November 1, 1982

An inspection of the "Richardson Ranch" abandoned location established that the well was improperly abandoned, at least superficially. The cement slab used to support the derrick still exists & the cellar has been filled in with boulders.

This is all that remains of any past drilling activity at this location. The boulders will have to be removed before the condition of the surface casing can be established.

Read conditions to the well are good, making easy access. However, the landowner should be contacted prior to DOG entry. Contact:

John Richardson
17888 S Mountain Road
Santa Paula

525-2856
Mr. E. J. Kaplow,
Deputy Supervisor,
Division of Oil & Gas,
King Bldg.,
Santa Paula, Calif.

Dear Mr. Kaplow:

We have your letter of July 13, 1949, regarding
Richardson Ranch #1 well.

We have not done any more work on this well since
the first perforating job we did, which was approved and
witnessed by your office.

We are now trying to get a group together to deepen
this well into the Eocene. We shall keep you fully informed
on the developments.

Yours truly,

THOS. C. BANNON

SHAMROCK DRILLING COMPANY

TCB: J

George Calvert, D.S. Jan 17 50
Shamrock Drilling Co. has not been on this property.
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 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.

1-15-49 Shot 4 - 1/2" holes - B-J gun at 1150'. Bailed well down to 1150' and set for 8 hrs. The Division of Oil and Gas engineer witnessed that no fluid came in and gave his O. K. to perforate lower zone for production test.
1-16/49 Shot 30 1/2" holes at 1605' - 1620'.
Shot 20 1/2" holes at 1640' - 1650'.
Shot 30 1/2" holes at 1660' - 1675'.
1-17-49 Bailed well to 1680'. Let stand over night. No fluid of any kind came in.
1-20-49 Checked fluid level again. No rise.
1-21-49 Suspended operations. Now making plans to attempt to deepen well to Eocene.
Mr. Thomas C. Shannon
Los Angeles, Calif.

Sierra Drilling Company

Dear Sir:

Your well No. "Richardson Ranch" 1, Sec. 13, T. 28 N., R. 21 W., S.B., B. & M. S. Wildcat, Site, in Ventura County, was tested for water shut-off on January 16, 1945. Mr. Jack Briggs, designated by the supervisor, was present as prescribed in Sec. 3222 and 3223, Ch. 93, Stat. 1939; there were also present T. E. Dallas, Assistant Foreman, and R. L. Walker, Drilling Foreman.

Shut-off data: 7 in. 20 in. casing cemented at 3032 ft. on January 20, 1945, in 10 5/8 in. hole with 300 sacks of cement of which 6 sacks were left in casing. Casing record of well: 11 3/4 in. cas. 21 1/2 ft. 7 1/2 in. 9 3/4 ft. 3027 ft. 2925 ft. and 2927 ft. 0.50. at 2929 ft. 0.50. plugged with cement from below 3027 ft. to 2927 ft. Shot 1-1/2 holes at 1120 ft. for this test.

Reported total depth 1438 ft. Bridge with cement from 3027 ft. to 2932 ft. Cleaned out to 2932 ft. No special casing test was made.

Engineer Briggs arrived at the well at 3:30 p.m. on January 16, 1945, and Mr. Shannon reported:

1. The hole was filled to a depth of 920 ft. with fresh water and four 7/8 in. test holes were shot at 1120 ft. with the Byron Jackson Perfo Jet gun.
2. The fluid level was left at 920 ft. and allowed to stand undisturbed for this test.

Mr. Briggs noted:

1. After standing idle for 4 hours, the boiler was run in the hole at 1:00 p.m. on January 16, 1945, and the fluid level was located at 920 ft.
2. There was no rise in the fluid level during the four hour test.

The 7/8" water shut-off as tested through shot holes at 1120 ft. IS APPROVED.

R. D. BUSH, State Oil and Gas Supervisor

By: __________________________, Deputy
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P2-2162

Santa Paula  Calif.  January 7  1949

Los Angeles  Calif.

Agent for Shamrock Drilling Company

Dear Sir:

Your proposal to alter casing in Well No. "Richardson Ranch"-1, Section 13, T. 34 S., R. 21 W., S.B. & M., South Mountain Field, Ventura County, dated Jan. 6, 1949, received Jan. 6, 1949, has been examined in conjunction with records filed in this office.

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


THE NOTICE STATES:

"The present condition of the well is as follows:

1. Complete casing record.
   7" casing plugged from 2991' to bottom.
   11 3/4" casing to 215'.

2. Last produced: Never placed on production."

PROPOSAL:

"The proposed work is as follows:

A lease dated Dec. 2, 1948, in escrow was given to Thos. C. Bannon by Mr. Floyd Snyder, Pres. Louis Richardson Ranch Co. Bannon is sub-leasing (subject to escrow) to Shamrock Drilling Co. - 714 W. Olympic Bivd., L.A.

Shamrock proposes to shoot 4 holes at 1150' and squeeze 50 or more sks. ea. to shut off top water. Then gun perf., zones 1150' to 1750' and place on production."

DECISION: Your proposal is approved provided that:

1. Every precaution shall be taken to prevent blowouts and fires.
2. This Division shall be notified to witness a water shut-off test at about 1150' prior to gun-perforating for production.

No bond required

R. D. BUSH
State Oil and Gas Supervisor
By E. J. Kupchow  Deputy
Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well
This notice must be given before work begins; one copy only

Santa Paula, Calif. Jan. 16, 1922

DIVISION OF OIL AND GAS

Santa Paula, Calif.

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

(Road, Sec. 13, T. 3 N., R. 21 W., S. B., B. & M. South Mountain Field, Ventura County)

The present condition of the well is as follows:

1. Complete casing record.
   - 7" casing plugged from 2921' to bottom, with 11 1/4" casing at 218'.
   - 7" casing is reported to extend from surface to depth 5721'8".

2. Last produced: Never placed in production.

The proposed work is as follows:

A lease in said property given to B. E. Penman by the B. E. Penman, P. S. Penman, D. E. Penman, Ltd., Bannor, is subleased (subject to agreements) to Shamrock Drilling Co. - 719 W. Olympic Blvd., LA. Shamrock proposes to shoot 1 hole at 1156' and squeeze 50 or more times to that of top water. Then, 7 mm perf. from 1156' to 1750' and alter casing to place in production.

By

Name of Operator

ADDRESS NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED
Santa Paula, California
March 26, 1946

Mr. W. R. Railey, Agent,
The British-American Oil Producing Company,
Route 1, Box 23,
Ventura, California

Dear Sir:

Your report of abandonment of well No. "Richardson Ranch" 1,
Sec. 16, T. 4 S., R. 21 W., S. B. & M., Ventura County, dated May 5,
1945, and submitted to this Division on our Form 10C, has been examined
in conjunction with records filed in this office.

A review of the reports and records shows that the requirements
of this Division, which are based on all information filed with it, have
now been fulfilled.

Yours truly,

R. F. BUSH
State Oil and Gas Supervisor

cc - Company
R. F. Bush

Deputy Supervisor
**Division of Oil and Gas**

**Log of Oil or Gas Well**

**Operator:** British-American Oil Producing Co.  
**Field:** South Mountain

**Well No.:** Richardson Ranch  
**Sec.:** 3  
**T.:** 2N  
**R.:** 21W  
**S.R.:** B & M

**Location:** 721.5 South and 1115 East from  
**Corner of No. 80 of 8714:**

**Elevation of derrick floor above sea level:** 582.31 feet

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

**Date:** May 21, 1945

**J. E. Hatter**  
(Engineer or Geologist)

**W. F. Spalding**  
(Superintendent)

**Signed:**

**Title:** (President, Secretary or Agent)

---

**Commenced drilling:** 11/17/45  
**Completed drilling:** 2/10/45  
**Drilling tools:** Cable Rods  
**Rotary**

**Total depth:** 4638 ft.  
**Plugged depth:** 4540 ft.

**Saker cement run at 6090 ft.**

**196 ft. of 2" pipe below surface.**

**Saker cement run at 12100 ft.**

**1657 ft. of 3" pipe below cement.**

**Commenced producing:**

**Flowing/gas lift/pumping:**

**Clean Oil bbl. per day:**

**Gravity Clean Oil:**

**Per Cent Water including emulsion:**

**Gas Mcf. per day:**

**Tubing Pressure:**

**Casing Pressure:**

---

**Casing Record (Present Hole)**

<table>
<thead>
<tr>
<th>Size of Casing (A.P.I.)</th>
<th>Depth of Shoe</th>
<th>Top of Casing</th>
<th>Weight of Casing</th>
<th>New or Second Hand</th>
<th>Seamless or Lapweld</th>
<th>Grade of Casing</th>
<th>Site of Hole Casing landed in</th>
<th>Number of Sacks of Cement</th>
<th>Depth of Cementing through perforations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 1/4 OD</td>
<td>21 1/2</td>
<td>29 3/8</td>
<td>1728</td>
<td>Y</td>
<td>241c</td>
<td>4-1</td>
<td>7 1/2</td>
<td>12</td>
<td>1232 ft.</td>
</tr>
<tr>
<td>7 OD</td>
<td>13 1/2</td>
<td>39 5/8</td>
<td>24 7/8</td>
<td>Y</td>
<td>246c</td>
<td>4-1</td>
<td>4 1/2A, 2 1/2</td>
<td>20 1/2</td>
<td>500 ft.</td>
</tr>
</tbody>
</table>

---

**Perforations**

<table>
<thead>
<tr>
<th>Size of Casing</th>
<th>From</th>
<th>To</th>
<th>Size of Perforations</th>
<th>Number of Rows</th>
<th>Distance Between Centers</th>
<th>Method of Perforations</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 OD</td>
<td>6306 ft.</td>
<td>3526 ft.</td>
<td>140 Mesh</td>
<td>16</td>
<td>2 ft.</td>
<td>Machine cut</td>
</tr>
<tr>
<td>7 OD</td>
<td>3952 ft.</td>
<td>3631 ft.</td>
<td></td>
<td>8</td>
<td>2 ft.</td>
<td></td>
</tr>
<tr>
<td>7 OD</td>
<td>3592 ft.</td>
<td>3032 ft.</td>
<td></td>
<td>8</td>
<td>2 ft.</td>
<td></td>
</tr>
</tbody>
</table>

**Electrical Log Depths:** 7276 ft., 2173 ft., 2913 ft., 6418 ft., 6480 ft.  
(Attach Copy of Log)
History of Oil or Gas Well

The British-American Oil Prod. Co.  
FIELD  South Mountain

Well No.  

Signed  

Date  May 20, 1915  

Title  

(President, Secretary or Agent)

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

Date  

19/4  

17/13  

11/14  

20  

21  

22  

23  

24  

25  

26  

27  

28  

29  

30  

1/1  

1/10  

1/11  

1/12  

1/13  

1/14  

1/15  

1/16  

1/17  

1/18  

1/19  

1/20  

1/21  

1/22  

1/23  

1/24  

1/25  

1/26  

1/27  

1/28  

Spud ed at 5 p.m. Drilled to 80' in surface sand and lobbies.

20' drilling.


Drilled 22' to 122' 5'. Mud weight 70'.

Twisted off drill pipe at 80' and 136' cut, recovered fish both times.

Drilled and cored 137' to 367'.

Ran electric log 1974'.

Shut down for repairs to drilling equipment.

Drilled and cored 2437' to 3357', Ran electric log 3373'.

Drilled and cored 3357' to 3733', Ran dip meter and electric log.

Drilled and cored 3733' to 418', Ran electric log, oil and gas showing on ditch at 3859'.

Drilled and cored 418' to 4223'. Good ditch showing, mud gas cut at 4223'.

Circulating mud to kill gas. Mud weight 70'.

Drilling and cording 4223' to 4435'. Ran electric log 4458'.

Conditioning mud to run casing.

Ran 4270.85' of 7" OD 375 grade 1-55 and 2 13/8 x 32 grade 1-45 7/8 casing and cementsed with 300 sacks through perforations at 2031.22'.
HISTORY OF OIL OR GAS WELL

Page 2

1/28

Casing Point 434' 1/2 K.B.  C.P. Point 3032' 23' K.B.

Run temperature survey - found top cement 2695'.

Casing make up from bottom as follows:

<table>
<thead>
<tr>
<th>Depth</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.40'</td>
<td>Cement guide shoe</td>
</tr>
<tr>
<td>34.50'</td>
<td>23# grade J-55 blank</td>
</tr>
<tr>
<td>314.55'</td>
<td>23# grade J-55 perforated</td>
</tr>
<tr>
<td>39.13'</td>
<td>blank</td>
</tr>
<tr>
<td>320.83'</td>
<td>23# grade J-55 perforated</td>
</tr>
<tr>
<td>40.07'</td>
<td>blank</td>
</tr>
<tr>
<td>552.79'</td>
<td>23# grade J-55 perforated</td>
</tr>
<tr>
<td>6.65'</td>
<td>Cement basket</td>
</tr>
<tr>
<td>562.20'</td>
<td>23# grade J-55 blank</td>
</tr>
<tr>
<td>1201.52'</td>
<td>20# grade H-40 blank</td>
</tr>
<tr>
<td>668.51'</td>
<td>23# grade J-55 blank</td>
</tr>
</tbody>
</table>

1/29

Standing cemented. Well flowing gassy mud between 11-3/4" and 7" casing. When shut in built up pressure to 75#. Displaced 300 barrels 85# mud at 300# pressure. Opened 30 minutes - continuous small flow of mud. Shut in 30 minutes - pressure 75#. Displaced 150 barrels 115# mud. Flanging up.

1/30

Standing cemented. Laid down drill pipe. Made up 2-1/2" tubing.

1/31


2/2


2/3

Drilled out cement to 3009'. Shot four 1/2" holes at 2992'. Now running Acme formation tester.

2/4

Completed running tester. Set packer at 2973' with tail pipe at 2976'. Opened at 8:10 A.M. Fluid to surface in 1/2 minutes, 1/2" bottom choke. Flowed salt water at rate of 36 barrels per hour, and gradually decreased to 5 barrels per hour. Pulled tester at 5:00 A.M. Preparing to re-cement.

2/5

Displaced approximately 16.5 sacks cement through perforations at 2992'. Final pressure 900#. Set stand one hour and 45 minutes. Displaced approximately 70 sacks cement through perforations at 2992'. Final pressure 2000#. Standing cemented.

2/6

Found top cement at 2957'. Drilled out to 2966'. Drilled retainer to 2983'.

2/7

Drilled out to 2997'. Shot four 1/2" holes at 2989'. Ran Acme tester. Packer set at 2973' with tail pipe at 2976'. Open 5:12 P.M. Closed 5:55 P.M. Fair steady blow for 5 minutes. Dead balance of test. Recovered 230' net rise 90' from 1/40' drilling fluid. W.O.O. approved. C.O. to 3028'.

2/8

Cleaned out to 3427'. Repaired mud pumps.
2/9 Cleaned out and circulated to 434'. Ran 2-1/2" tubing and landed at 3600'.
Preparing to swab.

2/10 Swabbing salt water, small amount gas and oil to pits. Salinity 157 G.P.G.
Fluid level 1800'.

2/11 Swabbing. Salt water, small amount of oil and gas to pits. Fluid level 1700.

2/12 Swabbing. Salt water with small amount of gas and oil to pump. Lowered tubing
   to 4301/4. Pumped in 250 barrels fresh water. Preparing to run water witch.

2/13 Ran water witch. Located water coming from bottom. Bottom of second water 4150'.
   Preparing to cement.


2/15 Ripped up & cement. Set Baker retainer at 4025'. Displaced 80 sacks Colton
   Oil Well cement. Found top cement at 4105'. Standing cemented.

2/16 Drilled out cement to 4301/4. Ran tubing to 4267'. Changed mud to water. Pulled
   up and landed tubing at 4218'. Preparing to swab.

2/17 Swabbed fluid to 1501/2. Showed salt water. Lost swab in tubing. Pulled and
   recovered swab. Ran tubing to bottom and conditioned mud. Ran tubing to
   bottom and circulated mud with fresh water. Pulled tubing up to 3618'.
   While putting on sandline well killed fresh water between 7" and tubing for about
   3 hours, rates increased to about 4 barrels per hour. Some live oil in water.
   Swabbed 4 times from 1000'. Recovered 26 barrels water, partially salty, fluid
   level 1500'. Swabbed twice from 2250', recovered 8 barrels salt water. Total
   recovery 44 barrels in 2-1/2 hours. Lost swab in hole. Line broke at socket.
   Circulated water out with mud and killed well. Pulling tubing.

2/18 Ran Baker cement retainer with 1961/2 of 2" tail pipe below and with 9 Guiberson
   Swabb rubber (lubricated) approximately 20' apart. Set retainer at 4093'.
   Brake circulation at 1400#. Bottom tail pipe at 42941/2. Pumped in 200 sacks
   Victor Oil Well cement. Final pressure 2400#. Backed off retainer, reversed cir-
   culation. Washed back approximately 125 sacks cement. Standing cemented.

2/19 Located top cement at 3782', cleaned out to 4080'. Top 30 feet firm. Balance
   streaks of 5-10 feet firm and soft cement. Firm cement at 4030'. Job finished at
   4:20 A.M. Pulled out of hole, laid down blocks. Ran tubing to 4067'.
   Circulated mud out with water.

2/20 Pulled tubing up to 3611/2' and landed. Swabbed approximately 55 barrels fresh
   water with trace of oil in one hour. No swabbing.

2/21 Started swabbing with 2-1/2" tubing at 3614' at 7:00 A.M. Swabbed 122.6 barrels
   fluid in 9 hours. Fluid fresh at first, slightly brackish after first 60 barrels
   (653 G.P.G.) with approximately 4% oil. Lowered fluid level to 2715' at 3:30 P.M.
   Lowered tubing to 4068'. Fluid level at 11:00 P.M. 1820'. Swabbed 38 barrels
   fluid to 3:00 A.M. Fluid level 3255'. Fluid sample 1 to 4% oil.

2/22 8:30 A.M. to 4:00 P.M. swabbed from 4000'. 30 barrels, fluid 3250' to 3400'. 1%
   oil, salinity 1011 G.P.G. 4:00 P.M. to 10:00 swabbed from 4000' 37 barrels,
   fluid 3400-3700' 3% oil. 10:00 P.M. to 3:00 A.M. standing. Fluid rise 3700' to
HISTORY OF OIL OR GAS WELL

2/22
3160 feet or 5400 feet, 2:00 A.M. to 2:00 A.M. swabbed from 4000'. 10.4 barrels, fluid 3160 to 3700. 3:00 A.M. to 7:00 A.M. standing fluid 5,300'. In 2020', or 680', 7:00 A.M. to 10:00 A.M. swabbed from 4000'. 12 barrels, fluid 3020' to 3750', 15% oil.
Casing pressure 230'.

2/23
Swabbed 1:00 A.M. to 3:00 A.M. (35 barrels) total 65 barrels. Swabbed from 4000'. Lowered fluid level to 3530'. Average fluid rate 3.63 barrels per hour. Fluid samples range from 30% to 100', casing pressure 250'.

2/24
Swabbed 16 barrels from 4000'. In 3:30 A.M. (3:30 A.M. to 10:30 A.M.) Tearing out Drilling Equipment.

2/25
Tearing out Drilling Equipment to Installing Pumping Equipment.

3/4
Moving in Pulling Unit. Rigging up to pull tubing.

3/6
Pulling tubing. Preparing to run subsurface pump.

3/7
Ran 2½ tubing to 4000'. Ran 1½” “b” in 1½” x 7”. Top lock pump on bottom. Connecting up. Preparing to pump.

3/8
Pumping 9 hours, 54 barrels water with trace of oil.

3/9
Pumping 23 hours, 252 barrels water with trace of oil.

3/10
Pumping 24 hours. Started showing oil. 11:30 A.M. Pumped 121 barrels fluid cutting approximately 60% in 21 hours.

3/11
Pumping 24 hours, 66 barrels water with trace of oil.

3/12
Pumping 24 hours, 67 barrels water with trace of 0.25% oil.

3/13
Testing production. Pumping 25 hours = 79 barrels with trace to 0.25% oil.

3/14
Testing production. Pumping 24 hours; 67 barrels with trace to 1.0% oil.

3/15
Testing production. Pumping 24 hours; 62 barrels with trace of oil.

3/16
Pumping 24 hours, 79 barrels, trace of oil.

3/17
Pumping 24 hours, 65 barrels, trace of oil.

3/18
Pumping 24 hours, 81 barrels, trace of oil.

3/19
Pumping 24 hours, 75 barrels, trace of oil.

3/20
Pumping 24 hours, 85 barrels 1½” oil. Shut down 6:00 to pull and reperforate.

3/21
Fitted rods and tubing. Preparing to reperforate.

3/22

3/23
Completed running tubing, landed at 4000’. Ran 7/8” rods with 0 & E 1½” x 7” top lock pump on bottom. On beam at 5:00 P.M. On production test 13 hours, 111 barrels, all water.

3/24
Pumping 24 hours, 136 barrels, cutting 93.5%. S.P.M. 16

3/25
Pumping 24 hours, 71 barrels, cutting 97.5%. S.P.M. 16

3/26
Pumping 24 hours, 99 barrels, cutting 97.5%. Strokes 52%. S.P.M. 16

3/27
Pumping 24 hours, 58 barrels, all water, strokes 52%. S.P.M. 16

3/28
to
Operations Suspended.

4/3
Pumping 24 hours, produced 234 barrels water with trace of oil.

4/4
Pumping 24 hours, 135 barrels water with trace of oil.

4/5
Pumping 24 hours, 127 barrels water with trace of oil.

4/7
to
Shut down. Preparing to abandon.
5/2 Plugged 400'. Moved in pulling unit. Rigged up. Pulling and laying down rods.

5/3 Plugged at 4030'. Completed pulling rods and tubing. Located cut pumping unit and rods. Ran tubing, preparing to cement and abandon.

5/4 Ran and landed 2½" tubing at 4020'. Displaced 200 sacks Colton Construction Cement, pulled tubing to 2700'. Let stand 5 hours. Located top cement at 2991'. Displaced 100 sacks Colton Construction Cement between 11" and 12 3/4" casing. Let stand 5 hours and applied 400% pressure. Plug at 2961'. Witnessed and passed by Division of Oil and Gas. Laying down 2½" tubing.

**LOG AND CORE RECORD OF OIL OR GAS WELL**

**The British-American Oil Producing Company**

**Richardson Ranch No. 1 Well**

**South Mountain Field**

**Sec. 13, T. 31 N., R. 21 W.**

<table>
<thead>
<tr>
<th>Depth From</th>
<th>Depth To</th>
<th>Drilled or Cored</th>
<th>Recovery</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>82</td>
<td>D</td>
<td></td>
<td>Surface sand and gravel</td>
</tr>
<tr>
<td>82</td>
<td>350</td>
<td>D</td>
<td></td>
<td>Hard shale and shells</td>
</tr>
<tr>
<td>350</td>
<td>1025</td>
<td>D</td>
<td></td>
<td>Hard shale, streaks sand</td>
</tr>
<tr>
<td>1025</td>
<td>1149</td>
<td>D</td>
<td></td>
<td>Hard sandy shale</td>
</tr>
<tr>
<td>1149</td>
<td>1406</td>
<td>D</td>
<td></td>
<td>Hard sand</td>
</tr>
<tr>
<td>1406</td>
<td>1555</td>
<td>D</td>
<td></td>
<td>Sand and shale</td>
</tr>
<tr>
<td>1555</td>
<td>1915</td>
<td>D</td>
<td></td>
<td>Hard sandy shale</td>
</tr>
<tr>
<td>1915</td>
<td>1961</td>
<td>D</td>
<td></td>
<td>Hard sand</td>
</tr>
<tr>
<td>1976</td>
<td>2061</td>
<td>D</td>
<td></td>
<td>Grey shale, fine, silty &amp; kaolinitic - may not be permeable - w/ calcite &amp; feldspar. Fair 20° dip.</td>
</tr>
<tr>
<td>2077</td>
<td>2357</td>
<td>D</td>
<td></td>
<td>Salty Fine Sd, 15° - 20° dip - argillaceous, very silty &amp; impermeable.</td>
</tr>
<tr>
<td>2357</td>
<td>2375</td>
<td>C</td>
<td></td>
<td>Hard shale</td>
</tr>
<tr>
<td>2375</td>
<td></td>
<td></td>
<td></td>
<td>Gy, Sd, silty, kaolinitic, tight appearing. 3&quot; granitic cobbled top of core.</td>
</tr>
<tr>
<td>2375</td>
<td></td>
<td></td>
<td></td>
<td>Black Oil Sd, - mottled appearance. Fair odor, amber cut. Grade to gray sds. Is silty &amp; kaolinitic.</td>
</tr>
<tr>
<td>2375</td>
<td></td>
<td></td>
<td></td>
<td>Gy, Sd, Silty, kaolinitic, F-H. Appears to be impermeable. Exp 15°-18° typical feldspathic material w/c micas &amp; feldspars.</td>
</tr>
<tr>
<td>2375</td>
<td></td>
<td></td>
<td></td>
<td>Sh. maroon, brittle, hi. &amp; broken w/ com fractures &amp; wiggled sides. Massive - no discernable dips. Local green sand &amp; ad grades &amp; nests.</td>
</tr>
<tr>
<td>2357</td>
<td>2375</td>
<td>D</td>
<td></td>
<td>Black Oil Sd, w/ gray patches. Amber cut good odor. Sds is silty, argill w/ green clay inclusions. Tight looking vertical fractures.</td>
</tr>
<tr>
<td>2375</td>
<td></td>
<td></td>
<td></td>
<td>Sds as above - lighter &amp; fewer w/ only occas. lt. oil stains. Good 30° dip.</td>
</tr>
<tr>
<td>Depth From</td>
<td>Depth To</td>
<td>Drilled or Cored</td>
<td>Recovery</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>----------</td>
<td>------------------</td>
<td>----------</td>
<td>-------------</td>
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<tr>
<td>2375</td>
<td>2535</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2535</td>
<td>2545</td>
<td>C</td>
<td>5&quot;</td>
<td></td>
</tr>
<tr>
<td>2545</td>
<td>2666</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2666</td>
<td>2843</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2843</td>
<td>2849</td>
<td>C</td>
<td>1 1/2</td>
<td></td>
</tr>
<tr>
<td>2849</td>
<td>2874</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2874</td>
<td>2882</td>
<td>C</td>
<td>4 1/2</td>
<td></td>
</tr>
<tr>
<td>2882</td>
<td>2973</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2973</td>
<td>2980</td>
<td>C</td>
<td>1&quot;</td>
<td></td>
</tr>
<tr>
<td>2980</td>
<td>3110</td>
<td>D</td>
<td></td>
<td></td>
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<tr>
<td>3110</td>
<td>3120</td>
<td>C</td>
<td>3&quot;</td>
<td></td>
</tr>
<tr>
<td>3120</td>
<td>3173</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3173</td>
<td>3188</td>
<td>C</td>
<td>5&quot;</td>
<td></td>
</tr>
<tr>
<td>3188</td>
<td>3294</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3294</td>
<td>3340</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3340</td>
<td>3342</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3342</td>
<td>3393</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3393</td>
<td>3401</td>
<td>C</td>
<td>5&quot;</td>
<td></td>
</tr>
<tr>
<td>3401</td>
<td>3458</td>
<td>D</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1-1/2" Ed. & oil stained, St. cut & oil stain. Good odor. Ed. & argill. silty & tight. Appearing w/ conn. green clay. 
Inclusions. Good 35° dip. 

1-1/2" Silty, to silty hor. maroon-grn massive sh. Broken & fractured w/ "slicks". Local oil stain, in fractures. 

10° Ed. tight sh. At oil stains, cut & oil cuts where locally permeable. At 2566 2-1/2 of ed. w/ green clay matrix. 
Some grn shales & shaly inclusions throughout. Dip about 40° 
Note: Good gas flash when core removed from barrel. Hard sand. 

5" Ed. to fine green silty to clayshale w/ some slicks & fracture planes. Locally fine grn sand studded. 
Shale streaks sand 

1 1/2" Ed. & silty sh. Grn r/ gr-maroon cast - V tight. 
5" TV Ed. tight sh. Very well cemented. Almost a "shell". 
Probable dip is 35°-40°. Outside 1/2 of core is soft due to high water losses. 
Hard sandy shale 

4 1/2" V ed & silty, tight. Ed. well cemented. Argill to silty matrix 2-1/2 shaly disruptible w/ top of core. Several "cracks" in top shales. 
Positively not present. Is almost a "very silty hor. sh."
Locally, 

1" V ed. & silty argillaceous maroon siltstone. Calcareous locally. 

Hard sand & shale 

3" V ed. & silty. Well cemented. Sand appears tight - iodine small locally. 4" cone w/ top. Poor 35°-45° dip. May be locally wet. 
Hard grey sand 

5" V ed. tight, gy. Sandstone. Fairly well bedded. Becomes conglomerate to base (2") w/ igneous & sh pebbles. 
M. good 30°-35° dips. Locally pyritic. 

2-1/2" Gr. grn, finely argillaceous sil. w/ con. mica & local pyrite. 
7/10" V ed. Largely shaly core w/ con. pyrite crystals. 

4-6/10" Gr. Grn, silty, fine, sand to finely sandy sil. Con. mica, massive, tight. 

2-1/2" Gr. Grn, finely argillaceous sil. w/ con. mica & local pyrite. 
7/10" V ed. Largely shaly core w/ con. pyrite crystals. 

4-6/10" Gr. Grn, silty, fine, sand to finely sandy sil. Con. mica, massive, tight. 

3188 3294 D   Hard sand. 
3294 3340 D   Hard sand, sandstone. 
3340 3342 D   Shell. 
3342 3393 D   Hard sandy shale. 
3393 3401 C   5" Ed. friable & fractured maroon to loc. grn clly to silty shale. Loc. con. ed. grains. Con. slicken sides - very broken up. Sp. gypsum. 
3401 3458 D   Sand
<table>
<thead>
<tr>
<th>Depth</th>
<th>Drilled or Cored</th>
<th>Recovery</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3458-3474</td>
<td>C</td>
<td>5'</td>
<td>Gy. Sd., firm, tight, feldspathic, w/ rare cong. pebbles. Oil stains in bottom 3&quot;.</td>
</tr>
<tr>
<td>3492-3504</td>
<td>C</td>
<td>3/10'</td>
<td>Hard, shale pieces w/ top of core.</td>
</tr>
<tr>
<td>3504-3554</td>
<td>D</td>
<td>8'</td>
<td>Good dk brown live oil sd. Cores blsred free oil readily. Good odor &amp; cut. Gy, spot, s base.</td>
</tr>
<tr>
<td>3554-3562</td>
<td>C</td>
<td>1'</td>
<td>Ed. gy. c., feldspathic s.s. &quot;shell&quot;.</td>
</tr>
<tr>
<td>3562-3637</td>
<td>D</td>
<td>3/10'</td>
<td>Gy-gm. firmness, clay, shale, w/ com. feldspathic sd nests.</td>
</tr>
<tr>
<td>3637-3655</td>
<td>D</td>
<td>1/2'</td>
<td>Sec. 1/2' poor spotty oil sd. Free oil on core sheath. 3&quot; he marly shale includes. Probably knocked out 3' of oil sd.</td>
</tr>
<tr>
<td>3655-3684</td>
<td>D</td>
<td>2'</td>
<td>Ed. faintly bdded, gy, tight, silty sd. Poor 40°-57° dips.</td>
</tr>
<tr>
<td>3684-3702</td>
<td>C</td>
<td>2'</td>
<td>Ed. gy grm marly, massive shale. Ls. in upper 3&quot;.</td>
</tr>
<tr>
<td>3702-3704</td>
<td>D</td>
<td>1'</td>
<td>Ed. gy, fairly well bdded, silty, P-EM grd, tight, s.s. Good 30° – 33° dips.</td>
</tr>
<tr>
<td>3706-3708</td>
<td>D</td>
<td>3-5/10'</td>
<td>Hard sand and shale.</td>
</tr>
<tr>
<td>3708-3710</td>
<td>C</td>
<td>2'</td>
<td>Near to very oil sd. Locally free oil on sheath and &quot;bleeds&quot; when broken. Good odor. Local gray patches &amp; grains - fair saturation.</td>
</tr>
<tr>
<td>3710-3712</td>
<td>C</td>
<td>3/10'</td>
<td>Ed. gy-grm loy s.s. well.</td>
</tr>
<tr>
<td>3712-3714</td>
<td>C</td>
<td>1-2/10'</td>
<td>Oil sd as above - fair oil sd.</td>
</tr>
<tr>
<td>3714-3716</td>
<td>D</td>
<td>3'</td>
<td>Ed. tight, dry gy sd. (ill defined) base.</td>
</tr>
</tbody>
</table>
| 3716-3718 | C               | 2'       | Oil stained dry sd. Locally w/o. grd. Fored. Tight.
### LOG AND CORE RECORD OF OIL OR GAS WELL

**Depth**  
**From** **To** **Drilled** **Gr Core Cored** **Recovery** **Description**

**5-6-10'**

**3702** 3717  C  
**3-5/10'**  

**3717** 3740  D  
**3-5/10'**  
3' maroon shale @ top. Poor to locally good oil sd. depending on perm. 2/3 fair oil sd 50 - 53° dip suggestion. Gray patches, free oil. Tight syd w/ C. 5' fair oil sd @ base.

**3740** 3753  C  
**3-5/10'**  
No Recovery - Very good oil and gas showings.

**3751** 3884  D  
**2'**  
3' light oil sd - masked in barite.

**3894** 3996  C  
**3-5/10'**  
Hd massive gy adm./green shale inclusions.

**3896** 3901  C  
**9/10'**  
Td, sandstone "shell".

**3901** 3913  D  
Hard shale.

**3913** 3916  C  
**1'**  
Hd dk by-blk sh. fractured & slicken sided w/ local sandy siks. Some gas on sheath.

**3916** 3929  D  
**1-3/10'**  
Good live lt br oil sd. Gas & free oil on sheath. Good odor.

**3929** 3932  C  
**2'**  
Oil sd as above begins to grade to gray @ base.

**3932** 3935  C  
**7/10'**  
Gy hd tight sd - rare oil stains.

**3935** 3948  D  
**3/10'**  
Fair to good (at base) O sd.

**3948** 3951  C  
**5/10'**  
Fine gy grn syd alt.

**3951** 4025  D  
**3/10'**  
M-C gy tight sd.

**4025** 4038  C  
**5/10'**  
Mar. mas oly - calcl shale. Brittle to tough.

**1-5/10'**  
Gy oil stained sd to gr spotted oil sd. Silty to clay matrix w/ c shale inclusions up to 1/2". Good odor.

**4038** 4086  D  
**7'**  
Lt br, fine - silky oil sd w/ ap gray patches. Fairly even stn. Good odor, amber cut. Free oil on core & in fractures. Poor 65° dip. Fair - good sd.

**4086** 4105  C  
**1-5/10'**  
Gy V hd tight sd. Becomes shaly in lower 1/2' and grades to gy-gr shale @ base. Cont. shale inclusions.

**3-5/10'**  
Hard sand, streaks hard shale.

Massive silty shale broken & crumblly.

**3-5/10'**  
## Log and Core Record of Oil or Gas Well

<table>
<thead>
<tr>
<th>Depth From To</th>
<th>Drilled or Cored</th>
<th>Recovery</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4105 - 4126</td>
<td>0</td>
<td>G</td>
<td>Fair oil sl. sugar, &amp; lighter than above, but w/ fair saturation, good odor &amp; free oil &amp; good dr cut. sd is predominately mottled; 4-5 oil sd &amp; 1-5 gry sd. $^{1/6}$ dip.</td>
</tr>
<tr>
<td>4118 - 4126</td>
<td>0</td>
<td>G</td>
<td>6/0.09 ty gry, masl. cloudy, gritty sl.</td>
</tr>
<tr>
<td>4126 - 4140</td>
<td>D</td>
<td>G</td>
<td>0.7 ty, tight; gry oil sl'd sand.</td>
</tr>
<tr>
<td>4140 - 4183</td>
<td>D</td>
<td>G</td>
<td>1 ty gry-gr shade w/ free bits oil in fracts.</td>
</tr>
<tr>
<td>4183 - 4193</td>
<td>D</td>
<td>G</td>
<td>Sand &amp; shale.</td>
</tr>
<tr>
<td>4193 - 4223</td>
<td>D</td>
<td>G</td>
<td>Hard gray sand.</td>
</tr>
<tr>
<td>4223 - 4261</td>
<td>0</td>
<td>G</td>
<td>1.6/0 ty, gry sl'd, a br had 0, sd w/ several 3&quot; cong. cobbles.</td>
</tr>
<tr>
<td>4243 - 4261</td>
<td>0</td>
<td>G</td>
<td>Mottled Gry-to poor 0, sd; Good odor.</td>
</tr>
<tr>
<td>4261 - 4331</td>
<td>D</td>
<td>G</td>
<td>Gry &amp; bd, conglomeritic appearing sandstone w/ com silt, sh, &amp; ls inclusions.</td>
</tr>
<tr>
<td>4334 - 4352</td>
<td>G</td>
<td>0</td>
<td>Soft &amp; $^{1/6}$ oil stained gry sl'd looks wet, good amber cut, good odor. 0.7 ty, clayey sl.</td>
</tr>
<tr>
<td>4352 - 4373</td>
<td>D</td>
<td>G</td>
<td>0.7 ty, gry-gry cut; massive, brown, dull, free &amp; gas bubbles on core分析. sd had &quot;mottled odor&quot;. No salty taste.</td>
</tr>
<tr>
<td>4373 - 4382</td>
<td>G</td>
<td>0</td>
<td>9 ty; gry-gry cut; locally slightly oily odor when fresh (may be mild creased) &amp; not. Some gas on sheath. Could be wet. Correctly evaluated as 0.7 ty, clayey sl.</td>
</tr>
<tr>
<td>4382 - 4390</td>
<td>G</td>
<td>0</td>
<td>9 ty; gry-gry cut; locally slightly oily odor when fresh (may be mild creased) &amp; not. Some gas on sheath. Could be wet. Correctly evaluated as 0.7 ty, clayey sl.</td>
</tr>
<tr>
<td>4390 - 4392</td>
<td>0</td>
<td>G</td>
<td>3/0.10 ty, ty, gry, gry sl'd.</td>
</tr>
<tr>
<td>4392 - 4400</td>
<td>0</td>
<td>G</td>
<td>1.4/0.10 ty, gry sl'd sand &amp; mosaic masl. gry to silty (a base) shale.</td>
</tr>
<tr>
<td>4400 - 4405</td>
<td>0</td>
<td>G</td>
<td>3/0.10 ty, gry-gry cut. gry vs. 3/0.10 cm calcite filled fract.</td>
</tr>
<tr>
<td>4405 - 4460</td>
<td>D</td>
<td>G</td>
<td>Sand &amp; shale.</td>
</tr>
<tr>
<td>4460 - 4470</td>
<td>G</td>
<td>0</td>
<td>Gry-clay sl, mottled, shale.</td>
</tr>
<tr>
<td>4470 - 4480</td>
<td>0</td>
<td>G</td>
<td>6 ty; gry-clay sl, mottled, (brittle &amp; locally carbonaceous.)</td>
</tr>
</tbody>
</table>
| 4480 - 4490  | G                | 0        | Gry clay sl, appears fairly laminated, has mottled odor & looks wet. No salty after creased but "brightness locally". Fair - good cut in mud. Steep (60°) fractures near base.
<table>
<thead>
<tr>
<th>Depth From</th>
<th>to</th>
<th>Drilled or Cored</th>
<th>Recovery</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>44.70</td>
<td>44.84</td>
<td>C</td>
<td>9'</td>
<td>Above grade sand, coarse &amp; probably more permeable poor oil sand. Sand is partly to fairly well saturated. Com free heavy oil on core &amp; in fractures. Good odor. Averages 1/2 gay grains &amp; 1/2 only grains. Looks like heavy oil. Op. sd. F - locally V C locally silty &amp; strong medicated odor throughout most of core. Locally faint petrol odor. May be from mud. Core sheath had some gas bubbles. Appears &quot;wet&quot;. No salty taste. Wet cut. Upper 6' of core appears permeable like, into &quot;tincuits&quot;. Poor 25° dip to base.</td>
</tr>
<tr>
<td>2'</td>
<td></td>
<td></td>
<td></td>
<td>Hd was gray to brown shale. Locally sandy. Poor 20° dip suggestion.</td>
</tr>
<tr>
<td>COMPANY</td>
<td>BRITISH-AMERICAN OIL PROD. CO.</td>
<td>LEASE &quot;Richardson-Roh&quot;</td>
<td>WELL NO.</td>
<td>ELEV.</td>
</tr>
<tr>
<td>---------------</td>
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</tr>
<tr>
<td>FIELDS AREA</td>
<td>South Mountain</td>
<td>COUNTRY Ventura</td>
<td>SPUD.</td>
<td>11/13/44</td>
</tr>
<tr>
<td>LOCATION</td>
<td>715 &amp; 1115 ft W of Sec 13</td>
<td></td>
<td>COMP.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td>ABAND.</td>
<td>4/13/45</td>
</tr>
<tr>
<td>DATE OF ISSUE</td>
<td>4/28/45</td>
<td></td>
<td>T. D.</td>
<td>4494</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>PLUG</td>
<td>4080</td>
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</table>

### CASING RECORD

<table>
<thead>
<tr>
<th>SIZE</th>
<th>DEPTH</th>
<th>CMDD.(LDD.)</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 3/8</td>
<td>212</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>4342</td>
<td>*</td>
<td>Incl. 1311' perf. v/300 ex</td>
</tr>
<tr>
<td>cp</td>
<td>3032</td>
<td></td>
<td>Hung</td>
</tr>
<tr>
<td>2 1/2</td>
<td>4000</td>
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</table>

### GEOLOGICAL MARKERS

<table>
<thead>
<tr>
<th>DATE</th>
<th>DEPTH</th>
<th>FORMATION</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/21/44</td>
<td>50</td>
<td>Location</td>
<td>(T. &amp; T. Dug. Co.)</td>
</tr>
<tr>
<td>11/14/44</td>
<td>350</td>
<td>Drilling</td>
<td></td>
</tr>
<tr>
<td>11/25/44</td>
<td>1161</td>
<td>Recovered fish - Waiting on 5' drill pipe.</td>
<td></td>
</tr>
<tr>
<td>11/28/44</td>
<td>1270</td>
<td>Sand &amp; shale, drilling.</td>
<td></td>
</tr>
<tr>
<td>12/4/44</td>
<td>1970</td>
<td>Sand &amp; shale, drilling - Ran electrolog to 1952</td>
<td></td>
</tr>
<tr>
<td>12/5/44</td>
<td>2060</td>
<td>Sand &amp; shale, drilling.</td>
<td></td>
</tr>
<tr>
<td>12/12/44</td>
<td>2425</td>
<td>Shut down - making repairs.</td>
<td></td>
</tr>
<tr>
<td>12/13/44</td>
<td>2440</td>
<td>Drilling resumed.</td>
<td></td>
</tr>
<tr>
<td>12/18/44</td>
<td>2700</td>
<td>Shut down - making repairs.</td>
<td></td>
</tr>
<tr>
<td>12/22/44</td>
<td>2789</td>
<td>Drilling.</td>
<td></td>
</tr>
<tr>
<td>12/27/44</td>
<td>3110</td>
<td>Hard sand, drilling.</td>
<td></td>
</tr>
<tr>
<td>1/2/45</td>
<td>3294</td>
<td>Hard sand, drilling.</td>
<td></td>
</tr>
<tr>
<td>1/3/45</td>
<td>3402</td>
<td>Hard sand, drilling, and spot coring.</td>
<td></td>
</tr>
<tr>
<td>1/4/45</td>
<td>3458</td>
<td>Coring - oil showings on ditch.</td>
<td></td>
</tr>
<tr>
<td>1/6/45</td>
<td>3558</td>
<td>Coring - oil showings on ditch.</td>
<td></td>
</tr>
<tr>
<td>1/8/45</td>
<td>3602</td>
<td>Hard shale, drilling.</td>
<td></td>
</tr>
<tr>
<td>1/10/45</td>
<td>3702</td>
<td>Coring.</td>
<td></td>
</tr>
<tr>
<td>1/11/45</td>
<td>3725</td>
<td>Spot coring.</td>
<td></td>
</tr>
<tr>
<td>1/16/45</td>
<td>3972</td>
<td>Sand &amp; shale, drilling.</td>
<td></td>
</tr>
<tr>
<td>1/17/45</td>
<td>4001</td>
<td>Sand &amp; shale, drilling.</td>
<td></td>
</tr>
<tr>
<td>1/20/45</td>
<td>4128</td>
<td>Coring.</td>
<td></td>
</tr>
<tr>
<td>1/25/45</td>
<td>4268</td>
<td>Coring.</td>
<td></td>
</tr>
<tr>
<td>1/26/45</td>
<td>4326</td>
<td>Drilling &amp; spot coring.</td>
<td></td>
</tr>
<tr>
<td>1/28/45</td>
<td>4484</td>
<td>Total depth - Prop to run casing.</td>
<td></td>
</tr>
<tr>
<td>1/29/45</td>
<td></td>
<td>Ran 7&quot; casing incl. perforated on bottom.</td>
<td></td>
</tr>
<tr>
<td>2/5/45</td>
<td></td>
<td>Wet on shut-off test. - Reaming - testing.</td>
<td></td>
</tr>
<tr>
<td>2/13/45</td>
<td></td>
<td>On test of re-comant job swabbed salt water - little oil.</td>
<td></td>
</tr>
<tr>
<td>2/14/45</td>
<td></td>
<td>Run water-witch, found entry at shoe and up the hole.</td>
<td></td>
</tr>
<tr>
<td>2/17/45</td>
<td></td>
<td>Standing cemented.</td>
<td></td>
</tr>
<tr>
<td>2/23/45</td>
<td>Pg. 4080</td>
<td>Swabbing.</td>
<td></td>
</tr>
<tr>
<td>2/26/45</td>
<td></td>
<td>Teering out drilling equipment. Will put on pump.</td>
<td></td>
</tr>
<tr>
<td>3/1/45</td>
<td></td>
<td>Swabbed 55 bbls 19½ hrs., - cut ranged from 70 to 98½.</td>
<td></td>
</tr>
<tr>
<td>3/14/45</td>
<td></td>
<td>Will pump on pump &amp; try to exhaust water.</td>
<td></td>
</tr>
<tr>
<td>3/27/45</td>
<td></td>
<td>Prop to reperforate.</td>
<td></td>
</tr>
</tbody>
</table>
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 2-4466

Santa Paula, Calif. May 7, 1946

Mr. W. E. Hauptman
Ventura, Calif.
Agent for The British-American Oil Producing Company

Dear Sir:

Operations at your well No. "Richardson Ranch" 1Sec. 13, T. S. E., R. 21 W., S. E., B. & M., South Coast Field, in Ventura County, were witnessed by C. E. Thomas,representative of the supervisor,
on May 4, 1945. There was also present G. W. Linnan, curt.

M. P. Borden, Driller
Casing Record 11-5/8" cen. 218', 7" lead 4339' C. F. Junk
3088', perf. at intervals below 3088' S. C. as tested
through shot holes 2088' O.K. T.D. 4464', plugged
from bottom to 2991'.

The operations were performed for the purpose of determining the location and hardness of a cement plug proposed below 2991'.

The inspector arrived at the well at 4 p.m. and Mr. Linnan reported:

1. At 10 a.m., May 4, the final portion of the plug was placed consisting of 200 sacks cement pumped in through tubing hanging at the beginning of the operation at 4080'.

2. The top of this plug was located at 2991'.

The Deputy noted that 2-1/2" tubing, open on bottom, rested on a solid plug when lowered to a reported depth of 2991'.

The location and hardness of the plug at 2991' are APPROVED.

cc - Company
Bolsa Chino Oil Corp.

R. D. BUSH
State Oil and Gas Supervisor

By [Signature] Deputy
Mr. W. W. Pauling

Ventura, Calif.

Agent for The British-American Oil Producing Company

Dear Sir:

Your proposal to abandon Well No. "Richardson Ranch," 1, Section 15, T. 5 N., R. 21 W., S. B. & M., South Mountain Field, Ventura County, dated Apr. 10, 1945, received Apr. 11, 1945, has been examined in conjunction with records filed in this office.

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

Records in addition to those given in the notice:

The 7" shut-off through shot holes at 2569' was approved.

THE NOTICE STATES:

The present condition of the well is as follows:

11 3/4" surface casing cemented at 218 feet. The total depth 4486', with 7" casing hung with bottom at 4342'. Cemented through perforation at 3032'. Perforation 3036' to 4306'.

Flagged back to 4080'. Well produced 72 barrels water with trace of oil in 24 hours."

PROPOSAL:

The proposed work is as follows:

Plug with cement from 4080' to 2975'. Cement between 11 3/4" casing and 7"."

DECISION:

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. This office is notified to witness a test for location and hardness of the cement plug at about 2975'.

2. The log and history of the well are filed in duplicate at this office.

Blanket Bond

ce - Brit.-Amer. Oil Prod. Co.

Soles Chico Oil Corp.

P.A.W.

R. D. BUSH

State Oil Gas Supervisor

By

Deputy
Notice of Intention to Abandon Well

This notice must be given at least five days before work is to begin

Ventura, Cali. April 10, 1945.

DIVISION OF OIL AND GAS

Santa Paula, Cali.

In compliance with Section 3229, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to abandon well No. Richardson Ranch No. 1

Sec. 13, T. 3 N., R. 21 W., S. B. B. & M. South Mountain Field,

Ventura County, commencing work on the 16 day of April 1945.

The present condition of the well is as follows:

11 3/4" surface casing cemented at 218 feet. The total depth 4485', with 7" casing hung with bottom at 4342'.

Cemented through perforation at 3032'. Perforation 3038' to 4306'.

Plugged back to 4080'. Well produced 72 barrels water with trace of oil in 24 hours.

The proposed work is as follows:

Plug with cement from 4080' to 2975'. Cement between 11 3/4" casing and 7".

THE BRITISH-AMERICAN OIL PRODUCING COMPANY

(Name of Operator)

By W. P. Shaub

Address: Notice to Division of Oil and Gas in District where Well is Located
Report on Test of Water Shut-off

(FORMATION TESTER)

Santa Paula, Calif. February 9, 1946

Mr. W. R. Pauline
Ventura, Calif.

Agent for The British-American Oil Producing Company

Dear Sir:

Your well No. "Richardson," Sec. 15, T. 3 N., R. 21 W., 8th B. & M. South Mountian Field, in Ventura County, was tested for water shut-off on Feb. 7, 1946. Mr. C. C. Thomas, designated by the supervisor, was present as prescribed in Sec. 3222 and 3223, Ch. 91, Stat. 1919; there were also present

W. R. Pauline, ept.

Shut-off date: 7 in. 20 ft. casing was cemented at 3083 ft. on Jan. 28, 1946. 20 ft. in 10-5/8" hole with 500 sacks of cement of which 6 sacks left in casing. Casing record of well: 11-5/4" casing 218 ft., 7" landed 4339 ft. C.P. 3039 ft. also through shot holes at 2995 ft. and 2999 ft. W.S.O. as tested through shot holes at 2989 ft., perf. at intervals below 3038 ft.

Reported total depth 4444 ft. Bridged with cement from 271 ft. to 278 ft. Cleaned out to 2868 ft. for this test. A pressure of 160 lb. was applied to the inside of casing for min. without loss after cleaning out to 2868 ft. An Ace tester was run into the hole on 21 in. tubing with no ft. of water cushion, and packer set at 2871 ft. with tailpiece to 2876 ft. Tester valve, with 1/2" bean, was opened at 5:12 p.m. and remained open for 4 min. and none thereafter.

Mr. Pauline reported the following:

1. Two previous tests with an Ace tester were made, through shot holes at 2995 ft. and 2999 ft., respectively. The water was not shut-off at either test.
2. After the first test 516 sacks of cement was forced out through the holes shot for test at 3095 ft. under a final pressure of 600 lb., on Feb. 2.
3. At the second test through shot holes at 2992 ft. the well flowed salt water with a salt content of 1482 g.p.s.t. at the rate of 30 bbls per hr.
4. The 7" casing was re-cemented on Feb. 5 through shot holes at 2992 ft. with 165 sacks of cement pumped away under a concluding pressure of 900 lb. After 2 hrs. 70 more sacks was forced away under a final pressure of 2000 lb.
5. The 7" casing was then shot with 4, 1/2" holes at 2868 ft. and the Ace tester run as shown in the form above.

The Deputy was present at the well from 7:56 to 8:15 p.m., Feb. 7, and noted the following:

1. 250 of new fluid was recovered in the 21/2" tubing, equivalent to 1.5 bbls.
2. This fluid consisted of frothy mud and testing of cement.
3. The pressure bomb chart satisfactorily checked the details of the test as reported.

The 7" shut-off as tested through shot holes at 2989 ft. is APPROVED.


R. D. BUSH, State Oil and Gas Supervisor

By / Signature Deputy
STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS

Report on Proposed Operations

No. P 2-5304

Santa Paula, Calif. October 21, 1944

Mr. W. E. Earling
Ventura, Calif.

Agent for: The British-American Oil Producing Company

DEAR SIR:

Your proposal to drill Well No. "Richardson Ranch" 1
Section 13, T. 28 N., R. 21 W., S. 4, M. & N., South Mountain Field, Ventura County,
dated Oct. 26, 1944, received Oct. 26, 1944, 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 NATURE OF THE LEASE:
"Lease consists of 40 Acres"
The well is 711 feet S., and 1115 feet E. from R. R. Gv. NE 1/4 of SW 1/4.
The elevation of the ground above sea level is 532.31 feet.
We estimate that the first productive oil or gas sand should be encountered at a depth of about 2600 feet."

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

<table>
<thead>
<tr>
<th>Size of Casing</th>
<th>Ft.</th>
<th>Depth</th>
<th>Landed or Cemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 5/8&quot; OD 7&quot;</td>
<td>47</td>
<td>200'</td>
<td>Cemented</td>
</tr>
<tr>
<td>7&quot;</td>
<td>23</td>
<td>4200'</td>
<td>Cemented</td>
</tr>
</tbody>
</table>

(7" to be combination string, cemented through perforations at approx. 2600')
Well is to be drilled with rotary tools.
It is understood that if changes in this plan become necessary we are to notify you before cementing or landing casing.

RECESS:

Date available at this office indicates the following:
1. This well is located very near abandoned drilling well No. Louis Richardson 1.
2. That well reported oil sands as high as 1816' and a salt water formation at 3115' - 3503'.
3. Oil sands were logged at intervals down to bottom, 5781'.

THE PROPOSAL IS APPROVED PROVIDED THAT:
1. The hole is, at all times, kept full of mud fluid of proper weight and quality to assure satisfactory drilling conditions and adequate equipment is maintained on the well to prevent blowouts.
2. Sufficient casing is cemented in the hole in proper formation and at sufficient depth to make a satisfactory conductor, estimated as at least 260' with sufficient cement to reach the surface.
3. Any sidetracked hole penetrating an oil or gas zone is plugged with cement insofar as possible.
4. THIS OFFICE IS NOTIFIED:
   a. Before drilling below a depth of 4200' or running any casing in the hole below the conductor pipe.  
   b. To witness a satisfactory test of the water shut-off through not less than 4 holes immediately above the C.P. point, prior to drilling out below the C.P. point.

By.  R. D. Bush
Deputy State Oil and Gas Supervisor

Blanket Bond
co - Brit.-Amer. Oil Prod. Co.
Seima Chinese Oil Corp.

By.  R. D. Bush
Deputy State Oil and Gas Supervisor
DIVISION OF OIL AND GAS

Santa Paula, Calif.

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of drilling well No. "Richardson Ranch" - 1, Sec. 12, T. 9 S., R. 27 W., S. B. & M., South Mountain Field, Ventura County.

Lease consists of 40 Acres

The well is 711 feet N. of S., and 1115 feet E. of N. of SW 1/4 of SW 1/4.

The elevation of the derrick floor above sea level is 582.31 feet.

We estimate that the first productive oil or gas sand should be encountered at a depth of about 2800 feet.

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

<table>
<thead>
<tr>
<th>Size of Casing, Inches</th>
<th>Weight, Lb. Per Foot</th>
<th>Grade and Type</th>
<th>Depth</th>
<th>Landed or Cemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 3/4 OD</td>
<td>47</td>
<td>J-55</td>
<td>200'</td>
<td>Cemented</td>
</tr>
<tr>
<td>7&quot;</td>
<td>23</td>
<td>J-55 &amp; H-40</td>
<td>4200'</td>
<td>Cemented</td>
</tr>
</tbody>
</table>

(7" to be combination string, cemented through perforations at approx. 2800')

Well is to be drilled with rotary tools.

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

Address: Route 1, Box 23

Telephone number: 5860

The British-American Oil Producing Company
(Name of Operator)

By W.R. Hanline

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