

Messman-Rinehart Oil Company
No. 3 Karlin
S/2 SE SE Section 31-12S-17W
Ellis County, Kansas

31-12S-17W

DRILL STEM TESTS:

DST #1 3309-67

Tool open 20'', SI 30'', open 45'', SI 45''. Strong blow thru test. Rec. 50' sl OC Gsy mud, 60' HO&GCM, 360' Gsy oil sl mud cut, 90' Mdy Gsy oil, 360' GIP, IBHP 941#, IFP 148#, FFP 222#, FBHP 800#, Temp 109°.

DST #2 3375-3410

Tool open 20'', SI 30'', Open 1 hr., SI 45'', Fair blow thru test. Rec. 110' Mdy salt wtr. with show of oil, IBHP 644#, IFP 74#, FFP 95#, FBHP 612#, Temp 109°.

DST #3 3410-3454

Tool open 20'', SI 30'', Open 30'', SI 45'', Weak blow 20'', Rec. 30' Mud, IBHP 529#, IFP 21# FFP 21#, FBHP 519#, Temp 109°.

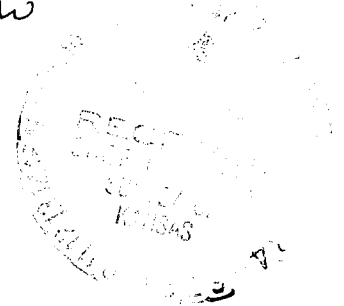
DST #4 3497-3587

Tool open 20'', SI 30'', Open 30'', SI 45'' Weak blow 20'', Rec. 20' mud with spots of oil. IBHP 571#, IFP 74#, FFP 73#, FBHP 445#, Temp 111°.

DST #5 3584-3623

Tool open 20'', SI 30'', Open 30'', SI 45'', Weak blow 20'' Rec. 20' mud, IBHP 53#, IFP 21#, FFP 21#, FBHP 36#, Temp 111°.

31-12-17W



DRILLER'S LOG

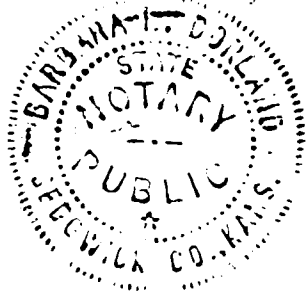
No. 3 Karlin

CASING RECORD:	COMPANY:	Massman-Rinehart Oil Co.	DESCRIPTION:
8-5/8" @ 298'	CONTRACTOR:	Red Tiger Drilling Co.	S/2 SE SE
w/220 sx cement	COMMENCED:	August 14, 1972	<u>31-12S-17W</u>
4-1/2" @ 3625'	COMPLETED:	August 24, 1972	Ellis County, Kansas
w/125 sx cement			
TOTAL DEPTH: 3627'			ELEVATION:

<u>FORMATION</u>	<u>FROM</u>	<u>TO</u>	<u>REMARKS</u>
Shale	0	730	
Sand	730	940	
Shale	940	1299	
Anhydrite	1299	1338	
Shale	1338	1920	
Shale - Lime	1920	2085	
Lime	2085	3627	

I certify that this is a true and correct copy of the above log to the best of my knowledge.

RED TIGER DRILLING COMPANY



Virginia K. Albert
Virginia K. Albert

Subscribed and sworn to before me this 29th day of August, 1972.

Barbara L. Dorland
Notary Public

My Commission Expires:
July 25, 1976.