

COPY 2107

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 # 4767Name: Ritchie Exploration, Inc.Address 125 N. Market, Suite 1000City/State/Zip Wichita, KS 67202Purchaser: Texaco Trading & Trans.Operator Contact Person: Bob MathiesenPhone (316) 267-4375Contractor: Name: Murfin Drilling Co.License: 6033Wellsite Geologist: Bob Mathiesen

Designate Type of Completion

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

If OWWO: old well info as follows:

Operator: _____

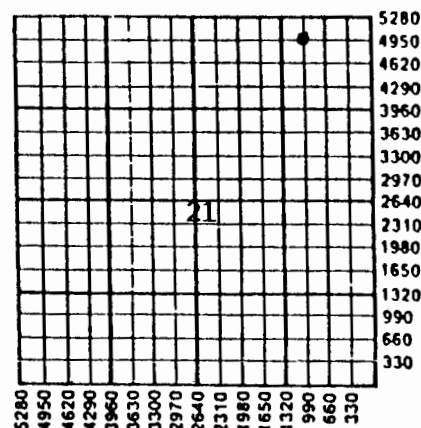
Well Name: _____

Comp. Date _____ Old Total Depth _____

Drilling Method:

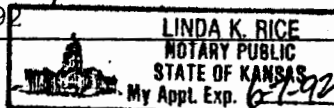
☒ Mud Rotary ☐ Air Rotary ☐ Cable7/17/90 7/28/90 8/20/90

Spud Date Date Reached TD Completion Date

API NO. 15- 193-20,523County ThomasNW NE NE Sec. 21 Twp. 10 Rge. 31 X East West4950 Ft. North from Southeast Corner of Section990 Ft. West from Southeast Corner of Section
(NOTE: Locate well in section plat below.)Lease Name L. Ottley Well # 1Field Name unknownProducing Formation LansingElevation: Ground 2970' KB 2975'Total Depth 4650' PBTD 4550'Amount of Surface Pipe Set and Cemented at 323' FeetMultiple Stage Cementing Collar Used? ☒ Yes ☐ NoIf yes, show depth set 2505' FeetIf Alternate II completion, cement circulated from 2505'feet depth to surface w/ 300 275 sx cm.

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 [Signature]Title President Date 10/11/90Subscribed and sworn to before me this 11th day of October, 19 90.Notary Public Linda K. RiceDate Commission Expires 6/07/92

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) IS

79343

SIDE TWO

Operator Name Ritchie Exploration, Inc. Lease Name L. Ottley Well # 1
Sec. 21 Twp. 10S Rge. 31W ☐ East County Thomas
☒ 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.)

(See attached page)

Formation Description
☒ Log ☐ Sample
Name Top Bottom

(See attached page).

PLEASE KEEP THIS
INFORMATION
CONFIDENTIAL

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"	28#	323'	60/40 poz	200	2% gel, 3% CC
Production	7-7/8"	5 1/2"	14#	4642'	60/40 poz	150	105 salt, 3% gil-sonite

PERFORATION RECORD		Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	
Shots Per Foot	Specify Footage of Each Interval Perforated		Depth
3 shots	4587'-4590' (Miss.)	Acid.w/ 250 gal. 15% MCA	4587'-90'
		Acid.w/500 gal. 15% INS	" "
2 shots	4284'-87' (L/KC "L" zone)	Acid.w/500 gal. 15% NE	4284'-87'
		Acid.w/750 gal. 28% NE	" "

TUBING RECORD			Liner Run ☐ Yes ☐ No	
Size	Set At	Packer At		

Date of First Production	Producing Method ☐ Flowing ☒ Pumping ☐ Gas Lift ☐ Other (Explain)			
8/20/90				
Estimated Production Per 24 Hours	Oil	Gas	Water	Gas-Oil Ratio
	3 Bbls.	Mcf	0 Bbls.	

Disposition of Gas: ☐ Vented ☐ Sold ☐ Used on Lease (If vented, submit ACO-18.)
METHOD OF COMPLETION: ☐ Open Hole ☒ Perforation ☐ Dually Completed ☐ Conmingled
☐ Other (Specify) _____
Production Interval: 4284'-87'

COPY

Ritchie Exploration, Inc.
#4767
#1 L. Ottley
NW NE NE
Section 21-10S-31W
Thomas County, KS

ACO-1
Page 2

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DRILL STEM TESTS

DST #1 from 4079' to 4102' (L/KC "E" zone).
Misrun. Tool would not open.

DST #2 from 4079' to 4102' (L/KC "E" zone).
Recovered 20' of mud.
IFP:11-22#/30"; ISIP:1277#/30";
FFP:22-33#/30"; FSIP:1267#/30".

DST #3 from 4142' to 4240' (L/KC "II-J" zones).
Recovered 20' of mud.
IFP:22-22#/30"; ISIP:1288#/30";
FFP:22-22#/30"; FSIP:1277#/30".

DST #4 from 4229' to 4300' (L/KC "K-L" zones).
Recovered 1200' of gas in pipe; 310' of
clean gassy oil (50% gas, 50% oil); 180'
of gassy mud cut oil (40% gas, 40% oil,
20% mud); 120' of gassy oil cut mud (40%
gas, 20% oil, 40% mud). 610' of total
fluid.

IFP:45-167#/30"; ISIP:1298#/45";
FFP:189-255#/30"; FSIP:1288#/45".

DST #5 from 4394' to 4470' (Pawnee-Myrick
Station). Recovered 10' of mud, scum of
oil on top of tool.
IFP:11-11#/30"; ISIP:33#/30";
FFP:11-11#/30"; FSIP:33#/30".

DST #6 from 4467' to 4565' (Ft. Scott-Johnson
zone). Recovered 15' of oil cut mud and
120' of gas in pipe.
IFP:11-11#/30"; ISIP:288#/30";
FFP:11-11#/30"; FSIP:738#/45".

DST #7 from 4556' to 4582' (Cong. sand).
Recovered 10' of mud with spots of oil.
IFP:11-11#/30"; ISIP:30#/30";
FFP:11-11#/30"; FSIP:45#/30".

DST #8 from 4557' to 4593' (Miss. Dolo.).
Recovered 420' of gas in pipe; 60' of clean
gassy oil (40% gas, 60% oil); 270' of gas
and oil cut mud (40% gas, 30% oil, 30%
mud). 330' total fluid.
IFP:33-78#/30"; ISIP:1140#/45";
FFP:89-134#/30"; FSIP:1129#/45".

ELECTRIC LOG TOPS

Anhydrite	2533' (+ 442)
B/Anhydrite	2561' (+ 414)
Heebner	3976' (-1001)
Toronto	3999' (-1024)
Lansing	4019' (-1044)
Muncie Creek	4147' (-1172)
Stark	4228' (-1253)
B/KC	4290' (-1315)
Marmaton	4321' (-1346)
Pawnee	4414' (-1439)
Myrick Station	4446' (-1471)
Ft. Scott	4475' (-1500)
Cherokee	4505' (-1530)
Johnson zone	4547' (-1572)
Cgl. sand	4574' (-1599)
Miss. Dolo.	4580' (-1605)
LTD	4650' (-1675)