

15-053-20392-00-00

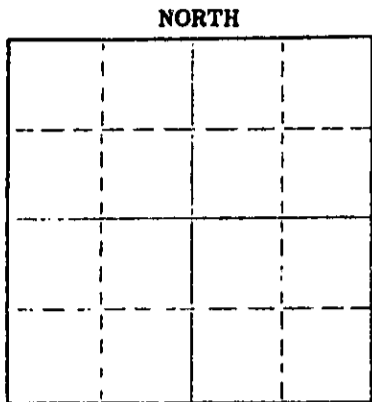
STATE OF KANSAS  
STATE CORPORATION COMMISSION  
CONSERVATION DIVISION  
P. O. BOX 17027  
WICHITA, KANSAS 67217

FORM CP-4

WELL PLUGGING RECORD

Ellsworth County, Sec. 14, Twp 14, Rge. 10 (E) W (W)

Location as "NE/CNW/SE" or footage from lines W<sup>2</sup> SW SW  
Lease Owner Jack Bock, 521 S. 14th St., Lincoln, Neb.  
Lease Name Virginia E. Vopat Well No. #1  
Office Address Drawer 546, Wilson, Kansas  
Character of Well (completed as Oil, Gas or Dry Hole) D & A  
Date well completed 12/17/74 19  
Application for plugging filed 12/18/74 19  
Application for plugging approved same 19  
Plugging commenced 12/20/74 0900 on loc 19  
Plugging completed 12/20/74 1120 job comp. 19  
Reason for abandonment of well or producing formation Dry



Locate well correctly on above Section Plat

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 Richard Schmidt Gilbert J. Toman

Producing formation \_\_\_\_\_ Depth to top \_\_\_\_\_ Bottom \_\_\_\_\_ Total Depth of Well 3000 Feet

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

OIL, GAS OR WATER RECORDS

CASING RECORD

FORMATION	CONTENT	FROM	TO	SIZE	PUT IN	PULLED OUT

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.

Halliburton services. Ticket #838229

hole filled with mud. spot 40sks cement @ 500' thru 4 1/2" drill/pipe lay down D/p. 25 sks pumped thr d/pipe to 240' plug & 1/2 sk/hulls to 40' cemented to base of call with 10sks cement. rathole bridged & Cemented with 2 sks. Cement.

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

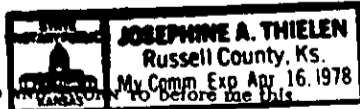
Name of Plugging Contractor Wilson Exploration and Development, Inc.

Address Drawer 546, Wilson, Ks.

STATE OF Kansas COUNTY OF Ellsworth so.

Julius Ehrlich, employee (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) Julius Ehrlich  
Julius Ehrlich Drawer 546, Wilson, Kansas  
(Address)



SUBSCRIBED 15th day of January 19 75

My commission expires April 16, 1978

Josephine A. Thielen

Notary Public.

RECEIVED  
STATE CORPORATION COMMISSION

17 1975  
01-17-75  
CONSERVATION DIVISION  
Wichita, Kansas

15-053-20392-00-00

RECEIVED  
STATE CORPORATION COMMISSION

FEB 3 1975

CONSERVATION DIVISION  
Wichita, Kansas

VIRGINIA E. VOPAT # 1

**Location:** The center of the  $W\frac{1}{2}$ ,  $SW\frac{1}{4}$  of the  $SW\frac{1}{4}$  of Section 14, Township 14 South Range 10 West of 6th P. M. Ellsworth County, Kansas  
**Commenced:** December 10, 1974

**Operator:** JACK BOCK AND OTHERS  
521 South 14 th Street  
Lincoln, Nebraska 68508  
**Completed:** December 20, 1974

**Contractor:** Wilson Exploration and Development, Inc.  
P. O. Drawer 546  
Wilson, Kansas 67490  
**Plugged:** December 20, 1974  
40 sxs @ 500 ft.  
25 sxs @ 240 ft.  
12 sxs @ 40ft to 0  
3 sxs in rat hole

**Casing:** 250 feet of 8 - 5/8ths inch cemented with 150 sacks of cement by Halliburton Oil Well Services, Hays, Kansas, as well as the above plugging.  
**Production:** D & A

- \* \* \* L O G \* \* \* -

(Figures indicate bottom of formation except where indicated otherwise)

Graneros shale	30	Zeandale lime top	2292
Dakota	210	Burlingame lime top	2368
Kiowa	305	Howard lime top	2438
Harper silt top	440	TOPEKA,	
		Wilson Creek top	2516
STONE CORRAL top		Queen Hill shale	2681
base		Oread lime top	2684
		HEEBNER SHALE top	2768
Ninnescah shale top	592	Toronto lime top	2788
HUTCHINSON SALT top	995		
base	1170	IATAN also called	
CHASE LIME GROUP & Herrington lime top	1340	Brown lime top	2866
		LANSING LIME top	2889
Towanda lime top	1462	Vilas shale top	2924
Ft. Riley lime top	1510	KANSAS CITY LIME	
Wreford lime top	1659	and also the	
NEVA LIME top	1830	Wyandotte lime top	2964
Foraker lime top	1956	Drilling terminated at near the base of said Wyandotte lime	
Woodsiding lime top	2102		
Grandhaven lime top	2147	TOTAL DEPTH	3000
First Tarkio sand top	2154		
Dover lime top	2167	DST # 1 by Halliburton ticket # 838526 was taken from 2504 to 2524 feet, recovered 15 ft. of mud. pressures, 64 to 36 and flow 14 & 14.	
Stotler lime top	2227		

DST # 2 by Halliburton, ticket # 838527 from 2968 to 2987 ft. recovered 28 feet of watery mud. Pressures: 720 to 333 & flow 19 to 28 lbs.

The 25 foot Lansing lime member or Captain Creek lime, the major producing zone of the Wilson Creek Pool was not developed into any oolitic lime & porosity.

The undersigned, JACK BOCK, hereby certifies that the above log is a true and correct log of the formations encountered in the drilling of the above well as reflected by daily drilling reports, sample examination and the geological log.

JACK BOCK  
 By: *Richard B. Schmidt*  
 Richard B. Schmidt  
 Petroleum Exploratin Consultant, AB & BBA  
 1219 College Avenue,  
 Topeka, Kansas 66604

**RICHARD B. SCHMIDT**1219 COLLEGE AVENUE  
TOPEKA, KANSAS 66604

PETROLEUM EXPLORATION CONSULTANT

December 27, 1974

JACK BOCK &amp; OTHERS

521 South 14 th Street

Lincoln, Nebraska 68508

Operator

VIRGINIA E. VOPAT # 1, the center  
of the West Half of the Southwest  
Quarter of the Southwest Quarter  
[ SW $\frac{1}{4}$  ] of Section 14, Township 14  
South, Range 10 West of the 6th P. M.,  
ELLSWORTH COUNTY, KANSAS**GENERAL:**Contractor: Wilson Exploration & Development, Inc.  
Wilson, Kansas 67490

Rotary Drilling: surface to total depth

Spudded &amp; set surface casing: December 10, 1974

Under surface casing drilling commenced: 12/11/74

Drilling completed: December 20, 1974, 3:58 a. m.

Total depth: 3,000 feet

**CASING:**Surface pipe: 250 feet of 8 - 5/8ths inch  
cemented with 150 sacks of cement

Production pipe:

none

**ELEVATIONS:**

Ground level after dirt work: 1749 feet

Derrick floor: 1752 feet

Rotary bushing: 1754 feet above sea level

Rotary bushing elevation and measurements used.

**DRILL STEM TESTS:** # 1 by Halliburton Oil Well Services, Hays, Kansas,  
on December 16, 1974, ticket # 838526 from 2504 to  
2524 feet.# 2 by the same firm on December 19, 1974, ticket  
# 838527 from 2968 to 2987 feet**CORES:**

None

**ELECTRIC LOGS:** None

## G E O L O G I C A L   D A T A

Ten (10) foot drilling samples were saved and examined wet from 2060 feet to 3,000 feet and one (1) foot drilling time was retained from 2,000 feet to the total depth of 3,000 feet.

The rotary drilling samples are being delivered to the Kansas Geological Survey at Wichita, Kansas, due to their requirements.

FORMATION TOPS =====	BY SAMPLES & TIME LOG =====	SUB-SEA =====
Grandhaven lime	2147	- 393
First Tarkio Sand	2154 to 2158	
Stotler lime	2227	- 473
Zeandale lime	2292	- 538
Burlingame lime	2368	- 614
Howard lime	2438	- 684
TOPEKA LIME = Wilson Creek	2516	- 762
Queen Hill shale	2681	
Oread lime	2684	
HEEBNER SHALE	2768	- 1014
Toronto lime	2788	
IATAN LIME (Brown Lime)	2866	- 1112
LANSING LIME	2889	- 1135
Vilas shale	2924	
KANSAS CITY LIME [ Wyandotte ]	2964	
Total depth	3000	- 1246

## Z O N E S   O F   I N T E R E S T

ROOT SECTION [ First Tarkio Sand ] 2154 to 2158  
=====

At 2150 feet, after circulating  $\frac{1}{2}$  hour, recovered dense buff limestone from the so called Grandhaven lime plus gray shales.

At 2162 feet, after circulating  $\frac{1}{2}$  hour, recovered light pale-green-brown sub-micaceous sandstone, very friable with NO odor or show of free oil or gas; gray claystone.

At 2170 feet, after circulating  $\frac{1}{2}$  hour, recovered more of the same; gray shale and siltstone; dense cream fossiliferous limestone from the top part of the so called Dover lime at 2167 feet.

TOPEKA LIME [ Kansas Geological Society terminology ] 2516 - 762  
=====

At 2510 feet, after circulating 1 hour in the Severy shale section for any gas shows, recovered dense gray fossiliferous limestone; dense gray and cream limestone.

At 2515 feet, after circulating 40 minutes, recovered more of the same and gray claystone.

At 2520 feet, after circulating 1 hour, recovered light tan dense small grain sucrosic dolomitic limestone with a poor to fair odor and a good live oil stain and florescence under black light examination but no shows of free oil or gas. It appears that this porous zone is from 2517 to 2519 feet on the time log with slightly rough drilling at 2519 feet.

At 2524 feet, after circulating 1 hour, recovered more of the last above.

DRILL STEM TEST # 1 by Halliburton Oil Well Services, Hays, Kansas, was taken from 2504 to 2524 feet on December 16, 1974, ticket # 838526, open 75 minutes with no blow after a tool flush. Recovered 15 feet of drilling mud. The initial closed-in pressure was 64 lbs & the final closed-in pressure was 36 lbs; Initial & final flow pressure was 14 lbs. on field readings.

OREAD LIME 2684  
=====

At 2730 feet, recovered light buff crystalline to cream chalky limestone.

At 2740 feet, recovered light gray-buff crystalline to cream chalky limestone.

At 2760 feet, recovered porous light tan crystalline to cream chalky limestone. These samples are from the porous zone of the Oread limestone formation from 2716 to 2720 feet; from 2742 to 2748 feet on the time log.

LANSING LIME 2889 - 1135  
=====

At 2900 feet, recovered gray-white fossiliferous limestone; light tan-gray fossiliferous limestone. NO SHOWS. Thus, in 89 minutes of drilling time, no shows were observed from the so called 10 foot zone or the upper Stanton member of the Lansing formation.

At 2920 feet after 70 more minutes of drilling time, recovered light tan cherty oolitic limestone; dense gray limestone.

At 2930 feet, after 80 more minutes of further drilling time with NO POROSITY ZONE, recovered more of the same.

At 2912 feet, only a portion of said foot had slightly rough drilling time. Using several other drilling time and electric logs, it appears that the normal productive porous Captain Creek zone of the Wilson Creek Field should have developed in this test well from 2907 to 2922 feet with indications that some small porosity was encountered from 2912 to 2915 feet with NO oolitic development and NO SHOWS WHATSOEVER. It is my opinion that the soft 8, 5, 6 minute drilling time from 2908 to 2911 feet is shale as in the RUPE & BELL - Vopat # 1 C, W $\frac{1}{2}$ , NE, SW $\frac{1}{4}$  of Section 23, 14-10, as evidenced by the Great Guns 4 curve electric log of said dry hole.

KANSAS CITY LIME [ Wyandotte member ] 2964  
=====

At 2970 feet, recovered white chalky limestone and Bonner Springs shales.

At 2975 feet, recovered white chalky limestone; cream sub-crystalline limestone after circulating 1 hour.

At 2985 feet, after circulating 1 $\frac{1}{2}$  hour, recovered dense light tan sucrosic limestone; light tan sub-oolitic limestone with a sucrosic matrix with a show of viscous free oil and gas with a fair to poor odor. This 13 foot porous zone is from 2969 to 2982 feet. A second small porous zone was encountered at 2985 to 2989 feet.

DRILL-STEM-TEST # 2 was taken by Halliburton Oil Well Services on December 19, 1974, ticket # 838527 from 2968 to 2987 feet [ 79 to 98 foot zone ], open 90 minutes, recovered 25 feet of watery mud. Initial closed-in pressure was 720 lbs & final closed-in pressure was 333 lbs. Initial flow pressure was 19 lbs & final flow pressure was 28 lbs. on field readings.

The drill-stem test covered the 79 to 98 foot zone area covering the porous upper half of the Wyandotte limestone or all of the so called 80 foot and the upper part of the 90 foot zone. This test compares to the zones covered in the above listed RUPE & BELL - Vopat C # 1, [74 to 95 feet tested] and the zones covered in the GLENN RUPE-Pekarek # 2 [ 71 to 97 feet tested], the NW, SE, NE $\frac{1}{4}$  of Section 20, 14-10 producing oil well with perforations 83 to 89 feet penetration into the Lansing top as well as others.

Apparently, the zones tested in this well did not contain sufficient adjacent-contiguous oolitic porosity and permeability to trap and yield oil or even water. The samples did indicate less than 10% oolitic with very, very few contiguous. All these negative indicators probably are due to " A RELATIVE TOO LOW STRUCTURAL POSITION AS WELL AS WRONG DIRECTIONAL LOCATION FOR OIL PRODUCTIVE RESULTS. "

At 2995 feet, recovered trip cuttings from the drill-stem trip.

At 3000 feet, recovered dense light gray-white sub-oolitic to sub-oolitic limestone; gray-white sub-oolitic, barren in the greater part with NO ODORS. At 3000 feet, this covered 111 feet of penetration into the Lansing-Kansas City Lime members.

STRUCTURAL COMPARISONS

Structural comparisons are made to the following test holes in Township 14 South, Range 10 West, Ellsworth County, Kansas:

FORMATION	GLENN UPE = Foran # 2, SE, SW of SW $\frac{1}{4}$ Section 15,	RUPE = Vopat # c-1, W $\frac{1}{2}$ , NE, SW $\frac{1}{4}$ Section 23	RUPE = Soukup # 1, SE, SE NE $\frac{1}{4}$ Section 22	THIS TEST WELL W $\frac{1}{2}$ , SW, SW $\frac{1}{4}$ Section 14
Grandhaven	?	- 370	- 369	- 393
Topeka Lime	- 754	- 738	- 736	- 762
LANSING LIME	- 1114	- 1110	- 1106	- 1135

As you can see, on all tops, this Vopat dry hole is structurally low to all the near-by test wells. It is 21 feet low on the Lansing lime to the nearest oil producer, the # 2 Foran listed above. It is 33 feet low to the L. G. STEPHENSON & CO. # E. Ptacek in the SW, SW of the NE $\frac{1}{4}$  of Section 15, 14-10.

CONCLUSIONS

Based upon the datum in the whole area, your Virginia E. Vopat dry hole is on the north slope or flank of the plunging nose of the NORTHWEST BLACK WOLF ANTICLINE since it has dropped 40 feet almost due north of the dry hole (-1095) in the NE $\frac{1}{4}$  of Section 27, 14-10 in a distance of 1 $\frac{1}{2}$  mile.

The North end of the NE $\frac{1}{4}$  of Section 22 and the South end of the SW $\frac{1}{4}$  of Section 14, in my opinion, are the north lines or ends of said anticline as evidenced by the " LANSING CONTOUR " map on page 5 prepared by me dated December 10, 1974, with no changes made after said date except adding the Lansing top of this Vopat dry hole.

The three dry holes between your V. Vopat and the dry hole in the NE $\frac{1}{4}$  of Section 27 due south did not have a massive porous oolitic development in the 25 foot zone or in the Captain Creek member above the Vilas shale. Thus, a northerly direction from the high axis of the NORTHWEST BLACK WOLF ANTICLINE generally does not obtain a massive oolitic development in this zone as it does in a south direction of the basic northwest & southeast trending axis, a situation as on the south flank of the Wilson Creek Lansing Pool.



JACK BOCK & OTHERS, 521 South 14th Street, Lincoln, Nebraska 68508

Virginia E. Vopat # 1, the center of the W $\frac{1}{2}$ , SW $\frac{1}{4}$  of the SW $\frac{1}{4}$  of Section 14,  
Township 14 South, Range 10 West, ELLSWORTH COUNTY, KANSAS.

Depth	Minutes per foot	Remarks
2001 - 2020	7 7 5 5 6 8 6 5 8 7 5 5 2 3 5 6 4 4 4 4	= Mix mud 12/14/74
2021 - 2040	2 4 3 3 2 3 2 1 2 3 2 2 6 8 6 6 6 4 5 6	
2041 - 2060	4 5 6 4 5 6 4 5 5 4 4 3 6 3 4 4 3 3 2 4	
2061 - 2080	4 3 3 3 3 3 2 3 2 1 2 3 5 5 3 2 3 2 4 1	= Mix mud
2081 - 2100	5 4 2 2 2 2 3 1 2 2 4 4 3 5 4 5 4 4 4 2	
2101 - 2120	3 7 6 6 8 6 5 6 6 6 6 6 4 4 4 3 2 3 3 2	= Vis. 40, 12/15/74
2121 - 2140	3 3 3 6 5 2 3 3 2 3 4 3 3 2 2 3 2 3 2 3	
2141 - 2160	2 2 2 1 1 1 2 9 4 2 3 4 4 3 3 3 3 3 2 1	= C @ 2162 & 2170 $\frac{1}{2}$ hr. each
2161 - 2180	1 $\frac{1}{2}$ $\frac{1}{2}$ 1 2 1 2 2 2 4 2 2 3 1 1 2 2 2 1 2	& 2150
2181 - 2200	1 1 2 1 2 1 2 1 2 1 2 2 2 2 2 2 1 2 1 2 2	
2201 - 2220	1 2 1 1 1 2 1 2 1 1 1 2 1 1 1 1 1 1 1 1	= Vis. 39
2221 - 2240	1 1 1 1 2 2 3 6 7 4 6 5 6 5 5 5 5 3 3 2	
2241 - 2260	3 6 7 4 2 4 3 5 7 4 4 4 4 3 4 4 4 4 4 2	
2261 - 2280	3 3 3 2 2 2 3 1 2 1 3 1 3 2 2 2 2 3 2 2	
2281 - 2300	2 2 3 3 2 2 3 2 3 1 2 2 3 6 5 5 4 5 8 5	
2301 - 2320	3 7 5 5 6 5 8 8 4 6 8 4 3 3 2 3 3 8 6 5	
2321 - 2340	5 7 5 4 2 2 2 2 5 7 5 6 7 6 6 5 3 4 4 1	
2341 - 2360	4 6 3 3 3 2 5 5 6 6 7 6 5 5 6 8 4 7 4 5	
2361 - 2380	2 3 4 3 4 3 3 2 4 6 8 4 6 6 6 4 5 8 2 3	
2381 - 2400	1 5 4 5 4 3 3 4 3 3 5 5 3 5 4 5 5 3 5 4	= Vis. 35
2401 - 2420	2 1 2 4 4 2 3 4 3 3 3 4 4 2 4 4 4 3 4 3	= Mix mud
2421 - 2440	4 3 4 4 4 3 3 5 4 3 4 4 2 3 5 3 3 4 5 6	= Vis. 40
2441 - 2460	5 5 6 2 3 5 8 5 4 2 3 3 5 3 5 4 4 5 6 5	
2461 - 2480	3 4 3 3 3 2 4 3 3 3 2 3 3 3 2 5 6 6 5 5	= 12/16/74 start
2481 - 2500	4 3 4 5 5 5 6 6 5 6 6 6 6 5 6 8 7 9 9 5	
2501 - 2520	7 7 7 7 3 2 5 3 3 4 2 3 4 3 3 4 3 3 3 5	C @ 2510-1 hr., 2515-40" = Vis. 41
2521 - 2540	5 5 5 7 7 6 6 6 4 6 5 5 5 5 5 5 7 6 5	= SR@ 2519, C @ 2522 $\frac{1}{2}$ hr.
2541 - 2560	5 7 5 5 4 4 3 2 4 3 3 4 3 4 3 2 3 4 3 6	= C @ 2560 $\frac{1}{2}$ hr. 12/17/74
2561 - 2580	3 2 2 10 10 6 6 6 8 6 6 6 7 5 6 4 5 5 5 6	= Mix mud & trip @ 2570 # 4
2581 - 2600	6 4 5 5 6 5 3 3 3 4 2 2 2 3 2 3 2 3 5 4	= Vis. 41
2601 - 2620	6 3 4 4 4 5 4 2 4 5 5 5 4 3 4 5 2 2 3 3	
2621 - 2640	4 6 5 5 5 5 2 2 3 3 3 4 5 3 2 2 3 3 3 2	
2641 - 2660	4 2 4 2 3 4 6 4 3 3 3 2 5 3 3 5 2 2 4 4	= 12/18/74
2661 - 2680	3 4 5 4 4 6 5 4 3 5 4 5 5 5 5 4 4 4 4 4	
2681 - 2700	4 3 3 4 3 3 3 4 4 4 4 5 5 4 4 4 3 3 2 2	
2701 - 2720	2 3 4 4 4 3 3 2 2 3 4 5 6 6 3 3 3 1 1 2	
2721 - 2740	2 4 2 4 2 2 3 3 5 5 5 5 5 5 5 5 4 5 4	
2741 - 2760	4 4 3 1 1 4 2 3 3 5 4 7 7 7 7 5 4 5 6 8	
2761 - 2780	5 7 8 7 9 9 9 7 8 4 4 7 13 14 9 10 8 9 8 4	
2781 - 2800	11 10 8 9 10 8 6 8 10 9 6 4 4 4 5 6 9 10 9 12	
2801 - 2820	14 10 9 7 9 6 8 3 4 9 7 5 5 5 5 4 3 3 2 3	
2821 - 2840	3 3 4 3 3 3 2 2 2 2 3 3 3 4 2 3 4 3 4 6	= Vis. 39
2841 - 2860	5 3 4 5 4 6 5 5 5 4 6 6 5 5 4 3 5 4 5 5	
2861 - 2880	8 5 5 4 5 7 9 4 5 7 10 9 5 10 6 8 9 6 7 6	
2881 - 2900	4 5 6 6 5 8 5 6 6 9 8 10 9 8 8 10 9 10 8 7	= 12/19/74
2901 - 2920	8 7 8 6 9 6 10 8 5 6 6 6 6 6 7 8 7 7 8 9	SR@ 2912 only part of ft.
2921 - 2940	9 8 8 6 8 6 7 6 10 12 8 5 5 6 6 6 7 9 6 8	
2941 - 2960	9 12 9 7 8 9 8 7 8 8 7 8 8 8 7 8 8 7 6 10	
2961 - 2980	6 4 2 1 3 6 8 7 4 $\frac{1}{2}$ $\frac{1}{2}$ 2 2 1 1 1 2 2 2 5	
2981 - 3000	6 4 9 10 8 8 7 5 5 9 5 5 6 10 10 10 8 5 7 10	12/19/74 @ 2987 end end drilling @ 12/20/74 3:58 a. m.

Excellent drilling mud used through-out the whole drilling.