

Computer Inventories

FORMATION LOG

Deep Rock #6 Calbeck
NE/NE/NE; 33-26S-13W
Pratt County, Kansas
Elevation: 1949 derrick floor

10 3/4" surface casing 798'; 500 sacks
500# c.c.
7" casing 4401; 200 sacks; 3% gel.

Note: All measurements are taken from the top of the rotary bushing which is three (3) feet above the derrick floor.

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
0 - 170	Surface clay and shale	Drillers log 0 - 3500'
170 - 185	Sand & gravel	
185 - 300	Shale & shells	
300 - 800	Red bed	
800 - 825	Anhydrite	Stone Corral
825 - 1300	Shale & shells	
1300 - 1890	Salt & shale	
1890 - 2075	Shale & limestone	
2075 - 2195	Limestone	
2195 - 2375	Limestone & sand	
2375 - 2620	Limestone & sand	
2620 - 2800	Shale & limestone	
2800 - 3060	Shale	
3060 - 3200	Shale & sand	
3200 - 3375	Shale	
3375 - 3500	No log	
	<u>Sample log starts 3500'</u>	
3500 - 3564	Limestone: white to tan, finely crystalline to crystalline.	
3564 - 3568	Shale: dark gray	
3568 - 3581	Limestone: tan, finely crystalline.	
3581 - 3585	Shale: brown-black, soft	Heebner.
3585 - 3590	Limestone: dark gray to brown, sub-crystalline.	Leavenworth
3590 - 3601	Shale: green-gray, some silty.	Snyderville.
3601 - 3617	Limestone: white to cream, finely crystalline.	Toronto
3617 - 3646	Shale: gray, green-gray; trace brown shale	Douglas
3646 - 3686	Sand: gray, angular, sub-medium to fine, micaceous.	
3686 - 3745	Shale: gray; some green & brown.	
3745 - 3750	Limestone: dark brown to gray, dense.	Brown Lansing
3750 - 3769	Shale: gray;	
	Limestone: streak, as above	
3769 - 3791	Limestone: tan, sub-crystalline, some large brown, oolites	Lansing
	Chert: some gray opaque with large oolites	
	Shale: streak gray	
3791 - 3809	Limestone: white to gray; finely crystalline, a few oolites.	Some vugular porosity; fair odor; trace free oil & stain
3809 - 3819	Limestone: brown to tan, sub-crystalline to dense	
	Shale: streak gray at bottom	
3819 - 3832	Limestone: tan, sub-crystalline	Some porosity; trace stain; no odor.

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<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
3832 - 3856	Limestone dark brown to light gray, dense; chert, dark brown, translucent & light gray, opaque; streaks gray shale.	
3856 - 3870	Limestone, buff & brown, mottled, crystalline	Slight trace vugular porosity, trace stain.
3870 - 3883	Limestone, as above; chert, as above.	Slightly more porous.
3883 - 3917	Limestone tan, sub-crystalline to finely crystalline; much gray, opaque, chert; streak brown shale.	
3917 - 3922	Limestone, as above.	Trace oolitic or vugular porosity; trace dark stain
3922 - 3935	Limestone, as above; chert, white, devitrified, tan, oolitic & gray, translucent, much gray shale.	
3935 - 3939	Limestone, brown, oolitic	Trace pin-point porosity & trace stain.
3939 - 3951	Limestone & shale, as above.	
3951 - 3957	Limestone, finely crystalline, as above; some gray, opaque chert.	some vugular porosity & dark stain.
3957 - 3967	Limestone, gray to white, sub-crystalline to dense, chalky.	
3967 - 3974	Limestone, as above.	Good pin-point & vugular porosity; good stain, fair odor.
3974 - 4000	Limestone, gray to white, chalky; shale gray, brown & green	
4000 - 4004	Limestone, tan, sub-crystalline to dense	Trace porosity & stain
4004 - 4111	Limestone, as above; shale, gray, green & some brown; some gray, translucent to opaque chert.	
4111 - 4180	Limestone & chert, as above; shale, red, green, gray & brown.	
4180 - 4214	Chert, white, opaque, vitreous, some amber translucent & some white, devitrified with brown stain.	Conglomerate
4214 - 4252	Shale, green; some chert, as above.	Viola
4252 - 4292	Chert, white & gray blue, opaque to translucent.	
4292 - 4297	Limestone	
4297 - 4300	Shale, green	Simpson
4300 - 4306	Dolomite, light brown, finely crystalline	Some vugular porosity & stain
4306 - 4315	Sandy dolomite & dolomitic sand	Some vugular porosity & stain
4315 - 4317	Shale, green	
4317 - 4328	Dolomite, light brown, finely crystalline, slightly sandy	Trace vugular porosity & stain no odor.
4328 - 4330	Shale, green	
4330 - 4345	Sand, brown, medium, angular, somewhat shaly & dolomitic	Fair saturation
4345 - 4348	Dolomite, as above	
4348 - 4400	Mostly green gray shale; streak dolomite and sand.	
4400 - 4405	Dolomite, brown, finely crystalline, oolitic, tan, finely sucrose; chert, white to tan, oolitic	(Arbuckle; trace vugular porosity with good show free oil, no odor.
4405	ROTARY TOTAL DEPTH	

(3) Formation log; Deep Rock #6 Calbeck

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
	<u>Drilling in samples:</u>	
4404 - 08	Dolomite, gray to tan, to brown, dense, some sandy; sand, white, medium quartzite; trace pale, green shale.	
4408 - 4410	Dolomite, tan, crystalline, tight	
4410 - 4412	Dolomite, as above; trace green shale	
4412 - 4414	Dolomite, gray to tan, sub-crystalline to finely crystalline	Trace porosity & oil stain
4414 - 4416	Dolomite, tan to brown, finely crystalline	
4416 - 4418	Dolomite, brown to gray, crystalline; some coarse rounded sand grains.	
4418 - 4423	Dolomite, gray to brown, crystalline, sandy, as above; trace gray, opaque chert; considerable increase in green shale with pyrite.	
4423 - 4426	Dolomite, brown to tan, coarsely crystalline; some chert, brown to white, translucent, vitreous	Good porosity, fair stain
4426	TOTAL DEPTH.	

D.S.T. 3790 - 3811/ open 45 min.; very good blow throughout; gas in 20 minutes; recovered 150' very gassy oil cut mud; 90' of very gassy oil/ B.H.P. = 1265# (15 minutes)

D.S.T. 4253 - 90/ open 30 minutes; very good blow; gas in 7 min.; recovered 360' very gassy oil cut mud & 810' oil with some mud, no water/ B.H.P. = 1650#

D.S.T. 4304 - 4331/ open 1 hour; good blow; gas in 10 min./ recovered 180' very gassy oil cut mud & 720' oil with some mud/ B.H.P. & 1400#

(Samples examined and log compiled by Wendell S. Johns)

TIME LOG

WENDELL C. JOHNS

Deep Rock #6 Calbeck
NE/NE/NE; 33-265-13W
Pratt County, Kansas
Elevation: 1949 derrick floor

Note: All measurements are taken from the top of the rotary bushing which is three (3) feet above the derrick floor.

1' time log starts 3500'

<u>Depth</u>	<u>Time</u>	<u>Remarks</u>
3500 - 10	3-2-3-2-2-3-3-2-3-3	
20	2-3-2-3-2-2-2-3-3-2	
30	2-3-2-2-2-1-2-2-1-2	
40	2-2-3-2-2-3-2-3-5-3	
50	2-2-2-4-4-3-2-2-2-2	
60	3-2-2-2-3-3-4-4-3-5	
70	6-3-3-3-6-8-6-6-8-7	
80	5-5-5-5-4-6-5-7-6-8	
90	8-5-4-5-3-4-8-8-6-6	Heebner 3581
90 - 3600	5-5-5-5-7-6-6-6-6-5	
3600 - 10	6-5-5-4-5-6-6-5-5-5	
20	5-5-5-5-10-5-10-5-4-4	Trip 3615
30	4-3-3-4-5-4-4-3-3-4	
40	5-5-5-4-5-4-4-4-4-5	
50	4-4-3-4-4-5-3-2-2-2	
60	2-1-1-6-6-2-1-2-1-2	
70	2-2-1-1-1-1-1-1-1-1	
80	2-1-2-2-1-1-1-1-1-1	
90	2-2-2-3-2-3-5-5-5-3	
90 - 3700	4-4-3-4-4-4-4-3-3-3	
3700 - 10	2-3-4-4-4-5-3-4-4-4	
20	4-4-4-4-3-5-4-4-4-3	
30	4-4-4-4-4-4-3-4-4-4	
40	4-4-3-8-4-4-4-4-4-5	
50	4-4-4-4-4-5-5-5-7-6	Brown Lansing 3745
60	4-4-5-5-6-5-5-5-5-5	
70	5-4-4-5-3-5-5-5-4-5	Lansing 3769
80	6-5-5-6-5-6-6-5-6-7	
90	7-5-6-6-7-6-6-7-7-7	
90 - 3800	7-6-5-4-5-5-4-5-4-4	
3800 - 10	4-4-5-5-5-4-4-5-5-7	Circ. 3800; 1 1/2 hrs.
20	6-8-6-5-5-6-5-4-4-3	Circ. 1 1/2 hrs. = 3811
30	3-2-2-2-3-2-2-2-3-4	
40	4-4-5-5-6-7-6-7-6-7	
50	6-7-6-7-7-10-9-6-7-7	
60	7-7-5-7-7-5-6-6-7-8	
70	7-7-7-7-6-5-5-7-7-7	
80	6-6-6-6-6-5-5-5-4-4	
90	5-5-5-10-15-10-6-7-7-8	
90 - 3900	7-7-7-6-6-8-8-10-8-8	
3900 - 10	8-8-7-8-9-8-11-8-14-17	Trip 3910
20	9-8-8-5-4-6-5-3-1-1	
30	3-4-6-5-6-6-7-6-5-5	
40	5-5-6-4-6-6-6-5-5-7	
50	6-7-7-8-8-5-6-6-7-7	

(2) Time log; Deep Rock #6 Calbeck

<u>Depth</u>	<u>Time</u>	<u>Remarks</u>
3950 - 60	6-7-7-5-5-5-5-7-9-10	
70	10-10-9-9-7-6-5-4-3-2	
80	3-2-3-3-9-9-8-9-10-9	
90	9-9-11-11-7-7-8-10-13-12	Trip 3990
90 - 4000	6-4-3-3-4-4-4-5-5-5	
4000 - 10	3-3-3-5-6-6-6-6-6-5	
20	5-6-5-6-6-5-5-5-6-5	
30	6-5-5-6-7-6-6-6-5-5	
40	5-5-7-5-5-4-5-5-6-7	
50	6-4-5-6-6-8-6-6-7-8	
60	8-6-8-8-8-8-6-6-7-7	
70	8-8-8-7-6-9-8-10-10-10	
80	11-9-9-8-8-10-10-10-10-7	
90	6-7-7-8-7-8-9-9-6-5	
90 - 4100	5-5-5-10-9-7-6-8-8-10	
4100 - 10	9-7-9-8-8-8-8-8-7-6	
20	7-9-10-10-11-11-10-10-9-10	
30	8-8-7-8-8-10-11-11-12-12	
40	12-8-9-8-8-8-7-7-11-10	
50	10-12-4-4-5-8-8-8-7-6	
60	5-5-5-8-8-9-5-5-5-7	
70	7-8-7-7-5-5-7-6-6-5	
80	6-7-4-5-5-5-5-5-6-6	
90	4-5-3-2-3-3-3-3-4-4	
90 - 4200	5-5-5-4-3-4-3-4-4-4	
4200 - 10	4-4-4-3-4-5-3-3-5-3	
20	4-4-5-4-5-8-8-5-5-5	
30	5-5-8-7-5-5-5-5-8-6	
40	7-9-8-6-5-6-8-8-9-14	
50	10-11-11-10-9-7-8-9-12-9	
60	9-9-7-5-7-6-4-4-4-3	
70	4-4-4-4-5-4-3-4-4-4	
80	4-4-4-4-4-4-4-4-6-5	
90	5-4-5-4-4-5-5-5-5-6	
		Circ. 23 min. @ 4285
90 - 4300	5-5-6-8-5-5-6-6-6-6	Circ. 1½ hrs. @ 4290
4300 - 10	5-8-6-5-5-6-5-5-4-3	Slapson 4297
20	5-4-5-6-5-4-5-5-5-4	
30	7-8-8-7-7-7-6-7-5-5	Circ. 1½ hrs. 4320
40	7-4-5-5-5-5-4-4-4-5	
50	5-5-5-6-7-12-8-7-8-8	Circ. 1½ hrs. 4331
60	7-6-5-6-6-8-8-8-6-5	
70	5-7-7-8-8-7-8-10-9-10	
80	8-9-9-9-9-8-8-8-8-10	
90	9-10-9-10-9-11-11-11-7-9	
90 - 4400	7-6-2-5-6-7-6-6-7-5	
4400 - 05	12-10-10-8-11	
		Circ. 1½ hrs. @ 4394
		Arbuckle 4400
		Circ. 1½ hrs. @ 4405
		R.T.D. 4405

(Time log condensed by W. J. Magathan)