

BIG SPRINGS DRILLING, INC.

SUITE 29 • 400 NORTH WOODLAWN • (316) 681-1732

P.O. BOX 8287
MUNGER STATION
WICHITA, KANSAS 67208

February 20, 1981

DRILLERS LOG

RE: Mosier A - #1
SW SW NW
Sec. 3 Twp 9S Rg 27W
Sheridan County, Kansas

OPERATOR: Arrowhead Petroleum, Inc.
CONTRACTOR: Big Springs Drilling, Inc.
COMMENCED: February 2, 1981
COMPLETED: February 12, 1981

Surface Pipe: 237' w/200 SX Common 2% gel 3% cc1

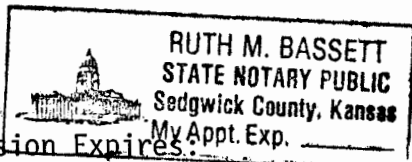
0	240'	Surface clay & Shale
240'	1050'	Clay & Shale
1050'	1827'	Shale
1827'	1983'	Sand
1983'	2197'	Shale
2197'	2232'	Anhydrite
2232'	3570'	Shale
3570'	3707'	Shale w/lime & Streaks
3707'	3735'	Shale & Lime
3735'	3774'	Lime
3774'	3780'	Lime & Shale
3780'	3964'	Lime
3964'	3990'	Lime & Shale
3990'		RTD

We certify that the above and foregoing is a true and correct copy of the log on the Mosier A - #1 located in Sheridan County, Kansas.

Big Springs Drilling, Inc.


Paul A. Seymour, Jr.

Subscribed and sworn to before me this 20th day of February, 1981.


RUTH M. BASSETT
STATE NOTARY PUBLIC
Sedgwick County, Kansas
My Commission Expires _____
My Appt. Exp. _____
20 1983


Ruth M. Bassett Notary Public