

OPERATOR:
 CONTRACTOR:
 WELL NAME:
 LOCATION:
 SPUD DATE:
 COMPLETION DATE:

Phillips Oil Operations Company
 Abercrombie Drilling, Inc.
 Rakestraw #1 'A'
 NE SW NE Section 31-1S-18W
 Phillips County, Kansas
 June 9, 1977
 June 14, 1977

0	160	Surface clay
160	235	Sand
235	254	Shale
254	1262	Sand & shale
1262	1440	Shale
1440	1550	Sand
1550	1815	Shale & sand
1815	1838	Shale
1838	1858	Anhydrite
1858	2527	Shale
2527	3000	Lime & shale
3000	3414	Shale & lime
3414	3680	Lime
	3680	Rotary Total Depth

Spud hole at 10:45 a.m., June 9, 1977. Drilled 255' of 12¼" hole. Ran 6 joints of 8-5/8" surface casing. Set at 254' K.B. with 175 sacks cement, 3% CaCl, 2% gel. Plug was down at 3:15 p.m., June 9, 1977.

T.D. 3680'. Ran 97 joints of 4½" - 9½ & 10½# casing. Set at 3678' K.B. Cemented with 300 sacks cement. Job was complete at 6:45 p.m., June 14, 1977

STATE OF KANSAS)
) ss
 COUNTY OF SEDGWICK)

Jack L. Partridge, Assistant Secretary-Treasurer of Abercrombie Drilling, Inc., does hereby state that the above and foregoing is a true and correct copy of the log of the Rakestraw #1; NE SW NE Section 31-1S-18W, Phillips County, Kansas.

ABERCROMBIE DRILLING, INC.

BY Jack L. Partridge
 Jack L. Partridge,
 Assistant Secretary-Treasurer