFERENCES: Hardoin, J.L., Stevens Pool of the Main Area of McKittrick Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 52, No. 1 (1966). Zulberti, J.L., McKittrick Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 42, No. 1 (1956).

NORTHEAST AREA

TYPE OF TRAP: Faulted anticline

ELEVATION: 850 - 1,125

DISCOVERY DATA

						l daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Tulare	Texfel Petroleum Corp. "McNeil" 2	Charles R. Jacobson "Jacobson-McNeil" 2	18 30S 22E		65	0	Jul 1948
Olig	Standard Oil Co. of Calif. No. 113	Same as present	7 30S 22E	MD	28	0	Jan 1944
Antelope	Standard Oil Co. of Calif. No. 34	Same as present	17 30S 22E	MD	57	0	Jan 1964
Carneros	Standard Oil Co. of Calif. "Spreckels" 555	Same as present	16 30S 22E	MD	556	225	Jul 1964
Phacoides	Standard Oil Co. of Calif. "Spreckels" 555	Same as present	16 30S 22E	MD	541	300	Jul 1964
Oceanic	Standard Oil Co. of Calif. "Jacobson" 581	Same as present	18 30S 22E	MD	20	6,700	Jan 1965
Point of Rocks	Standard Oil Co. of Calif., Opr. "Jacobson" 572R	Standard Oil Co. of Calif. "Jacobson" 572	18 30S 22E	MD	20	N.A.	May 1965

Remarks: Initial production from the Point of Rocks zone was estimated because it was commingled with production from the Phacoides zone.

DEEPEST WELL DATA

		Date			Depth	At total d	lepth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Standard Oil Co. of Calif., Opr. "Jacobson" 5728	Standard Oil Co. of Calif. "Jacobson" 572	Jan 1965	18 30S 22E	MD	10,864	Point of Rocks	late Eo

PRODUCING ZONES

Average	Average net		Geologic		Salinity of	Class BOPE required	
(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal		
650	400	Pleistocene	Tulare	11 - 25	70 - 420	None	
800	500	late Miocene	Monterey	15	N.A.	None	
3,600	2,400	late Miocene	Monterey	22 - 28	1,430	III	
6,500	100	early Miocene	Temblor	34 - 40	1,230	IV	
790	300	early Miocene	Temblor	35	570	IV	
8,300	125	Oligocene	Tumey	36	680	IV	
9,100	1,400	late Eocene	Kreyenhagen	24	1,330	IV	
			1 2 2		10000		
1				1			
	depth (feet) 650 800 3,600 6,500 790 8,300	depth (feet) thickness (feet) 650 400 800 500 3,600 2,400 6,500 100 790 300 8,300 125	depth (feet) thickness (feet) Age 650 400 Pleistocene 800 500 late Miocene 3,600 2,400 late Miocene 6,500 100 early Miocene 790 300 early Miocene 8,300 125 Oligocene	depth (feet) thickness (feet) Age Age Formation 650 400 Pleistocene 3,600 Tulare 3,600 2,400 late Miocene 4,500 Monterey 6,500 100 early Miocene 4,500 Temblor 790 8,300 125 Oligocene 0 Cligocene Tumey	depth (feet) thickness (feet) Age Formation Gas (btu) 650 400 Pleistocene Tulare 11 - 25 800 500 late Miocene Monterey 15 3,600 2,400 late Miocene Monterey 22 - 28 6,500 100 early Miocene Temblor 34 - 40 790 300 early Miocene Temblor 35 8,300 125 Oligocene Tumey 36	depth (feet) thickness (feet) Age Formation (*AFI) or Gas (btu) zone water gr/gai 650 400 Pleistocene Tulare 11 - 25 70 - 420 800 500 late Miocene Monterey 15 N.A. 3,600 2,400 late Miocene Monterey 22 - 28 1,430 6,500 100 early Miocene Temblor 34 - 40 1,230 790 300 early Miocene Tumey 36 680	

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Remarks)

1972 Production			1972 Proved	1972 Average number	Cumulative	production	Peak oil prod	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
3,205,415	10,018,295	4,282,081	1,920	277	42,662,875	119,541,711	7,356,272	1966	391	346	1,930

STIMULATION DATA (Jan. 1, 1973)

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	4,672,042	154
Steam flood	1971	308,931	2
Water flood	1970	2,098,343	2

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: Tulare & Olig: 7" cem. above zone; 5 1/2" liner landed through zone. Antelope: 10 3/4" cem. 500; 7" cem. above zone; 5 1/2" liner landed through zone. Carneros & deeper: 10 3/4" cem. through shallow oil zone; 7" cem. through zone. METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps.

REMARKS: A total of 1,232,460 Mcf of dry gas has been produced from 5 wells completed in the Amnicola sand of the Tulare zone at structurally high locations. The gas has a heat value of 997 Btu. Although no BOPE is required for Tulare zone wells, extra care should be used because of the localized occurrences of low pressure gas. An in-situ combustion project was started in the Tulare zone in 1966 and discontinued in 1970.

REFERENCES: Bertholf, H.W., Northeast Area of McKittrick Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 1 (1962). Weddle, J.R., Northeast Area of McKittrick Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 51, No. 2 (1965).

Kern County





OIL RESERVOIRS

PLIOCENE

HIM MIOCENE LIRNARD M











LOCATION: Vicinity of Taft, about 28 miles southwest of Bakersfield

Kern and San Luis Obispo Counties

TYPE OF TRAP: Regional homocline modified by: anticlines; anticlinal noses; lithofacies variations; angular unconformities; lenticular sands; fractured shales ELEVATION: 600 - 1,750

DISCOVERY DATA

					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & N	Oil (bbl)	Gas (Mcf)	Date of completion
Tulare	Operator name and well number unknown	Same as present	N.A.	MD	N.A.	N.A.	prior to 1894
Mya Tar	Getty Oil Co. No. 101	Associated Oil Co. No. 101	2 31S 22E	MD	10	N.A.	Jan 1920
Top Oil	Operator name and well number unknown	Operator name and well number unknown	N.A.	MD	N.A.	N.A.	N.A.
Kinsey	Same as above	Same as above	N.A.	MD	N.A.	N.A.	N.A.
Wilhelm	Same as above	Same as above	N.A.	MD	N.A.	N.A.	N.A.
Gusher	Chanslor-Western Oil & Dev. Co. No. 2	Chanslor-Canfield Midway Oil Co. No. 2 A	6 32S 23E	MD	3,000	N.A.	Nov 1909
Calitroleum	Operator name and well number unknown	Same as present	N.A.	MD	N.A.	N.A.	N.A.
Lakeview and Sub- Lakeview	Mobil Oil Corp. "Lakeview" 1	Lake View Oil Co. B No. 1	25 12N 24W	SB	68,000	N.A.	Mar 1910
Potter	Exeter Oil Co. Ltd. "Exeter-BAOC" 101-15	Dominion Oil Co. No. 1	15 31S 22E	MD	100	N.A.	Jan 1910
Marvic	Mobil Oil Corp. "Marvic" 1	Marvic Associates Ltd. No. 1	16 31S 22E	MD	72	N.A.	May 1941
Monarch	Standard Oil Co. of Calif. "Monarch" 28	Sunset-Monarch Oil Co. No. 1	2 11N 24W	SB	N.A.	N.A.	about 190
Webster	Directors Oil Co. No. 7	Ruby Oil Co. No. 7	2 11N 24W	SB	35	N.A.	Dec 1913
Moco	Mobil Oil Corp. "Moco 35" WT 504	General Petroleum Corp. "Moco 35" 204	35 12N 24W	SB	188	20	Jul 1957
Obispo	Union Oil Co. of Calif. "Obispo" 6	Obispo Oil Co. No. 6	32 12N 23W	SB	6,000	N.A.	Sep 1925
Pacific	Mobil Oil Corp. "Pacific" 4	General Petroleum Corp. "Pacific" 4	32 12N 23W	SB	1,078	N.A.	Jun 1947
Metson	Tenneco Oil Co. "Metson" 47-24	Bankline Oil Co. "Metson" 47-24	24 11N 23W	SB	27	0	Mar 1953
Leutholtz	Gulf Oil Corp. No. 2 - "I.M. Woodward USL"	Western Gulf Oil Co. No. 2 - "I.M. Woodward USL"	21 11N 23W	SB	1,021	120	Aug 1945
Republic	Shell Oil Co. "Sec. 8" 25	Republic Petroleum Co. No. 25	8 32S 23E	MD	1,114	350	Mar 1928

Remarks: A First of over 100 gushers in field and is the first significant production from the Gusher zone. B "America's Most Spectacular Gusher" blew out and flowed uncontrolled for 18 months after which the flow stopped probably because the bottom of the hole caved in. It was estimated that the early flow rate was about 68,000 b/d and that production amounted to 8-1/4 million barrels oil of which 3-1/2 million barrels was lost by evaporation and seepage.

DEEPEST WELL DATA

					Date			Depth	At total	depth	
Presen	t operator and well	name	Or	iginal operator and well n	ame	started	Sec. T. & R	. B&N		Strata	Age
The Superior Oil	Co. "C.W.O.D."	58-21	Same			Nov 1957	21 325 23	E MD	14,504	lower Santos	early Mi
PRODUCING ZONES								0.54	ā.,		
	Average	Average net thickness		Geologic	Oil gravity (*API) or	Salinit		Class B0	DPF	1	
Zone	depth (feet)	(feet)	Age	Formation	Gas (btu)	zone w gr/ga		require			
Tulare	200 - 1,400	50 - 200	Pleistocene	Tulare	13	200 - 1,		None		1	
Mya Tar	1,100	150	Pliocene	San Joaquin	12	1	260	None			
Top Oil	500 - 2,500	20 - 50	Pliocene	San Joaquin	15 - 23	1,49	90 -	None			
Kinsey	2,000 - 3,600	15 - 175	Pliocene	Etchegoin	14 - 26	1,50	860	None			
Wilhelm	2,000 - 3,000	100	Pliocene	Etchegoin	14 - 26		.100	None			
Gusher	2,000 - 3,000	75	Pliocene	Etchegoin	14 - 26		40 - .580	None			
Calitroleum	1,500 - 4,500	80	Pliocene	Etchegoin	14 - 26		20 -	None			
Lakeview	2,600 -	20 - 200	late Miocene	Monterey	21	1	,670	None			
Sub-Lakeview	400 - 3,100	10 - 300	late Miocene	Monterey	22		440	111			3
Potter	200 - 2,500	60 - 500	late Miocene	Monterey	14	5 -	400	None			
Marvic	1,000	200	late Miocene	Monterey	13		40	None			2.6.7
Monarch	600 - 2,000	50 - 400	late Miocene	Monterey	13 - 17	50 - 1	,300	None			
Webster	1,500 - 1,800	50 - 250	late Miocene	Monterey	14	1	N.A.	None			
Moco	2,150	70 - 450	late Miocene	Monterey	15		980	III			
Obispo	3,600	50 - 1,500	late Miocene	Monterey	14 - 27		970	III			
Pacific	3,700	50 - 300	late Miocene	Monterey	16		600	III			
Metson	1,250	400	late Miocene	Monterey	8 - 12		790	None			
Leutholtz	3,200	40 - 400	late Miocene	Monterey	15 - 24		550	III			
Republic	1,300 - 4,900	150	late Miocene	Monterey	12 - 24		70 .	111			
PRODUCTION DATA	A (Jan. 1, 1973)						,				
	and the second se										

	1972 Production		1972 Proved	1972 Average number	Cumulative	production	Peak oil prod	Peak oil production		Total number of wells	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	proved acreage
34,579,424	5,810,674	66,810,031	24,370	5,549	1,157,831,025	500,583,802	34,579,424	1972	10,318	9,486	28,090
STIMULATION D	ATA (]an. 1, 197	3)									

Type of project	Date started	Cumulative Injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection	Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood Steam flood	1954 1963	20,838,718 15,398,177	15 47	Air injection for a fire flood	1960	N.A.	24
Cyclic-steam	1963	195,087,515	4,870	Gas injection for pressure maint-	1944	43,302,959	7

SPACING ACT: Does not apply except at extreme southeast end of field.

CURRENT CASING PROGRAM: Various; depending on zone and location.

METHOD OF WASTE DISPOSAL: Percolation and evaporation sumps; during 1972, 6,222,115 bbl. of waste water was injected into 7 disposal wells.

REMARKS: In a report by W.L. Watts titled "Sunset Oil Claims" in the Calif. State Mining Bureau Bull. No. 3 (1894) mention is made of steam injection into a well in Sec. 21, T. 11N., R. 23W., S.B.B. & M to reduce the viscosity of the heavy oil so it can be pumped to the surface. Later application and refinement of this method of reservoir stimulation was a significant contributing factor toward attaining the peak oil production in 1972.

BASE OF FRESH WATER: None



Mio

REFERENCES: Anderson, D.N., Monarch 10-10 Pool of Midway-Sunset Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 50,

CRENCES: Anderson, D.N., Monarch 10-10 Pool of Midway-Sunset Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 50, No. 1 (1964).
Arnold, Ralph and H.R. Johnson, McKittrick-Sunset Oil Region, Kern and San Luis Obispo Counties, Calif.: U.S. Geol. Survey Bull. 406 (1910).
Borkovich, G.J., Northernmost Portion of Midway-Sunset Oil Field: Calif. Div. of Oll and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 1 (1961).
Ingram, W.L., Olig Pool of Midway-Sunset Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 50, No. 1 (1964).
Land, P.E. and D.N. Anderson, Midway-Sunset Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 51, No. 2 (1965).
Pack, R.W., The Sunset-Midway Oil Field, Part 1, Geology and Oil Resources: U.S. Geol. Survey Prof. Paper 116, p. 64 (1920).
Zulberti, J.L., Exeter and 29-D Pools of Midway-Sunset Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 1 (1960).
Zulberti, J.L., Lakeview Pool of Midway-Sunset Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 1 (1961).
Zulberti, J.L., Republic Sands of Midway-Sunset Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 1 (1961).
Zulberti, J.L., Republic Sands of Midway-Sunset Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 2 (1957).
Zulberti, J.L., Santiago Area of Midway-Sunset Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 2 (1957).
Zulberti, J.L., Santiago Area of Midway-Sunset Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 2 (1957).
Zulberti, J.L., Thirty-five Anticline of Midway-Sunset Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 45, No. 1 (1959).</

MOFFAT RANCH GAS FIELD



LOCATION: 18 miles west of Madera

TYPE OF TRAP: Anticline

ELEVATION: 150

DISCOVERY DATA

					Ini	tial product	tion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Howard Nortonville Domengine	Trico Industries, Inc. "Howard" 1 Trico Industries, Inc. "Moffat" 1-7 Trico Industries, Inc. "Moffat" 1-6	Trico Oil and Gas Co. "Howard" 1 The Texas Co. "Moffat" 1-7 Trico Oil and Gas Co. "Moffat" 1-6	36 115 14E 7 125 15E 6 125 15E	MD MD MD	4,220 6,570 11,000	1,125 1,118 1,590	41/64 1/2 2	Aug 1953 Sep 1943 Oct 1954

Remarks: The "Howard" 1 well did not begin sustained production until Oct. 1954, at which time it produced at 1,820 Mcf/d: "Moffat" 1-7 began production during May 1946 at a rate of approximately 30 Mcf/day.

DEEPEST WELL DATA

			ate			Depth	At total of	lepth
Present operator and well name	Original operator and well name		rted	Sec. T. & R.	8 & M		Strata	Age
Kenyon C. Sills, Opr., Inc.	Union Oil Co. of Calif. "Union-Texas U.S. Royalty" 77-17	• Oct	1958	17 12S 15E	MD	6,716	Second Panoche sand	Late Cret

PRODUCING ZONES

the second s	Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Howard Nortonville Domengine	3,800 3,920 3,960	5 12 12	Eocene Eocene Eocene	Kreyenhagen Kreyenhagen Domengine	920 930 900	N.A. 1,550 N.A.	1,575 1,620 1,620	IV IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum proved
let gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
42,140	0	\$40	2	7,214,400	613,186	1956	26	15	590

SPACING ACT: Applies

BASE OF FRESH WATER: 500

CURRENT CASING PROGRAM: 9 5/8" cem 500; 5 1/2" cem 4,000.

METHOD OF WASTE DISPOSAL

REMARKS:

REFERENCES: Hill, F.L., Moffat Ranch Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 2 (1961).





LOCATION: 13 miles northeast of Bakersfield

TYPE OF TRAP: See areas

ELEVATION: 650 - 1,450

DISCOVERY DATA

ъ.					Initial daily production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B&M	Oil (bbl)	Gas (Mcf)	Date of completion	
Pyramid Hill and Upper Vedder	Shell Oil Co. "Vedder" 1	Shell Co. of California "Vedder" 1	9 275 28E	MD	300	N.A.	Jul 1926	
							l	

Remarks:

DEEPEST WELL DATA

		Date	1	1	Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Pacific Oil and Gas Dev. Corp. "City of San Francisco" 56-32	Same	Aug 1957	32 27S 28E	MD	3,759	Walker	Eocene

PRODUCING ZONES (See areas)

Average	Average net	Geo	logic	Oil gravity	Salinity of	Class BOPE
(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
				1		
	Average depth	Average Average net depth thickness	Average Average net Geo depth thickness	Average Average net Geologic depth thickness	Average Average net Geologic Oil gravity depth thickness Geologic (*API) or	Average Average net Geologic Oil gravity Salinity of depth thickness (*API) or zone water

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum	
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
1,830,017	728	84,316,129	3,630	532	164,558,017	1,977,245	8,427,304	1943	1,184	828	3,805

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

project started	- Water, bbl; Gas, Mcf; Steam, bbi (water equivalent)	number of wells used for injection
	start contact	and of allecton

SPACING ACT: See areas.

BASE OF FRESH WATER: See areas.

CURRENT CASING PROGRAM: See areas.

METHOD OF WASTE DISPOSAL: See areas.

REMARKS:

REFERENCES: Albright, N.B., A.G. Hluza, and J.C. Sullivan, Mount Poso Oil Field, Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 43, No. 2 (1957).

Kern County

LOCATION: See map sheet of Mount Poso Oil Field

TYPE OF TRAP: Faulted homocline with permeability variations

ELEVATION: 700 - 1,075

DISCOVERY DATA

						al daily duction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Upper Vedder	Thomas Oil Co. "Ring 18" 1	Dwight G. Vodder No. 1	18 27S 28E	MD	0	5,300	Dec 1943
	ж. П						

Remarks: Gas cap was of limited volume. After being shut in for one year the discovery well was recompleted producing oil.

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Pacific Oil & Gas Dev. Corp. "City of San Francisco" 56-32	Same	Aug 1957	32 27S 28E	MD	3,759	Walker	Eocene

PRODUCING ZONES

	Average depth	Average net thickness	(leologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Upper Vedder	2,575	15 - 50	early Miocene	Vedder	16	60	None

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prode	uction	Total num	ber of wells	Maximum	
Oil (bbl)	Net gas (Mcf)	Water (bbl)		producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
32,036	0	1,421,879	195	23	2,888,399	0	190,765	1957	92	47	220

STIMULATION DATA (Jan. 1, 1973)

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: 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone. METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps (to be phased out).

REMARKS: Vedder zone water contains 3 to 4 ppm boron.

MAIN AREA

TYPE OF TRAP: Faulted homocline ELEVATION 700 - 1,450

DISCOVERY DATA

					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oii (bbl)	Gas (Mcf)	Date of completion
Pyramid Hill and Upper Vedder	Shell Oil Co. "Vedder" 1	Shell Oil Co. of Calif. "Vedder" 1	9 27S 28E	MD	300	N.A.	Jul 1926
Lower Vedder ^A Third Vedder	Shell Oil Co. "Vedder" 6 Unknown	Same as present Unknown	9 275 28E 4 275 28E or 9		835 N.A.	N.A. N.A.	Jan 1933 Prior to 1957
Fourth Vedder ^B	Shell Oil Co. "Glide" 6	Same as present	15 27S 28E	MD	134	N.A.	Aug 1957

Remarks: The first separate well that produced from the Pyramid Hill zone was Shell Oil Co. "Security" 3, Sec. 9, T. 27S., R. 28E. Initial production was 4 barrels per day. A Commingled production from Upper Vedder and Lower Vedder. B Commingled production from Third Vedder and Fourth Vedder.

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Trico Industries, Inc. "USL" 6-2	Trico Oil and Gas Co. "USL" 6-2	Jul 1960	6 275 28E	MD	2,665	Vedder	early Mio

PRODUCING ZONES

	Average depth	Average net thickness	(Seologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Pyramid Hill	1,600	160	early Miocene	Pyramid Hill	17	N.A.	None
Upper Vedder	1,750	140	early Miocene	Vedder	16	80	None
Lower Vedder	1,900	80	early Miocene	Vedder	16	N.A.	None
Third Vedder	1,985	120	early Miocene	Vedder	16	75	None
Fourth Vedder	2,105	50	early Miocene	Vedder	16	65	None
					1		
				1	1 1		
					1		

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximum proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbi)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
1,590,436	728	75,595,054	2,225	374	146,734,300	1,977,245	7,982,576	1943	641	524	2,265

STIMULATION DATA (Jan. 1, 1973)

	Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Steam	flood	1963	9,351,042	11

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,000 - 1,500

CURRENT CASING PROGRAM: 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 and percolation sumps; injection into Vedder sand.

REMARKS: A cyclic-steam project was started in 1963 and discontinued after 116,623 bbls. of water in the form of steam was injected. A water flood project was started in 1952 and discontinued after 608,470 bbls. of water was injected.

GRANITE CANYON AREA

Kern County

LOCATION: See map sheet of Mount Poso Oil Field

TYPE OF TRAP: Faulted homocline; lithofacies variations

ELEVATION: 1,300

					Initia	al daily lection	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	6 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Upper Vedder	Road Oil Sales, Inc. "SP" 2	J.J. Chevalier "Southern Pacific" 2	3 275 28E	MD	50	N.A.	Nov 1936

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth	
Present operator and well name -	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Lyle A. Garner & Assoc. "S.P." 3-1	Same	May 1952	3 27S 28E	MD	2,226	Granite	Late Jur

PRODUCING ZONES

	Average	Average net thickness	(Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)			Formation	Gas (btu)	gr/gal	required
Upper Vedder	1,390	30	early Miocene	Vedder	15	10	None
-F							
	1			1	1 1	1	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production Peal		Peak oil produ	ection	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
3,808	0	20,675	80	10	823,450	0	65,780	1949	65	30	130

STIMULATION DATA (Jan. 1, 1973)

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: Basement

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

METHOD OF WASTE DISPOSAL: Evaporation sumps on outcrop of Round Mountain Silt.

REMARKS: A cyclic-steam project was started in 1967 and discontinued after 19,069 bbls. of water in the form of steam were injected. A pilot fire flood project, initiated in 1965, was terminated in 1965.

DORSEY AREA

TYPE OF TRAP: Faulted homocline

ELEVATION: 900 - 1,250

DISCOVERY DATA

						I daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbi)	Gas (Mcf)	Date of completion
lpper Vedder	Thomas Oil Co. "Dorsey" 2	R.S. Lytle "Dorsey" 2	26 27S 28E		570	N.A.	Sep 1928

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth	
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Emjayco "Glide" 15-1	Harry H. Magee, Opr. "Glide" 15-1	Oct 1956	15 27S 28E	MD	2,000	Vedder	early Mio

PRODUCING ZONES

	Average depth	Average net thickness	(Geologic	Oil gravity ("API) or	Salinity of zone water	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gall	required	
Upper Veddør	1,500	30	early Miocene	Vedder	16	5	None	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative p	Cumulative production		action	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
86,429	0	1,913,270	375	47	4,676,008	0	204,880	1958	142	76	410

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Does not apply

BASE OF FRESH WATER: Basement

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

METHOD OF WASTE DISPOSAL. Percolation and evaporation sumps on outcrop of Round Mountain Silt; injection wells.

REMARKS: Vedder zone water contains 1.75 ppm boron.
DOMINION AREA

Kern County

LOCATION: See map sheet of Mount Poso Oil Field

TYPE OF TRAP: Faulted homocline; lithofacies variations

ELEVATION: 1,100 - 1,350

DISCOVERY DATA

					Initia	al daily luction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Vedder	Robert B. Doe, "Dominion" 2	A. Bruce Frame "Dominion" 2	28 265 28E	MD	435	N.A.	Dec 1928

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	il depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Glen H. Mitchell "SP" 1	Same	May 1945	33 26S 28E	MD	2,512	Schist	Late Jur

PRODUCING ZONES

	Average depth	Average net thickness	0	ieologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Vedder	1,560	35	early Miocene	Veddor	15	10	None

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prodi	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
107,317	0	4,482,093	675	74	5,735,208	0	197,189	1933	195	128	690

.

STIMULATION DATA (Jan. 1, 1975)

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	177,242	12
	1		

SPACING ACT: Does not apply

BASE OF FRESH WATER: No saline waters present

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

METHOD OF WASTE DISPOSAL: Injection into the Vedder; evaporation and percolation sumps. REMARKS:

REFERENCES:

BAKER - GROVER AREA

LOCATION: See map sheet of Mount Poso Oil Field

TYPE OF TRAP: Faulted regional homocline

ELEVATION: 650 - 1,050

DISCOVERY DATA

7					prod	al daily luction Gas	Date of
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B&M	(bbl)	(Mcf)	completion
Upper Vedder	Emjayco "Baker" l	Baker-Grover Co. "Baker" 1	33 275 28E	MD	250	N.A.	Jul 1935

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	I depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
The White Hills Oil Co. No. 1	Ralph R. Whitehill No. 1	Apr 1961	34 275 28E	MD	2,483	Vedder	early Mio

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Upper Vedder	1,750	25	early Miocene	Vedder	15	190	None

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
9,991	0	883,158	80	4	3,700,652	0	276,899	1937	49	23	90

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 1,100

CURRENT CASING PROGRAM: 7" cem. above zone; 5 1/2" liner landed through zone. METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps (to be phased out). REMARKS:

REFERENCES:





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Kern County

LOCATION: 4 miles southeast of Bakersfield

TYPE OF TRAP: See areas

ELEVATION: 450

DISCOVERY DATA

						I daily action	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbi)	Gas (Mcf)	Date of completion
Santa Margarita	Chester F. Dolley "Wharton" 1	Hogan Petroleum Co. "Wharton" 1	32 30S 29E	MD	3,200	N.A.	May 1933
							1

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total d	epth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M	M (feet) Strata		Age
Union Oil Co. of Calif., Opr. "Stenderup" 55X-21	Union Oil Co. of Calif., Opr. "Union-Hancock Stenderup" 55X-21	Jul 1956	21 31S 29E	MD	12,514	Freeman-Jewett	early Mio

PRODUCING ZONES (See areas)

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

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Production 1972 1972 Proved Average number		Cumulative production		Peak oil production		Total number of wells		Maximum proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Dritled	Completed	acreage
714,021	565,013	2,410,708	2,660	188	78,563,063	82,369,452	9,371,651	1936	794	621	4,655

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

SPACING ACT: See areas.

BASE OF FRESH WATER: See areas.

CURRENT CASING PROGRAM: See areas.

METHOD OF WASTE DISPOSAL: See areas.

REMARKS: The Santa Margarita oil zone has also been referred to as Hogan or Wharton.

REFERENCES:

.

ARVIN AREA

TYPE OF TRAP: Sand buttressing against older high; lithofacies variations

ELEVATION: 450

DISCOVERY DATA

						i daily action	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbi)	Gas (Mcf)	Date of completion
Chanac Santa Margarita Schist	Frank Goldman "H.S. Jewett" 2 Frank Goldman "Arvin Waterflood Unit" G 1 Frank Goldman "George" 4	The Texas Co. "H.S. Jewett" 2 The Texas Co. "George" 1 The Texas Co. "George" 4	23 31S 29E 23 31S 29E 23 31S 29E 23 31S 29E	MD	42 142 35	N.A. 85 25	Jan 1953 Jul 1951 Mar 1952

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Frank Goldman "H.S. Jewett" 3	The Texas Co. "H.S. Jewett" 3	Oct 1953	23 31S 29E	MD	7,133	Basement (schist)	Late Jur (?)

PRODUCING ZONES

	Average net	G	eologic			Class BOPE
(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
5,500	300	e Plio - lt Mio	Chanac	26 - 33	560	III
6,100 - 6,500	100	late Miocene	Santa Margarita	15.04	IT STATES	III
5,700 - 7,100	100	Lt Jurassic (?)	Schist	29	N.A.	III
	5,500 6,100 - 6,500 5,700 -	depth (feet) thickness (feet) 5,500 300 6,100 - 100 6,500 5,700 -	depth thickness Age (feet) (feet) Age 5,500 300 e Plio - lt Mio 100 late Miocene 6,500 100 Lt Jurassic (?)	depth (feet) thickness (feet) Age Formation 5,500 300 e Plio - lt Chanac 6,100 - 100 late Miocene Santa Margarita 6,500 5,700 - 100 Lt Jurassic (?)	depth thickness Age Formation (*AP1) or (feet) (feet) Age Formation Gas (btu) 5,500 300 e Plio - lt Chanac 26 - 33 6,100 - 100 late Miocene Santa Margarita 35 6,500 100 Lt Jurassic (?) Schist 29	depth (feet) thickness (feet) Geologic Age Formation CAPD or Gas (btu) zone water gr/gat 5,500 300 e Plio - 1t Chanac 26 - 33 560 6,100 - 100 late Miocene Santa Margarita 35 N.A. 6,500 5,700 - 100 Lt Jurassic (?) Schist 29 N.A.

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Production 1972 1972 Cumulative production				roduction	Peak oil prod	uction	Total num	Maximum proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	OII (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
51,073	41,766	114,667	360	13	3,771,245	7,369,954	722,491	1955	74	62	675

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 2,800

CURRENT CASING PROGRAM: 10 3/4" cem. 700; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone. METHOD OF WASTE DISPOSAL: 5,831 bb1. of waste water was injected during 1972 into one disposal well; evaporation and percolation sumps. REMARKS: A water flood of the Chanac and Santa Margarita zones was started in 1959 and terminated in 1968; cumulative injection totaled 1,600,586 bb1s.

REFERENCES: Matthews, J.F. Jr., Arvin and Vaccaro Areas of Mountain View Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 1 (1961).

Kern County

Kern County

ARVIN, WEST, AREA

LOCATION: See map sheet of Mountain View Oil Field

TYPE OF TRAP: Faulted homocline; lithofacies variations; sand truncation and overlap.

ELEVATION: 450

DISCOVERY DATA

Zone					Initial daily production		
	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Chanac - Cattani	Standard Oil Co. of Calif, "Jewett Community Lease No. 2" 1	Standard Oil Co. of Calif. "Jewett Community"	16 31S 29E	MD	2,988	1,390	Feb 1939
Cattani	Jim Riley "Houchin" 1	General Petroleum Corp. of Calif. "Houchin" 1	27 31S 29E	MD	123	N.A.	Dec 1937
Houchin	Union Oil Co. of Calif., Opr. "Houchin- Giumarra" 77-27	Union Oil Co. of Calif., Opr. "Union-Hancock Houchin-Giumarra" 77-27	27 31S 29E	MD	85	50	Apr 1957
Stenderup	Union Oil Co. of Calif., Opr. "Stenderup" 55X-21	Union Oil Co. of Calif., Opr. "Union-Hancock Stenderup" 55X-21	21 31S 29E	MD	1,170	800	Oct 1956
Frick	Kenneth Sperry, Opr. "Norris-Frick" 41-16	Norris Oil Co. "Norris Frick" 41-16	16 31S 29E	MD	65	N.A.	Арт 1959
Brite	Union Oil Co. of Calif., Opr. "Shaffer Brite" 77-16	Union Oil Co. of Calif., Opr. "Union-Hancock Shaffer-Brite" 77-16	16 31S 29E		420	265	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age	
Union Oil Co. of Calif., Opr. "Stenderup" 55X-21	Union Oil Co. of Calif., Opr. "Union-Hancock Stenderup" 55X-21	Jul 1956	21 31S 29E	MD	12,514	Freeman-Jewett	early Mio	

PRODUCING ZONES

depth	Average net thickness	G	eologic	Oil gravity (*API) or	Salinity of	Class BOPE
(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
6,100	60	early Pliocene	Chanac	31	100	III
7,100	130	early Pliocene	Chanac	30	N.A.	III
8,100	150	late Miocene	Santa Margarita	35	N.A.	IV
9,600	200	early Miocene	Fruitvale	28	N.A.	IV
8,900	120	early Miocene	Olcese	27	N.A.	IV
8,300	250	early Miocene	Freeman-Jewett	35	N.A.	IV
	(feet) 6,100 7,100 8,100 9,600 8,900	(feet) (feet) 6,100 60 7,100 130 8,100 150 9,600 200 8,900 120	(feet) Age 6,100 60 early Pliocene 7,100 130 early Pliocene 8,100 150 late Miocene 9,600 200 early Miocene 8,900 120 early Miocene	(feet) Age Formation 6,100 60 early Pliocene Chanac 7,100 130 early Pliocene Chanac 8,100 150 late Miocene Santa Margarita 9,600 200 early Miocene Fruitvale 8,900 120 early Miocene Olcese	(feet) Age Formation Gas (btu) 6,100 60 early Pliocene Chanac 31 7,100 130 early Pliocene Chanac 30 8,100 150 late Miocene Santa Margarita 35 9,600 200 early Miocene Fruitvale 28 8,900 120 early Miocene Olcese 27	(feet) (feet) Age Formation Gas (btu) gr/gat 6,100 60 early Pliocene Chanac 51 100 7,100 130 early Pliocene Chanac 30 N.A. 8,100 150 late Miocene Santa Margarita 35 N.A. 9,600 200 early Miocene Fruitvale 28 N.A. 8,900 120 early Miocene Olcese 27 N.A.

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximum proved	
Oil (bb1)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
123,171	122,753	107,281	530	32	9,414,813	13,958,840	769,822	1947	193	157	900

STIMULATION DATA (Jan. 1, 1973)

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. 600 - 1,000; 7" or 5 1/2" combination string landed through zone and cem. through ports above zone and across base of fresh-water sands. METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps.

REMARKS: A water flood of the Cattani zone was started in 1957 and terminated in 1962; cumulative injection totals 449,348 bbls.

REFERENCES: Matthews, J.F. Jr., West Arvin Area of Mountain View Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 1 (1962).

DIGIORGIO AREA (Abandoned)

Kern County

LOCATION: See map sheet of Mountain View 0il Field

TYPE OF TRAP: Angular unconformity; lithofacies variations.

ELEVATION: 450

					Initial daily production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion	
Santa Margarita Schist	Reserve Oil & Gas Co. "Earl Fruit Co." 1 Terminal Oil Co. "DiGiorgio" 3-1	Mohawk Petroleum Co. "Earl Fruit Co." 1 Same as present	10 31S 29E 3 31S 29E		182 26	650 N.A.	Aug 1936 Nov 1955	

Remarks:

DEEPEST WELL DATA		Date		-	Durth	At tota	l depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M	Depth (feet)	Strata	Age
The Superior Oil Co. "Cal Pride Farms" 1	Same	Apr 1956	15 31S 29E	MD	6,694	Basement (schist)	Late Jur (?)

PRODUCING ZONES

	Average depth	Average net	Average net Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Santa Margarita Schist	6,000 5,800	50 100	late Miocene Lt Jurassic (?)	Santa Margarita Schist	33 26	N.A. N.A.	IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972	1972 Average number	Cumulative p	Cumulative production		uction	Total number of wells		Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	Proved acreage	producing wells	Oil (bbl)	Gas (Mcf)	* Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	115,769	43,062	15,605	1948	20	9	70

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
0.0			

SPACING ACT: Applies

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

CURRENT CASING PROGRAM: 10 3/4" cem. 600; 7" combination string landed through zone and cem. through ports above zone and across base of fresh-water sands. METHOD OF WASTE DISPOSAL:

REMARKS: The last production from the area was in 1959.

REFERENCES: Miller, R.H., and C.V. Bloom, Mountain View Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 22, No. 4 (1937).

LOCATION: See map sheet of Mountain View Oil Field

TYPE OF TRAP: Faulted homocline; angular unconformity; lithofacies variations.

ELEVATION: 450

DISCOVERY DATA

					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Nichols Hood Transition Wharton Nozu Olcese Schist	Operator name and well number unknown Same as above Same as above Chester F. Dolley "Wharton" 1 Pyramid Oil Co. "Atlantic Wible" 3 BP Exploration U.S.A. Inc. "Winters" 46 Getty Oil Co. "Pacific Western P.H. Greer" 53	Operator name and well number unknown Same as above Same as above Hogan Petroleum Co. "Wharton" 1 MJM & M Oil Co. "Atlantic Wible" 3 Kern Oil Calif. Limited "Winters" 46 Pacific Western Oil Co. "Pacific Western P.H. Greer" 53	N.A. N.A. N.A. 32 305 29E 23 305 28E 13 305 28E 9 315 29E	MD MD	N.A. N.A. 3,200 385 49 244	N.A. N.A.	N.A. N.A. May 1933 Apr 1953 May 1958 Dec 1947

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Getty Oil Co. "Frick-Hogan" 23-9	Pacific Western Oil Corp. "Frick-Hogan" 23-9	Sep 1955	9 315 29E	MD	10,619	Walker	Olig - Eo

PRODUCING ZONES

Average	Average net thickness (feet)			Oil gravity	Salinity of	Class BOPE
(feet)		Age	Formation	Gas (btu)	gr/gal	required
4,900	300	e Plio-lt Mio	Chanac	17 - 27	30	III
5,200	100	e Plio-lt Mio	Chanac	25	30	III
5,400	200	e Plio-lt Mio	Transition	25	30	III
5,500	65	late Miocene	Santa Margarita	23	620	III
7,300	40	m Miocene	Round Mountain	35	1,150	IV
7,000	60	m Miocene	Olcese	32	N.A.	IV
7,275	75	Lt Jurassic (?)	Schist	45	N.A.	IV
	depth (feet) 4,900 5,200 5,400 5,500 7,300 7,000	depth (feet) thickness (feet) 4,900 300 5,200 100 5,400 200 5,500 65 7,300 40 7,000 60	depth thickness Age (feet) Age 4,900 300 e Plio-lt Mio 5,200 100 e Plio-lt Mio 5,400 200 e Plio-lt Mio 5,500 65 late Miocene 7,300 40 m Miocene 7,000 60 m Miocene	depth (feet) thickness (feet) Age Formation 4,900 300 e Plio-lt Mio Chanac 5,200 100 e Plio-lt Mio Chanac 5,400 200 e Plio-lt Mio Transition 5,500 65 late Miocene Santa Margarita 7,300 40 m Miocene Round Mountain 7,000 60 m Miocene Olcese	depth (feet) thickness (feet) Age 0 Formation (*API) or Gas (btu) 4,900 300 e Plio-1t Mio Chanac 17 - 27 5,200 100 e Plio-1t Mio Chanac 25 5,400 200 e Plio-1t Mio Transition 25 5,500 65 late Miocene Santa Margarita 23 7,500 40 m Miocene Round Mountain 35 7,000 60 m Miocene Olcese 32	depth (feet) thickness (feet) Age Formation (*API) or Gas (btu) zone water gr/gal 4,900 300 e Plio-1t Mio Chanac 17 - 27 30 5,200 100 e Plio-1t Mio Chanac 25 30 5,400 200 e Plio-1t Mio Transition 25 30 5,500 65 late Micenee Santa Margarita 23 620 7,500 40 m Miocene Round Mountain 35 1,150 7,000 60 m Miocene Olcese 32 N.A.

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
526,725	396,885	2,181,652	1,710	139	64,467,521	60,429,355	9,364,753	1936	483	380	2,880

STIMULATION DATA (Jan. 1, 1973)

	Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mci; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water	flood	1965	1,776,268	4

SPACING ACT: Applies

BASE OF FRESH WATER: 1,150 - 4,800

CURRENT CASING PROGRAM: 10 3/4" cem. 500. - 800; 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; also evaporation and percolation sumps. REMARKS: The Wharton zone is also locally known as the Hogan.

REFERENCES: Miller, R.H., and C.V. Bloom, Mountain View Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 22, No. 4 (1937).
Park, W.H., Main Area of Mountain View Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 52, No. 1 (1966).

VACCARO AREA

Kern County

LOCATION: See map sheet of Mountain View Oil Field

TYPE OF TRAP: Faulted homocline; lithofacies variations; sand buttressing against older high

ELEVATION: 450

DISCOVERY DATA

				10		uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & F	. B&N	Oil (bbl)	Gas (Mcf)	Date of completion
Chanac Cattani Houchin Derby	Texaco Inc. "Capital-Vaccaro" 1 Kenneth M. Byrum & Dwight E. Byrum "Arvin" 1 Ancora-Verde Corp. "Union-Signal-Ancora- Tipton-Stockton" 42-35 Ancora-Verde Corp. "Kovacevich" 63-35	The Texas Co. "Capital-Vaccaro" 1 General Petroleum Corp. of Calif. "Arvin" 1 Verde Enterprises, Opr. for Ancora Corp. "Union Signal-Ancora-Tipton-Stockton" 42-35 Mariposa Co. "Kovacevich" 63-35	36 318 29 26 315 29 35 318 29 35 318 29	E MD E MD	133 44 133 100		Sep 1955 May 1937 Oct 1959 Oct 1956

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Ferguson & Bosworth "Union-Signal Tipton- Stockton" 57-34	Same	Apr 1959	34 31S 29E	MD	11,711	Basement (schist)	Lt Jur (?)

PRODUCING ZONES

depth			Geologic		zone water	Class BOPE	
(feet)	thickness (feet)	Age	Formation	(*API) or Gas (btu)	gr/gal	required	
7,400	150	e Plio-lt Mio	Chanac	36	N.A.	III	
7,100 - 7,400	400	e Plio-lt Mio	Chanac	34	N.A.	111	
8,000 - 9,100	200	late Miocene	Santa Margarita	32	N.A.	IV	
8,400	100	Miocene	Fruitvale	35	N.A.	IV	
8,400	100	Miocene	Fruitvale	35	N.A.	IV	
1							
	7,100 - 7,400 8,000 - 9,100	7,100 - 400 7,400 8,000 - 200 - 9,100	7,100 - 400 e Plio-lt Mio 7,400 8,000 - 200 late Miocene 9,100	7,100 - 400 e Plio-lt Mio Chanac 7,400 - 200 late Miocene Santa Margarita	7,100 - 400 e Plio-1t Mio Chanac 34 7,400 7 <t< td=""><td>7,100 - 400 e Plio-lt Mio Chanac 34 N.A. 7,400 7 7 8 7</td></t<>	7,100 - 400 e Plio-lt Mio Chanac 34 N.A. 7,400 7 7 8 7	

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
13,052	3,609	7,108	60	4	793,715	568,241	65,177	1949	24	13	130

STIMULATION DATA (Jan. 1, 1973)

Date started	- Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	number of wells used for injection
		Hater, bor, caus, mer,

SPACING ACT: Applies

BASE OF FRESH WATER 2,900

CURRENT CASING PROGRAM: 10 3/4" cem. 700 - 900; 5 1/2" combination string landed through zone and cem. through ports above zone and across base of fresh-water sands. METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps.

REMARKS

REFERENCES: Matthews, J.F. Jr., Arvin and Vaccaro Areas of Mountain View Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 1 (1961).

PALOMA OIL FIELD



LOCATION: 17 miles southwest of Bakersfield

TYPE OF TRAP: See areas

ELEVATION: 300

DISCOVERY DATA

						al daily luction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Pliocene Gas Sands	Marathon Oil Co. "KCL-N" 1	The Ohio Oil Co. "Kern County Land Co." 1	31 31S 26E	MD	0	9,461	Jul 1934

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Gulf Oil Corp., Opr. "KCL-A" 72-4	The Ohio Oil Co. "KCL-A" 72-4	Oct 1951	4 32S 26E	MD	21,482	Santos	early Mio

PRODUCING ZONES (See areas)

	Average depth	Average net thickness	Ge	eologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE	
Zone (feet)		(feet)			Gas (btu)	gr/gal	required	
				s:				
		L L			1			

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Main Area)

	1972 Production		1972 Proved	1972 Average number	Cumulative	production	Peak oil produ	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
146,224	1,309,877	124,494	3,970	72	57,932,328	417,910,006	6,084,949	1949	210	176	5,760

STIMULATION DATA (Jan. 1, 1973)

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: Formerly known as Buena Vista Lake Gas Field.

REFERENCES: Kaplow, E.J., Gas Fields of Southern San Joaquin Valley: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 24, No. 1 (1938). Peirce, G.G., Paloma Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 35, No. 1 (1949).

LOCATION: See index map of Paloma Oil Field

TYPE OF TRAP: Anticline

ELEVATION: 300

DISCOVERY DATA

						al daily luction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf) ·	Date of completion
2nd Mya (Gas) U. Scalez (Gas) 4th Mya (Gas) 5th Mya (I) (Gas) 5th Mya (J) (Gas) 5th Mya (Gas) R-S Sand (Gas) Sub-Scalez (Gas)	Marathon Oil Co. "KCL-N" 1 *	The Ohio Oil Co. "Kern County Land Co. " 1	31 315 26E	MD		9,461	Jul 1934
Mulinia (Gas Paloma (Stevens)	Gulf Oil Corp. "Paloma Unit-3" 54	Western Gulf Oil Co. "KCL-A" 54-3	3 32S 26E	MD	984	10,140	Aug 1939

Remarks: * Discovery well may not have penetrated all zones.

DEEPEST WELL DATA

	*)	Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Gulf Oil Corp., Opr. "KCL-A" 72-4	The Ohio Oil Co. "KCL-A" 72-4	Oct 1951	4 32S 26E	MD	21,482	Santos	early Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required	
2nd Mya (Gas)	4,180	12	Pliocene -	San Joaquin	990	N.A.	III	
U. Scalez (Gas)	4,580	20	Pliocene	San Joaquin	990	470	III	
4th Mya (Gas)	5,180	25	Pliocene	San Joaquin	980	N.A.	III	
5th Mya (I) (Gas)	5,200	5	Pliocene	San Joaquin	990	1,220	III	
5th Mya (J) (Gas)	5,210	15	Pliocene	San Joaqu'in	990	1,220	III	
5th Mya (Gas)	5,350	10	Pliocene	San Joaquin	990	1,220	III	
R-S Sand (Gas)	5,410	5	Pliocene	San Joaquin	1,015	1,220	III	
Sub-Scalez (Gas)	5,440	10	Pliocene	San Joaquin	1,015	N.A.	III	
Mulinia (Gas)	5,520	20	Pliocene	Etchegoin	1,015	N.A.	III	
Paloma (Stevens)	11,800	600	late Miocene	Monterey	35 - 55	1,100	IV	

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Remarks)

	1972 Production		1972 Proved	1972 Average number	Cumulative ;	production	Peak oil prodi	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
133,870	1,243,943	124,058	3,790	69	56,921,076	408,618,653	5,131,451	1949	202	169	5,380

STIMULATION DATA (Jan. 1, 1973)

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

METHOD OF WASTE DISPOSAL: Injection wells.

REMARKS: 1972 dry gas production, 165,524 Mcf from 3 wells; cumulative dry gas production 13,815,180 Mcf. Proved acreage is currently 120 and maximum is 390 acres. During the period from 1941 to 1966 a total of 374,599,000 Mcf of gas was injected into a maximum of 5 wells for pressure maintenance.

REFERENCES: Kaplow, E.J., Gas Fields of Southern San Joaquin Valley: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 24, No. 1 (1938). Peirce, G.G., Paloma Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 35, No. 1 (1949).

PALOMA OIL FIELD Kern County

SYMONS AREA

LOCATION: See Paloma index sheet

TYPE OF TRAP: Permeability variations on an anticlinal nose

ELEVATION: 300

DISCOVERY DATA

						daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Symons (Stevens) Paloma (Stevens)	Gulf Oil Corp. "Symons Dev. Co." 12-7	Western Gulf Oil Co. "Symons Dev. Co." 12-7	7 32S 27E	MD	37	303	Feb 1942

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total d	epth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Gulf Oil Corp. "L.A. Club" 67-6	Western Gulf Oil Co. "L.A. Club" 67-6	Jan 1945	6 32S 27E	MD	12,792	Antelope shale	late Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gai	required
Symons (Stevens) Paloma (Stevens)	11,400 11,700	100 35	late Miocene late Miocene	Monterey Monterey	29 - 60 29 - 60	N.A. 440	IV IV

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prode	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbi)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
12,354	65,934	436	180	3	1,011,252	9,291,353	107,999	1947	8	7	380

STIMULATION DATA (Jan. 1, 1973)

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

METHOD OF WASTE DISPOSAL: Waste water is hauled by truck to disposal well in Main Area.

REM'ARKS:

REFERENCES: Peirce, G.G., Paloma Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 35, No. 1 (1949).



LOCATION: 15 miles southeast of Taft TYPE OF TRAP: Faulted anticlinal nose ELEVATION: 1,200

DISCOVERY DATA

						al daily luction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Pioneer	Standard Oil Co. of Calif. "KCL 44" 34	Same as present	32 11N 22W	SB	281	226	Jul 1959

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot.	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Same as discovery well	Same	Mar 1959	32 11N 22W	SB	10,017	Temblor	early Mio

PRODUCING ZONES

	Average depth	Average net thickness	G	ieologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Pioneer	3,500	1,000	early Miocene	Temblor	40	2,090	111

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
6,207	5,677	29,028	40	2	143,697	225,941	24,382	1960	10	6	100

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 800

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: After January 1, 1973, unlined sumps are not permitted. REMARKS:

REFERENCES: Barnes, J.A., Pioneer Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 2 (1960).



LOCATION: 6 miles east of Coalinga

TYPE OF TRAP: Permeability barrier lying on the axis of the southeasterly plunging Coalinga anticline.

ELEVATION: 550

DISCOVERY DATA

					Initia prod	daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Gatchell	Standard Oil Co. of Calif. "P.V.F." 82-29F	Same	29 20S 16E	MD	812	502	Feb 1943
	5						
		ίλ.					

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Union Oil Co. of Calif., Opr. "Gatchell" 68-28	Robert S. Lytle, Opr. No. 68	Feb 1942	28 205 16E	MD	11,586	Moreno	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Gatchell	9,144	120	Eocene	Lodo	26 - 32	377	IV

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
8,764	5,644	16,736	100	2	13,168,307	12,056,291	1,500,250	1947	37	28	500

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
	12	1 1	

SPACING ACT: Applies

BASE OF FRESH WATER: 2,300

CURRENT CASING PROGRAM: 11 3/4" cem 600; 7" cem 9,144; 5 1/2" liner landed through oil zone.

METHOD OF WASTE DISPOSAL: Water is disposed of by evaporation and seepage from unlined sumps.

REMARKS:

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REFERENCES: Loken, K.P., Pleasant Valley Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 41, No. 1 (1955).

PLEITO OIL FIELD Index Map



. PLEITO OIL FIELD Kern County

LOCATION: 27 miles southeast of Taft TYPE OF TRAP: See areas ELEVATION: 2,000

DISCOVERY DATA

					prod	l daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Santa Margarita	Jim Riley, Opr. "Ten West" 1	Humble Oil & Rfg. Co. "Kern County Land Co. B (34-35)" 1	35 11N 21W	SB	55	34	Aug 1951

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Shell Oil Co. "KCL" 48-25	Same	May 1957	25 11N 21W	SB	15,177	Chanac -	Pliocene

PRODUCING ZONES (See areas)

	Average	Average net thickness	Geo	logic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
	1						
			1		1		

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
74,175	17,199	54,358	220	7	2,876,263	1,715,391	248,218	1960	26	21	220

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:

REFERENCES: See areas.

PLEITO OIL FIELD Creek Area



CALIFORNIA DIVISION OF OIL AND GAS CREEK AREA

LOCATION: See index map of Pleito 0il Field

TYPE OF TRAP: Faulted anticline

ELEVATION: 2,000

DISCOVERY DATA

					Initia prod	dally uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Santa Margarita	Jim Riley, Opr. "Ten West" 1	Humble Oil & Rfg. Co. "Kern County Land Co. B (34-35)" 1	35 11N 21W	SB	55	34	Aug 1951
Remarks:		l.		l.			

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Jim Riley, Opr. "Ten West" 16	Humble Oil & Rfg. Co. "Kern County Land Co. B 57-35" 16	Feb 1953	35 11N 21W	SB	14,935	Chanac	Pliocene

PRODUCING ZONES

provide and the set	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Santa Margarita	4,300	200	late Miocene	Santa Margarita	13 - 20	N.A.	111

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrets	Year	Drilled	Completed	acreage
5,988	0	572	170	3	1,401,102	1,137,319	159,073	1953	18	16	170

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
22			
	1	1	

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 11 3/4" cem. 350; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: Formerly known as Pleito Creek Oil Field. A water flood was initiated in 1954 and terminated after 298,896 bbls. of water was injected.

REFERENCES: Crowder, R.E., Pleito Creek Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 40, No. 2 (1954).



PLEITO OIL FIELD Ranch Area

LOCATION: See index map of Pleito Oil Field TYPE OF TRAP: Sand truncated by thrust fault

ELEVATION: 2,000

DISCOVERY DATA

						al daily action	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Chanac	Shell Oil Co. "KCL" 48-25	Same as present	25 11N 21W	SB	105	N.A.	Sep 1957
						l	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	il depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Same as discovery well	Same	May 1957	25 11N 21W	SB	15,177	Chanac	Pliocene

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Fermation	Gas (btu)	gr/gal	required
Chanac	8,900	300	Pliocene	Chanac	23	520	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prodi	action	Total num	ber of wells	Maximum proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
68,187	17,199	53,786	50	4	1,475,161	578,072	157,985	1960	8	5	50

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 10 3/4" cem. 850; 5 1/2" combination string cem. through ports above zone.

METHOD OF WASTE DISPOSAL. Percolation and evaporation sumps.

REMARKS:

REFERENCES:

POSO CREEK Index Map



LOCATION: 11 miles northwest of Bakersfield TYPE OF TRAP: See areas ELEVATION: 550 - 1,000

DISCOVERY DATA

					Initia	al daily uction	-
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Chanac	Standard Oil Co. of Calif. No. 2	Standard Oil Co. No. 2	5 28S 27E	MD	90	N.A.	Dec 1920

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Standard Oil Co. of Calif. No. 34	Same	Feb 1945	5 28S 27E	MD	7,187	Basement	Jurassic

PRODUCING ZONES (See areas)

	Average depth	Average net thickness	Ge	ologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
						-	
			1		1		

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Production 1972 1972 Proved Average number			Cumulative production		Peak oil prod	uction	on Total number of wells		Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	Proved acreage		Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
1,671,754	155,069	30,670,538	3,670	498	55,471,568	4,548,370	2,891,023	1964	925	720	3,780

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

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

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.

POSO CREEK OIL FIELD M^CVan Area



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LOCATION: See index map of Poso Creek Oil Field

TYPE OF TRAP: Faulted homocline; lithofacies change

ELEVATION: 750 - 1,000

DISCOVERY	DATA
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						daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Basal Etchegoin Vedder	Consolidated Resources Inc. "Trico" 2 Miller and York, Trustees "Fitzhugh" (USL) C-8	Vedder Oil Corp., Ltd. "McVan" 2 General Drilling Co. "Fitzhugh" (USL) C-8	14 275 27E 14 27S 27E		26 155	0	Mar 1932 Nov 1949

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
American Pacific International, Inc. "Claflin" 2	Bargol Oil Co. "Claflin" 2	Mar 1938	10 27S 27E	MD	3,840	Vedder	early Mio

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age			gr/gai	required
Basal Etchegoin Vedder	1,150 3,160	40 30	Pliocene early Miocene	Etchegoin Vedder	13 17	5 N.A.	None None

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative p	Cumulative production		uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbi)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
130,628	0	853,793	270	48	2,534,959	0	301,046	1968	151	70	285

STIMULATION DATA (Jan. 1, 1973)

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	1,206,374	47

SPACING ACT: Applies

BASE OF FRESH WATER: 1,900

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

METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps.

REMARKS: The only well completed in the Vedder zone was abandoned in 1956.

REFERENCES: Matthews, J.F., McVan Area of Poso Creek Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 43, No. 1 (1957).

POSO CREEK OIL FIELD Enas & Premier Areas







ENAS AREA

Kern County

LOCATION: See index map of Poso Creek Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 700

DISCOVERY DATA

						daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Basal Etchegoin Chanac	Little and Gillstrap "Keating" 1 Tenneco Oil Co. "Agey" 1	Same as present Agey Petroleum Co. "Agey" 1	20 27S 27E 28 27S 27E		75 25	0	Nov 1938 Dec 1929

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
George F. Getty, Inc. "Marland" 1	Same	Mar 1926	20 27S 27E	MD	4,434	Olcese	early Mio

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Basal Etchegoin Chanac	1,800 1,900	90 150	late Miocene late Miocene	Etchegoin Chanac	12 13	25 - 60 25 - 60	None None

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil prod	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbi)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
16,468	0	389,897	130	13	912,473	0	52,834	1965	59	29	190

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 2,200

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

METHOD OF WASTE DISPOSAL: Waste water is piped to Kern River Oil Field and utilized in steam-flooding operations.

REMARKS:

REFERENCES: Weddle, J.R., Poso Creek Oil Field, Premier and Enas Areas: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 45, No. 2 (1959).

PREMIER AREA

LOCATION: See index map of Poso Creek Oil Field

TYPE OF TRAP: Faulted homocline and permeability variations

ELEVATION: 550 - 800

DISCOVERY DATA

					Initial daily production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion	
Macoma Basal Etchegoin Chanac Kelly 2	Tenneco Oil Co. "Mabry" 5 Tesoro Petroleum Corp. "Conoco" 33 Standard Oil Co. of Calif. No. 2 Bender Oil Operations "Kelly" 2	Golden Bear Oil Co. "Mabry" 5 Independent Exploration Co. "Conoco" 33 Standard Oil Co. No. 2 Same as present	4 28S 27E 33 27S 27E 5 28S 27E 20 28S 27E	MD MD	0 125 90 130	960 0 0	Nov 1959 Jun 1944 Dec 1920 Jun 1946	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	5 & M		Strata	Age
Standard Oil Co. of Calif. No. 34	Same	Feb 1945	5 28S 27E	MD	7,187	Basement	Late Jur

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of zone water	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	(*API) or Gas (btu)	gr/gal	required	
Macoma	2,350	7	Pliocene	Etchegoin	N.A.	20	None	
Basal Etchegoin Chanac	2,400 2,500	100 250	Pliocene late Miocene	Etchegoin Chanac	11 - 13 11 - 13	20 25	None None	
Kelly 2	3,100	40	late Miocene	Santa Margarita	15	30	None	
			35					
	1 1							
	1 1							

PRODUCTION DATA (Ian. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	Cumulative production		Peak oil production Total number of wells		Total number of wells		
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	proved acreage
1,524,658	155,069	29,426,848	3,270	437	52,024,136	4,548,370	2,810,249	1964	715	621	3,305

STIMULATION DATA (Jan. 1, 1973)

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	3,238,262	193

SPACING ACT: Does not apply

BASE OF FRESH WATER: 1,600 - 2,000

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

NETHOD OF WASTE DISPOSAL: Evaporation and percolation sumps; large scale subsurface injection projects commenced in latter part of 1972.

REMARKS: Produced water contains 0.8 to 3.0 ppm boron. A steam flood project was initiated in the Etchegoin zone in 1970 and terminated after 336,396 bbls. of water (in the form of steam) was injected.

REFERENCES: Weddle, J.R., Poso Creek Oil Field, Premier and Enas Area: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 45, No. 2 (1959).

POSO CREEK OIL FIELD

Kern County



LOCATION: 28 miles southeast of Coalinga

TYPE OF TRAP: See areas

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ELEVATION: 600 - 900

DISCOVERY DATA

						daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Kr	Pacific Oil and Gas Development Corp. "West Slope" l	Tide Water Associated Oil Co. "West Slope" 1	20 24S 18E	MD	35	0	May 1940

Remarks:

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DEEPEST WELL DATA

			Date			Depth	At tota	al depth
10	Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Ferguson &	Bosworth "Meakin" 45	Same	Jun 1957	33 24S 18E	MD	5,940	Moreno	Late Cret

PRODUCING ZONES (See areas)

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

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included-see West Area-Gas)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production Total number (Total number of well		Maximun
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
114,009	206,230	282,326	490	74	4,691,083	5,895,092	239,486	1958	181	106	585

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
7.7			
1			

SPACING ACT: Applies

BASE OF FRESH WATER: See areas CURRENT CASING PROGRAM: See areas METHOD OF WASTE DISPOSAL: See areas REMARKS:

REFERENCES: See areas

PYRAMID HILLS OIL FIELD Dagany Area



Kings County

LOCATION: See index map of Pyramid Hills Oil Field

TYPE OF TRAP: Truncation of Eccene sands bounded by unconformity.

ELEVATION: 650

DAGANY AREA

DISCOVERY DATA

						daily uction	10280/1807
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	OII (bbl)	Gas (Mcf)	Date of completion
Kr Eocene (Canoas)	Mobil Oil Corp. "Dagany" 1 Mobil Oil Corp. "Norris-Orchard" 41B-33	Caminol Co. "Dagany" 1 Franco Western Oil Co. "Norris-Orchard" 418-33	33 245 18E 33 245 18E		75 80	N.A. N.A.	Feb 1954 Feb 1957

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Ferguson & Bosworth "Meakin" 45	Same	Jun 1957	33 245 18E	MD	5,940	Moreno	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required
Kr Eocene (Canoas)	650 2,750	125 40	Eocene Eocene	Kreyenhagen Kreyenhagen	16 42 - 47	290 N.A.	None - III

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil production		Total num	ber of wells	Maximum	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage	
20,851	Ö	44,744	100	14	1,028,167	24,618	103,436	1955	43	23	120	

STIMULATION DATA (Jan. 1, 1973)

project	started	Steam, bbl (water equivalent)	number of wells used for injection
**			

SPACING ACT: Applies

BASE OF FRESH WATER: 0 - 300

CURRENT CASING PROGRAM: Kr completions: 7" cem 600 - 800; 5 1/2" liner landed through zone. Eocene completions: 9 5/8" cem 400; 5 1/2" cem through zone. METHOD OF WASTE DISPOSAL. Water is allowed to percolate into sediments (McLure shale - U Miocene) containing saline waters.

REMARKS: Between 1965 and 1967, 165,885 barrels of water was injected into 19 wells for steam-cyclic stimulation of the Kr pool. Between 1963 and 1967 a combustion project was active in the Kr pool.

REFERENCES: Curtin, George, Pyramid Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 41, No. 2 (1955).
PYRAMID HILLS OIL FIELD Norris Area



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LOCATION: See index map of Pyramid Hills Oil Field

TYPE OF TRAP: Truncation bounded by unconformity in Kr and Temblor pools; faulted anticline in Eccene pools.

ELEVATION: 675

DISCOVERY DATA

					Initial daily production			
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion	
Miocene Kr	Mobil Oil Corp. "Norris-Drilexco-Hand" 115-28 Mobil Oil Corp. "Norris-Drilexco-Bayliss" 1	Norris Oil Co. 115-28 Franco Western Oil Co. "Norris-Drilexco- Bayless" 1	28 24S 18E 29 24S 18E		35 19	0	Jul 1951 Jan 1955	
Eocene	Edward Nepple "Orchard" 48-20	Reserve Oil and Gas Co. "Orchard" 48-20	20 24S 18E	MD	310	250	Nov 1953	
ŝ								

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Mobil Oil Corp. "Norris-Drilexco-Westslope" 57-20	Franco Western Oil Co. "Norris-Drilexco- Westslope" 57-20	May 1955	20 24S 18E	MD	5,425	Moreno	Late Cret

PRODUCING ZONES

	Average Average net depth thickness			Seologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Miocene Kr (Point of Rocks sand)	850 800	40 70	early Miocene Oligocene - Eocene	Temblor Kreyenhagen	12 - 19	N.A. 345	None None
Eocene	3,950	100	Oligocene - Eocene	Kreyenhagen	38 - 43	600	111

PRODUCTION DATA (Jan. 1, 1973)

 1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total num	ber of wells	Maximum
 Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
47,384	193,420	174,006	135	25	1,755,114	5,523,687	179,630	1956	65	36	185

STIMULATION DATA (Jan. 1, 1973)

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 - 400

CURRENT CASING PROGRAM: Miocene and Kr completions: 7" cem 750 - 900; 5 1/2" liner landed through zone. Eocene completions: 9 5/8" cem 400; 5 1/2" cem 3,500 - 4,800. METHOD OF WASTE DISPOSAL: Water is allowed to percolate into sediments (McLure shale - U Miocene) containing saline waters.

REMARKS: Sands included in the Eocene zone are the Point of Rocks (below the thrust fault), Canoas and Avenal. Waters from the Avenal sand have an , average salinity of 410.

REFERENCES: Curtin, George, Pyramid Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 41, No. 2 (1955).

PYRAMID HILLS OIL FIELD Orchard Ranch Area (Abandoned)



ORCHARD RANCH AREA (Abandoned)

4

LOCATION: See index map of Pyramid Hills Oil Field

TYPE OF TRAP: Lenticular sands

ELEVATION: 650

DISCOVERY DATA

					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	6 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Canoas	Transco Oil Co. 2-32	Drilling & Production Co. "Orchard" 44-32	32 24S 18E	MD	97	44	Dec 1959
							2

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Transco Oil Co. 2-32	Drilling & Production Co. "Orchard" 44-32	Nov - 1959	32 24S 18E	MD	4,960	Martinez	Paleocene

PRODUCING ZONES

	Average	Average Average net Geologic Oil gr depth thickness (*API		Geologic		Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal~	required
Canoas	3,650	20	Eocene	Kreyenhagen	47	N.À.	111

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production Total nu		Total number of wells		Total number of wells		Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage		
0	0	0	0	0	45,453	27,730	10,973	1964	11	4	25		

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 550 - 700

CURRENT CASING PROGRAM. 8 5/8" cem 700; 5 1/2" cem 3,800.

METHOD OF WASTE DISPOSAL

REMARKS: The area was originally abandoned in 1962, reactivated in 1964 with the completion of Transco Oil Co. Well No. 1-32, Sec. 32, and reabandoned in 1969.

REFERENCES:



CONTOURS ON TOP OF MARTINEZ



WEST AREA - GAS (Abandoned)

LOCATION: See Index Map of Pyramid Hills Oil Field

TYPE OF TRAP: Anticline

ELEVATION: 700

DISCOVERY DATA

2					Init	al product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Cretaceous	D. J. Pickrell, Opr. "Avenal Land" 1	Sane	19 24S 18E		850	1392	5/32	Oct 1967

Remarks:

DEEPEST WELL DATA

		Date			Depth	· At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
D. J. Pickrell, Opr. "Avenal Land" 1	Same	Sep 1967	19 245 18E	MD	5,860	Panoche	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Cretaceous	5,030	50	Lt Cretaceous	Panoche	1055	N.A.	2,090	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Pro	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas prod	luction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	0	0	8,359	4,846	1967	7	1	40

SPACING ACT: Applies

BASE OF FRESH WATER: 300

CURRENT CASING PROGRAM: 9 5/8" cem 500; 5 1/2" cem 5,250.

METHOD OF WASTE DISPOSAL:

REMARKS: The only producing well was abandoned in 1968.

REFERENCES:



CONTOURS ON TOP OF KR-2 SAND



WEST SLOPE AREA

LOCATION: See index map of Pyramid Hills Oil Field

TYPE OF TRAP: Truncated zone bounded by unconformity

ELEVATION: 700 - 900

DISCOVERY DATA

					Initia	daily uction	Common March
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Kr	Pacific Oil & Gas Development Corp. "West Slope" 1	Tide Water Associated Oil Co. "West Slope" 1	20 24S 18E	MD	35	0	May 1940

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Pyramid Hills Syndicate No. 1	Same	Aug 1920	20 245 18E	MD	2,465	Kreyenhagen	Eocene

PRODUCING ZONES

	Average depth	Average net thickness	-	Geologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Kr (Point of Rocks sands)	800	120	Eocene	Kreyenhagen	17	315	None

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
45,774	12,810	63,576	255	35	1,862,349	319,057	135,340	1945	62	43	255

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 7" cem 600 - 900; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Water is allowed to percolate into sediments (McLure shale - U Miccene) containing saline waters.

REMARKS: During 1966, 1969, and 1970, 50,814 barrels of water was injected into 8 wells for steam-cyclic stimulation.

REFERENCES: Curtin, George, Pyramid Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 41, No. 2 (1955).

RAILROAD GAP OIL FIELD





LOCATION: 15 miles northwest of Taft

TYPE OF TRAP: Anticline; fractured shale

ELEVATION: 925

DISCOVERY DATA

						fuction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Amnicola	Standard Oil Co. of Calif. No. 1-2	Same as present	15 30S 22E	MD	26	N.A.	May 1965
2nd Mya (Gas)	Standard Oil Co. of Calif. No. 5-6	Same as present	15 30S 22E	MD	0	300	Aug 1960
Olig	Standard Oil Co. of Calif. No. 366	Standard Oil Co. of Calif. No. 66	15 30S 22E	MD	45	1,441	Jun 1964
Antelope Shale	Signal Oil and Gas Co. "Signal-Pike" 1	Same as present	10 30S 22E	MD	45	N.A.	Sep 1948
Valv	Standard Oil Co. of Calif. No. 477	Standard Oil Co. of Calif. No. 77	15 30S 22E	MD	82	254	Apr 1964
Carneros	Standard Oil Co. of Calif. No. 568	Same as present	15 30S 22E	MD	329	183	May 1964
Phacoides	Standard Oil Co. of Calif. No. 555	Same as present	15 30S 22E	MD	170	1,700	Jul 1964
						1	
				1 1		1	1

Remarks:

DEEPEST WELL DATA

		Date		2	Depth	At total d	epth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Standard Oil Co. of Calif. No. 555	Standard Oil Co. of Calif. No. 55	Feb 1964	15 30S 22E	MD	12,731	Point of Rocks	Eocene

PRODUCING ZONES

	Average depth	Average net thickness	0	ieologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Amnicola	1,100	60	Pleistocene	Tulare	14	225	None
2nd Mya (Gas)	2,300	25	Pleistocene	San Joaquin	1,220	N.A.	None
Olig	4,400	50	late Miocene	Monterey	29	955	II
Antelope Shale	5,000	1,100	late Miocene	Monterey	33	N.A.	III
Valv	6,700	120	m Miocene	Monterey	34	1,830	III
Carneros	7,000	250	early Miocene	Temblor	34	1,530	IV
Upper Santos	8,000	50	early Miocene	Temblor	30	N.A.	IV
Phacoides	9,100	180	early Miocene	Temblor	34	325	IV

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Remarks)

		1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prodi	uction	Total num	ber of wells	Maximum proved
1	Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
	303,693	5,450,269	1,436,883	480	40	7,591,530	57,494,928	1,472,297	1965	81	71	490

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbi; Gas, Mcf; Steam, bbi (water equivalent)	Maximum number of wells used for injection
Cyclic-steam	1965	347,132	10
	1	1	

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: Pleistocene: 7" cem. above zone; 5 1/2" liner landed through zone. Middle and late Miocene: 10 3/4" cem. 1,200; 7" cem. above zone; 5 1/2" liner landed through zone. Lower Miocene: 11 3/4" cem. 1,500; 7: cem. through zone. METHOD OF WASTE DISPOSAL: Unlined sumps are permitted.

REMARKS: No dry gas production in 1972; cumulative dry gas production 676,765 Mcf; 2 dry gas wells were completed. The Valv zone is also referred to as Foraminite.

REFERENCES: Hardoin, J.L., Railroad Gap Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 51, No. 1 (1965).

RAISIN CITY OIL FIELD



TYPE OF TRAP: Anticline with minor faulting; lenticular sands

ELEVATION: 190

DISCOVERY DATA

						al daily duction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Miocene Tar Miocene Eocene	Industrial Development Associates 1-18 Shell Oil Co. "Properties Inc" 8-18 Texaco Inc. "Surfluh" 53-14	D.H. Graham and Associates 1-18 Same as present Seaboard Oil Co. of Delaware "Seaboard-Tide Water Associated-Union" 53-14	18 15S 18E 18 15S 18E 14 15S 17E	MD	120 7 400	N.A. 5,740 69	Apr 1946 Jun 1941 Aug 1943

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name		Sec. T. & R.	3 & M		Strata	Age
Norris Oil Co. "S.A. & F.L." 1	Same	Dec 1969	19 15S 18E	MD	10,300	Panoche	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Miocene Tar Miocene Eocene	4,680 5,080 6,260	20 35 20	early Miocene early Miocene Eocene & Paleocene	Zilch Zilch Kreyenhagen, Domengine & Martinez	24 - 60 23 - 62	2,850 2,580 1,300	III III IV

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	oroduction	Peak oil produ	uction	Total number of wells		Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
445,954	192,046	17,464,483	1,125	68	36,725,812	20,954,532	2,135,905	1956	217	187	1,670

STIMULATION DATA (Jan. 1, 1973)

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: 10 3/4" cem. 600, 7" cem. above zone and across base of fresh water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: All water is injected. This is the largest subsurface disposal project in the San Joaquin Valley and cumulative injection through 1972 totals 392,491,128 bbls. REMARKS:

REFERENCES: Hunter, G.W., Raisin City Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 40, No. 1 (1954).

RAISIN CITY OIL FIELD

Fresno County



LOCATION: 15 miles northwest of Bakersfield

TYPE OF TRAP: Anticline

ELEVATION: 325

DISCOVERY DATA

						il daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Etchegoin Gas	Rio Bravo Shallow Gas Sand Unit, The Superior Oil Co., Unit Opr. "Kernco" 61X-34	Union Oil Co. of Calif. "Kernco" 61X-34	34 28S 25E	MD	0	1,400	Oct 1956
Olcese	The Superior Oil Co. "Weber" 3-50	Same as present	27 28S 25E	MD	71	N.A.	Jul 1961
Rio Bravo - Vedder	The Superior Oil Co., Unit Opr. "Kernco" 85-34	Union Oil Co. of Calif. "Kernco" 1-34	34 28S 25E	MD	2,400	1,260	Nov 1937
Helbling	Union Oil Co. of Calif. "Kernco" 62-34	Same as present	34 28S 25E	MD	330	N.A.	Aug 1953
		Na.					

Remarks:

DEEPEST WELL DATA

		Date			Depth '	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
The Superior Oil Co. "Helbling" 1	Same	May 1938	1 29S 25E	MD		Basement (metamorphics)	late Jur (?)

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (°API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gai	required
Etchegoin Gas Olcese Rio Bravo - Vedder Helbling	6,000 10,550 11,400 11,650	30 130 400 130	early Pliocene early Miocene early Miocene early Miocene	Etchegoin Freeman-Jewett Vedder Vedder	1,015 34 35 - 40 34	2,250 N.A. 1,250 760	III IV IV IV

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number			ber of wells	Maximum			
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
386,122	3,832,179	1,736,539	1,870	42	112,700,329	112,694,314	5,922,268	1944	160	155	2,080

STIMULATION DATA (Jan. 1, 1973)

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	1946	170,064,208	7
maintenance Water flood	1949	61,296,852	9

SPACING ACT: Applies

BASE OF FRESH WATER: 2,500

CURRENT CASING PROGRAM: 11 3/4" cem. 1,300; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: All waste water is used in the Rio Bravo - Vedder zone water flood. Primary purpose is disposal, however, there may be some water-flood effect. REMARKS:

REFERENCES: Sullivan, J.C., Rio Bravo Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 1 (1960).

RIVERDALE OIL FIELD



LOCATION: 20 miles southwest of Fresno

TYPE OF TRAP: Anticline; lenticular sands

ELEVATION: 215

DISCOVERY DATA

						al daily luction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Zilch Eocene	Amerada Hess Corp. "Lawton" 45-26 Samson Resources Co. "Courtney" 34-23	Amerada Petroleum Corp. "Lawton" 45-26 Amerada Petroleum Corp. "Courtney" 34-23	26 175 19E 23 17S 19E	MD	290 229	296 118	Dec 1941 Jul 1943
			1	L.		1	1

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Amerada Hess Corp. "Lawton" 58-26	Amerada Petroleum Corp. "Lawton" 58-26	Apr 1942	26 17S 19E	MD	11,998	Basement (Slate)	Late Jur

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required
Žilch Eocene	6,800 7,830	50 35	early Miocene Eocene	Zilch Kreyenhagen & Domengine	34 - 38 37	2,360 1,320	III IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Production 1972 1972 Proved Average number		Cumulative production		Peak oil prod	uction Total num		ber of wells	Maximum proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
218,475	202,643	2,074,528	830	32	18,546,922	28,119,584	1,546,699	1947	120	98	1,870

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 1,500 - 1,850

CURRENT CASING PROGRAM: 9 5/8" cem 500; 5 1/2" cem 7,000 - 8,000.

METHOD OF WASTE DISPOSAL: All water is injected.

REMARKS: Sands included in the Eocene productive zone are the Courtney, Nortonville, and Domengine (all of Eocene age).

REFERENCES: Hunter, G.W., Riverdale Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 38, No. 2 (1952).



T 29 S R 26 E

ROSEDALE OIL FIELD





Kern County

LOCATION: 7 miles west of Bakersfield

TYPE OF TRAP: See areas

ELEVATION: 355

DISCOVERY DATA

					Initial daily production		Data of
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Main Stevens	Frank Goldman "Rosedale-Stevens Community" 1	Humble Oil & Refining Co. "Rosedale-Stevens Community" 1	15 29S 26E	MD	507	184	Sep 1951
	-						

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Union Oil Co. of Calif. "Smith" 34X-23	Same	Sep 1952	23 295 26E	MD	10,617	Olcese	early Mio

PRODUCING ZONES (See areas)

	Average depth	Average net thickness	G	eologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
					1 10		

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prodi	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	Proved acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage	
72,210	4,476	76,047	200	14	4,441,664	5,689,373	527,937	1954	66	41	410	

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcl; Steam, bbl (water equivalent)	Maximum number of wells used for injection
	i .	1 1	

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.

LOCATION: See map sheet of Rosedale Oil Field

TYPE OF TRAP: Lithofacies change on an anticlinal nose

ELEVATION: 355

DISCOVERY DATA

						daily uction	Date of completion
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	6 & N	Oil (bbl)	Gas (Mcf)	
Stevens	Exxon Corp. "Kern County Land Co. G" 1	Humble Oil & Rfg. Co. "Kern County Land Co. G" 1	23 295 26E	MD	95	29	Jan 1959

Remarks:

DEEPEST WELL DATA

	2	Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Same as discovery well	Same	Jan 1959	23 295 26E	MD	7,200	Stevens	late Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required	
Stevens	4,800 - 6,800	10 - 50	late Miocene	Fruitvale	28	1,600	111	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total number of wells		Maximum	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
6,966	0	21,395	30	3	334,082	627,208	71,525	1960	9	7	80

STIMULATION DATA (Jan. 1, 1973)

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: 9 5/8" cem. 700; 5 1/2" cem. through zone and across base of fresh-waters.

METHOD OF WASTE DISPOSAL. Waste water is transported by pipe line to Main Area of field for disposal in a subsurface project.

REMARKS:

REFERENCES: Beecroft, G.W., North, South, and East Areas of Rosedale Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 53, No. 2 (1967).

MAIN AREA

LOCATION: See map sheet of Rosedale Oil Field

TYPE OF TRAP: Faulted anticlinal nose; lithofacies variations

ELEVATION: 355

DISCOVERY DATA

					Initial daily production		allow der
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Stevens Sand Stringers	Frank Goldman "T.N. Knight" 2	Humble Oil & Rfg. Co. "T.N. Knight" 2	15 29S 26E	MD	73	30	Apr 1952
Main Stevens	Frank Goldman "Rosedale-Stevens Community" 1	Humble Oil & Rfg. Co. "Rosedale-Stevens Community" 1	15 29S 26E	MD	507	184	Sep 1951
Lower Massive Stevens	Frank Goldman "Rosedale Oil Unit No. 1" 1	Humble Oil & Rfg. Co. "Rosedale Oil Unit No. 1" 1	22 295 26E	MD	22	5	Apr 1952

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age	
Union Oil Co. of Calif. "Smith" 34X-23	Same	Sep 1952	23 29S 26E	MD	10,617	Olcese	early Mio	

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Stevens Sand Stringers	5,600	10 - 50	late Miocene	Fruitvale	26 - 35	N.A.	111
Main Stevens	5,800	20 - 100	late Miocene	Fruitvale	32	1,700	III
Lower Massive Stevens	7,500	25	late Miocene	Fruitvale	31	N.A.	111

PRODUCTION DATA (Jan. 1, 1973)

1972 Production 1972 1972 Cumulative product				oduction Peak oil production		Total num	Maximum proved				
Oil (bbl)	Net gas (Mcf)	Water (bbl)	Proved acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
46,300	2,040	43,850	120	8	3,318,221	4,523,669	527,937	1954	42	24	230

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 3,200

CURRENT CASING PROGRAM: 9 5/8" cem. 800; 5 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water from East and Main Areas is injected into the Etchegoin formation.

REMARKS: A water flood in the Main Stevens was begun in 1960 and terminated after 3,591,296 bbls. was injected.

REFERENCES: Albright, M.B., Rosedale Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 40, No. 1 (1954).

Kern County

NORTH AREA

TYPE OF TRAP: Lithofacies variations on an anticlinal nose

ELEVATION: 355 DISCOVERY DATA

Zone					Initia prod	-	
	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Lower Massive Stevens	Tenneco West, Inc. "KCL" 53-14	Shell Oil Co. "KCL" 53-14	14 29S 26E	MD	60	330	May 1957

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	 Original operator and well name 		Sec. T. & R.	8 & M		Strata	Age	
Tenneco West, Inc. "KCL" 53-14	Shell Oil Co. "KCL" 53-14	Apr 1957	14 29S 26E	MD	10,029	Vedder	early Mio	

PRODUCING ZONES

	Average depth	Average net thickness (feet)		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)		Age	Formation	Gas (btu)	gr/gal	required
Lower Massive Stevens	6,900	120	late Miocene	Fruitvale	31	N.A.	111

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil produ	otion	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
16,212	2,436	9,018	30	2	161,159	124,182	23,752	1958	6	4	40

STIMULATION DATA (Jan. 1, 1973)

SPACING ACT: Applies

BASE OF FRESH WATER: 3,200

CURRENT CASING PROGRAM: 9 5/8" cem. 700; 5 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: After January 1, 1973, unlined sumps are not permitted.

REMARKS:

REFERENCES: Beecroft, G.W., North, South, and East Areas of Rosedale Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 53, No. 2 (1967).

Kern County

SOUTH AREA

TYPE OF TRAP: Faulted anticlinal nose; lithofacies variations

ELEVATION: 355

DISCOVERY DATA

Zone					Initial daily production			
	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion	
Stevens	Atlantic Oil Co. "Ricards" 1	Atlantic Oil Co. "Rosedale" 1	26 29S 26E	MD	260	113	Sep 1955	
	2							

Remarks:

DEEPEST WELL DATA

		Date	1		Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	5 & M	(feet)	Strata	Age
Exxon Corp. "William H. Cornelson et ux" 1	Humble Oil & Rfg. Co. "William H. Cornelson et ux" 1	Jan 1956	26 29S 26E	MD	8,000	Stevens	late Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Stevens	5,800 - 6,100	20 - 60	late Miocene	Fruitvale	32	N.A.	III

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drifled	Completed	acreage
2,732	0	1,784	20	1	628,202	414,314	228,770	1956	9	6	60

STIMULATION DATA (Jan. 1, 1973)

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 9 5/8" cem. 700; 5 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: After January 1, 1973, unlined sumps are not permitted.

REMARKS:

REFERENCES: Beecroft, G.W., North, South, and East Areas of Rosedale Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 53, No. 2 (1967).



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Kern County

LOCATION: 6 miles northwest of Bakersfield

TYPE OF TRAP: Faulted anticlinal nose; lithofacies changes

ELEVATION: 380

DISCOVERY DATA

						l daily action	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Etchegoin sand	Standard Oil Co, of Calif. "KCL 62" 178-2	Standard Oil Co. of Calif. "Kern County Land Lease 31" 78-2	2 29S 26E	MD	224	0	Jul 1965
Lerdo	Mobil Oil Corp. "Kernway" 75-1	General Petroleum Corp. "Kernway" 75-1	1 29S 26E	MD	131	64	Aug 1945
KCL 31-38	Standard Oil Co. of Calif. "Kern County Land Lease 31" 38-1	Same as present	1 295 268		152	20	
Kernway 44	<pre>Standard Oil Co. of Calif. "Kern County Land Lease 31" 44-1</pre>	General Petroleum Corp. "Kernway" 44-1	1 295 26E	MD	109	N.A.	Mar 1945

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	I depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Standard Oil Co. of Calif. "Kern County Land Lease 31" 12-1	Same	Oct 1952	1 29S 26E	MD	10,812	Basement (Gabbro)	Late Jur

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (°API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required
Etchegoin sand Lerdo KCL 31-38 Kernway 44	3,500 4,200 4,675 4,900	100 160 80 100	Pliocene Pliocene late Miocene late Miocene	Etchegoin Etchegoin Chanac Chanac	15 17 20 24	N.A. 1,270 1,650 1,650	II III III III

PRODUCTION DATA (Jan. 1, 1973)

•4	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prode	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
338,886	126,486	6,656,460	660	47	11,380,258	8,315,277	705,690	1955	110	86	, 750

STIMULATION DATA (Jan. 1, 1973)

	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	46,434,947	4

SPACING ACT: Applies

BASE OF FRESH WATER: 2,500

CURRENT CASING PROGRAM: 11 3/4" cem. 500; 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 the Etchegoin and Chanac zones. Cumulative injection totals 19,845,216 bbls. REMARKS: A cyclic-steam injection project was started in the Etchegoin sand in 1966 and terminated after 7,548 bbls. was injected.

REFERENCES: Betts, F.W., Rosedale Ranch Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 41, No. 1 (1955).

ROUND MOUNTAIN OIL FIELD









4

LOCATION: 14 miles northeast of Bakersfield

TYPE OF TRAP: See areas

ELEVATION: 600 - 1,500

DISCOVERY DATA

						daily uction	a- a
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	OII (bbl)	Gas (Mcf)	Date of completion
Jewett Pyramid Hill Vedder	Getty Oil Co. No. 2 Same as above Same as above	Elbe Oil Land Dev. Co. No. 2 Same as above Same as above	20 28S 29E 20 28S 29E 20 28S 29E 20 28S 29E	MD	*204 N.A. N.A.	N.A. N.A. N.A.	May 1927 May 1927 May 1927

Remarks: * Production listed for Jewett is the combined production rate from the Jewett, Pyramid Hill, and Vedder zones.

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M	(feet)	Strata	Age
C.C. Killingsworth "Alma" 6	Barnsdall Oil Co. "Alma" 6	Mar 1948	15 28S 28E	MD	4,418	Basement (Granite)	Late Jur (?)

PRODUCING ZONES (See areas)

-		Average depth	Average net thickness	Geo	logic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
_	Zone	(feet)	(feet)	Age Formation	Gas (btu)	gr/gal	required	
			- K					
		1 1				1		

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum	
Oit (bb1)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
711,406	46,635	48,630,496	2,435	292	89,199,121	1,424,213	5,453,194	1938	665	468	2,59

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

Type of project	Date started	- 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.

Kern County

LOCATION: See map sheet of Round Mountain Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 700 - 1,270

DISCOVERY DATA

						I daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Vedder	Harold C. Morton & H.S. Kohlbush "Alma" 1	Same as present	15 28S 28E	MD	152	N.A.	Feb 1947
		1 (c)					
							1

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
C.C. Killingsworth "Alma" 6	Barnsdall Oil Co. "Alma" 6	Mar 1948	15 28S 28E	MD	4,418	Basement (Granite)	Late Jur

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Vedder	2,600	15	early Miocene	Vedder	13	N.A.	None

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative production		Peak oil produ	uction	Total num	ber of wells	Maximum proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oit (bbf)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
6,240	0	107,447	50	3	598,904	0	113,392	1948	47	21	80

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
342			

SPACING ACT: Applies

BASE OF FRESH WATER: None

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

METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps on outcrops of the Round Mountain Silt.

REMARKS:

REFERENCES: Albright, M.B. Jr., Sharktooth and Alma Areas of Round Mountain Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 42, No. 1 (1956).

COFFEE CANYON AREA

LOCATION: See map sheet of Round Mountain Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 690 - 1,300

DISCOVERY DATA

						daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Pyramid Hill Vedder	Acacia Oil Co. "Coffee" 1 Acacia Oil Co. "Lindsay" 1	Reynolds Oil and Gas Co. No. 1 Lindsay Oil Co. No. 1	6 28S 29E 6 28S 29E		*600	N.A. N.A.	Sep 1928 Aug 1928

Remarks: * Production is commingled from Pyramid Hill and Vedder.

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	3 & M		Strata	Age
Richard S. Rheem, Opr. "Smoot-Vedder" 2	Same	May 1957	1 28S 28E	MD	2,313	Vedder	early Mio

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (°API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required
Pyramid Hill Vedder	1,500 1,650	150 30	early Miocene early Miocene	Jewett Vedder -	18 16	- 50 75	None None
						-	

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production			1972 Average number	Cumulative production		Peak oil prode	uction	Total num	ber of wells	Maximun proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	Proved acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
103,176	0	7,292,707	435	50	18,507,039	67,567	1,857,108	1937	133	104	475

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1960	3,815,746	1
	1		

SPACING ACT: Does not apply

BASE OF FRESH WATER: 0 - 200

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

METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps on outcrops of the Round Mountain Silt.

REMARKS: A cyclic-steam injection project in the Pyramid Hill and Vedder zones was started in 1965 and terminated in 1968. Cumulative injection totals 12,200 bbls. The Pyramid Hill zone was originally known as the Elbe zone.

REFERENCES: Park, W.H., J.R. Weddle, J.A. Barnes, Main, Coffee Canyon, and Pyramid Areas of Round Mountain Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 49, No. 2 (1963).

MAIN AREA

LOCATION: See map sheet of Round Mountain Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 600 - 1,500

DISCOVERY DATA

					Initial daily production		120000020	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion	
Jewett Pyramid Hill Vedder	Getty Oil Co. No. 2 Same as above Same as above	Elbe Oil Land Dev. Co. No. 2 Same as above Same as above	20 285 29E 20 285 29E 20 285 29E	MD	*204 N.A. N.A.	N.A. N.A. N.A.	May 1927 May 1927 May 1927	

.Remarks: * Production listed for Jewett is the combined production rate from the Jewett, Pyramid Hill, and Vedder zones.

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Shell Oil Co. "Jewett" 3	Same	Jun 1928	29 28S 29E	MD	2,678	Walker	Eo &/or Olig

PRODUCING ZONES

	Average depth			Oil gravity (°API) or	Salinity of zone water	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Jewett Pyramid Hill Vedder	1,600 1,900 2,000	130 150 80	early Miocene early Miocene early Miocene	Freeman-Jewett Jewett Vedder	22 18 16	N.A. N.A. 95	None None None

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total number of wells		Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
510,916	46,561	35,953,284	1,415	171	59,572,216	1,293,959	3,794,620	1938	302	225	1,465

STIMULATION DATA (Jan. 1, 1973)

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: 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: 4,845,286 bb1. of waste water was injected during 1972 into two disposal wells; percolation and evaporation sumps on outcrops of the Round Mountain Silt.
REMARKS: A water flood project in the Vedder zone was started in 1961 and terminated in 1963. Cumulative injection totals 872,587 bb1s.

REFERENCES: Park, W.H., J.R. Weddle, J.A. Barnes, Main, Coffee Canyon, and Pyramid Areas of Round Mountain Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 49, No. 2 (1963).

PYRAMID AREA

LOCATION: See map sheet of Round Mountain Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 730 - 1,470

DISCOVERY DATA

					Initial daily production		-	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion	
Pyramid Hill Vedder Walker	Thomas Oil Co. "Olcese" 2 Crestmont Oil Co. "Olcese" 1 Crestmont Oil Co. "Staley" 11	Harp & Brown "Olcese" 2 Eastmont Oil Co. "Olcese" 1 Same as present	17 285 29E 16 285 29E 8 285 29E	MD	5 250 40	0 N.A. N.A.	May 1944 May 1937 Jul 1943	
							1	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Piute Holding Co. "Smith" 1	Same	Oct 1929	17 28S 29E	MD	3,110	Walker	Eo &/or Olig

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Pyramid Hill Vedder Walker	1,250 1,390 1,535	130 40 50	early Miocene early Miocene Eo &/or Olig	Jewett Vedder Walker	18 16 20	50 80 - 110 N.A.	None None None

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Average number	Cumulative production		Peak oil prode	iction	Total number of wells		Maximum		
gas (Mcf)	Water (bb1)	acreage				Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
74	1,527,767	290	37	5,692,349	6,876	378,882	1946	98	60	300		
÷	gas (Mcf)	gas (Mcf) Water (bbl)	gas (Mcf) Water (bbl) Proved acreage	gas (Mcf) Water (bbl) acreage producing wells	gas (Mcf) Water (bb1) acreage producing wells Oil (bb1)	gas (Mcf) Water (bbl) acreage producing wells Oil (bbl) Gas (Mcf)	gas (Mcf) Water (bb1) acreage producing wells Oil (bb1) Gas (Mcf) Barrels	gas (Mcf) Water (bb1) acreage producing wells Oil (bb1) Gas (Mcf) Barrels Year	gas (Mcf) Water (bbl) acreage producing wells Oil (bbl) Gas (Mcf) Barreis Year Drilled	gas (Mcf) Water (bbi) acreage producing wells Oil (bbi) Gas (Mcf) Barrels Year Drilled Completed		

STIMULATION DATA (Jan. 1, 1973)

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 8 5/8" or 7" cem. above zone; 6 5/8" or 5" liner landed through zone.

METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps on outcrops of the Round Mountain Silt.

REMARKS:

REFERENCES: Park, W.H., J.R. Weddle, J.A. Barnes, Main, Coffee Canyon, and Pyramid Areas of Round Mountain Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 49, No. 2 (1963).

ROUND MOUNTAIN OIL FIELD

Kern County

SHARKTOOTH AREA

Kern County

LOCATION: See map sheet of Round Mountain Oil Field

TYPE OF TRAP: Faulted homocline

ELEVATION: 700 - 1,300

DISCOVERY DATA

						-
Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
G M V Oil Co. "Signal-Mills" 1	Bandini Petroleum Co. "Signal Mills" 1				N.A.	Sep 1943
					Present operator and well name Original operator and well name Sec. T. & R. B & M (bbl)	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age	
Mobil Oil Corp. "Bradford" 1	General Petroleum Corp. "Bradford" 1	Jun 1943	15 28S 28E	MD	2,995	Vedder	early Mio	

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gt/gal	required
Vedder	2,400	25	early Miocene	Vedder	13	N.A.	None

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total number of wells		Maximum proved	
Oil (bb1)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	OII (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage	
35,360	0	3,749,291	245	31	4,828,613	55,811	503,449	1947	85	58	270	

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: None

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

METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps on outcrops of the Round Mountain Silt.

REMARKS:

REFERENCES: Albright, M.B. Jr., Sharktooth and Alma Areas of Round Mountain Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 42, No. 1 (1956).





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Kern County

LOCATION: 23 miles south of Bakersfield

TYPE OF TRAP: Permeability barriers on an anticlinal nose

ELEVATION: 530

DISCOVERY DATA

					Initia produ		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bb1)	Gas (Mcf)	Date of completion
lst Reef Ridge 3rd Reef Ridge 4th Reef Ridge H-83-9	Atlantic Richfield Co. "KCL H" 34-9 Atlantic Richfield Co. "KCL H" 63-9 Atlantic Richfield Co. "KCL H" 63-9 Atlantic Richfield Co. "KCL H" 83-9	Richfield Oil Corp. "KCL H" 34-9 Richfield Oil Corp. "KCL H" 63-9 Richfield Oil Corp. "KCL H" 63-9 Richfield Oil Corp. "KCL H" 83-9	9 11N 21W 9 11N 21W 9 11N 21W 9 11N 21W 9 11N 21W	SB SB	667 510 * 549	140 245 * 40	Jul 1958 Nov 1958 Nov 1958 Mar 1959
	1						

Remarks: * Production from 3rd and 4th Reef Ridge was commingled.

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Atlantic Richfield Co. "KCL H" 43-10	Richfield Oil Corp. "KCL H" 43-10	Sep 1960	10 11N 21W	SB	14,499	McLure	late Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
lst Reef Ridge	11,500	120	late Miocene	Monterey	30	1,000	IV
Srd Reef Ridge	11,740	60	late Miocene	Monterey	31	1,000	IV
th Reef Ridge	11,870	60	late Miocene	Monterey	33	1,000	IV
H-83-9	12,600	150	late Miocene	Monterey	32	380	IV
	6						
						8	
	1						
				1	1 1		

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
446,743	133,956	225,876	1,090	11	16,210,186	4,270,988	2,199,735	1960	38	27	1,140

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water flood	1967	3,600,061	4
		1 1	

SPACING ACT: Applies

BASE OF FRESH WATER: 3,800 - 5,000

CURRENT CASING PROGRAM. 11 3/4" cem. 800; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone. METHOD OF WASTE DISPOSAL: All of the waste water is injected into the Tulare and San Joaquin formations. Cumulative injection totals 5,361,244 bbls. REMARKS: The "H-83-9" zone is also referred to as a Stevens sand.

REFERENCES: Land, P.E., San Emidio Nose Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 1 (1960).

SAN EMIGDIO OIL FIELD

(Abandoned)


LOCATION: 17 miles southeast of Taft

TYPE OF TRAP: Lithofacies change on faulted anticlinal nose

ELEVATION: 1,600

DISCOVERY DATA

					Initla produ	I daily uction	100
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Pioneer	Apex Petroleum Corp. Ltd. "Los Lobos" 3	Same as present	5 10N 22W	SB	25	N.A.	Mar 1948
	~						
	1						l.

Remarks:

DEEPEST WELL DATA

4		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Apex Petroleum Corp. Ltd. "Los Lobos" 1	Same	Sep 1947	5 10N 22W	SB	3,504	Temblor	early Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal .	required
Pioneer	1,415	62	early Miocene	Temblor	. 28	N.A.	111
							ų.

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	1,864	0	793	1948	6	1	1

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Ncf; 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. 200; 7" cem. above zone; 5 1/2" liner landed through zone. METHOD OF WASTE DISPOSAL:

neritor of thore por conte

REMARKS: Abandoned August 1953. Formerly known as Los Lobos Area.

REFERENCES:

SAN EMIGDIO CREEK OIL FIELD (Abandoned)



LOCATION: 30 miles southwest of Bakersfield

TYPE OF TRAP: Sand pinchout on an anticlinal nose

ELEVATION: 1,975

DISCOVERY DATA

		117				l daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Eocene (27-12)	Standard Oil Co. of Calif. "KCL 69" 27-12	Standard Oil Co. of Calif. "KCL" 27-12	12 10N 22W	SB	337	1,288	Nov 1967

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Standard Oil Co. of Calif. "KCL 69" 68-11	Same	Jan 1968	11 10N 22W	SB	11,069	Tejon	late Eo

PRODUCING ZONES

	Average depth	Average net thickness (feet)		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)		Age	Age Formation		Gas (btu) gr/gal	
Eocene (27-12)	8,660	60	late Eocene	Tejon	46	1,500	IV
							÷*
	1.00						

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximun proved
Oil (bbi)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	57,529	469,826	56,627	1968	2	1	4

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
	4	1 1	

SPACING ACT: Applies

BASE OF FRESH WATER: 3,200

CURRENT CASING PROGRAM: 10 3/4" cem. 750; 5 1/2" cem. through zone and across base of fresh-water sands. METHOD OF WASTE DISPOSAL:

REMARKS: The last production from the field was in November 1968.

REFERENCES:



LOCATION: 22 miles southwest of Fresno

TYPE OF TRAP: Lenticular sands on a faulted anticline

ELEVATION: 175

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	prod	daily uction Gas (Mcf)	Date of completion
Eocene	John MacKessy "Hakala" 55-32	The Superior Oil Co. "Hakala" 55-32	32 155 17E	MD	144	64	Mar 1947

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	3 & M		Strata	Age
The Superior Oil Co. "R.S. Brackney" 68-30	Same	Jul 1944	30 15S 17E	MD	8,045	Panoche	Late Cret

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Eocene	7,000	40	Eocene and Paleocene	Kreyenhagen, Domengine and Martinez	30	1,230	111

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	noiton	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
21,000	0	171,008	70	6	886,944	229,589	135,826	1949	17	8	180

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 1,050 - 1,150

CURRENT CASING PROGRAM: 9 5/8" cem. 600; 5 1/2" cem. through the zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: All water is injected.

REMARKS:

REFERENCES: Hunter, G.W., San Joaquin Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 42, No. 1 (1956).





LOCATION: 24 miles southwest of Fresno

TYPE OF TRAP: Anticline

ELEVATION: 170

DISCOVERY DATA

					Ini	tial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Nortonville	Texaco Inc. "Teed" 1	Same as present	23 15S 16E	MD	1,950	2,250	3/16	Nov 1965

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M	(feet)	Strata	Age
Same as discovery well	Same	Oct 1965	23 15S 16E	MD	7,400	Panoche	Lt Cret

PRODUCING ZONES

	Average depth	Average net thickness	Geologic			Salinity of zone water		Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Nortonville	6,780	35	Eocene	Kreyenhagen	1,015	1,010	2,325	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas prov	duction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
469,448	5,210	120	2	2,447,528	608,725	1971	6	2	120

SPACING ACT: Applies

BASE OF FRESH WATER: 1,050 - 1,150

CURRENT CASING PROGRAM: 8 5/8" cem. 700; 4 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water trucked to Raisin City oil field and injected into water disposal well.

REMARKS: Gas deliveries commenced in February 1968.

REFERENCES: Hill, F.L., Northwest San Joaquin Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 55, No. 1 (1969).

SEMITROPIC OIL FIELD



Kern County

LOCATION: 25 miles northwest of Bakersfield

TYPE OF TRAP: Asymmetrical anticline; lithofacies change

ELEVATION: 275

DISCOVERY DATA

						daily uction	-
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
San Joaquin (Gas) Randolph	Standard Oil Co. of Calif. "Hill" 1 Supreme Oil and Gas Corp. "Elizabeth G. Williams et al" 1	Same as present Humble Oil & Refg. Co. "Elizabeth G. Williams et al" 1	8 275 23E 24 275 23E		0 39		Mar 1935 Jun 1956

Remarks:

DEEPEST WELL DATA

		Date		1.1	Depth	At lota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Standard Oil Co. of Calif. "Standard- Fullerton" 1	Same	Apr 1944	25 27S 23E	MD	14,770	Vedder	early Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	- Age	Formation	Gas (btu)	gr/gal	required
San Joaquin (Gas)	2,200 - 4,400	5 - 15	Pliocene	San Joaquin	990	1,980	III
Randolph	7,400	100	Pliocene	Etchegoin	28	1,150	IV
					1	-	

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Remarks)

.

	1972 Production		1972 Proved	1972 Average number	Cumulative p	oroduction	Peak oil produ	oction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbi)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
17,826	6,576	5,164	70	6	367,146	261,939	43,169	1965	10	7	70

STIMULATION DATA (Jan. 1, 1973)

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. Gas zone: 9 5/8" cem. 550; 5 1/2" cem. through zone. Oil zone: 9 5/8" cem. 800; 5 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL: Waste water is trucked to a disposal well in McClung field.

REMARKS: Formerly known as Semitropic Gas Field. 1972 dry gas production 79,014 Mcf from one producing well; cumulative dry gas production 16,034,172 Mcf; current proved acreage 920, maximum proved acreage 3,980; 72 wells were drilled for dry gas and 30 wells were completed.

REFERENCES: Kaplow, E.J., Gas Fields of Southern San Joaquin Valley: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 24, No. 1 (1938).

NORTHWEST SEMITROPIC GAS FIELD (Abandoned)





SEMITROPIC, NORTHWEST, GAS FIELD (Abandoned)

Kern County

LOCATION: 38 miles northwest of Bakersfield

TYPE OF TRAP: Faulted anticline

ELEVATION: 230

DISCOVERY DATA

				1 1	Init	ial product	noi	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
lst Mya	Texaco Inc. "BLH Gas Unit One" 1	Same as present	22 265 22E	MD	835	870	1/8	Mar 1961

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Same as discovery well	Same	Feb 1961	22 26S 22E	MD	3,058	San Joaquin	Pliocene

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
lst Mya	2,740	10	Pliocene	San Joaquin	1,010	2,000	840	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Proc	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas proc	duction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	0	0	51,870	26,480	1962	1	1	40

SPACING ACT: Applies

BASE OF FRESH WATER: 1,100

CURRENT CASING PROGRAM: 7" cem, 500; 2 7/8" cem, through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

REMARKS: The only well in the field was abandoned in July 1966.

REFERENCES:

SEVENTH STANDARD OIL FIELD







LOCATION: 9 miles northwest of Bakersfield

TYPE OF TRAP: Faulted homocline with lithofacies variation

ELEVATION: 355

DISCOVERY DATA

						I daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Stevens ("27-3" sand)	Standard Oil Co. of Calif. "KCL 67" 27-3	Same as present	3 29S 26E	MD	316	156	Dec 1966

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	il depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Same as discovery well	Same	Nov 1966	3 29S 26E	MD	8,720	Fruitvale	late Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Stevens ("27- 3 " sand)	7,900	30	late Miocene	Fruitvale	27	1,750	IV

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	iction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bb1)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
96,724	51,303	450,074	50	4	1,133,055	591,210	215,080	1967	9	5	50

STIMULATION DATA (Jan. 1, 1973)

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: 3,000

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

METHOD OF WASTE DISPOSAL: All waste water is injected into the Etchegoin formation. Cumulative injection totals 2,019,707 bbls. REMARKS:

REFERENCES: Kohlbush, R.L., Seventh Standard Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 54, No. 2 (1968).

SHAFTER GAS FIELD







A



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LOCATION: 20 miles northwest of Bakersfield

TYPE OF TRAP: Faulted anticline

ELEVATION: 330

DISCOVERY DATA

				1 1	Init	ial product	on	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Etchegoin (E-7)	Getty Oil Co. "Loepp" 63-18	Tide Water Associated Oil Co. "Loepp" 63-18	1 28S 25E	MD	5,400	1,690	1/2	Dec 1954

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Exxon Corp. "George W. Watson et ux" 1	Humble Oil & Rfg. Co. "George W. Watson et	Sep 1961	17 28S 25E	MD	12,864	Vedder	early Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
Etchegoin (E-7)	4,300	25	Pliocene	Etchegoin	1,015	2,300	1,690	IV
	1.							

PRODUCTION DATA (1an. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas proc	luction	Total num	Total number of wells	
Net gas (Mcf)	Water (bb1)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	proved
0	0	35	0	2,130,544	743,392	1957	7	3	95

SPACING ACT: Applies

BASE OF FRESH WATER: 1,500

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

METHOD OF WASTE DISPOSAL:

REMARKS: The most recent production from the field was in 1968.

REFERENCES:

14

SHAFTER OIL FIELD (Abandoned)





Kern County

LOCATION: 22 miles northwest of Bakersfield TYPE OF TRAP: Anticline ELEVATION: 330 DISCOVERY DATA

					Initia prode	I daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	011 (551)	Gas (Mcf)	Date of completion
Vedder	Continental Oil Co. "K.C.L." C-2	Same as present	35 27S 24E	MD	488	550	Sep 1941
	1	1					L
Remarks:							

Present operator and well name		Date	Sec. T. & R.		Depth	At tota	At total depth	
	Original operator and well name			B & M		Strata	Age	
ame as discovery well	Same	Jan 1941	35 27S 24E	MD	12,936	Vedder	early Mio	

PRODUCING ZONES

	Average depth	Average net thickness	6	leologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age Formation		Gas (btu)	gr/gal	required
Vedder	12,800	70	early Miocene	Vedder	38	1,400	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bb1)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	54,651	45,600	21,259	1942	2	2	60

STIMULATION DATA (Jan. 1, 1973)

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: 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 #ASTE DISPOSAL:

REMARKS: The last well in the field was abandoned in March 1965.

REFERENCES:



CONTOURS ON C ELECTRIC LOG MARKER



LOCATION: 41 miles northwest of Taft

TYPE OF TRAP: Lithofacies change on a homocline

ELEVATION: 900

DISCOVERY DATA

					Init	tial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Mabury	Shell Oil Co. "Unit" 15	Same as present	9 27S 19E	MD	4,200	1,020	7/16	Jul 1960

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total d	lepth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Standard Oil Co. of Calif. "Mercantile" 1	Standard Oil Co. "Mercantile" 1	May 1916	8 27S 19E	MD	4,050	Undiff. marine	Paleocene

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	pressure (psi)	required
Mabury	2,800	100	Eocene	Kreyenhagen	1,020	N.A.	1,200	111

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Maximum number	Cumulative gas	Peak gas production		Total number of wells		Maximum proved
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	0	0	153,679	128,313	1961	3	1	40

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 8 5/8" cem. 400; 4 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: The only producing well in the field was abandoned in September 1969.

REFERENCES: Anderson, D.N., Shale Flats Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 52, No. 2 (1966).



SHALE POINT GAS FIELD (Abandoned)
Kern County

LOCATION: 44 miles northwest of Taft

TYPE OF TRAP: Lithofacies change on a homocline

ELEVATION: 800

DISCOVERY DATA

					Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Mabury	The Superior 011 Co. "Scherrer" 1	Beach, Church, & Bell "Scherrer" l	36 26S 18E	MD	3,550	1,260	1/4	Aug 1956

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B&M		Strata	Age
The Superior Oil Co. "Scherrer" 2	William M. Keck, Jr. "Scherrer" 2	Oct 1956	36 26S 18E	MD	3,754	Kreyenhagen	Eocene

PRODUCING ZONES

	Average depth	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
Mabury	3,400	100	Eocene	Kreyenhagen	1,090	N.A.	1,260	III
			-					

PRODUCTION DATA (Jan. 1, 1973)

1972 Pro	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas prod	luction	Total num	ber of wells	Maximum proved
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	0	0	1,740,321	541,764	1964	3	3	130

SPACING ACT: Applies

.

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 10 3/4" cem. 350; 5 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL:

REMARKS: The last producing well in Shale Point Gas Field was abandoned in October 1969.

REFERENCES: Anderson, D.N., Shale Point Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 52 No. 2 (1966).

STOCKDALE OIL FIELD (Abandoned)



LOCATION: 3 miles southwest of Bakersfield

TYPE OF TRAP: Sand pinchout on a homocline

ELEVATION: 365

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DISCOVERY DATA

						I daily action	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Chanac	Sherman F. Wagenseller and John J. August "W-A-M-S KCL" 12-16	Same as present	16 305 27E		98	N.A.	Jan 1962

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Same as discovery well	Same	Nov 1961	16 30S 27E	MD	7,003	Chanac	late Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required
hanac	6,350	20	late Miocene	Chanac	26	N.A.	111

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prode	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bb1)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	1,016	0	1,016	1962	2	1	10

STIMULATION DATA (Jan. 1, 1973)

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: 3,300

CURRENT CASING PROGRAM: 9 5/8" cem. 600; 5 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

REMARKS: The only producing well in the field was abandoned in October 1962.

REFERENCES:



STRAND OIL FIELD



LOCATION: 12 miles southwest of Bakersfield

TYPE OF TRAP: See areas

ELEVATION: 340

DISCOVERY DATA

						produ	l daily oction	Date of
Zone	Present operator and well name	(\mathbf{C})	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	completion
Upper Stevens	Tenneco West, Inc. No. 35		Tide Water Associated Oil Co. "KCL-E" 35-7	7 30S 26E	MD	1,130	800	Jun 1939

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Tenneco West, Inc. No. 1	Shell Oil Co. "Posuncula" 1	Dec 1954	12 305 25E	MD	14,224	Basement	Late Jur

PRODUCING ZONES (See areas)

	Average depth	Average net thickness	G	eologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
					÷		
						2	

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Main and Northwest Areas)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	iction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bb1)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
496,815	411,803	982,748	885	29	20,174,221	16,132,951	1,753,667	1956	125	97	1,240

STIMULATION DATA (Jan. 1, 1973)

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: See areas.

EAST AREA

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TYPE OF TRAP: Faulted anticlinal nose; lithofacies variations

ELEVATION: 340

DISCOVERY DATA

					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bb1)	Gas (Mcf)	Date of completion
Upper Stevens Lower Stevens	Tenneco West, Inc. No. 56 Tenneco West, Inc. No. 83	Tide Water Associated Oil Co. "KCL" 56-8 Shell Oil Co. "KCL" 85-8	8 305 26E 8 305 26E		1,368 115		Jan 1943 Aug 1955

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Standard Oil Co. of Calif. "KCL 66" 32-16	Same	Jan 1966	16 30S 26E	MD	10,395	Fruitvale	late Mio

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Upper Stevens Lower Stevens	8,150 9,770	10 - 25 85	late Miocene late Miocene	Fruitvale Fruitvale	35 33	1,200 1,200	III III

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
48,804	48,691	191,385	210	8	4,205,888	3,468,483	261,444	1945	38	20	270

STIMULATION DATA (Jan. 1, 1973)

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: 10 3/4" cem. 600 - 900; 5 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water is injected into the Upper Stevens and piped to disposal systems in other areas of the field.

REMARKS:

REFERENCES: Campbell, G.E., Southeast Portion of East Area--Strand Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 56, No. 1 (1970). Matthews, J.F. Jr., Strand Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 1 (1960).

MAIN AREA

Kern County

LOCATION: See map sheet of Strand Oil Field

TYPE OF TRAP: Lithofacies variations on faulted anticlinal noses

ELEVATION: 340

DISCOVERY DATA

					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbi)	Gas (Mcf)	Date of completion
Upper Stevens Lower Stevens Vedder	Tenneco West, Inc. No. 35 Thomas Oil Co. "Shell-Ohio KCL-A" 73X-12 Tenneco West, Inc. No. 1	Tide Water Associated Oil Co. "KCL-E" 35-7 Shell Oil Co. "Shell-Ohio KCL A" 73X-12 Shell Oil Co. "Posuncula" 1	7 30S 26E 12 30S 25E 12 30S 25E	MD	1,130 528 1,810	433	Jun 1939 Sep 1955 Jun 1955

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Tenneco West, Inc. No. 1	Shell Oil Co. "Posuncula" 1	Dec 1954	12 30S 25E	MD	14,224	Basement	Late Jur

PRODUCING ZONES

	Average depth	Average net thickness	G	eologic	Oil gravity (*API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required
Upper Stevens	8,200 - 8,500	15 - 40	late Miocene	Fruitvale	• 34	2,050	111
Lower Stevens	9,500	40	late Miocene	Fruitvale	33	2,050	III
Vedder	12,450	25	early Miocene	Vedder	38	880	IV
	1 1		1				

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Remarks)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	oction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
356,811	321,378	680,904	445	16	14,110,254	11,383,990	1,567,559	1956	70	63	710

STIMULATION DATA (Jan. 1, 1973)

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: Stevens: 8 5/8" cem. 1,000; 5 1/2" cem. through zone and across base of fresh-water sands. Vedder: 9 5/8" cem. 2,000; 5 1/2" cem. through zone and across base of fresh-water sands. METHOD OF WASTE DISPOSAL: Waste water is injected into the San Joaquin and Etchegoin formations and piped to Canal field for use in a water flood. REMARKS: The dry gas zone was abandoned in 1966; cumulative dry gas production 18,518 Mcf; one dry gas well drilled and completed.

REFERENCES: Matthews, J.F. Jr., Strand Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 1 (1960).

LOCATION: See map sheet of Strand Oil Field

TYPE OF TRAP: Faulted homocline; lithofacies variations

ELEVATION: 335

DISCOVERY DATA

					Initial daily production			
	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbi)	Gas (Mcf)	Date of completion	
Upper Stevens Lower Stevens	Tenneco West, Inc. No. 13 E.A. Bender Opr. "Smith" 73-2	Standard Oil Co. of Calif. "KCL" 13-1 Union Oil Co. of Calif. "Smith" 73-2	1 30S 25E 2 30S 25E		*328 110	*297 N.A.	Jun 1964 May 1956	

Remarks: * Commingled production from Upper and Lower Stevens.

DEEPEST WELL DATA

		Date			Depth	At tota	il depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Tenneco West, Inc. No. 22	Standard Oil Co. of Calif. "KCL 56" 22-1	Dec 1964	1 30S 25E	MD	12,673	Vedder	early Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Upper Stevens Lower Stevens	8,700 9,740	40 70	late Miocene late Miocene	Fruitvale Fruitvale	36 34	N.A. 1,300	III III

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Remarks)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
91,200	41,734	110,459	230	5	1,730,298	1,211,351	422,178	1965	16	13	250

STIMULATION DATA (Jan. 1, 1973)

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 10 3/4" cem. 1,000; 5 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water is injected in Main and East Areas of Strand Oil Field.

REMARKS: 1972 dry gas production 56,744 Mcf from one producing well; cumulative dry gas production 69,705 Mcf. Only one well was drilled for dry gas. Effective January 1, 1961 administrative boundaries of Strand Oil Field were extended to include Northwest Strand area.

REFERENCES: Shea, D.N., Northwest Area of Strand Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 52, No. 1 (1966).

Kern County

SOUTH AREA (Abandoned)

LOCATION: See map sheet of Strand Oil Field

TYPE OF TRAP: Lithofacies variation on a faulted anticlinal nose

ELEVATION: 340

DISCOVERY DATA

					Initia produ	I daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Lower Stevens	Shell Oil Co. "KCL" 34-17	Same as present	17 30S 26E	MD	596	372	Sep 1956

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Same as discovery well	Same	Jul 1956	17 30S 26E	MD	10,486	Fruitvale	late Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required	
Lower Stevens	9,240	30	late Miocene	Fruitvale	31	1,200	111	

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	umulative production Peak oil production Total		Total number of wells		Maximum proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bb1)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	127,781	69,127	26,430	1956	1	1	10

STIMULATION DATA (Jan. 1, 1973)

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: 9 5/8" cem. 1,000; 5 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

REMARKS: The only producing well in the area was abandoned in 1964.

REFERENCES: Matthews, J.F. Jr., Strand Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 46, No. 1 (1960).

TEJON OIL FIELD INDEX MAP



1

DISCOVERY DATA	
ELEVATION: 1,000	
TYPE OF TRAP: See areas	
LOCATION: 28 miles south	of Bakersfield

		4				al daily uction	-
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
2-1 sand	Reserve Oil and Gas Co. No. 2-1	Reserve Oil and Gas Co. "Tejon Ranch" I	2 10N 19W	SB	55	0	Jun 1935

Remarks:

DEEPEST WELL DATA

		Date			Deoth	At tot	ai depth
Present operator and well name	Original operator and well name		Sec. T. & R.	B & M		Strata	Age
Chanslor-Western Oil & Dev. Co. No. 4-1-32	Standard Oil Co. of Calif. "CCMO 4" 35	Mar 1953	32 11N 19W	SB	13,239	Tejon	late Eo

PRODUCING ZONES (See Areas)

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

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	iction	Total num	ber of wells	Maximum	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
457,341	99,736	3,422,841	1,370	152	27,340,135	18,244,296	2,885,306	1955	355	290	2,099

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: Applies

BASE OF FRESH WATER: See areas.

CURRENT CASING PROGRAM: See areas.

METHOD OF WASTE DISPOSAL: See areas. REMARKS:

REFERENCES: See areas.

TEJON OIL FIELD Central Area



CALIFORNIA DIVISION OF OIL AND GAS CENTRAL AREA

LOCATION: See index map of Tejon Oil Field

TYPE OF TRAP: Faulted anticline with lateral variations in porosity and permeability

ELEVATION: 1,000

DISC	OVER	V D	ATA	

					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
"Transition"	Woodland Oil Co., Opr. "Ridge Hill-Tejon" 34-3	M. Metzenbaum No. 34-3	34 11N 19W	SB	0	1,500	Jul 1944
Santa Margarita	Reserve Oil and Gas Co. "Bright" 2	Rose L. Bright "Bright" 2	34 11N 19W	SB	200	N.A.	Apr 1950
Reserve	Reserve Oil and Gas Co. "Reserve-E.W. Pauley" 33-3	Reserve Oil and Gas Co. No. 33-3	33 11N 19W	SB	0	12,000	Jan 1937
Valv	Reserve Oil and Gas Co. "Reserve-E.W. Pauley" 58-33	Reserve Oil and Gas Co. No. 58-33	33 11N 19W	SB	0	3,000	Dec 1951
Olcese	Reserve Oil and Gas Co. "Reserve-E.W. Pauley" 42-34	Reserve Oil and Gas Co. No. 42-34	34 11N 19W	SB	477	360	May 1954
JV	Drilling & Production Co. "JV" 33-33	Same as present	33 11N 19W	SB	495	330	Dec 1954

Remarks: The discovery wells of "Transition", Reserve, and Valv zones were completed in the gas cap of the respective oil zone.

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Reserve Oil and Gas Co. "Reserve-E.W. Pauley" 12-34	Same	Jul 1954	34 11N 19W	SB	11,687	Reed Canyon	late Eo

PRODUCING ZONES

	Average depth	Average net thickness	1	Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Åge	Formation	Gas (btu)	gr/gal	required
"Transition"	2,725	85	late Miocene	"Transition"	17	15	None
Santa Margarita	2,900	100	late Miocene	Santa Margarita	18	15	None
Reserve	4,400	80	late Miocene	Fruitvale	23 - 28	250	111
Valv	4,650	80	m Miocene	Round Mountain	33	250	III
01cese	5,600	170	m Miocene	Olcese	29	570	IV
JV	7,200	50	early Miocene	Freeman-Jewett	34 - 40	390	IV
	1 1						

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximur proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
114,792	36,649	594,379	495	51	12,862,085	14,403,676	2,376,082	1955	148	132	1,045

STIMULATION DATA (Jan. 1, 1973)

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: 1,600

CURRENT CASING PROGRAM: Above Olcese: 11 3/4" or 10 3/4" cem. 450 or shallower; 8 5/8" or 7" cem. above zone & across base of fresh-water sands; 6 5/8" or 5 1/2" landed through zone. Olcese & deeper zones: 11 3/4" or 10 3/4" cem. 550 or deeper; 7" cem. through zone & across base of fresh-water sands. METHOD OF WASTE DISPOSAL: In 1972 waste water was either piped to Western Area for injection into a water flood project or disposed of into sumps. REMARKS:

REFERENCES: Carls, J.M., Central Area of Tejon Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 42, No. 2 (1956).



EASTERN AREA

TYPE OF TRAP: Faulted homocline with lithofacies variations.

ELEVATION: 930

Zone					Initial daily production		
	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
"Transition" - Santa Margarita	Atlantic Richfield Corp. "Tejon A" 57-35	Richfield Oil Corp. "Tejon A" 57-35	35 11N 19W	SB	120	N.A.	Nov 194:

Remarks:

DEEPEST WELL DATA

				Depth	At total	depth	
Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	3 & M		Strata	Age
Marathon Oil Co. "Title Insurance & Trust" 1	The Ohio Oil Co. "Title Insurance & Trust" 1	May 1936	36 11N 19W	SB	5,507	Tecuya (?)	early Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Åge	Formation	Gas (btu)	gr/gal	required
"Transition" - Santa Margarita	2,000	150	late Miocene	"Transition" and Santa Margarita	18	40	None
			64				

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil produ	uction	Total num	ber of wells	Maximum	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
22,102	1,639	76,767	195	18	1,442,879	292,107	118,690	1947	35	23	210

STIMULATION DATA (Jan. 1, 1973)

	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	258,414	2

SPACING ACT: Applies

BASE OF FRESH WATER: 1,300

CURRENT CASING PROGRAM: 8 5/8" cem. above zone and across base of fresh water sands; 6 5/8" liner landed through zone. METHOD OF WASTE DISPOSAL: In 1972 all of the waste water was injected into the water flood project. REMARKS:

REFERENCES: Kasline, F.E., Tejon Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 34, No. 1 (1948).

Kern County
TEJON OIL FIELD Southeast Area



SOUTHEAST AREA

Kern County

LOCATION: See index map of Tejon Oil Field

TYPE OF TRAP: Permeability variations on a faulted anticlinal nose

ELEVATION: 1,000

DISCOVE	RY	DATA	

						daily daily	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
2-1 sand Upper Reserve Lower Reserve	Reserve Oil and Gas Co. No. 2-1 * Drilling & Production Co. No. 18A-1 Drilling & Production Co. No. 58A-1	Reserve Oil and Gas Co. "Tejon Ranch" 1 B-K-S Oil Co. "F E P" 18A-1 Same as present	2 10N 19W 1 10N 19W 1 10N 19W	SB	55 7 90	0 0 16	Mar 1951

Remarks: * This was the only well to obtain commercial production from the 2-1 zone. It was abandoned in 1936 after producing a total of 3,871 bbls. of oil. No further oil production from this area until March 1951 when B-K-S Oil Co. completed a well in the Upper Reserve zone.

DEEPEST WELL DATA

	Date		Date Depth			At total depth		
Present operator and well name	Original operator and well name		Sec. T. & R.	3 & M		Strata	Age	
Atlantic Richfield Co. "Tejon Ranch" 1	Richfield Oil Corp. "Tejon Ranch" 1	Mar 1940	2 10N 19W	SB	10,940	Live Oak	late Eo	

PRODUCING ZONES

940 - 920 - C	Average depth	Average net thickness		Geologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal .	required
2-1 sand Upper Reserve Lower Reserve	2,670 1,810 1,670	20 20 - 190 150 - 250	late Miocene late Miocene late Miocene	Fruitvale Fruitvale Fruitvale	16 17 23	N.A. 280 280	None None None

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative p	Cumulative production		uction	Total num	ber of wells	Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
177,751	38,658	493,299	140	21	1,053,208	186,575	, 191,958	1970	53	24	155

STIMULATION DATA (Jan. 1, 1973)

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 - 1,700

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: In 1972 all of the waste water was injected into two water disposal wells. REMARKS:

REFERENCES: Barnes, J.A., Southeast Area of Tejon Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 54, No. 1 (1968)

TEJON OIL FIELD Western Area



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CALIFORNIA DIVISION OF OIL AND GAS WESTERN AREA

TYPE OF TRAP: Elongated dome

ELEVATION: 1,100

DISCOVE	RY D.	ATA

Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	(idd)	Gas (Mcf)	Date of completion
Gulf Oil Corp. and Transamerica Development Co. "Tejon Ranch" 41-5	British-American Oil Producing Co. "Tejon Ranch" 41-5	5 10N 19W	SB	200	N.A.	Dec 1945
Drilling & Production Co. "J.V." 101-32	Same as present	32 11N 19W	SB	27	60	Dec 1949
Texaco Inc. "Tejon Ranch B" No. 2	The Texas Co. "Tejon Ranch B" 2	6 10N 19W	SB	108	20	Oct 1957
D	ulf Oil Corp. and Transamerica Development Co. "Tejon Ranch" 41-5 rilling & Production Co. "J.V." 101-32	ulf Oil Corp. and Transamerica Development Co. "Tejon Ranch" 41-5 rilling & Production Co. "J.V." 101-32 British-American Oil Producing Co. "Tejon Ranch" 41-5 Same as present	ulf Oil Corp. and Transamerica Development Co. "Tejon Ranch" 41-5 rilling & Production Co. "J.V." 101-32 British-American Oil Producing Co. "Tejon Ranch" 41-5 Same as present 32 11N 19W	ulf Oil Corp. and Transamerica Development Co. "Tejon Ranch" 41-5 rilling & Production Co. "J.V." 101-32 British-American Oil Producing Co. "Tejon Ranch" 41-5 Same as present 5 10N 19W SB	ulf Oil Corp. and Transamerica Development Co. "Tejon Ranch" 41-5 rilling & Production Co. "J.V." 101-32 Barch" 41-5 Same as present Same as p	ulf Oil Corp. and Transamerica Development Co. "Tejon Ranch" 41-5 rilling & Production Co. "J.V." 101-32 British-American Oil Producing Co. "Tejon 5 10N 19W SB 200 N.A. Same as present 32 11N 19W SB 27 60

Remarks:

DEEPEST WELL DATA

	*	Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Chanslor-Western Oil & Dev. Co. 4-1-32	Standard Oil Co. of Calif. "CCMO 4" 35	Mar 1953	32 11N 19W	SB	13,239	Tejon	late Eo

PRODUCING ZONES

	Average depth	Average net thickness	1	Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
"Transition" - Santa Margarita	2,600	55	late Miocene	"Transition" and Santa Margarita	16	65	111
Pulv	4,600	125	late Miocene	Fruitvale	20	110	IV
Valv	5,400	60	m Miocene	Round Mountain	19	870	IV
	1 1			1			
			1	1			
	1			1			

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil prod	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrets	Year	Drilled	Completed	acreage
142,696	22,790	2,258,396	540	62	11,981,963	3,361,938	984,473	1947	119	111	685

STIMULATION DATA (Jan. 1, 1973)

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	33,175,373	6

SPACING ACT: Applies

BASE OF FRESH WATER: 1,250 - 1,800

CURRENT CASING PROGRAM: 11 3/4" or 10 3/4" cem. as deep as 500 depending on intended zone; 8 5/8" or 7" cem. above zone and across base of fresh-water sands; 6 5/8" or \$ 1/2" liner landed through zone. METHOD OF WASTE DISPOSAL: In 1972 waste water was used in the water flood project or injected into two disposal wells, or disposed of into sumps.

REMARKS: A cyclic-steam injection project was started in 1964 and was discontinued in 1967 after the injection of 167,189 bbls. of water (in the form of steam).

REFERENCES: Kasline, F.E., Tejon Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 34, No. 1 (1948).

TEJON FLATS OIL FIELD (Abandoned)



Kern County

LOCATION: 28 miles south of Bakersfield

TYPE OF TRAP: Lithofacies variation on a homocline

ELEVATION: 750

DISCOVERY	DATA

						l daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
San Emigdio	Union Oil Co. of Calif. "Reserve Kerr" 46-24	Same as present	24 11N 19W	SB	27	N.A.	Mar 1953

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Reserve 0il and Gas Co. "Reserve-Union-Kerr" 38-24	Same	Jan 1956	24 11N 19W	SB	7,407	Basement	Late Jur (?)

PRODUCING ZONES

	Average depth			Oil gravity (*API) or	Salinity of zone water	Class BOPE	
Zone			Gas (btu)	gr/gal	required		
San Emigdio	6,900	7	Oligocene	San Emigdio	30	1,575	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil produ	uction	Total num	ber of wells	Maximum proved
Oit (bbt)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oit (bbi)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	22,118	6,632	4,969	1955	2	1	10

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

.

CURRENT CASING PROGRAM: 11 3/4" cem. 800; 7" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

BASE OF FRESH WATER: 2,200

REMARKS: The one producing well was abandoned in 1958.

REFERENCES: Kasline, F.E., Tejon Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 39, No. 1, p. 7, (1953).



.

Kern County

LOCATION: 20 miles southeast of Bakersfield

TYPE OF TRAP: Faulted homocline

ELEVATION: 800 - 1,400

DISCOVERY	DATA

						daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Santa Margarita Valv Vedder (DK) San Emigdio (LO)	Crown Central Petroleum Co. "Sunset-Tejon" 2 Standard Oil Co. of Calif. "Tejon Ranch 23" 13 Standard Oil Co. of Calif. "Tejon Ranch 23" 73 Standard Oil Co. of Calif. "Tejon Ranch 23" 183	The Tejon Hills Co. "Tejon Hills" 2 D.K. Associates "D.K. Corral" 1 D.K. Associates - 2 No. 75 D.K. Partnership #2 "Corral" 183-29	10 11N 18W 28 11N 18W 29 11N 18W 29 11N 18W	SB SB	62 200 500 32	N.A.	Aug 1948 Feb 1950 Jun 1950 Oct 1952
		1					

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Gulf Oil Corp. "Tejon Ranch" 1	Western Gulf Oil Co. 1 - "Tejon Ranch"	Aug 1947	29 11N 18W	SB	4,231	Granite	Late Jur

PRODUCING ZONES

Zone	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Santa Margarita	450	50	late Miocene	Santa Margarita	29	5	None
Valv	1,350	30	m Miocene	Round Mountain	29	5	None
Vedder (DK)	1,565	100	early Miocene	Vedder	33	N.A.	None
San Emigdio (LO)	2,100	75	Oligocene	San Emigdio	32	N.A.	None
				1			
	1						

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil prod	uction	Total num	ber of wells	Maximu
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
76,755	29,333	3,366,965	775	104	12,501,385	2,408,839	1,604,301	1952	494	321	94

STIMULATION DATA (Jan. 1, 1973)

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	29,033,063	15
<i>.</i>	× .		

SPACING ACT: Applies

BASE OF FRESH WATER: 800

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: Some waste water is used to water-flood the Santa Margarita zone; evaporation and percolation sumps.

REMARKS: Boron concentrations in waste water exceed maximum recommended by U.S. Public Health Service for human consumption.

REFERENCES: Kasline, F.E., Tejon Hills Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 39, No. 1 (1953).



Kern County

LOCATION: 24 miles south of Bakersfield

TYPE OF TRAP: Faulted anticlinal nose with major permeability barriers

ELEVATION: 900

DIS	CON	ERY	DA	TA

					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bb1)	Gas (Mcf)	Date of completion
Pulv	Atlantic Richfield Co. "Richfield-Mohawk- Wheeler Ridge Community" 16-30	Richfield Oil Corp. "Richfield-Mohawk-Wheeler Ridge Community" 16-30	30 11N 19W	SB	97	20	Sep 1956
Olcese	Reserve Oil and Gas Co. "R-S-T" 185-19	Same as present	19 11N 19W	SB	521	430	Jul 1958
JV	Atlantic Richfield Co. "Richfield-Mohawk- Wheeler Ridge Community" 16-30	Richfield Oil Corp. "Richfield-Mohawk-Wheeler Ridge Community" 16-30	30 11N 19W	SB	594	8,700	Feb 1957
Basalt	Frank Goldman "KCL" 85X	Kern Oil Calif. Ltd. "KCL" 85X	25 11N 20W	SB	285	N.A.	Dec 1960
Vedder	Atlantic Richfield Co. "KCL F" 52-36	Richfield Oil Corp. "KCL F" 52-36	36 11N 20W	SB	154	880	Mar 1956
San Emigdio A	Reserve Oil and Gas Co. "W-T" 304-19	Same as present	19 11N 19W	SB	164	2,180	Mar 1959
Metralla	Atlantic Richfield Co. "ROC-KCL G" 63-24	Richfield Oil Corp. "ROC-KCL G" 63-24	24 11N 20W	SB	205	2,175	Nov 1958

Remarks: A Discovery well is open to San Emigdio and Metralla zones.

DEEPEST WELL DATA

		Date			Deoth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Reserve Oil and Gas Co. "R-S-T" 187-19	Same	Feb 1959	19 11N 19W	SB	14,205	Tejon	Eocene

PRODUCING ZONES

	Average depth	Average net thickness	(Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal -	required	
Pulv	5,370	230	m Miócene	Fruitvale	27	N.A.	III	
Olcese	7,300	180	m Miocene	Olcese	36	1,850	III	
JV	8,150	85	early Miocene	Freeman-Jewett	37 - 58	1,480	IV	
Basalt	7,800	50 B	early Miocene	Basalt	38 - 51	1,250	IV	
Vedder ^B	10,000	В	early Miocene	Vedder	31 - 60	1,940	IV	
San Emigdio (R-1 and R-2)	10,900	100	Oligocene	San Emigdio	43	N.A.	IV	
Metralla	11,000	400	late Eocene	Tejon	33 - 53	N.A.	IV	
1 C C C C C C C C C C C C C C C C C C C	1							

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative production Peak oil production		Total num	ber of wells	Maximum proved			
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
331,702	3,553,294	428,395	1,705	76	19,384,486	189,084,920	3,662,853	1960	136	112	2,660

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 2,100

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

METHOD OF WASTE DISPOSAL: Waste water is injected into the Santa Margarita.

REMARKS: B There are 7 productive sand intervals in the Vedder, Z-0, Z-1R, Z-1, Z-3, Z-4, Z-5, and Z-6, having a combined thickness ranging from 700° to 2,000°.

REFERENCES: Park, W.H., North Tejon Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 2 (1961).





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LOCATION: 24 miles northwest of Taft

TYPE OF TRAP: Angular unconformity and fault

ELEVATION: 1,400

DISCOVERY DATA

						uction	Data at
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Phacoides	Ferguson & Bosworth "FO'B" 42-A	Same as present	31 29S 21E	MD	9	0	Jun 1953

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8& #		Strata	Age
Calumet Gold Mines Co. "FO'B" 2	Same	Dec 1946	31 29S 21E	MD	3,013	Santos	early Mio

PRODUCING ZONES

	Average depth	Average net thickness	6	Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(leet)	Age	Formation	Gas (btu)	gr/gal	required
Phacoides	2,060	25	early Miocene	Temblor	20	N.A.	None

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total number of wells		Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	20	0	14,829	0	9,661	1966	15	4	40

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
-12			
		1 1	

SPACING ACT: Applies

BASE OF FRESH WATER: None

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

METHOD OF WASTE DISPOSAL:

REMARKS:

REFERENCES: Land, P.E., East Temblor Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 54, No. 1 (1968).





LOCATION: 24 miles northwest of Taft TYPE OF TRAP: Faulted anticline ELEVATION: 1,600

DISCOVERY DATA

		-		prod	l daily uction	
Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Victory Oil Co. No. 7	Climax Oil Co. No. 1	36 29S 20E	MD	10	N.A.	May 1900
						1
l.	1 2	1	1 3	1 8	1	1
		Victory Oil Co. No. 7 Climax Oil Co. No. 1	Victory Oil Co. No. 7 Climax Oil Co. No. 1 36 295 20E	Victory 011 Co. No. 7 Climax 011 Co. No. 1 56 29S 20E MD	Present operator and well name Original operator and well name Sec. T. & R. B & M (bbl) Victory 0il Co. No. 7 Climax 0il Co. No. 1 36 295 20E MD 10	Victory Oil Co. No. 7 Climax Oil Co. No. 1 36 295 20E MD 10 N.A.

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total d	epth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Victory Oil Co. J-12	Aslin Oil Co., Inc. 69-J-12	Oct 1952	36 29S 20E	MD	2,119	Point of Rocks	late Eo

PRODUCING ZONES

	Average depth	Average net thickness	0	Geologic	Oil gravity (*API) or	Salinity of zone water	Class 80PE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Phacoides	400	60	early Miocene	Temblor	16	20	None
				-	18	ſ	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Production 1972 1972 Cumulative prod Proved Average number Cumulative prod			roduction Peak oil production			Total num	Maximum proved		
Oil (bbl)	Net gas (Mcf)	Water (bbf)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
9,012	0	62,939	90	15	1,063,642	0	47,115	1947	51	36	90

STIMULATION DATA (Jan. 1, 1973)

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: 7" cen. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Percolation and evaporation sumps.

REMARKS: Formerly part of Temblor field.

REFERENCES: Land, P.E., Temblor Ranch Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 54, No. 1 (1968).





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LOCATION: 10 miles southwest of Bakersfield

TYPE OF TRAP: See areas

ELEVATION: 325

DISCOVERY DATA

						al daily duction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbi)	Gas (Mcf)	Date of completion
Upper Stevens	Shell Oil Co. "KCL-A" 1	Shell Oil Co. "K.C.LStevens A" 1	29 30S 26E	MD	827	14,120	Jun 1936

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Shell Oil Co. "KCL" 15X-24	Same	Dec 1957	24 30S 25E	MD	15,739	Basement	Jurassic

PRODUCING ZONES (See areas)

	Average depth	Average net thickness	Ger	ologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone			Gas (btu)	gr/gal	required		
			1				

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Main Area)

1972 Production		1972 Production 1972 1972 Cumulative production		Peak oil production		Total num	Maximum proved				
011 (bb1)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
759,360	1,055,878	1,006,606	2,295	79	77,414,127	173,115,067	6,557,724	1943	184	167	2,420

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

SPACING ACT: Applies

BASE OF FRESH WATER: See areas.

CURRENT CASING PROGRAM: See areas.

METHOD OF WASTE DISPOSAL: See areas.

BEMARKS:

REFERENCES: Hluza, A.G., Ten Section Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 53, No. 1 (1967).

LOCATION: See map sheet of Ten Section Oil Field

TYPE OF TRAP: Anticline; permeability variations

ELEVATION: 325

DISCOVERY DATA

						al daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bb1)	Gas (Mcf)	Date of completion
Pliocene (Gas) Upper Stevens Lower Stevens	Tenneco West, Inc. "Ten West-Shell" 16 Shell Oil Co. "KCL-A" 1 Shell Oil Co. "KCL-A" 53-30	Carr & Wrath "K.C.LShell" 1-G Shell Oil Co. "K.C.LStevens A" 1 Shell Oil Co., Inc. "KCL-A" 53-30	29 30S 26E 29 30S 26E 30 30S 26E	MD		560 14,123 1,212	Jun 1936

Remarks:

DEEPEST WELL DATA

		Date		1	Depth	At tot	il depth
Present operator and well name	Original operator and well name		Sec. T. & R.	3 & M		Strata	Age
Shell Oil Co. "KCL-A" 53-30	Shell Oil Co., Inc. "KCL-A" 53-30	Sep 1946	30 30S 26E	MD	14,000	Vedder	early Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE	
Zone (feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required		
Pliocene (Gas) Upper Stevens Lower Stevens	4,500 7,950 9,000	7 320 150	Pliocene late Miocene late Miocene	Etchegoin Fruitvale Fruitvale	1,015 32 - 39 33	1,200 1,410 N.A.	III IV IV	
2.00					1			

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Remarks)

	1972 Production		1972 Production 1972 1972 Cumulative production				Peak oil prod	uction	Total num	Maximum	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
717,130	1,046,114	915,498	2,190	75	75,594,902	171,204,959	6,557,724	1943	172	155	2,250

STIMULATION DATA (Jan. 1, 1973)

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	24,679,603	3

SPACING ACT: Applies

BASE OF FRESH WATER: 2,000

CURRENT CASING PROGRAM: Plicene: 8 5/8" cem. 500; 4 1/2" cem. through zone and across base of fresh-water sands. Stevens: 9 5/8" cem. 1,000; 5 1/2" cem. through zone and across base of fresh-water sands. METHOD OF WASTE DISPOSAL: In 1972 all waste water was injected into the San Joaquin - Etchegoin.

REMARKS: 1972 dry gas production 140,895 Mcf from 3 producing wells; cumulative dry gas production 7,032,010; 12 wells drilled and completed; proved acreage (1972) 130, maximum 170.

REFERENCES: Gentry, A.W., Ten Section Oil Field: Calif. Div. of Mines Bull. 118, p. 549-550 (1943).

LOCATION: See map sheet of Ten Section Oil Field

TYPE OF TRAP: Anticline; lithofacies variations

ELEVATION: 325

SCOVERY	DATA	

						daily ction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oii (bbl)	Gas (Mcf)	Date of completion
Upper Stevens Lower Stevens	Shell Oil Co. "KCL" 84-23 Same as above	Same as present Same as present	23 30S 25E 23 30S 25E		338 N.A.	472 N.A.	Jul 1958 Jul 1958

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age	
Shell Oil Co. "KCL" 15X-24	Same	Dec 1957	24 30S 25E	MD	15,739	Basement	Jurassic	

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Upper Stevens Lower Stevens	8,100 9,500	130 100	late Miocene late Miocene	Fruitvale Fruitvale	35 34	1,400 N.A.	IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Production 1972 1972 Cumulative production				Peak oil production		Total number of wells		proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
42,230	9,764	91,108	105	4	1,819,225	1,910,108	355,948	1959	12	12	17

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 2,000

CURRENT CASING PROGRAM: 9 5/8" cem. 1,000; 5 1/2" cem. through zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Waste water is transported by pipeline to Canal field and utilized in a water flood project.

REMARKS: A water flood of the Upper Stevens was begun in March 1961 and terminated in 1971. Cumulative injection totals 4,769,372 bbls.

REFERENCES:

TERRA BELLA OIL FIELD (Abandoned)



LOCATION: 6 miles south of Porterville

TYPE OF TRAP: Permeability variations on a homocline

ELEVATION: 450

Zone					Initia		
	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	OII (bbi)	Gas (Mcf)	Date of completion
Santa Margarita	Norwood Oil Co. "Gardner" 1	Terra Bella Oil Co. "Gardner" l	35 22S 27E	MD	50	N.A.	Aug 193

Remarks:

DEEPEST WELL DATA

			ate			Depth	At total	depth
Present operator and well name	Original operator and well name		arted	Sec. T. & R.	8 & M		Strata	Age
Tres Carlos Exploration Co. "Tres Carlos Gardner" 4B	Same	' Oct	1951	35 22S 27E	MD	1,710	Basement (Granite)	Late Jur (?)

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Santa Margarita	860	100	late Miocene	Santa Margarita	16	20 - 140	None
				-			

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Production 1972 1972 Cumulative production		roduction	Peak oil production		Total number of wells		Maximum		
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	17,651	0	3,525	1933	16	3	15

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Does not apply

BASE OF FRESH WATER: Basement

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

METHOD OF WASTE DISPOSAL:

REMARKS:

REFERENCES: Weddle, J.R., Deer Creek Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 44, No. 1 p. 53 (1958).



LOCATION: 12 miles west of Delano

TYPE OF TRAP: Anticline; permeability barriers

ELEVATION: 310

DISCOVERY DATA

					Init	ial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
First Mya Atwell Island	Trico Industries Inc. No. 2 Trico Industries Inc. "Atwell Island	Trico Oil and Gas Co. No. 2 Trico Oil and Gas Co. "Atwell Island	3 25S 23E 7 24S 23E		3,400 5,500	25 1,020		Nov 1934 Oct 1945
ALWEIT ISTAIN.	Comm." 1	Comm." 1						

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total d	epth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B& M		Strata	Age
Trico Industries Inc. "H.C. Morris" 1	Standard Oil Co. of Calif. "H.C. Morris" 1	Jul 1938	36 24S 23E	MD	13,480	Undiff. marine	Late Cret (?)

PRODUCING ZONES

	Average depth	Average net thickness	0	Seologic		Salinity of zone water	Original zone	Class BOPE	1
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required	E.
First Mya Atwell Island	2,525 3,225	20 24	e Pleistocene Pliocene	San Joaquin San Joaquin	1,010 1,010	1,870 2,650	1,150 1,480		

PRODUCTION DATA (Jan. 1, 1973)

1972 Pro	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas prod	luction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
1,562,012	1,018	6,610	23	195,952,335	10,672,438	1948	164	133	11,125

SPACING ACT: Applies

BASE OF FRESH WATER: 1,200

CURRENT CASING PROGRAM: 10 3/4" cem. 400; 5 1/2" cem. through zone and across base of fresh-water sands.

. NETHOD OF WASTE DISPOSAL:

REMARKS:

REFERENCES: Bailey, W.C., and R.M. Barger, Trico Gas Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 32, No. 2 (1946).



CONTOURS ON TOP OF FIRST MYA ZONE



Kings County

LOCATION: 44 miles southeast of Coalinga

TYPE OF TRAP: Anticlinal nose with permeability variations

ELEVATION: 200

DISCOVERY DATA

				1	Ini	tial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
First Mya Atwell Island	Artnell Oil and Gas Co. "Cutter" 1 Same as above	W.W. Holmes, Opr. "Cutter" 1 Standard Oil Co. of Calif. "Cutter" 1	29 235 22E 29 235 22E		5,000 10,000	950 1,300	1/2 N.A.	Feb 1953 Sep 1944
		3						

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name		Sec. T. & R.	B & M		Strata	Age
Transco Oil Co. "SLF" 1-25	Same	Dec 1967	25 23S 21E	MD	5,000	Etchegoin	Pliocene

PRODUCING ZONES

	Average	Average net thickness		Geologic		Salinity of zone water	Original zone	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	pressure (psi)	required
First Mya Atwell Island	2,750 3,800	8 10	Pliocene Pliocene	San Joaquin San Joaquin	N.A. 1,040	N.A. N.A.	1,250 1,555	

PRODUCTION DATA (1an. 1, 1973)

1972 Pro	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas pro	duction	Total num	ber of wells	Maximun proved
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
273,163	2,682	190	4	7,687,953	1,868,922	1968	41	22	840

SPACING ACT: Applies

BASE OF FRESH WATER: 380

CURRENT CASING PROGRAM: 7" cem 400; 2 7/8" cem 2,800 - 4,000.

METHOD OF WASTE DISPOSAL:

REMARKS: The major period of development followed the completion in Sept. 1967 of Transco Oil Co. Well No. "H.I." 1-30, Sec. 50. The Atwell Island zone includes the Cutter sand.

REFERENCES: Hill, F.L., Northwest Trico Gas Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 50, No. 1 (1964).





LOCATION: 2 miles south of Bakersfield

TYPE OF TRAP: Faulted anticlinal nose

ELEVATION: 400

DISCOVERY DATA

						daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Chanac Santa Margarita	L.W. Babcock "Roberts" 2 L.W. Babcock "Roberts" 1	Hancock Oil Co. of Calif. "Roberts" 2 Hancock Oil Co. "Roberts" 1	6 30S 28E 6 30S 28E		150 400	1,000 N.A.	Oct 1941 Jan 1941
		1	f			l	

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tot	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Atlantic Richfield Co. "Union Avenue" 1	Richfield Oil Corp. "Union Avenue" 1	Jul 1938	6 305 28E	MD	10,427	Vedder	early Mio

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Chanac Santa Margarita	4,100 5,000	200 200	Miocene Iate Miocene	Chanac Santa Margarita	15 15	20 70	
			E .				

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972	1972 Average number	Cumulative production		Peak oil produ	uction	Total num	ber of wells	Maximur proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	Proved acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
36,527	0	863,602	15	3	1,210,040	829,013	139,103	1946	14	7	5

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 3,550

CURRENT CASING PROGRAM: 11 3/4" cem. 600; 8 5/8" cem. above zone and across base of fresh-water sands; 6 5/8" liner landed through zone. METHOD OF WASTE DISPOSAL: Percolation and evaporation sumps.

REMARKS: Waste water has a boron concentration of 3 ppm.

REFERENCES: Weddle, J.R., Union Avenue Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 1 (1961).

The same carlos sand			GRISWOLD CANYON AREA INSERT MAP A CONTOURS ON TOP OF SAN CARLOS SAND	S RIDE 40 III III IIII IIII IIII IIII IIIIIIII	*1000 X 24 CEE INSERT MAP A) 20 LE 21	25 20 20 20 20 20 20 20 20 20 20 20 20 20		TRUNCATION OF TOP OF THE PART		C T LOS PINOS CANYON	T 17 S R II E	CONTOURS ON TOP OF KREYENHAGEN
				т ⁴ 6		26 PIMENTAL C AREA CASIC	1 +	A TRUNCATIC OF KREYE				CONTOU
FORMATION 6. MEMBER	ALLUVIUM AND TERRACE	ETCHEGOIN	TEMBLOR	KREYENHAGEN ASHURST SAND	1 10	ARROYO HONDO SHALE		CERROS SHALE OF KREVE	SAN CARLOS SAND	MARTINEZ	MORENO	PANOCHE CONTOU



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VALLECITOS OIL FIELD











LOCATION: 25 miles northwest of Coalinga

TYPE OF TRAP. See areas

ELEVATION: 1,560 - 2,725

DISCOVERY DATA

					Initial daily production		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
San Carlos	Aubrey A. Norwood "Norwood" 5	The Texas Co. "Nicholas" 1	28 16S 12E	MD	33	0	Jul 1948

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name Original operator and well name		started	Sec. T. & R.	3 & M		Strata	Age	
Artnell Co. & Artnell Oil & Gas Co. "Mohawk-Ashurst" 5-5	Same	Oct 1958	5 17S 11E	MD	9,252	Lodo	Eocene	

PRODUCING ZONES (See areas)

	Average depth	Average net thickness	Ge	ologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
	1.		1		1		

PRODUCTION DATA (Jan. 1, 1973) (Dry gas production data not included - see Pimental Canyon Area - Gas)

1972 Production		1972 Production 1972 1972 Cumulative production			Peak oil production		Total number of wells		Maximum		
Oil (bbl)	Net gas (Mcf)	Water (bb1)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
60,056	51,135	290,663	280	21	4,339,295	3,761,542	859,911	1959	123	44	360

STIMULATION DATA (Jan. 1, 1973)

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: Anderson, Ralph, and R.W. Pack, Geology and 011 Resources of the West Border of the San Joaquin Valley, North of Coalinga, California: U.S. Geological Survey Bull. 603 (1915).
 Atwill, E.R., Cantua Vallecitos Area: Calif. State Div. of Mines, Bull. 118, pp. 471-474 (1943).
 Irelan, William, Jr., Eighth Annual Report of the State Mineralogist: Calif. State Mining Bureau, p. 488 (1888).
 Wilkinson, E.R., Vallecitos Field: Calif. Div. of Oil and Gas--Summary of Operations Vol. 45, No. 2, pp. 17-33 (1959).

VALLECITOS OIL FIELD San Benito County

ASHURST AREA (Abandoned)

LOCATION: See map sheet of Vallecitos Oil Field

TYPE OF TRAP: Lithofacies change on north limb of Vallecitos syncline

ELEVATION: 2,725

DISCOVERY DATA

					Initial daily production		Data at
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Domengine - Yokut	Tesoro Petroleum Corp. "Cedar Flat-USL" 2	Intex Oil Co. "Cedar Flat-USL" 2	35 16S 11E	MD	57	0	Jun 1958

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age	
Texaco Inc. "Cedar Flat" USL 1	Intex Oil Co. and Seaboard Oil Co. "Cedar Flat" USL 1	May 1956	35 165 11E	MD	5,673	San Carlos	Paleocene	

PRODUCING ZONES

	Average	Average Average net depth thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Domengine - Yokut	1,058	60	Eocene	Domengine - Yokut	20	N.A.	None

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total number of wells		Maximum proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	13,130	0	6,098	1959	13	2	40

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 11 3/4" cem. 280 ; 8 5/8" cemented through zone.

METHOD OF WASTE DISPOSAL:

REMARKS:

REFERENCES: Vander Leck, Lawrence, Petroleum Resources of California: Calif. State Mining Bureau Bull. 89, pp. 72 and 73 (1921).

CEDAR FLAT AREA

San Benito County

LOCATION: See map sheet of Vallecitos Oil Field

TYPE OF TRAP: Fault trap on south flank of the Ciervo anticline

ELEVATION: 2,200

DISCOVERY DATA

						1250 11
Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Aubrey A. Norwood "Ashurst" 1	The Texas Co. "Ashurst NCT One" 1	27 16S 11E	MD	8	0	Sep 1948
÷.	18. C					
	Aubrey A. Norwood "Ashurst" 1	Aubrey A. Norwood "Ashurst" 1 The Texas Co. "Ashurst NCT One" 1	Aubrey A. Norwood "Ashurst" 1 The Texas Co. "Ashurst NCT One" 1 27 165 11E	Aubrey A. Norwood "Ashurst" 1 The Texas Co. "Ashurst NCT One" 1 27 165 11E MD	Present operator and well name Original operator and well name Sec. T. & R. B & M Original (bb) Aubrey A. Norwood "Ashurst" 1 The Texas Co. "Ashurst NCT One" 1 27 165 11E MD 8	Aubrey A. Norwood "Ashurst" 1 The Texas Co. "Ashurst NCT One" 1 27 165 11E MD 8 0

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name		Sec. T. & R.	3 & M		Strata	Age
W.W. Holmes "McCray" 45-26	Same	Apr 1956	26 16S 11E	MD	2,466	San Carlos	Paleocene

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age Formation		Gas (btu)	gr/gaf	required
San Carlos	1,000	70	Paleocene	Martinez	15	N.A.	None
~							

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil prode	oction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
1,892	0	0	10	1	7,783	0	1,892	1972	12	2	20

STIMULATION DATA (Jan. 1, 1973)

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" cem. over zone; 5 1/2" liner landed through zone. METHOD OF WASTE DISPOSAL: Percolation and evaporation from unlined sumps. REMARKS:

REFERENCES: Vander Leck, Lawrence, Petroleum Resources of California: Calif. State Mining Bureau Bull. 89, p. 75 (1921).

San Benito County

LOCATION: See map sheet of Vallecitos Oil Field

TYPE OF TRAP: A narrow anticlinal fold against a high angle thrust fault

ELEVATION: 1,950

CENTRAL AREA

DISCOVERY DATA

						I daily uction	1000
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	011 (bb1)	Gas (Mcf)	Date of completion
Ashurst	Transco Qil Co. "Ashurst" 1A-5	Long and Hedges "H & H" 1-A	5 17S 11E	MD	100	9	Jul 1955
Yokut	Vallecitos Oil Co. "F. & I." 58-31	Shell Oil Co. "F. & I." 58-31	31 165 11E	MD	441	110	Jul 1956
	1						î î
			1.0				

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	I depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Artnell Co. and Artnell Oil & Gas Co. "Mohawk-Ashurst" 5-5	Same	Oct 1958	5 17S 11E	MD	9,252	Lodo	Eocene

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Ashurst Yokut	5,350 3,300	60 300	Eocene Eocene	Kreyenhagen Yokut	37 35	N.A. 110	None II

PRODUCTION DATA (1an. 1, 1973)

1972 Production		1972 Proved	1972 1972 Cumulative production		Peak oil production		Total number of wells		Maximum' proved		
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
37,188	36,380	249,370	130	7	3,016,889	2,910,158	509,580	1959	26	14	130

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 100

CURRENT CASING PROGRAM: 9 5/8" cem. 500; 5 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL: 247,824 bb1. of waste water was injected during 1972 into one disposal well; percolation and evaporation from unlined sumps REMARKS:

REFERENCES: Vander Leck, Lawrence, Petroleum Resources of California: Calif. State Mining Bureau Bull. 89, pp. 71 and 72 (1921).

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FRANCO AREA

LOCATION: See map sheet for Vallecitos Oil Field

TYPE OF TRAP: Lenticular sands on south-dipping homocline

ELEVATION: 2,160

DISCOVERY DATA

						at daity luction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbi)	Gas (Mcf)	Date of completion
Yokut	McKnight Oil Co. "Ashurst" 52A-33	Franco Western Oil Co. "Ashurst" 52A-33	33 16S 11E	MD	38	N.A.	Dec 1956

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	al depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Shell Oil Co. "F. & I." 78-29	Same	Jul 1963	29 16S 11E	MD	5,183	Cantua	Eocene

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity ("API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Yokut	3,800	40	Eocene	Yokut	32	N.A.	None
			1				

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number Cumulative production Peak oil production Total number of wells		Cumulative production		ber of wells	Maximum proved		
Oil (bbl)	Net gas (Mcf)	Water (bbi)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
16,630	14,755	38,433	70	8	1,216,047	-846,829	341,336	1959	21	12	80

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
(1773)			

SPACING ACT: Applies

BASE OF FRESH WATER: 100 ± (no log of uppermost strata)

CURRENT CASING PROGRAM: 10 3/4" cem. 250; 7" or 5 1/2" cem. through zone. METHOD OF WASTE DISPOSAL: Percolation and evaporation from unlined sumps. REMARKS:

REFERENCES:

GRISWOLD CANYON AREA

San Benito County

LOCATION: See map sheet of Vallecitos Oil Field

TYPE OF TRAP: Tar seal

ELEVATION: 1,660

DISCOVERY DATA

						al daily oction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
San Carlos Martinez Moreno	T. B. Hess "Panoche" 1	Panoche Petroleum Co. "Panoche" 1	24 16S 10E	MD	16	0	Sep 1950

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Shell 011 Co. "Ortiz" 48-24	Same	Jul 1958	24 16S 10E	MD	8,090	Lodo	Eocene

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
San Carlos Martinez	80 - 759 200 - 1,000	80 50	Paleocene Paleocene	Martinez Martinez	23 23	N.A. N.A.	None None
Moreno	80 - 1,300	100	Cretaceous	Moreno	36	N.A.	None

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number			Peak oil prodi	uction	Total num	ber of wells	Maximum proved	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drifled	Completed	acreage
232	0	0	20	1	12,830	0	1,542	1951	17	4	30

STIMULATION DATA (Jan. 1, 1973)

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" or 9 5/8" cem. 100; 7" or 5 1/2" cem. through zone.

METHOD OF WASTE DISPOSAL: No water has been produced from this area.

REMARKS: Some oil was produced from a 70-foot, hand-dug well called "Rebecca" 1 in 1910, Sec. 19, T. 165, R. 11E, M.D.B.&M. and a minor amount was produced during the drilling of "Panoche" 1 in 1944.

REFERENCES: Vander Leck, Lawrence, Petroleum Resources of California; Calif. State Mining Bureau Bull. 89, pp. 72 and 73 (1921).
LOS PINOS CANYON AREA (Abandoned)

LOCATION: See map sheet of Vallecitos Oil Field

TYPE OF TRAP: Lithofacies change on steeply dipping homocline

ELEVATION: 2,180

DISCOVERY DATA

						daily uction	-
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
Kreyenhagen	Neaves Petroleum Developments "Neaves- Vallecitos" l	Calzona Exploration Co. "Calzona" 1	8 17S 11E	MD	5	0	Apr 1958

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Neaves Petroleum Developments "Neaves- Vallecitos" 2	Same	Oct 1958	17 175 11E	MD	5,056	Kreyenhagen	late Eo

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE	
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required	
Kreyenhagen	420	45	late Eocene	Kreyenhagen	26	N.A.	None	

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	production	Peak oil produ	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	0	312	0	287	1958	11	1	10

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 100

CURRENT CASING PROGRAM: 13 3/8" cem. 216; 5" cemented through zone.

METHOD OF WASTE DISPOSAL: Sump.

REMARKS:

REFERENCES: Vander Leck, Lawrence, Petroleum Resources of Calif.: Calif. State Mining Bureau Bull. 89, p. 71 (1921).

PIMENTAL CANYON AREA - GAS (Abandoned)

LOCATION: See map sheet of Vallecitos Oil Field

TYPE OF TRAP: Anticline tightly folded against upthrown north side of the Vallecitos thrust fault

ELEVATION: 2,125

DISCOVERY DATA

					In	itial product	ion	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Daily (Mcf)	Flow pressure (psi)	Bean size (in.)	Date of completion
Yokut	Shell Oil Co. "Breckenridge" 31-25	Same as present	35 16S 10E		5,000	700	32/64	Sep 1957

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Shell Oil Co. "Briggs" 6-36	Same	Aug 1957	36 16S 10E	MD	6,002	Kreyenhagen	late Eo

PRODUCING ZONES

	Average depth	Average net thickness	Geologic			Salinity of zone water	Original zone	Class BOPE	
Zone	Zone (feet) (feet)		Age Formation		Gas (btu)	gr/gal	pressure (psi)	required	
řokut	2,500	125	early Eocene	Yokut	945	65	1,200	11	
	1				1 1				

PRODUCTION DATA (Jan. 1, 1973)

1972 Pro	duction	1972 Proved	1972 Maximum number	Cumulative gas	Peak gas pro	duction	Total num	ber of wells	Maximum
Net gas (Mcf)	Water (bbl)	acreage	producing wells	production (Mcf)	(Mcf)	Year	Drilled	Completed	acreage
0	0	0	0	1,738,443	697,446	1960	7	1	40

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 9 5/8" cem. 400; 5 1/2" cemented through zone. METHOD OF WASTE DISPOSAL:

REMARKS:

REFERENCES:

SILVER CREEK AREA

LOCATION: See map sheet of Vallecitos Oil Field

TYPE OF TRAP: Angular unconformity on south flank of Ciervo anticline

ELEVATION: 1,560

DISCOVERY DATA

					Initia	I daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
San Carlos	Aubrey A. Norwood "Norwood" 5	The Texas Co. "Nicholas" 1	28 165 12E	MD	33	0	Jul 1948

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	 Original operator and well name 		Sec. T. & R.	8 & M		Strata	Age
Idria Petroleum Corp. "Barnett-USL" 1	Same	Oct 1953	33 16S 12E	MD	2,417	San Carlos	Paleocene

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age Formation		Gas (btu)	gr/ga1	required
San Carlos	1,180	32	Paleocene	Martinez	25	N.A.	11
	1						

PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative p	roduction	Peak oil prod	uction	Total num	ber of wells	Maximum
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	011 (bb1)	Gas (Mcf)	Barrels	Year	Driffed	Completed	acreage
4,114	0	2,860	50	4	72,304	4,557	7,848	1952	23	9	50

STIMULATION DATA (Jan. 1, 1973)

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. 200; 7" cem. above zone; 4 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Sumps.

REMARKS:

REFERENCES: Anderson, Ralph and R.W. Pack, Geology and Oil Resources of the West Border of the San Joaquin Valley North of Coalinga, Calif.: U.S. Geological Survey Bull. 603 (1915). Vander Leck, Lawrence, Petroleum Resources of Calif.: Calif. State Mining Bureau Bull. 89, pp. 75-76 (1921).



Kern County

LOCATION: 20 miles southeast of Bakersfield

TYPE OF TRAP: Permeability variation on a homocline

ELEVATION: 560

DISCOVERY DATA

					Initia	daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oii (bbi)	Gas (Mcf)	Date of completion
Santa Margarita	K.R. Evans, Oper. "S.P48" 1	Phillips Petroleum Co. "S.P48" 1	35 12N 19W	SB	103	N.A.	Nov 1961
	1						1

Remarks:

DEEPEST WELL DATA

					Depth	At total depth		
Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	8 & M		Strata	Age	
Same as discovery well	Same	May 1961	35 12N 19W	SB	12,894	Tecuya	Oligocene	

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Santa Margarita	6,700	40	late Miocene	Santa Margarita	27	1,200	III

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Proved	1972 Average number	Cumulative production		Peak oil produ	uction	Total num	ber of wells	Maximum	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
5,306	0	59,974	10	1	73,030	9,817	9,406	1962	2	1	10

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 5,700

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: Evaporation and percolation sumps.

REMARKS: Only one well was completed in the field.

REFERENCES: Welge, E.A., Valpredo Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 55, No. 1 (1969).



CONTOURED HORIZON VEDDER TUMEY EOCENE SANDS KREYENHAGEN

15000

SANDS

EOCENE

my

Man Issoo

EOCENE

LOCATION: 27 miles northwest of Bakersfield

TYPE OF TRAP: Anticline

ELEVATION: 275

DISCOV	/ERY	DATA	

						I daily uction	25.28-5024
Zone	Present operator and well name	¹ Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Fractured Shale Vedder Eocene	Continental Oil Co. "K.C.L." A-1-8 Continental Oil Co. "K.C.L." A-2-8 Standard Oil Co. of Calif. "Mushrush" 5	Continental Oil Co. "K.C.L." A-1 Continental Oil Co. "K.C.L." A-2 Same as present	8 275 24E 8 275 24E 7 275 24E	MD	25 3,663 354	N.A. 1,720 965	Nov 1936 Jun 1937 Sep 1949

Remarks:

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DEEPEST WELL DATA

		Date			Depth	At total	depth
Present operator and well name	Original operator and well name		Sec. T. & R.	3 & M		Strata	Age
Standard Oil Co. of Calif. "Mushrush" 5	Same	Feb 1949	7 27S 24E	MD	15,866	Krøyenhagen	Eocene

PRODUCING ZONES

	Average depth	Average net thickness	G	Seologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Fractured Shale Vedder Eocene	7,200 13,000 15,000	500 40 275	Pliocene early Miocene Eocene	Etchegoin Vedder Kreyenhagen	21 32 - 39 40	1,600 1,220 1,140	III IV V

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved			Peak oll prodi	uction	Total num	ber of wells	Maximum	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
0	0	0	0	- 0	5,071,409	3,276,043	822,751	1944	19	14	270

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: 1,400

CURRENT CASING PROGRAM: 13 3/8" cem. 1,000; 9 5/8" cem. 8,000 and across base of fresh-water sands; 6 5/8" cem. above zone; 4 3/4" liner landed through zone. METHOD OF WASTE DISPOSAL:

REMARKS: The field was abandoned in May 1960.

REFERENCES: Bailey, W.C., Wasco Oil Field: Calif. Div. of Oil and Gas, Summary of Operations -- Calif. Oil Fields, Vol. 24, No. 3 (1939).



Kern County

LOCATION: 52 miles northwest of Taft

TYPE OF TRAP: Fractured shale with a tar seal at the angular unconformity ELEVATION: 575

BEETATION. DIS

DISCOVERY DATA

or and well name	Original answerses and wall same	Sec. T. & R.	1000	Oil	Gas	Date of
	Original operator and well name		B&M	Oil (bbl)	Gas (Mcf)	completion
"MacKessy" 1-A M.R. P	eck Drilling Contractor "Beer" 1-A	7 26S 19E	MD	3	N.A.	Jan 1952
	Mackessy I'-A M.K. M	Mackessy I'A M.N. Feck Utiling Contractor Deer I'A	Markessy I-A Min. Feck Drilling Contractor beer I-A / 200 ISE	Mackessy I'-A M.R. Feck Utiling Contractor Deer I'-A / 200 ISE ND	Mackessy 1-A A.K. Feck Diffiling Contractor Deer 1-A 7 203 152 pb 3	Mackessy 1-A A.K. Feck Utiling Contractor Deer 1-A 7 400 192 AD 3 A.A.

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total d	epth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	B & M		Strata	Age
Great Western Drilling "Eddyell" 2	Edward Lustgarten and Ned Bamore "Eddye11" 2	Oct 1956	7 26S 19E	MD	2,611	Point of Rocks	Eocene

PRODUCING ZONES

	Average depth	Average net thickness	Geologic		Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Tuney	100	100	01igocene	Tumey	12	400	None
141							

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total number of wells		Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
1,366	0	1,340	110	6	31,371	0	3,874	1953	60	43	110

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 16" conductor cem. 10; no other casing used. METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps.

REMARKS:

REFERENCES



1

LOCATION: 25 miles south of Bakersfield

TYPE OF TRAP: See areas

ELEVATION: 750 - 2,000

DISCOVERY DATA

						al daily uction	Date of completion
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	
Main	Tenneco West, Inc. No. 1	Standard Oil Co. of Calif. "Kern County Lease No. 2" 1	28 11N 20W	SB	275	N.A.	Nov 1922

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth	
Present operator and well name	Original operator and well name.	started	Sec. T. & R.	8 & M		Strata	Age
Standard Oil Co. of Calif. "KCL 2" 337	Same	Aug 1952	27 11N 20W	SB	12,514	Tejon	late Eo

PRODUCING ZONES (See areas)

	Average depth	Average net thickness	Geo	ologic	O(I gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
					× .		

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative p	Cumulative production		Peak oil production Total number of wells		Total number of wells	
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	proved acreage
1,441,449	1,744,530	2,180,271	1,320	126	45,508,534	82,153,370	2,588,627	1956	235	195	1,610

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:

REFERENCES: See areas.

TELEGRAPH CANYON AREA (Abandoned)

TYPE OF TRAP: Anticline with permeability barrier across crest of structure

ELEVATION: 1,700

DISCOVERY DATA

						al daily uction	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Oil (bbl)	Gas (Mcf)	Date of completion
Tejon	Atlantic Richfield Co. "K.C.L. D" 84-31	Richfield Oil Corp. "K.C.L. D" 84-31	31 11N 20W	SB	31	N.A.	Aug 1955

Remarks:

DEEPEST WELL DATA

		Date			Depth	At tota	l depth
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age
Atlantic Richfield Co. "San Emidio B" 2	Richfield Oil Corp. "San Emidio B" 2	Jul 1954	31 11N 20W	SB	11,938	Tejon	late Eo

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE required	
Zone	(feet)	(feet)	Age	Fermation	Gas (btu)	gr/gal		
Tejon	10,580	60	late Eocene	Tejon	50	1,820	IV	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Production 1972 1972 Cumulative production		roduction	Peak oil production		Total num	Maximum proved			
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Dritled	Completed	acreage
0	0	0	0	0	99,785	2,005,872	60,590	1957	4	3	30

STIMULATION DATA (Jan. 1, 1973)

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. 1,000; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL

REMARKS: Area was abandoned in 1963.

REFERENCES:



LOCATION: See index map of Wheeler Ridge Oil Field

TYPE OF TRAP: Faulted anticlinal nose and permeability barriers

ELEVATION: 750 - 1,300

DISCOVERY DATA

					Initia produ		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
FA-2 Hagood ZB-1	Atlantic Richfield Co. "ROC-KCL G" 87-22 Atlantic Richfield Co. "Hagood" 38-22 Atlantic Richfield Co. "KCL S" 61-27	Richfield Oil Corp. "KCL G" 87-22 Richfield Oil Corp. "Hagood" 38-22 Richfield Oil Corp. "KCL S" 61-27	22 11N 20W 22 11N 20W 27 11N 20W	SB	106 82 18	20 9 40	May 1955 Oct 1955 Jan 1964

Remarks:

DEEPEST WELL DATA

		Date			Depth	At total depth		
Present operator and well name	Original operator and well name		Sec. T. & R.	8 & M		Strata	Age	
Atlantic Richfield Co. "KCL S" 61-27	Richfield Oil Corp. "KCL S" 61-27	Oct 1963	27 11N 20W	SB	11,972	Tejon	late Eo	

PRODUCING ZONES

	Average depth	Average net thickness	(Geologic	Oil gravity (°API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
FA-2 Hagood ZB-1	2,900 5,100 8,758	240 73 22	late Miocene late Miocene early Miocene	Fruitvale Fruitvale Vedder	18 17 39	430 N.A. N.A.	

PRODUCTION DATA (Jan. 1, 1973)

1972 Production 1972 1972 Cumulative production				Peak oil production		Total num	proved				
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
13,881	3,806	56,329	100	6	1,168,320	326,785	255,508	1956	21	17	160

STIMULATION DATA (Jan. 1, 1973)

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

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 8 5/8" or 7" cem. above zone; 6 5/8" or 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Percolation and evaporation from unlined sumps located on marine outcrop.

REMARKS:

REFERENCES: Hluza, A.G., Northeast Area of Wheeler Ridge Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 2 (1960).

WHEELER RIDGE OIL FIELD Southeast Area



CALIFORNIA DIVISION OF OIL AND GAS SOUTHEAST AREA

LOCATION: See index map of Wheeler Ridge Oil Field

TYPE OF TRAP: Faulted anticlinal nose and permeability barriers

ELEVATION: 1,250 - 2,000

DISCOVERY	DATEA	

					Initia prodi		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	8 & M	Oil (bbl)	Gas (Mcf)	Date of completion
72-34	Atlantic Richfield Co. "KCL L" 72-34	Richfield Oil Corp. "KCL L" 72-34	34 11N 20W	SB	149	216	Sep 1961
			-				
		1			6		

Remarks:

DEEPEST WELL DATA

X		Date			Depth	At total depth		
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age	
Atlantic Richfield Co. "ROC-KCL G" 65-27	Richfield Oil Corp. "ROC KCL G" 65-27	Jul 1955	27 11N 20W	SB	9,823	Vedder	early Mio	

PRODUCING ZONES

	Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Salinity of	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	zone water gr/gal	required
72-34	6,875	130	m Miocene	Olcese	43	2,600	III

PRODUCTION DATA (Jan. 1, 1973)

1972 Production		1972 Production 1972 1972 Proved Average number				Cumulative production		uction	Total number of wells		Maximum proved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Driffed	Completed	acreage
22,513	43,057	1,287	90	4	878,342	2,843,337	282,474	1962	11	6	100

STIMULATION DATA (Jan. 1, 1973)

	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	36,554	1
		1	1	

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 11 3/4" cem. 600; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Injection into water-flood wells.

REMARKS:

REFERENCES: Barnes, J.A., Southeast Area of Wheeler Ridge Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 50, No. 2 (1964).

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WHEELER RIDGE OIL FIELD Windgap Area



WINDGAP AREA

LOCATION: See index map of Wheeler Ridge Oil Field

TYPE OF TRAP: Anticline and permeability barrier

ELEVATION: 1,000 - 1,250

DISCOVERY DATA

						al daily uction		
Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B&M	Oil Gas (bbl) (Mcf)		Date of completion	
Reserve "Lower Olcese"	Atlantic Richfield Co. "KCL L" 36-36 Atlantic Richfield Co. "KCL L" 56-36	Richfield Oil Corp. "KCL L" 36-36 Richfield Oil Corp. "KCL L" 56-36	36 11N 20W 36 11N 20W		244 76	53 1,595	Sep 1959 May 1959	
							a	

Remarks:

DEEPEST WELL DATA

		Date	-		Depth	At tota	il depth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	3 & M		Strata	Age
Atlantic Richfield Co. "KCL F" 63-36	Richfield Oil Corp. "KCL F" 63-36	Apr 1956	36 11N 20W	SB	10,019	Vedder	early Mio

PRODUCING ZONES

	Average Average net depth thickness		(Seologic	Oil gravity (*API) or	Salinity of zone water	Class BOPE
Zone	(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
Reserve "Lower Olcese"	5,600 7,400	170 40	late Miocene early Miocene	Fruitvale Preeman-Jewett	21 64	600 2,000	IV IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved	1972 Average number	Cumulative production		Peak oil production		Total number of wells		Maximum
Dil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	acreage
645,642	152,957	1,101,908	510	27	10,812,841	9,117,994	1,623,974	1969	51	40	\$65

STIMULATION DATA (Jan. 1, 1973)

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	14,858,992	10

SPACING ACT: Applies

BASE OF FRESH WATER: 1,800

CURRENT CASING PROGRAM: 12 3/4" cem. 600 - 700; 7" cem. above zone and across base of fresh-water sands; 5" liner landed through zone.

METHOD OF WASTE DISPOSAL: Injection into water flood wells.

REMARKS: A total of 1,653,000 Mcf of gas was injected into one well for pressure maintenance from 1960 to 1968.

REFERENCES: Park, W.H., Windgap Area of Wheeler Ridge Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 46, No. 2 (1960).



SCALE 1" = 2000'



Kern County

LOCATION: 20 miles southeast of Maricopa

TYPE OF TRAP: Faulted anticline

ELEVATION: 2,100

DISCOVERY DATA.

			Initial daily production	
Zone	Present operator and well name	Original operator and well name	Sec. T. & R. B & M (bbl) (Mcf) complet	
700 Sand Reef Ridge Antelope		Same as present Same as present Same as present	5 10N 21W SB 7 N.A. Feb 15 5 10N 21W SB 15 N.A. Apr 19 5 10N 21W SB 15 N.A. Apr 19 5 10N 21W SB 38 4 Feb 19	959
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Banadici	· · ·		· · · · · ·	

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DEEPEST WELL DATA

· · · · · · · · · · · · · · · · · · ·		Date		_	Depth	- At total	lepth
Present operator and well name	Original operator and well name	started	Sec. T. & R.	8 & M		Strata	Age
Shell Oil Co. "KCL" 68-32	Same	Oct 1958	32 11N 21W	SB	10,133	Antelope	early Mio
	l .	1	ſ	۱ <u>.</u>	1	1	ι.

PRODUCING ZONES

		Average depth	Average net thickness		Geologic	Oil gravity (*API) or	Satinity of zone water	Class BOPE
Zone		(feet)	(feet)	Age	Formation	Gas (btu)	gr/gal	required
700 Sand Reef Ridge Antelope		- 815 2,800 1,770	350 200 - 740	Pliocene late Miocene late Miocene	Etchegoin Monterey Monterey	16 14 14	N.A. N.A. N.A.	III III '- III
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PRODUCTION DATA (Jan. 1, 1973)

	1972 Production		1972 Proved	1972 Average number	Cumulative	e production	Peak oil prode	uction	Total num	ber of weils	groved
Oil (bbl)	Net gas (Mcf)	Water (bbl)	acreage	producing wells	Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled -	Completed	acreage
38,021	0	9,751	110	. 7	732,764	0	176,664	1965	- 31	. 22	170
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STIMULATION DATA (Jan. 1, 1973)

Type of, project	Date Started	Cumulative injection Water, bb); Gas, Mcf; Steam, bbl (water equivalent).	Maximum number of wells used for injection
			,
		· · ·	-
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	1	1 1	

SPACING ACT: Applies

BASE OF FRESH WATER: None

CURRENT CASING PROGRAM: 10 3/4" cem. 500; 7" cem. above zone; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Percolation and evaporation sumps.

REMARKS: A cýclic-steam injection project was begun in the Reef Ridge zone in 1964 and terminated after 111,238 bbls. was injected.

REFERENCES: