

Confidentiality Requested:

Yes  No

**KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION**

Form ACO-1

January 2018

**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

Gas  DH  EOR

OG  GSW

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 EOR  Conv. to SWD  
 Plug Back  Liner  Conv. to GSW  Conv. to Producer

Commingled Permit #: \_\_\_\_\_

Dual Completion Permit #: \_\_\_\_\_

SWD Permit #: \_\_\_\_\_

EOR Permit #: \_\_\_\_\_

GSW Permit #: \_\_\_\_\_

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: \_\_\_\_\_

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  Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

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 <input 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 type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No  List All E. Logs Run:	<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

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				

1. Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
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) (Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: Jackie 1 dst 2

TIME ON: 07:48  
TIME OFF: 14:36

Company Krier, Kirby Oil Inc Lease & Well No. Jackie 1  
Contractor Southwind Drilling Rig 3 Charge to Krier Kirby Oil Inc  
Elevation 1856 Sur Formation \_\_\_\_\_ Lan KC H-K Effective Pay \_\_\_\_\_ Ft. Ticket No. RR274  
Date April-16-2017 Sec. 18 Twp. \_\_\_\_\_ 19 S Range \_\_\_\_\_ 13 W County Barton State KANSAS  
Test Approved By Jim Musgrove Diamond Representative Ricky Ray

Formation Test No. 2 Interval Tested from 3334 ft. to 3410 ft. Total Depth 3410 ft.  
Packer Depth 3329 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
Packer Depth 3334 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.

Depth of Selective Zone Set \_\_\_\_\_  
Top Recorder Depth (Inside) 3324 ft. Recorder Number 0062 Cap. 5000 P.S.I.  
Bottom Recorder Depth (Outside) 3402 ft. Recorder Number 8471 Cap. 5000 P.S.I.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type Chem Viscosity 52 Drill Collar Length \_\_\_\_\_ ft. I.D. 2 1/4 in.  
Weight 9.3 Water Loss 8 cc. Weight Pipe Length \_\_\_\_\_ ft. I.D. 2 7/8 in.  
Chlorides 500 P.P.M. Drill Pipe Length 3309 ft. I.D. 3 1/2 in.  
Jars: Make STERLING Serial Number na Test Tool Length 25 ft. Tool Size 3 1/2-IF in.  
Did Well Flow? na Reversed Out na Anchor Length 76A (13P) ft. Size 4 1/2-FH in.  
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 xh in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: 3/4" Blow (BOB in 2 1/2 mins) 6 1/2" BB  
2nd Open: 1 1/4 Blow (BOB in 4 mins) BBBB

Recovered <u>155'</u> ft. of <u>GIP</u>	
Recovered <u>124'</u> ft. of <u>O</u> <u>100% O</u> <u>35 Gravity @ 60 Deg</u>	
Recovered <u>156'</u> ft. of <u>GMO</u> <u>10% G</u> <u>60% O</u> <u>30% M</u>	
Recovered <u>305'</u> ft. of <u>SLW MO</u> <u>85% O</u> <u>5% W</u> <u>10%M</u>	
Recovered <u>5'</u> ft. of <u>M</u> <u>100% M</u>	Price Job
Recovered <u>590'</u> ft. of <u>Total Fluid</u>	Other Charges
Remarks: <u>Tool Sample: 50% O 10% W 40% M</u>	Insurance
	Total

Time Set Packer(s) 9:20 AM A.M. P.M. Time Started Off Bottom 12:05 PM A.M. P.M. Maximum Temperature 105

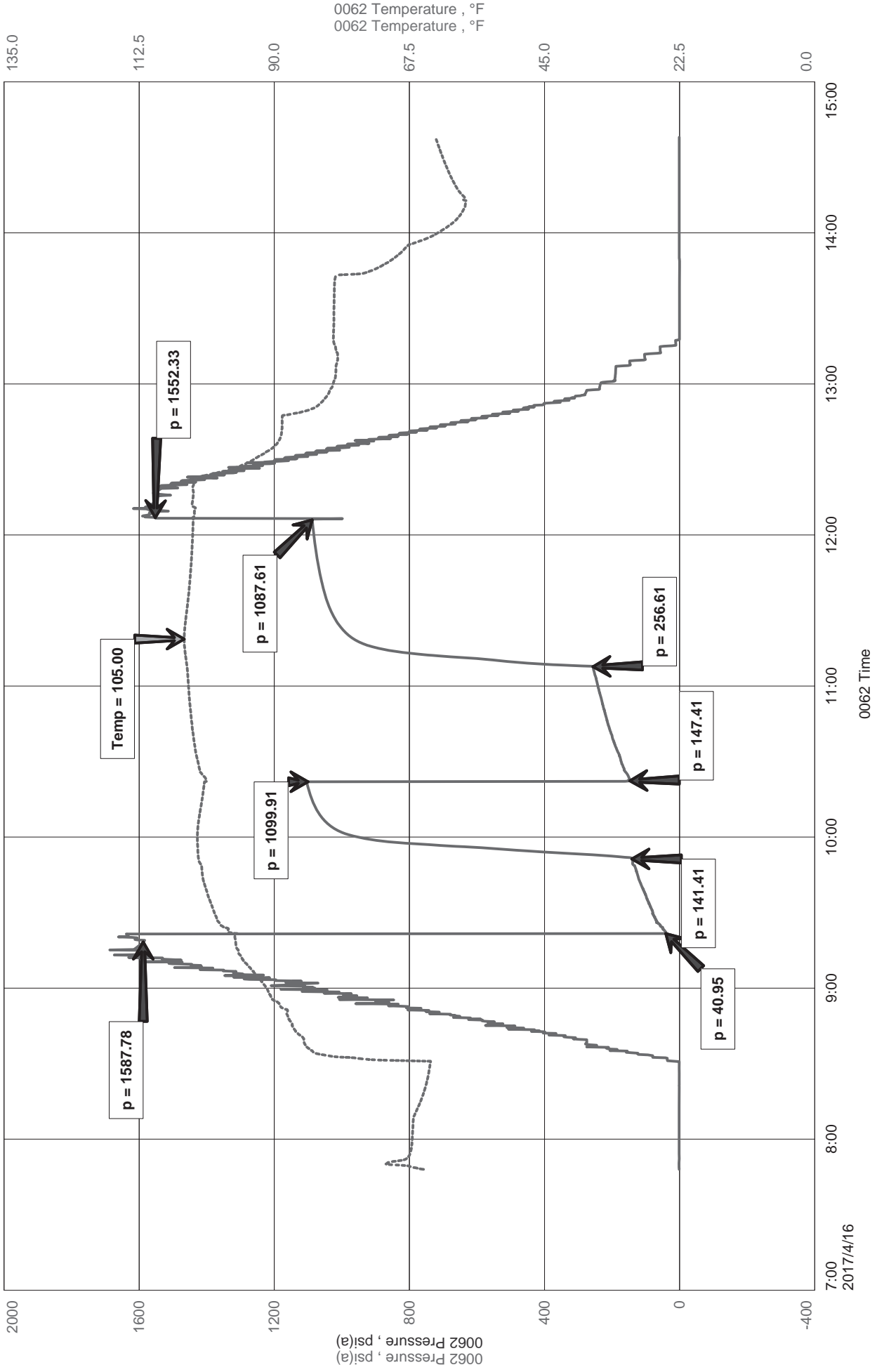
Initial Hydrostatic Pressure..... (A) 1588 P.S.I.  
Initial Flow Period..... Minutes 30 (B) 41 P.S.I. to (C) 141 P.S.I.  
Initial Closed In Period..... Minutes 30 (D) 1100 P.S.I.  
Final Flow Period..... Minutes 45 (E) 147 P.S.I. to (F) 257 P.S.I.  
Final Closed In Period..... Minutes 60 (G) 1088 P.S.I.  
Final Hydrostatic Pressure..... (H) 1552 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

Krier Kirby Oil Inc  
Dst 2 Lan KC (3334-3410)  
Start Test Date: 2017/04/16  
Final Test Date: 2017/04/16

Jackie 1  
Formation: Dst 2 Lan KC (3334-3410)  
Pool: Pool Ext  
Job Number: RR274

# Jackie 1





Diamond Testing LLC  
 P.O. Box 157  
 HoisingtonKS 67544

Ricky Ray - Tester  
 (620) 617-7261

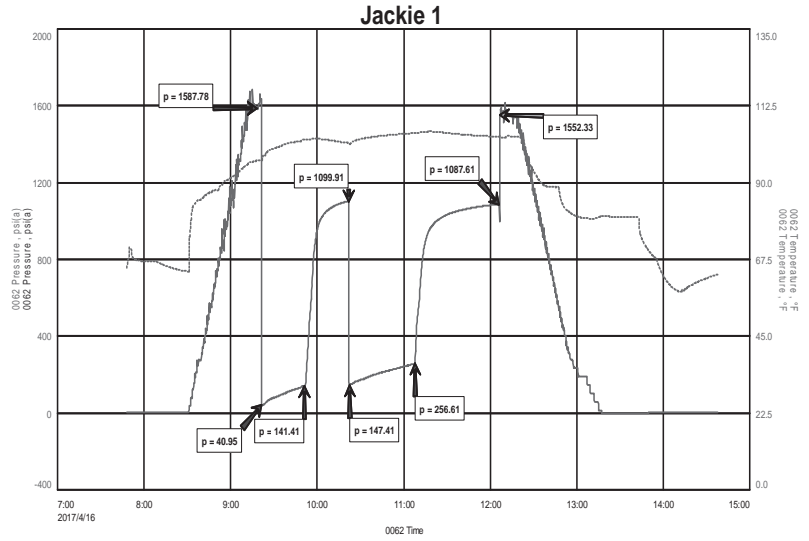
# Wellsite Report

## General Information

Company Name	Krier Kirby Oil Inc
Contact	Kirby Krier
Well Operator	Krier Kirby Oil Inc
Well Name	Jackie 1
Surface Location	Sec: 18-19s-13w (Barton County)
Field	Walnut Valley
Well Type	Vertical
Pool	Pool Ext
Test Purpose (AEUB)	Initial Test
Qualified By	
Gauge Name	0062

## Test Information

Job Number	RR274
Test Type	Drill Stem Test
Well Fluid Type	01 Oil
Formation	Dst 2 Lan KC (3334-3410)
Start Test Date	2017/04/16 YYYY/MM/DD
Start Test Time	07:48:00 HH:mm:ss
Final Test Date	2017/04/16 YYYY/MM/DD
Final Test Time	14:36:00 HH:mm:ss



## Test Results

### Recovery:

155'	GIP			
124'	O	100% O	35 Gravity @ 60 Deg	
156'	GMO	10% G	60% O	30% M
305'	SLWMO	85% O	5% W	105 M
5'	M	100% M		
590'	Total Fluid			

Tool Sample: 50% O 10% W 40% M



# 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. 1693

Date	4-17-17	Sec.	18	Twp.	19	Range	13	County	Barton	State	Ks	On Location		Finish	5:30PM
------	---------	------	----	------	----	-------	----	--------	--------	-------	----	-------------	--	--------	--------

Location 281 + Junc Rd - 2W, 5/4 into

Lease	Jackie	Well No.	1	Owner	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.
Contractor	Southwind		3	Charge To	Kirby Krier
Type Job	Longstring	T.D.	3505'	Street	
Hole Size	7 7/8"	Depth	3502'	City	
Csg.	5 1/2" 15.50# New	Depth		State	
Tbg. Size		Depth		The above was done to satisfaction and supervision of owner agent or contractor.	
Tool		Depth		Cement Amount Ordered	180 <del>200</del> Corn 10% Salt 5%
Cement Left in Csg.	11.71'	Shoe Joint	11.71'	Meas Line	Displace 83 BLS Gilsonite - 500 gal mud Clear 48

**EQUIPMENT**

Pumptrk	16	No.	Cementor	Travis	Common	180
			Helper		Poz. Mix	<del>180</del>
Bulktrk	3	No.	Driver	David	Gel.	
			Driver		Calcium	
Bulktrk pill.		No.	Driver	Rick	Hulls	

**JOB SERVICES & REMARKS**

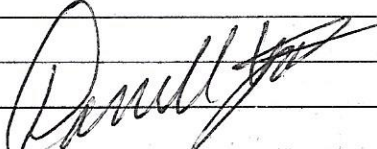
Remarks:	Salt	15
Rat Hole	Flowseal	
Mouse Hole	Kol-Seal	800#
Centralizers	Mud CLR 48	500 gal
Baskets	CFL-117 or CD110 CAF 38	
D/V or Port Collar	Sand	
pipe on bottom break Circulation	Handling	193
pump 500 gal mud Clear 48 plug Rathole	Mileage	
w/ 3052 Hook to 5 1/2" + mix 150 SX		

Cement. Shut down wash pump + lines Displaced plug w/ 83 BLS of H2O, Released + Held

Lift pressure 750 #  
Land plug to 1500 #

**FLOAT EQUIPMENT**

Guide Shoe	
Centralizer	9
Baskets	2
AFU Inserts	
Float Shoe	1
Latch Down	1
Rotating head Assy	
Pumptrk Charge	prod string
Mileage	15 (min)

X Signature 

Tax	
Discount	
Total Charge	



# 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. 017

Date	4-12-17	Sec.	18	Twp.	19	Range	13	County	Barton	State	Ks	On Location		Finish	
Lease								Location		Great Bend N to 30 <sup>th</sup> & Washington					
Jackie								Well No.		1					
Contractor								Owner		To Quality Oilwell Cementing, Inc.					
Southwind 3								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								Charge To		Kirby Krier					
Long Surface								Street							
Hole Size								City		State					
12 1/4								Depth		The above was done to satisfaction and supervision of owner agent or contractor.					
8 1/2								Cement Amount Ordered		350 7/30 3+2					
T.D. 789								Shoe Joint							
Csg. Depth 788															
Tbg. Size															
Tool															
Cement Left in Csg. 20'															
Meas Line															
Displace															
EQUIPMENT															
Pumptrk 18								Common		245					
No. Cementer								Poz. Mix		105					
Helper								Gel.		7					
Bulktrk 4								Calcium		812					
No. Driver								Hulls							
Bulktrk pu								Salt							
No. Driver								Flowseal							
No. Driver								Kol-Seal							
JOB SERVICES & REMARKS								Mud CLR 48							
Remarks:								CFL-117 or CD110 CAF 38							
Rat Hole								Sand							
Mouse Hole								Handling		<del>365</del> 369					
Centralizers								Mileage							
Baskets								FLOAT EQUIPMENT							
D/V or Port Collar								Guide Shoe							
Cement								Centralizer		8 1/2 plug					
Civ								Baskets							
Thanks								AFU Inserts							
								Float Shoe							
								Latch Down							
								Pumptrk Charge		Long Surface					
								Mileage		15 (miles)					
								Tax							
								Discount							
								Total Charge							
Signature															





# Musgrove

Petroleum Geology  
212 Main Street, Claflin KS

## NOTES

Company: Kirby Krier Oil, Inc.

Lease: Jackie #1

Location: SE-NE-NW-NE (375' FNL & 1585' FEL)

Sec: 18 Twsp: 19S Rge: 13W

County: Barton State: Kansas

Field: Walnut Valley

KB: 1866' GL: 1858'

Contractor: Southwind Drilling, Inc. (Rig #3)

Spud: 04/11/2017 Comp: 04/17/2017

RTD: 3505' LTD: 3506'

Mud Up: 2755' Type Mud: Chemical

API #: 15-009-26162-00-00

Samples Saved From: 3000' to RTD

Drilling Time Kept From: 3000' to RTD

Samples Examined From: 3000' to RTD

Geological Supervision from: 3000' to RTD

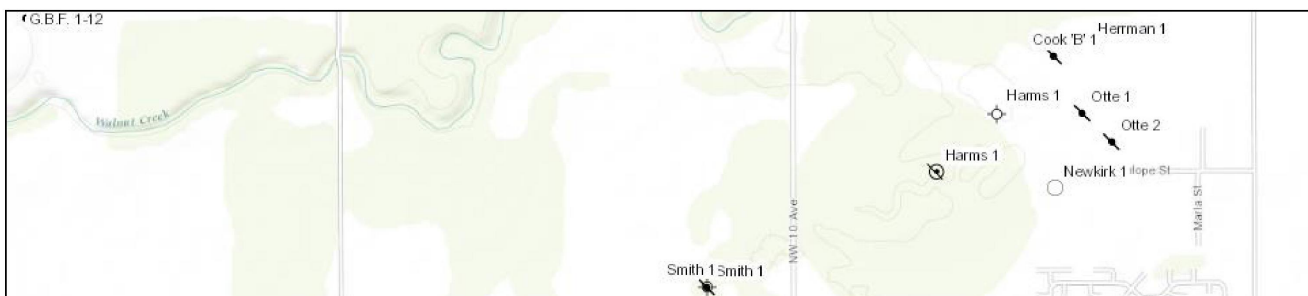
Geologist on Well: Jim Musgrove

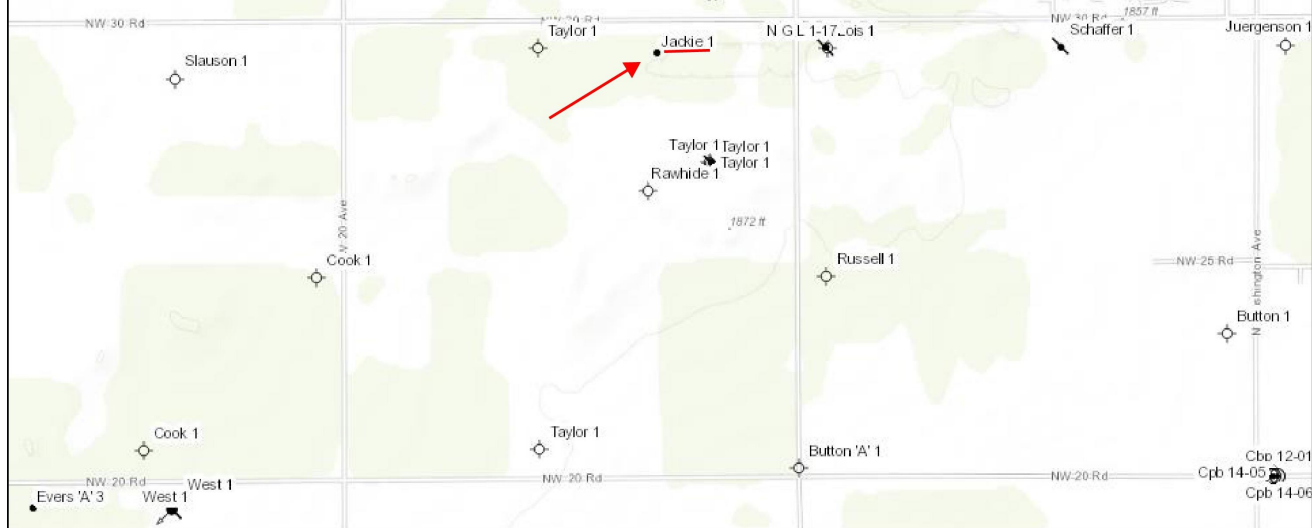
Surface Casing: 8 5/8" @ 789'

Production Casing: 5 1/2" @ 3503'

Electronic Surveys: Logged by Pioneer; DIL/MEL, BHCS, DCPL

## Kirby Krier Oil - Jackie # 1





## Kirby Krier Oil - Jackie #1 well comparison sheet

DRILLING WELL					COMPARISON WELL				COMPARISON WELL			
Kirby Krier Oil- Jackie #1					Barnett Oil- Taylor #1				R.G. Smith- Smith #1			
SE-NE-NW-NE 18-19S-13W					NE-NE-NW 18-19S-13W				SW-SE-SE 7-19S-13W			
1866 KB					1866 KB		Structural Relationship		1864 KB		Structural Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Anhydrite	787	1079	787	1079	793	1073	6	6	785	1079	0	0
B. Anhydrite	813	1053	813	1053					802	1062	-9	-9
Heebner	3111	-1245	3106	-1240	3130	-1264	19	24	3109	-1245	0	5
Toronto	3125	-1259	3120	-1254	3143	-1277	18	23	3124	-1260	1	6
Douglas	3143	-1277	3139	-1273					3142	-1278	1	5
Brown Lime	3203	-1337	3201	-1335	3227	-1361	24	26	3205	-1341	4	6
Lansing	3215	-1349	3213	-1347	3241	-1375	26	28	3222	-1358	9	11
BKC	3429	-1563	3430	-1564								
Conglomerate	3438	-1572	3439	-1573								
Arbuckle	3457	-1591	3456	-1590	3469	-1603	12	13	3449	-1585	-6	-5
RTD	3505	-1639	3505	-1639	3520	-1654	15	15	3500	-1636	-3	-3
LTD	3504	-1638	3506	-1640					3492	-1628	-10	-12



**DIAMOND TESTING**  
P.O. Box 157  
HOISINGTON, KANSAS 67544  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: Jackie 1 dst 1

TIME ON: 12:05  
TIME OFF: 18:33

Company Krier, Kirby Oil Inc Lease & Well No. Jackie 1  
Contractor Southwind Drilling Rig 3 Charge to Krier Kirby Oil Inc  
Elevation 1856 Sur Formation \_\_\_\_\_ A-F Effective Pay \_\_\_\_\_ Ft. Ticket No. RR273  
Date April-15-2017 Sec. 18 Twp. \_\_\_\_\_ 19 S Range \_\_\_\_\_ 13 W County Barton State KANSAS  
Test Approved By Jim Musgrove Diamond Representative Ricky Ray

Formation Test No. 1 Interval Tested from 3206 ft. to 3285 ft. Total Depth 3285 ft.  
Packer Depth 3201 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.  
Packer Depth 3206 ft. Size 6 3/4 in. Packer depth \_\_\_\_\_ ft. Size 6 3/4 in.

Depth of Selective Zone Set \_\_\_\_\_  
Top Recorder Depth (Inside) \_\_\_\_\_ 3196 ft. Recorder Number \_\_\_\_\_ 0062 Cap. \_\_\_\_\_ 5000 P.S.I.  
Bottom Recorder Depth (Outside) \_\_\_\_\_ 3274 ft. Recorder Number \_\_\_\_\_ 8471 Cap. \_\_\_\_\_ 5000 P.S.I.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type Chem Viscosity 50 Drill Collar Length \_\_\_\_\_ ft. I.D. 2 1/4 in.

Weight 9 Water Loss 8.8 cc. Weight Pipe Length -- ft. I.D. 2 7/8 in  
 Chlorides 4000 P.P.M. Drill Pipe Length 3181 ft. I.D. 3 1/2 in  
 Jars: Make STERLING Serial Number na Test Tool Length 25 ft. Tool Size 3 1/2-IF in  
 Did Well Flow? na Reversed Out na Anchor Length 79A (16P) ft. Size 4 1/2-FH in  
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2 xh in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in  
 Blow: 1st Open: WSB (Built to 10 1/4" in 45 mins) 1" BB  
 2nd Open: WSB (Built to 4 1/4" in 45 mins) 1/2" BB

Recovered 220 ft. of GIP  
 Recovered 28 ft. of HMCO 15% O 85% M  
 Recovered      ft. of       
 Recovered      ft. of       
 Recovered      ft. of      Price Job  
 Recovered      ft. of      Other Charges  
 Remarks: Tool Sample: 2% G 3% O 95% M Insurance  
 Total

Time Set Packer(s) 1:43 PM A.M. P.M. Time Started Off Bottom 4:43 PM A.M. P.M. Maximum Temperature 99  
 Initial Hydrostatic Pressure..... (A) 1518 P.S.I.  
 Initial Flow Period..... Minutes 45 (B) 10 P.S.I. to (C) 16 P.S.I.  
 Initial Closed In Period..... Minutes 30 (D) 54 P.S.I.  
 Final Flow Period..... Minutes 45 (E) 17 P.S.I. to (F) 19 P.S.I.  
 Final Closed In Period..... Minutes 60 (G) 81 P.S.I.  
 Final Hydrostatic Pressure..... (H) 1503 P.S.I.



**DIAMOND TESTING**  
 P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
 (800) 542-7313  
**DRILL-STEM TEST TICKET**  
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TIME ON: 07:48  
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 Below Straddle Recorder Depth      ft. Recorder Number      Cap.      P.S.I.

Mud Type Chem Viscosity 52 Drill Collar Length -- ft. I.D. 2 1/4 in.  
 Weight 9.3 Water Loss 8 cc. Weight Pipe Length -- ft. I.D. 2 7/8 in  
 Chlorides 500 P.P.M. Drill Pipe Length 3309 ft. I.D. 3 1/2 in  
 Jars: Make STERLING Serial Number na Test Tool Length 25 ft. Tool Size 3 1/2-IF in  
 Did Well Flow? na Reversed Out na Anchor Length 76A (13P) ft. Size 4 1/2-FH in  
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2 xh in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in  
 Blow: 1st Open: 3/4" Blow (BOB in 2 1/2 mins) 6 1/2" BB  
 2nd Open: 1 1/4 Blow (BOB in 4 mins) BBBB






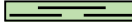


Recovered 155 ft. of GIP







Recovered	124 ft. of	O	100% O	35 Gravity @ 60 Deg	
Recovered	156' ft. of	GMO	10% G	60% O	30% M
Recovered	305' ft. of	SLW MO	85% O	5% W	10%M
Recovered	5 ft. of	M	100% M		Price Job
Recovered	590 ft. of	Total Fluid			Other Charges
Remarks:	Tool Sample:	50% O	10% W	40% M	Insurance
					Total

Time Set Packer(s)	9:20 AM	A.M.	Time Started Off Bottom	12:05 PM	A.M.	Maximum Temperature	105
Initial Hydrostatic Pressure.....		(A)	1588 P.S.I.				
Initial Flow Period.....		Minutes	30	(B)	41 P.S.I. to (C)	141 P.S.I.	
Initial Closed In Period.....		Minutes	30	(D)	1100 P.S.I.		
Final Flow Period.....		Minutes	45	(E)	147 P.S.I. to (F)	257 P.S.I.	
Final Closed In Period.....		Minutes	60	(G)	1088 P.S.I.		
Final Hydrostatic Pressure.....		(H)	1552 P.S.I.				

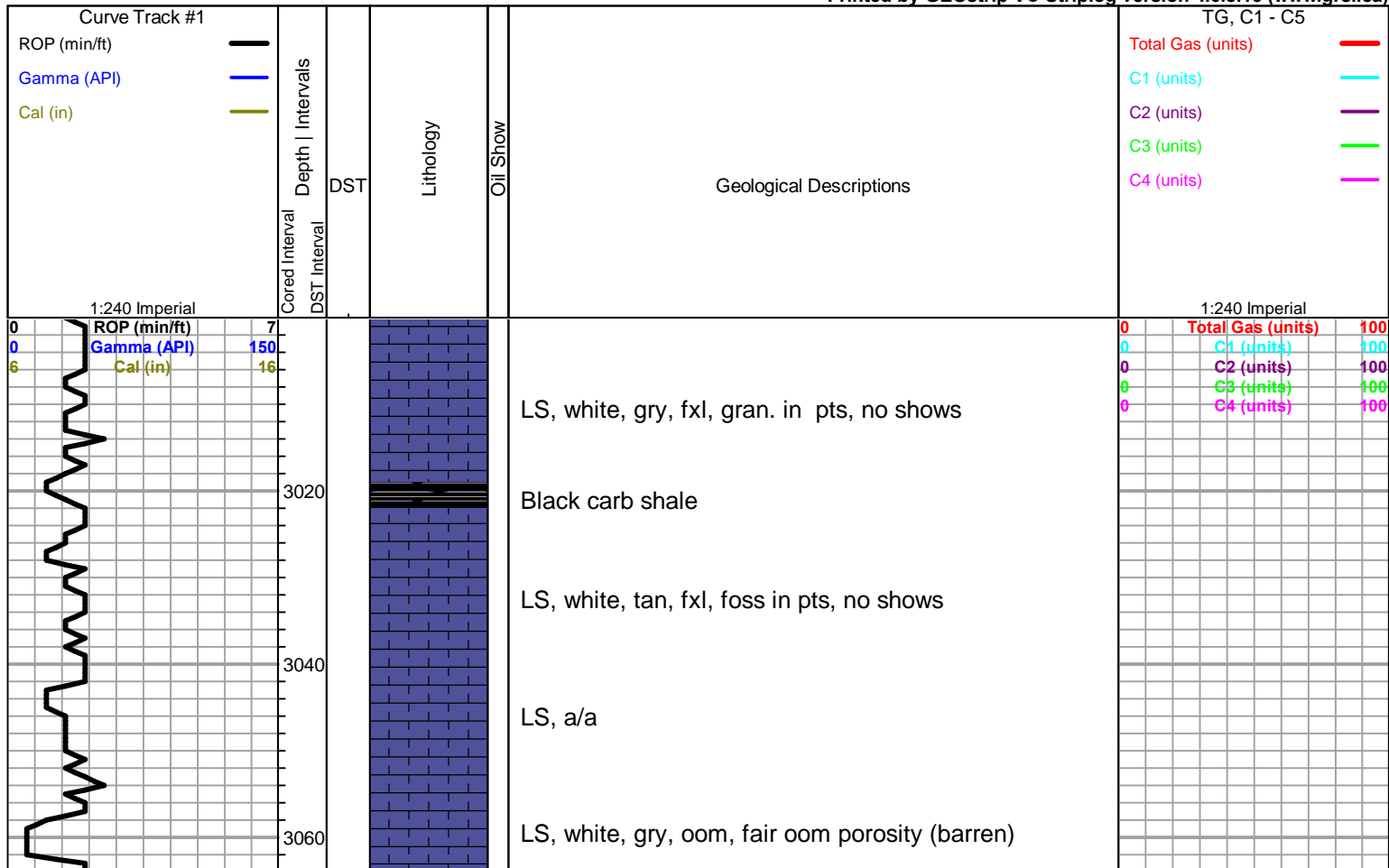
**ROCK TYPES**

 Chtcong	 Lmst fw<7	 shale, gry	 shale, red
 Dolprim	 shale, grn	 Carbon Sh	 Ss

**OTHER SYMBOLS**

- Oil Show**
- Good Show
  - Fair Show
  - Poor Show
  - Spotted or Trace
  - Questionable Stn
  - D Dead Oil Stn
  - Fluorescence
  - \* Gas
- DST**
-  DST Int
  -  DST alt
  -  Core
  -  tail pipe

Printed by GEOstrip VC Striplog version 4.0.8.15 (www.grsi.ca)



3080  
3100  
3120  
3140  
3160  
3180  
3200  
3220  
3240  
3260  
3280

ROP (min/ft) 7  
Gamma (API) 150  
Cal (in) 16

D  
S  
T  
#  
1

LS, gry, few foss, slightly cherty (dense)

LS, a/a, tr. gry chert

**Heebner 3111.0 (-1245.0)**

Black carb shale

**Toronto 3125.0 (-1260.0)**

LS, white, tan, fxl chalky in pt., poor visible porosity, poor brown stain, tr. fo, no odor

**Douglas 3143.0 (-1277.0)**

Sh, maroon, gry, gryish green

Tr. lime green, vfg, mica silty sand, poorly developed no shows

Sh, v.c. few silty

**Brown Lime 3203.0 (-1337.0)**

LS, tan, slightly cherty (dense)

**Lansing 3215.0 (-1349.0)**

LS, tan, fxl, chalky in pts, scattered p.p. porosity, brown/golden brown stain, tr. fo, no odor

LS, a/a, fr. stain, sat, sfo, ??? odor

LS, tan, foss, scattered porosity, slightly cherty, dk brown stain, sfo, ft. odor

LS, white, gry, foss, poor/fair porosity, few chalky, dk brown stain, sfo. (Tr. gry ool, LS, fair porosity, dk brown black stain, sfo)

LS, gry, tan, fxl, finely ool, few foss, scattered vuggy

Total Gas (units) 100  
C1 (units) 100

**DST#1 3206-3285**

45-30-45-60

1st Open:  
Weak surface blow

2nd Open:  
Weak surface blow

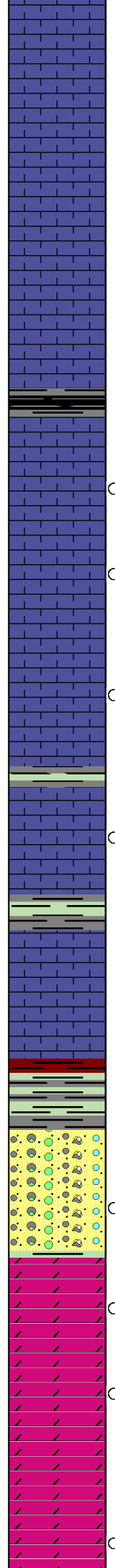
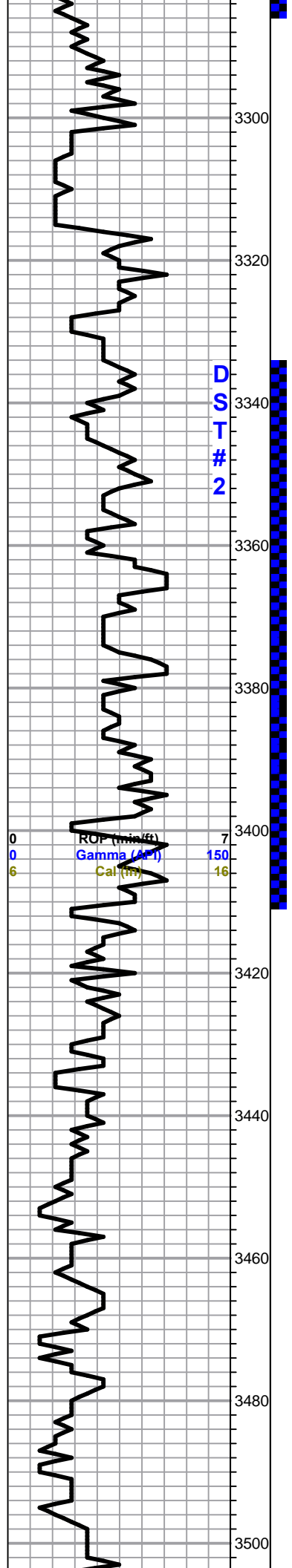
Recovery:

220' GIP

28' OCM  
(15%O, 85%M)

Pressures:

ISIP 54 psi  
FSIP 81 psi  
IFP 10-16 psi



porosity, brown, black stain, tr. fo no odor

LS, white, cream, oom, fair oom porosity (barren)

LS, a/a

LS, tan, gry, slightly cherty (dense)

Tr. gry, black sh

LS, white, tan, highly foss, scattered porosity, brown golden brown stain, tr. fo. ??? odor

LS, white, highly ool, good porosity, fair stain/sat, tr. fo, ??? odor

LS, gry, white, ool, chalky, brown/black stain, nsfo, ??? odor

Sh, gry, greenish

LS, gry, ool/foss, black, brown stain, tr. fo, no odor

Sh, gry, green

LS, white, gry, chalky, no shows

**Base Kansas City 3429.0 (-1563.0)**

Sh, maroon, gry, green shale, tr. white, chert

**Conglomerate 3438.0 (-1572.0)**

Sh, a/a, + white, gry, opaque cherts

Chert, white, gry, boney, black, stain, nsfo, ft. fair odor

**Arbuckle 3457.0 (-1591.0)**

Dol. tan, white, suc. scattered p.p. porosity, brown/golden brown stain, tr. fo, ft. odor

Dol. white, gry, f-med xln, fr. inxln porosity, dk black stain, nsfo, ft. fair odor

Dol. white, gry, fxl, suc. fair p.p. porosity, no shows,

Dol. white, gry, fxl, poor visible porosity, black stain, nsfo, fr. odor, plus white, cream, boney chert

FFP 17-19 psi  
HSH 1518-1503 psi

**DST#2 3334-3410**  
30-30-45-60

1st Open:  
BOB 2.5 mins

2nd Open:  
BOB 4 mins

Recovery:  
155' GIP  
124' Clean Oil  
156' GMO  
(10%G, 60%O, 30%M)

305' SLWMO  
(85%O, 5%W, 10%M)

5' Mud

Pressures:  
ISIP 1100 psi  
FSIP 1088 psi  
IFP 41-141 psi  
FFP 147-257 psi  
HSH 1588-1552 psi



3520

3540

RTD 3505.0 (-1639.0)

LTD 3506.0 (-1640.0)