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State Geological Survey WICHITA, BRANCH

STATE COMORATION COMMISSEMI,

GEOLOGICAL REPORT:

Schluntz No. 2 C-NE-NW, 30-1S-18W Phillips County, Kansas

CONTRACTOR:

Abercrombie Drilling Co., Rig 10

DRILLING COMMENCED:

April 24, 1981

DRILLING COMPLETED:

April 30, 1981

CASING RECORD:

8 5/8" set at 248' cemented with 180 sx. class A, 2% gel., 3% cc. 4 1/2" set at 3600' cemented with 50 sx. 50/50 poz., 10.5 lbs gil./sx., followed by 125 sx. 60/40 poz., 2% gel., 12% salt.

SAMPLES:

10' intervals from 3250' to 3600' R.T.D.

DRILLING TIME:

By Geolograph 1' intervals from 3150' to 3600' R.T.D. A copy of the plotted time/lithology log is included with this report.

DRILLSTEM TESTS:

2 by Cheney Testing Co. Hays, Kansas

LOGS:

Petro-Log (Great Bend, Kansas) Radiation Guard Log

ELEVATION:

Laughlin-Simmons Co., of Kansas Kelly Bushing 2153' Ground Level 2145' V Measurements from K.B.

SchlantzAV

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FORMATION TOPS

(Petro Log R.A. Guard Log)

KB-2153 Pi Ground L. 2145

FORMATION	DEPTH	MINUS DATUMS
Anhydrite	1747	+ 406
Base Anhydrite	1765	+ 388
Topeka	3041	- 888
Heebner	3312	- 1159
Toronto	3339 -	- 1186
Lansing - Kansas City	3356 ~	- 1203
Base - Kansas City	3579 [—]	- 1426
Rotary T.D.	3600	- 1447
Log T.D.	3602	- 1449
	-	

Lithology: Zones of Interest

Toronto 3339-42	LS;	white to light gray, fine crystalline, dense to chalky. Trace of pinpoint porosity. No free oil or odor.
Lansing- Kansas City 3356-63 A Zone	LS;	white, fine crystalline and dense, slightly oolitic. Trace of very light stain. No free oil or odor.
3392-96 C Zone	LS;	white to brown, fine crystalline, trace of light stain, slightly fossiliferous. No free oil or odor.
3412-16 D Zone	LS;	white to light gray, fine crystalline and dense, slightly chalky. Trace of free oil and light stain, no odor.
3430-34 F Zone	LS;	white to buff, fine crystalline and chalky. Trace of light stain, no free oil or odor.
3450-54 G Zone	LS;	white to buff, fine crystalline, dense to chalky. Trace of spotty stain, no free oil or odor.

Litho	ology
Page	2

3486-88 H Zone	LS;	white to buff, crystalline and chalky. Trace of very poor stain. No free oil or odor.
3505-07 & 3512-14 I Zone	LS;	white to tan, fossil crystalline porosity, with free oil, fair odor and dark stain.
3522-Top J Zone	LS;	white to buff, fine crystalline and dense, slightly uugular. Trace of free oil and \checkmark light stain.
3550-54 K Zone	LS;	buff to brown, fine crystalline and dense. No free oil or odor.
3560-Top L Zone	LS;	buff to brown, fine crystalline with a trace of fair crystalline porosity, slightly chalky. No free oil or odor.

NOTE: No shows below the Base of the Kansas City.

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DRILLSTEM TESTS:

Drillstem Test No. 1

3375-3440 L.K.C.

Time: Open 30 min., Shut in 45 min., Open 30 min., Shut in 45 min.

Blow: Initial - building weak blow

Final - weak

Recovery: 62' of oil specked mud

IFP: 29-29 1733# IHMP: FFP: 860# ISIP: BHT: 840# FSIP:

FHMP: 1713#

Mud Wt. 9.4

Vis. 47

59-39

N.A.

W1. 8.8

Drillstem Test No. 2

3492-3535 L.K.C.

Open 60 min., Shut in 45 min., Open 30 min., Shut in 45 min. Time:

Initial - weak Blow:

Final - weak

Recovery: 15' of heavy oil cut mud

49-39 IFP: IHMP: 1811# FFP: 49-39 673# ISIP: BHT: N.A. 712# FSIP:

1723# FHMP:

Vis. 102 Mud Wt. 9.1

W1. 9.2

30-1-184

11.25

	,			BIT RECORD		•		•
	SIZE	MAKE	TYPE	SERIAL	JET SIZE	DEPTH OUT	FEET	HOURS
1.	7 7/8	Reed	Y-12	912993	14/32	1740'	1491'	10.45
2.	7 7/8	Reed	Y-13T	912585	14/32	2347'	607'	10.25
3.	7 7/8	Reed	HS551	931592	14/32	3440'	1093'	49.75

BK7359

7 7/8

4.

Smith

F-3

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14/32

3600'

160'

REMARKS AND RECOMMENDATIONS

The table below compares the Schluntz No. 2 with the Schluntz No. 1.

	JAMES D. BERWICK SCHLUNTZ NO. 2	JAMES D. BERWICK SCHLUNTZ NO. 1		
	C-NE-NW 30-1S-18W			
Topeka ·	3041 (- 888)	3026 (- 894)		
Toronto	3339 (-1186)	3321 (-1189)		
Lansing	3356 (-1203)	3335 (-1203)		

After reviewing the table above, you will note that the two above captioned wells were flat structurally.

In reviewing the samples, drill stem tests and log, the I Zone should be perforated and treated. Also the C and F Zones should be perforated at the time of initial completion or before abandonment. The shows in these zones and the log characteristics warranted further testing a 4 1/2 production casing was set.

Prior to completion of the Schluntz No. 2, I recommend a cased hole gamma ray-neutron collar log be run to accurately locate and evaluate all zones of porosity.

Respectfully,

David Shumaker

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