

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

Ventura _____, California

November 12, 1991

R. D. Phillips, Agent
SOUTHERN CALIFORNIA GAS COMPANY
P.O. Drawer 3249 Mail Location 22GO
Los Angeles, CA 90051-1249

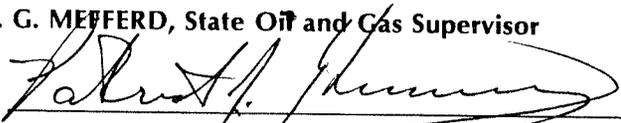
Your request, dated July 24, 1991, proposing to change the designation of well(s) in Sec. 29, T. 3N, R. 16W, S.B. B. & M., Aliso Canyon field, Los Angeles County, District No. 2, has been received.

The proposed change in designation, in accordance with Section 3203, Public Resources Code, is authorized as follows:

<u>FROM</u>	<u>TO</u>
"SFZU" F-2 (037-00665)	"Frew" 2 (037-00665)
"SFZU" F-3 (037-00666)	"Frew" 3 (037-00666)
"SFZU" F-4 (037-00667)	"Frew" 4 (037-00667)
"SFZU" F-5 (037-00668)	"Frew" 5 (037-00668)
"SFZU" F-6 (037-00669)	"Frew" 6 (037-00669)
"SFZU" F-7 (037-00670)	"Frew" 7 (037-00670)
"SFZU" F-8 (037-00671)	"Frew" 8 (037-00671)
"SFZU" F-9 (037-00672)	"Frew" 9 (037-00672)
"SFZU" SS-4 (037-00757)	"Standard Sesnon" 4 (037-00757)
"SFZU" SS-12 (037-00764)	"Standard Sesnon" 12 (037-00764)
"SFZU" SS-4-0 (037-22063)	"Standard Sesnon" 4-0 (037-22063)
"SFZU" SS-10 (037-00040)	"Standard Sesnon" 10 (037-00040)

M. G. MEFFERD, State Oil and Gas Supervisor

By



Deputy Supervisor

PATRICK J. KINNEAR

DIVISION OF OIL AND GAS

JUN 29 1976

History of Oil or Gas Well

SANTA PAULA, CALIFORNIA

OPERATOR SOUTHERN CALIFORNIA GAS COMPANY FIELD Aliso CanyonWell No. FREW #8, Sec. 29, T. 3N, R. 16W, S.B. B. & M.Date June 7, 1976Signed P. S. Magruder, Jr.P. O. Box 3249, Terminal AnnexLos Angeles, California 90051Title Agent

(Address)

(213) 689-3561 (Telephone Number)

(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date	Description
5-25-76	Moved in and rigging up.
5-26-76	Rigged up and prepared to kill well. Suspended operation (rig on stand-by).
5-27-76	Displaced 50 barrels of hot oil down tubing - Archer Reed unable to pull gas lift valve. Shot one 3/6" hole in tubing at 8310'. Killed well with 340 barrels of 67# polymer drilling fluid. Set plug in "X" nipple at 527'. Flanged down Christmas tree and nipped up B.O.P.'s.
5-28-76	Tested B.O.P.'s with nitrogen and mud at 3000 psi for 20 minutes - O.K. Archer-Reed recovered plug at 527'. Pulled packer loose and circulated hole. Measured out of hole, laid down gaslift valves, etc. Ran in hole with 5 7/8" bit and 7" casing scraper to 8540'.
5-29-76	Ran in hole with bit and scraper. Tagged retainer at 8568'. Circulated clean. Pulled out of hole. Rigged up Dresser Atlas and ran Cement Bond Log and recorded 8556'-1830'. Ran 20 stands in hole.
5-30-76	Rig idle.
5-31-76	Pulled out of hole. Ran Dresser Atlas Neutron Lifetime Log 8566'-7800'. Set Baker bridge plug at 8000' - tested to 1500 psi. Set Baker bridge plug at 65'. Flanged down B.O.P.E. and rigged up casing jacks.
6- 1-76	Ran Midway casing spear. Unlanded casing with 200,000# pull. Cut off 11 3/4" casing. Cut and thread 7" casing. Screwed on 7" 29# stub. Tested at 4500 psi for 30 minutes with HOWCO. Welded on 11 3/4" casing and head.
6-2-76	X-rayed welds on 11 3/4" - O.K. Landed 7" casing with 200,000#. Nipple up tubing spool and B.O.P.'s. Tested flanges and seals with 4500 psi. Tested

6-2-76
(cont'd)

B.O.P.'s to 3000 psi with nitrogen and mud.
Tested casing to 8012' with 1500 psi for 20 minutes - O.K.
Tested casing to 3000' to surface with 2000 psi for 20 minutes - O.K.
Tested casing to 2000' to surface with 2500 psi for 20 minutes - O.K.
Tested casing to 1250' to surface with 4000 psi for 20 minutes - O.K.

6-3-76

Ran in hole with Baker Retrieving Tool and retrieved bridge plug at 8012'.
Ran in to 8500' and circulated. Pulled out of hole and rigged up to run
production string.

6-4-76

Set Otis Permatrieve packer at 8429'. Ran tubing as programed. Changed
out tubing collars and stabbed seals into Model "D" at 8560'. Latched into
Otis packer and tested. Spaced out and landed with 8000#. Flanged down
B.O.P.'s.

6-5-76

Nippled up Christmas tree.
Tested to 5000 psi - O.K. Changed over from polymer mud to lease waste
salt water. Otis landed standing valve. Tested seals and packer with
2000 psi - O.K. Pulled valve. Released rig.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPPLICATE
(Other instructions on
reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

LA 055641-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS OIL AND GAS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL GAS WELL OTHER Gas Storage JUN 10 1976

2. NAME OF OPERATOR SOUTHERN CALIFORNIA GAS COMPANY SANTA PAULA, CALIFORNIA

3. ADDRESS OF OPERATOR P. O. Box 3249, Terminal Annex, Los Angeles, California 90051

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface
Aliso Canyon Field, Los Angeles County, California
Sec. 29, 3N, 16W S.B. B. & M.

7. UNIT AGREEMENT NAME SESNON-FREW ZONE

8. FARM OR LEASE NAME FREW

9. WELL NO. 8

10. FIELD AND POOL, OR WILDCAT Aliso Canyon - SF Zone

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 29, T3N, R16W

12. COUNTY OR PARISH 13. STATE

14. PERMIT NO. 15. ELEVATIONS (Show whether DF, RT, GR, etc.)

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input checked="" type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input checked="" type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	(Other) <input type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The present conditions of the well are, as follows:

- Total depth 8719'
- 11 3/4" cemented 1600'
7" cemented 8719', WSO 8443'
perforated at intervals 8455'-8711'
cement plug 8712'

PROPOSED WORK

- Move in rig, kill well, install B.O.P.E. and test.
- Pull tubing. Clean out to 8540' (Model "D" packer).
- Run Neutron Lifetime and Cement Bond logs.
- Perform any indicated remedial work. Install new wellheads.
- Pressure test 7" casing. Perform any indicated remedial work.
- Run packer, tubing, safety valve and gas lift valves.

18. I hereby certify that the foregoing is true and correct

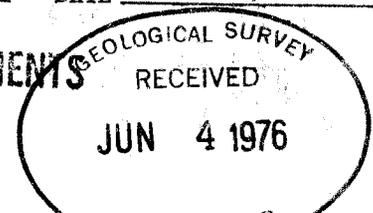
SIGNED Guy C. Abrahamson TITLE Consulting Engineer DATE June 1, 1976
 (This space for Federal or State office use)

APPROVED BY D.F. Russell TITLE District Engineer DATE June 7, 1976
 CONDITIONS OF APPROVAL, IF ANY: D.F. Russell

SEE ATTACHED CONDITIONS AND REQUIREMENTS

cc: DOG, Long Beach

*See Instructions on Reverse Side



DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 276-178

Mr. P. S. Magruder, Jr., Agent
Southern California Gas Co.
P.O. Box 54790 Terminal Annex
Los Angeles, Calif. 90054

Santa Paula, Calif.
June 1, 1976

DEAR SIR:

(037-00671)

Your proposal to rework gas storage Well No. "SF2U" F-8
Section 29 T. 31 N., R. 16W S.B. B. & M., Aliso Canyon Field, Los Angeles County,
dated 5/26/76, received 5/27/76, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. The drilling fluid used shall be of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts; and a reserve supply of this material shall be kept on hand to meet any emergency.
2. Blowout prevention equipment, at least of the Division of Oil and Gas Class III rating, shall be installed and maintained in operating condition at all times.
3. THIS DIVISION SHALL BE NOTIFIED TO WITNESS A PRESSURE TEST OF THE BLOWOUT PREVENTION EQUIPMENT BEFORE COMMENCING DOWNHOLE OPERATIONS.

NOTE: A COPY OF THIS APPROVAL SHALL BE POSTED AT THE WELL SITE PRIOR TO COMMENCING OPERATIONS.

Blanket Bond
MD:b

HAROLD W. BERTHOLF
JOHN D. MASTRULLI, Jr. State Oil and Gas Supervisor

By *Wm J. Campbell* Chief, Deputy

DIVISION OF OIL AND GAS
RECEIVED

MAY 27 1976

DIVISION OF OIL AND GAS Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, before rework on a well and if the well has not commenced within one year of receipt of the notice, this notice will be considered cancelled. SANTA PAULA, CALIFORNIA

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3. Public Resources Code, notice is hereby given that it is our intention to rework well No. FREW #8, API No. _____, Sec. 29, T. 3N, R. 16W, S.B. B. & M., Aliso Canyon Field, Los Angeles County.

The present condition of the well is as follows:

- Total depth. 8719'
- Complete casing record, including plugs and perforations:
11 3/4" cemented 1600'
7" cemented 8719', cement plug 8712'
WSO 8443', perforated at intervals 8455'-8711'

- Present producing zone name SESNON Zone in which well is to be recompleted -
- Present zone pressure 3000 psi New zone pressure -
- Last produced S.I. Gas Storage Well
(Date) (Oil, B/D) (Water, B/D) (Gas, Mcf/D)
or
- Last injected _____
(Date) (Water, B/D) (Gas, Mcf) (Surface pressure, psig.)

The proposed work is as follows:

- Move in rig, kill well, install B.O.P.E. and test with water and nitrogen.
- Pull tubing. Remove packer and clean out to 8712'.
- Run Neutron lifetime and cement bond logs. Perform any remedial work indicated by logs.
- Install new wellheads. Pressure test 7" casing. Perform any remedial work as indicated by pressure testing.
- Run packer, tubing, safety valve and gas lift valves.

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address P.O. Box 3249, Terminal Annex
(Street)
Los Angeles California 90051
(City) (State) (Zip)
Telephone Number (213) 689-3561

SOUTHERN CALIFORNIA GAS COMPANY
(Name of Operator)
By P. S. Magruder Jr. by GCA
(Name P.S. Magruder, Jr. (Date) 5-26-76)
Type of Organization Corporation
(Corporation, Partnership, Individual, etc.)

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

830 North La Brea Avenue
Inglewood, California

September 24, 1968

Mr. Mr. C. G. Nelson, Agent
Getty Oil Co., Operator
P. O. Box 811
Agent for Ventura, California 93001

DEAR SIR:

Your request dated letter dated August 26, 1968, relative to change in designation of well(s) in Sec. 29, T. 3 N., R. 16 W., S.B.B. & M., Aliso Canyon field, Los Angeles County, District No. 1, has been received;

and in accordance with Section 3203, Public Resources Code, reading in part as follows:

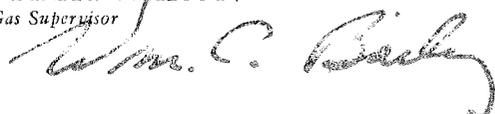
“* * * The number or designation by which any well heretofore drilled has been known, and the number or designation specified for any well in a notice filed as required by Section 3203, shall not be changed without first obtaining a written consent of the Supervisor.”

the proposed change in designation is hereby authorized as follows: (formerly owned by Standard Oil Co. of Calif.)

Old Designation	New Designation
"Frew 1" 2	"SFZU" F-2 (037-00665)
" 3	" F-3 (037-00666)
" 4	" F-4 (037-00667)
" 5	" F-5 (037-00668)
" 6	" F-6 (037-00669)
" 7	" F-7 (037-00670)
" 8	" F-8 (037-00671)
" 9	" F-9 (037-00672)

ag
cc: F. E. Kasline
Production Dept.
Conservation Committee

F. E. KASLINE
~~E. R. MURRAY-AARON~~
State Oil and Gas Supervisor



By _____
Deputy Supervisor

DOG-2 ✓
CWC
HCB
RWN
MC-File

COMPLETION REPORT - NEW WELL PRO-318-D

STANDARD OIL COMPANY OF CALIFORNIA

DIVISION OF OIL AND GAS
RECEIVED

SEP 28 1955

FIELD: Aliso Canyon

PROPERTY: Frew 1

LOS ANGELES, CALIFORNIA

WELL NO: 8 Sec. 29, T. 3-N., R. 16-W., S.B. E.& M.

LOCATION: 2079.63' southwesterly along the property line and 519.91' northwesterly at right angles to said line from Rancho corner S.F. #19 of Ex Mission San Fernando.

ELEVATION: 2216.28' U.S.G.S. D.F. above concrete mat 8.75'

DATE: September 12, 1955

By W. C. JOHNSON
Manager, Prod. Dept. So., Dist.

=====

DRILLED BY: Camay Drilling Company, contractor, using portable rotary equipment.

COMMENCED DRILLING: May 10, 1955 COMPLETED DRILLING: July 8, 1955

DATE OF INITIAL PRODUCTION: July 8, 1955

PRODUCTION:	Daily average 1st 30 days	Gravity 20.0° API	<u>FLOWING</u> <u>PUMPING</u> <u>X GAS LIFT</u>
	Oil 150 Bbl.	T. P. 700#	
	Water 3 Bbl.	C. P. 900#	
	Gas 8 1/2 Mcf.	Orifice -	

S U M M A R Y

TOTAL DEPTH: 8719' PLUGS: 8712-8719', cement.

CASING: 20" cemented 44' Not tested.
11-3/4" cemented 1600' with 1350 cu.ft. Pozzolan and 100 sacks neat cement. Not tested. 16" hole.
7" cemented 8719' with 300 sacks. Holes at 8440', 8493' and 8550' squeezed with cement. W.S.O. on holes at 8443' by D.O.G. Zonal segregation on holes at 8494' and 8550'. Perforated 8455-8462', 8469-8486', 8498-8532', 8557-8640', 8656-8684' and 8694-8711'. Hole Size: 10-5/8" 1600-2400'; 9-7/8" to 8719'.

(Summary continued next page.)

SEP 28 1955

Frew 1-#8
Aliso Canyon

LOS ANGELES, CALIF. Page 1-4

Standard Oil Company of California

S U M M A R Y (Continued)

PERFORATIONS: 7" jet perforated with four 1/2" holes at *8440' (gas seg.); 8443' (W.S.O.); *8493' (gas seg.); 8494' (gas seg.) and *8550' (gas seg.), Lane-Wells jet gun. *Squeezed with cement.

7" jet and gun perforated with two 1/2" holes/foot from 8455-8462'; 8469-8486'; 8498-8532'; 8557-8640'; 8656-8684' and 8694-8711', Lane-Wells jet and gun perforator.

JUNK: None

Types

Intervals Logged

LOG RUNS:	Halliburton electric log	150-1680'
	Halliburton electric log	1680-2500'
	Halliburton caliper log	1600-2500'
	Halliburton electric log	2500-7000'
	Halliburton electric log	7000-8719'
	Lane-Wells neutron log	7700-8708'

SEP 28 1955

Frow 1-#2
Aliso Canyon

Standard Oil Company of California, U.S.A.

Well drilled to the Sesson zone by Cansy Drilling Company, contractor, using a portable mast and Emco J-1000 equipment, with the derrick floor 8.75' above the concrete mat.

April 4, 1955, Galloway Drilling Service, contractor, moved in and drilled a 32" hole to 44'.

April 4, 1955, cemented 20" conductor pipe at 44' with 3-1/2 cubic yards of ready mixed concrete.

Casing Detail: All 1 joint, or 44', is 20", 79#, grade B, range 3, plain end, new National, seamless blank casing. Fitted on bottom at 44' with a 1/2" x 4" steel band welded on for a shoe.

May 10, 1955, spudded in at 6:45 a.m. and drilled a 10-5/8" hole to 321'.

May 11-14, 1955, drilled 10-5/8" hole from 321' to 1680'.

May 14, 1955, ran Halliburton electric log and recorded from 150' to 1680'. Ran multi-shot directional survey.

Opened 10-5/8" hole to 16" from 44" to 1600'.

May 16, 1955, cemented 11-3/4" casing at 1600' with 1350 cubic feet of 1:1 ratio Pozzolan and type "A" cement; followed by 100 sacks of neat type "A" cement. Used one top and one bottom plug. Displaced cement with 991 cubic feet of drilling fluid under 300# working pressure. Plugs bumped under 600# final pressure. Pipe free and good circulation throughout. Fifty minutes mixing and pumping cement to place. Finished job at 7:50 a.m. Used Oil Well Cementing Company power equipment and bulk cement.

Casing Detail: All 40 joints, or 1600', are 11-3/4", 47#, J-55, range 3, short 8-round thread, new, English make, seamless blank casing. Fitted from 1598' to 1600' with a 2' x 11-3/4" Baker cement float shoe; from 1513' to 1515' with a 2' x 11-3/4" Baker cement float collar and at 1595' and 1575' with Larkin centralizers.

Dumped 12 sacks of cement in annulus of 20" and 11-3/4" casings to bring cement to the surface.

Cut and recovered 18' of 20" conductor pipe, all of which was below the derrick floor.

Cut and recovered 15' of 11-3/4" casing, 7' of which was below the derrick floor.

RECEIVED
SEP 28 1955

Frew 1-#8
Aliso Canyon

LOS ANGELES, CALIFORNIA
Standard Oil Company of California

From To Feet Formation Cored

May 17, 1955, installed and tested Class III B.O.P. under 1500# pressure - held O.K.

May 17, 1955, drilled out cement from 1514' to 1645' including shoes of 11-3/4" casing at 1600' and cleaned out to 1680' with a 10-5/8" bit.

May 17-19, 1955, drilled 10-5/8" hole from 1680' to 2400'; reduced 10-5/8" hole to 9-7/8" at 2400' and drilled to 2500'.

May 19, 1955, ran Halliburton electric log and recorded from 1680' to 2500'. Ran Halliburton caliper log and recorded from 1600' to 2500'.

Johnston Formation Test of Interval 2460' to 2500': May 20, 1955, ran tester and set packer at 2460' with tail to 2500'. Opened tool at 7:42 a.m. Open sixty minutes. Strong steady blow of air at 25 MCF/D for first two minutes, next ten minutes a steady blow decreasing to 2 MCF/D; last forty-eight minutes a light steady blow at 1 MCF/D. Recovered 1200' rise: Top 350' drilling fluid grading to salt water, bottom 850' salt water, maximum salinity 10.7 G/G. Rat hole volume equivalent to 279' rise in 4-1/2" drill pipe.

Tool Assembly: 3/8" bean, Shaffer jaws and safety joint, 9" packer, 40' of 5-1/2" drill collar tail (top 6' blank with bumper sub, left hand joint and inside pressure recorder, next 31' perforated, bottom 3' blank including outside pressure recorder).

May 20-21, 1955, drilled 9-7/8" hole from 2500' to 2820'. Left bit cones off 9-7/8" bit in hole.

May 21, 1955, cored 9-1/4" hole with junk basket:

2820	2823	3	Recovered 1/2'
2820	2821	1	1/2' sand and pieces of iron
2821	2823	2	2-1/2' no recovery.

Opened 9-1/4" hole to 9-7/8" from 2820' to 2823'.

May 21-June 6, 1955, drilled up and sidetracked balance of bit cones at 2823' and drilled 9-7/8" hole from 2823' to 7000'.

June 7, 1955, ran Halliburton electric log and recorded from 2500' to 7000'.

SEP 28 1955

LOS ANGELES, CALIFORNIA

40

Frew 1-#8
Aliso Canyon

Standard Oil Company of California

June 7, 1955, took Halliburton sidewall samples as follows:

- 6558' - recovered 1/2" - Shals - olive green, soft, massive.
- 6605' - recovered 1-1/4" - Sand - light gray, silty to fine grained, firm, soft, easily friable. No cut or odor.
- 6730' - recovered 3/4" - Shale - olive green, soft.
- 6910' - recovered 2" - Silty to Sandy Shale - olive green, soft.
- 6987' - recovered 3/4" - (fragments) Sand - gray, silty to fine grained, soft, easily friable, no cut or odor.
- 6994' - recovered 1/2" - Sand - light gray, silty to fine grained, easily friable, soft, no cut or odor.
- 6995' - recovered 1/2" - Sand - same as above.
- 6996' - recovered 1/2" - Sand - same as above.

June 7-10, 1955, drilled 9-7/8" hole from 7000' to 7401'.

June 11, 1955, set retrievable whipstock (#1) at 7401' and directionally drilled 6-1/8" hole to 7414'.

Opened 6-1/8" hole to 9-7/8" from 7401' to 7414'.

June 11-16, 1955, directionally drilled 9-7/8" hole from 7414' to 7751'.

June 16, 1955, set retrievable whipstock (#2) at 7751' and directionally drilled 6-1/8" hole to 7765'.

Opened 6-1/8" hole to 9-7/8" from 7751' to 7765'.

June 17, 1955, directionally drilled 9-7/8" hole from 7765' to 7779'.

June 18, 1955, set retrievable whipstock (#3) at 7779' and directionally drilled 6-1/8" hole to 7793'.

June 18, 1955, while pulling whipstock, same stuck at 6925'. Spotted 45 barrels of oil in stages around stuck pipe and worked same loose. Cleaned out 9-7/8" hole to 7779'.

Opened 6-1/8" hole to 9-7/8" from 7779' to 7793'.

June 19-22, 1955, directionally drilled 9-7/8" hole from 7793' to 8167'. Left one cutter off 9-7/8" bit at 8167'.

Frew 1-#8
Aliso Canyon

LOS ANGELES, CALIFORNIA 50

Standard Oil Company of California

June 22-27, 1955, drilled up and sidetracked bit cutter at 8167' and directionally drilled 9-7/8" hole from 8167' to 8719'.

June 27, 1955, ran Halliburton electric log and recorded from 7000' to 8719'.

June 27, 1955, took Halliburton sidewall samples as follows:

- 7565' - recovered 1/2" - soft, coarse, gray sand with pebbles to 1/4" in diameter and inclusions of silt. No cut. Faint odor.
- 7800' - recovered 1-1/2" - firm, gray and brown shale.
- 7950' - recovered 2" - firm, gray shale.
- 8080' - recovered 3/4" - firm, gray, sandy shale.
- 8095' - recovered 1" - (sliver) friable, silty to very fine grained, gray sand with tan mottling. Straw cut, faint odor.
- 8417' - recovered 1-1/2" - brown silt.
- 7163' - no recovery
- 8250' - no recovery

SEP 28 1955

LOS ANGELES, CALIFORNIA 6.

Frew 1-#8
Aliso Canyon

Standard Oil Company of California

June 28, 1955, cemented 7" casing at 8719' with 300 sacks of Colton type "D" cement, mixed to an average 117#/cu.ft. slurry. Preceded cement with 50 cubic feet of water. Displaced cement with 1830 cubic feet of drilling fluid, in stages, under 200# working pressure and 2400# final pressure. Reciprocated casing 10' until casing froze before cement reached the shoe. Good circulation throughout. Fourteen minutes mixing and two hours and thirty-six minutes displacing cement. Finished job at 12 noon. Used Byron Jackson power equipment and bulk cement.

Casing Detail:

Bottom 30 joints, or 1321', are 7", 26#, S-95, range 1 and 3, long 8-round thread, new A.O. Smith, welded blank casing. Fitted from 8717' to 8719' with a 2' x 7" Baker differential float shoe; from 8578' to 8580' with a 2' x 7" Baker differential float collar. Bottom joint fitted with 3 B & W scratchalizers; at 8590', 8565', 8525', 8500', 8485', 8460' and 8418' with B & W centralizers and at 8560', 8550', 8540', 8490', 8495', 8455' and 8450' with clusters of scratchers of four each.

Next 21 joints, or 924', are 7", 23#, N-80, range 3, long 8-round thread, new Youngstown seamless blank casing.

Next 38 joints, or 1525', are 7", 26#, J-55, range 3, short 8-round thread, new unknown make and English make, seamless blank casing.

Next 87 joints, or 3672', are 7", 23#, J-55, range 3, short 8-round thread, new Youngstown seamless blank casing.

Next 28 joints, or 1213', are 7", 23#, N-80, range 3, long 8-round thread, new Youngstown seamless blank casing.

Top 2 joints, or 65', are 7", 26#, N-80, range 3, long 8-round thread, new Jones & Laughlin seamless blank casing.

Total 206 joints, or 8719'

Cut and recovered 30' of 7" casing, 8' of which was below the derrick floor.

June 29, 1955, re-installed Class III B.O.P. and tested under 1000# pressure - held O.K.

June 30, 1955, drilled out cement from 8758' to 8708' with a 6-1/8" bit.

June 30, 1955, ran Lane-Wells neutron log and collar locator and recorded from 7700' to 8708'.

July 1, 1955, ran Lane-Wells jet perforator and shot four 1/2" holes in 7" casing at 8550'.

SEP 28 1955

LOS ANGELES, CALIFORNIA

Frew 1-#8
Aliso Canyon

Standard Oil Company of California

July 1, 1955, ran Lane-Wells jet perforator and shot four 1/2" holes in 7" casing at 8550'.

July 1, 1955, Johnston Gas Segregation Test on Jet Holes in 7" Casing at 8550': Ran tester and set packers at 8533' and 8556'. Used 1600' water cushion. Opened tool at 8:18 a.m. Open sixty minutes. Very light blow for twenty-five minutes; dead for fifteen minutes then faint blow for remainder of test. Recovered 3760' gross rise or 2160' net rise: Top 800' gassy, oily water cushion; next 90' watery oil which blew out; next 1440' dry; next 1070' gassy oil; next 90' watery oil; bottom 270' oily water. Samples 3700', 2600', 1290', 450' and 270' above tool and at tool tested 14 G/G, 14 G/G, no free water, no free water, 246 G/G and 280 G/G, respectively. Charts indicated tool open. Gas segregation approved by Company test.

Tool Assembly: 3/4" bean, 5-1/2" packer, 5-15/16" Olympic packer, 23' of 4-1/4" drill collar between packers (top 16' perforated, bottom 7' blank including two pressure recorders), 4' blank below bottom packer including one pressure recorder.

July 1, 1955, ran Lane-Wells jet perforator and shot four 1/2" holes in 7" casing at 8493'.

July 1, 1955, Johnston Gas Segregation Test on Jet Holes in 7" Casing at 8493': Ran tester and set packers at 8474' and 8497'. Used 1560' water cushion. Opened tool at 8:26 p.m. Open fifty minutes. Very light blow increasing to maximum of 4 MCF/D in ten minutes then declined to 1 MCF/D during next forty minutes or for balance of test. No gas to surface. Recovered 6150' gross rise or 4590' net rise: Top 900' oily, muddy, gassy water cushion; next 500' gassy, oily, muddy water cushion which blew out in stages; next 2510' gassy oil which blew out in stages; next 1880' muddy, gassy oil; bottom 360' slightly gassy mud with droplets of oil. Samples at 6000', 3700', 2400' and 180' above tool tested 14 G/G. Charts indicated tool open. Test inconclusive.

Tool Assembly: 3/4" bean, 5-1/2" packer, 5-15/16" Olympic packer, back-scuttling tool 420' above tool, 23' of 4-1/4" drill collar between packers (top 16' perforated, bottom 7' blank including two pressure recorders), 4' blank below bottom packer including one pressure recorder.

July 2, 1955, ran Lane-Wells jet perforator and shot four 1/2" holes in 7" casing at 8440'.

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LOS ANGELES, CALIFORNIA 8.

Fraw 1-#8
Aliso Canyon

Standard Oil Company of California

July 2, 1955, Johnston Gas Segregation Test on Jet Holes in 7" Casing at 8440': Ran tester and set packers at 8429' and 8452'. Used 1560' water cushion. Opened tool at 9:28 a.m. Open one hour and forty-five minutes. Light blow decreasing to very light blow in fifteen minutes and remaining for balance of test. Gas to surface after fifty minutes. Recovered 6900' gross rise or 5340' net rise: Top 1560' water cushion; bottom, heavy, gassy drilling fluid. Bottom packer leaked. Test inconclusive.

Tool Assembly: Not available.

To Squeeze Jet Holes in 7" Casing at 8440', 8493' and 8550' with Cement:
July 3, 1955, set cement tool at 8220'. Applied pressure and formation broke down and took fluid at 3 cu.ft./minute under 2500# and 8 cu.ft./minute under 3600#. Pumped in 125 sacks of Victor High-temp cement. Preceded cement with 50 cubic feet of water. Closed tool when water reached holes. Displaced cement with 255 cubic feet of drilling fluid under 2000-5000# by hesitation method. Held 2000# on the annulus. Estimated 116 sacks of cement squeezed through holes. Finished job at 11:10 a.m. Used Halliburton Cementing Company power equipment and bulk cement.

July 3-4, 1955, drilled out cement from 8411' to 8550' and cleaned out to 8712'.

July 4, 1955, ran Lane-Wells jet perforator and shot four 1/2" holes in 7" casing at 8494'.

July 4, 1955, Johnston Gas Segregation Test on Jet Holes in 7" Casing at 8494': Ran tester and set packers at 8482' and 8505'. Used 1560' water cushion. Opened tool at 1:52 p.m. Open sixty minutes. Puff blow then dead for remainder of test. No gas to surface. Recovered 1570' gross rise or 10' net rise: Top 1560' muddy water cushion; bottom 10' drilling fluid. Maximum salinity 14 G/G. Charts indicated tool open. Gas segregation approved by Company test.

Tool Assembly: 3/4" bean, 5-1/2" straddle packers, backcuttling valve 500' above tool, 23' of 4-1/4" drill collar between packers (top 16' perforated, bottom 7' blank including two pressure recorders) 4' below packers including one pressure recorder.

July 4, 1955, ran Lane-Wells jet perforator and shot four 1/2" holes in 7" casing at 8443'.

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LOS ANGELES, CALIFORNIA 9.

Frew 1-#8
Aliso Canyon

Standard Oil Company of California

July 5, 1955, Johnston Water Shut-Off Test on Jet Holes in 7" Casing at 8443': Ran tester and set packers at 8431' and 8453'. Used 1560' water cushion. Opened tool at 12:45 a.m. Open sixty minutes. Light blow for five minutes then dead for remainder of test. Recovered 15' net rise of drilling fluid. Charts indicated tool open. Test witnessed and water shut-off approved by Inspector R. Ybarra of the Division of Oil and Gas.

Tool Assembly: 3/4" bean, 5-1/2" straddle packer, backcutting valve 500' above tool, 22' of 4-1/4" drill collar between packers (top 16' perforated, bottom 6' blank including two pressure recorders), 4' below packer including one pressure recorder.

July 5, 1955, ran Lane-Wells jet and gun perforator and perforated 7" casing with two 1/2" jet holes/foot and two 1/2" gun holes/foot from 8455' to 8462', 8469' to 8486', 8498' to 8532', 8557' to 8640', 8656' to 8684' and 8694' to 8711'.

Scraped 7" casing from 8455' to 8711'.

July 6, 1955, hung 2-1/2" tubing at 8612' with a swab shoe at 8612' and gas lift valves at 2996', 4487', 5729', 6685', 7555' and 8053'.

Tubing Detail: All 278 joints, or 8612', are 2-1/2", 6.5#, J-55, range 2, short 8-round thread, new Republic and Spanish make, seamless blank tubing. Fitted from 8611' to 8612' with a 2-1/2" x 1-3/4" swab shoe and at 2996', 4487', 5729', 6685', 7555' and 8053' with 1200#, 1190#, 1180#, 1170#, 1160# and 600# gas lift valves, respectively.

July 7, 1955, installed and tested Xmas tree under 3000# pressure - held O.K.

Displaced drilling fluid with oil.

Crew released at 2:00 a.m., July 8, 1955.

Well completed in the Seanon zone.

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LOS ANGELES, CALIF. 104

Frew 1-#8
Aliso Canyon

Standard Oil Company of California

PRODUCTION TRENDS

<u>1955</u> <u>Date</u>	<u>Hrs.</u> <u>G/L</u>	<u>B/D</u> <u>Oil</u>	<u>B/D</u> <u>Wtr.</u>	<u>%</u> <u>Cut</u>	<u>°API</u> <u>Grav.</u>	<u>MCF/D</u> <u>Gas</u>	<u>#</u> <u>C.P.</u>	<u>#</u> <u>T.P.</u>	<u>Remarks</u>
7-8	2h	*189) 190)	2	0.5		161	900	800	18/64" bean. Gas in 300 MCF.
7-9	2h	193	6	3.1		42	950	925	Gas in 427 MCF.
7-10	2h	174	0	3.1		80	925	860	Gas in 350 MCF.
7-11	2h	156	0	0.2		62	925	825	Gas in 420 MCF.
7-12	2h	157	1	0.6		36	925	825	Gas in 250 MCF.
7-13	Shut in - no gas-lift gas.								
7-14	2h	198	1	0.2	21.4	42	900	790	Gas in 250 MCF.
7-15	2h	182	1	0.7	21.3	30	900	750	Gas in 200 MCF.
7-16	2h	140	1	0.5	21.4	27	900	750	Gas in 275 MCF.
7-17	2h	179	1	0.8	21.0	23	900	750	Gas in 250 MCF.
7-18	2h	165	9	5.2	20.0	102	900	700	Gas in 375 MCF.
7-19	2h	125	7	5.5	19.4	134	1000	700	Gas in 375 MCF.

*Recoverable oil.

Well averaged 150 B/D oil, 3 B/D water, 84 MCF/D gas, 20.0° gravity, for the first thirty days' new production.

DRILLING FLUID HISTORY

<u>1955</u> <u>Date</u>	<u>Interval</u>	<u>Type of</u> <u>Fluid</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Filter Loss</u>
5/10-6/3	44-6400'	Gel-natural	75-81 pcf.	40-50 sec.	6-10 cc.
6/3-6/28	6400-8719'	Emulsion	75-77 pcf.	45-55 sec.	4-5 cc.

Contractors: Cenay Drilling Company

Drillers: F. R. Cooksey
W. L. Bowen
C. O. De Lano, Jr.
J. C. CrawfordJ. WEEB
N. TWENELLnt
September 12, 1955

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off

(FORMATION TESTER)

No. T. 155-1503

Mr. W C Johnson
P O Box 397
La Habra Calif
 Agent for STANDARD OIL COMPANY OF CALIFORNIA

Los Angeles 15 Calif.
July 29 19 55

DEAR SIR:

Your well No. "Trew 1" 8, Sec. 29, T. 3 N., R. 16 W., S B B & M.
Aliso Canyon Field, in Los Angeles County, was tested for water shut-off
 on July 5, 19 55. Mr. R. Ybarra, Engineer, designated by the supervisor was present
 from 3:00 a.m. to 4:00 a.m. as prescribed by law; there were also present M. Lynch, Drilling
Foreman, and C. Delano, Driller. 8440' &
 Shut-off data: 7 in. 23 & 26 lb. casing was re cemented through perforations at 8490 ft.
 on July 3, 19 55 in 9-7/8 in. hole with 125 ~~xxx~~ sacks of cement
 calculated to fill behind casing to xxx ft. below surface.

Casing record of well: 11-3/4" cem. 1600'; 7" cem. 8719', c.p. 8490' and 8440', four
1/2" holes 8550', four 1/2" test holes 8443', W.S.O.

Present depth 8719 ft. cmt. bridge xxx ft. to xxx ft. Cleaned out cmt. 8411 ft. to 8550 ft. for test.
 A pressure of xxx lb. was applied to the inside of casing for xxx min. without loss after cleaning out to xxx ft.
 A Johnston gun and tester was run into the hole on 2-7/8 in. drill pipe xxx
 with 1560 ft. of water xxx cushion, and packer s set at 8453 & 8451 ft. with tailpiece to xxx ft.
 Tester valve, with 3/4 in. bean, was opened at 12:45 a.m. and remained
 open for 1 hr. and - min. During this interval there was a light blow for 5 minutes and
no blow thereafter.

Mr. xxx reported:

R. YBARRA, ENGINEER, VISITED THE WELL FROM 2:00 P.M. TO 3:00 P.M. ON JULY 2, 1955,
AND MR. C. DELANO REPORTED:

1. A 10-5/8" rotary hole was drilled from 1600'-1685', and a 9-7/8" rotary hole, from 1685'-8719'.
2. On June 8, 1955, the 7", 23 & 26 lb. casing was cemented at 8719' with 300 sacks of cement, calculated to fill behind the casing to 7532'.
3. The cement was cleaned out from 8578'-8708'.
4. The 7" casing was shot-perforated with four 1/2" holes at 8550' and tested dry.
5. The 7" casing was shot-perforated with four 1/2" holes at 8490' and tested wet.
6. The 7" casing was shot-perforated with four 1/2" holes at 8440'.
7. A Johnston tester was run into the hole on 2-7/8" drill pipe (1560' water cushion) and packers set at 8429' and 8452'.
8. The tester valve was opened at 9:00 p.m. and remained open for 1 hour and 45 min. During this interval, there was a light blow for 15 minutes and a faint blow for the balance of the test.

THE ENGINEER NOTED:

1. When the drill pipe was removed, there was a net recovery of 4090' of medium drilling fluid in the drill pipe above the tester, equivalent to 18.0 bbl.
2. The recording pressure bomb chart showed that the tester valve was open 1 hour and 45 minutes.

The operator decided to recement.

E. H. MUSSER

State Oil and Gas Supervisor

By (CONTINUED ON PAGE TWO) Deputy

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off

or

Special Report on Operations Witnessed

No. T. 155-1503

Page 2

STANDARD OIL COMPANY OF CALIFORNIA

Well No. "Trev 1" 8, Sec. 29, T. 3 N., R. 16 W., S. B. B. & M.

R. YBARRA, ENGINEER, ARRIVED AT THE WELL AT 3:00 A.M. ON JULY 5, 1955. AND MR. M. LYNCH REPORTED:

1. On July 3, 1955, the 7" casing was recemented through perforations at 8440' and 8490' with 125 sacks of cement of which 116 sacks was squeezed away under a final pressure of 5000 Psi.
2. The 7" casing was shot-perforated with four 1/2" holes at 8443'.

THE ENGINEER NOTED:

1. When the drill pipe was removed, there was a net recovery of 15' of medium drilling fluid in the drill pipe above the tester, equivalent to 0.1 bbl.
2. The recording pressure bomb chart showed that the tester valve was open 1 hour.

THE 7" SHUT-OFF AT 8443' IS APPROVED.

RY:mm

cc Mr C W Gibbs
Mr R W Norton

E. H. MUSSER

State Oil and Gas Supervisor

By R. W. Walling Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 155-1165

Mr. W C Johnson
P O Box 397
La Habra Calif
 Agent for STANDARD OIL COMPANY OF CALIFORNIA

Los Angeles 15 Calif.
May 26 1955

DEAR SIR:

Operations at your well No. Trow 1" 8 Sec. 29 T. 3 N. R. 16 W. S. B. B. & M.,
Aliso Canyon Field, in Los Angeles County, were witnessed
 on May 23, 1955 Mr. G. I. Lee, Engineer, representative of the supervisor was present
 from 10:30 a.m. to 11:00 a.m. There were also present J. C. Crawford, Driller
W. Hill, Derrickman
 Present condition of well: 11-3/4" cas. 1600'; T.D. 3558'.

The operations were performed for the purpose of inspecting blowout prevention equipment and installation.

Mr. Crawford reported:

1. A 16" rotary hole was drilled from the surface to 1600'.
2. On May 16, 1955, 11-3/4", 47 lb. casing was cemented at 1600' with 1350 cubic feet 1:1 Fossolan mix followed by 100 sacks neat cement.
3. Cement returned to the surface.
4. A 10-5/8" rotary hole was drilled from 1600' to 3558'.

THE ENGINEER NOTED THAT the well was equipped with the following blowout prevention equipment:

1. A Shaffer double cellar control gate for closing in the well with the drill pipe out of the hole, and for closing around the 4-1/2" drill pipe.
2. A Hydril blowout preventer for closing around the 4-1/2" drill pipe.
3. The controls for the above equipment were located outside the derrick.
4. A 2" mud fill-up line with a 2" high pressure stopcock into the 11-3/4" casing below the above equipment.
5. A high pressure stopcock on the kelly.

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

GEL:mm

cc Mr C W Gibbs Assistant General Manager
 (Development) Producing Department
 Standard Oil Company of California
 225 Bush Street
 San Francisco 20 California

Mr R W Norton
 Standard Oil Company of California
 P O Box 1211
 Ventura California

E. H. MUSSER
 State Oil and Gas Supervisor

By R. W. Walling Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS
REPORT ON PROPOSED OPERATIONS

No. P. 155-828

Mr. W O Johnson
P O Box 397
La Habra Calif
Agent for STANDARD OIL COMPANY OF CALIFORNIA

Los Angeles 15 Calif.
May 10 1955

DEAR SIR:
Your proposal to drill Well No. Trov 1" 8
Section 29, T. 3 N, R. 16 W, S. E. B. & M., Aliso Canyon Field, Los Angeles County,
dated May 5, 1955, received May 6, 1955, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

THE NOTICE STATES

"Location of Well: 2079.63 feet Southwesterly along property line and 519.91 feet Northwesterly at right angles to said line from Rancho Corner S. F. #19 of Ex Mission San Fernando (FINAL) or approx. 650' N'ly along Sec. Line and 4080' E'ly at right angles from SW Corner Sec. 29.
Elevation of derrick floor above sea level 2216.28 feet U. S. G. S. datum. (FINAL)
All depth measurements taken from top of Derrick Floor which is 8.75 feet above concrete mat."

PROPOSAL

"PROPOSED CASING PROGRAM

Size of Casing Inches A.P.I.	Weight Conductor pipe	Grade and Type	Top	Bottom	Cementing Depths
20"	47#	J-55	0'	40'	40'
11-3/4"	23#	J-55 & N-80	0'	1680'	1680'
7"	23#	J-55 & N-80	0'	8730' ^{1/2}	8730' ^{1/2} to be selectively gun perforated.

Intended zone or zones of completion: Seamon Zone
It is understood that if changes in this plan become necessary we are to notify you before running casing."

DECISION

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Mud fluid consistent with good drilling practice shall be used and the column of mud fluid maintained at all times to the surface, particularly while pulling the drill pipe.
2. Adequate blowout prevention equipment shall be installed and maintained in operating condition at all times.
3. THIS DIVISION SHALL BE NOTIFIED AS FOLLOWS:
 - a. To inspect the installed blowout prevention equipment before drilling below 2000'.
 - b. To witness a test of the effectiveness of the 7" shut-off.

FKK:mn

cc Mr C W Gibbs
Mr R W Horton

E. H. MUSSER, State Oil and Gas Supervisor

By R. H. Stalling Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS

MAY 6 1955

LOS ANGELES, CALIFORNIA

037-00621
F-8

Notice of Intention to Drill New Well

This notice and surety bond must be filed before drilling begins

16

Oxnard Calif. May 5 1955

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division III, Article 4, Public Resources Code, notice is hereby given that it is

our intention to commence the work of drilling well No. ^{"FREW 1" 8 *} **Frew #8**, Sec. **29**, T. **3 N**

R. **16 W**, **S B** B. & M., **Aliso Canyon** Field, **Los Angeles** County.

Legal description of lease
(Attach map or plat to scale)

Location of Well: **2079.63** feet **Southwesterly** along ~~road~~ ^{property} line and **519.91** feet **Northwesterly**
(Direction) (Direction)

at right angles to said line from ~~the~~ **Rancho Corner S. F. #19 of** ~~the~~ **Ex Mission**

San Fernando (FINAL) OR *Approx 650' N 1/4 of Sec Line and 4080' E 1/4 at N 1/4 S for SW Cor Sec 29*

derrick floor
Elevation of ~~ground~~ above sea level **2216.28** feet **U. S. G. S.** datum. **(FINAL)**

All depth measurements taken from top of **Derrick Floor** which is **8.75** feet above ~~ground~~ **concrete mat.**
(Derrick Floor, Rotary Table or Kelly Bushing)

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES A.P.I.	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS
20"	Conductor pipe		0'	40'	40'
11-3/4	47#	J-55	0'	1680'	1680'
7"	23#, 26#	J-55 & N-80	0'	8730'±	8730'± to be selectively gun perforated.

Intended zone or zones of completion: **Sesnon Zone**

BOND FORMS
114 121
644 Blanket
Gyl (ISA)

It is understood that if changes in this plan become necessary we are to notify you before running casing.

Address **P. O. Box 1309, Oxnard, Calif.** **Standard Oil Company of California**
(Name of Operator)

Telephone Number **HU 3-0181** By **W.C. Johnson Jr.**

W.C. Johnson Mgr. Prod. Dept. So. Dist.