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

No. T **216-0249**

REPORT ON OPERATIONS

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

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

Ventura, California
July 12, 2016

Your operations at well **"Standard Sesnon" 17**, A.P.I. No. **037-00769**, Sec. **28**, T. **03N**, R. **16W**, **SB** B.&M., **Aliso Canyon** field, in **Los Angeles** County, were witnessed on **7/11/2016**, by **Mark Davis**, a representative of the supervisor.

The operations were performed for the purpose of **determining casing integrity**.

DECISION:

APPROVED

MD/TKC

Kenneth A. Harris Jr.
State Oil and Gas Supervisor

By _____ for
Patricia A. Abel, *District Deputy*

State of California
Department of Conservation
Division of Oil, Gas, and Geothermal Resources

No. T 216-0249
16, 1

INTERNAL MECHANICAL INTEGRITY TEST (MIT)
(Standard Annulus Pressure Test-SAPT)

Operator: SO. CAL. GAS CO.				Well: STANDARD SESNON " 17	
Sec. 28	T. 3N	R. 16W	B.&M. SB	API No.: 037-00769	Field: ALISO CANYON
County: LOS ANGELES				Witnessed/Reviewed on: 7-11-16	

MARK DAUN, representative of the supervisor, was present from 12:30 to 14:00

Also present were: DONNIE BALDWIN - SO. CAL. GAS CO.

Casing record of the well:

The Internal MIT was performed for the purpose of pressure testing the 5" casing above 8600' (2) (prior to injecting fluid) STDT 1041 PSI

PACKER @ 8600' END 1100 PSI FOR 1 HR.

☒ The Internal MIT is approved since it indicates that the 5" casing has mechanical integrity above 8600' at this time..

☐ The Internal MIT is not approved due to the following reasons: (specify)

INDICATE WHERE PACKER WAS SET AND HOW LONG PRESSURE WAS HELD ALONG WITH ANY BLEEDOFF DATA. FOR PLUG-BACK & SUSPEND OR PLUG & ABANDON.

STARTING PRESSURE 1041 PSI

ENDING PRESSURE 1100 PSI

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST-RECORDS RECEIVED AND WELL STATUS

Operator: **Southern California Gas Company** WELL DESIGNATION **"Standard Sesnon" 17**

API No. **03700769** SE **28** T: **3N** R.: **16W** , **SB** B. and M.

County: **Los Angeles** FIELD: **Aliso Canyon**

Type of Notice: **Rework** **Date** **6/22/2016** **Report Number:** **P216-0100**

RECORDS RECEIVED (ATTACH PAGES IF REQUIRED)

	Date	OK	NEED	Remarks
Well Summary (OG100)				
History (OG103)				
E-Log				
Mud Log				
Dipmeter				
Directional				
Core and/or SWS				
Press. Test	7/11/16	✓	✓	Need date from SCG
BOPE			✓	

NEW STATUS

DATE: _____

NOTICE OF RECORDS DUE

DATE: _____

DATE: _____

DATE: _____

DATE: _____

WELL STATUS INQUIRY

DATE: _____

DATE: _____

Well Stat

Change Required: _____

Change Done: _____

ABANDONMENTS/REABANDONMENTS/DRILLS/REDRILLS

CalWims Abandonment Form: _____ SURFACE INSPECTION NEEDED _____ COMPLETED _____
Date and Inspector

FINAL LETTER NEEDED _____ COMPLETED _____ Calwims DRILL/REDRILL Form _____
(Date)

ENGINEER'S CHECK LIST

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

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

CLERICAL CHECK LIST

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

REMARKS

RECORDS SCANNED: _____
(Date)

RECORDS APPROVED: _____
(Date and Engineer)

Modified OGD2

AOR Datbase _____

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1000 S. Hill Rd, Suite 116 Ventura, CA 93003 - 4458

No. P 216-0100

Old	New
010	010
FIELD CODE	
00	00
AREA CODE	
30	30
POOL CODE	

PERMIT TO CONDUCT WELL OPERATIONS

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

Ventura, California
July 05, 2016

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

Your proposal to **Rework** well **"Standard Sesnon" 17**, A.P.I. No. **037-00769**, Section **28**, T. **03N**, R. **16W**, **SB** B. & M., **Aliso Canyon** field, **Any** area, **Sesnon-Frew** pool, **Los Angeles** County, dated **6/22/2016**, received **6/23/2016** has been examined in conjunction with records filed in this office. (Lat: **34.311217** Long: **-118.568488** 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, and a **lubricator** for wireline operations.
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. Prior to commencing downhole operations, a pressure test is conducted to demonstrate the mechanical integrity of the **7"** casing.
5. Injection shall be through tubing and packer only. Injection or withdrawal through the casing is not permitted.
6. This office shall be contacted by phone prior to making any program changes and no changes are made without Division approval.
7. This well is taken out of service and isolated from the storage reservoir and is to be re-evaluated or abandoned within 1 year of the installation of a tubing plug and filling of the annular space with liquid above the packer pursuant to Order #1109 and its amendments.

THIS DIVISION SHALL BE NOTIFIED TO:

a. Inspect the installed blowout prevention equipment prior to commencing **downhole** operations.
b. Witness a pressure test on the **7"** casing after the installation of the liquid in the annular space.

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

Engineer Clifford R. Knight
Office (805) 654-4761

CRK/crk

Kenneth A. Harris Jr.
State Oil and Gas Supervisor

By _____
Patricia A. Abel, *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.

OG111 (revised 6/2011)

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. This permit is being issued as part of Division Order No. 1109 dated March 4, 2016. Any well that fails any of the testing must be taken out of service and isolated from the storage reservoir pursuant to the Safety Review Testing Regime.
4. The required History of Oil or Gas Well (OG103) shall include a complete description of the required pressure testing. **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.

ATTACHMENT 1
TO DOGGR ORDER 1109

SAFETY REVIEW TESTING REGIME
FOR THE ALISO CANYON NATURAL GAS STORAGE FACILITY

This document identifies the requirements of this comprehensive safety review that shall be completed by the Southern California Gas Company (Operator) and verified by the Department of Conservation, Division of Oil, Gas, and Geothermal Resources (Division). The Operator shall use accepted industry practices and procedures.

The Division has consulted with independent technical experts from the Lawrence Berkeley, Lawrence Livermore, and Sandia National Laboratories ("National Laboratories") to develop the requirements of this facility safety review. The National Laboratories experts independently reviewed and concurred with the testing requirements for the safety review detailed below.

This comprehensive safety review requires that each of the active injection wells in the Aliso Canyon Storage facility either pass a thorough battery of tests in order to resume gas injection or be taken out of operation and isolated from the underground gas storage reservoir. Several steps, detailed below, are required in this safety review. Documentation of all testing required under this comprehensive safety review shall be provided electronically to the Division within 72 hours of completion of a test in digital (i.e. LAS) and printed (i.e. pdf) form. All pressure tests required under this comprehensive safety review shall be witnessed by Division staff. A well that is properly plugged and abandoned in accordance with Public Resources Code section 3208 is not subject to testing under this comprehensive safety review. A well that does not pass all tests must be repaired, retested, and pass all tests, or be plug and abandoned.

REQUIRED TESTS FOR EACH WELL IN THE FACILITY

Step 1: The Operator shall perform an initial casing assessment on the well consisting of temperature and noise logs.

a. Temperature Log:
A temperature survey shall be run from the surface to the packer to measure the temperature within the wellbore. A temperature survey that demonstrates no unexplained anomalous temperature changes in the well is one indication of casing integrity.

b. Noise Log:
An acoustic sensor survey capable of detecting the sound of fluid flow will be conducted the length of the well above the packer to the surface. The survey will include stops at least every 250 feet and at the midpoint of any anomaly detected by the temperature survey. The absence of anomalous sound above the packer is an indication of well integrity

Step 2: The results of the Temperature Logs and Noise Logs will be independently reviewed by Division engineers. Any unexplained abnormal findings in this set of tests shall be addressed by the Operator in one of the following ways:

a. Conduct further investigation and demonstrate to the Division's satisfaction that the abnormal finding is not an indicator of a lack mechanical integrity;
b. Remediate the well to the Division's satisfaction; or
c. With Division review and approval, remove the well from operation and isolate the well from the underground gas storage reservoir in accordance with Steps 4b through 7b below.

Necessary actions to remediate any abnormalities revealed by these tests will be reviewed by Division engineers. Once repairs or mitigations are completed, the Temperature Log and Noise Log must then be repeated on the well and reviewed by Division engineers to ensure that there are no additional abnormal test results and to confirm the issue was repaired.

Step 3: After these tests are completed on the well, and all required action has been completed, the operator shall either:

a. Conduct the additional tests and evaluations on the well, outlined in Steps 4a through 7a below, in order to gain approval for injecting gas through that well; or
b. Remove the well from operation and isolate the well from the underground gas storage reservoir in accordance with Steps 4b through 7b below.

REQUIRED TESTS IF A WELL IS INTENDED TO RESUME OPERATIONS

If Temperature and Noise Logs have been completed on a well and they indicate well integrity, and the Operator designates the well to return to injection operations, then the Operator shall perform the additional testing outlined in Steps 4a through 7a. The results of these tests will be independently reviewed by Division engineers and posted publicly. Each of the following tests requires that the production tubing be removed from the well.

Step 4a: The Operator shall conduct a **Casing Inspection log.**
The Operator shall conduct a Casing Inspection log of the well that measures the thickness of the production casing, from the surface to the bottom of the gas storage reservoir cap rock. If the inspection reveals a reduction in wall thickness, the current minimum strength of the casing will be calculated. If the current minimum strength of the casing has diminished to the point that it cannot withstand authorized operating pressures for the well plus a built-in additional safety factor of pressure, the well has failed this test. *A passing test for a casing inspection log would show no thinning of the casing that diminishes the casing's ability to contain at least 115% of the well's maximum allowable operating pressure as authorized in the current Project Approval Letter.*

Step 5a: The Operator shall conduct a **Cement Bond Log** for the well.
The Operator shall conduct a Cement Bond Log (CBL) that measures the bonding between cement and the production casing of the well, and also the bonding between the annular cement and the formation. Cement should be solidly bonded to both the well's production casing and the geologic formation to ensure a seal that prevents fluids from migrating up or down the outside of the well. *A passing test for a cement bond log shows definitive bond, as demonstrated by sonic waveform,*

between cement and casing and between cement and the gas storage formation and/or cap rock for at least 100 feet above the top of the gas storage reservoir.

Step 6a: The Operator shall conduct a **Multi-Arm Caliper Inspection** of the well. The operator shall conduct an inspection that measures any internal degradation or significant changes to the well's geometry from the surface to the top of the gas storage reservoir, using a minimum 32-arm caliper tool. If the inspection reveals a thinning or deformity of the casing, the current strength of the casing will be calculated. If the current strength of the casing has diminished, such that it cannot withstand authorized operating pressures plus a built-in safety factor of additional pressure, the well fails this inspection. *A passing test for a Multi-Arm Caliper Inspection would show no deformation or thinning of the casing that diminishes the casing from being able to properly contain at least 115% of each well's maximum operating pressure.*

Step 7a: The Operator will conduct a **Pressure Test** of the production casing and of the well once the production tubing has been reinstalled. The Operator may conduct the casing pressure test prior to reinstalling the production tubing. Using a digital recorder, the operator will conduct a liquid-filled positive pressure test within the production tubing of the well, and in the annular space between the production tubing and the casing, to determine the well's ability to withstand normal operating pressures. The production tubing will be isolated and then pressure tested. The annular space between tubing and casing will be pressure tested. This testing also evaluates the integrity of any packers, which seal the annular space between the tubing and casing. The pressure test will be one hour and begin at a pressure of 115% of the maximum operating pressure or the minimum yield strength of the casing and tubing, whichever is less. *A passing pressure test is a pressure loss not exceeding 10% for any 30 minute period during the hour long test.*

After conducting the above tests, the Operator will conduct any indicated remediation so that the well can pass these tests. All remediation will be subject to the review of Division engineers. The well would then be required to undergo the tests once again to demonstrate well integrity.

If the well passes the Casing Wall Thickness Inspection, the Cement Bond Log, the Multi-Arm Caliper inspection and the Pressure Test to the Division's satisfaction, then the Division may clear the well for use for gas injections and withdrawal, once the Division has authorized resumption of injection into the gas storage reservoir. As noted below, wells approved for operation will only be permitted to inject or withdraw gas through the production tubing.

REQUIRED ACTIONS IF THE WELL IS TO BE TAKEN OUT OF OPERATION AND ISOLATED FROM THE GAS STORAGE RESERVOIR:

If the operator elects to take a well out of service, then the following steps shall be taken to isolate the well from the gas storage reservoir:

Step 4b: The Operator shall confirm the presence of cement outside the well's external casing in the section of the well that prevents the movement of gas from the underground gas storage reservoir to shallower geologic zones above the gas storage reservoir. Existing cement bond logs and well construction

records may be used to make this confirmation. This confirmation requires concurrence from Division engineers.

Step 5b: The Operator shall install a mechanical seal or "packer" within the well's production casing and install a mechanical plug within the well's production tubing, if applicable. These seals shall be set in place near the bottom of the well, within the portion of the well surrounded by cement. This kind of seal is an industry standard practice for isolating a well from reservoir gases or fluids and will further protect the casing from internal gas pressure.

Step 6b: The Operator shall fill the well with fluid to the well's surface in order to create appropriate downward hydrostatic pressure in the well that further contributes to the integrity of the well seal.

These measures will isolate a well from the underground gas reservoir, as confirmed by National Laboratory experts. Each of the above actions is subject to review and approval by Division Engineers.

Step 7b: Once the Operator has completed steps 4b, 5b, and 6b, and the seal is in place at the bottom of the well and the well is filled with fluid above the seal, the operator shall:

a. Conduct daily gas monitoring at the surface of the non-operational well, including monitoring the area around the well perimeter and in the annular space between the plugged casing string and the outmost casing;
b. Conduct noise log, temperature log and positive pressure test every six months;
c. Conduct weekly monitoring of fluid levels in the well or, install and operate real-time pressure monitors that provide immediate notification to the operator when pressures deviate from normal in the well's interior tubing and its annular space.

The above monitoring shall be reported to Division engineers and maintained as a part of the well file. Division engineers will review all submitted information for evaluation on a regular basis to ensure that the well taken out of service has maintained safety, and the operator shall take all necessary steps maintain the safety of the well.

Any well taken out of operation cannot be approved to resume operations and gas injection until the successful completion of the battery of tests outlined above in Steps 4a through 7a (Casing Wall Thickness Inspection, the Cement Bond Log, the Multi-Arm Caliper Extension and the Pressure Test) is completed. Those tests must be successfully completed within one year of completing step 6b. If a well cannot successfully complete all necessary steps required in this safety review after one year of completing step 6b, then the well shall be properly plugged and abandoned in accordance with Public Resources Code section 3208.

REQUIREMENTS FOR WELLS RESUMING OPERATIONS IN ALISO CANYON

The Division's authorization to resume injection in the Aliso Canyon Storage Facility will be contingent on the successful completion of this comprehensive safety review. The State Oil and Gas Supervisor must confirm in writing that all wells in the facility have either completed and passed the full battery of tests required in the safety review, been taken out of service and isolated from the underground gas storage reservoir, or been properly plugged and abandoned in accordance with Public Resources Code Section 3208.

Rec'd 06-30-16 DOGGR Ventura.

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

FOR DIVISION USE ONLY		
	Forms	
Bond	~~OGD114~~	OGD121
	CALWIMS	1154

P216-0100

NOTICE OF INTENTION TO REWORK / REDRILL WELL

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

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework ☒ / redrill ☐ (Check one) well SS 17, API No. 037-00769,

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

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

See attached wellbore schematic

The total depth is: 9142 feet. The effective depth is: 9139 feet.

Present completion zone(s): S4; S6 (Name). Anticipated completion zone(s): None (Name).

Present zone pressure: ~1195 psi. Anticipated/existing new zone pressure: 0 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 for Idlement Procedure

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

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: Ella Lein	Telephone Number: 661.340.4250	Signature: E.L.	Date: 6/22/16
Individual to contact for technical questions: Ella Lein	Telephone Number: 661.340.4250	E-Mail Address: elein@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.

Rec'd 06-30-16 DOGGR Ventura.

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, redrilling, 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/

Rec'd 06-30-16 DOGGR Ventura.

Well
Standard Sesnon 17

API #: 04-037-00769-01
Sec 28, T3N, R16W

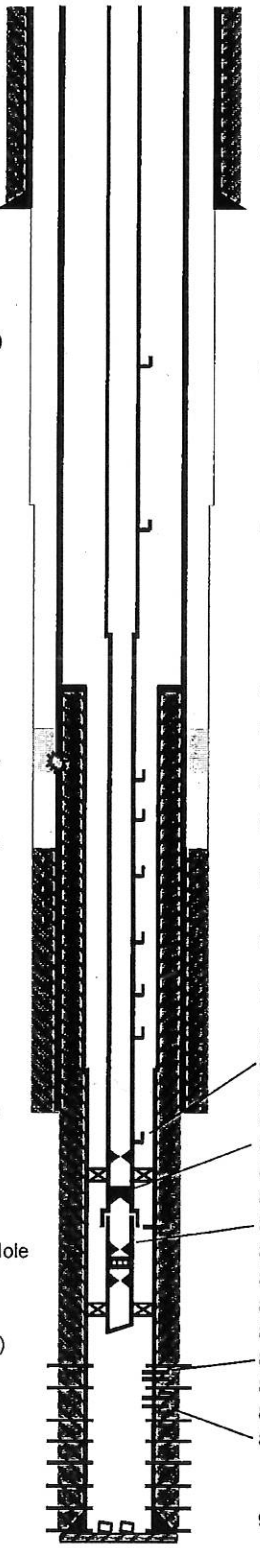
Operator: So. California Gas Co.

Lease: Standard Sesnon
Field: Aliso Canyon
Status: Idle Gas Storage
BFW:
USDW:

Ground Elevation: 2592.04' asl
Datum to Ground: 8.32' DF

Spud Date: 3/5/1952
Sidetrack Kick-off Date: 7/28/1952
Completion Date: 9/7/1952

Junk: Possible Iron from PCKR that was Milled to 9139' (7/30/1977)



13-3/8" TOC Surface

17-1/2" Hole

Surface Casing
13-3/8", 54.5#, J-55
0' - 1010'

1010'

CMT'D w/ 425 SKS,
Good CMT Returns to Surface

12-1/4" Hole (1010' - 3944')

11" Hole

7" CSG Hole 5238'
(*73 CF [Calc'd Away] + 150 SKS CMT SQZ'D, 7/31/1952)
7" ETOC 6663'

Production Casing
7"
0' - 1459' 26#, N-80
1459' - 5357' 26#, J-55
5357' - 7387' 26#, N-80
7387' - 8390' 29#, N-80
8390' - 8476' 32#, N-80

CMT'D w/ 700 SKS (from 9457' in OH)

(1st ST KOP & Top of Window) 8476'

Liner
5-9/16"
4845' - 8334' 22#
5" 6" Hole
8334' - 9140' 18#, N-80

CMT'D w/ 225 SKS**,
No CMT Returnes @ TOL (WSO @ Splice)

5-9/16" & 5" Perfs:
8872' - 8890', 8910' - 8922' & 8938' - 8956'
Four (4) 0.31" HPF (6/28/1973)
9005' - 9140' Six (6) 3/8" HPF (9/5/1952)

PBTD 9140'
TD 9142' 9140'
TVD (9141')
Directionally Drilled: No

Tubing
2-7/8"
0' - 4651' J-55
2-3/8"
4651' - 8856' J-55

2288' McMurry GLM MMA

4054' McMurry GLM MMA

4845' 5-9/16" TOL & ETOC

5052' *7" ETOC (1st SQZ)

5309' McMurry GLM MMA PSIDU

6191' McMurry GLM MMA PSIDU

6735' McMurry GLM MMA PSIDU

7306' McMurry GLM MMA PSIDU

7844' McMurry GLM MMA PSIDU

8315' McMurry GLM MMA PSIDU

8732' McMurry GLM 1" MRU (w/ dummy valve. Unable to pull the valve f/ mandrel, 6/2016)

8771' Otis "J" Latch Left Hand On-Off Tool

8773' Otis RH PCKR

8784' Otis "XN" No-Go Nipple (Plug Set, 6/2016)

8786' Baker TBG Bowl

8790' Four (4) 1/2" Holes WSO (9/3/1952)

8809' Otis No-Go Nipple

8810' Otis Safety System - Annular Flow

8838' Otis "XN" No-Go Nipple

8849' Otis PW PCKR w/ Seal Assembly

8856' Mule Shoe

8928' Four (4) 1/2" Holes (Co. WSO, 9/2/1952)

8930' Four (4) 1/2" Holes (50 SKS CMT SQZ'D, 8/30/1952)

8980' Four (4) 1/2" Holes (25 SKS CMT SQZ'D, 8/24/1952)

8982' Four (4) 1/2" Holes (Co. WSO, 8/28/1952)

9139' Top of Possible Junk

Wellbore History

Orig. Hole (OH) TD @ 12417'
(See Standard Sesnon 17 OH)

1st Sidetrack KOP @ 8476'
(from OH, 1st Hole)
(While attempting to Sidetrack from OH, it was found that the new hole was following alongside 7" CSG, plugged back to sidetrack & drill new hole)
2nd Hole TD @ 8669' (6" Hole)
CMT Plug @ 8507' - 8669'
(100 SKS, C/O f/ 8250')
2nd Sidetrack KOP @ 8507' into this Wellbore (3rd Hole)
TD @ 9142'

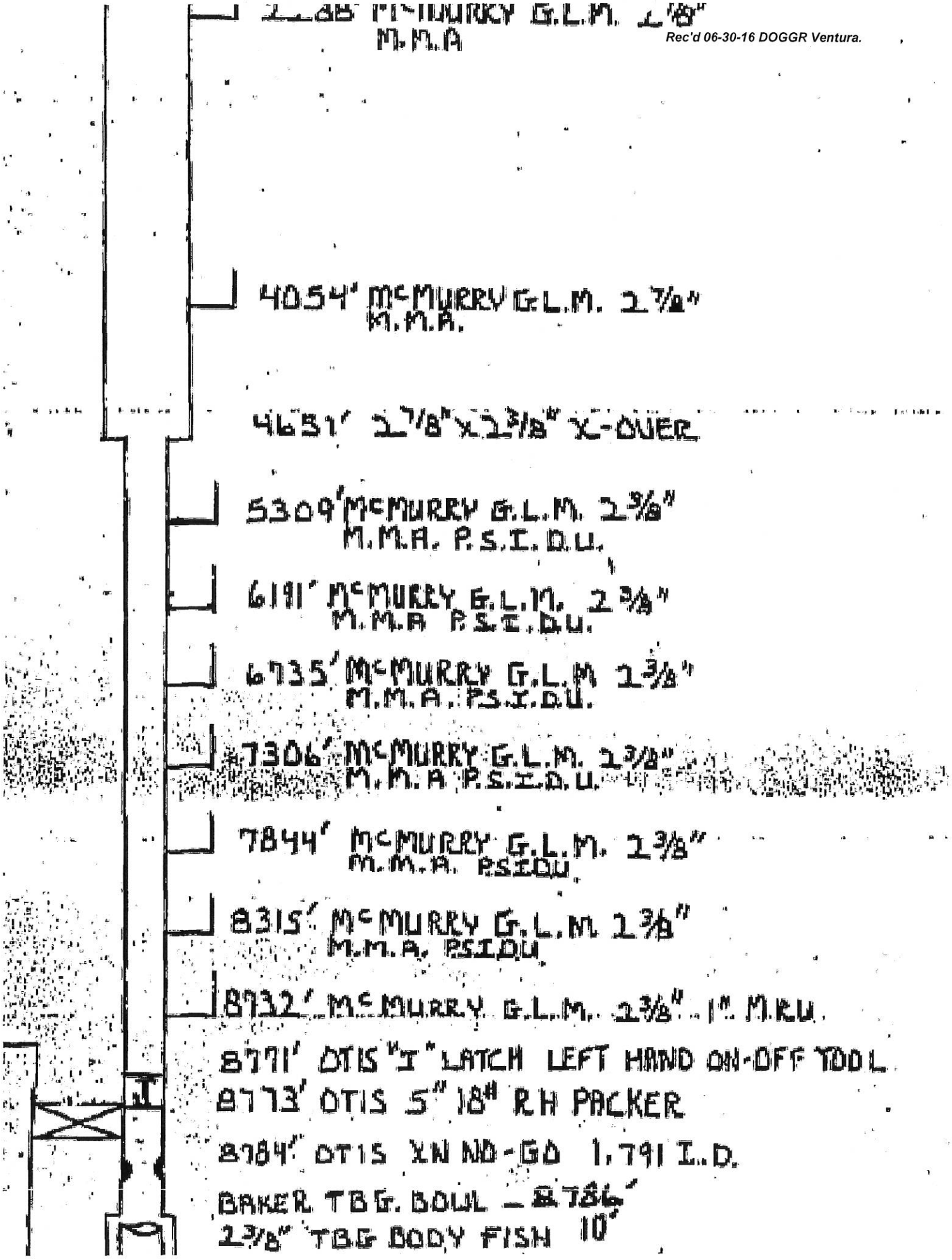
Notes

**Had partial circ. while displacing CMT

Top of Zone Markers	md	(tvd)
PEupth	2740'	(2740')
FREWupth	3450'	(3450')
CRupth	3740'	(3740')
K1upth	3990'	(3990')
UDA1	6905'	(6904')
MDA	7795'	(7794')

Prepared by: CAM (6/22/2016)

InterAct

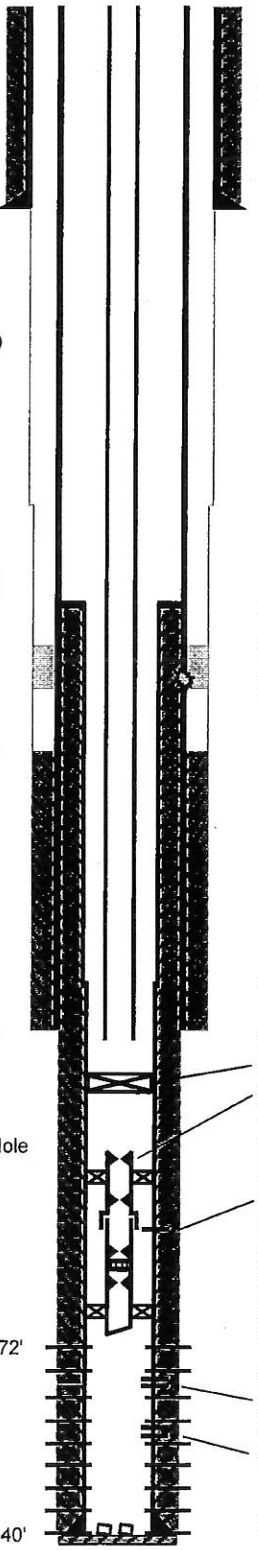


Rec'd 06-30-16 DOGGR Ventura.

Well
Standard Sesnon 17

API #: 04-037-00769-01
Sec 28, T3N, R16W

Proposed



13-3/8" TOC Surface

17-1/2" Hole

Surface Casing
13-3/8", 54.5#, J-55
0' - 1010'

1010'

CMT'D w/ 425 SKS,
Good CMT Returns to Surface

12-1/4" Hole (1010' - 3944')

11" Hole (3944' - 8476')

7" ETOC 6663'

Production Casing
7"
0' - 1459' 26#, N-80
1459' - 5357' 26#, J-55
5357' - 7387' 26#, N-80
7387' - 8390' 29#, N-80
8390' - 8476' 32#, N-80

CMT'D w/ 700 SKS (from 9457' in OH)

1st ST KOP & Top of Window 8476'

Liner
5-9/16", 22# 6" Hole
4845' - 8334'
5", 18#, N-80
8334' - 9140'

CMT'D w/ 225 SKS**,
No CMT Returns @ TOL (WSO @ Splice)

8872'

5" Liner Perfs:
8872' - 8890', 8910' - 8922', 8938' - 8956'
Four (4) 0.31" HPF (6/28/1973)
9005' - 9140'
Six (6) 3/8" HPF (9/5/1952)

PBTD 9140'
TD 9142'
TVD (9141')
Directionally Drilled: No

9140'

Kill String
0' - 8500'

4845' 5-9/16" TOL & ETOC

5052' *7" ETOC (after 1st SQZ)

5238' 7" CSG Hole (73 CF CMT SQZ'D Away* + 150 SKS CMT SQZ'D, 7/31/1952)

8334' 5-9/16" x 5" X-Over

8500' Tail of Kill String
8600' 5" Retrievable Bridge Plug
8771' Otis "J" Latch Left Hand On-Off Tool **(See Notes†)**
8773' Otis RH PCKR
8784' Otis "XN" No-Go Nipple
8786' Baker TBG Bowl
8790' Four (4) 1/2" Holes WSO (9/3/1952)
8809' Otis No-Go Nipple
8810' Otis Safety System - Annular Flow
8838' Otis "XN" No-Go Nipple
8849' Otis PW PCKR w/ Seal Assembly
8856' Mule Shoe

8928' Four (4) 1/2" Holes (Co. WSO, 9/2/1952)
8930' Four (4) 1/2" Holes (50 SKS CMT SQZ'D, 8/30/1952)
8980' Four (4) 1/2" Holes (25 SKS CMT SQZ'D, 8/24/1952)
8982' Four (4) 1/2" Holes (Co. WSO, 8/28/1952)

9139' Top of Possible Junk

Operator: So. California Gas Co.

Lease: Standard Sesnon
Field: Aliso Canyon
Status: Idle Gas Storage
BFW:
USDW:

Ground Elevation: 2592.04' asl
Datum to Ground: 8.32' DF

Spud Date: 3/5/1952
Sidetrack Kick-off Date: 7/28/1952
Completion Date: 9/7/1952

Junk: Possible Iron from PCKR that was Milled to 9139' (7/30/1977)

Wellbore History
Orig. Hole (OH) TD @ 12417'
(See Standard Sesnon 17 OH)
1st Sidetrack KOP @ 8476'
(from OH, 1st Hole)
(While attempting to Sidetrack from OH, it was found that the new hole was following alongside 7" CSG, plugged back to sidetrack & drill new hole)
2nd Hole TD @ 8669' (6" Hole)
CMT Plug @ 8507' - 8669'
(100 SKS, C/O f/ 8250')
2nd Sidetrack KOP @ 8507' into this wellbore (3rd Hole)
TD @ 9142'

Notes
**Had partial circ. while displacing CMT
†**Junk Tubing Remaining**
8771' - 8856' 2-3/8", J-55

Top of Zone Markers	md	(tvd)
PEupth	2740'	(2740')
FREWupth	3450'	(3450')
CRupth	3740'	(3740')
K1upth	3990'	(3990')
UDA1	6905'	(6904')
MDA	7795'	(7794')

Prepared by: CAM (6/22/2016)
Updated by: LD (6/27/2016)

InterAct

SoCalGas
SIMP
Well Operations Procedure
SS 17
Idlement Program
Version 2

Primary Engineer: Ella Lein 818 700-3676 (ofc)/661 340-4250 (mobile)
Alternate Engineer: Brian Vlasko 818 700-3897 (ofc)/714 655-9506 (mobile)
Engineering Supervisor: Jose Iguaz 818 700-3889 (ofc)/661 384-5337 (mobile)
Well Site Supervisor: xxxx xxxx xxx xxx xxxx (mobile)
Well Work Superintendent: Mike Volkmar 562 685-3810 (mobile)

Objective: Temporary idle SS 17 to enable the field injection. Will J out from Otis packer. Ran scraper in 7". Set BP @8,600'. Pressure test. Fill with weighted fluid. Run kill string. RDMO.

Project Data:

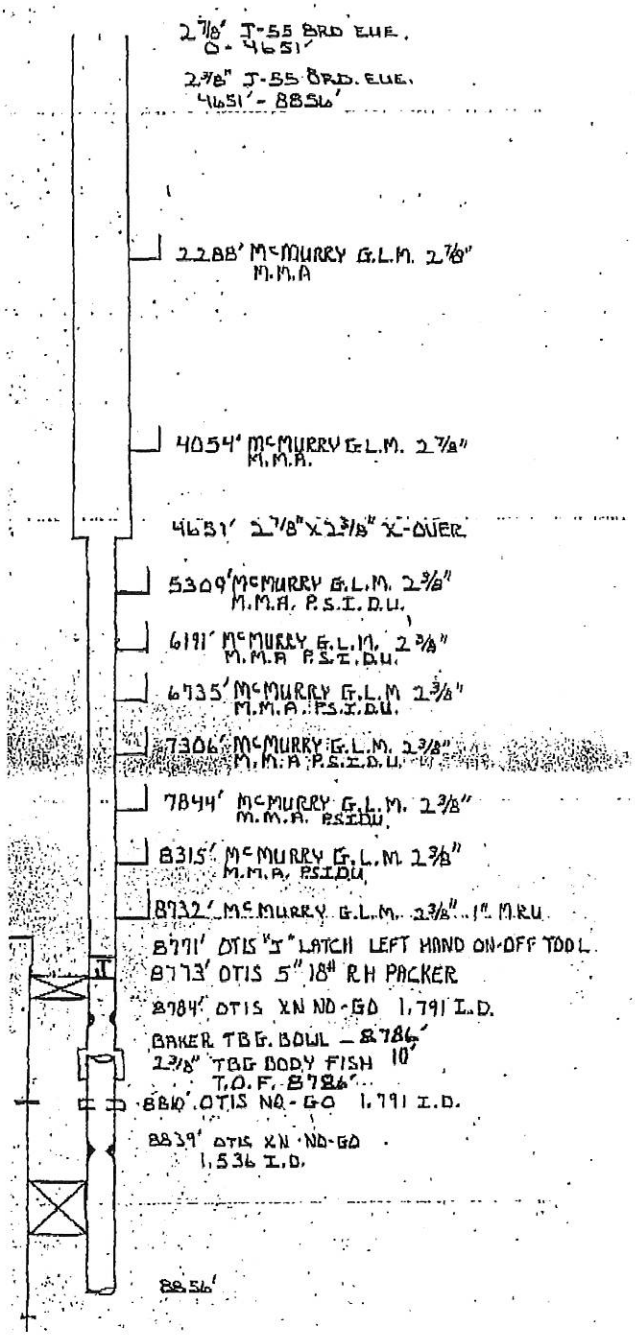
Expected Rates: 0 mcfpd

Well Data:
API #: 037-00769
KB to GL: 13.32
TVD/ PBMD: 9,142' / 9139' (Previous PBMD is @ 9140'; TOF is @ 9139')
Surface Location: Sec. 28, T 3N, R 16W

Casing Data:
Conductor: 13-3/8",55#, Cem @ 1010'
Surface Casing: 7", 26#, Cem @ 8476'
Production Liner:
i. 5-9/16", 22#, FJ used drill pipe @ 4845' - 8334'. (ID: 4.859").
ii. 5", 18# FJ drill pipe @ 8334' - 9140' (ID: 4.276")

Tubing Details:

SoCalGas
SIMP
Well Operations Procedure
SS 17



GEOLOGIC MARKERS

Ground Level Elevation - 2592'
Datum – 8'
Original KB - 17'

Top of Zone	TMD
PEupth	2740
FREWupth	3450
CRupth	3740
K1upth	3990
K2upth	4370
K4upth	4920
UDA1	6905
UDA2	7305
MDA	7795
MP	8580
S1	8819
S2	8848
S4	8868
S6	8939
S8	8993
S12	9086
S14	9116
FREW	9180
CR	9218
K1	9500

SoCalGas
SIMP
Well Operations Procedure
SS 17

Estimated Reservoir Pressure: 1175 psi

Estimated Bottom-hole Temperature: 160°F from 10/29/2014 temperature survey

Wellhead: 8" 5M

Perforations: 8,928' - 8,982'

Current Status: Idle

Well History:

1. 3/5/51 Well Spud
2. 9/7/52 Well Completed
3. 7/2/73 Converted to Gas Storage by perforating Sesnon Zone; cleaned out to 9114'.
4. 8/12/77 cleaned out to 9139'. Pressure tested csg and ran tubing with SSSV
5. 9/20/1993 Left Fish in hole @ 8786'. Were unable to back off tubing and chemically cut @ 8786. Latched on fish with Baker TBG Bowl and ran completion to surface.
6. 5/31/16 - 8784RIH with WL, set the plug @8784' but couldn't remove gas lift mandrel from 8732' as they kept hanging up on the one above. RDMO wireline.

Permit Status: Pending

Ensure DOGGR permit is in place and posted on site before commencing work.

- *If a permit has not been issued contact DOGGR 24 hours prior to rigging up on the well for verbal approval to rig up.*

Work Requirements, Long Lead Items and Contacts for Rig Option:

I. *Contact Ella Lein for pre-spud meeting prior to commencing work.*
II. *Install Baker tank. Fill up with 500 bbls of 8.5 ppg brine and treat with Biocide, 5 gals/100 bbls*
III. *Prior to MIRU test 7" csg annulus to 500 psi to ensure integrity.*

PROCEDURE

1) MIRU with workover rig. ND wellhead tree. NU and test BOPE.

2) Unland tubing and attempt to un J (left hand on-off tool) from Otis RH packer @ 8771'. (if didn't succeed prepare to cut the tubing at ~ 8750')
3) POOH with production string and stand back tubing to be used as work string and lay down 2 all of the gas lift mandrels.
4) PU and RIH with positive ID 5", 18# N-80 scraper on work string to 8650'. POOH and lay down scraper.
5) RIH with RBP and set @ 8,600'
6) Test the plug to 1000 psi for an hour. Chart the test. Call DOGGR in advance to witness the test. Place 10' of sand on top of RBP.
7) RIH with of kill string using 2 3/8" for liner portion and 2 7/8" after that to surface.
8) Filll up the well with 8.5 ppg weighted fluid.
9) ND BOP and RU wellhead tree.
10) RDMO.
11) Secure the well and hand over to the surface team to install surface pressure transducers.

OPERATOR So. Cal. Gas

LSE & NO SE24 5517

MAP 250

	(1)	(2)	(3)	(4)	( )	( )
INTENTION	DRLG	SUPP TD (1)	ALTR CSG W/ RBP TO 3000'	ALTR CSG	REWORK	
NOTICE DATED	9-14-51	7-1-52	6-5-73	6-9-77	2-18-93	
P-REPORT NUMBER	1-9541	152-845	273-251	277-210	293-060	
CHECKED BY/DATE						
MAP LETTER DATED						
SYMBOL	2				N/C	

	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED	REC'D	NEED
NOTICE	9-17-51		9-3-52		6-11-73		6-14-77		2-19-93			
HISTORY	→		10-14-52		9-17-73		9-28-77		4-21-93			
SUMMARY	→		10-14-52									
IES/ELECTRIC LOG												
DIRECTIONAL SURV												
CORE/SWS DESCRIP			10-14-52									
OTHER												
RECORDS COMPLETE	(4)		(4)		(4)		(2)		4-21-93 SAM			

ENGINEERING CHECK

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

CLERICAL CHECK

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

REMARKS: _____

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator Southern California Gas Company **Field** Aliso Canyon **County** Los Angeles
Well Standard Sesnon #17, **Sec.** 28, **T** 3N, **R** 6W S.B.B. & M.
A.P.I. No. 037-00769 **Name** R. D. Phillips (Person submitting report) **Title** Agent (President, Secretary or Agent)
Date April 19, 1993

Signature J. A. Hemmerly for R. D. Phillips

P. O. Box 3249 Los Angeles, CA 90051-1249 (213) 244-2687
(Address) (Telephone Number)

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

Date	
1993	
03/26	Move in - rig up. Started well operations at 3:00 p.m. Nippled up blow down lines. Bled down tubing from 1425 psi to 0. Secured well.
03/27	Attempted to bleed tubing down. Tubing bled down to 20 psi. Removed x-profile tubing plug. Installed repaired x-profile plug. Well bled to 20 psi.
03/29	Ran temperature survey. Found holes in 2-7/8" tubing at 3880', 4290' and 8220'. Pulled plug out of x-nipple. Displaced tubing with 44 Bbls of 3% KCl. Opened casing and pumped additional 236 Bbls 3% KCl. Installed back pressure valve. Nippled down xmas tree. Installed BOPE. Removed back pressure valve.
03/30	Unable to test BOPE. Tubing hanger leaking. Pumped 48 Bbls 3% KCl down tubing and 172 Bbls down casing. Unable to unlatch tubing from Otis packer. Steve Mulqueen with D.O.G. waived BOPE test.
03/31	Tested blind rams, pipe rams, choke manifold and annular preventor to 2000 psi. Freepointed tubing. Tubing stuck at 8818'. Attempted unsuccessfully to back off tubing at 8818' and 8849'.
04/01	Pumped 80 Bbls of KCl down casing. Rigged up Dialog and chemically cut 2-3/8" tubing at 8786'. Pulled and laid down 2-7/8" tubing. Changed 2-7/8" pipe rams to 2-3/8" pipe rams. Pulled and laid down 2000' of 2-3/8" tubing.
04/02	Pumped 40 Bbls of 3% KCl down casing. Pulled and laid down 2-3/8" tubing. Picked up and ran in well with 2-7/8" tubing to kill string at 2008'.

DOG 4/20/93

04/05 With 1460 psi on tubing and casing, pumped 200 Bbls of 3% KCl down casing. Bled to 0 psi. Pulled kill string. Picked up 5" casing scraper, 2-3/8" and 2-7/8" tubing. Ran in well to 6010'.

04/06 Pumped 40 Bbls of 3% KCl down casing. Picked up and ran in well with 1100' of 2-7/8" tubing to 7110'. Secured well because of winds.

04/07 With 500 psi on casing, pumped 40 Bbls of 3% KCl down casing. Secured well because of wind.

04/08 Strip in Baker 7" 26# retrievamatic packer, set at 30'. Rigged up United Well Control snubbing unit. Tested rig pipe rams to 3000 psi. and rig stripping rams to 3000 psi. Unable to test snubbing unit BOPE. Safety valve leaking.

04/09 Equalized and un-set Baker Packer at 30'. Strip out TIW valve. Re-set Baker packer. Tested snubbing BOPE. Un-set Baker Packer. Pulled out of well. Laid down Packer.

04/12 With 1500 psi on casing. Stripped in well with 5" casing scraper on 2-7/8" tubing to 8778'. Stripped tubing out of well to 1852'.

04/13 With 1500 psi on casing, snub tubing and scraper out of well. Picked up and snubbed, while externally testing 2-3/8" tubing in well. Ran in well with tubing bowl, 2' 2-3/8" pup, Otis "XN" nipple 1.791" I.D., 8' 2-3/8" pup, Otis 5" 18# Single Hydraulic RH Retrievable Packer, Otis j-Latch on/off tool. Rig delayed 4 hours because of high winds.

04/14 Snubbed 2-3/8" tubing and gas lift mandrels to 1804'. Stripped and externally tested 2-3/8" tubing and gas lift mandrels to 3950'.

04/15 Stripped in well with production equipment and externally tested 2-7/8" tubing to 5000 psi.

04/16 Strip in well. Engaged fish at 8786' with Baker tubing bowl. Pulled 10,000 lbs over string weight. Filled tubing with 3% KCl. Pulled 6000 lbs over string weight. Set Otis RH packer. Bled off casing pressure. Filled casing with 3% KCl. Unlatched from packer. Circulate well with filtered KCl fluid. Landed tubing with 10,000 lbs compression. Rigged down snubbing unit. Tested casing and packer to 1500 psi.

04/17 Installed back pressure valve. Nippled down BOPE. Installed xmas tree. Tested xmas tree to 5000 psi. Removed back pressure valve. Released rig. Rig down. Move out.

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

No. P293-060
Field Code 010
Area Code 00
New Pool Code 30
Old Pool Code 30

PERMIT TO CONDUCT WELL OPERATIONS
GAS STORAGE

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

Ventura, California
February 22, 1993

Your proposal to rework well "Standard Sesnon" 17, A.P.I. No. 037-00769, Section 28, T. 3 N, R. 16W, S.B. B.&M., Aliso Canyon field, --- area, Sesnon-Frew pool, Los Angeles County, dated 2-18-93, received 2-19-93, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

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

LARRY MULLER / S. MULQUEEN, BORE INSP. NAIVCD 3-30-93

Blanket Bond
PK:SF:nr

Engineer Steve Fields

Phone (805) 654-4761

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

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

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

Notice of Intention to Rework Well

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

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD 114	OGD 121
BB	2-19-93	✓

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 Standard Sesnon #17 ✓ (Well designation), API No. 037-00769 ✓

Sec. 28, T. 3N, R. ~~6W~~ 16, SB B. & M., Aliso Canyon ✓ Field, Los Angeles County.

The present condition of the well is as follows:

1. Total depth 9142'

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

   See Attachment

DIVISION OF OIL AND GAS
RECEIVED
FEB 19 1993
VENTURA, CALIFORNIA

3. Present producing zone name Sesnon ; Zone in which well is to be recompleted _____

4. Present zone pressure 1900 psig ; New zone pressure _____

5. Last produced Gas Storage Project _____ _____ _____
   (Date) (Oil, B/D) (Water, B/D) (Gas, Mcf/D)

   (or)

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

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:

See Attachment

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

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

Address P. O. Box 3249 (Street)

Los Angeles, (City) CA (State) 90051 (Zip)

Telephone Number (213) 244-2665

Southern California Gas Co. (Name of Operator)

By E. S. Sinclair for R. D. Phillips (Agent) (Name - Printed)

E. S. Sinclair 2/18/93 (Name - Signature) (Date)

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

OG107 (8/87/DWRR/5M)

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

NOTICE OF INTENTION TO REWORK WELL
Standard Sesnon #17

ATTACHMENT

2. Complete casing record, including plugs and perforations (Present Hole)

0' - 1010'	13-3/8"		55#	
0' - 8476'	7"	26, 29 & 32#		N-80 & J-55, Squeezed holes at 5238'.
4845' - 8334'	5-9/16"		22#	Flush joint
8334' - 9140'	5"		18#	Flush joint, packer at 8849'. Perfs: 8872'-8890', 8910'-8922', 8938'-8956' and 9005'-9140'.

The proposed work is as follows:

1. Move in, rig up, install and test BOPE.
2. Pull tubing and clean out well.
3. Install tubing with new gas lift design.
4. Recomplete well and return to service.

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

Ventura, California

November 6, 1991

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

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

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

FROM	TO
"SFZU" SS-11 (037-00763)	"Standard Sesnon" 11 (037-00763)
"SFZU" SS-13 (037-00765)	"Standard Sesnon" 13 (037-00765)
"SFZU" SS-14 (037-00766)	"Standard Sesnon" 14 (037-00766)
"SFZU" SS-16 (037-00768)	"Standard Sesnon" 16 (037-00768)
"SFZU" SS-17 (037-00769)	"Standard Sesnon" 17 (037-00769)
"SFZU" SS-25 (037-00776)	"Standard Sesnon" 25 (037-00776)
"SFZU" SS-29 (037-00741)	"Standard Sesnon" 29 (037-00741)
"SFZU" SS-30 (037-00780)	"Standard Sesnon" 30 (037-00780)
"SFZU" SS-31 (037-00781)	"Standard Sesnon" 31 (037-00781)
"SFZU" SS-44 (037-00788)	"Standard Sesnon" 44 (037-00788)
"SFZU" SS-1-0 (037-22058)	"Standard Sesnon" 1-0 (037-22058)

M. G. MEFFERD, State Oil and Gas Supervisor

By _____
Deputy Supervisor
PATRICK J. KINNEAR

OGD157 (10/85/DWRR/1M)

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
SEP 28 1977
SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

Operator SOUTHERN CALIFORNIA GAS COMPANY Field or County Aliso Canyon
Well name and No. STANDARD SESNON #17, Sec. 28, T 3N, R 16W, S. B. & M.
A.P.I. well No. 037-00769 Name Phil S. Magruder, Jr. (Person submitting report) Title Agent (President, Secretary or Agent)
Date September 22, 1977

Signature Phil S. Magruder Jr.

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

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

Date	
1977	
7-13-77	Killed well with 290 barrels of 66#/cu.ft. calcium chloride HEC polymer fluid. Used B. J. Hughes pump truck.
7-18-77	Moved in California Production Service Rig #M-28 and rigged up. Circulated and conditioned 68#/cu.ft. brine-polymer drilling fluid.
7-19-77	Rigged up. Installed 10" 5000 psi Class III B.O.P.E. Installed sub-base. Pressure tested choke manifold under 2500 psi for 10 minutes. Testing B.O.P.E. with water.
7-20-77	Using H. & H. pump, tested B.O.P.E. with water, as follows: Blind Rams at 4000 psi for 20 minutes 2 7/8" Pipe Rams " 4000 psi " 20 " Shaffer Bag " 3000 psi " 20 " Above tests O.K. Witnessed and approved by D.O.G. Using NOWSCO pump, tested B.O.P.E. with nitrogen, as follows: Blind rams at 4000 psi for 20 minutes 2 7/8" Pipe Rams " 4000 psi " 20 " Shaffer Bag " 3000 psi " 20 "
7-21-77	Pulled hydrostatic packer loose with 95,000#. Circulated hole. Measured out. Ran in with 6 1/8" bit on 7" casing scraper on float valve to 4845' (top of liner). Ran in 2000' of tubing.
7-22-77	Ran in hole with 5 1/2" casing scraper on float valve to 8338' (top of liner). Pulled out of hole. Ran in hole with 4 1/8" bit, 5" casing scraper with float valve.
7-23-77	Ran in hole. Could not get in 5" liner. Pulled out of hole. Changed bit. Ran

in with 4 1/8" bit and 5" casing scraper and float valve. Located 5" packer at 8976'. Circulated hole. Ran in with Baker packer milling tool, junk sub, Bowen jars, 60' of 3 1/16" drill collars to 8396'. Pulled up to 8306'.

7-24-77 Rig and crew idle.

7-25-77 Using Baker Oil Tools Model "C" milling tool, milled over Model "D" packer at 8922'. Pulled out of hole but did not recover packer. Ran back to 8922' and continued milling. Jarred up on packer - had indication packer was released.

7-26-77 Finished pulling out of hole but did not recover Baker Model "D" packer. (Assumed packer bore split). Ran Johnston Tester's 5" 18# retrievable plug to 8850' and pressure tested to 1500 psi. Displaced polymer drilling fluid with fresh water mixed with surface tension agent. Pulled out of hole and ran 7" Johnston Bobcat retainer to 4500'.

7-27-77 Set Johnston retrievable retainer at 4500'. Pressured down tubing to 2500 psi - lost 10 psi/minute and had returns to shaker pit out of annulus. Moved packer 5' with same leak. Pulled out of hole and hydrotested back into hole, finding leak in tubing string. Tested casing as follows:

4500'	to	8850'	with 2500 psi	for 60	minutes
4500'	"	Surface	" 3000 psi	" 60	"
3300'	"	"	" 3500 psi	" 60	"
2200'	"	"	" 4000 psi	" 60	"

All above tests O.K.

7-28-77 Pulled Johnston 7" retainer and 5" 18# retrievable bridge plug from well. Made up drilling assembly using Midway Fishing tools (4" O.D. carbide tipped mill shoe on 20' of wash pipe; Bowen 2 3/8" hydraulic jars; Baker 2 3/8" junk basket and three 3 1/16" O.D. drill collars). Started in well.

7-29-77 Milled for six hours making 4'. Pulled mill and ran Servco 4 1/8" O.D. concave mill.

7-30-77 Continued milling - total of 7 hours. Pulled out of hole and ran back in to 9115' with new Servco mill (flat bottom). Milled to 9139'.

7-31-77 Rig and crew idle.

8-1-77 Circulated well clean. Started breaking off tubing collars, cleaning tubing pins and Baker sealing them. Replaced tubing collars.

8- 2-77 Continued breaking off collars, cleaning pins, applying Baker seal and replacing collars with inspected ones. Rig and crew then idle waiting for Otis safety system.

8-3-77 thru 8-7-77 Rig idle.

8- 8-77 Pulled tubing from well. GO-International ran packer which stopped at 4845' (top of 5 9/16" liner). Ran junk basket on wireline, but stopped at 4845'. Otis making mule shoe for packer. Ran 2000' of tubing in hole.

8- 9-77 Pulled out of well. Ran packer which stopped at 4845'. Ran in hole with 4 3/4" mill. Worked mill from 4845' to 4871' - no junk. Could not circulate. Pulled out of well. Ran 4 1/2" mill to 4975'. Circulated for 45 minutes - no junk. Pulled out of well. Ran packer to 4972'. Packer would not go below 4972'. Pulled packer and started in hole with 4 1/2" mill.

8-10-77 Finished going in hole with 4 1/2" tapered mill to top of 5" liner at 8334'. Pulled out of hole. Ran 3 7/8" bit to 9140'. Circulated out rubber and wood. Started out of hole.

8-11-77 Pulled out of well. GO-International ran and set packer at 8850'. Ran tubing, hydrotesting to 5000 psi for one minute. Landed tubing with 8000# on packer. Pulled up to 15,000# over weight of tubing to check latch.

8-12-77 Removed sub-base and B.O.P.E. Installed tree and tested to 5000 psi. Changed over from polymer drilling fluid to lease salt water. Ran tubing plug and tested packer and seals with 1500 psi for 15 minutes - O.K. Recovered plug from NO-GO nipple at 8840'.
RIG RELEASED at 6:00 P.M. (8-12-77)

jp

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

Report on Operations

No. T 277-174

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

Santa Paula Calif.
August 2, 1977

DEAR SIR:

Operations at well No. "SFZU" SS-17, API No. 037-00769, Sec. 28, T. 3N, R. 16W, S.B., B & M. Aliso Canyon Field, in Los Angeles County, were witnessed on July 20, 1977. Mr. Ms. Toni M. Callaway, representative of the supervisor was present from 1100 to 1400. There were also present Mr. C. Downey, consulting engineer

Present condition of well: No additions to the casing record since proposal dated June 9, 1977.

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

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

r

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

By [signature] Deputy

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

No. P 277-210

REPORT ON PROPOSED OPERATIONS

Santa Paula, California

June 15, 1977

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

Your proposal to alter casing well "SFZU" SS-17
(Name and number)
, A.P.I. No. 037-00769, Section 28, T. 3N, R. 16W,
S.B. B. & M., Aliso Canyon field, Los Angeles County,
dated 6-9-77, received 6-14-77, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

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

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

Blanket Bond
MD:b

M. G. MEFFERD (acting)
State Oil and Gas Supervisor

By
Deputy Supervisor

John L. Hardoin

OG111 (11-76—GSR1—30M)

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS RECEIVED
JUN 14 1977
SANTA PAULA, CALIFORNIA

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

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. STANDARD SESNON #17, API No. _____,

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

The present condition of the well is as follows:

1. Total depth. 9140'

2. Complete casing record, including plugs and perforations:

13 3/8" cemented 1010'

7" cemented 8476' (milled section)

4295' 5" and 5 9/16" cemented 9140', top 4845', WSO on lap, WSO 8790', segregation 8925' and 8982' perforated 9140'-9005'; 8956'-8938'; 8922'-8910'; 8890'-8872'

3. Present producing zone name SESNON Zone in which well is to be recompleted -

4. Present zone pressure 3100 psi New zone pressure -

5. Last produced _____ (Date) Gas Storage Well (Oil, B/D) _____ (Water, B/D) _____ (Gas, Mcf/D)

or

6. Last injected _____ (Date) _____ (Water, B/D) _____ (Gas, Mcf) _____ (Surface pressure, psig.)

The proposed work is as follows:

1. Move in and rig up. Kill well. Install B.O.P.E. and pressure test.
2. Pull tubing and packer. Mill over and recover packer at 8972'.
3. Clean out to 9114' (junk). Set bridge plug at 8700'.
4. Pressure test 5" and 7" casing. Perform any remedial work indicated by pressure testing.
5. Set packer, run tubing with down hole safety system and recomplete well as gas storage well.

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 (City) California (State) 90051 (Zip)

Telephone Number (213) 689-3561

SOUTHERN CALIFORNIA GAS COMPANY (Name of Operator)

By P.S. Magruder (Name) P.S. Magruder, Jr. (Date) 6-9-77

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

OG107 (8-75--GSRI--15M)

FORM 103 SUBMIT IN DUPLICATE △ OSP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR Pacific Lighting Service Company FIELD Aliso Canyon

Well No. SS-17, Sec. 28, T. 3N, R. 16W, S.B. B. & M.

Date September 13, 1973 Signed R S Magruder Jr.

P. O. Box 54790, Terminal Annex
Los Angeles, California 90054 (213) 689-3561 Title Agent
(Address) (Telephone Number) (President, Secretary or Agent)

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

Date	
1973	
6-19	Pumped 50 bbls. hot oil down tubing.
6-20	Pulled Udell CS gas lift valve from 8931'. Moved in C.P.S. production rig with pump and shaker tank at 2:00 PM. Spotted 60 bbls. brine-polymer fluid with 100 lb./bbl. carbonates on bottom and waited one hour. Attempted to circulate with 360 bbls. total without getting returns. (Hole volume 280 bbls.) Spotted 60 bbls. with 30 lb./bbl. on bottom and shut down. Total fluid used 395 bbls.
6-21	Mixed and pumped in 120 bbls. without getting returns. Shot annulus fluid level at 2573'. Mixed 480 bbls. brine-polymer mud. Spotted 60 bbls. salt water mixed with 38 sacks Grandee (carbonates - 3000-5000 microns) and 19 sacks sluggit max on bottom. Established circulation with 160 bbls. Circulated bottoms up losing 32 bbls. mud and recovering fine sand.
6-22	Filled hole with 45 bbls. Total mud loss 472 bbls. Installed and tested Class III B.O.P.E. to 2000 psi--Ok. Pulled packer and tubing, keeping hole full with 51 bbls. Ran 7" casing scraper and checked top of 5-11/16" casing at 4856' keeping hole full with 45 bbls. Ran 5" scraper and 4-1/8" bit to 8292'. Total mud loss 568 bbls.to date.
6-23	Filled hole with 16 bbls. Hit top of fill at 9111'. Circulated out soft fill to 9114' where bit hit junk iron. Circulated bottoms up from 9114' losing only 13 bbls. mud. Pulled out, keeping hole full with 30 bbls. Ran Dresser-Atlas CBL from 9110' to 8000' and NLL from 9110' to 8600'.
6-24	Set and tested 5" bridge plug at 8770' to 1000 psi for 10 minutes--Ok. Keeping hole full with 32 bbls.
6-25	Removed B.O.P.E. and tubing head. Unlanded 7" casing with 200,000 lbs. Chipped out 16" cellar floor. Prepared 13-3/8" casing and casing head for welding.

1973

6-26 Installed new 13-3/8", 5000 psi casing head by making butt weld in 13-3/8" casing. X-rayed weld--Ok. Relanded 7" casing at 200,000 lbs. Found 3/16" deep gouges 9" down inside the 7" casing. Cut off 10" of 7" casing and welded on new piece of casing.

6-27 X-rayed 7" weld--Ok. Installed tubing head and tested seals to 3500 psi for 20 minutes--Ok. Re-installed B.O.P.E. Ran packer and pressure tested casing from 4493' to 8770' at 1750 psi, 4493' to surface at 2500 psi and 2090' to surface at 3200 psi, all for 20 minutes--Ok.

6-28 Pulled 5" bridge plug from 8770', keeping hole full with 17 bbls. Using Welex 11 gram D.P. charge and 3-1/8" hollow carrier, shot four 0.31" holes per foot from 8872' to 8890', 8910' to 8922' and 8938' to 8956'. Checked top of fill at 9112'. Set 2-3/8" x 5" Baker Model "D" packer at 8970'. Filled hole with 5 bbls. Started running completion tubing.

6-29 Completed running completion tubing testing to 5000 psi. Landed on Baker Model "D" at 8973' with 1000 lbs. Set Baker RZR plug at 8973'. Pressured tubing to 2000 psi and set Baker Model "FH" packer at 8845'. Opened sliding sleeve at 8778' and changed over to lease salt water thru sleeve. Removed B.O.P.E. and installed production head and tested to 3100 psi--Ok for 20 minutes.

6-30 Idle.

7-1 Idle.

7-2 Rigged out and released rig at 9:30 AM.

TUBING DETAIL
SS-17

No.Jts.	Item	Length	Depth
	K.B. to mat	11.32	
	Mat to tubing head	2.00	
	2-7/8" EU 8 thd. Donut	.65	
	2-7/8" EU 8 thd. J-55 pup jt.	4.00	
144	2-7/8" EU 8 thd. J-55 tubing	4805.37	
	2-7/8" x 2.31" I.D. Baker "F" landing nipple	.98	4824.32
1	2-7/8" EU 8 thd. J-55 tubing	31.05	
	2-7/8" x 2-3/8" EU 8 thd. crossover	1.15	4856.52
8	2-3/8" EU 8 thd. J-55 tubing	244.97	
	2-3/8" EU 8 thd. N-80 pup jt.	4.15	5105.64
	2-3/8" Camco KBMG mandrel w/1/4" port BK 1050# valve	7.90	5113.54
32	2-3/8" EU 8 thd. J-55 tubing	986.01	
	2-3/8" EU 8 thd. J-55 tubing	4.17	6103.72
	2-3/8" Camco KBMG mandrel w/1/4" port BK 1025# valve	7.86	6111.58
30	2-3/8" EU 8 thd. J-55 tubing	926.97	
	2-3/8" EU 8 thd. N-80 pup jt.	4.08	7042.63
	2-3/8" Camco KBMG mandrel w/1/4" port BK 1000# valve	7.86	7050.49
28	2-3/8" EU 8 thd. J-55 tubing	862.42	
	2-3/8" EU 8 thd. N-80 pup jt.	4.11	7917.02
	2-3/8" Camco KBMG mandrel w/1/4" port BK 975# valve	7.75	7924.77
26	2-3/8" EU 8 thd. J-55 tubing	806.89	
	2-3/8" EU 8 thd. N-80 pup jt.	4.10	8735.76
	2-3/8" Camco KBMG mandrel w/1/4" port BK 950# valve	7.81	8743.57
1	2-3/8" EU 8 thd. J-55 tubing	31.36	
	2-3/8" x 1.87 I.D. Baker "L" sliding sleeve	2.62	8777.55
1	2-3/8" EU 8 thd. J-55 tubing	30.55	
	2-3/8" x 1.87 I.D. Baker "F" landing nipple	.95	8809.05
1	2-3/8" EU 8 thd. J-55 tubing	30.55	
	2-3/8" x 5" 18# Baker F.H. Hydrostatic set packer	5.48	8845.08
3	2-3/8" EU 8 thd. J-55 tubing	92.80	
	2-3/8" x 1.87 I.D. Baker "L" sliding sleeve	2.62	8940.50
1	2-3/8" EU 8 thd. J-55 tubing	31.29	
	2-3/8" x 1.81 I.D. Baker nonported seating nipple	.78	8972.57
	2-3/8" Baker locator sub landed in Model "D" packer at 8972'	.55	8973.12
	5 sets of Baker seal for Model "D" packer	5.55	8978.67

FORM 111

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 273-251

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

Santa Paula, Calif.
June 13, 1973

DEAR SIR:

Your proposal to alter casing Well No. "SFZU" SS-17 (037-00769),
Section 28, T. 3N, R. 16W, S.B. B. & M., Aliso Canyon Field, Los Angeles County,
dated 6/5/73, received 6/11/73, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT ADEQUATE BLOWOUT PREVENTION EQUIPMENT SHALL BE INSTALLED AND MAINTAINED IN OPERATING CONDITION AT ALL TIMES.

Blanket Bond
DER:a
cc: Operator

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

By L. G. Peterson, Deputy

68207-708 12-72 35M ① OSP

FORM 107

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

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

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

RECEIVED
JUL 11 1973
SANTA PAULA, CALIFORNIA

Los Angeles Calif. June 5 1973

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 SS 17
(Cross out unnecessary words)

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

Aliso Canyon Field, Los Angeles County.

The present condition of the well is as follows:

1. Total depth. 12,417'; Pg. 8507
Redrilled to 9142'

2. Complete casing record, including plugs:

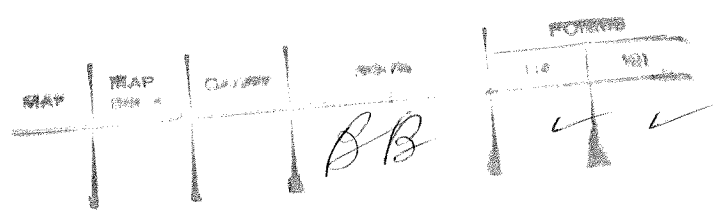
13-3/8", 54.5#, c. 1010'
7", 26, 29 & 32# effec. to 8476'
Sec. 8476'-8516'
Csg. repair 5238'
4295'-5", 18# and 5-9/16, 22# c. 9140'
WSO splice and 4 h's 8790'*
WSO (Co.) 4 h's 8928'
cmtd. 4 h's (WNSO) 8930', 8982', 8980'
J.P. 6 - 3/8" HPF 9005'-9140'
T.L.H. 4845'

*Witness & approved by D.O.G.

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

The proposed work is as follows:

Jet perforate 4 holes per foot and/or
reperforate 2 holes per foot in the Sesnon (8860-9140) perfs w/in this int.
Zone to convert well to a gas storage well.



P. O. Box 54790, Terminal Annex
Los Angeles, California 90054
(Address)

(213) 689-3561
(Telephone No.)

Pacific Lighting Service Company
(Name of Operator)

By P. S. Magruder Jr.
P. S. Magruder, Jr. - Agent

48086-705 11-70 15M OSP

FORM 157

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 23, 1968

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

DEAR SIR:

Your ~~requested~~ letter dated August 26, 1968, relative to change in designation of well(s) in Sec. 28,29, T. 3 N., R. 16 W., S.B. B. & M., Aliso Canyon field, Los Angeles County, District No. 1, has been received;

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

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

the proposed change in designation is hereby authorized as follows:

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 in Designation

Sec. 28:

Old Designation		New Designation	
"Standard-Sesnon 1"	1	"SFZU" SS-1	(037-00754)
"	2	" SS-2	(037-00755)
"	3	" SS-3	(037-00756)
"	5	" SS-5	(037-00758)
"	6	" SS-6	(037-00759)
"	7	" SS-7	(037-00760)
"	8	" SS-8	(037-00761)
"	9	" SS-9	(037-00762)
"	11	" SS-11	(037-00763)
"	13	" SS-13	(037-00765)
"	14	" SS-14	(037-00766)
"	16	" SS-16	(037-00768)
"	17	" SS-17	(037-00769)
"	24	" SS-24	(037-00770)
"	25	" SS-25	(037-00776)
"	29	" SS-29	(037-00041)
"	30	" SS-30	(037-00780)
"	31	" SS-31	(037-00781)
"	44	" SS-44	(037-00788)

Sec. 29:

Old Designation		New Designation	
"Standard-Sesnon 1"	4	"SFZU" SS-4	(037-00757)
"	10	" SS-10	(037-00040)
"	12	" SS-12	(037-00764)

FORM 100.
CALIFORNIA STATE PRINTING OFFICE

SUBMIT LOG IN DUPLICATE

FILL THIS BLANK IN WITH TYPEWRITER. WRITE ON ONE SIDE OF PAPER ONLY

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
RECEIVED
OCT 14 1952
LOS ANGELES

WELL SUMMARY REPORT

Operator TIDE WATER ASSOCIATED OIL COMPANY Field ALISO CANYON

Well No. Standard-Semon #2-17 Sec. 28, T. 3 N, R. 16 W, S.B. B. & M.

Location 2223.85' South and 6697.15' West from station #64 Elevation above sea level 2600.36 feet.

All depth measurements taken from top of Derrick Floor, which is 6.32 feet above ground.

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

Date October 13, 1952 Signed F. C. Foote

W. L. Perkes (Engineer or Geologist) E. S. Carl (Superintendent) Title Agent (President, Secretary or Agent)

Commenced drilling March 5, 1952 Completed drilling August 18, 1952 Drilling tools Cable Rotary

Total depth 12,417' Plugged depth 8507'

Junk ~~Fish~~ Redrilled to 9142'

GEOLOGICAL MARKERS	DEPTH

Commenced producing September 7, 1952 (date) Flowing/~~gas lift/pumping~~ (cross out unnecessary words)

	Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production	535	20.8	0.2%	253	500#	0#
Production after 30 days	228	20.7	0.2%	84	500#	1025#

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	New or Second Hand	Seamless or Lapweld	Grade of Casing	Size of Hole Drilled	Number of Sacks of Cement	Depth of Cementing if through perforations
13-3/8"	1010'	0'	54.5#	New	Seamless	J-55	17-1/2"	650; ½% Gel	
7"	9457'	0'	26,29,32#	New	Seamless	J-55 N-80	11"	1150; 300 c.f. strat. ¼% Gel	9400'; 1939'; 9357'; 52'
5"	8459/16" 9140'	4845'	18, 22#	New & S.H.	Seamless	N-80, S.H.	6"	250; 75 c.f. strat. ¼% Gel	8960'; 8930'

PERFORATIONS

Size of Casing	From	To	Size of Perforations	Number of Rows	Distance Between Centers	Method of Perforations
5"	9005 ft.	9140 ft.	6 - 3/8" holes per ft.			Jet
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				
	ft.	ft.				

Electrical Log Depths 1010' - 12417'; 8507' - 9142' (Attach Copy of Log)

FORM 103.
CALIFORNIA STATE PRINTING OFFICE

SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
RECEIVED
OCT 14 1952
LOS ANGELES

History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. Standard-Seamon #1-17, Sec. 25, T. 3 N, R. 16 W, S.B. B. & M.

Signed J. C. Foster

Date October 13, 1952 Title Agent
(President, Secretary or Agent)

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

Date

LOCATION: 2223.85' S & 6697.15' W from Station #84

ELEVATION: 2592.04' Mat
2600.36' Derrick Floor

1952
11/16 Dug cellar.
11/17-18 Idle
11/19 Dug Cellar.
11/20 Idle.
11/21 Poured foundation concrete.
11/22-26 Idle.
11/27-28 Graveled road and rig site. Moved in derrick.
11/29 Idle.
11/30 Erected derrick.
12/1-2 Idle.
12/3 Erected derrick.
12/4-2/28 Idle.
2/29 Severns Drilling Contractor moved in rotary equipment.
3/1-3/4 Moved in and rigged up rotary and dug rat hole.
3/5 Spudded 12-1/4" hole at 10:30 AM. Lost circulation while drilling at 50'. Drilled to 88' without circulation. Hung drill pipe at 88' and pumped in 300 sacks of Colton Construction Cement, all treated.
3/6-3/7 Drilled 12-1/4" hole from 88' to 394'. Lost circulation while drilling at 336' and at 394'. Mixed rice hulls and gel and regained circulation.
3/8-3/10 Drilled 12-1/4" hole from 394' to 982'. Lost circulation while drilling at 917'. Regained circulation with rice hulls and gel after 8 hours. Twisted off drill pipe while drilling at 982', leaving four drill collars and bit in hole. Recovered with overshot.
3/11-3/16 Drilled 12-1/4" hole from 982' to 2266'. Lost circulation while drilling at 2266' but regained after losing three pits of mud. Well being drilled by Severns Drilling Contractor.
3/17 Drilled 12-1/4" hole from 2266' to 2432'. Opened 12-1/4" hole to 17-1/2", from surface to 312'.
3/18 Opened 12-1/4" hole to 17-1/2" from 312' to 1010'.
3/19 Ran and cemented 13-3/8" 54.5# Youngstown T & C casing at 1010' with 425 sacks Colton Construction Cement mixed with 425 cu. ft. Strata-Crete and 1% Gel. Had good cement returns to surface. Pressure increased from 200# to 400# when plugs bumped. Time 12:30 PM. B.J. Service. Installed cellar cementation.

FORM 103.
CALIFORNIA STATE PRINTING OFFICE

SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
RECEIVED
OCT 14 1952
LOS ANGELES

History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. Standard-Seaco #2-17, Sec. 28, T. 3 N, R. 15 W, S.B. B. & M.

Signed T. C. Foote

Date October 13, 1952 Title Agent

(President, Secretary or Agent)

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

Date

1952

3/20 Cleaned out cement from 1001' to 1010' and circulated to 2432'.

3/21 Drilled 12-1/4" hole from 2432' to 2676'. Had a minor loss of mud while drilling.

3/22 Drilled 12-1/4" hole from 2676' to 3005'. Lost 3 pits of mud while drilling at 2977'.

3/23-3/26 Drilled 12-1/4" hole from 3005' to 3944', then reduced size of hole to 11" and drilled to 4296'.

3/27-3/30 Drilled 11" hole from 4296' to 5243'. Twisted off, leaving one drill collar and bit in hole. Fishing for drill collar.

3/31-4/3 Drilled 11" hole from 5243' to 6067'. Lost 30 barrels drilling fluid in 4 hours.

4/4-4/9 Drilled 11" hole from 6067' to 7214'. Lost circulation while drilling at 7135'. Mixed 100 barrels 72# mud with 15 sacks rice hulls and 26 sacks gel and regained circulation.

4/10-4/16 Drilled 11" hole from 7214' to 8370'. Repaired rig.

4/17-4/23 Drilled 11" hole from 8370' to 8950'. Ran Schlumberger electric log at 8950'.

4/24 Drilled 11" hole from 8950' to 8995'. Reduced size of hole to 7-5/8" at 8995' and cored to 9013'.

4/25-4/26 Cored 7-5/8" hole from 9013' to 9074'. Reamed 11" hole to 9000'.

4/27 Cleaned out 7-5/8" hole to 9074'. Ran Johnston tester on 4-1/2" drill pipe and set packer on formation shoulder at 9000' with hole open to 9074'. Bottom of tailpipe, 9026'. Opened 3/8" valve at 3:20 PM. Had a fair, increasing blow for 20 minutes, then a strong blow for 15 minutes, then a decreasing to fair blow for 40 minutes. Gas to surface in 25 minutes. Closed valve after being open 1 hour and 15 minutes and recovered 5560' (79 barrels) of new fluid. Fluid mostly oil, which blew out of drill pipe. Bottom 75' muddy oil. Average of 7 cuts taken while pulling drill pipe, 0.1% water and 2.5% mud, 20.0 gravity.

4/28-5/1 Opened 7-5/8" hole to 11" from 9000' to 9074'. Cored 7-5/8" hole from 9074' to 9164'. Cleaned out with 7-5/8" bit from 9075' to 9164'.

5/2 Ran Johnston tester on 4-1/2" drill pipe with 1120' of water cushion and set packer on formation shoulder at 9075' with hole open to 9164'. Bottom of tailpipe, 9095'. Opened tester at 11:25 AM and had a fairly strong blow with gas to surface in 20 minutes and water cushion in 55 minutes. Closed tester and pulled packer loose after being open one hour. Net fluid rise, 7955'(113 barrels). Well flowed after packer pulled loose. Obtained 4 samples while flowing and 4 samples while pulling drill pipe. Average of 8 samples, cut 0.0% water and 2.0% mud, 19.5 gravity.

5/3-5/8 Opened 7-5/8" hole to 11" from 9075' to 9164' and drilled 11" hole from 9164' to 9367'. Had drilling break at 9350'. Circulated for 1-1/2 hours and logged minor oil and gas showing by Reed Log Equipment.

FORM 103.
CALIFORNIA STATE PRINTING OFFICE

SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
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OCT 14 1952
LOS ANGELES

History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. Standard-Seaman #1-17, Sec. 28, T. 3 N, R. 16 W, S.B. B. & M.

Signed J. C. Foster

Date October 13, 1952 Title Agent
(President, Secretary or Agent)

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

Date	
1952	
5/9-5/10	Drilled 11" hole from 9387' to 9565'. Cored 7-5/8" hole from 9565' to 9574'.
5/11-5/14	Cored 7-5/8" hole from 9574' to 9603'. Opened 7-5/8" hole to 11" from 9565' to 9603' and drilled 11" hole from 9603' to 9946'. Had drilling break at 9905' and circulated for 1-1/2 hours at 9925'.
5/15	Drilled 11" hole from 9946' to 10,072'. Ran Schlumberger electric log at 10,072'.
5/16-5/17	Drilled 11" hole from 10,072' to 10,280'. Pulled bit into tight spot at 5100' and pipe stuck 3 hours before worked loose.
5/18	Drilled 11" hole from 10,280' to 10,395'.
5/19	Drilled 11" hole from 10,395' to 10,445'. Pulled bit at 10,445' and found tight spot at 5015', which required 7 hours to work bit through. Reamed tight spot from 4975' to 5200'.
5/20	Drilled 11" hole from 10,445' to 10,501'. At depth of 10,501', added 155 barrels of Diesel oil to drilling mud.
5/21-5/29	Drilled 11" hole from 10,501' to 11,244'. Ran Schlumberger electric log at 10,244'. Ran dipmeter at 9455'-9465'; 10,240'-10,270'; 10,740'-10,770'; 11,095'-11,125'. Took sidewall samples with Schlumberger 6-1/2 gram gun at 9210', 9250', 9260', 9330', 9397', 9450', 9720', 10,117', 10,245', 10,522, 10,570', 10,695', 10,985'.
5/30-6/6	Drilled 11" hole from 11,244' to 11,507'. Cored 7-5/8" hole from 11,507' to 11,522'.
6/7-6/14	Drilled 11" hole from 11,522' to 12,173'.
6/15	Cored 7-5/8" hole from 12,173' to 12,201'. Ran Schlumberger electric log at 12,186'.
6/16-6/18	Opened 7-5/8" hole to 11" from 12,173' to 12,201' and drilled 11" hole to 12,278'.
6/19	Cored 7-5/8" hole from 12,278' to 12,292'. Ran Schlumberger electric log at 12,292' and Microlog.
6/20-6/21	Took Homco sidewall samples at 11,225', 11,180', 10,805', 10,740', 10,540', 10,523', 10,310', 10,245', 10,030'.
6/22-6/26	Drilled 11" hole from 12,292' to 12,405'. Reduced size of hole and started coring 7-5/8" hole from 12,405 to 12,417'. Ran Schlumberger electric log and dipmeter survey at 12,417'. Conditioned mud after running log.
6/27-6/28	Took Homco sidewall samples at 10,260', 10,055', 9450', 9375', 9250', 9210' and 9165'. Hung 4-1/2" drill pipe at 11,200' and plugged with 200 sacks of Colton Hi-Temperature Cement. Final pressure 400#. Time 10:40 P.M. B.J. Service.
6/29	Located top of cement at 10,578' and cleaned out to 11,000'. Conditioned mud.

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SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. Standard-Seaton #1-27, Sec. 28, T. 3 N, R. 15 W, S.B. B. & M.

Signed J. C. Foster
P

Date October 13, 1952 Title Agent
(President, Secretary or Agent)

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Date

1952

6/30 Ran 7" 25#, 29# and 32# T & C casing at 9502' with aluminum section from 6520' to 8560'. Cemented with 600 sacks Colton Hi-Temperature Cement mixed with 300 cu. ft. Strata-Crete and 4% Gel and followed with 100 sacks of Neat Cement. Pressure increased from 700-1100# when plugs bumped. Time 7:30 PM. B.J. Service. Casing details as follows: bottom 94', 32# N-80; then 40' aluminum section; then 86' 32# N-80; then 1003' 29# N-80; then 2030' 26# N-80; then 3898' 26# J-55; then 3502' 26# N-80; total 9502'. (Two centralizers on shoe joint and two on first joint above aluminum section.)

7/1 Standing cemented. Laying down 4-1/2" drill pipe.

7/2-7/3 Standing cemented. Made up 3-1/2" drill pipe.

7/4 Located top of cement at 9404' and cleaned out to 9440'. Ran combination Johnston tester and gun on 3-1/2" drill pipe with 1000' of water cushion and shot four 1/2" holes at 9400'. Set packer at 9340' with perforated tailpipe to 9360' and opened tester at 8:20 PM. Had fair to faint heading blow throughout 2-hour test. Pulled tester and recovered 2580' of new fluid, consisting of slightly gassy drilling mud. Test of water shutoff witnessed but not approved by Division of Oil and Gas.

7/5 Made up 2-1/2" tubing to re-cement. Conditioned mud.

7/6 Ran Baker Model "K" retainer on 2-1/2" tubing and set at 9360'. Applied pressure and shot holes at 9400' took fluid with 3500# pressure which dropped to 2200# pressure. Displaced fluid at 1¼ cu. ft. per minute rate. Mixed 50 sacks of Colton Hi-Temperature Cement and squeezed all cement below retainer. Final pressure 3200#. Time 7:45 PM. B.J. Service.

7/7 Cleaned out retainer and cement from 9350' to 9404' and circulated to 9440'.

7/8 Ran combination Johnston tester and gun on 3-1/2" drill pipe with 1000' of water cushion and shot four holes at 9395'. Set packer at 9338' with perforated tailpipe to 9361'. Opened tester at 2:40 PM and had a faint steady blow throughout 2-hour test. Pulled tester and recovered 21 stands (1930') of new fluid. Top 5 stands, viscous, gassy drilling mud; next 10 stands, watery, gassy drilling mud; water sample tested 500 grains per gallon; bottom 6 stands, viscous, gassy drilling mud. Test of water shutoff witnessed but not approved by Division of Oil and Gas.

7/9 Ran Model "K" Baker retainer on 3-1/2" tubing and set bottom of retainer at 9352'. Applied pressure to shot holes at 9395' and took fluid at 2800# pressure. Displaced fluid at 12 cu. ft. per minute at 2400# pressure. Mixed 75 sacks Colton Hi-Temperature Cement and squeezed all cement below retainer. Final pressure 2500#. Time 2:00 PM. B.J. Service. Pulled up 5 stands and circulated.

FORM 103.
CALIFORNIA STATE PRINTING OFFICE

SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. Standard-Sesnon 41-17, Sec. 28, T. 3 N, R. 16 W S.B. B. & M.

Signed T. C. Frate

Date October 13, 1952 Title Agent

(President, Secretary or Agent)

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

Date

1952

7/10 Cleaned out retainer and cement from 9349' to 9395' and circulated to 9440'.

7/11 Ran combination Johnston tester and gun on 3-1/2" drill pipe with 1100' of water cushion and shot four 1/2" holes at 9387'. Set packer at 9337' with tailpipe to 9360'. Opened tester at 12:27 PM and had a faint, steady blow throughout 1 hour 50 minute test. Pulled tester and recovered 8 stands of new fluid. Top 4 stands, viscous, gassy drilling mud. Could not filter water sample. Bottom 4 stands, very water, gassy drilling mud. Water sample 375' above packer tested 535 grains per gallon. Sample at drill collar tested 465 grains per gallon. Test of water shutoff witnessed but not approved by Division of Oil and Gas.

7/12 Ran Baker Model "K" retainer on 2-1/2" tubing but retainer stopped at 4899'. Could not pull retainer. Pulled tubing, ran bit and drilled up retainer.

7/13 Ran Baker Model "K" retainer with stinger sub on 2-1/2" tubing and set at 9347'. Applied pressure and displaced fluid through shot holes at 9387' with 2600# pressure which decreased to 2300#. Mixed 75 sacks Colton Hi-Temperature Cement and squeezed all cement through shot holes. Cleared holes with excess of mud. Final pressure 2700#. Time 11:45 AM. At 2:45 PM, applied 4800# pressure and could not displace fluid through shot holes at 9387'.

7/14 Cleaned out Baker retainer at 9347' and found hole clean to 9440'.

7/15 Cleaned out cement from 9440' to 9457', then broke through cement and circulated down to 11,000'. Measured drill pipe and found measurements O.K. No evidence of cement below 9457'. Corrected 7" casing shoe to 9457'.

7/16 Ran Johnston tester on 2-1/2" tubing with 970' of water cushion and set packer at 9443' with perforated tailpipe to 9569'. Opened 5/8" bean at 11:50 AM and had a fair diminishing blow and dead by 2:00 PM. Ran swab at 3:30 PM and located fluid level at 1350'. Lost swab on first run. Rigged new swab and started swabbing at 7:00 PM. Swabbed 65 barrels mud to 6:00 AM, July 17.

7/17 Stuck swab at approximately 2000' and parted sand line. Pulled tester loose at 9:30 AM and found fluid level 940' from surface. Fluid all drilling mud down to tester. Ran bit and cleaned out hole to 11,000'.

7/18 Ran Johnston tester on 2-1/2" tubing with 970' of water cushion and set packer at 9443' with perforated tailpipe to 9569'. Opened 5/8" bean at 5:15 PM and had a fair, diminishing blow until dead at 7:00 PM. Ran swab at 8:00 PM and located fluid level at 1530'. Swabbed out water cushion.

7/19 Swabbed 150 barrels of mud and muddy water. Weight of drilling mud began dropping after 65 barrels had been swabbed. Fluid was muddy water after 125 barrels had been swabbed. Salinity at 10:00 PM, 455 grains per gallon. Fluid level 2000'-2300'.

FORM 103.
CALIFORNIA STATE PRINTING OFFICE

SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. Standard-Seamon 1-17, Sec. 28, T. 3 N, R. 16 W, S.B. B. & M.

Signed T. C. Foster

Date October 13, 1952 Title Agent

(President, Secretary or Agent)

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Date

1952

7/20 Swabbed 175 barrels of muddy water. Salinity at 4:00 PM, 492 grains per gallon. Fluid level 2000'. Pulled tester loose at 11:00 PM and found fluid level at 1500'. Water sample above tester, 554 grains per gallon.

7/21 Ran bit and cleaned out to 11,000'. Found sand bridge from 10,430' to 10,435'. Had good gas showing on ditch while circulating returns from 10,430'. Ran McCullough Neutron Log.

7/22 Hung 3-1/2" drill pipe at 9548' and plugged with 100 sacks Colton Hi-Temperature Cement. Final pressure 800#. Time 11:30 AM. B.J. Service. Located top of plug at 9234' after standing 6 hours. Ran McCullough Magnatector and checked aluminum section at 8483' to 8523'. Started milling aluminum section at 8490'.

7/23 Milled aluminum section from 8490' to 8516'.

7/24 Found bottom of aluminum section at 8516'. Pulled up and started milling aluminum section at 8476' and milled to 8490'.

7/25 Ran 10-5/8" Baker scraper and scraped from 8476' to 5516'.

7/26 Ran Baash Ross whipstock on 3-1/2" drill pipe and set on stub of 7" casing at 8516' with tailpipe to 8531'. Cemented in place with 50 sacks of Colton Hi-Temperature Cement. Time 5:45 AM. B.J. Service.

7/27 Standing cemented. Located top of cement at 8438'.

7/28 Cleaned out cement from 8438' to 8507' and redrilled to 8535' with 6" bit.

7/29 Redrilled 6" hole from 8535' to 8669'. Ran Schlumberger electric log at 8669'. Hole following alongside 7" casing.

7/30 Hung 2-1/2" tubing at 8656' and plugged well with 100 sacks Colton Hi-Temperature cement. Final pressure 700#. Time 6:00 AM. B.J. Service. At 4:00 PM located top of cement at 8250'. Cleaned out to 8278' and lost circulation. Ran Halliburton squeeze tool and located hole in 7" casing at 5238'.

7/31 Set Halliburton squeeze tool at 4965' and pumped in 100 sacks Victor Hi-Temperature cement through hole at 5238'. Final pressure 400#. Time 6:30 AM. Halliburton Bulk Method. At 1:30 PM applied 1100# pressure without loss. Located top of cement at 4996' and cleaned out hard cement to 5206', then found stringers of cement to 5286'.

8/1 Cleaned out cement from 8278' to 8359'. Closed rams and applied 1250# pressure for 15 minutes without loss. Cleaned out cement from 8359' to 8390' and lost circulation. Ran Halliburton shoe squeeze tool on 3-1/2" drill pipe and set at 4955'. Displaced fluid easily with 600# pressure. Mixed 150 sacks of Colton Slow Cement and displaced with 227 cu. ft. mud. Final pressure 500# which bled to 0#. Time 6:00 PM. Halliburton Bulk Method.

8/2 Standing cemented. Located top of cement at 4955'.

FORM 103.
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SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. Standard-Seamon #1-17, Sec. 28, T. 3 N, R. 16 W, S.B. B. & M.

Signed T. C. Foster

Date October 13, 1952 Title Agent

(President, Secretary or Agent)

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Date

1952

8/3 Cleaned out cement from 4965' to 5259', then circulated to 5390'. Closed rams and held 2000# for 15 minutes without loss. Cleaned out hard cement from 5390' to 8499'.

8/4 Cleaned out hard cement from 8499' to 8507' and redrilled 6" hole to 8536'.

8/5 Redrilled 6" hole from 8536' to 8595'.

8/6 Redrilled 6" hole from 8595' to 8636'.

8/7 Redrilled 6" hole from 8636' to 8690'. Ran Schlumberger electric log and magnetic survey.

8/8 Redrilled 6" hole from 8690' to 8727'.

8/9 Redrilled 6" hole from 8727' to 8768'.

8/10 Redrilled 6" hole from 8768' to 8823'.

8/11 Redrilled 6" hole from 8823' to 8892'.

8/12 Redrilled 6" hole from 8892' to 8910'. Lost circulation while drilling at 8910'. Ran Halliburton straddle tool on tubing and pressure tested casing from 4600' to 5500' with 1000# pressure. Found no hole. Applied pressure to annulus with straddle tool at 5500' and pumped away mud with 250# pressure. Testing above 4600' to locate hole.

8/13 Pressure tested 7" casing in 90' stages from 4600' to 1750' without locating hole in casing.

8/14 Pressure tested 7" casing in 90' stages from 1750' to surface with 1000# pressure but could not locate hole. At 1900' and at 1400' applied pressure to annulus and displaced fluid easily at 250# pressure. Ran Baker bridging plug and set at 8175'.

8/15 Set Model "R" retainer at 90'. Held 1400# for 45 minutes. Pulled out and closed rams and held 1200# pressure for 30 minutes. Drilled out Baker retainer at 8175' and hole took fluid through casing at 400# but built up to 1000# and held. Redrilled 6" hole from 8910' to 8947'.

8/16 Redrilled 6" hole from 8947' to 9022'.

8/17 Redrilled 6" hole from 9022' to 9117'.

8/18 Redrilled 6" hole from 9117' to 9142'. Ran Schlumberger electric log at 9142'. Reamed 6" hole from 8507' to 9060'.

8/19 Reamed 6" hole from 9060' to 9142'. Ran 4294' of 5" and 5-9/16" casing and cemented at 9140' with 150 sacks Colton Hi-Temperature cement mixed with 75 sacks of Strata-Crete and 4% gel and followed by 25 sacks of Neat Cement. Final pressure 1400#. 12:00 Midnight. B.J. Service. Top of liner hanger, 4845'. Had partial circulation while displacing cement. Casing details as follows: bottom 506' is new 5" 18#

FORM 103.
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SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. Standard-Seamon #1-17, Sec. 28, T 3 N, R. 16 W, S.B. B. & M.

Signed J. C. Foster

Date October 13, 1952 Title Agent
(President, Secretary or Agent)

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

Date 1952

casing with Ventura tool flush joint threads; balance is 5-9/16" 22# second-hand drill pipe with Security flush joint threads.

8/20 Ran bit to top of casing at 4845' and found no cement. Held 1000# pressure for 15 minutes without loss.

8/21 Ran Johnston tester on 3-1/2" drill pipe with no water cushion and set packer at 4509' with perforated tailpipe to 4824'. Opened tester at 10:45 AM. Had one puff, then dead for balance of 1 hour and 10 minute test. Recovered 120' of drilling mud. Pressure bomb charts checked details of test. Test of splice witnessed and approved by Division of Oil and Gas. Hung drill pipe at 4500'. Closed rams and applied 2500# pressure to casing for 30 minutes without loss. Ran bit to 9140' and found no cement inside 5" casing.

8/22 Ran McCullough Gamma Ray log from 8580' to 9140'. Shot four 1/2" holes at 8980' with McCullough jet gun. Ran Johnston tester on 2-1/2" tubing and set packer at 8942' with tailpipe to 8957'. Opened tester at 10:15 PM. Had a light, steady blow for 15 minutes, then a medium, steady blow with fluid to surface in 38 minutes. Well flowed gassy, muddy oil for balance of 1 hour and 45 minute test. No free water.

8/23 Ran Baker Model "K" retainer and tried to set at 8944' without success. Started pulling retainer when it set at 8465'.

8/24 Drilled up retainer at 8465'. Ran Baker Model "K" retainer on 2-1/2" tubing and set at 8944'. Shot holes at 8980' tool fluid at 12 cu. ft. per minute rate with 1700# pressure. Opened circulating ports and mixed 50 sacks of Colton Hi-Temperature cement preceded by 25 cu. ft. of water and followed by 10 cu. ft. of water and 270 cu. ft. of mud. Closed circulating ports and squeezed an estimated 25 sacks of cement below retainer. Final pressure 4300#. Backed off retainer and backscuttled excess cement. Time 10:30 PM. B.J. Service.

8/25 Started drilling up retainer at 8944'. Left piece of Baker scraper in hole.

8/26 Ran Cavins junk bowl and recovered pieces of iron. Ran bit and scraper but could not make any progress. Removed scraper. Going in hole with bit.

8/27 Drilled up Baker retainer at 8944' and cleaned out hard cement to 8980'.

8/28 Ran McCullough jet gun and shot four holes at 8982'. Ran Johnston tester on 2-1/2" tubing with 1030' of water cushion and set packer at 8941' with perforated tailpipe to 8956'. Opened tester at 4:30 PM. Had a light steady blow for 3 minutes, then dead for balance of 1 hour test. Pulled tester and recovered 5' of new fluid above water cushion, all drilling mud. Pressure bomb charts checked details of test.

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SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. Standard-Seamon #1-17, Sec. 28, T. 3 N, R. 16 W, S.B. B. & M.

Signed F. C. Foster
P

Date October 13, 1952 Title Agent
(President, Secretary or Agent)

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Date

1952

8/29 Ran McCullough jet gun and shot four holes at 8930'. Ran Johnston tester on 2-1/2" tubing with 1000' of water cushion and set packer at 8879' with perforated tail-pipe to 8895'. Opened tester at 1:28 PM. Had light steady blow for 15 minutes, increasing to medium steady blow for next 5 minutes when gas surfaced, then strong steady blow for 25 minutes. Fluid reached surface in 45 minutes. Closed tester after being open 50 minutes. After flowing water cushion, well flowed and blew clean oil.

8/30 Ran Model "K" retainer on 2-1/2" tubing and set at 8894'. Shot holes at 8930' took fluid at 14 cu. ft. per minute with 1600# pressure. Opened circulating ports and mixed 50 sacks of Colton Hi-Temperature Cement preceded by 25 cu. ft. of water and followed by 10 cu. ft. of water and 297 cu. ft. of mud. Closed circulating ports and squeezed all cement below retainer. Final pressure 1100#. Backed off retainer and backscuttled. Time 3:10 PM. B.J. Service.

8/31 Drilled up Baker retainer and cement and cleaned out to bottom. Casing held 2500# for 30 minutes with no loss.

9/1 Ran Johnston tester on 2-1/2" tubing and while attempting to set packer at 8880' tubing parted, leaving 48 stands and tester in hole.

9/2 Recovered fish. Ran McCullough jet gun and shot four holes at 8928'. Ran Johnston tester on 2-1/2" tubing with 1000' of water cushion and set packer at 8881' with perforated tailpipe to 8896'. Opened tester at 2:30 PM. Had one puff, then dead for balance of 1 hour test. Recovered water cushion and 15' of drilling mud. Pressure bomb charts checked details of test.

9/3 Ran Johnston jet gun and tester on 2-1/2" tubing and shot four holes at 8790'. Set packer at 8743' with bottom of perforated tailpipe at 8769'. Used 1000' water cushion. Opened tester at 12:20 AM. Had one puff, then dead for balance of 1 hour test. Recovered water cushion and 15' rise of drilling mud. Pressure bomb charts checked details of test. Water shutoff witnessed and approved by Division of Oil and Gas. Laying down 2-1/2" tubing and making up 2" tubing.

9/4 Making up tubing and conditioning mud.

9/5 Spotted 20 barrels Kem-Oil on bottom. Jet perforated 6 holes per foot by McCullough from 9140' to 9060'.

9/6 Shot 6 jet holes per foot by McCullough from 9060' to 9005'. Landed tubing at 8985' Details of tubing as follows: 4443.5 - 144 joints, 2-3/8" Upset, 8 Thd. Rd. J-55; 1.1' Crossover; 4526.7' - 142 joints, 2-7/8" Upset, 8 Thd. Rd. J-55; 2.6' Landing Nipple; Total 8973.9'. Changed mud to oil.

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SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. Standard-Seanon #1-17, Sec. 28, T. 3 N, R. 16 W, S.B. B. & M.

Signed T. C. Foster

Date October 13, 1952 Title Agent
(President, Secretary or Agent)

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

Date

1952
9/7 Swabbed well in and turned to tanks at 5:00 PM. In 13 hours well swabbed and flowed 481 barrels gross, of which 106 barrels is formation oil, 0.2% cut, 20.6 gravity, 36/64" bean, 420# tubing pressure, 0# casing pressure.

Date	Gross	Net	Cut	Gravity	Bean	Tubing Pressure	Casing Pressure	MCF Gas
9/8	536	535	0.2%	20.8	40/64 (10 hrs) 24/64 (14 hrs)	400#	0#	253
9/9	220	219	0.2%	20.8	24/64 (5 hrs) 12/64 (19 hrs)	530#	0#	131
9/10	274	274	0.1%	20.8	12/64 (24 hrs)	540#	0#	130
9/11	237	237	0.1%	21.1	12/64	540#	0#	117
9/12	226	226	0.2%	20.8	12/64	540#	0#	114
9/13	237	237	0.2%	20.8	12/64	540#	15#	116
9/14	256	256	0.2%	20.8	12/64	550#	15#	104
9/15	226	226	0.2%	20.8	12/64	540#	15#	106
9/16	216	216	0.2%	20.7	12/64	540#	15#	103
9/17	206	206	0.2%	20.8	12/64	500#	15#	93
9/18	102	101	0.2%	20.7	12/64	540#	50#	36
9/19-9/21	Shut in.							
9/22	194	193	0.2%	20.7	12/64	50#	200#	80
9/23	235	234	0.2%	20.7	12/64	540#	250#	90
9/24	226	225	0.2%	20.7	12/64	500#	275#	85
9/25	226	226	0.2%	20.7	12/64	500#	400#	94
9/26	226	226	0.2%	20.7	12/64	500#	450#	90
9/27	231	231	0.2%	2017	12/64	500#	500#	92
9/28	236	236	0.2%	20.7	12/64	500#	550#	91
9/29	224	224	0.2%	20.7	12/64	500#	600#	86
9/30	226	226	0.2%	20.7	12/64	500#	650#	85
10/1	227	227	0.2%	20.7	12/64	500#	650#	91
10/2	226	226	0.2%	20.7	12/64	520#	750#	92
10/3	217	217	0.2%	20.7	12/64	520#	800#	95

FORM 103
CALIFORNIA STATE PRINTING OFFICE

SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
RECEIVED
OCT 14 1952
LOS ANGELES

History of Oil or Gas Well

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. Standard-Segnon #1-17, Sec. 28, T. 3 N, R. 16 W, S.B. B. & M.

Signed J. C. Foster
P

Date October 13, 1952 Title Agent
(President, Secretary or Agent)

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

Date 1952	Gross	Net	Cut	Gravity	Bean	Tubing Pressure	Casing Pressure	MCF Gas
10/4	236	236	0.2%	20.7	12/64	500#	850#	104
10/5	227	227	0.2%	20.7	12/64	520#	875#	91
10/6	227	227	0.2%	20.7	12/64	520#	925#	94
10/7	227	227	0.2%	20.7	12/64	500#	1000#	91
10/8	228	228	0.2%	20.7	12/64	500#	1025	84

CASING RECORD

13-3/8" 54.5#
7" 26, 29 & 32# C 9457'
O.P. 5238'
Milled section 8476' - 8516'
4294' 5" 18# & 5-9/16" 23# C 9140'
Top 4845' J.P. 6 h/ft 9080' - 9140'

TUBING RECORD

2-7/8" upset w/bottom 4414' 2-3/8" L 8935'

FORM 101
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SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
RECEIVED
OCT 14 1952
LOS ANGELES

LOG AND CORE RECORD OF OIL OR GAS WELL

Operator TIDE WATER ASSOCIATED OIL COMPANY Field ALISO CANION

Well No. Standard-Seenon #1-17 Sec. 28, T. 3 N, R. 16 W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO Top of Formation	DEPTH TO Bottom of Formation	Thickness	Drilled or Cored	Recovery		DESCRIPTION
			7-5/8" Reed Conventional Cores			
8995'	9013'			15'0"	8'0"	Firm to hard, dark grey to well saturated, sandy siltstone. No to good cut and odor. (Well saturated parts almost fine silty oil sand.)
					0'6"	Firm, medium oil sand. Good cut and odor. (Unable to get representative sample for testing.)
					1'6"	Firm, very sandy siltstone. Good cut and odor.
					1'0"	Firm, medium oil sand. Good cut and odor. (Unable to get good representative sample.)
					7'0"	Firm, sandy siltstone with very sandy streaks. Generally good cut and oder.
			7-5/8" Reed Wire Line Cores			
9013'	9022'			7'0"	6'3"	Firm, fine oil sand. Good cut and burned odor.
					0'9"	Shell.
9022'	9032'			10'0"	0'3"	Shell.
					2'9"	Firm to fairly hard, fairly fine oil sand with numerous biscuit partings. Good cut and burned odor.
					6'9"	Hard to very fine oil sand. Good cut and burned odor. (Looks tight, may be oil saturated sandy siltstone.)
					0'3"	Shell.
9032'	9033'			0'2"	0'2"	Shell.
9033'	9034'			0'3"	0'3"	Shell.
9034'	9044'			3'0"	2'9"	Fairly hard, oil saturated, sandy siltstone. Fair cut and burned odor. (In part, may be fine silty oil sand.)
					0'3"	Shell.
9044'	9054'			10'0"	10'0"	Fairly hard oil saturated sandy siltstone with numerous biscuit partings showing free oil. Occasional greyish spots in harder portion of core. Fair cut & burned odor. (In part, may be fine silty oil sand.)

FORM 101
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SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Operator TIDE WATER ASSOCIATED OIL COMPANY Field ALISO CANYON

Well No. Standard-Seenon #1-17 Sec. 25, T. 3 N, R. 16 W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO Top of Formation	DEPTH TO Bottom of Formation	Thickness	Drilled or Cored	Recovery	DESCRIPTION
9054'	9064'			10'0"	10'0" Fairly hard, oil stained, sandy siltstone with grey mottlings. Fair cut and burned odor.
9064'	9074'			10'0"	8'3" Firm, generally well saturated, sandy siltstone with numerous biscuit partings and occasional grey spots. Generally fair cut and burned odor. Sandy portions may be fine silty oil sand. (3" of shell 2' from top.) 0'3" Shell. 1'6" Hard, dark grey, sandy siltstone. No cut or odor.
9074'	9084'			10'0"	10'0" Hard, dark grey, oil stained sandy siltstone. No to fair cut and burned odor.
9084'	9092'			0'9"	0'6" Hard, oil saturated, sandy siltstone. Fair cut and burned odor. 0'3" Shell.
9092'	9097'			4'6"	3'0" Firm, oil saturated, very sandy siltstone with numerous biscuit parting planes. Fair cut and burned odor. (May be very fine oil sand.) 1'6" Hard, dark grey, oil stained sandy siltstone. No to slight cut and burned odor.
9097'	9099'			3'0"	1'0" Hard, dark grey, slightly oil stained sandy siltstone. No to slight cut and burned odor. 0'6" Fairly hard, fine grey sand. No cut or odor. 0'6" Firm, medium oil sand. Fair cut and burned odor. 1'0" Hard, oil saturated, sandy siltstone. Fair cut and burned odor.
9099'	9109'			1'0"	1'0" Fairly hard, oil saturated, sandy siltstone. Fair cut and oder.

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SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Operator TIDE WATER ASSOCIATED OIL COMPANY Field ALISO CANYON

Well No. Standard-Seamon #1-17 Sec. 28, T. 3 N, R. 16 W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO Top of Formation	DEPTH TO Bottom of Formation	Thickness	Drilled or Cored	Recovery	DESCRIPTION	
9101'	9119'			10'0"	10'0"	Sandy siltstone as above.
9119'	9129'			10'0"	3'0"	Sandy siltstone as above.
					7'0"	Firm, well sorted, medium oil sand. Good cut and fair to burned odor.
9129'	9134'			4'6"	3'6"	Oil sand as above.
					0'10"	Hard, fine, grey sand. No cut and odor. (Probably too tight to be wet)
					0'2"	Shell.
9134'	9138'			0'3"	0'3"	Shell.
9138'	9146'			6'0"	1'0"	Hard, mottled, oil stained, dark grey sandy siltstone. No to fair cut and burned odor.
					2'0"	Fairly hard, oil saturated, very sandy siltstone with streaks of silty oil sand. Fair cut and burned odor.
					1'0"	Shell.
					2'0"	Hard, oil saturated, sandy siltstone. Fair cut and burned odor.
9146'	9156'			11'0" (Picked up 1' from above.)	5'0"	Hard, oil saturated, sandy siltstone as above. Grades to 6'0" hard, dark grey, sandy siltstone with 1'6" shell in middle. No cut and odor.
9156'	9160'			2'0"	2'0"	Shell. (Very hard, liney, dark grey shale with light streaks - Eocene or hard zone.)
9160'	9163'			1'0"	1'0"	As above.
9163'	9164'			No recovery		
9565'	9574'			7'0"	7'0"	Fairly hard to hard, generally fine, grey sand. No cut and odor. Top 4" shows biscuit partings. Looks tight, in part almost a shell. Pyritic Micaceous. Several angle pebbles to 1/4".

FORM 101
CALIFORNIA STATE PRINTING OFFICE

SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Operator TIDE WATER ASSOCIATED OIL COMPANY Field ALISO CANYON

Well No. Standard-Saenon #2-17 Sec. 28, T. 3 N, R. 16 W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO Top of Formation	DEPTH TO Bottom of Formation	Thickness	Drilled or Cored	Recovery	DESCRIPTION
9574'	9579'			5'0"	3'6" Grey sand, as above No cut and odor 1'6" Firm, generally fine, grey sand with slight oil staining. Slight cut and burned odor. Shows some fluorescence.
9579'	9584'			3'0"	3'0" Hard, fine to coarse, poorly sorted, silty grey sand. No cut and odor. Almost a shell. Shows very slight fluorescence near botton. Possible dip 15°.
9584'	9593'			10'0"	4'0" Firm, fine, silty, grey sand. No cut and odor. Shows considerable mud contamination. 5'0" Hard, fine, silty, grey sand. No cut and odor. Occasional pebbles to 1/4". 1'0" Shell. (Very hard, limey, fine sandstone.)
9593'	9603'			2'0"	2'0" Hard, generally fine, silty, grey sand. No cut and odor. Poorly sorted, with pebbles to 1/4". In part, a shell.
		Schlumberger Sidewall Samples - 3-1/2 Gram Gun			
9210'				No Recovery	
9250'				"	
9280'				"	
9330'				1/2"	Pieces soft blue-grey siltstone.
9397'				1"	Firm, fine silty grey sand. No fluorescence 1/8" streak siltstone or shale. Low dip suggested.
9450'				3/4"	Pieces blue-grey siltstone and grey streak as above.

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STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

LOG AND CORE RECORD OF OIL OR GAS WELL

Operator TIDE WATER ASSOCIATED OIL COMPANY Field ALISO CANYON

Well No. Standard-Seaton 51-17 Sec. 28, T. 3 N, R. 16 W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO Top of Formation	DEPTH TO Bottom of Formation	Thickness	Drilled or Cored	Recovery	DESCRIPTION
			Schlumberger Sidewall Sample - 5-1/2 Gun Gun		
9,780'				No Recovery	
10,117'				"	
10,245'				"	
10,522'				"	
10,740'				"	
10,895'				"	
10,985'				"	
11,112'				"	
11,162'				"	
			7-5/8" Reed Conventional Core		
11,807'	11,822'			15'0"	15'0" Hard, dark grey shale. Parting planes 12° to 15°, average 14°. Occasional megafossils.
12,173'	12,186'			3'3"	3'0" Hard, dark grey shale with sandy streaks. No cut or odor. 75-90° dips. 70° fracture planes with slickensides.
					0'3" Fragments of fine, grey sand at top of core. No cut or odor. Slight fluorescence.
12,186'	12,201'			8'0"	8'0" Hard, dark grey shale with sandy streaks. No cut or odor. 70° fracture planes with slickensides. Dips 65°.
12,278'	12,292'			10'0"	10'0" Hard, dark grey shale with sandy streaks. Badly fractured and slickensided in part. Good dips - 40-60°.

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DIVISION OF OIL AND GAS

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OCT 14 1952
LOS ANGELES

LOG AND CORE RECORD OF OIL OR GAS WELL

Operator TIDE WATER ASSOCIATED OIL COMPANY Field ALISO CANYON

Well No. Standard-Seaton #1-17 Sec. 28, T. 3 N, R. 16 W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO Top of Formation	DEPTH TO Bottom of Formation	Thickness	Drilled or Cored	Recovery	DESCRIPTION
				Homco Sidewall Samples	
11,225'				1"	Firm, fine kaolinitic grey sand. No cut or odor.
11,180'				No recovery	- Tried twice.
10,805'				1"	Grey sand as above.
10,740'				1"	Hard, broken, dark grey shale.
10,540'				2"	Firm, fine grey sand as at 11,225'.
10,523'				2"	Hard, broken dark grey shale. (As at 10,740')
10,310'				1"	Firm, fine grey sand. No cut or odor.
10,245'				No recovery	
10,030'				1-1/2"	Firm, fine kaolinitic grey sand. No cut or odor.
				7-5/8" Reed Conventional Core	
12,405'	12,417'			10'0"	Very hard, dark grey to black, brittle shale with occasional sandy streaks badly fractured and slickensided. Megafossils. Good 32-37° dips. Fractured planes at all angles.
				Homco Sidewall Samples	
9,185'				1"	Firm, medium kaolinitic grey sand. No cut or odor.
9,210'				1"	As above.
9,250'				2"	Firm, mottled, dark grey shale with some very fine sand. No cut or odor.
9,375'				1-1/2"	Soft, mottled, dark grey shale with some very fine sand. No cut or odor. (Looks more like sandy siltstone.)
9,450'				2"	Firm, fine kaolinitic grey sand. No cut or odor.
10,055'				1-1/2"	Firm, medium kaolinitic grey sand. No cut or odor.
10,260'				1"	As above.

JUN 6 1952

TIDE WATER ASSOCIATED OIL COMPANY, OPERATOR, STANDARD OIL COMPANY-SESNON 1 NO. 17, SECTION 28-3N-16W: This is now a deeper test well which is exploring sediments of possible Cretaceous age at 11,752 feet. The mud-loggers have reported a drilling break from sand to shale at about 11,725 feet. The D.D.P.C. has recommended that the well be drilled ahead through the next shale body, providing it is at least 50 feet thick, and attempt to determine the fluid content of the next sand. The top of the Sesnon zone (S_4 point) has been placed at 8862 feet (-6262 feet). Electric log and dip-meter surveys were made at a depth of 11,215 feet and percussion type side-wall samples were taken for faunal information. Preliminary dipmeter results indicate that the beds are dipping 18° to the southwest. We have not had an opportunity to examine the electric log but our petroleum engineers inform us that below 9500 feet the section has been almost entirely sand. Cores and ditch samples have been barren of foraminifera with the exception of the ditch sample from 10,840 feet, which contained foraminifera of possible lower Eocene or Cretaceous age. No good Eocene fauna has been found in this hole and we know of no section of Eocene in the Aliso Canyon area which contains such a thickness, over 2000 feet, of sand. Our Frew 1-1 well penetrated approximately 2000 feet of sand in the Cretaceous between 3300 and 5350 feet and the Sunray-Porter Estate well penetrated approximately 1200 feet of coarse Cretaceous sediments. We feel that it is entirely possible that the Miocene may rest directly on the Cretaceous at Sesnon 1-17 location and that the sand interval which has been penetrated in this well is similar to that which was found in our Frew 1-1. We hope that Homco sidewall samples or the core which will be taken within the next few feet will give us some faunal information with which the age of these sediments may be determined.

JUN 13 1952

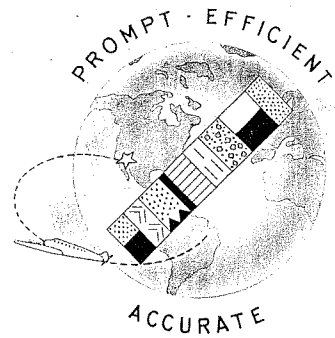
TIDE WATER ASSOCIATED OIL COMPANY, OPERATOR, STANDARD-SESNON 1 NO. 17, SECTION 28-3N-16W, is drilling ahead in Cretaceous sand and shale at 12,122 feet. A conventional core was cut from 11,807 feet to 11,822 feet which recovered 15 feet of very hard dark-gray shale with thin partings of fine, light-gray sandstone. Good 7°-11° dips were measured. Our paleontologists found a definite Cretaceous fauna in this core. Some evidence of Eocene was found in ditch samples between 9000 feet and 9500 feet. Assuming that this well has been in Cretaceous sediments below approximately 9500 feet, it has penetrated a greater thickness of Cretaceous than any well in this area with the exception of the Sunray-Porter Estate No. 81-16 well which had approximately 4300 feet of Cretaceous.

JUN 20 1952

TIDE WATER ASSOCIATED OIL COMPANY, OPERATOR, STANDARD-SESNON 1 NO. 17, SECTION 28-3N-16W: During the past week this hole was drilled and cored to 12,292 feet in Cretaceous sand and shale. A core was cut from 12,173 to 12,201 feet which recovered hard gray shale with minor sandy streaks. Some slickensides were observed and dips ranged from 65° to 90°. No cut or odor was obtained from these cores. A core from 12,272 to 12,292 feet recovered hard dark gray shale with occasional sandy streaks. Some minor slickensides and fracturing were noted. Good 40°-60° dips were measured. We are of the opinion that this bore-hole intersected the Ward fault zone at some point between the core at 11,807 to 11,822 feet, which had 7°-11° dips, and the core at 12,173 to 12,201 feet. These data fit the interpretation of this area as shown in the cross sections on drawing B-2574, which was prepared by Mr. E. C. Jacobsen, accompanying Mr. K. Arleth's report dated September 6, 1950. This office has recommended that the hole be drilled ahead approximately 100 feet, then take a core to determine the dip of the beds at that depth. If the core indicates that the fault zone has been penetrated, we have requested that a dipmeter survey be made to determine the attitude of the Cretaceous above and below the Ward fault.

PETROLEUM ENGINEERING ASSOCIATES, INC.
Complete Laboratory Service

709-11 SOUTH FAIR OAKS AVENUE
PASADENA 2, CALIFORNIA
Telephones
SYCAMORE 3-1156
RYAN 1-8141



July 7, 1952

Standard Oil Company of California
P. O. Box 397
La Habra, California

Attention: Mr. Clark Thomas

Subject: Core Analysis
Well: Sesnon 1-17
Our Job Order No. 688

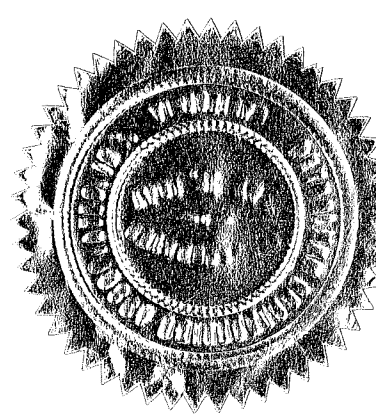
Dear Sirs:

Submitted herewith are the results of the core analysis data requested for two sidewall samples received from the subject well July 1, 1952. Porosities and air permeabilities were desired. Data shown confirm those already reported by telephone.

PETROLEUM ENGINEERING ASSOCIATES, Inc.

by Florent H. Bailly
Florent H. Bailly

GBM:th



IBM

PETROLEUM ENGINEERING ASSOCIATES, INC.

PEA FORM 1

CORE ANALYSIS

Job Order No. 688

COMPANY Standard Oil Company of California ACCESSION NO. 3928 PAGE 1 OF 1

FIELD Sesnon Lease ZONE WELL Sesnon 1-17 DATE July 7, 1952

CORE DIA. IN. Sidewall TYPE MUD SATURATION METHOD OIL GRAV. °API WATER SALINITY GPG NaCl

DEPTH FT.	SAMPLE NO.	CHARACTER OF SAMPLE	KOBE POROSITY % (HELIUM)	PERMEABILITY-MD			I.W.*	OIL WATER RATIO	% PORES FULL OF			REMARKS
				AIR	WATER	EFFECTIVE			OIL	WATER	TOTAL	
9185	1	pr srtd Sand slty slt-med	23.0	0								
9210	2	pr srtd Sand slty slt-med	26.4	0								

PETROLEUM TECHNOLOGISTS, INC.
PRODUCTION RESEARCH – CORE ANALYSIS
RESERVOIR ENGINEERING
868 TRUCKWAY
MONTEBELLO, CALIFORNIA
UNion 1-5338

NORRIS JOHNSTON
PRESIDENT

N. VAN WINGEN
VICE PRESIDENT

June 30, 1952

Mr. Joseph Jensen
Tide Water Associated Oil Company
333 Pacific Electric Building
610 South Main Street
Los Angeles, California

Dear Mr. Jensen:

Herewith are data on the analysis of cores from your Aliso Canyon well Sesnon 1-17 in the depth interval 8995-9153.

The porosity is quite uniform at about 20% and the permeability varies from 1 md. to 3230 md. Most of the permeabilities over 100 md. are found in the two intervals 9013-9024 and 9122-9140.

The oil saturation is disappointingly low in many of the medium permeability sands, though almost without exception the higher permeability sands are well oil saturated, and generally the tight sands appear wet. Strictly on the basis of core analysis, some water could be produced at the following depths: 9023, 9045-9064, 9111-9121, and 9151-9153. Actually the water production should not be damaging, as the permeabilities are all under 115 md. and mostly under 30 md.

The total saturation is high for the tighter, less oily sands, but satisfactory for the more permeable intervals, indicating considerable gas in solution. Some of the tighter sands with low oil content may be gassy instead of wet, such as 9051, and 9055-9059. However, the remainder of the above intervals described as partially wet should definitely produce some water rather than gas.

Sincerely,

Norris Johnston

Norris Johnston

de

IBM

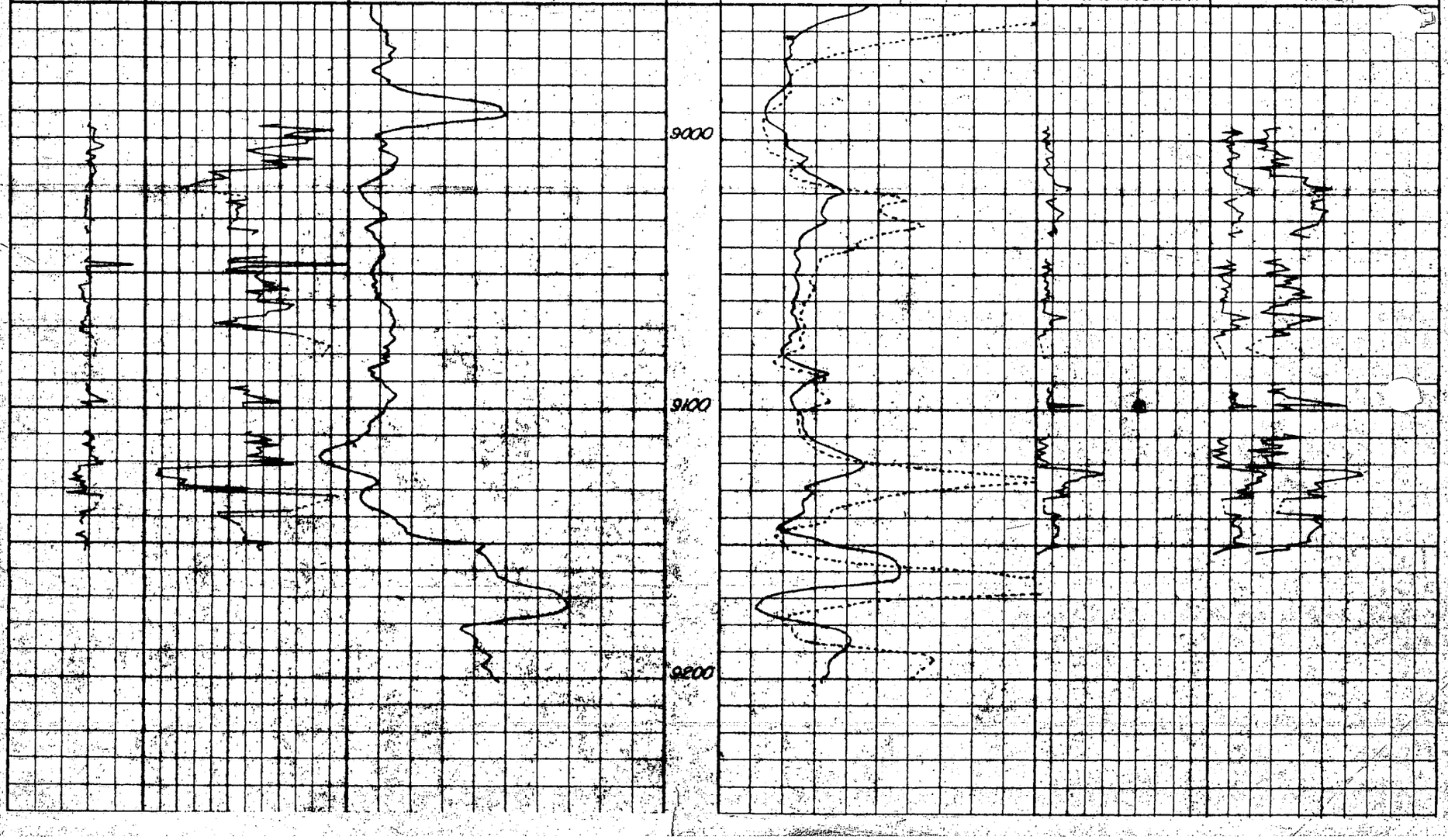
PETROLEUM TECHNOLOGISTS, INC.

CORE ANALYSIS GRAPH

COMPANY Tide Water Assoc Oil Co. STATE Calif DRILLING FLUID Water Base

FIELD Aliso Canyon COUNTY CORE BARREL TYPE

WELL Sesnon 1-17 SEC. T. R. DATE ANALYZED May 2, 1952



Core Analysis File

PETROLEUM TECHNOLOGISTS, INC

Zone: Lower Sesnon

PRODUCTION RESEARCH – CORE ANALYSIS
RESERVOIR ENGINEERING
868 TRUCKWAY
MONTEBELLO, CALIFORNIA
UNion 1-5338

NORRIS JOHNSTON, PRESIDENT
N. VAN WINGEN, VICE PRESIDENT

May 2, 1952

7 7/8" Conv. Core

Tide Water Associated Oil Company
333 Pacific Electric Building
610 South Main Street
Los Angeles, California

Field: Aliso Canyon
Well: Sesnon 1-17
Oil: 23° API
Mud: Water Base

CORE ANALYSIS REPORT

Depth	% Porosity	md. Air Permeability	Q/W Ratio	Saturation of Pore Space % Oil	% Water	Total Liquid
8995	20.1	11 ✓	.14	9.9	69.0	78.9
96	20.5	30	.15	10.9	74.8	85.7
97	17.8	.9	.07	5.8	85.0	90.8
98	18.6	5.7	.15	10.1	72.3	82.4
99	18.9	8.5	.11	8.1	73.2	81.3
9000	18.7	1.7	.05	4.1	86.3	90.4
01	18.9	3.4	.15	10.8	74.2	85.0
02	18.3	3.4	.11	7.9	73.2	81.1
03	15.5	7.6	.12	9.2	78.0	87.2
04	16.5	17	.14	9.5	70.0	79.5
05	20.6	52	.19	12.8	69.1	81.9
06	21.6	26	.20	12.7	63.5	76.2
07	17.9	11	.11	7.9	70.8	78.7
08	18.6	2.3	.13	9.1	70.8	79.9
09	20.9	23	.15	9.7	65.1	74.8
10	18.8	8.1	.08	6.4	79.0	85.4
11	19.1	8.1	.09	6.6	71.3	77.9
13	17.9	280	.14	8.8	71.6	80.4
14	19.3	165	.19	12.6	57.2	69.8
15	20.1	106	.21	12.2	58.3	70.5
16	19.5	290	.21	12.2	59.2	71.4
17	20.0	510	.27	15.5	56.6	72.1
18	20.7	658	.42	19.9	47.2	67.1
19	21.6	990	.36	19.6	54.4	74.0
21	21.1	58	.23	11.4	50.5	61.9
23	21.0	48	.12	7.0	56.1	63.1
24	21.6	121	.16	8.5	53.9	62.4
25	20.9	62	.21	11.6	55.9	67.5
26	22.1	73	.26	12.6	48.7	61.3
27	21.2	85	.32	16.0	50.3	66.3
28	21.6	78	.28	14.3	50.4	64.7
9029	21.8	81	.26	13.3	50.8	64.1

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CORE ANALYSIS REPORT (Continued)

Depth	% Porosity	md. Air Permeability	O/M Ratio	Saturation of Pore Space % Oil	% Water	Total Liquid
9030	22.0	79	.25	13.2	52.1	65.3
31	19.1	90	.19	9.9	52.5	62.4
34	21.9	109	.23	14.6	62.2	76.8
35	20.9	32	.14	9.1	64.0	73.1
36	21.0	39	.20	11.6	57.1	68.7
44	19.9	19	.12	8.1	68.5	76.6
45	21.1	89	.12	9.1	75.2	84.3
46	21.9	107	.16	11.4	69.2	80.6
47	4.4	0	.07	1.0	66.7	67.7
48	20.8	55	.18	11.4	64.9	76.3
49	21.0	115	.13	8.5	73.0	81.5
50	20.0	23	.05	3.6	68.3	71.9
51	20.8	34	.09	5.5	61.6	67.1
52	19.6	30	.10	6.6	66.6	73.2
53	20.1	25	.14	9.0	63.9	72.9
54	19.7	13	.14	9.6	69.5	79.1
55	23.8	20	.09	5.2	60.5	65.7
56	22.9	7.7	.15	8.9	59.2	68.1
57	22.5	53	.11	6.7	62.9	69.6
58	22.6	26	.13	8.1	56.0	64.1
59	23.1	30	.07	4.3	63.2	67.5
60	22.3	32	.11	7.3	65.9	73.2
61	22.3	28	.10	6.6	65.6	72.2
62	19.9	6.4	.09	6.6	71.1	77.7
63	21.0	7.6	.09	6.5	71.7	77.2
64	20.6	8.5	.08	5.9	76.5	82.4
65	20.9	18	.17	11.0	64.5	75.5
66	19.9	19	.37	18.3	50.0	68.3
67	22.2	80	.13	10.4	58.8	69.2
68	21.9	83	.16	9.8	62.2	72.0
69	23.3	192	.21	13.9	65.4	79.3
70	21.7	22	.18	11.9	65.2	77.1
71	23.3	67	.08	5.3	69.3	72.6
72	23.5	14	.11	6.9	64.6	71.5
9073	19.7	5.1	.03	1.8	73.1	74.9

8.7

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PETROLEUM TECHNOLOGISTS, INC.
PRODUCTION RESEARCH - CORE ANALYSIS
RESERVOIR ENGINEERING
868 TRUCKWAY
MONTEBELLO, CALIFORNIA
UNION 1-5338

NORRIS JOHNSTON
PRESIDENT

N. VAN WINGEN
VICE PRESIDENT

May 7, 1952

Tide Water Associated Oil Company
888 Pacific Electric Building
610 South Main Street
Los Angeles, California

Field: Alise Canyon
Well: Sesnon #1-17
Oil: 20.5° API
Mud: Water Base

CORE ANALYSIS REPORT

Depth	% Porosity	md. Air Permeability	O/W Ratio	Saturation of Pore Space % Oil	% Water	Total Liquid
9077	17.3	1.1	.06	5.3	82.7	88.0
81	18.8	1.6	.11	7.6	69.9	77.5
92	20.9	48	.15	10.3	66.7	77.0
93	20.7	96	.14	10.1	71.8	81.9
94	21.2	45	.19	13.1	67.3	80.4
95	19.9	65	.15	9.5	64.7	74.2
98	13.6	10	.14	10.6	79.3	89.9
98.5	23.1	67	.56	21.4	37.9	59.3
99	19.6	68	.14	9.3	66.2	75.5
9100	21.1	56	.20	12.5	63.0	75.5
09	20.6	42	.15	9.9	66.8	76.7
10	21.6	55	.16	9.6	59.2	68.8
11	19.4	23	.04	3.1	75.2	78.3
12	19.3	15	.06	4.3	74.4	78.7
13	20.2	56	.13	8.4	67.2	75.6
14	22.4	10	.12	7.9	67.8	75.7
15	18.5	32	.01	.8	80.9	81.7
16	19.5	26	.12	7.5	65.2	72.7
17	19.8	25	.03	1.9	74.0	75.9
18	19.7	47	.05	3.9	72.4	76.3
19	16.9	8.7	.12	8.3	72.4	80.7
20	18.0	45	.15	10.5	67.9	78.4
21	15.1	6.7	.04	2.9	82.6	85.5
22	24.1	327	.39	16.2	41.3	57.5
23	24.0	2510	.71	24.4	34.2	58.6
24	24.1	2230	.80	26.3	32.9	59.2
25	26.6	3230	.54	21.9	40.4	62.3
26	23.2	1930	.50	23.6	47.3	70.9
27	27.0	771	.37	20.0	53.2	73.2
28	21.7	850	.33	17.0	52.1	69.1
29	23.3	923	.36	18.2	50.2	68.4
30	20.9	46	.24	13.0	57.1	70.1
9131	20.9	340	.33	18.6	56.6	75.2

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Tide Water Associated Oil Company
May 7, 1952

Page two
Well: [illegible] #1-17

CORE ANALYSIS REPORT (Continued)

Depth	% Porosity	md. Air Permeability	O/W Ratio	Saturation of Pore Space % Oil	% Water	Total Liquid
9132	23.6	14	.41	20.3	49.2	69.5
33	15.1	.6	.09	6.1	67.0	73.1
38	14.3	7.0	.11	7.3	69.2	76.5
39	25.2	166	.29	14.3	50.0	64.3
40	21.5	162	.22	12.1	54.7	66.8
42	27.2	89	.21	10.6	50.5	61.1
43	21.8	71	.27	14.2	52.1	66.3
46	21.8	59	.26	14.8	56.5	71.3
47	24.7	49	.20	11.5	56.9	68.4
48	20.7	61	.21	11.7	55.6	67.3
49	20.5	62	.19	11.3	58.8	70.1
50	21.5	14	.29	19.3	65.5	74.8
52	21.0	30	.12	7.6	64.3	71.9
9153	21.6	25	.03	2.7	78.1	80.8

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1	WHH CLA
2	RW
3	BLDG 345
	FILE

FAUNAL INFORMATION REPORT

(For Graphic Well Logs)

MAY 27, 1951.

Company S.O. CO. T.W.A. (OPERATOR) Well No. STD-SESNON 1-15

Field ALISO CANYON Elevation 3270' [redacted]

	Faunal Marker	In Hole Depth	Sub-Sea Depth
within	PLIOCENE in Sidewall sample	3665'	-395'
"	PLIOCENE Lito @	3920'	-650'
"	PLIOCENE Lito @	4130'	-860'
"	PLIOCENE Lito @	4865'	-1595'
	PLIOCENE/MIOCENE @ by elect log	4885'	-1615'
within	MIOCENE in Sidewall Samp @	4925'	-1655'
"	MIOCENE (Luisian) " @	5485'	-2215'
"	MIOCENE (Luisian) " @	5570'	-2300'
within	PLIOCENE in sidewall Samp @	5670'	-2400'
within	PLIOCENE "	5825'	-2555'
"	PLIOCENE "	5975'	-2705'
"	PLIOCENE "	6460'	-3190'
"	PLIOCENE "	6560'	-3290
"	PLIOCENE "	6720'	-3450'

Faunal Information by: JLG

6/29, 1951

K. Ala

R.W.

IBM

MEMORANDUM GO-144

TO

FROM

SUBJECT: TWA Standard Seaman #1-18 OUR FILE

~~Home's~~ Sidewall samples Sec 28, T 31N, R 16W Elev. 3270 YOUR FILE

23 3665' 9" in recov. Sectile gray siltstone - v fine gry sd inclusions - bedding near angle of penetration of sampler

22 3920' 3" Med brownish gray shale

21 4130' 6" Mod brownish gray & firm shale (looks pliocene) very sandy

20 4465' 6" friable gray silt (cf. sample 23)

19 4865' 3½" blocky gry sdy silt

18 4925' silt in part gray - mostly oil saturated

17 5153' pcs brittle shale in mud nodular shale -

16 5485' 4in gry brown & firm shale - oren & forams, Uvig

15 5370' 2" gry brown shale : fragments & fish bone

14 5670 5" gry brn shale w/ v fine oil sd inclusions

13 5825' 1½" Argillaceous sd - generally fine w scattered cse grns -

12 5975' 3" sdy gray shale

IBM

WHEN REPLY IS REQUIRED, FORWARD ORIGINAL AND ONE COPY.

GO 144 (46M-1

MEMORANDUM GO-144

TO

FROM

SUBJECT: T NA Standard Seamon #1-18 OUR FILE

YOUR FILE

10 6235' 2" Very argilaceous coarse pebbly sand

9 6400' 5½" V fine argilaceous sd w/oil stained sd inclusions -

8 6460' 2" Pale cut petroleum odor & fine sand oil stained
Mollusk & fragments

7 6560 4" sandy & friable siltstone some oil stain

2 6720 3" V fine sand oil stained faint petroleum od

1 6845' 2" V fine sand oil Stained, pale cut, faint odo

IBM

WHEN REPLY IS REQUIRED, FORWARD ORIGINAL AND ONE COPY.

GO 144 (46M-1

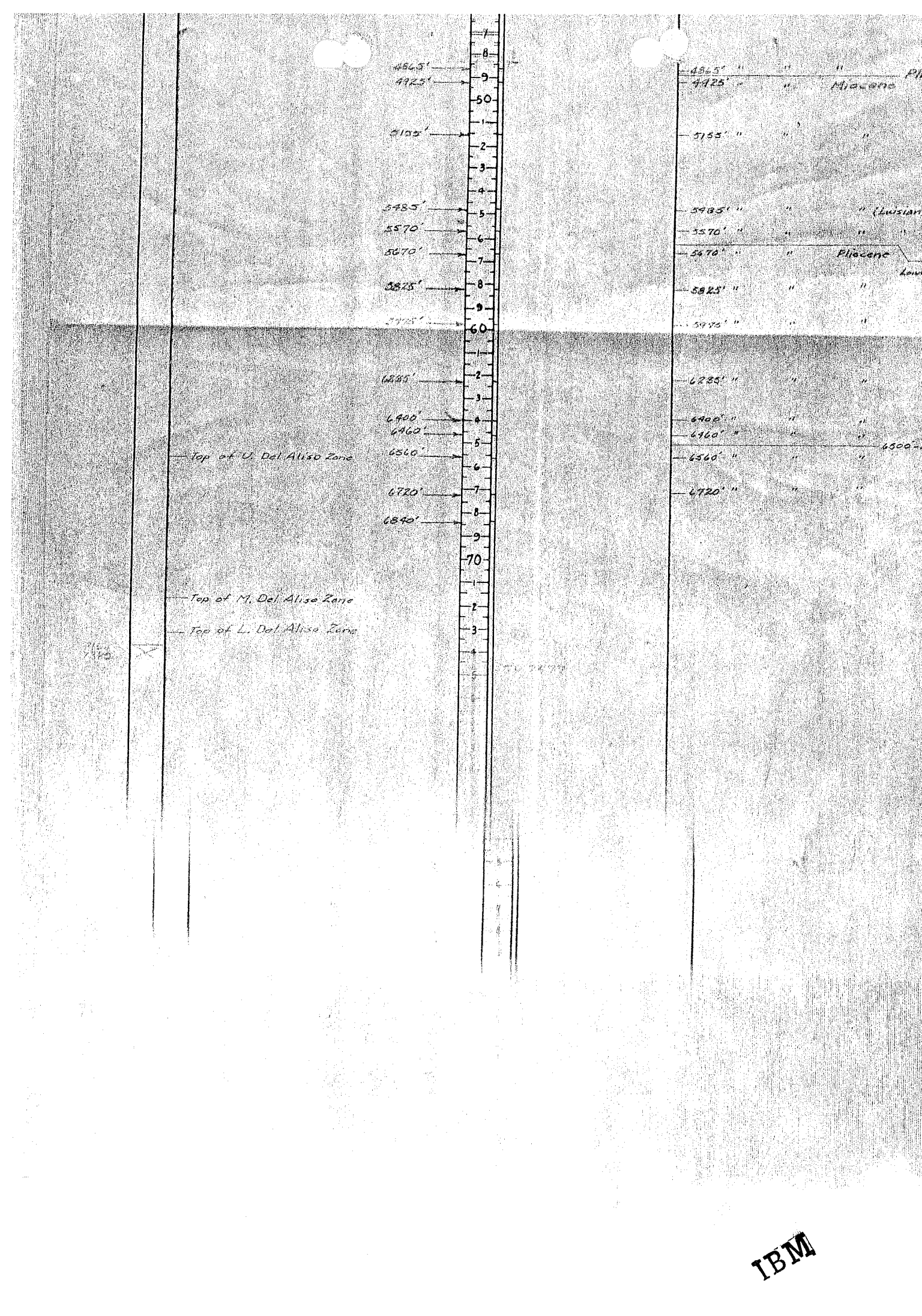
Well Std. Sesnon #1-18
Company T.W.A.
Sec 28 T. 3-N R. 16-W
District Aliso Canyon

Elevation
Date Spudded Feb.
Date Finished May
Date of Report June

Casing	Log	Oil Zones	Depth 100'	CORE	Faunal Zones	Remarks
			1 2 3 4 5 6 7 8 9 10 1 2 3 4 5 6 7 8 9 20 1 2 3 4 5 6 7 8 5 30 1 2 3 4 5 6 7 8 9 40 1 2 3 4			3665' within the Pliocene 3920' " " 4130' " "

3665'
3920'
4130'
4465'

IBM


4843'
4925'
5102'
5485'
5570'
5670'
5825'
6285'
6400'
6460'
6560'
6720'
6840'
4843' " " " Pl
4925' " " Miocene
5155' " " "
5485' " " " (Louisian
5570' " " " "
5670' " " Pliocene
5825' " " "
6285' " " "
6400' " " "
6460' " " "
6560' " " "
6720' " " "
6500'
Top of U. Del Aliso Zone
Top of M. Del Aliso Zone
Top of L. Del Aliso Zone

Sent to R. Wetle 7-25-52, extra form handed to E.H.R. for Kil Carson 7-25-52

FAUNAL INFORMATION REPORT

(For Graphic Well Logs)

July 16, 1952.

Company T W A Operator - Standard Oil Company Well No. Standard-Seamon 1 #17

Field Aliso Canyon Elevation 2600.36' D F

Faunal Marker	In Hole Depth	Sub-Sea Depth
First ditch sample examined is within Middle MIOCENE - Lusian	8960'	
Wire line core, still within Middle MIOCENE - Lusian	9160'63'	
Sidewall core first questionable Lower EOCENE or Upper CRETACEOUS	9250'	
Conventional core first definite CRETACEOUS	11,600'	

Faunal Information by: _____

_____, 195__

T.W.A.

Well Standard Sesnon #1-17 S. 28 R. 3N B. 16

Sample Lot CC Form Sheet No. 1

Field Sample No.	Depth	Box	Treated Sample Washed Record	Treated Sample Picked Record	Remarks
4-14-52					
1	7500	1658 ✓			Lith-o-Log Box 1658 9180-9660 Box 1666 10,960-11,900
2	7500-20				
3	7520-40				
4	7540-60				
5	7560-80				
6	7580-7600				
7	7600-20				
8	7620-40				
9	7640-60				
10	7660-80				
11	7680-7700				
12	7700-20				
13	7720-40	1658 ✓			
4-16-52					
14	7740-60				
15	7760-80				
16	7800-20 Break				
17	7820-40				
18	7840-60				
19	7860-80				
20	7880-7900				
21	7900-20				
22	7920-40				For Additional information on t well see page #3 of Form #1
23	7940-60				
24	7960-80				
25	7980-8000				
26	8000-20				
27	8020-40				
28	8040-60				
29	8060-80	1658 ✓			
4-22-52					
30	8320-40	1657 ✓			
31	8340-60				
32	8360-80				
33	8380-8400				
34	8400-20				
35	8420-40				
36	8440-60				
37	8460-80				
38	8480-8500				
39	8500-20				
40	8520-40				
41	8540-60				
42	8580-8600 Break				
43	8600-20				
44	8620-40	1657 ✓			

IRM

T.W.A.

Well Standard Sesnon #1-17 S. 28 T. 3N R. 16

Sample Lot CC Form Sheet No. 2

Field Sample No.	Depth	Box	Treated Washed Record	Sample Picked Record	Remarks
4-22-52					
45	8640-60	1657 ✓			
46	8660-80				
47	8680-8700				
48	8700-20				
49	8720-40	1657 ✓			
50	8740-60 4-25-52		✓ 1641	X 3-J	
51	8760-80			X	
52	8780-8800			X	
53	8800-20			X	
54	8820-40			X	
55	8840-60			X	
56	8860-80			X	
57	8880-8900			X	
58	8900-20			X	
59	8920-40				
60	8940-60				
61	8960-80	1657 ✓	✓ 1641		
62	8995-9013	1642 ✓	✓ 1648	X	
63	9013-9022				
64	9022-32				
65	9032-33				
66	9033-34				
67	9034-44				
68	9044-54				
69	9054-64				
70	9064-74				
71	9074-84		✓ 1648	X	
72	9084-92				
73	9092-97		✓ 1648	X	
74	9097-99		✓ 1648	X	
75	9099-9109				
76	9109-9119				
77	9119-29				
78	9129-34				
79	9134-38				
80	9138-46				
81	9146-56				
82	9156-60			X	
83	9160-63			X 3-J	
84	9565-74				
85	9574-79				
86	9579-84				
87	9584-93				
889593-9603		1642 ✓			

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For intervals 9280 to 30 missed in recording s[illegible]orm 1 page 3A

Well T.W.A. Standard-Sesnon #1-17 S. 28 T. 3N R. 16W

Sample Lot CC Form Sheet No. 3

Field Sample No.	Depth	Box	Treated Sample Washed Record	Treated Sample Picked Record	Remarks
89	9100-20	1657	1641		WASHED ↓ Broken Intervals Filed in Box 1641 And Box 1648
90	9120-40				
91	9140-60				
92	9160-80				
93	9180-9200				
94	9200-20	1657	1641		
95	9680-9700 Break	1648	1648	3-K	
96	9700-20		1648		
97	9720-40				8740-10,980
98	9740-60				Cores & Ditch
99	9780-9800 Break				
100	9800-20				
101	9820-40				
102	9840-60				
103	9860-80				
104	9880-9900				
105	9900-20				
106	9920-40				
107	9940-60				
108	9960-80				
109	9980-10,000				
110	10,000-020				
111	10,020-040				
112	10,040-060				
113	10,060-080				
114	10,080-10,100				
115	10,100-120				
116	10,120-140				
117	10,140-160				
118	10,160-180				
119	10,180-200				
120	10,200-220				
121	10,220-240	No Surplus	1648		For intervals 9280 to 10,260 missed in recordin see form 1 page 3A
122	10,240-260		1650		
123	10,260-280				
124	10,280-10,300				
125	10,300-320				
126	10,320-340				
127	10,340-360				
128	10,360-380		1650		
129	10,380-400		1648		
130	10,400-420				
131	10,420-440				
132	10,440-460		1648		
133	10,480-500 Break		1650		
134	10,500-520				
135	10,520-540		1648	3-K	

IBM

Missed in Recording

WELL T.W.A. Standard-Sesnon #1-17 S 28 T 3N R

Sample Lot CC Form Sheet No. 3A

Field Sample No	Depth	Box	Treated Sample Washed Record	Treated Sample Picked Record	Remarks
95A	9280-9300 Break		1641	3-J	
96A	9300-9320				
97A	9360-80 Break				
98A	9380-9400				
99A	9400-20				
100A	9420-40				
101A	9440-60				
102A	9460-80				
103A	9480-9500				
104A	9500-20	No Surplus			
105A	9520-40				
106A	9540-60				
107A	9560-80				
108A	9580-9600				
109A	9500-20			3-J	
110A	9620-40			3-K	
111A	9640-60				
112A	9660-80		1641	3-K	
6-24-52	Sidewalls				
214A	10,030	1697 ✓	1653		
215A	10,523				
216A	10,540				
217A	10,740				
218A	10,805		1653		
219A	11,225	1697 ✓	1930		
6-25-52					
220A	12,360-80	1718 ✓	1662		
221A	12,380-400	1718 ✓	1662		
6-27-52					
222A	12,405-417	1697 ✓	1653		
7-1-52					
223A	12,410 - Core	1697 ✓			
224A	9250		1653		
225A	9375				
226A	9450				
227A	10,055 Sidewalls				
228A	10,260	1697 ✓	1653		

Missed in recording

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WELL T.W.A. Standard-Sesnon #1-17 S 28 T 3N R 1

Sample Lot CC Form Sheet No. 4

Field Sample			Treated Sample		Remarks
No	Depth	Box	Washed Record	Picked Record	
5-26-52					
136	10,560-580		1648	3-4	
137	10,580-600				
138	10,600-620				
139	10,620-640				
140	10,640-660				
141	10.660-680				
142	10,680-700				
143	10,700-720				
144	10,720-740				
145	10,740-760	No Surplus	1650		
146	10,760-780		1[illegible]		
147	10,780-800				
148	10,800-820				
149	10,820-840				
150	10,840-860				
151	10,860-880				
152	10,880-9000		1651		
153	10,900-20		1650		
154	10,920-940				
155	10,940-960				
156	10,960-980		1648		
6-3-52					
157	9330 Sidewall		1648 ~~1650~~		
158	9397 Sidewall		1		
159	9450 Sidewall		~~1650~~ 1648		
160	10,980-11,000		1662		
161	11,000-11,020				
162	11,020-11,040				
163	11,040-11,060				
164	11,060-080				
165	11,080-11,100	No Surplus			
166	11,100-120				
167	11,120-140				
168	11,140-160				
169	11,160-180				
170	11,180-11,200				
171	11,200-220				
172	11,220-240				
173	11,240-260 ✓	1685 ✓			
174	11,260-280 ✓				
175	11,280-11,300 ✓				
176	11,300-320 ✓				
177	11,320-340 ✓				
178	11,340-360 ✓				
179	11,360-380 ✓				
180	11,380-400 ✓				
181	11,400-420 ✓				
182	11,420-440 ✓				
183	11,440-460 ✓	1685 ✓	1662	3-4	

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WELL T.W.A. Standard-Sesnon #1-17 S 28 T 3N R

Sample Lot CC Form Sheet No. 5

Field Sample			Treated Sample		Remarks
No	Depth	Box	Washed Record	Picked Record	
6-3-52					
184	11,460-480	1685 ✓	1662	X 3-L	
185	11,480-500	1685 ✓		X 3-L	
186	11,500-520	No Surplus		X 3-M	
187	11,520-540			X	
188	11,540-560			X	
189	11,560-580		1662	X	
6-9-52					
190	11,807-22	1683 ✓	1653		
191	11,807-22 (2)	1683 ✓	1653		
192	11,640-60 ✓	1685 ✓	1662	X	
193	11,660-80 ✓			X	
194	11,680-700 ✓			X	
195	11,700-720 ✓			X	
196	11,720-740 ✓				
197	11,740-760 ✓				
198	11,760-80 ✓				
199	11,780-800 ✓				
200	11,800-820 ✓				
201	11,820-840 ✓				
202	11,840-860 ✓				
203	11,860-880 ✓				
204	11,880-900 ✓				
205	11,900-920 ✓				
206	12,180-200 ✓	1685 ✓	1662		
207	12,173-175½	1683 ✓	1653		
208	12,186-194	1683 ✓	1653		
209	12,200-220	1684 ✓	1662		
210	12,220-240				
211	12,240-260				
212	12,260-280	1684 ✓	1662		
213	12,278-288	1683 ✓	1653	X 3-M	

IBM

Well I W A. Standard-Lessen #1-17 S. T. R.

Sample Lot TEMPORARY Form Sheet No. 1

Field Sample No.	Depth	Bag	Treated Washed Record	Sample Picked Record	Remarks
	Diff				
	8920-40			X Temp. C	
	8940-60			X " "	
	8960-80			X Temp. C	

IBM

August 21, 1952

Tidewater Associated Oil Co., Standard-Sesnon No. 1-17 Paleontological Correlation

Question 1 - Were Luisian forams found in any of the cores within the interval 8995-9163? Answer - No, Luisian forams were found in ditch samples only. 8980 feet - first Luisian based on core lithology and forams in ditch samples.

Question 2 - Is it possible that the brecciated shale member 9156-9163 feet is Eocene? Any forams in this interval or other evidence? Answer - No, there is no paleontological evidence for Eocene in this interval.

Questions 3 - Would you care to outline your correlation of the interval 9250-10,740 feet in terms of Simi Valley section? Answer - within the interval 9250-10,740 feet we found forams which range from Lower Santa Susana (lower Eocene) to Upper Cretaceous in age. No index microfossils occurred in this interval to determine the top of the Cretaceous.

Question 4 - Would you say the faunas of interval 10,740-11,807 were more like these in the interval 11,807 down than from 10,740 upward? Can you place these units in the general Simi Valley section? Answer - the faunas from 10,740-11,807 feet were like the faunas from 11,807 down.

Ed: Can you answer these questions. B

BRADFORD C. ADAMS
GEOLOGIST
1025 EAST PALM STREET
ALTADENA, CALIFORNIA

August 9, 1952

Mr. Harold Radar,
Standard Oil Co.
605 W. Olympic Blvd.,
Los Angeles 15, Calif.

Re: Tidewater Associated
Sesnon 1-17
Aliso Canyon

Dear Hal:

I have just received a report on paleontological correlations of subject well, released by Mr. W.C.Johnson. The latter suggested that I contact you if I had any additional questions, and here are a few:

1. Were Luisian forams found in any of the cores within interval 8995-9163? 9150 Luisian based on core lithology, ditch only 2% ditch

2. Is it possible that brecciated shale member 9156 to 9165 is Eocene? Any forams. this interval, or other evidence? No.

3. Would you care to outline your correlation of the interval 9250 to 10,740 in terms of the Simi Valley section (i.e. Poison Oak Canyon) Llajas- Santa Susana- Martinez - Chico (Stipp's terminology, Bulletin 118) I noted some large broken Nodosaria in the ditch; did you find any good Eocene at all in this interval, cores, sidewall samples, or ditch? We found forams of Lower Santa Su & U-Cretaceous age. Forams noted in SWS 10, Ditch 10,840, 11,120, 11,400, 11,580, 11,

4. Would you say the faunas of interval 10,740 to 11,807 were more like these in the interval 11,807 down than from 10,740 upward? Can you place these units in the general Simi Valley section? They were like 11,807 No forams older than Luisian were found 10,740!

Lastly, I am sure that Mr. Sesnon would appreciate it if you would release the points for subject well (formation breaks, zone contacts, faults) so that I may turn in areport to him using your terminology.

With best personal regards, I am,

Very truly yours,

Bradford C. Adams

Bradford C.Adams
Geologist for Porter Sesnon

4 copies sent to J.R. Russell for transmittal to TWA & Sesnon representatives.

3N-16W

July 31, 1952

TIDEWATER ASSOCIATED OPERATOR WELL STANDARD-SESNON 1-17
PALEONTOLOGICAL CORRELATIONS

Highest material examined in the well was a ditch sample at 8980 feet which was found to be Luisian in age, and below the top of the Sesnon Zone.

The cores within the interval 8995 feet to 9163 feet were found to be within the Sesnon sand of Luisian age.

Sidewall core 9250 feet and succeeding core samples contained a lithology indicating an indeterminate Lower Eocene or Upper Cretaceous age.

Sidewall core 10,740 feet and some of the succeeding cores and ditch samples contained micro-faunas indicating an indeterminate Lower Eocene or Cretaceous age; most of these samples, however, were barren of foraminifera.

Conventional core 11,807 feet to 11,822 feet and succeeding for samples contained megafossils of definate Cretaceous age.

Hvnr's 9185 & 9210 SWC's

L R Wolfe
2 M.C. File
2 Review file

FAUNAL INFORMATION REPORT

(For Graphic Well Logs)

July 16, 1952.
Original hole

Company T W A Operator - Standard Oil Company

Well No. Standard-Seaman 1 #17

Field Aliso Canyon

Elevation 2600.36' D F

Faunal Marker	In Hole Depth	Sub-Sea Depth
First ditch sample examined is within Middle MIOCENE - Lusian	8980'	
Wire line core, still within Middle MIOCENE - Lusian	9160'63'	
Sidewall core first questionable Lower EOCENE or Upper CRETACEOUS	9250'	
Conventional core first definite CRETACEOUS	11,800'	

Faunal Information by: W E A

7-25-, 1952

CALIFORNIA RESEARCH CORPORATION
La Habra, California

FILE 561.11
PROJECT 2008
JULY 8, 1952

CORE ANALYSIS RESULTS
WELL SESNON 1-17, ALISO CANYON

This report presents the results of analysis of one Homco Sidewall sample from Well Sesnon 1-17, Aliso Canyon.

The results are tabulated as follows:

Depth feet	Perm. md	Porosity per cent	Water Sat. per cent	Oil Sat. per cent	Formation Factor dimensionless
10310	17 —	17.8	56	35	9.1

T. D. MUELLER

MR. W. C. JOHNSON:

Please note in answer to Mr. J. R. Russell's request on G0113 G42219 dated June 23, 1952.

R. F. FAULL
7-8-52

WCJ(SOCo)-3
KHS(SOCo)-3
EGG-1
FILE-3

MEMORANDUM GO-144

TO: MR. _____ 19

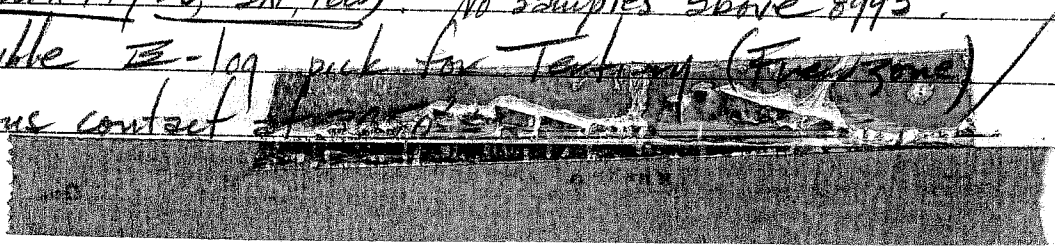
FROM: MR.

SUBJECT:

OUR FILE:

YOUR FILE:

7) TWO - Std Season #17 (28, 3N, 16W). No samples above 8993'.
Possible E-log pick for Testing (Fruitland)
H-2 Cretaceous contact [redacted]



Std - Season 1-17

- ditch samples down to 8980'

- mud logger samples start at 9180'

Not filed w/DOG

Not

CORE RECORD EXP-203

COMPANY Tide Water Associated

WELL Standard Sesnon 1-17

Aliso Canyon Field DIST
Los Angeles County

LOCATION Sec. 28, T. 3 N., R. 16 W., 2223' South, 6695' West from Station 84.

ELEVATION 2600 Gr.

REMARKS

COMMENCED DRILLING

COMPLETION DATE

DESCRIBED BY

ABANDONMENT DATE T.D.

SAMPLED BY

DEPTH FROM	TO	RECOVERY	DESCRIPTION
Conventional Core			
8995	9013	18'	18' Light gray siltstone with irregular zones of light brown oil-stained siltstone, finely micaceous, compact, massive, well cemented. Cut = dark brown.
Wire Line			
9013	9022	6'	6' Dark brownish-gray oil sand, medium grained, micaceo massive, being fairly well cemented. Cut = dark bro
9022	9032	8'	½' Dark brownish-gray oil sand, as above. 7' Light brown oil-stained siltstone, finely micaceous, massive, fairly well cemented, megafossil (unidentifiable). Cut = dark brown. ½' Light gray, slightly conglomeratic sandstone, as abo
9032	9033	2"	1" Light gray conglomeratic sandstone - pebble-size grains, subangular with a medium sandstone matr biotitic, compact. 1" Light gray quartzitic sandstone - very hard, well-cemented sandstone.
9033	9034	½'	½' Dark gray mudstone, hard, compact, well cemented. Cut = dark brown.
9034	9044	3'	3' Light brown oil-stained siltstone - finely micaceous, massive, compact, being fairly well cemented.
9044	9054	9'	9' As above - fish remains.
9054	9064	10'	10' Light brown oil-stained siltstone, as above.

IBM

Depth From	To	Recovery	DESCRIPTION
Wire Line			
9064	9074	8'	7' Light brown oil-stained siltstone, as above, with megafossils (pelecopods?) biotitic. Cut = dark brown. 1' Light gray siltstone, as above, with slight brown staining.
9074	9084	10'	10' Light gray siltstone, becoming mottled. Light gra and light brown oil-stained siltstone, as above, with megafossils (pelecopods?) and pla remains.
9084	9092	¼'	¼' As above.
9092	9097	4'	4' Mottled, light gray and medium brown oil-stained siltstone - mascovite, biotite, massive, fair well cemented. Cut = dark brown.
9097	9099	3'	2' As above. 1' Dark brown oil sand; medium grained, compact, mass sandstone. Cut = dark brown.
9099	9109	1'	1' Light brown oil-stained siltstone - compact, massi Cut = dark brown.
9109	9119	8'	8' As above.
9119	9129	10'	3' As above - micaceous. 7' Dark brown oil sand - very fine grained, massive, crushable, poorly cemented. Cut = dark brown
9129	9134	4'	3½' As above. Cut = dark brown. ½' Light gray sandstone, as above.
9134	9138	1"	1" Reddish-gray quartzite.
9138	9146	6'	6' Dark brown oil-stained siltstone, as above. Cut = dark brown.
9146	9156	10'	5' Dark to light brown oil-stained siltstone, as abov Cut = dark brown. 5' Mottled light gray and light brown oil-stained siltstone, as above, but more compact.
9156	9160	1½'	1½' Dark gray shale with inclusions of light gray silt difficultly friable, compact, no bedding.
9160	9163	2"	2" Dark gray shale, as above.

CORE RECORD EXP-203

COMPANY T W A

WELL Standard - Sesnon 1 - 17

LOCATION Sec. 28, T. 3N., R. 16W.

ELEVATION

COMMENCED DRILLING

COMPLETION DATE

ABANDONMENT DATE T.D.

REMARKS

DISTI

DESCRIBED BY

SAMPLED BY

DEPTH FROM	TO	RECOVERY	DESCRIPTION
Wire Line Cores:			
9160	9163	½'	¼' Dark gray shale - compact, difficulty friable, plant remains. ¼' Medium gray conglomeratic sandstone - pebble size grains being tightly cemented appearing quartzitic
9565	9574	6½'	3½' Light gray conglomeratic sandstone - pebble to cobble size grains with a poorly sorted fine to coarse grained matrix, compact, hard, micaceous (muscovite and biotite). Well cemented.
9574	9579	3'	3' Light gray conglomeratic sandstone - as above. Cut - colorless.
9579	9584	2½'	2½' Light gray conglomeratic sandstone - as above. Cut - colorless.
9584	9593	9'	5' Light gray conglomeratic sandstone - grains granule size with a matrix of silty fine to medium grained sandstone, crushable, poorly cemented, micaceous (muscovite and biotite). Cut - colorless. 4' Light gray conglomeratic sandstone. Pebble to cobble size grains with a poorly sorted fine to coarse grained matrix, compact, hard, well cemented micaceous (muscovite and biotite).
9593	9603	1½'	1½' Light gray conglomeratic sandstone - as above.

IBM

From	To	Recovery		Description
Conventional Core				
11807	11822	15'		Very hard, dense, dark gray, shale, with seve very thin partings of light gray, fine-graine sandstone. Good 7 - 11° dip.
12173	12186	2½'	2'	Hard, compact, dark gray shale with thin parti of light gray, fine-grained sand. Slickenside abundant and core badly broken up.
12186	12201	8'	2'	As above with some carbonaceous material.
			½'	Medium grained, light gray sandstone, finely micaceous.
			2½'	Shale as last above.
			1'	Sandstone as last above.
			1'	Shale as last above.
			1'	Sandstone as last above
				55 - 60° dips. T.W.A. geologist reports dips as high as 90°.
12278	12292	10'		Very hard, dense, brownish-gray to dark gray s and siltstone with thin partings and irregular streaks of light gray, fine-grained sand, mica and slickensides. Good 52 - 58° dips.
12405	12417	12'		Very hard, dense, dark gray shale (85%), with laminae and partings (up to 3/4" in thickness) light gray, fine-grained sand. Abundance of slickensides. Good 30 - 32° dips.

IBM

T. W. A.
Sesnon 1 - 17

HOMCO SIDEWALL SAMPLES

From	Recovery	Description
9185	1"	Soft, light brown with greenish gray cast, calcared fine-grained sand. No cut.
9210	1"	As above.
9250	1½"	Diff. friable, medium gray silty shale.
9375	1½"	Soft, medium gray shale and light brown with grayis cast, fine-grained silty sand.
9450	2"	Soft, light gray, fine-grained silty sand.
10055	1½"	Diff. friable, light brown with grayish cast, fine coarse grained sand. No cut.
10260	1"	As above.

IBM

file in folder

MEMORANDUM GO-144

TO _____ 7-1- 1952

FROM _____

SUBJECT: Standard Oil Co. Std. Sesnon #1-17 OUR FILE Sidewall cores

YOUR FILE Lab desc.

9250' Badly mud cut med gy clay shale w/occ thin silty shale laminae, and abundant fine bronze mica

9370 Badly mud cut med gy fn.gn. Sandstone, frags, lime cemented, abundant bronze mica flakes

9450 Sand, gray, w/fine gn abundand bronze mica " part mud cut, part clean.

10055 Sand, completely mud shot, cse to fn gn, gy? w/ abundant bronze mica.

10260 Sand, gy w/gn clay inclusions (small) occ red gns, occ gn mica & c-bronze mica, med to fn gry s.lty.

IBM

MEMORANDUM GO-144

TO _____ 6-24-19

FROM WEH

SUBJECT: Standard Session 1-17 OUR FILE

Sidewall cores YOUR FILE

10030	Sand, oil stained, mudshot
10523	Sand, hd, brittle, wet, mixed w/ drlg mud & Shale, hd, gy, barren, mixed in mud (small frgs)
10570	Sand, oil stained, mudshot
10740	Shale, gray, clay shale, barren
11225	Sand, oil stained, mudshot

IRM

WHEN REPLY IS REQUIRED, FORWARD ORIGINAL AND ONE COPY. GO-144 (46M-10-

MEMORANDUM GO-144

TO _____ May 17 1952

FROM _____

SUBJECT: TWA Std Section 1-17 OUR FILE

YOUR FILE

8995-9013	Sd, oil stn'd very fine to pebbly
9013-22	Sd, oil stn'd, well sorted, med cse
9022-32	ditto,
9032-33	ditto, pebbly.
9033-34	Lime cem sd & dk brn sh
9034-44	Sd, oil stn'd very fine - calc cem sd
9044-54	Sd, oil stnd very fine
9054-64	Sd. ✓ ✓
9064-74	Sd oil stnd & oil spotted
9074-84	✓ ✓
9084-92	✓
9092-97	✓
9097-99	Sd & sltst int'beds
9099-9109	Sd, oil stnd. fine.
9109-19	✓ /
9119-29	Oil sd & oil stn'd sd
9129-34	✓ ✓
9134-38	Gy sd fine pink quartzite
9138-46	Sd oil stn'd & oil spotted
9146-56	✓ ✓
9156-9160	Sh, mottled, dk gy, calc cem. calc cem sd
9160-68	ditto
9565-74	Sd, gy med cse to pebbly

WHEN REPLY IS REQUIRED, FORWARD ORIGINAL AND ONE COPY.

GO-144 (46M-10-48)

MEMORANDUM GO-144

TO _____ 195__

FROM _____

SUBJECT: TWA Std-Section 1-17 OUR FILE

YOUR FILE

9160-63 Sh, mottled, dk gy, calc cem sd, fine quartzite

9565-74 Sd, gy, med cse, pebbly.

9574-79 ✓ /

9579-84 Sd gy, slightly shd

9584-93 ✓ ✓

9593-9603 ✓ ✓

WHEN REPLY IS REQUIRED, FORWARD ORIGINAL AND ONE COPY.

GO-144 (46M-10-48)

SESNON #1-17

Sesnon 1-17

Drill Wire	Days	Ftge.	Depth	
4/24	49	89'	8968'	Ran Elec log to 8950'. S4 point at 8868'.
4/25	50	45'	9013'	Drld 8968-9013' incl cores 8995-9013'. Description not yet available. Reduced 11" hole to 7-5/8" at 8995'.
4/28	53	61'	9074'	Conventionally cored 8995-9013' and W L cored to 9074'. Rec 69' sdy oil stained siltstone with 10' of oil sand 9022-9032' and few thin stks shell. One stk shale at bottom. Opened 7-5/8" hole to 11" from 8995-9000'. F T 9000'-9074'. Fair to strong blow throughout with gas to surface in 20 min. Rec 5560. Rise of slightly muddy oil. Average cut 3%. Grav 20.0 deg.
4/29	54	23'	9097'	Opened 7-5/8" hole to 11" from 9000-9074' and W L Cored 7-5/8" hole to 9098'. Cores 9074-9097' rec 15' top 10' oil stained sdy siltstone, next 4' oil saturated sdy siltstone with 3" stk of shell at 9085', bottom 1' oil stained sdy siltstone. Fairto good cuts. Burned odors.
4/30	55	127'	9124'	W L cored 9097-9124'. Rec 21'. Top 14' fairly hd oil saturated sdy siltstone. Fair cut and odor. Bottom 7" SS 7' HFirm well sorted med grained oil sand good cut fair to burned odor.
5/1	56	39'	9163'	W L cored 9124-9129'. Rec 5' med grained oil sand; 9129-9134'. Rec 5' med graind oil sand, 1' HD fine tight gy SS on bottom; 9134-9138' no recovery except 3" hd sdy sh; 9138-9146' rec 6' oil saturated sdy silt with stks silty oil sand incl 1' shell at 9141; 9146-9156' rec 10' hd sdy siltstone with oil saturated in top 4' 9156-9160'. Rec 2' hd liney shell possible Eocene? 9160-9163' rec 1' hd limey shell.
5/2	57	1'	9164'	W L Core 9163-9164'. RC 1' hd shell. C O 11" hole to 9075' and 7-5/8" hole to 9164'.
5/5	60	12'	9176'	F.T. 9075-9164' open 60 min. used 1120' of water cushion. Fairly strong blow with gas to surface in 20 min. and fluid to surface in 55 min. Flowed out water cushion and pulled tester. Well flowed oil for one hourafter closing tester. Recov. 7955' rise of oil, 19.5 deg. gravity in 4-1/2" D.P. Sample showed no water. Open 7-5/8" hole to 11" from 9075'-9164'. Installed mud logging service and drilled to 9176'.
5/6	61	46'	9222'	Drld 9176-9222'.
5/7	62	41'	9263'	Drld 9222-9263'.
5/8	63	67'	9330'	Drld 9263-9330'. Mud loggers report delayed.
5/9	64	102'	9432'	Drld 9330-9432'. Mud loggers report minor drlg. break at 9350' with minor oil & gas shows.
5/12	67	251'	9683'	Drld 9432-9683'. W L cores 9565-9603'. Core descriptions and mud loggers reports delayed. Will supplement this report with separate wire when data available.

IBM

SESNON #1-17

Drill Wire	Days	Ftge.	Depth	
5/13	68	101'	9784'	Drld 9683-9784'. Mud loggers report 70% sand in cuttings. Gas 20-40 units gas 1 unit oil at 9625'. None thereafter.
5/14	69	59'	9843'	Drld 9784-9843'. Mud loggers report sd with thin stks sh 80% sd. 28-38 units gas. No oil.
5/15	70	132'	9975'	Drld 9843-9975'. Mud logger report drlg break from 9905-9915'. 30-45 units gas and no oil from 9843-9935'. 80% sd. Mud logging report delayed after M T.
5/16	71	109'	10,084'	Drld 9975-10,084'. Ran elec log to 10,072'. Mud loggers report sd with thin stks shale 70-80% sd - 37 units gas. Tar flakes 10,005 -10,015'. No other oil shows.
5/19	74	361'	10,445'	Drld 10,084-10,445.(While pulling bit at 10,280' pulled thru tight spot near 5100'. Took 3 hrs to work loose.). Mud loggers report delayed. Will send supplementary wire when available.
5/20	75	20'	10,465'	Drld 10,445-10,465!. Pulled dull bit into tight hole at 5015' while pulling from 10,445'. Worke loose after 7 hrs. Rmd 11" hole 4975-5200' and C O to 10,445'. Mud loggers report drlg rate 8-12'/hr. No cuttings surfaced below 10,445'.
5/21	76	50'	10,515'	Drld 10,465-10,515'. Mud loggers report sd with stks sh 70% sd. 10-26 units gas, no oil. Converted to diesel emul fluid at 10,501'.
5/22	77	80'	10,595'	Drld 10,515-10,595'. Mud loggers report break from sand to shale at 10,515' with 20-50% D to 10,595. Ditch gas 9-18 units with 1-2 units methane. No oil. Cuttings ≤ gas 2-4 units with 1 unit methane. No oil. Diesel emuls fluid 81 pcf.
5/23	78	105'	10,700'	Drld 10,595-10,700'. Mud loggers report 10,595-10,605 60% sd, 10,615-10,620' 20% sd, and 10,620-10,680' 65% sd. 13 units gas, no oil. Diesel emul fluid 79# 51 sec 2.8 cc for 15 min.
5/26	81	260'	10,960'	Drld 10,700-10,960'. Mud loggers report 10,700-10,742' 70% sd, 10,742-10,780' 30% sd, 10,780-10,960' 70-80% sd. 2 units cuttings gas incl 1 unit methane, no oil. Diesel emul fluid 81# 60 sec 4.2 cc-WL for 30 min. 12.5 PH.
5/27	82	90'	11,050'	Drld 10,960'-11,050'. Mud loggers report: 70% sd. Ditch 10 units gas incl 1 unit methane, no oil. Cuttings 2 units gas incl 1 unit meth-ane, no oil. Diesel emul fluid 81# 48 sec. 4.2 cc. pH 12.5.
5/28	83	96'	11,146'	Drld 11,050-11,146'. Mud loggers report: 55-75% sd. Ditch contains 11 units gas incl 1 unit methane. Cuttings contain 2 units gas incl 1 unit methane. No oil. Diesel emul fluid 82# -51 WSEC-4.5 cc-pH 12.5

IBM

SESNON #1-17

Drill Wire	Days	Ftge.	Depth	
5/29	84	69'	11,215'	Drld 11,146-11,215'. Ran elec log. Rng dipmeter and prep to sidewall sample. Mud loggers report: 45% sd 11,146-11,160' 10% sd 11,160-11,170', 50-90% sd 11,170-11,215'. Ditch contains 8 units gas incl 1 unit methane. Cuttings contain 2 units gas incl 1 unit methane. No oil. Diesel emul fluid 82# 53 sec. 5.1 cc pH 12.5.
6/2	88	380'	11,595'	Rec blue gy siltstone and gy sd from sidewall cores at 9330', 9397' and 9450'. No rec from cores 9210-9280' and 9780-11,162'. Drld 11,215-11,595'. Mud loggers report delayed.
6/3	89	54'	11,649'	Drld 11,595-11,649'. Mud loggers report 55% sd. Ditch contains 5 units gas incl 1 unit methane. Cuttings contain 2 units gas incl 1 unit methane. No oil.
6/4	90	56'	11,705'	Drld 11,649-11,705'. Mud loggers report 75% sd. Ditch shows 7 units gas incl 3 units methane.
6/5	91	47'	11,752'	Drld 11,705-11,752'. Mud Logging report delayed
6/6	92	55'	11,807'	Drld 11,752-11,807'. Prep to take spot core. Mud loggers report 35% sd, drlg rates 4'/hr. Ditch shows 6 units gas incl 1 unit methane. Cuttings show 2 units gas 1 unit methane. No oil.
6/9	95	104'	11,911'	Drld 11,807-11,911' incl core 11,807-11,822' recov 15' hd grey shale thin partings grey sandstone - Dips 7-11 deg found definite cretaceous forms in core. Mud loggers report cuttings are mostly shale fragments with minor gas showings.
6/10	96	56'	11,967'	Drld 11,911-11,967'. Mud loggers report: 20% sd. Ditch contain 4 units gas incl 1 unit methane. Cuttings contain 2 units gas incl 1 unit methane.
6/11	97	20'	11,987'	Drld 11,967-11,987'. Mud loggers report 40% sd. Ditch contains 2 units gas incl 1 unit methane. No oil. Cuttings contain 3 units gas incl 2 units methane. No oil.
6/12	98	65'	12,052'	Drld 11,987-12,052'. Mud loggers report 20% sd ditch contains 3 units gas incl 1 unit methane; cuttings contain 2 units gas incl 1 unit methane. No oil.
6/13	99	70'	12,222'	Drld 12,052-12,122'. Mud loggers report 20% sd. Ditch contains 3 units gas incl 1 unit methane. Cuttings contain 2 units gas incl 1 unit methane. No oil.
6/16	102	79'	12,201'	Drld 12,122'-12,201' incl cores 12,173-12,201' rec 11' hd dk gy fractured slickensided sh with few thin stks sd 65-90 deg dips. Ran elec log to 12,186. Reduced 11" hole to 7-5/8" @ 12,173'. Prep to drill ahead. Mud loggers report delayed.

SESNON #1-17

Drill Wire	Days	Ftge.	Depth	
7/11	127	-	12,417'	DO retainer & cmt to 9440'. Prep to shoot & test for SO.
7/14	130	-	"	WNSO on gun holes @ 9387'. Set retainer @ 9347' and squeezed 75 sks cmt thru holes @ 9387' under 2700# final pressure. Tested under 4800#, held O.K.
7/15	131	-	"	Drld out retainer @ 9347' & cleaned out to 9440'. Prep to test shutoff.
7/16	132	-	"	DOC 9440-9457' and CO to 11,000'. Prep to test.
7/17	133	-	"	DO & located shoe of 7" csg 9457' instd of 9502' as previously reported. Ran Johnston Tester with 970' wtr cushion set packer @ 9443'; tail to 9569'. Open @ 11:50 AM. Fair diminishing blow, dead @ 2:00 PM. Ran swab @ 3:30 PM and loc FL @ 1350'. Lost swab on 1st run. Ran new swab & swabbed 85 bbls mud to 6:00 AM 7-17-52. FL 2250. Stuck swab & parted sand line, pulling tester.
7/18	134	-	"	Pulled tester & rec swab. FL 940'. Rec 8500' drlg fluid in 2⅛" tbg. CO to 11,000'. Prep to rerun formation tester.
7/21	137	-	"	FT 9443-11,000'. Packer @ 9443', tail to 9569! Used 970' wtr cushion. Open 54 hrs 45 min. Fair diminishing blow of air for 1 hr 45 min then dead balance of test. Commenced swabbing @ 8:00 PM 7-18-52. 52 hrs swabbed wtr cushion & 275 bbls muddy wtr testing 455 g/g. Rec 7769' of wtr testing 554 g/g.
7/22	138	-	"	Ran bit which stopped @ 10,430'. Circ out sd to 10,435'. Conditioned mud and C O to 11,000'. Ran Neutron Log 8300-10,970'. Prep to bridge hole w/cmt.
7/23	139	-	"	Bridged hole w/cmt 9234-9548'. Ran magnet & checked Al slv 8483-8523' or 8' lower than previously reported. Milled up 7" Al 8490-8497'.
7/24	140	-	"	Milled up 7" Al 8497-8516'.
7/25	141	-	"	Milled up 7" Al 8476-8490'.
7/28	144	-	"	Wallscraped 10-5/8" hole 8476-8516'. Cmtd WS#1 @ 8516'. Loc top cmt @ 8438'. Prep to DOC.
7/29	145	-	"	DOC 8438-8507'. R/D to 8565'.
7/30	146	-	"	R/D 8565-8669'. Ran Elec-Log which indicated R/D hole rng alongside 7" csg. Plugged with 100 sax cmt thru tbg @ 8656'. Q top not located.
7/31	147	-	"	Bridged hole with cmt 8250-8656'. DOC 8250'-8278' and lost circ. Press tested 7" csg in stages and found leak @ 5238'.
8/1	148	-	"	Set squeeze tool @ 4985' and squeezed leak in 7" csg @ 5238' w/100 sks hi-temp cmt under 400# FP. After stdg cmt 4 hrs press tested csg under 1100#, held okay. DOC 4996-5206' & cmt stringers to 5286'.

//BM

13-3/8" csg @ 1010'
7" csg cmtd @ 9502' incl 40' Al slv.
{Cmtd 4294' of 5-9/16" incl
{806' of 5" on btm @ 9140' } SESNON #1-17

Drill Wire	Days	Ftge.	Depth	
8/4	151	-	12,417'	CO to 8278' & DOC to 8390'. DOC to 8359 and lost circ. Set squeeze tool in 7" @ 4955' and squeezed w/150 sax cmt thru hole in 7" @ 5238' under 500 psi final press.
8/5	152	-	"	DOC 4955-5259', CO 830' and DOC 8390-8499'.
8/6	153	-	"	DOC 8499-8507' and R/D 8536'.
8/7	154	-	"	R/D 8536-8602'.
8/8	155	-	"	R/D 8602-8652'.
8/11	158	-	"	R/D 8652-8690'. Rng E-log.
8/12	159	-	"	E-log @ 8690' indicated R/D hole away fr orig hole below 8575'. R/D 8690-8828'. Totco 8822 4¼ deg.
8/13	160	-	"	R/D 8828-8905'. Totco 8868 - 2¼ deg.
8/14	161	-	"	R/D 8905-8910' & lost circ. Press tested 7" csg in stages 4600-5500' under 1000# press, held okay. With straddle tool @ 5500' press tested DP. Csg annulus and annulus took fluid under 250# press. Prep to press test in stages above 4600' to locate leak.
8/15	162	-	"	Press tested 7" csg in 90' stages fr 1385-4600'. Held OK. Now testing above 1385'.
8/18	165	-	"	Press tested 7" csg in 90' stages to surface under 1500# psi. Found no leaks. Set Baker Bridge plug in 7" at 8175' closed BOP and applied 1500# psi to annulus, held okay. Prep to drill out bridge plug and proceed w/ R/D.
8/19	166	-	"	Drld out bridge plug @ 8175'. Hole took fluid under 400# after drlg out bridge plug. Redrilled 8910-9128'. Totco 3½ deg @ 8954'; 6 deg @ 9022'; 7 deg. @ 9081'.
8/20	167	-	"	R/D 9128-9142'. Ran Ran Elec Log. Rmd 6" hole 8507-9060'.
8/21	168	-	"	Rmd 6" hole 9060-9142'. Cmtd 4294' of 5-9/16" incl 806' of 5" on bottom at 9140' with 150 cu ft perlite cmt followed by 25 sks neat cmt, partial circ while cmtg.
8/22	169	-	"	CO to 4846', top of 5-9/16" liner, without locating cmt. Press tested splice at 4846' under 1000# press, held OK. Rng tester to test S O on splice.
8/25	172	-	"	(Report on 8/21 wire on running splice test wrong.) WSO on 5-9/16" x 7" splice at 4846'. Ran bit to 4500' and pressure tested csg under 2500# press for 10 min without loss. CO to 9140' found no cmt above shoe. Ran Gamma Ray log. Shot 4 holes in 5" at 8990' well flowed oil on exclusion test. Squeezed with 25 sax cmt under 4300# PSI final press.

IBM

13-3/8" csg @ 1010'
7" csg cmtd @ 9502 w/ 40' Al slv.
Cmtd 4294' of 5-9/16" incl
806' of 5" on btm @ 9140'

SESNON#1-17

Drill Wire	Days	Ftge.	Depth	
8/26-	173	-	12,417'	Ran bit and scraper to 8944'. Bit and scraper ran rough, unable to make progress. Pulled and found piece of scraper had been left in hole. Prep to run junk basket.
8/27	174	-	"	Rec some iron from 8944' with junk basket. Drld on iron at 8944' with bit and csg scraper. Removed scraper and will attempt to drill up junk and retainer with bit.
8/28	175	-	"	DOC retainer and junk 8944-8980'. Prep to test S O on holes at approx 8978'.
8/29	176	-	"	CO 8980-9140'. WSO on JET hols in 5" liner at 8982'.
9/2	180	-	"	JET shot 4 holes in 5" liner at 8930' shut off test on hole 8930' packer 8879, 1000' water cushion, open 50 minutes. Gas to surface in 20 minutes. Oil to surface in 45 minutes. Recovered all clean oil. Set baker "K" retainer at 8884'. Formation broke down under 1600 psi. Squeezed holes at 8930' with 50 sacks cement under 1100 psi FP. DO retainer and cemented 8884-8930'. Cleaned out to 9140'. Pressure tested casing OK under 1200 psi. Lost and recovered tester and 4320' of 2-1/2" tubing which parted while attempting to set packer.
9/3	181	-	"	WSO on holes at 8928 and 8790'.
9/4	182	-	"	Laid down 2-1/2" tubing. Making up 2" tbg.
9/5	183	-	"	Making up 2" and 2-1/2" tubing and conditioning mud.
9/8	186	-	-	Spotted 20 bbls oil base fluid @ 9138'. Jet perfd 5" liner 9005-9138'. Ran T. Displaced drlg fluid w/oil. Swabbed 3 hrs & well commenced to flow @ 5 pm 9-7-52. 13 hrs. flwg 480/1 incl 375 bbls rec oil 36/64" bean, CP 0# TP 420#. Crew released 5 pm 9-7-52.
9/9	187	-	-	24 hrs flwg 536/1, grav 20.8 deg., Bean 40-64 to 24/64", CP 0# TP 400# 253 M/D.
9/10	188	-	-	24 hrs flwg 219/1, 24/64" to 12/64" bean. CP 0# TP 530#.
9/11	189	-	-	24 hrs flwg 274/0, gas 130 mcf. Grav 20.8 deg bean 12/64", CP 0# TP 540#.
9/12	190	-	-	24 hrs flwg 237/0 gas 117 mcf 21.1 deg grav, bean 12/64" CP 0# TP 540#.
9/15	193	-	-	24 hrs flwg 226/0, gas 114 Mcf, grav 20.8 deg., 12/64" bean CP 15# TP 540#. 24 hrs flwg 237/0 gas 116 mcf, 12/64" bean CP 15# TP 540#. 24 hrs flwg 258/0 gas 104 mcf 12/64" bean CP 15# TP 550#.
9/16	194	-	-	(Dropped from report)

IBM

JUN 2 7 1952 TIDE WATER ASSOCIATED OIL COMPANY, OPERATOR, STANDARD-SESNON 1 NO. 17, SECTION 28-3N-16W: A total depth of 12,405 feet was reached in this deep-test well. The last core was cut from 12,405 to 12,417 feet and it recovered 12 feet of very hard, dense dark gray shale with thin laminae of fine gray sand. Good 30° to 32° dips were measured and some slickensides were noted throughout the core. We are of the opinion that the marked decrease in dip, 12,272 to 12,292 feet, 40° to 60° dips, and 12,405 to 12,417 feet, 30° to 32° dips, is evidence that the bore-hole is probably getting away from the effect of the Ward fault. An electric log is being run to total depth and an attempt will be made to pick dipmeter stations above and below the fault. An attempt will be made to obtain some sidewall cores from the sediments between the Sesnon zone and the top of the Cretaceous, probably near 9500 feet. The present program is to cement 7-inch casing near 9585 feet with an alloy sleeve above the Sesnon zone. An open hole test will then be made from the shoe of the casing to total depth in an attempt to determine the fluid content of the Cretaceous rocks. If nothing of commercial interest is recovered during the test, the hole and casing will be plugged to point near the bottom of the alloy sleeve. The hole will then be redrilled and the well will be completed in the Sesnon zone.

JUL 3 1952 TIDE WATER ASSOCIATED OIL COMPANY, OPERATOR, STANDARD-SESNON 1 NO. 17, SECTION 28-3N-16W: Sidewall cores were taken at 10,260 feet, 10,055 feet, 9450 feet, 9370 feet and 9250 feet before this deep-test well was plugged back from a total depth of 12,417 feet to 11,000 feet. Two of the sidewall cores, 9250 feet and 9370 feet, recovered gray shale to silty sandstone which carried forams of lower Eocene or Cretaceous age; however, lithologically the material is more similar to Cretaceous sediments than to the Eocene. The balance of the sidewall cores recovered gray Cretaceous sandstone. Seven-inch casing, including an alloy sleeve from 8520 feet to 8560 feet, has been cemented at 9502 feet. After a water shut-off has been obtained, an open-hole test will be made from 9502 feet to 11,000 feet in an attempt to determine the fluid content and the possibility of commercial accumulation of gas in the Cretaceous rocks.

IBM

TELEGRAM

GA

52 JUN 26 AM 10 57

LA HABRA JUNE 26 11:45 3-2MC

KHS SF 3

ECD LA 2

J-70SSESNON 17, ALISO CANYON

RECOVERED 10' OF HARD, GRAY TO BLACK, BADLY FRACTURED AND SLICKEN-
IDED SHALE WITH OCCASIONAL SANDY PARTINGS. SHOWS GOOD 32-37 DEGREE
DIP IN CORE 12,405-12,417'. ARE NOW RUNNING ELECTRIC LOG AND
DIPMETER AFTE R WHICH PLAN TO TAKE BALANCE OF HOMCO
DXX SIDEWALL CORES PREVIOUSLY PROGRAMMED BELOWS9200'. INTENSE SHEARING
IN CORE DESCRIBED ABOVE INDICATE WELL IS STILL IN OR IN CLOSE
PROXIMITY TO FAULT. WE HAVE NO BASIS FOR REASONABLE ESTIMATE AS TO
DEPTH WELL WILL BE FREE OF FAULT INTERFERNCE. TIDE WATR REPORT THAT
DRILLING EQUIPMENT IS NOW AT DEPTH LIMIT FOR 4-1/2"HDRILL
PIPE AND TO GO MUCH DEEPER WILL HAVE TO PUT UP 3-1/2"
DRILL IPXXX PIPE. TIDE WATER GROUP AND D.D.P.C.NX PROPOSE
THAT DRILLING BE DISCONTINUED AT PRESENT DEPTH. OE CONCUR.
UNLESS ADVISED OTHERWISE TODAY, PLAN TO PROCEED WITH PROGRAM
OUTLINED OUR J-61.

J-92

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FORM 109-A (10-48)

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

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

No. T152-1020

Los Angeles 15 Calif. September 17 1952

Mr. F C Foster
Los Nietos Calif.
Agent for TIDE WATER ASSOCIATED OIL COMPANY

DEAR SIR:

Your well No. "Standard-Sesnon 1" 17, Sec. 28, T. 3 N, R. 16 W, S B B & M. Aliso Canyon Field, in Los Angeles County, was tested for water shut-off on September 3, 1952. Mr. V. F. Gaede, Inspector, designated by the supervisor, was present as prescribed in Secs. 3222 and 3223, Ch. 93, Stat. 1939; there were also present R. Burns, Engineer; F. Kimbrough, Drilling Foreman.

Shut-off data: 5-9/16 in. xxx lb. casing was re-cemented through perforations at 8930 ft. on August 30, 1952 in 6 in. hole with 50 sacks of cement xxxx of which xxxx sacks was left in casing.

Casing record of well: 13-3/8" cem. 1010'; 7" cem. 9457' (incl. aluminum sleeve 8420'-8460'), milled through 8476'-8516'; 5-9/16" (600' of 5" on top) cem. 4846'-9140', c.p. 8980', 8930', four 1/2" holes 8982', 8928', four 1/2" holes 8790', W.S.O. T.D. (1st hole)11,200'.

Present depth 9142 ft. Bridged with cement from 9140 ft. to 9139 ft. Cleaned out to 9139 ft. for test.

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

A Johnston tester was run into the hole on 2-1/2 in. ~~drill pipe~~ tubing, with 1000 ft. of water ~~mud~~ cushion, and packer set at 8743 ft. with tailpiece to 8769 ft.

Tester valve, with 3/8 in. bean, was opened at 12:20 a.m. and remained open for 1 hr. and xxx min. During this interval there was a puff blow, then no blow thereafter.

THE INSPECTOR ARRIVED AT THE WELL AT 3:30 A. M. AND MR. BURNS REPORTED:

1. The 5-9/16" casing was shot-perforated with four 1/2" holes at 8980' for company test of water shut-off.
2. The above perforations tested wet.
3. On August 24, 1952, the 5-9/16" casing was recemented through perforations at 8980' with 50 sacks of cement of which 25 sacks was squeezed away under a final pressure of 4300 lb.
4. The 5-9/16" casing was shot-perforated with four 1/2" holes at 8982' for company test of water shut-off.
5. The above perforations tested dry.
6. The 5-9/16" casing was shot-perforated with four 1/2" holes at 8930' for company test of water shut-off.
7. The above perforations tested wet.
8. On August 30, 1952, the 5-9/16" casing was recemented through perforations at 8930' with 50 sacks of cement, all of which was squeezed away under a final pressure of 1100 lb.
9. The 5-9/16" casing was shot-perforated with four 1/2" holes at 8928' for company test of water shut-off.
10. The above perforations tested dry.
11. The 5-9/16" casing was shot-perforated with four 1/2" holes at 8790'.
12. A Johnston tester was run as noted above.

THE INSPECTOR NOTED:

1. When the tubing was removed, a net rise of 15' of drilling fluid was found in the tubing above the tester, equivalent to 0.1 bbl.
2. The recording pressure bomb chart showed that the tester valve was open 1 hr.

The test was completed at 4:45 a.m.

THE 5-9/16" SHUT-OFF AT 8790' IS APPROVED.

VFG:OH
cc T L Wark
Jos Jensen
Wm E Perkes (2)

R. D. BUSH, State Oil and Gas Supervisor

By E H Mussen, Deputy

FORM 109-D

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T152-1019

Los Angeles 15
Mr F C Foster xxxxxx Calif. September 17 1952
~~xxx~~ Box Y
Los Nietos Calif.
Agent for TIDE WATER ASSOCIATED OIL COMPANY

DEAR SIR: "Standard-Sesnon 1"

Operations at your well No. 17 Sec. 28, T. 3 N, R. 16 W, S B B. & M.,
Aliso Canyon Field, in Los Angeles County, were witnessed by
C. N. Schultz, Inspector, representative of the supervisor,
on August 21, 1952. There was also present J. Bovyer, Engineer;
W. Herrion, Drilling Foreman.

Casing Record 13-3/8" cem. 1010'; 7" cem. 9457' (incl. aluminum sleeve 8420'-8460'), milled through 8476'-8516'; 5-9/16" (600' of 5" on top) cem. 4846'-9140'; T.D. (present hole) 9142'.

Junk T.D. (1st hole) 11,200'.

The operations were performed for the purpose of demonstrating that no fluid has access to the well between the 7" and 5-9/16" casings.

The inspector arrived at the well at 1:15 p.m. and Mr. Bovyer reported:

1. On July 22, 1952, 100 sacks of cement was pumped into the hole through 3-1/2" drill pipe hanging at 9548', filling to 9234'.
2. A window was milled out of the 7" casing from 8476' to 8516'.
3. A whipstock was set at 8507'.
4. A 6" rotary hole was drilled from 8507' to 9142'.
5. On August 19, 1952, 5-9/16" casing (including 600' of 5", 18 lb. casing on top) was cemented 4846'-9140' with 150 sacks of cement mixed with 75 sacks of Strata-Crete and 4% gel. followed by 25 sacks of neat cement.
6. The hole was cleaned out to 9140' without locating cement.
7. A Johnston tester was run into the hole on 3-1/2" drill pipe and packer set at 4809'.
8. The tester valve was opened at 10:45 a.m., and remained open 1 hr. and 10 min. During this interval, there was a puff blow, then no blow thereafter.

THE INSPECTOR NOTED:

1. When the drill pipe was removed, 120' of thin, slightly gassy, drilling fluid was found in the drill pipe above the tester, equivalent to 0.9 bbl.
2. The recording pressure bomb chart showed that the tester valve was open 1 hr. and 10 min.

The test was completed at 2:10 p.m.

THE OPERATIONS AS WITNESSED AND REPORTED ARE APPROVED AS INDICATING THAT NO FLUID HAS ACCESS TO THE WELL BETWEEN THE 7" AND 5-9/16" CASINGS.

VFG:CH

M/O

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

R. D. BUSH
State Oil and Gas Supervisor

By C. H. Musser Deputy

44226 5-51 14,250 ② SPO

FORM 111 (1-49)

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS

No. P 152-845

Los Angeles 15 Calif. July 8 1952

MR. F C Foster
Box Y
Los Nietos Calif.

12-1

Agent for TIDE WATER ASSOCIATED OIL COMPANY

DEAR SIR:

Your supplementary proposal to drill Well No. 17 "Standard-Sesnon 1",

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

dated July 1 1952, received July 3 1952, has been examined in conjunction with records filed in this office.

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

THE NOTICE STATES

"The new conditions are as follows:
1. Well has been drilled to 12,417'.
2. Some formations below the Sesnon zone justify testing for oil and gas."

PROPOSAL

"We now propose
1. To bridge hole with cement from 11,200'-11,000'.
2. Cement 7" casing at 9500' with 40' aluminum section from 8520'-8540'.
3. Test water shutoff at 9400' by shooting and testing.
4. Test zones from 9500'-11,000'. If oil and gas not found in commercial quantities, then:
   A. Plug well at approximately 9400'.
   B. Test water shutoff at 8500'.
   C. Mill out aluminum section and redrill well to Sesnon Zone.
   D. Land 5" liner and complete well."

DECISION

THE PROPOSAL IS APPROVED PROVIDED THAT THIS DIVISION SHALL BE NOTIFIED TO WITNESS tests of the effectiveness of the 7" shut-offs at 9400' and 8500' (if made).

ERMA:OH

cc T L Wark
c/o Tide Water Associated Oil Co.
79 New Montgomery Street
San Francisco

Jos Jensen
Wm E Perkes (2)

B/M

7/22/52
WE Perkes/ERMA
Tested interval 9457-11000
by swabbing - Salt water -
will plug 9525-9400± and
either gun-perf Sesnon (with test
of SO. before perf'ing) or go out thru
7" at 9000± test SO at window
ERMA

R. D. BUSH
State Oil and Gas Supervisor.

By E H Nussen Deputy

Blanket bond.

43268 4-51 25M SPO

FORM 123 35390 8-36 10M
CALIFORNIA STATE PRINTING OFFICE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JUL 3 1952
LOS ANGELES, CALIFORNIA

Supplementary Notice

Los Nietos, Calif. July 1 19 52

DIVISION OF OIL AND GAS

Los Angeles Calif.

Our notice to you dated September 14, 19 51, stating our intention to

drill well No. Standard-Seanon #1-17,
(Drill, deepen, redrill, abandon)

Sec. 26, T. 3 N, R. 16 W, S.B. B. & M. Aliso Canyon Field,

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

The new conditions are as follows:

1. Well has been drilled to 12,417'.

2. Some formations below the Seanon Zone justify testing for oil and gas.

We now propose

1. To bridge hole with cement from 11,200'-11,000'.
2. Cement 7" casing at 9500' with 40' aluminum section from 8520'-8540'.
3. Test water shutoff at 9400' by shooting and testing.
4. Test zones from 9500'-11,000'. If oil and gas not found in commercial quantities, then:
   A. Plug well at approximately 9400'.
   B. Test water shutoff at 8500'.
   C. Mill out aluminum section and redrill well to Seanon Zone.
   D. Land 5" liner and complete well.

Suppl to drill

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

TIDE WATER ASSOCIATED OIL COMPANY
(Name of Operator)

By T. C. Foster
Agent

FORM 109-D

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 152-393

Los Angeles 15 Calif. March 27 1952

Mr. F C Foster
Los Nietos Calif.
Agent for TIDE WATER ASSOCIATED OIL COMPANY

121

DEAR SIR:

Operations at your well No. "Standard-Sesnon 1" 17 Sec. 28, T. 3 N, R. 16 W, S B B. & M., Aliso Canyon Field, in Los Angeles County, were witnessed by J. F. Matthews, Inspector, representative of the supervisor, on March 21, 19 52. There was also present R. Frantz, Drilling Foreman; R. Johnson, Driller.

Casing Record	Junk
13-3/8" cem. 1010'. T.D. 2500'.	None

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

The inspector arrived at the well at 1:00 p.m. and Mr. Frantz reported:

1. A 17-1/2" rotary hole was drilled from the surface to 1010'.
2. On March 20, 1952, 13-3/8", 54 lb. casing was cemented at 1010' with 425 sacks of cement and 425 sacks of Stratacrete.
3. Cement returned to the surface.
4. A 12-1/4" rotary hole was drilled from 1010' to 2500'.

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 2" mud fill-up line with a 2" high pressure stopcock into the 13-3/8" casing below the above equipment.

The inspection was completed at 1:25 p.m.

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

JFM:OH

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

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

56241 1-52 17,500 ② SPO

FORM 111 (1-49)

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS

No. P 1-50547

Los Angeles 15, Calif. September 21 19 51

MR. F C Foster
Box Y
Los Nietos, Calif.

Agent for TIDE WATER ASSOCIATED OIL COMPANY

DEAR SIR:

Your "Standard-Sesnon 1" proposal to drill Well No. 17,

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

dated Sept. 14 19 51, received Sept. 17 19 51, has been examined in conjunction with records filed in this office.

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

THE NOTICE STATES

"Location of Well: 2223.30' South & 6694.53' West of Station #84
Elevation of ground above sea level Approx. 2600 feet.
All depth measurements taken from top of Derrick Floor which is 6.92 feet above ground."

PROPOSAL

"PROPOSED CASING PROGRAM

Size of Casing Inches A.P.I.	Weight	Grade and Type	Top	Bottom	Cementing Depths
13-3/8"	54.5#	T & C, J-55	0	800'	800'

Intended zone or zones of completion:
Name Perforated Interval
An exploratory well to examine Eocene and possibly Cretaceous formations below the Sesnon zone. Maximum depth 12,000'. Will complete in Sesnon zone at approx. 8850'-9000' if unsuccessful.
It is understood that if changes in this plan become necessary we are to notify you before running casing."

DECISION

THE PROPOSAL IS APPROVED PROVIDED THAT

1. Blowout prevention equipment, sufficient to provide a complete close-in of the well under pressure at any time, shall be installed and approved by this division.
2. Any hole to be sidetracked in any oil or gas zone shall be filled with cement, if possible.
3. A supplementary proposal shall be filed with this Division prior to running any casing other than the proposed surface string.
4. THIS DIVISION SHALL BE NOTIFIED TO INSPECT the installed blowout prevention equipment before drilling below 1500'.

ERMA:OH

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

R. D. BUSH
State Oil and Gas Supervisor

By E. H. Musser Deputy

43268 4-51 25M SPO
Blanket bond.

FORM 105

D

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL & GAS
RECEIVED
SEP 17 1951
LOS ANGELES

037-00769

13

Notice of Intention to Drill New Well

This notice and surety bond must be filed before drilling begins

SFZU SS-17

Los Nietos, Calif. September 14 1951

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 drilling well No. "Standard-Sesnon (") #1-17, Sec. 28, T. 3 N, R. 16 W, S.B. B. & M., Aliso Canyon Field, Los Angeles County.

JLW

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

Location of Well: 2223.30' South & 6694.53' West of Station #84
(Give exact footage from section corners or other legal subdivision or streets)

Elevation of ground above sea level Approx. 2600 feet.

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

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES A.P.I.	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS
13-3/8"	54.5#	T & C, J-55	0	800'	800'

Intended zone or zones of completion:

NAME PERFORATED INTERVAL

An exploratory well to examine Eocene and possibly Cretaceous formations below the Sesnon zone. Maximum depth 12,000'. Will complete in Sesnon zone at approx. 8850'-9000' if unsuccessful.

MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
Mar	18A JKW	EB	Blanket	EB	EB

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

Address P. O. Box Y, Los Nietos, California

TIDE WATER ASSOCIATED OIL COMPANY
(Name of Operator)

Telephone Number Oxford ~~42043~~ 9105

By F. C. Foster
Agent

SEND ONE COPY OF NOTICE TO DIVISION OFFICE IN DISTRICT WHERE WELL IS LOCATED