

# SKELLY OIL COMPANY

NORTH									
SOUTH									

Well Record  
 A. W. Dick S.W.D.W.  
 Lease Name and No. **B. S. Dick 26410** Well No. **1** Elev. **2165' BH**  
 Lease Description **N/2 E/4 Section 29-10E-19N, Rocks County, Kansas (80 Acres)**  
 Location made **January 22, 1954** by **P. J. Cussen**  
 feet from North line **330** feet from East line **N/2 NW/4**  
 feet from South line **330** feet from West line of **Sec. 5**

Work com'd **1/25 1954** Rig com'd **1/30 1954** Drig. com'd **1/30 1954** Drig. com'd **2/12 1954**  
 Rig Contractor **Claude Wentworth Drilling Co., Inc.**  
 Drilling Contractor **Claude Wentworth Drilling Co., Inc., Tulsa, Oklahoma**  
 Rotary Drilling from **0'** to **3750'** Cable Tool Drilling from **To complete** to  
 Commenced Producing **March 4, 1954** Initial Prod. before shot or acid **None Show free oil** Bbls.  
 Initial Prod. after shot or acid **9.28 Bbls to estab. 24 hr. SCC potential 111 Bbls** Bbls.  
 Dry Gas Well Press. **9.28 Bbls to estab. 24 hr. SCC potential 111 Bbls** Cu. ft.  
 Casing Head Gas Pressure Volume Cu. ft.  
 Braden Head **(8-5/8" 25# OD)** Gas Pressure Volume Cu. ft.  
 Braden Head ( ) Gas Pressure Volume Cu. ft.

PRODUCING FORMATION **Arbuckle Lime** Top **3743'** Bottom **3745'** TOTAL DEPTH **3750'**

### 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"	22.7	83	1599'				40	1592'	0	ARCO 5#	A	675	Halliburton
5-1/2"	17	8R					6	138'	0	BL LM	B		
5-1/2"	14	8R					83	2608'	0	J55 R2 S2	B		
5-1/2"	14	8R					5	157'	0	J55 R2 S2	A		
5-1/2"	14	8R	3749'				20	875'	0	J55 R3 R2W	A	150	Halliburton
(8-5/8" casing set 1' in cellar and 5 1/2" cased to derrick floor)													
(5 1/2" casing perforated from 3743' to 3745' with 20 holes)													

Liner Set at Length Perforated at  
 Liner Set at Length Perforated at  
 Packer Set at Size and Kind  
 Packer Set at Size and Kind

### SHOT OR ACID TREATMENT RECORD

	FIRST	SECOND	THIRD	FOURTH
Date	2/19/54	2/24/54	2/25/54	
Acid Used Size Shot	300 Gals. DM	150 Gals. DM	350 Gals. DM	
Shot Between	3749' Ft. and 3750' Ft.	3743' Ft. and 3748 1/2' Ft.	3743' Ft. and 3748 1/2' Ft.	Ft. and Ft.
Size of Shell				For remaining treatments see remarks
Put. in by (Co.)	Halliburton	Halliburton	Halliburton	
Length anchor				
Distance below Cas'g				
Damage to Casing or Casing Shoulder				

### SIGNIFICANT GEOLOGICAL FORMATIONS

NAME	Top	Bottom	GAS		OIL		REMARKS
			From	To	From	To	
Topeka Lino	3173'				3204'	3378'	
Heener Shale	3387'						
Lansing Lino	3427'				3465'	3622'	
Conglomerate	3668'						
Simpson Shale	3722'						
Arbuckle Lino	3743'				3744'	3750'	

### CLEANING OUT RECORDS

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

### PLUGGING BACK AND DEEPENING RECORDS

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

(See Reverse for Record of Formation)  
 DIVISION  
 Tulsa, Kansas

# RECORD OF FORMATIONS

FORMATION	TOP	BOTTOM	REMARKS
			Indicate Casing Points, Describe Shows of Oil, Gas and Water, etc.
Surface soil, sand and shale	0	300	
Shale and shales	300	625	
Shale	625	815	
Sand	815	935	
Shale and sand	935	1555	
Lime and rock	1555	1590	<b>TOP ANHYDRITE 1590'</b>
Anhydrite	1590	1610	Set and cemented 8-5/8" OD, 22.7 lb Arco U.S. steel casing (A cont.) at 1590' with 500 sacks of cement and 25 sacks of straco-cement, followed by 100 sacks of common cement with 2 sacks of calcium chloride. Cement did not circulate. Halliburton Temperature Survey showed top of cement behind 8-5/8" casing at 25'. Re-cemented around top of 8-5/8" casing with 75 sacks of regular cement and 25 calcium chloride.
Anhydrite	1610	1625	<b>TOP ANHYDRITE 1613'</b>
Shale	1625	1860	
Shale and shales	1860	2135	<b>TOP LIME 1941'</b>
Lime	2135	2210	
Shale	2210	2270	
Shale and lime	2270	2500	
Shale	2500	2690	
Shale and lime	2690	2795	
Shale and shales	2795	2900	
Shale	2900	3065	
Shale and lime	3065	3204	<b>TOP LIME 3173'</b>
Green to gray, fine crystalline lime	3204	3214	Fair to good coloration and stain with waxy porosity
Shale and lime	3214	3232	
Green, fine crystalline lime	3232	3243	Fair spotty stain and porosity
Lime and shale	3243	3359	
Green, finely crystalline partly cherty lime	3359	3369	Spotted fair stain and porosity
Lime	3369	3375	
White, dense lime	3375	3378	Spotted stain, fair to poor regular porosity
Lime and shale	3378	3390	<b>TOP ANHYDRITE 3378'</b>
Lime	3390	3465	<b>TOP ANHYDRITE 3418'</b> <b>TOP LIME 3427'</b>
Green, medium crystalline dolomitic lime	3465	3468	Fair stain, show of free oil, fair porosity
Lime	3468	3470	
Green, fine crystalline oolitic lime	3470	3475	Light stain, slight show of free oil, fair porosity
Lime	3475	3482	
Green, medium crystalline lime	3482	3491	Fair spotted stain, fair porosity
Lime	3491	3498	
Green, medium crystalline dense slightly oolitic lime	3498	3500	Fair stain and porosity
Lime	3500	3506	
Green, finely crystalline lime to dense oolitic lime	3506	3509	Spotted light stain, poor porosity
Lime	3509	3510	
Green, dense partly oolitic lime	3510	3515	Fair spotted stain, fair to poor porosity
Lime	3515	3518	
Green dense lime	3518	3550	Spotted light stain, fair to poor porosity
Lime	3550	3582	
Green, fine crystalline lime	3582	3585	Spotted light stain, slight show of free oil, fair porosity
Lime	3585	3615	
Green, finely crystalline lime	3615	3625	Spotted stain, fair show of free oil, fair to poor porosity


A. W. S.W.D.  
# DICK WELL NO. 1

Sheet No. 2

Line	3622	3624	Ran Halliburton drill stem test, packer set at 3573', used 51' anchor, open 27 minutes, work blow for 20 minutes, recovered 20' of drilling mud with few specks of oil, BHP-1000%.
Line and shale	3624	3685	TOP CONGLOMERATE 3668'
Line	3685	3744	TOP BIRCHON SHALE 3722'
			TOP ARBUCKLE LIMES 3743'
Buff, medium crystalline very pyritic dolomite	3744	3746	Poor to good porosity, good show of free oil
White, chalky, soft lime w/ scattered crystals of dolomite	3746	3747 1/2	Unstained to spotty show of free oil
Buff, medium crystalline dolomite	3747 1/2	3750	Fair to good porosity, good show of free oil, good odor

Set and cemented 138' of 5 1/2" OD, 17 1/2' CR thd., R-1, South Chester L.S. steel casing (B cond.); 2602' of 5 1/2" OD, 14' ER thd., R-2, J-55, S.S., JAL casing (B cond.); 157' of 5 1/2" OD, 14' ER thd., R-2, J-55, Pittsburgh S.S. casing (A cond.); and 875' of 5 1/2" OD, 14' ER thd., R-3, J-55, R.S.W. steel casing (A cond.) at 3749' with 150 sacks of common cement and 3 1/2 aquesol. Finished cementing at 3:30 a.m. 2/13/54. Opened stage collar at 3119' with 1000/-CP and spotted 149 barrels of oil behind 5 1/2" casing through stage collar, slight circulation of oil, closed stage collar with 1100/-CP. Finished at 8:00 a.m. 2/13/54.

Rigged up cable tools and bailed the hole dry to stage collar at 3119' on 2/17/54, 5 1/2" casing tested dry. Drilled cement plug and cleaned out to bottom. Cement job tested OK, slight show of oil. Bailed and tested 8 hours, 3 gallons of oil and 4 gallons of water per hour. Ran Lane-Wells Gamma Ray Survey. Treated through 5 1/2" casing with 300 gallons of Dowell 20% acid as follows:

ACID TREATMENT NO. 1 - Between 3749' and 3750'

Treatment put in 2/19/54 by Dowell Inc., using 300 gallons of acid and 107 barrels of water to fill hole and flush.

TIME	CP	TP	REMARKS
1:27 pm			300 gallons of acid in
2:02 pm			Filled hole with 91 barrels of water
2:15 pm	200		Start flush
2:20 pm	600		42 gallons of acid in formation
2:23 pm	200		105 gallons of acid in formation
2:26 pm	100		160 gallons of acid in formation
2:30 pm	300		300 gallons of acid in formation

Swabbed through 5 1/2" casing 6 hours, 120 barrels of water and no oil. On February 21, ran 2" tubing and set Halliburton DR retainer at 3721'. Cemented off open hole with 150 sacks of common cement and 270' of calcium chloride, estimated 134 sacks below retainer at 1550/-TP. Recovered out estimated 15 sacks of cement and pulled 2" tubing. On February 22, swabbed and bailed hole dry to 3721' and 5 1/2" casing tested dry. Perforated 5 1/2" casing from 3743' to 3748 1/2' with 5/8" holes by Lane-Wells. Bailed and tested 10 hours, 2 gallons of oil and 6 gallons of water per hour. On February 24, ran 2" tubing and treated with 150 gallons of Dowell "KXF-32 W-17" acid as follows:

ACID TREATMENT NO. 2 - Between 3743' and 3748 1/2'

Treatment put in 2/24/54 by Dowell Inc., using 150 gallons of acid and 88 barrels of oil to fill hole and flush.

TIME	CP	TP	REMARKS
2:52 pm	600	600	Filled hole with 84 barrels of oil
3:00 pm	400	400	Start acid
3:04 pm	100	50	150 gallons of acid in, start flush
3:19 pm	300	100	Acid on bottom
3:44 pm	400	200	31 gallons of acid in formation
3:59 pm	500	325	63 gallons of acid in formation
4:06 pm	500	350	64 gallons of acid in formation
4:08 pm	600	600	150 gallons of acid in formation
			Flushed with 4 barrels of oil

Ran rods and PDS 12 hours, 84 barrels of oil used in treating and well pumped off. Pulled rods and reacidized with 350 gallons of Dowell "KXF-32 W-17" acid as follows:

ACID TREATMENT NO. 3 - Between 3743' and 3748 1/2'

Treatment put in 2/25/54 by Dowell Inc., using 350 gallons of acid and 87 barrels of oil to fill hole and flush.

TIME	CP	TP	REMARKS
2:05 pm			Filled hole with 79 barrels of oil
2:10 pm	200	200	Start acid
2:36 pm	400	250	Acid on bottom
2:56 pm	425	200	42 gallons of acid in formation
3:11 pm	500	350	84 gallons of acid in formation
3:41 pm	600	600	210 gallons of acid in formation
3:51 pm	600	600	250 gallons of acid in formation
4:12 pm	600	600	350 gallons of acid in formation
			Flushed with 84 barrels of oil



Ran rods and FOB 6 hours, 79 barrels of oil used in treating, then  
 FOB 7 hours, 15 barrels of oil and 5 barrels of water. On February 26,  
 FOB 3 hours, 4 barrels of oil and 4 barrels of water. Pulled rods and  
 tubing and reran tubing. Set Halliburton LI retainer at 3709' and cemented  
 off Arbuckle Lime with 250 sacks of cement and 2% calcium chloride.  
 Estimated 250 sacks below retainer, maximum TP-2700'. Recovered out 20  
 sacks of cement and pulled 2" tubing.

On February 28, swabbed and bailed the hole dry to 3709' and 5 1/2"  
 casing tested dry. Drilled retainer and cement plug to 3746'.

TOTAL DEPTH 3750' PB 3746'

Perforated 5 1/2" casing from 3743' to 3745' with 8 Lane-Wells Bone  
 shots and 12 A-2 holes, no shows. On March 1, ran 2" tubing and treated  
 with 500 gallons of Dowell "XIF-32 C-17" acid as follows:

ACID TREATMENT NO. 5 - Between 3743' and 3745'

Treatment put in 3/1/54 by Dowell Inc., using 500 gallons of acid  
 and 98 barrels of oil to fill hole and flush.

TIME	CP	TP	REMARKS
4:02 pm	600	600	Filled hole with 85 barrels of oil, start acid
4:14 pm	300	50	500 gallons of acid in, start flush
4:30 pm	400	150	Acid on bottom
6:30 pm	1000	750	42 gallons of acid in formation
6:45 pm	1000	775	105 gallons of acid in formation
7:00 pm	1000	775	160 gallons of acid in formation
7:45 pm	950	500	370 gallons of acid in formation
8:15 pm	950	950	500 gallons of acid in formation

Ran rods and FOB 6 hours, 49 barrels of oil used in treating. Well  
 quit pumping, pulled and reran rods, then FOB 3 hours, 37 barrels of oil  
 used in treating. FOB 12 hours, 11 barrels of oil and 5 barrels of water.  
 Pulled rods and treated with 750 gallons of Dowell "XIF-32 W-17" acid as  
 follows:

ACID TREATMENT NO. 5 - Between 3743' and 3745'

Treatment put in 3/3/54 by Dowell Inc., using 750 gallons of acid  
 and 111 barrels of oil to fill hole and flush.

TIME	CP	TP	REMARKS
1:35 am	400	400	Filled hole with 96 barrels of oil, start acid
1:48 pm			Acid on bottom
2:52 pm	250	Vac.	120 gallons of acid in, start flush
4:00 pm	250	Vac.	250 gallons of acid in formation
4:30 pm	225	Vac.	330 gallons of acid in formation

Ran rods and FOB 6 hours, 96 barrels of oil used in treating, then  
 FOB 5 hours, 21 barrels of oil and 6 barrels of water.

On March 4, FOB 8 hours on State Corporation Commission physical  
 potential test, 37.12 barrels of oil and 9.28 barrels of water to  
 establish 24 hour S.C.C. potential of 111 barrels. This potential  
 allows 25 barrels per day for the remainder of March, 1954.

SLOPE TEST DATA: Tests were taken at 500', 1000', 1500', 2000', 2500',  
 with no deviation from vertical noted.