

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003 - 4458

No. P 215-0262

PERMIT TO CONDUCT WELL OPERATIONS

Old	New
010	010
<small>FIELD CODE</small>	
00	00
<small>AREA CODE</small>	
30	30
<small>POOL CODE</small>	

Gas Storage
Storage Integrity Management Program
"Sesnon-Frew" - Modelo (Miocene-Eocene) Formation

Ventura, California
December 23, 2015

Thomas W. Schroeder, Agent
Southern California Gas Company (S4700)
9400 Oakdale Avenue
Chatsworth, CA 91313

Your proposal to **Rework** well "Porter" 35, A.P.I. No. 037-00722, Section 28, T. 03N, R. 16W, SB B. & M., Aliso Canyon field, Any area, Sesnon-Frew pool, Los Angeles County, dated 12/10/2015, received 12/23/2015 has been examined in conjunction with records filed in this office. (Lat: 34.311604 Long: -118.555927 Datum:83)

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, as defined by this Division's publication No. M07, shall be installed and maintained in operating condition and meet the following minimum requirements:
 - a. Class III 5M on the 7" casing.
2. Hole fluid of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts shall be used.
3. Blowout prevention practice drills are conducted at least weekly and recorded on the tour sheet. A practice drill may be required at the time of the test/inspection.
4. A USIT log shall be performed to demonstrate that the 7" casing has integrity. If the casing does not have integrity, the well shall be shut in and no injection operations shall be undertaken until the casing is repaired to Division satisfaction.
5. Prior to commencing injection, a pressure test is conducted to demonstrate the mechanical integrity of the 7" casing. The minimum test pressure shall be 1000 psi at surface.
6. Injection is through a tubing and packer only. Casing injection and withdrawal shall only be allowed in casing that is cemented back from the casing shoe to surface. The packer shall be set above the water shut off (WSO) holes at 7818'.
7. This office shall be contacted by phone prior to making any program changes and no changes are made without Division approval.
8. **THIS DIVISION SHALL BE NOTIFIED TO:**
 - a. Inspect the installed blowout prevention equipment prior to commencing downhole operations.
 - b. Witness a pressure test of the 7" casing prior to commencing injection.
 - c. Review the USIT log prior to commencing injection.
 - d. Inspect the electronic monitoring equipment prior to commencing injection.

Continued on Next Page

Blanket Bond Dated: 7/6/1999
UIC Project No. 0100006,0100006

Engineer Kris Gustafson
Office (805) 654-4761

KG/kg

Kenneth A. Harris Jr.
State Oil and Gas Supervisor

By 
Bruce Hesson, District Deputy

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. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.

Page 2
Well #: "Porter" 35
API #: 037-00722
Permit : P 215-0262
Date: December 23, 2015

e. Witness a mechanical integrity test within three months after injection has commenced.

NOTE:

1. The base of the freshwater zone is at **800'±**.
2. No operation shall be undertaken or continued that will contaminate or otherwise damage the environment.
3. Laterals that are servicing the well, must be tested to ensure their integrity.
4. The required History of Oil or Gas Well (OG103) shall include a complete description of the required pressure test. **An updated casing and tubing diagram shall be included with the well history.**
5. **A Well Summary Report (Form OG 100)** and **Well History (Form OG 103)** shall to be submitted to the Division within 60 days after the well is drilled, reworked, plugged and abandoned, or if the work is suspended. Any additional well work will require an additional notice to be submitted to this office prior to resuming well operations.



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

FOR DIVISION USE ONLY		
Bond	Forms	
	OGD11#	OGD121
	CALWIMS	115

NOTICE OF INTENTION TO REWORK / REDRILL WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog **P215-0262**

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework / redrill well Porter 35, API No. 037-00722
 (Check one)

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

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

- 13-3/8", 54.5#, T&C casing cemented at 505'.
 - 7", 23# & 26#, J-55 & N-80 casing cemented at 7910'. WSO at 7818', 7820', and 7900'.
 - 5", 18#, N-80 liner hung at 8142', top at 7877'.
 - 5" slotted from 7891'-8142' from 7891'-8142' with 2" x 80 mesh slots, 12 rows, 2" centers, cemented off from 7940'-7965' and 7990'-8020', selectively jet perforated from 7968'-8119'.
 - 2-7/8", wire-wrapped liner hung at 8134', top at 7851'.
 - 2-7/8" slotted from 7904'-8134' with 18 mesh slots.
- The total depth is: 8145 feet. The effective depth is: 8134 feet.

Present completion zone(s): Sesnon (Name) Anticipated completion zone(s): Same (Name)

Present zone pressure: <3500 psi. Anticipated/existing new zone pressure: Same psi.

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes No

For redrilling or deepening only, is a California Environmental Quality Act (CEQA) document required by a local agency? Yes No If yes, see next page.

The proposed work is as follows: (A complete program is preferred and may be attached.)

See attached program.

If well is to be redrilled or deepened, show proposed coordinates (from surface location) and true vertical depth at total depth: _____ feet and _____ feet Estimated true vertical depth: _____
 (Direction) (Direction)

Will the Field and/or Area change? Yes No If yes, specify New Field: _____ New Area: _____

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator Southern California Gas Company		
Address P. O. Box 2300	City/State Chatsworth	Zip Code 91313-2300
Name of Person Filing Notice Charles Jackle	Telephone Number: (310) 578-2693	Signature <i>Charles Jackle</i>
Individual to contact for technical questions: Charles Jackle	Telephone Number: (310) 578-2693	Date 12/10/15
		E-Mail Address: cjackle@scgprautilities.com

This notice and an indemnity or cash bond must be filed, and approval given, before the workover begins. (See the reverse side for bonding information.) If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

WORKOVER PROGRAM

Rec'd 12-23-15 DOGGR D2 Ventura

Porter 35 – Well Inspection

DATE: December 22, 2015
OPERATOR: SOUTHERN CALIFORNIA GAS COMPANY
FIELD: ALISO CANYON
WELL: PORTER 35
API NUMBER: 037-00722
ELEVATION: All depths based on original KB, 22' above GL.
SURFACE LOCATION: SEC 28, T3N, R16W, S.B. B&M

OBJECTIVE

The intent of this program is to inspect the well integrity and remediate identified conditions as part of the Storage Integrity Management Program (SIMP). This program will include pulling 2-7/8" completion string, running USIT and Gyro surveys, pressure testing casing and well laterals, installing new completion string – converting well to tubing flow, installing pressure monitors, and returning well to service. Baseline assessment data will be gathered on vertical casing pipe and other well components.

WELL RECORD

Current Status:	Active
ECOD:	8134' MD (Bottom of 2-7/8" Wire-Wrapped Liner).
Special Conditions:	9/21/15, Wireline survey tagged down at 8059' (75' above ECOD).
Casing Record:	13-3/8", 54.5#, T&C casing cemented at 505'. 7", 23#/26#, J-55/N-80 casing cemented at 7910'. WSO at 7818', 7820', and 7900'. 5", 18#, N-80 liner hung at 8142', TOL at 7877'. 5" slotted from 7891-8142 w/ 2" x 80 mesh slots, 12 rows, 2" centers, cemented off 7940-7965' and 7990'-8020', and selectively jet perforated from 7968'-8190'. 2-7/8" wire-wrapped liner hung at 8134', top at 7851. 2-7/8" slotted from 7904'-8134' w/ 18 mesh slots.
Tubing Record:	See Attached Tubing Detail.

GEOLOGIC MARKERS

M-P: 7604' MD, 5503' VSS
S-1: 7825' MD, 5724' VSS
S-2: 7866' MD, 5765' VSS
S-4: 7919' MD, 5818' VSS
S-6: 7961' MD, 5860' VSS
S-8: 8016' MD, 5915' VSS
S-10: 8053' MD, 5952' VSS
S-12: 8100' MD, 5999' VSS
S-14: 8115' MD, 6014' VSS

Estimated Field Pressure: 2662 PSI (Variable)

Estimated Bottomhole Temperature: 180 DEG F

PROGRAM NOTES:

1. BOPE requirements in Gas Company Standard 224.05 shall be fully implemented at all times.
2. The storage reservoir pressures shall be monitored during the workover with a minimum 300 psi overbalance for well control fluids.
3. Prepare the location by removing all relevant landscaping/lighting fixtures as well as surface piping and electrical components as needed. Locate rig anchors; reinstall - if necessary.
4. DOGGR permit must be posted on site. Notify the DOGGR as required for BOPE testing as stated on permit.

PRE-RIG WORK

De-energize and remove all laterals. Install companion flanges for killing the well.

WELLWORK PROGRAM

1. MIRU production rig and associated equipment.
2. Spot 500 bbl Baker tank and fill with 8.6 ppg KCl brine.
 - 2.1 Connect pump to the tubing and vent the casing through the choke manifold to the SoCalGas withdrawal system.
 - 2.2 Treat all brine fluids with Biocide, 5 gals/100 bbls
3. If the hole is not standing full of brine, then kill the well with an HEC polymer pill with approximately 8.6 ppg KCl brine. The liner volume is approximately 2 bbls. The tubing volume is approximately 42 bbls, and the tubing/casing annulus is approximately 250 bbls.

NOTE: Verify field surface pressure to ensure the proper kill fluid density is used prior to killing well and for well control during workover operations.

4. Install a Class III 5M BOPE per Gas Company Standard 224.05 and in accordance with the DOGGR permit. All connections and valves must be flanged and at least 5000 psig rated.
 - a.) Pressure test the Class III 5M annular preventer to 3500 psig for 20 minutes. Test blind rams and the 2-7/8" pipe rams to 5000 psig for 20 minutes. Test all lines and connections to 5000 psig.
 - b.) Perform a 300 psig low pressure test on the annular preventer, blind rams and pipe rams for 20 minutes. Test all lines and connections to 300 psig.
 - c.) All tests are to be charted and witnessed by a DOGGR representative.
5. Unland 2-7/8" tubing string and POOH with the completion tubing along with Camco mandrel assembly.

6. Make up retrieving tool assembly and attempt to release Baker Retrieval D packer set at 7825' as per vendor recommendation.

NOTE: If unable to recover packer with retrieving tool after first attempt, proceed with program as directed.

7. PU 7" (23#-26#) casing scraper and RIH to top of Baker Retrieval D packer set at 7825'. Circulate hole clean.

8. MU 7" RBP and set above liner top at 7841'± (10' above TLH).

9. Rig up Schlumberger wireline unit and run high resolution USIT/Neutron/CBL inspection survey in 7" casing from top of RBP to surface to evaluate casing integrity.

NOTE: Engineering team to analyze USIT and pressure test survey results and may recommend additional remediation work.

10. Rig up Scientific Drilling wireline unit and run Gyro survey from top of RBP to surface.

11. Perform Pressure Integrity Test on 7" casing from RBP to surface as per pressure test schedule to a minimum pressure of 3400 psi.

12. Inspect wellhead and pressure test the wellhead seals to a minimum pressure of 3400 psi.

- a.) If wellhead seals do not test, remove Class III 5M BOPE, crossover spool, and primary pack-off.
- b.) Replace pack-off seals and reinstall a tubing head, refurbished as necessary.
- c.) Pressure test all wellhead seals to 5000 psi.
- d.) Reinstall Class III 5M BOPE and function test.

13. Make up retrieving tool assembly and recover 7" RBP. POOH, laying down tubing.

14. Pick up new completion string:

- a. 7" mechanical set production packer
- b. 10' pup joint 2-7/8" 6.5# EUE 8RD tubing
- c. 2-7/8" XN EUE 8RD no-go nipple
- d. Full joint 2-7/8" 6.5# EUE 8RD tubing
- e. 2-7/8" EUE 8RD sliding sleeve
- f. Full joint 2-7/8" 6.5# EUE 8RD tubing
- g. 10' pup joint 2-7/8" 6.5# EUE 8RD tubing
- h. 2-7/8" EUE 8RD gas lift mandrel
- i. 2-7/8", 6.5# EUE 8RD tubing to surface
- j. Pup joints 2-7/8", 6.5# EUE 8RD tubing for space-out
- k. Tubing hanger and fatigue nipple

15. RIH with new completion string with packer at 7820'± and land as per vendor specifications. Pressure test the 2-7/8" tubing x 7" casing annulus to 1000 psi.
16. Remove Class III 5M BOPE and install the wellhead tree - test to 5000 psig.
17. RDMO production rig.
18. Rig up wireline and set a plug in the 2-7/8" XN profile, shift the sliding sleeve open and unload the workover brine from the tubing/casing annulus. Pull the wireline plug from the XN profile and shift the sliding sleeve closed.

WELL LATERAL HYDROTESTING

19. Per Gas Company Standard 182.0170, pressure test the tubing and casing kill laterals from the wellhead to the remote tie-in to 3400 psig. Pressure test the tubing and casing withdrawal/injection laterals from wellhead to operating valves to 3400 psig.
20. Reinstall the hydrotested laterals.
21. Install the well safety systems and instrumentation. Install pressure transmitters on tubing, casing, and surface casing.
22. Release well to operations.

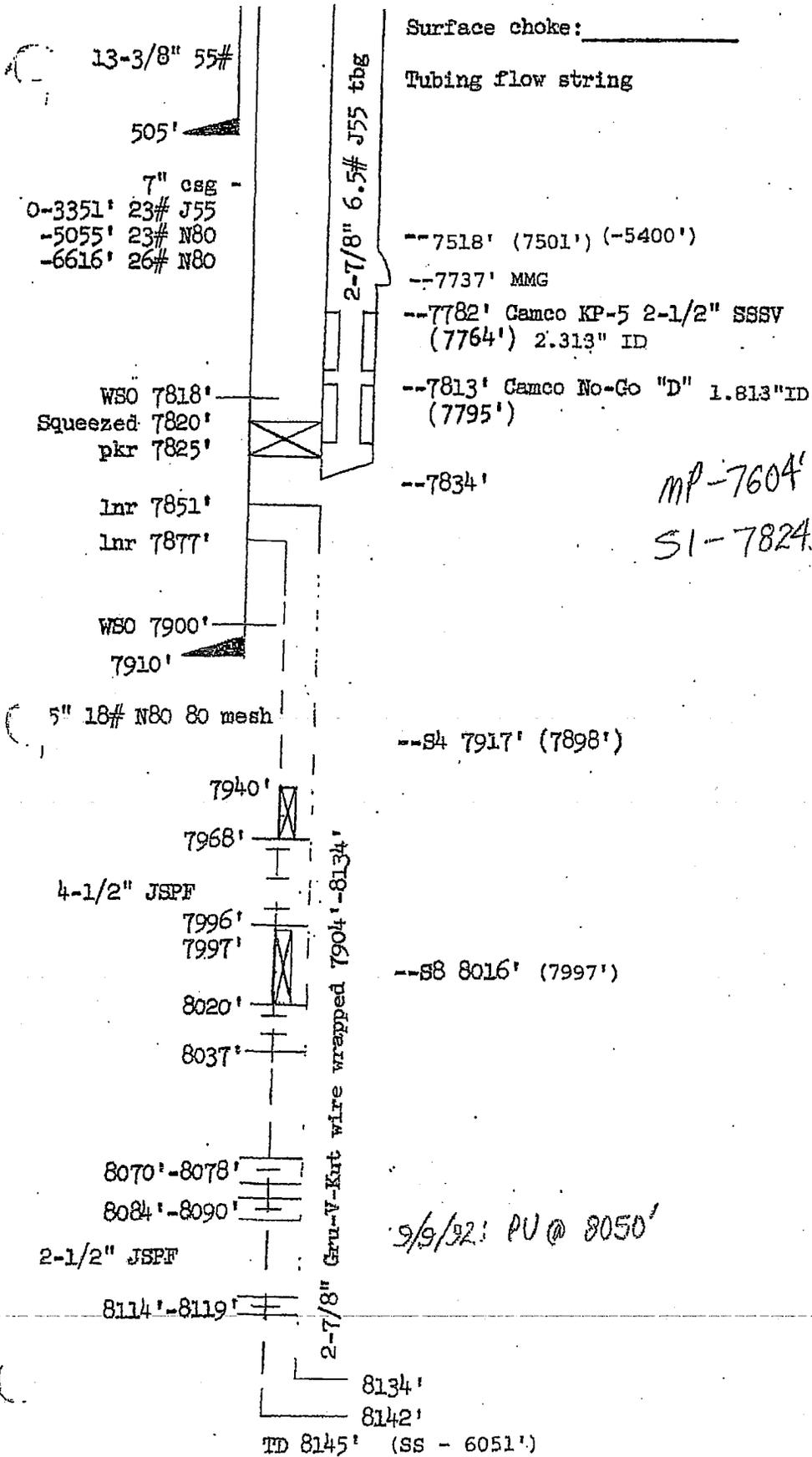
EXTERNAL CORROSION PROTECTION

Per Gas Company Standard 167.30, remove any lead based paint and recoat wellhead, production tree, and laterals.

Elevation: 2094' G.L.
 KB: 7' MV: 7'

Porter 35

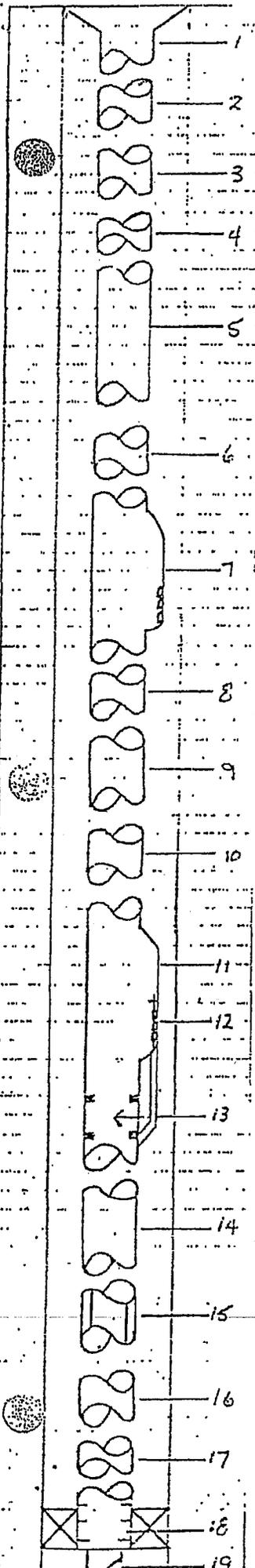
Rec'd 12-23-15 DOGGR D2 Ventura



11/8/45 - Well spud
 3/19/46 - Well completed
 TD 8145'
 9/7/52 - 9/25/52 - Scab
 cemented.
 2-18/55 - 9/19/55 - Scab ce-
 mented & jet perf'd.
 11/25/74 - 12/15/74 - Cleaned
 out to 8142', wirebrushed
 perfs, pressure tested csg,
 WSO 7819', ran 2-7/8" liner
 7851'-8134', & ran tbg.
 7/25/77 - 8/13/77 - Squeezed
 7820' for WSO, ran tbg with
 SSSV.

WELL VOLUME		
	Cu.Ft.	Bbl.
Tubing	255	45
Csg/Lnr.	36	6
Annulus	1360	242

6/24/85



OPERATOR	Gas Company	LOGGING	LINER	1	2	3
WELL #	Porter #35					
FIELD	Aliso Canyon					
COUNTY	Los Angeles					
STATE	California					
DATE	August 12, 1977					
	<input type="checkbox"/> NEW COMPLETION	<input checked="" type="checkbox"/> WORKOVER				

ITEM NO.	TUBING DETAILS	LENGTH	DEPTH
1	K.B.	6.00	6.0
2	Decor	.60	7.5
3	Fatigue Nipple 2 7/8" 8rd EUE	1.80	9.3
4	Pup Joint 2 7/8" 6.5# N-80 8rd EUE	3.10	12.4
5	2pc Joints 2 7/8" 6.5# J-55 8rd EUE tbg	7720.72	7732.1
6	Pup Joint 2 7/8" 6.5# N-80 8rd EUE 2.441 ID	4.13	7737.2
7	Camco MMG Mandrel (empty) 2.441 ID 5.25 OD	8.40	7745.6
8	Pup Joint 2 7/8" 6.5# N-80 8rd EUE 2.441 ID	.64	7746.3
9	1 Joint 2 7/8" 6.5# J-55 8rd EUE tbg 2.441 ID	31.54	7777.8
10	Pup Joint 2 7/8" 6.5# N-80 8rd EUE 2.441 ID	4.16	7782.0
11	Camco KP-5 Safety sys tbg flow 2.312 ID 4.750 OD	11.39	7793.3
12	EH-Shutoff valve (closed)		
13	KP-5 Safety valve nipple 2.312 ID 4.750 OD		
14	Camco 20' Blast Joint 2.441 ID 3.625 OD	19.83	7813.2
15	Camco NO GO "D" Nipple 1.812 ID 3.625 OD	.82	7814.0
16	Camco 10' Blast Joint 2.441 ID 3.625 OD	9.82	7823.8
17	Latch-in Locator	1.03	7824.8
18	Baker Seals Assy 2 7/8" 10rd EUE	3.97	7828.8
19	Production Tube	5.22	7834.0

Baker Retrieval Packer set at 7825.0

- NOTES -
 Baker Retrieval "D" Lock set packer set @ 7825' wireline measurement. KP-5 Camco tubing flow safety system was run with EH-shutoff valve closed. MMG mandrel was run empty. Safety system is to receive PC-4 Camco safety valve. MMG mandrel is to receive Camco DCRT kill valve.

Baker Retrieval "D" packer 6.92 left in hole.

Well No. P-35

Rec'd 12-23-15 DOGGR D2 Ventura

Field Aliso

Date Prepared 5-4-81

Wellhead Mfgr. Cameron

1. Casing Head 5000 psi Size 13-5/8" x 13-3/8" Type _____

Slips & Pack-off 13-5/8" x 7"

A. Surface Csg. Size 13-3/8" Wt 54.5 Grade J-55

B. Casing Head Valve Marpac Size 2" 3000 psi Fig.No. CSB-790-JN

2. Seal Flange _____ Size _____

A. Type Seal PS Ring BX-160 & _____

3. Tubing Head Cameron Size 13-5/8" x 8" 5000 psi Type _____

Ring BX-160 & Ring R-50

Outlets _____ Sec. Seal PS

Valve Removal Thrd 1 1/2" Rd 8-V 2-1/2"

A. Tubing Hanger _____ Size 8" x 2-1/2" Type AJO

B.P.V. Size 2-7/8" Thrd 4 L.H.

B. Tubing Head Valves Mc Evoy Size 3" 5000 psi Fig.No. 129

C. Automatic Csg. Valve _____ Size 3" 5000 psi Fig.No. 114522

4. Adapter Seal Flange Cameron Size 8" x 2-1/2" Type AJO

A. Ring Size R-50 & R-27

5. Master Valve Mc Evoy Size 2-1/2" 5000 psi Fig.No. 129

6. Xmas Tree Cross Cameron Size 2-9/16" x 2-9/16" x 2-1/16" Bore Thru 2-9/16"
2-1/16" Across 2-1/16"

7. Tubing Wing Valves Rockwell Size 2" 5000 psi Fig.No. 21055

A. Automatic Tbg. Valve WKM Size 2" 5000 psi Fig. No. 110261

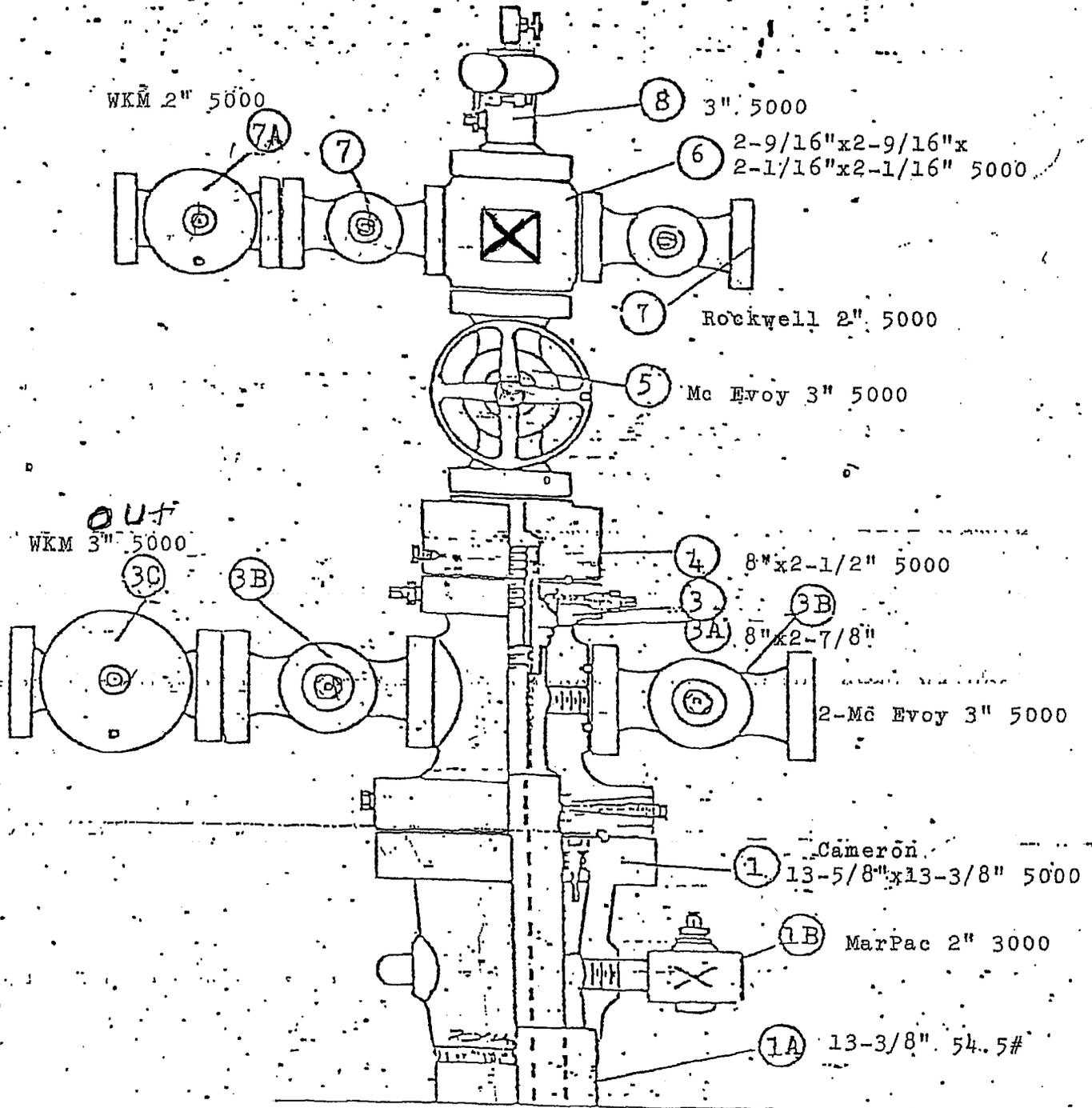
8. Unibolt Size 3" x 2-1/2" 5000 psi Inside Thrds 2-7/8" EUE

9. Wt. Landed in Csg. Head 180,000 Wt. 7" 23# Grade J-55

250 jts. 2-7/8" 7825'

Wt. Landed on Doughnut 10,000 38,000 Wt. 6.5# 2-7/8" Grade J-55

1. Tubing Head to Ground Level 5.50 Below



Well Name: P 35 - Aliso Canyon

Mfg.: Cameron

Date Prepared: 12-13-82

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

Ventura _____, California

November 6, 1991 _____

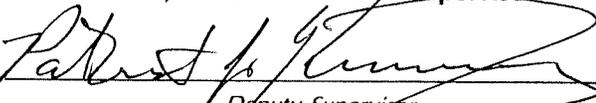
R. D. Phillips, Agent
SOUTHERN CALIFORNIA GAS COMPANY
P.O. Drawer 3249 Mail Location 22G0
Los Angeles, CA 90051-1249

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

	(1)	(2)	(3)	(4)	(5)	()
INTENTION	DRILL	ALTER CSG	ALTER CSG	ALTER CSG	REWORK CRAS STORE	
NOTICE DATED	12-14-45	6-6-52	3-31-55	12-10-74	7-20-77	
P-REPORT NUMBER	1-41516	152-734	155-584	274-459	277-273	
CHECKED BY/DATE						
MAP LETTER DATED	12-17-45				NC	
SYMBOL	⊙	⊙	⊙	↗	↗	

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	12-17-45		6-9-52		4-1-55		12-16-74		7-25-77	
HISTORY	5-1-46		11-18-52		2-29-56		2-24-75		9-6-77	
SUMMARY	5-1-46		11-18-52		2-29-56					
IES/ELECTRIC LOG	5-1-46									
DIRECTIONAL SURV										
CORE/SWS DESCRIP										
OTHER										
RECORDS COMPLETE							AS		⊙	

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

SEP - 6 1977

History of Oil or Gas Well

SANTA PAULA, CALIFORNIA

Operator Southern California Gas Company..... Field or County Aliso Canyon
Well name and No. PORTER # 35....., Sec. 28, T3N, R16W, S.B.B. & M.
A.P.I. well No. 037-00722..... Name P.S. Magruder, Jr. Title Agent
Date August 27, 1977..... (Person submitting report) (President, Secretary or Agent)

Signature

P.S. Magruder Jr.

P.O. BOX 3249 Terminal Annex, Los Angeles, CA., 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

- 7-25-77 Killed Porter #35 with 325 barrels of 77#/cu.ft. brine-polymer drilling fluid.
- 7-27-77 Moved in Oilwell Service Rig #1 and rigged up. Circulated gas out of drilling fluid. Secured well.
- 7-28-77 Installed back-pressure valve in doughnut. Removed Christmas tree. Testing B.O.P.E.
- 7-29-77 Rigged up and tried to test blind rams with water but donut leaked. Unseated Otis Packer and pulled out of well. Made up Baker Model "B" lock set bridge plug. Ran in to 500' set bridge plug. Pulled up and tested to 1200 psi (O.K.)
- 7-30-77 Attempted to test blind rams with water, but had leak. Ran in and re-set bridge plug. Tested bridge plug to 4000 psi for 20 minutes - O.K. Tested pipe rams to 4000 psi for 20 minutes - O.K. Tested Hydril bag to 3000 psi for 20 minutes - O.K. Rigged up NOWSCO and tested blind rams to 4000 psi - O.K. Tested pipe rams but had a small leak. Tested Hydril bag to 3000 psi for 20 minutes - O.K.
- 7-31-77 Rig and crew idle.
- 8-1-77 Tested pipe rams with 4000 psi for 20 minutes, using nitrogen. Pulled tubing and bridge plug. Ran 6" bit and scraper to 7851'. Circulated for two hours. Pulled out of well and started in well with bridge plug.
- 8-2-77 Set bridge plug at 7840'. Tested plug with 1000 psi for 15 minutes. Changed to water with surface tension agent. Pulled out of well. Ran retainer to 3400'. Byron Jackson did not bring all equipment to pressure test casing. Rigged up Dowell and checking lines.

- 8-3-77 Set retainer at 3400'. Pressure tested 3400' to 7840' with 2800 psi - psi dropped to 2200 psi in 10 minutes. Tested 3400' to surface with 3000 psi for 60 minutes; 2200' to surface with 3400 psi for 60 minutes; 1600' to surface with 3600 psi for 60 minutes; 1100' to surface with 4000 psi for 60 minutes. Ran in hole with tubing to 7840' and pumped in 3 sacks of sand. Pulled up 600' for 60 minutes.
- 8-4-77 Finished pulling out of hole. Ran Johnston retainer to 7800'. Tested casing from 7800' to surface under 2800 psi for 60 minutes. Obtained breakdown through holes from 7819-7821' at 9 cu.ft./minute under 4200 psi. Set retainer at 7700'. Mixed 50 sacks of Type "G" cement with 3% DL3. Squeezed away 35 cu.ft. under 5000 psi (final pressure) and held 5000 psi for 30 minutes.
- 8-5-77 Top of cement 7730'. Drilled out cement to 7830'. Rigged up GO-International to perforate.
- 8-6-77 GO-International shot four 1/2" holes from 7817' to 7818'. Dowell tested perforations with 2800 psi for 30 minutes - O.K. Ran Johnston tester packer set at 7771'. Tool open 90 minutes. Puff blow for 5 minutes then dead balance of test. Pulled tester out of hole and recovered 6' rise in 2 7/8" tubing.
- 8-7-77 Rig and crew idle.
- 8-8-77 Circulated out sand and retrieved bridge plug. Rigged up GO-International wireline. Repaired wireline. Ran in and packer stuck at 7867' on top of liner. Pulled out of rope socket leaving 16' of fish in well.
- 8-9-77 Pulled out of hole. Made up Brown Oil Tools overshot and jars. Ran in hole, latched on to Baker setting tool and with overshot pulled 50,000# over weight of string. Pulled out and recovered setting tools leaving packer in well. Made up Baker seal assembly with two seals - tested seals, O.K.
- 8-10-77 Running 2 7/8" tubing, changing collars, applying Baker Seal and Hydrotesting in hole at 5000 psi for one minute.
- 8-11-77 Finished testing in hole with 2 7/8" tubing. Latched on to Baker packer. Tested packer with rig pump and circulated - no pressure. Pulled 90,000# but could not move packer. Released from packer and pulled out of well. Rigged up GO-Wireline. Ran in and set packer at 7825'. Hydrotesting in well with 2 7/8" tubing.
- 8-12-77 Finished Hydrotesting in well, latched onto packer with 10,000# on packer and pulled 25,000# over weight of tubing to check latch. Removed B.O.P.E. Installed Christmas tree and tested Christmas tree to 5000 P.S.I. - O.K. Changed over to lease water. Hook load of tubing as landed 38,000#.

8-13-77

Set tubing plug in NO-GO nipple and tested to 2000 psi for 20 minutes -
O.K. Released rig at 11:00 A.M. (8-13-77)

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

Report on Operations

No. T 277-207

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

Santa Paula, Calif.
Aug. 19, 1977

DEAR SIR:

Operations at well No. "SFZU" P-35, API No. 037-00722, Sec. 28, T. 3N, R. 16W,
SB, B & M. Aliso Canyon Field, in Los Angeles County, were witnessed
on 7/30/77. Mr. P.R. Wycle, representative of the supervisor was
present from 1700 to 1900. There were also present A. Awalt, foreman

Present condition of well: No additions to the casing record since proposal dated 7/20/77.

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

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

By John L. Gordon Deputy

REPORT ON PROPOSED OPERATIONS

Santa Paula, California

July 28, 1977

Mr. P. S. Magruder, Agent
Southern Calif. Gas Company
P. O. Box 3249 Terminal Annex
Los Angeles, CA 90051

Your proposal to rework gas storage well "SFZU" P-35
(Name and number)
A.P.I. No. 037-00722, Section 28, T. 3N, R. 16W
S.B. B. & M., Aliso Canyon field, Los Angeles County,
dated 7-20-77, received 7-25-77, has been examined in conjunction
with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. The hole 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.

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

Blanket Bond
MWD:r

M. G. MEFFERD (acting)

State Oil and Gas Supervisor

By

John L. Hardoin
Deputy Supervisor

John L. Hardoin

JUL 25 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 null and void. SANTA PAULA, CALIFORNIA

FOR DIVISION USE ONLY		
BOND	FORMS	
	114	121
BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3. Public Resources Code, notice is hereby given that it is our intention to rework well No. PORTER #35 "SFZU" P-35, 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. 8145'
- Complete casing record, including plugs and perforations:
 - 13 3/8" cemented 505'
 - 7" cemented 7910'
 - 265' 5" landed 8142', top 7877'
slotted 7891'-8142'
scabbed with cement 8020'-7995' and 7973'-7940'
shot four 1/2" holes per foot 8119'-8114'; 8090'-8084';
8078'-8070'; 8037'-8020'; and 7996'-7968'
 - 283' 2 7/8" 18-mesh Gru-V-Kut wire-wrapped liner landed 8134',
top 7851', slotted 7904'-8134'
- Present producing zone name SESNON Zone in which well is to be recompleted _____
- Present zone pressure 3500 psi New zone pressure _____
- Last produced _____ (Date) Gas Storage Well (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 and rig up. Kill well. Install B.O.P.E. and pressure test.
- Pull tubing and clean out to 7851'. Pressure test 7" casing.
- Perform any remedial work indicated by pressure testing.
- Set packer. 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.
(Name) (Date) 7-20-77
Type of Organization Corporation
(Corporation, Partnership, Individual, etc.)

PORTER #35 - ALISO CANYON

Program to run new packer, pressure test casing and run down hole safety valve.

TUBING WITHDRAWAL ONLY

Take all measurements from original derrick floor 6.92' above ground.

PRESENT CONDITIONS:

13 3/8" cemented 505' 54.5# J-55
7" cemented 7910', original WSO through
holes of 7900', squeezed at 7920',
WSO 7919'
265' 5" landed 8142, slotted 7891'-8142'
scabbed with cement 8020'-7995' and
7973'-7940' jet perforated with four
1/2" holes per foot
8119'-8114'
8090'-8084' Top of liner 7877'
8078'-8070'
8037'-8020'
7996'-7968'
283' 2 7/8" 18 mesh Gru-V-Kut landed 8134', top 7851' -
perforated 7904'-8134' with lead seal liner
hanger on top and closed shoe on bottom

7" CASING DETAILS

			No Safety Factor	
			Burst	Collapse
0'-3351'	23#	J-55	4360	3290
3351'-5055'	23#	N-80	6340	4300
5055'-6616'	26#	N-80	7240	5320
6616'-7910'	29#	N-80	8160	6370

TUBING DETAIL:

2 7/8" 8rd EUE J-55 landed 7844'
Otis "XN" nipple 7843'
Otis perma latch packer 7811'
Otis "X" nipple 7774'
Otis "X" nipple 7741'
Otis sliding sleeve 7709' (open)

PROGRAM:

1. Move in and rig up.
2. Kill well with 77#/cu.ft. brine-polymer drilling fluid. Re-check hole pressure before moving in rig. Volume of well = 325 barrels.
3. Install back-pressure valve in doughnut. Remove Christmas tree and install Class III 5000 psi B.O.P.E. Pressure test complete shut-off rams and pipe rams to 4000 psi with water and nitrogen. Also, test Hydril bag to 3000 psi with water and nitrogen. Use float valve.
4. Unseat packer and pull tubing.
5. Run 6" bit and casing scraper. Clean to top of 2 7/8" liner at 7851'.
6. Set bridge plug at 7840' and pressure test with rig pump. Circulate polymer drilling fluid out of well with fresh water treated with surface tension agent. Pressure test casing, using cement retainer and cement pump truck equipped with calibrated pressure chart and pressure gauge, as follows:

3400' -7840'	with	2800	psi	for	60	minutes	
3400'	to	Surface	"	3000	psi	"	60
3000'	"	"	"	3200	psi	"	60
2200'	"	"	"	3400	psi	"	60
1600'	"	"	"	3600	psi	"	60
1100'	"	"	"	4000	psi	"	60
- Change to polymer drilling fluid.
7. Perform any remedial work indicated by pressure testing. Pull bridge plug at 7840'.
8. Run Baker Retrieval-"D" packer on wireline and using reference collars, set packer near 7825'. Do NOT set packer in a collar.
9. Run 2 7/8" tubing, change tubing collars, clean pins, apply Baker seal and hydrotest to 5000 psi holding for one minute. Tubing to include:
 - Baker Production Tube
 - Baker Seals (4)
 - Baker Latch-in Locator
 - Camco 10' Heavy Wall Tube
 - Camco 1.81" NO-GO Nipple with 2 7/8" threads
 - Camco 20' Heavy Wall Tube
 - Camco Tubing Flow Safety System
 - One Joint 2 7/8" Tubing
 - Camco MMG Gas Lift Mandrel (EMPTY)
10. Land tubing on packer with up to a maximum of 10,000#. Pull 25,000# over weight of tubing to check latch.

PROGRAM (Continued)

11. Set back pressure valve in doughnut. Remove B.O.P.E. and reinstall Christmas tree. Pressure test Christmas tree to 5000 psi. Also pressure test well head seals to 3000 psi
12. Circulate drilling fluid out of well with waste salt water. Set tubing plug in "NO GO" nipple. Pressure test seals and packer to 2000 psi. Pull tubing plug and release rig.

G. C. ABRAHAMSON

July 20, 1977

cc: Rig Supervisor (and Book Copy)
Contract pusher (2)
Relief Supervisor
Division of Oil & Gas
B. F. Jones
D. Smiley
J. Melton
D. Justice)
M. Grijalva)
Well File
Spare Copy

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED

FEB 24 1975

History of Oil or Gas Well

OPERATOR Pacific Lighting Service Co. FIELD Aliso Canyon SANTA ANITA, CALIFORNIAWell No. Porter #35, Sec. 28, T. 3N, R. 16W, S.B. B. & M.Date _____, 19____ Signed A. S. MagruderP. O. Box 54790, Terminal Annex
Los Angeles, Ca. 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	
1974	
11-25	Moved in California Production Service rig and mud pump. Using piano wire equipment, pulled valve from MM mandrel at 7779'. Circulated 64#/cu. ft. water out of well with 80#/cu. ft. brine-polymer drilling fluid (325 barrels). Attempted to pull tubing plug from 7812' with no success. Circulated and conditioned drilling fluid.
11-26	Pulled plug from tubing at 7812'. Pulled choke from ported nipple at 7916'. Circulated and conditioned drilling fluid. Set tubing plug in "X" nipple at 512'. Removed Xmas tree and installed BOPE. Attempted to test complete shutoff with water but tubing plug leaked. Finished rigging up.
11-27	Pulled tubing plug and reset second plug in "X" nipple at 512'. Tested complete shut-off, pipe rams and hydril bag to 2500 psi with water. Retested BOPE with nitrogen under 2300 psi. Removed plug from tubing. Pulled tubing to 7830' and circulated for 2 hours. Pulled tubing, measuring. Ran part way in well with 6" bit and casing scraper.
11-28	Idle.
11-29	Ran 6" bit and casing scraper to top of 5" liner at 7877'. Pulled out of well. Ran 4-1/8" bit, casing scraper, wire brush and bumper sub. Cleaned out fill 8127'-8142'. Cleaned slots in liner 8142'-7891' by circulating and reciprocating wire brush. Pulled part way out of well.

1974

11-30 Pulled out of well. Ran Baker full bore retainer. Using Dowell power equipment, pressure tested 7" casing as follows:

7866' - surface	2200 psi	22 minutes
6200' - surface	2400 psi	24 minutes
5006' - surface	2600 psi	22 minutes
4016' - surface	2800 psi	23 minutes
2527' - surface	3000 psi	25 minutes
1005' - surface	3400 psi	23 minutes

Pulled out of well and ran open end tubing to 1900'.

12-1 Idle.

12-2 Pulled out of well. Ran Schlumberger cement bond log and recorded 8122'-6400'. Ran Schlumberger dual spaced thermal neutron decay time log and recorded 8124'-7200'. Ran Baker Model "B" bridge plug part way in well.

12-3 Ran Baker Model "B" bridge plug and set same at 7860'. Pressure tested bridge plug to 1500 psi. Pulled out of well. Removed BOPE and tubing head. Removed packing from casing head. Rigged up spear and casing jacks. Attempted to unland casing with 190,000# pull.

12-4 Welder split casing head - removed slips. Welder cut off base plate and casing heads. Jack hammered out 15" of cellar floor. Welder cut off conductor and 13-3/8" surface casing. Beveled 13-3/8" casing to prepare for welding.

12-5 Welded on new 5,000 psi casing head. Weld was checked with gamma ray device and found to be satisfactory. Rigged up casing spear and jacks. Installed slips and packing and relanded 7" casing with 185,000#. Welder cut off excess 7" casing. Installed new 5,000 psi tubing head and injected plastic. Tested packing and secondary seal to 3,000 psi. Reinstalled BOPE.

12-6 Tested complete shut-off with water to 2500 psi. Attempted to test pipe rams with donut set in tubing head but same leaked. Ran 3100' of tubing and tested pipe rams under 2500 psi. Set donut and tested hydril to 2500 psi with water. Retested hydril and pipe rams under 2400 psi with nitrogen. Ran tubing to 7860' and conditioned drilling fluid.

1974

- 12-7 Using Dowell power equipment, pumped 25 cu. ft. of fresh water and displaced with 225 cu. ft. of drilling fluid. Pulled out of well. Ran McCullough 4" jet gun and located top of sand at 7827' (33' fill). Shot four 1/2" jet holes at 7820'. Ran Baker fullbore retainer and set at 7673'. Using Dowell power and bulk equipment, obtained breakdown at 3500 psi with 15 cu. ft. per minute rate. Pumped 20 cu. ft. of fresh water, 115 cu. ft. class "G" cement mixed with 0.1% D-13 to an average 118#/cu. ft. slurry. Followed cement with 10 cu. ft. of fresh water. Closed circulating valve and squeezed away 40 sacks of cement when pressure rose to 4,000 psi and did not bleed off in 5 minutes. Backscuttled 30 sacks of cement. Required 35 minutes mixing and displacing. Finished job at 5:20 PM. Pulled part way out of well.
- 12-8 Idle.
- 12-9 Pulled out of well with cement retainer. Made up 6" bit, casing scraper and two drill collars. Drilled out cement 7674'-7823' and circulated well clean. Pulled part way out of well.
- 12-10 Pull out of well. Using McCullough 4" jet gun and reference collars, shot four 1/2" jet holes at 7819'. Ran Johnston tester and set packer at 7739' with tail to 7760'. Opened tool at 4:20 PM. Had a light steady blow throughout 90 minute test with no gas to surface. Pulled part way out of well.
- 12-11 Pulled out of well with tester. Recovered 60' rise of drilling fluid in 2-7/8" tubing. Pressure charts showed tool opened and there was no pressure increase from 50 psi. WSO approved by Company. D.O.G. waived witnessing test. Ran Baker retrieving tool, washed out sand, unseated bridge plug and circulated for 2 hours. Pulled out of well with bridge plug. Ran in well with 4-1/8" bit and casing scraper to 7850'.
- 12-12 Ran in well and cleaned out fill 8132'-8142'. Pulled out of well. Ran 283' of 2-7/8" Gru-V-Kut wire wrapped liner and landed at 8134'. Top of liner 7851'. Perforated from 7904' to 8134'. Set lead seal in liner hanger and pressure tested under 1000 psi. Pulled part way out of well.

Porter #35 History (Cont'd.)

Page 4

1974

12-13 Pulled out of well with liner hanging tools. Ran 2-7/8" tubing, hydro-testing to 4000 psi. Landed tubing at 7845' with 14,000# on Otis perma-latch packer at 7811'. Installed back pressure valve in doughnut. Removed BOPE and installed new 5000 psi Xmas tree. Tested doughnut seal and Xmas tree to 4500 psi.

12-14 Idle.

12-15 Idle.

12-16 Circulated drilling fluid out of well with 310 barrels of lease salt water. Rigged down and moved out.

TUBING DETAIL

Porter 35

12-13-74

	<u>Length</u>	<u>Depth</u>
Below K. B.	13.00	13.00
Donut	.60	13.60
2-7/8" J-55 8rd. pup	1.80	15.40
129 jts. dbls. J-55 8rd. tubing	7690.43	7705.83
Otis sliding sleeve 2-7/8" 8rd. (open)	3.20	7709.03
One jt. 2-7/8" 8rd. J-55 tubing	31.30	7740.33
Otis 2-7/8" x 2.313 X nipple	1.00	7741.33
One jt. 2-7/8" J-55 8rd. tubing	31.31	7772.64
Otis 2-7/8" x 2.313 X nipple	1.00	7773.64
One jt. 2-7/8" 8rd. J-55 tubing	31.76	7805.40
Otis 7" x 2-7/8" perma latch packer	5.70	7811.10
One jt. 2-7/8" 8rd. J-55 tubing	31.15	7842.25
Otis XN 2-7/8" x 2.205	1.00	7843.25
Baker 2-7/8" chamfered collar	.90	7844.15

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

REPORT ON PROPOSED OPERATIONS No. P 274-459

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

Santa Paula, Calif.
December 18, 1974

DEAR SIR:

(037-00722)

Your proposal to alter casing Well No. "SFZU" P-35,
Section 28, T. 3N, R. 16W, S.B.B. & M., Aliso Canyon Field, Los Angeles County,
dated 12/10/74, received 12/16/74, has been examined in conjunction with records filed in this office.

**THE PROPOSAL, COVERING WORK ALREADY COMPLETED IN ACCORDANCE WITH PRIOR AGREEMENT,
IS APPROVED.**

Blanket Bond
ALL:b
cc: Operator

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

By 1000 P. Riggs, Deputy

DIVISION OF OIL AND GAS

DEC 10 1974

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. December 10, 19 74

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. Porter #35
(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. **8145'**
- Complete casing record, including plugs:
 - 13-3/8" cmt'd. 505'
 - 7" cmt'd. 7910', WSO through four 1/2" holes 7900'
265' 5" landed 8142', top 7877'
 - Slotted 7891'-8142'
 - Scabbed with cement 7940'-7973' & 7995'-8020'
 - Perf'd. 8119'-8114', 8090'-8084', 8073'-8070' with
2 jet holes per foot.
 - Perf'd. 8037'-8020' & 7996'-7968' with 4 jet holes
per foot.

3. Last produced. Shut-in
(Date) (Oil, B/D) (Water, B/D) (Gas, Mct/D)

The proposed work is as follows:

- Run cement bond log.
- Set bridge plug at 7860' and cap with sand.
- Shoot four 1/2" holes at 7820' and squeeze with cement.
- Drill out cement, shoot four 1/2" jet holes and test WSO.
- Remove bridge plug.
- Run 280' 2-7/8" wire wrapped liner landed 8142'.
- Complete as gas storage well.

				FORMS	
MAP	MAP BOOK	CARDS	BOND	114	121
			BB	✓	✓

P. O. Box 54790, Terminal Annex
Los Angeles, California 90054
(Address)
(213) 689-3561
(Telephone No.)

Pacific Lighting Service Company
(Name of Operator)
By P. S. Magruder, Jr.
P. S. Magruder, Jr.

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)

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS
WELL SUMMARY REPORT

DIVISION OF OIL AND GAS
RECEIVED

FEB 29 1956

LOS ANGELES, CALIFORNIA

SUBMIT IN DUPLICATE

Operator TIDE WATER ASSOCIATED OIL CO. Well No. Porter #35

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

Location 2082.69' South and 2903.72' West from Station #81

(Give location from property or section corner, or street center lines)

Elevation of ground above sea level 2094.13 feet

All depth measurements taken from top of derrick floor which is 6.92 feet above ground.
(Derrick Floor, Rotary Table or Kelly Bushing)

In compliance with Sec. 3215, of the Public Resources Code, 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 February 3, 1956

Signed Thomas P. Weaver

R. M. Burns
(Engineer or Geologist)

H. D. Gould
(Superintendent)

Title T. E. Weaver, Agent
(President, Secretary or Agent)

Commenced	Geological Markers	Depth
<u>rework 4-6-55</u>		
<u>rework 8-18-55</u>		
Completed		
Total depth <u>8145'</u>		
Plugged depth		

Note: Seal cemented perforations from 7940'-7965' and 7990'-8020'

Geologic age at total depth: Miocene

Recompleted 8-24-55
Commenced producing (Date)

Flowing 3200 gpm
(Cross out unnecessary words)

Name of producing zone Sesnon

Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production <u>74</u>	<u>20.1</u>	<u>20.0</u>	<u>328</u>	<u>550</u>	<u>1150#</u>
Production after 30 days Production 1-1-56 <u>29</u>	<u>20.1</u>	<u>5.0</u>	<u>133</u>	<u>850#</u>	<u>1750#</u>

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 Drilled	Number of Sacks of Cement	Depth of Cementing if through perforation
<u>3 3/8"</u>	<u>505</u>	<u>0</u>	<u>54.5#</u>	<u>New</u>	<u>Seamless</u>	<u>T & C</u>	<u>12-1/4"</u>	<u>350</u>	
<u>7"</u>	<u>7920</u>	<u>0</u>	<u>23.26, 29#</u>	<u>New</u>	<u>"</u>	<u>J-55, N-80</u>	<u>11"</u>	<u>500</u>	
<u>5"</u>	<u>8142</u>	<u>7877</u>	<u>18#</u>	<u>New</u>	<u>"</u>	<u>N-80</u>	<u>6"</u>		

PERFORATED CASING

(Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

5" csg. Perf. 7891'-7940'; 7940'-7965' (cmt.off); 7965'-7990'; 7990'-8020' (cmt.off);
8020'-8142' with 80 Mesh, 2" slots, 12 Rows, 2" Centers, 6" Undercut
by Pacific.

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCESDIVISION OF OIL AND GAS
RECEIVED

DIVISION OF OIL AND GAS

FEB 29 1956

History of Oil or Gas Well

LOS ANGELES, CALIFORNIA

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON FIELDWell No. Porter #35, Sec. 28, T. 3 N, R. 16 W, B. & M.

Date _____, 19____

Signed

*Thomas E. Weaver*February 3, 1956Title T. E. Weaver, 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

19552/18

Rigged up hoist. Pulled tubing and packer. Ran Guilberson hook well circulating type packer and attempted to set packer and pressure test in annulus at the following depths:

7960' - circulated with 0# pressure,

7963' - circulated with 0# pressure.

2/19

Attempted to set packer and pressure test in annulus at the following depths:

Blank interval - circulated with 350# pressure,

8002' - circulated with 0# pressure,

8006' - circulated with 0# pressure,

8010' - circulated with 950# pressure,

8013' - circulated with 0# pressure,

8016' - circulated with 0# pressure,

8020' - circulated with 0# pressure.

Scabbed intervals 8020' - 8002' (S-B Shale) and 7965' - 7956' (S-6 Shale) apparently not effective. Hung 2-1/2" tubing at 7960' with packer on bottom (packer not set).

2/20-21

Shut in.

4/4

Terminal Drilling & Production moving in prep. to re-scab.

4/5

Idle.

4/6

Contractor moved in 8:00 AM. Rigged up. Tearing out Christmas tree and hooking up B.O.P.

4/7

Finished installing and testing B.O.P. Pulled tubing and packer. Started in with tubing and equipment broke down.

4/8

Ran 2-7/8" tubing and spotted Ken Pak from 81 1/2' - 8025'. Backcuttled excess. Ran M & T bridge plug and set at 8025'.

4/9

Ran scabbing tool on 2-7/8" tubing and tested by blanking off with 2000#. Washed perforations from 8020' - 7990' with salt water for 2 hours; washed perforations from 7965' - 7940' with salt water for 1 hour. Interval from 8000' - 8010' held 2000# pressure. Scab cemented from 8020' - 7990' with 30 sacks C.H.T. Pulled tool to 7960' and backcuttled estimated 20 sacks. Scab cemented interval 7965' - 7940' with 30 sacks C.H.T. Pulled tool to 7930' and backcuttled estimated 20 sacks.

4/10

Ran 1-1/8" bit and scraper. Found top of cement to 7932'. Cleaned out cement from 7932' to 8025'. Found hole in tubing one single down.

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LOS ANGELES, CALIFORNIA

OPERATOR: TIDE WATER ASSOCIATED OIL COMPANY

WELL NO.: Porter #35, Aliso Canyon Field

1955

- 4/11 Pressure tested interval 8020'-7990' in 1' stages with M & T scabbing tool:
 8020' - 7996' (24') held 1800# pressure
 7995' - 7990' (5') would not hold pressure
 Pressure tested interval 7965'-7940' in 1' stages with M & T scabbing tool:
 7965' - 7950' (15') held 1800# pressure
 7950' - 7940' (10') would not hold pressure
 Washed perforations with salt water from 7950'-7940' and scab cemented with 30 sacks C.H.T. Pulled tool to 7930' and backscuttled approximately 20 sacks. Time 4:15 AM (4-12-55). B.J. Services.
- 4/12 Drilled out cement from 7924' - 7969'. Cleaned out and scraped to 8025'. Pressure tested interval 7965' - 7940' in 1' stages with M & T scabbing tool (6:00 A M 4-13-55):
 7965' - 7950' (15') held 1800# pressure
 7950' - 7948' (2') would not hold pressure
 7948' - 7947' (1') held 1800# pressure
 7947' - 7940' (7') would not hold pressure.
- 4/13 Retested interval 8001' - 7948' in 1' stages with M & T scabbing tool:
 8001' - 7997' (4') held 1800# pressure
 7997' - 7970' (20') would not hold pressure
 7970' - 7949' (21') held 1800# pressure
 7949' - 7947' (2') would not hold pressure
 Summary of intervals effectively scabbed:
 8020' - 7997' (23') held 1800# pressure
 7970' - 7949' (21') held 1800# pressure
 Ran 1/8" bit and scraper and drilled up bridge plug at 8025'. Circulated out Ken Pak to 8100'.
- 4/14 Finished circulating out Ken Pak to 8137'. Circulated for 2 hours at 8137'. Pulled out of liner. After one hour lowered tubing to bottom and found hole clean. Measured out on hook and found tubing made up 3.64'. Ran M & T scabbing tool and washed perforations from 8137'-8020'. All perforations open. Tool blanked off at 8020'.
- 4/15 Ran Guiberson hook wall packer on 2-7/8" tubing and set at 7959' with 13,000#. Annulus held 1500# for 30 minutes. Tearing out rig. Contractor released 12:00 Midnight.
- 4/16 Company rig moving in. Circulated out salt water with oil.
- 4/17 Finished circulating out salt water with oil. Swabbed 80 barrels circulating oil in 2 hours. Fluid level 2300'. Time 4:00 PM. Shut in.
- 4/18 Swabbed 85 barrels circulating oil and water in 8 hours. Fluid level 3200'. Shut in at 4:00 PM.
- 4/19 In 16 hours swabbed 156 barrels circulating oil and water, cutting 35-40%. Fluid level 4000'. Small amount of gas.
- 4/20 In 16 hours swabbed 118 barrels circulating oil and water and small amount of gas, cutting 35.0%. Fluid level 4400#. Casing pressure 550#.
- 4/21 In 16 hours swabbed 115 barrels gross fluid, approximately 86 barrels net formation oil, 25.0% cut. Fluid level 4000#. Casing pressure at Midnight 650#; 6:00 AM 4-22-55, 1150#.
- 4/22 In 8 hours swabbed 50 barrels gross fluid, approximately 37 barrels net oil, 25.0% cut, then flowed 5 barrels to trap. 1000# casing pressure.
- 4/23 Flowed 16 barrels gross, approximately 12 barrels net oil. Found leak in bug. Casing pressure dropped from 1000# to 400#. Bled down casing to kill well.
- 4/24 Killed well with 320 barrels of oil.
- 4/25 Found thread on hold down ring bad. Installed new bug and re-landed tubing.

OPERATOR: TIDE WATER ASSOCIATED OIL COMPANY

FEB 29 1956

WELL NO.: Porter #35, Aliso Canyon Field

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LOS ANGELES, CALIFORNIA

1955

4/26 Swabbed 110 barrels circulating oil in 8 hours. Well started to flow at 4:00 PM. Flowed 157 barrels circulating oil with 425# tubing pressure through a 20-36/64" bean. Well died at 2:00 AM 4-27-55. Casing pressure 1100#.

4/27 Swabbed and flowed 169 barrels gross fluid of which 43 barrels was circulating oil and 126 barrels formation oil and water cutting approximately 20%. Net formation oil, 101 barrels. Wet gravity 16.0. Well dead from 2:00 AM to 8:30 AM. Well started flowing into cellar at 8:30 AM and died at 7:00 PM. Swabbed from 7:00 PM to 11:00 PM. Flowed from 11:00 PM to 6:00 AM 4-28-55. Cut 12%, 400/800#.

	Gross	Net	Cut	Wet Gravity	Bean	Tubing Pressure	Casing Pressure	MCF Gas
4/28	115	98	15.0%	21.2	12/64"	300#	800#	412
4/29	124	107	14.0%	21.2	12/64"	300#	800#	410
4/30	92	81	12.0%	21.4	12/64"	350#	800#	422
5/1	119	106	11.0%	21.8	12/64"	400#	900#	425
5/2	102	92	10.0%	22.2	12/64"	400#	900#	427
5/3	59	53	18.0%	22.6	12-48/64"			*
Installed 3/64" choke at 1:00 PM when well died. Well flowed by heads 23 bbls. gross fluid to 6:00 at 5-4-55. Casing pressure 2100#, bean 48/64"								
5/4	26	24	8.0%	22.6	48/64"	50#	2250#	*

* Unable to get accurate gas reading

5/5	26	24	8.0%	22.6	12-48/64"	50#	2300#	35
Changed to 1 1/64" bean at 6:00 PM.								
5/6	27	25	7.0%	22.6	16/64"	150#	2300#	120
Off 5 hours. 3-4/64" choke. Changed to 4/64" choke at 3:00 PM.								
5/7	32	30	7.0%	22.6	16/64"	50#	2300#	128
4/64" choke.								
5/8	43	40	7.0%	22.6	16/64"	50#	2300#	214
4/64" choke								
5/9	20	17	16.0%	21.0	16/64"	150#	2300#	84
4/64" choke. Shut in at 6:00 PM due to excessive GOR. 4930 GOR.								

5/10-18 Shut in due to excessive gas-oil ratio.

5/19 Killed well with salt water.

5/20 Pulled tubing and reran with M & T circulating washer.

5/21 With M & T circulating washer on bottom, circulated out salt water with oil.

5/22 Washed perforations with M & T circulating washer, using 100 barrels of Cypress crude with the following results:

7891'-7900' Tight, no circulation
 7900'-7950' Tight, but circulated with 300#
 7950'-7973' Tight (Scab)
 7973'-7996' Tight, but circulated with 300#
 7996'-8020' Tight (Scab)
 8020'-8141' Open

5/23 Pulled out of liner and circulated out oil with salt water. Pulled tubing and washer.

5/24 Ran Guiberson hook wall packer on 2-7/8" tubing and set at 7959' with 13000# (wire line measurement 7950'). Ran blank choke and pressured annulus with 1500#. Held O.K.

5/25 In 16 hours swabbed 165 barrels salt water. Fluid level 4300'. 250# casing pressure

1955

- 5/26 In 16 hours swabbed 142 barrels salt water. Total fluid recovered 307 barrels. Fluid level 4500', 1000# casing pressure.
- 5/27 In 8 hours swabbed and flowed 82 barrels gross fluid, 66 barrels net oil, 20.0% cut.
- 5/28 In 9 hours well flowed 33 barrels gross, 26 barrels net, 20.0% cut, 8/64" bean, 0-1000# tubing pressure, 750-1500# casing pressure, 173 MCF gas, 6650 GOR. Well died at 5:00 PM.
- 5/29 Swabbed and started flowing at 8:00 AM. In 22 hours well flowed 84 barrels gross, 68 barrels net, 19.0% cut, 8-6/64" bean, 500/950#, 394 MCF, 5800 GOR. Changed to a 6/64" bean at 4:00 PM.
- 5/30 In 24 hours well flowed 79 barrels gross fluid, 67 barrels net oil, 15.0% average cut, 6/64" bean, 625/1150#, 323 MCF, 4820 GOR.
- 5/31 In 24 hours well flowed 75 barrels gross, 64 barrels net oil, 15.0% average cut, 20.0 gravity, 6/64" bean, 600/1100#, 372 MCF, 5820 GOR.
- 6/1 In 24 hours well flowed 83 barrels gross, 76 barrels net oil, 9.0% cut, 22.0 gravity, 6-4/64" bean, 700/1200#, 378 MCF, 4974 GOR. Changed to a 4/64" bean at 3:00 PM.
- 6/2 In 4 hours well flowed 16 barrels gross, 13 barrels net, 20.0% cut (18.0% water, 2.0% emulsion). Installed 3/64" Otis choke at 10:00 AM and opened surface bean to 32/64". Well open to tanks for 16 hours but would not flow. Shut in 4 hours (2:00 AM to 6:00 AM 6-3-55). Pressures 250/2200#.
- 6/3 Well dead. Equalized tubing and casing pressures at 5:00 PM.
- 6/4 In 20 hours well flowed 18 barrels while bleeding off tubing pressure. Well dead 4 hours.
- 6/5 Swabbed well 5-1/2 hours. Well started flowing at 3:00 PM and swabbed and flowed 115 barrels gross, 97 barrels net oil, 16.0% cut (10% emulsion, 6% water), 1000-400# tubing pressure, 1100# casing pressure, 3/64" Otis choke with 8/64" surface bean.
- 6/6 In 24 hours well flowed 100 barrels gross, 86 barrels net oil, 14.0% cut, 21.8 gravity, 8-6/64" bean, 600/900#, 430 MCF. Changed to 6/64" bean at 12:00 Noon.
- 6/7 In 10 hours well flowed 50 barrels gross, 45 barrels net oil, 10.4% cut, 21.2 gravity, 4/64" bean. Changed to 4/64" surface bean. Shut in at 4:30 PM to pull choke.
- 6/8 Shut in.
- 6/9 Pulled choke.
- 6/10 Installed 4/64" choke at 2:00 PM. In 16 hours well flowed:

	<u>Gross</u>	<u>Net</u>	<u>Cut</u>	<u>Gravity</u>	<u>Bean</u>	<u>Tubing Pressure</u>	<u>Casing Pressure</u>	<u>MCF Gas</u>
	8	7	10.0%	20.8	2 1/2/64"	50#	2200#	Not gauged
6/11	In 24 hours well flowed:							
	26	23	10.0%	20.8	2 1/2/64"	100#	2200#	"
6/12	16	14	10.0%	20.8	2 1/2/64"	100#	2200#	"
6/13	13	12	10.0%	20.8	2 1/2-30/64"	50#	2200#	"
	Changed to 30/64" bean at 12:00 Noon.							
6/14	17	16	6.0%	20.1	30/64"	50#	2200#	"
6/15	9	8	8.0%	20.1	30/64"	50#	2200#	18
6/16	Shut in. Preparing to install choke.							
6/17	Installed 5/64" choke and changed to 2 1/2/64" surface bean. In 15 hours well flowed as follows:							
	4	4	6.0%					
6/18	In 24 hours well flowed:							
	11	10	6.0%	20.1	2 1/2/64"	50#	2200#	21
6/19	12	11	6.0%	20.1	2 1/2/64"	50#	2200#	15
6/20	4	2	42.0%	20.1	2 1/2/64"	50#	2200#	

(Flowed to collar)

OPERATOR: TIDE WATER ASSOCIATED OIL COMPANY

FEB 29 1956

WELL NO.: Porter #35, Aliso Canyon Field

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LOS ANGELES, CALIFORNIA

<u>1955</u>	<u>Gross</u>	<u>Net</u>	<u>Cut</u>	<u>Gravity</u>	<u>Bean</u>	<u>Tubing Pressure</u>	<u>Casing Pressure</u>	<u>MCF Gas</u>
6/21	11	6	42.0%	20.1	2 1/2" 6 1/2"	50#	2200#	0 (18 hrs)
6/22	20	11	45.0%	20.1	2 1/2" 6 1/2"	50#	2200#	0
6/23	20	11	45.0%	20.1	4 8/6 1/2"	50#	2250#	0
6/24	11	6	45.0%	20.1	3 2/6 1/2"	50#	2200#	0
6/25	5	3	45.0%	20.1	3 2/6 1/2"	50#	2300#	0
6/26	8	5	45.0%	20.1	3 2/6 1/2"	50#	2200#	0
6/27	10	6	45.0%	20.1	3 2/6 1/2"	50#	2200#	0
6/28	5	3	45.0%	20.1	3 2/6 1/2"	50#	2200#	0
6/29	Swabbing.							
8/17	Killed well with salt water.							
8/18	Pulled tubing and packer. Ran Lane-Wells jet gun and found hole bridged at 8120'. Reperforated 5" liner with 2 holes per foot from 8119'-8114'; 8090'-8084'; 8078'-8070' and with 1/2 holes per foot from 8037'-8020'; 7996'-7968'.							
8/19	Ran tubing with Guiberson packer and Otis blank choke and set at 7956'. Hydro-tested tubing on way in.							
8/20	Tested packer with blank choke. Annulus held 1100# with no circulation. Pulled choke, installed Christmas tree and in 1/2 hours swabbed 35 barrels, all salt water.							
8/21	In 8 hours swabbed 120 barrels salt water, with scum of oil. Gas showings at end of swabbing period. Casing pressure 600#.							
8/22	In 8 hours swabbed 135 barrels salt water, 400# tubing pressure, 1500# casing pressure.							
8/23	Swabbed well and began flowing at 10:00 AM. In 20 hours swabbed and flowed 108 barrels gross, 77 barrels net oil, 25.0% cut, 12/6 1/2" bean, 500/1100#, 251 MCF gas, 3260 GOR. (Choke not installed.)							
8/24	In 24 hours well flowed 92 barrels gross, 74 barrels net oil, 20.0% cut, 19.0 wet gravity, 12/6 1/2" bean, 550/1150#, 328 MCF gas, 4430 GOR. (Choke not installed).							
8/25	97	84	13.0%	21.4	12/6 1/2"	600#	1100#	300
	4524 GOR. Choke not installed.							
8/26	51	48	5.0%	21.4	12/6 1/2"			
	Installed 4/6 1/2" bottom hole choke and changed surface bean from 12 to 32/6 1/2" bean at 12:00 Noon.							
8/27	8	7	10.0%	21.4	32/6 1/2"	50#	2150#	
	4/6 1/2" bottom hole choke. Well occasionally making small heads.							
8/28	9	8	10.0%	21.4	32/6 1/2"			
	4/6 1/2" bottom hole choke. Well occasionally making small heads.							
8/29	In 24 hours well flowed approximately 6 barrels net oil to cellar. Shut in for pressure build up. Tubing pressure 400#; casing pressure 2200#.							
8/30	Equalized pressures and attempted to flow well. No production.							
8/31	In 24 hours well flowed by heads 37 barrels gross, 35 barrels net oil, estimated 6.0% cut, 4/6 1/2" bottom hole choke, 18/6 1/2" surface bean, 100/2200#.							
9/1	In 24 hours well flowed by heads to cellar 12 barrels gross, approximately 11 barrels net, estimated 6.0% cut, 4/6 1/2" bottom hole choke, 18/6 1/2" surface bean, 2200# casing pressure.							
9/2	In 24 hours well flowed by heads 11 barrels gross, 11 barrels net, estimated 2.0% cut, 4/6 1/2" bottom hole choke, 10/6 1/2" surface bean, 50/2250#. Changed from 18/6 1/2" to 10/6 1/2" surface bean.							
9/3	In 24 hours well flowed by heads 25 barrels gross, approximately 24 barrels net, estimated 2.0% cut, 4/6 1/2" bottom hole choke, 1 1/4/6 1/2" surface bean, 50/2200#. Changed from 10/6 1/2" to 1 1/4/6 1/2" surface bean.							
9/4	In 24 hours well flowed by heads 11 barrels gross, 11 barrels net, estimated 2.0% cut, 4/6 1/2" bottom hole choke, 1 1/4/6 1/2" surface bean, 50/2200#.							

OPERATOR: TIDE WATER ASSOCIATED OIL COMPANY

WELL NO.: Porter #35, Aliso Canyon Field

LOS ANGELES, CALIFORNIA Page 6

1955

- 9/5 In 24 hours well flowed by heads 5 barrels gross, approximately 5 barrels net, estimated 2.0% cut, 1/64" bottom hole choke, 1 1/64" surface bean, 50/2200#.
- 9/6-7 Shut in to equalize pressures. Preparing to install larger choke.
- 9/8 Attempted to pull choke.
- 9/9 Took hold of 1/64" bottom hole choke. Unable to pull.
- 9/10 Shut in.
- 9/11 Shut in. Unable to pull bottom hole choke.
- 9/12 Pulled 1/64" bottom hole choke.
- 9/13 Installed 5/64" bottom hole choke. In 16 hours well flowed by heads 17 barrels gross, 16 barrels net, 9.0% cut, 18/64" bean, 25/2150#.
- 9/14 In 24 hours well flowed by heads 30 barrels gross, 25 barrels net, 17.0% cut, 5/64" bottom hole choke, 18/64" surface bean, 25/2200#, 10/MCF gas. Changed to 12/64" bean at 4:00 PM.

	Gross	Net	Cut	Gravity	* Bean	Tubing Pressure	Casing Pressure	MCF Gas
9/15	27	22	17.0%	20.1	12-18/64"	25#	2200#	9
	Changed to 18/64" bean at 4:00 PM.							
9/16	22	19	15.0%	20.1	18/64"	50#	2200#	4
9/17	17	14	15.0%	20.1	18/64"	50#	2200#	1
9/18	19	16	15.0%	20.1	18/64"	50#	2200#	0
9/19	1	1	15.0%	20.1	18/64"	50#	2200#	0
9/20	Well dead. In 1 hour swabbed 21 barrels. Tubing pressure at 7:30 PM 750#. At 6:00 AM 1500/2000#. 8 MCF.							
9/21	46	39	15.0%	20.1	18/64"	50#	2200#	213
	* 5/64" bottom hole choke.							
9/22	In 4 hours well flowed 11 barrels gross, 9 barrels net, 17.0% cut. Shut in.							
9/23-28	Shut in.							

CASING RECORD

13-3/8" 54.5# C 905'
 7" 23, 26, 29# C 7910' 4 H 7900'
 265' 5" 18# L 8112' Top 7877' Pf. 7891'-8112'
 Scab Cmtd. 8020'-7997'; 7968'-7949'

TUBING RECORD

2-7/8" H w/pkr. at 7956' incl. 183' of 2-3/8" on bottom.

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS
REPORT ON PROPOSED OPERATIONS

No. P 155-584

Mr. Thomas E Weaver
Box Y
Los Nietos California
Agent for TIDE WATER ASSOCIATED OIL CO

Los Angeles 15 Calif.
April 4 19 55

DEAR SIR:

Your proposal to alter casing Well No. "Porter" 35,
Section 28, T. 3 N, R. 16 W, S B B. & M., Aliso Canyon Field, Los Angeles County,
dated March 31 1955, received April 1 19 55, has been examined in conjunction with records filed in this office.

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

THE NOTICE STATES

"The present condition of the well is as follows:

1. Total depth. 8145'
2. Complete casing record.

13-3/8"	54.5#	C	905'	
7"	23, 26, 29#	C	7910'	WSO 7900'
265' 5"	18#	L	8142'	Pr. 7891'-8142'
		Top	7877'	Scab cmtd. 8020'-8002'; 7965'-7956'
3. Last produced.

<u>January, 1955</u>	<u>110</u>	<u>22.5</u>	<u>7.2%</u>
(Date)	(Net Oil)	(Gravity)	(Cut)"

PROPOSAL

"The proposed work is as follows:

1. Kill well and equalize 8 barrels Ken Pak on bottom.
2. Set bridge plug at 8025'.
3. Wash perforations and scab cement with straddle tool across intervals 8020'-7990' and 7965'-7940'. Test and recement above intervals as required.
4. Clean out to 8142' and scrape liner.
5. Wash perforations and reperforate any scabbed interval below 8025'.
6. Run tubing with packer and complete well."

DECISION

THE PROPOSAL IS APPROVED.

FEK:OH

cc J R Bovyer (2)

F W Hertel c/o Tide Water Assoc Oil Co
79 New Montgomery Street
San Francisco 5 California

R S Curl c/o Tide Water Assoc Oil Co
888 Pacific Electric Building
LOS ANGELES 14

E. H. MUSSER, State Oil and Gas Supervisor

By R. H. Walling, Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

APR 1 1955

DIVISION OF OIL AND GAS

LOS ANGELES, CALIFORNIA

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

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

~~Los Nietos~~ Calif. ~~March 31~~ 1955

DIVISION OF OIL AND GAS

~~Los Angeles~~ Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of deepening, redrilling, plugging or altering casing at Well No. ~~Porter #35~~

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

~~Aliso Canyon~~ Field, ~~Los Angeles~~ County.

The present condition of the well is as follows:

- 1. Total depth. **8145'**
- 2. Complete casing record.

	13-3/8"	51.5#	C	905'	
	7"	23, 26, 29#	C	7910'	WSO 7900'
265'	5"	18#	L	8142'	Pf. 7891'-8142'
			Top	7877'	Scab cmtd. 8020'-8002'; 7965'-7956'

3. Last produced. January 1955 (Date) 110 (Net Oil) 22.5 (Gravity) 7.2% (Cut)

The proposed work is as follows:

- 1. Kill well and equalize 8 barrels Ken Pak on bottom.
- 2. Set bridge plug at 8025'.
- 3. Wash perforations and scab cement with straddle tool across intervals 8020'-7990' and 7965'-7940'. Test and recement above intervals as required.
- 4. Clean out to 8142' and scrape liner.
- 5. Wash perforations and reperfurate any scabbed interval below 8025'.
- 6. Run tubing with packer and complete well.

MAP	MAP BOOK	CARDS	BOND	FORMS	
				114	121
		<i>Blanket</i>			

TIDE WATER ASSOCIATED OIL COMPANY
(Name of Operator)

By *T. E. Weaver*
T. E. Weaver, Agent

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

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NOV 18 1952

WELL SUMMARY REPORT

DIV. OIL & GAS, L.A.

p. 35

Operator TIME WATER ASSOCIATED OIL COMPANY Field ALISO CANYON
Well No. Porter 435 Sec. 28, T. 3 N, R. 16 W, S. B. B. & M.
2082.69' S & 2903.72' W from Elevation above sea level 2094.13 feet.
Location Station #84 All depth measurements taken from top of derrick floor,
which is 6.92 feet above ground.

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

Date November 14, 1952

Signed J. C. Foster

W. E. Poston
(Engineer or Geologist)

R. S. Ouel
(Superintendent)

Title Agent
(President, Secretary or Agent)

Commenced ~~drilling~~ scrubbing 9-7-52 Completed ~~drilling~~ scrubbing 9-20-52 Drilling tools ~~Cable~~ Rotary

Total depth 8145' Plugged depth _____ GEOLOGICAL MARKERS DEPTH

~~Block Note:~~ scrub cemented perforations
from 7940'-7965' and 7995'-8020'.

Commenced producing September 25, 1952 (date) Flowing/~~gas~~ scrubbing (cross out unnecessary words)

	Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production	203	22.5	6.0%	426	175#	750#
Production after 30 days	66	23.0	8.0%	50	100#	2400#

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 Drilled	Number of Sacks of Cement	Depth of Cementing if through perforations
13-3/8"	505'	0'	54.5#	New	Seamless	T & G	12-1/4"	350	
7"	7920"	0'	23.26, 29#	New	Seamless	2-55, K-80	11"	500	
5"	8142'	7877'	18#	New	Seamless	K-80	6"		

PERFORATIONS

Size of Casing	From	To	Size of Perforations	Number of Rows	Distance Between Centers	Method of Perforations
5"	7892 ft.	7940 ft.	80 Mesh - 2" slots	12	2"	Pacific - 6" Undercut
5"	7940 ft.	7965 ft.	80 Mesh - 2" slots	12	2"	Cemented off
5"	7965 ft.	7995 ft.	80 Mesh - 2" slots	12	2"	Pacific - 6" Undercut
	7995 ft.	8020 ft.	80 Mesh - 2" slots	12	2"	Cemented off
	8020 ft.	8142 ft.	80 Mesh - 2" slots	12	2"	Pacific - 6" Undercut

Electrical Log Depths 505' - 8145' (Attach Copy of Log)

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DIVISION OF OIL AND GAS

DIV. OIL & GAS, L.A.

History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. Porter #35, Sec. 25, T. 3 N, R. 16 W, S.B. B. & M.

Signed J. C. Foster

Date November 14, 1952 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

1952
9/4 - 9/6
9/7
9/8
9/9

Rigged up rotary

Killed well with salt water and displaced salt water with 75# mud. Installed B.O.P. Pulled tubing. set Baker bridging plug at 8030'.

Dumped 1 sack of cement on bridge plug at 8030'. Top not located. Washed intervals from 7995' to 8020' and 7940' to 7965' three times with mud. Ran three inverted Galbergon cups on bottom of 2-1/2" tubing and hung at 7995'. Mixed 35 sacks of Colton Hi-Temperature cement preceded by 150 cu. ft. of water and followed by 20 cu. ft. of water and washed interval 7995' to 8020' three times while displacing water and twice while displacing cement. Final pressure 1100#. Time 10:10 PM. Pulled up to 7985' and backscuttled 20 sacks. Repeated similar operation between interval 7965' to 7940'. Final pressure 1100#. Time 11:30 PM. Pulled up to 7930' and backscuttled 25 sacks. R.J. service.

Ran in with 4" bit and Baker scraper and located top of cement at 7963'. Drilled out hard cement from 7963' to 7969'. Hole open from 7969' to 7993'. Drilled out hard cement from 7993' to 8025'.

Pressure tested interval from 8020' to 7995' in 1' stages. From 8020' to 8010' obtained circulation at 1200# pressure. From 8010' to 7995' obtained circulation from 750-500#. Pressure tested interval 7965' to 7940' in 1' stages and obtained circulation from 600-400#. Ran three inverted Galbergon swab cups on bottom of 2-1/2" tubing and hung at 8020'. Mixed 35 sacks Colton Hi-Temperature cement preceded by 150 cu. ft. of water and followed by 20 cu. ft. of water and washed interval 8020' to 7995' four times while displacing water and twice while displacing cement. Final pressure 1400#. Time 4:00 AM. Pulled up to 7985' and backscuttled. Fluid backscuttled was of indeterminate mix of water, cement and mud. It is believed there is hole in 2-1/2" tubing. Pulled up into 7" casing and backscuttled. Found two holes in tubing at 7340'. Drilled out cement stringers from 7837' to 8025'. Conditioned mud.

Seab cemented interval 8020' to 7995' with 35 sacks of Colton Hi-Temperature Cement preceded by 150 cu. ft. of water. Washed interval four times while displacing water and twice while displacing cement. Final pressure 1400#. Time 9:35 AM. Pulled up to 7985' and backscuttled approximately 33 sacks cement. Repeated similar operation between interval 7965' to 7940'. Final pressure 1400#. Time 12:10 PM. Pulled up to 7930' and backscuttled approximately 30 sacks cement.

9/12

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NOV 18 1952

DIVISION OF OIL AND GAS

DIV. OIL & GAS, L.A.

History of Oil or Gas Well

OPERATOR TYNE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. Porter #35, Sec. 28, T. 3 N, R. 16 W, S.3. B. & M.

Signed J. C. Foster

Date November 14, 1952 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.

1952
9/13

Drilled out hard cement from 7973' to 7979'. Circulated from 7979' to 7995'. Drilled out hard cement from 7995' to 8025'. Pressure tested interval 8020' to 7995' in 1' stages. Held 1500# from 8020' to 8016'. From 8016' to 7995' obtained circulation from 1500-900#. Pressure tested interval 7965' to 7940' in 1' stages. Obtained circulation throughout interval from 1400-900#. Seab cemented interval from 8016' to 7995' with 35 sacks Colton HI-Temperature cement preceded by 150 cu. ft. of water. Washed interval four times with water and twice with cement. Final pressure 1400#. Time 2:30 PM. Pulled up to 7985' and backcuttled approximately 32 sacks of cement. Repeated similar operation between interval 7965' and 7940'. Final pressure 1400#. Time 5:20 PM. Pulled up to 7915' and backcuttled approximately 25 sacks. B.J. Service.

9/14

Drilled out hard cement from 7962' to 7971'. Circulated from 7991' to 7994'. Drilled out hard cement from 7994' to 8025'. Pressure tested interval 8020' to 7995' in 1' stages. Held 1500# pressure from 8020' to 8011'. Held 1250-1000# from 8011' to 8006'. From 8006' to 7995' circulated from 1000-750#. Pressure tested interval 7965' to 7940' in 1' stages. Held 1500# at 7965' only and remainder circulated from 1000-750#. Seab cemented interval 8007' to 7995' with 25 sacks Colton HI-Temperature cement preceded by 100 cu. ft. of water. Washed interval three times with water and twice while displacing cement. Final pressure 1600#. Time 12:00 Midnight. Pulled up to 7980' and backcuttled approximately 22 sacks of cement. Seab cemented interval 7965' to 7940' with 35 sacks of Colton HI-Temperature cement preceded by 150 cu. ft. of water. Washed interval three times with water and twice while displacing cement. Final pressure 1400#. Time 1:40 AM 9-15-52. Pulled up to 7915' and backcuttled approximately 31 sacks cement.

9/15

Drilled out hard cement from 7960' to 7975'. Circulated from 7975' to 7995'. Drilled out hard cement from 7995' to 8025'. Began pressure testing scabbed interval from 8020' to 7995' when cups failed or tubing leaked.

9/16

Pressure tested interval 8020' to 7995' in 1' stages. Held 1500# from 8020' to 8002'. Held 1400-1000# from 8002' to 7997'. Held 1700# from 7996' to 7995'. Pressure tested interval 7965' to 7940' in 1' stages. Held 1500# from 7965' to 7964'. Circulated at 750-400# pressure from 7963' to 7940'. Ran washing tool on 2-1/2" tubing and hung at 7963'. Mixed 35 sacks Colton HI-Temperature cement preceded by 150 cu. ft. water and followed by 20 cu. ft. water and washed interval 7963' to 7940' five times while displacing water and twice while displacing cement. Final pressure 1400#. Time 6:30 PM. Pulled up to 7915' and backcuttled an estimated 25 sacks. B.J. Service. Found top of cement at 7965'.

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. Porter #35, Sec. 28, T. 3 N, R. 16 W, S.R. B. & M.

Signed J. C. Foster
Title Agent
(President, Secretary or Agent)

Date November 14, 1952

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
1952
9/17

9/18

9/19

9/20

9/21

9/22

9/23

9/24

Pressure tested interval 7965' to 7940' in 1' stages. Held 1500# from 7965' to 7964'. Circulated with 750# from 7963' to 7940'. Seab cemented interval 7963' to 7940' with 35 sacks Colton Hi-Temperature cement preceded by 150 cu. ft. of water and followed by 20 cu. ft. of water. Washed interval 7963' to 7940' four times while displacing water and once while displacing cement. Final pressure 1400#. Time 1:00 PM. Pulled up to 7915' and backscuttled approximately 27 sacks of cement. B.J. service.

Found top of hard cement at 7930' and cleaned out to 7965'. Pressure tested interval 7965' to 7940' in 1' stages. Held 1500# from 7965' to 7963'. From 7962' to 7940' circulated with 1000-750#. Seab cemented interval 7962' to 7940' with 35 sacks Colton Hi-Temperature cement preceded by 150 cu. ft. of water followed by 20 cu. ft. of water. Washed interval four times while displacing water and twice while displacing cement. Final pressure 1400#. Time 6:30 PM. Pulled up to 7920' and backscuttled an estimated 25 sacks of cement. B.J. service.

Found top of hard cement at 7950' and cleaned out to 7965'. Pressure tested interval 7965' to 7940' in 1' stages. Held 1500# from 7965' to 7963'. Circulated with difficulty from 1250-1000# from 7962' to 7940'. Seab cemented interval 7962' to 7940' with 35 sacks Colton Hi-Temperature cement preceded by 150 cu. ft. of water followed by 20 cu. ft. of water. Washed interval five times while displacing water and once while displacing cement. Final pressure 1600#. Time 8:00 PM. Pulled up to 7920' and backscuttled an estimated 25 sacks of cement. B.J. service.

Found top of hard cement at 7932' and cleaned out to 7965'. Pressure tested interval 7965' to 7940' in 1' stages. Held 1500# from 7965' to 7956'. Circulated with difficulty from 7955' to 7940' at 1500-1250#.

Waiting on washing chemical.

Ran Yowell perforation washer with 12 barrels Hi-Wash #4 chemical. Washer would not function. Dumped chemical at bottom of hole.

Washed perforations with Yowell tool. Landed packers on 2-1/2" tubing with details as follows: 8018' - 8011' Gulberson packer assembly with 4 cups up and 4 down; 8011' - 8009' 2" Otis choke; 8009' - 7962' 2" tubing; 7962' - 7955' Gulberson packer assembly with 4 cups up and 4 down; 7955' - 7952' 2-1/2" Otis choke and swage nipple; remainder 2-1/2" tubing.

Displaced mud with oil, swabbed 225 barrels, all circulating oil.

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. Porter #35, Sec. 23, T. 3 N, R. 16 W, S. B. B. & M.

Signed J. C. Foster

Date November 14, 1952 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>Gross</u>	<u>Net</u>	<u>Cut</u>	<u>Gravity</u>	<u>Bean</u>	<u>Tubing Pressure</u>	<u>Casing Pressure</u>	<u>MCF Gas</u>
<u>1952</u>	In 20 hours well swabbed and flowed 215 barrels of which 115 barrels is new fluid formation oil							
<u>9/25</u>	115	112	3.0%	23.0	48/64	200#	700#	301
<u>9/26</u>	217	203	6.0%	22.5	48/64	175#	750#	426
<u>9/27</u>	217	208	4.0%	22.5	48/64	200#	750#	354
<u>9/28</u>	133	129	3.0%	22.5	8/64	1200#	1750#	427
<u>9/29</u>	133	126	5.0%	23.0	8/64	1750#	1200#	449
<u>9/30</u>	75	73	3.5%	23.0	16/64	300#	2300#	189
	Ran 2-1/2" Otis side door choke at 2:00 PM.							
<u>10/1</u>	109	107	2.0%	23.0	24/64	50-200#	2400#	105
<u>10/2</u>	83	81	3.5%	23.0	24/64	50-200#	2400#	101
<u>10/3</u>	92	89	3.5%	23.0	24/64	0- 50#	2400#	104
<u>10/4</u>	83	81	3.5%	23.0	24/64	0- 50#	2400#	120
<u>10/5</u>	83	81	3.5%	23.0	24/64	0- 50#	2400#	115
<u>10/6</u>	83	82	0.2%	23.0	24/64	0- 50#	2400#	89
<u>10/7</u>	74	73	0.2%	23.0	24/64	0- 50#	2400#	90
<u>10/8</u>	69	68	0.2%	23.0	24/64	100#	2400#	94
<u>10/9</u>	83	82	0.2%	23.0	24/64	100#	2400#	74
<u>10/10</u>	81	80	0.2%	23.0	24/64	100#	2400#	74
<u>10/11</u>	59	58	0.2%	23.0	24/64	100#	2400#	60
<u>10/12</u>	82	81	0.2%	23.0	24/64	100#	2400#	71
<u>10/13</u>	65	60	8.0%	23.0	24/64	100#	2400#	78
<u>10/14</u>	81	75	8.0%	23.0	24/64	100#	2400#	78
<u>10/15</u>	81	75	8.0%	23.0	24/64	100#	2400#	156
<u>10/16</u>	81	75	8.0%	23.0	24/64	100#	2400#	73
<u>10/17</u>	70	64	8.0%	23.0	24/64	100#	2400#	69
<u>10/18</u>	70	64	8.0%	23.0	24/64	100#	2400#	62
<u>10/19</u>	59	54	8.0%	23.0	24/64	100#	2400#	70
<u>10/20</u>	75	69	8.0%	23.0	24/64	100#	2400#	76
<u>10/21</u>	70	64	8.0%	23.0	24/64	100#	2400#	74
<u>10/22</u>	70	64	8.0%	23.0	24/64	100#	2400#	68
<u>10/23</u>	68	63	8.0%	23.0	24/64	100#	2400#	60
<u>10/24</u>	81	75	8.0%	23.0	24/64	100#	2400#	62
<u>10/25</u>	70	64	8.0%	23.0	24/64	100#	2400#	48
<u>10/26</u>	72	66	8.0%	23.0	24/64	100#	2400#	50

RECEIVED

DIVISION OF OIL AND GAS

NOV 18 1952

History of Oil or Gas Well

DIV. OIL & GAS, L.A.

OPERATOR TIME WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. Porter #35, Sec. 28, T. 3 N, R. 16 W, S. B. B. & M.

Signed _____

J. C. Foster

Date November 14, 1952

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

CASING RECORD

	13-3/8"	54.5#	C	905'	
	7"	23, 26, 29#	C	7910'	4 h 7900'
265'	5"	18#	L	8142'	Top 7877' Fr. 7891' - 8142'
					Cnt. seab 8020' - 7995'
					Cnt. seab 7965' - 7956'

TUBING RECORD

2-1/2" L w/bottom Flr. at 8018'

8018' - 8011' Guiberson packer assembly

8011' - 8009' 2" Otis Choke

8009' - 7962' 2" Tubing

7962' - 7955' Guiberson packer assembly

7955' - 7952' 2-1/2" Otis Choke & swage Nipple

Otis Blank Choke set at 7952' - 7955'

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCESDIVISION OF OIL AND GAS
REPORT ON PROPOSED OPERATIONSNo. P 152-734Los Angeles 15 Calif. June 12 19 52Mr. F C Foster
Box Y
LOS NIETOS Calif.Agent for TIDE WATER ASSOCIATED OIL COMPANY

DEAR SIR:

Your alter casing proposal to Well No. "Porter" 35,
Section 28, T. 3 N, R. 16 W, S B B. & M., Aliso Canyon Field, Los Angeles County,
dated June 6 1952, received June 9 1952, has been examined in conjunction with records filed in this office.

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

RECORDS IN ADDITION TO, OR AT VARIANCE WITH, THOSE SHOWN IN THE NOTICE
The 7" shut-off at 9700' was approved.

THE NOTICE STATES

"The present condition of the well is as follows:

1. Total depth. 8145'
2. Complete casing record.

13-3/8" 45#	C	505'
7" 23, 26, 29#	C	7910'
265' 5" 18#	L	8142' Top 7877'
		Perf. 7891' - 8142'

3. Last produced.	<u>June, 1952</u>	<u>15</u>	<u>23.0</u>	<u>8.0</u>
	(Date)	(Net Oil)	(Gravity)	(Cut)"

PROPOSAL

"The proposed work is as follows:

1. Set bridging plug at 8035'.
2. Scab cement 5" liner from 8030' to 8000' and 7965' - 7940' until intervals will hold 1500# pressure.
3. Run tubing with packer and set in upper scabbed interval and return to production."

DECISION

THE PROPOSAL IS APPROVED.

EIMA:OH

cc Wm. E. Perkes (2)
Jos JensenMr T L Wark
c/o Tide Water Assoc Oil Co
79 New Montgomery Street
SAN FRANCISCOR. D. BUSH
State Oil and Gas SupervisorBy E. H. Musser Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL & GAS
RECEIVED
JUN 9 1952

DIVISION OF OIL AND GAS

LOS ANGELES

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

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

Los Nieton, Calif. June 6 19 52

DIVISION OF OIL AND GAS

Los Angeles Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or~~ altering casing at Well No. Porter #35
(Cross out unnecessary words)

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

The present condition of the well is as follows:

1. Total depth. 8145'

2. Complete casing record.

13-3/8" 45' C 305'
7" 23, 26, 29' C 7910'
265' 5" 18' L 8142' Top 7877'
Perf. 789' - 8142'

alter casing

MAP	MAP BOOK	CARDS	BOND	FORMS	
				114	121
			<i>Blankett</i>		

3. Last produced. June, 1952 15 23.0 8.0
(Date) (Net Oil) (Gravity) (Cut)

The proposed work is as follows:

1. Set bridging plug at 8035'.
2. Scab cement 5" liner from 8030' to 8000' and 7965' - 7940' until intervals will hold 1500 psi pressure.
3. Run tubing with packer and set in upper scabbed interval and return to production.

TIDE WATER ASSOCIATED OIL COMPANY

(Name of Operator)

By J. C. Troster
Agent

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
MAY - 1 1946
LOS ANGELES, CALIFORNIA

WELL SUMMARY REPORT

Operator Tide Water associated Oil Company Field Alliso Canyon

Well No. Parlor #35 Sec. 28, T. 3 N, R. 16 W, S.E. B. & M.

Location 2082.69' south and 2903.72' west from station #84 Elevation of derrick floor 2101.05 feet.

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

Date 4/22/46

Signed R. S. Carl

W. E. Perkes
(Engineer or Geologist)

R. S. Carl
(Superintendent)

Title Agent
(President, Secretary or Agent)

Commenced drilling 11/8/45 Completed drilling 3/16/46 Drilling tools Cable Rotary

Total depth 8145 Plugged depth _____ GEOLOGICAL MARKERS _____ DEPTH _____

Junk _____

Commenced producing 3/19/46 (date) Flowing/gas lift/pumping XXXXXXXXXX (cross out unnecessary words)

Initial production (20 hrs.) 76
Production after 30 days 214

Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
76	23.2	15.0%	16	0 - 50#	800#
214	23.2	0.7%	99	425#	1300#

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	New or Second Hand	Seamless or Lapweld	Grade of Casing	Size of Hole Casing landed in	Number of Sacks of Cement	Depth of Cementing if through perforations
13-3/8"	505'	0	54.5#	New	Seamless	T&C	12 1/2"	350	
7"	7910'	0	23.26.29#	New	Seamless	J-55 N-80	11"	500	
5"	8142'	7877	18#	New	Seamless	N-80	6"	-	

PERFORATIONS

Size of Casing	From	To	Size of Perforations	Number of Rows	Distance Between Centers	Method of Perforations
5"	7891 ft.	8142 ft.	80 N. 2" slots	12	2"	Pacific 6" undercut
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				

MAP	MAP BOOK	CARDS	BOND	FORMS
				114 121

Electrical Log Depths 505' - 8145' (Attach Copy of Log)

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS
RECEIVED
MAY - 1 1945
LOS ANGELES, CALIFORNIA

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANTON

Well No. Porter 435, Sec. 25, T. 5 N, R. 16 W, B. & M.

Signed R. J. C. [Signature]

Date April 22, 1945 Title Agent (President, Secretary or Agent)

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Date	LOCATION: 2052.69' south and 2903.72' west from Station #64.	ELEVATION: 2101.05
1945		
12/23/44- 1/6/45	Graded rig site. Grading of this rig site was performed as a part of the construction of the main road past the rig site.	
1/7-23	Dug cellar. Built forms. Poured concrete.	
1/24-10/24	Idle.	
10/25-26	Moved in and rigged rotary.	
10/27-11/7	Rigged up rotary.	
11/8 35'	Spudded 12 1/4" hole at 12:00 Noon. Drilled 12 1/4" hole from 0' to 35'.	
11/9-18 800'	Drilled 12 1/4" hole from 35' to 800'. Opened hole from 12 1/4" to 17 1/2" from surface to 419'.	
11/19	Opened hole from 12 1/4" to 17 1/2" from 419' to 505'. Reamed 17 1/2" hole from surface to 505'.	
11/20	Ran and cemented 13-3/8", 54.5# Youngstown T-C casing at 505' with 350 sacks Colton construction cement. Treated last 150 sacks with quick set chemical. Spot welded 4 joints of casing. Finished cementing at 6:00 PM. International bulk method. Had good returns.	
11/21	Installed cellar connections.	

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

RECEIVED
MAY - 1 1946
LOS ANGELES, CALIFORNIA

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Tide Water Associated Oil Company FIELD Aliso Canyon

Well No. Forster #35, Sec. 28, T. 3 N, R. 16 W, B. & M.

Signed R. J. Carl

Date April 22, 1946 Title Agent
(President, Secretary or Agent)

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Date			
<u>1945</u>			
11/22-12/10	2665'	Drilled 12 1/2" hole from 800' to 2665'.	
12/11-31	4469'	Drilled 11" hole from 2665' to 4469'. Began replacing draw-works.	
<u>1946</u>			
1/2-6		Replaced draw-works.	
1/7		Ran bit and reamed to 3270'. Circulated and cleaned out to 4469'.	
1/8-28	6084'	Drilled 11" hole from 4469' to 6084'. Changed 5" to 4 1/2" drill pipe.	
1/29-30	6279'	Drilled 11" hole from 6084' to 6279'. Ran Eastman oriented drill pipe survey.	
1/31	6348'	Finished running Eastman drill pipe survey. Drilled 11" hole from 6279' to 6348'.	
2/1	6404'	Drilled 11" hole from 6348' to 6404'. Ran Eastman removable whipstock but pin sheared while running in hole.	
2/2	6506'	Drilled 11" hole from 6404' to 6506'. Reamed 11" hole.	
2/3	6521'	Set whipstock at 6506' and drilled with 7 1/2" bit to 6521'.	
2/4	6555'	Opened 7 1/2" hole to 6521' and drilled 11" hole from 6521' to 6555'.	
2/5	6578'	Set Eastman removable whipstock at 6555' and drilled 7 1/2" hole to 6578'. Opened rat hole to 11" at 6578'.	

SUBMIT IN DUPLICATE
 STATE OF CALIFORNIA
 DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

DIVISION OF OIL AND GAS
 RECEIVED
 MAY - 1 1946
 LOS ANGELES, CALIFORNIA

OPERATOR Tide Water Associated Oil Company FIELD Aliso Canyon

Well No. Porter #35, Sec. 5E, T. 11N, R. 16W, B. & M.

Signed R. J. Carl

Date April 22, 1946 Title Agent

(President, Secretary or Agent)

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Date	
1946	
2/6	Reamed 11" hole from 4130' to 5000'.
2/7	Reamed 11" hole from 5000' to 6556', Re-reamed from 3950' to 4575'.
2/8	Reamed 11" hole from 4575' to 5937' and re-reamed from 4300' to 4442'.
2/9	Reamed 11" hole from 4422' to 5850' and re-reamed from 4562' to 5493'.
2/10	Reamed 11" hole from 5493' to 6510' and re-reamed from 4742' to 5518'.
2/11	Reamed 11" hole from 5518' to 6560' and re-reamed from 5725' to 5760'.
2/12	Reamed 11" hole from 5760' to 6560'. Re-reamed from 5992' to 6578'.
2/13	6638' Drilled 11" hole from 6578' to 6638'. Set Mastman removable whipstock at 6614' and drilled by to 6625'. Pulled whipstock. Reamed out rat hole to 11" and drilled to 6638'.
2/14-19	7373' Drilled 11" hole from 6638' to 7373'.
2/20	Reamed from 6980' to 7130' and re-reamed from 6826' to 7357'.
2/21-22	7598' Drilled 11" hole from 7373' to 7598'. Reamed from 7322' to 7532'.
2/23	Stuck drill pipe. Spotted 80 bbls oil. Worked pipe.
2/24	Worked stuck pipe loose. Circulated out oil and conditioned mud.
2/25	76.5' Reamed from 6818' to 7598'. Drilled 11" hole from 7598' to 7615'.
2/26-28	7803' Drilled 11" hole from 7615' to 7803'. Shank and bit of cutters lost. Fished with junk basket.

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DIVISION OF OIL AND GAS
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DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Tide Water Associated Oil Company FIELD Aliso Canyon

Well No. Porter #35, Sec2E, T. 3N, R. 16 W, B. & M.

Signed R. S. Cook

Date April 22, 1946 Title Agent

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Date

1946

3/2

Began pulling junk basket but had to circulate and worked pipe thru tight place from 6800' to 6741' and lost fish.

3/2

Reamed tight hole from 6750' to 7803'. Ran junk basket and recovered most of bit left in hole.

3/3

7812' Drilled up and sidetracked remainder of bit. Drilled 11" hole from 7803' to 7812'.

3/4-5

7961' Drilled 11" hole from 7812' to 7961'. Ran Schlumberger electric log at 7961'.

3/6

Conditioned mud and reamed hole from 7700' to 7961'. Ran 7" casing.

3/7

Ran and cemented 7" Youngtown Speedtite casing at 7910' with 500 sacks Colton High Temperature cement. Casing details as follows:

- 0' - 3351' is 23# J-55
- 3351' - 5055' is 23# H-80
- 5055' - 6616' is 26# H-80
- 6616' - 7910' is 29# H-80

Pressure increased from 400# to 600# when plugs burned. Time 6:40 AM International bulk method.

2/8

Standing cemented. Lay down 4 1/2" drill pipe.

2/9

Landed 7" casing. Changed collar connections.

2/10

Made up 2-7/8" drill pipe.

DIVISION OF OIL AND GAS

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MAY - 1 1946

History of Oil or Gas Well

LOS ANGELES, CALIFORNIA

OPERATOR Tide Water Associated Oil Company FIELD Aliso Canyon

Well No. Porter #35, Sec. 28, T. 38, R. 16 W, B. & M.

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Date

1946

3/11

7961' Located top of cement at 7865' and cleaned out to 7905'. Ran combination Johnston tester and gun with 935' of water cushion. Shot four 1/2" holes at 7900'. Set packer at 7849' and opened 3/8" bean at 8:13 PM. Had strong blow for 5 minutes then dead for balance of one hour and six minute test. Recovered 1490' of new fluid consisting of 5 stands of drilling mud and balance clean looking oil. Trip valve was found to be plugged and pressure bomb chart indicated pressure had built up to 3500' after trip valve plugged. Test witnessed by D.O.G. engineer who gave deferred decision.

3/12

Cleaned out to 7905' and conditioned mud. Prepared to re-run tester.

3/13

Ran Johnston tester on 2-7/8" drill pipe with 935' of water cushion and set packer at 7849'. Opened 3/8" bean at 9:43 AM. Had strong steady blow which diminished to a weak blow until fluid reached surface after 32 minutes. Well flowed to tanks for 1 hour 15 minutes and produced 50 barrels gross fluid (960 B/D). The following cuts were taken: 10:35 AM cut 3.2% water, 0.2% sediment, 21° gravity; 10:50 AM cut 0.0% water, 0.2% sediment; 11:05 AM 3.0% water, 1.4% sediment; 11:25 AM 1.1% cut; 0.4% sediment. D.O.G. engineer witnessed cuts on flow samples and approved water shut off test. Pullerpacker loose at 11:30 AM after remaining open for 1 hour and 47 minutes.

3/14

8032' Cleaned out hard cement from 7905' to 7910' and circulated to 7961'. Drilled 6" hole from 7961' to 8032'.

3/15-16

8145' Drilled 6" hole from 8032' to 8145'. Ran Schlumberger electric log at 8145'. Reamed 6" hole from 7961' to 8145'.

3/17

Ran 265' of 5", 17.9# N-80 liner including 251' of 50 mesh Pacific slotted Security threaded Shank joint and landed at 8142' with 2" slots; 6" centers; 12 rows. Top of liner hanger 7877'. Ran 390' of 2", 4.5# J-55 tubing and 7686' 2", 6.5# J-55 tubing and hung at 8012'. Installed knee tree and tested with 1250' pressure.

SUBMIT IN DUPLICATE
 STATE OF CALIFORNIA
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DIVISION OF OIL AND GAS

History of Oil or Gas Well

DIVISION OF OIL AND GAS
 RECEIVED
 MAY - 1 1946
 LOS ANGELES, CALIFORNIA

OPERATOR Tide Water Associated Oil Company FIELD Aliso Canyon

Well No. Porter #35, Sec. 5E, T. 11N, R. 16W, B. & M.

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2/20	Reamed from 6980' to 7130' and re-reamed from 6826' to 7357'.
2/21-22	7596' Drilled 11" hole from 7373' to 7596'. Reamed from 7322' to 7532'.
2/23	Stuck drill pipe. Spotted 80 bbls oil. Worked pipe.
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3/7 Ran and cemented 7" Youngtown Speedtite casing at 7910' with 500 sacks Colton High Temperature cement. Casing details as follows:

0' - 3351' is 23# J-55

3351' - 5055' is 23# H-80

5055' - 6616' is 26# H-80

6616' - 7910' is 29# H-80

Pressure increased from 400# to 600# when plugs banded. Time 6:40 AM International bulk method.

2/8 Standing cemented. Lay down 4 1/2" drill pipe.

2/9 Landed 7" casing. Changed collar connections.

2/10 Made up 2-7/8" drill pipe.

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS

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MAY - 1 1946

History of Oil or Gas Well

LOS ANGELES, CALIFORNIA

OPERATOR Tide Water Associated Oil Company FIELD Aliso Canyon

Well No. Porter #35, Sec. 28, T. 38, R. 16 W, B. & M.

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3/14

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3/15-16

8145' Drilled 6" hole from 8032' to 8145'. Ran Schlumberger electric log at 8145'. Reamed 6" hole from 7961' to 8145'.

3/17

Ran 265' of 5", 17.9# N-80 liner including 251' of 50 mesh Pacific slotted Security threaded Shank joint and landed at 8142' with 2" slots; 6" centers; 12 rows. Top of liner hanger 7877'. Ran 390' of 2", 4.5# J-55 tubing and 7686' 2", 6.5# J-55 tubing and hung at 8012'. Installed knee tree and tested with 1250' pressure.

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DIVISION OF OIL AND GAS

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History of Oil or Gas Well

LOS ANGELES, CALIFORNIA

OPERATOR Tide Water Associated Oil Company FIELD Aliso Canyon

28 3 N 16 W

Well No. Forster 435, Sec. _____, T. _____, R. _____, B. & M. _____

Signed R. J. Carl

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Date 3/18/46
3/18 8145' Circulated out and with water and swabbed. Well began flowing by heads to sump on aft noon tour.
3/19 Completed well flowing to tanks at 10:00 AM 3/19/46. In 20 hours to 6:00 AM 3/20 well flowed by heads 93 bbls gross fluid; 76 bbls approximate net oil; 15.0% cut; 24/64" bean; 0-50 tubing pressure; 800" casing pressure; 15 MCF gas.

PRODUCTION

<u>Date</u>	<u>Gross</u>	<u>Approximate Net Oil</u>	<u>Gravity</u>	<u>Cut</u>	<u>Bean</u>	<u>Tubing Pressure</u>	<u>Casing Pressure</u>	<u>Gas MCF</u>	<u>Hours On</u>
3/20	221	186	23.2	16.0	12/64"	425#	825#	33	24
3/21	227	206	23.2	9.0	12/64"	300#	750#	30	24
3/22	247	217	23.2	16.0	12/64"	75#	825#	96	24
3/23	247	212	23.2	14.0	12/64"	375#	900#	96	24
3/24	246	230	23.2	6.5	12/64"	350#	1000#	100	24
2/25	185	173	23.2	6.5	12/64"	360#	1150#	71	24
3/26	235	228	23.2	3.0	12/64"	350#	1250#	82	24
3/27-4/2	Shut in					350#	1250#		
4/4	175	174	23.2	0.3	12/64"	550#	1700#	62	24
4/5	164	149	23.2	9.0	12/64"	500#	1700#	57	24
4/6	169	159	23.2	3.0	12/64"	500#	1700#	59	24
4/7	175	170	23.2	3.0	12/64"	450#	1700#	57	24
4/8	288	280	23.2	3.0	12/64"	325#	1650#	109	24
4/9	185	181	23.2	2.0	16/64"	325#	1600#	71	24
4/10	206	202	23.2	1.8	16/64"	225#	1700#	63	24
4/11	206	202	23.2	1.8	16/64"	300#	1650#	60	24
4/12	199	195	23.2	1.8	16/64"	300#	180#	72	24
4/13	236	235	23.2	0.4	16/64"	400#	1800#	87	24

Note: On 4 hour flow test 4/8/46 well produced 120 bbls gross fluid; 117 bbls approximate net oil (700 b/d rate) 3.0% cut; 32/64" bean; 250# tubing pressure; 1450# casing pressure.

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DIVISION OF OIL AND GAS
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LOS ANGELES, CALIFORNIA

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Tide Water Associated Oil Company FIELD Aliso Canyon

Well No. Porter #35, Sec. 28, T. 3 N, R. 16 W, S. 1, B. & M.

Signed [Signature]

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Date	Gross Fluid	Approximate Net Oil	Gravity	Cut	Depth	Tubing Pressure	Casing Pressure	Gas Hours	Hours On
4/14	208	207	23.2	0.4	16/64"	400+	1800+	77	24
4/15	200	198	23.2	0.8	16/64"	400+	1800+	73	24
4/16	200	198	23.2	0.8	16/64"	400	1800+	73	24
4/17	216	214	23.2	0.7	16/46"	425+	1800+	99	24

CASING RECORD

11-3/8", 54.5' G 505'
7", 23', 26', 29' G 7910' 4 b 7900
265' - 5", 18' L 8142' Top 7877 Perf. 7891-8142'

TUBING RECORD

2 1/2", 6.5' and 2", 4.5' H 5012 Bottom 390' to 2"

SIZE OF HOLES:

0 - 505' to 17 1/2"
505' - 2665' to 12 1/2"
2665' - 7961' to 11"
7961' - 8145' to 6"

MAP	MAP BOOK	CARDS	BOND	FORMS	
				114	121

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL LOS ANGELES, CALIFORNIA

Operator Tide Water Associated Oil Company Field Aliso Canyon

Well No. Porter #35 Sec. 23, 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				
0'	4521'		Drilled		Sand and shale
4521'	4528'		"		Shale
4528'	4869'		"		Sand and shale
4869'	4881'		"		Shale
4881'	4912'		"		Shale streaks sand
4912'	5498'		"		Sand and shale
5498'	5515'		"		Hard sand and shale
5515'	6422'		"		Sand and shale
6422'	6466'		"		Sandy shale
6466'	7373'		"		Sand and shale
7373'	7492'		"		Shale and sand
7492'	7803'		"		Sand and shale
7803'	7812'		"		Hard shale
7812'	7954'		"		Sand and shale
7954'	7961'		"		Hard shale
7961'	8032'		"		Sand
8032'	8128'		"		Sand streaks shale
8128'	8144'		"		Sand
8144'	8145'		"		Hard sand

MAP	MAP BOOK	CARDS	BOND	FORMS
				17
				18

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off
(FORMATION TESTER)No. T 1-45071Los Angeles 14, Calif. March 15, 19 46Mr. R. S. Curl
Los Nietos, Calif.Agent for TIDE WATER ASSOCIATED OIL COMPANY

DEAR SIR:

Your well No. "Porter" 35, 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 March 13, 1946. Mr. Paul Betts, Inspector, designated by the supervisor,
was present as prescribed in Sec. 3222 and 3223, Ch. 93, Stat. 1939; there were also present
J. R. Boyyer, Engineer; R. W. Ruberts, Drilling Foreman

Shut-off data: 7 in. 23, 26 lb. casing was cemented at 7910 ft. on March 7, 19 46
in 11" hole with 500 sacks of cement of which 8 sacks was left in casing.
Casing record of well: 13-3/8" cem. 503'; 7" cem. 7910', 4 - 1/2" test holes at 7900', W.S.O.

Reported total depth 7961 ft. Bridged with cement from 7910 ft. to 7905 ft. Cleaned out to 7905 ft. for this test.
A pressure of 1000 lb. was applied to the inside of casing for 15 min. without loss after cleaning out to 7865 ft.
A Johnston tester was run into the hole on 2-7/8" in. drill pipe, with 935 ft. of water cushion,
and packer set at 7849 ft. with tailpiece to 7869 ft. Tester valve, with 3/8" bean, was opened at 9:43 a.m.
and remained open for 1 hr. and 6 min. During this interval

INSPECTOR JOHN M. CARLS VISITED THE WELL FROM 11:00 P.M., MARCH 11, 1946, TO 1:15 A.M.,
MARCH 12, 1946, AND MR. BOYER REPORTED:

1. A 12-1/4" rotary hole was drilled from 503' to 2665'; an 11" rotary hole from 2665' to 7961'
2. Electrical core readings showed the Sesnon zone at 7917'.
3. A Johnston combination gun perforator and tester was run into the hole on 2-7/8" drill pipe with 935' of water cushion. After shooting the 7" casing with 4 - 1/2" holes at 7900', the packer was set at 7849' with tailpiece to 7869'.
4. The tester valve was opened at 8:13 p.m. and remained open 1 hr. and 6 min. During this interval there was a strong, steady blow for 5 min. and no blow for the remainder.

THE INSPECTOR NOTED:

1. When the drill pipe was removed 1365' of fluid exclusive of water cushion, consisting of drilling fluid grading to slightly muddy, gassy oil, was found in the drill pipe above the tester, equivalent to 6.2 bbl.
2. The pressure bomb chart showed the tester valve had plugged.

The operator decided to retest.

INSPECTOR PAUL BETTS ARRIVED AT THE WELL AT 9:30 A.M., MARCH 13, 1946, AND MR. BOYER REPORTED:

1. The well was cleaned out to 7905'.
2. A Johnston tester was run as noted above.

THE INSPECTOR NOTED:

1. When the tester valve was opened at 9:43 a.m., there was a medium blow for 32 minutes, at the end of which time the well began to flow muddy water.
2. The flow of water continued for 2 minutes and the fluid changed to clean oil.
3. Samples taken from the tubing head at 10:35 a.m. and 10:50 a.m. tested 2% sediment, 3.2% free water, 21° gravity and 0.2% sediment, no free water, 21.1° gravity, respectively.

The operations were completed at 11:30 a.m.

THE WATER SHUT-OFF ABOVE THE PERFORATIONS AT 7900' IS APPROVED.

PWB:OH

R. D. BUSH, State Oil and Gas Supervisor

cc- T. L. Wark

50045 10-45 12,500 SPO

Joseph Jensen

Wm. E. Perkes (2)

By E. H. Mussen, Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 1-44761

Los Angeles 14, Calif. December 27, 19 45

Mr. H. S. Curl,
Los Nietos, Calif.

Agent for TIDE WATER ASSOCIATED OIL COMPANY

DEAR SIR:

Operations at your well No. "Porter" 35 Sec. 28, T. 3 N., R. 16 W., S. B. B. & M.,
Alice Canyon Field, in Los Angeles County, were witnessed by
John M. Carls and Paul Betts, Inspectors, representative of the supervisor,
on December 12, 19 45. There was also present D. I. Nichols, Driller; M. O. Gentry,
Derrickmen

Casing Record <u>13-3/8" cas. 503'; T. D. 2820'.</u>	Junk <u>None</u>

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

The inspector arrived at the well at 5:00 p.m. and Mr. Nichols reported:

1. A 17 1/2" rotary hole was drilled from the surface to 503'.
2. On November 20, 1945, 13-3/8", 54.5-lb. casing was cemented at 503' with 300 sacks of cement.
3. An 11" rotary hole was drilled from 503' to 2820'.

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

1. A Shaffer double cellar control gate for closing in the well with the drill pipe out of the hole and for closing around the 5-9/16" drill pipe.
2. The controls for the above equipment were located outside the derrick.
3. A 3" mud fill-up line, with a 3" high pressure stopcock, into the 13-3/8" casing, below the above equipment.
4. A Hosmer type blowout preventer with packer to fit the 5-9/16" drill pipe.
5. An 8" shut-off gate on the mud discharge line.

The inspection was completed at 5:15 p. m.

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

JMC:my

cc - Messrs. T. L. Wark
- Jos. Jensen
- G. C. Pfeffer (2)

R. D. BUSH
State Oil and Gas Supervisor

By [Signature] Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P1-41516

Los Angeles 14, Calif. December 19, 19 45

Mr. R. S. Curl

Los Nietos, Calif.

Agent for TIDE WATER ASSOCIATED OIL COMPANY

DEAR SIR:

Your proposal to drill Well No. "Porter" 35, Section 28, T.3 N., R.16 W., S.B.B. & M., Aliso Canyon Field, Los Angeles County, dated Dec. 14, 19 45, received Dec. 17, 19 45, 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 2082.69 feet S. and 2903.72 feet W. from Station #84. The elevation of the derrick floor above sea level is 2101.0 feet. We estimate that the first productive oil or gas sand should be encountered at a depth of about _____ feet."

PROPOSAL:

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

Size of Casing	Weight	Grade and Type	Depth	Landed or Cemented
13-3/8	54.5	T&C Grade J-55	505	Cemented
7"	24 to 30	J-55 & N-80 T&C	7750	Cemented
5"	21	J-55 F.J.	8100	Landed (Pf.ln)

Well is to be drilled with rotary tools.

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

DECISION:

THE PROPOSAL IS APPROVED PROVIDED THAT

1. Mud fluid consistent with good drilling practice shall be used and the column of mud fluid maintained at all times to the surface, particularly while pulling the drill pipe.
2. Blowout prevention equipment, sufficient to provide a complete close-in of the well under pressure at any time shall be installed.
3. Any hole to be sidetracked in any oil or gas zone shall be filled with cement, if possible.
4. THIS DIVISION SHALL BE NOTIFIED AS FOLLOWS:
 - (a) To inspect the installed blowout prevention equipment before drilling below 1500'.
 - (b) To witness a test of the effectiveness of the 7" shut-off.

CLB:OH

cc- F. L. Wark
Jos. Jensen
G. C. Pfeffer (2)

M/C

Records Filed	
00	5-1-46
01	5-1-46
02	5-1-46
03	5-1-46

R. D. BUSH

State Oil and Gas Supervisor

By *E. H. Musser* Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

16

037-00722

Notice of Intention to Drill New Well

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

Los Nietos Calif. December 14, 1945

DIVISION OF OIL AND GAS

Los Angeles Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of drilling well No. "Porter" #35, Sec. 28, T. 3 N. R. 16 W, S.B. B. & M., Aliso Canyon Field, Los Angeles County. Lease consists of Porter lease

The well is 2082.69 feet ~~1166~~ S., and 2903.72 feet ~~2606~~ W. from Station #84
(Give location in distance from section corners or other corners of legal subdivision)

The elevation of the ~~XXXXXX~~ derrick floor above sea level is 2101.0 feet.

We estimate that the first productive oil or gas sand should be encountered at a depth of about _____ 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
13-3/8	54.5	T&C Grade J-55	505	Cemented
7"	24 to 30	J-55 & N-80 T&C	7750	Cemented
5"	21	J-55 F.J.	8100	Landed (Pf.ln)

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

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

Address P.O. Box "Y" Los Nietos, Tide Water Associated Oil Co.
(Name of Operator)

Telephone number Whittier 42-043 By R. S. Curl R. S. Curl
Agent P.

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

18A 12-27-45
JLW.