

STATE OF KANSAS
STATE CORPORATION COMMISSION

WELL PLUGGING RECORD

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

Rush County. Sec. 20 Twp. 18S Rge. (E) 16 (W)

Location as "NE/CNW/SW" or footage from lines SE/4 SE/4 NW/4

Lease Owner Skelly Oil Company

Lease Name Ben Huenergardt Well No. 1

Office Address Box 1650, Tulsa, Oklahoma

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

Date well completed August 26, 19 54

Application for plugging filed January 23, 19 59

Application for plugging approved January 26, 19 59

Plugging commenced January 23, 19 59

Plugging completed January 31, 19 59

Reason for abandonment of well or producing formation No longer economical to operate

If a producing well is abandoned, date of last production January 16, 19 59

Was permission obtained from the Conservation Division or its agents before plugging was commenced? Yes 3605'

Name of Conservation Agent who supervised plugging of this well Mr. Eldon Petty PB

Producing formation Conglomerate Depth to top 3549 Bottom 3558 Total Depth of Well 3570' Feet

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
Reagan	Oil	3559'	3569'	8-5/8"	1005'0"	None
Conglomerate	Oil	3549'	3558'	5-1/2"	3588'0"	1905'0"

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.

Sand 3570' to 3525'

4 sacks of cement 3525' to 3497'

Mud 3497' to 415'

30 sacks mud and 150 sacks Pozmix cement 415' to 5'

Surface soil 5' to 0'

RECEIVED
STATE CORPORATION COMMISSION

FEB 20 1959

CONSERVATION DIVISION
Wichita, Kansas

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

Name of Plugging Contractor West Supply Company

Address Box 506, Chase, Kansas

STATE OF Kansas COUNTY OF Reno, ss.

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

Box 391, Hutchinson, Kansas

(Address)

SUBSCRIBED AND SWORN TO before me this 19th day of February, 19 59

My commission expires April 7, 1959

Gladys E. Johnson
Notary Public.

PLUGGING
FILE SEC. 20 T 18 R 16W
BOOK PAGE 12 LINE 13

RECORD OF FORMATIONS

FORMATION	TOP	BOTTOM	REMARKS
Surface soil and shale	0	135	
Shale and shells	135	425	
Shale and sand	425	545	
Shale	545	565	
Shale and shells	565	940	
Red bed	940	1001	
Anhydrite	1001	1011	Set and cemented 8-5/8" OD, 22.7% Armco S.W., S.J. steel casing (A cond.) at 1011' with 500 sacks of Pozmix cement. Cement circulated.
Anhydrite	1011	1050	
Shale	1050	1450	
Salt	1450	1570	
Shale	1570	1840	
Shale and lime	1840	2010	
Shale	2010	2115	
Shale and lime	2115	2350	
Lime	2350	2410	
Shale	2410	2460	
Shale and shells	2460	2600	
Shale and lime	2600	2745	
Lime	2745	2825	
Shale and lime	2825	2995	
Lime	2995	3020	
Lime and shale	3020	3080	
Lime	3080	3400	
Lime and shale	3400	3558	
Fine to medium grained angular and rounded sand	3558	3560	No porosity or saturation Set and cemented 5 1/2" OD, 14 1/2" thd., R-2, J-55, R.E.W. steel casing (A cond.) at 3559' with 125 sacks of Pozmix cement. Finished cementing at 5:00 p.m. 7/12/54. Halliburton temperature survey showed top of cement behind 5 1/2" casing at 2570'.
Light gray sand	3560	3565	
Coarse grained cream colored sand	3565	3566	

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 CONSERVATION DIVISION
 KANSAS

TOP TOPEKA LIME 2951'

TOP HERRING SHALE 3202'
 TOP TORONTO LIME 3221'
 TOP DANFORD LIME 3256'
 BLUE KANSAS CITY 3481'
 CHERY CONGLOMERATE 3529'
 TOP BRAGAN SAND 3558'

Ran 2" tubing and set Halliburton BB packer at 3546' and treated with Halliburton Sand-Oil-Frac as follows:

SAND OIL FRAC TREATMENT NO. 1 - Between 3559' and 3566'

- Used 36 barrels of heavy crude oil
- 125 barrels of light crude oil
- 1000' of sand
- Maximum TP-4200, broke to 3000
- Time 12 minutes

Pulled tubing and packer and swabbed through 5 1/2" casing 4 hours, 140 barrels of oil used in treating. On July 18, swabbed through 5 1/2" casing 16 hours to bottom, 20 barrels of oil used in treating, 33 barrels of formation oil, and 160 barrels of water. Swabbed off bottom 6 hours, 26 barrels of oil and 61 barrels of water.

On July 19, ran 2" tubing with Halliburton RC tool, set tool at 3555' and cemented off open hole from 3559' to 3566' with Halliburton diesel oil cement job. Used 75 sacks of Pozmix cement, 450 gallons of diesel oil and 7 gallons of DCC chemical and 155 barrels of crude oil, maximum TP-3500'.

On July 22, bailed the hole dry to 3554' and cleaned out to 3564'. Swabbed through 5 1/2" casing 2 hours, 67 barrels of oil used in cementing and bailed the hole dry, show of gas, no fluid in hole. Cleaned out from 3564' to 3565'. Bailed and tested 8 hours, 34 gallons of oil used in cementing and 46 gallons of water. Cleaned out from 3565' to 3566'. Drilled deeper as follows:

Coarse, light gray sand	3566	3567	Swabbed off bottom 3 hours, 1-3/4 barrels of oil and 4 bbls. of water.
Coarse, light gray sand	3567	3569	
TOTAL DEPTH	3569'		

Swabbed off bottom 9 hours, 8 barrels of oil and 16 barrels of water. On July 26, ran 2" tubing and rods and shut down to move out cable tools.

Installed regular pumping equipment and on August 13, POB 24 hours, 15 barrels of oil and 25 barrels of water. On August 14, POB 24 hours, 12 barrels of oil and 24 barrels of water. On August 15, POB 24 hours, 12 barrels of oil and 24 barrels of water. On August 16, POB 24 hours, 12 barrels of oil and 25 barrels of water. On August 17, POB 24 hours, 7 barrels of oil and 16 barrels of water. On August 18, POB 24 hours, 7 barrels of oil and 16 barrels of water. On August 19, POB 24 hours, 7 barrels of oil and 16 barrels of water. Pulled rods and treated with 250 gallons of Halliburton MCA acid as follows:

ACID TREATMENT NO. 1 - Between 3559' and 3569'

Treatment put in 8/20/54 by Halliburton, using 250 gallons of acid and 72 barrels of oil to fill hole and flush.

TIME	CP	TP	REMARKS
9:50 am	200'	200'	Filled hole with 65 barrels of oil
10:15 am			Start acid
10:20 am			250 gallons of acid in tubing, start flush
10:35 am	200'	250'	60 gallons of acid in formation
10:40 am	225'	250'	130 gallons of acid in formation
10:45 am	300'	300'	230 gallons of acid in formation
10:46 am	300'	300'	250 gallons of acid in formation Flushed with 7 barrels of oil

Ran rods and on August 21, POB 24 hours, 72 barrels of oil used in treating, 3 barrels of formation oil, 6 barrels of acid water, and 7 barrels of formation water. On August 22, POB 24 hours, 25 barrels of oil and 58 barrels of water. On August 23, POB 24 hours, 20 barrels of oil and 46 barrels of water. On August 24, POB 24 hours, 23 barrels of oil and 24 barrels of water. On August 25, POB 24 hours, 18 barrels of oil and 43 barrels of water. On August 26, POB 24 hours, 17 barrels of oil and 43 barrels of water. Well is in a non-prorated pool.

SLOPE TEST DATA: Tests were taken at 1550', 1750', 2050', 2500', 3000', and 3250' with no deviation from vertical noted.

SKELLY OIL COMPANY

REPORT OF CHANGE IN WELL RECORD

Give complete description of all cleaning out, deepening, plugging back and fishing jobs, changes in casing, material lost in hole, etc., not recorded in original well record.

LEASE Ben Huenergardt WELL NO. 1 DISTRICT Western Kansas
 SEC. 20 T. 18S R. 16W COUNTY Rush 8840 JOB NO.
 SURVEY _____ BLOCK _____ STATE Kansas

CLEANING OUT RECORD				PLUGGING BACK OR DEEPENING RECORD			
Date commenced.....	<u>September 27, 19 54</u>			Date commenced.....	19		
Date completed.....	<u>October 3, 19 54</u>			Date completed.....	19		
Cleaned out from.....	to..... T. D. <u>3569'</u>			Plugged back or deepened from.....	to..... T.D.....		
Prod. before.....	<u>11</u> bbls. oil	<u>25</u> bbls. water	<u>--</u> cu. ft. gas	Prod. before.....	bbls. oil	bbls. water	cu. ft. gas
Prod. after.....	<u>13</u> bbls. oil	<u>52</u> bbls. water	<u>--</u> cu. ft. gas	Prod. after.....	bbls. oil	bbls. water	cu. ft. gas
Kind of tools used:	<u>Unit #8577</u>			Kind of tools used:		
Tools owned by:	<u>Skelly Oil Company</u>			Tools owned by:		

ACID SHOT RECORD

Date	<u>9/28/54</u>						
Size shot	<u>600 gals.</u>	<u>Qts.</u>		<u>Qts.</u>		<u>Qts.</u>	
Shot between	<u>3559 Ft. and 3569 Ft.</u>		<u>Ft. and Ft.</u>		<u>Ft. and Ft.</u>		<u>Ft. and Ft.</u>
Size of shell							
Put in by (Co.)	<u>Halliburton</u>						
Length anchor							
Distance below casing							
Damage to casing or casing shoulder							

CHANGES IN 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

.....Liner set at..... Length..... Perforated at.....
 Packer set at..... Size and kind.....

.....
 Superintendent.

REMARKS (Give review of work accomplished and any other comment of interest) Moved in Skelly Oil
Company pulling unit No. 8577 on September 27, 1954, pulled rods,
and treated with 600 gallons of MCA acid as follows:

ACID TREATMENT NO. 2 - Between 3559' and 3569'

Treatment put in 9/28/54 by Halliburton, using 99 barrels
of oil to fill hole and flush.

<u>TIME</u>	<u>CP</u>	<u>TP</u>	<u>REMARKS</u>
8:20 am			Filled hole with 85 barrels of oil
8:45 am			Start to spot acid
8:50 am			Acid on bottom
8:55 am	400'	200'	
9:00 am	700'	500'	
9:10 am	650'	600'	250 gallons of acid in formation
9:15 am	750'	700'	450 gallons of acid in formation
9:19 am	750'	750'	600 gallons of acid in formation

Ran rods, pumped out oil used in treating and POB as follows:

<u>DATE</u>	<u>HOURS PUMPED</u>	<u>BBLs. OIL</u>	<u>BBLs. WTR.</u>
9-29-54	24	21	84
9-30-54	24	19	76
10-1-54	24	17	68
10-2-54	24	13	52
10-3-54	24	13	52

RECORD OF FORMATIONS

<u>FORMATION</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>REMARKS</u> Indicate Casing Points, Describe Shows of Oil, Gas and Water, etc.

DEEPENING AND PLUGGING BACK RECORD

Date Commenced: November 15, 1956
Date Completed: December 7, 1956

Deepened from 3569' to 3605' PB TD-3570'

Production Before: 12 barrels of oil and 30 barrels of water
Production After: POB 24 hours, 18 barrels of oil and 65 barrels of water

Set 66' 4 1/2" OD, 9.5#, 8R, R-2, J-55, S.S. casing liner (A cond.) at 3605' with 25 sacks of cement

4 1/2" casing liner perforations open: 3549' and 3558' with 55 holes

Producing Formation: Conglomerate

- - - - -

On November 15, 1956, moved in cable tools of W. L. Copeland, pulled rods and tubing and bailed and cleaned out to bottom. Moved in rotary tools and deepened:

Cored from 3569' to 3577' - Recovered 1'

All light gray to brown, fine to coarse sand, some stain

Cored from 3577' to 3605' SLM - Recovered 21'

- Top 1' - Light gray, very tight quartzitic sand, free oil in fractures with scattered porosity
- Next 1' - Medium grained angular friable sand, spotted stain and bleeding oil.
- Next 1' - Gray, fine grained shaly sand, scattered streaks of spotted stain
- Next 2' - Fine to coarse grained angular sand, streaks of saturation and spotted stain
- Next 1' - Friable to light sand with streaks of saturation and spotted stain
- Next 2' 6" - Medium grained angular, tight to friable sand, oil saturated
- Next 2' 6" - Fine to medium grained, slightly shaly and quartzitic sand, oil saturated
- Next 2' - Fine to medium grained sand with green shale streaks, spotted stain
- Next 1' - Medium grained angular friable shaly sand, oil saturated
- Next 2' - Medium to coarse grained shaly sand, spotty oil stain
- TOP PRE-CAMBRIAN 3593 1/2'
- Next 2' - Green sand, medium to coarse grained angular with very shaly streaks of spotted stain
- Last 3' - Granite, finely chloritic, some mica and pyrite

TOTAL DEPTH 3605'

Swabbed through 5 1/2" casing 24 hours, 8 1/2 barrels of oil and 86 barrels of water. Ran Lane-wells Gamma Ray Neutron Survey. Reamed core hole to 3605' and ran 66' of 4 1/2" OD, 9.5#, 8R thd., R-2, J-55, S.S. casing liner (A cond.) on 2" tubing with bottom set at 3605' and top set at 3539' and cemented liner with 25 sacks of common cement, pressured to 2000#. Pulled 2" tubing and SD WOC.

Swabbed and bailed hole dry, tested dry. Drilled cement to 3589' and casing tested dry. Perforated 4 1/2" liner from 3582' to 3586' with 24 holes by Lane-wells, bailed and tested 1/2 hour, 13 gallons of water with scum of oil. Ran 2" tubing with 5 1/2" HM packer set at 3512'. Pumped 40 barrels of oil into formation, maximum TP-5100#. Ran Halliburton Vis-O-Frac as follows:

VIS-O-FRAC TREATMENT NO. 1 - Between 3582' and 3586'

Used 110 barrels of Vis-O-Frac agent
4000# of sand
156 barrels of oil
Maximum TP-3800#, minimum TP-3500#
Time 22 minutes

Pulled 2" tubing and packer. Swabbed 13 hours, from top of liner at 3539', 257 barrels of oil used in treating and 43 barrels of water. On November 26, swabbed off bottom 18 hours, 4 barrels of oil used in treating, 16 barrels of formation oil and 252 barrels of formation water. Ran 2" tubing and set Halliburton DM retainer at 3570' and cemented off perforations from 3582' to 3586' with 140 sacks of Pozmix cement, maximum TP-3500#. Pulled 2" tubing, swabbed and bailed hole dry, 5 1/2" casing tested dry.

Perforated 4 1/2" OD liner from 3549' to 3558' with 55 holes by Lane- Wells, no shows. Ran 2" tubing and set 5 1/2" Halliburton HM packer at 3512'. Pumped 38 barrels of oil into perforations from 3549' to 3558' and treated through 2" tubing with 250 gallons of Halliburton MGA acid as follows:

ACID TREATMENT NO. 3 - Between 3549' and 3558'

Treatment put in 11/28/56 by Halliburton, using 250 gallons of acid and 53 barrels of oil.

TIME	CP	TR	REMARKS
8:30 pm		2400	Acid on bottom
8:33 pm		2400	20 gallons of acid in formation
8:39 pm		2200	85 gallons of acid in formation
8:48 pm		2000	125 gallons of acid in formation
9:07 pm		1700	210 gallons of acid in formation
9:12 pm		750	250 gallons of acid in formation

Swabbed through 2" tubing 6 hours, 53 barrels of oil used in treating and 6 barrels of acid water. Swabbed through 2" tubing 12 hours, 35 barrels of oil and 35 barrels of water.

Pulled 2" tubing and packer, ran 2" tubing and rods and on December 2, POB 16 hours, 40 barrels of oil used in treating and 40 barrels of water.

DATE	HOURS PUMPED	BBLs. OIL	BBLs. STR.	REMARKS
12-3-56				SP repairing pumping equip.
12-4-56				
12-5-56	24	5	20	
12-6-56	24	17	60	
12-7-56	24	18	65	

PLUGGED BACK TOTAL DEPTH 3570'

REMARKS (Give review of work accomplished and any other comment of interest) On January 23, 1959,

moved in and rigged up plugging machine of West Supply Company and plugged the well as follows:

Sand 3570' to 3525'

4 sacks cement 3525' to 3497'

Shot off 5 1/2" casing at 2576', 2554', 2454', 2364', 2274', 2180', 2094', and 1896'. Pulled 1905' (61 jts.) of 5 1/2" OD, 14#, 8R thd., R-2, J-55, R.L.W. casing (B cond.)

Mud 3497' to 415'

30 sacks mud and 150

sacks Pozoix cement 415' to 5'

Surface soil 5' to 0'

Plugged and abandoned January 31, 1959.

RECORD OF FORMATIONS

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