

STERLING DRILLING CO.

BOX 129

STERLING, KANSAS 67579

WELL LOG - - - - - MALM #5-14

Located: C E/2 NE/4, Section 14-24S-17W, Edwards County,
Kansas

OWNER: F. G. Holl

ROTARY DRILLING CONTRACTOR: Sterling Drilling Company

COMMENCED: December 3, 1985

COMPLETED: December 10, 1985

TOTAL DEPTH: 4440'

<u>LOG</u>	<u>CASING RECORD</u>
0 - 40 Surface Soil and Sand	Ran 7 joints new 8 5/8", 23/24# casing. 295.15' pipe set at 307'
40 - 86 Sand	K.B. Cemented with 225 sacks 60/40 Pozmix with 3% cc. Plug down at 9:30 PM, 12-3-85, by Howco.
86 - 310 Shale, Red Bed	
310 - 500 Shale, Sand, Red Bed	
500 - 1027 Shale and Lime	
1027 - 1095 Shale, Red Bed	
1095 - 1109 Anhydrite	
1109 - 1560 Shale and Lime Strgs.	
1560 - 4343 Lime and Shale	
4343 - 4353 Chert, Lime	
4353 - 4440 Shale, Sand, Lime	Ran 111 joints used 4 1/2", 10.5# casing. 4426.17' pipe set at 4435' K.B. Cemented with 100 sacks Lite, 125 sacks 50/50 Pozmix plus our regular additives and flush ahead. Plug down at 12:30 PM, 12-10-85, by Howco. Plugged rathole.

Deviation Surveys: 3/4° at 2209'
3/4° at 4343'