[redacted]

Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1265150

Form ACO-1
November 2016
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 34318
Name: BEREXCO LLC
Address 1: 2020 N. Bramblewood
Address 2:
City: Wichita State: KS Zip: 67206 + 1094
Contact Person: Rodney Reynolds
Phone: (316) 265-3311
CONTRACTOR: License # 34317
Name: BEREDCO LLC
Wellsite Geologist: Bryan Bynog
Purchaser: N/A

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 #:

07/24/2015 Spud Date or Recompletion Date
08/07/2015 Date Reached TD
08/07/2015 Completion Date or Recompletion Date

API No.: 15-023-21431-00-00
Spot Description:
NE - SW - NW - SE Sec. 9 Twp. 2 S. R. 37 ☐ East ☑ West
1700 Feet from ☐ North / ☑ South Line of Section
2150 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☑ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Cheyenne
Lease Name: Wilkens D Well #: 1-9
Field Name: un-named Wildcat
Producing Formation: N/A
Elevation: Ground: 3366 Kelly Bushing: 3377
Total Vertical Depth: 4930 Plug Back Total Depth: 0
Amount of Surface Pipe Set and Cemented at: 303 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: 1100 ppm Fluid volume: 800 bbls
Dewatering method used: Evaporated
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: 09/24/2015
☑ **Confidential Release Date:** 09/23/2017
☑ **Wireline Log Received** ☐ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 09/28/2015

[redacted]

1265150

Operator Name: BEREXCO LLC Lease Name: Wilkens D Well #: 1-9

Sec. 9 Twp. 2 S. R. 37 ☐ East ☑ West County: Cheyenne

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 *(Attach Additional Sheets)*	☑ Yes	☐ No
Samples Sent to Geological Survey	☑ Yes	☐ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☑ Yes	☐ No
Geolgist Report / Mud Logs	☐ Yes	☐ No

List All E. Logs Run:

Radiation Guard Log
Microresistivity Log

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Attached	Attached	Attached

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	12.25	8.625	23	303	Common	225	3%cc, 2%gel

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ 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: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)*

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

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL:
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	Top / Bottom

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*

TUBING RECORD: Size: Set At: Packer At:

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	Wilkens D 1-9
Doc ID	1265150

Tops

Name	Top	Datum
Anhydrite (top)	3290	+87
Anhydrite (base)	3326	+51
Foraker	3864	-487
Topeka	4086	-709
Oread	4236	-859
Lansing A	4314	-937
Lansing B	4376	-999
Lansing C	4436	-1059
Lansing D	4478	-1101
Lansing E	4520	-1143
Lansing F	4557	-1180
Pawnee	4722	-1345
RTD	4930	-1553
LTD	4931	-1554

Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	Wilkens D 1-9
Doc ID	1265150

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	303	Common	225	3%cc, 2%gel

ALLIED OIL & GAS SERVICES, LLC

WELL FIL

Federal Tax I.D. #20-5975804

21450
067781
11.259

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Ada, Ok

DATE 2/25/15	SEC. 9	TWP. 2	RANGE 37	CALLED OUT	ON LOCATION	JOB START 8:00	JOB FINISH 8:30 pm
LEASE Wilkins O	WELL # 1-9		LOCATION McDonald N to W W to N 33 W of Nixto Pasture			COUNTY Cheyenne	STATE Ok
OLD OR (NEW) (Circle one)							

CONTRACTOR	Beredco 10	OWNER	Same
TYPE OF JOB	Surface		
HOLE SIZE	12 1/4	T.D.	305
CASING SIZE	8 5/8	DEPTH	305
TUBING SIZE		DEPTH	
DRILL PIPE		DEPTH	
TOOL		DEPTH	
PRES. MAX		MINIMUM	
MEAS. LINE		SHOE JOINT	
CEMENT LEFT IN CSG.			15 FT
PERFS.			
DISPLACEMENT			18.47 BBL

EQUIPMENT

PUMP TRUCK # 495-281	CEMENTER	Alan Ryan
	HELPER	Kevin Ryan
BULK TRUCK # 891	DRIVER	Paul Beaver
BULK TRUCK #	DRIVER	

CEMENT

AMOUNT ORDERED 225 sx 3%cc 2% gel

COMMON	225	@	17.90	4027.50
POZMIX		@		
GEL	423	@	.50	211.50
CHLORIDE	6 3/5	@	10	658.50
ASC		@		
		@		
		@		
		@		
		@		
		@		
		@		
		@		
		@		
		TOTAL		4,937.50
		DISCOUNT 48 %		2370.00

REMARKS:

Ran Csg Circulate, Mix Cement Displace Cement Shut in, Cement Did Circulate

Thank You
Alan, Kevin, Paul

SERVICE

HANDLING	243 sx 309	@	2.48 HP 1.04	603.41
MILEAGE	2 sx 10 mi 60/mile	11		1526.80
DEPTH OF JOB		305		
PUMP TRUCK CHARGE				1572.25
EXTRA FOOTAGE		@		
HV MILEAGE	50	@	.70	385.00
LV MILEAGE		@		
		@		
		@		
		TOTAL		4027.46
		DISCOUNT 48 %		1933.18

CHARGE TO: Beredco

STREET

CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

	@		
	@		
	@		
	@		
	@		
	TOTAL		
	DISCOUNT ___ %		

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Gilbert Davila Jr

SIGNATURE

SALES TAX (If Any)

TOTAL CHARGES 8,964.96

DISCOUNT 4,303.18 (48%) IF PAID IN 30 DAYS

NET TOTAL 4,661.77 IF PAID IN 30 DAYS

ALLIED OIL & GAS SERVICES, LLC

CEMENTING LOG

STAGE NO.

Date 7/25/15 District Oakley Ticket No 06378

Company Anadarko Rig Beeker 10

Lease Wilkerson D Well No. 1-9

County Cheyenne State KS

Location _____ Field _____

CASING DATA: Conductor ☐ PTA ☐ Squeeze ☐ Misc ☐
Surface ☑ Intermediate ☐ Production ☐ Liner ☐

Size 8 5/8 Type New Weight _____ Collar _____

Casing Depths: Top 40 Bottom 306

Drill Pipe: Size _____ Weight _____ Collars _____

Open Hole: Size _____ T.D. _____ ft. P.B. to _____ ft.

CAPACITY FACTORS:

Casing:	Bbls/Lin. ft.	.0637	Lin. ft./Bbl.	
Open Holes:	Bbls/Lin. ft.		Lin. ft./Bbl.	
Drill Pipe:	Bbls/Lin. ft.		Lin. ft./Bbl.	
Annulus:	Bbls/Lin. ft.		Lin. ft./Bbl.	
	Bbls/Lin. ft.		Lin. ft./Bbl.	

Perforations: From _____ ft. to _____ ft. Amt. _____

CEMENT DATA:

Spacer Type: _____

Amt. _____ Sks Yield _____ ft³/sk Density _____ PPG

LEAD: Pump Time _____ hrs. Type Class A 3% CaCl 2% gel

Excess _____

Amt. 225 Sks Yield 1.34 ft³/sk Density 15.2 PPG

TAIL: Pump Time _____ hrs. Type _____

Excess _____

Amt. _____ Sks Yield _____ ft³/sk Density _____ PPG

WATER: Lead 6.5 gals/sk Tail _____ gals/sk Total _____ Bbls.

Pump Trucks Used 485

Bulk Equip. 891

Float Equip: Manufacturer _____

Shoe: Type _____ Depth _____

Float: Type _____ Depth _____

Centralizers: Quantity _____ Plugs Top _____ Btm. _____

Stage Collars _____

Special Equip. _____

Disp. Fluid Type H2O Amt. 18.43 Bbls. Weight 8.4 PPG

Mud Type _____ Weight _____ PPG

COMPANY REPRESENTATIVE _____ CEMENTER _____

TIME (AM/PM)	PRESSURES PSI: DRILL PIPE CASING	PRESSURES PSI: ANNULUS	FLUID PUMPED DATA: TOTAL FLUID	FLUID PUMPED DATA: Pumped Per Time Period	FLUID PUMPED DATA: RATE Bbls Min.	REMARKS
						on location, SFTY mtg, set up
						Casing Conduct
				36.0	3 1/2	Mix Cement
				18.43	6.0	Displace Cement
						Shut in
8:30						Job complete

FINAL DISP. PRESS: _____ PSI BUMP PLUG TO _____ PSI BLEEDBACK _____ BBLS. THANK YOU

MILLER PRINTERS INC. • Great Bend, KS

DRILL STEM TEST REPORT

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne,KS

Wilkens D #1-9

Job Ticket: 53448 **DST#: 1**

Test Start: 2015.07.29 @ 01:35:00

GENERAL INFORMATION:

Formation: **Topeka**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:28:00
Time Test Ended: 11:50:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Kevin Mack
Unit No: 82

Interval: 4040.00 ft (KB) To 4120.00 ft (KB) (TVD)
Total Depth: 4120.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

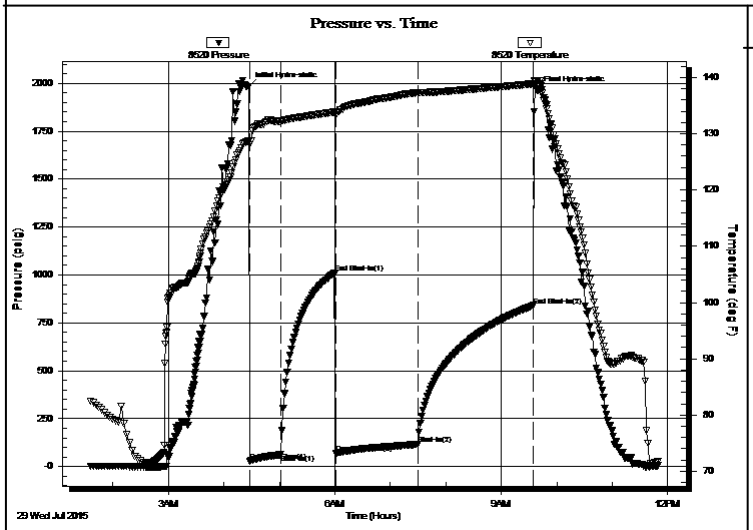
Reference Elevations: 3377.00 ft (KB)
3366.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8520 **Inside**

Press@RunDepth: 115.97 psig @ 4041.00 ft (KB)
Start Date: 2015.07.29 End Date: 2015.07.29
Start Time: 01:36:00 End Time: 11:50:00

Capacity: 8000.00 psig
Last Calib.: 2015.07.29
Time On Btm: 2015.07.29 @ 04:26:30
Time Off Btm: 2015.07.29 @ 09:39:00

TEST COMMENT: 30 - IF- 1/2" Blow built to 3"
60 - ISI- No Return
90 - FF- Surface Blow started at 10 min. Built to 1"
120 - FSI- No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1981.58	128.65	Initial Hydro-static
2	27.46	128.06	Open To Flow (1)
35	65.76	132.20	Shut-In(1)
94	1010.08	133.87	End Shut-In(1)
95	70.74	133.23	Open To Flow (2)
183	115.97	137.28	Shut-In(2)
308	840.17	138.85	End Shut-In(2)
313	1963.16	139.40	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	WM 30W 70M	0.59
60.00	WM 20W 80M	0.30
10.00	OSM 100M	0.05

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne,KS

Wilkens D #1-9

Job Ticket: 53448 **DST#: 1**

Test Start: 2015.07.29 @ 01:35:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	23000 ppm
Viscosity:	72.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.20 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	700.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	WM 30W 70M	0.590
60.00	WM 20W 80M	0.295
10.00	OSM 100M	0.049

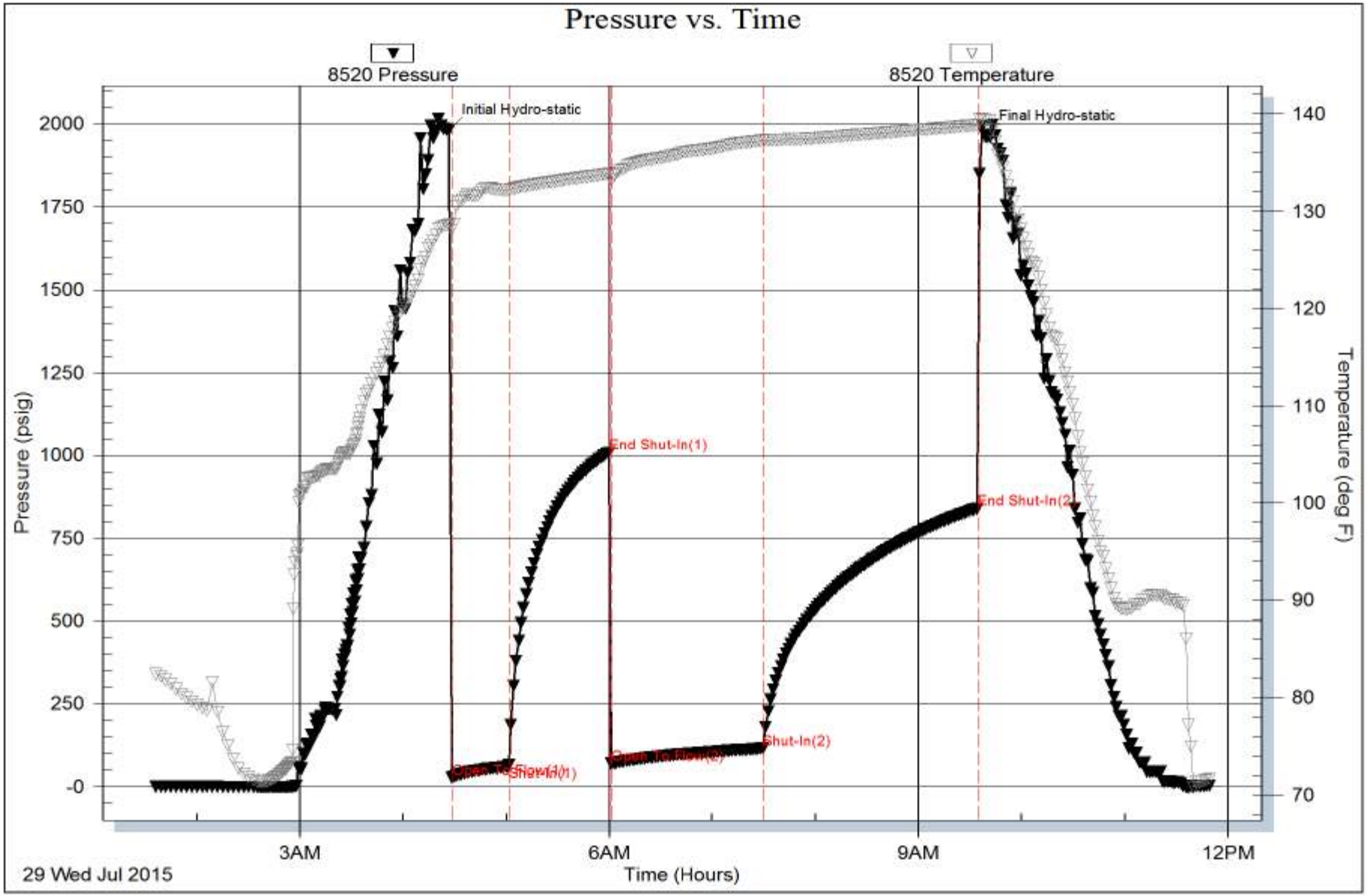
Total Length: 190.00 ft Total Volume: 0.934 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: RW .30 @ 75 deg. = 23000 ppm

Serial #: 8520 **Inside** Berexco, LLC. Wilkens D#1-9 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 53448 Printed: 2015.07.29 @ 14:33:35

DRILL STEM TEST REPORT

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne, KS

Wilkens D #1-9

Job Ticket: 53449 **DST#: 2**

Test Start: 2015.07.29 @ 22:56:00

GENERAL INFORMATION:

Formation: **Lower Topeka**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:26:00
Time Test Ended: 08:32:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Kevin Mack
Unit No: 82

Interval: 4122.00 ft (KB) To 4200.00 ft (KB) (TVD)
Total Depth: 4200.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

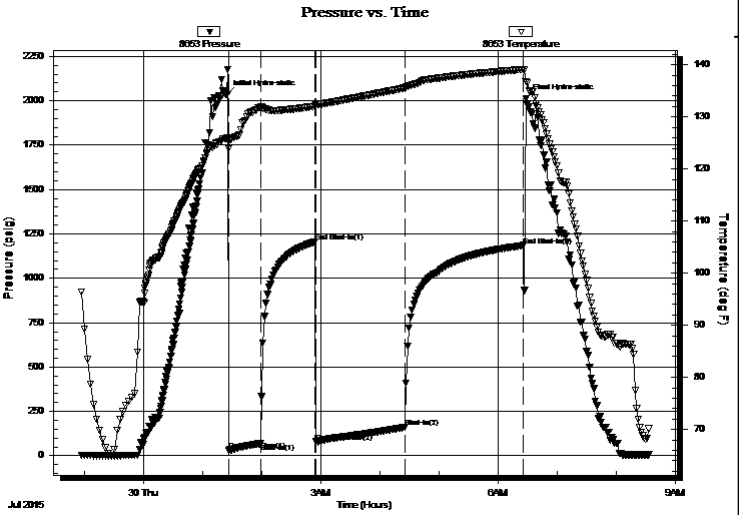
Reference Elevations: 3377.00 ft (KB)
3366.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8653 **Outside**

Press@RunDepth: 160.10 psig @ 4123.00 ft (KB)
Start Date: 2015.07.29 End Date: 2015.07.30
Start Time: 22:57:00 End Time: 08:32:30

Capacity: 8000.00 psig
Last Calib.: 2015.07.30
Time On Btm: 2015.07.30 @ 01:24:30
Time Off Btm: 2015.07.30 @ 06:28:00

TEST COMMENT: 30 - IF- 1/4" Blow built to 3"
60 - ISI- No Return
90 - FF- Surface Blow started at 8 min. Built to 3 3/4"
120 - FSI- No Retun



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2034.05	125.81	Initial Hydro-static
2	28.59	123.89	Open To Flow (1)
34	70.07	131.84	Shut-In(1)
89	1204.37	132.07	End Shut-In(1)
91	78.69	132.42	Open To Flow (2)
181	160.10	135.61	Shut-In(2)
301	1184.60	139.13	End Shut-In(2)
304	2011.49	136.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	OSMW 10M 90W (oil spots)	0.59
60.00	OSWM 50W 50M (oil spots)	0.30
60.00	OSWM 40W 60M (oil spots)	0.30
70.00	OSM 100M (oil spots)	0.34

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne, KS

Wilkens D #1-9

Job Ticket: 53449 **DST#: 2**

Test Start: 2015.07.29 @ 22:56:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	24000 ppm
Viscosity:	62.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.20 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	700.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	OSMW 10M 90W (oil spots)	0.590
60.00	OSWM 50W 50M (oil spots)	0.295
60.00	OSWM 40W 60M (oil spots)	0.295
70.00	OSM 100M (oil spots)	0.344

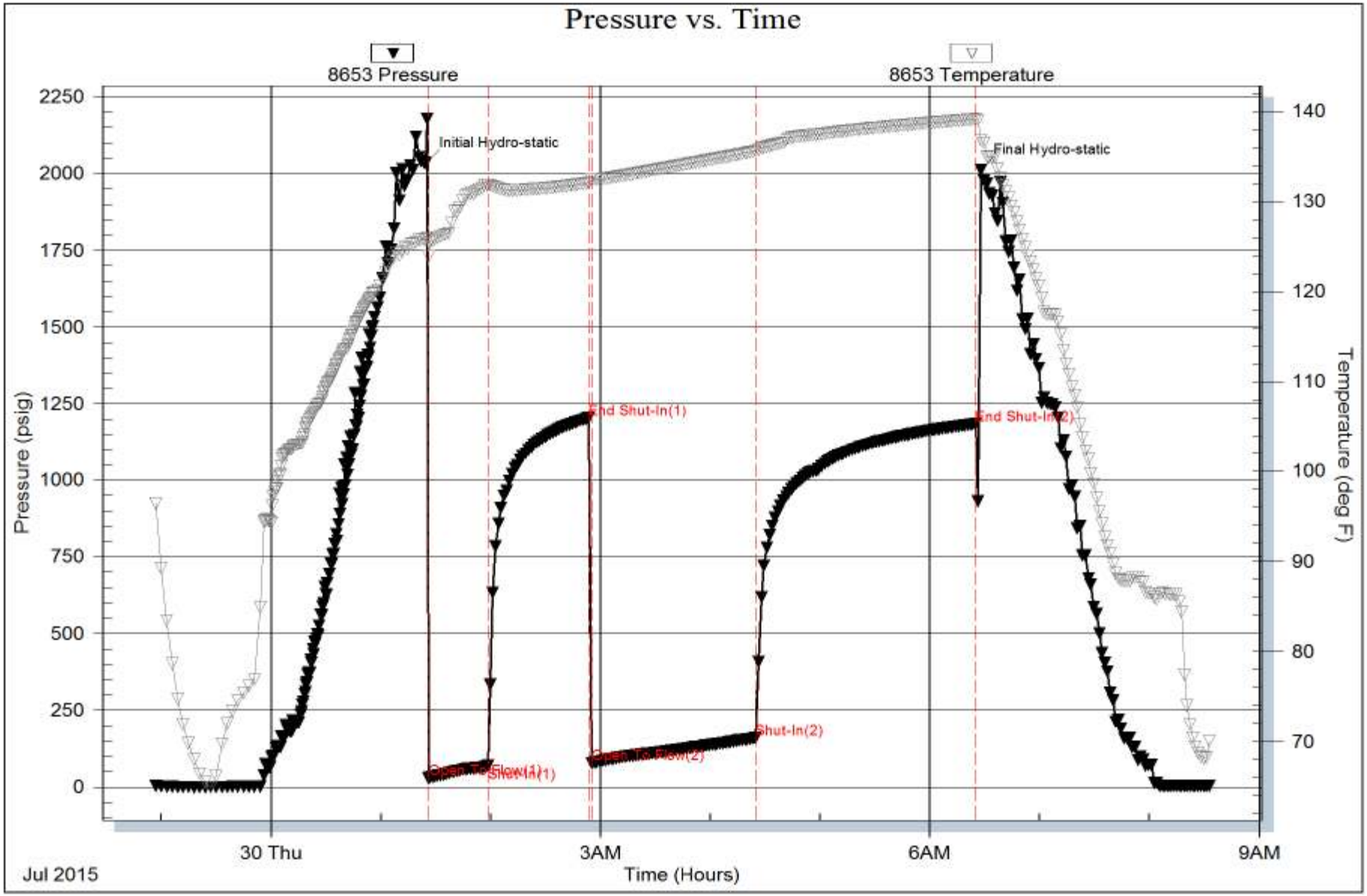
Total Length: 310.00 ft Total Volume: 1.524 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: W .31 @ 67 deg = 24000ppm

Serial #: 8653 **Outside** Berexco, LLC. Wilkens D#1-9 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 53449 Printed: 2015.07.30 @ 08:59:21

DRILL STEM TEST REPORT

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne, KS

Wilkens D #1-9

Job Ticket: 65201 **DST#: 3**

Test Start: 2015.07.30 @ 19:05:00

GENERAL INFORMATION:

Formation: **Oread**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:31:00
Time Test Ended: 03:23:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Kevin Mack
Unit No: 82

Interval: 4185.00 ft (KB) To 4255.00 ft (KB) (TVD)
Total Depth: 4255.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

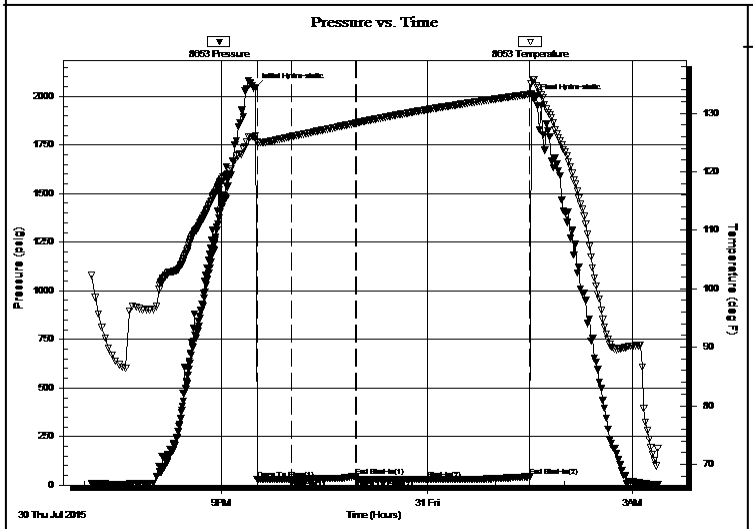
Reference Elevations: 3377.00 ft (KB)
3366.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8653 **Outside**

Press@RunDepth: 28.72 psig @ 4186.00 ft (KB)
Start Date: 2015.07.30 End Date: 2015.07.31
Start Time: 19:06:00 End Time: 03:23:00

Capacity: 8000.00 psig
Last Calib.: 2015.07.31
Time On Btm: 2015.07.30 @ 21:29:30
Time Off Btm: 2015.07.31 @ 01:33:30

TEST COMMENT: 30 - IF- 1/8" Blow died in 20 min.
60 - ISI- No Return
60 - FF- No Blow
90 - FSI- No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2043.55	126.11	Initial Hydro-static
2	30.41	125.19	Open To Flow (1)
32	28.08	125.99	Shut-In(1)
88	46.05	128.28	End Shut-In(1)
89	28.17	128.31	Open To Flow (2)
151	28.72	130.63	Shut-In(2)
241	43.49	133.23	End Shut-In(2)
244	1987.66	135.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	OSM 100M (oil spots)	0.02

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne, KS

Wilkens D #1-9

Job Ticket: 65201 **DST#: 3**

Test Start: 2015.07.30 @ 19:05:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	51.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.60 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	800.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

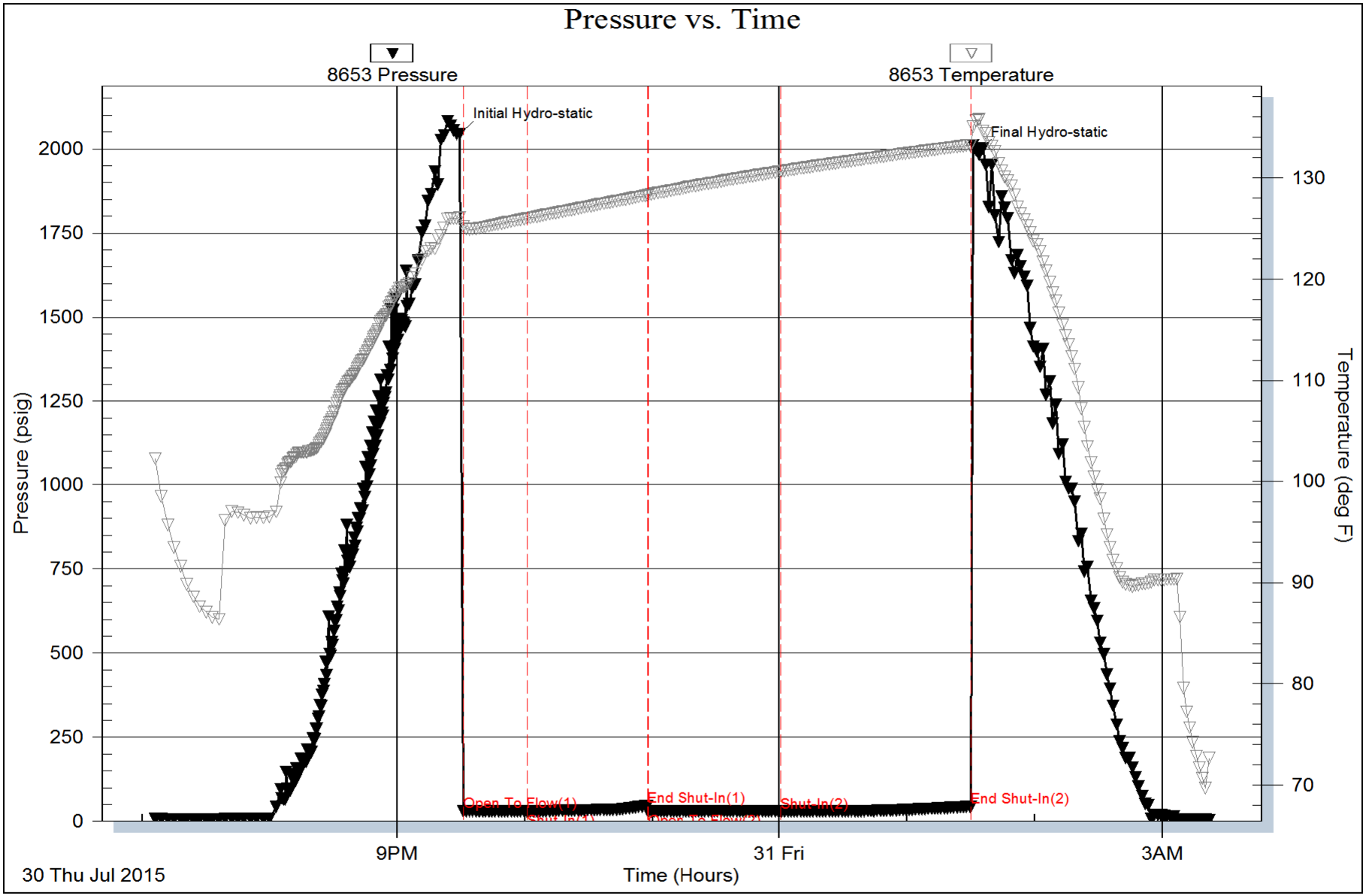
Recovery Table

Length ft	Description	Volume bbl
5.00	OSM 100M (oil spots)	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8653 **Outside** Berexco, LLC. Wilkens D #1-9 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 65201 Printed: 2015.07.31 @ 06:53:07

DRILL STEM TEST REPORT

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne, KS

Wilkens D #1-9

Job Ticket: 65202 **DST#: 4**

Test Start: 2015.07.31 @ 16:21:00

GENERAL INFORMATION:

Formation: **LKC "A"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 19:05:30
Time Test Ended: 01:17:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Kevin Mack
Unit No: 82

Interval: 4260.00 ft (KB) To 4355.00 ft (KB) (TVD)
Total Depth: 4355.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

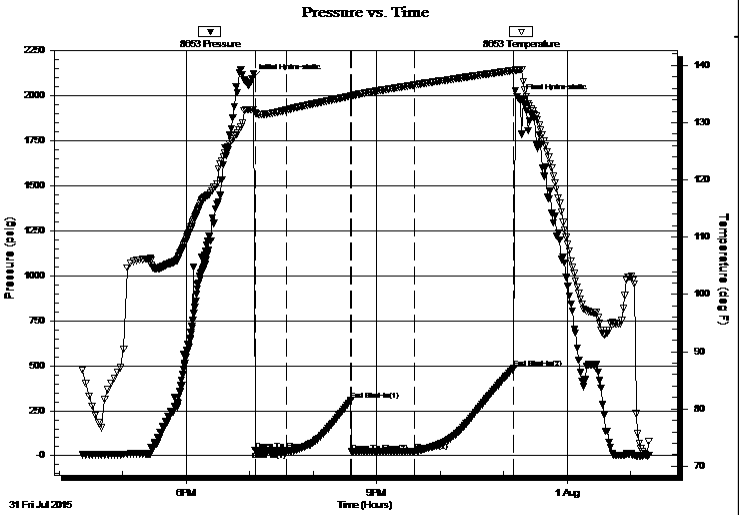
Reference Elevations: 3377.00 ft (KB)
3366.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8653 **Outside**

Press@RunDepth: 26.19 psig @ 4261.00 ft (KB)
Start Date: 2015.07.31 End Date: 2015.08.01
Start Time: 16:22:00 End Time: 01:17:00

Capacity: 8000.00 psig
Last Calib.: 2015.08.01
Time On Btm: 2015.07.31 @ 19:02:30
Time Off Btm: 2015.07.31 @ 23:14:30

TEST COMMENT: 30 - IF- 1/8" Blow died in 10 min.
60 - ISI- No Return
60 - FF- No Blow
90 - FSI- No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2095.55	132.25	Initial Hydro-static
3	28.58	131.67	Open To Flow (1)
33	27.12	132.25	Shut-In(1)
93	307.77	134.65	End Shut-In(1)
94	22.12	134.67	Open To Flow (2)
154	26.19	136.61	Shut-In(2)
247	487.46	139.12	End Shut-In(2)
252	1982.66	139.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	OSM 100M (oil spots)	0.02
1.00	Free Oil 100o	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne, KS

Wilkens D #1-9

Job Ticket: 65202 **DST#: 4**

Test Start: 2015.07.31 @ 16:21:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	58.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.20 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	900.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

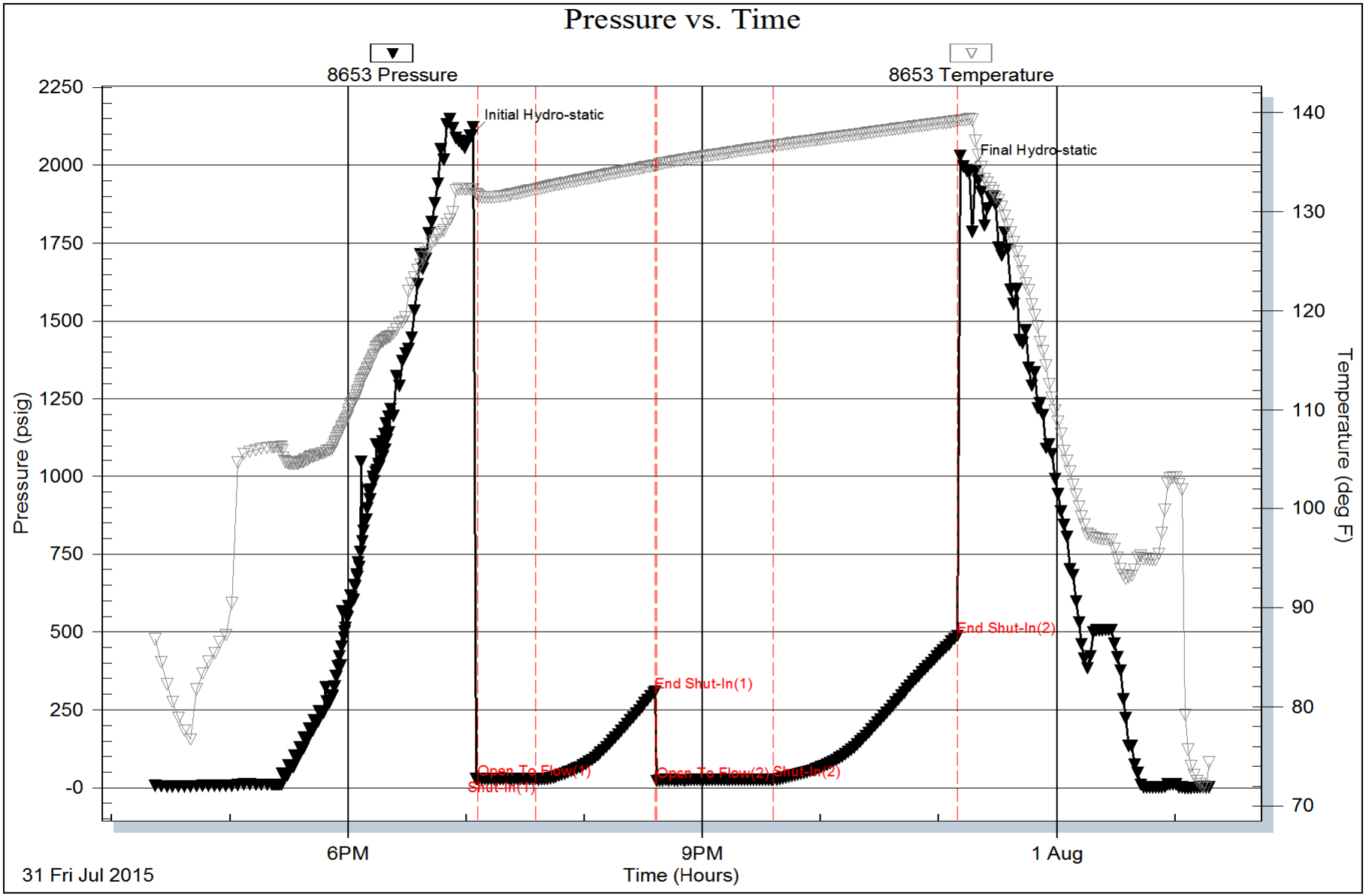
Recovery Table

Length ft	Description	Volume bbl
5.00	OSM 100M (oil spots)	0.025
1.00	Free Oil 100o	0.005

Total Length: 6.00 ft Total Volume: 0.030 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8653 **Outside** Berexco, LLC. Wilkens D #1-9 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 65202 Printed: 2015.08.01 @ 06:26:31

DRILL STEM TEST REPORT

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne, KS

Wilkens D #1-9

Job Ticket: 65203 **DST#: 5**

Test Start: 2015.08.01 @ 13:40:00

GENERAL INFORMATION:

Formation: **LKC "B"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 16:15:00
Time Test Ended: 22:41:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Kevin Mack
Unit No: 82

Interval: 4330.00 ft (KB) To 4420.00 ft (KB) (TVD)
Total Depth: 4420.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

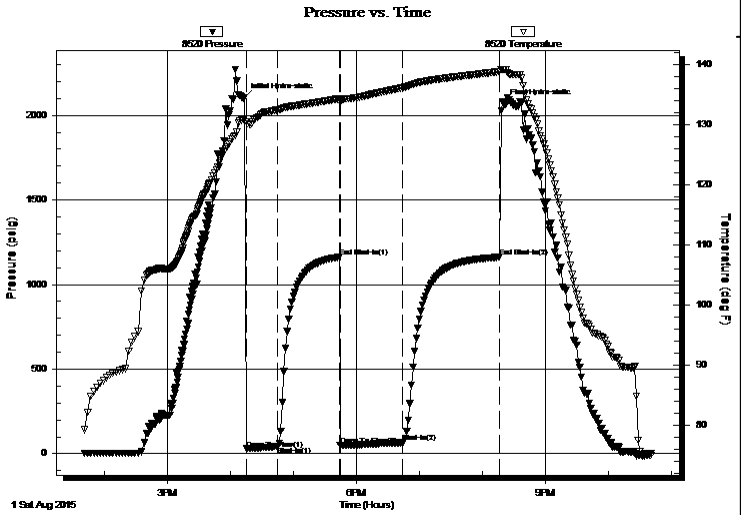
Reference Elevations: 3377.00 ft (KB)
3366.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8520 **Inside**

Press@RunDepth: 65.34 psig @ 4331.00 ft (KB)
Start Date: 2015.08.01 End Date: 2015.08.01
Start Time: 13:41:00 End Time: 22:41:30

Capacity: 8000.00 psig
Last Calib.: 2015.08.01
Time On Btm: 2015.08.01 @ 16:13:30
Time Off Btm: 2015.08.01 @ 20:20:30

TEST COMMENT: 30 - IF- 1/8" Blow built to 1"
60 - ISI- No Return
60 - FF- No Blow
90 - FSI- No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2104.15	130.95	Initial Hydro-static
2	28.49	130.45	Open To Flow (1)
32	43.55	132.46	Shut-In(1)
90	1162.19	134.31	End Shut-In(1)
91	48.92	133.62	Open To Flow (2)
151	65.34	136.15	Shut-In(2)
243	1162.76	138.80	End Shut-In(2)
247	2067.60	139.14	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	OCM 20o 80M	0.34
5.00	Free Oil 100o	0.02

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne, KS

Wilkens D #1-9

Job Ticket: 65203 **DST#: 5**

Test Start: 2015.08.01 @ 13:40:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	69.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.80 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	800.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

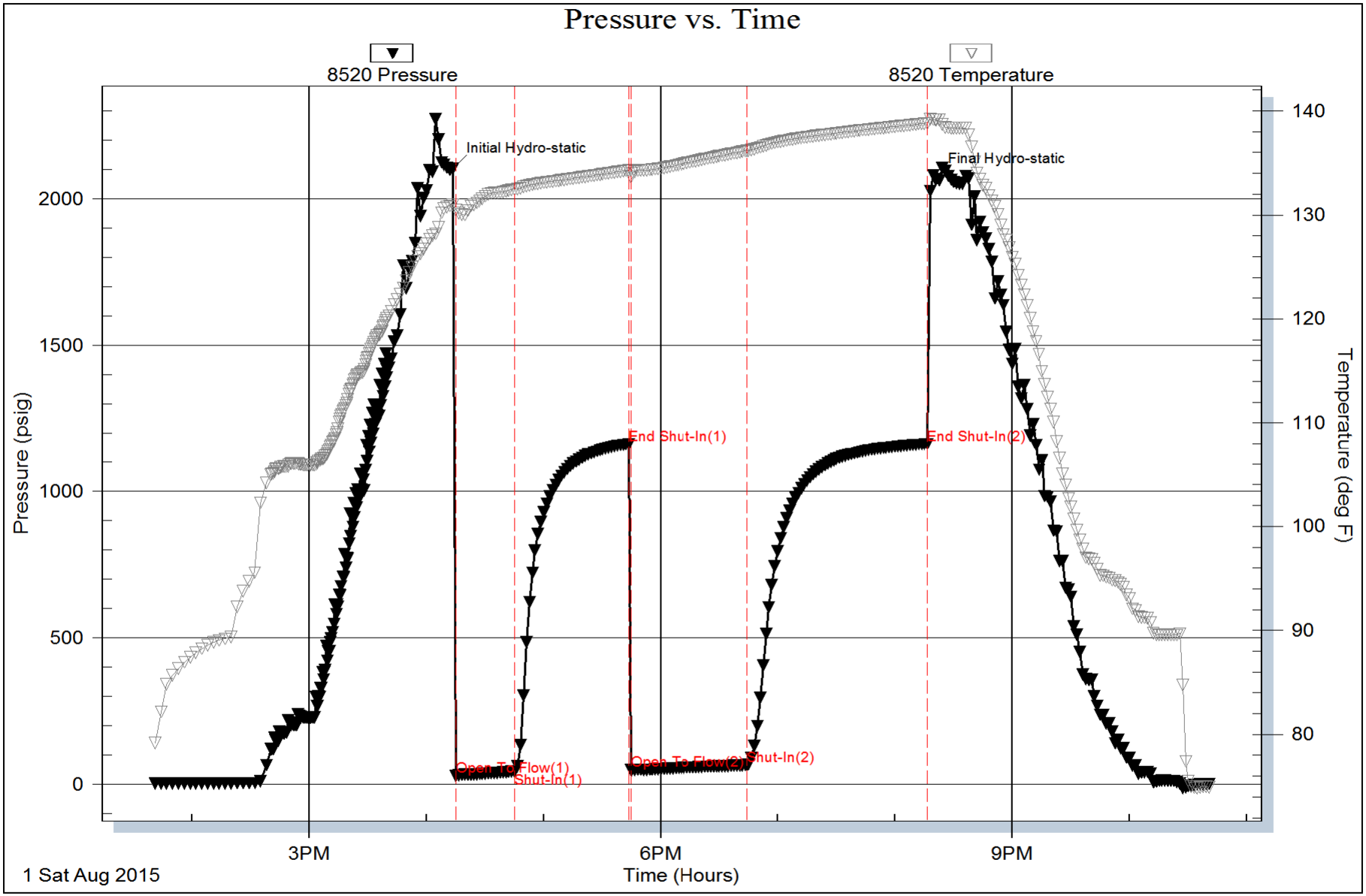
Recovery Table

Length ft	Description	Volume bbl
70.00	OCM 20o 80M	0.344
5.00	Free Oil 100o	0.025

Total Length: 75.00 ft Total Volume: 0.369 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8520 **Inside** Berexco, LLC. Wilkens D#1-9 DST Test Number: 5



Trilobite Testing, Inc Ref. No: 65203 Printed: 2015.08.01 @ 22:56:40

DRILL STEM TEST REPORT

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne, KS

Wilkens D #1-9

Job Ticket: 65204 **DST#: 6**

Test Start: 2015.08.02 @ 12:45:00

GENERAL INFORMATION:

Formation: **LKC "C-D"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 16:09:30
Time Test Ended: 23:23:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Kevin Mack
Unit No: 82

Interval: 4385.00 ft (KB) To 4510.00 ft (KB) (TVD)
Total Depth: 4385.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

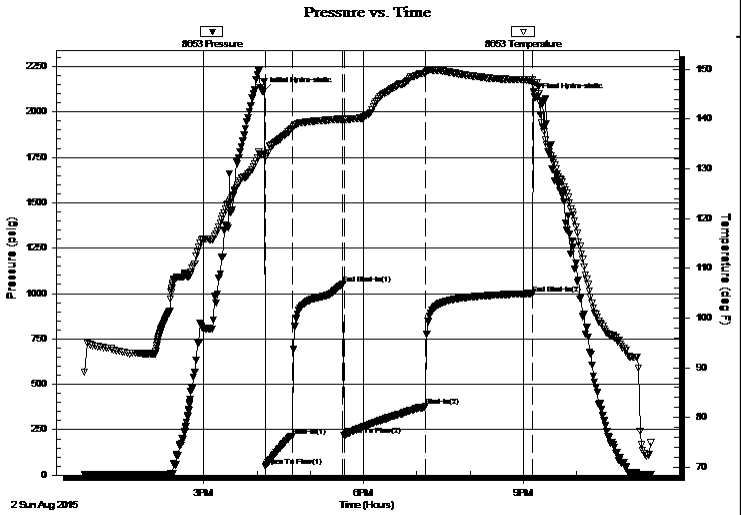
Reference Elevations: 3377.00 ft (KB)
3366.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8653 **Outside**

Press@RunDepth: 379.85 psig @ 4386.00 ft (KB)
Start Date: 2015.08.02 End Date: 2015.08.02
Start Time: 12:46:00 End Time: 23:23:30

Capacity: 8000.00 psig
Last Calib.: 2015.08.02
Time On Btm: 2015.08.02 @ 16:07:00
Time Off Btm: 2015.08.02 @ 21:13:30

TEST COMMENT: 30 - IF- BoB in 20 min.
60 - ISI- No Return
90 - FF- BoB in 30 min.
120 - FSI- No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2110.81	132.96	Initial Hydro-static
3	46.82	132.34	Open To Flow (1)
33	215.58	138.08	Shut-In(1)
90	1052.00	140.01	End Shut-In(1)
91	220.59	139.76	Open To Flow (2)
183	379.85	149.30	Shut-In(2)
303	1000.42	147.82	End Shut-In(2)
307	2079.29	147.31	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	OSMW 10M 90W (oil spots)	0.59
180.00	OSMW 30M 70W (oil spots)	0.89
183.00	OSWM 30W 70M (oil spots)	1.59
189.00	OSWM 10W 90M (oil spots)	2.65
146.00	OCM 10o 90M	2.05

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne, KS

Wilkens D #1-9

Job Ticket: 65204 **DST#: 6**

Test Start: 2015.08.02 @ 12:45:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	22000 ppm
Viscosity:	69.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.00 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	800.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	OSMW 10M 90W (oil spots)	0.590
180.00	OSMW 30M 70W (oil spots)	0.885
183.00	OSWM 30W 70M (oil spots)	1.592
189.00	OSWM 10W 90M (oil spots)	2.651
146.00	OCM 10o 90M	2.048

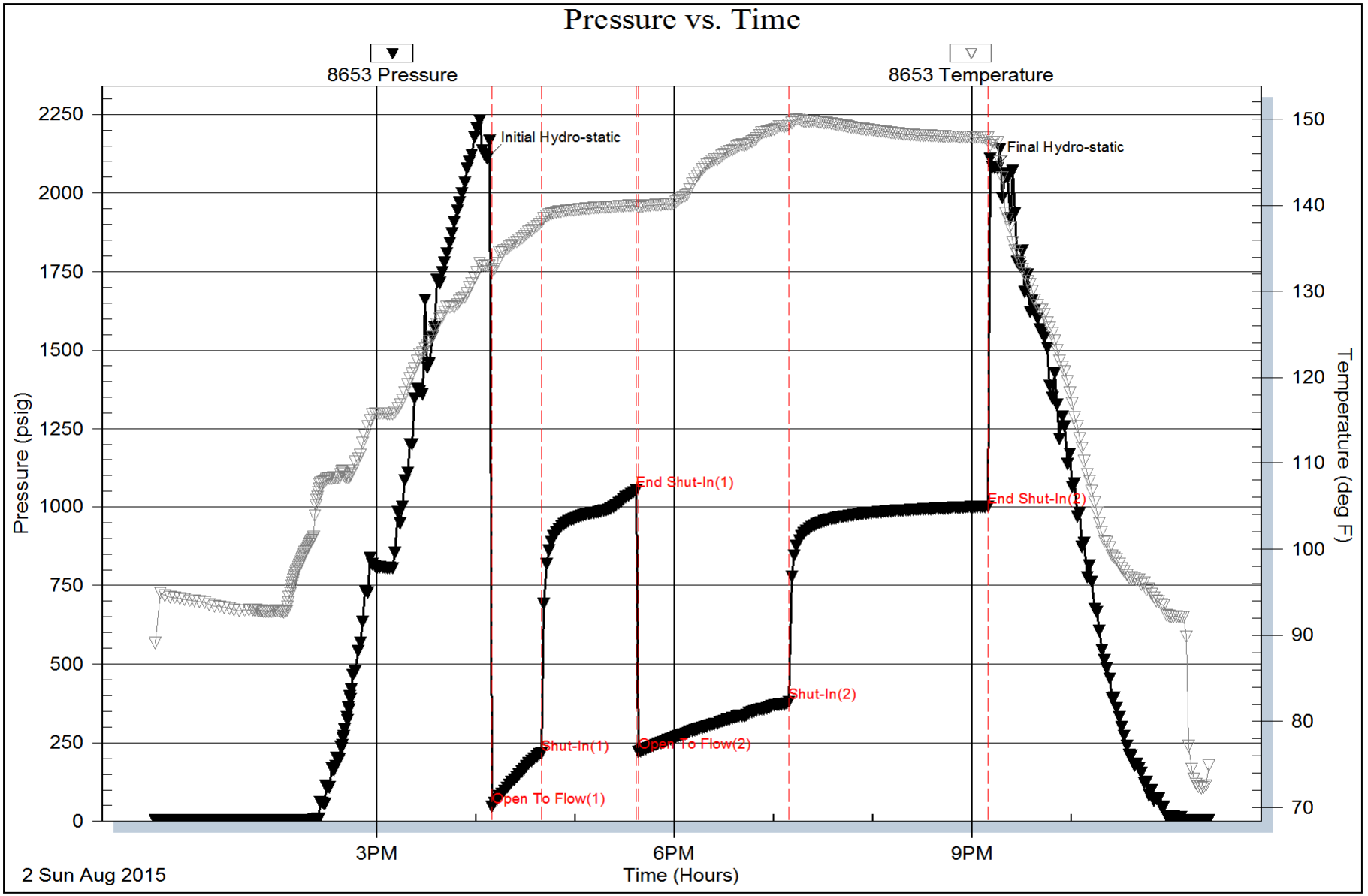
Total Length: 818.00 ft Total Volume: 7.766 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: RW .34 @ 75 deg = 22000ppm

Serial #: 8653 **Outside** Berexco, LLC. Wilkens D #1-9 DST Test Number: 6



Trilobite Testing, Inc Ref. No: 65204 Printed: 2015.08.03 @ 00:00:25

DRILL STEM TEST REPORT

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne, KS

Wilkens D #1-9

Job Ticket: 65205 **DST#: 7**

Test Start: 2015.08.03 @ 08:33:00

GENERAL INFORMATION:

Formation: **LKC "E"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:01:00
Time Test Ended: 16:55:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Kevin Mack
Unit No: 82

Interval: 4485.00 ft (KB) To 4540.00 ft (KB) (TVD)
Total Depth: 4540.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

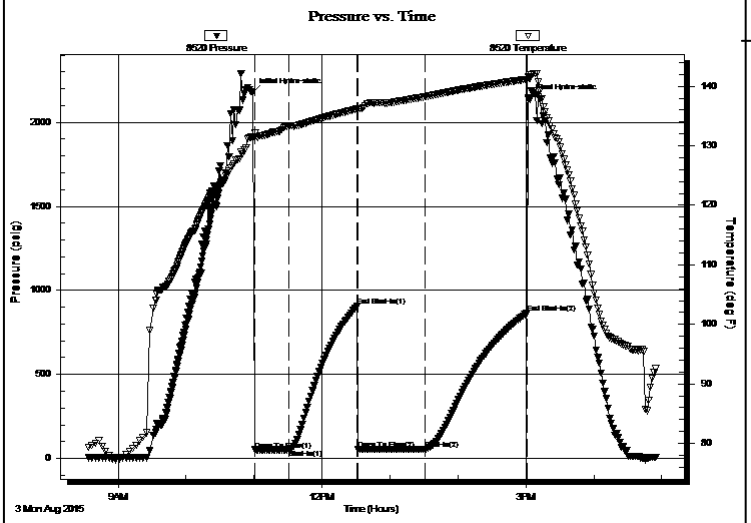
Reference Elevations: 3377.00 ft (KB)
3366.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8520 **Inside**

Press@RunDepth: 55.58 psig @ 4486.00 ft (KB)
Start Date: 2015.08.03 End Date: 2015.08.03
Start Time: 08:34:00 End Time: 16:55:00

Capacity: 8000.00 psig
Last Calib.: 2015.08.03
Time On Btm: 2015.08.03 @ 10:59:00
Time Off Btm: 2015.08.03 @ 15:02:30

TEST COMMENT: 30 - IF- Surface Blow died in 15 min.
60 - ISI- No Return
60 - FF- No Blow
90 - FSI- No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2175.54	131.54	Initial Hydro-static
2	50.95	132.10	Open To Flow (1)
32	52.60	133.31	Shut-In(1)
92	905.17	136.16	End Shut-In(1)
93	54.07	136.24	Open To Flow (2)
152	55.58	138.25	Shut-In(2)
242	866.61	141.18	End Shut-In(2)
244	2143.60	141.40	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	OSM 100M (oil spots)	0.30

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne, KS

Wilkens D #1-9

Job Ticket: 65205 **DST#: 7**

Test Start: 2015.08.03 @ 08:33:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	62.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.00 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	900.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

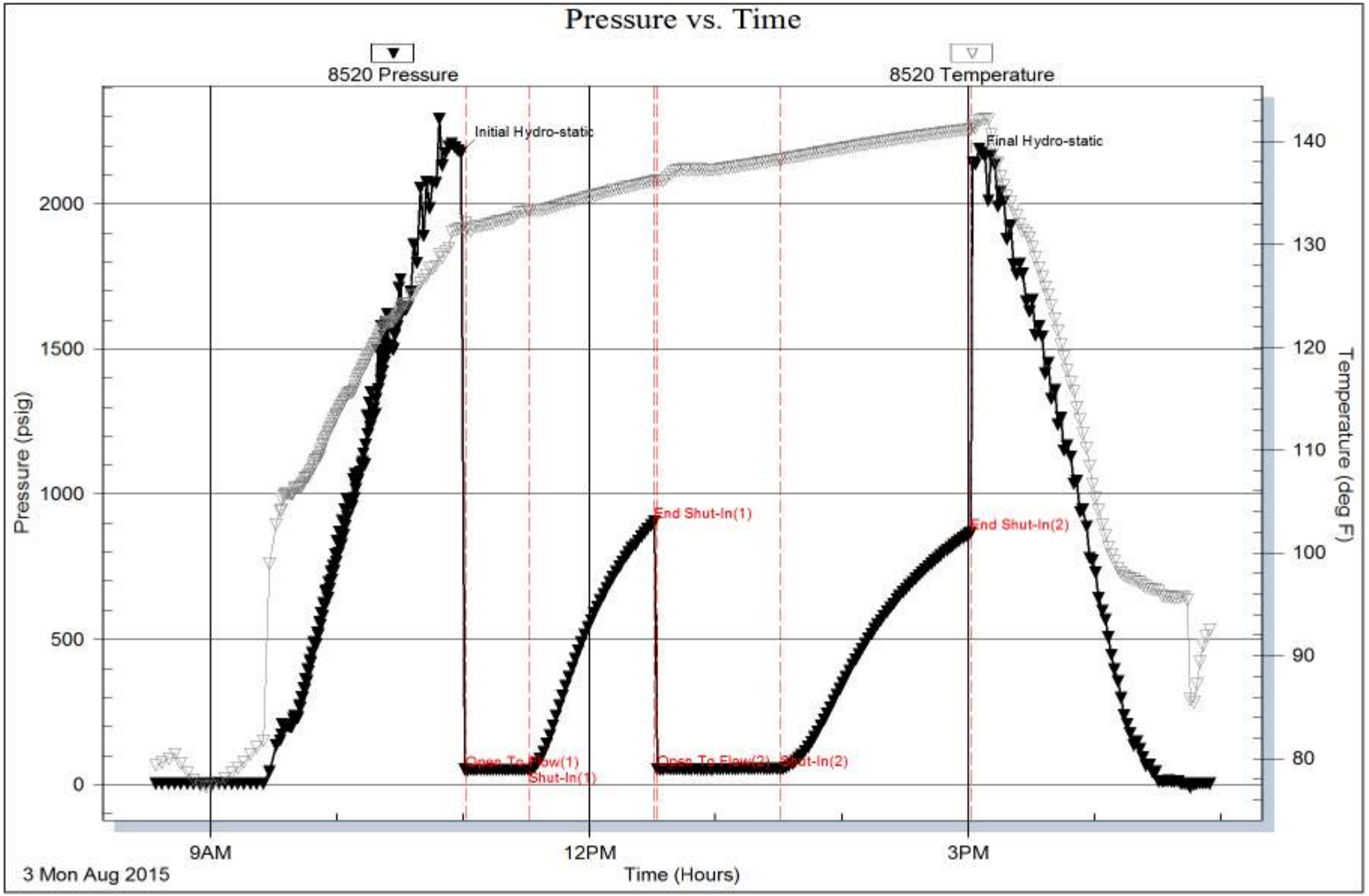
Recovery Table

Length ft	Description	Volume bbl
60.00	OSM 100M (oil spots)	0.295

Total Length: 60.00 ft Total Volume: 0.295 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8520 **Inside** Berexco, LLC. Wilkens D#1-9 DST Test Number: 7



Trilobite Testing, Inc Ref. No: 65205 Printed: 2015.08.03 @ 17:06:58

DRILL STEM TEST REPORT

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne, KS

Wilkens D #1-9

Job Ticket: 65206 **DST#: 8**

Test Start: 2015.08.04 @ 12:50:00

GENERAL INFORMATION:

Formation: **Pawnee**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:43:30
Time Test Ended: 21:54:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Kevin Mack
Unit No: 82

Interval: 4630.00 ft (KB) To 4730.00 ft (KB) (TVD)
Total Depth: 4730.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

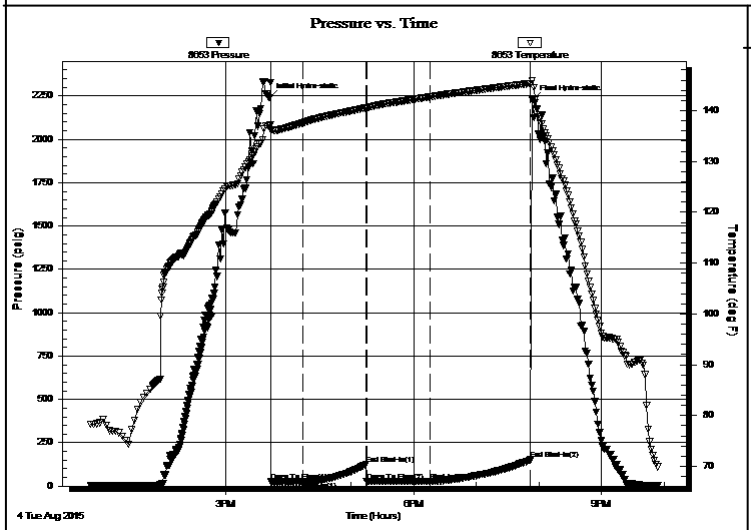
Reference Elevations: 3377.00 ft (KB)
3366.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8653 **Outside**

Press@RunDepth: 26.86 psig @ 4631.00 ft (KB)
Start Date: 2015.08.04 End Date: 2015.08.04
Start Time: 12:51:00 End Time: 21:54:00

Capacity: 8000.00 psig
Last Calib.: 2015.08.04
Time On Btm: 2015.08.04 @ 15:42:00
Time Off Btm: 2015.08.04 @ 19:54:00

TEST COMMENT: 30 - IF- Surface Blow built to 1/4" then died back to a Weak Surface Blow .
60 - ISI- No Return
60 - FF- No Blow
90 - FSI- No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2239.66	137.00	Initial Hydro-static
2	28.17	136.15	Open To Flow (1)
32	25.68	137.61	Shut-In(1)
93	126.18	140.55	End Shut-In(1)
93	26.99	140.54	Open To Flow (2)
154	26.86	142.70	Shut-In(2)
250	152.26	145.36	End Shut-In(2)
252	2227.79	145.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud 100M	0.02

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne, KS

Wilkens D #1-9

Job Ticket: 65206 **DST#: 8**

Test Start: 2015.08.04 @ 12:50:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	53.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.40 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	900.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

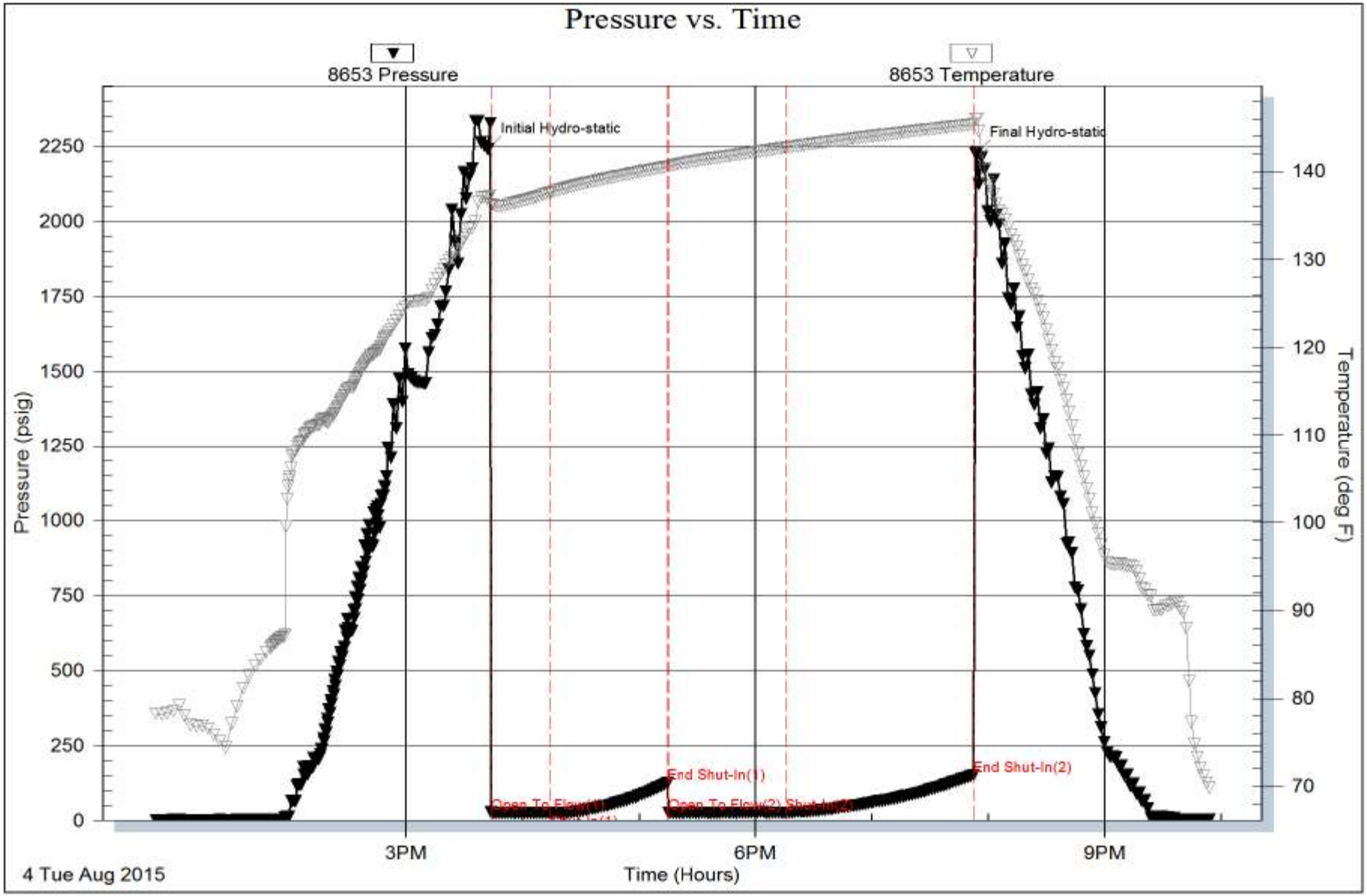
Recovery Table

Length ft	Description	Volume bbl
5.00	Mud 100M	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8653 **Outside** Berexco, LLC. Wilkens D#1-9 DST Test Number: 8



Trilobite Testing, Inc Ref. No: 65206 Printed: 2015.08.05 @ 08:00:37

DRILL STEM TEST REPORT

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne, KS

Wilkens D #1-9

Job Ticket: 65207 **DST#: 9**

Test Start: 2015.08.05 @ 14:10:00

GENERAL INFORMATION:

Formation: **Cherokee**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:27:00
Time Test Ended: 23:50:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Kevin Mack
Unit No: 82

Interval: 4790.00 ft (KB) To 4880.00 ft (KB) (TVD)
Total Depth: 4880.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

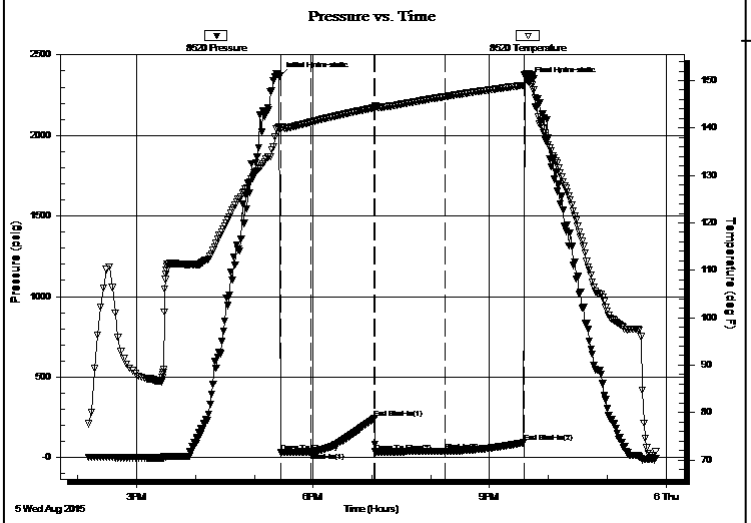
Reference Elevations: 3377.00 ft (KB)
3366.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8520 **Inside**

Press@RunDepth: 38.39 psig @ 4791.00 ft (KB)
Start Date: 2015.08.05 End Date: 2015.08.05
Start Time: 14:11:00 End Time: 23:50:00

Capacity: 8000.00 psig
Last Calib.: 2015.08.05
Time On Btm: 2015.08.05 @ 17:26:00
Time Off Btm: 2015.08.05 @ 21:39:30

TEST COMMENT: 30 - IF- 1/2" Blow died in 25 min.
60 - ISI- No Return
60 - FF- No Blow
90 - FSI- No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2366.98	140.22	Initial Hydro-static
1	32.11	139.71	Open To Flow (1)
32	36.51	141.28	Shut-In(1)
97	243.51	144.27	End Shut-In(1)
98	36.43	144.57	Open To Flow (2)
169	38.39	146.59	Shut-In(2)
249	93.03	148.99	End Shut-In(2)
254	2333.68	151.50	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	OSM 100M (oil spots)	0.05
1.00	Free Oil 100o	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne, KS

Wilkens D #1-9

Job Ticket: 65207 **DST#: 9**

Test Start: 2015.08.05 @ 14:10:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	52.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.80 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	900.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

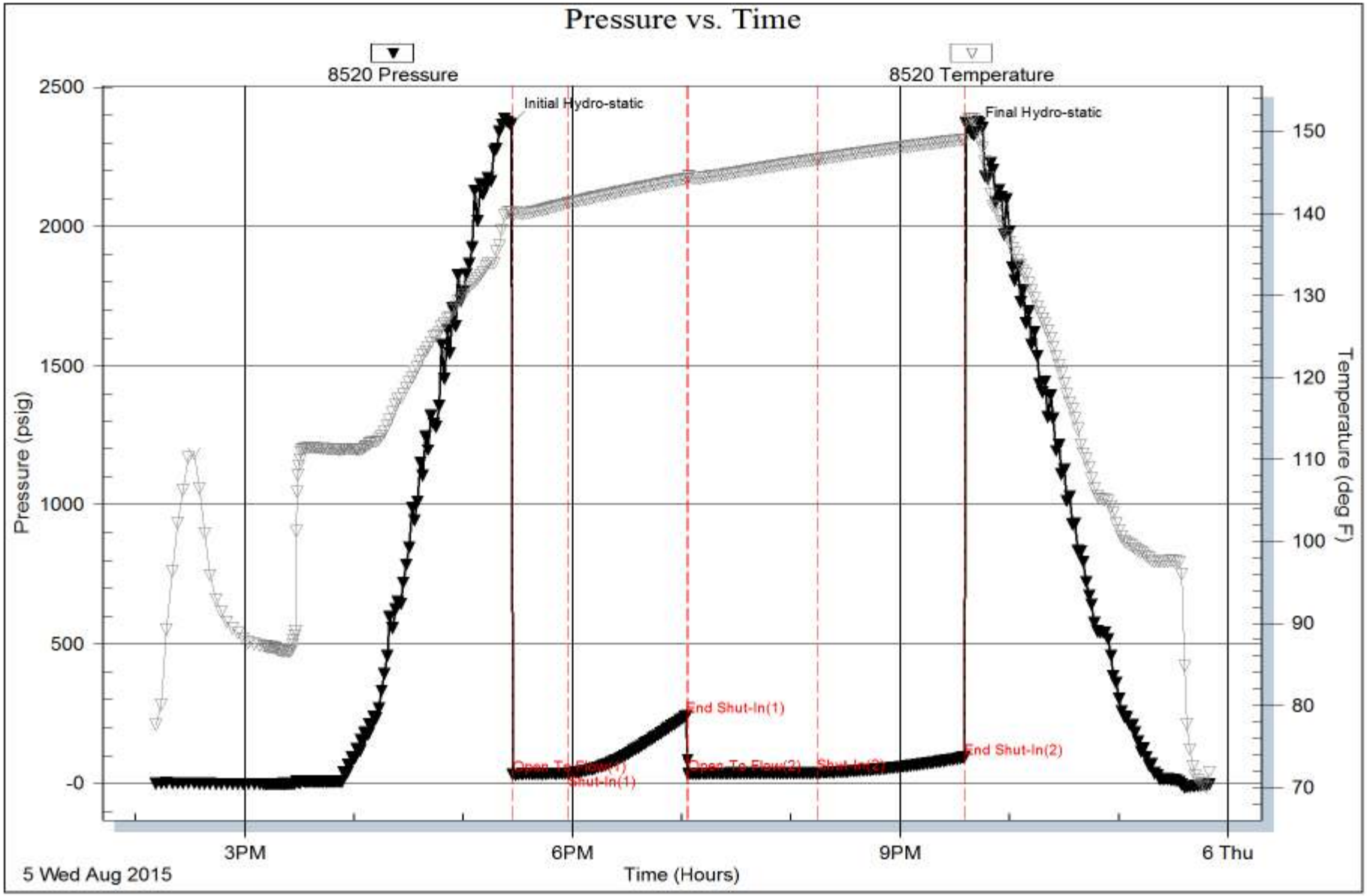
Recovery Table

Length ft	Description	Volume bbl
10.00	OSM 100M (oil spots)	0.049
1.00	Free Oil 100o	0.005

Total Length: 11.00 ft Total Volume: 0.054 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8520 **Inside** Berexco, LLC. Wilkens D#1-9 DST Test Number: 9



Trilobite Testing, Inc Ref. No: 65207 Printed: 2015.08.06 @ 07:54:14

DRILL STEM TEST REPORT

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne, KS

Wilkens D #1-9

Job Ticket: 65208 **DST#: 10**

Test Start: 2015.08.06 @ 15:51:00

GENERAL INFORMATION:

Formation: **LKC "F"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:04:30
Time Test Ended: 00:50:30

Test Type: Conventional Straddle (Initial)
Tester: Kevin Mack
Unit No: 82

Interval: 4530.00 ft (KB) To 4605.00 ft (KB) (TVD)
Total Depth: 4930.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

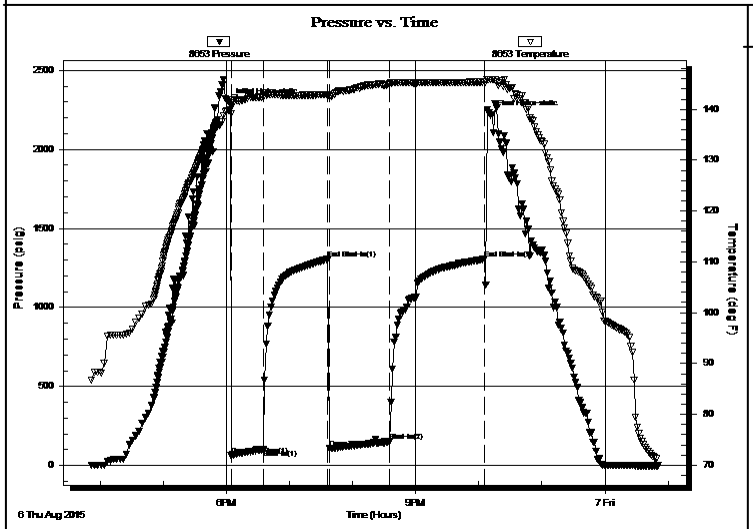
Reference Elevations: 3377.00 ft (KB)
3366.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8653 **Outside**

Press@RunDepth: 151.42 psig @ 4531.00 ft (KB)
Start Date: 2015.08.06 End Date: 2015.08.07
Start Time: 15:52:00 End Time: 00:50:30

Capacity: 8000.00 psig
Last Calib.: 2015.08.07
Time On Btm: 2015.08.06 @ 18:03:00
Time Off Btm: 2015.08.06 @ 22:11:00

TEST COMMENT: 30 - IF- 1/8" Blow died in 5 min.
60 - ISI- No Return
60 - FF- No Blow
90 - FSI- No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2296.10	139.90	Initial Hydro-static
2	62.29	139.16	Open To Flow (1)
32	100.46	142.44	Shut-In(1)
94	1307.60	142.92	End Shut-In(1)
95	108.66	142.42	Open To Flow (2)
152	151.42	145.00	Shut-In(2)
242	1305.85	145.39	End Shut-In(2)
248	2217.32	145.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	OSM 100M (oil spots)	0.89

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne, KS

Wilkens D #1-9

Job Ticket: 65208 **DST#: 10**

Test Start: 2015.08.06 @ 15:51:00

GENERAL INFORMATION:

Formation: **LKC "F"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:04:30
Time Test Ended: 00:50:30

Test Type: Conventional Straddle (Initial)
Tester: Kevin Mack
Unit No: 82

Interval: 4530.00 ft (KB) To 4605.00 ft (KB) (TVD)
Total Depth: 4930.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

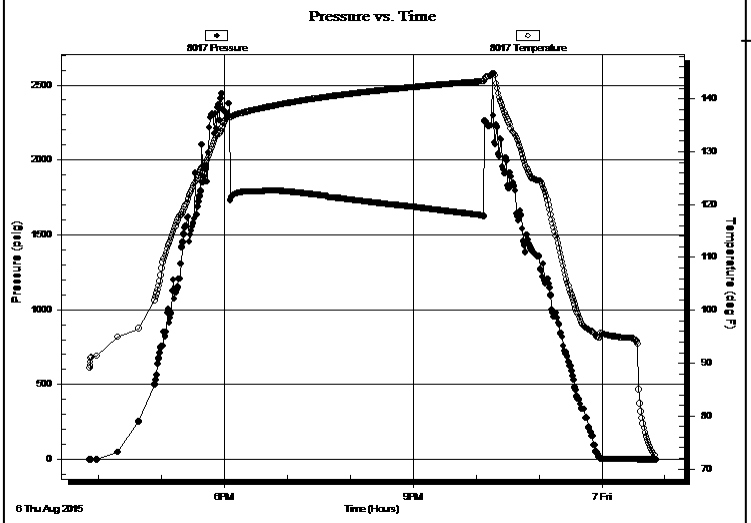
Reference Elevations: 3377.00 ft (KB)
3366.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8017 **Below (Straddle)**

Press@RunDepth: psig @ 4611.00 ft (KB)
Start Date: 2015.08.06 End Date: 2015.08.07
Start Time: 15:51:05 End Time: 00:51:30

Capacity: 8000.00 psig
Last Calib.: 2015.08.07
Time On Btm:
Time Off Btm:

TEST COMMENT: 30 - IF- 1/8" Blow died in 5 min.
60 - ISI- No Return
60 - FF- No Blow
90 - FSI- No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
180.00	OSM 100M (oil spots)	0.89

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC.

2020 N Bramblew ood
Wichita, KS 67206

ATTN: Bryan Bynog

9-2N-37W Cheyenne, KS

Wilkens D #1-9

Job Ticket: 65208 **DST#: 10**

Test Start: 2015.08.06 @ 15:51:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	52.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.80 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	900.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	OSM 100M (oil spots)	0.885

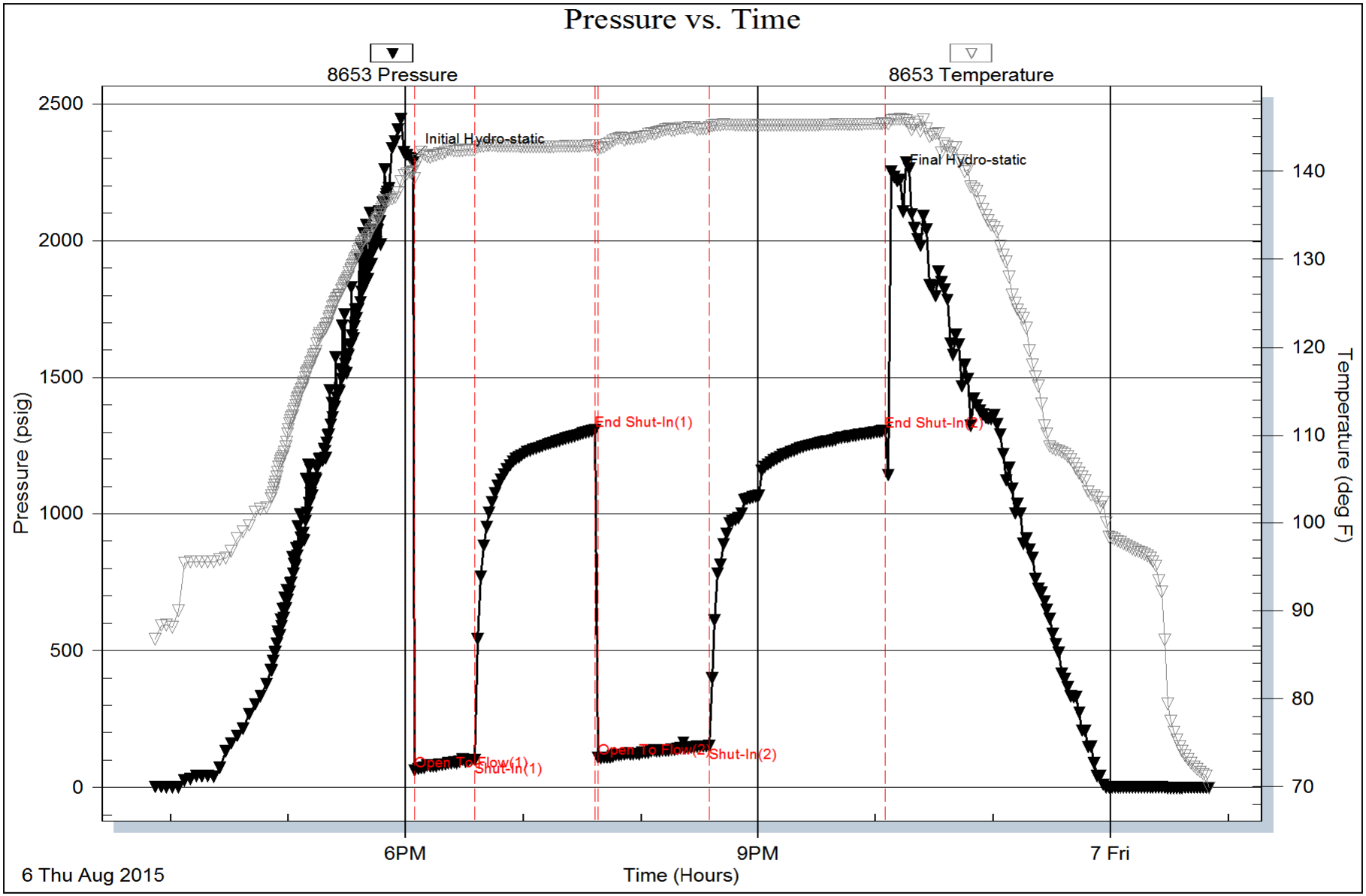
Total Length: 180.00 ft Total Volume: 0.885 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

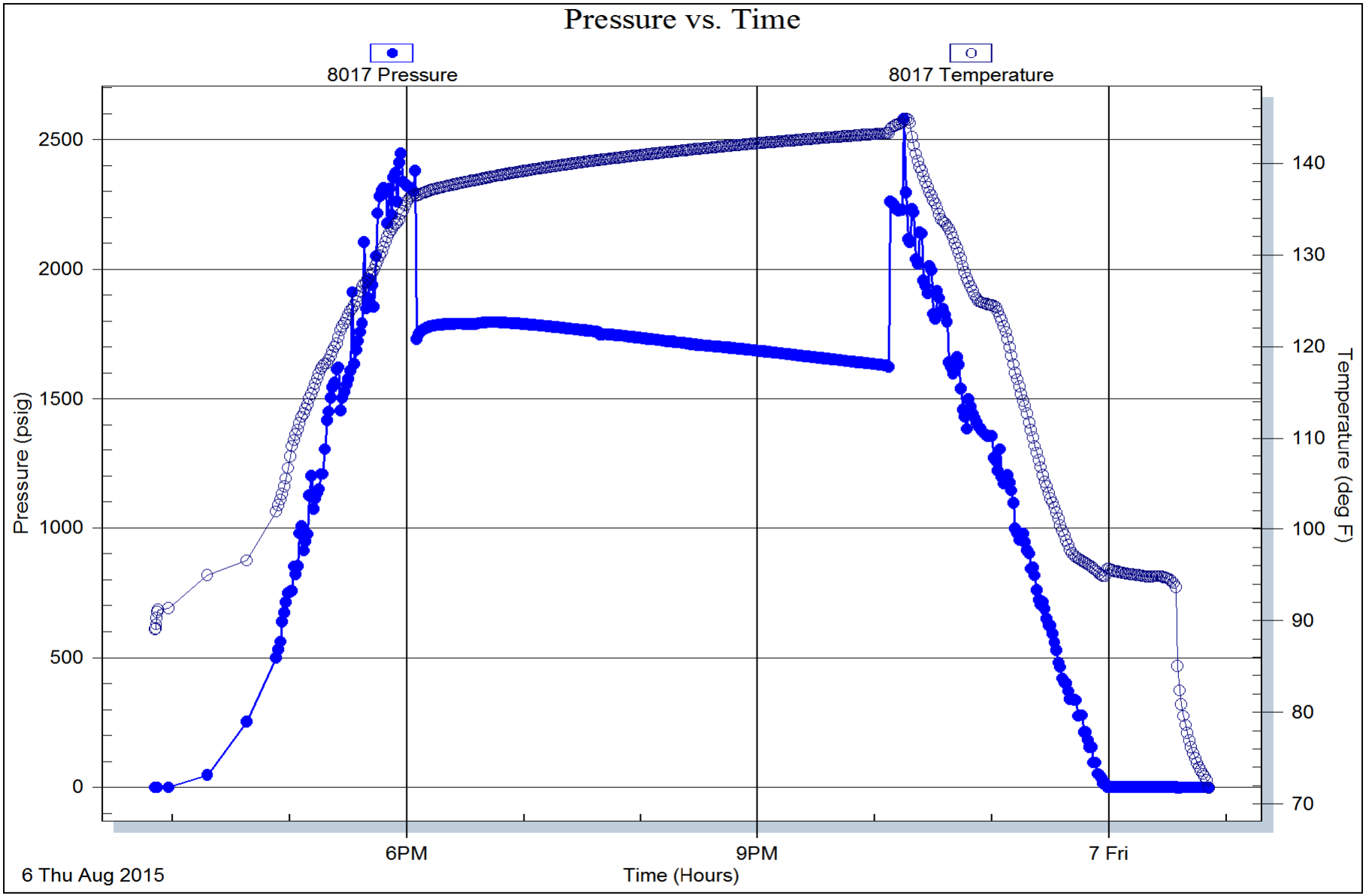
Recovery Comments:

Serial #: 8653 **Outside** Berexco, LLC. Wilkens D #1-9 DST Test Number: 10



Trilobite Testing, Inc Ref. No: 65208 Printed: 2015.08.07 @ 02:42:57

Serial #: 8017 Below (Straddle) Petco, LLC. Wilkens D #1-9 DST Test Number: 10



Trilobite Testing, Inc Ref. No: 65208 Printed: 2015.08.07 @ 02:42:57

BEREXCO, LLC.
WILKENS D #1-9
NWSE SECTION 9 2S-37W
CHEYENNE COUNTY, KANSAS

GEOLOGIST
WILLIAM B. BYNOG

RESUME

OPERATOR:	BEREXCO, LLC.
WELL NAME & NUMBER:	WILKENS D #1-9
LOCATION:	NWSE SECTION 9 2S-37W
COUNTY:	CHEYENNE
STATE:	KANSAS
SPUD DATE: 7-24-2015	COMPLETION DATE: 8-7-2015
ELEVATIONS:	GL: 3366 KB: 3377
CONTRACTOR:	BEREDCO RIG 10
LOGS: LOG TECH	TYPES: RAG, MICROLOG
WELLSITE ENGINEER:	NONE
MUD COMPANY:	MORGAN MUD
MUD TYPE & ENGINEER:	FRESH CHEMICAL
GEOLOGIST:	WILLIAM B. BYNOG
HOLE SIZE:	7 7/8
MUD LOGGING BY:	NONE
DRILL STEM TEST COMPANY:	TRILOBITE
DRILL STEM TEST:	DST#1 4040-4120, DST#2 4122-4200, DST#3 4185-4255, DST#4 44260-4355, DST#5 4330-4420, DST#6 4385-4510, DST#7 4485-4540, DST#8 4630-4730, DST#9 4790-4880, DST#10 4530-4605
WELL STATUS:	PLUG & ABANDON

DISCUSSION

Wilkens D #1-9 2S-37W was drilled a total depth of 4930 feet testing the Lansing Kansas City, Pawnee and Cherokee formations in Cheyenne County, Kansas. This well was a wildcat drilled with the help of seismic data and well control.

Structurally, Wilkens D #1-9 came in five low to the prognosis and low to other productive wells in the area.

The first good live oil show was encountered in the Topeka at 4090 feet. This zone was tested on drill stem test #1 recovering 190 feet of total fluid, (10 feet of oil cut mud & 180 feet of water). There were other good live oil shows in the lower Topeka in two lower zones. These zones were tested on drill stem test #2 recovering 310 feet of total fluid, (70 feet of oil cut mud and 240 feet of slightly oil cut water). Drilling continued to the Oread zone encountering a good live show of free oil in a fossiliferous Limestone. This zone was tested on drill stem test #3 recovering only 5 feet of oil spotted mud. The Lansing A zone had a good live oil show and was tested on drill stem test #4 recovering one foot of free oil and 5 feet of oil spotted mud with low pressures. The B zone turns out to be the best zone in the well. It was associated with a good drilling break, fair to good porosity development and good live oil shows in a fossiliferous Grainstone. This zone was tested on drill stem test #5 recovering 5 feet of free oil and 70 feet of oil cut mud (20% oil). Drilling continued to the C and D zones encountering good live oil shows in both zones. Drill stem test #6 recovered 818 feet of total fluid, (146 feet of oil cut mud and 672 feet of oil spotted muddy water). The E zone had a fair oil show in a tight limestone and was tested on drill stem test #7 recovering 60 feet of oil spotted mud. Drilling continued to the Pawnee encountering a good drilling break in a Grainstone and good live oil shows. This zone was tested on drill stem test #8 recovering 5 feet of oil cut mud. There was also a fair live oil show encountered in a Cherokee limestone at 4800-4810 feet, prompting drill stem test #9. Drill stem test #9 recovered one foot of free oil and 10 feet of oil spotted mud with low tight pressures. The F zone had no shows during drilling but looked promising on logs. A straddle test #10 was done on the F zone recovering 180 feet of oil spotted mud.

Logs agreed with sample evaluation recording poor to some fair porosity development. The Lansing B zone is the best zone in the well but only recovered 5 feet of free oil and 70 feet of oil cut mud.

A decision was made to plug and abandon due to the poor recoveries on drill stem tests and tight porosities on logs.

Wilkens D #1-9 Sample Descriptions

3850-70 SHALE red,firm,very silty

FORAKER

3870-93 LIMESTONE gray,hard,dense,very fossils,dirty,very shaly,poor porosity,no shows

3893-3910 LIMESTONE buff,hard,blocky,dense,crptoxln,trace Chert orange, poor porosity,no shows with thin SHALE as above

3910-20 SANDSTONE pale gray,firm,very fine grained,wsrtd,clay filled,poor porosity,no shows

3920-36 LIMESTONE buff,pale gray brown,very hs,dense,blocky,crptoxln,no shows abundant Chert orange

3936-95 SHALE red,soft,very argillaceous,silty in part with thin dense LIMESTONE as above

3995-4000 LIMESTONE buff,very hard,dense,crptoxln,poor porosity,trace black dead stain,no free oil

4000- 22 SHALE red,soft,argillaceous,silty in part with trace very thin LIMESTONE white,hard,slightly fossils,poor porosity,very spotty dead black stain,no free oil

4022-60 LIMESTONE white,slightly hard,very chalky,oolic,poor intergranular porosity,spotty black dead stain,poor cut,no free oil with bedded SHALE as above

4060-90 SHALE as above with interbedded thin LIMESTONE buff,very hard,dense,very fnly microcrystalline,no shows

TOPEKA

4090-94 GRAINSTONE white,firm,very oolic,very abundant pyrite,fair intergranular porosity,spotty live brown stain,very good cut,good show free oil

4094-4102 LIMESTONE buff,very hard,dense,crptoxln,no shows

4102-04 GRAINSTONE as above becoming slightly hard,poor to fair intergranular porosity,spotty live brown stain,good cut,fair show free oil

4104-36 LIMESTONE buff,very hard,dense,as above no shows with thin SHALE as above

4136-40 GRAINSTONE white,firm,chalky,very oolic,fair intergranular porosity,spotty live brown stain,good cut,fair show free oil

4140-46 LIMESTONE buff,very hard,dense,blocky,very fnly microcrystalline,no shows

4146-65 SHALE red,firm,very silty,sandy in part,poor porosity,dirty,no shows with very thin stringers LIMESTONE white,firm,oolic,sandy in part,poor vis porosity,spotty live brown stain,good cut,fair show free oil

4165-80 LIMESTONE buff,very hard,dense,blocky,crptoxln,

4180-92 LIMESTONE white,hard,blocky,slightly oolic,poor vis porosity,poor pinpoint vuggy porosity,very spotty live brown stain,fair cut,fair show free oil

4192-4200 SHALE red,soft,very argillaceous,gummy

4200-28 SHALE green,red,firm,fissile,abundant pyrite nods

OREAD

4228-32 GRAINSTONE white,firm,very oolic,sandy in part,poor to fair intergranular porosity,spotty live oil stain,gd cut, fair show free oil

4232-38 SHALE becoming sandy in part,very abundant pyrite

4238-45 GRAINSTONE white,soft,very oolic,chalky,poor to fair intergranular porosity,spotty to even live brown stain,very good cut,good show free oil

4245-50 LIMESTONE white,firm,very chalky,poor vis porosity,trace black dead stain,no free oil

4250-72 LIMESTONE buff,hard,dense,blocky,crptoxln,no shows

4272-80 SHALE gray,gray black,slightly carbonaceous,firm,fissile

4280-90 LIMESTONE pale gray brown,buff,very hard,dense,blocky,crptoxln,abundant pyrite nodules

4290-4316 SHALE red,green,firm,silty abundant pyrite

LANSING A

4316-22 SANDSTONE white,firm,very fine grained,wsrtd,poor to fair intergranular porosity,chalky in part,spotty to even live black stain,very good cut,good show free oil

4322-40 LIMESTONE pale gray brown,very hard,dense,crptoxln,rare black dead stain in fracture

4340-45 SHALE as above abundant pyrite

4345-48 SANDSTONE pale green,firm,very fine grained,wsrtd,chalky,poor vis porosity,spotty black dead stain,poor cut,no free oil

4348-73 SHALE as above

B ZONE

4373-90 GRAINSTONE white,firm,very fossils,oolic,fossils fragments, chalky in part,fair intergranular porosity,spotty live brown stain,very good cut,good show free oil

4370-80 LIMESTONE buff,hard,dense,blocky,very fnly microcrystalline,no shows

4380-90 LIMESTONE white,slightly hard,very chalky,fossils,poor to fair intergranular and pinpoint vuggy porosity,spotty live brown stain,good cut,fair show free oil

4390-4404 LIMESTONE buff,very hard,dense,sandy in part,poor porosity,no shows

4404-36 SHALE red,firm,silty

C ZONE

4436-42 LIMESTONE white,slightly hard,slightly fossils,chalky,poor pinpoint vuggy

porosity,spotty black thick stain,good cut,poor show free oil

4442-48 LIMESTONE buff,hard,blocky,chalky in part,poor porosity,no shows

4448-60 SHALE green,firm,silty

4460-75 SHALE gray,slightly hard,becoming sandy with thin LIMESTONE gray,hard,very dirty

D ZONE

4478-80 LIMESTONE white,slightly hard,chalky,poor pinpoint vuggy porosity,very spotty live brown stain,good cut,trace free oil

4482-4502 LIMESTONE buff,very hard,very dense,crptoxln,chalky in part,poor porosity,no shows with thin SHALE as above

4502-4522 SHALE green,red,firm,silty,sandy in part

E ZONE

4522-28 LIMESTONE white,firm,fossils,chalky in part,poor to fair microcrystalline porosity,spotty to even live brown stain,very good cut,fair show free oil

4528-32 LIMESTONE buff,hard,dense,very fnly microcrystalline,no shows

4532-40 SHALE red,green,firm,fissile,waxy in part

4540-57 SHALE red,firm,very silty,sandy in part

F ZONE

4557-72 LIMESTONE buff,very hard,dense,crptoxln,chalky in part,poor porosity,no shows

4572-80 SHALE red,firm,silty

4580-94 LIMESTONE buff,hard,dense,sandy in part,poor porosity,no shows

4594-20 SHALE red,firm,silty,sandy in part

4620-40 LIMESTONE buff,hard,dense,crptoxln,chalky in part,abundant sandy in part,poor porosity,no shows abundant Chert orange

4640-82 SHALE red,gray green,firm,very silty,abundant sandy very fine grained

4682-06 LIMESTONE white,firm,fossils,oolic,poor to fair microcrystalline to pinpoint vuggy porosity,very spotty light brown stain,good cut,poor show free oil

4606-4700 LIMESTONE white to buff,slightly hard,very fnly microcrystalline,very sandy in part poor porosity,no shows

4700-09 SHALE green,soft,very argillaceous,waxy in part

4706-16 GRAINSTONE white,firm,very oolic,poor to fair intergranular porosity,spotty to even live brown stain,very good cut,fair show free oil

PAWNEE

4716-26 LIMESTONE white,slightly hard,slightly oolic,poor pinpoint vuggy porosity,spotty live brown stain,fair cut,p show free oil

4726-40 LIMESTONE buff,very hard,dense,crptoxln,no shows

4740-50 Shale red,green,firm,argillaceous

4750-68 Shale dark gray,black,firm,fissile,very carbonaceous with thin LIMESTONE sandstone dense,no shows

4768-80 SHALE black,firm,fissile,very carbonaceous

4780-4806 LIMESTONE buff,hard,blocky,dense,slightly fossils,chalky in part,poor porosity,no shows

4806-10 LIMESTONE white,firm,fossils,chalky in part,poor to fair pinpoint vuggy porosity,spotty live brown stain,good cut,good show free oil

4810-22 LIMESTONE buff,hard,dense,chalky in part poor porosity,no shows

4822-26 Shale red,green,black,firm,fissile,carbonaceous in part

4826-42 LIMESTONE as above buff,chalky,dense,no shows

4842-52 SHALE as above with thin SANDSTONE red,hard,fine to mg,trace pink grains,sileous cement poor porosity,no shows

4852-56 LIMESTONE buff,hard,dense,crptoxln,no shows

4856-82 SANDSTONE white,slightly hard,mg,angular,psrtd,sileous cement,poor porosity,no shows with thin SHALE as above

4882-4914 SHALE red,maroon,green,firm,fissile,very silty with thin bedded SANDSTONE translucent,hard,fine to coarse good,sileous cement,poor vis porosity,abundant very large uncon quartz grains,no shows

4914-30 SANDSTONE/CONG translucent,pale red,hard,m to very cg,abundant very large grains,poor porosity,no shows with thin SHALE as above

RTD 4930'

LTD 4931'

ALLIED OIL & GAS SERVICES, LLC

Federal Tax I.D. #20-5976804

067785

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Oakley, KS

DATE 9/5/15	SEC. 9	TWP. 7	RANGE 37	CALLED OUT	ON LOCATION	JOB START 11:30 AM	JOB FINISH 12:30
LEASE Wilkins D	WELL # 1-9	LOCATION McDonald 1/2 W 1/2 E 1/2 S 33 1/4 W N into				COUNTY Cheyenne	STATE KS
OLD OR NEW (Circle one)							

CONTRACTOR Beredco 10
TYPE OF JOB PTA
HOLE SIZE 7 7/8 T.D.
CASING SIZE 8 5/8 DEPTH 305'
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG.
PERFS.
DISPLACEMENT

OWNER

1-03 8.5 pd

EQUIPMENT

PUMP TRUCK # 495 CEMENTER Allen Ryan 1
HELPER Allen Ryan 2
BULK TRUCK # 891 DRIVER Cory Bruce 3
BULK TRUCK # DRIVER

CEMENT

AMOUNT ORDERED 255 60/40 4% gel 1/4 pps

~~COMMON~~ Allowed 4% gel 255 sk	@	18.90	4824.60
POZMIX	@		
GEL	@		
CHLORIDE	@		
ASC	@		
	@		
Flo Seal 64lb	@	2.25	144.00
	@		
	@		
	@		
	@		
	@		
	@		
TOTAL			5014.65
DISCOUNT 48 %			2407.05

REMARKS:

50 sk @ 305'
100 sk @ 2500'
50 sk @ 350'
10 sk @ 40'
30 sk @ RH Hole
15 sk @ MH Hole

512.

SERVICE

HANDLING 273	@	2.40	654.72
MILEAGE 25 Trucks 11.44			1523.52
DEPTH OF JOB			
PUMP TRUCK CHARGE			2600.00
EXTRA FOOTAGE	@		
HV MILEAGE 60	@	2.00	360.00
LV MILEAGE	@		
	@		
	@		
TOTAL			5,137.70
DISCOUNT 48 %			2514.09

CHARGE TO: Beredco
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

8 5/8" Wood Plug	@		110.00
	@		
	@		
	@		
	@		
TOTAL			110.00
DISCOUNT 0 %			
SALES TAX (If Any)			80.81
TOTAL CHARGES			10,382.37
DISCOUNT 4984.74 (48%)			IF PAID IN 30 DAYS
NET TOTAL 5441.23			IF PAID IN 30 DAYS

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Gilberto Davila Jr.

SIGNATURE

ALLIED OIL & GAS SERVICES, LLC

CEMENTING LOG

STAGE NO.

Date 8/7/15 District Oakley Ticket No. 067787
Company Brexco Rig Sendes 10
Lease Millford Well No. 1-9
County Wayne State Ky
Location Field

CASING DATA: Conductor ☐ PTA ☒ Squeeze ☐ Misc ☐
Surface ☐ Intermediate ☐ Production ☐ Liner ☐
Size 8 5/8 Type Weight Collar

Casing Depths: Top Kb Bottom 385

Drill Pipe: Size Weight Collars
Open Hole: Size T.D. ft. P.B. to ft.
CAPACITY FACTORS:
Casing: Bbls/Lin. ft. .0637 Lin. ft./Bbl.
Open Holes: Bbls/Lin. ft. Lin. ft./Bbl.
Drill Pipe: Bbls/Lin. ft. .01422 Lin. ft./Bbl.
Annulus: Bbls/Lin. ft. Lin. ft./Bbl.
Bbls/Lin. ft. Lin. ft./Bbl.
Perforations: From ft. to ft. Amt.

CEMENT DATA:
Spacer Type:
Amt. Sks Yield ft³/sk Density PPG

LEAD: Pump Time hrs. Type 60/40 Poz 4% gel
1/4 FC 2%
Excess
Amt. 255 Sks Yield 1.25 ft³/sk Density 13.5 PPG
TAIL: Pump Time hrs. Type
Excess
Amt. Sks Yield ft³/sk Density PPG
WATER: Lead 6.9 gals/sk Tail gals/sk Total Bbls.

Pump Trucks Used 935
Bulk Equip. 831

Float Equip: Manufacturer
Shoe: Type Depth
Float: Type Depth
Centralizers: Quantity Plugs Top Btm.
Stage Collars
Special Equip.
Disp. Fluid Type H2O Amt. Bbls. Weight PPG
Mud Type Rig Mud Weight PPG

COMPANY REPRESENTATIVE

CEMENTER [signature]

TIME AM/PM	PRESSURES PSI DRILL PIPE CASING	ANNULUS	FLUID PUMPED DATA TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	REMARKS
						On location PTA Rig Set up
						Pump Spacer
				8 1/4	3.0	Mix 50sk @ 325'
				16 1/2	3.0	Mix 100sk @ 350'
				8 1/4	3.0	Mix 50sk @ 350'
				2	3.0	Mix 10sk @ 40'
				5	3.0	Mix 30sk RH
				2 1/2	3.0	Mix 15sk MH
12:30 pm						Job Complete

FINAL DISP. PRESS: PSI BUMP PLUG TO PSI BLEEDBACK BBLS. THANK YOU