

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

Form ACO-1  
June 2009  
Form Must Be Typed  
Form must be Signed  
All blanks must be Filled

OPERATOR: License # 9951  
Name: Kirby Krier Oil, Inc.  
Address 1: 1043 NE 80th. Road  
Address 2: \_\_\_\_\_  
City: Clafin State: KS Zip: 67525 + \_\_\_\_\_  
Contact Person: Kirby Krier  
Phone: ( 620 ) 587-3810  
CONTRACTOR: License # 33905  
Name: Royal Drilling, Inc.  
Wellsite Geologist: Jim Musgrove  
Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well     Re-Entry     Workover  
 Oil     WSW     SWD     SIOW  
 Gas     D&A     ENHR     SIGW  
 OG     GSW     Temp. Abd.  
 CM (Coal Bed Methane)  
 Cathodic     Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

- Deepening     Re-perf.     Conv. to ENHR     Conv. to SWD  
 Conv. to GSW  
 Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_  
 Commingled    Permit #: \_\_\_\_\_  
 Dual Completion    Permit #: \_\_\_\_\_  
 SWD    Permit #: \_\_\_\_\_  
 ENHR    Permit #: \_\_\_\_\_  
 GSW    Permit #: \_\_\_\_\_

6/7/2011    6/14/2011    6-14-11  
Spud Date or    Date Reached TD    Completion Date or  
Recompletion Date       Recompletion Date

API No. 15 - 009-25569-00-00

Spot Description:  
S2 NE NW SE Sec. 22 Twp. 16 S. R. 12  East  West  
2,200 Feet from  North /  South Line of Section  
1,650 Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE     NW     SE     SW

County: Barton

Lease Name: Riemann D Well #: 1

Field Name: Kraft-Prusa

Producing Formation: \_\_\_\_\_

Elevation: Ground: 1926' Kelly Bushing: 1931'

Total Depth: 3375' Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: 411 Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: 67,000 ppm Fluid volume: 500 bbls

Dewatering method used: Allow to dry and backfill

Location of fluid disposal if hauled offsite: \_\_\_\_\_

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

**INSTRUCTIONS:** An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, 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 of 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.

AFFIDAVIT

I am the affiant and I hereby certify that 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: Kirby Krier

Title: president Date: 8/2/11

KCC Office Use ONLY RECEIVED

Letter of Confidentiality Received

Date: AUG 03 2011

Confidential Release Date: \_\_\_\_\_

Wireline Log Received

Geologist Report Received

UIC Distribution

ALT  I  II  III Approved by: Dg Date: 8/10/11

KCC WICHITA

Operator Name: Kirby Krier Oil, Inc. Lease Name: Riemann D Well #: 1  
 Sec. 22 Twp. 16 S. R. 12  East  West County: Barton

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems 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 test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(If no, Submit Copy)</i>  List All E. Logs Run: <u>Gamma Ray NEUTRON</u> <u>Bond Log</u>	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> 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	12.25	8.625	20 #	411	common	190	3% cc
Production	7.87	5.5	15.5	3364	common	180	10% salt 5%

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <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
<del>4</del> 4	2942 - 2952		
4	2958 - 2968		

TUBING RECORD: Size: <u>2.87</u> Set At: <u>3010</u> Packer At:		Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD or ENHR. <u>7/1/2011</u>	Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____	
Estimated Production Per 24 Hours	Oil Bbls. <u>30</u>	Gas Mcf <u>0</u> Water Bbls. <u>0</u> Gas-Oil Ratio _____ Gravity _____

DISPOSITION OF GAS: <input checked="" type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5) (Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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# QUALITY OILWELL CEMENTING, INC.

Phone 785-483-2025  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 5023

Date	6/14/11	Sec.	22	Twp.	16	Range	12	County	Barton	State	KS	On Location		Finish	1:30 AM
Lease	Riemann D			Well No.	1			Location	Beaver, 2E, 4N, W into						
Contractor	Royal Drilling Rig #1							Owner	To Quality Oilwell Cementing, Inc.						
Type Job	Production string							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.	3375'			Charge To	Krier, Kirby Oil, Inc.							
Csg.	5 1/2" 15.50#		Depth	3364'			Street								
Tbg. Size			Depth				City	State							
Tool			Depth				The above was done to satisfaction and supervision of owner agent or contractor.								
Cement Left in Csg.	42'		Shoe Joint	42'			Cement Amount Ordered	180sx Com 10% Salt							
Meas Line			Displace	79 Bbks.			5% Gilsonite								
<b>EQUIPMENT</b>															
Pumptrk	1	No.	Cementer	Paul		Helper	Common 180								
Bulktrk	8	No.	Driver	Brandon		Driver	Poz. Mix								
Bulktrk	PJ	No.	Driver	Davy		Driver	Gel.								
<b>JOB SERVICES &amp; REMARKS</b>															
Remarks:	Calcium														
Rat Hole	30sx		Hulls												
Mouse Hole	20sx		Salt 16												
Centralizers	6-15		Flowseal												
Baskets	6, 15		Kol-Seal 900#												
DV or Port Collar	Mud CLR 48 500gal														
Est. Circ. Pump Mud Clear	CFL-117 or CD110 CAF 38														
Mix 130 sx down	Sand														
Displace	Handling 205														
Land Plug	Mileage 5 1/2"														
Float Hold	<b>FLOAT EQUIPMENT</b>														
	Guide Shoe 1														
	Centralizer 9-Turbos														
	Baskets 2														
	AFU Inserts 1														
	Float Shoe														
	Latch Down														
	Rubber Plug														
	Rotating Head														
	Pumptrk Charge good long string														
	Mileage 30														
	RECEIVED														
	AUG 03 2011														
	KCC WICHITA														
	Tax														
	Discount														
	Total Charge														
X Signature	Way Buey														

Thank You!!

**DEFINITIONS:** In these terms and conditions, "Quality" shall mean Quality Oilwell Cementing, Inc., and "Customer" shall refer to the party identified by that term on the front of this contract. As applicable, "Job" relates to the services described on the front side of this contract, "merchandise" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.

- **TERMS:** Unless satisfactory credit has been established, "CUSTOMER" must tender full cash payment to "QUALITY" before the job is undertaken or merchandise is delivered. If satisfactory credit has been established, the terms of payment for the job and/or merchandise, including bulk cement, are net cash, payable in 30 days from the completion of the job and/or delivery of the merchandise. For all past due invoices, "CUSTOMER" agrees to pay interest on amounts invoiced at a rate of 18 percent per annum until paid. Notwithstanding the foregoing in no event shall this Contract provide for interest exceeding the maximum rate of interest that "CUSTOMER" may agree to pay under applicable law. If any such interest should be provided for, it shall be and hereby is deemed to be a mistake, and this contract shall be automatically reformed to lower the rate of interest to the maximum legal contract rate, any amounts previously paid as excess interest shall be deducted from the amounts owing from the "CUSTOMER" or at the option of "QUALITY," refunded directly to "CUSTOMER." For purposes of this paragraph, QUALITY and CUSTOMER agree that KANSAS law shall apply. Any discounts granted with this contract are null and void if the charges are not paid when due.

- **ATTORNEY FEES:** In any legal action or proceeding between the parties to enforce any of the terms of this Service Contract, or in any way pertaining to the term of this Contract, the prevailing party shall be entitled to recover all expenses, including, but not limit to, a reasonable sum as and attorney's fees.

- **PRICES AND TAXES:** All merchandise listed in "QUALITY'S" current price schedule are F.O.B. QUALITY'S local station and are subject to change without notice. All prices are exclusive of any federal, state, local, or special taxes for the sale or use of the merchandise or services listed. The amount of taxes required to be paid by QUALITY shall be added to the quoted prices charged to CUSTOMER.

- **TOWING CHARGES:** QUALITY will make a reasonable attempt to get to and from each job site using its own equipment. Should QUALITY be unable to do so because of poor or inadequate road conditions, and should it become necessary to employ a tractor or other pulling equipment to get to or from the job site, the tractor or pulling equipment will be supplied by CUSTOMER or, if furnished by QUALITY, will be charged to and paid by CUSTOMER.

- **PREPARATION CHARGES:** If a job and/or merchandise is ordered and CUSTOMER cancels the order after preparation of a chemical solution or other material, CUSTOMER will pay QUALITY for the expenses incurred by QUALITY as a result of the cancellation.

- **DEADHAUL CHARGES:** Unless otherwise specified on the front of this Contract, a deadhaul charges as set forth in QUALITY'S current price book will be charged each way for each service unit which is ordered by CUSTOMER but not used.

- **SERVICE CONDITIONS AND LIABILITIES:** 1. QUALITY carries public liability and property damage insurance, but since there are so many uncertain and unknown conditions beyond QUALITY'S control, QUALITY shall not be liable for injuries to property or persons or for loss or damage arising from the performance of the job or delivery of the merchandise. Customer shall be responsible for and indemnify, defend, and hold harmless QUALITY, its officers, agents and employees, from and against any and all claims or suits for:

(A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and:

(B) Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with QUALITY'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of QUALITY or its employees.

2. With respect to any of QUALITY'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to QUALITY at the landing, CUSTOMER shall either recover the lost item without cost to QUALITY or reimburse QUALITY the current replacement cost of the item unless the loss or damage results from the sole negligence of QUALITY or its employees.

3. QUALITY does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.

**WARRANTIES:** 1. QUALITY warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. QUALITY'S obligation under this warranty is expressly limited to repair replacement, or allowance for credit, at its option, for any merchandise which is determined by QUALITY to be defective. THIS IS THE SOLE WARRANTY OF QUALITY AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE, CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and QUALITY shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.

2. More specifically:

(A) Nothing in this contract shall be construed as a warranty by QUALITY of the success or the effectiveness of the result of any work done or merchandise used, sold, or furnished under this contract.

(B) Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by QUALITY or any interpretation of test, meter readings, chart information, analysis or research, or recommendations made by QUALITY, unless the inaccuracy or incorrectness is caused by the willful misconduct or gross negligence of QUALITY or its employees in the preparation or furnishing of such facts, information or data. (C) Work done by QUALITY shall be under the direct supervision and control of the CUSTOMER or his agent and QUALITY will accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.

Phone 785-483-2025  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 4956

Date	6-8-11	Sec.	22	Twp.	16	Range	12	County	Barton	State	KS	On Location		Finish	10:00 AM
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Lease	Riemann D	Well No.	1	Location	Beaver, Ks - 2E, 1/2 S, 12 1/2 W
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Contractor	Royal #1	Owner	To Quality Oilwell Cementing, Inc.
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Type Job	Surface	I am hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.		
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Hole Size	12 1/4"	T.D.	411'	Charge To	Kirby Krier oil
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Csg.	8 3/8"	Depth	411'	Street	
------	--------	-------	------	--------	--

Tbg. Size		Depth		City	State
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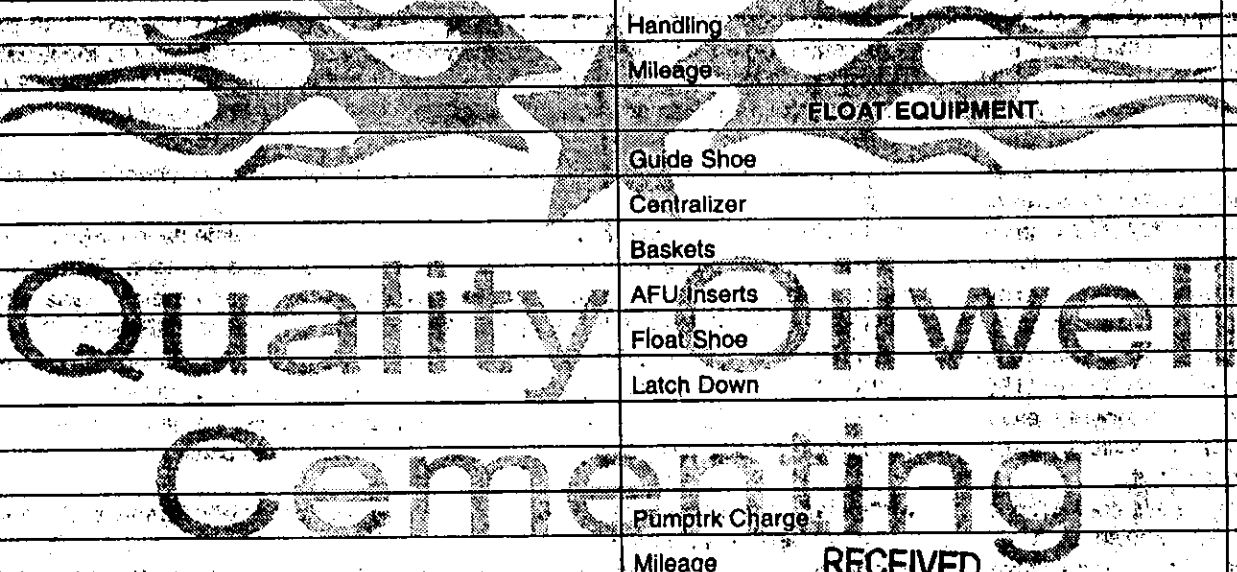
Tool		Depth		The above was done to satisfaction and supervision of owner agent or contractor.	
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Cement Left in Csg.	15'	Shoe Joint	15'	Cement Amount Ordered	190 SX Common 3% CC
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Meas Line		Displace	25 BLS	2% Gel	
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EQUIPMENT			
Pumptrk	No. 1	Cement. Helper	Common
Bulktrk	No. 10	Driver	Poz. Mix
Bulktrk	No. 10	Driver	Gel.

JOB SERVICES & REMARKS			
Remarks	Cement did Circulate		Calcium
Rat Hole			Hulls
Mouse Hole			Salt
Centralizers			Flowseal
Baskets			Kol-Seal
D/V or Port Collar			Mud CLR 48
			CFL-117 or CD110 CAF 38
			Sand
			Handling
			Mileage



Pumptrk Charge			
Mileage	RECEIVED		
	AUG 03 2011	Tax	
		Discount	
Signature	Howe Rudy	Total Charge	

KCC WICHITA



# PIPE TALLY

Visit our website [www.midwesternpipeworks.com](http://www.midwesternpipeworks.com)

Date June - 11 - 11

Company Kirby Kreir

Lease mann D

Boiler 2 East 1/4 NW-1/4 west into

	Size 5 1/2		New x		Used		Limited Service x				Weight 15.50		Grade		Type		Range K-3		
	Column 1 Feet	Column 1 In.	Column 2 Feet	Column 2 In.	Column 3 Feet	Column 3 In.	Column 4 Feet	Column 4 In.	Column 5 Feet	Column 5 In.	Column 6 Feet	Column 6 In.	Column 7 Feet	Column 7 In.	Column 8 Feet	Column 8 In.	Column 9 Feet	Column 9 In.	Column 10 Feet
1	42	80	42	95	42	2	42	50											
2		80		80	44	75		45											
3	43	10		85	44	40	40	45											
4	42	80		85	42	80	42	50											
5		50		85	39	85	40	50											
6	40	10		80	42	80	42	50											
7	42	85	44	05		80		45											
8		80	42	80		80		50											
9		80		90		90		50											
10		75	44	70		50		50											
11		80	44	70		75		45											
12		80	42	80		85		50											
13	42	15		75		80	40	45											
14	42	95		50		80	42	45											
15		85		80		85	42	45											
16	44	60		80		85		75											
17	42	80		85		80		85											
18		80	44	40		80		55											
19	39	20	44	65	44	70		85											
20	42	80	44	50	42	80	28	85											
Total	844	05	865	90	857	80	<del>845</del>												

830.30 81

3403.05 Subtotal this page  
23.10 she

Total Number of Joints

RECEIVED  
AUG 03 2011

3426.15 GRAND TOTAL

Tallied By

KCC WICHITA

Casing Head & Accessories

Other

Received In Good Order By

*X Jan B...* O-P

Limited Service and/or Used Materials are sold "as is, without warranty either expressed or implied."



# PIPE TALLY

Visit our website [www.midwesternpipeworks.com](http://www.midwesternpipeworks.com)

Date 6/6/11

Kirby Kner Oil  
Company

Lease  
Riemann D#1

Size <u>8 5/8</u>		New <u>X</u>		Used		Limited Service <u>X</u>		Weight <u>20#</u>		Grade		Type		Range <u>R3</u>					
Column 1		Column 2		Column 3		Column 4		Column 5		Column 6		Column 7		Column 8		Column 9		Column 10	
Feet	In.	Feet	In.	Feet	In.	Feet	In.	Feet	In.	Feet	In.	Feet	In.	Feet	In.	Feet	In.	Feet	In.
1	45	0																	
2	44	10																	
3	45	-																	
4	45	10																	
5	45	20																	
6	45	0																	
7	45	20																	
8	45	-																	
9	42	20																	
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
Total		<u>402</u>		<u>60</u>															

Subtotal this page

9 X 13  
Total Number of Joints

RECEIVED  
AUG 03 2011

Tallied By

KCC WICHITA

402.60 GRAND TOTAL

Received In Good Order By

Casing Head & Accessories

Royal  
David Mandy  
 Other



# Drilling Mud Report

Report no. 4

Date: 6/12/11

Depth: 3288

OPERATOR: ADDRESS: REPORT FOR	<b>Krier, Kirby Oil Co</b> co <b>JIM M.</b>	CONTRACTOR ADDRESS: REPORT FOR	<b>ROYAL DRLG</b> Rig <b>DOUG B.</b>	RIG NO. SPUD DATE COUNTY	1 June 7, 2011 BARTON
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WELL NAME	#1 Riemann D	SEC	22	TOWNSHIP	10	RANGE	12	W
Drilling Assembly		Casing		Mud Volume (BBL)		Circulation Data		
Bit Size	7 7/8	Surface	Hole	257	Pump Size	6 x 14	Annular Vel (Ft/Min)	
No. Bits	2	8 5/8 @ 411'	Pits	400	Pump Make / Model		DP	DC
Drill Pipe	4 1/2	Intermediate	Total Circ Vol.	657	BBL / Stroke	0.139	197	356
Type	XH		Mud up Dpth.	2585	Stroke / Min.	60	Circ PSI	800
Drill Collar	6 1/4	Production	Mud Type	CHEMICAL	BBL / Min.	8	Bottoms Up (min)	
Bit RPM	60		Activity	DRLG	Gal. / Min.	336	32	
Weight on Bit	30000		Pits used	3	Elevation		TTL (Min.)	82
Sample Taken From Flowline	x	Pit	Flowing Temp.		MUD COSTS			

MUD PROPERTIES		PRODUCT		Daily Cost	NA	Total	\$5,148.70
Time Sample Taken	11:30AM			On Hand	add Del.	Used	cost
Depth (ft.)	3288		Premium Gel	116			
Weight (ppg)	8.9		Hulls	39			
Mud Gradient (psi/ft)	0.463		Soda Ash	12			
Funnel Viscosity (sec/qt.)	42		Caustic Beads	8			
Plastic Viscosity cp at /	22		Lignite	8			
Yield Point (lb./100 sq. ft.)	10		Lime	3			
Gel Strength (lb.100 sq. ft.) 10 sec/ 10 min.	9/16		Drispac	1			
pH Strip / Meter	9.0		Desco	2			
Filtrate API (ml./30 min.)	11.2		PHPA	0			
API HP-HT Filtrate (ml./30 min.)	xxx		RH Vis	0			
Cake Thickness 32nd in. API	1/32		Barite	0			
Alkalinity, Mud (Pm)	0.8						
Alkalinity, Filtrate (Pf/Mf)	0.3		Misc. cost				

Mud Properties Specifications		Recommended Tour Treatment	
Chlorides (ppm)	4000	Weight	< 9.4
Calcium (ppm)	20	Viscosity	48-50
Sand Content (% by Vol.)	TR	Filtrate	8-10CC
Solids Content (% by Vol.)	4.0	<b>MAINTAIN VISCOSITY 48-50 SEC. / QT. WHILE DRLG AND FOR DST / LOG</b>	
Oil Content (% by Vol.)	xxx	<b>LCM AS NEEDED- RECOMMEND MAINTAIN 1 1/2 TO 2 #/BBL</b>	
Water Content (% by Vol.)	96.0	<b>RUN WATER AT FLOWLINE TO BUILD VOLUME AND EVEN OUT MUD SYSTEM AND ASSIST IN KEEPING WEIGHT UNDER 9.4 #/GAL</b>	
LCM, #/bbl	1#	<b>ALWAYS KEEP HOLE FULL &amp; PIPE MOVING. SHORT TRIP PRIOR TO TEST OR LOG</b>	
Methylene Blue Capacity	xxx	<b>IF NEEDED VISCOSITY, USE PIT MUD IN PREMIX:</b>	

**REMARKS:**  
**KEEP HOLE FULL ON ALL TRIPS- VERY IMPORTANT**  
**CIRCULATE HOLE CLEAN**  
**SHORT TRIP PRIOR TO DST / LOG**

**THANK YOU!!**

**GEL FOR VISCOSITY**  
**2 SODA ASH**  
**1 CAUSTIC SODA**  
**1 LIGNITE**  
**1/3 DRISPAC SLOWLY**  
**4-6 HULLS**

**RECEIVED**  
**AUG 03 2011**  
**KCC WICHITA**

RESERVE Chlorides=	67,000
CALCUIM=	600PPM
VOLUME=	500BBL

any liability by Andy's Mud & Chemical Co. or it's agents, and are statements of opinion only.	ENGINEER	Ken Rupp	WAREHOUSE	HAYS	PHONE	785-625-3531 (cell)785-635-6445
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**"GO WITH THE EXPERIENCE"**





# Drilling Mud Report

Report no. 5

Date: 6/13/11 Depth: 3375

OPERATOR: ADDRESS: REPORT FOR	<b>Krier, Kirby Oil Co</b> co <b>JIM M.</b>	CONTRACTOR ADDRESS: REPORT FOR	<b>ROYAL DRLG</b> Rig <b>DOUG B.</b>	RIG NO. SPUD DATE COUNTY	<b>1</b> June 7, 2011 BARTON
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WELL NAME	#1 Riemann D	SEC	22	TOWNSHIP	10	RANGE	12	W
Drilling Assembly		Casing		Mud Volume (BBL)		Circulation Data		
Bit Size	7 7/8	Surface		Hole	263	Pump Size	6 x 14	Annular Vel (Ft/Min)
No. Bits	2	8 5/8 @ 411'		Pits	400	Pump Make / Model		DP
Drill Pipe	4 1/2	Intermediate		Total Circ Vol.	663	BBL / Stroke	0.139	197
Type	XH			Mud up Dpth.	2585	Stroke / Min.	60	Circ PSI
Drill Collar	6 1/4	Production		Mud Type	CHEMICAL	BBL / Min.	8	Bottoms Up (min)
Bit RPM	60			Activity	DRLG	Gal. / Min.	336	33
Weight on Bit	30000			Pits used	3	Elevation		TTL (Min.)
Sample Taken From Flowline	x	Pit		Flowing Temp.		MUD COSTS		

MUD PROPERTIES		PRODUCT		Daily Cost	\$603.10	Total	\$5,763.80
Time Sample Taken	12:15PM			On Hand	add Del.	Used	cost
Depth (ft.)	3375		Premium Gel	89	296	27	
Weight (ppg)	9.4		Hulls	39	57	0	
Mud Gradient (psi/ft)	0.489		Soda Ash	10	24	2	
Funnel Viscosity (sec/qt.)	50		Caustic Beads	7	14	1	
Plastic Viscosity cp at /	20		Lignite	8	14		
Yield Point (lb./100 sq. ft.)	11		Lime	3	5		
Gel Strength (lb.100 sq. ft.) 10 sec/ 10 min.	8/15		Drispac	1	3		
pH Strip / Meter	8.5		Desco	2	2		
Filtrate API (ml./30 min.)	11.2		PHPA	0	0		
API HP-HT Filtrate (ml./30 min.)	xxx		RH Vis	0	0		
Cake Thickness 32nd in. API	1/32		Barite	0	0		
Alkalinity, Mud (Pm)	0.8						
Alkalinity, Filtrate (Pf/Mf)	0.3		Misc. cost				

Mud Properties Specifications		Recommended Tour Treatment	
Calcium (ppm)	20	Weight	< 9.4
Sand Content (% by Vol.)	TR	Viscosity	48-50
Solids Content (% by Vol.)	4.0	Filtrate	8-10CC
Oil Content (% by Vol.)	xxx	<b>MAINTAIN VISCOSITY 48-50 SEC. / QT. WHILE DRLG AND FOR DST / LOG</b>	
Water Content (% by Vol.)	96.0	<b>LCM AS NEEDED- RECOMMEND MAINTAIN 1 1/2 TO 2 #/BBL</b>	
LCM, #/bbl	1#	<b>RUN WATER AT FLOWLINE TO BUILD VOLUME AND EVEN OUT MUD SYSTEM AND ASSIST IN KEEPING WEIGHT UNDER 9.4 #/GAL</b>	
Methylene Blue Capacity	xxx	<b>ALWAYS KEEP HOLE FULL &amp; PIPE MOVING. SHORT TRIP PRIOR TO TEST OR LOG</b>	

**REMARKS:**  
**KEEP HOLE FULL ON ALL TRIPS- VERY IMPORTANT**  
**CIRCULATE HOLE CLEAN**  
**SHORT TRIP PRIOR TO DST / LOG**  
  
**THANK YOU!!**

**IF NEEDED VISCOSITY, USE PIT MUD IN PREMIX:**  
**GEL FOR VISCOSITY**  
**2 SODA ASH**  
**1 CAUSTIC SODA**  
**1 LIGNITE**  
**1/3 DRISPAC SLOWLY**  
**4-6 HULLS**

**RECEIVED**  
**AUG 03 2011**  
**KCC WICHITA**

RESERVE Chlorides=	67,000
CALCIUM=	600PPM
VOLUME=	500BBL

any liability by Andy's Mud & Chemical Co. or It's agents, and are statements of opinion only.	ENGINEER	DENNIS RECTOR	WAREHOUSE	HAYS	PHONE	785-625-3531 (cell)785-656-3039
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**"GO WITH THE EXPERIENCE"**