

SIDE ONE

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACO-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE

Operator: License # 5140
Name: FRONTIER OIL COMPANY
Address 125 N. Market, Ste. 1720
City/State/Zip Wichita, KS 67202
Purchaser: N/A
Operator Contact Person: Jean Angle
Phone (316) 263-1201

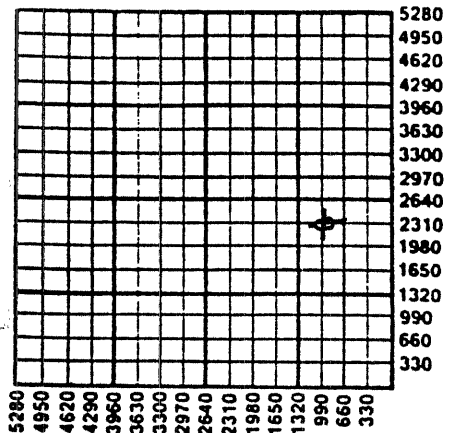
Contractor: Name: RED TIGER DRILLING CO.
License: 5302
Wellsite Geologist: Steve Parker

Designate Type of Completion
 New Well Re-Entry Workover
 Oil SWD Temp. Abd.
 Gas Inj Delayed Comp.
 Dry Other (Core, Water Supply, etc.)

If **OWMO**: old well info as follows:
Operator: _____
Well Name: _____
Comp. Date _____ Old Total Depth _____

Drilling Method:
 Mud Rotary Air Rotary Cable
3-20-90 3-29-90 3-30-90
Spud Date Date Reached TD Completion Date

API NO. 15- 163-23,084-00-00
County Rooks
NW NE SE Sec. 26 Twp. 10 Rge. 20 East West
2310 Ft. North from Southeast Corner of Section
990 Ft. West from Southeast Corner of Section
(NOTE: Locate well in section plat below.)
Lease Name Sutor Well # 1
Field Name Marcotte
Producing Formation N/A
Elevation: Ground 2153 KB 2158
Total Depth 3757 PBTD N/A



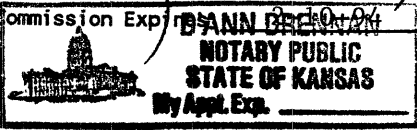
04-12-1990

Amount of Surface Pipe Set and Cemented at 267 Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set _____ Feet
If Alternate II completion, cement circulated from _____
feet depth to _____ w/ _____ SX cmt.

INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date of any well. Rule 82-3-130, 82-3-107 and 82-3-106 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form. See rule 82-3-107 for confidentiality in excess of 12 months. One copy of all wireline logs and drillers time log shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells. Any recompletion, workover or conversion of a well requires filing of ACO-2 within 120 days from commencement date of such work.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature Jean Angle
Title Agent Date 4-11-90
Subscribed and sworn to before me this 11th day of April,
19 90.
Notary Public D Ann Brennan
Date Commission Expires 11/10/94



COPY

K.C.C. OFFICE USE ONLY
F Letter of Confidentiality Attached
C Wireline Log Received
C Drillers Timelog Received
Distribution
 KCC SWD/Rep NGPA
 KGS Plug Other
(Specify) Dist. 4

4

SIDE TWO

Operator Name FRONTIER OIL COMPANY Lease Name Sutor Well # 1
 Sec. 26 Twp. 10 Rge. 20 East County Rooks
 West

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
 (Attach Additional Sheets.)
 Samples Sent to Geological Survey Yes No
 Cores Taken Yes No
 Electric Log Run Yes No
 (Submit Copy.)

Formation Description		
Name	Top	Bottom
Anhydrite	1595	+563
B/Anhydrite	1626	+532
Topeka	3181	-1023
Heebner	3393	-1235
Toronto	3416	-1258
Lansing-KS City	3430	-1272
Base KS City	3639	-1481
Arbuckle	3738	-1580
RTD	3757	-1599

DST #1 (3196-3220) 60-30-60-30. Rec. 530' MSW
 IF 44-122, FF 144-212, ISIP 707, FSIP 652.
 DST #2 (3628-3741) 60-30-15-30. Rec. 10' M.
 IF 111-122, FF 122-122, ISIP 322, FSIP 444.

cont'd.

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 1/2"	8 5/8"	20#	267	60-40 POZ	150	3%cc, 2%gel
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record			
Shots Per Foot	Specify Footage of Each Interval Perforated			(Amount and Kind of Material Used)		Depth	
N/A							
TUBING RECORD				Liner Run <input type="checkbox"/> Yes <input type="checkbox"/> No			
Date of First Production		Producing Method <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)					
N/A							
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity		

Disposition of Gas: N/A Vented Sold Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION Open Hole Perforation Dually Completed Commingled Other (Specify) _____

Production Interval _____

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 Contractor: Name: RED TIGER DRILLING CO.
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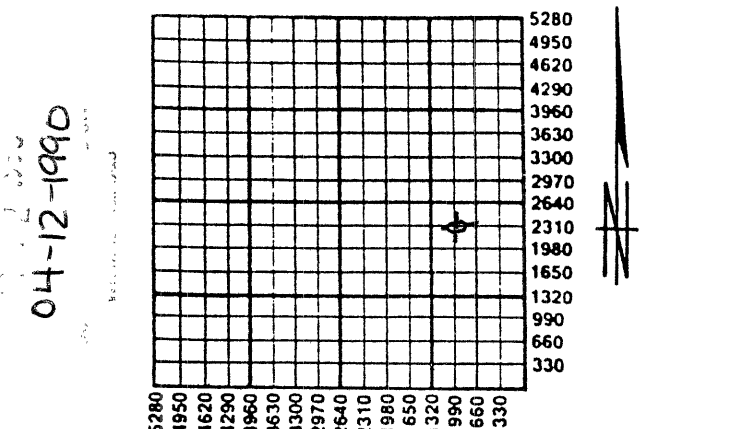
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All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature Jean Angle
 Title Agent Date 4-11-90
 Subscribed and sworn to before me this 11th day of April,
 19 90.
 Notary Public Diana Brennan

Date Commission Expires 03/31/94

**NOTARY PUBLIC
STATE OF KANSAS
My Appl. Exp. 03/31/94**

ORIGINAL

K.C.C. OFFICE USE ONLY
 F Letter of Confidentiality Attached
 C Wireline Log Received
 C Drillers Timelog Received
 Distribution
 KCC SWD/Rep NGPA
 KGS Plug Other
 (Specify)

SIDE TWO

Operator Name FRONTIER OIL COMPANY Lease Name Sutor Well # 1
 Sec. 26 Twp. 10 Rge. 20 East County Rooks
 West

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.

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Surface	12 1/2"	8 5/8"	20#	267	60-40 POZ	150	3%cc, 2%gel
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record			
Shots Per Foot	Specify Footage of Each Interval Perforated			(Amount and Kind of Material Used)		Depth	
N/A							
TUBING RECORD				Liner Run <input type="checkbox"/> Yes <input type="checkbox"/> No			
Date of First Production		Size		Set At		Packer At	
N/A							
Producing Method		Other (Explain)					
N/A		<input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)					
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity		

Disposition of Gas: N/A Vented Sold Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION Open Hole Perforation Dually Completed Commingled Other (Specify) _____

Production Interval _____

ORIGINAL

ORIGINAL

SIDE TWO (Page Two)

15-16323084-00-00

ACO-1 WELL HISTORY

OPERATOR FRONTIER OIL COMPANY

LEASE NAME SUTOR

* 1 SEC. 26 TWP. 10 RGE. 20W

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
DST #3 (3628-3744) 60-30-45-30. Rec. 70'. M w/slight show oil. IF 122-122, FF 122-133, ISIP 433, FSIP 411				
DST #4 (3630-3749) 60-30-60-30. Rec. 70' M IF 111-122, FF 122-133, ISIP 400, FSIP 377				
DST #5 (3742-3757) 30-30-30-30. Rec. 60' M IF 66-66, FF 66-66, ISIP 893, FSIP 783				

15-16323084-00-00

Phone 913-483-2627, Russell, Kansas
 Phone 316-793-5861, Great Bend, Kansas

ORIGINAL

Phone Plainville 913-434-2812
 Phone Ness City 913-798-3843

15-163-23084-00-00
 New

ALLIED CEMENTING CO., INC. N^o 8710

Home Office P. O. Box 31 Russell, Kansas 67665

Date	3-29-90	Sec.	26	Twp.	10 ^s	Range	20 ^w	Called Out	4:50 P.M.	On Location	6:30 P.M.	Job Start	7:00 P.M.	Finish	12:00 P.M.
Lease	Suton	Well No.	1	Location	Zunich 3W 35 1/2 W 2 1/2 S	County	Rooks	State	Ks.						
Contractor	Red Tiger Drilg. Co.		Rig # 8												
Type Job	Plug														
Hole Size	7 7/8"		T.D.		3757'										
Csg.	8 7/8"		Depth		267'										
Tbg. Size			Depth												
Drill Pipe			Depth												
Tool			Depth												
Cement Left in Csg.			Shoe Joint												
Press Max.	400#		Minimum												
Meas Line			Displace												
Perf.															

Owner: Same

To Allied Cementing Co., Inc.
 You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Charge To: Frontier Oil Company
 Street: 1437 N. Franklin
 City: Russell State Ks. 67665

The above was done to satisfaction and supervision of owner agent or contractor.

Purchase Order No. _____

X R. L. Deuling

CEMENT

EQUIPMENT

No.	Cementor	<u>Gary H.</u>
Pumptrk <u>191</u>	Helper	
No.	Cementor	<u>Manlyn K.</u>
Pumptrk	Helper	
	Driver	<u>Glen C.</u>
Bulktrk <u>#212</u>	Driver	

Amount Ordered	<u>215 sks @ 1.00/sk. 6 bags</u>	
Consisting of	<u>2 sks Floseal</u>	
Common	<u>129 sks @ 5.00/sk.</u>	<u>645.00</u>
Poz. Mix.	<u>86 sks @ 2.25/sk.</u>	<u>193.50</u>
Gel.	<u>7 sks @ 6.75/sk.</u>	<u>47.50</u>
Chloride		
Quickset		
Floseal	<u>50 # @ 1.60/lb.</u>	<u>80.00</u>
Sales Tax		
Handling	<u>0.90 \$/sk. (215 sks)</u>	<u>193.50</u>
Mileage	<u>0.03 \$/sk./mi. (17 mi.)</u>	<u>109.65</u>
Sub Total		<u>1269.15</u>
Total		

DEPTH of Job

Reference:	#9 Pumptruck - plug	<u>360.00</u>
	#8 1-8 7/8" dry hole plug	<u>20.00</u>
	#14 mileage @ 1.00/mi.	<u>17.00</u>
	Sub Total	<u>397.00</u>
	Tax	
	Total	

Floating Equipment: Thanks

Plugged rat hole w/15 sks.

Remarks:

1st plug @ 3738' w/25 sks.
 2nd plug @ 1600' w/25 sks.
 3rd plug @ 880' w/100 sks.
 4th plug @ 310' w/40 sks.
 8 7/8" plug @ 40' w/10 sks. to surface

Phone 913-483-2627, Russell, Kansas

Phone 316-793-5861, Great Bend, Kansas

Phone Plainville 913-434-2812

Phone Ness City 913-798-3843

ORIGINAL

15-163-23084-00-00

NEW

ALLIED CEMENTING CO., INC. N^o 10104

Home Office P. O. Box 31

Russell, Kansas 67665

Date	3-20-90	Sec.	26	Twp.	10	Range	20	Called Out	2:30 PM	On Location	4:30 PM	Job Start	9:00 PM	Finish	9:30 PM
Lease	Sutor	Well No.	#1	Location				Sutor School 2 1/2 S 1/4 E	Country	ROCKS	State	KANSAS			
Contractor	Red Tiger Drilg Rig 8							Owner	SAME						
Type Job	Surface							To Allied Cementing Co., Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.							
Hole Size	12 1/4"		T.D.	272'											
Csg.	8 3/8"		Depth	267'											
Tbg. Size			Depth												
Drill Pipe			Depth												
Tool			Depth												
Cement Left in Csg.	15'		Shoe Joint												
Press Max.			Minimum												
Meas Line	↘		Displace												
Perf.															

Charge To: **Frontier Oil Co**
 Street: **1437 N. Franklin**
 City: **Russell** State: **Kansas**

The above was done to satisfaction and supervision of owner agent or contractor.

Purchase Order No. _____
 X *Dave [Signature]*

CEMENT

EQUIPMENT

#191	No.	Cementer	M Kaufman
Pumptrk		Helper	
	No.	Cementer	Wayne M
Pumptrk		Helper	
#212		Driver	blen c
Bulktrk		Driver	

Amount Ordered	150 SKS 60/40 P-239cc 2706el	
Consisting of		
Common	90 SKS @ 5 ⁰⁰	450 ⁰⁰
Poz. Mix	60 SKS @ 22 ⁵	135 ⁰⁰
Gel.	3 SKS N/C	N/C
Chloride	5 SKS @ 20 ⁰⁰	100 ⁰⁰
Quickset		
Sales Tax		
Handling	@ 90¢	135 ⁰⁰
Mileage	3¢/SK/MILE	72 ⁰⁰
Sub Total		
Total	892 ⁰⁰	

DEPTH of Job			
Reference:	#	PUMP TAK	360 ⁰⁰
		1- 8 3/8" PLUG	40 ⁰⁰
		1 ⁰⁰ PER MILE	16 ⁰⁰
		Sub Total	
		Tax	
		Total	416 ⁰⁰

Remarks:
Cement Circulated

Floating Equipment

[Signature]