



SIDE TWO

Operator Name A. Scott Ritchie Lease Name Engel Well# 2 SEC 17 TWP. 11S RGE. 31  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  Yes  No  
 Samples Sent to Geological Survey  Yes  No  
 Cores Taken  Yes  No

Formation Description  
 Log  Sample

Name	Top	Bottom
Anhydrite	2497'	(+ 490)
B/Anhydrite	2523'	(+ 464)
Topeka	3749'	(- 762)
Heebner	3972'	(- 985)
Toronto	3998'	(-1011)
Lansing	4014'	(-1027)
Stark	4228'	(-1241)
Marmaton	4324'	(-1337)
Pawnee	4411'	(-1424)
Myrick Station	4456'	(-1469)
Ft. Scott	4478'	(-1491)
Cherokee Sh.	4506'	(-1519)
Johnson zone	4548'	(-1561)
Miss. Lm.	4576'	(-1589)
Miss. Dolo.	4636'	(-1649)
LTD	4666'	(-1679)

DST #1 from 3982' to 4013' (Toronto zone). Recovered 490' of slightly oil cut muddy salt water. IFP:55-161#/45"; ISIP:1180#/45"; FFP:198-265#/45"; FSIP:1146#/45".

DST #2 from 4020' to 4028' (Lansing A zone). Recovered 70' of oil specked muddy water. IFP:22-22#/45"; ISIP:1249#/45"; FFP:44-44#/45"; FSIP:1237#/45".

DST #3 from 4077' to 4109' (Lansing E & F zones). Recovered 2850' of muddy water. IFP:667-1295#/30"; ISIP:1295#/45"; FFP:1295-1295#/30"; FSIP:1295#/45".

DST #4 from 4143' to 4231' (Lansing H-J zones). Recovered 240' of gas in pipe, 1245' of gassy mud cut oil with no water. IFP:115-357#/30"; ISIP:1237#/45"; FFP:403-506#/30"; FSIP:1214#/45".

DST #5 from 4229' to 4264' (Lansing K zone). Recovered 30' of oil cut mud. IFP:46-46#/30"; ISIP:161#/30"; FFP:57-57#/30"; FSIP:161#/30".

DST #6 from 4263' to 4290' (Lansing L zone). Recovered 10' of mud. IFP:34-34#/30"; ISIP:69#/30"; FFP:34-34#/30"; FSIP:57#/30".

DST #7 from 4287' to 4343' (Marmaton). Recovered 180' of gas in pipe, 60' of clean oil, 180' of oil cut watery mud, 300' of slightly oil cut muddy water. IFP:57-138#/45"; ISIP:1294#/45"; FFP:172-241#/45"; FSIP:1271#/45".

(Continued on second page)

CASING RECORD <input checked="" type="checkbox"/> new <input type="checkbox"/> 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#	290.70'	quickset	200'	none
Production	7-7/8"	4 1/2"	10.5#	4658'	60/40 poz	230	10% salt, 10 sacks of salt flush.
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	1460'			Squeezed w/200 sks. 60/40 pozmix			1460'
2 SSB	4215'-4218'; 4556'-4559 1/2'			Squeezed w/50 sks. 50/50 common			2050'-2500'
4 SSB	4215'-4219'			Acidized w/750 gal. of 15% acid			4556'-59 1/2'
				Acidized w/750 gal. of 15% acid			4215'-18'
				Acidized w/1500 gal. of 15% AOG-200			4200'-4325'
				Squeezed w/300 sks. of 60/40 pozmix			4130'-4490'
TUBING RECORD				Liner Run <input type="checkbox"/> Yes <input type="checkbox"/> No			
size	set at	packer at					
Date of First Production	Producing method <input type="checkbox"/> flowing <input checked="" type="checkbox"/> pumping <input type="checkbox"/> gas lift <input type="checkbox"/> Other (explain)						
11/13/84							
Estimated Production Per 24 Hours	Oil	Gas	Water	Gas-Oil Ratio	Gravity		
80.0 Bbls		MCF	4.0 Bbls	CFPB			

Disposition of gas:  vented  
 sold  
 used on lease

METHOD OF COMPLETION  
 open hole  perforation  
 other (specify) \_\_\_\_\_  
 Dually Completed.  
 Commingled

PRODUCTION INTERVAL

4215'-4219'

Lansing "J" zone

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ACO-1 WELL HISTORY

OPERATOR A. Scott Ritchie

LEASE NAME Engel #2

SEC. 17 TWP 11S RGE. 31

(2)

(W) X

FILL IN WELL LOG AS REQUIRED:

Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

SHOW GEOLOGICAL MARKERS, LOGS RUN, OR OTHER DESCRIPTIVE INFORMATION.

FORMATION DESCRIPTION, CONTENTS, ETC.	TOP	BOTTOM	NAME	DEPTH
(Continued from 1st page)				
<p>DST #8 from 4436' to 4475' (Myrick Station). Recovered 1200' of gas in pipe, 420' of clean gassy oil, 300' of gassy mud cut oil, 120' of gassy oil cut muddy water, 420' of muddy water. IFP:138-334#/30"; ISIP:1009#/45"; FFP:380-460#/30"; FSIP:986#/45".</p>				
<p>DST #9 from 4482' to 4505' (Ft. Scott) Recovered 5' of mud, no show of oil. IFP:33-33#/30"; ISIP:77#/30"; FFP:33-33#/30"; FSIP:55#/30".</p>				
<p>DST #10 from 4503' to 4565' (Johnson zone). Recovered 130' of mud cut oil. IFP:44-55#/45"; ISIP:1078#/45"; FFP:77-88#/45"; FSIP:1066#/45".</p>				
<p>DST #11 from 4631' to 4641' (Miss. Dolomite). REcovered 70' of muddy water. IFP:22-33#/45"; ISIP:1066#/45" FFP:44-44#/45"; FSIP:998#/45".</p>				

RECEIVED  
STATE CORPORATION COMMISSION  
12-17-1984  
DEC 17 1984  
CONSERVATION DIVISION  
Wichita, Kansas