

15-009-06380-00-00

Driller's Log
NATIONAL COOPERATIVE REFINERY ASSOCIATION
#1 CHARLES
SW SW SE - SECTION 31-16S-12W
BARTON COUNTY, KANSAS

Copy

0	120	Clay & rock
120	140	Sand
140	180	Shale & shells
180	275	Shale & shells
275	445	Red Bed & shells
445	480	Hard Sand & pyrite
480	600	Shale & shells
600	860	Red Bed
860	890	Anhydrite
890	1125	Shale & shells
1125	1260	Shale & shells
1260	1440	Shale & Salt
1440	1560	Shale & shells
1560	1610	Lime
1610	1745	Lime
1745	1855	Lime
1855	1975	Lime
1975	2070	Lime
2070	2160	Lime
2160	2230	Shale & lime
2230	2415	Shale & lime
2415	2620	Shale & shells
2620	2760	Shale & lime
2760	2810	Shale & lime
2810	2830	Lime
2830	2925	Lime
2925	2995	Lime
2995	3036	Lime
3036	3100	Lime
3100	3188	Lime
3188	3213	Lime
3213	3219	6' correction
3219	3260	Lime
3260	3315	Lime
3315	3360	Lime
3360	3405	Lime
3405	3441	Lime
3441	3470	Conglomerate
3470	3489	Arbuckle

COMMENCED: 1/12/51
COMPLETED: 1/23/51

CASING RECORD:

Set 8-5/8" @ 180' with
90 sacks cement & 1 CC

D & A

ROTARY TOTAL DEPTH:

STATE OF KANSAS)
COUNTY OF SEDGWICK) SS

RECEIVED
PLUGGING 1/23/1951
FILE SEC 31 T 16 R 12W
BOOK PAGE 57

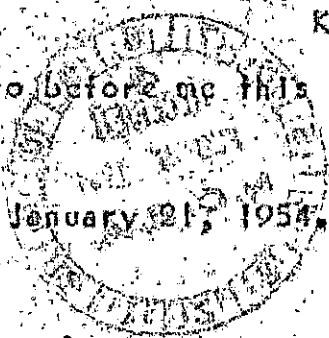
I hereby affirm that the above and foregoing is a true and correct copy of the log of the #1 Charles located in the SW SW SE of Section 31-16S-12W, Barton County, Kansas.

ANSCHUTZ DRILLING COMPANY

BY: *K. R. Swenson*
K. R. Swenson

Subscribed and sworn to before me this 7th day of February, 1951.

My commission expires January 21, 1954.



Tatiana A. Reber
Notary Public