CORE RECORD

Core No. 1 from 4890 to 4900		Cut 10 ft. Rec. 10ft.
4890-4900	10	Shale, black, rotten
Core No. 2 from 4900 to 4910		Cut 10 ft. Rec. 10 ft.
4900-4910	10	Shale, black, rotten
Core No. 3 from 4910 to 4920		Cut 10 ft. Rec. 10 ft.
4910-4911	1	Shale, black, rotten
4911-4912	1	Fine to medium grain fair saturation.
4912-4913	1	Same as above with few shale laminations.
4913-4915	2	Sand fine to medium grain fair saturation.
4915-4919	4	Sand fine to medium grain fair saturation.
4919-4920	1	Sand, fine to medium grain, hard, tight, light saturation.
Core No. 4 from 4920 to 4938		Cut 18 ft. Rec. 18 ft.
4920-4929	9	Sand, fine grain, good saturation with vertical fracture throughout.
4929-4931	2	Sand silty and shaly light gray
4931-4936	5	Shale and siltstone hard, gray.
4936-4938	2	Shale, black and rotten.

DRILL STEM RECORD

DST NO. 1 March 6, 1951
Total Depth 4920
Packer set at 4913
Tool opened 20 min.

Recovered gas to surface in 3 minutes with 30 ft. of oil cut mud on top of 4200 ft. of gasified oil. There was no excess of gas and no indication of water.

Initial flow pressure 774 psi.
Final flow pressure 875 psi.
Static pressure after 15 minutes 1252 psi.

DST No. 2 March 8, 1951
Total Depth 4938
Packer set at 4921½
Tool opened 15 min

Recovered gas to surface in 3 minutes with 1300 ft. of gasified oil on top of 50 ft. of what appears to be thin drilling fluid.

Initial flowing pressure 355 psi.
Final flowing pressure 480 psi.
Static pressure after 15 minutes 1253 psi.

FORMATION TOPS FROM ELECTRIC LOG

Tertiary	Surface
Pierre	912
Niobrara	4155
Carlisle	4456
Greenhorn	4667
Granerous	4675
Dakota	4909
Schlumberger TD	4937
Driller's TD	4938

Cement was drilled to 4933 and on March 14, 1951 perforated from 4913 to

Tertiary	Surface	912		Gravels and alluvium of gray and pink quartz rounded pebbles.
Pierre (Shale)	912	3243		Dark gray to black clay shale, few calcareous beds, soft and gummy, with stringers of limestone and fish scales.
Niobrara (Lime)	4155	301		Shale, limey, black, brownish black looking where abundant forams giving speckled appearance with their tiny white spots. Some shale slightly silty. Also, plain and soft blue gray shale alternating. Bentonite, pyrite specks, few limestone stringers fifrous arogonite.
Carlisle (Shale)	4456	211		Shale, sandy and silty shales, dark gray to black, sandy to very fine sandstone streaks, gray peppered with black specks, calcareous soft. Also limestone streaks, light orange, silty soft, and bentonite. Shales are calcareous and in part white specked with forams, and few fish fragments. The lower approximately 25' becoming limey sand, sandy lime, and some hard limestone.
Greenhorn (Limestone)	4667	8		Limestone, brown, dense hard, cherty looking. Sandy limestone to very fine and limey sandstone hard, tight, and gray. Softer and silty streaks inocaramus prisms. Some black shale.
Graneros (Shale)	4675	234	4890-4900	Shale, silty siltstone, black, much speckled with forams. Silty lime stringers. Plain shale dark gray, much calcareous. In lower portion few thin sandstone beds, gray very fine, speckled with glauconite and black specks.
Dakota (Sandstone)	4909	29	4910-4920	Sandstone, very fine to fine and well sorted grains angular to subangular, light gray where barren, mostly noncalcareous, little or no cementation.

4929 with Lane-Wells Conventional gun. Spaced 96 15/32" holes equal distant through intreval.

REP-YDE

State Oil Inspector (3)
University of Colorado (1)
State School of Mines (1)
TTF (1)
EWO (1)
WR (1)