



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 215-0261**

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 Plan
"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" 36, A.P.I. No. **037-00723**, Section 27, T. 03N, R. 16W, **SB B. & M., Aliso Canyon** field, Any area, **Sesnon-Frew** pool, **Los Angeles** County, dated **12/21/2015**, received **12/22/2015** has been examined in conjunction with records filed in this office. (Lat: **34.309571** Long: **-118.552391** 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.
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.
 - e. Witness a mechanical integrity test within three months after injection or withdrawal has commenced.

Continued on Next Page

Blanket Bond Dated: 7/6/1999
UIC Project No. 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" 36

API #: 037-00723

Permit : P 215-0261

Date: December 23, 2015

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

Rec'd 12-22-15 DOIGGR D2 Ventura
FOR DIVISION USE ONLY

Bond	Forms	
	OGD44	OGD21
	CAL WIMS	115

NOTICE OF INTENTION TO REWORK / REDRILL WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog/

P215-0261

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework / redrill well Porter 36, API No. 037-00723
(Check one)

Sec. 27, 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.)

See attached wellbore schematic

The total depth is: 7980 feet.

The effective depth is: 7977 feet.

Present completion zone(s): Sesnon
(Name)

Anticipated completion zone(s): Same
(Name)

Present zone pressure: storage psi.

Anticipated/existing new zone pressure: storage 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 Jovy Kroh	Telephone Number: (818)590-0298	Signature <i>Jovy Kroh</i> Date 12/21/15
Individual to contact for technical questions: Jovy Kroh	Telephone Number: (818)590-0298	E-Mail Address: jkroh@semprautilities.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.

INFORMATION FOR COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT OF 1970 (CEQA)

If an environmental document has been prepared by the lead agency, submit a copy of the *Notice of Determination* or *Notice of Exemption* with this notice. Please note that a CEQA determination by a local jurisdiction, if required, must be complete, or the Division may not issue a permit.

CRITICAL WELL DEFINITION

As defined in the California Code of Regulations, Title 14, Section 1720 (a), "Critical well" means a well within:

- (1) 300 feet of the following:
 - (A) Any building intended for human occupancy that is not necessary to the operation of the well; or
 - (B) Any airport runway.
- (2) 100 feet of the following:
 - (A) Any dedicated public street, highway or the nearest rail of an operating railway that is in general use;
 - (B) Any navigable body of water or watercourse perennially covered by water;
 - (C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground or any other area of periodic high-density population; or
 - (D) Any officially recognized wildlife preserve.

WELL OPERATIONS REQUIRING BONDING

1. Drilling, re-drilling, or deepening any well.
2. Milling out or removing a casing or liner.
3. Running and cementing casing or tubing.
4. Running and cementing liners and inner liners.
5. Perforating casing in a previously unperforated interval for production, injection, testing, observation, or cementing purposes.
6. Drilling out any type of permanent plug.
7. Reentering an abandoned well having no bond.

This form may be printed from the DOGGR website at www.conservation.ca.gov/dog/

WORKOVER PROJECT**Porter 36 – Well Inspection**

DATE: December 21, 2015
OPERATOR: SOUTHERN CALIFORNIA GAS COMPANY
FIELD: ALISO CANYON
WELL: PORTER 36
API NUMBER: 037-00723
ELEVATION: All depths based on original KB, 7' above GL
SURFACE LOCATION: SEC 27, 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 project will include pulling 2-7/8" completion string, running USIT and Gyro surveys, pressure testing casing and well laterals, installing a new completion string, converting well to tubing flow, and installing pressure monitors. Baseline assessment data will be gathered on vertical casing pipe and other well components.

WELL RECORD

Current Status:	Active
TD:	7980' md
Special Conditions:	Last tag 2/15/2006 with wireline at 7925' (52' above ECOD at 7977')
Casing Record:	13-3/8" 48.5# J-55 T&C casing cemented at 517' with 350 sx cmt 7" 23, 26 & 29#, J-55 & N-80 Speedtite casing cemented at 7850' 5" 18# 'Ruff-coated' liner to 7978' md with 500 sx cmt Perfs: 1970: 7910-7970'; WSO 4 h's at 7907' 1972: 7870-7893'; 7920-7926'; 7930-7968' 2006: 7870-7885'; 7885-7905'; 7905-7925' with 2 spf
Tubing Record:	See attached tubing detail; last tubing change 10/7/1977

GEOLOGIC MARKERS

A1	4015' md	-2083' vss	LDA	7041' md	-5109' vss
A36	4922' md	-2990' vss	MP	7565' md	-5633' vss
UP	5151' md	-3219' vss	S1	7772' md	-5840' vss
LP	5631' md	-3699' vss	S2	7818' md	-5886' vss
UDA1	6151' md	-4219' vss	S4	7868' md	-5936' vss
UDA2	6401' md	-4469' vss	S6	7958' md	-6026' vss
MDA	6871' md	-4939' vss			

Estimated Field Pressure: 2188 psi on 12/21/2015 (Variable)

Estimated Bottomhole Temperature: 179°F

PROJECT 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 of 300 psig 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. Move in production rig and rig pump with tank, shaker, and mixer.
2. Spot 500 bbl Baker tanks 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 with Biocide, 5 gals/100 bbls
3. If the well 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 5 bbl. The tubing volume is approximately 45 bbl, and the tubing/casing annulus is approximately 238 bbl.

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. Pick up a 2-7/8", 6.5#, N-80 joint of tubing with safety valve, unland the 2-7/8" 6.5#, J-55 tubing string and POOH with the completion tubing, and the Camco mandrel. Attempt to release the Baker Model "D" packer with seal assembly as per vendor recommendation. POOH and lay down completion jewelry.

6. Pick up 7" 29# casing scraper on tubing and scrape to 5" liner top at 7733'. Circulate well clean. POOH.
7. Rig up wireline unit and run gyro survey from ECOD at 7977' (or as deep as possible) to surface. Rig down wireline.
8. Make up and run a 7" retrievable bridge plug on 2-7/8" tubing. Set at approximately 7723' (10 ft above liner top), pressure test, and sand off.
9. Rig up wireline unit and log USIT/Neutron/CBL in high resolution mode in the 7" production casing from the top of the bridge plug to surface. Rig down wireline.
10. Run Pressure Integrity Test on 7" casing from bridge plug to surface to a minimum of 3400 psi as per schedule.
 - a.) Engineering team to analyze USIT and pressure test results and recommend any additional remediation.
11. Inspect production tree and pressure test the wellhead seals to a minimum of 3400 psig.
 - b.) If the wellhead seals do not test, nipple down the 11" Class III 5M BOPE, crossover spool, and primary pack-off.
 - c.) Replace the pack-off seals and reinstall a tubing head, refurbished as necessary.
 - d.) Pressure test all the wellhead seals to 5000 psig.
 - e.) Reinstall the 11" Class III 5M BOPE on the tubing head and function test.
12. Pick up and run tubing with bridge plug retrieving head to top of sand. Circulate out sand. Release bridge plug at approximately 7723, re-kill the well if necessary. POOH and lay down tubing.
13. 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
14. RIH with new completion string and land as per vendor specification at approximately the same depths as prior completion string. Pressure test the 2-7/8" tubing x 7" casing annulus to 1000 psig surface pressure.
15. Nipple down the Class III 5M BOPE and install the production tree and test to 5000 psig.
16. Release production rig, rig down and move out.

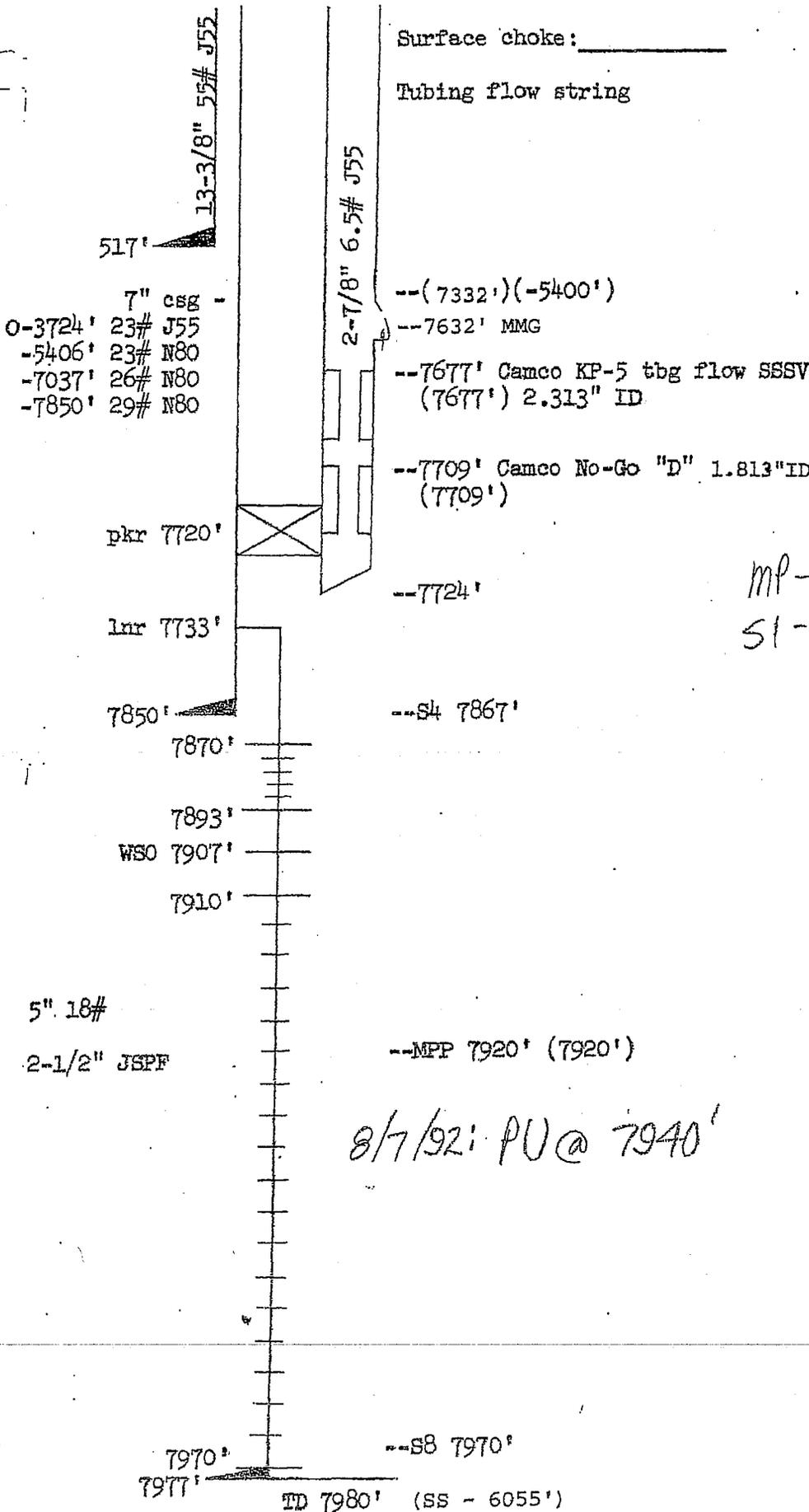
17. Rig up wireline and set a plug in the 3-1/2" XN profile, shift the sliding sleeve open and unload the workover brine from the tubing/casing annulus. Pull the wireline plug from the XN profile. Shift the sliding sleeve closed.

WELL LATERAL HYDROTESTING

18. 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.
19. Reinstall the hydro-tested laterals.
20. Install the well safety systems and instrumentation. Install pressure transmitters on tubing, casing, and surface casing.
21. 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.



9/4/46 - Well spud
 11/13/46 - Well completed ID 7980'.
 4/22/70 - 5/26/70 - Milled liner, ran 5" 18# liner & cmt'd at 7977', jet perf'd 7910'-7970', & ran tbg.
 11/11/72 - 11/27/72 - Perf'd 7870'-7893', 7920'-7926', & 7930'-7968', cleaned out to 7977'.
 8/3/73 - 8/10/73 - Cleaned out to 7972'.
 10/3/77 - 10/20/77 - Cleaned out to 7977', pressure tested csg, & ran tbg with SSSV.

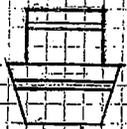
MP-7562'
 SI-7782'

8/7/92: PU @ 7940'

WELL VOLUME

	Cu.Ft.	Bbl.
Tubing	251	45
Csg/Lnr.	27	5
Annulus	1340	238

WELL PROFILE



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OPERATOR SOUTHERN CALIFORNIA GAS COMPANY

WELL # PORTER #36

FIELD Aliso Canyon

COUNTY Los Angeles

STATE California

DATE October 19, 1977

NEW COMPLETION WORKOVER

CASING	LINER	TUBING		
		1	2	3
SIZE _____				
WEIGHT _____				
GRADE _____				
THREAD _____				
DEPTH _____				

ITEM NO.	TUBING DETAILS	LENGTH	DEPTH
	Derrick Floor to Doughnut	11.42	11.42
1.	Shaffer Tubing Hanger (2 7/8" x 2 7/8" EUE)	.70	12.12
2.	Pup 2 7/8" 6.5# N-80 EUE 8rd	10.13	22.15
3.	" " " " " "	10.08	32.33
4.	" " " " " "	6.11	38.44
5.	247 Joints 2 7/8" 6.5# J-55 EUE 8rd	7589.20	7627.64
6.	Pup 2 7/8" 6.5# N-80 EUE 8rd	4.15	7631.79
7.	Camco MMG Gas Mandrel (Empty)	8.47	7640.26
8.	Pup 2 7/8" 6.5# N-80 EUE 8rd	1.13	7641.39
9.	1 Joint 2 7/8" 6.5# J-55 EUE 8rd	31.85	7673.24
10.	Pup 2 7/8" 6.5# N-80 EUE 8rd	4.11	7677.35
11.	Camco KP-5 Tubing Flow Safety System EH-shut-off Valve closed	11.40	7688.75
12.	Camco Blast Joint 2.441" I.D. x 3.668" O.D.	19.82	7708.57
13.	Camco "D" Nipple 1.812" NO-GO	.84	7709.41
14.	Camco Blast Joint 2.441" I.D. 3.668" O.D.	9.84	7719.25
15.	Baker Latch-in Locator	.75	7720.00
A.	Baker Model "D" Packer 7" x 4.27' set at		7720.00
16.	Baker Seal Assembly 2.35" I.D. 3.25" O.D.	4.08	7724.08
17.	Bker Chamfered Guide	.16	7724.24

- NOTES -
- a. Pulled 25,000# over hook load of 40,000# and tested latch. Landed 8000# compression.
 - b. Tubing hanger is Shaffer 2 7/8" EUE x 2 7/8" EUE
 - c. Used Baker packer lube on latch and seals
 - d. Camco safety system is tubing flow KP-5 with EH valve closed, safety valve nipple empty, MMG mandrel empty to receive DCRT valve later.

- PART NUMBERS -

KP-5 Safety Mandrel	05107-000-01001
MMG Mandrel	05294-000-01001
DCRT Kill Valve	01377-000-04000
PK Latch	100500-000-03000
D Nipple	33359-000-04001
PC-4 Safety Valve	20605-000-03000

COMMENTS: EH Shut-off Valve 01115-000-04000

A
TOP
124
7733
7" 7850

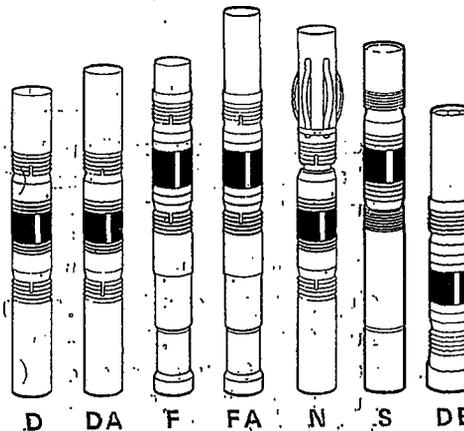
7977

PRODUCTION - COMPLETION EQUIPMENT

BAKER PACKERS

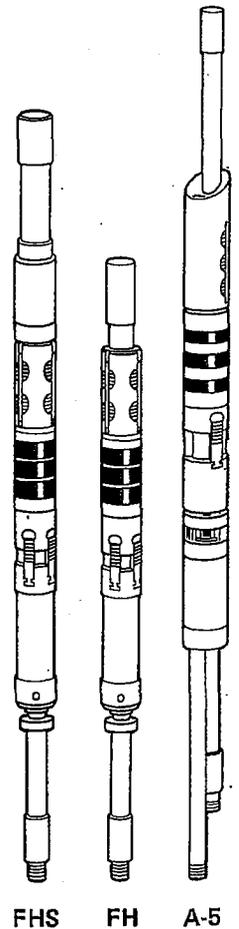
DRILLABLE

- D— Ret. Production, Product No. 415-01
- DA— Ret. Production, Product No. 415-03
- F— Ret. Production, Product No. 413-01
- FA— Ret. Production, Product No. 413-02
- N— Mechanical-Set, Product No. 416-01
- S— Hydro-Set, Product No. 409-03
- DE— Parallel-String, Product No. 415-12



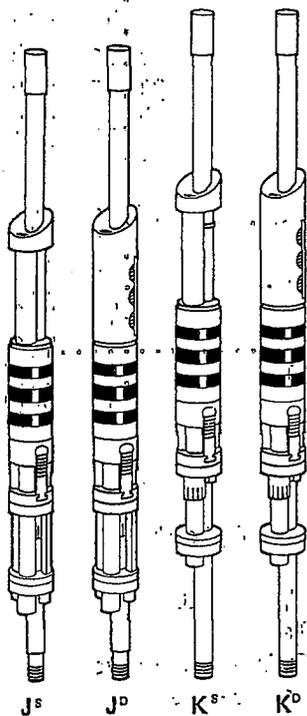
RETRIEVABLE HYDROSTATIC

- FHS— Selective-Set Double-Grip Single String, Product No. 781-09
- FH— Single, Product No. 781-08
- A-5— Dual, Product No. 783-16



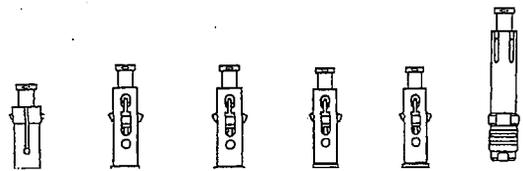
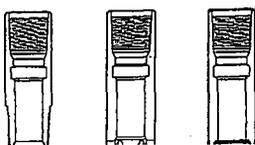
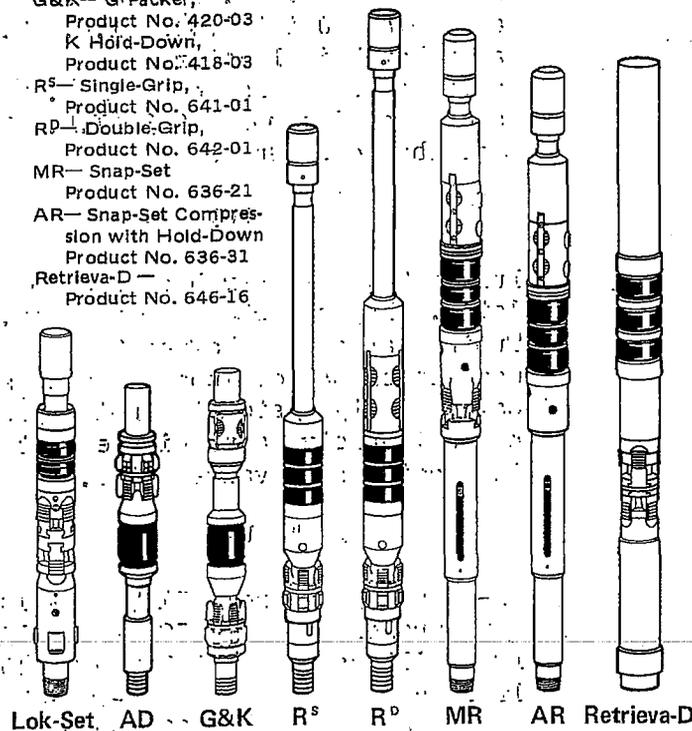
RETRIEVABLE SNAP-SET

- J^s— Dual, Single-Grip, Product No. 756-01
- J^D— Dual, Double-Grip, Product No. 757-01
- K^s— Dual, Single-Grip, Product No. 754-01
- K^D— Dual, Double-Grip, Product No. 755-01



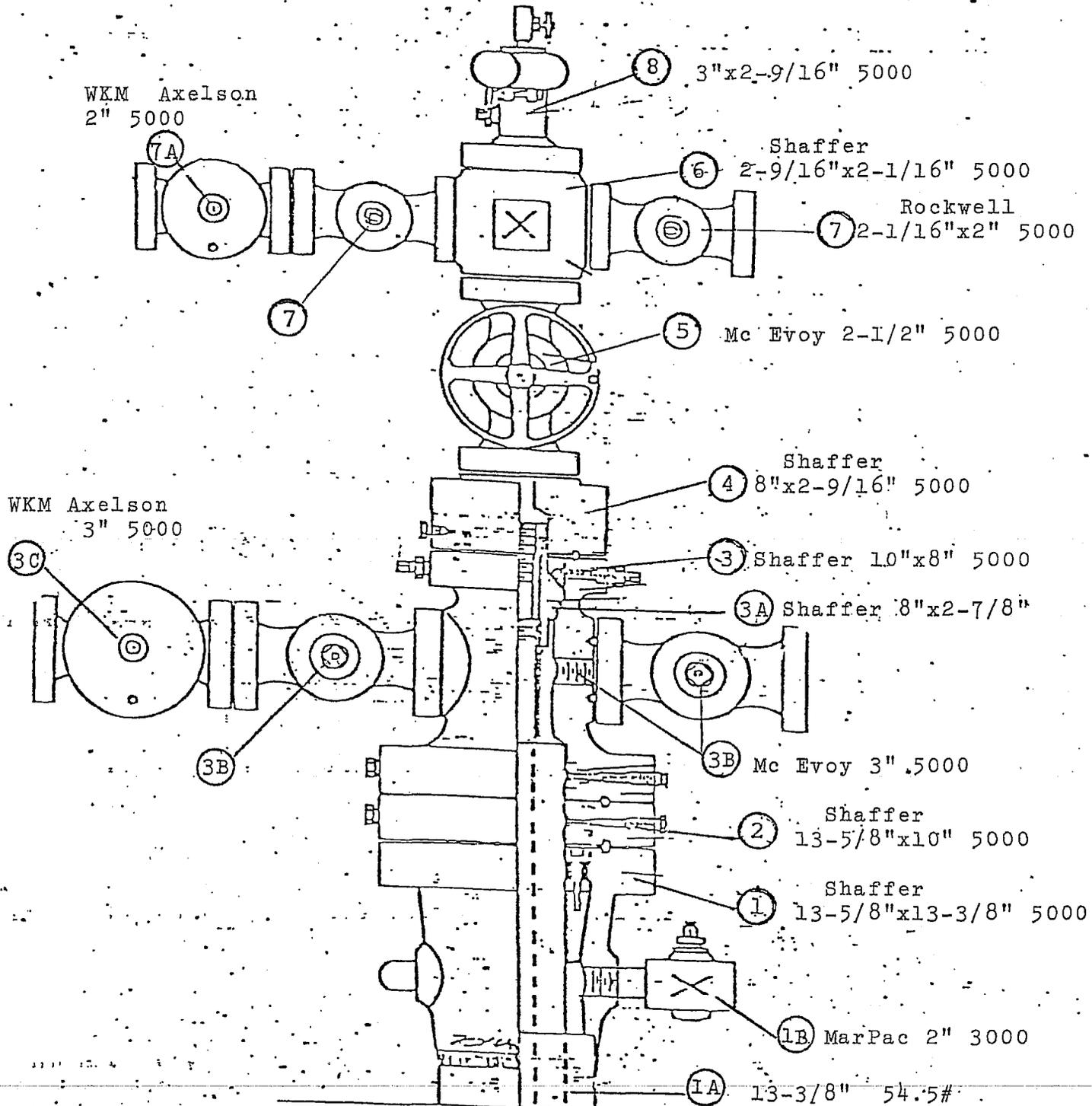
RETRIEVABLE SINGLE STRING

- Lok-Set, Product No. 646-12
- AD— Tension, Product No. 739-08
- G&K— G-Packer, Product No. 420-03
- K Hold-Down, Product No. 418-03
- R^s— Single-Grip, Product No. 641-01
- R^D— Double-Grip, Product No. 642-01
- MR— Snap-Set, Product No. 636-21
- AR— Snap-Set Compression with Hold-Down, Product No. 636-31
- Retrieva-D — Product No. 646-16



TYPE IV

Rec'd 12-22-15 DOIGGR D2 Ventura



Well Name: P 36 - Aliso Canyon

Mfgr.: Shaffer

Date Prepared: 12-13-82

Well No. P-36

Rec'd 12-22-15 DOIGGR D2 Ventura

Field Aliso

Date Prepared 5-4-81

Wellhead Mfgr. Shaffer

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

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 Shaffer Size 13-5/8" x 10" 5000 psi

A. Type Seal PS Ring BX-160 & R-54

3. Tubing Head Shaffer Size 10" x 8" 5000 psi Type 63-L-1

Ring R-54 & Ring R-50

Outlets 2-3" Sec. Seal PS

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

A. Tubing Hanger Shaffer Size 8" x 2-7/8" Type AJS

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

B. Tubing Head Valves 2 Mc Evoy Size 3" 5000 psi Fig.No. 129

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

4. Adapter Seal Flange Shaffer Size 8" x 2-9/16" 5000 psi Type AJS

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 Shaffer Size 2-9/16" x 2-9/16" x 2-1/16" Bore 2-1/16" Thru 2-9/16" Across 2-1/16"

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

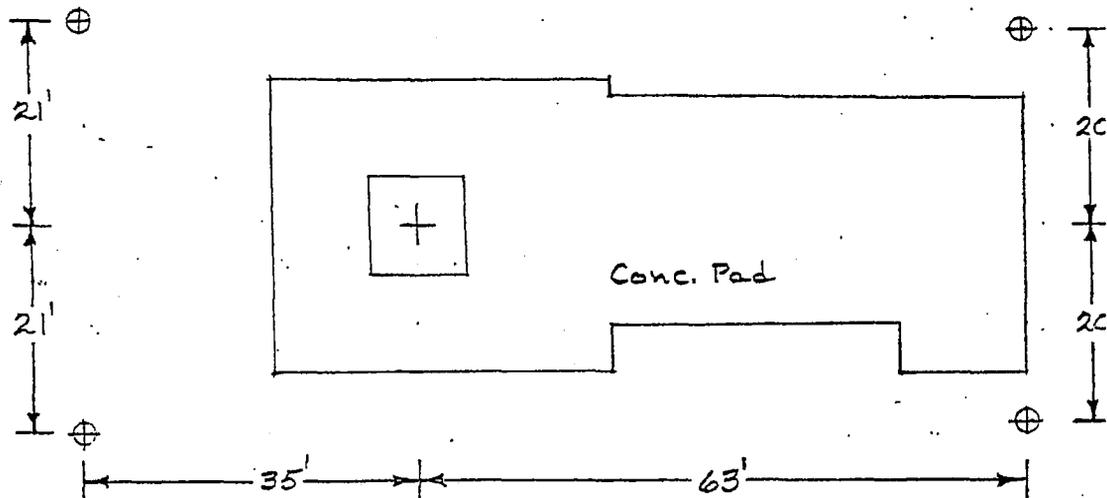
A. Automatic Tbg. Valve WKM Size 2" 5000 psi Fig. No.

8. Unibolt Size 3" 5000 psi Inside Thrds

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

10. Wt. Landed on Doughnut 30,000 Wt. 6.5# 2-7/8" Grade J-55

11. Tubing Head to Ground Level 3.60 Below



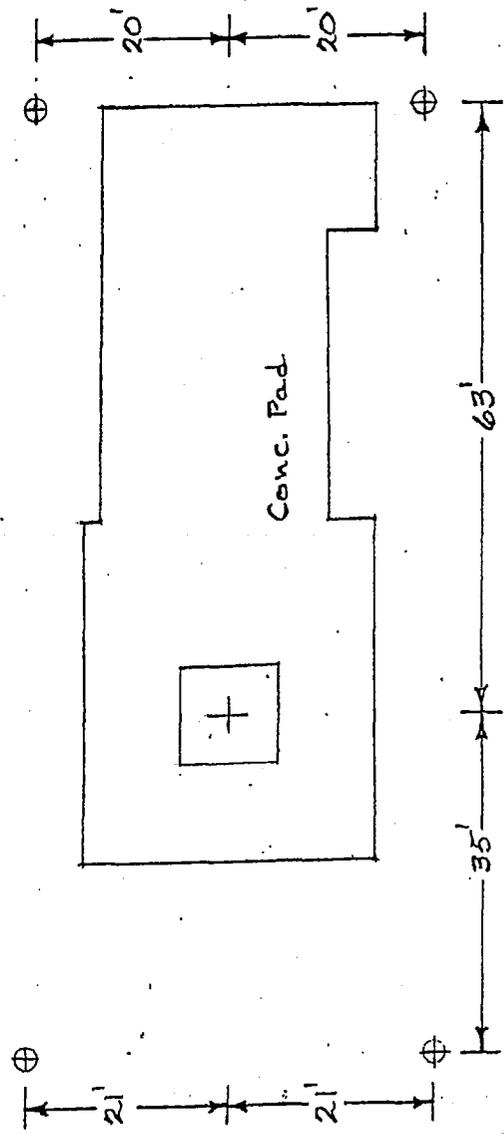
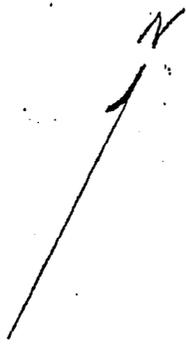
Deadman locations at Portex 36

8-15-72
Scale: 1/10" = 2' RFL

TRACT No. _____

TOTAL FEET N

WORK COMPLETED AS SHOWN ABOVE: _____			CREW FOREMAN _____		LEGEND I-INSTALL R-REMO A-ABANDON C-CONVI	
DATE MOVED _____			COMPANY _____			
OFF JOB _____			PLANNED BY: _____		PERMIT ISSUED BY: _____	
COUNTY: _____	DISTRICT: _____	ATLAS: _____	CONSTRUCTION PLANNER _____		PERM _____	
REASON RETIRED: _____			REVIEWED BY: _____			
TYPE OF COATING INSTALLED: _____			DISTRICT SUPERVISOR _____			
DATE OF OPERATION: _____						



Deadman locations at Portex 36

8-15-72
 Scale: 1/10" = 2' RFL

TOTAL FEET NEW BUSINESS INSTALLED: _____

TRACT No. _____		TOTAL FEET NEW BUSINESS INSTALLED: _____	
WORK COMPLETED AS SHOWN ABOVE: DATE MOVED OFF JOB _____		LEGEND I-INSTALL A-ABANDON R-REMOVE C-CONVERT	
COUNTY: _____	DISTRICT: _____	PERMIT ISSUED BY: _____	PERMIT NO. _____
REASON RETIRED: _____	ATLAS: _____	SOUTHERN CALIFORNIA GAS C	
TYPE OF COATING INSTALLED: _____	PLANNED BY: _____	PIPE LINE CONSTRUCTION SKETCH	
DATE OF OPERATION: _____	CONSTRUCTION PLANNER: _____	DIVISIO _____	
	REVIEWED BY: _____	W. O. _____	
	DISTRICT SUPERVISOR: _____		

OPERATOR Paw Lake
 LSE & NO. SFZD P-36
 MAP NO. 150

INTENTION	MT. Cog	NEWELL 9-23-72	REPERFORATE		
NOTICE DATED	7-8-72	10-6-77	02/09/2006		
P-REPORT DATED	1-2-1074	277-374	P206-46		
CHECKED BY/DATE	3-13-73				
MAP LETTER DATED	NC		W		
SYMBOL					

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	9-13-72		10-6-77 X		02/07/06					
HISTORY	2-23-73		12-6-77 X		3/6/00					
SUMMARY	2-25-73									
IES/ELECTRIC LOG										
DIRECTIONAL SURV.										
CORE/SWS DESCRIPT.										
DIPMETER RESULTS										
OTHER			BOPE 10-8-77		GR 3/13/00					
RECORDS COMPLETE	3-12-73		12-11-77 TMC		gk					

ENGINEERING CHECK		CLERICAL CHECK	
T-REPORTS _____	POSTED TO 121 _____	170 MAILED _____	FINAL LETTER MAILED _____
OPERATOR'S NAME _____	_____	_____	RELEASE BOND _____
WELL DESIGNATION _____	_____	_____	
LOC. & ELEVATION _____	_____	_____	
SIGNATURE _____	_____	_____	
SURFACE INSPECTION _____	_____	_____	
FINAL LETTER OK _____	_____	_____	

REMARKS _____

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

HISTORY OF OIL OR GAS WELL

Operator: Southern California Gas Company
 Well: Porter 36
 A.P.I. No. 03700723

Field: Aliso Canyon
 Surface Location: Sec. 27, T3N, R16W S.B.B.&M.
 Mark Kuncir
 County: Los Angeles
 Title: Storage Field Engineer
(President, Secretary, or Agent)

Date: 03/03/2006

Signature: 
(Person Submitting Report)

Address: PO Box 2300, SC9365, Chatsworth, CA, 91313-2300

Telephone Number: 818-700-3810

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.

Start Date	Ops. DOGGR Rpt
01/23/2006	RU Spicer W/L. RIH w/ 1-3/4" x 30' drift tool to clear tbg. Tagged @ 7963. RD W/L.
02/15/2006	MIRU Schlumberger W/L. RIH w/ PDC GR-NL tool and tagged @ 7925'. Closed well in overnight.
02/16/2006	PU 1-11/16" strip gun and RIH and perforated 5" liner w/ 2 SPF (Enjet-DP 1.69", EJ3, RDX, ~0.28" holes) from 7925-7905', 7905-7885' and 7885-7870' (Runs 1 - 3, 55'). RD W/L.

RECEIVED
 MAR 06 2006
 By _____

PERMIT TO CONDUCT WELL OPERATIONS

010
(field code)
00
(area code)
30
(new pool code)
30
(old pool code)

Gas Storage

James D. Mansdorfer, Agent
Southern California Gas Company
9400 Oakdale Ave
Chatsworth CA 91313

Ventura, California
February 15, 2006

Your _____ proposal to _____ reperformate _____ well "Porter" 36
A.P.I. No. 037-00723 Sec. 27, T. 3N, R. 16W, SB B.&M.,
Aliso Canyon field, _____ area, Sesnon-Frew pool
Los Angeles County, dated 02/9/2006 received 2/7/2006 has been examined in conjunction
with records filed in this office.

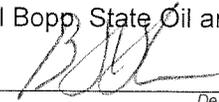
THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Wire line operations are conducted through at least a 5M lubricator.
2. This office shall be consulted before initiating any changes or additions to this proposed operation or if operations are to be suspended.

The Division recommends, as a minimum, that carbon monoxide monitoring equipment and a vent line be installed and maintained operational during all extensive perforating operations.

SAF:sf

Engineer Steven A. Fields
Phone (805) 654-4761

Hal Bopp, State Oil and Gas Supervisor
By 
Deputy Supervisor

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

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

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

NOTICE OF INTENTION TO REWORK / REDRILL WELL

P206-46

C.E.Q.A. INFORMATION (when redrilling or deepening only)			
Exempt <input type="checkbox"/>	Neg. Dec. <input type="checkbox"/>	E.I.R. <input type="checkbox"/>	Document not required by local jurisdiction <input type="checkbox"/>
Class _____	S.C.H. No. _____	S.C.H. No. _____	
See Reverse Side			

FOR DIVISION USE ONLY			
Bond	Forms		EDP Well File
	OGD114 <input checked="" type="checkbox"/>	OGD121 <input checked="" type="checkbox"/>	
1000 000	111 <input checked="" type="checkbox"/>	115 <input checked="" type="checkbox"/>	

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

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to

rework/redrill well Porter 36 API No. 03700723
(Circle one) (Well designation)

Sec. 27 T. 3N R. 16W S.B.B.&M. Aliso Canyon Gas Storage Field

Los Angeles County.

1. The complete casing record of the well (present hole), including plugs and perforations, is as follows:

- 0-517' 13-3/8" 55# J55 Surface csg;
- 0-7850' 7" 23, 26 & 29# K55 & N80 Prod. csg;
- 7733-7977' 5" 18# liner;
- 2-7/8" 6.5# J55 EUE 8rd tbg landed on 7" Baker Model 'D' pkr @ 7720';
- 7" csg perforated w/ four 1/2" HPF from 7910-7970', 7870-7893-, 7920-7926' and 7930-7968'.

GS

2. The total depth is: 7977 feet. The effective depth is: 7977 feet.

3. Present completion zone (s): Sesnon Anticipated completion zone (s): Sesnon
(Name) (Name)

4. Present zone pressure: 2740 psi. Anticipated/existing new zone pressure: 2740 psi.

5. Last produced: 1/2005 2.1 0 5,018
(Date) (Oil, B/D) (Water, B/D) (Gas, Mcf/D)

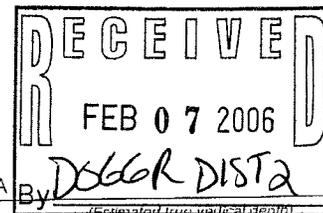
(or)

Last injected: - - - -
(Date) (Water, B/D) (Gas, Mcf/D) (Surface pressure, psig)

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

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

Re-perforate storage-zone (Sesnon) w/ 2 SPF (1-11/16" strip gun loaded w/ Enjet-DP 1.69", RDX, -0.28" hole) from 7870-7925' (55' total).



For redrilling or deepening: NA By DORR DISTA
(Proposed bottom-hole coordinates) (Estimated from previous permit)

The division must be notified if changes to this plan become necessary.

Name of Operator Southern California Gas Company	Telephone Number 818.700.3810
Address 12801 Tampa Avenue	City Northridge Zip Code 91326
Name of Person Filing Notice Mark T. Kuncir	Signature <u>Mark T. Kuncir</u> Date 2/9/06

File In Duplicate

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

Ventura, California

October 30, 1991

R. D. Phillips, Agent

SOUTHERN CALIFORNIA GAS COMPANY

P.O. Drawer 3249m Mail Location 22GO

Los Angeles, CA 90051-1249

Your request, dated July 24, 1991, proposing to change the designation of well(s) in Sec. 27, 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:

FROM

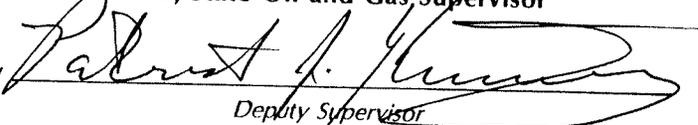
"SFZU" P-12 (037-00701)
"SFZU" P -14 (037-00703)
"SFZU" P-30 (037-00717)
"SFZU" P-31 (037-00718)
"SFZU" P-32 (037-00719)
"SFZU" P-36 (037-00723)
"SFZU" P-37 (037-00724)
"SFZU" P-45 (037-00732)
"SFZU" FF-32 (037-00686)
"SFZU" P-50A (037-22737)
"SFZU" P-68A (037-22742)
"SFZU" P-37-A (037-22046)
"SFZU" FF-32-A (037-21872)

TO

"Porter" 12 (037-00701)
"Porter" 14 (037-00703)
"Porter" 30 (037-00717)
"Porter" 31 (037-00718)
"Porter" 32 (037-00719)
"Porter" 36 (037-00723)
"Porter" 37 (037-00724)
"Porter" 45 (037-00732)
"Fernando Fee" 32 (037-00686)
"Porter 50A (037-22737)
"Porter" 68A (037-22742)
"Porter" 37-A (037-22046)
"Fernando Fee" 32-A (037-21872)

M. G. MEFFERD, State Oil and Gas Supervisor

By



Deputy Supervisor

PATRICK J. KINNEAR

DEC -6 1977

DIVISION OF OIL AND GAS

SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

OPERATOR SOUTHERN CALIFORNIA GAS COMPANY FIELD Aliso Canyon
 Well No. PORTER #36, Sec. 27, T. 3N, R. 16W, S.B. B. & M.
 Date November 29, 1977 Signed P. S. Magruder, Jr.
P. S. Magruder, Jr.
 P.O. Box 3249, Terminal Annex, Los Angeles Title Agent
 (Address) California 90051 (Telephone Number) (213) 689-3561 (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	
<u>1977</u>	
10-3	Casing and tubing pressure 2950 psi. Pumped 1500 cu.ft. drilling fluid into tubing and bled gas into withdrawal system to a final pressure of 550 psi. Bled down withdrawal line and got back slight amount of drilling fluid. Calculated volume of well = 1620 cu.ft.
10-6	Rigged down California Production Service Rig #D-3 at Standard Sesnon #1. Using H. & H. Truck and Crane Service, moved rig and equipment to Porter #36. Rigged up equipment and raised mast. Circulated hole with 82#/cu.ft. brine-polymer drilling fluid. Lost 100 barrels of brine-polymer drilling fluid.
10-7	Circulated hole clean, adding defoam. Installed tubing hanger plug. Removed Christmas tree. Installed Class III 5000' psi B.O.P.E. Tested B.O.P.E., as follows: Blind rams at 4000 psi for 20 minutes - O.K. Pipe rams " " " " " " - O.K.
10-8	Using H. & H. pump with water tested Shaffer bag on 2 7/8" tubing under 3000 psi for 20 minutes - O.K. Using water, body tested choke and kill manifold under 2000 psi for 10 minutes - O.K. Rigged down H. & H. Rigged up NOWSCO. Using nitrogen, tested B.O.P.E. as follows: Shaffer bag with 3000 psi for 20 minutes Pipe rams " 4000 psi " 20 " Blind rams " 4000 psi " 20 " All above tests O.K. Rigged down NOWSCO. D.O.G. inspected B.O.P.E.- approved. Pulled tubing and measured out of hole. Ran in hole with 6" bit and 7" casing scraper.
10-9	g and crew idle.
10-10	Re pac in hole with 6 1/8" bit and 7" casing scraper to top of Baker Model "D" with at 7720'. Pulled out of hole. Picked up nine joints of 2 3/8" tubing fill a 3/8" sawtooth pup. Ran in hole with 2 7/8" tubing and located top of circu 7920' in 5" liner - bottom of perforations at 7970'. Rigged up Guiberson ating head and Kelly.

DEC 6 1977

- 10-11 Cleaned out sand fill from 7920' to 7977'. Set "DR" plug in Baker Model "D" packer at 7720'. Pressure tested "DR" plug to 2000 psi. Circulated brine-polymer drilling fluid out of well with fresh water treated with surfactant.
- 10-12 Ran 7" Baker fullbore retrievable retainer. Pressure tested 7" casing, as follows:
- | | | |
|-------|-----------|------------------------------|
| 3400' | to 7720' | with 2600 psi for 70 minutes |
| 2400' | " Surface | " 2800 psi " 65 " |
| 2700' | " " | " 3100 psi " 60 " |
| 2400' | " " | " 3300 psi " 65 " |
| 1800' | " " | " 3500 psi " 60 " |
- Above tests all O.K.
Unable to obtain satisfactory test from 1300' to surface. Pulled retrievable retainer. Removed circulating sub and re-ran retainer.
- 10-13 Re-pressure tested at 1300' to surface - not satisfactory. Ran new retrievable retainer and Hydrottested tubing to 5000 psi (found no leaks in tubing). Pressure tested 7" casing as follows:
- | | | |
|-------|------------|------------------------------|
| 1300' | to Surface | with 3800 psi for 70 minutes |
| 800' | " " | " 4000 psi " 70 " |
- Above tests O.K.
Circulated fresh water out of well with brine-polymer drilling fluid. Released "DR" plug. Circulated and conditioned brine-polymer drilling fluid.
- 10-14 Pulled out of well with "DR" plug. Made up seal assembly and Camco safety system. Pressure tested to 5000 psi. Ran 2 7/8" tubing, changed collars, cleaned pins, applied Baker seal and Hydrottested to 5000 psi. After running 4400' of tubing, collar failed while Hydrottesting. Dropped tubing to packer at 7720' (3320'). Ran 2000' of tubing.
- 10-15 Pulled tubing. Ran overshot to top of fish at 3218' but could not engage fish. Ran 5 3/4" impression block which showed tubing collar at an angle on top of tubing fish. Ran magnet with lip guide but did not recover collar. Ran overshot with long lip guide and without stop.
- 10-16 Rig and crew idle.
- 10-17 Latched on to fish at 3218'. Released fish from Model "D" packer at 7720'. Pulled out of well slowly. Collar had burst axially and a strip $\pm 1\ 1/4$ " wide was missing. Loaded out fishing tools. Laid down 11 1/4 joints of bent 2 7/8" tubing. Hauled in 11 1/4 joints of used tubing. Using sand line, ran in to 7720' with 4" magnet but no recovery. Measured in hole with Baker seal assembly and latched on to 2 7/8" EUE tubing to check packer.
- 10-18 Continued measuring in hole. Latched into 7" Model "D" packer at 7720'. Pulled 22,000# over weight of string to test packer. Using H. & H. pump,

1977

tested packer and seals with completion fluid under 2000 psi for 20 minutes - O.K. Released packer and pulled out of well. Made up seal assembly with new seals, blast joints, Camco safety system and plug, tested under 5000 psi for five minutes - O.K. Hydrottested in well using Baker seal under 5000 psi for one minute on old tubing. On new used tubing, changed couplings, applied Baker seal, drifted to 2.347" and Hydrottested under 5000 psi for one minute.

10-19 Continued running tubing as before. Latched into Baker Model "D" packer at 7720'. Pulled 25,000# above hook load of 48,000# to check latch-in. Landed tubing with 8000# compression. Installed Christmas tree and pressure tested to 5000 psi. Circulated brine-polymer drilling fluid out of well with lease salt water.

10-20 Rigged up Archer-Reed piano wire. Ran and set Camco "CA" plug in "D" nipple at 7708'. Tested packer and seals under 2000 psi for 20 minutes. Pulled "CA" plug.
RELEASED RIG at 11:00 A.M. (10/20/77).

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

Report on Operations

No. T 277-301

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

Santa Paula Calif.
October 24, 1977

DEAR SIR:

Operations at well No. "SFZU" P-36, API No. 037-00723, Sec. 27, T. 3N, R. 16W,
S.B., B & M. Aliso Canyon Field, in Los Angeles County, were witnessed
on October 8, 1977. Mr. T. E. Adams, representative of the supervisor was
present from 0730 to 0830. There were also present Mr. David Eaton, contract
foreman

Present condition of well: No additions to the casing record since proposal dated 10/6/77.

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

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

M. G. MEFFERD

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

By John L. Adams Deputy

REPORT ON PROPOSED OPERATIONS

Santa Paula, California

Oct. 7, 1977

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

Your proposal to rework gas storage well "STZU" P-36 (Name and number)
A.P.I. No. 037-00723, Section 27, T. 3N, R. 16W

S.B. B. & M., Aliso Canyon field, Los Angeles County,

dated ---, received 10-6-77, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
2. Blowout prevention equipment of at least DOG Class III,5M, shall be installed and maintained in operating condition at all times.
3. THIS DIVISION SHALL BE NOTIFIED TO WITNESS A PRESSURE TEST OF THE BLOWOUT PREVENTION EQUIPMENT BEFORE COMMENCING DOWNHOLE OPERATIONS.

NOTE: A COPY OF THIS APPROVAL SHALL BE AVAILABLE AT THE WELL SITE DURING THE PROPOSED OPERATIONS.

Blanket Bond
MD:b

M. G. MEFFERD

State Oil and Gas Supervisor

By John L. Hardoin Deputy Supervisor

John L. Hardoin

DIVISION OF OIL AND GAS
RECEIVED

OCT 6 1977

DIVISION OF OIL AND GAS
Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

SANTA PAULA, CALIFORNIA

FOR DIVISION USE ONLY		
BOND	OGD114	OGD121
	BB	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3. Public Resources Code, notice is hereby given that it is our intention to rework well No. PORTER #36, API No. _____, Sec. 27, 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. 7980'
- Complete casing record, including plugs and perforations:
 - 13 3/8" cemented 517'
 - 7" cemented 7850', WSO on shoe
 - 244' 5" cemented 7977', top 7733'
 - WSO on lap, WSO thru 4 1/2" holes 7907'
 - 4 1/2" holes per foot 7910'-70', 7880' - 7903'
 - 2 1/2" holes per foot 7930' - 7936' and 7940' - 7978'

- Present producing zone name Sesnon Zone in which well is to be recompleted --
- Present zone pressure 3650 psi New zone pressure --
- Last produced Gas Storage Well
(Date) (Oil, B/D) (Water, B/D) (Gas, Mcf/D)
or
- Last injected _____
(Date) (Water, B/D) (Gas, Mcf) (Surface pressure, psig.)

The proposed work is as follows:

- Move in and rig up. Kill well. Install B.O.P.E. and pressure test.
- Clean out to 7720'. Pressure test 7" casing.
- Perform any remedial indicated by pressure testing.
- Run packer. Run tubing with down hole safety system.
- Return well to gas storage operation.

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) P.S. Magruder Jr. (Date)
Type of Organization Corporation
(Corporation, Partnership, Individual, etc.)

PORTER #36 - Aliso Canyon

DIVISION OF OIL AND GAS
RECEIVED

Program to pressure test casing and install down hole safety valve.

OCT 7 1977

TUBING WITHDRAWAL ONLY

SANTA PAULA, CALIFORNIA

Take all measurements from original derrick floor, 7' above ground.

PRESENT CONDITIONS:

13 3/8" cemented 517' 54.5# J-55
 7" cemented 7850', WSO on shoe
 244' 5" cemented 7977', Top 7633',
 WSO on lap, WSO through four 1/2" holes
 7907'
 shot four 1/2" holes per foot 7910' - 7970'
 shot four 1/2" holes per foot 7880' - 7903'
 shot two 1/2" holes per foot 7930 -36' and
 7940' - 7978'

CASING DETAILS:

Casing Depth Range	Casing Size	Casing Weight	Casing Type	100% Safety Factor	
				Burst	Collapse
0' - 3724'	7"	23#	J-55	4360	3290
3724' - 5406'	7"	23#	N-80	6340	4300
5406' - 7037'	7"	26#	N-80	7240	5320
7037' - 7850'	7"	29#	N-80	8160	6370
7733' - 7977'	5"	18# (assume J-55)		7000	6530

TUBING DETAILS:

2 7/8" 8rd EUE J-55 landed 7725'
 Baker model "D" packer 7720'
 Baker "F" nipple 7688'
 Otis sliding sleeve 7655' (closed)
 Four gas lift mandrels with valves

PROGRAM

1. Move in and rig up. Pressure test well head seals to 3300 psi.
2. Kill well with 82#/cu.ft. drilling fluid. Volume of well = 320 barrels.
NOTE: If necessary open sliding sleeve at 7655' before killing well.
3. Set 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 pressure test Hydril bag under 3000 psi with water and nitrogen.
4. Pull tubing. Run 6" bit and scraper and clean out to 7720' (Model "D" packer) clean out to 7977' through packer.

- Set Dr. R. plug in Model "D" packer at 7720' and pressure test plug 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 callibrated pressure chart and pressure gauge, as follows:

3400'	-	7720	with	2600	psi	for	60	minutes
3400'	to	Surface	with	2800	psi	for	60	minutes
2700'	"	"	"	3100	psi	"	60	"
2400'	"	"	"	3300	psi	"	60	"
1800'	"	"	"	3500	psi	"	60	"
1300'	"	"	"	3700	psi	"	60	"
800'	"	"	"	4000	psi	"	60	"

DIVISION OF OIL AND GAS
RECEIVED
OCT 7 1977
SANTA PAULA, CALIFORNIA

- Perform any remedial work indicated by pressure testing. Pull bridge plug at 7720'.
- Run 2 7/8" tubing, change collars, clean pins, apply Baker seal and hydrotest to 5000 psi for one minute on each test. Tubing to include:
 - Baker production tube
 - Baker four seals
 - Baker Latch-in locator
 - Camco 10' heavy wall tube
 - Camco 1.81" "NO GO" nipple - 2 7/8" threads
 - Camco 20' heavy wall tube
 - Camco tubing flow safety system
 - One joint 2 7/8" tubing
 - Camco empty gas lift mandrel
- Land tubing with up to a manimum of 10,000 pounds on packer. Pull up 25,000 pounds over weight of tubing to check latch.
- Install back pressure valve. Remove B.O.P.E. and reinstall Christmas tree. Pressure test Christmas tree to 5000 psi.
- Circulate drilling fluid out of well with waste salt water. Set tubing plug in "NO GO" nipple and pressure test seals and packer to 2000 psi. Remove tubing plug and release rig.

GCA
G. C. ABRAHAMSON
September 28, 1977

cc: Rig Supervisor
Relief Rig Supervisor
Contract Pusher (2)

Division of Oil & Gas ✓

B. Jones	Well File
D. Smiley	Book Copy
J. Melton	Spare Copy
D. Justice)	
M. Grijalva)	

DIVISION OF OIL AND GAS

FEB 23 1973

History of Oil or Gas Well

LONG BEACH, CALIFORNIA

OPERATOR Pacific Lighting Service Co. FIELD Aliso CanyonWell No. Porter 36, Sec. 27, T. 3N, R. 16W, SB B. & M.Date 2-21-73, 19____ Signed P.S. MaguadlyP.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.

1972

Date

- 11-11 Moved in CPS production rig and equipment.
- 11-13 Rigged up and killed well with Brine-Polymer mud. Installed BOPE. Pulled Packer and tubing.
- 11-14 Ran in hole with 6" bit and 7" scraper to 7733'. Ran in hole with 4-3/4" bit and 5" scraper. Found fill at 7957'. Circulated clean. Started out of hole.
- 11-15 Ran Dia-Log casing caliper log from 7740' to surface. Ran Schlumberger Thermal Neutron Decay time log from 7977' - 7700', Formation Density log from 7977' - 7700', Gamma Ray log 7977' - 7700', and Pipe Inspection log 7700' - surface. Caliper log showed internal corrosion in the 7" casing over two intervals approximately four feet long at 4000'; Dia-Log calculates approximately 59% of wall thickness remaining. A Schlumberger Pipe Inspection log was run from 7666' up to 500 feet. This log showed 90% of the original wall remaining in the area Dia-Log had calculated 59% remaining wall. The Schlumberger Pipe Inspection log also indicated thinning in the 7" casing at five other intervals: 7000'-7006'; 6914'-6922'; 6183'-6190'; 6009'-6046' and 5666'-5672'. All of these intervals have more than 90% of original wall remaining.
- 11-16 Ran Schlumberger cement bond log from 7733'-5550' and Compensated Neutron log from 7979'-7700'. Ran Baker bridge plug and set at 7710'. Pressure tested casing to 1000 psi for 20 minutes. Tore out BOPE and old tubing head.
- 11-17 Unlanded casing and removed old casing head; casing required 312,000# to unland. Welded extension on 7" casing for secondary packing. X-rayed weld on casing extension. Welded new casing head on surface pipe.

DIVISION OF OIL AND GAS
RECEIVED

FEB 23 1973

LONG BEACH, CALIFORNIA

1972

- 11-18 X-rayed weld on casing head. Landed 7" casing in new head. Pressure tested primary packing; held 4500 psi for 20 minutes. Pressure tested secondary packing; held 4500 psi for 15 minutes. Installed BOPF and pressure tested at 2000 psi for 15 minutes. Pressure tested casing from surface to 7710'; held 1780 psi for 15 minutes. Subsurface pressure at 3908' was 3516 psi. Pulled bridge plug and reset at 3908'. Pressure tested casing from surface to 3908'; held 2500 psi for 15 minutes. Subsurface pressure at 2000' was 3390 psi. Pulled bridge plug and reset at 2011'. Pressure tested casing from surface to 2011'; held 3200 psi for 15 minutes.
- 11-20 Ran and set 5" bridge plug at 7788'. Pressure tested lap, held 1500 psi for 20 minutes. Perforated with Schlumberger Hyperjet charge four holes per foot, 7880-7903'; two holes per foot, 7930'-7936' and 7940'-7978', per Schlumberger TDT log (correlated approximately 10 feet below depths of original well log). Depths of perforations corrected to original log were 7870-7893', 7920-7926' and 7930-7968', found 13' of fill in bottom of hole.
- 11-21 Cleaned out hole to 7977'. Ran and set Baker Model "D" packer at 7720' per original E-log. Started tubing in hole with Baker seal nipple, Camco safety valve, Otis sliding side door and four gas lift valves. Hydro tested tubing and pressure tested steel control line each to 5000 psi going in the hole.
- 11-22 Ran remaining tubing in hole. Landed donut with 12,000# on packer. Ran Baker locator sub and five seal nipples for Model "D" packer, Camco safety valve at 7714-7722', Camco Mandrel with 1/4" BK 975 psi valve at 7677-7685', Otis sliding side door at 7640-7644', Camco Mandrel with 1/4" BK 1000 psi valve at 6628-6636', Camco Mandrel with 1/4" BK 1025 psi valve at 5484-5491', Camco Mandrel with 1/4" BK 1050 psi valve at 4275-4283'. Tested 1/4" steel control line with 5000 psi and hydro tested 2-7/8" tubing with 5000 psi. Splices in 1/4" tubing were at 1167', 5468' and 5988'.
- 11-23 to 11-26 Shut-down four days - Thanksgiving.
- 11-27 Removed blow out preventer and installed new tree. Tested seals below donut to 3200 psi, tree above donut sleeve held 2900 psi. Tested control line through donut, held 5000 psi for 60 minutes. Lifted 170 barrels of fluid out of hole with nitrogen. Bled off nitrogen pressure in tubing and casing to zero psi. Released rig. Awaiting pipeline hook-up.

DIVISION OF OIL AND GAS
RECEIVED

FEB 23 1973

LONG BEACH, CALIFORNIA

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 172-1074

Mr. P. S. Magruder, Jr., Agent
PACIFIC LIGHTING SERVICE CO.
P.O. Box 54790, Terminal Annex
Los Angeles, CA 90054

Inglewood, Calif.
Sept. 19, 1972

DEAR SIR:

Your proposal to alter casing and convert to gas storage Well No. "SFZU" P-36 (037-00723),
Section 27, T. 3N, R. 16W, S.B. B. & M., Aliso Canyon Field, Los Angeles County,
dated 9/8/72, received 9/13/72, has been examined in conjunction with records filed in this office.

NOTE: 5" ld 7733'-7977'; perfs. 7859'-7977'.

THE PROPOSAL IS APPROVED PROVIDED blowout prevention equipment with a minimum 3000 psi working pressure shall be installed and maintained in operating condition during all stages of perforating.

ADS:dr

cc Company

Blanket Bond

dr

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

By *W. L. Ingram*, Deputy

DIVISION OF OIL AND GAS

SEP 13 1972

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. September 8, 1972

DIVISION OF OIL AND GAS

Inglewood, Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of deepening, redrilling, plugging or altering casing at Well No. "SFZU" P-36 (Porter 36)
(Cross out unnecessary words)

Sec. 27, T. 3N, R. 16W, SB B. & M.

Aliso Canyon Field, Los Angeles County.

The present condition of the well is as follows:

1. Total depth. 7980'

2. Complete casing record.

13-3/8" 54.5# C517
7" 23,26, 29# C7850
WSO shoe 7850'
244' 5" 18# C7977, Top Liner Hanger 7733'
Jet Perforated 4 holes per foot 7910' to 7970'

3. Last produced. March 1972 3 Bbls. 32+ 0.0%
(Date) (Net Oil) (Gravity) (Cut)

The proposed work is as follows:

Jet Perforate 4 - 1/2" holes, per foot 7868' to 7910' and Re-Perforate 2 - 1/2" holes per foot 7910' to 7970' in gas productive intervals as required to convert well to a gas storage well.

MAP	MAP BOOK	CARDS	SEAL	FORMS	
		ARG	B	114	121
		ARG		ARG	ARG

PACIFIC LIGHTING SERVICE COMPANY
(Name of Operator)

By P.B. Maguire Jr.

DIVISION OF OIL AND GAS

History of Oil or Gas Well

JUL 17 1970

OPERATOR GETTY OIL COMPANY FIELD ALISO CANYON

Well No. SFZU P-36, Sec. 27, T. 3N, R. 16W, S.B. B. & M.

Date July 16, 1970 Signed Carl G Nelson

P.O. Box 811, Ventura, Calif. 643-2154 Title Agent
(Address) (Telephone Number) (President, Secretary or Agent)

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

HISTORY

4/22/70 Atlantic, contractor, rigging up to recompleate the well.

4/23 Finished rigging up. Circulated and conditioned salt water. Prep. to install B.O.P. equipment.

4/24 Removed tree. Installed and tested B.O.P.E. to 2000 psi. Witnessed and approved by D.O.G. Pulled and laid down tubing. Picking up drill pipe.

4/25-27 Picked up 4 1/8" bit, 5" scraper and 200' of 2 3/8" tubing. Measured and picked up 2 7/8" drill pipe. Bit stopped at 7940' on fill. Made up kelly. Could not circulate. Pulled out of hole wet. Bit was plugged with scale. Unplugged bit and scraper. Started back in hole. While running in hole dropped 54 stands of 2 7/8" drill pipe. Ran in hole with socket and bumper sub. Latched on to and pulled fish. Laid down 7 joints of crooked tubing. Ran back in with bit, scraper and 200' of 2" tubing. Cleaned out to 7978' (bottom). Circulated hole clean. Pulled out. Made up pushout washer and ran in hole. Pumped in 25 barrels oil. Tool plugged. Broke knock-out plug and backscuttled oil. Pulled, repaired and reran washer. Equalized 25 barrels oil. Washed perforations as programmed. All perforations washed freely. Backscuttled oil. Circulated hole free of gas. Pulling out with washer.

4/28 Finished pulling out with washer. Made up spear, cutter and jars. Ran in hole. Hooked into liner. Jars would not work. Pulled out. Ran exchange jars. Hooked into liner. Jarred from 9 P.M. to 5 A.M. No success. Made cut at 7839'. Pulled up to release cutter. Spear would not go back into liner. Coming out of hole. Wt. 63#/cu.ft.; vis. 44.

4/29 Pulled out with cutter, spear, bumper sub and jars. Made up new spear. Ran in, latched onto liner hanger. Pulled out. Recovered 14' of liner including hanger. Ran 5 7/8" pilot mill. Conditioned salt water. Milling on liner at 7849'. Salt water wt. 64#/cu.ft.; vis. 45.

4/30 Milled liner to 7872'. Pulled mill. Ran in with 6" pilot mill. Mill stopped at 7756' in 7". Could not rotate or go through tight spot. Pulled out of hole. Prep. to run 5 7/8" mill. Salt water wt. 65#/cu.ft.; vis. 49.

5/1 Pulled out of hole. Ran 5 7/8" AZ pilot mill. Milled from 7872' to 7930'. Milling. Salt water wt. 66#/cu.ft.; vis. 30.

- 5/2-4/70 Milled 5" liner from 7930' to 7946'. Pulled out. Reran mill #1. Reamed from 7916-7946' going in. Milled liner to 7979' (bottom). Pulled out. Ran 6" bit. Reamed to bottom and circulated hole clean. Pulled out. Ran 7 5/8" hole opener. Opened hole from 7850' to 7979'. Circulated hole clean. Pulled out. Ran 244' of 5" 18# Hydril SFJ Ruffcoated liner as programmed. Hung liner at 7977'. T.L.H. at 7733'. Cemented with 60 cu.ft. slurry consisting of 23 sax Class G cement, 23 sax Pozmix and 1 sack of gel. Preceded with mud flush. Bumped plug with 217 cu.ft. salt water. C.I.P. 7:30 P.M. Ran 6" bit and scraper to top of liner hanger, found no cement above liner hanger. Pressured lap to 1000 psi, held O.K. Pulling out. Salt water wt. 66#/cu.ft.; vis. 60.
- 5/5 Finished pulling out. Ran 4 1/8" bit and 5" scraper. Ran in, tagged cement at 7920' (11' above float collar). Drilled out float collar and cement to 7972' (5' above shoe). Circulated hole clean. Pressured casing to 1000 psi., held O.K. Pulled out. Ran casing tester with 1400' of water cushion. Set packer at 7680'. Prep. to test lap.
- 5/6 Opened tester at 6:21 A.M. to test lap. Had light blow for one minute, dead for remainder of one hour test. Pulled tester loose at 7:21 A.M. Pulled out, recovered 15' of hole fluid. Lap test good. Ran Neutron-Correlation and Cement Bond logs. Installed lubricator. J.P'd 4 holes at 7907'. Made up casing tester and ran in hole. Set packer at 7864' with tail to 7874'. Had 1800' water cushion. Opened tester at 11:00 P.M. Had very light blow for one minute, dead remainder of one hour test. Pulled tester loose at midnight. Pulled out of hole, recovered 5' of hole fluid. Segregation at 7907' good. J.P'd 4 h/ft 7970-7910'.
- 5/7 Ran in with drill pipe. Circulated bottoms up. Pulled out of hole, laying down drill pipe. Picked up and ran 2 7/8" tubing with valves and packer. Prep. to displace treated salt water with field salt water and set packer.
- 5/8 Displaced treated salt water with lease salt water. Set packer with 12,000# at 7692'. Removed B.O.P.E. Installed tree. Released the rig at 4 P.M. (5-7-70).
- 5/11 Installed gas injection line to well. Unloading well manually. Attempted to set operating valve in MM mandrel at 7625', could not get valve to set in pocket. Prep. to unload well down to operating valve mandrel and attempt to blow away debris.
- 5/12 Installed meter run and intermitter. Injecting gas into the well.
- 5/13 Unloading with 850# on casing.
- 5/14 Blowing around with 600# on casing and 300# on tubing. No production.
- 5/19 Installed R-20 valve in MM at 7655'. Well on gas injection.
- 5/20 F.O.C. 5 BFPD; 5 BOPD.
- 5/21 F.O.C. 4 BFPD; 25%; 3 BOPD.
- 5/23 F.O.C. 5 BFPD; 20%; 4 BOPD.
- 5/24 F.O.C. 4 BFPD; 25%; 3 BOPD.
- 5/26 F.O.C. 18 BFPD; 38%; 11 BOPD.

FINAL REPORT

Casing Record:

13 3/8" 54.5# c 517'
7" 23, 26 & 29# c 7850'
WSO shoe 7850'*
244' -5" 18# (Ruffcoat) c 7977'
WSO (Co) Lap; Seg. 4 h's 7907'
J.P. 2 h/ft 7910-7970'
T.L.H. 7733'

*Witnessed and approved by D.O.G.

Tubing Record:

7642' - 2 7/8", 8 RT, Rg. 2, EU Tbg. (248 Jts) incl. 6 valves
4' - 2 7/8", 8 RT, pup jt.
9' - 2 7/8" MM mandrel w/R-20, 7/16" P, TBC at 60°F
31' - 2 7/8", 8 RT, Rg. 2, EU Tbg.
6' - 2 7/8" x 7" 28-32# Guiberson RMC-1 D.G. packer
1' - 2 7/8" B.L. 8 RT pump shoe
4' - 2 7/8", 8 RT, pup jt.
1' - 2 7/8" standing valve nipple, guide collar on bottom
7698' - Overall, K.B. meas.

<u>Valve</u>	<u>Pressure</u>	<u>Depth</u>
1-Camco J-20, 5/16" P	1000#	1707-1710'
2	990#	3034-3037'
3	980#	4298-4301'
4	970#	5437-5440'
5	960#	6484-6487'
6	950#	7217-7221'
7-MM as above	965#	7646-7655'
2 7/8" x 7" 28-32# Guiberson RMC-1, D.G. Pkr.		7686-7692'

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 170-375

Mr. C. G. Nelson, Agent
GETTY OIL COMPANY, OPERATOR
P. O. Box 811
Ventura, California 93001

Inglewood, Calif.
April 28, 1970

DEAR SIR: (037-00723)

Operations at well No. "SFZU" P-36, Sec. 27, T. 3 N, R. 16 W, S.B.B & M.
Aliso Canyon Field, in Los Angeles County, were witnessed
on April 23, 1970. Mr. L. Olson, Engineer, representative of the supervisor was present
from 10:30 a.m. to 11:00 a.m.. There were also present R. Jones, D. Supv. & H. Price,
Drilling Foreman

Present condition of well: 13-3/8" cem. 517'; 7" cem. 7850' WSO; 5" ld. 7827'-7978',
perf. 7859'-7978'. TD7980'.

7977'

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

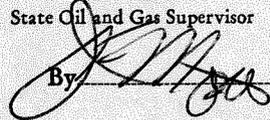
Mr. ----- reported:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

LO:nw

cc C. G. Nelson

F. E. KASLINE
State Oil and Gas Supervisor

By 

Deputy

6/5

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

REPORT ON PROPOSED OPERATIONS No. P 170-333

Mr. C. G. Nelson, Agent
GETTY OIL COMPANY, OPERATOR
P. O. Box 811
Ventura, California 93001

Inglewood, Calif.
April 7, 1970

DEAR SIR:

Your proposal to alter casing Well No. (037-00723) "SFZU" P-36,
Section 27, T. 3 N, R. 16 W, S.B.B. & M., Aliso Canyon Field, Los Angeles County,
dated 4/3/70, received 4/6/70, has been examined in conjunction with records filed in this office.

**THE PROPOSAL IS APPROVED PROVIDED THAT THIS DIVISION SHALL BE NOTIFIED TO INSPECT
the installed blowout prevention equipment.**

MM:nw

cc C. G. Nelson

Blanket Bond

w/s

Review in 7-20-70

F. E. KASLINE, State Oil and Gas Supervisor



Deputy

DIVISION OF OIL AND GAS

APR 6 1970

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

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

VENTURA, CALIFORNIA

Ventura,

Calif.

April 3,

1970

DIVISION OF OIL AND GAS

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or~~ altering casing at Well No. SFZU P-36

(Cross out unnecessary words)

Sec. 27

T. 3N

R. 16W

S.B. B. & M.

Aliso Canyon

Field,

Los Angeles

County.

The present condition of the well is as follows:

1. Total depth. 7980'

2. Complete casing record, including plugs:

13 3/8" 54.5# c 517'

7" 23, 26 & 29# c 7850'; WSO out shoe*

151'- 5" 17.93# L 7978'

Pf: 7859-7978' (2" x 80 M slots x 12 R x 6" C)

T.L.H. 7827'

*Witnessed and approved by D.O.G.

3. ~~Last produced~~ Presently Flowing 20 BOPD; 2 BWPD; 800 MCFPD;

(Date)

(Oil, B/D)

(Water, B/D)

(Gas Mcf/D)

The proposed work is as follows:

REPLACE OIL STRING

1. Recover liner.

2. Open hole to 7" from 7" shoe at 7850' to T.D.

3. Cement 180' of 5" 18# 'Ruff-Coated' liner at 7978'. Test lap, squeeze and retest as necessary.

4. Establish Seg. on 4 holes at 7907'.

5. J.P. 4 h/ft 7910-7970'.

6. Return well to production.

Alter casing

MAP	MAP BOOK	CARDS	BOND	FORMS	
				114	121
			<i>Blanket</i>	<i>no</i>	<i>no</i>

*BOPE
casing made*

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

643-2154

(Telephone No.)

GETTY OIL COMPANY

(Name of Operator)

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

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

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

REPORT OF PROPERTY AND WELL TRANSFER

Field or County **Los Angeles** District **1**
Former Owner: **Getty Oil Company** Date **Sept. 26, 1968**

Description of Property **Sec. 27, 28, 34, T. 3 N., R. 16 W., S. B. B. & M.**

Sec. 27:	Sec. 28:
*"Fernando Fee" 32 (037-00686)	"Porter" 40 (037-00727)
"Porter" 12 (037-00701)	" " 41 (037-00728)
" " 30 (037-00717)	" " 42 (037-00729)
" " 31 (037-00718)	" " 43 (037-00730)
" " 32 (037-00719)	" " 44 (037-00731)
List of Wells	" " 46 (037-00733)
"Porter" 36 (037-00723)	" " 47 (037-00734)
" " 37 (037-00724)	"Porter-Sesnon" 42 (037-00753)
" " 45 (037-00732)	Sec. 34:
Sec. 28:	"Fernando Fee" 31 (037-00685)
"Porter" 4 (037-00699)	" " 33 (037-00687)
" " 25 (037-00712)	" " 34 (037-00688)
" " 26 (037-00713)	" " 35 (037-00689)
" " 34 (037-00721)	"Mission-Adrian Fee" 3 (037-00693)
" " 35 (037-00722)	" " 4 (037-00694)
" " 38 (037-00725)	" " 5 (037-00695)
" " 39 (037-00726)	

Date of Transfer **August 1, 1968**
New Owner: **GETTY OIL COMPANY, OPERATOR**
Address: **3450 Wilshire Boulevard, Room 720
Los Angeles, California 90005**
Telephone No. **381-7151**

Type of Organization **Corporation**
Reported by: **C. G. Nelson for Getty Oil Co. & Getty Oil Co., Operator (letter of**
Confirmed by: **8-7-68) ***
New Operator New Status **PA**, Old Operator New Status **PA**
Request Designation of Agent **No**

Remarks:

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

Wm. C. Bailey
Deputy Supervisor

	INITIALS	DATE	
Form 121			LEGEND PA—Producing Active NPA—Non Potential Active PI—Potential Inactive NPI—Non Potential Inactive Ab—Abandoned or No More Wells
New Well Cards			
Well Records			
Electric Logs			
Production Reports			
Map and Book			
Form 148			
Notice to be cancelled			
Bond status			

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 Désignation:

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

DIVISION OF OIL AND GAS

RECEIVED

FEB 7 - 1947

WELL SUMMARY REPORT

p. 36

Operator TIDE WATER ASSOCIATED OIL COMPANY Field ALISO CANYON LOS ANGELES, CALIFORNIA

Well No. PORTER #36 Sec. 27, T. 3 N, R. 16 W, S. 2 B. & M.

Location 2828.27' S 1837.29' W from Stat. 44 Elevation of derrick floor above sea level 1931.52 feet.
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 February 3, 1947

Signed R. S. Carl

H. E. Foxen
(Engineer or Geologist)

R. S. Carl
(Superintendent)

Title Agent
(President, Secretary or Agent)

Commenced drilling 9/4/46 Completed drilling 11/1/46 Drilling tools Rotary

Total depth 7980' Plugged depth _____ GEOLOGICAL MARKERS _____ DEPTH _____

Junk _____

Commenced producing 11/13/46 (date) Flowing per lift pump (cross out unnecessary words)

Initial production
(16 hours)
Production after 30 days

Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
44	21.7	3.0	-	300#	525#
128	21.7	3.0	15	75#	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"	517	0	48.5	New	Seamless	J-55	17 1/2"	350	-
7"	7850'	0	23.26, 29#	"	"	J-55	11"	500	-
5"	7978'	7826	17.9	"	"	N-80	6"		

PERFORATIONS

Size of Casing	From	To	Size of Perforations	Number of Rows	Distance Between Centers	Method of Perforations
5"	7826 ft.	7978 ft.	80 Mesh	12	6"	Prolific slots (undercut)
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				

MAP	MAP BOOK	CARDS	BOND	FORMS
				114 121

Electrical Log Depths 500' - 7958' (Attach Copy of Log)

SUBMIT IN DUPLICATE
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
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History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON LOS ANGELES, CALIFORNIA

Well No. FORTER #36, Sec. 27, T. 3 N, R. 16 W, S. D. B. & M.

Signed R. S. Carl
Title Agent
(President, Secretary or Agent)

Date January 31, 1947

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

1946

LOCATION: 2628.27' South and 1837.29' West
from Station #84.

ELEVATION: 1931.52'

4/18-6/13		Graded road and rig site. Dug cellar. Built forms. Poured concrete mat. Erected derrick. Reinforced derrick.
6/14-8/28		Idle.
8/28-9/3		Moved in equipment and rigged up rotary.
9/4	40'	Spudded 12 $\frac{1}{2}$ " hole at 9:00 PM and drilled to 40'.
9/5	148'	Drilled 12 $\frac{1}{2}$ " hole from 40' to 148'. Opened 12 $\frac{1}{2}$ " hole to 17 $\frac{1}{2}$ "
9/6-8	519'	Drilled 12 $\frac{1}{2}$ " hole from 148' to 519'. Opened 12 $\frac{1}{2}$ " hole to 17 $\frac{1}{2}$ " from 60' to 390'.
9/9		Opened 12 $\frac{1}{2}$ " hole to 17 $\frac{1}{2}$ " from 390' to 519'. Ran and cemented 13-3/8" 48.5# Youngstown J-55 R&C casing at 517' with 350 sacks Colton construction cement in bulk. All treated with quick setting chemical. Lost circulation approximately 20 cu.ft. before plugs bumped. Pressure increased from 150# to 350# when plugs bumped. Had no cement returns to surface. Time 9:05 PM. Pumped in 50 sacks cement around outside of casing.
9/10	579'	Drilled 12 $\frac{1}{2}$ " hole from 519' to 579'. Installed cellar connections.
9/11-18	2089'	Drilled 12 $\frac{1}{2}$ " hole from 579' to 2089'. Changed drill pipe.
9/18-10/16	7532'	Drilled 11" hole from 2089' to 7532'. Stuck drill pipe at 7488' while going in hole.

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History of Oil or Gas Well

OPERATOR TIDE WATER & ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. PORTER #36, Sec. 27, T. 3 N, R. 16 W, S. B. B. & M.

Signed R. S. Carl
 Title Agent
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Date January 31, 1947

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Date	Well No.	Description
1946		
10/17		Spotted 56 bbls of oil and worked stuck drill pipe loose.
10/18	7598'	Reamed 10-5/8" hole from 7243' to 7288'. Drilled 11" hole from 7568' to 7598'.
10/19	7648'	Reamed 10-5/8" hole from 7243' to 7288'. Drilled 11" hole from 7598' to 7648'.
10/20	7723	Reamed from 7548' to 7618'. Drilled 11" hole from 7648' to 7723'.
10/21	7750'	Drilled 11" hole from 7723' to 7750'. Ran Schlumberger electric log at 7750'.
10/22-23	7850'	Drilled 11" hole from 7750' to 7850'. Ran Schlumberger electric log at 7850'.
10/24		Conditioned mud. Ran 7" casing.
10/25		Ran and cemented 7", 23#, 26#, 29# Youngstown Speedtite casing at 7850' with 500 sacks of Colton High Temperature cement. Detail of casing as follows: 0' - 3724' is 23# J-55 3724' - 5406' is 23# N-80 5406' - 7037' is 26# N-80 7037' - 7850' is 29# N-80
10/26		Displaced cement with 1760 cu.ft. of mud. Did not bump plugs. Final pressure 700#. Time 10:30 AM. International Cementers. Standing cemented. Laid down drill pipe and installed cellar connections.
10/27		Located top of cement at 7757'. Cleaned out to 7850' and drilled 5' for W.S.O. test.
10/28		Ran Johnston tester on 2-7/8" drill pipe with 940' water cushion and set packer at 7835'. Opened 3/8" bean at 7:25 AM. Had fair blow decreasing to slight blow then dead in seven minutes. After being dead 38 minutes had fair blow for 10 minutes then dead for balance of one hour and a half test. Pulled tester and recovered 1920' of new fluid (7.4 bbls). New fluid was gas cut drilling mud grading to muddy water in bottom. Maximum salinity of four samples 48 G/G. Test witnessed but W.S.O. not approved by D.O.G. engineer. Cleaned out to 7855'. Made up Baker retainer to re-cement 7" casing.

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DIVISION OF OIL AND GAS

History of Oil or Gas Well

LOS ANGELES, CALIFORNIA

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. PORTER #36, Sec. 27, T. 3 N, R. 16 W, S. 8, B. & M.

Signed R. A. Carl
 Title Agent
 (President, Secretary or Agent)

Date January 31, 1947

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Date

1946
 10/29

Ran Baker retrievable retainer on 2-7/8" drill pipe and set at 7820'. Applied pressure and formation began taking fluid at 4000# and decreased to 3000#. Mixed 20 sacks Colton High Temperature cement and while circulating cement to top of retainer pumps broke down on cement truck. Backscuttled cement. Time 2:30 AM. Repaired pumps and applied pressure to formation which took fluid at 3400#. Mixed 20 sacks Colton High Temperature cement and squeezed an estimated 12 sacks below retainer, when pumps again failed on cement truck. Final pressure 4100#. Backscuttled excess cement. Time 5:25 AM, International Cementers, Inc.

10/3
 10/31

7950'

Located top of cement at 7835' and cleaned out to 7855'. Drilled 6" hole from 7855' to 7950'. At 7855' ran Johnston tester with 940' water cushion and set packer at 7835'. Opened 3/8" bean at 6:05 AM. Had fair blow for two minutes then diminished blow for four minutes then dead for balance of one and half hour test. Pulled tester and recovered 227' (0.9 bbls.) drilling mud. Pressure bomb chart check details of test. W.S.O. test witnessed and approved by D.O.G.

11/1
 11/2

7980'

Ran Schlumberger electric log at 7958'. Drilled 6" hole from 7950' to 7980'. Ran Johnston tester and set packer at 7839' with tail pipe to 7859'. Opened 3/8" bean at 2:05 AM. Had fluid to surface at 4:00 AM. In 24 hours to 4:00 AM 11/3/. Well flowed 193 bbls gross fluid; 183 bbls approximate net oil; average cut 5.0%; maximum cut 13.9% emulsion.

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History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. PORTER #36, Sec. 27, T. 3 N, R. 16 W, S.B. S.B. B. & M.

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Date	Description
1946 11/3	Pulled Johnston tester loose at 9:15 AM after being open 31 hours and 10 minutes. Well flowed at 9 B/Hour rate; average cut 5.0%. Ran bit and found hole filled up from 7980' to 7858'. Cleaned out to 7980'.
11/4	Ran 151', 5", 17.9# N-80 Security flush joint liner including 119' 80 Mesh perforations and landed at 7978'. Top of liner hanger at 7826'. Perforations are 80 Mesh, 12 rows, 2" slots, 6" centers with 6° undercut. Ran 2-7/8", 6.5# J-55 upset tubing with bottom 187' 2", 4.7# and landed at 7926'.
11/5	Installed Xmas tree and circulated out mud with oil. Swabbed well to 1250'. Well flowed to pump for approximately one hour then died. Swabbed from 750' to 1200'.
11/6	Swabbed to 1200'. Well would not flow. Tore out rotary.
11/7	Tore rotary. Well shut in. Tubing pressure 450#; casing pressure 400#.
11/8	Well shut in. Tubing pressure 450#; casing 475#;
11/9	" " " " " 475# " 500#.
11/10	" " " " " 500# " 525#.
11/11	" " " " " 500# " 525#.
11/12	Opened well but after making small head died. Tubing pressure 550#. casing pressure 525#. Ran pressure bomb which stopped at approximately 7900'.
11/13	Opened well and well flowed. Flowed for 4 hours into mud tanks producing 135 bbls mud and water. Turned to production tanks at 2:00 PM. Well flowed by heads 46 bbls gross fluid; 44 bbls approximately net oil; average cut 0.8% water; 3.3% emulsion; 300# tubing pressure; 525# casing pressure; 32/64" been.

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History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. FORSTER #36, Sec. 27, T. 3 N, R. 16 W, S. B. B. & M.

Signed R. S. Carl
 Title Agent
 (President, Secretary or Agent)

Date January 31, 1947

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Date	Gross Fluid	Approximate Net Oil	Cut	Bean	Gravity	Tubing	Casing	GAS MCF	Hours On
<u>1946</u>									
11/14	72	70	3.0	32/64"	21.7	300#	525#	24	11
1/15	128	120	6.0	20/64"	"	275#	525#	42	24
11/16	15	14	6.0	20/64"	"	375#	525#	16	13
11/17	108	100	6.2	28/64"	"	250#	525#	39	24
11/18	144	141	1.7	28/64"	"	50#	525#	92	24
11/19	11	10	1.0	28/64"	"	50#	525#	4	15
11/20	123	121	1.5	28/64"	22.1	100#	525#	58	17
11/21	16	15	2.0	28/64"	"	100#	300#	4	10
11/22	164	162	1.0	32/64"	"	100#	300#	65	24
11/23	10	9	1.0	32/64"	"	50#	625#	8	24
11/24	170	168	1.0	32/64"	"	100#	425#	71	18
11/25	15	14	2.5	32/64"	"	50#	700#	12	24
11/26	Shut in.								
11/27	140	134	4.0	16/64"	"	75#	75#	56	16
11/28-29	Shut in.								
11/30	Idle								
12/1	Idle.								
12/2-3	Spooled sand line.								
12/4	Bailed and circulated. Some mud and water out. Bailor and pressure bomb did not go to bottom.								
12/5	Bailed and circulated. No mud or water out.								

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD MISO CANYON

Well No. PORTER 36, Sec. 27, T. 3N, R. 16 W, S. B. B. & M.

Signed R. J. Carl
 Title Agent
 (President, Secretary or Agent)

Date January 31, 1947

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Date	Operations
12/6	Ran bomb and found mud in tubing. Circulated some mud and sand out.
12/7-8	Idle. Well flowed part of time.
12/9	Ran bomb to 7928'. Bailed from 7928'. Some mud and water out.
12/10-11	Built lubricator and circulating tool.
12/12	Ran in 95' of 1" circulating tool packed off in 2" tubing with swab rubbers. Cleaned out from 7925' to 7972'. Return mostly sand with some mud and water.
12/13	Cleaned out to 7975' by circulating thru 1" tool. Considerably mud and sand returns with oil returning much lighter than previously.
12/14-15	Idle.
12/16	Circulated thru 1" tool. Hole clean.
12/17	Changed circulating oil. Well produced 177 bbls net oil; 3.0% cut.
12/18	Well produced 218 bbls net oil; 3.8% cut.
12/19	Well produced 114 bbls net oil; 4.0% cut.
12/20	Spooled sand line. Well produced 160 bbls net oil; 3.2% cut.
12/21-22	Idle.
12/23	Spooled sand line.
12/24	Well produced 85 bbls net oil; 3.5% cut.
12/25	Well flowed 21 bbls net oil; 3.0% cut.
12/26	Rigged up to swab.
12/27-28	Fished for pressure bomb.
12/29	Idle.
12/30	Recovered fish.
12/31	Well began flowing. Flowed approximately 136 bbls net oil; in 18 hours.

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DIVISION OF OIL AND GAS

LOS ANGELES, CALIFORNIA

History of Oil or Gas Well

OPERATOR THE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. PORTER #36, Sec. 27, 3 N, 16 W, S.B. B. & M.

Signed R. J. Carl

Date January 31, 1947 Title Agent
(President, Secretary or Agent)

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Date	Gross Fluid	Approximate Net Oil	Cut	Gravity	Bean	Tubing Pressure	Casing Pressure	Gas MCF	Hours On
1947 1/1	122	117	4.0	21.7	24/64"	-	300#	-	24
1/2	97	94	3.0	21.7	24/64"	50#	300#	-	24
1/3	-	-	-	-	-	-	-	-	-
1/4	238	226	5.0	21.7	24/64"	50#	450#	-	24
1/5	196	186	5.0	21.7	24/64"	-	700#	-	24
1/6	159	151	5.0	21.7	24/64"	50#	550#	-	24
1/7	-	-	-	-	-	-	-	-	-
1/8	138	132	4.0	21.7	24/64"	-	800#	28	24
1/9	108	105	3.0	21.7	29/64"	-	750#	28	24
1/10	41	39	4.0	21.7	24/64"	-	950#	28	24
1/11	130	125	4.0	21.7	24/64"	-	850#	28	24
1/12	22	21	3.8	21.7	18/64"	50	1150#	28	24
1/13	38	36	4.0	21.7	18/64"	50#	1160#	28	24
1/14	155	149	4.0	21.7	18/64"	-	875#	7	24
1/15	61	59	4.0	21.7	18/64"	150#	1150#	12	24
1/16	111	107	4.0	21.7	18/64"	100#	1100#	22	24
1/17	13	12	4.0	21.7	18/64"	-	1325#	2	24
1/18	66	63	4.0	21.7	18/64"	-	1325#	13	24
1/19	83	80	4.0	21.7	18/64"	-	-	16	24
1/20	55	53	3.0	21.7	18/64"	-	1350#	11	24
1/21	58	56	3.0	21.7	24/64"	-	1360#	11	24
1/22	Shut in	-	-	-	-	-	-	-	-
1/23	136	132	3.0	21.7	27/64"	75#	1050#	27	24
1/24	11	11	3.0	21.7	24/64"	50#	1300#	2	24
1/25	135	131	3.0	21.7	32/64"	50#	1125#	27	24
1/26	Shut in	-	-	-	-	-	-	-	-
1/27	132	128	3.0	21.7	32/64"	75#	1100#	26	24
1/28	13	12	3.0	21.7	32/64"	75#	1300#	15	24

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DIVISION OF OIL AND GAS

History of Oil or Gas Well

LOS ANGELES, CALIFORNIA

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. PORTER 236, Sec. 27, T. 3 N, R. 16 W, S. B. B. & M.

Signed R. J. Carl

Date January 31, 1947 Title Agent
 (President, Secretary or Agent)

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Date

CASING RECORD

151' - 13-3/8", 54.5# C 517'
 7", 23#, 26#, 29# C 7850'
 5", 17.93# L 7978' inc. 119' 80 Mesh perfs Top
 7826'

TUBING RECORD

2-7/8" inc. 187' - 2-3/8" H 7929'

MAP	MAP BOOK	CARDS	BOND	FORMS	
				114	121

JP

DIVISION OF OIL AND GAS

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

Operator SIDE WATER ASSOCIATED OIL COMPANY Field ALISO CANYON

Well No. PORT A 36 Sec. 27, T. 3 N, R. 16 W, S. 4 B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
0'	40'		Drilled		Surface sand and clay
40'	64'		"		Sand
64'	104'		"		Sand and shale
104'	186'		"		Sand
186'	264'		"		Sand and shale
264'	456'		"		Sand
456'	519'		"		Sand and shale
519'	649'		"		Sand
649'	1480'		"		Sand and shale
1480'	1532'		"		Shale
1532'	1893'		"		Sand and shale
1893'	2053'		"		Sand
2053'	2098'		"		Sand and shale
2098'	2197'		"		Sand
2197'	2270'		"		Sandy shale
2270'	2338'		"		Sand
2338'	3919'		"		Sand and shale
3919'	3978'		"		Sandy shale
3978'	4182'		"		Sand and shale
4182'	4192'		"		Hard shale and sand
4192'	4196'		"		Hard sandy shale
4196'	4436'		"		Sand and shale
4436'	4450'		"		Hard sandy shale
4450'	4562'		"		Sand and shale
4562'	4613'		"		Hard shale
4613'	5095'		"		Sand and shale
5095'	5235'		"		Sandy shale
5235'	5500'		"		Sand and shale
5500'	5547'		"		Hard sandy shale
5547'	5646'		"		Sandy shale
5646'	6141'		"		Sand and shale
6141'	6246'		"		Sandy shale
6246'	6883'		"		Sand and shale
6883'	6958'		"		Shale and sandy shale
6958'	6993'		"		Sand and shale streaks hard shale
6993'	7116'		"		Sand and shale
7116'	7183'		"		Shale

MAP	MAP BOOK	CARDS	BOND	FORMS	
				114	121

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LOS ANGELES, CALIFORNIA

LOG AND CORE RECORD OF OIL OR GAS WELL

Operator TIDE WATER ASSOCIATED OIL COMPANY Field ALISO CANYON

Well No. PORTER 36 Sec. 27, T. 3 N, R. 16 W, S. B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
7183'	7285'		Drilled		Sand and shale
7285'	7424'		"		Shale
7424'	7464'		"		Hard shale
7464'	7522'		"		Shale
7522'	7532'		"		Shale and sand
7532'	7543'		"		Sand
7543'	7568'		"		Hard sandy shale
7568'	7750'		"		Shale
7750'	7778'		"		Hard sandy shale
7778'	7788'		"		Shale
7788'	7826'		"		Shale and sandy shale
7826'	7855'		"		Hard shale
7855'	7880'		"		Sand streaks of shale
7880'	7980'		"		Sand

DIVISION OF OIL AND GAS

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

No. T. 1-45983

Los Angeles 14, Calif. November 7, 1946

Mr. R. S. Curl

Los Nietos, Calif.

Agent for TIDE WATER ASSOCIATED OIL COMPANY

DEAR SIR:

Your well No. "Porter" 36, Sec. 27, T. 3 N., R. 16 W., S. B. B. & M. Aliso Canyon Field, in Los Angeles County, was tested for water shut-off on October 31, 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

C. Clark, Drilling Foreman

John Bowyer, Engineer

Shut-off data: 7 in. 23, 26 & 29 lb. casing was cemented at 7850 ft. on October 29, 1946 in 11" hole with 20 sacks of cement of which 3 sacks was left in casing. Casing record of well: 13-3/8" cas. 517'; 7" cas. 7850', W.S.O. T.D. 7855'

Reported total depth 7855 ft. Bridged with cement from ~~xxx~~ ft. to ~~xxx~~ ft. Cleaned out to 7855 ft. for this test. A pressure of ~~xxx~~ lb. was applied to the inside of casing for ~~xxx~~ min. without loss after cleaning out to ~~xxx~~ ft. A Johnston tester was run into the hole on 2-7/8 in. drill pipe, with 940 ft. of water cushion, and packer set at 7835 ft. with tailpiece to 7852 ft. Tester valve, with 3/8" bean, was opened at 6:05 a.m. and remained open for 1 hr. and 35 min. During this interval there was a fair blow for 2 minutes, a light heading blow for 4 minutes, dead for the balance of the test.

THE INSPECTOR VISITED THE WELL AT 11:30 A.M. ON OCTOBER 28, 1946, AND MR. BOWYER REPORTED THE FOLLOWING:

1. A 12-1/4" rotary hole was drilled from 517' to 2053'; an 11" rotary hole from 2053' to 7850'; a 6" rotary hole from 7850' to 7855'.
2. Electrical core readings showed the estimated top of the Sesnon Zone at 7862'.
3. On October 25, 1946, 7", 23, 26, and 29 lb. casing was cemented at 7850' with 500 sacks of cement, of which 16 sacks was left in the casing.
4. Cement was drilled out of the 7" casing from 7757' to 7850', equivalent to 16 sacks, and the casing and hole was cleaned out to 7855'.
5. A pressure of 1000 lb. was applied to the inside of casing for 15 minutes without loss after cleaning out to 7810'.
6. A Johnston tester was run in the hole on 2-7/8" drill pipe with 940' of water cushion, and packer set at 7837'.
7. The tester valve was opened at 7:25 a.m. and remained open for 1 hour and 35 minutes. During this interval there was a fair to light blow for 7 minutes, dead for 38 minutes, and a fair blow diminishing to faint heads for 10 minutes, dead for the balance of the test.

THE INSPECTOR NOTED THE FOLLOWING:

1. When the drill pipe was removed, 1920' of medium gas-cut drilling fluid grading to muddy water was found in the drill pipe above the tester, equivalent to 10 bbl.
2. Water filtered from fluid samples taken from 960', 510', 50' and 0' above bottom of drill pipe tested 21, 48, 48 and 35 grains of salt per gallon, respectively.
3. The recording pressure bomb chart showed that the tester valve was open for the duration of the test.

The operator decided to recement.

R. D. BUSH, State Oil and Gas Supervisor

By (CONTINUED ON PAGE 2), Deputy

DIVISION OF OIL AND GAS

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

No. T 1-45983
Page 2

TIDE WATER ASSOCIATED OIL COMPANY

Well No. "Porter" 36, Sec. 27, T. 3 N., R. 16 W., S. B. B. & M.

THE INSPECTOR ARRIVED AT THE WELL AT 10:00 A.M. ON OCTOBER 31, 1946, AND MR. BOYER REPORTED THE FOLLOWING:

1. On October 29, 1946, a cement retainer was set in the 7" casing at 7820' and the 7" shoe at 7850' was recemented with 20 sacks of cement, of which an estimated 12 sacks was squeezed away at a final pressure of 4100 lb.
2. Cement was drilled out of the 7" casing from 7835' to 7850', equivalent to 3 sacks, and the casing and hole was cleaned out to 7855'.
3. A Johnston tester was run as noted above.

THE INSPECTOR NOTED THE FOLLOWING:

1. When the drill pipe was removed, 227' of medium drilling fluid was found in the drill pipe above the tester, equivalent to 1.2 bbl.
2. The fluid sample taken from the bottom of the drill pipe tasted fresh.
3. The recording pressure bomb chart showed that the tester valve was open for the duration of the test.

The test was completed at 11:00 a.m.

THE SHUT-OFF IS APPROVED.

cc - T. L. Wark
Jos. Jensen
Wm. E. Perkes (2)

PB:ES

R. D. BUSH
State Oil and Gas Supervisor

By E. H. Meusser Deputy

w/B

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 1-45881

Mr. R. S. Curl Los Angeles 14, Calif. October 7, 1946
Los Nietos, Calif.
Agent for TIDE WATER ASSOCIATED OIL COMPANY

DEAR SIR:

Operations at your well No. "Porter" 36 Sec. 27, T. 3 N., R. 16 W., S. B. B. & M.,
Aliso Canyon Field, in Los Angeles County, were witnessed by
John M. Carls, Inspector, representative of the supervisor,
on September 30, 1946. There was also present G. M. Reid, Driller;
D. A. Zacker, Derrickman.
Casing Record 13-3/8" cem. 517'; T. D. 4530'. Junk None

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

The inspector arrived at the well at 10:45 a.m. and Mr. Reid reported:

1. A 17-1/4" rotary hole was drilled from the surface to 517'.
2. On September 9, 1946, 13-3/8", 54.5 lb. casing was cemented at 517' with 350 sacks of cement.
3. A 12-1/4" rotary hole was drilled from 517' to 2053' and an 11" rotary hole, from 2053' to 4530'.

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

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

The inspection was completed at 11:00 a.m.

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

JMC:OH

cc- T. L. Wark
Jos. Jensen
Wm. E. Perkes (2)

R. D. BUSH
State Oil and Gas Supervisor

R/O
By E. H. Musser Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 1-42449

Los Angeles 14, Calif. September 5, 19 46

Mr. R. S. Curl

Los Nietos, Calif.

Agent for TIDE WATER ASSOCIATED OIL COMPANY

DEAR SIR:

Your proposal to drill Well No. "Porter" 36, Section 27, T. 3 N., R. 16 W., S.B. B. & M., Aliso Canyon Field, Los Angeles County, dated Aug. 30, 19 46, received Sept. 3, 19 46, 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 2828.27 feet S. and 1837.29 feet W. from Station #84. The elevation of the derrick floor above sea level is approx 1930 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 herein indicated:

Size of Casing	Weight	Grade and Type	Depth	Landed or Cemented
13-3/8"	54.5#	J-55 T&C	500'	Cemented
7"	23, 26#, 29#	J-55 N-80 Speedtite	7800'	Cemented
5"	17.93	N-80 inserted	8050'	Perf. lnr.

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 witness a test of the effectiveness of the 7" shut-off.
 - (b) To inspect the installed blowout prevention equipment before drilling below 1000'.

CLB:OH

cc- T. L. Wark
Jos. Jensen
Wm. E. Perkes (2)

R. D. BUSH

State Oil and Gas Supervisor

By E. H. Mussen Deputy

DIVISION OF OIL AND GAS

13

RECEIVED
SEP 3 1946
LOS ANGELES, CALIFORNIA

037-00723

Notice of Intention to Drill New Well

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

Los Nietos, Calif. August 30 19 46

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" #36, Sec. 27, T. 3N, P. 11W, B.

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

Lease consists of Porter lease

The well is 2828.27 feet ~~XXX~~ S., and 1837.29 feet ~~XXX~~ W. from Station #84
(Give location in distance from section corners or other corners of legal subdivision)

The elevation of the ~~ground~~ derrick floor above sea level is approx 1930 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#	J-55 T&C	500'	Cemented
7"	23, 26#, 29#	J-55 N-80 Speedtite	7800'	Cemented
5"	17.93	N-80 inserted	8050'	Perf. lnr.

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.

Address Los Nietos, Calif.

Tide Water Associated Oil Company

(Name of Operator)

Telephone number 420-43

By *R. S. Curl*
Agent

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

MAP	MAP BOOK	CARDS	BOND	FORMS	
				114	121
18A	9-3-46 P.W.B.	emb	Reliance 43486	emb	emb