

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 Yes No
 Samples Sent to Geological Survey Yes No
 Cores Taken Yes No

Formation Description
 Log Sample

DST #1 from 4011' to 4038' (Toronto). Recovered 10' of clean oil, 57' of oil cut mud, 372' of slightly oil cut muddy water, & 620' of water with scum of oil. IFP:87-349#/30"; ISIP:1172#/45"; FFP:360-480#/30"; FSIP:1172#/45".

DST #2 from 4109' to 4135' (Lansing D&E zones). Recovered 1,225' of muddy salt water, no show of oil. IFP:66-317#/30"; ISIP:1346#/45"; FFP:349-469#/30"; FSIP:1325#/45".

DST #3 from 4170' to 4257' (G-J zones in Lansing). Recovered 439' of watery mud. IFP:87-175#/45"; ISIP:1336#/45"; FFP:175-240#/45"; FSIP:1336#/45".

DST #4 from 4259' to 4321' (Lansing K&L zones). Recovered 835' of gas in pipe, 65' of clean gassy oil, 90' of slightly muddy gassy oil, and 150' of oil cut gassy mud. IFP:76-98#/30"; ISIP:1293#/45"; FFP:131-153#/30"; FSIP:1238#/45".

DST #5 from 4463' to 4505' (Pawnee-Myrick Station). Recovered 290' of clean gassy oil and 720' of muddy gassy oil. IFP:143-297#/30"; ISIP:1159#/45"; FFP:363-430#/30"; FSIP:1148#/45".

DST #6 from 4513' to 4535' (Ft. Scott). Recovered 3440' of gas in pipe, 510' of clean gassy oil, and 180' of muddy gassy oil. IFP:132-187#/30"; ISIP:407#/45"; FFP:275-297#/30"; FSIP:363#/45".

(Continued on next column)

Name	Top	Bottom
Anhydrite	2522'	(+ 473)
B/Anhydrite	2549'	(+ 446)
Topeka	3785'	(- 789)
Heebner	4004'	(-1009)
Toronto	4030'	(-1035)
Lansing	4046'	(-1051)
Stark Shale	4262'	(-1267)
B/KC	4322'	(-1327)
Marmaton	4352'	(-1357)
Pawnee	4446'	(-1451)
Ft. Scott	4512'	(-1517)
Cher. Shale	4538'	(-1543)
Miss. Ls.	4605'	(-1610)
Miss. Dolo.	4631'	(-1636)
LTD	4691'	(-16)

(Continued from 1st column)
 DST #7 from 4544'-4611' (Johnson zone) Recovered 6' of mud w/few spots of oil. IFP:55-55#/30"; ISIP:77#/30"; FFP:55-55#/30"; FSIP:66#/30".
 DST #8 from 4625'-4635' (Miss.Dolomite) Recovered 540' of gas in pipe, 230' of clean gassy oil, 360' of muddy oil cut salt water. IFP:99-198#/30"; ISIP:1170#/45"; FFP:264-308#/30"; FSIP:1170#/45".

CASING RECORD new used

Report all strings set - conductor, surface, intermediate, production, etc.

Purpose of string	size hole drilled	size casing set (in O.D.)	weight lbs/ft.	setting depth	type of cement	# sacks used	type and percent additives
Surface	12 1/4"	8-5/8"	20#	343.85'	60/40 poz.	225	2% gel, 3% CC
Production	7-7/8"	5 1/2"	14#	4685'	60/40 poz. gilsonite, 20 bbls. of brine preflush.	185	10% salt, 3%

PERFORATION RECORD

Acid, Fracture, Shot, Cement Squeeze Record

shots per foot	specify footage of each interval perforated	(amount and kind of material used)	Depth
2 SSB	4630 1/2' to 4633'	Acidized w/500 gal. of 15% acid	4630 1/2'-33'
2 SSB	4487' to 4493'	Acidized w/1000 gal. of 15% acid	4487'-93'