

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1250977
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed

Form must be Signed

All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

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
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ 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: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

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.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

1250977

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

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

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				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR: _____ Producing Method: Flowing Pumping Gas Lift Other *(Explain)* _____

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

DISPOSITION OF GAS: <input 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 type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Commingled <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Richlan Drilling, a General Partnership
Well Name	Kroeker 1
Doc ID	1250977

All Electric Logs Run

Dual Induction Log
Microresistivity Log
Dual Compensated Porosity Log
Computer Processed Interpretation

Form	ACO1 - Well Completion
Operator	Richlan Drilling, a General Partnership
Well Name	Kroeker 1
Doc ID	1250977

Tops

Name	Top	Datum
Stone Corral	1037	+1002
B/Stone Corral	1061	+978
Herrington	1967	+72
Towanda	2085	-46
Fort Riley	2140	-101
Neva	2472	-433
Topeka	3024	-985
Heebner Shale	3362	-1323
Lansing	3463	-1424
Muncie Creek Shale	3585	-1546
BKC	3688	1649
Cong	3737	-1698
Simpson Sd	3749	-1710
Arbuckle	3766	-1727
LTD	3932	-1727



QUALITY OILWELL CEMENTING, INC.

PO Box 32 - 740 West Wichita Ave, Russell KS 67665

Phone: 785-324-1041 fax: 785-483-1087

Email: cementing@ruraltel.net

Date: 1/15/2015
 Invoice # 905

P.O.#:

Due Date: 2/14/2015

Division: Russell

Invoice

Contact:

RICHLAND DRILLING

Address/Job Location:

RICHLAND DRILLING

598 2ND AVE

BEAVER, KS 67525

Reference:

KROEKER 1

Description of Work:

LONG SURFACE JOB

Services / Items Included:

	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		\$ 963.85	No				
Common-Class A	240	\$ 4,180.00	Yes				
POZ Mix-Standard	160	\$ 1,064.00	Yes				
Calcium Chloride	15	\$ 881.28	Yes				
Bulk Truck Matl-Material Service Charge	423	\$ 893.00	No				
Flo Seal	200	\$ 422.22	Yes				
Pump Truck Mileage-Job to Nearest Camp	21	\$ 221.22	No				
Premium Gel (Bentonite)	8	\$ 137.48	Yes				
Bulk Truck Mileage-Job to Nearest Bulk Plant	21	\$ 129.45	No				
8 5/8" Top Rubber Plug	1	\$ 111.89	Yes				

Invoice Terms:

Net 30

SubTotal: \$ 9,004.40

Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice: \$ (1,350.66)

SubTotal for Taxable Items: \$ 5,777.34

SubTotal for Non-Taxable Items: \$ 1,876.40

Total: \$ 7,653.74

Tax: \$ 413.08

7.15% Barton County Sales Tax

Amount Due: \$ 8,066.82

Applied Payments:

Balance Due: \$ 8,066.82

Thank You For Your Business!

Past Due Invoices are subject to a service charge (annual rate of 24%)

This does not include any applicable taxes unless it is listed.

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PAID

CK NO | DATE

6774 | 3-2-15

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 905

Date	Sec.	Twp.	Range	County	State	On Location	Finish
1-15-15	30	20	15	Barton	Ks		7:00 AM
Lease Kroeker				Well No. #1		Owner E.I.A.T.S.	
Contractor Southwind #3				To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.			
Type Job Surface				Charge To Richlan Drilling			
Hole Size 12 1/4		T.D. 808'		Street			
Csg. 8 5/8		Depth 808'		City			
Tbg. Size		Depth		State			
Tool		Depth		The above was done to satisfaction and supervision of owner agent or contractor.			
Cement Left in Csg. 30'		Shoe Joint		Cement Amount Ordered 400 sy 60% Hd 30% cc 20% Gel			
Meas Line		Displace 49 1/2 bbl					
EQUIPMENT				Common 240			
Pumptrk 5		No. Cementer Helper David		Poz. Mix 160			
Bulktrk 4		No. Driver Ryan		Gel. 8			
Bulktrk Pu		No. Driver Brett		Calcium 15			
JOB SERVICES & REMARKS				Hulls			
Remarks:				Salt			
Rat Hole				Flowseal 200ft			
Mouse Hole				Kol-Seal			
Centralizers				Mud CLR 48			
Baskets				CFL-117 or CD110 CAF 38			
D/V or Port Collar				Sand			
				Handling 423			
				Mileage 8 5/8			
				FLOAT EQUIPMENT			
Cement				Guide Shoe			
				Centralizer			
				Baskets			
Circulated!!				AFU Inserts			
				Float Shoe			
				Latch Down			
				Rubber Plug - 1			
				Pumptrk Charge Long Surface			
				Mileage 21			
				Tax			
				Discount			
				Total Charge			
X Signature Guy J. J. J.							

SWIFT



P. O. Box 466
Ness City, KS 67560
Off: 785-798-2300



Invoice

DATE	INVOICE #
1/22/2015	28156

BILL TO
Richlan Drilling 598 2nd Ave. Beaver, KS 67525

- Acidizing
- Cement
- Tool Rental

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#1	Krocker	Barton	SouthWind Drilling	Gas	Development	Cement LongStri...	Blaine
PRICE REF.	DESCRIPTION				QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way				60	Miles	6.00	360.00
578D-L	Pump Charge - Long String				1	Job	1,500.00	1,500.00
402-5	5 1/2" Centralizer				8	Each	70.00	560.00T
403-5	5 1/2" Cement Basket				2	Each	300.00	600.00T
406-5	5 1/2" Latch Down Plug & Baffle				1	Each	275.00	275.00T
407-5	5 1/2" Insert Float Shoe With Auto Fill				1	Each	375.00	375.00T
325	Standard Cement				175	Sacks	14.50	2,537.50T
284	Calseal				8	Sack(s)	35.00	280.00T
283	Salt				900	Lb(s)	0.20	180.00T
292	Halad 322				125	Lb(s)	8.00	1,000.00T
276	Flocele				50	Lb(s)	2.50	125.00T
287	Gas Stop (2 LBS/SK)				300	Lb(s)	8.00	2,400.00T
290	D-Air				2	Gallon(s)	42.00	84.00T
281	Mud Flush				500	Gallon(s)	1.25	625.00T
221	Liquid KCL (Clayfix)				2	Gallon(s)	25.00	50.00T
581D	Service Charge Cement				175	Sacks	2.00	350.00
583D	Drayage				835.88	Ton Miles	1.00	835.88
	Subtotal							12,137.38
	Sales Tax Barton County						7.15%	650.04

PAID
 CK NO 2776
 DATE 3-2-15

Thank You For Your Business In 2014!
We Look Forward To Serving You In 2015!

Total

\$12,787.42



CHARGE TO: Richard Drilling
 ADDRESS _____
 CITY, STATE, ZIP CODE _____

TICKET 28156
 PAGE 1 OF 2

SERVICE LOCATIONS: Am City KS
 WELLS/PROJECT NO: 21 LEASE: Kroeker COUNTY/PARISH: BARTON STATE: KS CITY: Pounce Rock DATE: 22 Jan 15 OWNER: _____
 TICKET TYPE: SERVICE SALES CONTRACTOR: _____ RIG NAME/NO.: 3 SHIPPED: YES DELIVERED TO: location ORDER NO.: _____
 WELL TYPE: 6AS WELL CATEGORY: southwind JOB PURPOSE: development cement log string WELL PERMIT NO.: _____ WELL LOCATION: 30-20-6
 REFERRAL LOCATION: _____ INVOICE INSTRUCTIONS: _____

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.	UM	QTY.	UM	UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575					MILEAGE	601	mi			6.00	3600.00
578					Pump Charge	1	ea			1500.00	1500.00
402					Centralizer	5 1/2	in	8	ea	70.00	560.00
403					Cement Basket	5 1/2	in	2	ea	300.00	600.00
406					Label down Plug & Baggage	5 1/2	in	1	ea	275.00	275.00
407					Insert Flat shoe w/ 450 FILL	5 1/2	in	1	ea	375.00	375.00

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions.
 MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS
 X Paul Shanks
 DATE SIGNED _____ TIME SIGNED _____ A.M. P.M.
 REMIT PAYMENT TO:
 SWIFT SERVICES, INC.
 P.O. BOX 466
 NESS CITY, KS 67560
 785-798-2300
 SURVEY: OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN? WE UNDERSTOOD AND MET YOUR NEEDS? OUR SERVICE WAS PERFORMED WITHOUT DELAY? WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY? ARE YOU SATISFIED WITH OUR SERVICE?
 CUSTOMER DID NOT WISH TO RESPOND

WFT OPERATOR: BSM APPROVAL: _____
 CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES: _____
 The customer hereby acknowledges receipt of the materials and services listed on this ticket.
 Thank You!



PO Box 466
Ness City, KS 67560
Off: 785-798-2300

TICKET CONTINUATION

TICKET No. 28156

CUSTOMER *Richard Drilling*

WELL *Krocker #1*

DATE *02/01/15* PAGE *2* OF *2*

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	WELL		UNIT PRICE	AMOUNT	
		LOC	ACCT	DF			QTY	U/M			QTY
325		1				Standard cement (for 31-2)	175	sk	14.50	2537.50	
284		1				Calseal	800	lb	35.00	280.00	
283		1				SALT	900	lb	2.00	180.00	
292		1				halad-322	125	lb	8.00	1000.00	
276		1				Fracker	50	lb	2.50	125.00	
287		1				Gas stop	2	96	300.00	600.00	
290		1				D-4 air	2	gal	42.00	84.00	
281		1				Mudflush	500	gal	1.25	625.00	
281		1				KCL Liquid	2	gal	25.00	50.00	
581		1				SERVICE CHARGE			2.00	350.00	
583		1				MILEAGE CHARGE			1.00	835.88	
SERVICE CHARGE TOTAL WEIGHT <i>18675</i> LOADED MILES <i>90</i> CUBIC FEET <i>175</i> TON MILES <i>835.88</i>											
CONTINUATION TOTAL <i>8467.38</i>											

JOB LOG

SWIFT Services, Inc.

DATE 22 Jan 15 PAGE NO.

CUSTOMER Richlan Drilling WELL NO. #1 LEASE Kroeker JOB TYPE cement long string TICKET NO. 28156

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								175 sk EA-2 cement w/ 1/4" floccle & 2% CAS STOP
								5 1/2" x 14# casing 113jt @ 3924
								Centralizer #1, 4, 6, 8, 10, 13, 18, 25
								Basket #2, 5 shoe jt 31.2'
	1930							on loc TRK 114
	2018							start 5 1/2" x 14# casing in well
	2018 2215							Drop ball - circulate
	2307	4	12			200		Pump 500 gal mud flush
		4	20			200		Pump 20 bbl KCL flush
	2313		6					Plug RH 30sk
	2319	4 1/2	37			200		Mix EA-2 cement 145 sk @ 15.3 ppg
								Drop latch down plug
								wash out pump & line
	2337	6				200		Displace plug
		5 3/4	90			850		
23 JAN	0000	5 3/4	93			1600		Land plug
	0003							Release pressure to truck - dried up
	0006							wash truck
								Rack up
	0035							job complete
								Thru
								Flint, Blaine & reoson



DIAMOND TESTING, LLC
P.O. Box 157
HOISINGTON, KANSAS 67544
(620) 653-7550 • (800) 542-7313
KRKR1DST1

Company Richlan Drilling Lease & Well No. Kroeker No. 1
Elevation 2031 EGL Formation Herrington/Krider/Winfield Effective Pay Ft. Ticket No. M744
Date 1-16-15 Sec. 30 Twp. 20S Range 15W County Barton State Kansas
Test Approved By Robert A. (Bob) Schreiber Diamond Representative Mike Cochran

Formation Test No. 1 Interval Tested from 1,936 ft. to 2,032 ft. Total Depth 2,032 ft.
Packer Depth 1,931 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 1,936 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Depth of Selective Zone Set ft.

Top Recorder Depth (Inside) 1,923 ft. Recorder Number 0063 Cap. 5,000 psi.
Bottom Recorder Depth (Outside) 1,938 ft. Recorder Number 5448 Cap. 5,000 psi.
Below Straddle Recorder Depth ft. Recorder Number Cap. psi.

Drilling Contractor Southwind Drilling, Inc. - Rig 3 Drill Collar Length 184 ft I.D. 2 1/4 in.
Mud Type Viscosity Weight Pipe Length ft I.D. in.
Weight Water Loss cc. Drill Pipe Length 1,725 ft I.D. 3 1/2 in.
Chlorides Spot A Pill P.P.M. Test Tool Length 27 ft Tool Size 3 1/2-IF in.
Jars: Make Sterling Serial Number Not Run Anchor Length 34' perf. w/62' drill pipe Size 4 1/2-FH in.
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.

Blow: 1st Open: Strong, surface blow increasing. Off bottom of bucket in 10 mins. No blow back during shut-in.

2nd Open: Strong, surface blow increasing to 8 ins. No blow back during shut-in.

Recovered 216 ft. of low BTU odorless gas (186' DP, 30' DC)
Recovered 154 ft. of gas cut mud = .757680 bbls. (Grind out: 2%-gas; 98%-mud)
Recovered 154 ft. of TOTAL FLUID = .757680 bbls.
Recovered ft. of
Recovered ft. of
Recovered ft. of

Remarks Tool Sample Grind Out: 100%-mud w/a slight odor

Time Set Packer(s) 6:45 P.M. Time Started off Bottom 8:45 P.M. Maximum Temperature 80°
Initial Hydrostatic Pressure.....(A) 934 P.S.I.
Initial Flow Period.....Minutes 30 (B) 13 P.S.I. to (C) 46 P.S.I.
Initial Closed In Period.....Minutes 30 (D) 418 P.S.I.
Final Flow Period.....Minutes 30 (E) 47 P.S.I. to (F) 76 P.S.I.
Final Closed In Period.....Minutes 30 (G) 407 P.S.I.
Final Hydrostatic Pressure.....(H) 907 P.S.I.

DIAMOND TESTING

Pressure Survey Report

General Information

Company Name	RICHLAN DRILLING, A GENERAL PARTNERSHIP	Job Number	M744
Well Name	KROEKER #1	Representative	MIKE COCHRAN
Unique Well ID	DST #1 HERRINGTON-KRIDER-WINFIELD 1936-2032	Well Operator	RICHLAN DRILLING, A GENERAL PARTNERSHIP
Surface Location	SEC 30-20S-15W BARTON CO. KS.	Report Date	2015/01/16
Field	ASH CREEK	Prepared By	MIKE COCHRAN
Well Type	Vertical	Qualified By	BOB SCHREIBER
		Test Unit	NO. 3

Test Information

Test Type	CONVENTIONAL		
Formation	DST #1 HERRINGTON-KRIDER-WINFIELD 1936-2032		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2015/01/16	Start Test Time	17:20:00
Final Test Date	2015/01/16	Final Test Time	22:05:00
		Well Fluid Type	01 Oil
Gauge Name	0063		
Gauge Serial Number			

Test Results

Remarks RECOVERED:

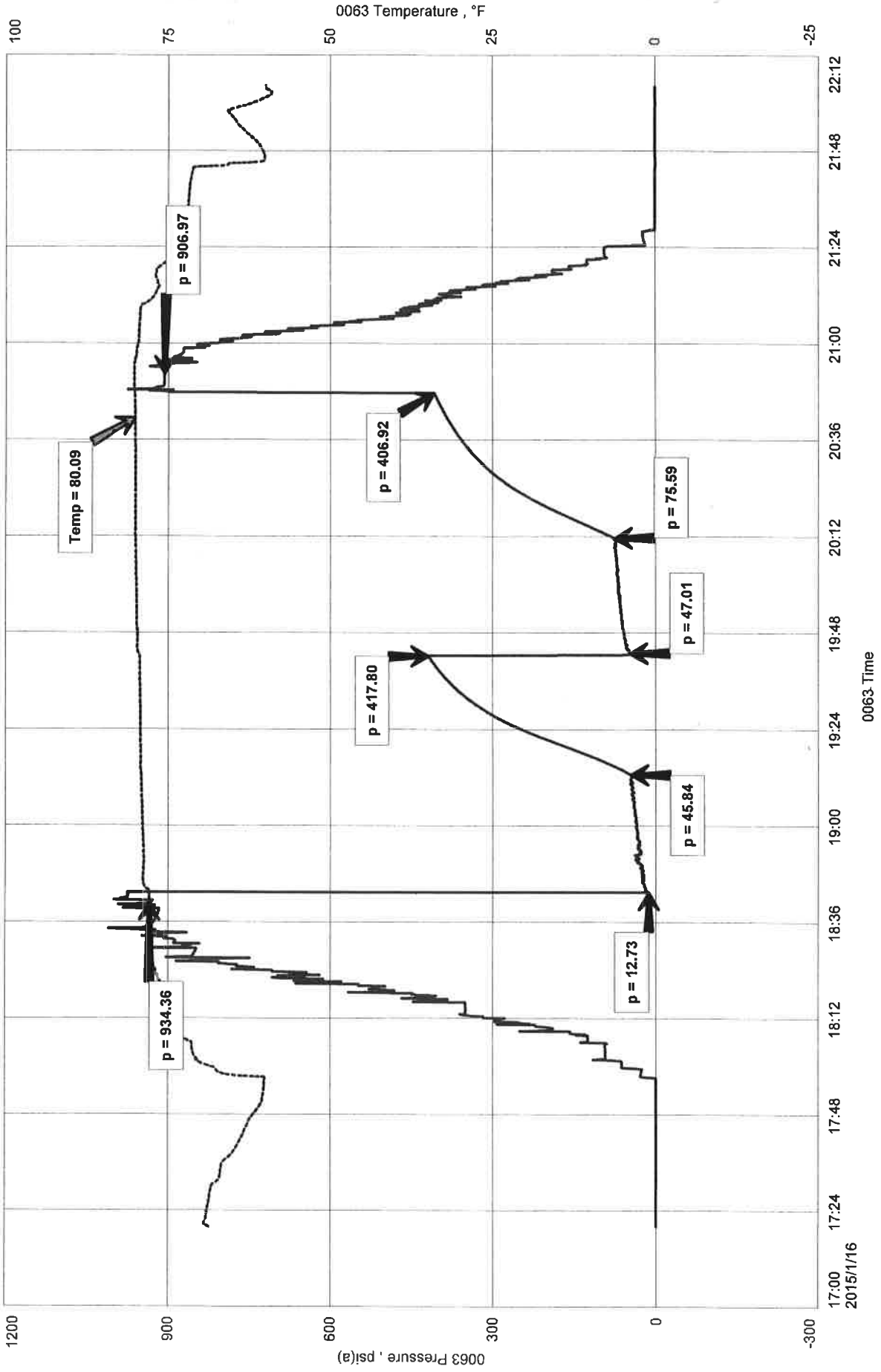
~216' LOW BTU ODORLESS GAS (186' DP, 30' DC)
154' GCM 2% GAS, 98% MUD (154' DC)
154' TOTAL FLUID

TOOL SAMPLE: 100% MUD, SLIGHT ODOR

KROEKER #1
Formation: DST #1 HERRINGTON-KRIDER-WINFIELD 1936-2032
Pool: WILDCAT
Job Number: M744

RICHLAN DRILLING, A GENERAL PARTNERSHIP
DST #1 HERRINGTON-KRIDER-WINFIELD 1936-2032
Start Test Date: 2015/01/16
Final Test Date: 2015/01/16

KROEKER #1





DIAMOND TESTING, LLC
P.O. Box 157
HOISINGTON, KANSAS 67544
(620) 653-7550 • (800) 542-7313
KRKR1DST2

Company Richlan Drilling Lease & Well No. Kroeker No. 1
Elevation 2031 EGL Formation Arbuckle Effective Pay Ft. Ticket No. M745
Date 1-20-15 Sec. 30 Twp. 20S Range 15W County Barton State Kansas
Test Approved By Robert A. (Bob) Schreiber Diamond Representative Mike Cochran

Formation Test No. 2 Interval Tested from 3,763 ft. to 3,771 ft. Total Depth 3,771 ft.
Packer Depth 3,758 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 3,763 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Depth of Selective Zone Set ft.

Top Recorder Depth (Inside) 3,750 ft. Recorder Number 0063 Cap. 5,000 psi.
Bottom Recorder Depth (Outside) 3,768 ft. Recorder Number 6884 Cap. 6,275 psi.
Below Straddle Recorder Depth ft. Recorder Number Cap. psi.

Drilling Contractor Southwind Drilling, Inc. - Rig 3 Drill Collar Length ft. I.D. in.
Mud Type Chemical Viscosity 59 Weight Pipe Length ft. I.D. in.
Weight 8.9 Water Loss 9.2 cc. Drill Pipe Length 3,736 ft. I.D. 3 1/2 in.
Chlorides 5,000 P.P.M. Test Tool Length 27 ft. Tool Size 3 1/2-IF in.
Jars: Make Sterling Serial Number Not Run Anchor Length 8 ft. Size 4 1/2-FH in.
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.

Blow: 1st Open: Strong blow increasing. Off bottom of bucket immediately. Gas to surface in 5 mins. Gas burned nicely. No blow back during shut-in.
2nd Open: Strong blow increasing. Off bottom of bucket immediately. Gas gauged at 1,379 MCF/D. No blow back during shut-in. (SEE GAS VOLUME REPORT)

Recovered 5 ft. of gas & oil cut muddy water = .071150 bbls. (Grind out: 2%-gas; 8%-oily condensate; 65%-water; 25%-mud)
Recovered ft. of Chlorides: 15,000 Ppm PH: 7.0 RW: .56 @ 61°
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of
Remarks Tool Sample Grind Out: 100%-gas

Time Set Packer(s) 9:15 A.M. Time Started off Bottom 12:30 P.M. Maximum Temperature 104°
Initial Hydrostatic Pressure.....(A) 1856 P.S.I.
Initial Flow Period.....Minutes 15 (B) 434 P.S.I. to (C) 472 P.S.I.
Initial Closed In Period.....Minutes 30 (D) 1199 P.S.I.
Final Flow Period.....Minutes 60 (E) 443 P.S.I. to (F) 592 P.S.I.
Final Closed In Period.....Minutes 90 (G) 1197 P.S.I.
Final Hydrostatic Pressure.....(H) 1835 P.S.I.

DIAMOND TESTING

Pressure Survey Report

General Information

Company Name	RICHLAN DRILLING, A GENERAL PARTNERSHIP	Job Number	M745
Well Name	KROEKER #1	Representative	MIKE COCHRAN
Unique Well ID	DST #2 ARBUCKLE 3763-3771	Well Operator	RICHLAN DRILLING, A GENERAL PARTNERSHIP
Surface Location	SEC 30-20S-15W BARTON CO. KS.	Report Date	2015/01/20
Field	ASH CREEK	Prepared By	MIKE COCHRAN
Well Type	Vertical	Qualified By	BOB SCHREIBER
	Test Unit		NO. 3

Test Information

Test Type	CONVENTIONAL		
Formation	DST #2 ARBUCKLE 3763-3771		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2015/01/20	Start Test Time	07:35:00
Final Test Date	2015/01/20	Final Test Time	14:10:00
		Well Fluid Type	01 Oil
Gauge Name	0063		
Gauge Serial Number			

Test Results

Remarks RECOVERED:
~5' GOCMW 2% GAS, 8% OILY CONDENSATE, 65% WTR, 25% MUD
~5' TOTAL FLUID

CHLOR: 15,000 PPM
PH: 7.0
RW: .56 @ 61 DEG

TOOL SAMPLE: 100% GAS



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Company Richlan Drilling Lease & Well No. Kroeker No. 1
 Date 1-20-15 Sec 30 Twp 20 S Rge 15 W Location 1780' FSL & 1240' FWL, SEC County Barton State Kansas
 Drilling Contractor Southwind Drilling, Inc. - Rig 3 Formation Arbuckle DST No. 2
 Remarks: 1st Open: Gas to surface in 5 mins. Gas burned nicely.

* NOTE: 2 samples taken. 1 at 20 mins. & 1 at 60 mins.

INITIAL FLOW

Time O' Clock	Orifice Size	Gauge	MCF/D

FINAL FLOW

Open Tool: 10:00 p.m.

Time O' Clock	Orifice Size	Gauge	MCF/D
10:05 p.m.	1 in.	42 psi	1,205
10:10 p.m.	1 in.	48 psi	1,333
10:15 p.m.	1 in.	50 psi	1,379
10:25 p.m.	1 in.	50 psi	1,379
10:35 p.m.	1 in.	50 psi	1,379
10:45 p.m.	1 in.	50 psi	1,379
* 11:00 p.m.	1 in.	50 psi	1,379

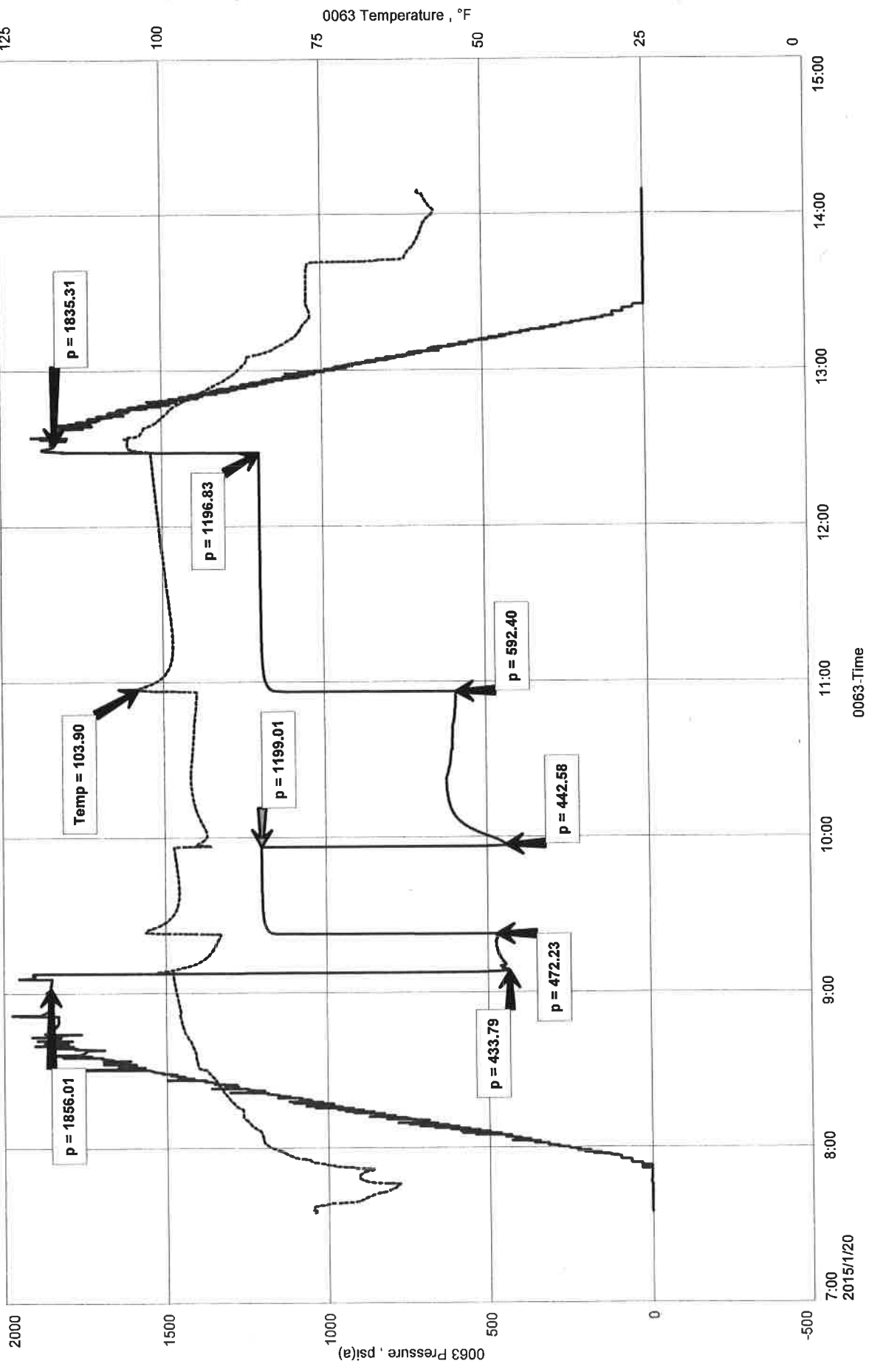
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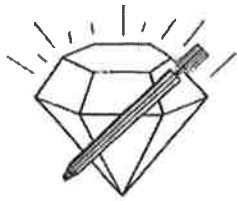
* Samples Taken.

RICHLAN DRILLING, A GENERAL PARTNERSHIP
DST #2 ARBUCKLE 3763-3771
Start Test Date: 2015/01/20
Final Test Date: 2015/01/20

KROEKER #1
Formation: DST #2 ARBUCKLE 3763-3771
Pool: WILDCAT
Job Number: M745

KROEKER #1





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KRKR1DST3

Company Richlan Drilling Lease & Well No. Kroeker No. 1
Elevation 2031 EGL Formation Arbuckle Effective Pay Ft. Ticket No. M746
Date 1-20-15 Sec. 30 Twp. 20S Range 15W County Barton State Kansas
Test Approved By Robert A. (Bob) Schreiber Diamond Representative Mike Cochran

Formation Test No. 3 Interval Tested from 3,784 ft. to 3,801 ft. Total Depth 3,801 ft.
Packer Depth 3,779 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 3,784 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Depth of Selective Zone Set ft.

Top Recorder Depth (Inside) 3,771 ft. Recorder Number 0063 Cap. 5,000 psi.
Bottom Recorder Depth (Outside) 3,786 ft. Recorder Number 5448 Cap. 5,000 psi.
Below Straddle Recorder Depth ft. Recorder Number Cap. psi.

Drilling Contractor Southwind Drilling, Inc. - Rig 3 Drill Collar Length ft. I.D. in.
Mud Type Chemical Viscosity 59 Weight Pipe Length ft. I.D. in.
Weight 8.9 Water Loss 9.2 cc. Drill Pipe Length 3,757 ft. I.D. 3 1/2 in.
Chlorides 5,000 P.P.M. Test Tool Length 27 ft. Tool Size 3 1/2-IF in.
Jars: Make Sterling Serial Number Not Run Anchor Length 17 ft. Size 4 1/2-FH in.
Did Well Flow? No Reversed Out Yes Surface Choke Size 1 in. Bottom Choke Size 5/8 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.

Blow: 1st Open: Strong blow increasing. Off bottom of bucket in 15 secs. Gas to surface. Tool small to measure. Sample taken. Gas burned nicely. Bottom of bucket blow back during shut-in.
2nd Open: Strong blow increasing. Off bottom of bucket in 15 secs. then decreasing. Weak blow back during shut-in.

Recovered 108 ft. of gas cut watery mud = 1.536840 bbls. (Grind out: 1%-gas; 30%-water; 69%-mud)
Recovered 2,403 ft. of gas cut water = 34.194690 bbls. (Grind out: 5%-gas; 95%-water)
Recovered 2,511 ft. of TOTAL FLUID = 35.731530 bbls.
Recovered ft. of
Recovered ft. of
Recovered ft. of

Remarks Tool Sample Grind Out: 1%-gas; 99%-water (Chlorides: 40,000 Ppm PH: 7.0 RW: .26 @ 71°)

Time Set Packer(s) 10:00 P.M. Time Started off Bottom 12:00 A.M. Maximum Temperature 117°
Initial Hydrostatic Pressure.....(A) 1864 P.S.I.
Initial Flow Period.....Minutes 15 (B) 714 P.S.I. to (C) 959 P.S.I.
Initial Closed In Period.....Minutes 30 (D) 1155 P.S.I.
Final Flow Period.....Minutes 30 (E) 1023 P.S.I. to (F) 1150 P.S.I.
Final Closed In Period.....Minutes 45 (G) 1173 P.S.I.
Final Hydrostatic Pressure.....(H) 1833 P.S.I.

DIAMOND TESTING

Pressure Survey Report

General Information

Company Name	RICHLAN DRILLING, A GENERAL PARTNERSHIP	Job Number	M746
Well Name	KROEKER #1	Representative	MIKE COCHRAN
Unique Well ID	DST #3 ARBUCKLE 3784-3801	Well Operator	RICHLAN DRILLING, A GENERAL PARTNERSHIP
Surface Location	SEC 30-20S-15W BARTON CO. KS.	Report Date	2015/01/21
Field	ASH CREEK	Prepared By	MIKE COCHRAN
Well Type	Vertical	Qualified By	BOB SCHREIBER
		Test Unit	NO. 3

Test Information

Test Type	CONVENTIONAL		
Formation	DST #3 ARBUCKLE 3784-3801		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2015/01/20	Start Test Time	20:40:00
Final Test Date	2015/01/21	Final Test Time	03:40:00
		Well Fluid Type	01 Oil
Gauge Name	0063		
Gauge Serial Number			

Test Results

Remarks RECOVERED:

108' GCWM 1% GAS, 30% WTR, 69% MUD
2403' GCW 5% GAS, 95% WTR
2511' TOTAL FLUID

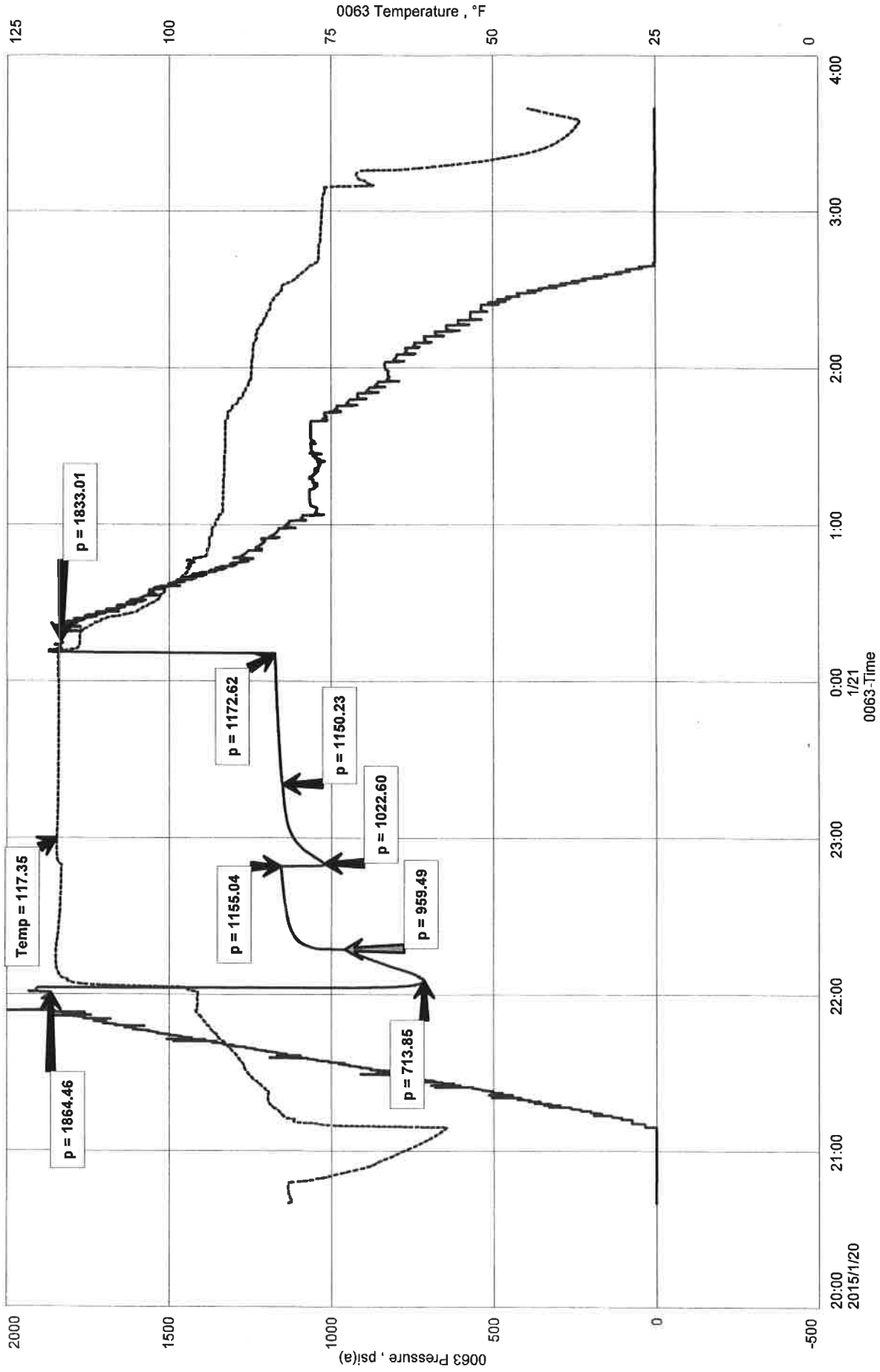
CHLOR: 40,000 PPM
PH: 7.0
RW: .26 @ 71 DEG

TOOL SAMPLE: 1% GAS, 99% WTR

RICHLAN DRILLING, A GENERAL PARTNERSHIP
DST #3 ARBUCKLE 3784-3801
Start Test Date: 2015/01/20
Final Test Date: 2015/01/21

KROEKER #1
Formation: DST #3 ARBUCKLE 3784-3801
Pool: WILDCAT
Job Number: M746

KROEKER #1





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KRKR1DST4

Company Richlan Drilling Lease & Well No. Kroeker No. 1
Elevation 2031 EGL Formation Arbuckle Effective Pay Ft. Ticket No. M747
Date 1-21-15 Sec. 30 Twp. 20S Range 15W County Barton State Kansas
Test Approved By Robert A. (Bob) Schreiber Diamond Representative Mike Cochran

Formation Test No. 4 Interval Tested from 3,817 ft. to 3,828 ft. Total Depth 3,828 ft.
Packer Depth 3,812 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 3,817 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Depth of Selective Zone Set ft.

Top Recorder Depth (Inside) 3,804 ft. Recorder Number 0063 Cap. 5,000 psi.
Bottom Recorder Depth (Outside) 3,819 ft. Recorder Number 5448 Cap. 5,000 psi.
Below Straddle Recorder Depth ft. Recorder Number Cap. psi.

Drilling Contractor Southwind Drilling, Inc. - Rig 3 Drill Collar Length ft I.D. in.
Mud Type Chemical Viscosity 47 Weight Pipe Length ft I.D. in.
Weight 9.2 Water Loss 10.0 cc. Drill Pipe Length 3,790 ft I.D. 3 1/2 in.
Chlorides 7,000 P.P.M. Test Tool Length 27 ft Tool Size 3 1/2-IF in.
Jars: Make Sterling Serial Number Not Run Anchor Length 11 ft. Size 4 1/2-FH in.
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH in.

Blow: 1st Open: Strong blow increasing. Off bottom of bucket immediately. Gas to surface. Gas burned nicely. Bottom of bucket blow back during shut-in.
2nd Open: Strong blow increasing. Off bottom of bucket in 30 secs. Gas gauged at 2.74 MCF/D. Weak blow back during shut-in. (SEE GAS VOLUME REPORT)

Recovered 205 ft. of oil specked, gas cut muddy water = 2.917150 bbls. (Grind out: 12%-gas; 5%-oil; 43%-water; 40%-mud)

Recovered 1,770 ft. of gas cut water = 25.187100 bbls. (Grind out: 4%-gas; 96%-water)

Recovered 1,975 ft. of TOTAL FLUID = 28.104250 bbls.

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks Tool Sample Grind Out: 100%-water w/a thin scum of oil (Chlorides: 30,000 Ppm PH: 7.0 RW: .28 @ 70°)

Time Set Packer(s) 6:25 P.M. Time Started off Bottom 8:30 P.M. Maximum Temperature 119°
Initial Hydrostatic Pressure.....(A) 1870 P.S.I.
Initial Flow Period.....Minutes 20 (B) 163 P.S.I. to (C) 497 P.S.I.
Initial Closed In Period.....Minutes 30 (D) 1209 P.S.I.
Final Flow Period.....Minutes 30 (E) 523 P.S.I. to (F) 875 P.S.I.
Final Closed In Period.....Minutes 45 (G) 1213 P.S.I.
Final Hydrostatic Pressure.....(H) 1798 P.S.I.

DIAMOND TESTING

Pressure Survey Report

General Information

Company Name	RICHLAN DRILLING, A GENERAL PARTNERSHIP	Job Number	M747
Well Name	KROEKER #1	Representative	MIKE COCHRAN
Unique Well ID	DST #4 ARBUCKLE 3817-3828	Well Operator	RICHLAN DRILLING, A GENERAL PARTNERSHIP
Surface Location	SEC 30-20S-15W BARTON CO. KS.	Report Date	2015/01/21
Field	ASH CREEK	Prepared By	MIKE COCHRAN
Well Type	Vertical	Qualified By	BOB SCHREIBER
		Test Unit	NO. 3

Test Information

Test Type	CONVENTIONAL		
Formation	DST #4 ARBUCKLE 3817-3828		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2015/01/21	Start Test Time	16:40:00
Final Test Date	2015/01/21	Final Test Time	23:00:00
		Well Fluid Type	01 Oil
Gauge Name	0063		
Gauge Serial Number			

Test Results

Remarks RECOVERED:

205' OSGCMW 12% GAS, 5% OIL, 43% WTR, 40% MUD
1770' GCW 4% GAS, 96% WTR
1975' TOTAL FLUID

CHLOR: 30,000 PPM
PH: 7.0
RW: .28 @ 70 DEG

TOOL SAMPLE: ~100% WTR W/ A THIN SCUM OF OIL

RICHLAN DRILLING, A GENERAL PARTNERSHIP
DST #4 ARBUCKLE 3817-3828
Start Test Date: 2015/01/21
Final Test Date: 2015/01/21

KROEKER #1
Formation: DST #4 ARBUCKLE 3817-3828
Pool: WILDCAT
Job Number: M747

KROEKER #1

