

TIME LOG

Stickle Drilling Lloyd Gray "B" #1  
SE/4 N/2 Lot 17, Sec. 31-26S-8E  
Butler County, Kansas  
Elevation: Unknown  
Contractor: White & Ellis Drilling, Inc.

WENDELL S. JOHNS

<u>Depth</u>	<u>Time</u>	<u>Remarks</u>
1600 - 10	2-1-2-1-2-1-2-1-2-2	
20	1-1-2-1-1-2-1-1-2-1	
30	2-2-1-1-2-1-2-1-2-1	
40	2-2-2-2-1-2-1-2-1-2	
50	1-2-1-2-1-2-1-2-1-5	
60	6-5-3-1-2-2-1 $\frac{1}{2}$ -1 $\frac{1}{2}$ -2-1 $\frac{1}{2}$	SR 1658 to 1665
70	1 $\frac{1}{2}$ -1 $\frac{1}{2}$ -2-1 $\frac{1}{2}$ -2-1-2-1 $\frac{1}{2}$ -1 $\frac{1}{2}$ -1 $\frac{1}{2}$	D.S.T. 1664-80 Recovered
80	1 $\frac{1}{2}$ -2-1 $\frac{1}{2}$ -2-1 $\frac{1}{2}$ -2-2-1-2-2	10' mud - no show

Conventional Core #1 1680-87  
Recovered 6'

1680 - 87	11-10-10-8-6-8-15
1687 - 90	4-2-1
1690 - 1700	1-1-2-1-2-1-1-1-2-5
1700 - 10	7-7-6-6-6-6-2-2-2-1
20	1-1-1-2-1-1-1-1-2-1
30	1-1-2-1-1-2-3-3-3-2
40	3-2-2-2-2-1-1-2-1-2
50	1-2-2-1-2-1-2-1-2-2
60	8-6-6-4-4-3-4-3-4-4
70	3-3-3-3-4-5-6-6-6-5
80	4-2-2-2-4-5-6-6-7-4
90	4-4-4-3-3-4-4-3-2-2
1790 - 1800	3-3-4-4-2-3-3-3-3-3
1800 - 10	4-4-4-3-3-4-3-4-5-4
20	5-4-5-4-5-4-4-5-6-6
30	5-6-5-4-4-6-6-3-3-3
40	3-2-3-2-4-3-3-4-3-3
50	2-2-2-2-2-2-4-3-3-4
60	3-4-5-4-4-4-4-3-4-3
70	2-3-3-2-4-4-4-2-3-2
80	2-2-2-2-2-2-3-3-3-3
90	3-2-2-3-2-3-3-2-3-3
1890 - 1900	3-3-4-3-3-3-3-3-3-3
1900 - 10	3-3-2-2-3-3-3-3-3-4
20	2-3-2-3-3-5-2-2-2-3
30	3-2-2-3-3-2-3-1-3-2
40	2-3-2-3-3-3-3-3-3-3
50	3-3-2-2-3-4-3-3-3-3

Trip for bit 1822

(2) Time Log: Stickle Drilling Lloyd Gray "B" #1

<u>Depth</u>	<u>Time</u>	<u>Remarks</u>
1950 - 60	2-3-2-3-2-3-2-3-2-3	
70	3-2-3-2-1-3-3-2-3-2	
80	3-3-3-3-3-3-3-3-3-3	
90	3-2-3-3-3-3-3-3-3-3	
1990 - 2000	3-3-2-3-3-3-3-3-3-3	
2000 - 10	3-3-3-3-3-3-3-3-3-3	
20	3-3-3-2-3-3-3-3-3-3	
30	2-3-3-3-3-3-3-3-3-2	
40	3-2-3-2-3-3-3-3-3-3	
50	2-2-3-3-2-3-3-2-2-3	
60	2-3-2-3-5-3-2-2-2-3	
70	2-3-6-7-5-4-6-6-3-3	
80	3-4-4-3-4-3-5-6-4-4	
90	5-4-3-4-2-3-3-4-4-3	Circ. 34 min. for samples
2090 - 2100	4-5-4-5-4-6-5-5-5-4	
2100 - 10	5-4-5-6-6-4-4-4-4-4	Tried to make trip - tight hole @ 1890' - back to bottom
2110 - 20	4-6-6-4-3-6-6-6-4-4	
30	4-4-4-4-5-4-4-5-6-5	
40	6-5-5-3-3-2-3-2-3-4	Trip for bit & reaming bridge @ 1835-1905
50	3-3-3-2-3-3-3-5-3-3	
60	2-2-4-4-4-5-3-4-4-4	
70	5-6-5-4-5-4-3-5-3-2	
80	6-6-4-1-1-1-1-1-1-1	D.S.T. 2172-80 Recovered 75 feet very slight oil and gas cut mud
2180 - 90	1-2-3-5-4-6-7-6-8-7	
2190 - 2200	7-7-9-6-4-4-8-7-5-5	
2200 - 10	3-3-4-3-4-6-6-5-8-5	
20	2-3-4-9-6-6-6-4-5-3	
30	3-2-2-2-3-5-3-2-3-2	
40	2-2-3-3-2-3-3-4-4-3	
50	3-4-5-4-4-5-5-4-3-3	
60	4-3-3-3-3-3-4-4-3-4	
70	3-3-4-3-4-4-4-4-3-5	
80	4-4-4-4-5-5-5-4-3-4	
90	4-5-5-4-5-5-5-5-4-5	
2290 - 2300	6-5-5-5-4-6-5-5-4-4	
2300 - 10	5-5-6-3-9-7-4-3-2-3	Trip for bit 1 hr. 25 min
20	3-3-4-6-5-5-4-3-3-3	
30	5-5-4-4-3-4-4-4-3-3	
40	2-3-4-4-3-3-4-2-2-3	
50	4-3-4-4-4-3-3-2-3-3	

(3) Time Log: Stickle Drilling Lloyd Gray "B" #1

Depth	Time	Remarks
2350 - 60	3-4-3-3-3-2-3-3-2-2	
70	2-2-3-3-2-3-2-3-2-3	
80	2-3-3-3-2-4-3-2-2-2	
90	3-5-4-3-4-3-3-3-3-4	
2390 - 2400	3-3-3-3-2-3-3-2-3-2	
2400 - 10	3-3-2-3-3-3-3-2-3	
20	2-2-3-3-2-3-2-3-3-2	
30	2-3-2-3-2-3-3-3-3-4	
40	2-3-3-3-3-2-3-3-3-3	
50	2-3-2-3-3-1-2-3-5-5	
60	5-3-4-3-3-4-4-6-4-4	
70	5-4-4-4-3-4-3-4-4-3	
80	3-3-4-4-3-2-2-2-4-4	
90	3-3-3-4-4-5-5-6-5-5	
2490 - 2500	5-5-6-7-4-5-4-4-4-6	
2500 - 10	6-4-4-4-4-4-4-2-3-3	
20	3-3-3-3-3-4-3-3-2-3	
30	2-3-3-2-3-3-3-3-3-3	
40	3-2-3-3-3-3-4-3-3-3	
50	3-3-3-3-3-3-4-4-3-4	
60	3-4-4-4-4-4-4-3-3-3	
70	3-4-4-4-4-3-4-4-4-4	
80	3-4-4-4-4-4-3-4-4-4	
90	3-4-4-5-2-4-5-5-5-4	
2590 - 2600	4-4-5-4-4-3-3-3-3-3	
2600 - 10	4-4-2-2-3-4-4-3-3-5	
20	4-4-4-3-5-4-5-5-4-4	
30	5-4-5-5-6-5-5-4-2-4	
40	3-3-4-3-5-4-4-5-5-6	
50	4-3-2-2-4-5-5-9-7-5	Trip for heads & liners
60	4-4-3-4-3-3-3-3-3-5	
70	5-4-6-6-4-5-5-5-5-5	
80	5-4-4-5-3-3-5-4-4-3	Circ. to core

Diamond Core #2 2680-2730

2680 - 90	8-7-10-10-11-8-7-5-9-11
2690 - 2700	8-10-10-9-10-9-8-8-4-2
2700 - 10	3-4-3-2-2-3-3-3-2-2
20	3-2-3-2-2-3-1-2-3-5
30	3-3-2-3-2-2-3-2-2-3

Diamond Core #3 2730-2755

2730 - 40	4-4-2-3-2-3-2-3-4-2	
50	2-2-2-2-3-2-1-2-2-2	
55	2-2-10-9-7	Lost circulation 2755

(4) Time Log: Stickle Drilling Lloyd Gray "B" #1

<u>Depth</u>	<u>Time</u>	<u>Remarks</u>
2755 - 60	3-4-4-4-4	Lost Circulation 2760 No time 2770 - Kelly correction
70	5-3-6-5-4-5-6-4-2-x	
80	4-4-4-6-8-5-4-4-4-4	
90	2-4-5-5-5-5-5-5-3-8	D.S.T. 2800
2790 - 2800	7-7-10-2-2-1-2-4-3-5	
2800 - 10	4-4-4-5-4-7-6-6-8-9-8	Rough 2814
20	9-15-8-5-6-6-6-8-9-8	
30	8-8-10-8-6-8-7-6-4-7	

Core Description

Core #1 Conventional Core 1680-87 - Rec. 6 ft.

1680 - 81	Alternated layers Brecciated Limestone and gray shale (1/2" - 2").
1681 - 83½	Tan to brown Brecciated to Conglomeratic Limestone - many small fossils and small limestone nodules in limestone.
1683½ - 85	Gray sandy lime in thin turbulent lenses alternated with 50 percent thin lenses of sandy gray shale.
1685 - 86	Gray shale (2" zone of Brecciated Brown Lime) No show - No odor - no porosity.

Core #2 Diamond Core 2680 - 2730 - 100% Recovery

2680 - 80½	Sandy gray shale.
2680½ - 81½	Fine grained "tight" sand - no show oil.
2681½ - 85	Sandy gray shale.
2685 - 88	Fine grained "tight" sand - no show oil.
2688 - 90½	Laminated gray shale and fine grained sand (70%).
2690½ - 93	Gray shale.
2693 - 94	Laminated gray shale and fine grained sand (40%).
2694 - 97½	Gray shale.
2697½ - 98	Medium grained gray sand - slight show oil.
2698 - 98½	Gray shale.

(5) Time Log: Stickle Drilling Lloyd Gray "B" #1

Core Description #2 Continued:

- 2698½- 99½ Medium grained gray sand - slight show oil and good odor.
- 2699½- 2701½ Medium grained gray sand - well saturated - good odor.
- 2701½- 02½ Medium grained gray sand, "tight" and very slightly shaly - no show.
- 2702½- 10½ Medium grained gray sand - well saturated - good odor.
- 2710½- 19½ Medium grained gray sand - well saturated and good odor - saturation dried in streaks - more zones of no saturation toward base.
- 2719½- 20½ Gray-black shale.
- 2720½- 21½ Medium grained gray sand - streaked saturation.
- 2721½- 22½ Medium grained gray sand with 20 percent black shale laminations - no show.
- 2722½- 25½ Medium grained gray sand - well saturated - good odor.
- 2725½- 30 Medium grained gray sand bleeding oil in pinpoint - saturation dried in spotted zones - salt crystals apparent on dry core.

(Salty taste and salt crystals were apparent in dry core throughout sand section. The salt was increasingly apparent downward through the core).

Core #3 Diamond Core 2730-55 - 100% Recovery

- 2730 - 30½ Medium grained gray sand with 10 percent Conglomeratic shale nodules - good odor - good show oil.
- 2730½- 31 Gray-black shale - 20 percent Conglomeratic shale nodules.
- 2731 - 37 Medium to coarse grained gray sand - very few (2%) shale nodules included - good saturation - good odor.
- 2737 - 38 Gray shale Conglomerate with sandy gray shale nodules - no show.
- 2738 - 39 Gray shale and sandy gray shale and fine grained gray sand nodules in Conglomerate - slight show oil.

(6) Time Log: Stickle Drilling Lloyd Gray "B" #1

Core Description #3 Continued:

2739 - 52 Medium to coarse grained gray sand - very few (4%) shale nodules included - good saturation - good odor.

2752 - 55 Soft - light gray shale.

(Entire core bleeding oil and bubbling gas except in shale sections as noted).

This core lay unwiped and under Aqua-jel bags as a covering for four hours on a hot day before Research Laboratories arrived to freeze it.

Lost circulation at 2755 while cutting this core and again at 2760 after reaming hole down.