

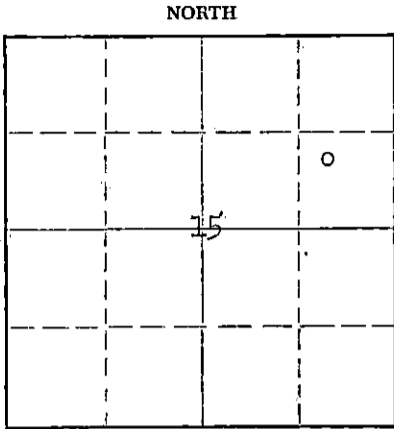
STATE OF KANSAS
STATE CORPORATION COMMISSION

Give All Information Completely
Make Required Affidavit
Mail or Deliver Report to:
Conservation Division
State Corporation Commission
211 No. Broadway
Wichita, Kansas

WELL PLUGGING RECORD

Kingman County. Sec. 15 Twp. 30S Rge. - (E) 7 (W)
Location as "NE/CNW%SW%" or footage from lines NW/4-SE/4-NE/4

Lease Owner The Pure Oil Company
Lease Name Hopper, R. A. Well No. 2
Office Address Box #271, Tulsa 2, Oklahoma
Character of Well (completed as Oil, Gas or Dry Hole) Dry Hole (SWD)
Date well completed February 25 19 57
Application for plugging filed September 20 19 57
Application for plugging approved September 23 19 57
Plugging commenced October 4 19 57
Plugging completed October 10 19 57



Locate well correctly on above Section Plat

Reason for abandonment of well or producing formation Dry Hole - used as salt water disposal well. No longer needed as only producer on lease was plugged
If a producing well is abandoned, date of last production -
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 M. A. Rives
Producing formation None Depth to top - Bottom - Total Depth of Well 3742 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
Lansing	Water	3270	3408	8-5/8"	164'	None
Kansas City	Water	3542	3728	5-1/2"	3760'	2810'
Gilchrist Zone	Water	3728	3742			

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.

Well plugged back to 3610' on completion. Plugged back with sand 3610-3535 and spotted 5 sx. cement 3535-3500. Shot off and pulled 86 jts. 5-1/2" casing. Circulated 39 sx. Halliburton Controljel in hole. Set rock bridge at 200' and plugged back 200-125 with 25 sx. cement. Filled hole 125-30 with mud then filled 8-5/8" casing 30' to surface with 10 sx. cement.

RECEIVED
OCT 24 1957
CONSERVATION DIVISION
Wichita, Kansas

(If additional description is necessary, use BACK of this sheet)
Name of Plugging Contractor Forbes Casing Pulling Company
Address Great Bend, Kansas

10-24-57

STATE OF L Oklahoma, COUNTY OF Tulsa, ss.
I, Leo K. Hughes (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) Leo K. Hughes Chief Div. Prod. Clerk
P. O. Box #271 - Tulsa 2, Oklahoma (Address)

SUBSCRIBED AND SWORN to before me this 23rd day of October, 19 57

My commission expires September 9, 1958

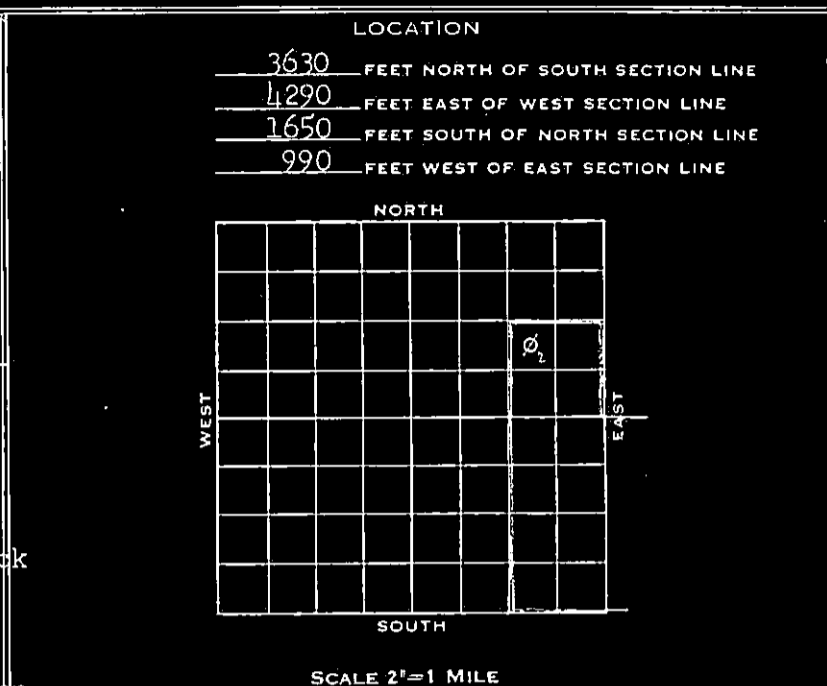
W. A. Brown Notary Public.

PLUGGING
FILE SEC 15 T 30 R 7W
BOOK PAGE 47 LINE 15

WELL LOG AND RELATED DATA

DIVISION S. W. Producing DISTRICT Buffalo LEASE Hopper, R. A.
 ACRES 280 LEASE NO. 11057 AFE NO. 2260 ELEVATION Grd. 1427' D.F. 1433' WELL NO. 2
 TWP. 15 TWP. 30S RGE. 7 W PRCT.-DIST.-TWP. -
 SURVEY (Rago-Belmont Prospect) COUNTY Kingman STATE Kansas

LOG			
FROM	TO	TOTAL	FORMATION.
(Sample data begin at 2900')			
0	65	65	Sand
65	180	115	Sand & Red Beds
180	866	686	Shale & Red Beds
866	2900	2034	Lime & Shale
2900	3000	100	Anhydrite & Shale
3000	3032	32	Shale, gray to gray-green & Limestone, tan, crystalline.
3032	3150	118	Limestone, white to gray white to light tan, crystalline - chalky & shale, black to gray.
3150	3270	120	Shale, medium gray, micaceous to silty-sandy w/ trace broken limestone.
3270	<u>LANSTING</u>		(Geol. Top)
3270	<u>3388</u>	118	Limestone, tan-cream-gray white, crystalline to chalky w/few shale breaks
3388	3408	20	Limestone, tan, oolitic & oocastic, fair porosity, poor permeability no show.
3408	3542	134	Shale, med. gray, lime w/thin lime streaks.
3542	<u>KANSAS CITY</u>		(Geol. Top)
3542	<u>3600</u>	58	Limestone, tan-cream white, crystalline to chalky, occasional trace dead asphaltic stain w/some gray shale.
3600	3676	76	Limestone, tan-cream white, crystalline chery w/some chalk
3676	3680	4	Limestone, light gray light tan, crystalline, oolitic, oocastic, some vugular por.; poor-fair perm., some cavities chalk filled, some contain oil, spotted good cut spotted poor-fair fluorescence.
3680	3695	15	Limestone brown, fine crystalline to dense
3695	3697	2	Shale black, carbonaceous
3697	3717	20	Limestone light gray brown-cream, crystalline oocastic in part, poor perm., slightly chalky in part.
3717	3726	9	Limestone tan-buff, crystalline w/chert & trace asphaltic material
3726	3728	2	Shale, black, carbonaceous.
3728	<u>GILCHRIST ZONE</u>		(Geol. Top)
3728	<u>3733</u>	5	Limestone tan-gray-cream, crystalline-chalk.



CASING AND CEMENTING RECORD

SIZE CASING	8-5/8"	5-1/2"		
THREAD	8 Rd.	8 Rd.		
WEIGHT	24#	14#		
GRADE	J-55	J-55		
CONDITION	C/A	C/A		
SET AT	175'	3740'		
SACKS CEMENT	200	150		
SIZE OF HOLE	12 3/4"	7-7/8"		

LINER RECORD

SIZE	WT.	COND.	LENGTH	BLANK	PERF.	SET AT

GUN PERFORATING RECORD

DATE	CASING	FROM	TO	SIZE SHOTS	NO. SHOTS
3-2-56	5 1/2"	3736'	3739'	1/2"	12 (Blkd off)
3-3-56	5 1/2"	3672'	3680'	1/2"	32
3-5-56	5 1/2"	3672'	3677'	1/2"	20
5-15-56	5 1/2"	3548'	3568'	1/2"	80

SHOT OR ACID RECORD

DATE	TOP	BOTTOM	SHOT-ACID	REMARKS
2-28-56	3710'	3742'	200 gals.	Mud Acid
3-2-56	3736'	3739'	200 gals.	Mud Acid
3-3-56	3672'	3680'	200 gals.	Mud Acid
5-16-56	3548'	3568'	200G. Mud Acid & 5000G. Retarded Acid	

DRILLING: COMMENCED 2-17-56 COMPLETED 2-25-56
 ELECTRICAL SURVEY BY Schlumberger (Lateralog) 2-25-56 (1)
 DRILLED WITH (Noble Drilling Co.) Rotary TOOLS
 DRILLED IN WITH (Noble Drilling Co.) Rotary TOOLS
 FIRST PROD. - NAT. DATE Dry HRS. _____ BBLs. _____ OIL
 WATER _____ M CU. FT. GAS _____ LBS. ROCK PRESS.
 SHOT _____
 FIRST PROD. AFTER ACID - DATE Dry HRS. _____ BBLs. _____ OIL
 WATER _____ M CU. FT. GAS _____ LBS. ROCK PRESS.
 GAS/OIL RATIO _____ POTENTIAL Dry Hole (2) BBLs. _____
 GRAVITY _____ TEMP. _____ GRADE _____
 (1) Welex (Gamma Ray-Neutron) 2/29/56.
 (2) Not plugged & abandoned - to be held for SWD well.
 CONV. TO LSE. DISP. WELL 5/20/56
 DATE ABANDONED - SOLD _____ 19 _____

FROM	TO	TOTAL	FORMATION	FROM	TO	TOTAL	FORMATION
3733	3740	7	Limestone, tan, crystal- line to cream chalk, trace occastic porosity no show, gold/fluorescence, no cut w/shale.	Squeeze & PB:	2-29-56 - 3- 2-56		Circulated salt water out of 5 1/2" csg. and loaded hole to surface with 102 bbls. oil. Set Halliburton HRC packer on 2-3/8" tubing at 3723, and squeezed 35 sx. Pozmix into formation 3740-3742 with max. 4000# squeeze pressure and held with no break-back. Drld. cement 3727-3740, new plugged back total depth.
3740	3742	2	Limestone, light tan- light brown oolitic to occastic, fair fluores- cence light to fair stain, good cut when crushed.				
3742			TOTAL DEPTH	Perforate & Acid:	3- 2-56 (K. C. Lime)		Welex perforated 5 1/2" csg. in K. C. Lime formation 3736-3739 with 12 shots, 4 shots/ft. Loaded hole with 85 bbls. crude oil. Dowell treated through per- forations 3736-3739 with 200 gals. mud acid max. treating pressure 1000#, min. 525#. Flushed with 15 bbls. crude oil - let acid work on formation 1 hr. swabbed on test recovered all but 10 bbls. load oil.
			Plugged Back:				
3742	3740	2	Cement				
3740	3710	30	Bridge plug in 5 1/2" csg.				
3710			TOTAL DEPTH - PB				
(All measurements taken from top of rotary bushing which is 3 1/2' above derrick floor)							
			Plugged Back:				
3710	3610	100	C.I. Bridge Plug in 5 1/2" Csg.	P. B. & Perforate & Acid:	3- 3-56 (K.C. Lime)		Welex set bridge plug @ 3710, new plugged back total depth. Loaded hole with 80 bbls. crude oil. Welex then perforated 5 1/2" csg. with 32 shots, 4 shots/ft in K. C. Lime 3672-3680 and treated through perforations with 200 gals mud acid at max. 425#, min. 125#. Swabbed well, recovered all but 26 bbls. load oil.
3610			TOTAL DEPTH - PB				
ADDITIONAL WELL DATA:							
ANGULAR DEVIATION:							
		Degrees	Degrees				
Depth	Off Vertical	Depth	Off Vertical				
180	3/4	2200	1/4				
550	0	2470	3/4				
1000	3/4	2855	1				
1339	3/4	3100	1-1/2				
1690	1	3354	1				
2130	1	3585	1-1/4				
DRILL STEM TESTS							
2-24-56			3658-3681 (K.C. Lime) Singler packer				
tool open 1 hr. fair blow thruout test, re- covery 60' of very slight oil and gas - Cut mud - IFP 30#, FFP 45#, S.I. BHP 1512# (Hy- drastatic pressure 1872#)							
2-25-56			3730-3742 (K.C. Lime) Tool open 40 minutes - Air to surface immediately, strong blow gas in 23 minutes - Recovered 50' heavy gas and slight oil cut mud, 30' heavy oil and gas cut mud - 30' slightly oil cut mud and 60' free oil with trace water - IFP 30#, FFP 60#, - 20 minute SI BHP 1435# (Hyd. press. 1885#)				
ACID:			2-28-55 (K. C. Lime) 5 1/2" csg. set at 3740 with 150 sx. Poz- mix. Drilled cement 3699-3710 and washed out soft cement 3740-3742. Loaded hole with 85 bbls. crude oil. Dowell treated K. C. Lime formation 3740-3742 with 200 gals. mud acid. Max. treating pressure 850#, min. 700#. Let acid work on formation 30 minutes. Flushed tubg. with 15 bbls. crude oil. Swabbed on test. recovered all load oil.				
				Reperforate:	3- 5-56 (K. C. Lime)		Loaded hole with 62 bbls. oil. Welex perforated 5 1/2" csg. with 20 shots, 4 shots/ft. in K. C. Lime 3672-3677. Sw- abbed on test, recovered all but 28 bbls. load oil. Halliburton spotted 13 sx. cement on top bridge plug. Well held unplugged for possible SWD use.
				CONV. TO LSE. DISP. WELL	5/10/56 - 5/20/56		Ran perf. gun & found top fluid @ 320 & top cement @ 3414. Washed out soft cmt. 3414-20 & drld. cement plug 3420- 3525. Tools swung free to 3709. Welex set C.I. bridge plug @ 3610, new PB TD. then perf. csg. w/ 80 shots, 1/2 per ft., 3548-3568. Set 2-3/8" tubg. @ 3515. Loaded hole with 40 bbls. SW. Dowell treated Kansas City Formation thru perforations 3548-68 with 200 gals. mud acid & 5000 gals. retarded acid. Max. pressure 1100#, min. 375#. Flushed tubing with 24 bbls. SW. Tested well for input rate for 8 days. Well taking 120 bbls. SW, by gravity, in 24 hrs. Lease produced approx. 105 bbls. SW per day.
				BEFORE:	Dry Hole		
				AFTER:	Lease Disposal Well		
				Acid	7/24/56		
					Dowell pumped 630 gals. 15% acid down 27/8" tubing set at 3545', at 200# pressure. Connected well to disposal line and resumed injection. Well taking all water produced by lease, by gravity.		
				Before:	79SW/Day (gravity)		
				After:	105SW/Day (gravity)		

FROM	TO	TOTAL	FORMATION	FROM	TO	TOTAL	FORMATION
<p><u>Acid:</u> 2/18/57</p> <p>Well taking approx. 140 bbls. SW daily by gravity. Dowell Injected 500 gals. X acid down 2-7/8" tubing through perforations in 5 1/2" casing 3548-3568 at 375# pressure. Flushed with 24 bbls. SW. Let acid stand 1 hr. Well now taking all SW.</p> <p>INJ. BEFORE: 140 bbls. SW, by gravity INJ. AFTER: 180 bbls. SW, by gravity</p>							