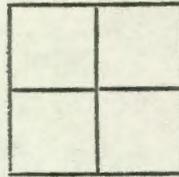




WELL LOG

Operator: John O. Farmer, Inc.
Well: Rugan #1
Commenced: May 19, 1977
Completed: May 27, 1977
Contractor: Shields Drilling Co., Inc.

Well Description: C NW NW
Sec. 12-18S-12W
Barton Co., Kansas



CASING RECORD

Size 8 5/8" Run 231' Pulled Cmtd. w/175 sax

Elevation:
Treatment:
Production: D & A
Tops:

..... Figures Indicate Bottom of Formations

Sand & shale	240'
Shale	535'
Shale & redbed	734'
Anhydrite	757'
Shale	785'
Shale & shells	1,455'
Shale & lime	2,200'
Shale	2,395'
Shale & lime	2,940'
Lime	3,450' RTD