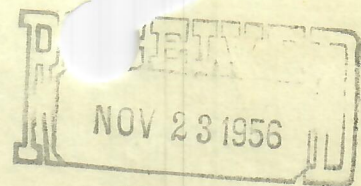




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Form PO-214 (Sheet 2 (12-52) 50M)

CONSERVATION COMMISSION

LOG OF WELL

SHEET No. 2

District Casper Wildcat Owner The Texas Company Farm Windsor Reservoir Well No. 1

FORMATION	Bottom	AMOUNT	COLOR	HARD OR SOFT	DEPTH CORES TAKEN	REMARKS
Derrick elevation	11	11				Rotary bushing to ground.
	1420	1409				Gravels & alluvium of gray & pink quartz rounded pebbles.
	3275	1855				Dark gray to black clay shale, few calcareous beds, soft & gummy, w/stringers of limestone & fish scales in places.
	3618	343				Shale, limey, black, (slightly silty).
	3647	29				Shale, sands & silty shale, calcareous limestone stringers.
	3714	67				Limestone, brown, dense hard, cherty.
	3745	31				Shale, silty siltstone, black, silty lime stringers, calcareous few thin sandstone beds.
	4148	403				Sandstone, very fine to fine and well sorted grains angular to subangular, friable.
	4274	126				Shale, dark gray.
	4350	76				Sandstone, tan to white, fine to medium grain.
	4423	73				Gray shale & siltstone.
	4440	17				Sandstone, white, soft
	4470	30				Shale & siltstone w/ some limestone.
	4656	186				Limestone, tan to brown, dense & hard.
	4704	48				Sandstone, white, medium to coarse grain
	4879	175				Shale, tight sandy
	5264	385				Dolomite, light pink, soft.
	5364	100				Dolomite, light to dark brown, dense.

LOG OF WELL

SHEET No. 3

District Casper Wildcat Owner The Texas Company Farm Windsor Reservoir Well No. 1

FORMATION	Bottom	AMOUNT	COLOR	HARD OR SOFT	DEPTH CORES TAKEN	REMARKS
	5426	62				Anhydrite, light gray.
	5544	118				Sandstone, light gray fine to medium grain.
	5605					Total Depth
FORMATION TOPS						
	Tertiary				Surface	
	Pierre Shale				1420	
	Niobrara				3275	
	Carlisle Shale				3647	
	Greenhorn				3714	
	Graneros				3745	
	Bentomite Marker				3915	
	Muddy				4148	
	Kiowa				4274	
	Dakota				4350	
	Fuson				4423	
	Lakota				4440	
	Morrison				4470	
	Sundance				4656	
	Entrada				4704	
	Lykins				4879	
	Forelle				5264	
	Day Creek				5364	
	Blaine				5426	
	Lyons				5544	
	Base of Lyons				5577	
	Total Depth				5605	

LOG OF WELL

SHEET No. 4District Casper Wildcat Owner The Texas Company Farm Windsor Reservoir Well No. 1

FORMATION	Bottom	AMOUNT	COLOR	HARD OR SOFT	DEPTH CORES TAKEN	REMARKS
<u>STRAIGHT HOLE SURVEY</u>						
	40'				1/2°	Totco
	70'				1/2°	"
	87'				1/2°	"
	117'				1/2°	"
	148'				1/4°	"
	400'				0°	"
	500'				0°	"
	518'				0°	Eastman
	625'				1/4°	"
	716'				1/4°	"
	827'				1/2°	"
	942'				3/4°	Totco
	983'				1°	Eastman
	1115'				1°	Totco
	1206'				1°	"
	1305'				1-1/4°	"
	1348'				1-1/4°	"
	1439'				1-1/4°	"
	1480'				1-1/4°	Eastman
	1602'				1°	"
	1723'				1°	Totco
	1814'				1°	"
	1895'				1-1/4°	Eastman
	1995'				1-1/4°	"
	2088'				1-1/2°	Totco
	2140'				1-3/4°	Eastman
	2250'				1-1/2°	Totco
	2294'				2°	"
	2337'				3-1/2°	Eastman
	2365'				4-3/4°	"
	2396'				5-1/4°	"
	2425'				5-1/2°	"
	2475'				5-3/4°	"
	2496'				5-3/4°	"
	2518'				6-1/4°	"
	2542'				6-1/2°	"
	2603'				8-1/4°	"
	2694'				10-1/2°	"
	2752'				11-1/2°	"
	2814'				11-1/2°	"
	2905'				11-3/4°	"
	2995'				12-1/4°	"
	3085'				12°	"
	3145'				12-1/4°	"
	3238'				12-1/2°	"
	3300'				12-3/4°	"
	3360'				12-1/2°	"
	3422'				12-1/4°	"
	3513'				12-1/4°	"
	3603'				12°	"
	3695'				11-1/2°	"
	3785'				10-3/4°	"
	3875'				10-10°	"
	3935'				9-1/2°	"
	3995'				10-1/2°	"
	4056'				11-1/4°	"
	4116'				12°	"
	4164'				12-3/4°	"
	4236'				12-3/4°	"
	4300'				13°	"
	4365'				12-1/2°	"

LOG OF WELL

SHEET No. 5

District Casper Wildcat Owner The Texas Company Farm Windsor Reservoir Well No. 1

FORMATION	Bottom	AMOUNT	COLOR	HARD OR SOFT	DEPTH CORES TAKEN	REMARKS
	4438'					
	4487'				12-1/2°	Eastman
	4548'				12-1/4°	"
	4610'				12°	"
	4680'				11-1/2°	"
	4737'				10-3/4°	"
	4796'				11°	"
	4856'				11°	"
	5007'				11-1/2°	"
	5109'				11-1/4°	"
	5277'				10-3/4°	"
	5408'				9-1/4°	"
	5545'				8°	Totco
					6-1/4°	"
CORE DESCRIPTIONS						
Core #1	4141 - 4154	41	54	Recovered 13'		
				Fine grained sandstone w/fair to poor pinpoint porosity; scattered shale partings; solid staining and fluorescence; scattered shale partings; some vertical frac.		
Core #2	4357 - 4373	57	63 1/2	Recovered 14-1/2'		
				Sand, tan, fine, poor to fair porosity & permeability, good stain.		
	63 1/2	64 1/2		Shale, black.		
	64 1/2	69 1/2		Siltstone, no show.		
	69 1/2	71 1/2		Shale and siltstone, no show.		
	71 1/2	73		Lost		
Core #3	4379 - 4390	79	90	Recovered 11'		
				Siltstone, gray, hard, lime, no shows.		
Core #4	4397 - 4413	97	13	Recovered 16'		
				Sand, tight, silty, shaly, no shows.		
Core #5	4413 - 4437	12	23	Recovered 24'		
		23	25	Siltstone, sandy, tight, no shows.		
		25	29	Shale, maroon.		
		29	33	Siltstone, dense, shaly.		
		33	37	Shale, black.		
				Shale, maroon.		
Core #6	4723 - 4738 1/2	23	38 1/2	Recovered 15-1/2'		
				Sand, tan to pink, fine, very friable, good porosity and permeability, no saturation, apperars wet.		
Core #7	5545 - 5560	45	46	Recovered 15'		
		46	54	Sand, light gray, fine hard tight, no show.		
				Sand, light gray, hard, friable, poor to fair porosity & permeability, dark oil stain, dull fluorescence, good odor, bleeding oil.		
	54	60		Same as above but slightly more spotty stain, bleeding oil.		

LOG OF WELL

SHEET No. 6District Casper Wildcat Owner The Texas Company Farm Windsor Reservoir Well No. 1

FORMATION		AMOUNT	COLOR	HARD OR SOFT	DEPTH CORES TAKEN	REMARKS
Core #8	5560 - 60	5575 63 $\frac{1}{2}$	Recovered 12-1/2'			
	63 $\frac{1}{2}$	67	Sand, firm, hard, poor porosity & permeability, dark oil stain, odor & fluor.			
	67	67 $\frac{1}{2}$	Sand, gray, fine, hard, very poor porosity & permeability with thin streaks oil stains.			
	67 $\frac{1}{2}$	72 $\frac{1}{2}$	Anhydrite.			
	72 $\frac{1}{2}$	75	Sand, light gray, very hard, fine, no shows.			
			Lost			
Core #9	5575 - 75	5595 77	Recovered 20'			
	77	78	Sandstone, gray, fine to medium grain; silicious cement, tite, cross bedded w/ thin streaks sandstone and dull fluorescence.			
	78	80	Siltstone, dark gray, fine grain, tite, no show.			
			Sandstone, red to gray, fine grain, friable, tite, no show.			
	80	95	Siltstone, dark red to maroon, tite no shows.			

DRILL STEM TESTS

Made Halliburton Drill stem Test, in 4-1/2" OD drill pipe, total depth 867'. Three misruns, unable to find packer seats at 700'; 725'; 730'. Recovered very little drilling mud each time.

Made Halliburton Drill Stem Test, in 4-1/2" OD drill pipe, from 3627' to 3648'.

Chokes: 5/8" Bottom; 1/2" Top.
 Time: 2 hours 7 minutes.
 Max. Surf. Pressure: 0# Weak blow died completely in 10 minutes.
 Recovery: 5' drilling mud.
 BHFP: 20# - 20#
 BHSIP: 23# (25 minutes)
 Mud Head: 1878#

Made Halliburton Drill Stem Test, in 4-1/2", OD drill pipe, from 4151' to 4162'.

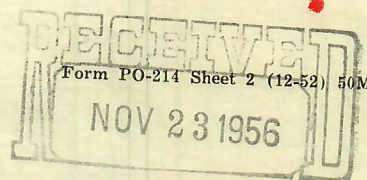
Chokes: 5/8" Bottom; 1/2" Top.
 Time: 55 minutes.
 Max. Surf. Pressure: 0# Opened with medium blow increasing to strong blow that slowly decreased to medium blow throughout test.
 Recovery: 60' of muddy water.
 BHFP: 18# - 332#
 BHSIP: 1196# (15 minutes)
 Mud Head: 2110#

Made Halliburton Drill Stem Test #4, in 4-1/2" OD drill pipe, from 4165' to 4218'.

Chokes: 5/8" Bottom; 1/2" Top
 Time: 1 hour 55 minutes.
 Max. Surf. Pressure: 0# Opened with fair blow and remained same throughout test.
 Recovery: 1030' of water and some mud.
 BHFP: 72# - 446#
 BHSIP: 1148#
 Mud Head: 2111#

LOG OF WELL

SHEET No. 7

OIL & GAS
CONSERVATION COMMISSION

District Casper Wildcat Owner The Texas Company Farm Windsor Reservoir Well No. 1

FORMATION	AMOUNT	COLOR	HARD OR SOFT	DEPTH CORES TAKEN	REMARKS
Made Halliburton Drill Stem Test from 4352' to 4373'.				#5, in 4-1/2" OD drill pipe,	
Chokes:				5/8" Bottom; 1/2" Top.	
Time:				1 hour 15 minutes	
Max. Surf. Pressure:				0# Opened with medium blow that remained for 1 hour then decreased slightly for rest of test.	
Recovery:				840' of slightly muddy with trace of sulphur water.	
BHFP:				18# - 366#	
BHSIP:				1830# (15 minutes)	
Mud Head:				2200#	
Made Halliburton Drill Stem Test from 5543' to 5560'.				#6, in 4-1/2" OD drill pipe,	
Chokes:				5/8" Bottom; 1/2" Top.	
Time:				1 hour 30 minutes.	
Max. Surf. Pressure:				0# Opened with very weak blow that died in six minutes.	
Recovery:				10 gallons of mud and 1 gallon oil.	
BHFP:				18# - 18#	
BHSIP:				1756# (1 hour)	
Mud Head:				2778#	
Made Halliburton Drill Stem Test from 5560' to 5595'.				#7, in 4-1/2" OD drill pipe,	
Chokes:				5/8" Bottom; 1/2" Top.	
Time:				2 hours 30 minutes.	
Max. Surf. Pressure:				0# Tool opened and slid approximately 8'. Received medium blow decreasing slowly for 20 minutes then died.	
Recovery:				142' drilling mud with very slight show of rainbow of oil. No free oil or water.	
BHFP:				80# - 62#	
BHSIP:				968# (30 minutes)	
Mud Head:				2796#	
CASING SETTING					
2.15	HOWCO Float Shoe				
403.44	10-3/4" OD 32.75# 8Rd H-40 Casing				
405.59	Total				
11.00	Derrick elevation				
416.59	Setting Depth				
Cemented with 300 sacks of Pozzolan cement, 2% CaCl ₂ . Cement was circulated to surface and allowed to set for 32 hours, then tested with 900 psi for 40 minutes before drilling was resumed.					
Ran Schlumberger Microlog and electric well survey to bottom; Schlumberger's measurement 5605'. Driller's measurement 5605'.					

SHEET No. 8

FORMATION

AMOUNT

COLOR

HARD OR SOFT

DEPTH CORES
TAKEN

REMARKS

PLUGGING RECORD

Plug No. 1	5575 - 5513 KB with 25 sacks regular cement.
Plug No. 2	4436 - 4115 KB with 125 sacks regular cement.
Plug No. 3	447 - 397 KB with 30 Sacks of regular cement.
Plug No. 4	Top of surface casing (2' below surface) to 15' below surface with 7 sacks of regular cement.
	9.9# Gel mud placed between all plugs.