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

**Operator:** License # 4767  
Name: Ritchie Exploration, Inc.  
Address: 125 N. Market, Suite 1000  
City/State/Zip: Wichita, KS 67202  
Purchaser: Koch Oil Co.  
Operator Contact Person: Jeff Christian  
Phone: (316) 267-4375  
Contractor: Name: Murfin Drilling Co.  
License: 6033  
Wellsite 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 OAMO: old well info as follows:
- **Operator:**  
- **Well Name:**  
- **Comp. Date:**  
- **Old Total Depth:**

Drilling Method:
- **Mud Rotary**
- **Air Rotary**
- **Cable**  
- 7/17/89  
- 7/24/89  
- 8/14/89

Spud Date  
Date Reached TD  
Completion Date

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**KANSAS GEOLOGICAL SURVEY**
**11/5/89**
**WICHITA BRANCH**
**WICHITA KANSAS**

Amount of Surface Pipe Set and Cemented at 266' Feet

Multiple Stage Cementing Collar Used? **Yes**  
If yes, show depth set **1976'** Feet

If Alternate II completion, cement circulated from 1976' feet depth to **Surface** w/ 550 px cnt.

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**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:**  
**Title:** Vice President  
**Date:** 10/27/89

Subscribed and sworn to before me this 27th day of **October**, 1989.

Notary Public  
**Linda K. Rice**

Date Commission Expires  
**6/07/92**

**LINDA K. RICE**  
**ROTARY PUBLIC**  
**STATE OF KANSAS**

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**K.C.C. OFFICE USE ONLY**
Letter of Confidentiality Attached  
Drillers Timelog Received

**Distribution**
- **KS**  
- **M**  
- **O**  
- **D**

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Form ACO-1 (7-89)
Operator Name: Ritchie Exploration, Inc.  Lease Name: David Frazey  Well #: 1
Sec. 18 Twp. 6S Rge. 21W  East  County: Graham
X 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 drill. Attach an extra sheet if more space is needed. Attach copy of log.

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

Formation Description
☐ Log  ☐ Sample

PLEASE KEEP THIS INFORMATION CONFIDENTIAL

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CASING RECORD
☐ New  ☐ Used

Report all strings set conductor, surface, intermediate, production, etc.

<table>
<thead>
<tr>
<th>Purpose of String</th>
<th>Size Hole Drilled</th>
<th>Size Casing Set (In O.B.)</th>
<th>Weight Lbs./Ft.</th>
<th>Setting Depth</th>
<th>Type of Cement</th>
<th># Sacks Used</th>
<th>Type and Percent Additives</th>
</tr>
</thead>
</table>
| Surface           | 12½"              | 8-5/8"                    | 23#             | 266'          | 60/40 poz      | 180          | 2% gel, 3% gil
| Production        | 7½/8"             | 4½"                       | 10.5#           | 3829'         | 60/40 poz      | 125          | 10% salt, salt flush    |

PERFORATION RECORD
Specify footage of each interval perforated

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

Depth

800 gal. of 28% acid 3562'-65'
2,200 gal. of 15% acid 3592.5'-96'
3608.5'-101'
3621'-23'
3626.5'-31'

TUBING RECORD

Size  Set At  Packer At  Liner Run  ☐ Yes  ☐ No

Date of First Production: 8/14/89
Producing Method: ☐ Flowing  ☑ Pumping  ☐ Gas Lift  ☐ Other (Explain)

Estimated Production Per 24 Hours


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

METHOD OF COMPLETION
☐ Open Hole  ☑ Perforation  ☐ Dually Completed  ☐ Commingled
Other (Specify) ____________________________________________

Production Interval

3562'-65'; 3592.5'-96'
3608.5'-101'
3621'-23'
& 3626.5'-31'
DST #1 from 3514' to 3576' (Toronto & Top zone). Recovered 230' of gas in pipe; 1' of clean oil; 125' of gassy, heavy oil cut mud (30% oil, 15% gas, 55% mud); 14' of heavy oil cut mud (33% oil, 67% mud). 140' total fluid.
IFP: 56-69#/30"; ISP: 1136#/45";
FIP: 80-87#/30"; FSIP: 1093#/45".

DST #2 from 3579' to 3622' (35' & 50' zones). Recovered 30' of oil cut mud (22% oil, 78% mud).
IFP: 32-34#/30"; ISP: 692#/45";
FIP: 37-37#/30"; FSIP: 574#/45".

DST #3 from 3616' to 3650' (70', 90' & 100' zones). Recovered 95' of gas in pipe and 55' of mud cut oil (65% oil, 35% mud).
IFP: 28-30#/30"; ISP: 820#/45";
FIP: 34-34#/30"; FSIP: 938#/45".
(Hisrun - pressure seals leaked).

DST #4 from 3665' to 3760' (140', 160', 180', 200' & 220' zones). Recovered 25' of very slightly oil cut mud (1% oil, 99% mud).
IFP: 76-76#/30"; ISP: 384#/30";
FSIP: 78-78#/30"; FSIP: 161#/30".

DST #5 from 3778' to 3826' (Conglomerate & Arbuckle). Recovered 25' of watery mud with a few oil spots.
IFP: 82-84#/30"; ISP: 549#/30";
FIP: 84-84#/30"; FSIP: 346#/30".