

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 # 5393Name: A. L. Abercrombie, Inc.Address 150 N. Main, Suite 801City/State/Zip Wichita, KS 67202Purchaser: Clear Creek, Inc.Operator Contact Person: Jack K. WhartonPhone (316) 262-1841Contractor: Name: Abercrombie Drilling, Inc.License: 5422Wellsite Geologist: Mark Galyon

Designate Type of Completion

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

If OWD: old well info as follows:

Operator: _____

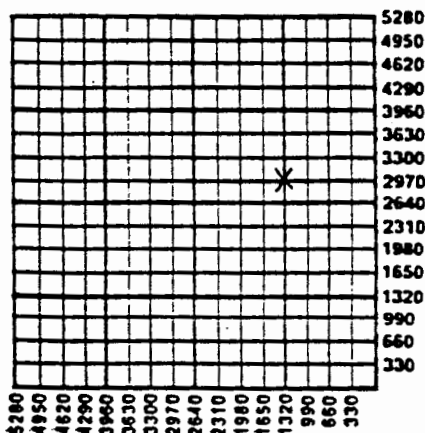
Well Name: _____

Comp. Date _____ Old Total Depth _____

Drilling Method:

☒ Mud Rotary ☐ Air Rotary ☐ Cable6-21-90 7-2-90 8-20-90

Spud Date Date Reached TD Completion Date

API NO. 15- 193-20.521County ThomasS/2 E/2 NE Sec. 29 Twp. 10S Rge. 32 X East West2970 Ft. North from Southeast Corner of Section1210 Ft. West from Southeast Corner of Section
(NOTE: Locate well in section plat below.)Lease Name Broeckelman Well # 2Field Name BroeckelmanProducing Formation Lansing-Kansas CityElevation: Ground 3060 KB 3065Total Depth 4130 PSTD 4138Amount of Surface Pipe Set and Cemented at 328 FeetMultiple Stage Cementing Collar Used? ☒ Yes ☐ NoIf yes, show depth set 1817.56 FeetIf Alternate II completion, cement circulated from 1817.56feet depth to surface w/ 325 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 Jack K. WhartonTitle Vice President Date 9-13-90Subscribed and sworn to before me this 13 day of September 19 90.Notary Public W. Douglas WoodardDate Commission Expires March 20, 1993

W. DOUGLAS WOODARD
Notary Public
My Admt. Exp. Mar. 20, 1993

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)

F06/SOC

79567

SIDE TWO

Operator Name A.L. Abercrombie, Inc. Lease Name Broeckelman Well # 2
County Thomas
Sec. 29 Twp. 10S Rge. 32
☐ East ☒ 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 (Attach Additional Sheets.)	☒ Yes ☐ No	Formation Description ☒ Log ☐ Sample
Samples Sent to Geological Survey	☒ Yes ☐ No	
Cores Taken	☐ Yes ☒ No	
Electric Log Run (Submit Copy.)	☒ Yes ☐ No	
DST #1 (4035'-4070') (B & D Zone Lansing) 30-45-60-45 Rec. 100' gip, 80' clean oil (33.8°) 60' oc wtry mud (10% oil, 40% water) 60' oil sptd wtr 475' wtr (38,000 chlorides)		Name Anhydrite 2569' (+496') Base Anhydrite 2597' (+468') Heebner 3977' (-912') Toronto 3998' (-933') Lansing 4016' (-951') Muncie Creek 4149' (-1084') Stark Shale 4231' (-1166') Base Kansas City 4298' (-1233') Marmaton 4326' (-1261') Pawnee 4422' (-1357') (cont.)

IEP 44-166 ISIP 1156
FEB 477-443 ESTD 1088 (cont.)

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 1/2	8 5/8	24#	328	60/40 pozmix	220	2%gel, 3%cc
production	7 7/8	4 1/2	10 1/2#		50/50 pozmix	50	1%Gill/sx 3/4%CFR-2
					common	250	WD-29
D.V.				1817.56	Lite	325	

PERFORATION RECORD

Shots Per Foot Specify Footage of Each Interval Perforated

Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used) Depth

2	4217 to 4222	500 gallons 15% INS	4535
4	4152 to 4153	500 gal 25% & 500 gal 15% Non-E	4535
4	4098 to 4100	500 gallons 15% INS	4176
2	4091 to 4093	squeeze w/100sx common	4138
		110 gallons 15% INS	4138

TUBING RECORD

Size
2 3/8"

Set At
4130

Packer At
NONE

Liner Run

☐ Yes ☒ No

Date of First Production
8-20-90

Producing Method ☐ Flowing ☒ Pumping ☐ Gas Lift ☐ Other (Explain)

Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Water	Bbls.	Gas-Oil Ratio	Gravity.
		64				Tr.		

Disposition of Gas:

METHOD OF COMPLETION

Production Interval

☐ Vented ☐ Sold ☐ Used on Lease
(If vented, submit ACO-18.)

☐ Open Hole ☒ Perforation ☐ Dually Completed ☐ Commingled

☐ Other (Specify) _____

4091-4093

29-10-32 W
Lease: Broeckelman #2

DRILL STEM TESTS

DST #2 (4084'-4105') (E & F Zone Lansing)
30-45-60-45
Rec. 200' gip, 844' clean gassy oil (33.2°)
186' so & mcw (10% oil, 40% mud)
930' water (46,000 chlorides)
IFP 77-422 ISIP 1211
FFP 477-805 FSIP 1189

DST #3 (4146'-4173') (H Zone Lansing)
30-45-60-45
Rec. 80' gip 15' clean oil
60' SO & WCM (5% oil 10% water)
245' muddy water
IFP 11-66 ISIP 740
FFP 88-166 FSIP 477

DST #4 (4180'-4205') (I Zone)
30-30-30-30
Rec. 10' oil sptd. mud
IFP 22-22 ISIP 66
FFP 22-22 FSIP 44

DST #5 (4198'-4227') (J Zone Lansing)
30-45-60-45
Rec. 280' gas in pipe
40' clean gassy oil, 40' mud cut oil (50% oil)
IFP 33-44 ISIP 1189 (38°)
FFP 44-55 FSIP 1090

DST #6 (4229'-4257') (K Zone Lansing)
30-30-30-30
Rec. 5' oil cut mud
IFP 22-22 ISIP 66
FFP 22-22 FSIP 55

DST #7 (4262'-4286') (L Zone Lansing)
30-30-30-30
Rec. 10' mud with scum oil
IFP 22-55 ISIP 729
FFP 22-22 FSIP 1013

DST #8 (4419'-4435') (Pawnee)
30-45-30-45
Rec. 70' water (26,000 chlorides)
IFP 22-55 ISIP 1057
FFP 55-55 FSIP 1013

DST #9 (4252'-4480') (Myrick Station)
30-30-30-30
Rec. 5' oil specked mud
IFP 22-22 ISIP 44
FFP 22-22 FSIP 22

DST #10 (4625'-4730') (Mississippian)
15-30-0-0
Rec. 180' wtry mud with a scum of oil
240' muddy water
FPS 77-233 FSIP 1167

LOG TOPS

Myrick Station	4461' (-1396')
Fort Scott	4487' (-1422')
Cherokee Shale	4516' (-1451')
Johnson Zone	4560' (-1495')
Mississippian	4615' (-1550')
LTD	4731' (-1666')
RTD	4730' (-1665')