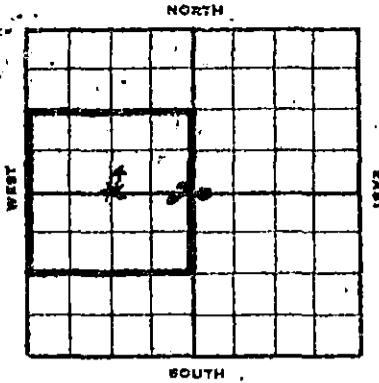


# SKELLY OIL COMPANY

## Well Record



Lease Name and No. A. J. Conley #7706 Well No. 4 Elev. 1702'  
 Lease Description S/2 NW/4 & S/2 SW/4, Sec. 20-27S-10W  
Kingman County, Kansas.  
 Location made Dec. 5, 1941 by Rice County Engineer  
2639 feet from North line \_\_\_\_\_ feet from East line W/2  
 \_\_\_\_\_ feet from South line 1320 feet from West line of Sec. 20

Work com'd Dec. 6, 1941 Rig com'd Dec. 9, 1941 Drlg. com'd Dec. 12, 1941 Drlg. com'd Jan. 9, 1942

Rig Contractor Built by drilling contractor

Drilling Contractor Bodine Drilling Company, Great Bend, Kansas.

Rotary Drilling from Top to 4230' Cable Tool Drilling from None to \_\_\_\_\_

Commenced Producing Feb. 10, 1942 Initial Prod. before shot or acid Gas Well Bbls. \_\_\_\_\_  
 Initial Prod. after shot or acid \_\_\_\_\_ Bbls. \_\_\_\_\_

Dry Gas Well Press. \_\_\_\_\_ Volume Before acid-3,677 M Cu. ft. \_\_\_\_\_  
After acid-16,928 M Cu. ft. \_\_\_\_\_

Casing Head Gas Pressure \_\_\_\_\_ Volume \_\_\_\_\_ Cu. ft. \_\_\_\_\_

Braden Head (8-5/8" x 4 1/2" OD) Gas Pressure \_\_\_\_\_ Volume \_\_\_\_\_ Cu. ft. \_\_\_\_\_

Braden Head ( \_\_\_\_\_ Size \_\_\_\_\_ ) Gas Pressure \_\_\_\_\_ Volume \_\_\_\_\_ Cu. ft. \_\_\_\_\_

PRODUCING FORMATION Arbuckle Lime Top 4147' Bottom 4190' TOTAL DEPTH 4230'  
 (Name) \_\_\_\_\_

### CASING RECORD

Size	Wt.	Thds.	Where Set	PULLED OUT			LEFT IN			KIND	Cond'n	CEMENTING	
				Jts.	Feet	In.	Jts.	Feet	In.			Sacks Used	Method Employed
8-5/8" OD	24#	8	366				18	363	6	Lapweld	"C"	150	Halliburton
4 1/2" OD	9 1/2#	8R	4223				135	4241	3	Seamless	"A"	500	Halliburton
(8-5/8" casing set 7' in cellar and 5 1/2" cased to derrick floor)													
(4 1/2" casing perforated w/ 105 holes between 4145' and 4162')													
(Used one 4 1/2" OD Baker Combination Guide and Float Shoe)													

Liner Set at \_\_\_\_\_ Length \_\_\_\_\_ Perforated at \_\_\_\_\_  
 Liner Set at \_\_\_\_\_ Length \_\_\_\_\_ Perforated at 11-28-60

Packer Set at \_\_\_\_\_ Size and Kind \_\_\_\_\_  
 Packer Set at \_\_\_\_\_ Size and Kind \_\_\_\_\_

### SHOT OR ACID TREATMENT RECORD

Date	FIRST		SECOND		THIRD		FOURTH	
	Acid Used	Size Shot	Acid Used	Size Shot	Acid Used	Size Shot	Acid Used	Size Shot
Feb. 8, 1942	1500		2500		3500			
Shot Between	4145 Ft. and 4162 Ft.		4145 Ft. and 4162 Ft.		4145 Ft. and 4162 Ft.			
Size of Shell								
Put in by (Co.)	Morgan		Morgan		Morgan			
Length anchor								
Distance below Cas'g								
Damage to Casing or Casing Shoulder	None		None		None			

### SIGNIFICANT GEOLOGICAL FORMATIONS

NAME	Top	Bottom	GAS		OIL		REMARKS
			From	To	From	To	
Topoka Lime	2890						
Lansing Lime	3401						
Kinderhook Dolo.	3904						See body of log for shows
Viola Lime	3968						
Simpson Dolomite	4056						
Simpson Shale	4066						
Simpson Sand	4070						
Arbuckle Lime	4147	4147	4190				Pay formation

### CLEANING OUT RECORDS

	DATE COMMENCED	DATE COMPLETED	PROD. BEFORE	PROD. AFTER	REMARKS
1st					
2nd					See Reverse for other details.
3rd					" " " " "
4th					" " " " "

### PLUGGING BACK AND DEEPENING RECORDS

	Date Commenced	Date Completed	No. Feet Plugged Back or Deepened	Prod. Before	Prod. After	REMARKS
1st						
2nd						See Reverse for other details.
3rd						" " " " "
4th						" " " " "

(See Reverse for Record of Formation)

RECORD OF FORMATIONS

FORMATION

TOP

BOTTOM

REMARKS  
Indicate Casing Points, Describe Shows of Oil, Gas and Water, etc.

Surface soil, sand & clay	0	70	
Sand	70	105	
Red bed	105	370	Set & cemented 8-5/8" OD, 24", L.L. steel casing at 366' w/ 150 sacks of cement and 6 sacks of aquagel.
Red bed	370	610	
Shale and shells	610	940	
Salt	940	1080	
Shale and shells	1080	1160	
Shale	1160	1275	
Lime	1275	1400	
Lime and shale	1400	1600	
Lime	1600	1665	
Lime and shale	1665	1695	
Sandy lime	1695	1815	
Lime and shale	1815	1880	
Shale	1880	1950	
Shale and lime	1950	2135	
Shale	2135	2395	
Shale and lime	2395	2435	
Shale	2435	2465	
Shale and lime	2465	2560	
Shale	2560	2615	
Shale and lime	2615	2915	To Topeka Lime at 2890'
Shale	2915	2940	
Lime	2940	2965	
Lime and shale	2965	2985	
Shale	2985	3000	
Lime	3000	3025	
Lime and shale	3025	3060	
Lime	3060	3145	
Shale	3145	3160	
Lime and shale	3160	3195	
Lime	3195	3220	
Shale	3220	3315	
Shale and lime	3315	3370	
Shale	3370	3401	To Lansing Lime at 3401'

Geological Department's sample determinations  
 Slightly porous, oil stained lime 3426' to 3428'  
 Slightly porous, oil saturated lime 3453' to 3461'  
 " " " " " 3465' to 3471'  
 Porous oolitic oil saturated lime 3520' to 3524'  
 " " " " " 3526' to 3532'  
 Porous oolitic fair oil saturated lime 3543' to 3552'  
 Porous oolitic fair oil saturated lime 3565' to 3575'  
 Slightly porous, oil stained lime 3601' to 3605'

Lime	3401	3630	
Shale	3630	3660	
Lime	3660	3770	
Shale and lime	3770	3885	
Shale and lime	3885	3968	To Kinderhook dolomite at 3904' To Viola Lime at 3938'

Grey cherty coarsely crystalline dolomite	3968	3972	Porous
Grey porous coarsely crystalline dolomite	3972	4020	
Lime	3972	4020	
Dense brown crystalline dolomite, hard	4020	4044	
Light coarsely crystalline lime and dolomite	4044	4048	Good porosity

**CORED**  
 4048' to 4062' - Recovered 13'  
 Top 4' - Dense grey crystalline lime, no porosity  
 Next 3'2" - Dense grey coarsely crystalline lime & dolomite, no saturation or porosity.  
 Next 3'10" - Dense grey sandy dolomite w/ trace of red shale, slight porosity, shell of gas.  
 Last 2' - Dense grey dolomitic sand, slight porosity, shell of gas  
 To Simpson Dolomite at 4056'

4062' to 4076' - Recovered 14'  
 Top 4' - Grey sand and shale w/ trace of dolomite, no porosity or saturation.  
 Next 4' - Green shale w/ 20% grey sand, no saturation or porosity  
 Last 6' - Grey & brown granular sand w/ slight porosity and show of gas, spotted show of condensate  
 To Simpson Shale at 4066'  
 To Simpson Sand at 4070'

<b>DRILLED</b>			
Lime	4076	4081	
Sand	4081	4092	Gas saturated
Shale and lime	4092	4147	To Siliceous (Arbuckle) Lime 4147'
Grey coarsely crystalline dolomite	4147	4166	Porous & gas saturated
Same	4166	4172	
Same	4172	4179	" " " "

Gray coarsely crystalline calcite	4179	4182	
Same	4182	4183	Porous & gas saturated
Same	4183	4186	
Same	4186	4190	" " " "
Same	4190	4207	No porosity or saturation
Same	4207	4216	Porous, probable water
Same	4216	4230	Spotted porosity, no oil or gas saturation

TOTAL DEPTH DRIILLED - 4230'

Stopped drilling Jan. 9, 1942.

Set and cemented 4 1/2" OD, 9 1/2", SS casing at 4223' w/ 500 sacks of cement. Finished cementing at 9:45 PM, 1/9/42 and while shut down waiting for cement to set, moved in and rigged up cable tools. Bailed the hole down and drilled cement plug to 4200' SLK on Feb. 4th and 4 1/2" casing tested OK. On Feb. 5th, loaded the hole with fresh water and perforated 4 1/2" casing with 105 holes by Lane-wells from 4145' to 4162'.

NEEDED TOTAL DEPTH - 4200'

On Feb. 7th, ran 2" tubing and swabbed well in thru tubing. After swabbing well in, let flow 5 hours to clean hole and gas gauged 3,677 M cubic feet.

On Feb. 8th, treated with acid as follows:

ACID TREATMENT NO. 1 - Between 4145' and 4162'

Treatment put in by Morgan Acid Co., 2/8/42, using 1500 gallons of Morgan acid and 800 gallons of water to flush.

TIME	CI	TI	REMARKS:
9:45 AM			Start acid in hole
9:55 "	1400'	500	500 gallons of acid in hole
9:59 "	1600'	100'	1000 gallons of acid in hole
10:05 "	1500'	100'	1500 gallons of acid in hole
10:12 "	1400'	Vac.	Flushed hole with 800 gallons of water.

After acid treatment, left shut in for one hour then opened and let flow for 2 hours to clean hole and gas gauged 6,579 M cubic feet. Shut in casing pressure, 1500'.

On Feb. 9th, reacidized as follows:

ACID TREATMENT NO. 2 - Between 4145' and 4162'

Treatment put in by Morgan Acid Co., 2/9/42, using 2500 gallons of Morgan acid and 600 gallons of water after treatment.

TIME	CI	TI	REMARKS:
1:14 AM			Start acid in hole
1:30 "	1350'	0'	1000 gallons of acid in
1:42 "	1320'	0'	2500 gallons of acid in hole
1:50 "	1320'	Vac.	Flushed hole with 600 gallons of water.

After acid treatment, left well shut in for one hour then opened and let flow for 2 hours to clean up hole and gas gauged 10,900 M cubic feet. Shut in casing pressure - 1320'.

On Feb. 10th, reacidized as follows:

ACID TREATMENT NO. 3 - Between 4145' and 4162'

Treatment put in by Morgan Acid Co., 2/10/42, using 3500 gallons of Morgan Acid and 700 gallons of water to flush.

TIME	CI	TI	REMARKS:
1:10 PM			Start acid in hole
1:15 "	1320'	1000	200 gallons of acid in hole
1:23 "	1320'	100'	700 gallons of acid in hole
1:36 "	1320'	0'	2200 gallons of acid in hole
1:50 "	1320'	0'	3500 gallons of acid in hole
2:00 "	1320'	0'	Flushed hole with 700 gallons of water.

After acid treatment, left well shut in for one hour then opened and let flow for 2 hours to clean up hole and gas gauged 15,922 M cubic feet. Shut in casing pressure - 1320'.

LOGS TEST DATA

Depth	Angle	Horiz.	Vert.
500'	1/2	2.2	.6
750'	1	4.4	.1
1000'	1-1/4	6.6	.1
1250'	1-1/2	8.8	.1
1500'	1-1/2	11.0	.1
1750'	1-1/2	13.2	.1
2000'	1-1/2	15.4	.1
2250'	1	17.6	.1
2500'	1-1/2	19.8	.1
2750'	2	22.0	.2
3000'	1-1/2	24.2	.1
3250'	1-1/2	26.4	.1
3500'	1	28.6	.1
3750'	3	30.8	.4
4000'	1-1/2	33.0	.1

Total Deflections 95.5' 1.8'