

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST-RECORDS RECEIVED AND WELL STATUS

Operator: So Cal Gas WELL DESIGNATION "Porter" 26

API No. 037 00713 SE 28 T: 3N R: 16W , SB B. and M.

County: Los Angeles FIELD: Aliso Canyon

Type of Notice: _____ Date _____ Report Number: _____

RECORDS RECEIVED (ATTACH PAGES IF REQUIRED)

NEW STATUS

	Date	OK	NEED	Remarks
Well Summary (OG100)				
History (OG103)				
E-Log				
Mud Log				
Dipmeter				
Directional				
Core and/or SWS				
<u>Noise Temp (MIT)</u>	<u>3/17/16</u>	<input checked="" type="checkbox"/>		<u>E. B.</u>

DATE: _____

NOTICE OF RECORDS DUE

DATE: _____

DATE: _____

DATE: _____

DATE: _____

WELL STATUS INQUIRY

DATE: _____

DATE: _____

Well Stat

Change Required: _____

Change Done: _____

ABANDONMENTS/REABANDONMENTS/DRILLS/REDRILLS

CalWims Abandonment Form: _____ SURFACE INSPECTION NEEDED _____ COMPLETED _____

Date and Inspector

FINAL LETTER NEEDED _____ COMPLETED _____ Calwims DRILL/REDRILL Form _____

(Date)

ENGINEER'S CHECK LIST

T-REPORT(S) OPERATOR'S NAME WELL DESIGNATION SIGNATURE

Calwims Location _____ Calwims ELEVATION: _____ CONFIDENTIAL RELEASE DATE: _____ PERMIT REQUIREMENTS MET _____

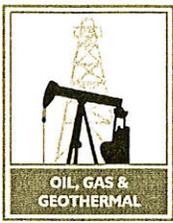
CLERICAL CHECK LIST

LOCATION CHANGE (OG165) _____ ELEVATION CHANGE (OG165) _____ RELEASE OF BOND (OG150) _____

REMARKS

RECORDS SCANNED: _____
(Date)

RECORDS APPROVED: _____
(Date and Engineer)



DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003-4458
Phone:(805) 654-4761 Fax:(805) 654-4765

No. T216-0087

REPORT ON OPERATIONS

GAS STORAGE PROJECT
"Sesnon-Frew" - Modelo (Miocene-Eocene)

Amy Kitson
Southern California Gas Company (S4700)
12801 Tampa Ave., SC9382
Northridge, CA 91326

Ventura, California
April 13, 2016

Your operations at well "**Porter**" 26, A.P.I. No. **037-00713**, Sec. **28**, T. **03N**, R. **16W**, **SB B. & M.**, **Aliso Canyon** field, in **Los Angeles** County, were witnessed on **3/17/2016**. **Ernest Blevins**, a representative of the supervisor.

The operations were performed for the purpose of **demonstrating that all of the injection fluid is confined to the approved zone.**

DECISION:

WITNESSED

Kenneth A. Harris Jr.
State Oil and Gas Supervisor

By pp Inclusion For PAAbel
Patricia A. Abel
District Deputy

EB/tkc
OG109

MECHANICAL INTEGRITY TEST (MIT)

Operator: <u>S₀ CA GAS</u>					Well: <u>"Porter" 26</u>				
Sec <u>28</u>	T. <u>3N</u>	R. <u>16W</u>	B.&M. <u>SB</u>	API No.: <u>037 00713</u>			Field: <u>Aliso Canyon</u>		
County: <u>Los Angeles</u>					Witnessed/Reviewed on: <u>3-17-16</u>				
<u>Ernie Blevins</u> , representative of the supervisor, was present from <u>1300</u> to <u>1645</u> .									
Also present were: <u>Sergio w/ Welaco (Chris)</u> <u>Nick w/ InterAct</u> ^{Noise Survey}									
Casing record of the well: <u>13³/₈" 0-522</u> <u>9⁵/₈" 0-6,119</u> <u>5" Liner 6010-7895</u> <u>5" Screen 7895-8,202</u>									
The MIT was performed for the purpose of demonstrating that all the injection fluid is confined to the approved zone. <div style="text-align: right; font-size: 1.2em;"><u>Temperature & Noise Survey</u></div>									
<input type="checkbox"/> The MIT is approved since it indicates that all of the injection fluid is confined to the formations below _____ feet at this time.									
<input type="checkbox"/> The MIT is not approved due to the following reasons: (specify)									

Well: <i>Porter 26</i>	Date: <i>3-17-16</i>	Time: <i>1330</i>
Observed rate: ϕ B/D	Meter rate: ϕ B/D	Fluid level: ϕ feet
Injection pressure: <i>1217</i> psi	MASP:	Pick-up depth: <i>8020</i> feet
Initial annulus pressure: <i>1217</i> psi	Pressure after bleed-off: <i>(circled)</i> psi	

Casing vented during test (Y/N) <i>(circled)</i>	Survey company: <i>Well Analysis Co.</i>
--	--

<u>SPINNER COUNTS</u>						
DEPTH	COUNTS	RATE	DEPTH	COUNTS	RATE	COMMENTS:
<hr/>						<i>Spinner Not Used</i>

<u>TRACER CASING AND TUBING RATE CHECKS</u>				
Interval	Time (sec.)	Rate (B/D)	Background log:	to
			COMMENTS: <i>Temp survey results: Slight discrepancy from 600-2000'</i>	

TOP PERFORATION CHECK

Top perforation depth: <i>7602</i>	Wait at: _____ for _____ seconds	Beads: (Y/N) <i>(circled)</i>
------------------------------------	----------------------------------	-------------------------------

Casing shoe at: <i>6119</i>	WSO holes at: _____	Arrival time: <i>Calculated</i> _____ <i>Actual</i> _____
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LOG FROM	TO	SLUG @	LOG FROM	TO	SLUG @	COMMENTS:
<hr/>						

PACKER CHECK

Packer at: <i>5840</i>	Wait at: _____ for _____ seconds	Beads: (Y/N)
------------------------	----------------------------------	--------------

Tubing tail at: <i>5822</i>	Tubing size: <i>2 7/8</i>	2nd Packer at: <i>5823</i>	Mandrel: <i>mmA Gas Lift 5711</i>
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LOG FROM	TO	SLUG @	LOG FROM	TO	SLUG @	COMMENTS:
<hr/>						

COMMENTS:

OPERATOR SOUTHERN CAL GAS
 LSE & NO SF24 P26
 MAP 250

	(7)	(8)	(9)	()	()	()
INTENTION	ALTR CSG	ACTR CSG IN GAS STOR	ALTR CSG IN GAS STOR.	rework	REWORK	
NOTICE DATED	2-23-73	5-21-76	4-15-77	8-28-91	11-12-92	
P-REPORT NUMBER	273-115	274-196	277-134	291-361	292-357	
CHECKED BY/DATE						
MAP LETTER DATED	N/C	N/C	N/C	N/C	N/C	
SYMBOL						

	REC'D NEED		REC'D NEED		REC'D NEED		REC'D NEED		REC'D NEED		REC'D NEED	
NOTICE	3-2-73		6-10-76		4-21-77		8-29-91		11-18-92			
HISTORY	10-31-72			X	7-21-77		1-29-92		1-13-93			
SUMMARY												
IES/ELECTRIC LOG												
DIRECTIONAL SURV												
CORE/SWS DESCRIP												
OTHER							GAMMA NEUT/COLL. 3/23/92					
RECORDS COMPLETE	(2)				(2)		5-27-92 SPM		1-27-92 SPM			

ENGINEERING CHECK

T-REPORTS	_____
OPERATOR'S NAME	_____
WELL DESIGNATION	_____
LOC & ELEV	_____
SIGNATURE	_____
SURFACE INSPECTION	_____
FINAL LETTER OK	_____

CLERICAL CHECK

POSTED TO 121 _____	170 MAILED _____	FINAL LETTER MAILED _____
_____	_____	RELEASED BOND _____
_____	_____	_____
_____	_____	_____
_____	_____	_____

REMARKS: _____

SUBMIT IN DUPLICATE
RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED

JAN 13 1993

History of Oil or Gas Well

VENTURA, CALIFORNIA

Southern California Gas Company Aliso Canyon County Los Angeles
Operator Porter 26 Field 28 County 3N
Well 037-00713 Sec. Phillips, T 3N, R 16W S.B. & M.
A.P.I. No. December 17, 1992 Name R. D. Phillips Title Agent
Date , 19..... (Person submitting report) (President, Secretary or Agent)

Signature *J.P. Wesson*
J. P. Wesson for R. D. Phillips
P. O. Box 3249 Los Angeles, CA 90051-1249 (213-244-2664)

(Address)

(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
1992

- 11-30 Moved in. Rig up.
- 12-01 Rigged up slickline unit. Opened sliding sleeve at 5756'. Tubing pressure at 2830'. Casing pressure at 2800 psi.
- 12-02 Pressure tested lines to 3500 psi. Killed well with 255 Bbls of 72#/cf NaCl/polymer. Installed 11" x 5000# Class III BOPE. Tested blind rams and choke manifold to 5000 psi. Bled off pressure. Removed back pressure plug. Filled well with 60 Bbls. Circulated well. Tested 2-7/8" pipe rams to 5000 psi. Tested bag to 3000 psi. Circulated well.
- 12-03 Circulated well. Released from Otis packer at 5823'. Pulled 2-7/8" tubing. Ran and set Baker Model "C" bridge plug at 5770'. Pulled out of well. Removed tubing head and seal flange. Removed BOPE.
- 12-04 Unlanded 6-5/8" casing. Removed slips. Re-installed BOPE. Unlatched from Otis packer at 5840'. Pulled and laid down two joints of 6-5/8" casing. Top pin appeared undersized and joints were not made up tight. Circulated 63#/cf KCl water out of well.
- 12-05 Circulated well (fluid coming back gas cut). Circulated well adding defoamer to system. Pulled up and checked next joint of 6-5/8" 24# K-55 casing. Connection tight. Latched into packer at 5840'. Pressure tested casing and seals to 1000 psi. Released from packer. Changed annulus over to 3% KCl water. Latched into packer. Pulled 20,000 lbs over string weight to check latch. Set 15,000 lbs on packer. Pressure tested seals, packer and casing to 1500 psi for 20 min.

Doc 1/12/93

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

No. P292-358
Field Code 10
Area Code 10
New Pool Code 30
Old Pool Code 30

PERMIT TO CONDUCT WELL OPERATIONS
GAS STORAGE

R.D. Phillips, Agent
Southern Calif. Gas Company
810 S. Flower St.
Los Angeles, CA. 90017

Ventura, California
December 9, 1992

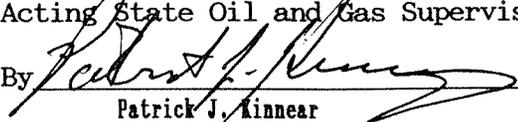
Your proposal to rework well "Porter" 26 ,
A.P.I. No. 037-00713, Section 28, T. 3 N, R. 16W, S.B. B.&M.,
Aliso Canyon field, --- area, Sesnon-Frew pool,
Los Angeles County, dated 11-19-92, received 11-23-92, has been
examined in conjunction with records filed in this office.

THE PROPOSAL, COVERING WORK ALREADY COMPLETED IN ACCORDANCE WITH PRIOR
AGREEMENT, IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class III 5M 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. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
SF:nr

Engineer Steve Fields
Phone (805) 654-4761

WILLIAM F. GUERARD, Jr.
Acting 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.

NOV 23 1992

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.

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD 114	OGD 121
BB	11-23-92 ✓	✓

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 Porter #26 (Well designation), API No. 037-00713
Sec. 28, T. 3N, R. 16W, SB B. & M., Aliso Canyon Field, Los Angeles County.

The present condition of the well is as follows:

- Total depth 8297'
- Complete casing record, including plugs and perforations (present hole)
See Attachment

- Present producing zone name Sesnon; Zone in which well is to be recompleted _____
- Present zone pressure 3350 psig; New zone pressure _____
- Last produced Gas Storage Project (Date) (Oil, B/D) (Water, B/D) (Gas, Mcf/D)
(or)
Last injected _____ (Date) (Water, B/D) (Gas, Mcf/D) (Surface pressure, psig)
- Is this a critical well according to the definition on the reverse side of this form? (Yes) (No)

The proposed work is as follows:

See Attachment

Note: If well is to be redrilled, show proposed new bottom-hole coordinates and true vertical depth.

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

Address P. O. Box 3249 (Street)
Los Angeles, CA 90051-1249 (City) (State) (Zip)
Telephone Number (213) 244-2665

Southern California Gas Co. (Name of Operator)
By E. S. Sinclair for R. D. Phillips (Agent)
[Signature] (Name - Signature) 11-19-92 (Date)

Type of Organization Corporation
(Corporation, Partnership, Individual, etc.)

NOV 23 1992

NOTICE OF INTENTION TO REWORK WELL VENTURA, CALIFORNIA
PORTER #26

ATTACHMENT

2. Complete casing record, including plugs and perforations
(present hole)

0' - 523'	13-3/8"	55#	J-55 Baash Ross casing bowl at 80'
0' - 1811'	9-5/8"	43#	J-55
1811' - 3436'	9-5/8"	40#	N-80
3436' - 6120'	9-5/8"	43#	N-80 Packer at 5840'
0' - 5840'	6-5/8"	24#	K-55 Packer at 5823'
6007' - 8297'	5"	18#	WSOs at 7602', 7877'; Perforations: 7658'-64', 7686'-90', 7710'-7722', 7742'- 7748', 7752'-7766', 7772'- 7778', 7785'-7790', 7796'- 7800', 7820'-7860', 7890'- 7900', 7916'-7920', 7950'- 8192', 8014'-8203'

The proposed work is as follows:

1. Move in, rig up and install and test BOPE.
2. Pull tubing.
3. Locate leak then pull 6-5/8" inner casing up to leak and repair.
4. Reinstall 6-5/8" inner casing string.
5. Install production tubing.
6. Remove BOPE, install xmas tree and return well to service.

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

No.P292-357
Field Code 10
Area Code 10
New Pool Code 30
Old Pool Code 30

PERMIT TO CONDUCT WELL OPERATIONS
GAS STORAGE

R.D. Phillips, Agent
Southern Calif. Gas Company
810 S. Flower St.
Los Angeles, CA. 90017

Ventura, California
December 9, 1992

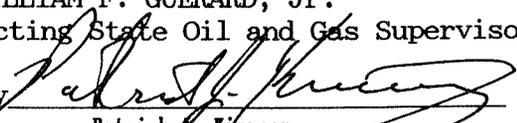
Your proposal to rework well "Porter" 26,
A.P.I. No. 037-00713, Section 28, T. 3 N, R. 16W, S.B. B.&M.,
Aliso Canyon field, --- area, Sesnon-Frew pool,
Los Angeles County, dated 11-12-92, received 11-18-92, has been
examined in conjunction with records filed in this office.

THE PROPOSAL, COVERING WORK ALREADY COMPLETED IN ACCORDANCE WITH PRIOR
AGREEMENT, IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class III 5M 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. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
SF:nr

Engineer Steve Fields
Phone (805) 654-4761

WILLIAM F. GUERARD, Jr.
Acting State Oil and Gas Supervisor
By 
Patrick A. 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.

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

No. P292-357
Field Code 10
Area Code 10
New Pool Code 30
Old Pool Code 30

PERMIT TO CONDUCT WELL OPERATIONS

R.D. Phillips, Agent
Southern Calif. Gas Company
810 S. Flower St.
Los Angeles, CA. 90017

Ventura, California
December 4, 1992

Your proposal to rework well "Porter" 26,
A.P.I. No. 037-00713, Section 28, T. 3 N, R. 16W, S.B. B.&M.,
Aliso Canyon field, --- area, Sesnon-Frew pool,
Los Angeles County, dated 11-12-92, received 11-18-92, has been
examined in conjunction with records filed in this office.

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AGREEMENT, IS APPROVED PROVIDED THAT:

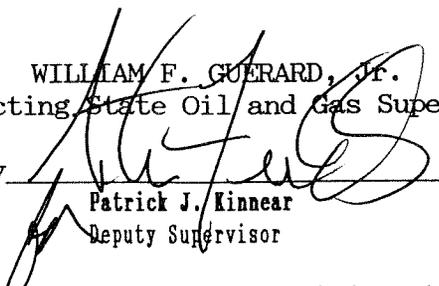
1. Blowout prevention equipment conforming to DOG Class III 2M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
SF:nr

Engineer Steve Fields

Phone (805) 654-4761

WILLIAM F. GUERARD, Jr.
Acting 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

NOV 18 1992

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.

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD 114	OGD 121
BB	11-20-92 ✓	✓

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 Porter 26 (Well designation), API No. 037-00713
Sec. 28, T. 3N, R. 16W, SB B. & M., Aliso Canyon Field, Los Angeles County.

The present condition of the well is as follows:

- Total depth 8297'
- Complete casing record, including plugs and perforations (present hole)
See Attachment
- Present producing zone name Sesnon Zone in which well is to be recompleted _____
- Present zone pressure 3350 psig; New zone pressure _____
- Last produced Gas Storage Project (Date) (Oil, B/D) (Water, B/D) (Gas, Mcf/D)
(or)
Last injected _____ (Date) (Water, B/D) (Gas, Mcf/D) (Surface pressure, psig)
- Is this a critical well according to the definition on the reverse side of this form? (Yes) (No)

The proposed work is as follows:

- Move in, rig up, install and test BOPE.
- Pull tubing.
- Pressure test 6-5/8" inner casing string.
- Place patch over shallow inner casing string leak.
- Reinstall tubing and wellhead.
- Return well to service.

Note: If well is to be redrilled, show proposed new bottom-hole coordinates and true vertical depth.

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

Address P. O. Box 3249 (Street)
Los Angeles, CA 90051-1249 (City) (State) (Zip)
Telephone Number (213) 244-2665

Southern California Gas Co. (Name of Operator)
By E. S. Sinclair for R. D. Phillips (Agent) (Name-Printed)
E. S. Sinclair (Name-Signature) 11-12-92 (Date)

Type of Organization Corporation
(Corporation, Partnership, Individual, etc.)

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

DIVISION OF OIL AND GAS
RECEIVED

NOV 18 1992

VENTURA, CALIFORNIA

NOTICE OF INTENTION TO REWORK WELL
PORTER #26

ATTACHMENT

Complete casing record, including plugs and perforations
(present hole)

0' - 523'	13-3/8"	55#	J-55 Baash Ross casing bowl at 80'
0' - 1811'	9-5/8"	43#	J-55
1811' - 3436'	9-5/8"	40#	N-80
3436' - 6120'	9-5/8"	43#	N-80 Packer at 5840'
0' - 5840'	6-5/8"	24#	K-55 Packer at 5823'
6007' - 8297'	5"	18#	WSO's at 7602', 7877'; perforations: 7658'-64', 7686'-90', 7710'-7722', 7742'-7748', 7752'- 7766', 7772'-7778', 7785'-7790', 7796'-7800', 7820'-7860', 7890'- 7900', 7916'-7920', 7950'-8192', 8014'-8203'.

SUBMIT IN DUPLICATE
RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED

JAN 29 1992

History of Oil or Gas Well

VENTURA, CALIFORNIA

Operator Southern California Gas Company Field Aliso Canyon County Los Angeles
Well Porter # 26, Sec 28, T3N, R16W, SB. B. & M.
A.P.I. No. 037-00756 00713 Name R. D. Phillips Title Agent
Date November 14, 1991 (Person submitting report) (President, Secretary or Agent)

Signature R. M. Dowell

R. M. Dowell for R. D. Phillips

P. O. Box 3249 Terminal Annex, Los Angeles, CA 90051 (213) 244-2680
(Address) (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

1991

- 8-30 Moved in and began rigging up.
- 9-3 Finished rigging up. Removed 8" x 5000 psi xmas tree and installed BOPE.
- 9-4 Finished installing BOPE. Tested choke manifold, blind and pipe rams to 5000 psi, annular preventer to 2000 psi. BOPE test waived by Bruce Hesson of the D.O.G.
- 9-5 Worked tubing and released from packer. Circulated gas out of well. Pulled and measured 2-7/8" tubing out of well. Laid down production equipment from 2-7/8" tubing.
- 9-6 Finished laying down 2-7/8" tubing. 2-3/8" tubing had parted at 7793'. Left 3 joints of 2-3/8" tubing, CAMCO "D" nipple and seal assembly in well. Made up bridge plug without top cup. Ran in and set at 5909'. Circulated bottoms up.
- 9-7 Pulled out of hole Lifted BOPE. Removed tubing head and seal flange with casing jacks. Unlanded 6-5/8" slips and packing. Reinstalled BOPE. Jacked out one joint of 6-5/8" casing at 150,000 lbs.
- 9-9 Pulled and laid down 141 joints of 6-5/8" 24# innerstring plus one cut off joint and seal assembly. Picked up 9-5/8" swab cup mandrel with 2 up cups and ran in hole on one joint of 2-7/8" tubing. Tested BOPE and spools to 1500 psi for 15 minutes. Started running in well with 2-7/8" tubing.

- 9-10 Ran in well with 2-7/8" tubing. Pulled out and laid down 2-7/8" tubing (189 joints total). Picked up kelly and swivel. Made up and ran in with packer retrieving tool, 8-1/2" millshoe, x-over, 2 junk baskets, x-over, bumper sub, jars, four 4-3/4" drill collars and 167 joints of 2-7/8" drill pipe to 5500'.
- 9-11 Finished running in hole with 2-7/8" drill pipe. Tagged top of packer at 5997'. Milled 9-5/8" packer for four hours while pumping at 5 Bbls/min. Packer milled free. Pulled out of hole to kill string.
- 9-12 Finished pulling out of well. Retrieved Baker Model "F-B1" packer with mill out extension and Baker "R" nipple. Made up bottom hole assembly and ran in hole with overshot with basket grapple, x-over, two junk baskets, x-over, bumper sub, jars, six 3" drill collars, accelerator, two x-overs, 73 joints of 2-3/8" drill pipe, x-over, and 167 joints of 2-7/8" drill pipe. Tagged tubing fish at 7755'. Worked lip guide over fish and picked up. Jarred 5 times at 100,000 lbs (38,000 lbs over string wt.). Picked up to 110,000 lbs and tubing came free. Started out of hole while dragging 10,000 lbs and tubing came free. Started out of hole while dragging 10,000 lbs over string weight.
- 9-13 Pulled out of well. Broke down tools. Recovered 4-1/2 joints of 2-3/8" tubing, CAMCO "D" nipple, Baker seal assembly (13 seals) and production tube. Made up and ran in hole with packer retrieving tool, 4" mill shoe, extension, x-over, drive sub, 2 junk baskets, x-over, bumper sub, jars, six 3" drill collars, x-over, 73 joints of 2-3/8" drill pipe, x-over and 80 stands of 2-7/8" drill pipe.
- 9-14 Tagged packer at 7902'. Started milling on 5" 18# Baker Model "D" packer. Milled for 8 hours on pieces of rubber and slips. Mill appeared to be worn out. Pulled 60 stands.
- 9-16 Pulled out of well. Drive sub had jumped box at mill shoe extension and was left in well. Made up and ran spear on drill pipe. Speared into fish at 7902'. Pulled out of liner with fish. Pulled to kill string.
- 9-17 Pulled out and recovered mill shoe. Laid down spear. Made up packer retrieving tool and mill shoe #2. Ran in and milled packer for 1-1/2 hours. Worked packer out of liner. Pulled to kill string.
- 9-18 Pulled kill string. Laid down packer and fishing tools. Made up and ran bit and 9-5/8" casing scraper to top of liner at 6013'. Started out of well.

- 9-19 Pulled out and laid down 9-5/8" scraper. Made up 4-1/8" bit and scraper. Ran in and tagged fill - 8139'. Cleaned out to 8159'. Unable to clean out junk. Circulated well clean. Started out of well.
- 9-20 Pulled out with bit and scraper. Made up 4" mill shoe. Ran in and cleaned out from 8159' to 8195'. Pulled to top of perforations.
- 9-21 Ran back to bottom. Cleaned out to 8198'. Circulated clean. Pulled out of well. Made up 5" RTTS tool. Ran in to 7580'. Could not set RTTS packer.
- 9-23 Pulled out of hole. Changed out first RTTS tool which had junk marks on it. Ran in and set RTTS at 7550'. Tested casing to 1500 psi for one hour. Started out of well.
- 9-24 Pulled out and laid down RTTS packer. Rigged up wireline. Ran Gamma/Neutron/Collar log in 5" 18# casing. Pulled out of well. Set drillable retainer on wireline at 7535'. Pulled out of well. Tested plug to 1000 psi. Made up perforating gun. Ran in and shot four 3/8" holes at 7513'. Rigged down wireline. Made up RTTS tool with 30' of 2-3/8" tubing tail. Started in the well.
- 9-25 Ran in well. Located retainer at 7535'. Set RTTS tool. Changed well fluid over to 2% KCL water. Dumped one sack of 8-12 sand down tubing. Waited one hour. Tagged top of sand at 7527'. Attempted to set RTTS packer at 7514'. Packer would not set. Circulated and backscuttled by RTTS packer. Unable to set packer. Closed pipe rams. Tested holes at 7513' to 1500 psi.
- 9-26 Pulled out of well. Changed out RTTS tools. Ran in and tagged top of sand at 7523'. Set packer at 7517'. Rigged up pump truck. Attempted to break down holes. Pumped 60 cu.ft. of 12% HCl/3% HF acid. Established final injection rate of 4 cu.ft./min at 2400 psi. Cleared holes of acid by 10 cu.ft.
- 9-27 Pumped 100 cu.ft. of 12%HCl/3%HF acid. Established final injection rate of 5 cu.ft. per minute at 2500 psi. Released packer. Pulled out of well. Rigged up wireline. Ran in and shot 4 holes 7513' to 7514'. Started in with RTTS tool to kill string.

- 9-28 Finished running in well. Set packer at 7480' with tubing tail at 7516'. Rigged up cementers. Pressure tested surface lines and connections to 3000 psi. Pumped 95 cf 12% HCl/3% HF acid and displaced with 80 cf KCl. Closed circulating valve and injected acid. Final injection rate was 12.5 cf/min at 2100 psi. Pulled packer up to 7230' with tail at 7266'. Pumped 30 cf of 6% HCl/1.5% HF acid followed by 28 cf fresh water, then 58 cf class "G" cement with 0.5% CFR-2 and 0.6% Halad 9. Displaced with 28 cf fresh water and 108 cf KCl. Closed circulating valve and squeezed 54 cf away through holes at 7513'. Final rate: 0.25 Bbl./min and 2550 psi. Left 4 cf cement in liner (40 linear feet). Held 2550 psi on casing for 4 hours (no bleed off). Released packer and circulated bottoms up to equalize fluid columns. Started pulling out of hole.
- 9-30 Pulled out of well. Made up 4-1/8" bit. Ran in and located top of cement at 7351'. Circulated bottoms up. Closed pipe rams and pressure tested squeeze holes at 7513' to 1600 psi. Lost 100 psi in one hour. Repressured to 1600 psi, lost 30 psi in 30 minutes. Pulled 2 stands.
- 10-01 Tagged 4' of fill. Backscuttled well clean. Pressure tested squeeze holes at 7513' to 1600 psi for two hours. No pressure bleed off. Changed fluid over to 72 pcf polymer. Backscuttled sand from plug. Drilled retainer at 7535'. Drilled and worked retainer to 7627'.
- 10-02 Drilled and worked retainer to 7659'. Pulled out of well. Changed bit and ran in well. Drilled retainer to 7722'. Retainer fell free. Ran in to 8195'. Pulled to top of perforations.
- 10-03 Ran in to 8195'. Circulated cement out of well. Pulled out and made up LPRN test tool. Picked up 1500' of 2-3/8" 8RD tubing. Ran in to 7485'. Installed 2" lines to manifold and tested to 4000 psi.
- 10-04 Set packer at 7485' - tail at 7515'. Opened LPR tool with 1500 psi annular pressure. Flowed well to Baker tank (22 Bbls fluid). Changed flow to Gas Company withdrawal line. Started flowing at 8MM cf/day and increased to 15MM cf/day. Flowed well for 12 hours then shut well in.
- 10-05 Rigged up loggers. Ran temperature log to 8150'. Bottom shieve broke and high stranded line. Pulled out of well. Rigged down loggers.
- 10-06 Rigged up loggers. Ran in to 8100'. Noise logged to 200'. Log indicated no gas movement above shoe. Pulled out of hole. Rigged down loggers. Pumped 40 bbls down pipe to kill well. Closed LPR tool. Pumped out circulating sub with 2300 psi pipe pressure. Released packer.

- 10-07 Circulated gas out of well. Pulled out of well. Laid down and loaded out LPR tools. Made up 4-1/8" bit. Ran in to 8195'. Backscuttled well clean. Started out of well.
- 10-08 Pulled out of well. Laid down 2-3/8" drill pipe and drill collars. Rigged up loggers. Made up Otis "WD" 9-5/8" x 5" bore packer. Ran in and set packer at 5840'. Loaded out loggers. Made up test seals. Ran in well and latched into packer. Pulled 20,000 lbs. over string weight to check latch. Tested packer to 1500 psi for 40 minutes. Pulled out of well laying down drill pipe.
- 10-09 Laid down drill pipe, drill collars, and kelly. Changed pipe rams to 6-5/8". Picked up and ran 6-5/8", 24#, LT&C casing while testing to 4000 psi and monitoring torque make-up on all connections. Ran pipe to 3950'.
- 10-10 Finished running 6-5/8" casing. Latched into packer. Pulled 20,000 lbs over. Set 10,000 lbs on packer. Tested to 1100 psi. Released from packer. Changed fluid over to double inhibited 2% KCl water. Landed 6-5/8" casing in packer with 10,000 lbs.
- 10-11 Picked up bridge plug. Could not get slips into 6-5/8". Changed out bridge plug. Picked up BOPE. Installed slips with 10,000 lbs weight on packer, 116,000 lbs weight on slips. Cut off 6-5/8" casing. Installed packing, seal flange and tubing head. Tested tubing head to 5000 psi. Changed pipe rams to 2-7/8". Tested BOPE to 1000 psi. Pulled bridge plug. Laid down 2-3/8" tubing. Picked up kill string of 2-7/8" tubing.
- 10-12 Pulled kill string. Ran and set 6-5/8" Otis "WB" packer on wireline at 5820'. Made up production equipment. Tested 2-7/8" tubing to 5000 psi while running in well. Latched into packer. Spaced out with 14,000 lbs weight on packer, 24,000 lbs on donut. Tested packer to 1000 psi.
- 10-14 Installed equalizing back pressure valve. Removed BOPE. Installed x-mas tree and tested with oil to 5000 psi. Rigged up wireline and opened sliding sleeve. Rigged down wireline. Changed over through sliding sleeve by pumping 200 Bbls of double inhibited 2% KCL water down backside. Released rig.

Cumulative Fluid Loss: 117 Bbls HEC Polymer

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

Ventura _____, California

November 6, 1991 _____

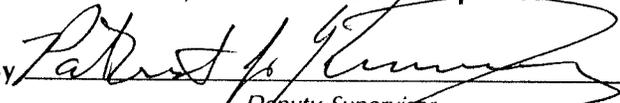
R. D. Phillips, Agent
SOUTHERN CALIFORNIA GAS COMPANY
P.O. Drawer 3249 Mail Location 22GO
Los Angeles, CA 90051-1249

Your request, dated July 24, 1991, proposing to change the designation of well(s) in Sec. 28, T. 3N, R. 16W, S.B. B. & M., Aliso Canyon field, Los Angeles County, District No. 2, has been received.

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

<u>FROM</u>	<u>TO</u>
"SFZU" P-4 (037-00699)	"Porter" 4 (037-00699)
"SFZU" P-25 (037-00712)	"Porter" 25 (037-00712)
✓ "SFZU" P-26 (037-00713)	"Porter" 26 (037-00713)
"SFZU" P-34 (037-00721)	"Porter" 34 (037-00721)
"SFZU" P-35 (037-00722)	"Porter" 35 (037-00722)
"SFZU" P-38 (037-00725)	"Porter" 38 (037-00725)
"SFZU" P-39 (037-00726)	"Porter" 39 (037-00726)
"SFZU" P-40 (037-00727)	"Porter" 40 (037-00727)
"SFZU" P-41 (037-00728)	"Porter" 41 (037-00728)
"SFZU" P-42 (037-00729)	"Porter" 42 (037-00739)
"SFZU" P-43 (037-00730)	"Porter" 43 (037-00730)
"SFZU" P-44 (037-00731)	"Porter" 44 (037-00731)
"SFZU" P-46 (037-00733)	"Porter" 46 (037-00733)
"SFZU" P-47 (037-00734)	"Porter" 47 (037-00734)

M. G. MEFFERD, State Oil and Gas Supervisor

By 
Deputy Supervisor
PATRICK J. KINNEAR

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

No. P291- 361
Field Code 10
Area Code 00
New Pool Code 30
Old Pool Code 30

PERMIT TO CONDUCT WELL OPERATIONS

R.D. Phillips, Agent
Southern Calif. Gas Company
810 S. Flower St.
Los Angeles, CA. 90017

Ventura, California
September 3, 1991

Your _____ proposal to rework well "SFZU" P-26
A.P.I. No. 037-00713, Section 28, T. 3N, R. 16W, S.B. B.&M.,
Aliso Canyon field, any area, Sesnon-Frew pool,
Los Angeles County, dated 8/28/91, received 8/29/91, has been
examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class III 5M 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. Wire line operations are conducted through at least a 5M lubricator.
4. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.
5. THIS DIVISION SHALL BE NOTIFIED:
 - a. To witness Noise log prior to returning well to service.

Blanket Bond
SF:ljb

Engineer Steve Fields

Phone (805) 654-4761

M.G. MEFFERD, State Oil and Gas Supervisor

By Patrick J. Kinnear
for
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.

010
/ 50
30

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

RECEIVED
DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

AUG 29 1991

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.

VENTURA, CALIFORNIA

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD 114	OGD 121
<i>AB</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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 "1730" P Porter #26 (Well designation), API No. 037-00713

Sec. 28, T. 3N, R. 16W, SB B. & M., Aliso Canyon Field, Los Angeles County.

The present condition of the well is as follows:

- Total depth 8297'
- Complete casing record, including plugs and perforations (present hole)
 - 0 - 523' 18-3/8" Cemented 523'
 - 0 - 6120' 9-5/8"
 - 0 - 5978' 6-5/8" Packer at 5978'
 - 6007' - 8203' 5" Perforation 8202'-7896' with 2 holes per foot. Squeezed 855 cu.ft. of cemented at 7896'. W.S.O. at 7877'
 - Perforations: 7742'-48', 7752'-66', 7772'-78', 7785'-90', 7790'-7800', 7820'-7860', 7890'-7900', 7916'-7920'
- Present producing zone name Sesnon; Zone in which well is to be recompleted _____
- Present zone pressure 3400 psig; New zone pressure _____
- Last produced Gas Storage Well (Date) _____ (Oil, B/D) _____ (Water, B/D) _____ (Gas, Mcf/D) _____
(or)
Last injected _____ (Date) _____ (Water, B/D) _____ (Gas, Mcf/D) _____ (Surface pressure, psig) _____
- Is this a critical well according to the definition on the reverse side of this form? (Yes) (No)

The proposed work is as follows:

- Move in, rig up, kill well and install and pressure test BOPE.
- Pull and lay down 2-3/8" and 2-7/8" tubing.
- Retrieve 6-5/8" and 5" packers.
- Shoot holes at approximately 7513' and squeeze casing leak.
- Flow and noise log well.
- Install 5" packer at 7900' and 6-5/8" packer near 5978'.
- Install 2-3/8" x 2-7/8" tubing.
- Remove BOPE and install wellhead.
- Return well to service.

Note: If well is to be redrilled, show proposed new bottom-hole coordinates and true vertical depth.

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

Address P. O. Box 3249, Terminal Annex (Street)
Los Angeles, California 90051 (City) (State) (Zip)
Telephone Number (213) 689-3925

Southern California Gas Company (Name of Operator)
By J. B. Lane for R. D. Phillips (Agent) (Name-Printed)
[Signature] (Name-Signature) 28 AUG 91 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

OPERATOR SOUTHERN GAS
 LSE & NO SF24 P-26
 MAP 250

	(1)	(2)	(3)	(4)	(5)	(6)
INTENTION	Drill	SUPP TO (1)	SUPP TO (2)	REDRILL	ACTR CS9	ACTR CS9
NOTICE DATED	8-8-41	10-23-41	11-21-41	9-7-62	9-15-69	6-22-70
P-REPORT NUMBER	1-36744	1-37040	1-37139	162-950	169-1033	170-579
CHECKED BY/DATE						
MAP LETTER DATED		N/C	N/C	N/C	N/C	N/C
SYMBOL	Q					

	REC'D NEED		REC'D NEED		REC'D NEED		REC'D NEED		REC'D NEED		REC'D NEED	
NOTICE	8-8-41		10-27-41		11-25-41		9-11-62		9-17-69		6-23-70	
HISTORY					6-17-42		3-1-63		12-5-69		11-4-70	
SUMMARY					6-17-62							
IES/ELECTRIC LOG												
DIRECTIONAL SURV							11-2-62					
CORE/SWS DESCRIP					6-17-42							
OTHER												
RECORDS COMPLETE					(9)		(10)		(11)		(12)	

ENGINEERING CHECK

T-REPORTS _____

OPERATOR'S NAME _____

WELL DESIGNATION _____

LOC & ELIV _____

SIGNATURE _____

SURFACE INSPECTION _____

FINAL LETTER OK _____

CLERICAL CHECK

POSTED TO 121 _____ 170 MAILED _____

FINAL LETTER MAILED _____

RELEASED BOND _____

REMARKS: _____

DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT OF CORRECTION OR CANCELLATION

Santa Paula, California

Aug. 26, 1977

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

In accordance with telecon J.Melton/J.Hardoin dated 8/25/77

the following change pertaining to your well "SFZU" P-26 (037-00713),

Aliso Canyon field, Los Angeles County,

Sec. 28, T. 3N, R. 16W, S.B. B. & M., is being made in our records:

The corrected location is _____

The corrected elevation is _____

Report No. _____, dated _____, has been corrected as follows: _____

Your notice to alter casing dated 5/21/76,
(Drill, abandon, etc.)

and our report No. P 276-196, issued in answer thereto, are hereby cancelled inasmuch as the work will not be done. If you have a drilling bond on file covering this notice it will be returned. No request for such return is necessary.

Other: _____

State Oil and Gas Supervisor



By _____
Deputy Supervisor John L. Hardoin

b

SUBMIT IN DUPLICATE
RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED

JUL 21 1977

SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

Operator SOUTHERN CALIFORNIA GAS COMPANY Field or County Aliso Canyon
Well name and No. PORTER #26, Sec. 28, T 3N, R 16W, S. B. & M.
A.P.I. well No. 037-00713 Name P. S. Magruder, Jr. Title Agent
Date July 18, 1977, 19..... (Person submitting report) (President, Secretary or Agent)

Signature *P. S. Magruder, Jr.*

P. O. Box 3249, Terminal Annex, Los Angeles, California 90051 (213) 689-3561
(Address) (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

- 4-11-77 Re-killed well with 358 barrels of 68# polymer drilling fluid.
- 6-15-77 Moved unit off of high mats. Set base over Porter #26. Set cat walk. Unit sent down to Getty's yard for repairs.
- 6-16-77 California Production Rig #D-6 for repairs.
- 6-17-77 Circulated and conditioned polymer completion fluid in Baker tank from 71#/cu.ft. to 73#/cu.ft. Rigged up to pump downtubing. Displaced hole fluid (68#/cu.ft.) with 350 barrels of 73#/cu.ft. polymer fluid. Had returns from annulus after pumping in 40 barrels. Rigged up McCullough Wire Line Services. Made feeler run to 7839'. Made chemical cut in 2 3/8" tubing at 7670' (Wire line measurement). Installed blind flanges on all wellhead valves on I.W. #65.
- 6-18-77 Rig #D-6 down for repairs.
- 6-19-77 Rig #D-6 down for repairs.
- 6-20-77 Finished setting C.P.S. Rig #D-6. Rig in place. Rigged up, circulated bottoms up. Associated Services tested seals on 9 5/8" 43# J-55 casing - three tests. Unflanged Christmas tree. Set in Class III 5000 psi B.O.P.E. Flanging up B.O.P.E.
- 6-21-77 Finished flanging up B.O.P.E. With H & H test pump, tested blind rams and pipe rams with water to 4000 psi; tested Hydril bag with water to 3000 psi. NOWSCO tested blind rams and pipe rams with nitrogen to 4000 psi; tested Hydril bag with nitrogen to 3000 psi. All tests approved by D.O.G.(Pete Wygle). Unseated packer at 7620'. Pulled tubing from 7710', recovered one packer and all equipment. Ran in well with 4 1/16" Bowen overshot, 2 3/8" bumper sub, Johnston jars and two 3 1/4" drill collars.

- 6-22-77 Finished running in well with Midway fishing tools and latched on to fish at 7705' - tubing measurement. Jarred packer #2 free and pulled out of well. Recovered packer and all equipment. Found sand blasted holes in 2 3/8" tubing at 7752', 7753', 7754', 7755' and 7756'. Ran in well with 4 1/8" bit and casing scraper to Model "D" packer. Circulated and conditioned drilling fluid. Pulling out of hole.
- 7-23-77 Finished pulling out of well with bit and scraper. Ran in well with 365' of 2 3/8" Hydril flush joint tubing stinger. Worked through Model "D" packer at 7903'. Worked down to 7933' - unable to go deeper. Pulled out of well. Ran in hole with 416' of 1 3/4" x 1" N-80 pipe. Worked through packer at 7903'. Located fill at 8098'. Cleaned out to 8199'. Circulated well clean.
- 6-24-77 Pulled out of well. Ran in well with Johnston bridge plug and set at 7600'. Tested bridge plug with 1000 psi. Displaced 73.5# polymer fluid with fresh water treated with surfactant. Pulled out of well. Ran in well with Johnston positrieve cement tool. Set tool at 6020'. Attempted to pressure test 5" casing with Halliburton pump truck - no good. Pulled out of well, checking tubing for holes. Replaced defective Johnston tool.
- 6-25-77 Ran in well with Johnston Positrieve cement tool, set tool at 6020'. Attempted to test - no good. Tested at 7562' and 7592' - bridge plug leaking. Pulled out of well. Ran in well with Johnston retrieving tool and Positrieve tool, reset bridge tool - bridge plug leaked at 2600 psi. Bled down to 900 psi in 5 minutes. Pulled out of well. Ran back in well with bridge plug #2, set at 7590', tested with 3000 psi. Pulled up and reset Positrieve at 6020'. Tested 5" x 18# liner with 3000 psi for 60 minutes. Changed over from fresh water to 73.5# polymer. Pulled out of well.
- 6-26-77 Removed 8" 5000 psi Class III B.O.P.E. and installed 10" 5000 psi Class III B.O.P.E. with spacer spool. Ran 6 5/8" 24# spear. Pulled 100,000#, casing came free. Removed 6 5/8" casing slips. Relanded B.O.P.E. Pulled and laid down 6 5/8" casing, one cut-off joint 31.40, 58 full joints and Baash-Ross lead seal packer.
- 6-27-77 Pressure testing B.O.P.E. Tested blind rams and 2 7/8" pipe rams at 4000 psi with water for 20 minutes - O.K. Unable to make test at 3000 psi on Hydril bag.
- 6-28-77 Changed Hydril rubber in 10" - 1500 Bag. Tested Hydril at 3000 psi with water for 20 minutes - O.K. Tested 2 7/8" rams at 4000 psi for 20 minutes - O.K. Tested blind and 2 7/8" rams with nitrogen at 4000 psi for 20 minutes - O.K. Tested Hydril Bag at 2800 psi for 20 minutes - O.K. Pulled Johnston packer. Ran in with 9 5/8" casing scraper and 8 5/8" bit to 6009'. Circulated around and free from gas. Pulled out. Made up Johnston Bobcat retrieving tool. Running in hole.

6-29-77

Ran in hole with Johnston Bobcat retrieving tool to top of bridge plug at 7570'. Circulated and worked over bridge plug retrieving bar - tool plugged. Pulled 14 stands. Rigged up lines and back-scuttled out water left in 5" liner. Ran back in and circulated bottoms up. Worked down over bridge plug at 7595' - unable to larch on. Pulled out - retrieving tool filled with rubber and lead. Ran in with second retrieving tool - latched on to bridge plug. Pulled out and recovered same. Ran in to recover second Johnston bridge plug.

6-30-77

Ran in to recover second 5" Johnston Bobcat bridge plug. Latched on and freed same. Circulated bottoms up - pulled out. Recovered bridge plug with some rubber. Ran in with Baker production tube with locator sub and one seal unit. Went through Model "D" packer at 7903'. Pulled above packer and circulated bottoms up. Pulled out. Rigged up lubricator GO-International. Ran in 9 5/8" casing and set Baker Model "F-B 1" packer with extension and Baker 3.688" "R" nipple with plug in place. Set top of packer at 5978' using collar reference. Changed 2 7/8" rams to 6 5/8" rams

7- 1-77

Rigged up to run 6 7/8" 24# K-55 LP&C casing. Made up Baker Locator sub with seal assembly on first joint. Ran 142 joints (5989') of 6 5/8" casing. Hydrotest same at 4000 psi for one minute. Before landing casing, displace 200 barrels of polymer fluid treated with corrosion inhibitor behind 6 5/8" casing. Landed 6 5/8" casing with 40,000# on Baker "F-B 1" packer at 5992'. Tested "F-B 1" packer and seals with 1500 psi for 20 minutes - O.K. Unflanged B.O.P.E. and picked up same. Needed more space to install casing slips. When attempting to remove 6 5/8" casing slips in rotary table with catline, E. Manues leaned over to grab other handle when slips pulled out and hit Manues injuring face. Injured was taken to Granada Hills Community Hospital by ambulance.

7- 2-77

Pulled and hung B.O.P.E. Set 6 5/8" casing slip. Tore out 10" x 1500 psi B.O.P.E. and loaded out same. Cut off 6 5/8" casing. Installed packing. Reinstalled 8" 1500 psi Class III B.O.P.E. Tested blind rams and 2 7/8" pipe rams at 4000 psi for 20 minutes - O.K. Tested Hydril bag at 3000 psi for 20 minutes - O.K. Made test with fresh water. Picked up B.O.P.E. and installed secondary seal packing. Tested packing and secondary flange at 4000 psi - casing slips packing would not hold pressure. Unflanged B.O.P.E. and tubing head and hung B.O.P.E. in sub-base. Welded new B.O.P.E. holding brackets on sub-base.

7- 3-77

Unflanged B.O.P.E. from tubing head and hung on sub-base. Removed tubing head. Ran Midway spear and latched on to 6 5/8" casing. Unlanded casing and removed pack-off and casing slips. Readjusted rubbers and slips. Re-set 6 5/8" casing with 45,000# on Baker Model "F-B 1" packer and 110,000# on slips. Reinstalled tubing head and B.O.P.E. Tested pack-off, flange and secondary seals at 4500 psi - bottom rubbers held O.K., but top rubbers leaked. Tested tubing flange and rams at 4000 psi - O.K. Ran 2400' of 2 3/8" and 2 7/8" tubing.

7- 4-77

Rig and crew idle.

- 7- 5-77 Pulled 2460' of 2 3/8" and 2 7/8" tubing out of well. Raised B.O.P.E. and secondary flange. Installed top pack-off rubber. Lowered B.O.P.E. and secondary flange. Tested pack-off, flange and secondary seals at 4500 psi. Tested pipe rams and blind rams to 4000 psi with nitrogen, and Hydril bag to 3000 psi. Using Archer-Reed Services, pulled equalizing prong from 6003'. Pulled Baker RZG plug.
- 7- 6-77 Using McCullough, made 3 1/2" feeler run to Model "D" packer - wireline measurement 7901'. Ran junk catcher. Ran and set Baker Model "F" packer at 5947'. Ran 2 3/8" and 2 7/8" tubing, changing all collars, applying Baker Seal and hydrotesting to 5000 psi.
- 7- 7-77 Finished running tubing. Landed tubing on packer with 10,000#. Pulled 25,000# over weight to check latch. Removed B.O.P.E. Installed Christmas tree. Tested upper and lower seals in Christmas tree to 5000 psi. Changed over from 73# polymer fluid to waste lease salt water. Ran and set standing valve in "No-Go" nipple. Tested seal assembly and packer with 3000 psi. Pulled standing valve. Blind flanges put on all valves. Rig released at 7:00 P.M. (7-7-77).

PORTER #26 - Aliso Canyon

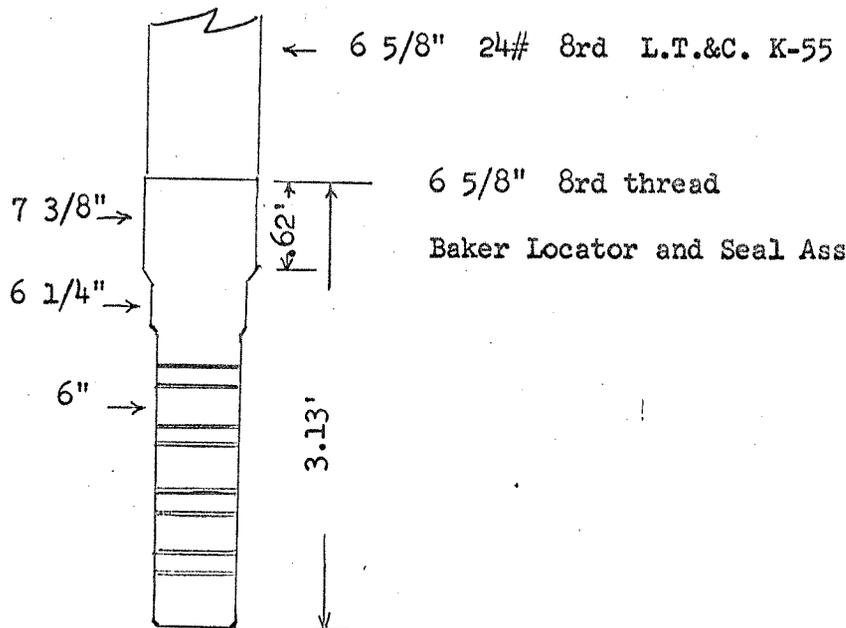
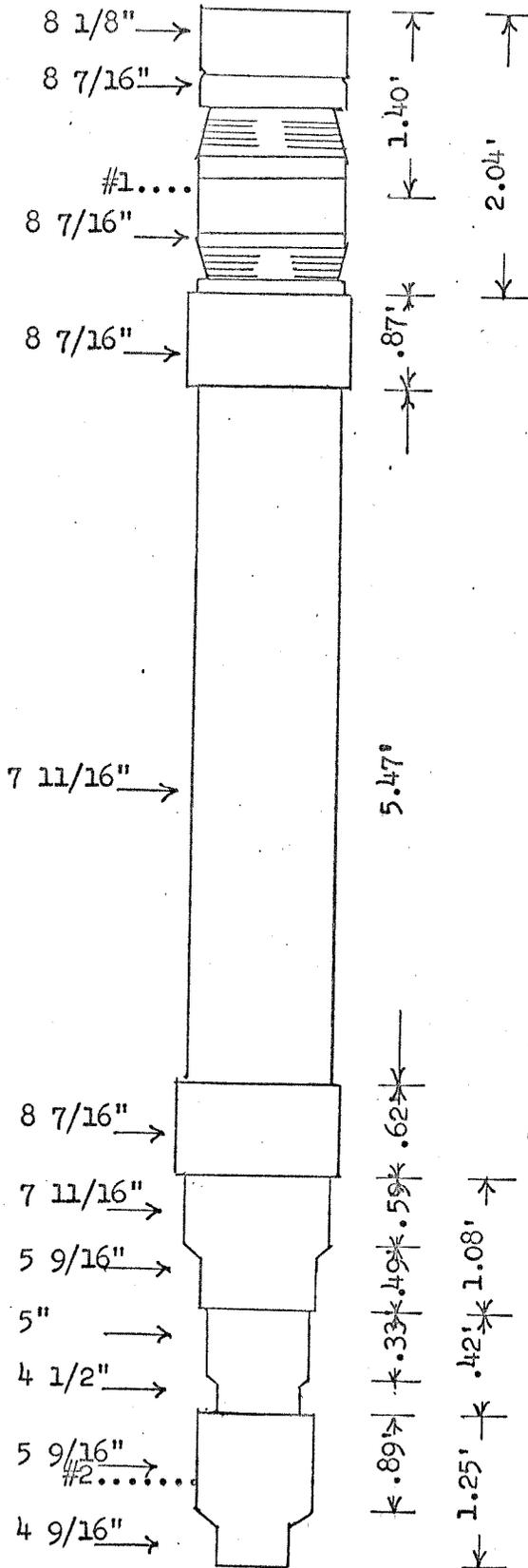
JUL 21 1977

SANTA PAULA, CALIFORNIA

#1. Baker Model FB-1 packer at
5978' ...includes extension.

#2. Baker "R" nipple - 3.688" I.D.

Set in 9 5/8" 43# N-80 casing



6 5/8" 8rd thread

Baker Locator and Seal Assembly

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

Report on Operations

No. T 277-152

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

Santa Paula, Calif.
July 13, 1977

DEAR SIR:

Operations at well No. "SFZU" P-26, API No. 037-00713, Sec. 28, T. 3N, R. 16W,
S.B., B & M. Aliso Canyon Field, in Los Angeles County, were witnessed
on 6/21/77. Mr. P.R. Wygle, representative of the supervisor was
present from 0500 to 0700. There were also present R. Stringer, contract foreman

Present condition of well: No additions to the casing record since proposal dated 4/15/77.

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

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

b

M. G. MEFFERD
JOHN P. MATTHEWS, Jr.
Acting, State Oil and Gas Supervisor

By James L. Hamilton Deputy

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 277-134

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

Santa Paula, Calif.
Apr. 22, 1977

DEAR SIR: alter casing in (037-00713)
Your proposal to gas storage Well No. "SFZU" P-26
Section 28, T. 3N, R. 16W, S.B. B. & M., Aliso Canyon Field, Los Angeles County,
dated 4/15/77, received 4/21/77, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

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

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

Blanket Bond
MD:b

M. G. MEPPERD (acting)
JOHN F. MATTHEWS, JR., State Oil and Gas Supervisor
By *John F. Matthews, Jr.*, Deputy

DIVISION OF OIL AND GAS
RECEIVED

APR 21 1977

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.

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3. Public Resources Code, notice is hereby given that it is our intention to rework well No. "SFZU" P. PORTER #26, API No. _____, Sec. 28, T. 3N, R. 16W, S.B. B. & M., Aliso Canyon Field, Los Angeles County.

The present condition of the well is as follows:

- Total depth. 8297'
- Complete casing record, including plugs and perforations:
 - 13 3/8" cemented 523'
 - 9 5/8" cemented 6120'
 - 2196' 5" landed 8203' - cp'd 7896' - top 6007' slotted 7897'-8203' - shot four 1/2" holes per foot 7658'-7920' - WSO 7602' and lap 6007'
 - 6498' 6 5/8" landed 2498' on lead seal hook wall packer

- Present producing zone name SESNON & FREW Zone in which well is to be recompleted same
- Present zone pressure 2500 psi New zone pressure -
- Last produced Gas Storage Well
(Date) (Oil, B/D) (Water, B/D) (Gas, Mcf/D)
or
- Last injected _____
(Date) (Water, B/D) (Gas, Mcf) (Surface pressure, psig.)

The proposed work is as follows:

- Move in rig, kill well and install B.O.P.E.
- Pull tubing. Set bridge plug, unland 6 5/8" and pull.
- Set packer and run 5990' 7" casing - land on packer, and in slips in wellhead. Pressure test casing.
- Set packer in 7". Run tubing with down hole safety system.
- Return well to gas storage.

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

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

SOUTHERN CALIFORNIA GAS COMPANY
(Name of Operator)
By P.S. Magruder, Jr. 4-15-77
(Name) (Date)
Type of Organization Corporation
(Corporation, Partnership, Individual, etc.)

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

REPORT ON PROPOSED OPERATIONS No. P 276-196

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

Santa Paula, Calif.
June 11, 1976

DEAR SIR: alter casing in (037-00713)
Your proposal to gas storage Well No. "SFZU" P-26
Section 28, T. 3N, R. 16W, S.B.B. & M., Aliso Canyon Field, Los Angeles County,
dated 5/21/76, received 6/10/76, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. The drilling fluid used shall be of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts; and a reserve supply of this material shall be kept on hand to meet any emergency.
2. Blowout prevention equipment, at least of the Division of Oil and Gas Class III rating, shall be installed and maintained in operating condition at all times.
3. THIS DIVISION SHALL BE NOTIFIED TO WITNESS:
 - a. A pressure test of the blowout prevention equipment before commencing downhole operations.
 - b. A pressure test of the 7" and 5" casings.

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

Blanket Bond
MD:b

HAROLD W. BERTHOLF
JOHN F. MATTHEWS, JR., State Oil and Gas Supervisor

By *[Signature]* Chief, Deputy

JUN 10 1976

DIVISION OF OIL AND GAS
Notice of Intention to Rework Well

SANTA PAULA, CALIFORNIA

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.

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well No. 5721 P 26 ~~PORTER #26~~, API No. _____,

Sec. 28, T3N, R. 16W, S.B.B. & M., Aliso Canyon Field, Los Angeles County.

The present condition of the well is as follows:

- Total depth. 8203'
- Complete casing record, including plugs and perforations:
 - 13 3/8" cemented 523'
 - 9 5/8" cemented 6120'
 - 2196' 5" landed 8203', cp'd 7896', top 6007' slotted 7897'-8203', perforations cemented 7897'-7920' shot four 1/2" holes per foot 7658'-7920'
 - 2498' 6 5/8" with lead seal packer on bottom (inner string)

June 11, 1976
MD-GA
7" WILL LAND
PACKER. STOPS
WILL BE ABOVE
TOP OF 9 5/8"
2. PACKER WILL BE
SET IN 5"
5. BOTH STRINGS
PRESSURE TESTED
3. PACKERS HOLD
LEAD 5"

- Present producing zone name SESNON & FREW Zone in which well is to be recompleted -
- Present zone pressure 2500 psi New zone pressure -
- Last produced Gas Storage Well
(Date) (Oil, B/D) (Water, B/D) (Gas, Mcf/D)
 or
- Last injected _____
(Date) (Water, B/D) (Gas, Mcf) (Surface pressure, psig.)

The proposed work is as follows:

- Move in rig, kill well, install B.O.P.E. and pressure test.
- Pull tubing and packers. Remove B.O.P.E. and pull 6 5/8" casing.
- Set packer at 5990' and run inner string of 7" 23# N-80 casing.
- Pressure test 5" and 7" casing.
- Set packer in 7" casing, run 2 3/8" and 2 7/8" tubing. Tubing to include seals, sliding sleeve and safety valve.
- Return well to gas storage.

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

Address P.O. Box 3249, Terminal Annex SOUTHERN CALIFORNIA GAS CO.,
(Street) (Name of Operator)
Los Angeles California 90051 By P.S. Magruder, Jr. 5-21-76
(City) (State) (Zip) (Name) (Date)
 Telephone Number (213) 689-3561 Type of Organization Corporation
(Corporation, Partnership, Individual, etc.)

Check all 4 years from 165 - dtl 5-26-77

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Pacific Lighting Service Company FIELD Aliso Canyon
 Well No. SFZU P-26, Sec. 28, T. 3N, R. 16W, S.B.B. & M.
 Date October 29, 1973 Signed [Signature]
P. O. Box 54790, Terminal Annex
Los Angeles, California 90054 (213) 689-3561 Title Agent
 (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

1973

Condition of well prior to workover concluded 4-3-73:

13-3/8", 54.5# c. 523'
 9-5/8", 40# & 43# c. 6120'
 5", 18# ldd. 8203'-6007'
 Perfs: 2" slots 7897'-8202', squeeze cemented 7897'-7926'
 Jet perforated 2 HPF 7950'-8202'
 C.P. 7896'
 WSO 7877' and 6007' (lap)

Changes in mechanical condition due to workover concluded 4-3-73:

6-5/8", 24# ldd. on packer at 2498'.
 Perfs: Jet perforated 4 HPF 7658'-641', 7686'-90', 7710'-22', 7742'-48',
 7752'-66', 7772'-78', 7785'-90', 7796'-7800',
 7820'-60', 7890'-7900', 7916'-20'
 Jet perforated 2 HPF 7960'-70', 8014'-22'

WNSO and gas not shut-off 7605', squeezed.

WSO 7602'.

Tubing and production tool detail as of 4-3-73 per attachment.

- 2-26 C.P.S. rig D-3 moved in and rigged up. Killed well with workover fluid.
- 2-27 Removed Xmas tree from above top of tubinghead. Installed class III B.O.P.E. Tested pipe rams with 2000 psig and bag with 1500 psig.
- 2-28 C.O. to 8203'. Scraped 5" liner from 6007'-8203'. Found top of fill at 8143'.
- 3-1 Lost sonde while running CBL. Recovered same. Ran CBL 5800'-8198', NLL 7500'-8194', CDL 7500'-8200'.
- 3-2 Set bridge plug at 7880' in 5" liner. Tested bridge plug with 1200 psig. Idle 1/2 day due to unavailability of casing jacks.

- 3-3 Idle due to unavailability of casing jacks.
- 3-4 Idle - Sunday.
- 3-5 Filled 9-5/8" x 13-3/8" annulus with workover fluid as a precautionary measure prior to any welding or cutting. Ran spear to 45' in 9-5/8" casing but could not unland with 232,000#. Cut casinghead off with torch. Could not release spear.
- 3-6 Could not release spear by turning, or by circulating with high viscosity mud.
- 3-7 Backed off 9-5/8" casing with string shot at 69'. Could not screw new 9-5/8" casing into coupling at 69' possibly due to splitting. I.B. appeared to indicate coupling was split.
- 3-8 Cut (inside) 9-5/8" casing at 80' and pulled. Sized stub with mill.
- 3-9 Idle. Waiting on casing bowl.
- 3-10 Welded on new 13-5/8" casinghead. X-rayed weld. Ran Baash-Ross casing bowl on 2 joints of new 9-5/8" casing, set slips on bowl and landed casing with 120,000# over weight of new pipe to expand lead seal in bowl. Slacked off to 28,000# over weight of new pipe, set slips and installed packing. Installed secondary sealing flange and tubinghead. Tested packing and upper and lower secondary seals with 3000#.
- 3-11 Idle - Sunday.
- 3-12 Re-installed B.O.P.E. and tested same. Scraped 9-5/8" casing to top of 5" & liner at 6007'. Ran casing profile caliper log and casing inspection and caliper log from surface to 7860' (top of B.P.). Ran packer and tested 9-5/8" casing, 9-5/8" x 5" lap and 5" casing from 5717'-7880' with 1500 psig. Tested 9-5/8" casing from surface to 5717' with 2500 psig.
- 3-13
- 3-14 Moved packer to 3318' and tested 9-5/8" casing from surface to 3318' with 3200 psig. Shot four 0.31" holes at 7605'. Ran tester to 7494'. Had strong blow immediately with gas to surface in 12 minutes. Shut-in after being open a total of 15 minutes. Had 180' fluid rise. Charts OK.
- 3-15 Squeezed holes at 7605' with 73 sacks cement. Waiting on Cement.
- 3-16 C. O. and scraped cement from 7503'-7608'. Tested from surface to 7860' (top of bridge plug) with 1500 psig.
- 3-17 Shot four 0.31" holes at 7602'. Ran tester to 7487'. Open 1 hour. Faint blow in two minutes and for balance of test. Recovered 10' fluid rise - oily water. Charts OK. Witnessed and approved by P. K. Wygle of Division of Oil & Gas.
- 3-18 Idle - Sunday.

- 3-19 C. O. and recovered bridge plug. Jet perforated four 0.31" HPF 7658'-64' (6'), 7686'-90' (4'), 7710'-22' (12'), 7742'-48' (6'), 7752'-66' (14'), 7772'-78' (6'), 7785'-90' (5'), 7796'-7800' (4'), 7820'-7860' (40'), 7890'-7900' (10') and 7916'-20' (4'). Perforated two 0.31" HPF 7960'-70' (10') and 8014'-22' (8'). 129' total.
- 3-20 Set bridge plug in 5" liner at 6169' and tested with 1200 psig. Pulled secondary sealing flange and tubing head. Tubinghead to be rebored to accommodate landing 6-5/8" protective string. Idle 1/2 day awaiting reborring.
- 3-21 Installed landing head (rebored tubinghead) for 6-5/8" casing. 6-5/8" casing and packer set at 2498'. Ran 59 joints 6-5/8", 24#, K-55, new, seamless, range 3, ST&C, 8 round casing 2500.30' overall including 5.83' Baash-Ross 6-5/8", 24# x 9-5/8", 40# regular action hookwall packer with lead and neoprene packing with 6-5/8", 24#, 8 round box up x shoe down (part No. ML 7813-145-HL). One lead seal top and bottom and two neoprene seals between lead seals.
- 3-22 Circulated corrosion inhibitor between 9-5/8" & 6-5/8" casing strings before setting packer. Set 40,000# on packer and 20,000# on slips. Tested above packer and 9-5/8" x 6-5/8" annulus with 3200 psig. Installed secondary sealing flange and tubinghead and tested between upper and lower secondary seals with 4250 psig.
- 3-23 Pulled bridge plug from 6169'. Set Baker Model "D" packer at 7908.5'. Rigged up to run tubing.
- 3-24 Ran 2-7/8" & 2-3/8" tubing with three sliding sleeves, two hydraulic packers and Page 2-3/8" RTL safety valve and 1/4" control line. Stung into packer at 7908.5'.
- 3-25 Idle - Sunday.
- 3-26 Installed tubinghead and tested seals. Closed upper sleeve and set plug in bottom of tubing. Pressured tubing to set packers. Tested annulus to check setting of top packer - pumped away. Opened middle sleeve and pumped down annulus. Circulated back to surface through tubing. Upper packer not set. Opened top sleeve after being unable to retrieve plug.
- 3-27 Pulled tubing and control line leaving 23 banding straps in hole.
- 3-28 Recovered a portion of one banding strap on six 4" magnet runs. Recovered 7 banding straps with surge surge tool run (15 + banding straps remain in hole). Recovered one small piece of metal casting on one 4" magnet run.
- 3-29 Stabbed through model "D" successfully with dummy run of seal assembly. Pumped through tubing at low rate - no annulus returns of consequence. Model "D" setting, and tubing condition satisfactory.
- 3-30 Stung through Model "D" packer at 7908.5' with 317' of 1-1/4" F. J. drill rod and circulated hole from bottom, running workover fluid through desilters.
- 3-31 Broached 2-7/8" and 2-3/8" tubing while going in hole. Replaced 2 joints of 2-3/8" and 1 joint of 2-7/8" due to tight spots. Maximum sand content from flowline prior to running tubing - trace.

4-1 Idle - Sunday.

4-2 Ran 2-7/8" and 2-3/8" tubing with 3 sliding sleeves, 2 hydraulic packers, one Page 2-3/8" RTL safety valve, 1/4" control line and seal assembly (see attachment for tubing and tool detail). Tools were run with all three sleeves closed and tubing open-ended. Filled through Hydro-Trip sub by running with 3000 psig on control line until approximately 2700' of tubing had been run, and by periodically opening safety valve thereafter until all tubing had been run. Tested initial control line splice at valve with 5000 psig, splice with 2700' of tubing run with 4900 psig and splice with 6800' of tubing run with 4800 psig.

4-3 Tested control line splice at donut with 5000 + psig. Landed locator sub on Model "D" with 12,000#. Installed tubinghead and tested above top seal on donut neck with 4650 psig, below bottom seal on donut neck with 4900 psig and between top and bottom seals on donut neck with 5000+ psig (nitrogen). Set hydraulic packers with 1150 psig and blew ball out of Hydro-Trip sub with 1400 psig. Tested top packer at 7620.07' by pressuring annulus to 1000 psig.

Well left with tubing open ended, all three sliding sleeves closed, packers set, 63# 38 seconds, workover fluid in hole and 5000 psig on control line.

PORTER 26 - TUBING AND TOOL DETAIL 4-3-73

<u>DESCRIPTION</u>	<u>LENGTH</u>	<u>TOP</u>	<u>BOTTOM</u>
K.B. to donut	12.00	0.00	12.00
Donut	1.00	12.00	13.00
1 jt. 2-7/8" 6.5# EUE (pup)	6.10	13.00	19.10
1 jt. 2-7/8" 6.5# EUE (pup)	6.11	19.10	25.21
182 jts. 2-7/8" 6.5# EUE	5642.48	25.21	5667.69
2-3/8" x 2-7/8" X-over	1.00	5667.69	5668.69
59 jts. 2-3/8" 4.7# EUE	1818.16	5668.69	7486.85
Camco sliding sleeve	2.75	7486.85	7489.60
2 jts. 2-3/8" 4.7# EUE	61.44	7489.60	7551.04
Page 2-3/8" RTL safety valve	3.15	7551.04	7554.19
2 jts. 2-3/8" 4.7# EUE	61.80	7554.19	7615.99
1 jt. 2-3/8" 4.7# EUE (pup)	4.08	7615.99	7620.07
Baker FH Hydraulic packer	5.40	7620.07	7625.47
3 jts. 2-3/8" 4.7# EUE	91.91	7625.47	7717.38
Camco sliding sleeve	2.75	7717.38	7720.13
1 jt. 2-3/8" 4.7# EUE	4.05	7720.13	7724.18
Baker FH hydraulic packer	5.40	7724.18	7729.58
1 jt. 2-3/8" 4.7# EUE	8.00	7729.58	7737.58
1 jt. 2-3/8" 4.7# EUE	8.04	7737.58	7745.62
3 jts. 2-3/8" 4.7# EUE	92.75	7745.62	7838.37
Baker Hydro-Trip sub	1.20	7838.37	7839.57
1 jt. 2-3/8" 4.7# EUE	30.22	7839.57	7869.79
Camco sliding sleeve	2.75	7869.79	7872.54
1 jt. 2-3/8" 4.7# EUE	29.12	7872.54	7901.66
Sleeve for blanking plug	0.95	7901.66	7902.61
Locator sub	0.45	7902.61	7903.06
Seal assembly (thru Model "D")	4.86	7903.06	7907.92
Baker production tube	4.00	7907.92	7911.92

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T. 273-184

Mr. P. S. Magruder, Jr., Agent
Pacific Lighting Service Co.
P O Box 54790, Terminal Annex
Los Angeles, California 90054

Santa Paula Calif.
April 4, 1973

DEAR SIR:

Operations at well No. "SFZU" P-26, API No. 037-00713, Sec. 28, T. 3N, R. 16W,
S.B. B & M, Aliso Canyon Field, in Los Angeles County, were witnessed
on March 17, 1973. Mr. P R Wygle, engineer representative of the supervisor was
present from 1300 to 1630. There were also present R. Geddes, engineer

Present condition of well: 13 3/8" cem. 523'; 9 5/8" cem. 6120'; 5" ld. 6007-8203', c.p.
7606' & 7896', perf. 7602' WSO, perf. 7877' WSO, perf. 7897-7926' (cem off), perf. 7926-
8202'. T.D. (pres hole) 8297'. T.D. (1st hole) 7844'.

The operations were performed for the purpose of testing the 5" shut-off by means of a
formation tester.

DECISION:

THE 5" SHUT-OFF AT 7602' IS APPROVED.

a

JOHN F. MATTHEWS, JR.
State Oil and Gas Supervisor

By ROD Pitman Deputy

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P. 273-115

Mr. P. S. Magruder, Jr., Agent	
Pacific Lighting Service Co.	Santa Paula Calif.
P. O. Box 54790, Terminal Annex	March 6, 1973
Los Angeles, California 90054	

DEAR SIR: (037-00713)

Your proposal to alter casing Well No. "SFZU" P-26,
 Section 28, T. 3N, R. 16W, S.B.B. & M., Aliso Canyon Field, Los Angeles County,
 dated 2/23/73, received 3/2/73, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Drilling fluid of proper weight and consistency shall be used to keep the well under control at all times; and a reserve supply of this material shall be kept on hand to meet any emergency. NO CONTAMINATES OR TOXIC MATERIAL SHALL BE USED IN ANY DRILLING FLUID THAT IS TO BE PLACED IN AN UNLINED SUMP.
2. Blowout prevention equipment, at least of the Division of Oil and Gas Class III rating, shall be installed and maintained in operating condition at all times.
3. THIS DIVISION SHALL BE NOTIFIED TO WITNESS THE TEST OF THE 5" WATER SHUT-OFF AT 7630'.

Blanket Bond
ALL:r

cc: Operator

JOHN F. MATTHEWS, JR., State Oil and Gas Supervisor

By *100 P. Ritzius*, Deputy

DIVISION OF OIL AND GAS
RECORDS
SANTA PAULA, 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

Los Angeles, Calif. February 23, 19 73

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. "SFZU" P-26

(Cross out unnecessary words)

Sec. 28, T. 3N, R. 16W, S.B. B. & M.

Aliso Canyon Field, Los Angeles County.

The present condition of the well is as follows:

1. Total depth. 8297' Rd. No. 1

2. Complete casing record, including plugs:

- 13 3/8" c. 523'
- 9 5/8" c. 6120'
- 5" ldd. 8203', top at 6007'
- Perfs.: 2" slots 7897'-8202', squeeze cemented 7897'-7926'
- Jet perfs. 2 hpf 7950'-8202'
- C.P. 7896'
- WSO 7877' and 6007' (lap)

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

The proposed work is as follows:

1. Demonstrate WSO at 7630'.
2. Perforate and/or re-perforate in the Sesnon and Frew Zones between 7640' and 8200' as required to convert well to a gas storage well.

		FORMS	
		101	102
	EB	✓	✓

P. O. Box 54790 T. A.
Los Angeles, Calif. 90054
(Address)
(213) 689-3561
(Telephone No.)

Pacific Lighting Service Company
(Name of Operator)
By *P.S. Maguider*

History of Oil or Gas Well

D.O.G.

OPERATOR.....GETTY OIL COMPANY.....FIELD ALISO CANYON

Well No. "SFZU P-26"....., Sec. 28....., T. 3N....., R. 16W....., S.B. B. & M.

Date.....November 3,....., 19 70..... Signed *Carl H Nelson*

P.O. Box 811, Ventura, Calif. 643-2154 Title Agent

(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.

HISTORY

8/3/70 California Production Service moving in to reperforate the zone.
 8/4 Finished moving in. Rigged up. Pulled pump loose. Filled tubing with salt water. Attempted to punch hole in 2 3/8" tubing at 7825' with wireline. No success. Shut job down until morning.
 8/5 With wireline and Kinley perforator, shot hole in 2 3/8" tubing at 7775'. Circulated bottoms up. Installed B.O.P.E. Pulled tubing and packer. Ran Neutron Correlation log from 8128' to 7500' (logging tool stopped at 8128'). Ran in hole with perforating gun, gun stopped at 8128'. Ran 4 1/8" bit and tagged fill at 8128'. Shut job down until morning.
 8/6 Cleaned out fill from 8128' to 8188'. Unable to clean out remaining 12'. Circulated hole clean and pulled out. J.P'd 2 h/ft from 8192' to 7950' (wireline measurements). Ran 2 3/8" and 2 7/8" tubing to 7884'. Landed on tubing hanger. Shut job down until morning.
 8/7 Circulated bottoms up. Removed B.O.P.E. Installed tree. Ran rods and pump. Tubing would not fill. Pulled rods and pump. Checked pump. Located scale under check valve. Reran rods with exchange pump. Tubing would not fill. Pulled rods and pump. Prep. to pull tubing.
 8/8 Circulated column free of gas. Removed tree. Installed B.O.P.E. Pulled tubing. Hydrotested back in hole at 4500 psi. Ran rods and repaired pump. Placed well on production.
 8/9-16 No gauge.
 8/17 California Production Service moved in and rigged up. Pulled rods and pump. Ran in with exchange pump and returned well to production.
 8/23 Pumped 24 BFPD; 42%; 14 BOPD.
 9/2 Pumped 12 BFPD; 33%; 8 BOPD.
 9/22 Pumped 10 BFPD; 40%; 6 BOPD.

DIVISION OF OIL AND GAS
RECEIVED

FINAL REPORT

Casing Record

13 3/8" 54.5# c 523'
 9 5/8" 40 & 43# c 6120'
 2195'-5" 18# L 8203'
 WSO 4 h's 7877'* and lap *
 C.P. 7896'
 Pf: 7897-8202' (2" straight slots 200 M x 8 R x 6" C)
 Sq. Cmtd. interval 7897-7926'
 J.P'd 2 h/ft 7950-8202'
 T.L.H. 6007'

NOV 4 1970

INALEWOOD, CALIFORNIA

*Witnessed and approved by D.O.G.

5203
6-12-70

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 170-574

Mr. C. G. Nelson, Agent

GETTY OIL COMPANY, OPERATOR

P. O. Box 811

Ventura, California 92621

Inglewood,

JUNE 25, 1970

Calif.

DEAR SIR:

(037-00713)

Your proposal to alter casing Well No. "SFZU" P-26
 Section 28, T. 3 N, R. 16 W, S.B. B. & M., Aliso Canyon Field, Los Angeles County,
 dated 6/22/70, received 6/23/70, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT adequate pressure control equipment shall be installed and maintained in operating condition during all stages of perforating.

AX:nw

cc C. G. Nelson

Blanket Bond

F. E. KASLINE, State Oil and Gas Supervisor

By *John J. Matthews* Deputy

JUN 23 1970

DOG

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

Ventura, Calif. June 22, 1970

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. "SEZU" P-26 (037-00713)

Sec. 28, T. 3N, R. 16W, S.B. B. & M.

Aliso Canyon Field, Los Angeles County.

The present condition of the well is as follows:

- 1. Total depth. Rd. #1 T.D. 8297'
- 2. Complete casing record, including plugs:
 - 13 3/8" 54.5# c 523'
 - 9 5/8" 40 & 43# c 6120'
 - 2196'-5" 18# L 8203'; WSO 4 h's 7877'* & lap*; C.P. 7896'
 - Pf: 7897-8202' (2" straight slots x 200 M x 8 R x 6" C)
 - Squeeze Cmtd. interval 7897-7926'
 - T.L.H. 6007'

*Witnessed and approved by D.O.G.

3. Last produced Presently Producing 6 BOPD; 2 BWPD; 85 MCFPD.
(Date) (Oil, B/D) (Water, B/D) (Gas Mcf/D)

The proposed work is as follows: REPERFORATE PRODUCING INTERVAL BY J.P.'g 2 h/ft 7950-8202'

Alter Casing

MAP	MAP BOOK	CARDS	BOND	FORMS	
			B	114	121
				ARG	ARG

P.O. Box 811, Ventura, Calif.
(Address)

643-2154

(Telephone No.)

GETTY OIL COMPANY, Operator
(Name of Operator)

By C. S. Nelson
C.G. Nelson, Agent

DIVISION OF OIL AND GAS

DOG

History of Oil or Gas Well

OPERATOR GETTY OIL COMPANY FIELD ALISO CANYONWell No. "SEZU" P-26, Sec. 28, T. 3N, R. 16W, S.B. B. & M.Date December 4, 1969Signed Carl A. NelsonP.O. Box 811, Ventura, Calif. 643-2154 Title Agent
(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.

9/22/69 C.P.S. moved in and rigged up to squeeze cement interval of gas entry. Pulled pump loose. Pumped in 120 barrels of water. Pulled rods and pump.

9/23 Punched hole in tubing at 7802' with wireline. Circulated well with salt water. Removed tree. Installed and tested B.O.P.E. Pulled tubing to T.L.H. and shut down for the night.

9/24 Circulated bottoms up. Pulled and measured out with tubing. Ran in with sawtooth collar. Tagged fill at 8141'. With tubing hung at 7941' spotted 12 sax of 20-40 sand. Pulled 15 doubles and waited 30 minutes. Ran in, tagged sand at 8078'. With tubing hung at 7807' spotted 15 sax of sand and pulled 15 doubles. Waited 30 minutes. Ran in, tagged sand at 7865'. Attempted to backscuttle and circulate sand out of hole with no success. Pulled to T.L.H. and shut down for the night.

9/25 Ran down and tagged fill at 7865'. Rotated and backscuttled sand to 7929'. Pulled to 7920'. Backscuttled clean. Tagged fill at 7926'. Pulled out. Ran Johnston Positrievie squeeze tool. Hydro-tested tubing in the hole at 5000 psi. Tagged fill at 7926'. Pulled and set tool at 7385'. Pumped in 100 cu.ft. of salt water (12 cu.ft./min. at 3000 psi.). Pumped in 20 cu.ft. fresh water then 50 sax cement slurry. Displaced with 20 cu.ft. fresh water and 239 cu.ft. salt water. MP 4000 psi, FP 4000 psi. C.I.P. at 10:30 P.M. Closed well in with 4000 psi on tubing and 500 psi on casing. Shut down for the night.

9/26 Bled off casing and tubing. Casing had 900 psi and tubing had 3700 psi. Pulled tubing out of the hole. Ran in with bit and scraper. Found cement at 7835', drilled out to 7926'. Pressured annulus to 2000 psi surface pressure. Perforations would not take fluid. Drilled out to 7934'. Pulled tubing to top of liner hanger and shut down for the night.

9/27-29 Ran back to 7934'. Drilled out hard cement to 7935'. Cleaned out sand and fill to 8200'. Circulated Visco corrosion inhibitor. Pulled bit and scraper. Ran tubing and packer. Filled hole with inhibited salt water. Set packer at 7891'. Removed B.O.P. and installed tree. Ran rods and repaired pump. Pressured tubing and tree to 1000 psi, O.K. Placed the well on production.

10/4 Pumped 25 BFPD; 92%; 2 BOPD.

10/5 Pumped 28 BFPD; 96%; 1 BOPD.

10/6 Pumped 48 BFPD; 90%; 4 BOPD.

10/9 Pumped 16 BFPD; 88%; 2 BOPD.

10/17 Pumped 16 BFPD; 75%; 4 BOPD.

10/19 Pumped 20 BFPD; 40%; 12 BOPD.

DIVISION OF OIL AND GAS
RECEIVED

DEC 5 1969

INGLEWOOD, CALIFORNIA

Casing Record:

13 3/8" 54.5# c 523'
9 5/8" 40 & 43# c 6120'
2195' -5" 18# L 8203'
WSO 4 h's 7877'* and lap*
C.P. 7896'
Pf: 7897-8202'
(2" straight slots, 200 M x 8 R x 6" C)
Sq. Cmtd. interval 7897-7926'
T.L.H. 6007'

*Witnessed and approved by D.O.G.

Tubing Record:

5898' - 2 7/8", 8 RT, EU Tbg. (189 Jts) plus
2-12' subs at surface
1' - 2 7/8" x 2 3/8" Xover
1953' - 2 3/8", 8 RT, EU Tbg. (63 Jts)
1' - 2 3/8" D&B Simplex shoe
31' - 2 3/8", 8 RT, EU tbg.
9' - 2 3/8" x 5" 18# KV-30 packer (I.D. 1.9"+), with
.45' guide shoe
7893' - Overall

DIVISION OF OIL AND GAS
RECEIVED

DEC 5 1960

INGLEWOOD, CALIFORNIA

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

REPORT ON PROPOSED OPERATIONS No. P 169-1033

Mr. C. G. Nelson, Agent
GETTY OIL COMPANY, OPERATOR
P. O. Box 811
~~xxxxxx~~ Ventura, California 93002

Inglewood, Calif.
September 19, 1969

DEAR SIR:

(037-00713)

Your proposal to **alter casing** Well No. **"SPZU" P-26**,
Section **28**, T. **3 N.**, R. **16 W S.B.** B. & M., **Aliso Canyon** Field, **Los Angeles** County,
dated **9/15/69**, received **9/17/69**, has been examined in conjunction with records filed in this office.
~~These conditions are shown by the records and the proposal is as follows:~~

THE PROPOSAL IS APPROVED.

WLI:nw

cc C. G. Nelson

Blanket Bond

F. E. KASLINE, State Oil and Gas Supervisor

By *[Signature]*, Deputy

DIVISION OF OIL AND GAS

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

SEP 17 1969

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

INGLEWOOD, CALIFORNIA

Ventura, Calif. September 15, 1969

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. SFZU P-26
(Cross out unnecessary words)

Sec. 28, T. 3N, R. 16W, S.B. B. & M.

Aliso Canyon Field, Los Angeles County.

The present condition of the well is as follows:

- 1. Total depth. 8297' Rd. #1 T.D.
- 2. Complete casing record, including plugs:
 - 13 3/8" 54.5# c 523'
 - 9 5/8" 40 & 43# c 6120'
 - 2196' -5" 18# L 8203'
 - WSO 4 h's 7877'* and lap*
 - C.P. 7896'
 - Pf: 7897-8202'
 - (2" x 200 M straight slots x 8 R x 6" C)
 - T.L.H. 6007'

*Witnessed and approved by D.O.G.

3. ~~Last produced~~ Presently pumping 15 BOPD; 5 BWPD; 625 MCFPD (Frew Zone)
(Date) (Oil, B/D) (Water, B/D) (Gas Mcf/D)

The proposed work is as follows:

SQUEEZE CEMENT GAS ENTRY INTERVAL

- 1. Fill liner with 20-40 mesh sand from 7870' to 8203 in 10 sack stages, backscuttle sand to 7930'.
- 2. Set positrieve cementer at 7630', pump in 50 sax cement.
- 3. Cleanout to bottom.
- 4. Return to production.

Alter casing

MAP	MAP BOOK	CARDS	BOND	FORMS	
				114	181
			B	ARG	ARG

P.O. Box 811, Ventura, Calif.
(Address)

GETTY OIL COMPANY

(Name of Operator)

643-2154
(Telephone No.)

By *C.G. Nelson*
C.G. Nelson, Agent

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

830 North La Brea Avenue
Inglewood, California

September 26, 1968

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

DEAR SIR:

Your request dated letter dated August 26, 1968, relative to change in designation of well(s) in Sec. 27, 28, 34, T.3 N., R.16 W., S.B. B. & M., Aliso Canyon field, Los Angeles County, District No. 1, has been received;

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

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

the proposed change in designation is hereby authorized as follows: (formerly owned by Getty Oil Co.

See attached list.

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

F. E. KASLINE

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

By *Wm. C. Bailey*
Deputy Supervisor

Proposed Changes of Well Designation

Old Designation:

New Designation:

Sec. 27:

"Fernando Fee" 32
"Porter" 12
" 30
" 31
" 32
" 36
" 37
" 45

"SFZU" FF-32 (037-00686)
" P-12 (037-00701)
" P-30 (037-00717)
" P-31 (037-00718)
" P-32 (037-00719)
" P-36 (037-00723)
" P-37 (037-00724)
" P-45 (037-00732)

Sec. 28:

"Porter" 4
" 25
" 26
" 34
" 35
" 38
" 39
" 40
" 41
" 42
" 43
" 44
" 46
" 47
"Porter-Sesnon" 42

"SFZU" P-4 (037-00699)
" P-25 (037-00712)
" P-26 (037-00713)
" P-34 (037-00721)
" P-35 (037-00722)
" P-38 (037-00725)
" P-39 (037-00726)
" P-40 (037-00727)
" P-41 (037-00728)
" P-42 (037-00729)
" P-43 (037-00730)
" P-44 (037-00731)
" P-46 (037-00733)
" P-47 (037-00734)
" PS-42 (037-00753)

Sec. 34:

"Fernando Fee" 31
" 33
" 34
" 35
"Mission-Adrian Fee" 3
" 4
" 5

"SFZU" FF-31 (037-00685)
" FF-33 (037-00687)
" FF-34 (037-00688)
" FF-35 (037-00689)
" MA-3 (037-00693)
" MA-4 (037-00694)
" MA-5 (037-00695)

COMPLETION REPORT

(OIL, GAS OR INJECTION WELL)

JOB OF OIL AND GAS
RECEIVER

JAN 9 1963

CONSERVATION COMMITTEE OF
CALIFORNIA OIL PRODUCERS
868 SUBWAY TERMINAL BUILDING
417 SOUTH HILL STREET
LOS ANGELES 13, CALIFORNIA
MAdison 5-7731

FIELD OFFICE
451 HABERFELDE BUILDING
BAKERSFIELD, CALIFORNIA
FAirview 4-4504

REGION COASTAL
DISTRICT SANTA CLARA VALLEY
COUNTY LOS ANGELES
GROUP _____
FIELD ALISO CANYON
AREA Main
FAULT BLOCK _____
POOL Frew

INGLEWOOD, CALIFORNIA

SPUD DATE _____ 19____
COMPLETED _____ 19____
RECOMPLETED Nov. 28 1962
RECONDITIONED _____ 19____

TBG. SIZE (S) 2-7/8 IN. _____ IN.
TBG. DEPTH (S) 7890 FT. _____ FT.
PACKER (S) @ _____ FT. _____ FT.

COMPANY TIDEWATER OIL COMPANY
LEASE Porter
WELL NO. 26 SEC. 28 T. 3N R. 16W S. B. _____ B. & M. _____

IF A SERVICE WELL PLEASE CHECK:
WATER INJECTION _____ GAS INJECTION _____

PREVIOUS WELL DATA	PRESENT WELL DATA	GEOLOGIC MARKERS
(POOL <u>Sesnon</u>)		
TOTAL DEPTH <u>7844</u> FT.	TOTAL DEPTH <u>8297</u> FT.	<u>Top Aliso Deep</u> FT.
PLUG DEPTH _____ FT.	PLUG DEPTH _____ FT.	<u>Zone 7525</u> FT.
WSO DEPTH _____ FT.	WSO DEPTH _____ FT.	_____ FT.
CASING <u>6-5/8</u> IN. CMT'D <u>7610</u> FT.	CASING <u>9-5/8</u> IN. CMT'D <u>6118</u> FT.	_____ FT.
LINER <u>283</u> FT. <u>4-3/4</u> IN. <u>7556</u> FT. L. <u>7840</u> FT.	LINER <u>2196</u> FT. <u>5</u> IN. <u>6007</u> FT. L. <u>8203</u> FT.	_____ FT.
INCL. _____ FT. PERF. <u>60</u> MESH	INCL. <u>327 slot</u> FT. PERF. _____ MESH	_____ FT.
PERFORATIONS (INCLUDE PERF'D INTERVALS FROM TOP TO BOTTOM) _____	PERFORATIONS (INCLUDE PERF'D INTERVALS FROM TOP TO BOTTOM) _____	_____ FT.
		_____ FT.

REMARKS:

Corrections Made as Follows:	By Whom:
Form 114 _____	_____
115 _____	_____
121 _____	_____
142 _____	_____
Cards _____	_____
Production Reports _____	_____
Well Records (Field) _____	_____
Well Records (Report) _____	_____
Field Maps _____	_____

PRODUCTION OR INJECTION DATA

I.P.	DATE	OIL		WATER		BEAN /64	PRESSURE		GAS		METHOD*
		NET B/D	GRAVITY	B/D	% CUT		TBG. PSIG	CSG. PSIG	MCF	GOR	
	11/28/62	60	21.5		6.0		80	200		P	
	11/29/62	62			11.0			88			
	11/30/62	55			11.0						
	12/3/62	60			3.8						
P.P.											

*NOTE: F, GL, P, WI, GI, LPG

ELEVATION: KB _____ FT. RT. 2512 FT. GR. _____ FT. OTHER _____ FT.
SURFACE LOCATION 559.42'S. & 3298.75'W. from Station #84

SUB-SURFACE LOCATION (WHEN DIRECTIONALLY DRILLED) FROM SURFACE LOCATION _____

PIPELINE COMPANY _____

GAS SOLD TO _____

FOR THE COMPANY BY Ellsworth DATED 1/3/63
(from operator)

MEMO BY: _____
EFFECT. DEPTH 8202
SCH. PROD. _____
OR INITIAL PROD. 60

DISTRIBUTION

DOG MW

TIDEWATER OIL COMPANY
(WESTERN DIVISION)

CHANGE OF WELL STATUS REPORT

SECTION 28	TOWNSHIP 3N	RANGE 16W	B & M S.B.	LOCATION 559.42° South & 3298.73° West from Station No. 84
DISTRICT COASTAL		AREA Aliso Canyon	LEASE & WELL Porter No. 26	FIELD Aliso Canyon
COUNTY AND STATE Los Angeles, California			OPERATOR Tidewater Oil Co.	TOC FILE NO. - TOC WORKING INT. 100%

TYPE OF WELL <input checked="" type="checkbox"/> OIL <input type="checkbox"/> GAS	TYPE OF COMPLETION <input checked="" type="checkbox"/> SINGLE <input type="checkbox"/> MULTIPLE	OTHER PRODUCING WELLS ON LEASE OR UNIT <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/> OIL <input type="checkbox"/> GAS
--	--	---	--

DATE OF CHANGE 11-10-62 *	REASON FOR STATUS CHANGE	METHOD OF COMPLETION
<input type="checkbox"/> OIL COMPLETION (FIRST FORMATION OIL PRODUCED)	<input type="checkbox"/> RESUMPTION OF PRODUCTION	<input checked="" type="checkbox"/> PUMP
<input type="checkbox"/> GAS COMPLETION	<input type="checkbox"/> CESSATION OF PRODUCTION MAR 1 1968	<input type="checkbox"/> GAS LIFT
<input checked="" type="checkbox"/> RE-COMPLETION	<input type="checkbox"/> IDLE	<input type="checkbox"/> FLOW
<input type="checkbox"/> INITIAL PRODUCTION	<input type="checkbox"/> PLUGGED & ABANDONED	<input type="checkbox"/> INJECTION
		WATER _____ GAS _____

WELL DATA				PRODUCTION TEST DATA								
PRODUCING ZONE	PERFS. (sl, sp, ip)	PRODUCTION INTERVAL FROM	TO	BOPD	GAS AICFPD	CHOKE /64"	TP	CP	TRAP PRESSURE	GOR OR CONDENSATE YIELD	CUT	API GRAVITY
Frew	SL	7896'	8202'	60	200			80	80		6%	21.5°

IF CHANGE OF STATUS IS DUE TO CESSATION OF PRODUCTION, WHAT ARE THE PLANS TO RESTORE PRODUCTION, AND ON WHAT DATE IS PRODUCTION EXPECTED TO BE RESTORED?

REASON FOR PLUG & ABANDONMENT: **NOTE: Previously N.I.O. (Senon Zone Gas Cap Completion)**

TOTAL DEPTH, 8297' (Rd #1) PLUGGED DEPTH, _____ GROUND ELEVATION, 2512' POINT OF DEPTH MEASUREMENT, 6.92 FT. ABOVE GROUND

SIZE OF CASING (A.P.I.)	DEPTH OF SHOE	TOP OF CASING	WEIGHT OF CASING	NEW OR SECOND HAND	GRADE	SIZE OF HOLE DRILLED	NUMBER OF SACKS CEMENT	W S O DEPTHS	CASING PACKED DEPTHS (IF ANY)
13 3/8"	523'	Surface	54.5#	New	J-55	17 1/2"	400	-	-
9 5/8"	6,120'	Surface	40,43.5#	New	J-55, N-80	12 1/4"	800	-	-
5"	8,203'	6,007'	18#	New	-	7 7/8" 6 1/8"	CP 7896' 855 c.f.	Lap and 4 h's 7877'	-

JUNK, ST'd 6 5/8" from 6162-7610' (Rd #1): ST'd 4 3/4" 7556-7840' (Rd. #1)

REMARKS, Redrilled and Deepened (* Production-first formation oil Nov. 27, 1962)

SUBMITTED BY <i>J. M. Cadden</i>	TITLE District Engineer	DATE December 14, 1962
-------------------------------------	----------------------------	---------------------------

DISTRIBUTION: DISTRICT PRODUCTION MANAGER, DIVISION PRODUCTION MANAGER, DIVISION EXPLORATION MANAGER, PRODUCTION ACCOUNTING, LEASE RECORDS-PRODUCING PROPERTIES, DIVISION OF OIL & GAS (COMPLETIONS, RECOMPLETIONS AND ABANDONMENTS ONLY), CONSERVATION COMMITTEE OF CALIFORNIA OIL PRODUCERS (COMPLETIONS AND RE-COMPLETIONS ONLY).

P.24

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DISTRICT NO. 111 AND 112
RECEIVED

DIVISION OF OIL AND GAS

MAR 1 1963

History of Oil or Gas Well

INGLEWOOD, CALIFORNIA

OPERATOR TIDEWATER OIL COMPANY FIELD ALISO CANYON

Well No. PORTER No. 26, Sec. 28, T. 3N, R. 16W, S.B. B. & M.

Date February 27, 1963 Signed J. M. Cadden
J. M. Cadden,
P.O. Box #811, Ventura, Calif. 643-2154 Title Agent
(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.

HISTORY

1962

Date

9/17-21

Removed derrick. Prepared location for re-drilling and deepening to Frew Zone. Killed well with salt water. Installed BOP. Lowered tubing to 7840' (no fill) Established circulation. With tubing hung at 7840' equalized 54 sacks Class A cement. Displaced cement with 242 cu.ft. of salt water. Backscuttled, no cement in returns. Ran Gyroscopic survey, found top of cement plug at 7262'. Location of plug witnessed and approved by D.O.G.

9/22 -30

Cut 6 5/8" casing at 6115' (5' inside of 9 5/8" casing). Contractor moved in and rigged up rotary. Pulled and laid down 142 joints of 6 5/8" casing. Installed BOPE. With pilot mill located top of 6 5/8" stub at 6120' (new K.B. 12' above mat). Milled section to 6162'. With drill pipe at 6162' equalized 50 sacks Class A cement plus 17 sacks sand, preceded with 20 cu.ft. water. Displaced with 20 cu.ft. water, 212' drilling fluid. Located top of cement at 6085'. Cleaned out soft cement to 6142', firm cement from 6142' to 6147'. Changed over to oil mud.

10/1-19

Set whipstock #1 at 6147', oriented N 70 W, and drilled 5 5/8" hole to 6153'. Pulled whipstock and opened hole to 7 7/8". Set whipstock #2 at 6153', oriented N 70 W and drilled 7 7/8" hole to 8026'. Mud weight 61; viscosity 126.

10/20-26

Reduced hole to 6 1/8" and drilled 6 1/8" hole to 8297'. Ran Induction, Gamma-ray and Sonic logs. Conditioned hole for liner.

10/27-29

Landed 2195' of 5" 18# combination liner (bottom 350.28' hydril flush joint with 307.26' shop perforated) at 8203'. T.L.H. 6007'. Liner detail top to bottom:

- 2.50' - Burns plain type fluted liner hanger
- 1841.76' - 5" 18# T&C blank liner with Halliburton fillup collar-48 jts.
- 43.02' - Xover (5" 18# hydril to T&C)
- 1.00' - Halliburton solid baffle collar
- 306.16' - 5" 18# perf'd w/2" straight slots, 8 rows, 6" centers, 200 Mesh
- 1.10' - Halliburton cement guide shoe
- 2195.54' - Overall

Liner equipped with centralizers at 7921', 7868', 7835', 7734', 7581' and 7419' Cemented through port collar at 7896' with 855 cu.ft. Class A cement and Perfalite (1:1 ratio); 4% gel. Cleaned out soft cement 5325-5968', and cleaned out cement to 6007', top of liner hanger (14' high). Pressured casing to 1000# O.K. Ran CCT, set packer at 5810', tail to 5825'. Opened valve at 2:56 P.M. Had 1 minute blow dead balance of 1 hour test. Recovered 60' hole fluid. Lap test witnessed and approved by D.O.G.

1962

HISTORY

- 10/30-11/2 Cleaned out cement in liner 6007-6027⁰ and 7673-7853⁰ (fillup collar). Cleaned out cement 7853-7891⁰. Ran Neutron-collar log 7891-6007⁰. J.P.'d 4 holes at 7877⁰. Ran tester, set packer at 7815⁰, tail to 7832⁰, 1400' water cushion. Had faint blow increasing to strong blow at end of one hour test. Pulled loose, had 180⁰ (.7 bbls.) rise. Test witnessed and approved by D.O.G. Set full bore at 7681⁰. Pressured holes at 7877⁰ to 5000#, holes held with no bleed off. Drilled out cement 7890-7896⁰ and baffle collar at 7896⁰. Changed to lease crude. Removed B.O.P. Installed tubing head and reinstalled B.O.P. Ran and landed 2 7/8" EUE tubing at 7890⁰ including slotted gas anchor and 2 3/8" bottom lock shoe at 7858⁰. Tore out BOP. Installed spool and safety gate. Released rig contractor tearing out and moving out.
- 11/3-6 Contractor tearing out and moving out.
- 11/7-11 Formed pumping unit foundation. Poured pumping unit foundation. Ran rods and pump. Grouted pumping unit. On pump 12 noon (11-10-62). In 12 hours pumped 75 BF; 18%; 62 BO (circ. oil).
- 11/12-17 Quit pumping. Bumped down - no production. Washed pump back. Pumped 8 BF; 20%; 6 BO (circ. oil). Quit pumping. Pulled and replaced pump (metal particles in pump). Pulled rods and tubing. 2 3/8" tubing was twisted and kinked. Found two collars washed out. Ran bailer to 8200⁰ - no fill. Laid down 62 jts. 2 3/8" tubing.
- 11/18-19 Idle.
- 11/20-24 Reran 2" and 2 1/2" tubing. Hooked up tree. Ran pump, could not fill tubing. Pulled and checked pump - O.K. Pulled tubing, found 1 washout in 2 7/8" tubing. Hydrotested: replaced 2 bad joints. Landed tubing. Ran pump with rods. On pump at 5:00 P.M. (11-23-62). Did not pump up.
- 11/25 Pumped 249 bbls. circ. oil.
- 11/26 Pumped 191 BFPD; 1%; 189 BOFD circ. oil; 25 MCF/D net est.
- 11/27 Pumped 113 BFPD; 1.1%; 111 BOFD; 63 MCF.
- 11/28 Pumped 79 BFPD; 6%; 74 BOFD; 83 MCF.
- 11/29 Pumped 70 BFPD; 11%; 62 BOFD; 88 MCF.
- 11/30 Pumped 62 BFPD; 11%; 55 BOFD.
- 12/1 Pumped 66 BFPD; 6%; 64 BOFD.
- 12/2 Pumped 66 BFPD; 3.2%; 64 BOFD.
- 12/3 Pumped 62 BFPD; 3.8%; 60 BOFD.
- 12/4 Pumped 62 BFPD; 3%; 60 BOFD.
- 12/5 Pumped 62 BFPD; 3%; 60 BOFD.
- 12/6 Pumped 37 BFPD; no cut reported; 200 MCF/D.
- 12/7 Pumped 58 BFPD; 3%; 56 BOFD; 225 MCF net. Fluid level 4023⁰ above pump.
- 2/24/63 Pumped 67 BFPD; 20%; 54 BOFD.

Junk (St⁰d Rd. No. 1)

1. 1448⁰-6 5/8" ST⁰d 6162-7610⁰
2. 284⁰-4 3/4" ST⁰d 7556-7840⁰

T.D. Rd. #1 8297⁰

Zone: Frew

Logs: Submitted

Tubing Record

5925⁰-2 7/8", 8 RT, EU tbg. (191 Jts)
incl. landing nipple
1892⁰-2 3/8", 8 RT, EU tbg. (61 Jts) incl.
2 7/8" x 2 3/8" crossover
32⁰-2 3/8", 8 RT, B.L. Pump Shoe and
2 3/8" Poorman's Gas Anchor
(2 3/8" bull plug on bottom)
7849⁰-Overall

Casing Record

13 3/8" 54.5# c 523'

9 5/8" 40 & 43# c 6120'

(0-1811', 43#; 1811-3436', 40#; 3436-6120', 43#)

2195'-5" 18# L 8203'

WSO 4 h's 7877' * and Lap *

C.P. 7896'

Pf: 7897-8202' (2" straight slots, 8 rows, 6" centers, 200 M)

T.L.H. 6007'

* Witnessed and approved by D.O.G.

Ditch Samples

Depth	Predominate Formation	Estimated Composition			Other (Quartz - Slivers)
		% Sand	% Siltstone	% Shale	
7766'	Shale & slst, black & gray, hard & soft.		40%	60%+ liney sh. 5%	
7776	Slst. & shale - black		90%	10%	
7788	Slst, lt med gray, less than 5%		90%	5%	5% clay, white
7796	Sh & Slst, black		50%	50%	
7806	Sh (or soft clay) gray, silty		60%	40%	
7816	Slst, gray, fine	5%	60%	35%	
7826	Slst, gray, fine		60%	40%	
7836	Slst, black & brown, coarse pieces	Tr.	95%	5%	
7846	Slst & shale	Tr	90%	10%	black (liney)
7856	Slst & shale	Tr	"	10%	
7866	Slst & shale		70	30%	
7876	Slst & shale, fine pieces	Tr	"	"	
7888	Slst & shale	"	"	"	
7896	Shale, Slst & shell, coarse pieces	Tr	30%	45% shale is liney	Frew shell, 25%
7909	Shale & shell, med.-coarse	Tr		90	5% shell
7921	Shale & shell	Tr		"	"
7941	Shale & Shell	5%		"	"
7951	Sand & shale, & siltstone	35%	30%	30%	5%
7961	Sand & (shale) & siltstone	45%	50%		5%
7971	Sand & shale, & siltstone	40%	50%	5%	5%
7981	Siltstone & sand, lt. brown gray	20%	70%		5-10%

Ditch Samples

<u>Depth</u>	<u>Predominate Formation</u>	<u>Estimated Composition</u>			<u>Other (Quartz - Slivers)</u>
		<u>% Sand</u>	<u>% Siltstone</u>	<u>% Shale</u>	
7991'	Shale & siltstone, (brown & black)		35%	60%	5% ±
8001	Siltstone & shale (coarse)		60%	35%	5% ±
8011	Siltstone & sand (light gray)	25%	60% (& clay)	10%	5-10%
8021	Siltstone & sand (light gray)	30%	55%	10%	5-10%
8036	Siltstone, brown-blk, sandy	5% sand 10% shell	70%	20%	5-10% Shell chips, multi-colored
8046	Shale & siltstone		30%	60%	10%
8056	Shell, (sand), & siltstone	60% Sand & shell	30%	10%	Angular chips
8066	As above	60%	30%	10%	
8076	As above	60%	30%	10%	
8086	As above	60%	30%	10%	
8122	Shell sand	60% Shell & sand	30%	10%	Chips to 1/4"
8132	Shell sand	60% Shell & sand	20%	20%	White and rose colored.
8142	Shell sand	65% Shell & sand	15%	20%	
8162	Shell sand	60% Shell & sand	15%	25%	
8176	Shale, shell, & Slst. (Med.gr.)	45%	10%	45%	
8186	Shell sand & Slst. (coarse)	70%	15%	15%	
8196	Shell, shale	55%	25%	20%	
8206	Shale & slst. (Blk & gray & limey)	5%	40%	45%	
8216	Shale & slst. (Dark gray)		35%	65%	

Ditch Samples

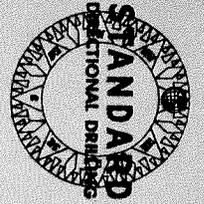
<u>Depth</u>	<u>Predominate Formation</u>	<u>Estimated Composition</u>			<u>Other (Quartz - Slivers)</u>
		<u>% Sand</u>	<u>% Siltstone</u>	<u>% Shale</u>	
8226	As above, (soft)				
8236	As above, (soft)	5%	35%	60%	
8246	As above, (coarse)		35%	65%	
8256	As above, medium gray, firm		35%	65%	
8266	As above		35%	65%	
8276	As above		30%	70%	
8286	As above, black & gray		30%	70%	
8296	As above, med. gray		60%	40%	

ACH:ml

Described by A. C. Hanson

Doc 28-37-16-20

PACIFIC LIGHTING SERVICE CO.
 "SFZU" P-26
 Sec. 28-3N-16W ALISO CANYON



GELTY OIL CO.

COMPANY TIDEWATER OIL CO.

WELL "PORTER" #26

LOCATION Del Aliso

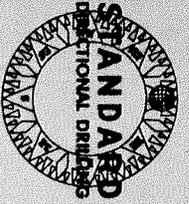
DATE Sept. '62

Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES				REMARKS
					North	South	East	West	
100	0°30'	100 00		N 21° E	0 82		0 31		Survey from surface to 7262' in original hole 1s Sperry-Sun Gyro survey.
200	0°15'			N 24° E	1 22		0 49		
300	0°15'			N 04° W	1 65		0 46		
400	0°15'			N 20° E	2 06		0 61		
500	0°15'	500 00		N 16° E	2 48		0 73		
600	0°00'			VERT.	2 48		0 73		
2300	0°00'			VERT.	2 48		0 73		
2400	0°15'			S 01° E	2 04		0 74		
2500	0°15'			S 29° E	2 42		0 95		
2600	0°15'	2600 00		S 04° W	1 99		0 92		
2700	0°15'			S 23° W	1 59		0 75		
2800	0°00'			VERT.	1 59		0 75		
3000	0°15'			S 45° E	1 28		0 06		
3100	0°00'			VERT.	1 28		0 06		
3400	0°15'	3400 00		WEST	1 28		0 63		
3500	0°15'			N 30° W	1 72		0 41		
3600	0°00'			VERT.	1 72		0 41		
3800	0°15'			N 61° E	1 93		0 79		
3900	0°00'			VERT.	1 93		0 79		
4000	0°15'	4000 00		S 15° E	1 51		0 96		
4100	0°15'			S 22° E	1 11		0 06		
4200	0°15'			S 07° E	1 68		1 11		
4300	0°15'			S 17° E	0 26		1 24		
4400	0°15'			S 38° E		0 08	1 51		
4500	0°00'	4500 00		VERT.		0 08	1 51		

INGLEWOOD, CALIFORNIA

NOV 2 1962

RECEIVED



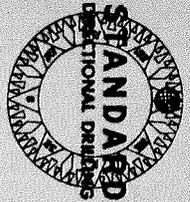
COMPANY TIDEWATER OIL CO.

WELL PORTER #26

LOCATION DEI ALISO

DATE Sept. '62

Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES					REMARKS
					North	South	East	West		
4600	0°00'			VERT. W		08	11	51		
4800	0°30'			S 25° W		087	114	14		
4900	0°45'			S 50° W		127	14	14		
5000	1°00'			S 54° W		274	14	14		
5100	1°00'	5099	95	S 65° W		348	14	14		7784
5200	1°00'			S 56° W		446	14	14		30
5300	0°45'			S 53° W		525	14	14		31
5400	0°15'			S 21° W		566	14	14		51
5500	0°00'			S VERT. W		566	14	14		51
5600	0°30'	5599	92	S 39° W		634	14	14		06
5700	0°45'			S 52° E		53	14	14		03
5800	0°45'			M 38° W		50	14	14		22
5900	0°45'			M 32° E		39	14	14		53
6000	1°00'			M 15° E		70	14	14		08
6100	1°00'	6099	85	M 23° E		09	14	14		40
6200	1°00'			M 29° E		44	14	14		58
6300	1°00'			M 38° E		82	14	14		48
6400	1°15'			M 37° E		56	14	14		
6500	1°15'			M 27° E		50	14	14		
6600	1°30'			M 35° E		65	14	14		
6700	1°30'	6699	71	M 08° E		09	14	14		
6800	1°15'			M 10° W		12	14	14		
6900	1°00'			M 25° W		14	14	14		
7000	1°00'			M 08° W		15	14	14		
7262	1°00'	7261	60	M 36° W		19	14	14		



COMPANY TIDEWATER OIL CO.

WELL PORTER #26

LOCATION DEL ALISO

DATE SEPT. '62

Measured Depth	Drift Angle	Vertical Depth	Drift Feet	Drift Direction	COORDINATES				REMARKS	
					North	South	East	West		
6100	1°00'	6099	8	N 23° E	0	0	2	2	40	From Gyro survey.
6147	1°00'	6146	13	N 26° E	0	0	2	2	04	
6153	1°45'	6152	30	N 20° W	17		2	2	07	
6164	4°45'	6163	0	N 58° W	17		2	2	77	
6207	6°00'	6206	4	N 53° W	87		6	2	35	
6271	8°00'	6269	8	N 61° W	8		14	14	15	
6371	7°45'	6369	13	N 62° W	14		26	26	06	
6594	7°45'	6590	30	N 60° W	29		52	52	11	
6733	7°00'	6727	16	N 60° W	38		66	66	78	
6809	6°45'	6803	8	N 65° W	41		74	74	87	
6880	7°15'	6873	8	N 65° W	45		82	82	99	
6938	7°45'	6931	7	N 64° W	49		90	90	02	
7002	8°45'	6994	9	N 62° W	53		98	98	62	
7088	8°45'	7079	13	N 64° W	59		110	110	37	
7226	8°15'	7216	19	N 65° W	67		128	128	47	
7320	8°30'	7309	13	N 63° W	74		140	140	84	
7459	8°15'	7446	19	N 56° W	85		157	157	38	
7661	7°15'	7647	25	N 54° W	100		178	178	01	
7707	6°30'	7692	5	N 54° W	103		182	182	23	
7790	7°00'	7775	10	N 54° W	109		190	190	42	
7966	6°45'	7949	20	N 49° W	122		206	206	02	
7992	6°30'	7975	2	N 49° W	124		208	208	24	
8026	6°00'	8009	3	N 49° W	127		210	210	92	
8114	6°45'	8096	10	N 44° W	134		218	218	11	
8297	7°15'	8278	23	N 48° W	150		235	235	24	

16

TD

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off

(FORMATION TESTER)

No. T. 162-789

Mr. James M. Cadden
P. O. Box 811
Ventura, California
 Agent for TIDEWATER OIL COMPANY

Inglewood Calif.
November 1, 1962

DEAR SIR:

Your well No. "Porter" 26, Sec. 28, T. 3 N, R. 16 W, S B B & M.
Aliso Canyon Field, in Los Angeles County, was tested for water shut-off
 on October 30, 1962. Mr. S. Cordova, Engineer, designated by the supervisor was present
 from 5:45 a.m. to 6:30 a.m. as prescribed by law; there were also present P. Gundelfinger, Engineer
 and J. Kennedy, Drilling Foreman

Shut-off data: 5 in. 18 lb. casing was ~~xx~~ cemented through ports at 7896 ft.
 on October 27, 1962 in 7-7/8 in. hole with 855 cu. ft. ~~xx~~ of cement
 and Perfalite (1:1), mixed with 4% gel
 filling ~~xxxxxxxxxxxx~~ behind casing to 6007 ft. below surface.

Casing record of well: 13-3/8" cem. 523'; 9-5/8" cem. 6120'; 5" ld. 6007'-8203', perf. 7896'-
8203', c.p. 7896', perf. 7877', W.S.O.; T.D. (1st hole) 7844'.

Present depth 8297 ft. cmt. bridge 7896 ft. to 7891 ft. Cleaned out cmt. 7673 ft. to 7891 ft. for test.
 A Johnston tester was run into the hole on 2 in. ~~drill pipe~~ tubing,
 with 1400 ft. of water-~~test~~ cushion, and packer ~~xx~~ set at 7815 ft. with tailpiece to 7832 ft.
 Tester valve, with 1/2 in. bean, was open for one hr. and ~~xxxx~~ min. During this interval there was a
faint blow, gradually increasing to a strong blow.

Mr. Gundelfinger reported: THAT the 5" casing was jet-perforated
 with four 1/2" holes at 7877'.

THE ENGINEER NOTED:

1. When the tubing was removed, a net rise of 180' of gas-cut drilling fluid was found above the tester.
2. The pressure bomb chart indicated that the tester tool functioned properly.

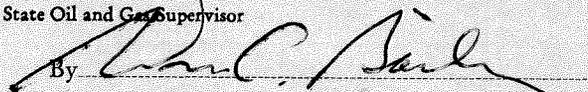
THE 5" SHUT-OFF AT 7877' IS APPROVED.

SC:omh

CC James M. Cadden
 Prod. Dept. - Tidewater Oil Co.

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

By



Deputy

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 162-788

Mr. James M. Cadden
P. O. Box 811
Ventura, California
 Agent for TIDEWATER OIL COMPANY

Inglewood Calif.
November 1, 1962

DEAR SIR:

Operations at well No. "Porter" 26, Sec. 28, T. 3 N, R. 16 W, S B B & M.
Aliso Canyon Field, in Los Angeles County, were witnessed
 on October 28, 1962. Mr. S. Cordova, Engineer, representative of the supervisor was present
 from 5:30 p.m. to 6:30 p.m.. There were also present P. Gundelfinger, Engineer and
J. Kennedy, Drilling Foreman
 Present condition of well: 13-3/8" cem. 523'; 9-5/8" cem. 6120'; 5" ld. 6007'-8203', perf.
7896'-8203', c.p. 7896'; T.D. (present hole) 8297', cem. bridge 7673'-7896',
T.D. (1st hole) 7844'.

The operations were performed for the purpose of demonstrating the effectiveness of the seal
between the 9-5/8" and 5" casings.

Mr. Gundelfinger reported:

1. The 6-5/8" casing was cut and recovered from 6120' and was milled to 6162'.
2. On September 28, 1962, 50 sacks of cement, plus 17 sacks of sand, was pumped in the hole through 3-1/2" drill pipe hanging at 6162', filling to 6035'.
3. The cement was drilled out of the hole from 6035' to 6147', and a removable whipstock was set at 6147'.
4. A 7-7/8" hole was redrilled from 6147' to 8026', and a 6-1/8" hole was drilled to 8297'.
5. On October 27, 1962, 2196' of 5", 13 lb. casing, including perforations from 7896' to 8203', was landed at 8203' (top at 6007'), and was cemented through ports at 7896' with 855 cubic feet of cement and Perfolite (1:1), mixed with 4% gel, filling behind the casing to 6007'.
6. The 9-5/8" casing was cleaned out to 6007'.
7. A Cook tester was run into the hole on 3-1/2" drill pipe, and packer set at 5810' with tailpiece to 5825'. The tester could not get below this depth because of an unknown obstruction in the casing. The tester valve, with 1/2" bean, was open for one hour. During this interval there was a faint blow for one minute, and no blow thereafter.

THE ENGINEER NOTED:

1. When the drill pipe was removed, 60' of drilling fluid was found above the tester.
2. The pressure bomb chart indicated that the tester tool functioned properly.

THE OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED as indicating that no fluid has access to the well from between the 9-5/8" and 5" casings.

SC:omh

cc James M. Cadden
 Prod. Dept. - Tidewater Oil Co.

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

By [Signature] Deputy

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 162-709

Mr. James M. Cadden
P. O. Box 811
Ventura, California
Agent for TIDEWATER OIL COMPANY

Inglewood Calif.
September 27, 1962

DEAR SIR:

Operations at well No. "Porter" 26, Sec. 28, T. 3 N, R. 16 W, S B B & M.
Aliso Canyon Field, in Los Angeles County, were witnessed
on September 20, 1962. Mr. R. Tudor, Engineer, representative of the supervisor was present
from 2:00 p.m. to 4:30 p.m.. There were also present J. Robertson, Superintendent

Present condition of well: 13-3/8" cem. 523'; 9-5/8" cem. 6120'; 6-5/8" cem. 7610', W.S.O.;
4-3/4" ld. 7556'-7840', perf. 7620'-7840'; T.D. 7844', plugged with cement 7840'-7262'.

The operations were performed for the purpose of testing the location and hardness of a cement
plug placed from 7840' to 7262' in the process of plugging back to redrill.

Mr. Robertson reported: THAT on September 19, 1962, 54 sacks of
cement was pumped in the hole through 2-7/8" and 2-3/8" tubing hanging at 7840', filling
to 7262'.

THE ENGINEER NOTED THAT a Sperry Sun Well Surveying Company instrument, located the
top of the cement plug at 7262'.

THE LOCATION AND HARDNESS OF THE CEMENT PLUG AT 7262' ARE APPROVED.

RT:omh

cc James M. Cadden
Prod. Dept. - Tidewater Oil Co.

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

By [Signature] Deputy

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P. 162-850

Mr. James M. Cadden
P. O. Box 811
Ventura, California
Agent for TIDEWATER OIL COMPANY

Inglewood Calif.
September 14, 1962

DEAR SIR:

Your proposal to redrill Well No. "Porter" 26,
Section 28, T. 3 N, R. 16 W, S. B. B. & M., Aliso Canyon Field, Los Angeles County,
dated Sept. 7, 1962, received Sept. 11, 1962 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:
6-5/8" W.S.O. at 7610'.

THE NOTICE STATES

"The present condition of the well is as follows:

1. Total depth. 7844'
2. Complete casing record, including plugs:
13 3/8" 54.5# c 523'
9 5/8" 40 & 43# c 6120'
6 5/8" 26 & 29# c 7610'
284' - 4 3/4" 16# L 7840'
Pf: 7620'-7840'
T.L.H. 7556'

3. Last produced. July 1960 (Gas Only-Sesnon Zone Gas Cap Completion)
(Date) (Net Oil) (Gravity) (Cut) "

PROPOSAL

"The proposed work is as follows: DEEPEN TO INCLUDE FREW ZONE

1. Plug back to 6600'+, to be witnessed and approved by D.O.G.
2. Cut and recover 6 5/8" casing from as deep as possible, cap stub with cement.
3. Redrill from 6120'+ to 8300'+.
4. Cement 2300' of 5" shop perforated liner thru C.P. collar at 7790', shoe at 8300'.
Establish WSO on lap, and on 4 holes at 7945', to be witnessed and approved by D.O.G.
5. Return well to production. "

DECISION

THE PROPOSAL IS APPROVED PROVIDED:

1. The cement plug proposed in item 1 shall extend from 7840' to 7500' or above.
2. 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.
3. Adequate blowout prevention equipment shall be installed and maintained in operating condition at all times.
4. THIS DIVISION SHALL BE NOTIFIED TO INSPECT the installed blowout prevention equipment before drilling below 6120'.

JLZ:omh

cc James M. Cadden
Prod. Dept. - Tidewater Oil Co.

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

Blanket Bond

By [Signature], Deputy

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS
RECEIVED

SEP 11 1962

DIVISION OF OIL AND GAS

INGLEWOOD, CALIFORNIA

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

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

Ventura, Calif. September 7, 19 62

DIVISION OF OIL AND GAS

Inglewood, 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 in~~ Well No. Porter #26
(Cross out unnecessary words)

Sec. 28, T. 3N, R. 16W, S.B. B. & M.
Aliso Canyon Field, Los Angeles County.

The present condition of the well is as follows:

- Total depth. 7844'
- Complete casing record, including plugs:
 - 13 3/8" 54.5# c 523'
 - 9 5/8" 40 & 43# c 6120'
 - 6 5/8" 26 & 29# c 7610'
 - 284' -4 3/4" 16# L 7840'
 - Pf: 7620'-7840'
 - T.L.H. 7556'

3. Last produced. July 1960 (Gas Only-Sesnon Zone Gas Cap Completion)
(Date) (Net Oil) (Gravity) (Cut)

The proposed work is as follows: DEEPEN TO INCLUDE FREW ZONE

- Plug back to 6600'±, to be witnessed and approved by D.O.G.
- Cut and recover 6 5/8" casing from as deep as possible, cap stub with cement.
- Redrill from 6120'± to 8300'±.
- Cement 2300' of 5" shop perforated liner thru C.P. collar at 7790', shoe at 8300'. Establish WSO on lap, and on 4 holes at 7945', to be witnessed and approved by D.O.G.
- Return well to production.

Redrill & deepen

MAP	BOOK	CARDS	EGND	FORMS
				114 121
		<i>Blanket</i>	<i>EB</i>	<i>EB</i>

TIDEWATER OIL COMPANY
(Name of Operator)
By J. M. Cadden
J. M. Cadden, Agent

DIVISION OF OIL & GAS
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 JUN 17 1942
 LOS ANGELES, CALIFORNIA

p. 26

STATE OF CALIFORNIA
 DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

LOG OF OIL OR GAS WELL

Operator FIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon
 Well No. Porter #26 Sec. 28, T. S-N, R. 16-W, S.E. B. & M.
 Location 559.42' South and 3293.73' West from Station #84 Elevation 2511.74'

In compliance with the provisions of Chapter 718, Statutes of 1915, as amended, 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 May 15, 1942 Signed R. S. Curl
G. C. Pfeffer (Engineer or Geologist) R. S. Curl (Superintendent) Title Agent
 (President, Secretary or Agent)

Commenced drilling August 8, 1941 Completed drilling December 31, 1941 Drilling tools Cable Rotary

Total depth 7044' Plugged depth _____

Junk _____

GEOLOGICAL MARKERS				DEPTH	
Interval	Description	Correlation	Card	114	122

Commenced producing January 13, 1942 (date) Flowing/gas lift/pumping _____ (cross out unnecessary words)

Initial production (20 hours)
 Production after 30 days

Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
193	53.0	1.0	8270 (rate)	675#	2800#
149	48.0	0.4	8883	725#	2700#

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 Cement if through perforations
13-3/8"	523'	0'	54.5#	New	Seamless	J-55	17 1/2"	400	
9-5/8"	6120'	0'	40# & 43#	"	"	J-55 & N-80	18 1/2"	800	
6-5/8"	7610'	0'	26# & 29#	"	"	J-55 & N-80	9-5/8"	250	
4-3/4"	7840'	7586'	16#	"	"	J-55	8 1/2"		

PERFORATIONS

Size of Casing	From	To	Size of Perforations	Number of Rows	Distance Between Centers	Method of Perforations
4-3/4"	7520 ft.	7840 ft.	60-mesh	8	6"	Kobe
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				

Electrical Log Depths 523' - 7844' (Attach Copy of Log)

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DIVISION OF OIL AND GAS

History of Oil or Gas Well

Sheet #50 LOS ANGELES, CALIFORNIA

OPERATOR WIDE WATER ASSOCIATED OIL COMPANY FIELD Aliso Canyon

Well No. Porter #26, Sec. 28, T. 3-N, R. 16-W, S. B. B. & M.

Signed R. S. Caryl

Date May 15, 1942 Title Agent

(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

LOCATION: 559.42' South and 3296.73' West from Station #84.

ELEVATION: 3511.74'

A. PREPARING TO DRILL.

DATE		STATUS	
DATE	STATUS	DATE	STATUS

1941

- 3/20-3/28 Graded rig site.
- 3/29-3/30 Idle
- 3/31-4/1 Idle on account of storm.
- 4/2-4/11 Graded rig site.
- 4/12-4/20 Idle.
- 4/21-4/25 Graded road and rig site.
- 4/26-4/27 Idle.
- 4/28-4/29 Graded road
- 4/30 Idle on account of storm.
- 5/1-5/22 Graded road
- 5/23-5/26 Idle.
- 5/27-5/29 Dug cellar and built forms.
- 5/30-6/1 Idle.
- 6/2 Poured concrete for foundations
- 6/3 Moved in steel
- 6/4-6/6 Built rig and pipe racks.

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DIVISION OF OIL AND GAS

History of Oil or Gas Well Sheet #31

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD Aliso Canyon

Well No. Porter #26, Sec. 28, T. 3-N, R. 16-W, S. & B. B. & M.

Signed R. A. Gayle

Date May 15, 1942 Title Agent
 (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date
1941

<u>6/7-6/8</u>	Idle.
<u>6/9</u>	Installed woodwork
<u>6/10</u>	Idle.
<u>6/11-6/13</u>	Installed woodwork
<u>6/13</u>	Erected mud tanks
<u>6/14</u>	Idle
<u>6/15</u>	Moved in equipment
<u>6/16-6/19</u>	Rigged up rotary
<u>6/20-8/7</u>	Idle

B. DRILLING TO 7844'

Depth

<u>8/8</u>	<u>83'</u>	Spudded 12 1/2" hole at 8:00 A.M. Drilled 12 1/2" hole from 0' to 83'. Lost circulation while drilling at 83'. Mixed cottonseed hulls and Aquagel with mud and regained circulation.
<u>8/9-8/13</u>	<u>523'</u>	Drilled 12 1/2" hole from 83' to 523'. Opened hole from 12 1/2" to 17 1/2" from surface to 448'.
<u>8/14</u>		Opened hole from 12 1/2" to 17 1/2" from 448' to 523'. Cemented 13-3/8", 54.5# Youngstown, Grade J-55, Marcell welded slip joint casing at 523' with 400 sacks Fast Colton cement in bulk using California Bulk Cement Service equipment. Pressure jumped from 250# to 350# when plugs bumped. Time 12:15 P.M. Oil Well Cementing Co. Had intermittent circulation while running and cementing casing. Had no circulation at end of cement job. Cemented around top of casing with 20 sacks Fast Colton cement.

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DIVISION OF OIL AND GAS

History of Oil or Gas Well Sheet #32

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD Aliso Canyon

Well No. Porter #26, Sec. 22, T. 3-N, R. 16-W, S.B. B. & M.

Signed R. A. Cough

Date May 15, 1942 Title Agent
 (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date

<u>1941</u>	<u>Depth</u>	
8/15	545'	Installed cellar connections. Made casing test O.K. with 1000#. Located top of cement at 510'. Cleaned out to 523' and resumed drilling making 12" hole. Drilled 12" hole from 523' to 545'.
8/16-8/18	869'	Drilled 12" hole from 545' to 869'. Twisted off while drilling at 869' leaving one stand and 6' of drill pipe, drill collar and bit in hole. Recovered fish with overshot.
8/19-8/21	1077'	Drilled 12" hole from 869' to 1077'. Lost circulation while drilling at 1077'. Added cottonseed hulls and Aquagel to mud and regained circulation.
8/22-8/25	1335'	Drilled 12" hole from 1077' to 1335'. Lost circulation between 1263' and 1287'. Dumped 15 sacks cottonseed hulls and regained circulation.
8/24-9/4	3180'	Drilled 12" hole from 1335' to 3180'.
9/5	3276'	Drilled 12" hole from 3180' to 3208'. Twisted off while drilling at 3208' leaving drill collar and bit in hole. Recovered fish with overshot. Resumed drilling. Drilled 12" hole from 3208' to 3276'.
9/6	3361'	Drilled 12" hole from 3276' to 3361'. Laid down 6" drill pipe. Made up 5" full hole drill pipe.
9/7-9/12	4050'	Drilled 12" hole from 3361' to 4050'. Strung 8 lines.
9/13		Reduced size of hole from 12" to 8 1/2" and began coring at 4050'.
9/14-9/16	4252'	Cored 8 1/2" hole from 4050' to 4252'. Ran Schlumberger electric log at 4252'. Opened 8 1/2" hole to 12" from 4050' to 4233'.
9/17	4295'	Opened 8 1/2" hole to 12" from 4233' to 4252'. Resumed drilling 12" hole. Drilled 12" hole from 4252' to 4291'. Twisted off while drilling at 4291', leaving bit, drill collar and 6" of drill pipe in hole. Recovered fish with over-shot. Resumed drilling. Drilled 12" hole from 4291' to 4295'.
9/18	4315'	Drilled 12" hole from 4295' to 4315'. Twisted off while drilling at 4315', leaving drill collar and bit in hole. Recovered fish with over-shot.

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Sheet #33

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD Aliso Canyon

Well No. Porter #26, Sec. 28, T. 3-N, R. 16-W, S. & B. B. & M.

Signed R. A. Cuyler

Date May 15, 1942 Title Agent

(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date	Depth	
1941 9/19-9/26	5300'	Drilled 12 $\frac{1}{2}$ " hole from 4315' to 5300'. Reduced size of hole to 8 $\frac{1}{2}$ " and began coring at 5300'.
9/27-9/28	5459'	Cored 8 $\frac{1}{2}$ " hole from 5300' to 5459'. Ran Schlumberger electric log at 5459'.
9/29-9/30	5696'	Cored 8 $\frac{1}{2}$ " hole from 5459' to 5696'. Ran Schlumberger electric log at 5696'. Reamed 12 $\frac{1}{2}$ " hole to 5531'.
10/1		Reamed 12 $\frac{1}{2}$ " hole from 5531' to 5300'. Cleaned out 8 $\frac{1}{2}$ " hole from 5300' to 5696'.
10/2	5706'	Cored 8 $\frac{1}{2}$ " hole from 5696' to 5706'. Ran Johnston tester on 5" full hole drill pipe. Set packer on shoulder at 5300'. Bottom of tail pipe 5319'. Opened 1/8" bean at 9:17 A.M. Had fair blow of air until 9:26 A.M. then dead. Opened 3/16" bean at 9:31 A.M. Had fair to fairly strong blow with gas to surface at 9:50 A.M. (after 53 minutes). Closed valve at 9:59 A.M. after being open 39 minutes. Pulled drill pipe and recovered 915' (20.7 bbls.) gassy drilling mud. Chart in pressure bomb showed 630 $\frac{1}{2}$ flow pressure with 3/16" bean. Cleaned out to 5696' and resumed coring 8 $\frac{1}{2}$ " hole. Found hole bridged 5300'-5486' and 5576'-5696'. Had showing of oil on ditch after cleaning out first bridge.
10/3-10/7	6220'	Cored 8 $\frac{1}{2}$ " hole from 5706' to 6220'.
10/8-10/10		Reamed 8 $\frac{1}{2}$ " hole to 12 $\frac{1}{2}$ " from 5300' to 6220'. Laid down 5" full hole drill pipe. Made up 4" full hole drill pipe.
10/12-10/12	6370'	Cored 8 $\frac{1}{2}$ " hole from 6220' to 6370'.
10/13-10/13		Changed rotary equipment.
10/19	6380'	Finished changing rotary equipment and resumed coring 8 $\frac{1}{2}$ " hole. Cored 8 $\frac{1}{2}$ " hole from 6370' to 6380'.
10/20-10/21	6519'	Cored 8 $\frac{1}{2}$ " hole from 6380' to 6519'. Changed lines and repaired rig.
10/22-10/23	6889'	Cored 8 $\frac{1}{2}$ " hole from 6519' to 6889'. Ran Schlumberger electric log at 6889'. Ran in with hole opener. Cleaned out to 4711'.

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Sheet 34

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD Aliso Canyon

Well No. Porter 426, Sec. 23, T. 3-N, R. 16-W, S. 1. B. & M.

Signed R. A. Cuyler

Date May 15, 1942 Title gent (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date

1941 Depth

10/29-10/31 6289' Cleaned out 12" hole from 4711' to 6220'. Reamed 8 1/2" hole to 12" from 6220' to 6750'. Cleaned out 8 1/2" hole from 6750' to 6786'.

11/1 Cleaned out 8 1/2" hole from 6786' to 6889'. Set packer of Johnston tester on shoulder at 6750'; bottom of tail pipe 6762'. Opened 1/8", 3/16", and 1/4" beans at 11:44 A.M. and four 11/32" beans at 11:52 A.M. Had fair blow of air throughout test. Closed valve at 12:19 P.M. after being open 35 minutes. Pulled drill pipe and recovered 4184' (59.0 bbls.) drilling mud grading into water. Top 800' to 900' drilling mud showing a little gas; remainder of fluid water. Salinity of fluid samples as follows:

HEIGHT ABOVE TESTER	FLUID	SALINITY Gr/gal.
3552'	Drilling mud	178
2477'	Water	472
1602'	"	630
727'	"	710
169'	"	759
Tester	"	777

Chart in pressure bomb showed valve open throughout test. Cleaned out sand from 6786' to 6889'.

11/2-11/7 7310' Gored 8 1/2" hole from 6889' to 7310'. Stuck drill pipe at 5510' while coming out of hole. Spotted 50 barrels of oil. Worked pipe.

11/8-11/10 Spotted 75 barrels of oil. Worked pipe. Spotted 1,000 gallons of acid. International Cementers, Inc. Worked pipe.

11/11-11/13 Cut and recovered drill pipe fish to 3934'.

11/14 Unable to get over drill pipe fish with wash pipe. Top of fish 5934'.

11/15-11/17 Cut and recovered drill pipe fish from 3934' to 5308'.

11/18 Washed over drill pipe fish to 5480' and fish dropped down hole. Conditioned mud and cleaned out to 6599'.

11/19-11/20 Cleaned out from 4537' to 6100' with 12" bit. Strung 10 lines.

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DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Sheet #55

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD Aliso Canyon

Well No. Porter #26, Sec. 28, T. 3-N, R. 16-W, S. S.B. B. & M.

Signed R. A. Cuyler

Date May 15, 1943 Title Agent
(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date	Depth	Description
1941		
11/21	7310'	Reamed 12 1/2" hole from 4494' to 6100'. Conditioned mud. Preparing to run 9-5/8" casing.
11/22		Cemented 9-5/8", National seamless T & C casing at 6119' with 800 sacks slow Colton in bulk. Did not bump plugs with 40cu.ft. excess mud. Final pressure 1200#; time 3:30 P.M. Oil Well Cementing Co. Cement furnished by California Bulk Cementing Service. Detail of casing as follows: bottom 2623.8' is 43# N-80; next 1625.1' is 40# N-80; remainder is 43# J-55.
11/23		Standing cemented. Landed 9-5/8" casing and installed cellar connections.
11/24		Located top of cement at 6074'. Made casing test O.K. with 1600#. Cleaned out to 7310'. Found shoe of 9-5/8" casing at 6120'.
11/25		Conditioned mud.
11/26-11/28	7405'	Resumed coring making 6 1/2" hole. Cored 6 1/2" hole from 7310' to 7405'.
11/29		Reamed 8 1/2" hole to 7310' and reamed 6 1/2" hole to 8 1/2" from 7310' to 7403'. Repaired equipment.
11/30-12/5	7530'	Resumed coring. Cored 6 1/2" hole from 7405' to 7530'.
12/4		Reamed 6 1/2" hole to 8 1/2" from 7403' to 7520'.
12/5-12/7	7695'	Cored 6 1/2" hole from 7530' to 7695'. Mixed and conditioned mud.
12/8		Cleaned out 8 1/2" hole to 7520' and reamed 6 1/2" hole to 8 1/2" from 7520' to 7648'.
12/9-12/10	7765'	Cored 6 1/2" hole from 7695' to 7765'. Ran Schlumberger electric log and dip-meter survey.
12/11		Reamed 8 1/2" hole from 6750' to 7648'.
12/12		Cleaned out 6 1/2" hole from 7648' to 7765'. Unable to run Johnston tester hole approximately 7000'. Reamed 8 1/2" hole from 6750' to 7283'.
12/13		Reamed 8 1/2" hole from 7283' to 7648'. Changed cellar connections.

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Sheet #56

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD Aliso Canyon

Well No. Porter #26, Sec. 28, T. 3-N, R. 16-W, S.B. B. & M.

Signed R. A. Cuff

Date May 15, 1943 Title Agent
(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date	Depth	
<u>1941</u>		
12/14	7765'	Cleaned out 6 1/2" hole from 7648' to 7765'. Unable to run Johnston Tester below approximately 7000'.
12/15		Wall scraped 8 1/2" hole to 10 1/2" from 6750' to 6808'.
12/16-12/18		Under-reamed 8 1/2" hole to 9-5/8" from 6808' to 7394'.
12/19-12/22		Re-reamed 9-5/8" hole from 6855' to 7004' and 6934' to 7099'; 7004' to 7183'; 6952' to 7325'; 7294' to 7394'.
12/23		Under-reamed 8 1/2" hole to 9-5/8" from 7394' to 7471'. Re-reamed 9-5/8" hole from 7450' to 7471'. Under-reamed 8 1/2" hole to 9-5/8" from 7471' to 7528'.
12/24-12/25		Re-reamed 9-5/8" hole from 7336' to 7454' and 7390' to 7528'. Under-reamed 8 1/2" hole to 9-5/8" from 7528' to 7607'.
12/26		Re-reamed 9-5/8" hole from 7560' to 7607'. Under-reamed 8 1/2" hole to 9-5/8" from 7607' to 7648'. Cleaned out 6 1/2" hole from 7648' to 7765'.
12/27		Ran Johnston Formation tester on 4" full hole drill pipe and seated 7-5/8" cone packer at 7648'. Bottom of tail pipe 7665'. Tripped 3/32" valve at 11:04 A.M. Started fair blow increasing to very strong blow at 11:05 A.M. Gas to surface 11:06 A.M. Blow increased to rate estimated similar to Porter #12 (10 million cu. ft. per day). Blew into mud tank which was 2/3 full. Blow made spray out of water on top of mud. Gas had good gasoline odor. No colors of oil noted. Pulled packer loose at 11:13 A.M. after being open 9 minutes. Leak in nipple at top of drill pipe. Packer pulled loose freely. Killed gas with mud and pulled tester out of hole. Pressure bomb indicated valve open for duration of test. Bottom hole flow pressure 3025#. Recovered 175' of fluid consisting of gas and oil cut drilling mud. Could not recover enough fluid for test.
12/28		Reamed 6 1/2" hole to 8 1/2" from 7648' to 7765'. Crew reported bridge from 7687' to 7699'.
12/29-12/30	7839'	Cored 6 1/2" hole from 7765' to 7839'. Formation at 7839' was extremely hard, unable to core. Reamed 8 1/2" hole from 7726' to 7765'. Reamed 6 1/2" hole to 8 1/2" from 7765' to 7839'.

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 DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD Aliso Canyon

Well No. Bortor #26, Sec. 28, T. 3-N, R. 16-W, S. & M. B. & M.

Signed R. A. Cuyler

Date May 15, 1942 Title Agent

(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date	Depth	
12/31 <u>1941</u>	7844'	Drilled 8 1/2" hole from 7839' to 7844'. Ran Schlumberger electric log at 7844'. Hung 4 1/2" drill pipe at 7850' and pumped in 50 sacks Victor High Temperature cement. Displaced with 595 cu.ft. mud. Final pressure 500#. Time 1:50 P.M. International Cementers, Inc. Pulled up three stands and circulated out excess cement.
<u>1942</u>		
1/1		Located top of cement at 7572'. Cleaned out to 7610'. Strung 10 lines. Conditioned mud. Preparing to run 6-5/8" casing.
1/2		Cemented 6-5/8" Youngstown Speedtite casing at 7610' with 250 sacks Victor High Temperature cement in bulk. Pressure jumped from 500# to 900# when plugs bumped. Time 2:25 P.M. International Cementers, Inc. Detail of casing as follows: 0'-1438' is 26# Grade J-55; 5438'-7009' is 26# Grade N-30; 7009'-7610' is 29# Grade N-30.
1/3		Standing cemented. Laid down 4" full hole drill pipe. Landed 6-5/8" casing. Installing cellar connections.
1/4		Standing cemented. Made up 2-7/8" full hole drill pipe.
1/5		Standing cemented. Installing cellar connections.
1/6		Finished installing cellar connections. tested casing and cellar connections O.K. with 1800# for 15 minutes.
1/7		Located top of cement at 7560'. Cleaned out to 7615'. Checked shoe of 6-5/8" casing at 7610'. Ran Johnston tester on 2-7/8" full hole drill pipe. Set packer at 7578'; bottom of tail pipe 7595'. Opened 1/16" bean at 7:08 P.M. Had one brief puff of air then dead. Opened 1/8" valve at 7:15 P.M. Had one brief puff of air then dead. Opened 3/16" valve at 7:20 P.M. Had fair blow of air increasing to strong blow by 7:23 P.M. with gas to surface at 7:24 P.M. Closed valve at 7:40 P.M. after being open 31 minutes. Pulled drill pipe and recovered 420' (1.6 bbls.) gas-out drilling mud with trace of oil. Pressure recorder indicated that 1/16" and 1/8" beans had plugged immediately upon opening and indicated a flow pressure of 1950# through 3/16" bean. W.S.O. approved by D.O.G.

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STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well Sheet #38

OPERATOR THE WATER ASSOCIATED OIL COMPANY FIELD Aliso Canyon

Well No. Porter 186, Sec. 28, T. 3-N, R. 16-W, 3-S B. & M.

Signed P. A. Cuyler

Date May 15, 1942 Title Agent
(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date

Depth

- | | | |
|------|--------------|--|
| 1942 | <u>Depth</u> | |
| 1/8 | 7844' | Cleaned out to 7844' with 5-5/8" bit. Cement from 7615' to 7675'. Conditioned mud. |
| 1/9 | | Wall scraped 9-5/8" hole from 7610' to 7648' and 8 1/2" hole from 7648' to 7844'. Landed 284.4' of 4 1/2" 16# Youngstown Grade J-55 inserted casing at 7840' including 219.5' 60-mesh Kobe perforated; 8 rows; 2" slots; 6" centers; 6" under-cut. Top of liner hanger 7856'. Perforated 7620' - 7840'. |
| 1/10 | | Landed 2 1/2", 6.5" and 3", 4.7# Grade H-40 Youngstown upset tubing at 7790'. Bottom 499' is 2". |
| 1/11 | | Laid down drill pipe. Moved out steel sub-structure. |
| 1/12 | | Installed Xmas Tree. Tested same O.K. with 3500#. |
| 1/13 | | Circulated and thinned mud with water. Swabbed to 400'. Well started to come in. Shut well in and ran pressure survey. Opened well to sump at 4:15 P.M. Began cleaning up rapidly, flowing spray of 51.2 gravity oil and water to sump with gas estimated at 15,000 MCF rate. Lead lines and fittings froze up before well was turned through gas trap and before any measurement of fluid or gas was taken. Shut well in at 7:30 P.M. At 6:00 A.M. 1-14-42 tubing pressure 3000#; casing pressure 1000#. |
| 1/14 | | Opened well up at 12:00 noon for representatives of Pacific Lighting Corp. to secure gas samples. Flowed at 7250 MCF rate through 22/64" bean with 2000# tubing pressure. After flowing short time, gas and oil regulators froze up. Opened well up between tubing and casing and flowed to sump until clean. Closed casing and flowed well through 43/64" bean directly to stack at estimated 18,000 MCF rate with 1550# tubing and casing pressure. Shut well in at 2:00 P.M. At 6:00 A.M. 1-15-42 2800# tubing pressure; 2700# casing pressure. |
| 1/15 | | Ran in pressure recorder and flowed well for one hour at varying rates. During test well produced 235 MCF gas (5640 MCF rate) with a small amount of mud and oil water which was not gauged. Maximum flow 9200 MCF rate through 24/64" bean with 2840# tubing pressure and 2840# casing pressure. |

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STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Sheet 139

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD Aliso Canyon

Well No. Porter #26, Sec. 88, T. 3-N, R. 16-W, S. B. B. & M.

Signed R. A. Cuyf

Date May 15, 1942 Title Agent

(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date 1942 Depth

1/16 7044' Installed 3/8" Otis adjustable choke at 7009' and 1/2" Otis adjustable choke at 5512'. Flowed well for 20 minutes to set chokes and check adjustment. Flowed at 7000-7500 MCF gas rate; tubing pressure 500-700; casing pressure 2200-2550.

C. PRODUCTION DATA

Well flowed:

Date	Gross Fluid	Approximate Net Oil	Gravity (Dry)	Cut	Surface Bean	Tubing Pressure	Casing Pressure	MCF Gas	Hours On
1/17-1/18	Shut-in								
1/19	195	193	53.0	1.0	48/64*	675#	2600#	8270	20
1/20	150	149	48.7	0.4	48/64*	675#	2775#	8307	24
1/21	142	141	48.7	0.1	48/64*	654#	2775#	8497	24
1/22	180	159	48.0	0.4	48/64*	675#	2775#	8450	24
1/23	142	141	48.0	0.4	48/64*	675#	2725#	8460	24
1/24	154	153	48.7	0.1	48/64*	675#	2725#	8500	24
1/25	187	156	48.0	0.4	48/64*	700#	2650#	8484	24
1/26	195	194	48.0	0.4	48/64*	700#	2840#	8544	24
1/27	150	149	48.0	0.4	48/64*	700#	2825#	8512	24
1/28	142	141	48.0	0.4	48/64*	700#	2835#	8538	24
1/29	166	165	48.0	0.4	48/64*	700#	2600#	8516	24
1/30	150	149	48.0	0.4	48/64*	675#	2750#	8566	24
1/31	150	149	48.0	0.4	48/64*	675#	2750#	8578	24
2/1	150	149	48.0	0.4	48/64*	675#	2750#	8470	24
2/2	150	149	48.0	0.4	48/64*	700#	2750#	8527	24
2/3	150	149	48.0	0.4	48/64*	700#	2750#	8515	24
2/4	150	149	48.0	0.4	48/64*	700#	2750#	8516	24
2/5	50	49	48.0	0.4	48/64*	1900#	2800#	1952	3
2/6	Shut-in					2000#	2800#		0
2/7	Shut-in					2300#	2800#	68	0
2/8	Shut-in					2750#	2850#	108	0
2/9	125	124	48.0	0.4	48/64*	750#	2750#	8812	21
2/10	158	157	48.0	0.4	48/64*	700#	2750#	8917	24
2/11	158	157	48.0	0.4	48/64*	700#	2750#	8942	24
2/12	158	157	48.0	0.4	48/64*	720#	2750#	8901	24
2/13	150	149	48.0	0.4	48/64*	725#	2750#	8911	24
2/14	158	157	48.0	0.4	48/64*	725#	2725#	8925	24
2/15	158	157	48.0	0.4	48/64*	745#	2700#	8970	24
2/16	150	149	48.0	0.4	48/64*	725#	2725#	8905	24
2/17	150	149	48.0	0.4	48/64*	725#	2700#	8883	24

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DIVISION OF OIL AND GAS

History of Oil or Gas Well *Sheet 140*

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD Alice Canyon

Well No. Porter 126, Sec. 28, T. 3-3, R. 16-2, S.B. B. & M.

Signed *R. A. Campbell*

Date May 15, 1948 Title Agent
 (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production. Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date

C. PRODUCTION DATA (Cont'd)

* In addition to surface beans well has 3/8" Otis adjustable choke at 7009' and 1/2" Otis adjustable choke at 5612'.

CASING RECORD

T.D. 7844'

13-3/8", 54.5'	Cemented 523'	
9-5/8", 40' & 45'	Cemented 6120'	0"-1811' is 45'; 1811'-3436' is 40'; 3436'-6120' is 45'
6-5/8", 26' & 29'	Cemented 7610'	0"-7009' is 26'; 7009'-7610' is 29'
2 3/4" - 4-5/4", 16'	Landed 7840'	Top 7556', Pt. 7620'-7840'

TUBING RECORD

2 1/2", 6.5' & 2", 4.7' Landed 7790'.
 Bottom 499' is 2'.

SIZE OF HOLE

0" - 523'	is	17 1/2"
523" - 6750'	is	12 1/2"
6750" - 6802'	is	10 1/2"
7802" - 7643'	is	9-5/8"
7643" - 7844'	is	8 1/2"

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LOG AND CORE RECORD OF OIL OR GAS WELL

Sheet #1

Operator THE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter #26 Sec. 28, T. 3-N, R. 16-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
0	522		Drilled		Sand and shale
522	523		"		Sand
523	869		"		Sand and shale
869	923		"		Sand
923	963		"		Sand with hard streaks
963	986		"		Sand and shale
986	1003		"		Sand
1003	1221		"		Sand and shale
1221	1265		"		Sand with hard streaks
1265	1287		"		Hard sandy shale
1287	1392		"		Sand and shale
1392	1428		"		Sand, shale and hard streaks
1428	1475		"		Sand and shale
1475	1505		"		Shale; streaks sand
1505	1537		"		Sand and shale
1537	1561		"		Hard sandy shale
1561	1629		"		Sand and shale
1629	1714		"		Sandy shale
1714	2393		"		Sand and shale
2393	2438		"		Sand and shale; hard streaks
2438	2495		"		Sand and shale
2495	2525		"		Shale and hard sand
2525	2526		"		Hard shale; streaks sand
2526	2664		"		Sand and shale; streaks hard sand
2664	2686		"		Hard sandy shale
2686	2734		"		Hard sandy shale and sand
2734	2786		"		Sand and shale; streaks hard sand
2786	2891		"		Sand and shale
2891	2952		"		Sand and shale; hard streaks
2952	3032		"		Sandy shale
3032	3088		"		Sand and shale
3088	3122		"		Sand and shale; hard streaks
3122	3129		"		Shale
3129	3208		"		Sand and shale
3208	3240		"		Sand; streaks shale
3240	3276		"		Sand and shale
3276	3329		"		Sand; streaks hard shale
3329	3411		"		Sand and shale
3411	3426		"		Sand
3426	3463		"		Hard shale
3463	3494		"		Sandy shale

STATE OF CALIFORNIA
 DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL Sheet 12

Operator TIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter 126 Sec. 28, T. 3-N, R. 16-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
3494	3505		Drilled		Hard shale
3505	3546		"		Sand and shale
3546	3583		"		Shale
3583	3627		"		Sandy shale with hard streaks
3627	3735		"		Sandy shale
3735	3792		"		Sand and shale
3792	3822		"		Sandy shale and shale
3822	3970		"		Sand and shale
3970	4000		"		Shale
4000	4050		"		Sand and shale
<u>8 1/2" Globe Wire Line Cores:</u>					
4050	4060		Cored	8' 0"	Sandy siltstone. Firm to fairly hard, dark gray. No cut or odor. <u>Fractured</u> in core barrel. Mega-fossils present.
4060	4069		"	9' 0"	Sandy siltstone. Fairly hard, massive, dark gray. No cut or odor. Scattered mega-fossils.
4069	4079		"	5' 6"	Sandy siltstone. Firm to fairly hard, dark gray. No cut or odor. Upper 1' 6" badly <u>fractured</u> .
4079	4089		"	6' 0"	5' 0" Sandy siltstone. As above. <u>Fractured and slickensided</u> . 3' 0" Gray pebble conglomerate. Soft to firm, fine, silty gray sand ground mass. Pebbles generally less than 1/2" in diameter. One rock 1 1/2" in diameter. No cut or odor.
4089	4099		"	1' 0"	Gray pebble conglomerate as above except with an occasional slight oil stain. Two loose rocks 1 1/2" in diameter. No to slight cut. No odor.
4099	4109		"	9' 6"	0' 3" Sandy siltstone. Soft, dark gray. Several pebbles to 3/4" in diameter. 9' 3" pale oil sand. Soft to firm, fine,

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 DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL Sheet #3

Operator TIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter #26 Sec. 22, T. 3-N, R. 16-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
					8 1/2" Globe Wire Line Corral (Cont'd)
4089	4109		Cored		(Cont'd); Occasional small pebble.
4109	4119		"	8' 6"	Pale oil sand. Soft to firm, fine to coarse pebbly, poorly sorted, silty. 1' 2" silty, pebbly, gray sand 2' 0" from top. Generally with fair cut. Slight odor.
4119	4129		"	1' 0"	Pale oil sand. As above.
4129	4139		"	0' 4"	Pale oil sand. As above. Several pebbles to 3/4" in diameter.
4139	4149		"	4' 6"	Pale oil sand. Soft, fine to medium but generally fine, silty. Fair cut. Slight odor.
4149	4159		"	5' 6"	Pale oil sand. As above.
4159	4169		"	9' 0"	6' 0" Pale oil sand. As above. 3' 0" Pale oil sand. Fine to coarse, sometimes pebbly but generally fine. Fair cut. Slight odor.
4169	4179		"	5' 0"	Pale oil sand. Fine to coarse, sometimes pebbly but generally fine. Fair cut. Slight odor.
4179	4189		"	7' 6"	Pale oil sand. Fine to coarse, sometimes pebbly but generally fine. Fair cut. Slight odor.
4189	4199		"	7' 6"	1' 0" Pale oil sand. As above. 6' 6" Pale oil sand. Soft to firm, fine, silty. Fair to good cut. Slight odor.
4199	4203		"	2' 9"	0' 1" Pale oil sand. Soft, fine to coarse, poorly sorted, silty. Fair cut. Slight odor. 2' 8" Sandy siltstone. Firm, dark gray. Abundant broken mega-fossils. No cut or odor.

STATE OF CALIFORNIA
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LOG AND CORE RECORD OF OIL OR GAS WELL Sheet #4

Operator TIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter #26 Sec. 28, T. 3-N, R. 16-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
		8 1/2" Alpha Wire Line Core (Cont'd)			
4203	4207		Cored	3' 4"	1'9" Sandy siltstone. As above. 0'6" Silty gray sand. Hard (almost shell), fine, dark gray. Abundant mega-fossil. 0'8" Sandy siltstone. Soft to firm, dark gray, abundant mega-fossils. 0'6" Mottled oil sand and gray sand. Soft to firm, fine to coarse, but generally fine, silty. Fair cut. Slight odor.
4207	4217		"	3' 0"	Oil sand. Firm, fine to coarse, somewhat silty. Good cut. Slight to fair odor. Gray inspots when silt content is high. Occasional pebble to 1/2".
4217	4227		"	0' 1"	Shell. Several loose pebbles to 1/2" in diameter.
4227	4237		"	0' 5"	0'1" Oil sand. Firm, fine to coarse, pebbles poorly sorted, silty. Good cut. Fair odor. Pebbles to 1/4". 0'4" Shell. Two loose pebbles to 1" in diameter.
4237	4247		"	0' 9"	0'3" Gray sand. Soft, fine, somewhat silty. No cut or odor. 0'6" Pebble conglomerate. Matrix of fine silty gray sand and oil sand. Pebbles to 0'1" in diameter.
4247	4252		"	0' 6"	Oil sand. Firm, fine to coarse, pebbly, poorly sorted, silty. Good cut. Fair odor. Pebbles to 1" in diameter.
4252	4261		Drilled		Sand and shale
4261	4263		"		Sandy shale
4263	4418		"		Sand and shale
4418	4454		"		Sandy shale
4454	4554		"	3	Sand and shale
4554	4580		"		Shale
4580	4615		"		Sand and shale
4615	4630		"		Hard shale

STATE OF CALIFORNIA
 DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Sheet #5

Operator TIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter 426 Sec. 29, T. 3-N, R. 16-W, S. 2 B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
4650	4654		Drilled		Sand; streaks hard shale
4654	4933		"		Sand and shale
4933	5001		"		Sandy shale
5001	5042		"		Sand and shale; hard sand
5042	5080		"		Sandy shale
5080	5114		"		Shale and sand streaks
5114	5156		"		Hard shale with sandy streaks
5156	5207		"		Sandy shale
5207	5295		S		Sand and shale
5295	5300		"		Sandy shale
<u>8 1/2" Globe Wire Line Core:</u>					
5300	5310		Cored	3' 0"	Sandy siltstone. Generally heavily oil stained. Good cut and odor.
5310	5320		"	4' 6"	Sandy siltstone. Firm. Good oil saturation. Good cut and odor.
5320	5330		"	1' 6"	As above.
5330	5340		"	8' 0"	Sandy siltstone. Firm. Massive. Good oil saturation at top grading downward to oil stained. Generally with good cut. Fair to good odor.
5340	5350		"	4' 0"	Sandy siltstone. Firm. Bottom 3' 0" with good oil saturation. Good cut and odor. Dip on parting planes 20° to 23°.
5350	5360		"	9' 0"	Sandy siltstone. Firm. Massive. Oil stained at top grading downward to dark gray. No to good cut and odor. Dip 20° ₄ .
5360	5370		"	6' 0"	Sandy siltstone. Firm. Massive. Generally dark gray but with occasional slight oil stain. No to slight cut and odor. Dip on parting plane 23°.
5370	5380		"	9' 0"	As above.
5380	5390		"	10' 0"	As above.

STATE OF CALIFORNIA
 DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Sheet #6

Operator TIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter 226 Sec. 28, T. S-N, R. 16-N, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
					8 1/2' Globe Wire Line Cores: (Cont'd)
5390	5400		Cored	10' 0"	Sandy siltstone. Firm. Massive. Dark gray at top but grading downward to heavily oil stained. No to good cut and odor.
5400	5410		"	10' 0"	Sandy siltstone. Firm. Generally slightly but sometimes heavily oil stained. Slight to good cut and odor. Dip on parting planes 25°.
5410	5419		"	8' 0"	Sandy siltstone. Firm. Varies from slight oil stained to well oil saturated. Slight to good cut and odor. Dip on parting planes 20° to 25°.
5419	5429		"	9' 0"	Sandy siltstone. Firm, dark gray, massive. No cut or odor.
5429	5439		"	10' 0"	As above.
5439	5449		"	10' 0"	As above.
5449	5459		"	8' 0"	As above.
5459	5469		"	7' 0"	As above.
5469	5479		"	6' 0"	Sandy siltstone. Firm, generally dark gray but with 1' 0" streak near top and 0' 4" streak near bottom with good oil saturation.
5479	5489		"	1' 0"	Sandy siltstone. Firm, dark gray. No cut or odor.
5489	5499		"	7' 0"	As above.
5499	5509		"	9' 0"	As above.
5509	5519		"	0' 6"	As above.
5519	5527		"	8' 0"	As above.

STATE OF CALIFORNIA
 DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Sheet 17

Operator FIELD WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. North 125 Sec. 23, T. 3-N, R. 15-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
					<u>8 1/2" Globe Wire Line Core: (Core #3)</u>
5527	5537		Cored	10' 0"	As above.
5537	5547		"	10' 0"	As above. Occasional mega-fossil.
5547	5557		"	9' 6"	As above. Few slight oil stains in bottom 0'6".
5557	5566		"	9' 0"	Sandy siltstone. Firm, generally oil stained. Slight to good cut and odor.
5566	5576		"	10' 0"	Sandy siltstone. Top 5'0" dark gray. Bottom 5'0" slightly oil stained. No to slight cut and odor.
5576	5586		"	10' 0"	Sandy siltstone. Firm, oil stained and dark gray. No to good cut and odor.
5586	5596		"	10' 0"	Sandy siltstone. Firm, generally oil stained. Slight to good cut and odor.
5596	5606		"	10' 0"	Sandy siltstone. Firm, generally oil stained. One 0'6" streak very fine, oil sand 4'0" from bottom. Good cut and odor. Dip on parting planes 20° to 22°.
5606	5616		"	10' 0"	Sandy siltstone. Firm, dark gray with occasional oil stain in bottom 3'0". No to slight cut and odor. Dip on parting planes 22° to 35°.
5616	5626		"	9' 0"	1'6" Sandy siltstone. Firm, oil stained. Slight to fair cut and odor. 0'4" Shell. 0'6" Oil sand. Firm, fine, silty. Good cut and odor. 6'8" Sandy siltstone. Firm to hard, dark gray and oil stained. No to good cut and odor. Average dip on parting planes 25°.

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LOG AND CORE RECORD OF OIL OR GAS WELL Sheet #8

Operator WIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter 186 Sec. 23, T. S-N, R. 16-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
					8" Globe Wire Line Cores: (Cont'd)
5626	5636		Cored	10' 0"	Sandy siltstone. Firm, oil stained. Fair to good cut and odor. Average dip on parting planes 25°.
5636	5646		"	10' 0"	Sandy siltstone. Firm, generally with good oil saturation. Good cut and odor.
5646	5656		"	10' 0"	Sandy siltstone. Firm, generally oil stained. No to good cut and odor. One 0'3" streak shell near bottom.
5656	5666		"	10' 0"	Sandy siltstone. Firm, generally with good oil saturation. Good cut and odor. Average dip on parting planes 25°.
5666	5676		"	9' 0"	Sandy siltstone. Firm, dark gray and oil saturated. No to good cut and odor.
5676	5686		"	10' 0"	9'9" Sandy siltstone. Firm, dark gray with occasional oil stain. Generally no cut and odor. 0'3" oil sand. Soft to firm, fine to medium. Good cut and odor.
5686	5696		"	7' 6"	Sandy siltstone. Firm, dark gray with occasional oil stain. Generally no cut or odor.
5696	5706		"	10' 0"	Sandy siltstone. Firm, dark gray with occasional oil stain. Generally with no cut or odor. One 0'3" streak firm, fine oil sand with good cut and odor 0'6" from top.
5706	5716		"	9' 0"	Sandy siltstone. Firm, dark gray with occasional oil stain. Generally with no cut or odor.
5716	5726		"	10' 0"	2'0" Sandy siltstone, as above. 8'0" Sandy siltstone. Firm, generally oil stained and sometimes with good oil

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DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Sheet 19

Operator FINE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter 126 Sec. 23, T. 3-N, R. 16-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
		<u>9 1/2" Globe Wire Line Core: (Cont'd)</u>			
5716	5726		Cored	(Cont'd)	saturation. No to good cut and odor. 0'1" streaks firm, fine oil sand 4'0" from bottom and 0'6" from bottom.
5726	5736		"	9' 0"	Sandy siltstone. Firm, Good oil saturation at top grading downward to dark gray. No to good cut and odor.
5736	5746		"	8' 0"	Sandy siltstone. Firm, dark gray with occasional oil stain having acrid odor. Generally with no cut or odor. Very sandy.
5746	5756		"	8' 0"	As above. Dip on parting planes average 25°.
5756	5766		"	7' 0"	As above. One 0'2" streak soft, fine oil sand 2'0" from bottom. Good cut. Acrid odor.
5766	5776		"	5' 0"	Sandy siltstone. Firm, dark gray. No cut or odor. Very sandy. Average dip on parting planes 20°.
5776	5786		"	6' 0"	As above. Three 0'2" streaks soft, fine oil sand with good cut and acrid odor. Average dip on parting planes 23°.
5786	5796		"	8' 0"	As above.
5796	5806		"	9' 6"	Sandy siltstone. Firm, dark gray. No cut or odor.
5806	5816		"	5' 2"	As above. Two 0'2" streaks soft, medium gray sand. No cut or odor. One streak at top of core and one 2'0" from bottom. Average dip on parting planes 25°.
5816	5826		"	10' 0"	As above. Two 0'3" streaks soft, medium gray sand near bottom of core. No cut or odor. Dip approximately 30°.
5826	5836		"	10' 0"	As above.

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 DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL Sheet #10

Operator TIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter #26 Sec. 28, T. 2-N, R. 16-W, S. B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
<u>3 1/2" Globe Wire Line Corer: (Cont'd)</u>					
5836	5846		Cored	9' 6"	As above. Dip 36°.
5846	5856		"	9' 0"	As above. Very sandy.
5856	5866		"	11' 0"	As above. Very sandy. Dip on parting planes 20° to 25°.
5866	5876		"	5' 0"	Sandy siltstone. Firm, dark gray. No cut or odor.
5876	5886		"	11' 6"	As above.
5886	5896		"	0' 6"	As above.
5896	5906		"	7' 6"	As above.
5906	5916		"	8' 0"	As above. Average dip on parting planes 26°.
5916	5926		"	6' 6"	As above.
5926	5936		"	7' 0"	As above.
5936	5940		"	0'	No recovery.
5940	5947		"	7' 6"	Sandy siltstone. Firm, dark gray. No cut or odor.
5947	5957		"	5' 6"	As above.
5957	5967		"	6' 0"	Sandy siltstone. Firm, generally dark gray but with occasional oil stain. Generally no cut or odor.
5967	5977		"	10' 0"	As above.
5977	5987		"	10' 9"	As above. Average dip on parting planes 23°.
5987	5997		"	6' 0"	Sandy siltstone. Firm, generally oil stained and with fair to good cut and odor.
5997	6007		"	9' 0"	Sandy siltstone. Firm, dark gray. No cut or odor.

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DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Sheet 11

Operator TIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter 126 Sec. 23, T. 34, R. 16, S. 22 B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
<u>8 1/2" Globe Wire Line Corer (Cont'd)</u>					
6007	6017		Cored	4' 0"	Sandy siltstone. Firm. Top 3'0" dark gray. Bottom 1'0" oil stained. Fair to good cut and odor.
6017	6027		"	11' 0"	10'2" Sandy siltstone. Firm, generally dark gray but with the bottom 2'6" oil stained and with fair to good cut and odor. 0'10" Shell.
6027	6037		"	5' 0"	Sandy siltstone. Firm, oil saturated and with an occasional thin streak of very fine oil sand. Good cut and odor.
6037	6047		"	7' 6"	Sandy siltstone. Firm, dark gray with occasional oil stain. Generally no cut or odor.
6047	6057		"	9' 0"	0'6" Oil sand. Firm, fine to medium. Good cut and odor. 3'0" Sandy siltstone. Firm, dark gray. No cut or odor. 1'0" Oil sand. Firm, fine to medium. Good cut and odor. 4'6" Sandy siltstone. Firm, dark gray and oil stained. No to good cut and odor. Free oil between parting planes. Average dip on parting planes 19°.
6057	6067		"	9' 6"	3'0" Sandy siltstone. Firm, oil saturated. Very sandy. Good cut and odor. Free oil between parting planes. Average dip on parting planes 21°. 6'6" Sandy siltstone. Firm, dark gray. No cut or odor.
6067	6077		"	10' 0"	Sandy siltstone. Firm, dark gray and oil stained. Several thin streaks very sandy and with good oil saturation. No to good cut and odor. Average dip on parting plane 20°.

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 DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Sheet #12

Operator TIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter #26 Sec. 28, T. 5-N, R. 16-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
					<u>8" Globe Wire Line Core: (Cont'd)</u>
6077	6080		Cored	2' 0"	Sandy siltstone. Firm, generally dark gray but with an occasional oil stain. Generally no cut or odor. Average dip on parting plane 22°.
6080	6090		"	10' 6"	Sandy siltstone. Firm to hard, dark gray. No cut or odor.
6090	6100		"	11' 0"	Sandy siltstone. Firm, dark gray. No cut or odor. Dip 27°.
6100	6110		"	10' 0"	Sandy siltstone. As above. Dip 35°.
6110	6120		"	8' 0"	Sandy siltstone. As above.
6120	6130		"	11' 0"	Sandy siltstone. As above.
6130	6140		"	6' 6"	Sandy siltstone. As above.
6140	6150		"	6' 6"	Sandy siltstone. As above.
6150	6160		"	7' 6"	Sandy siltstone. As above. One 0'3" streak firm, very fine oil sand with good cut and odor. 3'0" from bottom.
6160	6170		"	7' 6"	Sandy siltstone. As above. One 0'3" streak firm, very fine oil sand with good cut and odor 3'6" from bottom. Dip 17°.
6170	6180		"	6' 6"	Sandy siltstone. As above.
6180	6190		"	10' 0"	Sandy siltstone. As above.
6190	6200		"	10' 0"	Sandy siltstone. As above.
6200	6210		"	9' 6"	Sandy siltstone. As above.
6210	6220		"	3' 0"	Sandy siltstone. As above.
6220	6230		"	0'	No recovery. Inner barrel did not seat.

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DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL Sheet #13

Operator LINE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter 126 Sec. 28, T. 3-N, R. 16-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
<u>8 1/2" Globe Wire Line Cores: (Cont'd)</u>					
6230	6240		Cored	8' 0"	Sandy siltstone. firm, dark gray. No cut or odor.
6240	6250		"	0'	No recovery.
6250	6260		"	9' 0"	Sandy siltstone. firm, dark gray. No cut or odor. Broken mega-fossils near bottom.
6260	6270		"	9' 0"	As above.
6270	6280		"	9' 6"	As above.
6280	6290		"	9' 0"	As above.
6290	6300		"	9' 6"	As above.
6300	6310		"	10' 0"	As above.
6310	6320		"	2' 0"	Sandy siltstone, streaks shell. Siltstone is firm, dark gray.
6320	6330		"	5' 0"	4'0" Sandy siltstone. firm, dark gray. 1'0" shell.
6330	6340		"	10' 0"	Sandy siltstone. firm, dark gray. Dip on parting planes 16° - 21°.
6340	6350		"	9' 6"	As above.
6350	6360		"	10' 0"	As above. Dip on parting planes 15°.
6360	6370		"	10' 0"	As above.
6370	6380		"	9' 0"	As above. No cut or odor.
6380	6390		"	7' 0"	As above.
6390	6400		"	10' 0"	As above.
6400	6410		"	6' 0"	As above.

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DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Sheet #14

Operator WIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter #26 Sec. 23, T. S. 31, R. 16. W., S. R. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
<u>8 1/2" Globe Wire Line Cores: (Cont'd)</u>					
6410	6420		Cored	4' 0"	As above.
6420	6430		"	9' 0"	As above.
6430	6440		"	9' 0"	As above.
6440	6450		"	10' 0"	As above.
6450	6460		"	6' 6"	As above.
6460	6470		"	9' 0"	6' 0" As above. 5' 0" Sandy siltstone. Firm, dark gray and oil stained. No to fair cut and odor. 0' 4" streak shell at bottom.
6470	6480		"	2' 0"	Sandy siltstone. Firm, dark gray with occasional slight oil stain. No to slight cut and odor.
6480	6482		"	1' 0"	Sandy siltstone. Fairly hard, dark gray.
6482	6492		"	9' 0"	Sandy siltstone. Firm, dark gray. No cut or odor.
6492	6502		"	9' 0"	Sandy siltstone. Firm, dark gray, sometimes oil stained. No to fair cut and odor.
6502	6512		"	9' 0"	2' 6" Sandy siltstone. Firm, dark gray. No cut or odor. 3' 6" Sandy siltstone. Some oil stained and oil saturated. Slight to good cut and odor. 2' 0" Sandy siltstone. Firm, dark gray. No cut or odor.
6512	6522		"	10' 0"	Sandy siltstone. Firm to fairly hard dark gray. No cut or odor.
6522	6530		"	2' 6"	Sandy siltstone. Hard, dark gray. No cut or odor.
6530	6540		"	7' 6"	Sandy siltstone. Firm, oil stained. No to good cut and odor.

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DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Sheet / 15

Operator TIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter #26 Sec. 28, T. 2-N, R. 16-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
<u>8 1/2" Globe Wire Line Cores: (Cont'd)</u>					
6540	6550		Cored	11' 0"	Sandy siltstone. As above. Bottom 2'0" with good oil saturation.
6550	6560		"	8' 6"	Sandy siltstone. As above. Top 2'0" with good oil saturation. Dips on parting planes average 10 degrees.
6560	6570		"	10' 0"	Sandy siltstone. Firm, dark gray. No cut or odor.
6570	6580		"	7' 6"	Sandy siltstone. Firm, dark gray. No cut or odor.
6580	6590		"	9' 0"	Sandy siltstone. As above.
6590	6600		"	8' 6"	Sandy siltstone. As above.
6600	6610		"	9' 0"	Sandy siltstone. Firm. Top 3'0" dark gray. Bottom 6'0" oil stained and with fair cut and odor.
6610	6620		"	3' 0"	Sandy siltstone. Top 2'0" oil stained and with fair cut and odor. Bottom 1'0" dark gray.
6620	6626		"	5' 6"	Sandy siltstone. Firm, dark gray. No cut or odor.
6626	6636		"	8' 0"	Sandy siltstone. As above except with an occasional irregular oil stain and one 0'1" streak fine to medium oil sand with good cut and odor 0'6" from top of core.
6636	6646		"	10' 0"	Sandy siltstone. Firm slightly oil stained. Fair cut. Slight to fair odor.
6646	6656		"	6' 0"	Sandy siltstone. Top 1'0" as above. Bottom 5'0" fine to fairly hard dark brownish-gray. No to slight cut and odor.

STATE OF CALIFORNIA
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DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Sheet #16

Operator TIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter 126 Sec. 28, T. 3-N, R. 16-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
		<u>8 1/2" Globe Wire Line Core:</u> (Cont'd)			
6656	6666		Cored	10' 0"	Sandy siltstone. Firm to fairly hard dark brownish gray. No cut or odor.
6666	6676		"	7' 6"	Sandy siltstone. As above. Occasional minor slickenside.
6676	6686		"	7' 0"	Sandy siltstone. Firm to fairly hard, dark brownish-gray. No cut or odor.
6686	6696		"	7' 6"	Sandy siltstone. As above. Some minor fracturing.
6696	6706		"	2' 9"	Sandy siltstone. Firm to fairly hard, dark brownish-gray. No cut or odor.
6706	6716		"	8' 6"	Sandy siltstone. As above.
6716	6726		"	10' 0"	Sandy siltstone. As above.
6726	6736		"	7' 0"	Sandy siltstone. As above.
6736	6746		"	8' 0"	Sandy siltstone. As above.
6746	6756		"	7' 0"	Sandy siltstone. As above. Poor dip on indistinct bedding plane 20°.
6756	6766		"	9' 0"	Sandy siltstone. As above.
6766	6774		"	1' 0"	Sandy siltstone. As above.
6774	6784		"	10' 0"	Sandy siltstone. Firm to fairly hard, dark brownish-gray. No cut or odor. One 0'4" streak oil stained and with fair cut and odor 4'6" from top.
6784	6794		"	5' 6"	0'6" Oil sand. Firm, fine, silty. Good cut and odor. 5'0" Sandy siltstone. Firm to fairly hard dark brownish-gray. Top 3'0" slightl oil stained. One 0'4" streak shell 1'0" from bottom.

STATE OF CALIFORNIA
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DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Sheet #17

WIDE WATER ASSOCIATED OIL COMPANY

Aliso Canyon

Operator Field

Porter #26

28

3-N

16-W

S.B.

Well No. Sec., T., R., B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
0' Globe Wire Line Cores: (Cont'd)					
6794	6804		Cored	4' 3"	0'3" Sandy siltstone. Firm, dark brownish-gray. No cut or odor. 0'3" Sandy siltstone. Firm, oil stained. Fair cut and odor. 0'3" Oil sand. Firm, fine. Good cut and odor. 2'0" Sandy siltstone. Firm, dark brownish-gray. Top 1'0" oil stained. 1'0" Shell. 0'3" Sandy siltstone. Firm, oil stained. 0'3" Oil sand. Firm, fine. Good cut and odor.
6804	6814		"	5'4"	0'6" Sandy siltstone. Firm, dark brownish-gray. 1'0" Shell. 1'6" Oil sand. Firm, fine. Good cut and odor with 0'1" streak shell in middle. 0'4" Shell. Dip 18°.
6814	6824		"	2' 0"	0'3" Oil sand. Firm, fine. Good cut and odor. 0'3" Sandy siltstone. Firm to fine hard oil stained. Fair cut and odor. 1'6" Streaks shell and sandy siltstone. Firm to fairly hard, dark brownish-gray. No cut or odor. Dips 10° and 20°.
6824	6834		"	2' 6"	Oil sand. Firm, fine. Fair cut. Good odor. One 0'9" streak fairly hard dark brownish-gray sandy siltstone with no cut or odor near middle of core. Dip 12°.
6834	6844		"	3' 0"	Sandy siltstone. Firm, dark brownish-gray with occasional oil stain. No to slight cut and odor.
6844	6854		"	5' 0"	Sandy siltstone. As above. No to fair cut and odor. Two 0'6" streaks shell near bottom. Dip 12°.

STATE OF CALIFORNIA
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DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL Sheet #18

Operator THE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter 426 Sec. 28, T. 3-N, R. 16-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
		<u>8 1/2" Glass Wire Line Cores (Cont'd)</u>			
6854	6864		Cored	2' 3"	0'9" Oil sand. Firm, medium. Pale. Fair cut and odor. 0'9" Shell. 0'9" Sandy siltstone. Firm, dark brownish-gray with occasional oil stain. No to slight cut and odor. Very sandy.
6864	6874		"	3' 0"	0'9" Oil sand. Firm, fine to medium. Pale. Fair cut and odor. 0'9" Sandy siltstone. Firm, dark brownish-gray with occasional oil stain. No to slight cut and odor. 1'6" Oil sand. Firm, fine. Pale. Fair cut and odor.
6874	6884		"	10' 0"	4'5" Oil sand. Firm, fine to medium. Pale. Fair cut and odor. 5'9" Sandy siltstone. Firm to fairly hard dark brownish gray and oil stained. No to fair cut and odor. Very sandy. One 0'9" streak badly cross bedded shell 4'0" from bottom.
6884	6889		"	3' 5"	0'2" Sandy siltstone. Fairly hard dark brownish-gray. No cut or odor. 3'0" Oil sand. Firm, fine to medium, pale. Good cut and odor. 0'1" Shell. Dip approximately 25°.
6889	6899		"	6' 0"	0'6" Shell. 5'6" Streaks oil sand and sandy siltstone. Oil sand is firm, fine to medium, pale. Fair cut. Good odor. Sandy siltstone is firm, dark brownish gray, sometimes oil stained. No to fair cut and odor. Dip 27°.
6899	6909		"	4' 0"	0'4" Shell. 3'8" Streak oil sand and sandy siltstone as above.

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DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL Sheet #19

Operator WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter #86 Sec. 28, T. 3-N, R. 16-W, S.E. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
<u>3 1/2" Globe Wire Line Cores: (Cont'd)</u>					
6909	6919		Cored	4' 6"	Oil sand. Firm, fine to medium. Pale. Fair cut. Good odor. Three thin streaks shell.
6919	6929		"	5' 0"	0'10" Sandy siltstone. Firm, very sandy, oil stained. Fair cut and odor. 1' 0" Shell. 0'9" Oil sand. Firm, fine, pale. Fair cut and odor. 0'5" Shell.
6929	6939		"	1' 0"	Shell.
6939	6949		"	4' 6"	Streaks oil sand and sandy siltstone. Oil sand is firm, fine to medium. Pale. Good cut and odor. Sandy siltstone is firm, dark brownish gray and oil stained with no to fair cut and odor.
6949	6952		"	0' 6"	Shell.
6952	6962		"	2' 0"	Oil sand. Firm, fine to medium, pale. Fair cut. Good odor.
6962	6972		"	1' 6"	0'6" Shell. 1'0" Oil sand and gray sand. Firm, fine, mottled. No to fair cut and odor.
6972	6982		"	3' 0"	Shell with 0'6" firm, dark brownish gray sandy siltstone near top.
6982	6992		"	5' 6"	4'6" Oil sand. Firm, fine to coarse, pale. Fair cut and odor. 1'0" Oil sand. Firm, fine, silty. Very pale. Fair cut and odor. Dip 38°.
6992	7002		"	8' 0"	0'6" Gray sand. Firm, fine. No cut or odor. 3'0" Gray sand. Firm, fine, oil stained. Fair cut. Slight to fair odor. Grades to 4'6" Gray sand. Firm, fine to coarse. Fair cut. Slight to fair odor.

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DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Operator FIELD SERVICE SPOON HILL OIL COMPANY Field Miss Canyon

Well No. Porter 28 Sec. 12, T. 3-N, R. 15-W, S. 2 B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
		<u>8' Globe Valve Line Cores: (Cont'd)</u>			
7011	7011		Cored	4' 0"	1'0" Gray sand. Firm, fine, slight oil stained. No to fair cut and odor. Grades to 3'0" Gray sand. Firm, fine to coarse, oil stained. Fair cut. Slight to fair odor.
7012	7022		"	4' 6"	3'0" Gray sand. Firm, fine to coarse. Oil stained and with fair cut and odor. Grades to 1'6" Gray sand. Firm, fine to coarse, pebbly. No cut or odor. Pebbles to 1/2".
7022	7032		"	6' 0"	1'6" Gray sand. Firm, fine. No cut or odor. Grades to 3'5" Gray sand. Firm, medium. No cut or odor. Grades to 1'0" Gray sand. Firm, medium to coarse. No cut or odor. 0'2" streak shell at bottom.
7032	7042		"	5' 6"	0'9" Shell. 4'9" Gray sand. Firm, generally medium. No cut or odor. 0'2" streak firm, dark brownish-gray sandy siltstone in middle. Dip 25°.
7042	7050		"	1' 9"	1'6" Gray sand. As above. 0'3" Sandy siltstone. Fairly hard, dark brownish gray. No cut or odor.
7050	7050		"	1' 9"	0'1" Sandy siltstone. As above. 1'0" Gray sand. Firm, generally medium. No cut or odor. 0'8" Gray sand. Firm, fine, silty. No cut or odor.
7050	7070		"	4' 6"	0'5" Gray sand. Hard, coarse, pebbly. No cut or odor. Pebbles to 1/2". 4'1" Sandy siltstone. Firm to hard, dark brownish gray. No cut or odor.

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LOG AND CORE RECORD OF OIL OR GAS WELL Sheet 120

Operator WIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter #26 Sec. 28, T. 3-N, R. 16-W, S. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
		<u>3 1/2" Globe Wire Line Cores: (Cont'd)</u>			
7002	7012		Cored	4' 0"	1'0" Gray sand. Firm, fine, slightly oil stained. No to fair cut and odor. Grades to 3'0" Gray sand. Firm, fine to coarse, oil stained. fair cut. Slight to fair odor
7012	7022		"	4' 6"	3'0" Gray sand. firm, fine to coarse. Oil stained and with fair cut and odor. Grades to 1'6" Gray sand. Firm, fine to coarse, pebbly. No cut or odor. Pebbles to 1/2".
7022	7032		"	6' 0"	1'6" Gray sand. Firm, fine. No cut or odor. Grades to 3'6" Gray sand. Firm, medium. No cut or odor. Grades to 1'0" Gray sand. Firm, medium to coarse. No cut or odor. 0'2" streak shell at bottom.
7032	7042		"	5' 6"	0'9" Shell. 4'9" Gray sand. Firm, generally medium. No cut or odor. 0'2" streak firm, dark brownish-gray sandy siltstone in middle. Dip 23°.
7042	7050		"	1' 9"	1'6" Gray sand. As above. 0'3" Sandy siltstone. Fairly hard, dark brownish gray. No cut or odor.
7050	7060		"	1' 9"	0'1" Sandy siltstone. As above. 1'0" Gray sand. Firm, generally medium. No cut or odor. 0'8" Gray sand. Firm, fine, silty. No cut or odor.
7060	7070		"	4' 6"	0'5" Gray sand. Hard, coarse, pebbly. No cut or odor. Pebbles to 1/2". 4'1" Sandy siltstone. Firm to hard, dark brownish gray. No cut or odor.

STATE OF CALIFORNIA
 DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Sheet #21

Operator THE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter 126 Sec. 23, T. 3-N, R. 16-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
<u>8 1/2" Globe Wire Line Cores: (Cont'd)</u>					
7070	7080		Cored	6' 0"	5'6" Sandy siltstone. Fairly hard dark brownish gray. Very sandy. No cut or odor. 0'6" Gray sand. Firm, fine to medium. No cut or odor.
7080	7090		"	7' 6"	7'0" Sandy siltstone. Fairly hard, dark brownish gray. No cut or odor. 0'6" Shell.
7090	7100		"	9' 0"	Sandy siltstone. Firm, dark brownish gray. Generally very sandy. No cut or odor. 0'5" streak soft, fine, silty, gray sand 2'0" from top and 0'9" streak shell 3'0" from top. Several high angle fracture planes near top of core.
7100	7110		"	9' 0"	7'6" Sandy siltstone. Firm, dark brownish gray. No cut or odor. 1'6" Shell.
7110	7120		"	8' 6"	Sandy siltstone. Firm to fairly hard, dark brownish gray. Very sandy in streaks. No cut or odor.
7120	7130		"	6' 0"	Sandy siltstone. As above. 0'9" streak firm, fine, gray sand 0'6" from bottom. No cut or odor.
7130	7139		"	4' 6"	Sandy siltstone. Fairly hard, dark brownish gray. Very sandy near bottom. 0'1" streak fine gray sand 0'6" from bottom. No cut or odor.
7139	7149		"	0' 9"	Sandy siltstone. Fairly hard, dark brownish gray. Very sandy. No cut or odor.
7149	7159		"	0' 4"	0'2" Shell. 0'2" Gray sand. Firm, fine. Pieces. No cut or odor.

STATE OF CALIFORNIA
 DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL Sheet #23

Operator TIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter #26 Sec. 28, T. 3-N, R. 16-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
<u>3 1/2" Globe Wire Line Cores: (Cont'd)</u>					
7159	7169		Cored	2' 6"	0'3" Gray sand. Firm, fine, silty. No cut or odor. 1'9" Shell. 0'6" Sandy siltstone. Firm, dark brownish gray. No cut or odor.
7169	7179		"	4' 0"	Sandy siltstone with thin streaks gray sand. Sandy siltstone if firm, dark brownish gray. No cut or odor. Gray sand is firm, fine, silty. No cut or odor.
7179	7189		"	3' 0"	0'9" Gray sand. Firm, fine, silty. No cut or odor. 2'3" Sandy siltstone. Firm, dark brownish gray. No cut or odor.
7189	7199		"	9' 0"	8'9" Sandy siltstone. Firm, dark brownish gray. No cut or odor. 0'3" Shell
7199	7209		"	3' 6"	Gray sand. Firm, fine, sometimes silty. No cut or odor. 0'6" streak shell near top and 0'3" streak shell in middle.
7209	7219		"	4' 6"	0'9" Gray sand. As above. 2'3" Sandy siltstone. Firm, dark brownish gray. No cut or odor. 1'6" Gray sand. Firm, fine. No cut or odor.
7219	7229		"	3' 0"	0'8" Sandy siltstone. Firm, dark brownish gray. No cut or odor. 2'4" Gray sand. Firm, fine, sometimes silty. No cut or odor. 0'9" streak shell near top.
7229	7239		"	1' 4"	0'6" Gray sand. Firm, fine. No cut or odor. 0'10" Shell.
7239	7249		"	8' 0"	Sandy siltstone. Firm, hard dark brownish gray. No cut or odor. 1'6" streak shell near middle.

STATE OF CALIFORNIA
 DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Sheet 23

Operator TIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter 126 Sec. 28, T. 3-S, R. 16-S, S. 1 B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
<u>2 1/2" Alpha Wire Line Cores: (Cont'd)</u>					
7249	7257		Cored	8' 0"	Sandy siltstone. As above. 1'0" streak shell 2'6" from top.
7257	7267		"	0'	No recovery.
7267	7270		"	6' 0"	Sandy siltstone. Hard, dark brownish gray. No cut or odor.
7270	7280		"	3' 0"	Sandy siltstone. As above.
7280	7290		"	10' 0"	Sandy siltstone. As above.
7290	7300		"	0' 1"	Sandy siltstone. As above. Stringers of calcite (?).
7300	7305		"	0'	No recovery.
7305	7310		"	0'	No recovery.
<u>6 1/2" Reed Wire Line Cores:</u>					
7310	7318		"	6' 0"	5'6" Sandy siltstone. Firm, dark brownish gray. Oil stained near bottom. No to fair cut and odor. 0'6" Shell. Limestone.
7318	7326		"	3' 9"	Shell. Very hard sandy limestone with occasional pebble to 3/4". Numerous calcite veinlets. Several fractures showing oil staining.
7326	7334		"	6' 0"	2'0" Shell. Limestone. 4'0" Shale. Hard, dark brown. Highly foraminiferal. Phosphatic nodules. Average of several good dips 16°.
7334	7337		"	2' 0"	Shale. As above. Average dip 17°.
7337	7345		"	7' 0"	Shale. Hard, dark brown. Foraminiferal. Phosphatic nodules. Average dip 27°.
7345	7355		"	10' 0"	Shale. As above. One 0'9" streak limestone shell in middle. Dip 20° to 29° Average 24°.

STATE OF CALIFORNIA
 DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL Sheet #24

Operator TIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter #26 Sec. 28, T. 3nd, R. 16nd, S. 1st B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
		<u>5 1/2" Reed Wire Line Core</u> (Cont'd)			
7356	7365		Cored	9' 6"	Shale. As above. One 0'2" streak limestone shell 2'0" from bottom. Some fracturing and slickensiding. Dip 21° to 30°. Average 25°.
7365	7375		"	10' 0"	Shale. As above. Fractured and slickensided. Dip 20° to 26°. Average 25°.
7375	7377		"	1' 8"	Shale. As above. Minor fracturing and slickensiding. Dips 23° and 25°.
7377	7383		"	6' 0"	Shale. Hard dark brown. Foraminiferal. Dips 20° and 23°.
7383	7393		"	7' 0"	Shale. As above. Bottom 0'6" badly fractured. Dip 18°, 24°, and 29°.
7393	7403		"	7' 0"	Shale. As above. Top 0'4" badly fractured and
7403	7405		"	1' 8"	Shale. As above. Dip 22°.
7405	7415		"	9' 6"	Shale. As above. Dip 20° to 23°; average 23°.
7415	7425		"	5' 0"	Shale. As above. Dip 23°.
7425	7435		"	7' 6"	Shale. As above. Dip 24°.
7435	7442		"	2' 0"	Shale. As above. Generally badly fractured and with thin gougy streaks.
7442	7452		"	10' 0"	Shale. Hard, dark brown. Foraminiferal. Average dip 22°.
7452	7462		"	6' 0"	Shale. As above. Fractured and slickensided. Average dip 23°.
7462	7472		"	4' 0"	Gouge. Dark brown with pieces badly fractured and slickensided dark brown foraminiferal shale.
7472	7479		"	0' 3"	Shale. Pieces hard dark brown foraminiferal
7479	7489		"	4' 6"	Shale. Dark brown. Foraminiferal. Fractured and slickensided.

STATE OF CALIFORNIA
 DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Sheet #25

Operator WIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter #26 Sec. 29, T. 3-N, R. 16-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
					<u>5 1/2" Red Wire Line Core: (Cont'd)</u>
7499	7499		Cored	9' 0"	Shale. As above. Fractured and slicken-sided. Average dip 30°.
7499	7509		"	10' 0"	Shale. Dark brown. Fractured and slicken-sided. Dip 18°.
7509	7519		"	9' 0"	Shale. Hard, dark brown. Foraminiferal. Poorly preserved megafossils. Average dip 20°.
7519	7530		"	9' 6"	6'0" Shale. Hard, dark brown. Sandy. Foraminiferal. Grades to 3'6" Oil sand. Firm, very fine, generally silty, biscuit type with almost horizontal parting planes. Slight to fair cut. Fair to good odor. One 0'6" streak firm dark brown sandy shale 1'0" from bottom
7530	7540		"	9' 0"	2'6" Sandy siltstone. Firm, very sandy. Good oil saturation. Slight to fair cut. Fair odor. Numerous parting planes dip 0° to 10°. 6'6" Sandy siltstone. Fairly hard. Dark gray. No cut or odor. One 0'2" streak 3'0" from bottom oil saturated and with slight to fair cut. Fair odor.
7540	7550		"	10' 0"	Sandy siltstone. Fairly hard, dark gray. No cut or odor.
7550	7560		"	10' 0"	Sandy siltstone. Fairly hard, dark gray. Three thin streaks oil stained and with slight cut and odor. Numerous nearly horizontal parting planes.
7560	7570		"	10' 0"	5'0" Sandy siltstone. Fairly hard. Dark gray. No cut or odor. 5'0" Sandy siltstone. Firm, very sandy. Oil stained. Slight cut and slight to fair odor.

STATE OF CALIFORNIA
 DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL Sheet #26

Operator WIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon

Well No. Porter #26 Sec. 28, T. 3-N, R. 16-W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
<u>6 1/2" Rod Wire Line Cores: (Cont'd)</u>					
7570	7580		Cored	6' 0"	2'0" Sandy siltstone. Firm, oil stained. Slight cut and odor. Dip on numerous parting planes 0° to 10°. 4'0" Sandy siltstone. Fairly hard, dark gray. No cut or odor.
7590	7590		"	5' 6"	Sandy siltstone. Firm to fairly hard. Oil stained and dark gray in streaks. No to slight cut. No to fair odor.
7590	7600		"	2' 0"	1'3" Sandy siltstone. firm oil stained. fair cut. Good odor. 0'9" Shell.
7600	7611		"	9' 0"	Sandy siltstone. Fairly hard, dark gray. No cut or odor. Dip 21°.
7611	7621		"	9' 0"	Sandy siltstone. Firm, oil stained. Slight cut and odor. Numerous low angle parting planes 0° to 10°. Three thin streaks fair, hard, dark gray.
7621	7622		"	0'	No recovery.
7622	7631		"	3' 0"	Sandy siltstone. Firm, oil stained. Slight cut and odor. Badly contaminated with drilling mud.
7631	7641		"	9' 0"	Sandy siltstone. Streaks firm oil stained and fairly hard dark gray. No to slight cut and odor.
7641	7651		"	9' 6"	7'6" Sandy siltstone. firm oil stained. Slight cut. fair odor. 2'6" Shell.
7651	7661		"	7' 6"	Sandy siltstone. Streaks firm oil stained and fairly hard dark gray. No to slight cut and odor.
7661	7671		"	1' 6"	Sandy siltstone. firm, dark gray, limey. No cut or odor.

STATE OF CALIFORNIA
 DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Chest #27

Operator TIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon
 Well No. PORTER 726 Sec. 23, T. S-41, R. 16-W, S.D. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
<u>6 1/2" Reed Wire Line Cores: (Cont'd)</u>					
7671	7675		Cored	4' 0"	3'6" Oil sand. Soft to firm, fine to medium. Slight cut and odor. 0'6" Shell.
7675	7685		"	2' 6"	Oil sand, firm, generally fine. Very silty. Slight cut and odor.
7685	7695		"	4' 6"	1'0" Shell. 3'6" Burned drilling mud with pieces of sandy siltstone included. Siltstone is firm, slightly oil stained. Slight cut and odor.
7695	7705		"	0' 6"	Sandy siltstone. Firm, dark gray. No cut or odor.
7705	7715		"	6' 6"	Sandy siltstone. Firm, oil stained. Slight cut and odor.
7715	7725		"	3' 0"	Oil sand. Soft, fine to medium. Slight cut and odor.
7725	7735		"	4' 6"	0'3" oil sand. Firm, fine to coarse. Slight cut and odor. 1'6" Oil sand. Firm, very fine. Slight cut and odor. 0'6" Oil sand. Firm, fine to medium. Slight cut and odor. 1'6" Shell. 0'9" Oil sand. Firm, very fine. Slight cut and odor.
7735	7745		"	10' 0"	6'0" Oil sand. Firm, fine. Slight cut and odor. Numerous nearly horizontal parting planes. 4'0" Shell.
7745	7755		"	5' 6"	4'6" Oil sand. Firm, very fine. Slight cut and odor. Numerous nearly horizontal parting planes. 1'0" Shell.

STATE OF CALIFORNIA
 DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Sheet #88

Operator TIDE WATER ASSOCIATED OIL COMPANY Field Aliso Canyon
 Well No. Porter #26 Sec. 28, T. S-N, R. 16-N, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
<u>6 1/2" Reed Wire Line Cores: (Cont'd)</u>					
7755	7765		Cored	6' 6"	Oil sand. Firm, very fine. Slight cut and odor. Numerous nearly horizontal parting planes. One 0'9" streak shell near bottom.
7765	7775		"	7' 0"	4'0" Oil sand. Firm, fine, occasional pebbles to 1/4". Slight to fair cut and odor. 0'9" from top 0'2" streak shell. 2'0" from top 0'6" streak hard, medium gray sand. Low angle parting planes. 5'0" Shell. Top 2'0" is badly cross bedded. Indicates dip from 15° to 20°. Several high angle fracture planes with oil stain.
7775	7785		"	9' 0"	Oil sand. Firm, fine to coarse. Occasional pebbles to 1/4". Pale. Slight to fair cut and odor. Numerous low angle parting planes. Several hard streaks with very poor saturation. 1'6" from bottom 0'2" shell showing shearing.
7785	7795		"	8' 6"	0'6" Shell. 1'0" Oil sand. Firm, fine. Slight cut and odor. 3'0" Shell. 4'0" Sandy siltstone. Firm, oil stained. Slight cut and odor.
7795	7805		"	10' 0"	4'0" Oil sand. Firm, very fine, silty. Pale. Slight cut and fair odor. Numerous low angle parting planes. 6'0" Sandy siltstone. Firm, oil stained. Slight cut and odor.
7805	7812		"	2' 0"	1'3" Oil sand. Firm, very fine, silty. Pale. Slight cut. Fair odor. Numerous low angle parting planes. 0'9" Shell.
7812	7822		"	9' 0"	0'6" Shell. 8' 6" Oil sand. Very fine, silty. Pale. Slight cut. Slight to fair odor. 1'6" from bottom 0'3" shell.

STATE OF CALIFORNIA
 DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL Sheet 29

Operator TIDE WATER ASSOCIATED OIL COMPANY Field Allan Canyon

Well No. Porter 186 Sec. 00, T. S-N, R. 16-N, S. 00 B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
		<u>6 1/2" Reed Wire Line Cores: (Cont'd)</u>			
7822	7832		Cored	0' 6"	Shell.
7832	7839		"	3' 5"	Sandy siltstone. Firm, oil stained. slight cut and odor. (At 7839' encountered hard formation. Unable to make footage. Pulled bit--badly worn).
7839	7840		Drilled		Hard sand Chert
7840	7844		"		

DIVISION OF OIL AND GAS

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

No. T1-40558

Los Angeles, Calif. January 9, 1942.

Mr. R. S. Curl,

Los Nietos,

Calif.

121

Agent for TIDE WATER ASSOCIATED OIL COMPANY

DEAR SIR:

Your well No. "PORTER" 26, Sec. 28, T. 3 N., R. 16 W., S.B. B. & M.
Aliso Canyon Field, in Los Angeles County, was tested for water shut-off
on January 7, 1942. Mr. S. H. Hook, Inspector, designated by the supervisor,
was present as prescribed in Sec. 3222 and 3223, Ch. 93, Stat. 1939; there were also present
J. R. Boyer, Engineer, and M. B. Smith, Drilling Foreman.

Shut-off data: 6-5/8 in. 26 & 29.1 lb. casing was cemented at 7610 ft. on January 2, 1942
in 9-5/8" hole with 250 sacks of cement of which 7 sacks was left in casing.
Casing record of well: 13-3/8" cem. 523'; 9-5/8" cem. 6120'; 6-5/8" cem. 7610', W.S.O.

Reported total depth 7844 ft. Bridged with cement from 7650 ft. to 7615 ft. Cleaned out to 7615 ft. for this test.
A pressure of 1500 lb. was applied to the inside of casing for 15 min. without loss after cleaning out to 7560 ft.
A Johnston tester was run into the hole on 2-7/8 in. drill pipe, with ~~xxx~~ ft. of water cushion,
and packer set at 7578 ft. with tailpiece to 7595 ft. Tester valve, with variable bean, was opened at 7:09 p.m.
and remained open for ~~xxx~~ hr. and 31 min. During this interval there was a strong puff upon
opening the first bean, then dead for 4 minutes, another strong puff upon opening the
second bean, then dead for 7 minutes, and upon opening the 3/16" bean there was a strong
blow which continued for the balance of the test. Gas reached the surface at 7:24 p. m.

THE INSPECTOR ARRIVED AT THE WELL AT 8:15 P. M. AND MR. BOYER REPORTED THE FOLLOWING:

1. A 12-1/4" rotary hole was drilled from 6120' to 6750', a 10-1/2" rotary hole from 6750' to 6802', a 9-5/8" rotary hole from 6802' to 7648', and an 8-1/2" rotary hole from 7648' to 7844'.
2. Mud fluid was circulated 3 hr. before cementing the casing.
3. Electrical core readings showed oil sand with streaks of silt stone from 7620'-7839'.
4. The fluid between the drill pipe and the 6-5/8" casing remained stationary during the time that the valve was open.

THE INSPECTOR NOTED THE FOLLOWING:

1. When the drill pipe was removed 420' of medium, gas-cut drilling fluid was found in the drill pipe above the tester, equivalent to 1.7 bbl.
2. The fluid sample taken from the bottom of the drill pipe tasted fresh.
3. The recording pressure bomb chart showed that the tester valve was open 31 minutes.

The test was completed at 12:00 midnight.

THE SHUT-OFF IS APPROVED.

cc- L. C. Decius
Jos. Jensen
G. C. Pfeffer (2)
SHR:OH
R/S

R. D. BUSH, State Oil and Gas Supervisor

By E. H. Messer, Deputy



STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-37139

Los Angeles, Calif. November 25, 19 41.

Mr. R. S. Carl,

Los Nietos, Calif.

Agent for TIDE WATER ASSOCIATED OIL COMPANY

DEAR SIR:

Your supplementary proposal to drill Well No. "PORTER" 26,
Section 28, T. 3N., R. 16W., S. B. B. & M., Aliso Canyon Field, Los Angeles County,
dated Nov. 21, 19 41, received Nov. 25, 19 41, 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 new conditions are as follows:

The total depth of the hole is now 7310'. No casing has been set below the 13-3/8" surface casing at 523'. The hole is beginning to cave and cannot safely be carried deeper without setting further casing."

PROPOSAL:

"We now propose

1. To cement a protective string of 9-5/8" casing at 6100'. No test of shut-off will be made.

NOTE: This program was presented to Mr. Rook by Mr. Pfeffer in a telephone conversation had on Nov. 19, 1941 and was approved by Mr. Rook."

DECISION:

THE PROPOSAL IS APPROVED.

cc- L. C. Decius
Jos. Jensen
G. C. Pfeffer (2)
CVB:G

R. D. BUSH

State Oil and Gas Supervisor

By E. H. Messer Deputy

DIVISION OF OIL AND GAS

Supplementary Notice

Los Nietos, Calif. Nov. 21, 1941

DIVISION OF OIL AND GAS

Los Angeles, Calif.

Our notice to you dated August 8, 1941, stating our intention to

Drill well No. Porter #26

(Drill, deepen, redrill, abandon)

Sec. 23, T. 3N, R. 16W, S. S.B. B. & M. Aliso Canyon Field,

Los Angeles County, must be amended on account of changed or recently

discovered conditions.

The new conditions are as follows:

The total depth of the hole is now 7310'. No casing has been set below the 13-3/8" surface casing at 523'. The hole is beginning to cave and cannot safely be carried deeper without setting further casing.

We now propose

1. To cement a protective string of 9-5/8" casing at 6100'. No test of shut-off will be made.

NOTE: This program was presented to Mr. Rook by Mr. Pfeffer in a telephone conversation had on Nov. 19, 1941 and was approved by Mr. Rook.

Supp. Drill

Reference to file at 1012

Scope	Work	Person	Date	Time
				121
				✓
				✓

TIDE WATER ASSOCIATED OIL COMPANY

(Name of Operator)

By

Agent

R. S. Cook

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-37040

Los Angeles, Calif. October 29, 19 41.

MR. R. S. Curl,

Los Nietos, Calif.

121

Agent for TIDE WATER ASSOCIATED OIL COMPANY

DEAR SIR:

Your supplementary proposal to drill Well No. "PORTER" 26,
Section 28, T. 3 N., R. 16 W., S.B. B. & M., Aliso Canyon Field, Los Angeles County,
dated Oct. 23, 19 41, received Oct. 27, 19 41, 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 new conditions are as follows:

Producible sand bodies which are present in wells located further to the east within the interval commonly designated as the Porter zone are in Porter #26 represented by siltstones or are so silty that they are not regarded as being capable of yielding oil in commercial quantities. The well is at present coring at 6570'. The only casing in the well is a string of 13-3/8" cemented at 523'."

PROPOSAL:

"We now propose

1. To drill and/or core ahead in search of deeper production, further program to be dependent upon data secured through such drilling and/or coring."

DECISION:

THE PROPOSAL IS APPROVED PROVIDED THAT a supplementary notice shall be filed with this division before running any additional casing in the hole.

cc- L. C. Decius
Jos. Jensen
G. C. Pfeffer (2)
CLB:OH

Sfma

R. D. BUSH

State Oil and Gas Supervisor

By E. H. Messer Deputy

DIVISION OF OIL AND GAS

Supplementary Notice

Los Nietos, Calif. October 23 19 41

DIVISION OF OIL AND GAS

Los Angeles, Calif.

Our notice to you dated August 8, 19 41, stating our intention to

Drill well No. Porter #26

(Drill, deepen, redrill, abandon)

Sec. 28, T. 5-N, R. 16-W, S.B. B. & M. Aliso Canyon Field,

Los Angeles County, must be amended on account of changed or recently

discovered conditions.

The new conditions are as follows:

Producible sand bodies which are present in wells located further to the east within the interval commonly designated as the Porter zone are in Porter #26 represented by siltstones or are so silty that they are not regarded as being capable of yielding oil in commercial quantities. The well is at present coring at 6570'. The only casing in the well is a string of 15-3/8" cemented at 523'.

We now propose

- 1. To drill and/or core ahead in search of deeper production, further program to be dependent upon data secured through such drilling and/or coring.

Supp Dr

REGISTRATION IN THIS OIL WELL				PAGES	
Wagon	Model	CRUISE NUMBER	CORES	1	2
				✓	✓

TIDE WATER ASSOCIATED OIL COMPANY

By R. H. Cough (Name of Operator)
Agent

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-36744

Los Angeles, Calif. August 14, 19 41.

Mr. R. S. Curl,

Los Nietos, Calif.

Agent for TIDE WATER ASSOCIATED OIL COMPANY

DEAR SIR:

Your proposal to drill Well No. "FORSTER" 26, Section 28, T. 3 N., R. 16 W., S.E. B. & M., Aliso Canyon Field, Los Angeles County, dated Aug. 8, 19 41, received Aug. 13, 19 41, 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 559 feet S. and 3299 feet W. from Station #84. The elevation of the derrick floor above sea level is 2512 feet. We estimate that the first productive oil or gas sand should be encountered at a depth of about 5337 feet."

PROPOSAL:

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

Size of Casing	Weight	Grade and Type	Depth	Landed or Cemented
13-3/8"	54.5#	J-55 S.J.	500'	Cemented
8-5/8"	32# & 36#	J-55 & N-80 T&C	5325'	"
6-5/8"	26#	J-55 P.J.	5660'	Landed (Pf. liner)

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. Adequate blowout prevention equipment shall be provided and ready for use at all times.
3. Any hole to be sidetracked in any oil zone shall be filled with cement, if possible.
4. The formations to be left back of the 8-5/8" casing shall be mudded in a manner consistent with good drilling practice.
5. This division shall be notified to examine cores and/or electrical log before running the 8-5/8" casing.
6. The column of mud fluid back of the 8-5/8" casing shall be maintained to the surface for at least 30 days after cementing this casing.
7. THIS DIVISION SHALL BE NOTIFIED TO WITNESS a test of the effectiveness of the 8-5/8" shut-off.

cc- L. C. Decius
Jos. Jensen
G. C. Pfeffer (2)
CLB:OH

S/mw

R. D. BUSH
State Oil and Gas Supervisor

By E. H. [Signature] Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

037-00713

Notice of Intention to Drill New Well
This notice must be given and surety bond filed before drilling begins

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Los Nietos, Calif. August 8 1941

DIVISION OF OIL AND GAS

Los Angeles Calif.

In compliance with Section 17, Chapter 718, Statutes of 1915, as amended, notice is hereby given that it is our intention to commence the work of drilling well No. Porter #26, Sec. 28, T. 5-N, R. 16-W, S.B. B. & M., Aliso Canyon Field, Los Angeles County. Lease consists of Porter Lease

The well is 552 feet N of S., and 5292' feet E of W. from Station #04
(Give location in distance from section corners or other corners of legal subdivision)

The elevation of the ~~ground~~ ^{derrick floor} above sea level is 5012 feet.

We estimate that the first productive oil or gas sand should be encountered at a depth of about 5257 feet.

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
13-5/8"	54.5#	J-55 S.J.	500'	Cemented
8-5/8"	32# & 36#	J-55 & N-20 T&C	5325'	"
6-5/8"	26#	J-55 P.J.	5660'	Landed (Pf. liner)

Well is to be drilled with ~~cable~~ ^{rotary} tools.

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

Address Box #7
Los Nietos, California

TIDE WATER ASSOCIATED OIL COMPANY

(Name of Operator)

Telephone number Whittier 420-43

By R. A. Cuyler
Agent

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

18 Aug.					

Book
5-13-41
S.M.