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DEC 1 1991

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

FROM CONFIDENTIAL
County Logan

API NO. 15- 109-20,485 -0000

NW NE SE Sec. 29 Twp. 15 Rge. 35 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.)

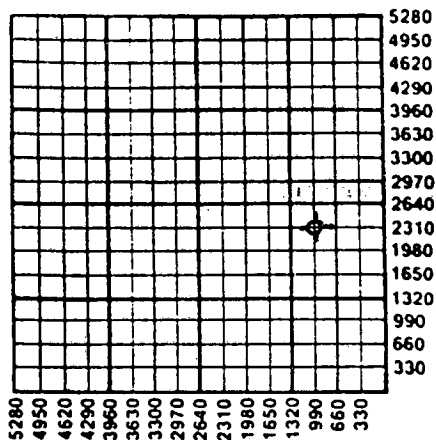
Lease Name Dirks Well # 4

Field Name Dirks

Producing Formation N/A

Elevation: Ground 3228 KB 3233

Total Depth 4496 PBSD 4440



Handwritten note: A-1-2 DFO

Amount of Surface Pipe Set and Cemented at 365 Feet

Multiple Stage Cementing Collar Used? Yes X No

If yes, show depth set _____ Feet

If Alternate II completion, cement circulated from _____

feet depth to _____ w/ _____ sx cmt.

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: Joel Alberts

Designate Type of Completion

X New Well Re-Entry Workover

Oil SWD Temp. Abd.

Gas Inj Delayed Comp.

X Dry Other (Core, Water Supply, etc.)

If OWM: old well info as follows:

Operator:

Well Name:

Comp. Date Old Total Depth

Drilling Method:

X Mud Rotary Air Rotary Cable

3-28-90 4-10-90 11-15-90

Spud Date Date Reached TD Completion Date

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 11-19-90

Subscribed and sworn to before me this 19th day of November, 1990.

Notary Public D'Ann Brennan

Date Commission Expires 2-10-94

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



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SIDE TWO

Operator Name FRONTIER OIL COMPANY Lease Name Dirks Well # 4
 Sec. 29 Twp. 15 Rge. 35 East West
 County Logan

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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. (Log attached)

Drill Stem Tests Taken (Attach Additional Sheets.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Formation Description <input type="checkbox"/> Log <input checked="" type="checkbox"/> Sample <table border="1"> <thead> <tr> <th>Name</th> <th>Top</th> <th>Bottom</th> </tr> </thead> <tbody> <tr><td>Anhydrite</td><td>2495</td><td>+738</td></tr> <tr><td>Topeka</td><td>3721</td><td>-488</td></tr> <tr><td>Heebner</td><td>3950</td><td>-717</td></tr> <tr><td>Toronto</td><td>3971</td><td>-738</td></tr> <tr><td>Lansing-KS City</td><td>3997</td><td>-764</td></tr> <tr><td>Base of KS City</td><td>4393</td><td>-1160</td></tr> <tr><td>Marmaton</td><td>4407</td><td>-1174</td></tr> <tr><td>Pawnee</td><td>4472</td><td>-1239</td></tr> <tr><td>RTD</td><td>4496</td><td>-1263</td></tr> <tr><td>4 1/2" Casing</td><td>4491</td><td>-1258</td></tr> </tbody> </table>	Name	Top	Bottom	Anhydrite	2495	+738	Topeka	3721	-488	Heebner	3950	-717	Toronto	3971	-738	Lansing-KS City	3997	-764	Base of KS City	4393	-1160	Marmaton	4407	-1174	Pawnee	4472	-1239	RTD	4496	-1263	4 1/2" Casing	4491	-1258
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4 1/2" Casing	4491	-1258																																	
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																																		
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																																		
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																		

DST #1 (3948-3990) 45-45-45-45. Rec. 100' SOCM (25% O, 75% M). IF 42-74, FF 74-74, ISIP 1054 FSIP 1037.

DST #2 (3990-4020) 60-60-45-60. Rec 120' GO 100' OCM (35% O, 5% G, 60% M) IF 42-78, FF 106-121, ISIP 159 FSIP 163. cont'd.

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# New	365	60-40POZ	200	2% gel, 3% CC
Production	7 7/8"	4 1/2"	10 1/2# Used	4491	ASC	225	-0-

Shots Per Foot	Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
4	4032-36	N/A	
4	4052-4080	500 gal Mud Acid	4052-80
2	4231-4240	500 gal NEA Acid	4231-40
4	3970-3976	250 gal 15% Mud Acid	3970-76

TUBING RECORD N/A Size Set At Packer At Liner Run Yes 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	Cf 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) _____

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OPERATOR FRONTIER OIL COMPANY LEASE NAME Dirks # 4 SEC. 29 TWP. 15 RGE. 35W

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 (4018-4050) 30-45-30-45. Rec. 15' SGCO, 225' O&GCWM (24% O, 6% G, 35% W, 35% M) 440' GSW. IF 74-223, FF 265-312, ISIP 1054, FSIP 1027.		RELEASED DEC 13 1991 FROM CONFIDENTIAL		
DST #4 (4048-4062) 45-60-45-60. Rec. 40' O 90' SO&WCM (86% M, 8% O, 6% W). IF 10-36, FF 68-89, ISIP 1106, FSIPP1085.				
DST #5 (4198-4240) 60-45-60-45. Rec. 3' O, 75' SOCM (97% M, 3% O). IF 21-42, FF 53-68, ISIP 1131, FSIP 1096.				
DST #6 (4414-4446) 30-60-30-60. Rec. 15' Mww/spks of O. IF 14-21, FF 21-25, ISIP 180, FSIP 148.				
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STATE OF KANSAS COMMISSION

NOV 20 1990

CONSERVATION DIVISION
Wichita, Kansas

ORIGINAL

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ALLIED CEMENTING CO., INC. No. 8884

Home Office P. O. Box 51

Russell, Kansas 67665

Date	11-15-90	Sec.	29	Twp.	15	Range	135	Called Out	10 AM	On Location	10 AM	Job Start	12:45 PM	Finish	12:45 PM
Lease		Well No.	11	Location	Russell Springs	County	KS	State	Kan						
Contractor															
Type Job															
Hole Size								I.D.							
Csg.								Depth							
Tbg. Size								Depth							
Drill Pipe								Depth							
Tool								Depth							
Cement Left in Csg.								Shoe Joint							
Press Max.								Minimum							
Meas Line								Displace							
Perf.															

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

Charge To: Franklin Co.

Street

City

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

Purchase Order No. 11-15-90

Amount Ordered 250.00

EQUIPMENT

No.	Cementer	Helper	Driver
Pumptrk 177	McAboo	Will H.	
Pumptrk			Mark D.
Bulktrk			
Bulktrk			

Consisting of

Common
Poz. Mix
Gel.
Chloride
Quickset
Sales Tax
Handling
Mileage
Total

DEPTH of Job

Reference:	Pump Truck
Sub Total	
Tax	
Total	

Floating Equipment

Total	
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Remarks:

STATE CORPORATION

NOV 20 1990

CONSERVATION DIVISION
Wichita, Kansas

15-109-20485-0000

ALLIED CEMENTING CO., INC.

CONFIDENTIAL

New

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

No. 10129

Date	3-28-90	Sec.	29	Twp.	15c	Range	35w	Called Out	8:00 AM	On Location	2:15 PM	Job Start	6:15 PM	Finish	6:45 PM
Case	DIRK 5		Well No. #4		Location			Russell - Springs 12 S	Lane		County		State		Kansas
Contractor	Red Tiger Dalg. Rig #7			Owner			3 1/2 W 1 S 1/4 W into								
Type Job	Surface					To: Allied Cementing Co., Inc. You are hereby requested to rent cementing equipment and furnish cement and helper to assist owner or contractor to do work as listed.									
Core Size	12 1/4		T.D.		368'										
Csg.	8 7/8		Depth		365'										
Tbg. Size			Depth												
Drill Pipe			Depth												
Tool			Depth												
Cement Left in Csg.	15'		Shoe Joint												
Press Max.			Minimum												
Meas Line	✓		Displace		22 1/2 BBL.										
Perf.															

EQUIPMENT

Pumptrk	No. #177	Cementer	<i>Shawn</i>
		Helper	<i>Will</i>
Pumptrk	No.	Cementer	
		Helper	
Bulktrk	#132	Driver	<i>Mark</i>
		Driver	

Purchase Order No.	<i>Ward Hughes</i>		
Amount Ordered	200 SK 6 7/8 1/4 Poz 2 7/8 gel 3% cc		
Consisting of			
Common	120	5.00	720.00
Poz. Mix	80	2.40	192.00
Gel.	4		n/c
Chloride	6	20.00	120.00
Quickset			
Sales Tax			
Handling	90¢		180.00
Mileage	3¢		276.00
Sub Total			
Total			1488.00

DEPTH of Job		
Reference:	Pump. TRUCK chrg.	360.00
	1.00 per mile	46.00
	WOODEN Plug	40.00
	39¢ per Ft @ 300 Ft	25.35
	Sub Total	471.35
	Total	471.35

Remarks: CEMENT Circulated

Shawn

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STATE CORPORATION-COMMISSION

NOV 20 1990

CONSERVATION DIVISION

Wichita, Kansas