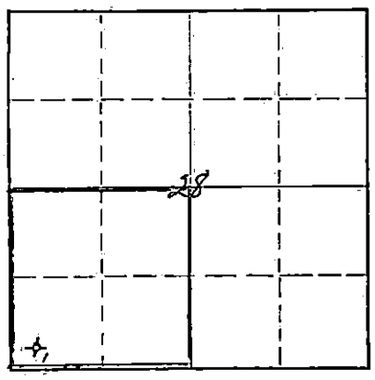
15-119-10192-0000

STATE OF KANSAS
STATE CORPORATION COMMISSION

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

WELL PLUGGING RECORD

NORTH



Locate well correctly on above Section Plat

Meade County. Sec. 28 Twp. 33S Rge. (E) 29 (W)

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

Lease Owner Skelly Oil Company

Lease Name F. L. Feldman Well No. 1

Office Address Box 1650, Tulsa, Oklahoma

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

Date well completed April 14, 1957

Application for plugging filed April 15, 1957

Application for plugging approved April 16, 1957

Plugging commenced April 19, 1957

Plugging completed April 25, 1957

Reason for abandonment of well or producing formation Dry Hole

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

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 ____ Depth to top ____ Bottom ____ Total Depth of Well 6010 Feet

Show depth and thickness of all water, oil and gas formations. PB 4543'

OIL, GAS OR WATER RECORDS — CASING RECORD

FORMATION	CONTENT	FROM	TO	OD SIZE	PUT IN	PULLED OUT
Morrow	Dry	5774'		8-5/8"	1033'3"	None
				5-1/2"	6056'9"	3911'8"

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.

25 gallons rock	4543' to 4520'
10 sacks of cement	4520' to 4450'
Mud	4450' to 350'
Rock bridge	350' to 340'
20 sacks of cement	340' to 290'
Mud	290' to 35'
Rock bridge	35' to 25'
10 sacks of cement	25' to 4'
Surface soil	4' to 0'

RECEIVED
STATE CORPORATION COMMISSION
5-8-1957
MAY 8 - 1957
CONSERVATION DIVISION
Wichita, Kansas

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

Name of Plugging Contractor Ace Pipe Pulling Company

Address Box 304, Great Bend, Kansas

STATE OF Kansas, COUNTY OF Reno, ss.

H. E. Wamsley (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) H. E. Wamsley

Box 391, Hutchinson, Kansas (Address)

SUBSCRIBED AND SWORN TO before me this 6th day of May, 19 57

Josephine L. Johnson Notary Public.

My commission expires April 7, 1959

PLUGGING
FILE SEC 28 T 33 R 29W
BOOK PAGE 6 LINE 12

15-119-10192-0000

Form N47A Rev.

SKELLY OIL COMPANY

Well Record

			28				
4							

NORTH / SOUTH / WEST / EAST

Lease Name and No. F. L. Folders Well No. [illegible] Elev. 2603' DB 2601' DF 2590' LH

Lease Description SW/4 Sec. 28-33S-29W, Meade County, Kansas (160 Acres)

Location made January 3, 1957 by W. C. Wilson

feet from North line feet from East line } SW/4

330 feet from South line 330 feet from West line } of Sec. 28

Work com'd 1/6 1957 Rig comp'd 1/8 1957 Drlg. com'd 1/8 1957 Drlg. comp'd 2/12 1957

Rig Contractor Danforth Drilling Company

Drilling Contractor Danforth Drilling Company, Tulsa, Oklahoma

Rotary Drilling from 0' to 6010' Cable Tool Drilling from To complete to

Commenced Producing DRY HOLE 19 { Initial Prod. before shot or acid Bbls. / Initial Prod. after shot or acid Bbls. }

Dry Gas Well Press. Volume Cu. ft.

Casing Head Gas Pressure Volume Cu. ft.

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

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

PRODUCING FORMATION DRY HOLE (Name) Top Bottom TOTAL DEPTH 6010'

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
8-5/8	24	8R	1038'				33	1033	3	J55 R2 SS	A	550	Halliburton
5-1/2	15	8R		64	1978	11				J55 R2 SS	B		
5-1/2	14	8R		50	1587	5				R2 SS	C		
5-1/2	14	8R		11	345	4	33	1092	6	J55 R2 SS	B		
5-1/2	15	8R	6009				33	1051	7	J55 R2 SS	A	250	Halliburton
(8-5/8" casing set 2' in cellar and 5' raised to derrick floor)													

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	2/17/57	2/25/57	2/25/57	
Acid Used / Size Shot	500 Gals.	300 Gals.	Gals.	Gals.
Shot Between	5942 Ft. and 5949 Ft.	5942 Ft. and 5949 Ft.	5942 Ft. and 5949 Ft.	Ft. and Ft.
Size of Shell				For remaining
Put in by (Co.)	Halliburton	Halliburton	Halliburton	treatments see
Length anchor				remarks
Distance below Cas'g.				
Damage to Casing or Casing Shoulder				

SIGNIFICANT GEOLOGICAL FORMATIONS

NAME	Top	Bottom	Gas From	Gas To	Oil From	Oil To	REMARKS
Heebner Shale	4423'						
Lansing Lime	4579'						
Marmaton Lime	5256'						
Cherokee Lime	5476'						
Morrow Shale	5774'						

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, clay and sand	0	136	
Sand, clay and shells	136	331	
Shale, clay and red bed	331	1038	Set and cemented 8-5/8" OD, 24#, 8R thds., R-2, J-55, [illegible] casing ([illegible] cond.) at 1038' with 300 sacks of common cement and 250 sacks of common cement with 2% calcium chloride. Cement circulated.
Sand, shale and red bed	1038	1400	
Shale	1400	1972	
Anhydrite and lime	1972	2212	
Shale	2212	2346	
Lime and shale	2346	2855	
Chalky lime and shale	2855	2960	
Lime and shale	2960	4892	TOP [illegible] SHALE 4423' TOP LANSING LIME 4579'
Lime	4892	4920	
Lime and shale	4920	5388	TOP [illegible] 5256' TOP [illegible] 5476'
Lime	5388	5418	
Lime and shale	5418	5463	
Lime, shale and chert	5463	5522	
Lime and shale	5522	5808	TOP [illegible] 5774'

Cored from 5808' to 5827' - Recovered 17'

Top 4'6" - Shaly lime to limy shale, gray to black, very fossiliferous sand, show of gas last 2".

Next 2'6" - Sand, gray to green, fine well sorted, laminated with black shale (85% to 90% sand), sand bleeding oil, odor, fair porosity, permeability probably discontinuous because of shale, last 1' very calcareous with fossil fragments, slight visible oil stain.

Next 1'6" - Shale, black, very calcareous with much fossil detritus, gray, mottled with residual hydrocarbons, fine medium grained, well sorted, slightly glauconitic, odor on break, possible bleeding oil, poor to fair porosity, mostly poor permeability.

Next 2' - Sand as above, becoming calcareous and tight with some black shale laminations.

Next 1' - Sand as above with black shale laminations

Next 1' - Shale, black, very calcareous with much fossil detritus

Last 2' - No recovery except 1" of black shale, fillile, rotten, slightly sandy

Halliburton drill stem test No. 1, packer set at 5769', used 58' anchor, open 1 hour, light blow for 1 hour, recovered 5' of drilling mud, IFP-45#, FFP-45#, BHP-70# in 20 minutes.

FORMATION	TOP	BOTTOM
Sand and shale	5827	5836

Cored from 5836' to 5855' - Recovered 18'

Top 13' - Shale, black, rotten

Next 5' - Sand, fine, gray-green, poor porosity plugged with clay, no permeability, single vertical fracture, open, had slight bleeding gas, trace of odor.

Cored from 5855' to 5858' - Recovered 3'

Top 2'6" - Quartzitic sand, light gray, extremely hard, discontinuous vuggy porosity

Last 6" - Laminated dark gray quartzitic sand and black shale

Cored from 5858' to 5901' - Recovered 41'

Top 2' - Sand, light gray, fine quartzitic

Next 2' - Shale, black with sand lenses

Next 11'6" - Sand, very shaly, fine, slight bleeding gas and trace rainbow show of oil, poor porosity, no permeability

Next 6" - Shale, black fossiliferous

Next 8' - Lime, brown to near black, fine crystalline, calcitic, very fossiliferous thin shale partings, closed vertical fracture, slight sulphur odor on break

Next 3' - Shale, black, very fossiliferous with thin limestones interbedded

Next 3' - Shale, black

Next 5' - Limestone, interbedded with shale, black

Next 2' - Sandstone, brown-gray, fine grained, well sorted, very calcareous, to sandy lime, slight trace oil stain, no odor on break, single vertical fracture

Next 2' - Limestone, gray-brown, fine crystalline, very fossiliferous, calcitic, slight sulphur odor

Last 2' - Limestone, as above, less fossiliferous, has intergranular porosity, apparent slight stain and slight bleeding, slight sulphur odor.

Ran Halliburton drill stem test No. 2, packer set at 5923', used 70' anchor, open 1 hour, weak blow for 25 minutes, recovered 10' drilling mud, IFP-65, FFP-65, SIP-110 in 30 minutes.

Chale and lime 5901 5960

TOP SAND AT 5910'

Ran Halliburton drill stem test No. 3, set packer 5898', used 62' anchor, packer would not hold. Pulled and reran tester and set packer at 5885', used 75' anchor, gas to surface in 11 mins., open 1 hour 15 mins., gas gauged 62 MCF, recovered 210' gas cut drilling mud, IFP-75#, FFP-100#, SIP-1265# in 30 minutes.

Lime 5960 6010

Ran Halliburton drill stem test No. 4, packer set at 5960', used 50' anchor, open 1 hour, light blow for 24 mins., recovered 20' drilling mud, IFP-25#, FFP-50#, SIP-50# in 20 minutes.

TOTAL DEPTH 6010'

Ran Schlumberger Survey.

Set and cemented 1978'11" of 5½", 15.5#, 8R thd., J-2, J-55, S.S. casing (A cond.); 1567'5" of 5½", 14#, 8R thd., J-2, J-55, S.S. casing (C cond.); 1436'10" of 5½", 14#, 8R thd., J-2, J-55, S.S. casing (A cond.); and 1051'7" of 5½", 15.5#, 8R thd., J-2, J-55, S.S. casing (A cond.) at 6009' with 250 sacks of common cement and 600 gallons of Dowell Gasmaco. Finished cementing at 1:00 p.m., 2/14/57. Halliburton temperature survey showed top of cement behind 5½" casing at 5000'.

Rigged up cable tools, swabbed the hole dry to 5976' and 5½" casing tested dry on February 16. On February 17, plugged back with 15 gallons of rock from 5976' to 5964'.

Perforated 5½" casing from 5942' to 5949' with 42 holes by McCullough, no show of gas or water. Ran 25 gallons of Halliburton mud acid and let set 2 hours, bailed out acid, then treated through 5½" casing with 500 gallons of Halliburton 15% acid as follows:

ACID TREATMENT NO. 1 - Between 5942' and 5949'

Treatment put in 2/17/57 by Halliburton, using 500 gallons of acid and 136 barrels of water.

TIME	CP	TP	REMARKS
4:10 pm			Start acid
4:30 pm	700#		Acid on bottom
10:13 pm	1250#		
10:18 pm	1250#		Treatment completed

Swabbed out water used in treating, then swabbed through 5½" casing 2 hours, no gas and 100 gallons of acid water per hour.

Ran 2" tubing and set Halliburton DC retainer at 5930'. Cemented off perforations from 5942' to 5949' with 200 sacks of common cement, TP-3300#. Pulled 2" tubing and shut down for cement to set.

On February 20, swabbed the hole dry and 5½" casing tested dry. Drilled cement plug and cleaned out to 5953'. Re-perforated 5½" casing from 5942' to 5949' with 21 Velex Zone shots, no shows. Dumped 30 gallons of Halliburton mud acid on bottom followed with 1000 gallons of water. Perforated 5½" casing at 5945½' with 1 shot by Velex WFT gun. Swabbed hole down, no show of gas. Tried to acidize through 5½" casing from 5942' to 5949' with 500 gallons of Halliburton 15% acid, pressured to 1600# and formation would not take acid in 10½ hours. Swabbed the hole dry, no show of gas. Dumped 40 gallons of Halliburton mud acid on bottom, let set 2 hours, bailed out spent acid, then treated through 5½" casing with 300 gallons of Halliburton 15% acid as follows:

ACID TREATMENT NO. 2 - Between 5942' and 5949'

Treatment put in 2/25/57 by Halliburton, using 300 gallons of acid and 142 barrels of water.

TIME	CP	TP	REMARKS
11:52 pm			Start acid
11:55 pm			Start flush
12:26 am	500#		Acid on bottom
2:00 am	700#		
2:45 am	1100#		
3:21 am	1000#		
4:05 am	1000#		Treatment completed

Swabbed hole dry, tested dry, no gas or water. Ran Halliburton Acid-Frac through 5½" casing from 5942' to 5949' as follows:

ACID-FRAC TREATMENT NO. 1 - Between 5942' and 5949'

Used 6000 gallons of 15% acid
6000# of sand
Maximum CP-1350#
Time 10 minutes
Used 6000 gallons of water to fill hole and flush
Time 20 minutes

Swabbed through 5½" casing 6 hours, swabbing drilling mud. Washed mud down to bottom with water. Cemented off leak in 5½" casing at 4684' with 100 sacks of common cement. Drilled cement plug to 4690', then loaded hole with water, leak in 5½" casing took fluid at 1000#CP. Drilled and cleaned out cement to 4695'. Ran 2" tubing and set Halliburton BH retainer at 4660' and re-cemented off leak in 5½" casing at 4684' with 300 sacks of common cement, TP-3500#. Pulled 2" tubing and shut down for cement to set.

On March 2, swabbed the hole dry, drilled cement plug and cleaned out to 4690' and water broke in. Ran 2" tubing and set Halliburton BH retainer at 4665' and re-cemented leak in 5½" casing with 250 sacks of common cement, TP-5000#. Pulled 2" tubing and shut down for cement to set.

On March 5, swabbed the hole dry, drilled retainer and cement plug and cleaned out to 4690'. Found 5½" casing parted at 4690'. Ran 4-5/8" casing swedge to straighten casing. Swedged 5½" casing to 4-3/4" to 4697'. Bailer would not go down to bottom. Ran rasp casing swedge to cut off end of parted casing. Bailer would only go to 4689'. Cleaned out and drilled on iron to 4698'. Cleaned out to 4713' and plugged back with 4 gallons of sand from 4713' to 4710'. Plugged back with 60 gallons of Coalment from 4710' to 4663', pressured to 500#. Let set 3 hours. Drilled Coalment to 4702', water broke in, drilled Coalment and cleaned out to 4747'. Ran 2" tubing and set Halliburton BH cement retainer at 4666'. Cemented with 200 sacks of common cement, pressured to 5000#. Pulled 2" tubing and shut down for cement to set.

Swabbed hole dry, drilled cement to 4715', well made 3½ barrels of water per hour. Ran 2" tubing and set Halliburton BH cement retainer at 4665'. Squeeze cemented with 125 sacks of common cement, pressured to 5000#. Pulled 2" tubing and shut down for cement to set.

Moved in small rotary tools, ran 2" tubing, drilled retainer and cement from 4665' to 4692' and 4-3/4" bit quit drilling. Found two cones off of bit. Ran impression block and fished out one cone. Ran 2" tubing with new 4¾" bit, unable to drill. Pulled 2" tubing.

Drilled cement with cable tools to 4753', bailed hole down, 200' salt water in hole. Drilled cement and cleaned out to 4805'. Shut down on March 23, due to snow storm.

On March 26, ran center spear and drove through Halliburton plug at 4809'. Drove plug to 4860', bailer stopped at 4805'. Ran 4-3/4" casing swedge and 4¾" bailer would only go to 4760'. Ran 3¾" bailer and bailer went to bottom. Bailed and cleaned out to 5953'.

Ran Schlumberger Gamma Ray Neutron Survey. Ran 2" tubing and set Halliburton BH packer at 5914'. Swabbed through 2" tubing 5 hours, no gas or water.

Pulled 2" tubing and packer. On March 31, set Baker bridging plug at 5923' and perforated 5½" casing from 5914' to 5918' with 24 holes, and from 5900' to 5904' with 24 holes by Calex. Ran 2" tubing and set Halliburton BH packer at 5883' with 35' anchor on packer. Swabbed through 2" tubing and hole tested dry. Treated through 2" tubing with 1500 gallons of Halliburton mud acid as follows:

ACID TREATMENT NO. 2 - Between 5900'-04' and 5914'-18'

Treatment put in 4/1/57 by Halliburton, using 500 gallons of acid and 3½ barrels water to flush.

TIME	CP	TP	REMARKS
3:50 pm			Start acid
4:00 pm			500 gallons acid in
4:28 pm		250#	Acid on bottom
5:00 pm		1000#	20 gallons acid in
5:23 pm		1300	75 gallons acid in
5:33 pm		1000	220 gallons acid in
5:55 pm		1250#	320 gallons acid in
6:00 pm		1100	500 gallons acid in

Swabbed through 2" tubing 8 hours, no gas and 3 gallons of acid water per hour. Reacidized through 2" tubing with 2000 gallons of Halliburton 15% acid as follows:

ACID TREATMENT NO. 4 - Between 5900'-04' and 5914'-18'

Treatment put in 4/3/57 by Halliburton, using 2000 gallons of acid and 21 barrels of water.

TIME	CP	TP	REMARKS
7:15 am			Start acid
7:20 am		1000#	Acid on bottom
7:31 am		1050#	2000 gallons of acid in, start flush
7:44 am		1175#	21 barrels water in to flush, treatment completed

Swabbed through 2" tubing 24 hours, 1/4 barrel heavy oil per hour, gas gauged 33 M.C.F. Ran Halliburton Acid-Frac as follows:

ACID-FRAC TREATMENT NO. 2 - Between 5900'-04' and 5914'-18'

Used 8000 gallons of Gel
8000# sand
Time 29 minutes
Maximum TP-3300#

Swabbed through 2" tubing 20 hours, gas gauged 215 M.C.F. with 45 gallons of acid water per hour, and 10 gallons of heavy oil per hour. On April 5, swabbed through 2" tubing 5 hours, gas gauged 219 M.C.F. and 20 gallons of heavy oil and 1 barrel of water per hour.

Pulled 2" tubing and set 5½"OD Baker bridging plug at 5876'. Perforated 5½" casing from 5854' to 5860' with 36 holes by McCullough. Ran 2" tubing and set Halliburton HM packer at 5836'. Tried to swab tubing dry, found communication with perforations from 5900' to 5904' and 5914'-5918'; tested 210 M.C.F. gas and 20 gallons of heavy oil per hour. Pulled 2" tubing and packer and plugged back with 60 gallons of Dowell Cealment to 5840'. Let set 12 hours.

Drilled Cealment and cleaned out to 5864'. Re-perforated 5½" casing from 5854' to 5860' with 24 Jelex Kone shots. Ran 2" tubing and set Halliburton HM packer at 5820'. Swabbed hole dry and tested 5 hours, 1 gallon of water per hour. Ran Halliburton Vis-O-Frac through 2" tubing as follows:

VIS-O-FRAC TREATMENT NO. 1 - Between 5854' and 5860'

Used 8000 gallons of diesel gel
8000# sand
950 gallons of water to flush
Time 30 minutes
Maximum TP-4200#

Swabbed hole dry, gas gauged 10 M.C.F., no water. Pulled 2" tubing and packer.

Set 5½" Lane-Wells bridging plug at 5842'. Perforated 5½" casing 5818' to 5824' with 36 Lane-Wells Type "B" bullets and from 5811' to 5814' with 18 holes. Ran 2" tubing and set Halliburton HM packer at 5799'. Tested 18 hours through 2" tubing, 30 gallons of oil per hour and 30 gallons of water per hour, gas gauged 175 M.C.F. Tried to run Halliburton Vis-O-Frac as follows:

VIS-O-FRAC TREATMENT NO. 2 - Between 5815'-24' and 5811'-14'

Used 8000 gallons frac gel (blender broke down, pumped in only 5000 gallons of gel)
5000# sand
Time 25 minutes
Maximum TP-3300#
950 gallons water to flush

Swabbed through 2" tubing 24 hours, gas gauged 215 M.C.F. with 1½ barrels fluid per hour (70% water). On April 12, swabbed and tested through 2" tubing 2 hours, gas gauged 215 M.C.F. and 1½ barrels of fluid per hour (70% water).

Pulled 2" tubing and Halliburton HM packer, set 5½" Baker bridging plug at 4595'. Plugged back with 5 gallons of Cal-Seal to 4593'. Swabbed hole dry, tested dry. Perforated 5½" casing from 4577' to 4584' with 42 Jelex Jet shots. Treated through 5½" casing with 500 gallons of Halliburton mud acid as follows:

ACID TREATMENT NO. 5 - Between 4577' and 4584'

Treatment put in 4/13/57 by Halliburton, using 500 gallons of acid and 109 barrels of water.

TIME	CP	TP	REMARKS
2:45 pm			Start acid
2:57 pm	600#		Acid on bottom
3:15 pm	500#		50 gallons of acid in
3:22 pm	800#		200 gallons of acid in
3:30 pm	800#		500 gallons of acid in

Swabbed and tested through 5½" casing 11 hours, 155 gallons of salt water per hour, no gas. Set 5½" Baker bridging plug at 4574'.

Perforated 5½" casing from 4560' to 4557' with 42 Mcculloughs bullets. Swabbed and tested through 5½" casing 5 hours, 120 gallons of salt water per hour with trace of gas.

Set 5½" Baker bridging plug at 4548' and plugged back from 4548' to 4543' with 5 gallons of Cal-Seal. Perforated 5½" casing from 4528' to 4534' with 36 Lelex jet shots; tested 60 gallons of salt water per hour, no gas. Swabbed and tested through 5½" casing 5 hours, 80 gallons of salt water per hour, no gas.

As neither oil nor gas were found in commercial quantities in drilling to 6010', and all zones were tested, regular authority was granted to plug and abandon the well.

On April 19, moved in plugging machine of Ace Pipe Pulling Company and plugged the well as follows:

Rock	4543' to 4520'
10 sacks of cement	4520' to 4450'

Shot off 5½" casing at 3900' and pulled 1976'11" of 5½"OD, 15.5#, 8R thd., R-2, J-55, S.S. casing (2 cond.); 1587'5" of 5½"OD, 14#, 8R thd., R-2, J-55, S.S. casing (2 cond.); and 345'4" of 5½"OD, 14#, 8R thd., R-2, J-55, S.S. casing (2 cond.)

Mud	4450' to 350'
Rock bridge	350' to 340'
20 sacks of cement	340' to 290'
Mud	290' to 35'
Rock bridge	35' to 4'
Surface soil	4' to 0'

Plugged and abandoned April 25, 1957.

PLUGGING
FILE SEC. 28 T. 33 R. 21W
BOOK PAGE 6 LINE 12

DEPTH	SLOPE TEST DATA ANGLE OF DEFLECTION
250'	3/4 Degree
500'	1 "
740'	1/2 "
1400'	3/4 "
1900'	1 "
2900'	1/2 "
3670'	1 "
4750'	3/4 "
5400'	3/4 "

RECEIVED
STATE CORPORATION COMMISSION
MAY 8 — 1957
CONSERVATION DIVISION
Wichita, Kansas