RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF WELL PLUGGING AND ABANDONMENT

Ventura, California

March 16, 1998

Bradford A. Dewitt, Agent
MEDALLION CALIFORNIA PROPERTIES
1100 Mohawk St., Ste. 154
Bakersfield, CA 93309-7416

Your report of the plugging and abandonment of well "Rancho San Francisco" 66,
A.P.I. No. 037-10663, Section 27, T. 4N, R. 17W, SBB.& M.,
Newhall Potrero field, Los Angeles County,
dated January 9, 1998, received January 23, 1998, has been examined in conjunction with records filed in this office. We have determined that all of the requirements of this Division have been fulfilled relative to plugging and abandonment of the well, removal of well equipment and junk, and the filing of well records.

William F. Guerard, Jr
State Oil and Gas Supervisor

tkc

By
Patrick J. Kinnear
Deputy Supervisor

cc: Update

Modified OG159 (4/94)

OPERATOR Sun Exploration & Prod. Co
WELL NO. "Rancho San Francisco" 66
MAP 253

ENTION	Convert to WF	Abandon				
ICE DATED	8-24-84	8-11-97				
EPORT NUMBER	284-296	297-298				
ICKED BY/DATE						
DATED	Dmc 8/17/85	2-7-98				
BOL						

	REC'D	NEED	REC'D	NEED	REC'd	NEED	REC'D	NEED	REC'D	NEED	REC'D	NE
ICE	9/28/84		8-14-97									
TORY	10-11-84		1-23-98									
NARY	10-11-84											
OG												
LOG												
METER												
RECTIONAL												
RE/SWS												
E												
Step Rate	4-4-85											
R/A Survey	12-10-84											

ENGINEERING CHECK

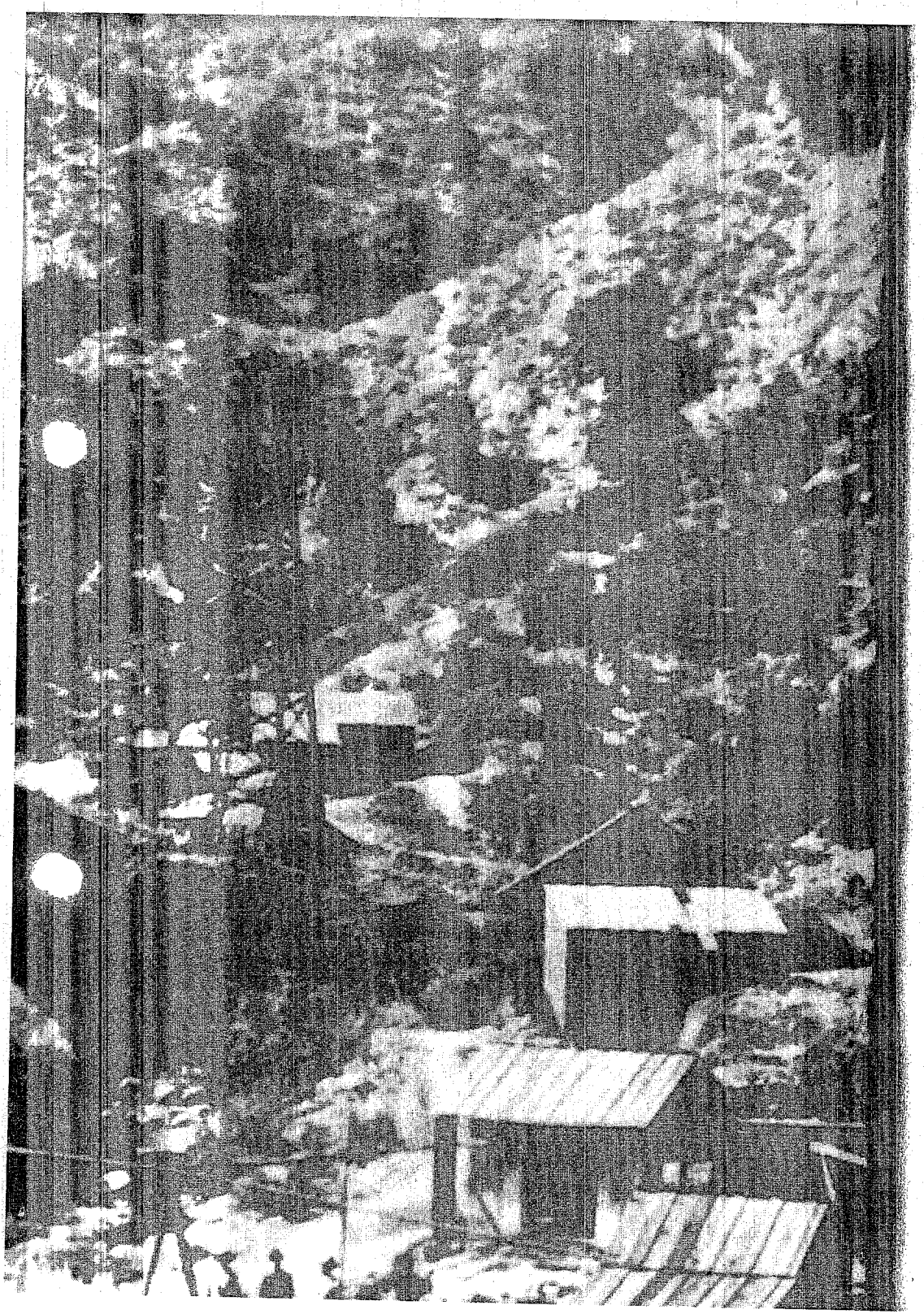
REPORTS	✓					
ERATOR'S NAME	✓					
LL NO.	✓					
& ELEV						
NATURE	✓					
FACE INSP.		2-4-98 PC				
ILL CARD						
CORD'S COMPLETE	DMC 8/17/85	BMJ 3-18-98				

FINAL LETTER OK _____
MAILED _____

JECTION BOOK _____
E WELL LIST _____
FACE INSP. CARD _____

REMARKS:

RELEASED BOND _____



"RSF" 66 037-10663

20

Treasure Trove

Atholl McBean had every reason to feel pleased with himself. He had turned the corner to success in his effort to make The Newhall Land and Farming Company a profitable business. The planning and hard work and creative management that McBean had applied to the company had proved themselves. The books that became Jim Finch's province were those of a healthy corporation. In 1935, the year that Finch settled into his office in the orange groves, prospects were brightening.

For McBean, who was not a Newhall stockholder and who had a handsome income of his own, it was not significant to his way of life whether or not the Newhall companies paid dividends. But for various members of the Newhall family, the cessation of dividends in 1933 had meant abandoning a well-cushioned lifestyle and trying to find a way in an unfamiliar world. Homes at the beach or on the shores of Lake Tahoe went on banks' for-sale lists. Teenagers who had assumed they would go to Yale or Stanford found themselves behind sales counters or in ships' engine rooms or greasing machinery or running tractors. They had a chance to see life as they had never seen it.

Opposite: Pico Canyon.

There is a Texas saying: "Nothing fattens a steer so much as standing in the shade of an oil well." These steers on the Newhall Ranch may not have been fattened by the well at left center, but their owners were. Note that well shapes had changed since those drilled sixty years earlier in Pico Canyon (page 138).

McBean was anxious to start the dividends going again, as a badge of success. In June 1935, McBean informed the directors that possibly, if company affairs continued to improve, the following year would see dividends resumed on a modest basis. Seven months later, when the annual audit proved that the company had indeed made more than $100,000, the Newhall family stockholders found dividend checks in the mail.

Then came the unexpected event.

One of the continual minor sources of income over the years had been lease monies paid by various oil companies for rights to drill on the ranches, especially the Rancho San Francisco. The oil companies were aware that the first oil discovery in western America had been made in 1876 in Pico Canyon, less than a mile from the southern border of the Rancho San Francisco. And the tarry asphaltum seepage from the ranch's hillsides, used by the Indians of the region to waterproof their baskets, had led many people to believe that oil lay just under the surface. There had been oil discoveries in Placerita Canyon and other areas not far outside the ranch boundaries. Over the years, some

fifty different companies had leased Newhall land. Most of the leases had expired without any exploration, but both Union Oil and Associated Oil had drilled to 5,000 feet without success. Mayo Newhall, writing a history of the company as its president in 1928, said, "There is no indication that this ranch is an oil property."

In January 1935, McBean was called on by Patrick Calhoun, who had a distant relationship-by-marriage with the Almer Newhall family. Because of this connection, Calhoun, a retired corporation lawyer, had been assigned by the Barnsdall Oil Company to try to negotiate an oil lease for them on the Rancho San Francisco. He was then 80 years old, a striking Southern gentleman with a white mustache and erect bearing, who matched McBean in height and presence. He had come west from his native Louisiana, founded the Market Street Railway Company in San Francisco, had been deeply embroiled in politics, and had made and lost several fortunes. He bemoaned the fact that, at his age, he had nothing to leave his seven children and his many grandchildren. He told McBean that he felt his next fortune lay under the Newhall Ranch in the form of oil, which would bring a matching fortune to the Newhalls.

McBean was reluctant to sign another lease. However, the land that interested the Barnsdall Company was high in the Potrero hills—the grazing land near the Ventura County end of the ranch, far from any proposed agriculture or other development. McBean got the directors' concurrence to the lease in February 1935. It provided for a 12.5 percent royalty for Newhall Land.

News of the lease spread through the petroleum community, and a group of Los Angeles investors approached McBean with the offer to buy half the anticipated royalties—6.25 percent of the oil produced—for $40,000. That sum sounded handsome at the time, and McBean went to the experts for advice. Geologist Harry Johnson, whose instincts for productive oil land were highly regarded, was hired to look over the terrain and advise as to whether a sure $40,000 might be better than the chances on still-unseen petroleum. Johnson came back from his investigations with the report that he could assure nothing but that he held high hopes for Potrero Canyon as an oil site. McBean decided to take the risk and keep the whole royalty on the Barnsdall exploration.

It was a year and a half after the lease was signed—August 10, 1936—that the Barnsdall equipment was finally in place, and a drill bit cut into the rough brushy ground in Potrero Canyon. The hole under the drill shaft was christened Rancho San Francisco No. 1, or RSF 1. On December 23, the family got their Christmas present: RSF 1 had hit oil sands at 6,100 feet. Though oil

was not yet flowing, the prospects were excellent. The Newhall Land and Farming Company declared a Christmas dividend. The hard days were over.

Steady production began the following March 22, when RSF1 flowed 118 barrels a day, a good average yield. It later was deepened twice, and each time, production was increased. Within the ensuing months, a second well produced 631 barrels a day. The Potrero was a major field. Petroleum engineers and geologists joined the Newhall staff. In 1944, Barnsdall drilled its forty-fourth well nearly a mile deeper than RSF1 and found a new pool. RSF66 in 1946 went more than three miles into the earth. It became one of the world's deepest producing wells and opened still another pool.

After the Barnsdall discovery, the rush was on for leases on the ranch. One of the new lessees, the Humble Oil Company of Texas, had drilled thirteen dry holes in Southern California, with only one minor strike of less-than-commercial value. Humble took a lease in 1948 just west of Castaic Junction near where the Indians had found their asphaltum. They set their drill into the dry bed of the Santa Clara River. At a depth of 225 feet, they hit a fine artesian spring, which was welcomed for irrigating the ranch. Drilling continued, and in January 1950, the bit struck oil. It was a modest but satisfactory find, and Humble promptly leased more land. Seven other wells were drilled over the next two years. The seventh came in at the rate of 704 barrels a day—the major California discovery of the year.

At every meeting, the company's board of directors was asked to approve new oil and gas leases as producers flocked onto the ranch. McBean regretted the liberal terms he had given Calhoun for the Barnsdall lease, with a majority of the royalties accruing to Calhoun rather than Newhall. McBean, like his predecessors, had believed that oil drilling on the ranch was a futile exercise. His later appointment of Jim Finch, the company's most expert and penny-wise negotiator, to take over the company's petroleum division was assurance that there would be no more giveaways.

McBean was not content simply to strike unexpected riches. He explored every opportunity of making the most of them. At the time, oil technology could extract about 15 percent of the underground deposits. Through his Standard Oil contacts, McBean heard that better systems had been developed. He hired oil engineer Ernest Parks to study the matter and learned that if the gas that comes from an oil well is reapplied under pressure, the well's yield could be increased to around 50 percent or a little more. As soon as the war ended and materials were available, both Barnsdall and Humble built huge repressuring plants in their hilly fields. Petroleum production leaped.

The oil profits multiplied and presently became the major source of Newhall Land and Farming Company income. As family members rejoiced, McBean announced dourly at stockholders' meetings: "That oil money is not for diamonds and mink coats. It is for investment. One day soon the oil will be gone." McBean pointed to federal tax law, which gave owners of oil-producing properties a 26 percent depletion allowance—presumably to replace their depleted properties. He intended to use it for that purpose.

He eagerly looked for land investments. There seemed to be no end to growth of the company fortunes. New directions lay ahead to be explored, and now there was money on hand with which to explore them.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

HISTORY OF OIL OR GAS WELL

Operator Medallion California Properties Co. Field Newhall-Potrero County Los Angeles

Well "Rancho San Francisco" 66 Sec. 27, T 4N, R 17W, S. B. B. & M.

A.P.I. No. 037-10663 Name Claude D. Fiddler (Person submitting report) Title Engineer (President, Secretary, Agent)

Date January 9, 1998

Signature Claude D. Fiddler

5400 Rosedale Highway, Bakersfield, CA 93308 (Address)

805/635-0465 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1997	
9/18	MIRU coil tubing unit (CTU) w/Class II BOPE. RIH w/CT, tagged down at 12,115 ft. Mixed and pumped 142 sxs Class "G" cmt w/40% silica flour (230 ft^3) in 4-1/2" drill pipe liner and 7" casing to 9819 ft. PUH. SIWFN.
9/19	Tagged cmt at 9817 ft w/CT. Tag witnessed by Paul Cronmiller, DOGGR. Mixed and pumped 320 bbls 9.6 lb/gal mud from 9817 ft to 1200 ft. POOH w/CT. RU perforators. RIH. Made cavity shot at 1150 ft, PUH to 145 ft, and shot eight 1/2" holes. RD perforators. RIH w/CT to 1150 ft. Mixed and pumped 66 ft^3 of Class "G" cmt and plugged from 1150 ft to 850 ft. POOH. SIWFN.
9/22	RIH w/CT. Tag cement plug at 849 ft, spot 28 bbls 9.6 lb/gal mud. Filled 7" casing to 145 ft. Tag and mudding witnessed by Paul Cronmiller, DOGGR. POOH. Pumped 221 sxs Class "G" cmt down 7" casing and up 7"x13-3/8" annulus with returns to surface. RD CTU. SIWFN.
9/23	Found top cmt at 138 ft. Filled 7" casing w/28 sxs Class "G" cmt and 7"x13-3/8" annulus w/52 sxs Class "G" cmt.
11/20	Completed abandonment, welded cap and marker, cleaned and cleared well location.

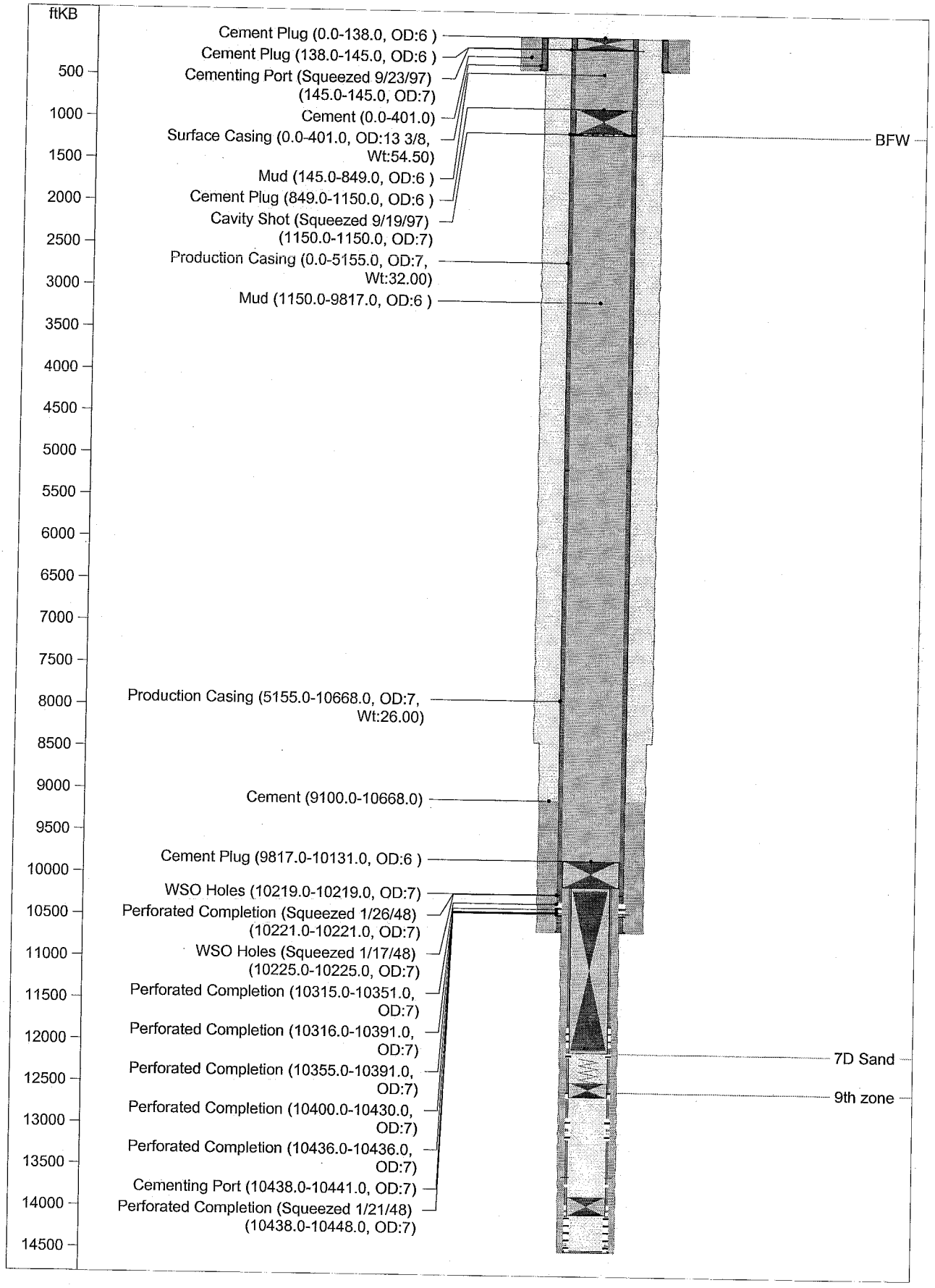
RECEIVED
JAN 23 1998
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
VENTURA, CALIFORNIA

OG103 (10/95/GSR1/5M)

SUBMIT IN DUPLICATE

RANCHO SAN FRANCISCO 66

10/2/97



RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

No. T297-271

Report on Operations

Bradford A. DeWitt, Agent
MEDALLION CALIFORNIA PROPERTIES
1100 Mohawk St., Ste. 154
Bakersfield, CA 93309-7416

Ventura, California
October 20, 1997

Your operations at well "Rancho San Francisco" 66, API No. 037-10663, Sec. 27, T. 4N, R. 17W, S.B. B.&M. Newhall Potrero Field, in Los Angeles County, were witnessed on 9-29-97. Steve Mulqueen, representative of the supervisor, was present from 0900 to 1000. There were also present Von Fortenberry

Present condition of well: 13 3/8" cem 401'; 7" cem 10,668', perf 10,219' WSO, cp 145', 10,221', 10,225', perfs @ int 10,315'-10,575', cav shot 1150'; 4 1/2" cem 10,131'-14,506', perf 11,780' WSO, perf 12,475' WSO & perf 14,149' WSO, cp 13,601', perfs @ int 11,780'-13,015' & perfs @ int 13,685'-14,501'. Junk below 12,179'. TD 14,509'. Plugged w/ cem 12,115'-9817', 1150'-849' & 145'-5'.

The operations were performed for the purpose of abandonment.

DECISION:

The plugging operations as witnessed and reported are approved.

tkc

William F. Guerard, Jr.
State Oil and Gas Supervisor

By _____

Patrick J. Kinnear
Deputy Supervisor

OG109 (Modified 1993)

DIVIS[illegible] OF OIL, GAS, AND GEOTHERMAL R[illegible]URCES

Cementing/Plugging Memo

T271

Operator MEDALLION CALIFORNIA PROPERTIES CO. Well No. "RANCHO SAN FRANSISCO" 66
API No. 037-10663 Sec. 27, T. 4N, R. 17W, SB B&M
Field NEWHALL-POTRERO, County LOS ANGELES. On 9-29-97
Mr./Ms. S. MULQUEEN, representative of the supervisor, was present from 0900 to 1000.
There were also present VON FORTENBERRY

Casing record of well: 13 3/8" cem 401'; 7" cem 10668', perf 10219' WSO, cp 145', 10221', 10225', perfs @ int 10315'-10575', CAV shot 1150'; 4 1/2" cem 10131'-14506', perf 11780' WSO, perf 12475' WSO & perf 14149' WSO, cp 13601', perfs @ int 11780'-13015' & perfs @ int 13685'-14501'. Junk below 12179'. TD 14509'. Plugged w/ cem 12115'-9817', 1150'-849' & 145'-5'.

☒ The plugging/cementing operations as witnessed and reported are approved.

☐ The location and hardness of the cement plug @ _____' are approved.

Hole size: _____" fr. _____' to _____', _____" to _____' & _____" to _____'

Casing				Cemented			Top of Fill		Squeezed Away	Final Press.	Perfs.
Size	Wt.	Top	Bottom	Date	MO-Depth	Volume	Annulus	Casing			
7"				9-22	DOWN 7" & UP ANNULUS	256 cf	—	138	60 cf	—	145'

Casing/tubing recovered: CAV" shot/cut at 1150', _____', _____' pulled fr. _____';
PERF" shot/cut at 145', w/8 JTS', _____' pulled fr. _____'.

Junk (in hole): _____

Hole fluid (bailed to) at _____'. Witnessed by _____

Mudding	Date	Bbls.	Displaced	Poured	Fill	Engr.
9.6 PPG	9-19-97	327	9817'	→	1150	PC
GREAT VISCOSITY	9-22-97	28	849		140'±	"

Cement Plugs		Placing	Placing Witnessed		Top Witnessed			
Date	Sx./cf	MO & Depth	Time	Engr.	Depth	Wt/Sample	Date & Time	Engr.
9-18-97	232 cf	ctu @ 12,115	—	REP	9817'	ctu wt	9-19-97 @ 7:00	PC
9-19-97	66 cf	ctu @ 1150	—	REP	849	ctu wt	9-22-97 @ 9:30	PC
9-22-97	256 cf	circ @ 145'	1215-1315	PC	138'	CTU	9/23 —	REP
9-23	92 cf	TBG @ 138'	—	REP	5'	VISUAL	9/29 0900	SPM

(32 cf IN 7", 60 cf IN ANNULUS)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

No. P297-283

PERMIT TO CONDUCT WELL OPERATIONS

500 (field code)
00 (area code)
-- (new pool code)
40 (old pool code)

WATERFLOOD

Bradford A. DeWitt, Agent
Medallion Calif. Properties
1100 Mohawk St. Suite 154
Bakersfield, CA 93309-7416

Ventura, California
August 25, 1997

Your proposal to abandon well "Rancho San Francisco 66,
A.P.I. No. 037-10663, Section 27, T. 4N, R. 17W, S.B. B.&M.,
Newhall-Potrero field, ---------- area, 7th pool,
Los Angeles County, dated 8/11/97, received 8/14/97, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOGGR Class II 2M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. A diligent effort shall be made to clean out the well to at least 12,179'.
4. All portions of the well not plugged with cement are filled with inert mud fluid having a minimum density of 72 lbs./cu. ft and a minimum gel-shear strength of 25 lbs./100 sq. ft.
5. This office shall be consulted before deviating from the proposed abandonment program.
6. THIS DIVISION SHALL BE NOTIFIED:
   a. To witness the location and hardness of the cement plug at 10,031'.
   b. To witness the mudding of the well.
   c. To witness the location and hardness of the cement plug at 1050'.
   d. To witness the placing of the surface plug and the 7-5/8" x 13-3/8" annulus and to verify its location.
   e. To inspect and approve the cleanup of the well site with 60 days after well has been plugged and abandoned.

Blanket Bond
SAF:sf

Engineer Steven A. Fields

Phone (805) 654-4761

William F. Guerard, Jr.
State Oil and Gas Supervisor

By _____

Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (Modified 1993)

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Notice of Intention to Abandon Well

File in Duplicate

FOR DIVISION USE ONLY			
CARDS	BOND	FORMS	
		OGD114	OGD121
✓	—	✓	✓

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

In compliance with Section 3229, Division 3, Public Resources Code, notice is hereby given that it is our intention to abandon well "Rancho San Francisco" #66, API No. 037-10663,

Sec. 27 T. 4N, R. 17W, S.B. B. & M., Newhall-Potrero Field, Los Angeles County,

commencing work on September 1, 19 97.

WSF

The present condition of the well is:

1. Total depth Effective depth 12,470 FT; cement plugs 14,063 FT - 13,843 FT; 12,647 FT - 12,470 FT
2. Complete casing record, including plugs and perforations (present hole)

Please see below.

3. Last produced _____ (Date) (Oil, B/D) (Gas, Mcf/D) (Water, B/D)

(or)

4. Last injected Prior to 10/92 (Date) (Water, B/D) (Gas, Mcf/D) (Surface pressure)

Additional data for dry hole (show depths):

5. Oil or gas shows
6. Stratigraphic markers
7. Formation and age at total depth
8. Base of freshwater sands

9. Is this a critical well according to the definition on the reverse side of this form? ☐ Yes ☒ No

The proposed work is as follows:

Please see attached **Proposed Abandonment Program.**

RECEIVED
AUG 14 1997
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
VENTURA, CALIFORNIA

Complete Casing Record (see No. 2 above):
13-3/8" 54.5# J-55 cmtd @ 405 FT.
7" 26#, 29# & 32# J-55 & N-80 casing cmtd @ 10,668 FT.
4-1/2" DP liner cmtd @ 14,506 FT, 7" x 4-1/2" lap sqz'd w/cmt 10,136 FT - 10,137 FT, WSO holes @ 11,780 FT, 12,087 FT, 12,475 FT; perf'd four 1/2" HPF 11,800 FT - 12,050 FT, 12,118 FT - 12,170 FT.

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

Address 1100 Mohawk Street, Suite 154 (Street)
Bakersfield, CA 93309 (City) (State) (Zip)
Telephone Number ( ) 805/635-0465 (Area Code) (Number)

Medallion California Properties Co. (Name of Operator)
By Claude D. Fiddler (Print Name)
(Signature) 8-11-97 (Date)

PROPOSED ABANDONMENT PROGRAM
RANCHO SAN FRANCISCO WELL #66
NEWHALL-POTRERO FIELD, LOS ANGELES COUNTY

1. RU Coil Tubing Unit (CTU), install Class II BOPE. RIH and lay a Class "G" cement plug in 4-1/2" DP liner and 7" casing from top of junk (junk scraper on top of gauge cutter) at 12,179 FT to 10,031 FT. Tag cement plug, DOGGR to witness location and hardness of plug. Fill 7" casing with 72# clay base mud from 10,003 FT to 1,150 FT.

2. RU perforators, RIH with cavity shot gear to 1,150 FT, make cavity shot. POOH with perforating gear. RIH with coil tubing, clean out to bottom of cavity if necessary and set Class "G" cement plug from 1,150 FT to 1,050 FT. Tag top of plug. DOGGR to witness location and hardness of plug.

3. Fill 7" casing with 72# clay base mud from 1,050 FT to 100 FT.

4. RU perforators and shoot eight (8) 1/2" holes at 100 FT. RD perforators. RIH with coil tubing and circulate surface plug into 7" x 13-3/8" casing annulus and 7" casing. DOGGR to witness surface plugging. RD coil tubing unit.

5. Clear well location, cut off casing five feet below ground level and weld on required well identification marker. DOGGR to witness plug prior to welding ID plate. DOGGR to make final inspection of location after restoration.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

REPORT OF PROPERTY AND WELL TRANSFER

Field or county: Newhall-Potrero		District: 2 Ventura
Former owner: DKM Offshore Energy, Inc.	Operator code: D0230	Date: 10-1-94

Name and location of well(s)

All wells previously owned by DKM Energy, Inc.
in Sec. 25, 26, 27, 31, 35, 36, T. 4N, R. 17W SBB&M.

Except:
"Rancho San Francisco" 152 (037-12654)

Description of the land upon which the well(s) is (are) located

Date of transfer, sale, assignment, conveyance, or exchange	New owner	Operator code	Type of organization
10-1-94	Medallion California Properties Company	M4805	Corporation
	Address: 1400 Easton Dr., #133, Bakersfield, CA. 93309		Telephone No.: (805) 395-3029

Reported by: Medallion California Properties Company

Confirmed by: DKM Offshore Energy

New operator new status (status abbreviation)	Request designation of agent
PA	
Old operator new status (status abbreviation)	Remarks

Deputy Supervisor: Patrick J. Kinnear

Signature: Patrick J. Kinnear

OPERATOR STATUS ABBREVIATIONS

- PA – Producing Active
- NPA – No Potential, Active
- PI – Potential Inactive
- NPI – No Potential, Inactive
- Ab – Abandoned or No More Wells

FORM AND RECORD CHECK LIST

Form or record	Initials	Date	Form or record	Initials	Date
Form OGD121	TKC		Map and book 252 + 253	PC	1-3099
Form OGD140			Notice to be cancelled		
New well cards			Bond status		
Well records			EDP files	TKC	
Electric logs	TKC		Computer Files		
Production reports	TKC				

OGD156 (5/98)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

REPORT OF PROPERTY AND WELL TRANSFER

Field or county: Newhall-Potrero		District: 2 Ventura
Former owner: Tidelands Oil Production Company	Operator code: T2975	Date: 11-1-92

Name and location of well(s)

All wells previously owned by Tidelands Oil Production Company, in Sec. 25, 26, 27, 31, 35, 36, T. 4N, R. 17W SBB&M.

Description of the land upon which the well(s) is (are) located

Date of transfer, sale, assignment, conveyance, or exchange: 11-1-92	New owner: DKM Offshore Energy, Inc.	Operator code: D0230	Type of organization: Corporation
	Address: 1100 Louisiana, Ste.4550 Houston, Texas 77002		Telephone No.: (713) 739-0312

Reported by: DKM Offshore Energy, Inc.

Confirmed by: Tidelands Oil Production Company

New operator new status (status abbreviation): PA	Request designation of agent
Old operator new status (status abbreviation)	Remarks

Deputy Supervisor: Patrick J. Kinnear

Signature: Patrick J. Kinnear PJK/1

OPERATOR STATUS ABBREVIATIONS

PA – Producing Active
NPA – No Potential, Active
PI – Potential Inactive
NPI – No Potential, Inactive
Ab – Abandoned or No More Wells

FORM AND RECORD CHECK LIST

Form or record	Initials	Date	Form or record	Initials	Date
Form OGD121	TKC		Map and book 252+253	PC	1-30-99
Form OGD140			Notice to be cancelled		
New well cards			Bond status		
Well records			EDP files	TKC	
Electric logs	TKC		Computer Files		
Production reports	TKC				

OGD156 (5/98)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county	District
Newhall Potrero	2
Former owner	**Date**
Oryx Energy Company	May 15, 1991

Name and location of well(s)

Sec. 27, T. 4N., R. 17W., SBB&M (continued)

"Rancho San Francisco" 9	(037-12628)	"Rancho San Francisco" 26	(037-00069)
"Rancho San Francisco" 13	(037-12632)	"Rancho San Francisco" 27	(037-12645)
"Rancho San Francisco" 16	(037-12636)	"Rancho San Francisco" 28	(037-12646)
"Rancho San Francisco" 19	(037-12638)	"Rancho San Francisco" 29	(037-12647)
"Rancho San Francisco" 20	(037-12639)	"Rancho San Francisco" 41	(037-12855)
"Rancho San Francisco" 21	(037-12640)	"Rancho San Francisco" 45	(037-12858)
"Rancho San Francisco" 22	(037-12641)	"Rancho San Francisco" 47	(037-12860)
"Rancho San Francisco" 23	(037-12642)	"Rancho San Francisco" 58	(037-12870)
"Rancho San Francisco" 24	(037-12643)	"Rancho San Francisco" 66	(037-10663)
"Rancho San Francisco" 25	(037-12644)	"Rancho San Francisco" 82	(037-13261)

Description of the land upon which the well(s) is (are) located

Date of transfer, sale, assignment, conveyance, or exchange	New owner	Type of organization
1-1-91	Tidelands Oil Production Co.	Co.
	Address 925 Harbor Plaza Long Beach, CA 90801	**Telephone No.** 213-436-9918

Reported by
Oryx Energy Company

Confirmed by
Tidelands Oil Production Co.

New operator new status (status abbreviation)	Request designation of agent
PA	
Old operator new status (status abbreviation)	**Remarks**
PA	

Deputy Supervisor
Patrick J. Kinnear

Signature
Patrick J. Kinnear

OPERATOR STATUS ABBREVIATIONS

- PA – Producing Active
- NPA – No Potential, Active
- PI – Potential Inactive
- NPI – No Potential, Inactive
- Ab – Abandoned or No More Wells

FORM AND RECORD CHECK LIST

Form or record	Initials	Date	Form or record	Initials	Date
Form OGD121			Map and book		
Form ODG148			Notice to be cancelled		
New well cards			Bond status		
Well records			EDP files		
Electric logs					
Production reports					

STATE OF CALIFORNIA-RESOURCES AGENCY
GEORGE DEUKMEJIAN, *Governor*

DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS
146 SOUTH OJAI STREET, P. O. BOX 67
SANTA PAULA, CALIFORNIA 93060
(805) 525-2105

April 24, 1985

Sun Exploration & Production Co.

Stanley W. Blossom, Agent
P.O. Box 55060
Valencia, CA 91355

RE: Newhall-Potrero
Rancho San Francisco
Water Flood, 7th Zone

Dear Mr. Blossom:

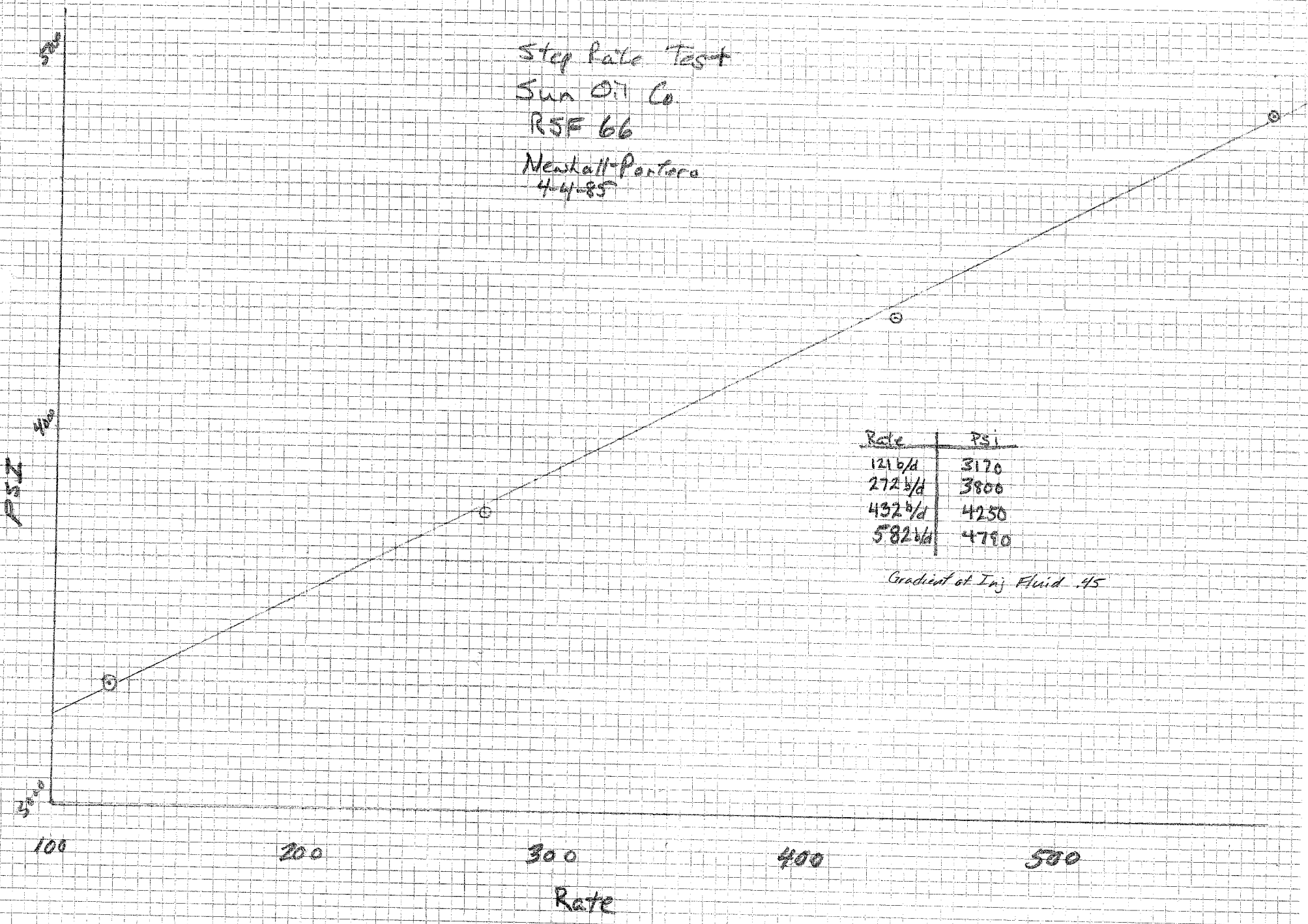
The Division has reviewed the step rate test data on your well, "Rancho San Francisco" 66, which was performed on April 4, 1985. From the data obtained, we have limited your injection pressure to 4700 psi, which translates to a .84 gradient. If yo have any questiions please contact this office.

Very truly yours,

Bill Winkler
Division Engineer

BW:ljg

Stg Rate Test
Sun Oil Co
R5F 66
Newsall-Pentecost
4-4-85



Rate	Psi
121 b/d	3170
272 b/d	3800
432 b/d	4250
582 b/d	4790

Gradient of Inj Fluid .45

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

No. T 285-3

DIVISION OF OIL AND GAS

Report on Operations

Stanley W. Blossom, Agent
Sun Explor & Prod Co.
Box 55060
Valencia, CA 91355

Santa Paula, Calif.
Jan. 11, 1985

Your operations at well "Rancho San Francisco" 66, API No. 037-10663,
Sec. 27, T.4N, R.17W, SB B.& M. Newhall-Potrero Field, in Los Angeles County,
were witnessed on 12/10/84. S. Mulqueen, representative of
the supervisor, was present from 1130 to 1230. There were also present Steve Moreland

Present condition of well: 13 3/8" cem 401'; 7" cem 10668', cp 10221' & 10225', perf 10219' WSO, perfs 10315-10468' (cem off); 4 1/2" cem 10131-14506', cp 10136', perf 11780', 12475 & 14149' WSO, perfs 11800-12050', 12118-12170' & 12585-14501', hole at 13601' (cem off) Junk below 12179'. TD 14509'. Plugged w/cem 14063-13843' & 12647-12470'.

The operations were performed for the purpose of demonstrating that the injected fluid is confined to strata below 10,668'.

DECISION:

THE OPERATIONS ARE APPROVED AS INDICATING THAT ALL OF THE INJECTION FLUID IS CONFINED TO THE FORMATIONS BELOW 10668' AT THIS TIME.

b

M. G. MEFFERD

Murray W. Dosch

Murray W. Dosch

OG109 (9/83/GSR1/15M)

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

SUN EXPLORATION AND PRODUCTION COMPANY

Operator SUN PRODUCTION DIVISION Field or County Newhall-Potrero

Well Rancho San Francisco #66, Sec. 27, T 4N, R 17W, SB B. & M.

A.P.I. No. 037-10663 Name STAN W. BLOSSOM (Person submitting report) Title Agent (President, Secretary or Agent)

Date 10-8, 1984

Signature Stanley W Blossom

Box 55060, Valencia, California 91355-0560 (Address)

(805) 257-6200 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
1984	
9/11	7" CSG @ 10,688'/4½" LNR @ 10,131-14,506/PBTD @ 12,470 (JUNK TO 12,179)/ PERFS: 12,170-12,118 & 12,050-11,800/7TH ZONE/PERFS CEMENTED OFF: 14,501-12,585/ 9TH ZONE/ MIRU/INSTL BOE/POH & TALLY TBG, LD GL EQUIPMENT/SI/
9/12	RIH w 4½" POSITIVE CSG SCRPR ON 2200' 2-3/8" TBG & 10,000' 2-7/8" TBG SCRPR STOPD @ 10,804', UNABL TO GET PAS/CHANGED OVR TO FRSH WTR & POH w SCRPR/SI/
9/13	RIH w TBG TO 12,181 PBTD & ESTABLISHED CIRCULATION/CIRC IN 821 GAL 15% HCl (w 25% SOLV) & SPOTTED ACROSS PERFS/POH w TBG/SI/
9/14	RIH w 4½" 16.6# POSITIVE CSG SCRPR & 3-3/4" BIT/WRKD THRU TIGHT SPOTS @ 10,804 & 11,331/STOPD @ 11,397, UNABL TO GET PAST/POH w SCRPR & BIT/SI/
9/15	RIH w OPN ENDED TBG TO 12,181 & BKSC ACID OUT OF HOLE/CHG HOLE OVR TO PKR FLUID/POH/ SI/
9/16	RU McCULLOUGH/SET BAKER MOD 'D' PKR @ 10,750 (CLR @ 10,760)/HYDROTESTING TBG IN HOLE/SI/
9/17	FINISH TESTING IN HOLE w TBG/SPACE WELL OUT & LAND TBG IN 6000# TENSION/RD HYDRO-TEST/REMOV BOE/TST CSG TO 5000 PSI FOR 5 MIN, OK/INSTL TREE/RDMO/ FINAL REPORT/
	T 5001/I 22,294/

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 284-296

PERMIT TO CONDUCT WELL OPERATIONS

500 (field code)
00 (area code)
--40 (new pool code)
~~40~~ 10 (old pool code)

WATER FLOOD

Stanley W. Blossom, Agent
Sun Exploration & Production Co.
P.O. Box 55060
Valencia, CA 91355

Santa Paula, California
August 31, 1984

Your convert to proposal to water flood well "Rancho San Francisco" 66, A.P.I. No. 037-10663, Section 27, T. 4N, R. 17W, S.B. B. & M., Newhall-Potrero field, any area, 7th pool, Los Angeles County, dated 8/24/84, received 8/28/84 has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Blowout prevention equipment of at least DOG Class II 3M shall be installed and maintained in operating condition at all times.
3. Injection shall cease if any evidience of damage is observed, or upon written notice from the Division.
4. The provisions as set forth in Section 1724.10 of the Divisions onshore regulations shall apply to this waterflood project.
5. A step rate test shall be conducted prior to sustained liquid injection to establish the maximum allowable surface injection pressure.
6. In all other respects the provisions set forth in our project approval letter dated November 9, 1977 shall apply.
7. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.
8. THIS DIVISION SHALL BE NOTIFIED:
   a. TO WITNESS a survey to demonstrate that injected fluid is confined below 11,780'.
   b. TO WITNESS a step rate test.

Blanket Bond
MS:ljg

Engineer Michael Stettner

Phone (805) 525-2105

M. G. MEFFERD, State Oil and Gas Supervisor

By [signature]
Deputy Supervisor

A copy of this report and the proposal must be posted at the well site prior to commencing operations.

Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111 (9/83/GSR1/5M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

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 begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

DIVISION OF OIL AND GAS
RECEIVED
AUG 28 1984
SANTA PAULA, CALIFORNIA

FOR DIVISION USE ONLY		
BOND	OGD114	OGD121
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. RANCHO SAN FRANCISCO #66, API No. 037-10663, Sec. 27, T. 4N, R. 17W, ____ B. & M., Newhall Potrero Field, Los Angeles County.

The present condition of the well is as follows: SHUT IN

1. Total depth. 14509'

2. Complete casing record, including plugs and perforations:

SEE ATTACHMENT "B"

3. Present producing zone name SEVENTH Zone in which well is to be recompleted SAME

4. Present zone pressure 2600 New zone pressure SAME

5. Last produced 4/84 (Date) | 0 (Oil, B/D) | 2 (Water, B/D) | 0 (Gas, Mcf/D)

or

6. Last injected N/A (Date) | ____ (Water, B/D) | ____ (Gas, Mcf) | ____ (Surface pressure, psig.)

The proposed work is as follows: CONVERT TO WATER INJECTION

SEE ATTACHED PROCEDURE

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

Address Box 55060 (Street)
Valencia (City) (State) (Zip)
Telephone Number (805) 257-6200

Sun Exploration and Production Company (Name of Operator)
By Stanley W. Blossom (Name) 8/24/84 (Date)
Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OG107 (8-75—GSRI—15M)

RECOMMENDED WORK PROCEDURE Sun—5036-3-C

WELL NAME	FIELD NAME	COUNTY	STATE
Rancho San Francisco 66	Newhall-Potrero	Los Angeles	CA

PERMANENT ZERO POINT	UPPERMOST PLUG	RETAINER
KB = 9' AGL	12470'	

	SIZE & WEIGHT PROD	DEPTH SET	PACKER DEPTH (TOP) & TYPE	(1) (2) (3)
CASING	7" 26 29 & 32#	10668'		(1736') BKR RC Hydrogrip
	SIZE, WEIGHT, GRADE, ETC.	**DEPTH SET**	**TOP OF CEMENT BEHIND PROD CSG.**	**CALCULATED / LOG**
TUBING	2 7/8" 2 3/8" N-80, J-55	12145'		9100'
Liner:	4 1/2" 16.6# DP	14506 (10131')	PERFS	12170-11800'

PROCEDURE | **RIG TIME**

1. MIRU. Install Class II BOPE. Release Baker RC Hydrogrip packer and POH w/all.

2. MU and RIH w/4 1/2" 16.6# positive casing scraper on ±2200' 2 3/8" tbg and ±10000 2 7/8" tbg to PBTD @ 12179'.

3. RU Halliburton. Circulate in 250 gal 15% HCl (w/25% solvent) followed by 65 bbls clean water. PU to ±9500. Shut in overnight.

4. RIH to PBTD @ 12179' and backscuttle acid out of hole w/±400 bbls clean water. Change hole over to treated water (5 gal/100 bbls each XC 370 and K 700). POH.

5. RU McCullough. RIH w/4 1/2" 16.6# Baker Model 'D' PKR and set @ ±11700'. POH w/wireline. RDMO McCullough.

6. MU and RIH w/seal assembly on ±1700' 2 3/8" tbg and ±10000' 2 7/8" tbg to top of PKR @ 11700' (test tbg into hole to 5000 psi). Stab into PKR and land tbg in tension. Test csg to 500 psi. Install tree. RDMO.

7. After well stabilizes, run injection survey.

   NOTE: Have ±1500' of 2 7/8" N-80 tbg on top.

WELL COMPLETION SKETCHES SUN--5036-4-A

WELL: RSF #66-7 | FIELD: NEWHALL-POTRERO | DATE: 8/9/84

☐ PRESENT COMPLETION ☒ SUGGESTED COMPLETION

PERMANENT WELL BORE DATA

17-⅞" hole to 401'
12-½" hole to 8155'
12-¼" hole to 8413'
11" hole to 10668'
5-⅞" hole to 14509'

13-⅜", 54.5# J-55 csg. Cmt'd @ 401' w/ 350 sx cmt (to surface)

7" 26, 29, and 32# csg. Cmt'd @ 10668' w/ 600 sx cmt. Est TOC @ 9100'.

4-½", 16.6# DP liner hung @ 14506' w/ hanger @ 10131'. Cmt'd out shoe w/ 230 sx. Squeezed lap thru 4-½" holes (10136' - 10137')

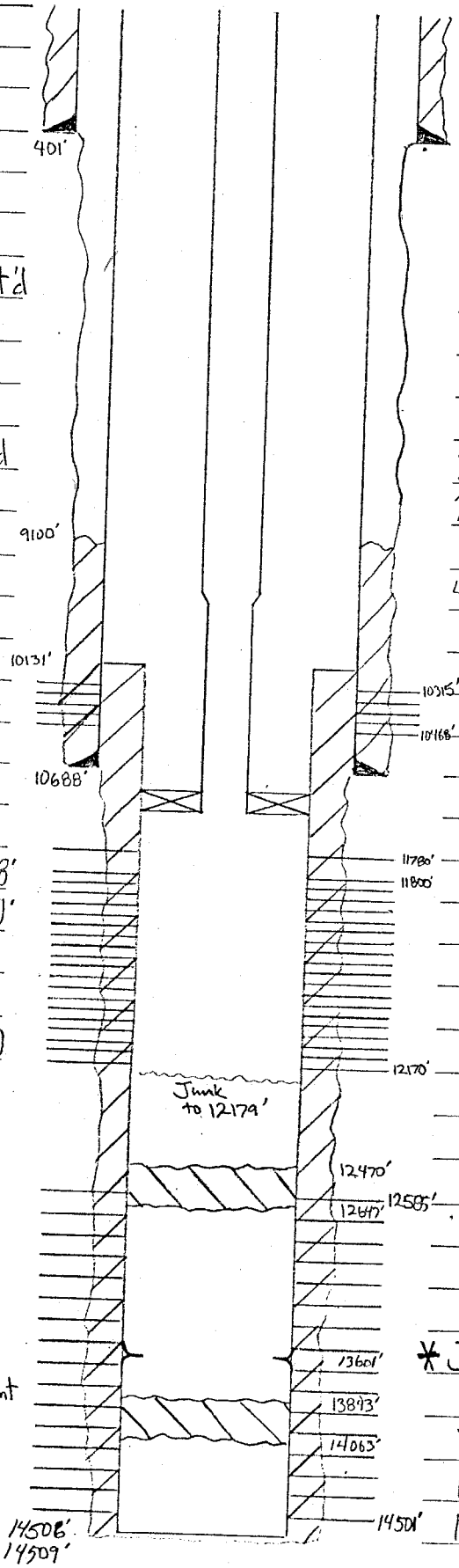
Perfs: 4-½" JHPF 12170'-12118'
4-½" JHPF 12050'-11800'

Other perfs:
4-⅜" Jet holes @ 12087' - WSO
4-⅜" Jet holes @ 11780' - WSO

4-½" JHPF — various intervals from 14501' to 12585'

4-⅜" Jet holes @ 12475' - WSO

Hole in liner @ 13601' - sqz'd w/ 23 sx cmt
Cmt plugs - 12470' - 12647'
13843' - 14063'



DATA ON THIS COMPLETION

KB = 9' AGL

2-⅞" tba to ± 10000'
2-⅜" tba to ± 11700'

4-½" 16.6# Baker Model 'D' pkr @ ± 11700'

* Junk in hole: One gauge cutter off bit @ 14469'. 4-½" 16.6# Roto Vert scpr w/ 2-⅜" EUE X 1.660" EU tbg swage @ 12179'

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF PROPERTY AND WELL TRANSFER

Field or county: NEWHALL-POTRERO	District: 2
Former owner: Sun Oil Company	Date: Mar. 31, 1983

Name and location of well(s)

Sections 21, 22, 25, 26, 27, 28, 35, 36, T4N. R. 17W.

ALL WELLS

Description of the land upon which the well(s) is (are) located

Date of transfer, sale, assignment, conveyance, or exchange	New owner	Type of organization
1/1/82	Sun Exploration & Production Co. Address: P.O. Box 55060 Valencia, Ca. 91355	Company Telephone No. (805) 257-6200

Reported by: Sun Oil Company

Confirmed by: Sun Exploration & Production Co.

New operator new status (status abbreviation)	Request designation of agent
PA	on file
Old operator new status (status abbreviation)	**Remarks**
Ab	NAME CHANGE ONLY

Deputy Supervisor	Signature
Murray W. Dosch	Murray W. Dosch

OPERATOR STATUS ABBREVIATIONS

- PA – Producing Active
- NPA – No Potential, Active
- PI – Potential Inactive
- NPI – No Potential, Inactive
- Ab – Abandoned or No More Wells

FORM AND RECORD CHECK LIST

Form or record	Initials	Date	Form or record	Initials	Date
Form OGD121			Map and book		
Form OGD148			Notice to be cancelled		
New well cards			Bond status		
Well records			EDP files		
Electric logs					
Production reports					

SUNRAY DX OIL COMPANY
SOUTHWESTERN DIVISION — NEWHALL DISTRICT

WELL SUMMARY REPORT

Field Newhall - Potrero

Well No. Rancho San Francisco #66-7, Sec. 27, T. 4N, R. 17W, S.B. B. & M.

Location 1311' South and 2300' East from Corner "J", Los Angeles County.

Elevation of K.B. above sea level 1183'.

K.B. above ~~Ground~~ Concrete Mat 9.00'.

Date August 29, 1967

Signed J. R. Hinkle by G. J. Williams
J. R. Hinkle, District Engineer

Contractor California Production Service
Type Rig Drive-in Hopper Hoist
Commenced Workover : 8/16/67 (Date)

Completed Workover : 8/19/67 (Date)

WELL CONDITIONS PRIOR TO WORK

Total Depth 14,509' Plugged Depth 12,470'

(See attached)

WELL CONDITIONS AFTER WORK

Total Depth 14,509' Plugged Depth 12,470'

(See attached)

DIVISION OF OIL AND GAS
RECEIVED
SEP 8 1967
INGLEWOOD, CALIFORNIA

Commenced Producing August 20, 1967 (Date) ~~Flowing~~/gas lift/~~pumping~~

	Clean Oil Bbls. per day	Gravity Clean Oil	Per Cent Water Incl. Emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production 8/20/67	* 81	26.5	11.0	0	120	600
Production after 9 days	12	27.8	7.7	25	120	580

* All Load Oil

Electrical Log Depths _____ (Attach copy of Log)

SUMMARY OF WELL CONDITIONS PRIOR TO WORK

13 3/8" 54.5#, J-55, Seamless Csg. cmt'd. w/350 sx. at 401'.
7" 32#, 29#, 26#, 23#, N-80, LT&C and X-line Csg. cmt'd. at 10,668' w/600 sx.
7" Casing bowl at 5157'.
4-3/8" Bullet holes at 10,219' - WSO.
4-3/8" Bullet holes at 10,221' - Squeezed w/32 sx.
4-3/8" Bullet holes at 10,225' - Squeezed w/ 9 sx.
4-1/2" JHPF: (10,315-10,351') (10,355'-10,391').
1-1/2" BHPF: (10,316-10,351') (10,356'-10,391').
4-1/2" BHPF: (10,400' - 10,430')
4-1/2" JHPF: (10,400' - 10,430')
4-3/8" Bullet holes at 10,436'.
6-1/2" BHPF: (10,438-10,448') (10,448-10,468') (10,473-10,473').
Squeezed holes from (10,438-10,441') w/40 sx.
4-3/8" Bullet holes at 10,530'.
4-3/8" Bullet holes at 10,553'.
8-3/8" Bullet holes at 10,574-10,575'.
4 1/2" 16.6# Drill Pipe liner hung at 14,506' w/hanger at 10,131'. Cemented out shoe w/230 sx. Squeezed lap thru 4-1/2" Holes (10,136'-10,137') w/133-1/2 sx. - WSO.
2-1/2" JHPF: (12,585-12,663') (12,890-13,015') (13,050-13,070') (13,075-13,160'), (13,685-13,720').
4-1/2" BHPF: (13,936-13,999') (14,016-14,059') (14,079-14,146') (14,236-14,271') (14,344-14,396') (14,161-14,176'), (14,180-14,205') (14,271-14,281') (14,309-14,339') (14,398-14,413') (14,430-14,501').
1-1/2" JHPF: (13,940-14,000') (14,020-14,060') (14,080-14,140') (14,160-14,200') (14,240-14,280') (14,320-14,340') (14,350-14,410') (14,430-14,450')
4-3/8" Bullet holes at 14,149'.
4-3/8" Jet holes at 11,780' - WSO.
4-1/2" JHPF: (11,800-12,050').
4-3/8" Jet holes at 12,087' - WSO.
Cement Plug from (12,470-12,647').
4-3/8" Jet holes at 12,475' - WSO.
Hole in liner at 13,601' - Squeezed w/23 sx.
Cement Plug from (13,843-14,063').
Junk: (One gauge cutter from 3-1/2" bit) at 14,469'.
4-1/2" - 16.6# Roto-Vert Scraper w/2 3/8" EUE x 1.660" EU Tubing Swage) at 12,179'.

17 3/8" Hole to 401'.
12 1/2" Hole to 8155'.
12 1/4" Hole to 8413'.
11" Hole to 10,668'.
5 7/8" Hole to 14,509' - Total Depth.

SUMMARY OF WELL CONDITIONS AFTER WORK

13 3/8" 54.5#, J-55, Seamless Csg. cmt'd. w/350 sx. at 401'.

7" 32#, 29#, 26#, N-80, LT&C and X-line Csg. cmt'd. at 10,668' w/600 sx.
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4-3/8" Bullet holes at 10,219' - WSO.
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4-1/2" JHPF: (10,315-10,351') (10,355'-10,391').
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4-1/2" BHPF: (13,936-13,999') (14,016-14,059') (14,079-14,146') (14,236-14,271'), (14,344-14,396') (14,161-14,176'),(14,180-14,205') (14,271-14,281') (14,309-14,339') (14,398-14,413') (14,430-14,501').
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Hole in liner at 13,601' - Squeezed w/23 sx.
Cement plug from (13,843-14,063').
Junk: (One gauges cutter from 3-1/2" bit) at 14,469'.
4-1/2" - 16.6# Roto-Vert Scraper w/2 3/8" EUE x 1.660" EU Tubing Swage) at 12,179'.

17 3/8" Hole to 401'.
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12 1/4" Hole to 8413'.
11" Hole to 10,668'.
5 7/8" Hole to 14,509' - Total Depth.

FORM 103

SUBMIT IN DUPLICATE

Δ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR SUNRAY DX OIL COMPANY FIELD Newhall-Potrero

Well No. Rancho San Francisco #66-7, Sec. 27, T. 4N, R. 17W, S.B. B. & M.

Date August 29, 19 67 Signed J. R. Hinkle by D. J. Clare
J. R. Hinkle

23928 Lyons Avenue
Newhall, California 91321 805-259-2440 Title District Engineer
(Address) (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	
1967	ALL MEASUREMENTS TAKEN FROM KELLY BUSHING WHICH IS 9.0 FEET ABOVE GROUND.
8/16	Moved in CPS Drive-in Rig and pump. Circulated well free of gas by pumping 400 barrels of lease crude. Removed X-mas tree and installed Class III BOE. Built working platform. Pulled and measured tubing out of hole. Layed down 55 jts. - 1 1/2" line pipe. Made up 4 1/2" - 16.6# Positive Scraper on 2 3/8" Nat. Seal-Lock tubing. Changed 40 - 2 3/8", EUE, 8RD collars to N-80 turned down couplings. Now running in hole.
8/17	Ran 4 1/2" - 16.6# Baker Positive Scraper. Hit tight spot from 11,398 to 11,400'. Worked scraper through interval several times. Took 2000# wt. at finish to push through. Tagged bottom (old junk) at 12,181'. Pulled out of hole. Ran tubing open-ended with gas lift valves and gas lifted fluid out to 8200'. Pulled out of hole.
8/18	Rigged-up McCullough. Perforated 7D Sand with 4 - 1/2" Standard Casing Glass Jet Holes per foot from (12,118' - 12,170'). Liner collars checked approximately 2' high on wireline. Tore out McCullough. Rigged up Hydro-Test and tested production string into hole to 4000#. Packer did not take any weight while going through tight spot in 4 1/2" liner from (11,398' - 11,400'). Set packer at 11,741' with tail to 12,144'. Tore out Hydro-Test. Removed Floor and BOE. Installed X-mas tree. Shut down job at 1:00 AM.
8/19	Resumed operations at 7:00 AM. Cleaned and loaded out tools. Tore out pump and tank. Layed down mast and moved out. Rig released 9:30 AM, 8/19/67.
8/20 - 8/28	See attached production sheet.

WELL NO.: RSF #66-7

MORNING PRODUCTION REPORT

Date:	Method Of Prod.:	Hrs. Prod	Bbls Oil	Bbls. Water	% Sd	Gravity	Choke Size:	Flow Tbg. Press	CSG Press	Form. Gas MCF/D	GOR (CF/B)	Input Gas MCF/D	Remarks
8/20/67	Gas Lift	24	81	10	0	26.5	40/64	120#	600#	0	0	726	W/O 77 BO
8/21/67	GL	24	17	0	0	28.0	40/64	120#	610#	0	0	530	W/O 60 BO
8/22/67	GL	24	13	0	0	28.0	40/64	130#	580#	0	0	371	W/O 47 BO
8/23/67	GL	24	13	0	0	26.7	48/64	120#	580#	0	0	288	W/O 34 BO
8/24/67	GL	24	13	1	0	27.8	48/64	120#	580#	26	2000	262	W/O 21 BO
8/25/67	GL	24	11	1	0	27.8	48/64	120#	580#	6	545	254	W/O 10 BO
8/26/67	GL	24	12	1	0	27.8	48/64	120#	580#	13	1083	275	All Wash Oil Pd. Back + 2 Bbls.
8/27/67	GL	24	12	1	0	27.8	48/64	120#	580#	10	833	260	
8/28/67	GL	24	12	1	0	27.8	48/64	120#	580#	25	2083	282	

FORM 111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 167-880

Mr. John R. Hinkle
23928 Lyons Avenue
Newhall, California
Agent for SUNRAY DX OIL COMPANY

Inglewood, Calif.
August 11, 1967

DEAR SIR:

Your (037-10663) proposal to alter casing in Well No. "Rancho San Francisco" 66-7
Section 27, T. 4 N, R. 17 W, S.B.B. & M., Newhall-Potrero Field, Los Angeles County,
dated -----, received Aug. 10, 1967, 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

"The present condition of the well is as follows:

1. Total depth. 14,509'
   PBTD 12,470'
2. Complete casing record, including plugs:
   (see attached)
3. Last produced. June, 1967 (Date) 11 (Oil, B/D) 1 (Water, B/D) 42 (Gas Mcf/D)"

PROPOSAL

"The proposed work is as follows:

1. Move in workover rig, kill well, and install BOE.
2. Scrape liner from (10,131-12,175').
3. Unload well down to 8200'.
4. Perforate lower 7th Zone from (12,118-12,170') w/4-1/2" standard glass jet holes per foot.
5. Run production string and place well on gas lift."

DECISION

THE PROPOSAL IS APPROVED.

JLZ:nw

cc Company

Blanket Bond

W/S

E. R. MURRAY-AARON, State Oil and Gas Supervisor

By [signature], Deputy

75567-705 7-66 50M ① △ OSP

ORM 107

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
RECEIVED
AUG 10 1967
INGLEWOOD, CALIFORNIA

DIVISION OF OIL AND GAS

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given before work begins; one copy only

Newhall, Calif., 19

DIVISION OF OIL AND GAS

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or~~ altering casing at Well No. 11 Rancho San Francisco (037-10663) #66-7
(Cross out unnecessary words)

, Sec. 27, T. 4N, R. 17W, SB B. & M.

Newhall-Potrero Field, Los Angeles County.

The present condition of the well is as follows:

1. Total depth. 14,509'
   PBTD 12,470'

2. Complete casing record, including plugs:

   (see attached)

3. Last produced. June, 1967 (Date) | 11 (Oil, B/D) | 1 (Water, B/D) | 42 (Gas Mcf/D)

The proposed work is as follows:

1. Move in workover rig, kill well, and install BOE.
2. Scrape liner from (10,131-12,175').
3. Unload well down to 8200'.
4. Perforate lower 7th Zone from (12,118-12,170') w/4-1/2" standard glass jet holes per foot.
5. Run production string and place well on gas lift.

Alter Casing

MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
			Blanket	A2	A2

23928 Lyons Avenue
Newhall, California 91321
(Address)

805 259-2440
(Telephone No.)

SUNRAY DX OIL COMPANY
(Name of Operator)

By J. R. Hinkle, District Engineer

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

81988-705 10-66 15M OSP

SUMMARY OF WELL CONDITIONS AS OF 5-13-56

Commenced Workover: 1-11-56

Completed Workover: 5-13-56

17-3/8" hole to 401'.
13-3/8" 54.5# J-55 Smls. casing with shoe at 401'. Cemented with 350 sacks containing 2-1/2% Gel.
12-1/2" hole to 8155'.
12-1/4" hole to 8413'.
11" hole to 10,668'.
7" 32#, 29#, 26#, 23# N-80, LT&C and X-Line casing cemented at 10,668' with 600 sacks with casing bowl at 5157'.
5-7/8" hole to 14,509' - total depth.
4-1/2" 16.60# drill pipe liner hung at 14,506' with hanger at 10,131' Cemented out shoe with 230 sacks.
Squeezed lap with 133-1/2 sacks - **W.S.O.**
Four 3/8" bullet holes at 10,219' - **W.S.O.**
" 3/8" " " " 10,221'; squeezed with 32 sacks.
" 3/8" " " " 10,225'; " " 9 sacks.
" 1/2" jet holes per foot: 10,391'-10,355'; 10,351'-10,315'.
One 1/2" bullet hole per foot: 10,391'-10,356'; 10,351'-10,316'.
Four 1/2" " " " " : 10,430'-10,400'.
Four 1/2" jet holes per foot: 10,430'-10,400'.
Four 3/8" bullet holes at 10,436'.
Six 1/2" bullet holes per foot: 10,448'-10,438'; 10,468'-10,448'; 10,478'-10,473'.
Squeezed holes from 10,441' to 10,438' with 40 sacks.
Four 3/8" bullet holes at 10,530'.
Four 3/8" bullet holes at 10,553'.
Eight 3/8" bullet holes at 10,575'-10,574'.
Four 3/8" jet holes at 11,780' - **W.S.O.**
Four 1/2" jet holes per foot: 12,050'-11,800'.
Four 3/8" jet holes at 12,087' - **W.S.O.**
Cement plug from 12,647' to 12,470'.
Four 3/8" jet holes at 12,475' - **W.S.O.**
Hole in liner at 13,601'; squeezed with 23 sacks.
Cement plug from 14,063' to 13,843'.
Two 1/2" jet holes per foot: 13,720'-13,685'; 13,160'-13,075'; 13,070'-13,050; 13,015'-12,890'; 12,663'-12,585'.
Four 1/2" bullet holes per foot: 14,501'-14,430'; 14,413'-14,398', 14,339'-14,309'; 14,281'-14,271'; 14,205'-14,180'; 14,176'-14,161'; 14,396'-14,344'; 14,271'-14,236'; 14,146'-14,079'; 14,059'-14,016'; 13,999-13,936'.
One 1/2" jet hole per foot: 14,450'-14,430'; 14,410'-14,350'; 14,340'-14,320'; 14,280'-14,240'; 14,200'-14,160'; 14,140'-14,080'; 14,060'-14,020'; 14,000'-13,940'.
Four 3/8" bullet holes at 14,149'.
Junk (one gauge cutter from 3-1/2" bit) at 14,469'.

FORM 103. 62884 8-46 47,500
CALIFORNIA STATE PRINTING OFFICE

SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

DIVISION OF OIL AND GAS
RECEIVED
FEB 1 1957
LOS ANGELES, CALIFORNIA

OPERATOR Sunray Mid-Continent Oil Company FIELD Newhall-Potrero

Well No. "Rancho San Francisco" 66-7, Sec. 27, T. 4N, R. 17W, S.B. B. & M.

Signed O. G. Graybeal Jr

Date January 14, 1957

Title O. A. Graybeal, Agent
(President, Secretary or Agent)

Use this form in reporting all important operations at the well, together with the dates thereof, in the order of their performance. Such operations include drilling, redrilling, deepening, plugging, or altering casing as by perforating, shooting, or pulling. Include in your report size of hole drilled, redrilled, or deepened; size, weight and length of casing landed, cemented, or removed, amount and location of perforations; number of sacks of cement used in cementing or plugging operations, number of feet of cement drilled out of casing, location of top and bottom of cement plugs. If the well was dynamited, give date, dimensions and weight of all shots. If tests were made give interval tested and results of tests, such as, amount and nature of fluids recovered.

HISTORY OF WORKOVER

Date 1956	
1-11	Moved in rotary rig.
1-12	Circulated with oil base mud. Removed X-mas tree and installed blowout preventer equipment.
1-13	Pulled tubing.
1-14	Pulled tubing. Found hole in bottom gas lift valve.
1-15	Made up 2-7/8" drill pipe. Ran in and circulated at 13,860'. Pulled out of hole.
1-16	Ran in with bit and 3-3/4" scraper. Could not get below 10,229'. Pulled back to 10,094' and conditioned mud.
1-17	Cement Plug #1: Ran and hung 9940' of 2-7/8" 10.4# drill pipe and 3982' of 2-3/8" tubing at 13,916'. Pumped 60 cu. ft. K.D. ahead of 150 sacks Colton Hi-Temp cement at 114# slurry. Followed by 24 cu. ft. K.D. displaced with 314 cu. ft. oil base mud. Estimated top of plug 13,691'.
1-18	Found top of cement at 13,763'. Drilled out hard cement at 13,767'. Pressure tested 7" casing, liner, and cement plug with 2000 psi. Pressure bled back to 1000 psi. Hole took an estimated 6 barrels mud. Pressured again with 2000 psi. Pressure again bled back slowly to 1000 psi. Hole took approximately 4 barrels mud.
1-19	Shot four 3/8" jet holes at 12,475'. Test #1: Ran Halliburton Hydrospring tester with packer set at 10,100' and tail to 10,123'. Used 1200' water cushion and 1/2" bottom bean. Tester opened at 9:20 a.m. for one hour. Had strong blow decreasing to dead in 2 minutes, then dead with occasional very faint heading for 58 minutes. Recovered 540' oil base mud. Charts showed no pressure build up.
1-20	Shot two 1/2" jet holes per foot: 13,720'-13,685'; 13,160'-13,075'; 13,070'-13,050'; 13,015'-12,975'.
1-21	Shot two 1/2" jet holes per foot: 12,975'-12,890'; 12,663'-12,585'.
1-22	Drilled out cement from 13,767' to 13,964'. Cleaned out to 14,485'.
1-23	Laid down drill pipe. Ran tubing.
1-24	Finished running 342 joints of 2-1/2" tubing and 5 Garrett type "O" gas lift valves. Landed tubing at 10,092'. Installed X-mas tree. Changed from Black Magic oil base mud to crude oil and completed well

Date
1956

PRODUCTION DATA

	GROSS	CUT	NET	BEAN	GRAV.	TUBING PRESSURE	CASING PRESSURE	M.C.F.	G.O.R.	REMARKS
1-24	386	1.6	380	--	31.0	175-200	550	222	584	
1-25	-	100	-	--	--	-	-	-	-	
1-26	-	-	-	--	--	-	-	-	-	No production

1-27 thru 1-31 Shut in.

2-1 Swabbing muddy water.

2-2 Swabbing muddy water.

2-3 thru 2-5 Well Idle.

2-6 Rigged up rotary rig.

2-7 Change over from crude oil to 73# mud. Remove X-mas tree. Installed blowout preventer equipment. Pulled tubing.

2-8 Pulled tubing. Tubing joint at 4882' collapsed.

2-9 Made up 2-7/8" drill pipe. Rolled 7" casing from 4876' to 4881' with 1500# weight. Cleaned out from 4881' to 4904'.

2-10 Rolled casing from 4875' to 4877'. Pulled out. Rolled casing from 4877' to 4885'. Did not touch casing from 4885' to 4903'. Hole took 18 barrels of mud. Ran in with casing roller and rolled casing from 4876' to 4888'.

2-11 Rolled casing from 4875' to 4888'. Pulled out of hole. Hole took 14 barrels of mud.
Cement Plug #2: Laid 20 sack cement plug with drill pipe hung at 5155'. Estimate top of plug at 5040'.

2-12 Rolled casing from 4876' to 4888'.

2-13 Rolled casing from 4875' to 4888'.
Squeeze Job #1: Squeezed holes in 7" casing from 4875' to 4888' with retainer set at 4818' with 75 sacks of cement mixed at 116# slurry. Maximum pressure 1100 psi. Estimate 75 sacks away. Unlatched from retainer, pulled clear and backscuttled.
Squeeze Job #2: Latched into retainer set at 4818'. Squeezed 7" casing from 4875' to 4888' with 50 sacks of cement mixed at 116# slurry. Maximum pressure 1900 psi. Final pressure 1800 psi. Estimate 50 sacks away. Unlatched from retainer. Pulled up and backscuttled.

2-14 Squeeze Job #3: Latched into retainer set at 4818'. Squeezed 7" casing from 4875' to 4888' with 50 sacks of cement mixed at 116# slurry. Maximum pressure 2400 psi. Final pressure 1850 psi. Estimate 50 sacks away. Unlatched from retainer. Pulled up and backscuttled.
Squeeze Job #4: Latched into retainer set at 4818'. Squeezed 7" casing from 4875' to 4888' with 50 sacks of cement mixed at 116# slurry. Maximum pressure 2900 psi. Final pressure 2300 psi. Estimate 44 sacks away. Unlatched from retainer. Pulled up and backscuttled.

2-15 Drilled out retainer from 4818' to 4821'. Drilled out medium hard cement from 4865' to 4890'. Cleaned out to top of cement plug at 5051'. Drilled out medium hard cement to 5054'. Circulated at 4863' for test.

Date
1956

2-16 Test #2: Ran Johnston Formation Tester with packer set at 4806' and tail to 4823'. Used 510' water cushion and 3/4" bottom bean. Opened tester at 11:20 a.m. for one hour. Had medium blow 2 minutes; very light blow 4 minutes; then dead remainder of test. Recovered 240' of 73# mud and 630' of cement cut mud grading from 73# on top to very thick on bottom. Charts showed rapid pressure build up from 1050 psi to 1425 psi in 10 minutes, then a gradual build up to 1750 psi at end of test period.
Ran in with 5-5/8" Diamond Point bit. Cleaned out to 5040' for test.
Test #3: Ran Johnston Formation Tester with packer set at 4803' and tail to 4820'. Used 510' water cushion and 3/4" bottom bean. Opened tester at 11:33 p.m. for one hour. Had medium blow 5 minutes; very light blow 2 minutes; then dead remainder of test. Recovered 540' of 73# drilling fluid, 90' of slightly gas cut drilling fluid, and 300' of cement cut drilling fluid grading from 73# per cu.ft. on top to very thick on bottom. Charts showed a rapid pressure build up from 500 psi to 1200 psi in 2 to 3 minutes then a gradual build up to 1650 psi at end of test.

2-17 Ran in with bit to 4894'. Circulated and conditioned mud.
Squeeze Job #5: Squeezed holes in 7" casing with Baker Model "K" retainer with latch in sub. Squeezed with 75 sacks of cement mixed at 116# per cu.ft. slurry. Maximum pressure 3200 psi. Estimated 66 sacks away through holes. Unlatched from retainer and pulled out.

2-18 Drilled out retainer from 4815' to 4818'. Cleaned out to 5054'.

2-19 Test #4: Ran Johnston Formation Tester with packer set at 4801' and tail to 4818'. Used 510' water cushion and 3/4" bottom bean. Opened tool at 9:45 a.m. Tool opened a total of 40 minutes. Had puff blow, then dead 40 minutes, very faint blow 10 minutes, dead 24 minutes. Recovered 360' of 69#-71# mud. Charts showed tester set 34 minutes before it opened, at which time the pressure dropped from 2425 psi to 325 psi. Pressure increased steadily to 375 psi during open period of 40 minutes.
Test #5: Ran Johnston Formation Tester with Packer set at 4805' and tail to 4822'. Used 510' water cushion and 3/4" bottom bean. Opened tool at 4:48 p.m. Open for 54 minutes. Had strong blow 3 minutes; medium blow 19 minutes; light blow 9 minutes; light heads 17 minutes; then dead 6 minutes. Recovered 450' of 68# mud on top grading to 63# mud slightly gassy on bottom. Charts showed a pressure build up from 300 psi to 720 psi during open period.
Ran in with 5-5/8" Diamond Point bit. Found tight spots from 4875' to 4889'.

2-20 Spudded from 4892' to 4902' with 4-5/16" cable tool swage.

2-21 Attempted to take core with 2-7/8" tubing core barrel with teeth on bottom from 4955' to 4957'. No recovery.

2-22 Filled between 7" and 13-3/8" casing. Cut 7" casing loose from landing head. Removed landing head. Installed blowout preventer. Ran Baash-Ross Spear and Free Point Indicator. Found casing free to 1777'.

2-23 Cut off 7" casing at 1777'. Pulled 46 joints of 7" casing.

2-24 Cleaned out to top of 7" casing. Found top at 1776'. Washed over 7" casing from 1776' to 2180'.

2-25 Cut off 7" casing at 2175'. Pulled out 10 joints of casing. Cleaned out to 2175'.

2-26 Washed over 7" casing from 2175' to 2579'. Cut off 7" casing at 2564'. Recovered 10 joints of 7" casing.

2-27 Cleaned out to top of 7" casing at 2564'. Washed over 7" casing from 2564' to 2968'. Cut off 7" casing at 2953'. Recovered 10 joints of 7" casing.

2-28 Cleaned out to 2953'. Washed over 7" casing from 2953' to 3357'. Cut off 7" casing at 3347'. Recovered 10 joints of 7" casing.

Date 1956	
2-29	Cleaned out to 3347'.
3-1	Washed over 7" casing from 3347' to 3751'. Cut off 7" casing at 3743'. Recovered 10 joints of 7" casing. Cleaned out 3743'.
3-2	Washed over 7" casing from 3743' to 4147'. Cut off 7" casing at 4127'. Recovered 10 joints of 7" casing.
3-3	Cleaned out to 4127'. Washed over 7" casing from 4127' to 4437'. Cut off 7" casing at 4402'. Stuck pipe in key seat coming out. Worked pipe out. No recovery.
3-4	Cleaned out to 4127'.
3-5	Washed over 7" casing from 4127' to 4469'. Ran in with outside cutter and recovered 7 joints of 7" casing. Could not get below 4401'.
3-6	Cleaned out to 4401'. Changed to Hi pH Mud.
3-7	Washed over 7" casing from 4402' to 4683'. Cut off 7" casing at 4635'. Recovered 6 joints of 7" casing. Cleaned out to 4635'.
3-8	Washed over 7" casing from 4635' to 4791'. Cut off 7" casing at 4754'. Recovered 3 joints of 7" casing.
3-9	Cleaned out to 4754'. Washed over 7" casing from 4754' to 4857'. Stuck wash pipe at 4857'.
3-10	Washed over 7" casing to 4884'. Bad spot from 4875' to 4879'.
3-11	Re-washed over 7" casing to 4884'. Spotted 30 barrels Driscose pill on bottom. Cut off 7" casing at 4873'. Recovered 3 joints of 7" casing. Cleaned out to 4873'. Washed over 7" casing from 4873' to 4882'.
3-12	Ran in with wash pipe; could not get over stub of 7" casing.
3-13	Ran in with wash pipe; could not get over stub of 7" casing. Pulled out. Ran in with tungsten shoe and wash pipe. Washed over 7" casing from 4885' to 4904'.
3-14	Washed over 7" casing from 4904' to 4961'.
3-15	Washed over 7" casing from 4961' to 4992'. Cut off 7" casing at 4960'. Recovered 3 joints of 7" casing.
3-16	Cleaned out to 4959'. Washed over 7" casing from 4960' to 5066'.
3-17	Washed over 7" casing from 5066' to 5112'. Attempted to cut off 7" casing. No success.
3-18	Cut off 7" casing at 5074'. Recovered 3 joints of 7" casing. Cleaned out to 5074'.
3-19	Washed over 7" casing from 5112' to 5180'. Cut off 7" casing at 5155'. Recovered 2 joints of 7" casing.
3-20	Cleaned out to 5155'. Washed over 7" casing from 5155' to 5180'. Top of casing 5155'.
3-21	Ran 5179.97' of 7" 23# N-80 LT&C casing with 32# N-80 LT&C landing joint on top and 8-1/2" O.D. heavy, double slip, lead seal casing bowl on bottom. Found top of 7" casing at 5157'. Worked over 7" casing stub and set casing bowl with 100,000# net pull. Landed 7" casing. Tested 7" casing pack off to 3500#. O.K. Installed blowout preventer equipment.
3-22	Cleaned out to 5300'. Test #6: Ran Halliburton Hydrospring Straddle Tester with packers set at 5166' and 5150' with tail to 5179'. Used 5/8" bottom bean and 1977' of water cushion. Opened tool at 9:37 a.m. for one hour. Had very light puff, then dead remainder of test. Recovered 5' of slightly muddy fresh water. Charts showed no pressure build up.
3-23	Cleaned out to 10,147'. Changed over to oil base mud.
3-24	Cleaned out to 14,469'. Left one gauge cutter in hole.

Date
1956

3-25 Ran 342 joints of 2-1/2" J-55 E.U. 8 rd. 6.5# T&C tubing and 6 Garrett type "O" gas lift valves. Landed tubing at 10,100'. Installed X-mas tree. Changed from oil base mud to crude oil and completed well.

PRODUCTION DATA

	GROSS	CUT	NET	GRAVITY	BEAN	M.C.F.	TUBING PRESSURE	CASING PRESSURE
3-26	70	30	54	-	48	90	200	580
3-27	29	42	17	-	48	86	180	430
3-28	20	74	5	10.7-21.0	48	92	140	430
3-29	20	100	0	-	-	-	-	-
3-30	19	100	0	-	48	13	140	420

3-31 Production from 3-31 to 4-11 was cutting 100% (water and oil base mud)

4-12 Killed well with crude oil. Removed X-mas tree. Installed blowout preventer equipment and tested. O.K.

4-13 Pulled tubing. Ran Lane Wells Voltage Profile Log from 9000' to Surface.

4-14 Cleaned out to 14,469'. Shot one 1/2" hole per foot from 14,450' to 14,430'.

4-15 Shot one 1/2" hole per foot from 14,410' to 14,350', 14,340' to 14,320'; 14,280' to 14,240'; 14,200 to 14,160'.

4-16 Shot one 1/2" hole per foot from 14,140' to 14,080'; 14,060' to 14,020', 14,000' to 13,980'.

4-17 Shot one 1/2" hole per foot from 13,980' to 13,940'. Ran 342 joints of 2-1/2" tubing; 142 joints of 2" tubing; 4 Garrett type "O" gas lift valves, 2 Camco type "CR" F.O. valves, and 1 Camco type "MMR" retrievable valve. Landed tubing at 14,451'. Installed X-mas tree and completed well.

PRODUCTION DATA

	GROSS	CUT	NET	GRAVITY	BEAN	MCF	TUBING PRESSURE	CASING PRESSURE	REMARKS
4-18	194	4.8	185	30.4	48	-	450	900	Well owes 8 barrels.
4-19	2	100.0	0	-	-	-	-	-	
4-20	0	-	0	-	-	-	-	-	
4-21	Shut In.								
4-22	Shut In.								
4-23	48	96.0	2	-	-	-	60	850	
4-24	0	-	0	-	-	-	-	-	Circulated with crude oil.

4-25 Mud Acid Job: Attempted to acidize formation with 2100 gallons B.J. 15% HSEN Acid. Could not break down formation.

4-26	Shut In.								
4-27	7	10	6	-	48	-	50	350	
4-28	20	60	8	-	48	-	110	850	
4-29	18	83	3	-	48	-	100	850	
4-30	7	96	0	-	-	-	120	850	
5-1	10	100	0	-	48	-	60	850	
5-2	17	83	3	12.7	33	-	100	850	
5-3	Shut In.								

5-4 Killed well with mud. Removed X-mas tree. Installed blowout preventer equipment and tested to 1000#. O.K. Pulled tubing.

Date
1956

5-5 Made up drill pipe.

5-6 Cleaned out to 10,143'.
Cement Plug #3: Laid 20 sack cement plug with drill pipe hung at 14,063'. Estimated top of plug 13,762'.

5-7 Found top of cement plug at 13,839'. Drilled out cement to 13,843'.
Cement Plug #4: Laid 20 sack cement plug with drill pipe hung at 12,647'. Estimated top of plug 12,346'.

5-8 Found top of cement plug at 12,465'. Drilled out cement to 12,470'.

5-9 Shot four 3/8" jet holes at 12,087' with McCullough Strip Gun.
Test #7: Ran Halliburton Hydrospring Tester with packer set at 10,091' and 2-3/8" tubing tail to 12,061'. Used 1/2" bottom bean and no cushion above tools. Opened tool at 7:22 a.m. for one hour. Had light blow 3 minutes, then dead remainder of test. Recovered 5.5 cu.ft. of fluid. Recovery characteristic unknown because entry not great enough to rise above tools. Charts showed that the pressure was constant at 90# for first 20 minutes, then increased steadily to 110# at end of test.
Shot four 3/8" jet holes at 11,780' with McCullough Strip Gun.
Test #8: Ran Halliburton Hydrospring Tester with Packer at 10,092' and 2-3/8" tubing tail to 11,753'. Used 1/2" bottom bean and no cushion above tools. Opened tool at 9:20 p.m. for one hour. Had medium steady blow 3-1/2 minutes; weak steady 6-1/2 minutes; intermittent blow 8 minutes; dead 5 minutes; weak heading 37 minutes. Recovered a net rise of 2520' gas and oil cut mud. Charts showed pressure remained constant at 130# for 10 minutes, then built gradually to 1260# at end of test.

5-10 Cleaned out to 12,470'. Changed over to oil base mud.

5-11 Shot four 1/2" jet holes per foot from 12,050' to 11,800'.

5-12 Cleaned out to 10,143'.

5-13 Ran 337 joints of 2-1/2" tubing; 63 joints of 2" tubing; 8 Camco type "CR" F.O. valves; and 1 Camco type "MMR" retrievable F.O. valve.
Installed X-mas tree. Changed over from oil base mud to crude oil. Completed well.

PRODUCTION DATA

	GROSS	CUT	NET	GRAVITY	BEAN	MCF	TUBING PRESSURE	CASING PRESSURE
5-13	336	2.1	329(W.O.)	31.9	48	-	225	730
5-14	316	1.2	81(W.O.) and 231	30.8	48	234	150	650
5-15	201	0.4	200	29.0	48	192	200	600
5-16	194	0.5	193	29.4	35	154	180	575
5-17	179	1.3	177	28.7	35-48	124	150	580
5-18	166	1.2	164	29.2	48	108	140	550

RDC:jh

FORM 109-A

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off

(FORMATION TESTER)

No. T 156-787

Mr. O A Grayheal
714 West Olympic Boulevard
Los Angeles 15 California
~~Agent~~ for SUNRAY MID-CONTINENT OIL COMPANY

Los Angeles 15 Calif.
May 16 1956

DEAR SIR:

Your well No. "Rancho San Francisco" 66-9, Sec. 27, T. 4 N., R. 17 W., S.B. B & M. Newhall-Potrero Field, in Los Angeles County, was tested for water shut-off on May 10, 1956. Mr. A. Mluza, Engineer, designated by the supervisor was present from 3:00 to 3:50 a.m. as prescribed by law; there were also present H. Ferguson, Engineer, D. Sanders, Drilling Foreman

Shut-off data: 4 1/2 in. 16:60 lb. casing was xx cemented xxx at 14,505 ft. on November 16, 1948 in 5 7/8 in. hole with 230 xxxsks.—sacks of cement xxx calculated to fill behind casing to xxx ft. below surface.

Casing record of well: 13 3/8" cem. 401'; 7" cem. 10,668' c.p. 10,225' and 10,221', perf. 10,478'-10,473', 10,468'-10,438' (cem. off) 10,436', 10,430'-10,400', 10,391'-10,356', and 10,531'-10,315'; four 3/8" holes 10,553', 10,530', 10,225' and 10,219', 4 1/2" ld. 10,131'-14,504*

Present depth 14,509 ft. cmt. bridge 12,650 ft. to 12,473 ft. Cleaned out cmt. 12,468 ft. to 12,473 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 Halliburton tester was run into the hole on 2 7/8 in. drill pipe-~~tubing~~ with xxx ft. of water-mud cushion, and packer xx set at 11,756 ft. with tailpiece to 11,778 ft. Tester valve, with 1/2 in. bean, was opened at 9:20 p.m. May 9, 1956 and remained open for 1 hr. and xx min. During this interval there was a medium steady blow for 3 1/2 minutes, a weak steady blow for 6½ minutes and intermittent blow for 8 minutes, no blow*** Mr. reported: *perforated in intervals 14,501'-12,890', four 3/8" holes 12,090', four 3/8" test holes 14,149', 12,475' and 11,780', W.S.O., plugged with cement 14,066'-13,846' and 12,650'-12,473'.

*** for 15 minutes and a weak heading blow for 37 minutes.

1. On May 6, 1956, 20 sacks of cement was pumped into the hole through 2 7/8" drill pipe hanging at 14,066', filling to 13,842'.
2. Cement was drilled out of 4 1/2" casing from 13,842' to 13,846'.
3. On May 7, 1956, 20 sacks of cement was pumped into the hole through 2 7/8" drill pipe hanging at 12,650', filling to 12,468'.
4. Cement was drilled out of 4 1/2" casing from 12,468' to 12,473'.
5. The 4 1/2" casing was shot-perforated with four, 3/8" holes at 12,090' and tested dry.
6. The 4 1/2" casing was shot-perforated with four, 3/8" holes at 11,780'.

THE ENGINEER NOTED

1. When the drill pipe was removed, 2,520' of gassy oily mud and gassy muddy oil was found in the drill pipe above the tester, equivalent to 0.11 bbl.
2. There was no evidence of free water.
3. The recording pressure bomb chart showed that the tester valve was open 1 hour.

THE 4 1/2" SHUT-OFF AT 11,780' IS APPROVED.

AH:ys

cc Company

E. H. MUSSER
State Oil and Gas Supervisor

By R. N. Walling Deputy

12367 2-55 21,400 SPO

FORM 111

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS

No. P 156-662

Mr. O A Grayheal
714 West Olympic Boulevard
Los Angeles 15 California

Los Angeles 15 Calif.
May 7 1956

Agent for SUNRAY MID-CONTINENT OIL COMPANY

DEAR SIR:

Your proposal to plug and alter casing Well No. "Rancho San Francisco" 66-9

Section 27, T. 4 N., R. 17 W., S.B. B. & M., Newhall-Potrero Field, Los Angeles County,

dated May 3, 1956, received May 4, 1956, 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

"The present condition of the well is as follows:

1. Total depth. 14509'; plugged depth 14503'.
2. Complete casing record.
   13-3/8" 54.5# J-55 casing cemented at 401' with 350 sacks.
   7" 23#, 26#, 29# & 32# N-80 casing cemented at10,668' with 600 sacks.
   4-1/2" 16.60# Grade "N" liner hung at 14505' with top of hanger at 10131'. Cemented with 230 sacks. CP'd lap with 130 sacks. Hole in liner at 13601' CP'd with 23 sacks.
   Four 1/2" bullet holes/foot 14501'-14430'; 14413'-14398'; 14396'-14344'; 14339'-14309'; 14281'-14236'; 14205'-14180'; 14176'-14161'; 14146'-14079'; 14059'-14016'; 13999'-13936'.
   Four 3/8" holes at 12475'; WSO.
   Two 1/2" jet holes/foot 13720'-13685'; 13160'-13075'; 13076'-13050'; 13015'-12890'; 12663'-12585'.
   One 1/2" jet holes/foot 14450'-14430'; 14410'-14350'; 14340'-14320'; 14280'-14240'; 14200'-14160'; 14140'-14080'; 14060'-14020'; 14000'-13940'.
3. Last produced. 5/2/56 (Date) 0 (Net Oil) ____ (Gravity) 100% water (Cut)"

PROPOSAL

"The proposed work is as follows:

1. Kill well with high pH mud.
2. Remove tree and install blowout preventer.
3. Lay cement plug from 14050' to 13850'.
4. Lay cement plug from 12650' to 12400'.
5. Shoot four 1/2" holes at 12090' and make WSO test.
6. Shoot four 1/2" holes at 11780' for WSO. Notify Div. of Oil & Gas to witness
7. Change mud to oil base mud.
8. Shoot four 1/2" holes/foot from 12050' to 11800'.
9. Put well on production."

DECISION

THE PROPOSAL IS APPROVED.

FEK:ys

cc Company

Blanket Bond

E. H. MUSSER, State Oil and Gas Supervisor

By R. J. Nelson, Deputy

25463 10-55 60M SPO

FORM 107. 50672 9-51 15M SPO

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
MAY 4 1956
LOS ANGELES, CALIFORNIA

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given before work begins; one copy only

Los Angeles Calif. May 3 19 56

DIVISION OF OIL AND GAS

MAP	MAP BOOK	CARD	BOND	FORMS 114	FORMS 121
			Blanket	ES	ES

Los Angeles Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening/redrilling~~, plugging or altering casing at Well No. "Rancho San Francisco" 66-9
(Cross out unnecessary words)

, Sec. 27, T. 4N, R. 17W, S.B. B. & M.

Newhall-Potrero Field, Los Angeles County.

The present condition of the well is as follows:

1. Total depth. 14509'; plugged depth 14503'.

2. Complete casing record.

13-3/8" 54.5# J-55 casing cemented at 401' with 350 sacks.
7" 23#, 26#, 29# & 32# N-80 casing cemented at 10,668' with 600 sacks.
4-1/2" 16.60# Grade "E" liner hung at 14505' with top of hanger at 10131'. Cemented with 230 sacks. CP'd lap with 130 sacks. Hole in liner at 13601' CP'd with 23 sacks.
Four 1/2" bullet holes/foot 14501'-14430'; 14413'-14398'; 14396'-14344'; 14339'-14309'; 14281'-14236'; 14205'-14180'; 14176'-14161'; 14146'-14079'; 14059'-14016'; 13999'-13936'.
Four 3/8" holes at 12475'; WSO.
Two 1/2" jet holes/foot 13720'-13685'; 13160'-13075'; 13076'-13050'; 13015'-12890'; 12663'-12585'.
One 1/2" jet holes/foot 14450'-14430'; 14410'-14350'; 14340'-14320'; 14280'-14240'; 14200'-14160'; 14140'-14080'; 14060'-14020'; 14000'-13940'.

3. Last produced. 5/2/56 (Date) 0 (Net Oil) (Gravity) 100% Water (Cut)

The proposed work is as follows:

1. Kill well with high pH mud.
2. Remove tree and install blowout preventer.
3. Lay cement plug from 14050' to 13850'.
4. Lay cement plug from 12650' to 12400'.
5. Shoot four 1/2" holes at 12090' and make WSO test.
6. Shoot four 1/2" holes at 11780' for WSO. Notify Div. of Oil & Gas to witness.
7. Change mud to oil base mud.
8. Shoot four 1/2" holes/foot from 12050' to 11800'.
9. Put well on production.

SUNRAY MID-CONTINENT OIL CO.
(Name of Operator)

By O. A. Graybeal
O. A. Graybeal, Agent

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

FORM 109-A

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off
(FORMATION TESTER)

No. T 156-201

Mr. O A Graybeal
714 West Olympic Blvd
LOS ANGELES 15
~~Agent~~ for SUNRAY MID-CONTINENT OIL CO

Los Angeles 15 Calif.
February 6 1956

DEAR SIR:

Your well No. "Rancho San Francisco" 66-9, Sec. 27, T. 4 N, R. 17 W, S B B & M. Newhall-Potrero Field, in Los Angeles County, was tested for water shut-off on January 19, 1956. Mr. R. Ybarra, Engineer, designated by the supervisor was present from 3:10 to 4:00 p.m. as prescribed by law; there were also present R. Timm, Engineer; P. Peterson, Drilling Foreman.

Shut-off data: 4-1/2 in. 16.60 lb. casing was xx cemented xxxx at 14505 ft. on November 16, 1948 in 5-7/8 in. hole with 230 xxxxxx sacks of cement xxxxxx calculated to fill behind casing to xxxxx ft. below surface.

Casing record of well: 13-3/8" cem. 401'; 7" cem. 10,668', c.p. 10,225' and 10,221', perf. 10,478'-10,473', 10,468'-10,438' (cem. off), 10,436', 10,430'-10,400', 10,391'-10,356' and 10,351'-10,315', four 3/8" holes 10,553', 10,530', 10,225', and 10,219'; 4½" ld. 10,131'-14,504', *

Present depth 14,509 ft. cmt. bridge plug xxxx at 13,770 ft. Cleaned out cmt. xxx ft. to 13,770 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 Halliburton gun and tester was run into the hole on 2-7/8 in. drill pipe with 1200 ft. of water-~~mud~~ cushion, and packer xx set at 10,103 ft. with tailpiece to 10,126 ft. Tester valve, with 1/2 in. bean, was opened at 9:40 a.m. and remained open for 1 hr. and xxx min. During this interval there was a strong blow for 2 min., and no blow thereafter.

Mr xxxxxxxxx reported: *c.p. 13,602', perf. 14,501'-14,430', 14,413'-14,398', 14,396'-14,344', 14,339'-14,309', 14,281'-14,236', 14,205'-14,180', 14176'-14,161', 14,146'-14,079', 14,059'-14,016', and 13,999'-13,936', four 3/8" test holes 14,149' and 12,475', W.S.O.

MR. TIMM REPORTED:
1. A bridge plug was set at 13,770'.
2. The 4-1/2" casing was shot-perforated with four 3/8" holes at 12,475'.

THE ENGINEER NOTED:
1. When the drill pipe was removed, 578' (net) of oil was found in the drill pipe above the tester, equivalent to 2.6 bbl.
2. The recording pressure bomb chart showed that the tester valve was open 1 hr.

THE 4½" SHUT-OFF AT 12,475' IS APPROVED.

RY:OH

cc Company

E. H. MUSSER
State Oil and Gas Supervisor

By R. J. Kelly Deputy

12367 2-55 21,400 SPO

ORM 111

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS

No. P156-87

Mr. O A Graybeal
714 West Olympic Blvd
LOS ANGELES 15

Agent for SUNRAY MID-CONTINENT OIL CO

Los Angeles 15 Calif.
January 16, 1956.

DEAR SIR:

Your "Rancho San Francisco" proposal to alter casing Well No. 66-9,

Section 27, T. 4 N, R. 17 W, S B B. & M., Newhall-Potrero Field, Los Angeles County,

dated Jan. 11, 1956, received Jan. 13, 1956, has been examined in conjunction with records filed in this office.

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

RECORDS IN ADDITION TO, OR AT VARIANCE WITH, THOSE SHOWN IN THE NOTICE
The 7" shut-off at 14,149' was approved.

THE NOTICE STATES
"The present condition of the well is as follows:
1. Total depth. 14,509'; plugged depth - 14,503'
2. Complete casing record.
13-3/8" 54.5# J-55 casing cemented at 401' with 350 sacks.
7" 23#, 26#, 29#, & 32# N-80 casing cemented at 10,668' with 600 sacks.
4-1/2" 16.60# Grade "E" liner hung at 14,505' with top of hanger at 10,131'. Cemented with 230 sacks. C.P.'d lap with 130 sacks. Hole in liner at 13,601' C.P.'d with 23 sacks.
Four 1/2" bullet holes/foot 14,501'-14,430'; 14,413'-14,398'; 14,396'-14,344'; 14,339'-14,309'; 14,281'-14,236', 14,205'-14,180'; 14,176'-14,161'; 14,146'-14,079'; 14,059'-14,016'; 13,999'-13,936'.

3. Last produced. 6/6/55 (Date) .42 (Net Oil) 20.8° (Gravity) 36% (Cut)"

PROPOSAL
"The proposed work is as follows:
1. Set Baker bridge plug at 13,788'.
2. Shoot four 1/2" jet holes at 12,475'.
3. Make test for W.S.O. Notify Div. of Oil & Gas to witness.
4. Shoot two 1/2" jet holes/foot 13,745'-13,685'; 13,160'-13,075'; 13,070'-13,050'; 13,015'-12,890'; 12,663'-12,585'.
5. Run tubing and complete well."

DECISION
THE PROPOSAL IS APPROVED.

FEK:OH

cc Company

E. H. MUSSER, State Oil and Gas Supervisor

By R. W. Welling, Deputy

Blanket bond.

25462 10-55 60M SPO

FORM 107. 50672 9-51 15M SPO

DIVISION OF OIL AND GAS
RECEIVED
JAN 13 1956
LOS ANGELES, CALIFORNIA

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

This notice must be given before work begins; one copy only

Los Angeles Calif. January 11 1956

DIVISION OF OIL AND GAS

Los Angeles Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening/redrilling/plugging/~~ altering casing at Well No. "Rancho San Francisco" 66-9
(Cross out unnecessary words)

, Sec. 27, T. 4W, R. 17W, S.B. B. & M.

Newhall-Potrero Field, Los Angeles County.

The present condition of the well is as follows:

1. Total depth. 14,509'; plugged depth - 14,503'

2. Complete casing record.

13-3/8" 54.5# J-55 casing cemented at 401' with 350 sacks.
7" 23#, 26#, 29#, & 32# N-80 casing cemented at 10,668' with 600 sacks.
4-1/2" 16.60# Grade "E" liner hung at 14,505' with top of hanger at 10,131'. Cemented with 230 sacks. C.P.'d lap with 130 sacks. Hole in liner at 13,601' C.P.'d with 23 sacks.
Four 1/2" bullet holes/foot 14,501'-14,430'; 14,413'-14,398'; 14,396'-14,344'; 14,339'-14,309'; 14,281'-14,236', 14,205'-14,180'; 14,176'-14,161'; 14,146'-14,079'; 14,059'-14,016'; 13,999'-13,936'.

3. Last produced. 8/6/55 (Date) 42 (Net Oil) 20.8° (Gravity) 36% (Cut)

The proposed work is as follows:

1. Set Baker bridge plug at 13,788'.
2. Shoot four 1/2" jet holes at 12,475'.
3. Make test for W.S.O. Notify Div. of Oil & Gas to witness.
4. Shoot two 1/2" jet holes/foot 13,745'-13,685'; 13,160'-13,075'; 13,070'-13,050'; 13,015'-12,890'; 12,663'-12,585'.
5. Run tubing and complete well.

Alter casing

MAP	MAP BOOK	CARDS	BOND	FORMS 1/4	FORMS 121
			Blanket		

SUNRAY MID-CONTINENT OIL COMPANY
(Name of Operator)

By O. A. Graybeal
O. A. Graybeal, Agent

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

SUBMIT LOG IN DUPLICATE

STATE PRINTING OFFICE — FILL IN BLANK IN WITH TYPEWRITER. WRITE ON ONE SIDE OF PAPER ONLY

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

JAN 22 1949
LOS ANGELES, CALIFORNIA

WELL SUMMARY REPORT

Operator BARNSDALL OIL COMPANY Field NEWHALL-POTRERO

Well No. Rancho San Francisco "66-9" Sec. 27, T. 4 N., R. 17 W., S.B. B. & M.

Location 1311' S. & 2300' E. from Corner "J" Elevation of kelly bushing 1183 / der. floor 1180 / ground or conc. mat 1174.16 above sea level feet.

In compliance with the provisions of Chapter 93, Statutes of 1939, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date January 20, 1949 Signed R. E. Foss

H. M. Stanier (Engineer or Geologist) T. J. Prehoda (Superintendent) Title R. E. FOSS Agent (President, Secretary or Agent)

Commenced drilling 9-4-47 Completed drilling 12-27-48 Drilling tools Rotary

Total depth 14,509' Plugged depth 14,503'

Junk

GEOLOGICAL MARKERS DEPTH

MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121

Commenced producing 12-29-48 (date) Flowing/gas lift/~~pumping~~ (cross out unnecessary words)

	Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production	55	28.5	1.6	20	260	750
Production after 30 days						

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	New or Second Hand	Seamless or Lapweld	Grade of Casing	Size of Hole Casing landed in	Number of Sacks of Cement	Depth of Cementing if through perforations
13 3/8"	401'	Surface	54.5#	New	Smls.	J55	17 3/8"	350	
7"	10,668'	Surface	32,29,26& 23#	New	Smls.	N80	12¼" & 11"	681	9 sx-10225 32 " 10221 40 " 10141
4 1/2"	14,505.5	10130.93	16.6#	Used	Smls.	"E" d.p.	5 7/8"	326	13601-break 10131-lap

PERFORATIONS

Size of Casing	From	To	Size of Perforations	Number of Rows	Distance Between Centers	Method of Perforations
4½"	14501 ft.	14430 ft.	½" - 4 holes per ft.-240 holes			McCullough Gun
4½"	14413 ft.	14161 ft.	" " " 380	"		" "
4½"	14396 ft.	14236 ft.	" " " 320	"		" "
4½"	14146 ft.	13936 ft.	" " " 620	"		" "
	ft.	ft.	Total 1560	"		

Electrical Log Depths 14509' (Attach Copy of Log)

JCM-JSH

ORM 103. 62984 9-46 47,500
CALIFORNIA STATE PRINTING OFFICE

SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR BARNSDALL OIL COMPANY FIELD NEWHALL-POTRERO

Well No. Rancho San Francisco "66-9", Sec. 27, T. 4 N., R. 17 W., S.B. B. & M.

Signed R. E. Foss

R. E. FOSS

Date January 20, 1949 Title Agent

(President, Secretary or Agent)

Use this form in reporting all important operations at the well, together with the dates thereof, in the order of their performance. Such operations include drilling, redrilling, deepening, plugging, or altering casing as by perforating, shooting, or pulling. Include in your report size of hole drilled, redrilled, or deepened; size, weight and length of casing landed, cemented, or removed, amount and location of perforations; number of sacks of cement used in cementing or plugging operations, number of feet of cement drilled out of casing, location of top and bottom of cement plugs. If the well was dynamited, give date, dimensions and weight of all shots. If tests were made give interval tested and results of tests, such as, amount and nature of fluids recovered.

Date	
1947	
9-4	Spudded in with 11" bit.
9-5	Depth 475'. Opened hole to 401' with 17 3/8" bit. Ran & cmt'd. 13 3/8" - 54.5# J55 csg. @ 401'. w/350 sx. Const. cmt. containing 2% gel.
9-6	Found top of cement @ 389.5' & shoe @ 401'. Drilled ahead to 648' w/12¼" bit.
11-3	Reduced hole to 11" @ 8413'. Drilled ahead to 8467'.
11-4	Depth 8475'. Ran Schlumberger Electric Log. Drilled ahead to 8508'.
11-26	Depth 9402'. 2nd Run Schlumberger Electric Log. Drilled ahead to 9430'.
12-9	Depth 10009'. 3rd Run Schlumberger Electric Log. Drilled ahead.
12-24	Depth 10483'. 4th Run Schlumberger Electric Log. Drilled ahead to 10518'.
12-26	Depth 10570'. 5th Run Schlumberger Electric Log. Drilled ahead to 10580'.
12-28	Depth 10635'. 6th Run Schlumberger Electric Log. Drilled ahead
12-29	Depth 10668'. 7th Run Schlumberger Electric Log.
12-31	Ran 7" 32, 29, 26 & 23# casing cmt'd. @ 10668' w/600 sx.
1948	
1-4	Drilled cmt. stringers 10239'-10302'. Hard cmt. @ 10302'.
1-5	Depth 10656'. Drilled out to within 12' of shoe w 5 7/8" bit.
1-6	Ran Sperry-Sun Survey to 10600'. Shot 8 - 3/8" holes @ 10575 to 10574'.
1-7/8	Ran Johnston Tester w/pkr. set @ 10510'. Left valve open for 2½ hrs. Net rise 8480' of gassy mud & water w/trace of oil.
1-9	Laid cmt. plug from 10656' to 10518' w/35 sx. cmt. Cmt. stringers 10484'-10518'.
1-10	Drilled out to 10555. Shot 4 - 3/8" holes @ 10553'. Ran Johnston Tester w/pkr. set @ 10510'. Valve open 1 hr. thru a 3/8" btm. bean. Net rise 352' of gas cut mud w/some water. Approx. 3" x 1" fine gray sand in btm. of tool.
1-12	Laid cmt. plug from 10,555' to 10,412' w/20 sx. cmt. Cmt. stringers 10395'-10412'.
1-13	Drilled out to 10533'.
1-14	Shot 4 - 3/8" holes @ 10530'. Ran Johnston Tester w/pkr. set @ 10476'. Valve open for 2 hrs. & 3 min. thru a 3/8" btm. bean. Recovered 6070' of mud, gassy mud & thin mud w/trace of oil. Salinity of filtrate 158 to 252 g/g. Main valve cut out.
1-15	Laid cmt. plug from 10533' to 10503' w/35 sx. cmt.
1-16	Drilled out cmt. to 10513'. Shot 4 - 3/8" holes @ 10,225'. Ran Johnston Tester w/pkr. set @ 10,201'. Valve open for 1 hr. & 6 min. thru a 3/8" btm. bean. Net rise 810' of watery mud & gas; water and a trace of oil. D.O.G. decision W.N.S.O.

(continued)

1948

1-17 Squeezed w/Halliburton S.S.T. an est. 9 sx. of cmt. to formation with a max. press. of 6000#.

1-18 No solid cement in hole. Shot 4 - 3/8" holes @ 10,221'.

1-19 Ran Johnston Tester w/pkr. set @ 10,218'. Valve open for 1 hr. & 3 min. thru a 3/8" btm. bean. Net rise of 1230' of mud gas cut oily mud and muddy water.

1-20 Shot 30 - 1/2" holes 10,478' to 10,473', 120 holes 10,468' to 10,448', 60 holes 10,448' to 10,438'.
Ran Johnston Tester w/pkr. set @ 10,416'. Valve open for 4 hr. & 56 min. thru a 3/8" btm. bean. Net rise of 1540' of mud, gassy mud w/trace of oil, muddy gassy water w/trace of oil.

1-21 Laid cmt. plug from 10,513' to 10,420' w/35 sx. cmt.

1-22 Drilled out cmt. to 10,441'.

1-23 Laid cmt. plug 10,441' to 10,417', cleaned out to 10,419'. 35 sx. cmt.

1-26 Squeezed w/Baker Mdl. "K" retainer set @ 10,200' thru 4 - 3/8" holes @ 10,221. Put an est. 32 sx. into formation with a max. squeeze pressure of 6500#.

1-27 Drilled out cmt. 10,198' to 10,222', open to 10,419'.

1-28 Shot 4 - 3/8" holes @ 10,219'.
Ran Johnston Tester w/pkr. set @ 10,199'. Valve open 1 hr. thru a 3/8" btm. bean. Net rise 15' of frothy gas cut mud. Test witnessed and W.S.O. approved by Paul Betts of D.O. & G.
Drilled out cement 10,419' to 10,441'.

1-30 Squeezed w/Baker Model "K" retainer set @ 10,416' thru 1/2" holes 10,441' to 10,438'. Squeezed 40 sx. cement with calc. displacement to clear holes with a max. displ. press. of 6000#.

1-31 Drilled out retainer & cement 10,415' - 10,437'.
Shot 4 - 3/8" holes @ 10,436'.

2-1 Ran Johnston Tester w/pkr. set @ 10,414'. Valve open for 1 hr. & 35 min. thru a 3/8" btm. bean. Net rise of 130 ft. of thin gassy mud. Shot 120 - 1/2" holes, 4 per ft., 10,430' to 10,400' - McCullough gun.

2-2 Ran Johnston Tester w/pkr. set @ 10,380'. Valve open for 1 hr. 57 min. Net rise 285' thin gassy drilling mud.

2-3 Shot 120 - 1/2" holes, 10,430' to 10,400' - Byron-Jackson Perfo-Jet.

2-4 Ran Johnston Tester w/pkr. set @ 10,373'. Valve open 5 hrs. & 51 min. Net rise 572' of watery mud & muddy water.

2-6 Shot 288 - 1/2" holes, 4 holes per ft., 10,391' to 10,355' and 10,351' to 10,315'.

2-7 Ran Johnston Tester w/pkr. set @ 10,288'. Valve open 22 hrs. & 58 min. Net rise 2596' of thin watery mud and water w/gas.

2-8 Shot 69 - 1/2" holes, 1 hole per ft., 10,391' to 10,316'.

2-8 to 2-10 Ran Johnston Tester w/pkr. set @ 10,288'. Valve open 40 hrs. & 50 min. Net rise 3780' of mud, thin mud w/gas, watery mud w/gas, muddy water w/gas.

2-12 Depth 10,699'. Drilled out cmt. w/5 7/8" bit. 10,438' - 10,666'.

2-24 Depth 10,996'. 8th Run Schlumberger Electric Log. Drilled ahead.

2-25 Ran Johnston Tester w/pkr. set @ 10,638'. Valve open 4 hrs. & 48 min. Net rise 5770' of thin mud & water with some gas. Drilled ahead.

3-15 Depth 11,337'. 9th Run Schlumberger Electric Log. Drilled ahead.

4-3 Depth 11,587'. 10th Run Schlumberger Electric Log. Drilled ahead.

4-21 Depth 11,908'. 11th Run Schlumberger Electric Log. Drilled ahead.

4-29 Depth 12,063'. 12th Run Schlumberger Electric Log. Drilled ahead.

5-19 Depth 12,339'. 13th Run Schlumberger Electric Log. Drilled ahead.

6-17 Depth 12,998'. 14th Run Schlumberger Electric Log. Drilled ahead.

6-29 Depth 13,245'. Set Baker Magnesium Retainer @ 10,204'. Cemented with 25 sx. Top @ 9427'.

7-15 Drilled out cmt. 9427' - 10,208'.

7-26 Depth 13,315'. 15th Run Schlumberger Electric Log. Drilled ahead.

(continued)

(R.S.F. #66-9 - History (Cont'd.)

1948

8-14 Depth 13,624'. 16th Run Schlumberger Electric Log. Drilled ahead.
9-4 Depth 13,892'. 17th Run Schlumberger Electric Log. Drilled ahead.
9-16 Depth 14,156'. 18th Run Schlumberger Electric Log. Drilled ahead.
10-8 Depth 14,509'. 19th Run Schlumberger Electric Log. T.D. 5 7/8" hole.
10-13 Depth 14,509'. 1st Run Lane-Wells Electric Log.
10-16 Hung 4,374.57' of 4½" 16.6# Drill Pipe for liner @ 14,505.5' w/top of Burns Hanger @ 10,130.93'. Cmt'd. from bottom of liner w/an est. 230 sx.
10-18 Drilled out to 14,051' w/3 5/8" bit. Cmt. from 13,361' to 14,051'.
10-19 Squeezed liner lap w/Halliburton S.S.T. set @ 10,026'. Used 75 sx. cmt. w/max. press. of 3880#.
10-21 Squeezed liner lap w/Halliburton S.S.T. set @ 10,029'. Used 50 sx. cmt. w/max. press. of 4900#.
10-27 Located hole in liner @ 13,600.83' to 13,602.83' w/Halliburton Straddle Tool.
11-1 Shot 4 - 3/8" holes @ 14,149'.
11-5 Tried to squeeze water thru holes @ 14,149' w/Halliburton S.S.T. set @ 13,684'. At 3200# holes took no fluid.
11-7 Squeezed w/Halliburton S.S.T. set @ 13,496' thru hole @ 13,601'. Squeezed an est. 4½ sx. cmt. to formation w/max. press. of 6000#.
11-9 Squeezed w/Halliburton S.S.T. set @ 13,495' thru hole @ 13,601'. Squeezed an est. 18.5 sx. to formation w/max. press. of 6800#. Held 5000# press. on cmt. job 1 hr. after cmt. in place.
11-10 Squeezed w/Halliburton S.S.T. set @ 10,123' thru liner lap. Squeezed an est. 8½ sx. cmt. thru holes in 7" csg. in liner lap w/max. press. of 6400#.
11-12 Ran Johnston Tester w/pkr. set @ 10,089'. Valve open 1 hr. Net rise 5' mud. Test witnessed & W.S.O. approved by Lloyd White, D. O. & G.
11-14 Drilled out to 14,309' w/ 3 5/8" bit from 10,193'.
11-15 Ran Johnston Tester w/pkr. set @ 9710' & tailpc. to 14,128'. Valve open for 1 hr. Net rise 1260' of gassy mud w/oil stains & mud w/no evidence of water. Test witnessed & W.S.O. approved by Paul Betts of D.O. & G.
11-16 Drilled out to 14,503'. Shot 240 - 1/2" holes, 14,501' to 14,430', 4 holes per ft.
11-20 Ran Johnston Tester w/pkr. set @ 10,087' w/tailpc. to 14,354' to test holes @ 14,501' to 14,430'. Valve open 29 hrs. & 50 min. Rcvd. 63 bbls. Tester was plugged.
11-23 Ran Johnston Tester w/pkr. set @ 10,086' w/tailpc. to 14,353' to test interval 14,501' to 14,430'. Valve open 53 hrs. Rcv'd. 64 bbls.
11-26 Shot 380 - 1/2" holes, 4 per foot, 14,413-14,398', 14,339'-14,309', 14,281-14,271', 14,205-14,180', 14,176-14,161'.
11-28 Ran Johnston Tester w/pkr. set @ 10,100' & w/tailpc. to 14,102' to test intervals of 14,501' to 14,161'. Valve open 6 days & 17 hrs. Swabbed 11/29/48 to 12/2/48. Started to flow by heads 1:00 P.M. 12/2/48. Total recovery 607 bbls.
12-8 Shot 320 - 1/2" holes, 4 holes per ft., 14,396'-14,344', 14,271'-14,236'.
12-9 Ran Johnston Tester w/pkr. set @ 10,098' & w/tailpc. to 14,098' to test intervals 14,501' to 14,161'. Swabbed 10:00 A.M. 12/10/48, to 8:00 A.M. 12/12/48. Fluid to surface in 6 hrs. & 50 min. Well flowing by heads 3:20 P.M. on 12/12/48. Recovered 77 bbl. by flow gassy mud, gas & oil and water, w/occasional mud. Backscuttled 12/14/48.
12-16 Shot 620 - 1/2" holes, 4 holes per foot, 14,146 to 14,079', 14,059' to 14,016', 13,999 to 13,936'.
12-17 Ran Johnston Tester w/pkr. 10,098' & w/tailpc. to 13,881' to test intervals from 14,501 to 13,936'. Swabbed from 10:30 A.M. 12/18 to midnight 12/19. Well flowing by heads 4:40 A.M. 12/20. Recovered 131 bbls.

(continued)

1948

12-17 (Cont) by flow of mud, oil & water. (Gravity of oil 20.4 to 29.7) Backscuttled 9:00 A.M. 12/22.

12-26 Ran 2½" E.U. & 2" E.U. production tubing w/out packer. Hung @ 14,445.87', w/7 McEvoy gas lift valves on string.

12-27 Changed from mud to salt water to oil.

MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121

JCM-JSH

BARNSDALL OIL COMPANY

Form 5-OD

CORE RECORD

COUNTY Los Angeles FIELD OR DIST. Newhall-Potrero COMPANY BARNSDALL OIL COMPANY WELL (R.S.F.No.) 66-26

LOCATION 1311' S & 2300' E from corner "J" SECT. 27 T. 4N R. 17W ELEV. 1183KB

DIVISION OF OIL AND GAS
RECEIVED
OCT 29 1947
LOS ANGELES, CALIFORNIA

DATE	CORE BARREL MAKE	CORE BARREL SIZE	FROM	TO	RECOVERY FEET	RECOVERY %	SHALE	SAND	SHELL	OIL SAND	DESCRIPTION NOTE: COLOR, HARDNESS, TEXTURE, SORTING, FOSSILS, DIPS OF BEDS AND FRACTURES	F/D
1947												
10/27	Reed #1	11"	7975	7986	9.5'	86	9.5'			x	Claystone & Siltstone, dull dark brown-gray, hard, dense, brittle. Fair 50° to 55° dips. Top 3' has high angle to vertical slickensided fractures with some free oil on faces. Bottom one foot has about 30% fine silty oil sandstone occurring in irregular lenses and spots, thus causing a mottling effect in the siltstone. Oil sandstone has fair petroleum odor, is light brown and gives a dark brown CCl_4 cut. J.S.L.	D
10/27	" #2	"	7986	8006	10.0'	50	x			2.0'	Brown-gray, firm, difficultly friable, fine, silty with thin interbedded siltstone giving dips averaging 55°. More permeable portions moderately saturated, have fair odor and give brown CCl_4 cut.	F
										7.0'	Brown-gray, hard to firm and difficultly friable, fine, silty, fair saturation and odor, dark brown CCl_4 cuts. Some high angle fractures.	
									1.0'		Light gray, hard, lime-cemented medium to coarse gritty sandstone. J.S.L.	
10/31	" #3	"	8155	8164	11.0'	100	11.0'				Dull brown-gray, hard, brittle, silty and sandy with common lenses and irregular mottling of light gray fine silty sand, giving dips 50° to 55°. Common high angle slickensides. J.S.L.	D
12/15	" #4	9-5/8	10,171— 10,180		4.0'	66	4.0'			x	Dark gray, hard siltstone, silty shale and shale with thin bands up to 1/8" of fine silty brown oil sand in lower 2' which has good petroleum odor and gives dark brown CCl_4 cuts. Good dips 49° to 51°. J.S.L.	F

INSTRUCTIONS. Show amounts in ft. and tenths of ft. to nearest 0.5 ft.; use lesser divisions only for formations of particular significance, such as "0.2 ft. oil sand" or "0.3 ft. Bentonite." Show silt and siltstone under shale. Siltstone means definitely impervious shale-like material but silty and/or sdy. in texture. "s" in oil sand column means streaks or spots of oil. Make note of any apparent reason for poor condition or recovery. Tests cores for gas and record results. Record dips of beds, fractures, joints, slickensides, etc. Indicate by "F" or "D" in column at right if core was fresh or dry when described. Indicate author by initials, followed by date described if other than date of core.

ABBREVIATIONS. COLOR: Bf Buff, Blk Black, Blu Blue, Br Brown, Gy Gray, Gn Green, Choc Chocolate, Dk Dark, Lt Light, Ol Olive, Pur Purple, R Red, T Tan, Wh White.
HARDNESS: Frm Firm, Fri Friable, H or Hd Hard, M or Med Medium, S Soft, V Very.
TEXTURE: C or Cse Coarse, Fn Fine, M or Med Medium, Peb Pebbly, Shly Shaley, V Very.
SORTING: E Even, G Good, P Poor, F Fair.
MISCELLANEOUS: Bent Bentonite/Bentonitic, Carb Carbonaceous, Cong Conglomerate, Fos Fossils/Fossiliferous, Mic Micaceous, S S Sandstone.

BARNSDALL OIL COMPANY

Form 5-OD

CORE RECORD

DIVISION OF OIL AND GAS
RECEIVED
OCT 29 1949
LOS ANGELES, CALIFORNIA

COUNTY FIELD OR DIST. COMPANY WELL R.S.F.No. 66-7

LOCATION -2- SECT. T. R. ELEV.

DATE	CORE BARREL MAKE	CORE BARREL SIZE	FROM	TO	RECOVERY FEET	RECOVERY %	SHALE	SAND	SHELL	OIL SAND	DESCRIPTION NOTE: COLOR, HARDNESS, TEXTURE, SORTING, FOSSILS, DIPS OF BEDS AND FRACTURES	F/D
1947	Reed	9-5/8										
12/16	"	"	10,224		4.0'	31	4.0'			x	Dark gray, hard, shale, siltstone and sandy silt-	
	#5		10,237								stone with thin interbeds up to 1/8" of soft, fine	
											silty brown oil sand giving good petroleum odor	F
											and dark brown Ether cuts. Distinct banding	
											throughout giving 46° - 50° dips.	
											Free oil on some bedding planes.	
											J.S.L.	
12/17	"	"	10,237									
	#6		10,244		3.5'	50	3.5'			x	Siltstone and silty shale, as above with several	
											fragments totaling about 3" of hard, brown, fine	
											oil sand with good petroleum odor and dark brown	
											ether cuts. Excellent dips at 48°. Some fractur-	F
											ing with free oil on faces.	
											J.S.L.	
12/18	"	"	10,286		5.0'	50				2.0'	Brown, hard, fine to medium fine silty oil sand.	
	#7		10,296								Very micaceous with conspicuous biotite, common	
											fragments of carbonized wood. Oil stained through-	
											out but looks dry and dead and like heavy dark	
											brown oil. Core was bleeding. Somewhat rotten	
											petroleum odor, brown ether cuts.	
							1.0'				Dark gray-brown, hard, good fissility with 40° dips.	
										2.0'	Brown, hard, coarse, gritty, with common sub-	F
											rounded quartzite grits up to 1/8". Silty matrix.	
											Dead and dry looking; bleeding. Rotten odor as	
											above, brown ether cuts. Tight throughout.	
											Note: No Flash	
											J.S.L.	
12/20	"	"	10,344		6.0'	50				6.0'	Brown hard to very hard, poorly sorted, medium to	
	#8		10,356								coarse and pebbly with rounded to subrounded	F
											quartzite and fine grained metamorphic pebbles up	
											to 1/2", silty, throughout and tight. Rare gray	
											spots due to impermeability. Good saturation and	
											petroleum odor. Dark brown to brown ether cuts.	
											J.S.L.	

INSTRUCTIONS. Show amounts in ft. and tenths of ft. to nearest 0.5 ft.; use lesser divisions only for formations of particular significance, such as "0.2 ft. oil sand" or "0.3 ft. Bentonite." Show silt and siltstone under shale. Siltstone means definitely impervious shale-like material but silty and/or sdy. in texture. "s" in oil sand column means streaks or spots of oil. Make note of any apparent reason for poor condition or recovery. Tests cores for gas and record results. Record dips of beds, fractures, joints, slickensides, etc. Indicate by "F" or "D" in column at right if core was fresh or dry when described. Indicate author by initials, followed by date described if other than date of core.

ABBREVIATIONS. COLOR: **Bf** Buff, **Blk** Black, **Blu** Blue, **Br** Brown, **Gy** Gray, **Gn** Green, **Choc** Chocolate, **Dk** Dark, **Lt** Light, **Ol** Olive, **Pur** Purple, **R** Red, **T** Tan, **Wh** White.
HARDNESS: **Frm** Firm, **Fri** Friable, **H** or **Hd** Hard, **M** or **Med** Medium, **S** Soft, **V** Very.
TEXTURE: **C** or **Cse** Coarse, **Fn** Fine, **M** or **Med** Medium, **Peb** Pebbly, **Shly** Shaley, **V** Very.
SORTING: **E** Even, **G** Good, **P** Poor, **F** Fair.
MISCELLANEOUS: **Bent** Bentonite/Bentonitic, **Carb** Carbonaceous, **Cong** Conglomerate, **Fos** Fossils/Fossiliferous, **Mic** Micaceous, **S S** Sandstone.

BARNSDALL OIL COMPANY

Form 5-OD

CORE RECORD

COUNTY

FIELD OR DIST.

COMPANY

DIVISION OF OIL AND GAS
RECEIVED
OCT 29 194?
LOS ANGELES, CALIFORNIA

WELL R.S.F. No. 66-7

-3-

SECT. T. R. ELEV.

LOCATION

DATE	CORE BARREL MAKE	SIZE	FROM	TO	RECOVERY FEET	%	SHALE	SAND	SHELL	OIL SAND	DESCRIPTION (NOTE: COLOR, HARDNESS, TEXTURE, SORTING, FOSSILS, DIPS OF BEDS AND FRACTURES)	F/D
1947	Reed	9-5/8										
12/22	"	"	10,402--		1.5'	11				0.5'	Recovered fragments brown, hard oil sand as above with several 1" to 1½" pebbles of gneiss. Good odor, brown ether cut.	
	#9			10,416					1.0		Very hard, gray, cemented conglomeratic sandstone shell. Subrounded grits and pebbles up to 1" of fine grained quartzose and granitic metamorphics. J.S.L.	F
12/23	"	"	10,458--									
	#10			10,473	0'	0					No recovery	
12/24	"	"	10,473--									
	#11			10,483	2.5'	25				0.3'	Recovered fragments of hard pebbly oil sandstone, hard well cemented. Good saturation and odor. Some pebbles up to 2" of light gray gneiss.	
										0.7'	Brown, fine, silty, hard, difficultly friable, tight. Banded with thin streaks of dark gray minerals giving good 40° dips. Good saturation and odor.	F
							1.5'				Brown and dark gray, hard, brittle, good fissility. Good 40° dips. J.S.L.	
12/29	"	"	10,570--		6.0'	60	0.5'	5.5'			Gray, hard, well cemented, medium-coarse to coarse, gritty and pebbly with occasional fragments up to 1/2". 0.3' of hard gray shale 3' from top, 0.2' shale 1/2' from bottom. Fair dip at 30°. J.S.L.	D
	#12			10,580								
	"	"	10,626--									
	#13			10,635	8.5'	94		8.5'			Gray, hard to firm and difficultly friable, coarse medium to fine grained, fairly well sorted, uniform, massive. No cut, odor. Looks more permeable than any other sands cored in this zone in this well. J.S.L.	D

INSTRUCTIONS. Show amounts in ft. and tenths of ft. to nearest 0.5 ft.; use lesser divisions only for formations of particular significance, such as "0.2 ft. oil sand" or "0.3 ft. Bentonite." Show silt and siltstone under shale. Siltstone means definitely impervious shale-like material but silty and/or sdy. in texture. "s" in oil sand column means streaks or spots of oil. Make note of any apparent reason for poor condition or recovery. Tests cores for gas and record results. Record dips of beds, fractures, joints, slickensides, etc. Indicate by "F" or "D" in column at right if core was fresh or dry when described. Indicate author by initials, followed by date described if other than date of core.

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HARDNESS: Frm Firm, Fri Friable, H or Hd Hard, M or Med Medium, S Soft, V Very.
TEXTURE: C or Cse Coarse. Fn Fine, M or Med Medium, Peb Pebbly, Shly Shaley, V Very.
SORTING: E Even, G Good, P Poor, F Fair.
MISCELLANEOUS: Bent Bentonite/Bentonitic, Carb Carbonaceous, Cong Conglomerate, Fos Fossils/Fossiliferous, Mic Micaceous, S S Sandstone.

BARNSDALL OIL COMPANY

Form 5-OD

COUNTY FIELD OR DIST.

LOCATION

DIVISION OF OIL AND GAS
RECEIVED
OCT 29 1948
LOS ANGELES, CALIFORNIA

CORE RECORD

COMPANY -4-

WELL R.S.F.No. 66-7

SECT. T. R. ELEV.

DATE	CORE BARREL MAKE	CORE BARREL SIZE	FROM	TO	RECOVERY FEET	RECOVERY %	SHALE	SAND	SHELL	OIL SAND	DESCRIPTION NOTE: COLOR, HARDNESS, TEXTURE, SORTING, FOSSILS, DIPS OF BEDS AND FRACTURES	F/D
1948												
2/21	Reed #114	5-3/4	10,952	10,954	2.0'	100				0.5'	Dark brown hard, difficultly friable, fine to gritty with small pebbles, black CCl_4 cut, rotten petroleum odor. Occasional gray spots. Oil looks dead.	
								1.0'			Gray, firm, friable, fine to pebbly. No cut.	
									0.5'		Gray hard, fine to pebbly, free oil in parting. R.M.B.	F
2/25	" #15	"	10,996	10,998	0.6'	30			0.6'		Light gray, very hard and well cemented conglomeratic shell. Rounded to angular pebbles up to $1\frac{1}{2}$". J.S.L.	F
3/2	" #16	"	11,061	11,064	2.0'	67	2.0'				Dark gray-brown, very hard, with common interbeds of light gray fine silty sandstone. Platy with excellent dips at 40° to 42°. Pieces dug out of core bit are fine oil stained hard sandstone giving brown ether cut. Common slickensides with heavy brown oil on surfaces, occasional oil saturation spots in sandy streaks. J.S.L.	D
3/5	" #17	"	11,114	11,116	0.5'	25	0.5'				Dark gray-brown, very hard, sandy as above. Good dip at 37°. J.S.L.	D
3/11	" #18	"	11,170	11,174	2.5'	62	2.5'				Dark gray-brown, hard with thin light gray sandy laminae. Excellent platy fissility with very good dips at 42°. J.S.L.	D
3/16	" #19	"	11,256	11,263	4.5'	64	4.5'	x			Interbedded sandstone and shale. Shale is finely laminated, platey, splintery, relatively soft, dark brown; sandstone is light gray, fine, silty, hard and in beds from zero to 3" thick. Excellent dips averaging 44°. shale/sand = 75/25 J.S.L.	
3/16	" #20	"	11,334	11,337	2.5'	83	2.5'				As above but with only small amounts of thin sandstone interbeds. Shale/Sand = 95/5. Excellent dips averaging 42°. All dark brown, hard, brittle. J.S.L.	

INSTRUCTIONS. Show amounts in ft. and tenths of ft. to nearest 0.5 ft.; use lesser divisions only for formations of particular significance, such as "0.2 ft. oil sand" or "0.3 ft. Bentonite." Show silt and siltstone under shale. Siltstone means definitely impervious shale-like material but silty and/or sdy. in texture. "s" in oil sand column means streaks or spots of oil. Make note of any apparent reason for poor condition or recovery. Tests cores for gas and record results. Record dips of beds, fractures, joints, slickensides, etc. Indicate by "F" or "D" in column at right if core was fresh or dry when described. Indicate author by initials, followed by date described if other than date of core.

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HARDNESS: Frm Firm, Fri Friable, H or Hd Hard, M or Med Medium, S Soft, V Very.
TEXTURE: C or Cse Coarse, Fn Fine, M or Med Medium, Peb Pebbly, Shly Shaley, V Very.
SORTING: E Even, G Good, P Poor, F Fair.
MISCELLANEOUS: Bent Bentonite/Bentonitic, Carb Carbonaceous, Cong Conglomerate, Fos Fossils/Fossiliferous, Mic Micaceous, S S Sandstone.

BARNSDALL OIL COMPANY

Form 5-OD

CORE RECORD

DIVISION OF OIL AND GAS
RECEIVED
-5- OCT 29 1948
LOS ANGELES, CALIFORNIA

COUNTY FIELD OR DIST.

COMPANY WELL R.S.F.No. 66-96

LOCATION SECT. T. R. ELEV.

DATE	CORE BARREL MAKE	CORE BARREL SIZE	FROM	TO	RECOVERY FEET	%	SHALE	SAND	SHELL	OIL SAND	DESCRIPTION (NATURE, COLOR, HARDNESS, TEXTURE, SORTING, FOSSILS, DIPS OF BEDS AND FRACTURES)	F/D
1948	Reed	5-3/4										
3/22	"	"	11,440--		4.0'	80	4.0'				Dark brown, very hard, brittle platy shale with	
	#21		11,445								thin laminae light gray fine silty sandstone.	D
											Excellent dips 35° to 40°. Some fracturing with	
											dark brown heavy oil on faces and some on bedding	
											plane faces.	
											J.S.L.	
3/29	"	"	11,536--		2.7'	90	2.7'				As above with excellent dips averaging 38°.	
	#22		11,539								Dark brown heavy oil in beads and spots on	D
											fracture and bedding plane surfaces.	
											J.S.L.	
4/7	"	"	11,636--		3.0'	75	3.0'				As above, dark brown, very hard, limy, with common	D
	#23		11,640								very fine grained light gray sandstone laminae	
											giving excellent 45° to 46° dips. Contains common	
											fish scales to 1/2" and occasional highly mica-	
											ceous interbeds; is somewhat fractured with a	
											little oil on fractures and bedding planes.	
											R.S.J.	
	"	"	11,715--		8.0'	100			1.0'		Sandstone, gray, bedded, hard, medium and mica-	F
	#24		11,723								ceous with common siltstone interbeds.	
										0.8'	Oil sand, dull gray-brown, hard, massive, diffi-	
											cultly friable, medium grained, with a fair oil	
											odor and brown cut, low permeability.	
							6.2'	x			Interlaminated sandstone and siltstone. Sandstone	
											is medium gray, fine to medium grained, hard and	
											impermeable. Siltstone is dark brown to dull gray,	
											sandy, micaceous and well bedded, giving excellent	
											35° dips. Core shows occasional fractures and slick-	
											ensides with a little heavy oil on fractures and	
											one 1/4" streak 6" from base of core of dark	
											brown-gray, soft oil sand.	
4/13	"	"	11,738--		6.0'	85			0.8'		R.S.J.	
	#25		11,745								Sandstone, dull gray, bedded with several thin	F
											streaks of brown siltstone, hard, fine to medium	
											grained, fairly well sorted. No odor, stain or cut.	

INSTRUCTIONS. Show amounts in ft. and tenths of ft. to nearest 0.5 ft.; use lesser divisions only for formations of particular significance, such as "0.2 ft. oil sand" or "0.3 ft. Bentonite." Show silt and siltstone under shale. Siltstone means definitely impervious shale-like material but silty and/or sdy. in texture. "s" in oil sand column means streaks or spots of oil. Make note of any apparent reason for poor condition or recovery. Tests cores for gas and record results. Record dips of beds, fractures, joints, slickensides, etc, Indicate by "F" or "D" in column at right if core was fresh or dry when described. Indicate author by initials, followed by date described if other than date of core.

ABBREVIATIONS. COLOR: Bf Buff, Blk Black, Blu Blue, Br Brown, Gy Gray, Gn Green, Choc Chocolate, Dk Dark, Lt Light, Ol Olive, Pur Purple, R Red, T Tan, Wh White.
HARDNESS: Frm Firm, Fri Friable, H or Hd Hard, M or Med Medium, S Soft, V Very.
TEXTURE: C or Cse Coarse, Fn Fine, M or Med Medium, Peb Pebbly, Shly Shaley, V Very.
SORTING: E Even, G Good, P Poor, F Fair.
MISCELLANEOUS: Bent Bentonite/Bentonitic, Carb Carbonaceous, Cong Conglomerate, Fos Fossils/Fossiliferous, Mic Micaceous, S S Sandstone.

BARNSDALL OIL COMPANY

Form 5-OD

CORE RECORD

COUNTY FIELD OR DIST. COMPANY WELL R.S.F.No. 66-76

LOCATION -6- SECT. T. R. ELEV.

DATE	CORE BARREL MAKE	CORE BARREL SIZE	FROM	TO	RECOVERY FEET	%	SHALE	SAND	SHELL	OIL SAND	DESCRIPTION (COLOR, HARDNESS, TEXTURE, SORTING, FOSSILS, DIPS OF BEDS AND FRACTURES)	F/D
1948	Reed	5-3/4										
			11,738--				5.2'				Silt shale, dark gray-brown, weakly bedded to occasionally finely laminated with thin streaks of light gray sandstone up to 3/4", weakly micro-micaceous, fairly hard, with scattered fish scales and common sand nests and sandy phases, shows a few weak fractures and slickensides. Good 44° to 46° dips.	
			11,745,	cont...								
'15	"	"	11,760--	5.0'	100	5.0'			x		R.S.J.	
	#26		11,765								Interlaminated sandstone and siltstone, as last above, sandstone is very fine to medium grained, well bedded with silt, hard and generally impermeable, but with a little dark brown oil in thin streaks in 6" zone 1½' from base of core, giving a dark brown cut. Siltstone is gray brown to black, fine and clayey with occasional micaceous streaks and scattered fish scales. In top 1/3 of core siltstone is light brown, very hard and limy. Core shows several bedding plane(down-dip) slickensides and some oil on bedding planes and fractures. Excellent 43° to 45° dips. About 75% sandstone and 25% siltstone.	D
4/16	"	"	11,783--	3.0'	75	3.0'			x		R.S.J.	
	#27		11,787								Interlaminated siltstone and sandstone, as above, but with much less sandstone(about 20%). Upper 1/3 of core is mainly an ill sorted, micaceous, sandy siltstone. Dips vary from 40° to 47° and average about 43°.	D
4/18	"	"	11,818--	7.0'	87					7.0'	R.S.J.	
	#28		11,826								Gray-brown, massive to rarely bedded, friable to difficultly friable, fine to coarse grained, ill sorted, slightly silty, probable fair permeability, rather fleeting odor of high gravity oil, dark brown cut. One fair 60°± dip, one slickensided siltstone parting.	D

INSTRUCTIONS. Show amounts in ft. and tenths of ft. to nearest 0.5 ft.; use lesser divisions only for formations of particular significance, such as "0.2 ft. oil sand" or "0.3 ft. Bentonite." Show silt and siltstone under shale. Siltstone means definitely impervious shale-like material but silty and/or sdy. in texture. "s" in oil sand column means streaks or spots of oil. Make note of any apparent reason for poor condition or recovery. Tests cores for gas and record results. Record dips of beds, fractures, joints, slickensides, etc. Indicate by "F" or "D" in column at right if core was fresh or dry when described. Indicate author by initials, followed by date described if other than date of core.

ABBREVIATIONS. COLOR: Bf Buff, Blk Black, Blu Blue, Br Brown, Gy Gray, Gn Green, Choc Chocolate, Dk Dark, Lt Light, Ol Olive, Pur Purple, R Red, T Tan, Wh White.

HARDNESS: Frm Firm, Fri Friable, H or Hd Hard, M or Med Medium, S Soft, V Very.

TEXTURE: C or Cse Coarse, Fn Fine, M or Med Medium, Peb Pebbly, Shly Shaley, V Very.

SORTING: E Even, G Good, P Poor, F Fair.

MISCELLANEOUS: Bent Bentonite/Bentonitic, Carb Carbonaceous, Cong Conglomerate, Fos Fossils/Fossiliferous, Mic Micaceous, S S Sandstone.

BARNSDALL OIL COMPANY

Form 5-OD

CORE RECORD

COUNTY FIELD OR DIST. COMPANY -7- WELL R.S.F.No. 66-7

LOCATION SECT. T. R. ELEV.

DATE	CORE BARREL MAKE	CORE BARREL SIZE	FROM	TO	RECOVERY FEET	RECOVERY %	SHALE	SAND	SHELL	OIL SAND	DESCRIPTION (NOTE: COLOR, HARDNESS, TEXTURE, SORTING, FOSSILS, DIPS OF BEDS AND FRACTURES)	F/D
1948	Reed	5-3/4										
	"	"	11,826--									
	#29			11,836	7.5'	75				7.5'	As above but with biscuit parting generally through F out. Contains one 1' siltstone streak that shows 20° dip. Top 1/2' is loose sand, probably cavings. Next 1/2' is massive and hard. Same odor and dark brown cuts throughout.	
4/20	"	"	11,819--		12.0'	100						
	#30			11,861						1.0'	As above, ill sorted, fine to coarse grained, biscuit bedded.	F
										11.0'	Gray-brown, massive, firm, friable to difficultly friable, fine grained and silty, but with very little clay; same good odor and brown cuts; core apparently slightly crushed in coring as pieces break readily along biscuit partings.	
4/20	"	"	11,883--		5.0'	62	1.0'		x			
	#31			11,895							Interbedded sandstone and siltstone, sandstone is F dull gray, hard, medium to fine and ill-sorted, hard, impermeable; siltstone is dark gray-brown, very hard, clayey, micaceous. Gives excellent 40° to 45° dips and shows a few bedding plane slickensides with down-dip slip.	
										1.3'	Gray-brown, massive, biscuit-bedded, fine to occasionally coarse grained, ill sorted, slightly friable, similar to last above with dark brown cuts.	
									2.5'		Sandstone, light gray, massive to rarely bedded (one good 45° dip), hard, compacted, occasionally very difficultly friable, perhaps somewhat crushed in coring. No stain or cuts.	
										0.2'	As last above, slightly burned in coring, slightly friable with brown cut (Whole interval cored fast).	

R.S.J.

INSTRUCTIONS. Show amounts in ft. and tenths of ft. to nearest 0.5 ft.; use lesser divisions only for formations of particular significance, such as "0.2 ft. oil sand" or "0.3 ft. Bentonite." Show silt and siltstone under shale. Siltstone means definitely impervious shale-like material but silty and/or sdy. in texture. "s" in oil sand column means streaks or spots of oil. Make note of any apparent reason for poor condition or recovery. Tests cores for gas and record results. Record dips of beds, fractures, joints, slickensides, etc. Indicate by "F" or "D" in column at right if core was fresh or dry when described. Indicate author by initials, followed by date described if other than date of core.

ABBREVIATIONS. COLOR: Bf Buff, Blk Black, Blu Blue, Br Brown, Gy Gray, Gn Green, Choc Chocolate, Dk Dark, Lt Light, Ol Olive, Pur Purple, R Red, T Tan, Wh White.

HARDNESS: Frm Firm, Fri Friable, H or Hd Hard, M or Med Medium, S Soft, V Very.

TEXTURE: C or Cse Coarse, Fn Fine, M or Med Medium, Peb Pebbly, Shly Shaley, V Very.

SORTING: E Even, G Good, P Poor, F Fair.

MISCELLANEOUS: Bent Bentonite/Bentonitic, Carb Carbonaceous, Cong Conglomerate, Fos Fossils/Fossiliferous, Mic Micaceous, S S Sandstone.

BARNSDALL OIL COMPANY

Form 5-OD

CORE RECORD

COUNTY FIELD OR DIST. COMPANY -8- WELL R.S.F.No. 66-7

LOCATION SECT. T. R. ELEV.

DATE	CORE BARREL MAKE	CORE BARREL SIZE	FROM	TO	RECOVERY FEET	RECOVERY %	SHALE	SAND	SHELL	OIL SAND	DESCRIPTION NOTE: COLOR, HARDNESS, TEXTURE, SORTING, FOSSILS, DIPS OF BEDS AND FRACTURES	F/D
1948	Reed	5-3/4										
4/24	"	"	11,964		5.7'	81				1.5'	As last above, gray-brown, massive, fine to	
	#32			11,971							medium grained, firm, micaceous, difficultly	D
											friable, brown cut.	
									0.8'		Sandstone shell, medium gray, fine to medium	
											grained, very hard, quite micaceous.	
										3.4'	As above, with several siltstone streaks giving	
											good 46° to 47° dips.	
4/25	"	"	11,971		11.0'	92				11.0'	As above, quite hard in part, with good odor, even	
	#33			11,983							saturation and dark amber cuts.	D
4/25	"	"	12,004		2.5'	42	2.5'				Siltstone shell, gray-brown, bedded, finely sandy	
	#34			12,010							in part, extremely hard and dense, micro-micaceous,	D
											somewhat fractured and slickensided, with oil	
											stains on fractures. Good 40° to 45° dips. Quite	
											sandy in top foot.	
4/26	"	"	12,037		9.0'	90				1.0'	Oil sand, as above, brown-gray, massive, biscuit	
	#35			12,047							bedded, silty, evenly saturated, fine to medium	F
											grained, brown cut.	
									1.0'		Sandstone, gray, massive, fine to medium grained,	
											hard, impermeable, with one siltstone streak at	
											top giving good 47° dip.	
										7.0'	Oil sand, as above, but grading from fine to	
											medium grained to fine to coarse, generally more	
											friable, uniform dark amber cuts, but very faint	
											irregularities in saturation. Contains one 1/2"	
											streak of slickensided siltstone at base.	
4/29	"	"	12,063		1.3'	30	1.3'				Siltstone, dark brown-black, weakly bedded, some-	
	#36			12,066							what fissile, clayed very hard, brittle, finely	
											micro-micaceous, with scattered fish scales and	D
											rare small carbonaceous fragments, occasionally	
											slickensided down bedding planes. Good 45°-50° dips.	

INSTRUCTIONS. Show amounts in ft. and tenths of ft. to nearest 0.5 ft.; use lesser divisions only for formations of particular significance, such as "0.2 ft. oil sand" or "0.3 ft. Bentonite." Show silt and siltstone under shale. Siltstone means definitely impervious shale-like material but silty and/or sdy. in texture. "s" in oil sand column means streaks or spots of oil. Make note of any apparent reason for poor condition or recovery. Tests cores for gas and record results. Record dips of beds, fractures, joints, slickensides, etc. Indicate by "F" or "D" in column at right if core was fresh or dry when described. Indicate author by initials, followed by date described if other than date of core.

ABBREVIATIONS. COLOR: Bf Buff, Blk Black, Blu Blue, Br Brown, Gy Gray, Gn Green, Choc Chocolate, Dk Dark, Lt Light, Ol Olive, Pur Purple, R Red, T Tan, Wh White.
HARDNESS: Frm Firm, Fri Friable, H or Hd Hard, M or Med Medium, S Soft, V Very.
TEXTURE: C or Cse Coarse. Fn Fine, M or Med Medium, Peb Pebbly, Shly Shaley, V Very.
SORTING: E Even, G Good, P Poor, F Fair.
MISCELLANEOUS: Bent Bentonite/Bentonitic, Carb Carbonaceous, Cong Conglomerate, Fos Fossils/Fossiliferous, Mic Micaceous, S S Sandstone.

R.S.J

BARNSDALL OIL COMPANY

Form 5-OD

CORE RECORD

DIVISION OF OIL AND GAS
RECEIVED
OCT 29 1948
LOS ANGELES, CALIFORNIA

COUNTY FIELD OR DIST. COMPANY WELL R.S.F.No. 66-9

LOCATION -9- SECT. T. R. ELEV.

DATE	CORE BARREL MAKE	CORE BARREL SIZE	FROM	TO	RECOVERY FEET	RECOVERY %	SHALE	SAND	SHELL	OIL SAND	DESCRIPTION NOTE: COLOR, HARDNESS, TEXTURE, SORTING, FOSSILS, DIPS OF BEDS AND FRACTURES	F/D
1948	Reed	5-3/4										
5/11	"	"	12,118--		8.0'	89				5.0'	Gray-brown, massive, biscuit bedded, fairly hard	
	#37		12,127								to difficultly friable, fine to coarse grained,	F
											ill-sorted, evenly saturated, strong odor, dark	
											brown cuts.	
									0.9'		Light gray, lithology as above, hard, calcareous,	
											impermeable with indicated 30° dip(very weak).	
										2.1'	As above, but fine to medium grained with scattered	
											coarse grains, good saturation, dark brown cuts.	
/12	"	"	12,173--		5.0'	62		2.0'				
	#38		12,181								Gray, massive, biscuit-bedded, firm, friable to	F
											difficultly friable, ill-sorted, fine to coarse	
											grained, weakly oil stained in bottom 6", where	
							1.5'				friability is lower, with a brown cut. Negative	
											cut in top portion. Permeable.	
											Siltstone, dark brown, massive to finely inter-	
									1.5'		bedded with fine sand, hard, micro-micaceous with	
											scattered fish scales and good 35° dips.	
											Sandstone, light gray, hard, massive but inter-	
											bedded at top with siltstone(35° dip), increasing	
											from fine to medium and downward.	
5/13	"	"	12,220--		4.5'	90	0.5'					
	#39		12,225								Siltstone, as last above, quite sandy at top. Dip	F
											42° to 45°.	
									2.5'		Sandstone, as in last core, light gray, massive,	
											fine to medium grained, hard, impermeable with	
											scattered silty interbeds giving good 40° to 45°	
											dips. No odor, stain or cut.	
							1.0'				Siltstone, as above, sandy throughout, with common	
											carbonaceous fragments.	
									0.5'		Sandstone, as above, medium grained. No odor,	
											stain or cut.	
											R.S.J.	

INSTRUCTIONS. Show amounts in ft. and tenths of ft. to nearest 0.5 ft.; use lesser divisions only for formations of particular significance, such as "0.2 ft. oil sand" or "0.3 ft. Bentonite." Show silt and siltstone under shale. Siltstone means definitely impervious shale-like material but silty and/or sdy. in texture. "s" in oil sand column means streaks or spots of oil. Make note of any apparent reason for poor condition or recovery. Tests cores for gas and record results. Record dips of beds, fractures, joints, slickensides, etc. Indicate by "F" or "D" in column at right if core was fresh or dry when described. Indicate author by initials, followed by date described if other than date of core.

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HARDNESS: Frm Firm, Fri Friable, H or Hd Hard, M or Med Medium, S Soft, V Very.
TEXTURE: C or Cse Coarse, Fn Fine, M or Med Medium, Peb Pebbly, Shly Shaley, V Very.
SORTING: E Even, G Good, P Poor, F Fair.
MISCELLANEOUS: Bent Bentonite/Bentonitic, Carb Carbonaceous, Cong Conglomerate, Fos Fossils/Fossiliferous, Mic Micaceous, S S Sandstone.

BARNSDALL OIL COMPANY

Form 5-OD

CORE RECORD

DIVISION OF OIL AND GAS

RECEIVED

OCT 29 1948

LOS ANGELES, CALIFORNIA

COUNTY

FIELD OR DIST.

COMPANY

WELL R.S.F.No. 66-76

LOCATION

-10-

SECT. T. R. ELEV.

DATE	CORE BARREL MAKE	CORE BARREL SIZE	FROM	TO	RECOVERY FEET	%	SHALE	SAND	SHELL	OIL SAND	DESCRIPTION (NOTE COLOR, HARDNESS, TEXTURE, SORTING, FOSSILS, DIPS OF BEDS AND FRACTURES)	F/D
1948	Reed	5-3/4										
5/14	"	"	12,262—		2.0'	50	2.0'				Shale, dark brown-black, bedded, fairly hard, slightly brittle, clay-shale, with scattered small biotitic flakes, common bedding plane slickensides and good 35° to 40° dips.	D
	#40		12,266									
5/19	"	"	12,312—		2.0'	39	2.0'				Shale, as above, low fissility in part with occasional sandy interbeds, good 45° to 47° dips and fair oil odor on fresh fractures.	F
	#41		12,319									
5/20	"	"	12,365—		8.5	77		2.5'			Sand, light dull gray, massive, biscuit-bedded, firm, friable, fine to medium grained, permeable.	F
	#42		12,377						2.5'		Sandstone, lithology as above, but hard to very hard, with one 1" shale streak giving good 50° dip.	
								2.0'			Sand, as above, becoming silty, firm and carbonaceous at base, 50° dip.	
							1.5'				Siltstone, dark brown-black, fairly hard, fractured and slickensided. Crushed sand and shale spilled from core shoe gave light amber cut.	
5/22	"	"	12,411—		2.0'	100			1.0'		Sandstone, dull gray-brown, massive, hard, medium grained with a very faint oil odor.	
	#43		12,413				1.0'				Siltstone, dark gray-brown, finely bedded with very fine gray sandstone. Good 45° to 47° dips.	
5/25	"	"	12,457—		2.0'	100	2.0'				Siltstone shell, dark gray-brown, massive to finely bedded, very hard, dense, quite limy, with occasional calcite coated fractures, pyrite specks and small carbonaceous fragments. Good 56° to 57° dips.	
	#44		12,459									
5/30	"	"	12,545—		4.5'	90	4.5'				Siltstone, dark gray-brown, well bedded, fissile in part, fairly hard, micro-micaceous, quite sandy in upper part, shows several bedding plane slickensides and good 52° to 55° dips.	D
	#45		12,550									

INSTRUCTIONS. Show amounts in ft. and tenths of ft. to nearest 0.5 ft.; use lesser divisions only for formations of particular significance, such as "0.2 ft. oil sand" or "0.3 ft. Bentonite." Show silt and siltstone under shale. Siltstone means definitely impervious shale-like material but silty and/or sdy. in texture. "s" in oil sand column means streaks or spots of oil. Make note of any apparent reason for poor condition or recovery. Tests cores for gas and record results. Record dips of beds, fractures, joints, slickensides, etc. Indicate by "F" or "D" in column at right if core was fresh or dry when described. Indicate author by initials, followed by date described if other than date of core.

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HARDNESS: Frm Firm, Fri Friable, H or Hd Hard, M or Med Medium, S Soft, V Very.

TEXTURE: C or Cse Coarse, Fn Fine, M or Med Medium, Peb Pebbly, Shly Shaley, V Very.

SORTING: E Even, G Good, P Poor, F Fair.

MISCELLANEOUS: Bent Bentonite/Bentonitic, Carb Carbonaceous, Cong Conglomerate, Fos Fossils/Fossiliferous, Mic Micaceous, S S Sandstone.

BARNSDALL OIL COMPANY

Form 5-OD

CORE RECORD

COUNTY FIELD OR DIST.

LOCATION

COMPANY -12-

WELL R.S.F.No. 66-6

SECT. T. R. ELEV.

DATE	CORE BARREL MAKE	CORE BARREL SIZE	FROM	TO	RECOVERY FEET	%	SHALE	SAND	SHELL	OIL SAND	DESCRIPTION NOTE: COLOR, HARDNESS, TEXTURE, SORTING, FOSSILS, DIPS OF BEDS AND FRACTURES	F/D
1948	Reed	5-3/4										
			12,844--									
			12,854, cont...								interbeds in top part of core.	
6/15	"	"	12,954--		5.6'	62				5.6'		
	#51		12,963								Oil sand, light brownish gray, massive, medium to coarse and hard and scarcely friable to very hard and shell-like. Top 8" is somewhat broken up and more friable, rest of core is biscuit bedded. Core gives clear amber cuts in CCl4 and straw cuts in acetone, shows a little free oil and has a sweet oil odor.	F
6/17	"	"	12,992--		4.8'	80			4.0'			
	#52		12,998					0.8'			Sandstone shell, light gray, massive, generally medium grained, quite hard, impervious.	F
											Sand and light gray, biscuit bedded, very difficultly friable medium grained, ill sorted, low permeability. No odor, stain or cut.	
6/21	"	"	13,109--		2.5'	31			2.1'			
	#53		13,117								Sandstone shell, dull gray, massive, hard, fine to coarse grained, broken in part, with a crushed streak of oil sand near base, giving good amber cut.	F
										0.4'	Oil sand, gray brown, massive, fine to medium grained, friable?, crushed and broken in coring, even saturation, clear dark amber cut, fair odor.	
6/23	"	"	13,136--		4.0'	44			4.0'	x		
	#54		13,145								Oil stained sandstone, gray brown, hard, massive, medium to coarse grained, very low permeability. Contains several streaks that are slightly friable, one 4" streak of siltstone that gives a fair 45° dip near top of core, and one 5" streak of gray sandstone shell. Core gives two clear amber cuts, and contains several fragments of difficultly friable oil sand that probably accounts for much of the last recovery.	F

INSTRUCTIONS. Show amounts in ft. and tenths of ft. to nearest 0.5 ft.; use lesser divisions only for formations of particular significance, such as "0.2 ft. oil sand" or "0.3 ft. Bentonite." Show silt and siltstone under shale. Siltstone means definitely impervious shale-like material but silty and/or sdy. in texture. "s" in oil sand column means streaks or spots of oil. Make note of any apparent reason for poor condition or recovery. Tests cores for gas and record results. Record dips of beds, fractures, joints, slickensides, etc. Indicate by "F" or "D" in column at right if core was fresh or dry when described. Indicate author by initials, followed by date described if other than date of core.

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HARDNESS: Frm Firm, Fri Friable, H or Hd Hard, M or Med Medium, S Soft, V Very.
TEXTURE: C or Cse Coarse, Fn Fine, M or Med Medium, Peb Pebbly, Shly Shaley, V Very.
SORTING: E Even, G Good, P Poor, F Fair.
MISCELLANEOUS: Bent Bentonite/Bentonitic, Carb Carbonaceous, Cong Conglomerate, Fos Fossils/Fossiliferous, Mic Micaceous, S S Sandstone.

BARNSDALL OIL COMPANY

Form 5-OD

CORE RECORD

COUNTY FIELD OR DIST.

COMPANY -13-

DIVISION OF OIL AND GAS
RECEIVED
OCT 29 1948
LOS ANGELES, CALIFORNIA

WELL R.S.F.No. 66-B

LOCATION SECT. T. R. ELEV.

DATE	CORE BARREL MAKE	CORE BARREL SIZE	FROM	TO	RECOVERY FEET	RECOVERY %	SHALE	SAND	SHELL	OIL SAND	DESCRIPTION NOTE COLOR, HARDNESS, TEXTURE, SORTING, FOSSILS, DIPS OF BEDS AND FRACTURES	F/D
1948	Reed	5-3/4										
6/24	"	"	13,163—		2.5'	83	2.5'		x		Siltstone, gray to brown, sandy in upper 6", massive to faintly bedded, showing fair 50° dip, hard, fairly dense, micro-micaceous, containing scattered fish scales. Lower part of core is broken up and shows several fragments of hard, dense sandstone shell and one or two small pieces of weakly oil-stained sand giving a light yellow cut.	D
	#55		13,166									
6/26	"	"	13,317—		1.0'	50	1.0'				Siltstone, dark brown-gray, bedded, hard, dense, finely sandy in streaks, micro-micaceous, somewhat fractured and slickensided, with fractures along bedding planes. Good 75° dip.	F
	#56		13,319									
8/3	"	"	13,427—		1.5'	75	1.5'				Siltstone, dark gray-brown, hard, brittle, fairly well bedded, micro-micaceous with common carbon fragments and with scattered brown sandy siltstone interbeds giving good 56° to 60° dip. Shows common bedding-plane slickensides and some fracturing.	F
	#57		13,429									
8/9	"	"	13,521—		3.0'	60	3.0'				Sandy siltstone, gray-brown, bedded with dark gray-brown siltstone interbeds, hard, brittle, micaceous, with scattered carbon fragments, negligible fracturing and slickensiding, but with excellent 53° to 57° dips.	F
	#58		13,526									
8/11	"	"	13,552—		8.0'	89			8.0'		Sandstone, dull gray to brown-gray, massive, hard, medium to coarse grained, ill-sorted, with a 1' streak showing grains up to 1/8". Fresh break has a fleeting petroleum odor. Negative CCl_4 cut. One 6" streak is fine grained with silty interbeds and shows good 50° to 51° dips. Tight	D
	#59		13,561									

INSTRUCTIONS. Show amounts in ft. and tenths of ft. to nearest 0.5 ft.; use lesser divisions only for formations of particular significance, such as "0.2 ft. oil sand" or "0.3 ft. Bentonite." Show silt and siltstone under shale. Siltstone means definitely impervious shale-like material but silty and/or sdy. in texture. "s" in oil sand column means streaks or spots of oil. Make note of any apparent reason for poor condition or recovery. Tests cores for gas and record results. Record dips of beds, fractures, joints, slickensides, etc. Indicate by "F" or "D" in column at right if core was fresh or dry when described. Indicate author by initials, followed by date described if other than date of core.

ABBREVIATIONS. COLOR: Bf Buff, Blk Black, Blu Blue, Br Brown, Gy Gray, Gn Green, Choc Chocolate, Dk Dark, Lt Light, Ol Olive, Pur Purple, R Red, T Tan, Wh White.
HARDNESS: Frm Firm, Fri Friable, H or Hd Hard, M or Med Medium, S Soft, V Very.
TEXTURE: C or Cse Coarse, Fn Fine, M or Med Medium, Peb Pebbly, Shly Shaley, V Very.
SORTING: E Even, G Good, P Poor, F Fair.
MISCELLANEOUS: Bent Bentonite/Bentonitic, Carb Carbonaceous, Cong Conglomerate, Fos Fossils/Fossiliferous, Mic Micaceous, S S Sandstone.

BARNSDALL OIL COMPANY

Form 5-OD

CORE RECORD

COUNTY FIELD OR DIST.

LOCATION

COMPANY -14- WELL R.S.F.No. 66-7

SECT. T. R. ELEV.

DATE	CORE BARREL MAKE	CORE BARREL SIZE	FROM	TO	RECOVERY FEET	%	SHALE	SAND	SHELL	OIL SAND	DESCRIPTION (NOTE: COLOR, HARDNESS, TEXTURE, SORTING, FOSSILS, DIPS OF BEDS AND FRACTURES)	F/D
1948	Reed	5-3/4										
8/14	"	"	13,623--		5'	100			5'		Sandstone, dull gray, massive, quite hard, fine	
	#60		13,628								to coarse grained, ill-sorted, silty, biotitic,	D
											with no petroleum odor and negative cuts. Top 2'	
											are quite silty and contain several siltstone	
											interbeds giving good 53° to 56° dips, tight.	
											Note: Mud in top of core barrel contained very	
											good showing of black oil that flashed,	
											but there is no evidence of oil or	
											permeability in core.	
8/20	"	"	13,688--		3.0'	75				2.0'	Oil sand, gray-brown, massive, hard, very slightly	
	#61		13,692								friable, coarse grained, ill-sorted, low permeabi-	F
											lity, good odor, amber cut, with gray mottlings in	
											part, only possibly due to varying permeability.	
							0.5'				Siltstone, dark brown, interbedded with fine and	
											very fine gray sand, giving excellent 62° dips and	
											showing a little brown oil staining with a good	
											odor where permeable. Siltstone shows a little	
											slickensiding and common large carbon fragments.	
										0.5'	Oil sand, light brownish gray, massive, hard, medium	
											grained, quite biotitic, with a good oil odor and	
											amber cut.	
8/28	"	"	13,790--		4.5'	74			4.5'		Sandstone, light to dark gray, massive, quite hard,	
	#62		13,796								fine grained, well sorted, biotitic and silty,	
											impermeable. Contains several thin siltstone inter-	
											beds at base, one is fractured and slickensided and	
											shows a little oil staining in streak of adjacent	
											low-permeable sand - good odor but straw cut; the	
											other shows an excellent 65° dip.	
9/5	"	"	13,915--		2.0'	50			1.3'		Sandstone, gray-brown, massive to silt-bedded, quite	
	#63		13,919								hard, ill-sorted fine to medium grained, tight, with	
											abundant biotite and occasional carbon fragments and brown cut.	

INSTRUCTIONS. Show amounts in ft. and tenths of ft. to nearest 0.5 ft.; use lesser divisions only for formations of particular significance, such as "0.2 ft. oil sand" or "0.3 ft. Bentonite." Show silt and siltstone under shale. Siltstone means definitely impervious shale-like material but silty and/or sdy. in texture. "s" in oil sand column means streaks or spots of oil. Make note of any apparent reason for poor condition or recovery. Tests cores for gas and record results. Record dips of beds, fractures, joints, slickensides, etc, Indicate by "F" or "D" in column at right if core was fresh or dry when described. Indicate author by initials, followed by date described if other than date of core.

ABBREVIATIONS. COLOR: Bf Buff, Blk Black, Blu Blue, Br Brown, Gy Gray, Gn Green, Choc Chocolate, Dk Dark, Lt Light, Ol Olive, Pur Purple, R Red, T Tan, Wh White.
HARDNESS: Frm Firm, Fri Friable, H or Hd Hard, M or Med Medium, S Soft, V Very.
TEXTURE: C or Cse Coarse, Fn Fine, M or Med Medium, Peb Pebbly, Shly Shaley, V Very.
SORTING: E Even, G Good, P Poor, F Fair.
MISCELLANEOUS: Bent Bentonite/Bentonitic, Carb Carbonaceous, Cong Conglomerate, Fos Fossils/Fossiliferous, Mic Micaceous, S S Sandstone.

BARNSDALL OIL COMPANY

Form 5-OD

CORE RECORD

DIVISION OF OIL AND GAS
RECEIVED
OCT 29 1948
LOS ANGELES, CALIFORNIA

COUNTY | FIELD OR DIST. | COMPANY | WELL R.S.F.No. 66-7

LOCATION | -15- | SECT. | T. | R. | ELEV.

DATE	CORE BARREL MAKE	CORE BARREL SIZE	FROM	TO	RECOVERY FEET	RECOVERY %	SHALE	SAND	SHELL	OIL SAND	DESCRIPTION NOTE: COLOR, HARDNESS, TEXTURE, SORTING, FOSSILS, DIPS OF BEDS AND FRACTURES	F/D
1948	Reed	5-3/4	13,915									
				13,919, cont...			0.7'				Siltstone, fragments of dark gray-brown sandy siltstone, very hard and slightly brittle. Dip 65°.	
9/7	"	"	13,968		2.5'	28			1.8'		Sandstone, medium gray, coarse to fine, quite hard, no oil noted, but with one straw cut & one negative cut.	D
	#64		13,972				0.7'				Siltstone, as above, sandy, hard, dip 68°, with one straw cut in sand streak at base.	
9/11	"	"	14,059		5.0'	100			2.0'		Sandstone shell, gray, hard, calcareous, medium to coarse and impermeable, but with a little oil on fractures.	D
	#65		14,064							3.0'	Oil sandstone, dull gray to brown, hard, fine to medium grained, with one band of small pebbles giving 67° dip, fairly biotitic, fair to spotty saturation - irregular permeability; amber cuts, quite low permeability, good oil odor. Core flashed.	
9/13	"	"	14,101		3.0'	43				3.0	Oil sandstone, brown to dark gray-brown, massive to interbedded with silt laminae and sandy siltstone streaks(20% of core). Sandstone is hard, fine to medium grained, evenly saturated with dark oil, giving good odor and dark brown cuts. Permeability quite low. Dip 65°.	D
	#66		14,108									
9/14	"	"	14,137		1.1'	16				0.5'	Fragments of oil sandstone as above but medium to coarse grained, dark brown cut, with several siltstone fragments.	F
	#67		14,144				0.6'				Sandy siltstone, massive, brown, very hard, coarse gritty, with one bedded streak at top giving poor 52° to 55° dips.	

INSTRUCTIONS. Show amounts in ft. and tenths of ft. to nearest 0.5 ft.; use lesser divisions only for formations of particular significance, such as "0.2 ft. oil sand" or "0.3 ft. Bentonite." Show silt and siltstone under shale. Siltstone means definitely impervious shale-like material but silty and/or sdy. in texture. "s" in oil sand column means streaks or spots of oil. Make note of any apparent reason for poor condition or recovery. Tests cores for gas and record results. Record dips of beds, fractures, joints, slickensides, etc. Indicate by "F" or "D" in column at right if core was fresh or dry when described. Indicate author by initials, followed by date described if other than date of core.

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HARDNESS: Frm Firm, Fri Friable, H or Hd Hard, M or Med Medium, S Soft, V Very.
TEXTURE: C or Cse Coarse, Fn Fine, M or Med Medium, Peb Pebbly, Shly Shaley, V Very.
SORTING: E Even, G Good, P Poor, F Fair.
MISCELLANEOUS: Bent Bentonite/Bentonitic, Carb Carbonaceous, Cong Conglomerate, Fos Fossils/Fossiliferous, Mic Micaceous, S S Sandstone.

BARNSDALL OIL COMPANY

Form 5-OD

CORE RECORD

COUNTY FIELD OR DIST. COMPANY

WELL R.S.F.No. 66-7

LOCATION -16- SECT. T. R. ELEV.

DATE	CORE BARREL MAKE	CORE BARREL SIZE	FROM	TO	RECOVERY FEET	RECOVERY %	SHALE	SAND	SHELL	OIL SAND	DESCRIPTION NOTE: COLOR, HARDNESS, TEXTURE, SORTING, FOSSILS, DIPS OF BEDS AND FRACTURES	F/D
1948	Reed	5-3/4										
9/16	"	"	14,187		3.0'	100			3.0'		Sandstone, dull gray, massive, hard, dense, very fine grained, silty and clayey, slightly calcareous, shows on 70° dip on siltstone streak at base of core. Mud around core shows 6-8 droplets of live gassy oil per sq. cm. Core gave 1 orange cut and 2 negative cuts, but no stain or odor of oil.	F
	#68		14,190									
9/18	"	"	14,219		2.0'	29			2.0'	x	Sandstone, gray to brown, massive, hard, fine to medium to occasionally coarse grained, partially stained and saturated with oil, giving yellow to dark amber cuts.	F
	#68		14,226									
7/19	"	"	14,261		5.0'	71				1.3'	Weakly oil stained sand, gray, friable(possibly crushed in coring, fine to coarse grained, pale yellow cut.	F
	#69		14,268				3.7'				Siltstone, very dark gray-brown, micro-micaceous, hard brittle slightly fractured, with one 2" streak of oil stained friable sand at base giving a dark yellow cut. Good 58° to 60° dips.	
9/21	"	"	14,326		8.0'	53				8.0'	Oil sand, light brown to gray-brown, massive to occasionally silt-bedded with one 60° dip, fine to medium grained, firm and difficultly friable to hard, fairly well sorted, biscuit-bedded for about 2⅔' with dark brown oil oozing from biscuits. Good odor, fairly uniform saturation(several silty and tight gray spots) light to dark amber cuts, good flash.	F
	#70		14,341									
9/27	"	"	14,366		4.5'	41		1.0'			Sand, gray, massive, medium to coarse grained, biotitic difficultly friable, biscuit-parting.	D
	#71		14,377						2.0'		Sandstone shell, gray, massive, hard, fine to medium grained, impermeable, with several silty streaks giving good 69° dip.	

INSTRUCTIONS. Show amounts in ft. and tenths of ft. to nearest 0.5 ft.; use lesser divisions only for formations of particular significance, such as "0.2 ft. oil sand" or "0.3 ft. Bentonite." Show silt and siltstone under shale. Siltstone means definitely impervious shale-like material but silty and/or sdy. in texture. "s" in oil sand column means streaks or spots of oil. Make note of any apparent reason for poor condition or recovery. Tests cores for gas and record results. Record dips of beds, fractures, joints, slickensides, etc. Indicate by "F" or "D" in column at right if core was fresh or dry when described. Indicate author by initials, followed by date described if other than date of core.

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TEXTURE: C or Cse Coarse, Fn Fine, M or Med Medium, Peb Pebbly, Shly Shaley, V Very.
SORTING: E Even, G Good, P Poor, F Fair.
MISCELLANEOUS: Bent Bentonite/Bentonitic, Carb Carbonaceous, Cong Conglomerate, Fos Fossils/Fossiliferous, Mic Micaceous, S S Sandstone.

BARNSDALL OIL COMPANY

Form 5-OD

CORE RECORD

COUNTY FIELD OR DIST. COMPANY

LOCATION -17- SECT. T. R. ELEV.

WELL R.S.F.No. 66-7

DATE	CORE BARREL MAKE	CORE BARREL SIZE	FROM	TO	RECOVERY FEET	RECOVERY %	SHALE	SAND	SHELL	OIL SANDS	DESCRIPTION (NOTE COLOR, HARDNESS, TEXTURE, SORTING, FOSSILS, DIPS OF BEDS AND FRACTURES)	F/D
1948	Reed	5-7/8										
			14,366									
			14,377, cont...					1.5'			Sand, as above, with several weak oil spots.	
10/3	"	"	14,485		3.0'	100	3.0'				Siltstone, dark brown, massive to finely sand-inter- D bedded hard, micro-micaceous, fractured in part with calcite or oil on fractures. Dip 64° to 66°.	
			14,488									

R.S.J.

MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121

INSTRUCTIONS. Show amounts in ft. and tenths of ft. to nearest 0.5 ft.; use lesser divisions only for formations of particular significance, such as "0.2 ft. oil sand" or "0.3 ft. Bentonite." Show silt and siltstone under shale. Siltstone means definitely impervious shale-like material but silty and/or sdy. in texture. "s" in oil sand column means streaks or spots of oil. Make note of any apparent reason for poor condition or recovery. Tests cores for gas and record results. Record dips of beds, fractures, joints, slickensides, etc. Indicate by "F" or "D" in column at right if core was fresh or dry when described. Indicate author by initials, followed by date described if other than date of core.

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HARDNESS: Frm Firm, Fri Friable, H or Hd Hard, M or Med Medium, S Soft, V Very.
TEXTURE: C or Cse Coarse, Fn Fine, M or Med Medium, Peb Pebbly, Shly Shaley, V Very.
SORTING: E Even, G Good, P Poor, F Fair.
MISCELLANEOUS: Bent Bentonite/Bentonitic, Carb Carbonaceous, Cong Conglomerate, Fos Fossils/Fossiliferous, Mic Micaceous, S S Sandstone.

ORM 109-A

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off
(FORMATION TESTER)

No. T 1-49002

Los Angeles 15, Calif. November 23, 1948

Mr. R. E. Foss
Los Angeles 15, Calif.
Agent for BARNSDALL OIL COMPANY

DEAR SIR:

Your well No. "Rancho San Francisco" 66-6, Sec. 27, T. 4 N., R. 17 W., S. B. B & M.
Newhall-Potrero Field, in Los Angeles County, was tested for water shut-off on November 15, 1948. Mr. Paul Betts, Inspector, designated by the supervisor, was present as prescribed in Secs. 3222 and 3223, Ch. 93, Stat. 1939; there were also present Hal Stanier, Engineer; Jim Murphy, Drilling Foreman.

Shut-off data: 4-1/2 in. 16.6 lb. ~~casing~~ drill pipe liner xxxx at 14505 ft. on November 16, 1948, in 5-7/8" in. hole with 230 sacks of cement xxxxx of which 1 sacks was left in casing.

Casing record of well: 13-3/8" cem. 401'; 7" cem. 10668', c.p. 10225' and 10221'; eight 3/8" test holes 10574'-10575'; four 3/8" test holes 10553', 10530', and 10219', W.S.O.; four 3/8" perfs. 10436', perf. 10478'-10473', and 10468'-10438' (both cem. off), perf. and *

Present depth 14509 ft. Bridged with cement from 14505 ft. to 14504 ft. Cleaned out to 14504 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 tester was run into the hole on 3½ 2-3/8 in. drill pipe/tubing, with 4427 ft. of ~~water~~-mud cushion, and packer set at 9710 ft. with tailpiece to 14128 ft.

Tester valve, with 3/8 in. bean, was opened at 4:35 p.m. and remained open for 1 hr. and xxx min. During this interval there was a light blow for 3 min., and a faint blow for the balance of the test.

*reperf. 10430'-10400' and 10391'-10356', perf. 10351'-10315'; 4-1/2" cem. 10131'-14505', c.p. 13602'; four 3/8" test holes at 14149', W. S. O.

THE INSPECTOR ARRIVED AT THE WELL AT 10:30 P. M. AND MR. STANIER REPORTED:

1. Cement was drilled out of the 4-1/2" liner from 10192' to 10341' and from 13504'-13597', and the hole was cleaned out to 14,504'.
2. A Johnston tester was run as noted above.

THE INSPECTOR NOTED THAT when the drill pipe and tubing was removed, there was a net rise of 1260' of gas and gassy oil-stained drilling fluid. There was no evidence of free water in the column of fluid.

The test was completed at 11:45 p.m.

THE WATER SHUT-OFF ABOVE THE PERFORATIONS AT 14149' IS APPROVED.

PWB:OR

cc- Company

R. D. BUSH, State Oil and Gas Supervisor

By E. H. Maurer, Deputy

90092 5-48 12,500 ② SPO

FORM 109-D

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 1-48983

Mr. R. E. Foss, Los Angeles 15, Calif. November 15, 1948
Los Angeles 15, Calif.
Agent for BARNSDALL OIL COMPANY

DEAR SIR:

Operations at your well No. "Rancho San Francisco" 66-6 Sec. 27, T. 4 N., R. 17 W., S.B. B. & M., Newhall-Potrero Field, in Los Angeles County, were witnessed by J. L. White, Inspector, representative of the supervisor, on November 12, 1948. There was also present T. H. Prehode, Superintendent; H. Stanier, Engineer.

Casing Record 13-3/8" cem. 401'; 7" cem. 10668', c.p. 10225' and 10221'; eight 3/8" test holes 10574'-10575', four 3/8" test holes 10553', 10530', and 10219', W.S.O.; four 3/8" perfs. 10436', perf. 10478'-10473' and 10468'-10438' (both cem. off); perf. and reperf. 10430'-10400' and 10391'-10356', perf. 10351'-10315'; 4-1/2" cem. *

Junk None.

The operations were performed for the purpose of demonstrating that no fluid has access to the well between the 7" and 4-1/2" casings.

~~The inspector arrived at the well at and Mr. reported~~ *10131'-14505', c.p. 13602'; four 3/8" perfs. 14149'; T. D. 14509', plugged with cement 7 - 10192'.

THE INSPECTOR ARRIVED AT THE WELL AT 10:45 A. M. AND MR. STANIER REPORTED:

1. On January 30, 1948, 40 sacks of cement was squeezed away through the perforations at 10478'-10473' and 10468'-10438'.
2. The 7" casing was shot-perforated with four 3/8" holes at 10436'. These holes tested dry.
3. The 7" casing was shot-perforated and and reperforated from 10430'-10400'.
4. The 7" casing was shot-perforated 10391'-10356' and 10351'-10315', and was reperforated 10391'-10356'.
5. A 5-7/8" rotary hole was drilled from 10668' to 14509'.
6. On October 16, 1948, 4-1/2", 16.6 lb. drill pipe liner was cemented 10131'-14505' with 230 sacks of cement.
7. On October 19, 1948, the 7" - 4-1/2" splice at 10131' was squeezed with 75 sacks of cement.
8. The 4-1/2" casing was shot-perforated with four 3/8" holes at 14149'.
9. On November 7 and 9, 1948, a total of 50 sacks of cement was squeezed away through a hole in the 4-1/2" casing at 13602'.
10. On November 10, 1948, the 7" - 4-1/2" splice at 10131' was recemented and an estimated 6 sacks of cement was squeezed away.
11. Cement was drilled out of the 7" and 4-1/2" casings to 10193'.
12. A Johnston tester was run into the hole on 3-1/2" drill pipe with 1502' of mud cushion, and the packer set at 10090'.
13. The tester valve was opened at 6:40 a.m. and remained open 1 hr. During this interval, there was a light puff, and no blow thereafter.

THE INSPECTOR NOTED:

1. When the drill pipe was removed, 5' of drilling fluid was found in the drill pipe above the tester, equivalent to 0.1 bbl.

R. D. BUSH
State Oil and Gas Supervisor

By (CONTINUED ON PAGE 2) Deputy

66681 2-48 16,250 ② SPO

FORM 109-X. 36345 7-44 7500
CALIFORNIA STATE PRINTING OFFICE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off
OR
Special Report on Operations Witnessed

No. T 1-48983

Page 2

BARNSDALL OIL COMPANY

Well No. "Rancho San Francisco" 66-6, Sec. 27, T. 4 N., R. 17 W., S.B. B. & M.,

2. The recording pressure bomb chart showed that the tester valve was open 1 hr. The test was completed at 11:45 a.m.

THE OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED AS INDICATING THAT NO FLUID HAS ACCESS TO THE WELL BETWEEN THE 7" AND 4-1/2" CASINGS.

JLW:OH

B/my

cc- Company

Stauner - Barton
O.K. to run 4400' of water cushion on test of WSO

R. D. BUSH
State Oil and Gas Supervisor

By E.H. Musser Deputy

FORM 109-A

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off
(FORMATION TESTER)

No. T 1-47733

Los Angeles 15, Calif. February 4, 1948

Mr. R. E. Foss,
Los Angeles 15, Calif.
Agent for BARNSDALL OIL COMPANY

DEAR SIR: "Rancho San Francisco"

Your well No. 66-6, Sec. 27, T. 4 N., R. 17 W., S. B. B. & M.
Newhall-Potrero Field, in Los Angeles County, was tested for water shut-off on January 28, 1948. Mr. Paul Bette, Inspector, designated by the supervisor, was present as prescribed in Sec. 3222 and 3223, Ch. 93, Stat. 1939; there were also present T. Prehoda, Superintendent; Dwight Fortine, Engineer.

Shut-off data: 7 in. 23, 26, / 29 & 32 lb. casing was cemented at 10221 ft. on January 26, 1948 through perforations in 11" hole with 40 sacks of cement of which 4 sacks was left in casing.

Casing record of well: 13-3/8" cem. 401'; 7" cem. 10668', perf. 10478'-10473' and 10468'-10438', c.p. 10225' and 10221'; eight 3/8" test holes 10574'-10575'; four 3/8" test holes at 10553', 10530', and 10219', W. S. O.

Reported total depth 10668 ft. Bridged with cement from 10668 ft. to 10417 ft. Cleaned out to 10417 ft. for this test.

A pressure of xxx lb. was applied to the inside of casing for xxx min. without loss after cleaning out to mud xxx ft.

A Johnston tester was run into the hole on 3-1/2 in. drill pipe, with 1530 ft. of water cushion, and packer set at 10199 ft. with tailpiece to 10217 ft. Tester valve, with 3/8" bean, was opened at 8:01 a.m. and remained open for 1 hr. and xxx min. During this interval there was a medium blow for 2 minutes, and no blow thereafter.

THE INSPECTOR VISITED THE WELL FROM 8:45 P. M. TO 11:30 P. M., JANUARY 16, 1948, AND MR. FORTINE REPORTED:

1. A 12-1/4" rotary hole was drilled from 401' to 8370'; an 11" rotary hole, from 8370' to 10668'.
2. Electrical core readings showed the top of the 6th zone at 10290'.
3. On December 31, 1947, 7", 23, 26, 29, and 32 lb. casing was cemented at 10668' with 600 sacks of cement.
4. Cement was drilled out of the 7" casing from 10302' to 10656' (equivalent to 61 sacks), and the casing was cleaned out to 10656'.
5. The 7" casing was shot-perforated with eight 3/8" holes at 10574'-10575', which tested wet.
6. On January 9, 1948, the hole was plugged with 35 sacks of cement from 10655'-10555'.
7. The 7" casing was shot-perforated with four 3/8" holes at 10553'.
8. A test of the above perforations was unsatisfactory to the company.
9. On January 12, 1948, the hole was plugged with 35 sacks of cement from 10555'-10533'.
10. The 7" casing was shot-perforated with four 3/8" holes at 10530'.
11. A test of the above perforations showed no oil or gas.
12. On January 15, 1948, the hole was plugged with 35 sacks of cement from 10533'-10513'.
13. The 7" casing was shot-perforated with four 3/8" holes at 10225'.
14. A Johnston tester was run into the hole on 3-1/2" drill pipe, and packer set at 10201'.
15. The tester valve was opened at 4:04 p.m. and remained open 1 hr. and 6 minutes. During this interval there was a light blow, decreasing to no blow at the end of 10 minutes, dead for 18 minutes, and occasional light puffs for the remainder of the test.

THE INSPECTOR NOTED:

1. When the drill pipe was removed, a net rise of 810' of medium, gassy, drilling fluid grading to water with a trace of oil was found in the drill pipe above the tester, equivalent to 5.9 bbl.

R. D. BUSH, State Oil and Gas Supervisor

By (CONTINUED ON PAGE 2), Deputy

79218 8-47 12,500 SPO

FORM 109-X. 36345 7-44 7500
CALIFORNIA STATE PRINTING OFFICE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off
OR
Special Report on Operations Witnessed

No. T 1-47733
Page 2

BARNSDALL OIL COMPANY

Well No. "Rancho San Francisco" 66-6, Sec. 27, T. 4 N., R. 17 W., S. B. B. & M.,

2. Water filtered from fluid samples taken from 546', 273', and 0' above the bottom of the drill pipe tested 82, 191, and 305 grains of salt per gallon, respectively.
3. The recording pressure bomb chart showed that the tester valve was open for the duration of the test.

The operator decided to recement.

THE INSPECTOR ARRIVED AT THE WELL 1:30 P. M. AND MR. FORTINE REPORTED:

1. On January 17, 1948, a removable retainer was set at 10205', and the 7" casing was cemented through the perforations at 10225' with 50 sacks of cement, of which 9 sacks was squeezed away at a final pressure of 6000 lb.
2. The hole was cleaned out to 10513' and the 7" casing was shot-perforated with four 3/8" holes at 10221', which tested wet.
3. The 7" casing was shot-perforated from 10478' - 10473' and 10468' - 10438'.
4. The above perforated intervals tested wet.
5. On January 21 and 23, 1948, the hole was plugged with cement from 10508'-10417' in two stages of 35 sacks each through drill pipe hanging at 10508' and 10440'.
6. On January 26, 1948, a cement retainer was set at 10200', and the 7" casing was cemented through perforations at 10221' with 40 sacks of cement of which 32 sacks was squeezed away at a final pressure of 6500 lb.
7. Set cement and the cement retainer was drilled out of the 7" casing from 10198'-10222', and the hole was cleaned out to 10417'.
8. The 7" casing was shot-perforated with four 3/8" holes at 10219' for this test.

THE INSPECTOR NOTED:

1. When the drill pipe was removed, a net rise of 15' of frothy, gas-cut, drilling fluid was found 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 hr.

The test was completed at 2:00 p.m.

THE WATER SHUT-OFF ABOVE THE PERFORATIONS AT 10219' IS APPROVED.

PWB:OH

cc- Company

R. D. BUSH
State Oil and Gas Supervisor
By E. H. Musser Deputy

FORM 109-D

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 1-47213

Mr. R. E. Foss, Los Angeles 15, Calif. October 2, 1947
Los Angeles 15, Calif.
Agent for BARNSDALL OIL COMPANY

DEAR SIR:

Operations at your well No. 66-6 "Rancho San Francisco" Sec. 27, T. 4 N., R. 17 W., S.B. B. & M., Newhall-Potrero Field, in Los Angeles County, were witnessed by J. L. White, Inspector on September 30, 1947. There was also present F. Berger, Driller; O. B. Burkhart, Derrickman, representative of the supervisor,

Casing Record 13-3/8" cem. 401'. T. D. 6025'. | Junk xxxx

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

The inspector arrived at the well at 11:00 a.m. and Mr. Berger reported:

1. A 17-1/2" rotary hole was drilled from the surface to 401'.
2. On September 5, 1947, 13-3/8", 52.7 lb. casing was cemented at 401' with 350 sacks of cement.
3. A 12-1/4" rotary hole was drilled from 401' to 6025'.

THE INSPECTOR NOTED THAT THE WELL WAS EQUIPPED WITH THE FOLLOWING BLOWOUT PREVENTION EQUIPMENT:

1. A Shaffer ram-type gate for closing in the well with the drill pipe out of the hole.
2. A Shaffer ram-type gate for closing around the 5-9/16" 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 13-3/8" casing below the above equipment.

The inspection was completed at 11:15 a.m.

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

JLW:OH

cc- Company

R. D. BUSH
State Oil and Gas Supervisor
By E. H. Meussen Deputy

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STATE PRINTING OFFICE

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Records Filed
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STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-43805

Los Angeles 15, Calif. August 29, 1947

MR. R. E. Foss

Los Angeles 15, Calif.

Agent for BARNSDALL OIL COMPANY

DEAR SIR:

Your proposal to drill Well No. "Rancho San Francisco" 66-6, Section 27, T. 4 N., R. 17 W., S.B. B. & M., Newhall-Potrero Field, Los Angeles County, dated Aug. 22, 1947, received Aug. 26, 1947, 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:

"The well is 1311 feet S. and 2300 feet E. from Corner "J"
Kelly bushing 1183
The elevation of the derrick floor above sea level is 1180 feet.
conc.mat 1174.16
We estimate that the Top 6th zone sand should be encountered at a depth of about 10,100 feet."

PROPOSAL:

"We propose to use the following strings of casing, either cementing or landing them as herein indicated:

Size of Casing	Weight	Grade and Type	Depth	Landed or Cemented
13 3/8"	52.74#	Smls. slip jt.	450'	cemented
* 9 5/8"	36 & 40#	J 55	8,300'	cemented
7"	23,26,29,32#	N 80	10,100'	"
5½"	17#	N 80	10,500'	Hung

*Protection string only

Well is to be drilled with rotary tools.

It is understood that if changes in this plan become necessary we are to notify you before cementing or landing 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. Blowout prevention equipment, sufficient to provide a complete close-in of the well under pressure at any time, shall be installed.
3. Any hole to be sidetracked in any oil or gas zone shall be filled with cement, if possible.
4. THIS DIVISION SHALL BE NOTIFIED AS FOLLOWS
   (a) To inspect the installed blowout prevention equipment before drilling below 1500'.
   (b) To witness a test of the effectiveness of the 7" shut-off.

cc - Company

CLB:ES

Blanket bond.

R. D. BUSH
State Oil and Gas Supervisor

By E. H. Nusser Deputy

FORM 105.
CALIFORNIA STATE PRINTING OFFICE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
AUG 26 1947
LOS ANGELES, CALIFORNIA

037-10663

Notice of Intention to Drill New Well 3

This notice must be given and surety bond filed before drilling begins

Los Angeles Calif. August 22 19 47

DIVISION OF OIL AND GAS

Los Angeles, Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of drilling well No. "Rancho San Francisco" #66-6, Sec. 27, T. 4 N. R. 17 W., SB B. & M., Newhall-Potrero Field, Los Angeles County.

NW

Lease consists of

The well is 1311 feet N. or S., and 2300 feet E. or W. from Corner "J"
(Give location in distance from section corners or other corners of legal subdivision)

The elevation of the derrick floor (Kelly bushing) above sea level is 1183 / 1180 / 1174.16 feet.
ground / conc. mat

We estimate that the first productive oil or gas sand should be encountered at a depth of about 10,100 feet.
Top 6th zone

We propose to use the following strings of casing, either cementing or landing them as herein indicated:

Size of Casing, Inches	Weight, Lb. Per Foot	Grade and Type	Depth	Landed or Cemented
13 3/8"	52.74#	Smls. slip jt.	450'	cemented
* 9 5/8"	36 & 40#	J 55	8,300'	cemented
7"	23,26,29,32#	N 80	10,100'	"
5½"	17#	N 80	10,500'	Hung

* Protection string only

Well is to be drilled with rotary / ~~cable~~ tools.

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

Address 714 W. Olympic Blvd., Los Angeles

DARNSDALL OIL COMPANY
(Name of Operator)

Telephone number RI 5171

By R. C. Foot Agent

ADDRESS NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

MAP	MAP BOOK	CARD	BOND	FORMS 114	FORMS 121
18A NW	NW	Y.	Blanket	Y	Y