

OPERATOR: Associates Oil & Gas, Inc.
 CONTRACTOR: Abercrombie Drilling, Inc.
 WELL NAME: Leitner #1
 LOCATION: E/2 NW SW Section 18-3S-35W
 Rawlins County, Kansas
 SPUD DATE: October 8, 1977
 COMPLETION DATE: October 17, 1977

0	1250	Sand & shale
1250	2420	Shale & sand
2420	2754	Shale
2754	2800	Anhydrite
2800	3090	Shale & sand
3090	3137	Anhydrite
3137	3350	Shale
3350	3906	Shale & lime
3906	4015	Lime & shale
4015	4540	Lime
4540	4630	Lime & shale
4630	4675	Lime
4675	4880	Lime & shale
	4880	Rotary Total Depth

Spud hole at 11:45 a.m., October 8, 1977. Drilled 298' of 12¼" hole. Ran 7 joints of 8-5/8" surface casing. Set at 297' K.B. with 225 sacks common cement, 3% CaCl, 2% gel. Plug was down at 4:30 p.m., October 8, 1977. Cement did circulate.

T. D. 4880'. Set 1st plug at 2000' with 70 sacks, 2nd plug at 240' with 20 sacks, 40' solid bridge with 10 sacks. Cemented with 50/50 posmix, 6% gel.

SAMPLE TOPS:

Anhydrite 3090'
 B/Anhydrite 3137'

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 Leitner #1, E/2 NW SW Section 18-3S-35W, Rawlins County, Kansas

ABERCROMBIE DRILLING, INC.

By Jack L. Partridge