

## LOG OF WELL

SHEET No. 3District **Casper - Luft** Owner **The Texas Company Farm** **Knudson** Well No. **#2**

FORMATION	AMOUNT	COLOR	HARD OR SOFT	DEPTH CORES TAKEN	REMARKS
<u>FORMATION TOPS FROM SCHLUMBERGER ELECTRIC LOG</u>					
Tertiary	Surface				
Pierre	834				
Niobrara	3957				
Fort Hayes	4298				
Carlile	4362				
Greenhorn Limestone	4564				
Graneros	4570				
Bentonite Marker	4714				
Dakota "D" Sands	4810				
Base "D"	4836				
Dakota "J" Sands	4913				
Driller's T.D.	4993				
Schlumberger T.D.	4995				
<u>DRILL STEM TESTS</u>					
DST. #1	September 27, 1952				
	Packer set at 4810' - 4818'				
	Tool open 1 hour; Shut in 15 Min.				
	Misrun. Could not get to bottom.				
DST. #2	September 27, 1952				
	Packer set at 4810' - 4818'				
	Tool open 1 hour; Shut in 15 Min.				
	Tool opened with good blow. Gas to surface in 1 hr.				
	Recovered 40' of oil & gas cut mud, 60' muddy water, 800' clear water.				
	IP - 300; PP - 1400; SI - 1500; HP - 2750;				
DST #3	September 29, 1952				
	Packer set at 4916' - 4922'				
	Misrun. Could not get down with packer				
DST. #4	September 30, 1952				
	Packer set at 4916' - 4922'				
	Tool open 1 hr.; Shut in 15 Min.				
	Instant strong blow of gas & gas cut water. Est. gas @ 500 MCF				
	Rec. 120' of free oil & distillate, 1451' of water				
	IP - 425; PP - 860; SI - 1260; HP - 2415;				
DST. #5	October 3, 1952				
	Packer set at 4962.5' to 4995'				
	Tool open 1 hour; Shut in 15 Min.				
	Instant blow continued for approximately 15 Min., gradually decreased to 0 at end of test, no gas.				
	Rec. 100' of mud, 2934' of water				
	IP - 970; PP - 1360; SI - 1360; HP - 2460.				

## LOG OF WELL

SHEET No. 4District Casper - Left Owner The Texas Company Farm Knudson Well No. #2

FORMATION	AMOUNT	COLOR	HARD OR SOFT	DEPTH CORES TAKEN	REMARKS
DST. #6 October 3, 1952 Packer set at 4960.5 - 4978.5 Tool open 1 hour; Shut in 15 Min. Instant strong blow to 0 in 1 hour. No gas. Rec. 90' mud, 294' of water IP - 660; FP - 1350; SI - 1350; HP - 2370.					
DST. #7 October 4, 1952 Packer set at 4811' - 4817' Tool open 1 hour; Closed 15 Min. Instant lite blow 15 min., fair blow 30 minutes and strong blow at end of 60 minutes. Rec. 60' heavy oil cut mud, 30' of oil & water cut mud. IP - 0; FP - 0; SI - 1275; HP - 2650.					
<u>CORE RECORD</u>					
<u>Core No. 1, from 4800' to 4840'</u>					<u>Cut 40'; Rec. 40'</u>
4800.0 - 4808.0	8				sh, bl, rotten
4808.0 - 4809.1	1.1				ss, dirty, fn, hard, sl per, tite, sl st & odor.
4809.1 - 4809.2	.1				Coal
4809.2 - 4809.4	.2				ss as above
4809.4 - 4809.5	.1				sh, bl, rotten
4809.5 - 4813.5	4.				ss, fn, clean, sh lam, hard, tite, appears wet
4813.5 - 4816.5	3.				ss, fn, bn, gy, clean, por, tite, med hd, good st & odor, VF
4816.5 - 4818.0	1.5				silt, h, tite, sandy, shaly, sl st & odor, VF.
4818.0 - 4818.5	.5				sh, bl, hd, sandy, barren
4818.5 - 4822.5	4.				sh, bl, rotten
4822.5 - 4824.0	1.5				sh, bl, hd, silty, sandy, barren
4824.0 - 4826.0	2.				ss, fn, gy, hard, tite, appears wet, VF
4826.0 - 4830.4	4.4				sh, bl, hd, sandy, tite, barren
4830.4 - 4835.7	5.3				ss, gy, clean, hd, por, appears wet.
4835.7 - 4837.0	1.3				ss, sh, lam, (ss, clean, hd, tite, barren)



## LOG OF WELL

SHEET No. 5District Casper - Luft Owner The Texas Company Farm Knudsen Well No. #2

FORMATION	AMOUNT	COLOR	HARD OR SOFT	DEPTH CORES TAKEN	REMARKS
<u>Core #1, from 4800' to 4840' (cont.)</u>					
4837.0 - 4838.6	1.6				sh, bl, hd, sandy
4838.6 - 4839.1	.5				bent, brn, soft
4839.1 - 4840.0	.9				sh, bl, hd (0.2' coal on bottom)
<u>Core No. 2, from 4910' to 4953'</u>					
4910.0 - 4911.3	1.3				ss, silty, v shaly, gy, dirty, hd, tite, carb fossil, barren
4911.3 - 4913.0	1.7				ss, fn, dirty, gy, hd, tite, silty, shaly, carb, fossil.
4913.0 - 4915.0	2.				ss, ss (11.3-13.0) sl stain & odor
4915.0 - 4921.5	6.5				ss, clean, gy, fn, por, hd, good st & odor
4921.5 - 4953.0	31.5				ss, as above, appears wet. small sh fractures 26.0-30.0, 36.0-37.0. sh streak 47.5, 49.1
<u>Core No. 3, from 4953' - 4984'</u>					
4953.0 - 4955.3	2.3				sh, ss, interlam, ss hd tite, barren.
4955.3 - 4959.3	4.				sh, bl, hd, sandy, barren
4959.3 - 4964.9	5.6				ss, fn, por, med hd, clean, good st & odor, appears gassy.
4964.9 - 4966.0	1.1				ss, fn, very mica, glauco., black, good st & odor
4966.0 - 4973.8	7.8				ss, fn, por, clean, med hd, good st & odor bleed.
4973.8 - 4975.3	1.5				ss, as above, no st or odor, appears wet
4975.3 - 4984.0	8.7				Lost (Core catcher didn't hold)

17-8N-53W

## GEOLOGICAL DATA AND DRILLING AND COMPLETION PROCEDURE

FORMATION OR DATE	TOP-DEPTH INTERVAL	REMARKS OR DESCRIPTION AND RESULTS OF WORK
		<p style="text-align: right;">MAR 10 1964</p> <p style="text-align: center;"><u>GENERAL</u></p> <p style="text-align: right;">OIL &amp; GAS CONSERVATION COMMISSION</p> <p>This well was drilled to a total depth of 4995' on October 5, 1952, and was plugged and abandoned at that time as non-commercial.</p> <p style="text-align: center;">D-ZONE</p> <p>With 1-1/2" pump set at 4780', operating 16-1/2 SPM with 4 1/4" stroke, pump tested "D" zone interval 4810-4820' for 7 days. Recovered 877 bbls water with slight trace oil.</p> <p>Cement squeezed D Zone interval 4810-4820' with 50 cu ft low fluid loss cement. Maximum squeeze pressure 3000 psi. Reversed out 10 sx.</p> <p><u>J-Zone: Drilled out cement and cleaned out to plug back depth of 4949'. Ran 1-1/4" tubing, and completed well in J-sand perforated intervals 4914-23' for 850 MCFG/day with 70 BW/day.</u></p>



WELL Doris Knudson #2 FIELD Luft AREA McCook (Colo)