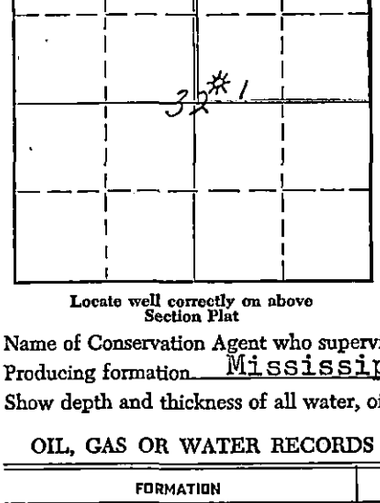
15-119-00155-0008

STATE OF KANSAS
STATE CORPORATION COMMISSION

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

WELL PLUGGING RECORD

NORTH



Locate well correctly on above Section Plat

Meade County. Sec. 32 Twp. 33S Rge. (E) 26 (W)

Location as "NE/CNW¼SW¼" or footage from lines SW/4 SW/4 NE/4

Lease Owner Skelly Oil Company

Lease Name D. B. Shrewder Well No. 1

Office Address Box 1650, Tulsa, Oklahoma

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

Date well completed July 21, 19 53

Application for plugging filed August 30, 19 54

Application for plugging approved September 1, 19 54

Plugging commenced October 25, 19 54

Plugging completed October 28, 19 54

Reason for abandonment of well or producing formation Depleted Gas Well

If a producing well is abandoned, date of last production May 11, 19 54

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 Mr. M. A. Rives

Producing formation Mississippi Lime Depth to top 5815 Bottom 5925' Total Depth of Well 5980 Feet PB 5947'

Show depth and thickness of all water, oil and gas formations.

OIL, GAS OR WATER RECORDS — CASING RECORD

FORMATION	CONTENT	FROM	TO	OD SIZE	PUT IN	PULLED OUT
Mississippi Lime	Gas	5815'	5925'	9-5/8"	1334'0"	None
				5-1/2"	6024'5"	2774'4"

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.

50 gallons of rock	5947' to 5897'
25 sacks of cement	5897' to 5722'
Mud	5722' to 500'
Crushed rock	500' to 490'
30 sacks of cement	490' to 450'
Mud	450' to 30'
Crushed rock	30' to 25'
10 sacks of cement	25' to 6'
Surface soil	6' to 0'

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

Name of Plugging Contractor Ace Pipe Pulling Company

Address P.O. Box 304, Great Bend, Kansas

STATE OF Kansas, COUNTY OF Reno, ss.

H. E. Wamsley (employee of 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) H E Wamsley

Box 391, Hutchinson, Kansas
(Address)

SUBSCRIBED AND SWORN TO before me this 11th day of November, 19 54

Josephine L. Johnson
Notary Public.

My commission expires April 7, 1955

24-7366-5 3-53-20M

PLUGGING
FILE SEC 32 T 33 R 26W
BOOK PAGE 60 LINE 31

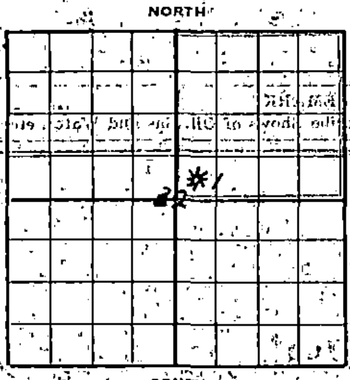
RECEIVED
STATE CORPORATION COMMISSION
NOV 12 1954
CONSERVATION DIVISION
Wichita, Kansas

11-12-1954

Form N47A Rev.

15-119-00155-0000

SKELLY OIL COMPANY



Indicate Casing Points, Describe Shows of Oil, Gas and Water, etc. | BOTTOM | **Well Record** | FORMATION

#44659

Lease Name and No. D. S. Shrowder Well No. 1 Elev. 2369' RB / 2367' DF / 2359' GR

Lease Description NE/4 Section 32-33S-26W, Meade County, Kansas (160 Acres)

Location made April 28, 1953 by Meade County Engineer

feet from North line ______ feet from East line } NE/4

330 feet from South line 330 feet from West line } of Sec. 32

Work com'd 5/20, 1953 Rig comp'd 5/28, 1953 Drlg. com'd 5/28, 1953 Drlg. comp'd 6/28, 1953

Rig Contractor Nichols-Duncan Drilling Company

Drilling Contractor Nichols-Duncan Drilling Company, Duncan, Oklahoma

Rotary Drilling from 0' to 5980' Cable Tool Drilling from To complete to ______

Commenced Producing July 21, 1953 { Initial Prod. before shot or acid ______ Bbls. / Initial Prod. after shot or acid ______ Bbls.

Dry Gas Well Press. CP-360# Volume 2,004,000 Cu. ft.

Casing Head Gas Pressure ______ Volume ______ Cu. ft.

Braden Head (9-5/8" x 5½" OD) Gas Pressure ______ Volume ______ Cu. ft.

Braden Head (______ Size ______) Gas Pressure ______ Volume ______ Cu. ft.

PRODUCING FORMATION Mississippi Lime (Name) Top 5815' Bottom 5955' TOTAL DEPTH 5980' PB 5952'

CASING RECORD

OD Size	Wt.	Thds.	Where Set	Pulled Out Jts.	Pulled Out Feet	Pulled Out In.	Left In Jts.	Left In Feet	Left In In.	Kind	Cond'n	Cementing Sacks Used	Cementing Method Employed
9-5/8"	32.3	8R	1334'				41	1334	0	H40 R2 SS	A	750	Halliburton
5-1/2"	15.5	8R					25	793	52	J55 R2 SS	A		
5-1/2"	14	8R					106	3367	4	J55 R2 RW	A		
5-1/2"	15.5	8R	5977'				59	1863	8	J55 R2 SS	A	300	Halliburton

(9-5/8" casing set 2' in cellar and 5½" cased to derrick floor)
(5½" casing perforated from 5815'-5837' with 156 holes, from 5858'-5866' with 60 holes, and from 5909'-5955' with 219 holes)
Used 1 - 5½" OD Larkin Combination Guide & Float Shoe

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	7/6/53	7/9/53	7/10/53	
Acid Used Size Shot (Gals. Qts.)		5000	8000	
Shot Between (Ft. and Ft.)	5909 Ft. and 5955 Ft.	5909 Ft. and 5955 Ft.	5909 Ft. and 5955 Ft.	
Size of Shell				For remaining
Put in by (Co.)	Halliburton	Halliburton	Halliburton	treatments see
Length anchor				remarks
Distance below Cas'g	(Acidfrac)			
Damage to Casing or Casing Shoulder				

SIGNIFICANT GEOLOGICAL FORMATIONS

NAME	Top	Bottom	GAS From	GAS To	OIL From	OIL To	REMARKS
Heebner Shale	4495'						
Toronto Lime	4515'						
Lansing Lime	4670'						
Morrow Shale	5779'						
Morrow Lime	5783'						
Mississippi	5811'		5815'	5955'			

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)

RECORD OF FORMATIONS

FORMATION	TOP	BOTTOM	REMARKS Indicate Casing Points, Describe Shows of Oil, Gas and Water, etc
Surface soil, red bed, sand and shale	0	505	
Red bed and shells	505	912	
Red bed, shale and shells	912	1181	
Red bed, salt, anhydrite shells and lime	1181	1334	TOP ANHYDRITE 1305' Set and cemented 9-5/8" OD, 32.3#, 8R thd., H-2, H-40, S.D. casing (4 cond.) at 1334' with 750 sacks of cement. Cement circulated.
Shale and shells	1334	1395	
Anhydrite, shale and shells	1395	1658	
Anhydrite, shale, shells, and salt	1658	2265	TOP DELLINGTON 1680'
Anhydrite, shale and shells	2265	2412	
Sand, anhydrite and shale	2412	2433	
Anhydrite and shale	2433	2659	TOP HOLLENBERG 2582' UPPER HERRINGTON 2610'
Anhydrite, lime and shale	2659	2760	TOP KRIDER 2661' TOP WINFIELD 2702' TOP DOYLE 2741'
Lime and shale	2760	2975	TOP TOWANDA 2770' TOP FT. RILEY 2835' TOP FLORENCE 2890'
Cherty lime	2975	3023	BASE FLORENCE 2937' TOP WINFIELD 3002'
Shale and lime	3023	3969	
Shale and shells	3969	4044	
Shale	4044	4218	
Shale and lime	4218	4248	
Shale	4248	4413	
Shale and shells	4413	4480	
Shale and lime	4480	5066	TOP HEEBNER SHALE 4495' TOP TORONTO LIME 4515' TOP DOUGLAS LIME 4670'
Cherty lime and shale	5066	5082	
Lime	5082	5118	
Lime and shale	5118	5838	TOP BRAINTREE LIME 5200' TOP CHEROKEE LIME 5516' TOP MISSION SHALE 5779' TOP MISSION LIME 5788' TOP MISSISSIPPI LIME 5811'

Ran Halliburton drill stem test, packer set at 5778', used 60' of anchor, light blow for 1 hour, recovered 75' drilling mud, BHP-300#, no gas to surface.

Cored from 5838' to 5891' - Recovered 49'

Top 4' - Light gray to buff dense lime with slight porosity and good odor
Next 2' - Black shale
Next 2' - Buff dense lime
Next 1' - Black shale
Next 4' - Gray dense lime with slight porosity and fair odor
Next 1' - Black shale
Next 3' - Brown dense lime
Next 3' - Gray dense Lime, interbedded with shale
Next 7' - Buff, fragmented dense lime, bleeding gas, slight to good porosity and odor
Next 1' - Black limey shale
Next 2' - Gray, dense lime with slight odor and slight porosity
Next 4'6" - Gray dense lime
Next 1' - Black shale
Next 4'6" - Buff, fragmented lime
Next 5' - Brown dense lime with black shale streaks
Next 2'6" - Brown dense lime
Last 1'6" - Black shale

Ran Halliburton drill stem test, packer set at 5833', used 58' of anchor, open 1 hour and gas gauged 3/4 M.C.F., recovered 150' of gas-cut mud, BHP-650#.

Cored from 5891' to 5944' - Recovered 53'

Top 1' - Light gray, fine-grained fossiliferous lime with shale partings
Next 3' - Gray, coarsely crystalline fragmental fossiliferous lime with shale partings

(See Reverse for Record of Formation)

Next 1' - Gray to brown fossiliferous dense lime
Next 9' - Dark gray, fine grained lime with dark gray shale streaks
Next 2' - Dark gray fossiliferous limey shale
Next 1' - Dark gray lithographic lime
Next 1' - Dark gray shale
Next 3' - Gray, fine grained shaley lime interbedded with gray shale
Last 32' - Gray oolitic micro-fossiliferous lime with fair porosity

Ran Halliburton drill stem test, packer set at 5884', open 1 hour, no gas to surface, recovered 130' gas cut mud, BHP-300#, gas in 1800' of drill pipe.

Drilled:
Lime and shale 5944' - 5980' Ran Schlumberger Survey

Set and cemented 1864' of 5½" OD, 15.5#, 8R thd., A-2, J-55, S.S. casing (A cond.); 3367' of 5½" OD, 14#, 8R thd., A-2, J-55, E.U.E. casing (A cond.); and 793' of 5½" OD, 15.5#, 8R thd., A-2, J-55, S.S. casing (A cond.) at 5977' with 300 sacks of cement. Finished 9:00 a.m. 6/29/53. Ran Halliburton Temperature Survey and found top of cement at 4470'.

Moved in cable tools on July 1, bailed hole dry and 5½" casing tested dry. Drilled cement plug to 5965' PBTD. Ran Lane-Wells Gamma Ray Survey. Perforated 5½" casing from 5909' to 5955', with 219 holes by Lane-Wells. Ran 2" tubing and set Halliburton BM packer at 5826'. Ran Halliburton Acidfrac treatment as follows:

ACIDFRAC TREATMENT NO. 1 - Between 5909' and 5955'

Used 4000 gallons of 15% Gel acid
2000 gallons 7½% acid
30 gallons of Korflo
60000# of sand
1700 gallons diesel fuel
Time 1 hour, 24 minutes
Maximum TP-3950#

Tried to swab through 2" tubing and swab would not go down tubing. Pulled tubing and swabbed through 5½" casing to clean hole, gas gauged 160 M.C.F. On July 8, swabbed and bailed hole dry, gas gauged 160 MCF. Treated through 5½" casing with 5000 gallons of Halliburton 15% acid as follows:

ACID TREATMENT NO. 1 - Between 5909' and 5955'

Treatment put in 7/9/53 by Halliburton, using 5000 gallons of acid and 140 barrels of water to flush.

TIME	CP	TP	REMARKS
5:49 am	300#		Start acid
5:50 am	Vac.		750 gallons of acid in
5:57 am	Vac.		5000 gallons of acid in, start flush
6:07 am	Vac.		40 barrels of water in to flush
6:10 am	750#		75 barrels of water in to flush
6:12 am	750#		100 barrels of water in to flush
6:22 am	750#		Flushed with 140 barrels of water

Swabbed and bailed out water and spent acid water used in treating, gas gauged 475 M.C.F. Reacidized through 5½" casing with 4000 gallons of Halliburton 15% acid and 4000 gallons of Halliburton 7½% acid as follows:

ACID TREATMENT NO. 2 - Between 5909' and 5955'

Treatment put in 7/10/53 by Halliburton, using 8000 gallons of acid and 140 barrels of water to flush.

TIME	CP	TP	REMARKS
7:08 am	250#		Start 15% acid
7:14 am	0#		4000 gallons of 15% acid in, start 7½% acid
7:16 am	0#		Acid on bottom
7:20 am	650#		4000 gallons 7½% acid in, start flush
7:22 am	900#		12 barrels water in to flush
7:35 am	1200#		Flushed with 140 barrels of water

Swabbed and flowed 18 hours to clean up hole, gas gauged 900 M.C.F. Tried to set 5½" Lane-Wells bridging plug at 5885' and plug would not hold. Ran another 5½" OD Lane-Wells bridging plug and set plug at 5888'. Perforated 5½" casing from 5856' to 5868' with 60 holes by Lane-Wells, gas gauged 900 M.C.F. Treated through 5½" casing with 1000 gallons of Halliburton 15% acid as follows:

ACID TREATMENT NO. 3 - Between 5856' and 5868'

Treatment put in 7/12/53 by Halliburton, using 1000 gallons of acid and 140 barrels of water.

TIME	CP	TP	REMARKS
3:00 pm	50#		Start acid
3:04 pm	Vac.		1000 gallons of acid in
3:30 pm	Vac.		Acid on bottom
3:34 pm	Vac.		Flushed with 140 barrels of water

Swabbed out water and spent acid water, gas gauged 1,000 M.C.F.

On July 13, drove Lane-Wells bridging plug to 5962½'. Set another Lane-Wells bridging plug at 5853', plug would not hold. Ran another Lane-Wells bridging plug and set at 5847½'. Perforated 5½" casing from 5829' to 5837' with 24 holes by Lane-Wells, show of gas; perforated casing from 5815' to 5837' with 132 holes by Lane-Wells, gas gauged 1,470 M.C.F. Treated through 5½" casing with 2000 gallons of Halliburton 15% acid as follows:

ACID TREATMENT NO. 4 - Between 5815' and 5837'

Treatment put in 7/15/53 by Halliburton, using 2000 gallons of acid and 140 barrels of water to flush.

TIME	CP	REMARKS
11:44 am	350#	Start acid
11:50 am	0#	2000 gallons of acid in, start flush
12:01 pm	0#	Acid on bottom
12:05 pm	0#	Flushed with 140 barrels of water

Flowed through 5½" casing 8 hours to clean hole, gas gauged 1,470 M.C.F.

Drilled Lane-Wells bridging plug to 5962'. Ran 2" tubing with perforated end. Ran 300 gallons of gel to shut off perforations from 5909' to 5955' and from 5858' to 5868', and treated with 4000 gallons of Dowell 15% acid as follows:

ACID TREATMENT NO. 5 - Between 5815' and 5837'

Treatment put in 7/17/53 by Dowell Inc., using 4000 gallons of acid and 127 barrels of water.

TIME	CP	TP	REMARKS
8:40 pm	840#	560#	Start Jel - 830 in tubing
8:52 pm	840#	560#	Start acid in casing
8:54 pm	840#	300#	300 gallons of jel in tubing, start flush in tubing
9:09 pm	0#	0#	4000 gallons of acid in casing, start flush in casing
9:10 pm	0#	0#	17 barrels of water in tubing, Jel - 830 on bottom
9:12 pm	0#	1200#	12 barrels water flush in casing, acid on bottom
			19 barrels water flush in tubing, 2 bbls. Jel over perforations
9:19 pm	0#	1500#	Stop tubing pump
9:30 pm	0#	1000#	102 barrels water flush in casing

Swabbed out water and spent acid water used in treating. Swabbed through 2" tubing and well started flowing, flowed through 2" tubing 14 hours, gas too wet to gauge.

On July 19, flowed through 2" tubing 9 hours, gas gauged 1,450 M.C.F. CP-460#. Shut in until July 21, SI CP-1450#, flowed through 2" tubing 6 hours, gas gauged 2,004 M.C.F., CP-360#.

TOTAL DEPTH 5980' PB 5962'

SLOPE TEST DATA

DEPTH	ANGLE OF DEFLECTION
1000'	1/4 Degree
2760'	3/4 "
4222'	1 "
4710'	1/4 "
5461'	1 "

CEMENT OFF LEAK

Date Commenced: December 31, 1953
Date Completed: February 13, 1954

Total Depth: PB 5925'

Production before: 69 M.C.F. of gas and 20 barrels water per day
Production After: 350 M.C.F. of gas and 8 gallons water per hour

- - - - -

On December 31, 1953, pulled 2" tubing and shut in to pressure up well. On January 2, 1954, pressured with gas to 1095#, then plugged back with 30 gallons of resin cement from 5962' to 5945'. On January 3, plugged back from 5945' to 5941' with 15 gallons of resin cement. On January 6, flowed through 5½" casing 8 hours, gas gauged 1,400 M.C.F., no water. On January 8, tested 24 hours, gas gauged 1,400 M.C.F. with 45 gallons of water per hour. On January 9, flowed through 5½" casing 10 hours, gas gauged 1,400 M.C.F. with 1 barrel of water per hour. On January 12, plugged back with 5 gallons of resin cement from 5941' to 5937'. On January 13, plugged back from 5937' to 5935' with 9 gallons of resin cement. On January 15, flowed through 5½" casing 8 hours, gas gauged 1,400 M.C.F. with 2 barrels of water per hour.

On January 17, moved in cable tools of Flournoy Drilling Company and cleaned out resin cement from 5935' to 5959'. Plugged back with 1½ gallons of chat from 5959' to 5957½', then plugged back with 250# of lead wool from 5957½' to 5954'. Bailed and tested 16 hours, gas gauged 880 M.C.F. and 90 gallons of water per hour.

On January 22, pressured well with gas and well would not pressure above 850#. Dumped 20 gallons of Halliburton resin cement and pressured well to 875# and plugged back from 5954' to 5939'. On January 23, plugged back with 40 gallons of Halliburton resin cement from 5939' to 5931'. On January 24, plugged back with 10 gallons of Halliburton plastic from 5931' to 5928'. On January 25, bailed and tested 24 hours, gas gauged 623 M.C.F. with 77 gallons of water per hour. On January 26, bailed and tested 24 hours and cleaned out plastic to 5935½', gas gauged 623 M.C.F. with 77 gallons of water per hour. On January 27, loaded hole with 200 barrels of water and plugged back with 16 sacks of Cal-Seal from 5935½' to 5894', then plugged back with 20 gallons of chat from 5894' to 5875', then plugged back with 17 sacks of Cal-Seal from 5875' to 5795', then pressured 5½" casing with water to 1000# and pressure held.

Perforated 5½" casing from 5786' to 5790' with 12 holes by Lane-Wells and tried to pump into formation at 1000# and pressure dropped to 800# in 35 minutes. On January 30, ran 2" tubing with Baker cast iron retainer and spotted 250 gallons of Halliburton acid at 5790'. Tried to set retainer at 5768' and retainer would not set. Picked up retainer and set at 5738'. Pumped 2000 gallons of acid into formation and pressure broke to 1000#. Squeeze cemented 5½" casing through perforations from 5786' to 5790' with 160 sacks of common cement pressured to 2500#. Pulled tubing and shut down for cement to set.

On February 2, drilled out retainer at 5738' and drilled cement plug to 5841'. Perforated 5½" casing from 5815' to 5838' with 45 holes by Lane-Wells, and gas gauged 108 M.C.F. Bailed and cleaned up hole and gas gauged 196 M.C.F. with 80 gallons of water per hour. On February 5, treated with 1000 gallons of Halliburton 15% acid as follows:

ACID TREATMENT NO. 6 - Between 5815' and 5838'

Treatment put in 2/5/54 by Halliburton, using 1000 gallons of acid and 110 barrels of water to flush.

TIME	CP	TP	REMARKS
4:21 pm	450#		Start acid
4:27 pm	150#		1000 gallons of acid in, start flush
4:50 pm	0#		Acid on bottom
4:52 pm	Vac.		Flushed with 110 barrels of water

Swabbed out water and acid water used in treating, then tested 24 hours and gas gauged 200 M.C.F. with 140 gallons of water per hour. On February 7, bailed and tested 8 hours, gas gauged 200 M.C.F. with 70 gallons of fresh water per hour. Drilled Cal-Seal plug to 5925' and gas gauged 325 M.C.F. Swabbed through 5½" casing 22 hours and gas gauged 400 M.C.F. with 80 gallons of fresh water per hour.

PLUGGED BACK TOTAL DEPTH 5925'

On February 9, bailed and tested 24 hours, gas gauged 439 M.C.F. with 80 gallons of fresh water per hour. On February 10, bailed and tested 24 hours, gas gauged 460 M.C.F. with 45 gallons of fresh water per hour. On February 11, tested 6 hours, gas gauged 460 M.C.F. with 45 gallons of water per hour. Treated through 5½" casing from 5815' to 5838', 5858' to 5868', and from 5909' to 5925' with 2000 gallons of Halliburton 15% acid and 3000 gallons of Halliburton 7½% acid as follows:

ACID TREATMENT NO. 7 - Between 5815'-38', 5858'-60', 5909'-25'

Treatment put in 2/11/54 by Halliburton, using 5000 gallons of acid and 115 barrels of water to flush.

TIME	CP	REMARKS
2:40 pm	350#	Start acid
2:45 pm	0#	2000 gallons of 15% acid, start 7½% acid
2:50 pm	0#	3000 gallons of 7½% acid in, start flush
2:53 pm	0#	Acid on bottom
3:02 pm	0#	Flushed with 115 barrels of water

Swabbed through 5½" casing 16 hours, gas gauged 215 M.C.F. with 2½ barrels of water used in treating per hour. On February 12, tested 24 hours, gas gauged 350 M.C.F. with 8 gallons of water per hour. On February 13, ran 2" tubing and moved out cable tools. On February 16, turned into Kansas Power & Light Company's line.

ACID TREATMENT NO. 11 - Between 5815' and 5837'

Treatment put in 8/18/54 by Halliburton, using 1000 gallons of acid and 138 barrels of water to flush.

TIME	CP	TP	REMARKS
12:25 pm			Start acid
12:30 pm			1000 gallons of 15% acid in, start flush
12:55 pm			Acid on bottom
12:59 pm			Flushed with 138 barrels of water

Swabbed out water used in treating, then tested 4 hours, no gas with trace of water. Drilled and drove Lane-Wells bridging plug from 5850' to 5935'. Swabbed through 5½" casing 12 hours, gas gauged 10 M.C.F. with 80 gallons of water per hour.

On August 19, ran 2" tubing with Halliburton retrievable retainer and set retainer at 5906'. Tested perforations from 5895' to 5901'. Pumped 40 barrels of water down 2" tubing and found communication around retainer. Reset retainer at 5870' and pumped 30 barrels of water down tubing and found communication around retainer. Reset retainer at 5906' and swabbed out water used in testing perforations. On August 20, treated through 5½" casing with 500 gallons of Dowell Gel X-830 acid and 1000 gallons of 15% acid as follows:

ACID TREATMENT NO. 12 - Between 5815' and 5837'

Treatment put in 8/20/54 by Dowell Inc., using 1500 gallons of acid and 110 barrels of water to flush.

TIME	CP	TP	REMARKS
12:44 pm			Start Gel X-830 in annulus
1:00 pm			500 gallons acid in, start 15% acid
1:05 pm			1000 gallons of X acid in
1:29 pm			Start flush
1:29 pm			22 barrels water in tubing
1:58 pm	150		630 gallons of acid in formation
2:01 pm	350	270	
2:03 pm	375	320	105 barrels water in casing to flush
2:05 pm	300	200	Flushed with 110 barrels water in casing

Swabbed out water used in treating, then swabbed through 2" tubing 24 hours, very light show of gas and 2 barrels of water per hour. Set Halliburton DM retainer at 5907' on 2" tubing and squeeze cemented off perforations from 5815' to 5837', 5895' to 5901', and 5912' to 5930' with 250 sacks of common cement, maximum TP-2500#. Pulled 2" tubing and bailed the hole dry and 5½" casing tested dry. Drilled cement plug and cleaned out to 5947'. On August 25, perforated 5½" casing from 5915' to 5945' with 30 Lane-Wells Kone shots and from 5914' to 5945' with 93 Lane-Wells A-2 shots, no shows. Ran 2" tubing and set Halliburton RH packer at 5906', then treated through 2" tubing with 500 gallons of Halliburton HCl acid as follows:

ACID TREATMENT NO. 13 - Between 5914' and 5945'

Treatment put in 8/25/54 by Halliburton, using 500 gallons of acid and 21 barrels of water to flush.

TIME	CP	TP	REMARKS
4:00 pm	0#	0#	Start acid
4:05 pm	0#	0#	500 gallons of acid in
4:05 pm	0#	0#	Start flush
4:15 pm	0#	0#	Flushed with 21 barrels of water

Swabbed through 2" tubing 11 hours, trace of gas with 2 barrels of water per hour. On August 26, swabbed through 2" tubing 24 hours, 5 M.C.F. gas and 62 gallons of water per hour. On August 27, swabbed through 2" tubing 9 hours, 40 gallons of water per hour with very light show of gas. Reacidized through 2" tubing with 2000 gallons of Halliburton 15% acid as follows:

ACID TREATMENT NO. 14 - Between 5914' and 5945'

Treatment put in 8/27/54 by Halliburton, using 2000 gallons of acid and 20 barrels of water to flush.

TIME	CP	TP	REMARKS
3:57 pm			Start acid
4:02 pm			Acid on bottom
4:05 pm		700#	1500 gallons of acid in
4:08 pm		800#	2000 gallons of acid in, start flush
4:15 pm		900#	Flushed with 20 barrels of water

Swabbed and tested through 2" tubing 3 hours, gas estimated 50 M.C.F. with 150 gallons of water per hour. Pulled 2" tubing and moved out cable tools. Since all zones of probable oil or gas production have been tested in this well, regular authority was granted to plug and abandon the well.

On October 25, 1954, moved in machine of Ace Pipe Pulling Company and plugged the well as follows:

50 gallons of rock	5947' to 5897'
25 sacks of cement	5897' to 5722'

SQUEEZE CEMENT OFF WATER

Date Commenced: August 3, 1954
Date Completed: October 28, 1954

Plugged back from 5925' to 0' Plugged and abandoned 10/28/54

Production before: 100% water

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Pulled:

251 jts. (7931 5") of 5½"OD, 15.5#, 8R thd., R-2, J-55, S.S. casing
64 jts. (1980'11") of 5½"OD, 14#, 8R thd., R-2, J-55, R&W casing

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Moved in and rigged up cable tools of Flournoy Drilling Company on August 3, 1954. On August 4, pulled 2" tubing and cleaned out to 5959'. On August 6, ran 2" tubing with Halliburton DH retainer and set retainer at 5781'. Squeeze cemented through perforations from 5815' to 5838', 5858' to 5868', and 5909' to 5925' with 250 sacks of common cement, maximum TP-2100#. Pulled 2" tubing and shut down for cement to set. On August 9, bailed the hole dry and 5½" casing tested dry. Drilled cement plug and cleaned out to 5935'.

On August 11, perforated 5½" casing from 5912' to 5930' with 36 Lane-Wells Kone shots and from 5912' to 5930' with 48 Lane-Wells A-2 shots, then tested 3 gallons of water per hour, no gas. Dumped 50 gallons of mud acid on bottom; after 5 hours had slight show of gas. Bailed out mud acid, then treated through 5½" casing from 5912' to 5930' with 500 gallons of Halliburton mud acid as follows:

ACID TREATMENT NO. 8 - Between 5912' and 5930'

Treatment put in 8/12/54 by Halliburton, using 500 gallons of acid and 144 barrels water to flush.

TIME	CP	TP	REMARKS
1:14 am	100		Start acid
1:17 am	100		500 gallons of acid in, start flush
2:05 am	Vac.		Acid on bottom
2:11 am	Vac.		Flushed with 144 barrels of water

Swabbed out water used in treating, then swabbed and bailed 24 hours, 60 gallons of water per hour with light show of gas. On August 13, bailed and tested 6 hours, gas gauged 10 M.C.F. with 25 gallons of water per hour. Reacidized through 5½"OD casing with 3000 gallons of Halliburton 15% acid as follows:

ACID TREATMENT NO. 9 - Between 5912' and 5930'

Treatment put in 8/13/54 by Halliburton, using 3000 gallons of acid and 141 barrels water to flush.

TIME	CP	TP	REMARKS
1:47 am			Start acid
1:58 am	100		3000 gallons of acid in, start flush
?	100		Acid on bottom
?	500		141 barrels water in to flush

Swabbed through 5½" casing 8 hours, 1 barrel of water per hour and gas gauged 19 M.C.F. Set Lane-Wells bridging plug at 5906'. Perforated 5½" casing from 5895' to 5901' with 12 Lane-Wells Kone shots and 18 Lane-Wells A-2 shots. Dumped in 30 gallons of Halliburton mud acid. Let acid set 3 hours, then bailed and cleaned up hole 3 hours and tested 3 barrels of water per hour with light show of gas. Treated through 5½" casing with 50 gallons of Halliburton mud acid and 1000 gallons of 15% acid as follows:

ACID TREATMENT NO. 10 - Between 5895' and 5901'

Treatment put in 8/15/54 by Halliburton, using 1000 gallons of acid and 140 barrels of water to flush.

TIME	CP	TP	REMARKS
5:10 pm			Start acid
5:17 pm	0		1000 gallons of acid in, start flush
5:40 pm	0		Acid on bottom
5:44 pm	0		1000 gallons of acid in formation
			Flushed with 140 barrels of water

Swabbed out water used in treating and well tested 3 barrels of acid water with very light show of gas per hour. On August 16, drilled out Lane-Wells bridging plug at 5908' and well tested 10 M.C.F. gas with 80 gallons of water per hour. On August 17, set Lane-Wells bridging plug at 5850'; bailed hole dry, then plugged back with 5 gallons of Sol-Coal from 5850' to 5845'. Perforated 5½" casing from 5815' to 5837' with 44 Lane-Wells Kone shots and from 5818' to 5834' with 52 Lane-Wells A-2 shots, no show of gas. Treated through 5½" casing with 1 barrel of Halliburton mud acid and 1000 gallons of Halliburton 15% acid as follows:

Ran McCullough magnetector and found pipe stuck at 2675'. Perforated 5½" casing at 2722' with 2 holes and tried to circulate with heavy mud to loosen 5½" casing; formation broke and failed to circulate. Magnetector indicated casing stuck at 2775'. Shot off 5½" casing at 2762' and pulled 25 joints (793'5") of 5½"OD, 15.5#, 8R thd., R-2, J-55, S.S. casing (90%) ; and 64 jts. (1980'11") of 5½"OD, 14#, 8R thd., R-2, J-55, R.F.W. casing (90%).

Mud	5722'	to	500'
Crushed rock	500'	to	490'
30 sacks of cement	490'	to	450'
Mud	450'	to	30'
Crushed rock	30'	to	25'
10 sacks of cement	25'	to	6'
Surface soil	6'	to	0'

Plugged and abandoned October 28, 1954.