

**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Berexco, LLC

27 5s 38w Cheyene, Ks

220 N Bramblewood  
Wichita, Ks 67206

Delores #1-27

Job Ticket: 65562

DST#: 1

ATTN: Bryan Bynos

Test Start: 2016.09.12 @ 11:14:00

## GENERAL INFORMATION:

Formation: LKC - A-C

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:11:30

Time Test Ended: 21:20:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Bradley Walter

Unit No: 78

Interval: 4248.00 ft (KB) To 4440.00 ft (KB) (TVD)

Total Depth: 4440.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3489.00 ft (KB)

3478.00 ft (CF)

KB to GR/CF: 11.00 ft

## Serial #: 8365

Inside

Press@RunDepth: 612.83 psig @ 4249.00 ft (KB)

Start Date: 2016.09.12

End Date:

2016.09.12

Capacity: 8000.00 psig

Last Calib.: 2016.09.12

Start Time: 11:14:05

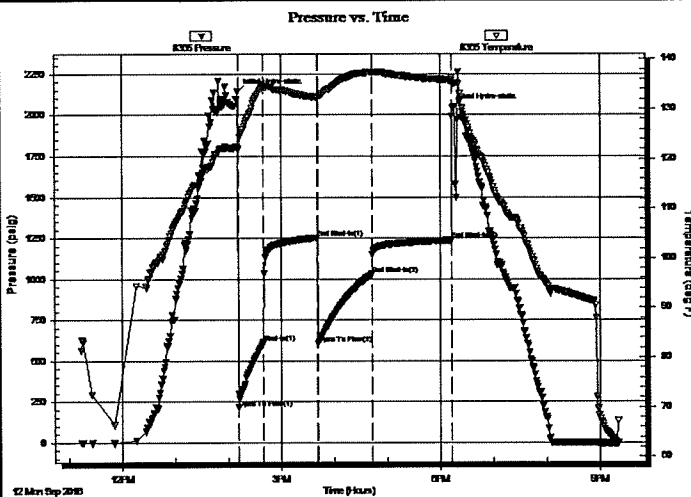
End Time:

21:20:45

Time On Btm: 2016.09.12 @ 14:11:00

Time Off Btm: 2016.09.12 @ 18:13:45

TEST COMMENT: IF: BOB @ 3 min.  
IS: No return.  
FF: BOB @ 3 min.  
FS: No return.



## PRESSURE SUMMARY

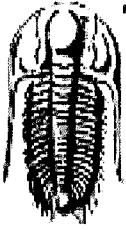
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2140.31	122.45	Initial Hydro-static
1	213.39	121.88	Open To Flow (1)
29	612.83	134.64	Shut-In(1)
90	1252.85	132.33	End Shut-In(1)
91	605.85	132.12	Open To Flow (2)
152	1029.72	137.31	End Shut-In(2)
242	1236.30	135.71	End Shut-In(3)
243	2044.34	134.94	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
1230.00	mcw 15m 85w (Oil spots in tool)	14.59

## Gas Rates

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



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FLUID SUMMARY

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27 5s 38w Cheyene, Ks

220 N Bramblewood  
Wichita, Ks 67206

Delores #1-27

Job Ticket: 65562

DST#: 1

ATTN: Bryan Bynos

Test Start: 2016.09.12 @ 11:14:00

## Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	0 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	24000 ppm
Viscosity:	48.00 sec/qt	Cushion Volume:	bbbl		
Water Loss:	8.39 in <sup>3</sup>	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4200.00 ppm				
Filter Cake:	2.00 inches				

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
1230.00	mcw 15m 85w (Oil spots in tool)	14.594

Total Length: 1230.00 ft      Total Volume: 14.594 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments: rw is .279 @ 74f = 24000ppm

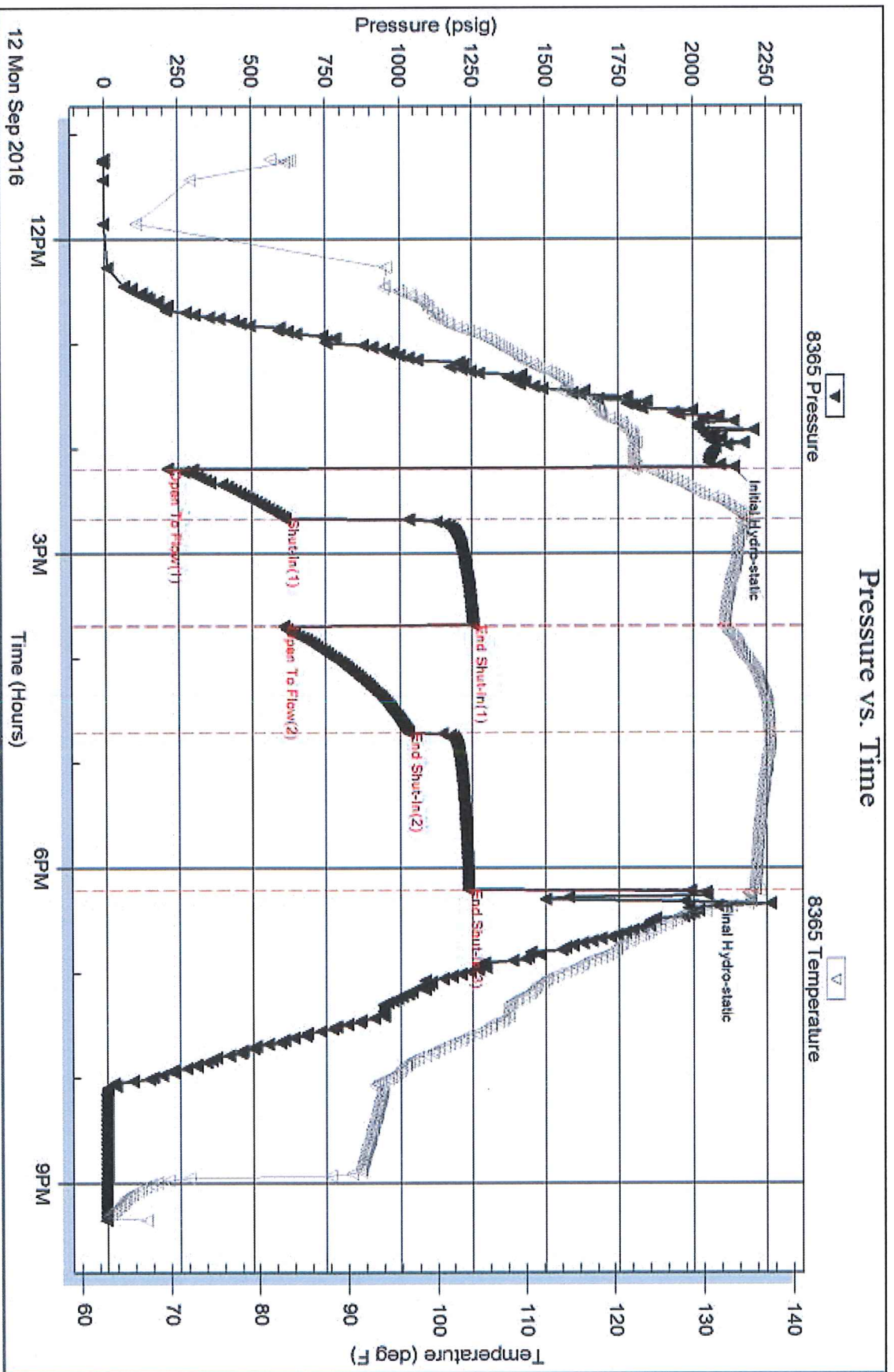
Serial #: 8365

Inside

Berexco, LLC

Delores #1-27

DST Test Number: 1





**TRILOBITE  
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# DRILL STEM TEST REPORT

Berexco, LLC

27 5s 38w Cheyene, Ks

220 N Bramblewood  
Wichita, Ks 67206

Delores #1-27

Job Ticket: 65563

DST#: 2

ATTN: Bryan Bynos

Test Start: 2016.09.13 @ 10:41:00

## GENERAL INFORMATION:

Formation: **LKC D-E**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:59:45

Time Test Ended: 18:29:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 78

Interval: 4425.00 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: 3489.00 ft (KB)

3478.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8365

Inside

Press@RunDepth: 737.83 psig @ 4426.00 ft (KB)

Start Date: 2016.09.13

End Date:

2016.09.13

Capacity: 8000.00 psig

Last Calib.: 1899.12.30

Start Time: 10:41:05

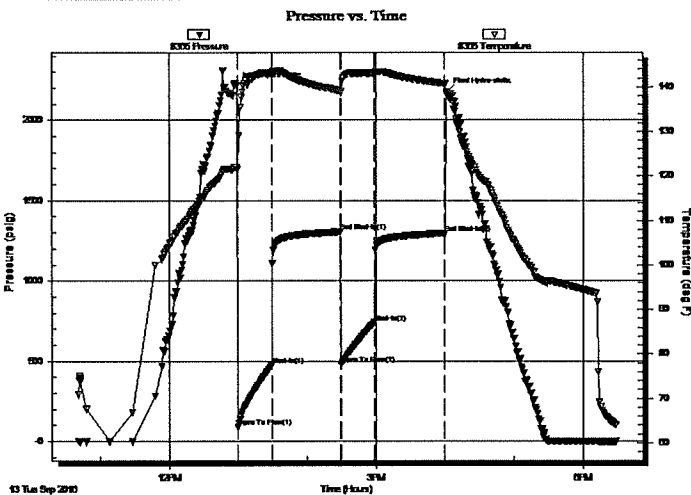
End Time:

18:28:59

Time On Btm: 2016.09.13 @ 12:59:00

Time Off Btm: 2016.09.13 @ 16:02:00

TEST COMMENT: IF: BOB @ 4 minutes.  
IS: No return.  
FF: BOB @ 4 minutes  
FS: No return.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2213.48	121.90	Initial Hydro-static
1	87.79	121.54	Open To Flow (1)
31	474.76	143.18	Shut-In(1)
91	1305.25	139.14	End Shut-In(1)
91	479.91	138.62	Open To Flow (2)
120	737.83	143.07	Shut-In(2)
182	1296.54	140.71	End Shut-In(2)
183	2176.77	138.54	Final Hydro-static

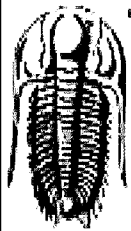
## Recovery

Length (ft)	Description	Volume (bbl)
1460.00	mcw 5m 95w	17.82

\* Recovery from multiple tests

## Gas Rates

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



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Berexco, LLC

27 5s 38w Cheyene, Ks

220 N Bramblewood  
Wichita, Ks 67206

**Delores #1-27**

Job Ticket: 65563

DST#: 2

ATTN: Bryan Bynos

Test Start: 2016.09.13 @ 10:41:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

39000 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4800.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
1460.00	mcw 5m 95w	17.820

Total Length: 1460.00 ft      Total Volume: 17.820 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw is .185 @ 71F = 39000ppm

Serial #: 8365

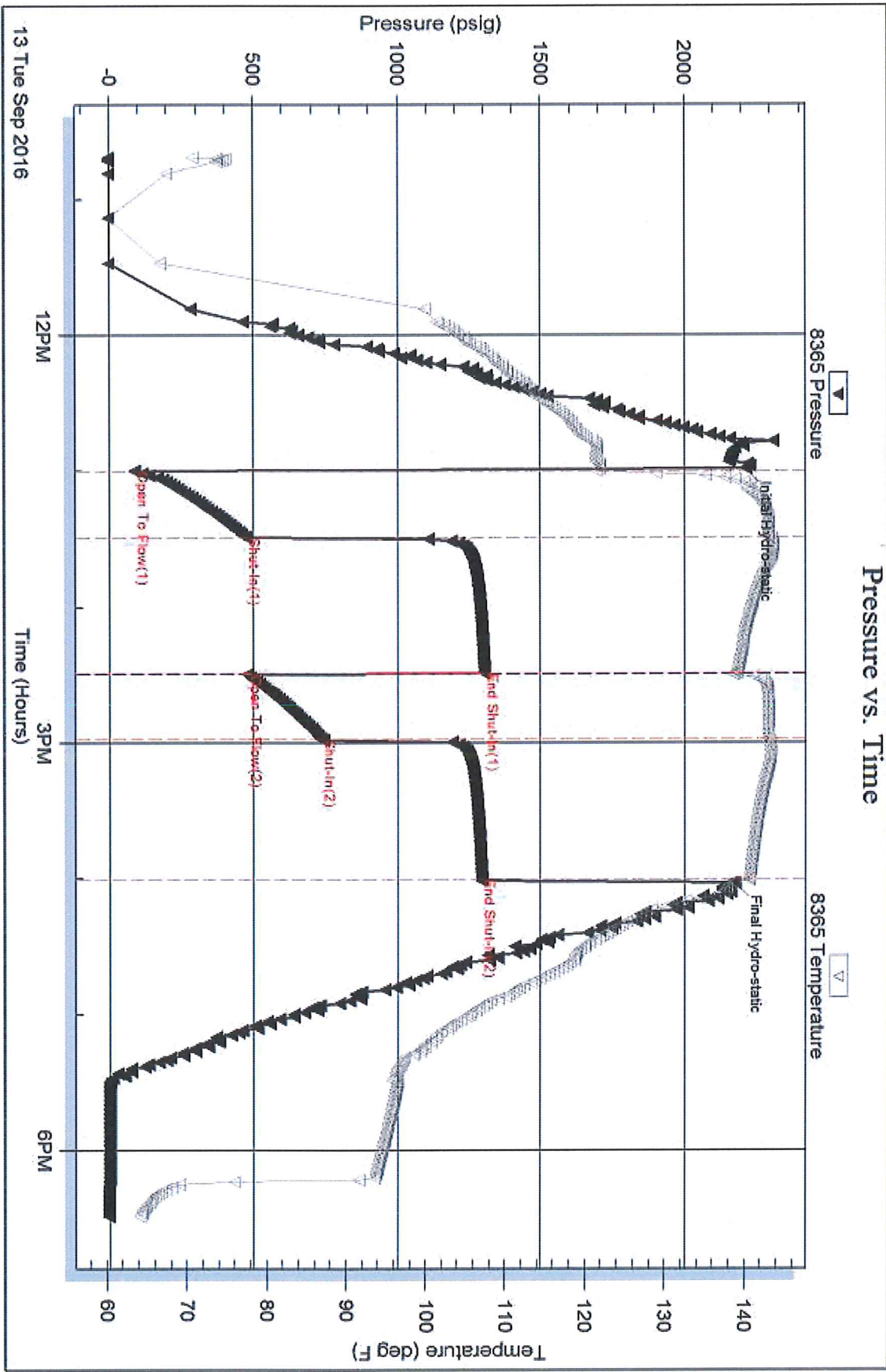
Inside

Berexco, LLC

Delores #1-27

DST Test Number: 2

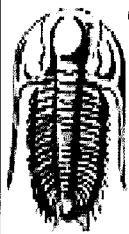
### Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 65563

Printed: 2016.09.13 @ 22:37:43



**TRILOBITE  
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# DRILL STEM TEST REPORT

Berexco, LLC

27 5s 38w Cheyene, Ks

220 N Bramblewood  
Wichita, Ks 67206

Delores #1-27

Job Ticket: 65564

DST#: 3

ATTN: Bryan Bynos

Test Start: 2016.09.14 @ 09:51:00

## GENERAL INFORMATION:

Formation: **Lower Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:05:00

Time Test Ended: 20:20:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Waller

Unit No: 78

Interval: 4638.00 ft (KB) To 4682.00 ft (KB) (TVD)

Total Depth: 4638.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3489.00 ft (KB)

3478.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8845

Outside

Press@RunDepth: 48.93 psig @ 4639.00 ft (KB)

Start Date: 2016.09.14

End Date:

2016.09.14

Start Time: 09:51:05

End Time:

20:20:30

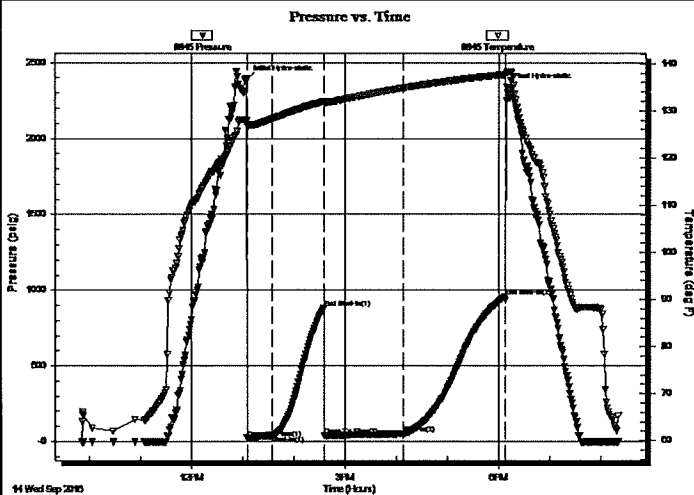
Capacity: 8000.00 psig

Last Calib.: 2016.09.14

Time On Btm: 2016.09.14 @ 13:04:45

Time Off Btm: 2016.09.14 @ 18:09:15

TEST COMMENT: IF: 1" blow  
IS: No return  
FF: 4" blow, receded to a surface blow.  
FS: No return.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2391.62	127.86	Initial Hydro-static
1	21.63	126.90	Open To Flow (1)
30	39.62	128.26	Shut-In(1)
91	882.07	131.93	End Shut-In(1)
91	37.79	131.69	Open To Flow (2)
183	48.93	134.84	Shut-In(2)
303	958.61	137.68	End Shut-In(2)
305	2337.29	138.14	Final Hydro-static

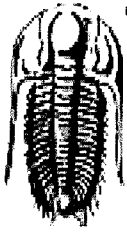
## Recovery

Length (ft)	Description	Volume (bbl)
50.00	ocm 10o 90m	0.25
10.00	free oil 100o	0.05

\* Recovery from multiple tests

## Gas Rates

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



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## FLUID SUMMARY

Berexco, LLC

27 5s 38w Cheyene, Ks

220 N Bramblewood  
Wichita, Ks 67206

Delores #1-27

Job Ticket: 65564

DST#: 3

ATTN: Bryan Bynos

Test Start: 2016.09.14 @ 09:51:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

27 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5300.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	ocm 10o 90m	0.246
10.00	free oil 100o	0.049

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:

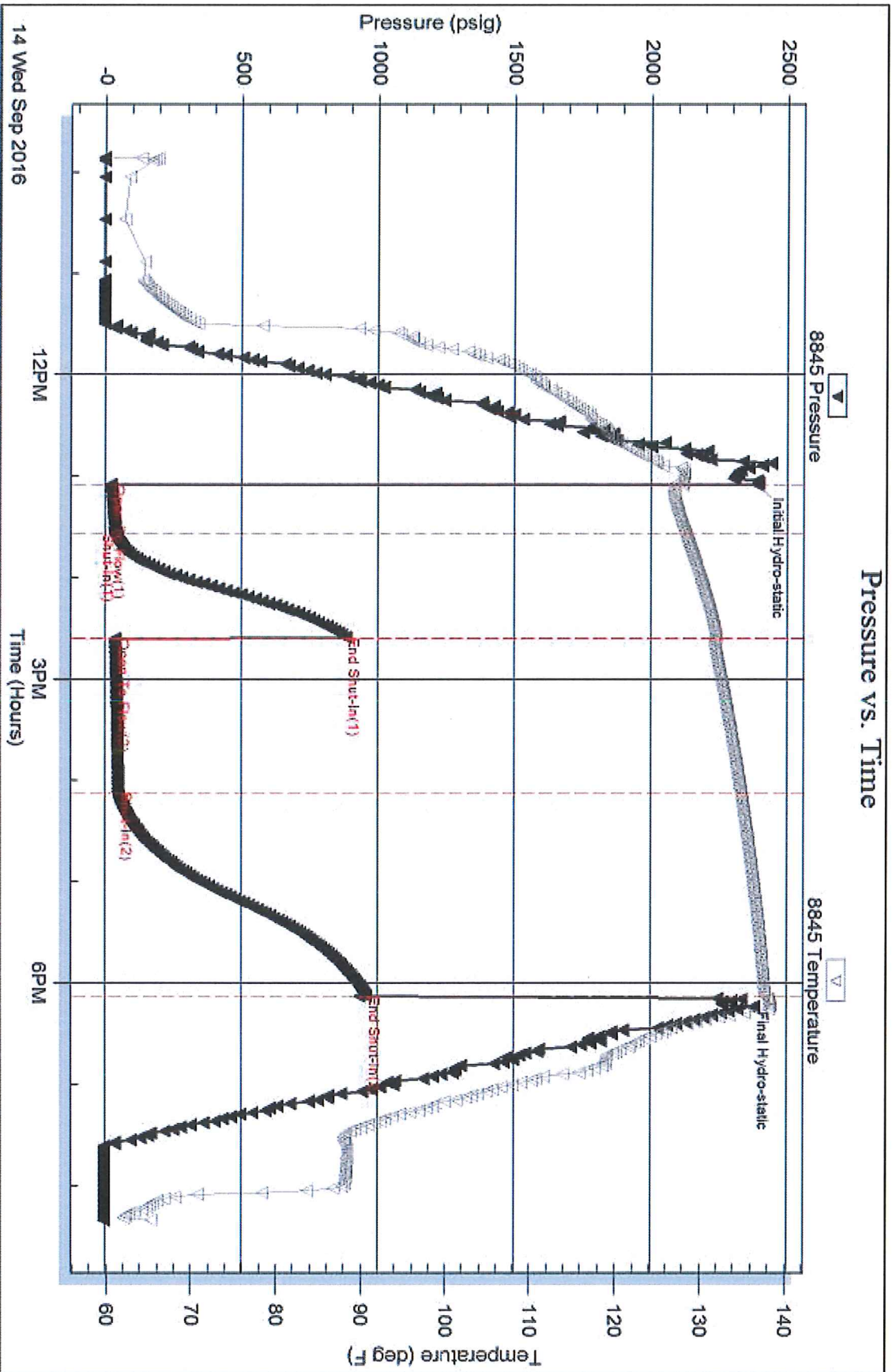


Serial #: 8845

Outside Berexco, LLC

Delores #1-27

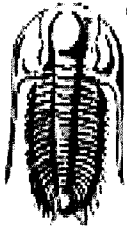
DST Test Number: 3



Tribble Testing, Inc

Ref. No: 65564

Printed: 2016.09.14 @ 21:25:37



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Berexco, LLC

27 5s 38w Cheyene, Ks

220 N Bramblewood  
Wichita, Ks 67206

Delores #1-27

Job Ticket: 65565

DST#: 4

ATTN: Bryan Bynog

Test Start: 2016.09.15 @ 04:41:00

## GENERAL INFORMATION:

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:40:30

Time Test Ended: 11:57:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 78

Interval: 4664.00 ft (KB) To 4720.00 ft (KB) (TVD)

Total Depth: 4720.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3489.00 ft (KB)

3478.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8845 Outside

Press@RunDepth: 19.69 psig @ 4665.00 ft (KB)

Start Date: 2016.09.15 End Date: 2016.09.15

Start Time: 04:41:05 End Time: 11:57:44

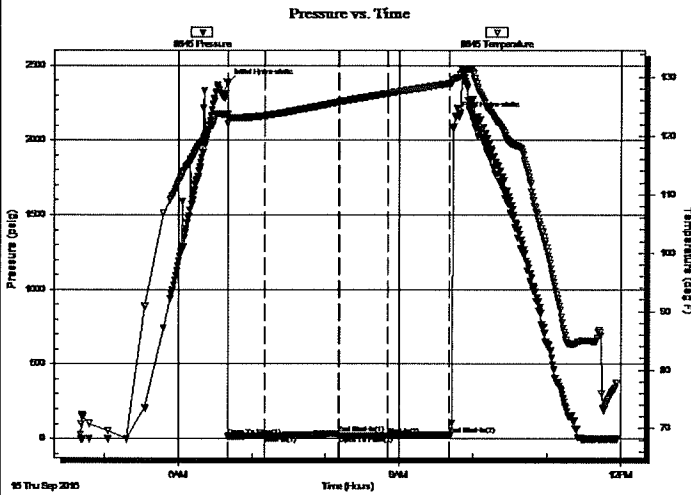
Capacity: 8000.00 psig

Last Calib.: 2016.09.15

Time On Btm: 2016.09.15 @ 06:40:00

Time Off Btm: 2016.09.15 @ 09:45:15

TEST COMMENT: IF: Surface blow, died @ 20 minutes.  
IS: No return.  
FF: No blow.  
FS: No return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2383.80	123.70	Initial Hydro-static
1	13.48	122.14	Open To Flow (1)
31	17.58	123.45	Shut-In(1)
91	32.88	125.74	End Shut-In(1)
91	18.01	125.79	Open To Flow (2)
131	19.69	127.24	Shut-In(2)
181	26.92	128.95	End Shut-In(2)
186	2160.36	129.81	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100m	0.02

\* Recovery from multiple tests

## Gas Rates

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



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**FLUID SUMMARY**

Berexco, LLC

**27 5s 38w Cheyene, Ks**

220 N Bramblewood  
Wichita, Ks 67206

**Delores #1-27**

Job Ticket: 65565

**DST#: 4**

ATTN: Bryan Bynog

Test Start: 2016.09.15 @ 04:41:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.99 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5300.00 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 #: 8845

Outside Berexco, LLC

Delores #1-27

DST Test Number: 4

