



RECEIVED

Operator Name TXO PRODUCTION CORP. Lease Name HOUGH Well# 4 SEC 9 TWP 32S RGE 12 ☐ East ☒ West

WELL LOG

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken
Samples Sent to Geological Survey
Cores Taken

☒ Yes ☐ No
☒ Yes ☐ No
☐ Yes ☒ No

Formation Description
☒ Log ☐ Sample

DST #1, 3390-3415', Elgin Sand, w/results as follows:
IFP/30"=180-337 psig, strong blow
ISIP/60"=662 psig, GTS in 1"
FFP/45"=270-427 psig, gauged 8.9 MCFD, stabilized
FSIP/90"=662 psig
Rec: 30' O&GCM + 558' GO + 496' SW
(Cl=91,000 ppm)

Name	Top	Bottom
Herrington	1765	- 280
Towanda	1896	- 411
Ft. Riley	1950	- 465
Florence	1988	- 503
B/Florence	2035	- 550
Wreford	2100	- 615
Council Grove	2125	- 640
Beattie	2296	- 811
Red Eagle	2443	- 958
Onaga Sh.	2572	-1087
Wabaunsee	2625	-1140
Stotler	2766	-1281
Tarkio	2812	-1327
Topeka	3016	-1531
Lecompton	3305	-1826
Elgin Sandstone	3388	-1900
Oread	3438	-1900
Heebner	3482	-1997
RTD	3520	
LTD	3519	
PBTD	3507	

TUBING RECORD size <u>2-3/8"</u> set at <u>3446'</u> packer at		Liner Run ☐ Yes ☒ No	
Date of First Production <u>7-29-85</u>	Producing method ☐ flowing ☒ pumping ☐ gas lift ☐ Other (explain)		
Estimated Production Per 24 Hours	Oil <u>23.38</u> Bbls	Gas <u>N/A</u> MCF	Water <u>0</u> Bbls Gas-Oil Ratio <u>CFPB</u> Gravity

Disposition of gas: ☒ vented
☐ sold
☐ used on lease

METHOD OF COMPLETION

☐ open hole ☒ perforation
☐ other (specify)

PRODUCTION INTERVAL

3388-96' Elgin

☐ Dually Completed.
☒ Commingled

Surface	12-1/4"	8-5/8"	23#	252'	150 sxs lite + 100 sxs common/3% CaCl ₂ gel
Production	7-7/8"	4-1/2"	10.5#	3519'	100 sxs Class 'A' .75% CFR-2

PERFORATION RECORD

shots per foot specify footage of each interval perforated

Acid, Fracture, Shot, Cement Squeeze Record

(amount and kind of material used)

Depth

4	Elgin 3388-96'	300 gals 7-1/2% HCl w/additives	3388-96'