

SIDE TWO

Operator Name Ritchie Exploration, Inc. Lease Name Krug Well # 1

Sec. 27 Twp. 10 Rge. 32W East West
 County Thomas

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.)

List All E.Logs Run:
 R.A. Guard Log
 Gamma Ray Correlation Log

Log Formation (Top), Depth and Datum Sample

Name	Top	Datum
------	-----	-------

**PLEASE ATTACHED SHEET
 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 csg	12 1/4	8 5/8	28#	238	60/40poz	165	2% gel 3% CC
prod. csg	7 7/8	4 1/2	10 1/2#	4686'	60/40 poz	195	10% salt

ADDITIONAL 'CEMENTING/SQUEEZE' RECORD

Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input checked="" type="checkbox"/> Perforate	4110'-	50-60/40 poz		
<input type="checkbox"/> Protect Casing	4112.3'	90-common	140	10% gel
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
3.18	4173.5'-4175' "G" prime	500 gal. 15% NE	4173.5' 4175'
3.18	4110'-4112.3' "E" zone	500 gal 15% NE	4110' 4112.3'
	4 1/2" CIBP at 4160'		
4	4110'-4111.5' "E" zone	75 gal. 15% NE	4110' 4111.5'

TUBING RECORD Size 2 3/8" Set At 4141' Packer At NA Liner Run Yes No

Date of First, Resumed Production, SWD or Inj. 9-18-92 Producing Method Flowing Pumping Gas Lift Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	15.87	0	0		

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

METHOD OF COMPLETION

Open Hole Perf. Dually Comp. Commingled

Other (Specify) _____

Production Interval _____

RITCHIE EXPLORATION, INC.

125 N. Market - Suite 1000
 Wichita, Kansas 67202-1775
 316-267-4375 FAX 316-267-3026

ORIGINAL

#1 Krug
 SW NW NE
 Section 27-10S-32W
 Thomas County, Kansas
 API# 15-193-20,599-00-00
 White & Ellis Rig #9

OCT 13

CONFIDENTIAL

RELEASED

NOV 21 1994

FROM CONFIDENTIAL

ELECTRIC LOG TOPS

Anhydrite	2569' (+ 477)
B/Anhydrite	2595' (+ 451)
Topeka	3775' (- 729)
Heebner	3993' (- 947)
Lansing	4033' (- 987)
Stark	4252' (-1206)
B/KC	4312' (-1266)
Marmaton	4340' (-1294)
Pawnee	4436' (-1390)
Myrick Sta.	4474' (-1428)
Fort Scott	4503' (-1457)
Cherokee	4531' (-1485)
Johnson zn.	4575' (-1529)
Cgl. Sd.	4623' (-1577)
Miss. LS.	4647' (-1601)
Miss. Dolo.	4661' (-1615)
LTD	4692' (-1646)

PLEASE KEEP THIS
 INFORMATION
 CONFIDENTIAL

RECEIVED
 KANSAS CORPORATION COMMISSION

OCT 14 1992

CONSERVATION DIVISION
 WICHITA, KS

DST #1 from 4047' to 4074' (L/KC "C" zone). Recovered 2' oil cut mud (10% oil, 90% mud), and 671' water.
 IFP:70-172#/30"; ISIP:1184#/45"; FFP:264-345#/30"; FSIP:1164#/45".

DST #2 from 4098' to 4118' (L/KC "E" zone). Recovered 854' clean gassy oil (10% gas, 90% oil); 70' gas and water mud cut oil (20% gas, 45% oil, 10% mud, 25% water); and 335' water with few oil spots. 1279' total fluid.
 IFP:134-325#/30"; ISIP:1204#/30"; FFP:386-547#/30"; FSIP:1144#/30".

DST #3 from 4150' to 4196' (L/KC "G" and "H" zones). Recovered 180' mud with few oil spots; 2132' water. 2312' total fluid.
 IFP:284-886#/30"; ISIP:1283#/30"; FFP:956-1164#/30"; FSIP:1283#/30".

DST #4 from 4201' to 4256' (L/KC "I" and "J" zones). Recovered 20' mud with few oil spots.
 IFP:50-50#/30"; ISIP:101#/30"; FFP:50-50#/30"; FSIP:81#/30".

DST #5 from 4249' to 4318' (L/KC "K" and "L" zones). Recovered 130' oil specked mud (1% oil, 99% mud); 360' water with few oil spots. 490' total fluid.
 IFP:71-152#/45"; ISIP:1025#/45"; FFP:203-223#/45"; FSIP:966#/45".

DST #6 from 4427' to 4602' (Pawnee and Johnson zones). Recovered 20' mud.
 IFP:50-50#/30"; ISIP:1055#/30"; FFP:50-50#/30"; FSIP:866#/30".

DST #7 from 4586' to 4645' (Conglomerate Sand). Recovered 180' oil specked mud and 540' water with few oil spots. 720' total fluid.
 IFP:71-172#/45"; ISIP:1125#/45"; FFP:243-325#/45"; FSIP:1105#/45".

OCT 13

ORIGINAL

ALLIED CEMENTING CO., INC.

2985

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

15-193-20599-00-00

New

Date	8-20-92	Sec.	27	Wp.	10	Range	32	Called Out	2:50 AM	On Location	6:00 AM	Job Start	11:15 AM	Finish	11:40 AM
Lease	Krug	Well No.	1	Location	Oakley T-70 West EXT			County	Thomas	State	KS				
Contractor	White & Ellis Drily			Owner	25 ³ / ₄ W 4 ⁵ / ₈										
Type Job	Production String			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	7 ⁷ / ₈		T.D.	4690											
Csg.	4 ¹ / ₂		Depth	4686											
Tbg. Size				Depth											
Drill Pipe				Depth											
Tool	Port Collar			Depth	2563										
Cement Left in Csg.				Shoe Joint	14										
Press Max.				Minimum											
Meas Line	⊙			Displace	74.60										
Perf.															

Charge To Ritchie Exploration Inc
 Street 125 N Market Suite 1000
 City Wichita State KS 67202
 The above was done to satisfaction and supervision of owner agent or contractor.

Purchase Order No. [Signature]
 X [Signature]

CEMENT
 500 gal WFR-2
 Amount Ordered 210 @ 10% salt

EQUIPMENT

No.	Cementer	Dave
Pumptrk 153	Helper	Jessie
No.	Cementer	
Pumptrk	Helper	RELEASED
Driver	NOV 21 1994	
Bulktrk 218	Driver	Jason

Consisting of		
Common	126 @ 6.35	800.10
Poz. Mix	84 @ 2.65	222.60
Salt	18 @ 4.75	85.50
Chloride		
Quickset		
WFR-2	500 gals @ 50¢	250.00
Handling	@ 1.00	210.00
Mileage	40 / 50¢ / mile	45.00
Sub Total		1613.20
AUG 27 1992		Total

FROM CONFIDENTIAL

DEPTH of Job		
Reference:		
	Pump trk chg	880.00
	2 @ per mile	8.00
	4 ¹ / ₂ Rubber plug	33.00
	Sub Total	
	Tax	
	Total	921.00

Floating Equipment	4 ¹ / ₂ Baker	
	1 AFU Insert	169.00
	1 Basket	113.00
	6 Centrifizers	258.00
	1 Port Collar	1680.00
	1 Guide Shoe	109.00
		2329.00

Remarks: plug Rat hole w/ 15 sk
 Centon 1, 6, 9, 13, 15, 53, 56
 port collar on 55 Basket on Bottom
 Float held

RECEIVED
 KANSAS CORPORATION COMMISSION
 OCT 14 1992
 CONSERVATION DIVISION
 WICHITA, KS
 AUG 24 1992

Well, Kansas

ORIGINAL OCT 13

Phone Plainville 913-434-2812

Phone Ness City 913-798-3843

193-5861, Great Bend, Kansas

CONFIDENTIAL

ALLIED CEMENTING CO., INC.

1614

Home Office P. O. Box 31

Russell, Kansas 67665

15-193-20599-00-00

NEW

Date	9-16-92	Sec.	27	Twp.	10 S	Range	32 W	Called Out	10:00 A.M.	On Location	12:00	Job Start	11:00 P.M.	Finish	5:00 P.M.
Lease	Krug	Well No.	#1	Location	2-N Oahlan			County	Logan	State	Mo.				
Contractor	Express Well Service														
Type Job	Port Collar														
Hole Size	7 7/8	T.D.													
Csg.	4 1/2	Depth													
Tbg. Size	2"	Depth													
Drill Pipe		Depth													
Tool	Port Collar	Depth 2565													
Cement Left in Csg.		Shoe Joint RELEASED													
Press Max.		Minimum NOV 21 1994													
Meas Line		Displace													
Perf.	FROM CONFIDENTIAL														

EQUIPMENT

Pumptrk	No.	Cementer	Alex
	191	Helper	Dary
Pumptrk	No.	Cementer	
		Helper	
Bulktrk	212	Driver	Joe
Bulktrk	218	Driver	Paul

DEPTH of Job

Reference:	Pump Truck Chg.	475 ⁰⁰
	Pump Truck Mi. 3-Mi	6 ⁰⁰
	Sub Total	
	Tax	
	Total	481 ⁰⁰

Remarks: 1 qt sand on Plug Port Collar @ 2565 Mix 425 sk cement
 Cement did circulate, Washed out tubing & casing, Washed sand off plug

Owner Richie Exploration Inc.
 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 Richie Exploration Inc.
 Street 1705 Anthony Drive
 City Hays State Kan 67601
 The above was done to satisfaction and supervision of owner agent or contractor.

Purchase Order No. [Signature]
 X [Signature]

CEMENT
 Used 425 SKs
 Amount Ordered 550 SK 50/50 Pos. 670322
 Consisting of 1/4" Fls Seal 1-sk sand
 Common 213 SKs @ 6³⁵ 1,352⁵⁵
 Poz. Mix 212 SKs @ 2⁶⁵ 561⁸⁰
 Gel. 15 SKs @ 6²⁵ 101²⁵
 Chloride
~~Cement~~ 106 lbs Fls-Sal @ 1⁰⁰ 106⁰⁰
1-Sand @ 4²⁵ 4⁷⁵

Handling 1⁰⁰ per SK 425⁰⁰
 Mileage 2⁰⁰ per SK 1 mil 51⁰⁰

Sub Total
 Total 2,602³⁵

SEP 29 1992

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

ORIGINAL OCT 13

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

CONFIDENTIAL

ALLIED CEMENTING CO., INC.

1591

Home Office P. O. Box 31

Russell, Kansas 67665

15-193-20599-00-00

New

Date	8-10-92	Sec.	27	Twp.	10 S	Range	32 W	Called Out	10:00 AM	On Location	2:00 PM	Job Start	2:15 PM	Finish	2:30 PM
Lease	KRUG	Well No.	#1	Locality	OAKLEY	Hwy	40 & 83	Sec	4 N	Twp	34 W	County	THOMAS	State	KANSAS
Contractor	WHITE & ELLIS DRUG RIG # 9														
Type Job	SURFACE														
Hole Size	12 1/4	T.D.	239												
Csg.	8 5/8	#	Depth	238'											
Tbg. Size	Depth														
Drill Pipe	Depth														
Tool	Depth														
Cement Left in Csg.	15'	Shoe Joint													
Press Max.	Minimum														
Meas Line	✓ 225'	Displace	✓ 14 1/2	BBL											
Perf.															

Owner 4 S

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 RITCHIE EXPLORATION INC.
 Street 125 N MARKET #1000
 City WICHITA State KAN 67202

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

Purchase Order No. Donald A. Dendrig #9

CEMENT

Amount Ordered	165 SK	6 1/4	2% Gel	3% CC
Consisting of				
Common	99	6.35	628.65	
Poz. Mix	64	2.65	174.90	
Gel.	3	6.75	20.25	
Chloride	5	21.00	105.00	
Quickset				

EQUIPMENT

No.	Cementor	<u>Will</u>
#177	Helper	<u>Will</u>
No.	Cementor	
#	Helper	
	Driver	<u>Paul</u>
	Driver	

DEPTH of Job

Reference:	Pump Truck CHRG	380.00
	200 per mile	12.00
	Plug	42.00
	Sub Total	434.00
	Tax	
	Total	

Remarks: Cement CIRCULATED

Handling	100-	165.00
Mileage	04	45.00
	Sub Total	1118.55

RELEASED

NOV 21 1994

RECEIVED
 KANSAS CORPORATION COMMISSION

OCT 14 1992

CONSERVATION DIVISION
 WICHITA, KS

AUG 12 1992

15-193-20599-0070P ORIGINAL

Phone Plainville 913-434-2812

Phone Ness City 913-798-3843

Great Bend, Kansas

OCT 13

1708

ALLIED CEMENTING CO., INC.

Home Office P. O. Box 31

Russell, Kansas 67665

Date	9-9-92	Sec.	27	Twp.	10	Range	32	Called Out	Noon	On Location		Job Start		Finish	2:45 PM
Lease	Krug	Well No.	1	Location	OKley 2nd Exit 25th Thomas			County	State	Kan					
Contractor	Express Well Ser														
Type Job	Squeeze														
Hole Size	T.D.														
Csg.	4 1/2" Depth														
Tbg. Size	2" Depth 4009														
Drill Pipe	Depth														
Tool	Depth														
Cement Left in Csg.	Shoe Joint														
Press Max.	Minimum														
Meas Line	Displace														
Perf.	4110-12 1/2														

EQUIPMENT

No.	Cementer	McAlao
Pumptrk 177	Helper	Will
No.	Cementer	
Pumptrk 213	Helper	Mark
	Driver	
Bulktrk 160	Driver	Jason
Bulktrk	Driver	

DEPTH of Job		
Reference:	Pump Truck	475.00
	200 Per mile 4m	8.00
	Sub Total	483.00
	Tax	
	Total	

Remarks: Test Plug at 2000# Held
 Inj. Rate 3BPM at 1100#
 Mixed 50 40 10% salt & 90 com
 Squeezed at 2000# washed out
 Shut in with 200#.

Owner
 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 Ritchie Exp.
 Street 125 N Market #1000
 City Wichita State Kan 67202
 The above was done to satisfaction and supervision of owner agent or contractor.

Purchase Order No. X
 CEMENT

Amount Ordered	50 40 10% salt 90 com	
Consisting of		
Common	120	6.35 762.00
Poz. Mix	20 RELEASED	2.65 53.00
Gel.		
Chloride	NOV 2 1 1994	
Quickset		
SALT FROM CONFIDENTIAL	475	2375
Handling	140	1.00 140.00
Mileage	.04	45.00
Sub Total		102375
SEP 9 2	1 0 0 7 4 3 3	

Floating Equipment
RECEIVED
 KANSAS CORPORATION COMMISSION
 OCT 14 1992
 CONSERVATION DIVISION
 WICHITA, KS
 SEP 21 1992
 SEP 15 1992

FORM MUST BE TYPED

SIDE ONE

COPY

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACO-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE 20'N & 50'

API NO. 15- 193-20,599-00-00
County Thomas
ESW . NW. NE Sec. 27 Twp. 10 Rge. 32W

Operator: License # 4767
Name: Ritchie Exploration, Inc.
Address 125 N. Market, Suite 1000
City/State/Zip Wichita, KS 67202

970 Feet from S/W (circle one) Line of Section
2260 Feet from E/W (circle one) Line of Section
Footages Calculated from Nearest Outside Section Corner:
NE, SE, NW or SW (circle one)

Purchaser: Texaco
Operator Contact Person: A. Scott Ritchie III
Phone (316) 267-4375

Lease Name Krug Well # 1
Field Name PAC83

Contractor: Name: White & Ellis Drilling
License: 5420

Producing Formation L/KC
Elevation: Ground 3041 KB 3046
Total Depth 4690' PBTD 4160

Wellsite Geologist: B. Mathiesen

Amount of Surface Pipe Set and Cemented at 238' Feet
Multiple Stage Cementing Collar Used? X Yes No
If yes, show depth set 2565' Feet

Designate Type of Completion
X New Well Re-Entry Workover
X Oil SWD SIOW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSU, Expl., Cathodic, etc.)

If Alternate II completion, cement circulated from 2565'
feet depth to surface w/ 425 sx cat.

If Workover/Re-Entry: old well info as follows:

Drilling Fluid Management Plan ATL 11-16-92
(Data must be collected from the Reserve Pit)

Operator: _____

Chloride content 320 ppm Fluid volume 800 bbls

Well Name: _____

Dewatering method used evaporation

Comp. Date _____ Old Total Depth _____

Location of fluid disposal if hauled offsite:
OCT 14 1992

 Deepening Re-perf. Conv. to Inj/SWD

 Plug Back PBTD

 Commingled Docket No. _____

 Dual Completion Docket No. _____

 Other (SWD or Inj?) Docket No. _____

Operator Name _____

Lease Name _____

Quarter _____ S Rng. _____ E/W _____

County _____ Docket No. _____

8-10-92 8-20-92 9-18-92
Spud Date Date Reached TD Completion Date

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 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 geologist well report 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.

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 10-13-92

Subscribed and sworn to before me this 13 day of October 1992.

Notary Public [Signature]

Date Commission Expires _____

LISA THIMMESCH
NOTARY PUBLIC
STATE OF KANSAS
My Appt. Exp. 3-29-95

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