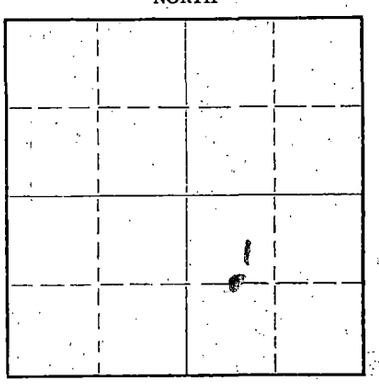
STATE OF KANSAS
STATE CORPORATION COMMISSION

Give All Information Completely
Make Required Affidavit
Mail or Deliver Report to:
Conservation Division
State Corporation Commission
212 North Market, Insurance Bldg.
Wichita, Kansas

15-025-00011-00-00

WELL PLUGGING RECORD

NORTH



Locate well correctly on above Section Plat

Clark County. Sec. 22 Twp. 34S Rge. (E) 21 (W)

Location as "NE/CNW¼SW¼" or footage from lines (1330' NofS Section Line - 3400' EofW Section Line)

Lease Owner The Pure Oil Company

Lease Name J. C. Harper "C" Well No. 1

Office Address Box 9545 - Oklahoma City 18, Oklahoma

Character of Well (completed as Oil, Gas or Dry Hole) Oil

Date well completed 9-25-55 19

Application for plugging filed 7-7 19 61

Application for plugging approved 7-13 19 61

Plugging commenced 7-15 19 61

Plugging completed 7-19 19 61

Reason for abandonment of well or producing formation Dead

If a producing well is abandoned, date of last production June 19 59

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 W. L. LacKamp, Jr.

Producing formation Morrow Depth to top 5426' Bottom 5620' Total Depth of Well 5505PB 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
				20"	55'	--
				16"	131'	--
				8-5/8"	2412'	--
				5½"	5726'	3015'

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.

Mudded to 4465'. Cemented with 5 sacks 4465-4460'. Mudded 4460-600'. 10' crushed rock and 20 sacks cement 600-570'. Mudded 570-40'. 10' crushed rock and 10 sacks cement 40-0'. Steel cap on 8-5/8" casing.

RECEIVED
STATE CORPORATION COMMISSION
AUG 16 1961
CONSERVATION DIVISION
Wichita, Kansas

(If additional description is necessary, use BACK of this sheet)

Name of Plugging Contractor Forbes Casing Pulling Company

Address Box 221 - Great Bend, Kansas

STATE OF Oklahoma, COUNTY OF Oklahoma, ss.

J. J. Wasicek (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) J. J. Wasicek

Box 9545 - Oklahoma City 18, Oklahoma
(Address)

SUBSCRIBED AND SWORN TO before me this 15 day of August, 19 61

John L. Stallard
Notary Public.

My commission expires 4-14-64

5441

FORM 301.34 3M 8-9-54

THE PURE OIL COMPANY 15-025-00011-00-00

WELL LOG AND RELATED DATA

DIVISION S. W. Producing DISTRICT Buffalo LEASE Harper, J. C. "C"
ACRES 600 LEASE NO. 12109 AFE NO. 2195 ELEVATION Grd. 1773' D.F. 1781' WELL NO. 1
SEC. 22 TWP. 34S RGE. 21W PRCT.-DIST.-TWP. —
SURVEY (Harper Ranch Pool) COUNTY Clark STATE Kansas

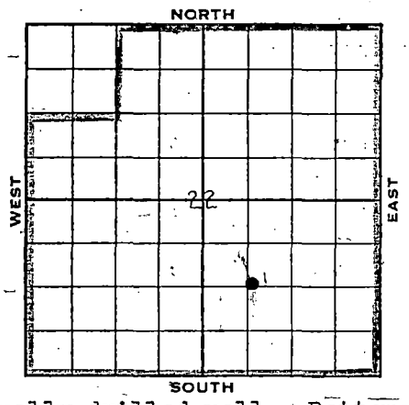
LOG

FROM	TO	TOTAL	FORMATION
(Sample data begin at 4700')			
0	55	55	Sand & Clay
55	146	91	Shale & Sand
146	155	9	Clay & Gyp.
155	340	185	Shale & Gyp.
340	600	260	Shale & Shells
600	641	41	Red Beds & Shale
641	1030	389	Shale & Shells
1030	1100	70	Shale & Gyp.
1100	1275	175	Red Beds & Shale
1275	1447	172	Shale & Lime Shells
1447	1575	128	Shale & Lime
1575	1698	123	Shale & Gyp.
1698	1827	129	Shale & Shells
1827	1950	123	Shale & Lime
1950	2005	55	Lime & Anhydrite
2005	2041	36	Shale
2041	2106	65	Shale & Shells
2106	2180	74	Lime, hard
2180	2235	55	Lime, sandy
2235	2267	32	Lime & Anhydrite
2267	2335	68	Lime
2335	2377	42	Lime & Anhydrite
2377	2400	23	Lime
2400	2410	10	Lime & Anhydrite
2410	2501	91	Lime & Shale
2501	2573	72	Lime
2573	2601	28	Lime & Chert
2601	2983	382	Lime & Shale
2983	3057	74	Lime, chalky
3057	4000	943	Lime & Shale
4000	4098	98	Shale
4098	4175	77	Lime & Shale
4175	4331	156	Shale
4331	4363	32	Lime
4363	4488	125	Lime & Shale
4488	4512	24	Lime
4512	KANSAS CITY-LANSING (Geol. Top)		
4512	4548	36	Lime
4548	4649	101	Lime & Shale
4649	4700	51	Lime
4700	4730	30	Limestone, tan-gray, crystalline, w/trace porosity.
4730	4750	20	Limestone, tan-gray, chalky.
4750	4760	10	Limestone, cream, crystalline & Shale, gray.
4760	4770	10	Limestone, tan, crystalline, vugular porosity & chalk
4770	4780	10	Limestone, tan, sandy & Shale, gray
4780	4800	20	Limestone, white to gray, crystalline to chalky.
4800	4820	20	Shale, gray & Limestone, brown, crystalline.
4820	4840	20	Limestone, gray-white, crystalline - white chalky.
4840	4860	20	Shale, gray
4860	4890	30	Limestone, gray-tan, crystalline.
4890	4900	10	Limestone, gray-tan, crystalline & Shale, gray.

CB

LOCATION

1330 FEET NORTH OF SOUTH SECTION LINE
3400 FEET EAST OF WEST SECTION LINE
3950 FEET SOUTH OF NORTH SECTION LINE
1880 FEET WEST OF EAST SECTION LINE



(Directionally drilled well - Bottomed up in C-NW-SE.)
SCALE 2"=1 MILE

CASING AND CEMENTING RECORD

SIZE CASING	20"	16"	8-5/8"	5-1/2"
THREAD	8 Rd.	8 Rd.	8 Rd.	8 Rd.
WEIGHT	65.71#	65#	24#	15-1/2#
GRADE	SS	J-55	J-55	J-55
CONDITION	C/B	C/A	C/A	C/A
SET AT	55'	142'	2402'	5690'
SACKS CEMENT	150	250	1111	325
SIZE OF HOLE	26"	18-3/4"	12-1/4"	7-7/8"

Temperature survey ind. top cmt. behind 5½" csg. @ 4465'.

LINER RECORD

SIZE	WT.	COND.	LENGTH	BLANK	PERF.	SET AT

GUN PERFORATING RECORD

DATE	CASING	FROM	TO	SIZE SHOTS	NO. SHOTS
10/13/55	5-1/2"	5492	5500	Jet(Welex)	32
(For add'l perforating & squeezing during testing of well see sheet #2 of log.)					

SHOT OR ACID RECORD

DATE	TOP	BOTTOM	SHOT-ACID	REMARKS

DRILLING: COMMENCED 7/21/55 COMPLETED 9/25/55
ELECTRICAL SURVEY BY Schlumberger(Elec.&Micro) DATE 9/26/55 (1)
DRILLED WITH (Unit Drlg. Co.) Rotary TOOLS
DRILLED IN WITH (Unit Drlg. Co.) Rotary TOOLS
FIRST PROD.—NAT. DATE 10/30/55 HRS. 7 BBLS. 10 OIL
72 WATER NT M CU. FT. GAS NT LBS. ROCK PRESS.
FIRST PROD. AFTER SHOT ACID—DATE — HRS. — BBLS. — OIL
— WATER — M CU. FT. GAS — LBS. ROCK PRESS.
GAS/OIL RATIO 3490-1 POTENTIAL (2) 99 oil & no wtr. (22/64" CK.) BBLS.
GRAVITY 31.8 TEMP. 60° GRADE

(1) Lane-Wells (Gamma Ray-Neutron) 9/29/55.
(2) Based on State Productivity Test 11/17/55.

DATE ABANDONED—SOLD 19

FROM	TO	TOTAL	FORMATION
4900	4970	70	Limestone, gray-brown, crystalline-chalky
4970	4990	20	LLimestone, cream-tan, crystalline, cherty
4990	5010	20	Limestone, tan, crystalline & Shale, gray
5010	5120	110	Limestone, gray-white, crystalline-chalky
5120	5136	16	Shale, gray, limy
5136	MARMATON		(Geol. Top)
5136	5160	24	Limestone, white-light gray, crystalline & chalky w/traces gray-greenish gray shale
5160	5190	30	Limestone, as above, & Shale, gray
5190	5280	90	Limestone, gray-tan, sandy, slightly oolitic
5280	5298	18	Limestone, white-brown, sandy
5298	CHEROKEE		(Geol. Top)
5298	5320	22	Shale, gray
5320	5350	30	Limestone, gray-brown, crystalline, sandy, cherty
5350	5420	70	Shale, gray w/thin cherty lime streaks
5420	5426	6	Limestone, dark gray, hard
5426	MORROW		(Geol. Top)
5426	5452	26	Shale, gray-greenish gray & Limestone, gray-green sandy (See Core Record starting @ 5452')
5452	5454	2	Shale, green, limy
5454	5458	4	Lime, gray, dense, shaley
5458	5477	19	Shale, gray-green-black
5477	5481	4	Sand, gray, fine, tight, bottom 1' scattered stain & fluorescence
5481	5496	15	Shale, gray-black
5496	5517	21	Sand
5517	5519	2	Shale
5519	5525	6	Sand
5525	5532	7	Shale
5532	5556	24	Sand
5556	5562	6	Shale
5562	5615	53	Sand
5615	5620	5	Shale
5620	MISSISSIPPIAN		(Geol. Top)
5620	5700	80	Limestone, white-tan, crystalline
5700			TOTAL DEPTH
	PLUGGED BACK:		
5700	5505	195	Cement in 5½" csg.
5505			TOTAL DEPTH-PB

(All measurements taken from top of rotary bushing which is 1'4" above derrick floor.)

Directionally drilled well - All measurements shown are as drilled, and not corrected vertically.

(PAY ZONE 5492-5500)

FROM	TO	TOTAL	FORMATION

ADDITIONAL WELL DATA:

ANGULAR DEVIATION: (Sure-Shot)

Depth	Degrees Off Vertical	Depth	Degrees Off Vertical
160	3/4	975	3/4
265	1/2	1175	1/2
365	3/4	1400	1/4
460	1/2	1500	3/4
560	1/4	1750	1
775	1/2	1990	1/4
875	1/2	2190	1/2

EASTMAN DIRECTIONAL SURVEY

Eastman Oil Well Survey Co. ran 40 surveys from 2492' to 5596' - See separate report.

CORE RECORD:

Core No.	Depth	Rec.	Description
1	5452-5476	24'	2' Shale, green, limy - 4' Lime, gray, dense, shaley - 5' Shale, green-yellow 13' Shale, gray-green-black.
2	5476-5517	41'	1' Shale, gray-black - 4-1/2' Sand, gray, fine, tight, with 1' of scattered stain and fluorescence - 14-1/2' Shale, gray-black - 1-1/2' Sand, gray, fine - medium grained, tight, no show oil - 5-1/2' Sand, gray to coarse grained, good porosity and permeability, stain and fluorescence - 1' Sand, gray, tight, no show oil - 13' Sand, gray, fine to medium grained, tight to fair porosity and permeability, with scattered stain and fluorescence.
3	5517-5536	19'	2' Shale, black, rotten - 6' Sand, gray fine, tight, shaley, with scattered stain and fluorescence, bleeding oil locally 7' Shale, black, rotten - 4' Sand, gray to light brown, fine, tight, shaley, with fair odor, stain, and fluorescence, bleeding oil and gas.
4	5537-5595	58'	18½' Sand, gray-light brown, tight to fair porosity and permeability, good odor, stain & fluorescence - 3' Shale, black, sandy - 3' Sand, gray, fine shaley, no show oil - 9½' Sand, gray-light brown, coarse, slightly conglomeratic locally, fair stain & fluorescence, fair odor, tight to poor porosity and permeability, bleeding water-cut oil and gas - 2' Sand, gray, fine, tight glauconitic, scattered bleeding oil and gas - 6½' Sand, gray to light brown, tight to fair porosity and permeability, good to scattered stain, odor and fluorescence - 3' Sand, gray, tight, fine, no show oil - 1' Sand, reddish-gray, coarse, good porosity and permeability, faint odor, stain and fluorescence, looks wet - 7' Sand, reddish gray to light brown, fair to poor porosity and permeability, fair stain and fluorescence, looks wet - 3½' Sand, green, fine to tight glauconitic, shaley, no show oil - 1' Sand, white, fine to medium, tight - Bottom 3" bleeding oil and gas.
5	5596-5627	31'	10' Sand, gray-light brown, fine-medium, tight to fair porosity and permeability, fair stain, odor & fluorescence - 4'

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FROM	TO	TOTAL	FORMATION

(Core #5 continued) Sand, gray-light brown, tight to fair porosity and permeability, fair stain, odor and fluorescence, with scattered shale partings - 2' Conglomerate - 2' Sand, gray, fine, tight shaley, no show oil - 8' Shale, green rotten - 4½' Shale, green with thin limestone streaks - 1/2' Lime, white to tan, coarsely crystalline.

P.B. & PERFORATE: 5700-5651

Set 5½" casing at 5690' with 125 sx. regular and 200 sx. Pozmix cement - Top cement plug at 5651', new plugged back total depth - Lane-Wells ran Gamma Ray-Neutron log, then perforated 5½" casing - 4 shots at 5625 and 4 shots at 5470.

SQUEEZE: 9/29 & 30/55

Set Halliburton DM cement retainer at 5604 - Pumped in 5 bbls. water at 2200# pressure and squeezed perforations at 5625 with 43 sx. cement - Max. 4000# squeeze pressure - Reset DM cement retainer at 5440 - Halliburton broke down perforations at 5470 with 16 bbls. water at 3600# pressure and squeezed with 40 sx. cement - Max. 4000# squeeze pressure - Drilled top cement plug 5440-5455 and bottom plug 5602-5604 and circulated to bottom at 5651 - Pressured casing to 2500# - Squeeze OK.

PERFORATE & SQUEEZE: 10/2/55 - 10/4/55

Lane-Wells perforated 5½" casing with 32 jet shots, 4 shots/ft., 5592-5600 - Tested with negative results - Broke down formation with 3 bbls. water at 1600# pressure and squeezed perforations 5592-5600 with 88 sx. cement - Max. 4000# squeeze pressure - Drilled cement plug 5576-5600, new plugged back depth.

PERFORATE: 10/5/55

Lane-Wells perforated 5½" casing with 16 jet shots, 4 shots/ft., 5578-5582 - Swabbed on test with negative results.

PERFORATE TEST & SQUEEZE: 10/8/55 - 10/12/55

Lane-Wells perforated 5½" casing with 32 jet shots, 4 shots/ft., 5562-5570 Tested with negative results - Knocked out thin cement plug and circulated to 5651, plugged back depth - Tested perforations 5578-5582, recovered 7 bbls. SW cut 2% oil per hour - Tested perforations 5562-5670 and recovered 8 bbls. SW with no oil per hour - Halliburton broke down formation with 3 bbls. wtr. at 2300# pressure & squeezed perforations 5562-5570 & 5578-5582 with 123 sx. cement at Max. 4000# squeeze pressure - Drilled cement plug 5554-5562, new plugged back total depth - Lane-Wells perforated 5½" casing with 36 shots, 4 shots/ft., 5542-5551 - Tested perforations, recovering only salt water, no oil, & small show gas - Lane-Wells then perforated csg. with 8 jet shots, 4 shots/ft., 5520-5522 - Tested perforations with negative results.

FROM	TO	TOTAL	FORMATION	FROM	TO	TOTAL	FORMATION
P.B. &			PERFORATE & SQUEEZE: 10/13/55-11/1/55 Welex set bridge plug in 5½" csg. at 5530, new plugged back total depth, then perforated csg. with 32 jet shots, 4 shots/ft., 5492-5500 - Swabbed well in and tested with various size chokes on 40/64" choke well produced 7 bbls. oil with GOR of 31,766 to 1 - Welex then perforated csg. with 24 jet shots, 4 shots/ft., 5506-5512 - Tested perforations with recovery of only salt water, no oil - Halliburton squeezed perforations 5506-5512 with 60 sx. cement at 2000# pressure - Drilled out cement plug 5514-5516 - Halliburton squeezed perforations 5492-5500 and 5506-5512 with 23 sx. cement at 4200# pressure - Drilled cement 5463-5529 a and drilled out bridge plug at 5530 - Circulated and conditioned hole to 5562 new plugged back depth - Broke down formation at 2600# and squeezed perforations 5542-5551 with 96 sx. cement at max. 4100# pressure - Drld. cement 5512-5562 - Swabbed on test, recovering estimated 8 bbls. SW/hr. and could not lower fluid level below 2500' - Broke down formation at 3800# and resqueezed perforations 5542-5551 with 75 sx. cement at max. 4000# pressure - Drilled cement 5525-5562 - Welex set bridge plug at 5516 - Swabbed well in and flowed 7 hrs. thru 1" choke - TP 275#, produced 10 bbls. oil, cutting 2% water and 72 bbls. SW Killed well - Squeezed perforations 5492-5500 and 5506-5512 with 107 sx. cement - Max. 4150# pressure - Drilled cement 5474-5505, final total depth plugged back - Swabbed well in - Believe well producing from perforations 5492-5500.			
STATE			PRODUCTIVITY TEST: 11/17/55 Flowed 17.54 bbls. oil in 3 hrs. through 24/64" choke, flow pressure 130#, and established State Productivity Index of 99 bbls/day - FINAL.				
CONVERT			TO GAS WELL: 7/17/57 - 7/21/57 Moved in spudder, ran Howco RTTS tool on 2-3/8" tubing and set at 5473'. Howco attempted to break down formation 5492-5500 with water at 3800#. Rate of injection 1/2 bbl. per minute. Insufficient to squee e. Lane-Wells perforated 5-1/2" casing 5492-5500' with 32 shots Kone Jet. Ran 2-3/8" tubing and set at 5475'. Swabbed total of 10 hrs 0-3500', well started flowing fresh water and oil and cleaned itself. Started gas test: 1st hr. flowed very erratically, no test. 2nd hr. flowed through 28/64" choke, tested 2,820,000 CFD, CP 700#, TP 250#. 3rd hr. flowed through 32/64" choke, tested 3,300,000 CP 660#, TP 340#. 4th hr. remained constant at 3,300,000, CP 660#, TP 340#. Well showed 0 oil, est. 1/2 bbls. salt water per hr. Showed no free water. Shut in 5 min., CP 850#, TP 500#, 10. min CP 950#, TP 780#. 20 min. CP 1300#, TP 1300#. PROD. BEFORE: 3 bbls. oil 0 bbls. wtr. PROD. AFTER : 3,300,000 CFD gas			