

STATE OF KANSAS  
STATE CORPORATION COMMISSION

WELL PLUGGING RECORD

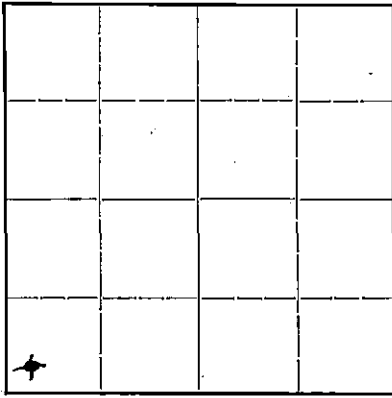
OR

FORMATION PLUGGING RECORD

Strike out upper line when reporting plugging off formations.

Give All Information Completely  
Make Required Affidavit  
Mail or Deliver Report to:  
Conservation Division  
State Corporation Commission  
800 Bittling Building  
Wichita, Kansas

NORTH



Locate well correctly on above Section Plat

McPherson County, Sec. 16, Twp. 21, Rge. 1 (E) (West)  
Location as "NE 1/4 NW 1/4 SW 1/4" or footage from lines SW/c SW/4  
Lease Owner The Derby Oil Company  
Lease Name H. L. Arnold Well No. 1  
Office Address Wichita, Kansas  
Character of Well (completed as Oil, Gas or Dry Hole) Oil  
Date well completed October 6 19 36  
Application for plugging filed April 9 19 43  
Application for plugging approved April 10 19 43  
Plugging commenced April 22 19 43  
Plugging completed April 29 19 43  
Reason for abandonment of well or producing formation Oil Depleted  
If a producing well is abandoned, date of last production February 19 42  
Was permission obtained from the Conservation Division or its agents before plugging was commenced? Yes

Name of Conservation Agent who supervised plugging of this well Ruel Durkee  
Producing formation Hunton Depth to top 3311 1/2 Bottom Total Depth of Well 3346 Feet  
Show depth and thickness of all water, oil and gas formations.

OIL, GAS OR WATER RECORDS

CASING RECORD

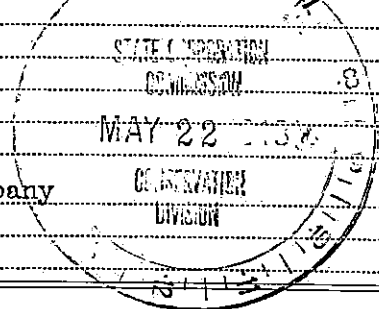
Formation	Content	From	To	Size	Put In	Pulled Out
				13'	142	None
				8-5/8"	3150	2650'
				5-3/16"	3312	2907'

Describe in detail the manner in which the well was plugged, indicating where the mud fluid was placed and the method or methods used in introducing it into the hole. If cement or other plugs were used, state the character of same and depth placed, from feet to feet for each plug set.

3346' to 2900' Mud  
2900' to 2875' Cement  
2875' to 142' Mud  
142' to 100' Cement  
100' to 10' Mud  
10' to Base of Cellar - Cement  
Base of Cellar to Surface - Earth

PLUGGING  
FILE SEC. 16, TWP. 21, R. 1, W. 4  
BOOK PAGE 70 LINE 2

5-22-43



(If additional description is necessary, use BACK of this sheet)  
Correspondence regarding this well should be addressed to The Derby Oil Company  
Address Wichita, Kansas

STATE OF Kansas, COUNTY OF Sedgwick, ss.  
S. E. Banks (employee of owner) or (owner or operator) of the above-described well,  
being first duly sworn on oath, says: That I have knowledge of the facts, statements, and matters herein contained and the log of the above-described well as filed and that the same are true and correct. So help me God.

(Signature) S.E. Banks  
Wichita, Kansas  
(Address)

SUBSCRIBED AND SWORN TO before me this 20th day of May, 19 43

My commission expires 7/31/43

[Signature]  
Notary Public.

ARNOLD #1

SW Corner southwest quarter (S 34)

16 21 17

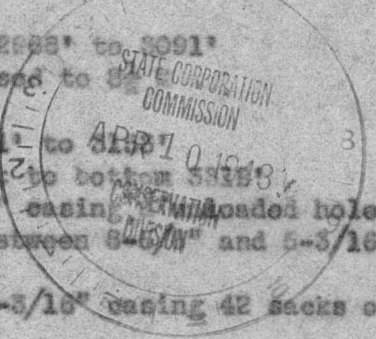
Hepheron Drilling Company

August 16, 1936

October 6, 1936

13" OD	142'	15'	50'	Cemented 135 sacks
8-5/8" OD	3150'	15'	32'	Cemented 110 sacks Multistage
5-3/16"	3312'	15'	17'	

Sand & Shale	0-134	52 sacks oil max cement through tool
Shale	150	at 2922'
Broken Line	535	Stopped top plug 2919'
Line	565	Line
Broken Line	780	Shale
Line	775	Sand
Broken Line	1180	Line
Shale	1580	Perforated 8-5/8" casing 2966' to
Broken Line	2050	2968' 30 holes
Line	2075	Run 5-3/16" seamless 17' casing 3312'
Shale	3120	Swung casing off bottom. Unloaded hole
Line	3140	10 M gas between 5-3/16" and 8-5/8"
Sandy Line	3170	casing. 30 bbls per hour water
Shale	2200	Killed gas. Pulled 5-3/16" casing
Broken Line	2262	Run 2" tubing to 2967'
Shale	2298	Cemented through tubing with 50 sacks
Line	2625	oil max
Shale	2650	standardized
Line	2675	
Shale	2698	<u>Standard Tools</u>
Line	2714	Unloaded 8-5/8" hole
Broken Line	2875	Gas tested 1 M after unloading at 5 A.M.
Shale	2918	Increased to 5 M at 7 A. M.
Chat	2968	
Halliburton test	2918 to	Cement 2922' to 3091'
2968 = show of oil		Gas increased to 8 M
Estimated 10 M gas		Killed gas
Chat	3068	Cement 3091' to 3150'
Chat & Line	3102	Cleaned out to bottom 3312'
Line	3150	Run 5-3/16" casing 3312' to 3312'
Set 8-5/8" OD 32' SS Casing 3150' using		8 M gas between 8-5/8" and 5-3/16"
Halliburton multistage cement tool at 2922'		casings
58 sacks oil max cement around bottom of		Cemented 5-3/16" casing 42 sacks oil max
casing at 3150'		



**PLUGGING**  
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Cement	3307	3313'	
Lime, Hard		3317'	Show of oil
Lime, Hard		3329	No increase
Lime, Soft		3333	Show of free oil
Lime, Hard		3336	No increase
Lime, Soft		3337	Filled up 200' oil
Lime, Medium Soft		3338 $\frac{1}{2}$	600' oil 1 hour
Lime, Soft		3342 $\frac{1}{2}$	1450' 2 hr 20 min.
Lime, Soft		3345	2300' 4 $\frac{1}{2}$ hours
Lime, Medium Soft		3348	
Shale		3349	

Swabbed 17 $\frac{1}{2}$  bbls per hour

Acidized 2000 gal.

Swabbed 50 bbls 1 hr. 1500' from top

Pumped 931 bbls 15 $\frac{1}{2}$  hrs state potential

Sample tops	Top Chat	2918'
	Base Miss.	3230
	Top Winton	3311 $\frac{1}{2}$

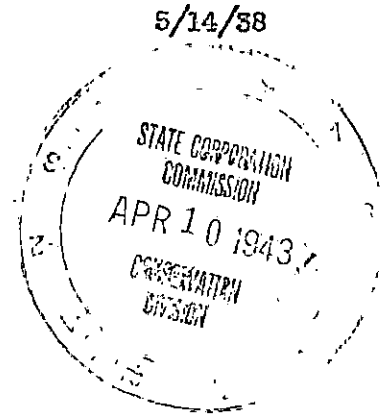
BOB  
 FILE  
 W. W. W.  
 FLUORINE

H. L. ARNOLD WELL #1  
SUBSEQUENT OPERATION #2

4/21/38

Nature of operation: Baker Squeeze Job Total  
Depth before Operation: 3349' Object of  
Operation: To shut off water.

5/14/38

DETAIL OF OPERATION

Bridged over from 3316' to 3318' - Plugged back to 3300' with rock. Dumped 2 sacks of Encor Cement to plug off Hunton Lime. Run tools and top of Cement was 3288'. Ripped pipe at 2908' and pulled out 2908' of 5 $\frac{1}{2}$ " O.D. 17# Seamless Casing. Run 3" Upset seamless tubing to 2888. Started 56 Sacks of Encor Cement into tubing. Formation only took 15 sacks. Then pressure built up 60 1100#, so reversed circulation and washed 41 sax back out through tubing. 15 sax were left in formation. Took 50 min. on squeeze job. Pulled out the 2888' of 3' tubing and strung up bailed to measure. Top of cement was 2928'. Drilled cement from 2928' to 2960'. Run solid reamer to 3285'. Run 5" bailer and hole was dry. Measured in with Lane Wells line. Top of 5 $\frac{1}{2}$ " O.D. Casing was 2909. (Pipe tally showed 2907'. Bottom plug with Lane Wells line measured 3280' 6". (with sand line 3285') Perforated with 59 shots from Lane Wells Gun Perforator.

DETAILS OF PERFORATION:

1st gun of 12' shots: from 2935' 6" to 2940' - 11 shots went off. No gas showed. No water. 2nd Gun of 12 shots: from 2943' to 2947' 6" - All 12 shots went off. No gas showed. No water. 3rd Gun of 12 shots: from 2949' (6" to 2954' - All 12 shots went off. Run bailer and showed 1 bailer of water per hour. 4th Gun of 12 shots: from 2954' to 2958' 6" - All 12 shots went off. Had small showing of gas. 5th Gun of 12 shots: from 2958' 6" to 2963' - All 12 shots went off. Small increase in gas. An increase in water. Hole filled up 1170' (with water) above liner in 16 hours. Changed tools and swabbed to top of liner. Took 4 hrs. to swab down.

TESTED

1st 1/2 hrs. filled up 55 ft. with water - 2nd 1/2 hrs. filled up 40 ft. with water. Filled up at the rate of 6 bbls. per hr. Swabbed & well filled up 750 ft. in 16 hrs. Drilled plug from 3298' to 3313'. Cleaned out at bottom. Bottom of hole at end of operation was 3349'. Run 109 joints or 3346' of 3" Upset Tubing with 5 3/16" X 3" Upset Lane Wells Thin Wall King Packer which was wet at 3252'. Gas is being produced from the Chat between casing & tubing. Production is being pumped from Hunton Lime through 3" Upset Tubing. Took test after operation (on Gas) 5/24/38. Made 196,000 cu. ft. of gas per day. Rock pressure .1 up and .1 down making a total of .2-No back pressure. Test was taken 2" nipple in side of Hinderliter Head. Final outcome of operation: Did not shut off water entirely but it was helped some. Gas was increased to a Production basis where otherwise it was dead and not making enough gas to even supply the lease. Also, there was a string (2907') of 5 $\frac{1}{2}$ " O.D. 17# Seamless Casing salvaged to use in our L.E. Wood #1 Well.

PLUGGING  
FILE SEC-16 2LR-1W  
BOOK PAGE 74 LINE 2

May 1, 1945

70-2

The Derby Oil Company  
358 North Broadway  
Wichita, Kansas

Dear Sirs:

Attached hereto find material report form to be executed by you on your No. 1 H.L. Arnold well, located in the SW<sub>4</sub> of the SW<sub>4</sub> of Section 16, Township 21, Range 1 West, McPherson County, Kansas.

This new form has been requested by the Federal Government and must be mailed to this office within five days after plugging has been completed. Will you please give this matter your immediate attention.

Very truly yours,

STATE CORPORATION COMMISSION  
CONSERVATION DIVISION

By: \_\_\_\_\_  
J. P. ROBERTS

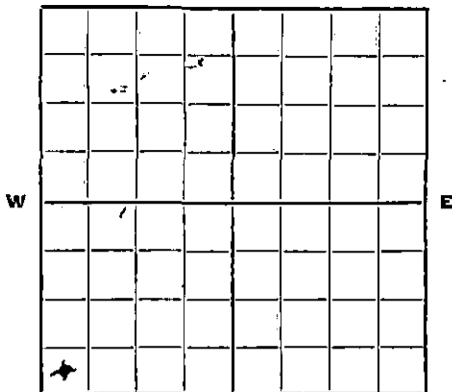
Encl.

**MATERIAL REPORT  
AND  
PLUGGING RECORD**

Mail To: STATE CORPORATION COMMISSION  
Conservation Division  
800 Bitting Building  
Wichita, Kansas

NOTICE: All questions on this form must be answered.

Company Operating The Derby Oil Company  
Office Address Wichita, Kansas



Locate well <sup>S</sup> correctly.

County McPherson Sec. 16 Twp. 21 Rge. 1 West

Farm Name H.L. Arnold Well No. 1 Field Graber, Hunton

Well Location SWc SW $\frac{1}{4}$

Name of Producing Sand Hunton Total Depth 3346

Commenced Plugging April 22, 1943 Finished April 29, 1943

DAILY AVERAGE PRODUCTION:

Initial Production: Oil 931 Gas 8 m Water None

Production when Plugged: Oil none Gas none Water none

Estimated Total Remaining Reserves Attributable to Well at Time Abandoned None

INFORMATION ON MATERIALS RECLAIMED FROM WELL  
CASING, TUBING AND ROD DATA

**PLUGGING**  
FILE SEC. 16 TWP. 21 RGE. 1W  
BOOK PAGE 70 LINE 22

Description	Size	Recovered		Junk		Reusable		Disposition Made Or To Be Made Of Usable Material
		Ft.	Tons	Ft.	Tons	Ft.	Tons	
SS 32#	8 5/8	2650	42			2650	42	want to trade, for smaller Tubing and rods pulled more than year ago.

SURFACE EQUIPMENT

Quantity	Description	*Condition	Est. Tons	Disposition Made Or To Be Made Of Reclaimed Material
				Surface equipment still in use

\* Usable, Usable with minor repairs, or junk.

Date: May 20 1943

Signed: S.E. Banks  
(For Operating Co. Title)

It is very important that all questions on this form be answered, as this Department has been asked by the Petroleum Administration for War to supply data on well abandonments undertaken during the war.

**This information is very essential in aiding the war effort; therefore, this Department is requiring this report to be mailed within 5 days after the abandonment of your well.**

19-6756