

**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Benbnett & Schulte Oil**

PO Box 329 Russell KS 67665+0329

ATTN: Bob Hopkins

Zvolanek Heirs 33-1

33-15-10 Ellsworth

Start Date: 2014.09.28 @ 08:35:00

End Date: 2014.09.28 @ 13:05:00

Job Ticket #: 60443 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.09.28 @ 13:25:54

Benbnett & Schulte Oil
33-15-10 Ellsworth
Zvolanek Heirs 33-1
DST # 1
Lansing C
2014.09.28



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Benbnett & Schulte Oil
PO Box 329 Russell KS 67665+0329
ATTN: Bob Hopkins

33-15-10 Ellsworth
Zvolanek Heirs 33-1
Job Ticket: 60443 **DST#: 1**
Test Start: 2014.09.28 @ 08:35:00

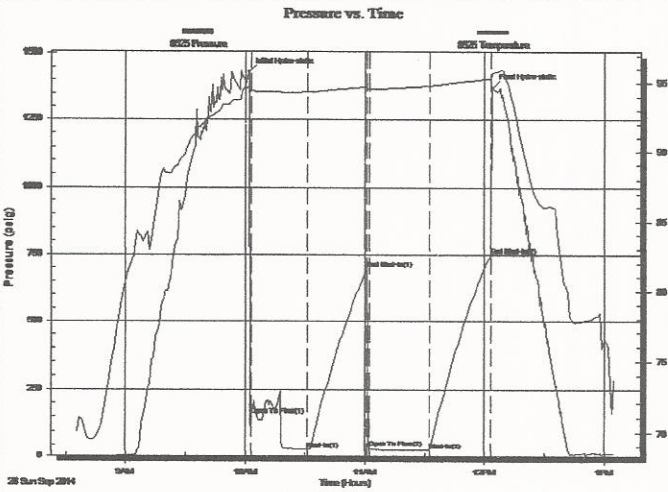
GENERAL INFORMATION:

Formation: **Lansing C**
Deviated: **No Whipstock:** ft (KB)
Time Tool Opened: 10:03:00
Time Test Ended: 13:05:00
Interval: **2913.00 ft (KB) To 2931.00 ft (KB) (TVD)**
Total Depth: **2931.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair**
Test Type: **Conventional Bottom Hole (Initial)**
Tester: **Jared Scheck**
Unit No: **S5-Great Bend -70**
Reference Elevations: **1750.00 ft (KB)**
1743.00 ft (CF)
KB to GR/CF: **7.00 ft**

Serial #: 8525

Press@RunDepth: **26.63 psig @** ft (KB) Capacity: **5000.00 psig**
Start Date: **2014.09.28** End Date: **2014.09.28** Last Calib.: **2014.09.28**
Start Time: **08:35:00** End Time: **13:05:00** Time On Btm: **2014.09.28 @ 10:02:00**
Time Off Btm: **2014.09.28 @ 12:04:00**

TEST COMMENT: **IFP-30 Minutes-Strong blow built bottom of bucket in 2 1/2 minutes**
ISIP-30 Minutes-No blow back
FFP-30 Minutes-Strong blow built bottom of bucket in 1 minute Gas to surface 10 see gas report
FSIP-30-Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1433.04	94.73	Initial Hydro-static
1	152.46	94.45	Open To Flow (1)
30	31.10	94.36	Shut-In (1)
59	695.48	94.74	End Shut-In (1)
61	38.22	94.59	Open To Flow (2)
91	26.63	94.79	Shut-In (2)
121	745.97	95.29	End Shut-In (2)
122	1372.48	95.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	mud	0.21
0.00	2908 gas in pipe	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Benbnett & Schulte Oil

33-15-10 Ellsworth

PO Box 329 Russell KS 67665+0329

Zvolanek Heirs 33-1

Job Ticket: 60443

DST#: 1

ATTN: Bob Hopkins

Test Start: 2014.09.28 @ 08:35:00

Tool Information

Drill Pipe:	Length: 2923.00 ft	Diameter: 3.80 inches	Volume: 41.00 bbl	Tool Weight: 1000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 41.00 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	2913.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	18.00 ft			
Tool Length:	38.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Shut In Tool	5.00			2898.00	
Hydraulic tool	5.00			2903.00	
Packer	5.00			2908.00	20.00 Bottom Of Top Packer
Packer	5.00			2913.00	
Recorder	1.00		Inside	2914.00	
Recorder	1.00		Outside	2915.00	
Anchor	13.00			2928.00	
Bullnose	3.00			2931.00	18.00 Bottom Packers & Anchor

Total Tool Length: 38.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Benbnett & Schulte Oil
PO Box 329 Russell KS 67665+0329
ATTN: Bob Hopkins

33-15-10 Ellsworth
Zvolanek Heirs 33-1
Job Ticket: 60443 **DST#: 1**
Test Start: 2014.09.28 @ 08:35:00

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:	ppm
Viscosity: 59.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.00 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	mud	0.210
0.00	2908 gas in pipe	0.000

Total Length: 15.00 ft Total Volume: 0.210 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: max gas gauge 2.69

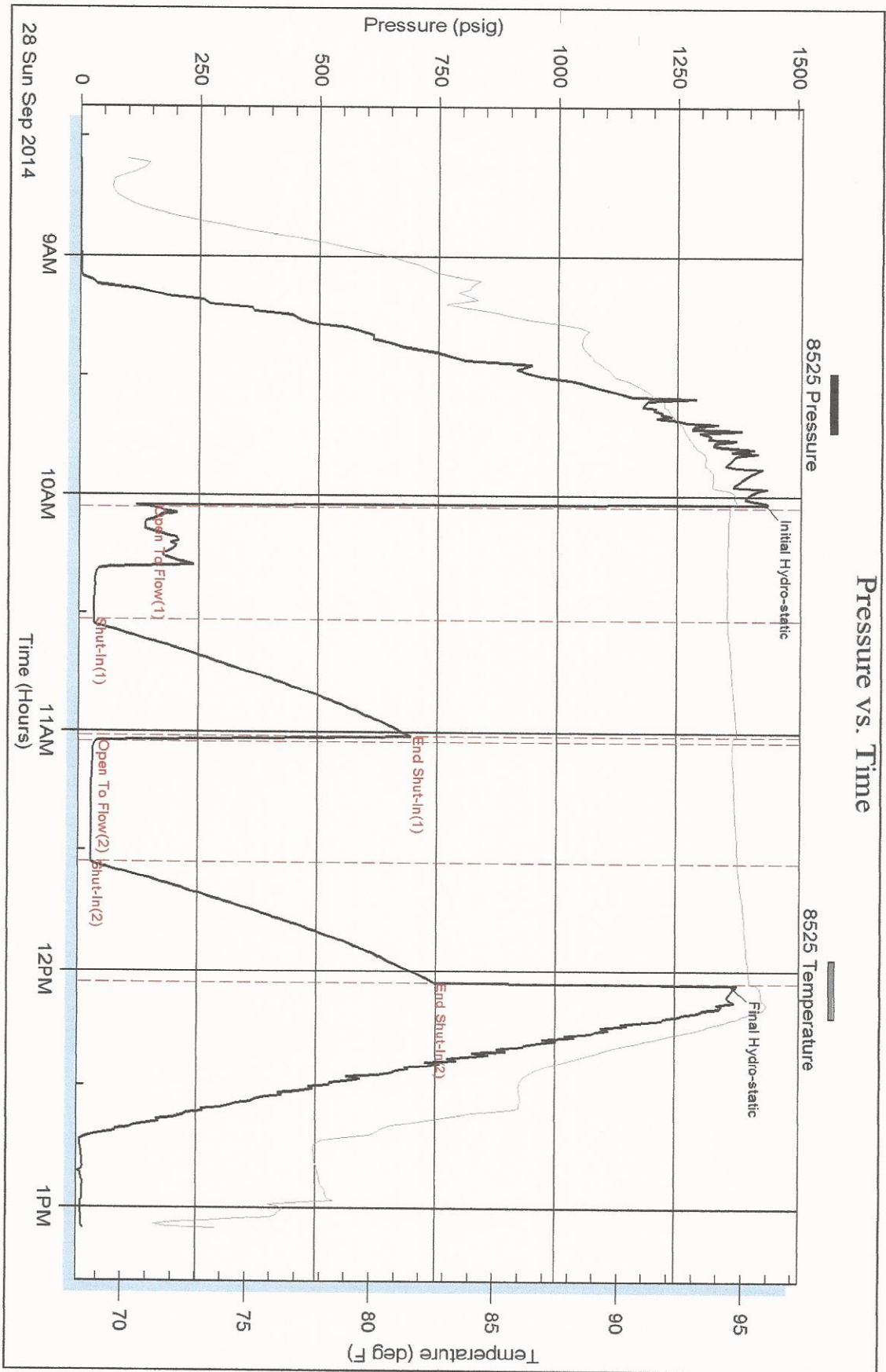
Serial #: 8525

Benbnett & Schulte Oil

Zvolanek Heirs 33-1

DST Test Number: 1

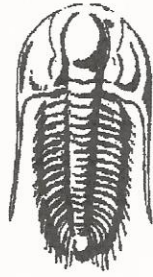
Pressure vs. Time



Triobite Testing, Inc

Ref. No: 60443

Printed: 2014.09.28 @ 13:25:54



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Benbnett & Schulte Oil**

PO Box 329 Russell KS 67665+0329

ATTN: Bob Hopkins

Zvolanek Heirs 33-1

33-15-10 Ellsworth

Start Date: 2014.09.29 @ 10:40:00

End Date: 2014.09.29 @ 15:14:00

Job Ticket #: 60444 DST #: 2

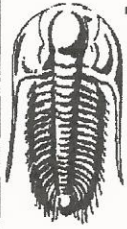
Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.09.29 @ 15:30:27

Benbnett & Schulte Oil 33-15-10 Ellsworth Zvolanek Heirs 33-1 DST # 2 Conn 2014.09.29



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Bennett & Schulte Oil
 PO Box 329 Russell KS 67665+0329
 ATTN: Bob Hopkins

33-15-10 Ellsworth
Zvolanek Heirs 33-1
 Job Ticket: 60444 **DST#: 2**
 Test Start: 2014.09.29 @ 10:40:00

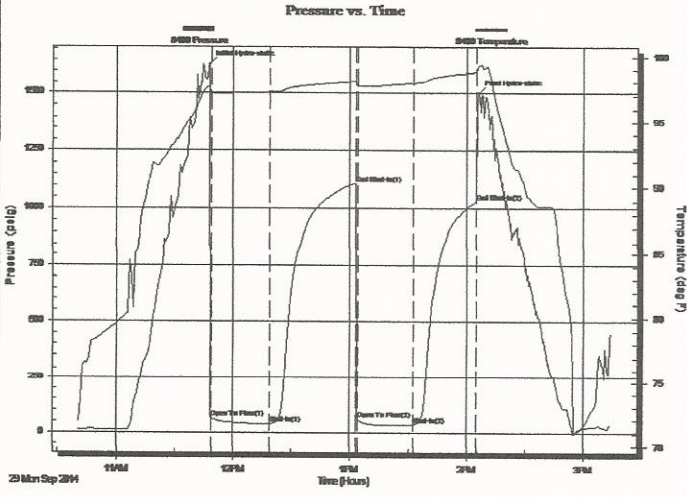
GENERAL INFORMATION:

Formation: **Conn**
 Deviated: **No** Whipstock: **ft (KB)**
 Time Tool Opened: 11:49:00
 Time Test Ended: 15:14:00
 Interval: **3233.00 ft (KB) To 3244.00 ft (KB) (TVD)**
 Total Depth: **3244.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**
 Test Type: **Conventional Bottom Hole (Initial)**
 Tester: **Jared Scheck**
 Unit No: **S5-Great Bend-70**
 Reference Elevations: **1750.00 ft (KB)**
1743.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8400

Press@RunDepth: **33.62 psig @ ft (KB)** Capacity: **5000.00 psig**
 Start Date: **2014.09.29** End Date: **2014.09.29** Last Calib.: **2014.09.29**
 Start Time: **10:40:00** End Time: **15:14:00** Time On Btm: **2014.09.29 @ 11:48:00**
 Time Off Btm: **2014.09.29 @ 14:06:00**

TEST COMMENT: IFP-30 Minutes-Very weak blow built 1/2 inch into bucket w ater
 ISIP-45 Minutes-No blow back
 FFP-30Minutes-Very weak blow did not build
 FSIP-30 Minutes-No blow back



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1628.92	97.63	Initial Hydro-static
1	63.72	97.19	Open To Flow (1)
31	36.82	97.24	Shut-In(1)
75	1108.24	98.08	End Shut-In(1)
76	58.67	97.73	Open To Flow (2)
105	33.62	97.95	Shut-In(2)
137	1031.62	98.80	End Shut-In(2)
138	1498.12	99.30	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
5.00	OM 30%oil 70%mud	0.07

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Benbnett & Schulte Oil
 PO Box 329 Russell KS 67665+0329
 ATTN: Bob Hopkins

33-15-10 Ellsworth
Zvolanek Heirs 33-1
 Job Ticket: 60444 **DST#: 2**
 Test Start: 2014.09.29 @ 10:40:00

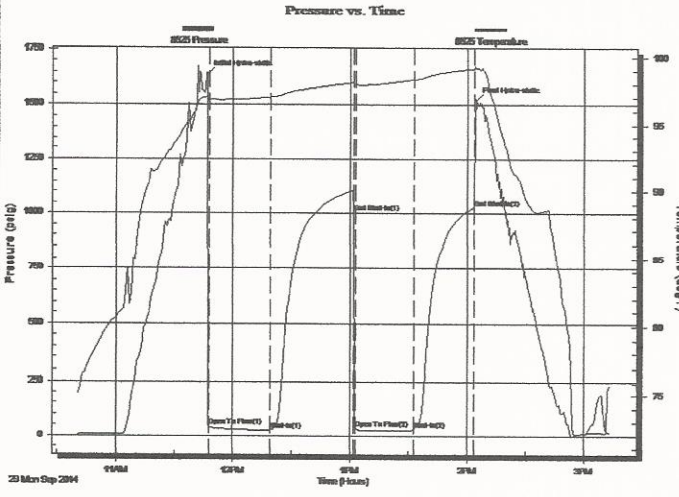
GENERAL INFORMATION:

Formation: **Conn**
 Deviated: **No** Whipstock: **ft (KB)**
 Time Tool Opened: 11:49:00
 Time Test Ended: 15:14:00
 Interval: **3233.00 ft (KB) To 3244.00 ft (KB) (TVD)**
 Total Depth: **3244.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**
 Test Type: **Conventional Bottom Hole (Initial)**
 Tester: **Jared Scheck**
 Unit No: **S5-Great Bend-70**
 Reference Elevations: **1750.00 ft (KB)**
1743.00 ft (CF)
 KB to GR/CF: **7.00 ft**

Serial #: 8525

Press@RunDepth: **1028.66 psig @ ft (KB)** Capacity: **5000.00 psig**
 Start Date: **2014.09.29** End Date: **2014.09.29** Last Calib.: **2014.09.29**
 Start Time: **10:40:00** End Time: **15:13:30** Time On Btm: **2014.09.29 @ 11:47:00**
 Time Off Btm: **2014.09.29 @ 14:04:30**

TEST COMMENT: IFP-30 Minutes-Very weak blow built 1/2 inch into bucket w ater
 ISIP-45 Minutes-No blow back
 FFP-30Minutes-Very weak blow did not build
 FSIP-30 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1637.60	97.16	Initial Hydro-static
1	40.86	96.86	Open To Flow (1)
32	25.71	97.03	Shut-In(1)
75	1005.62	98.08	End Shut-In(1)
76	34.59	97.96	Open To Flow (2)
106	28.85	98.35	Shut-In(2)
137	1028.66	99.16	End Shut-In(2)
138	1519.95	99.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	OM 30%oil 70%mud	0.07

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Benbnett & Schulte Oil

33-15-10 Ellsworth

PO Box 329 Russell KS 67665+0329

Zvolanek Heirs 33-1

Job Ticket: 60444

DST#: 2

ATTN: Bob Hopkins

Test Start: 2014.09.29 @ 10:40:00

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: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.20 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 6000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	OM 30%oil 70%mud	0.070

Total Length: 5.00 ft Total Volume: 0.070 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

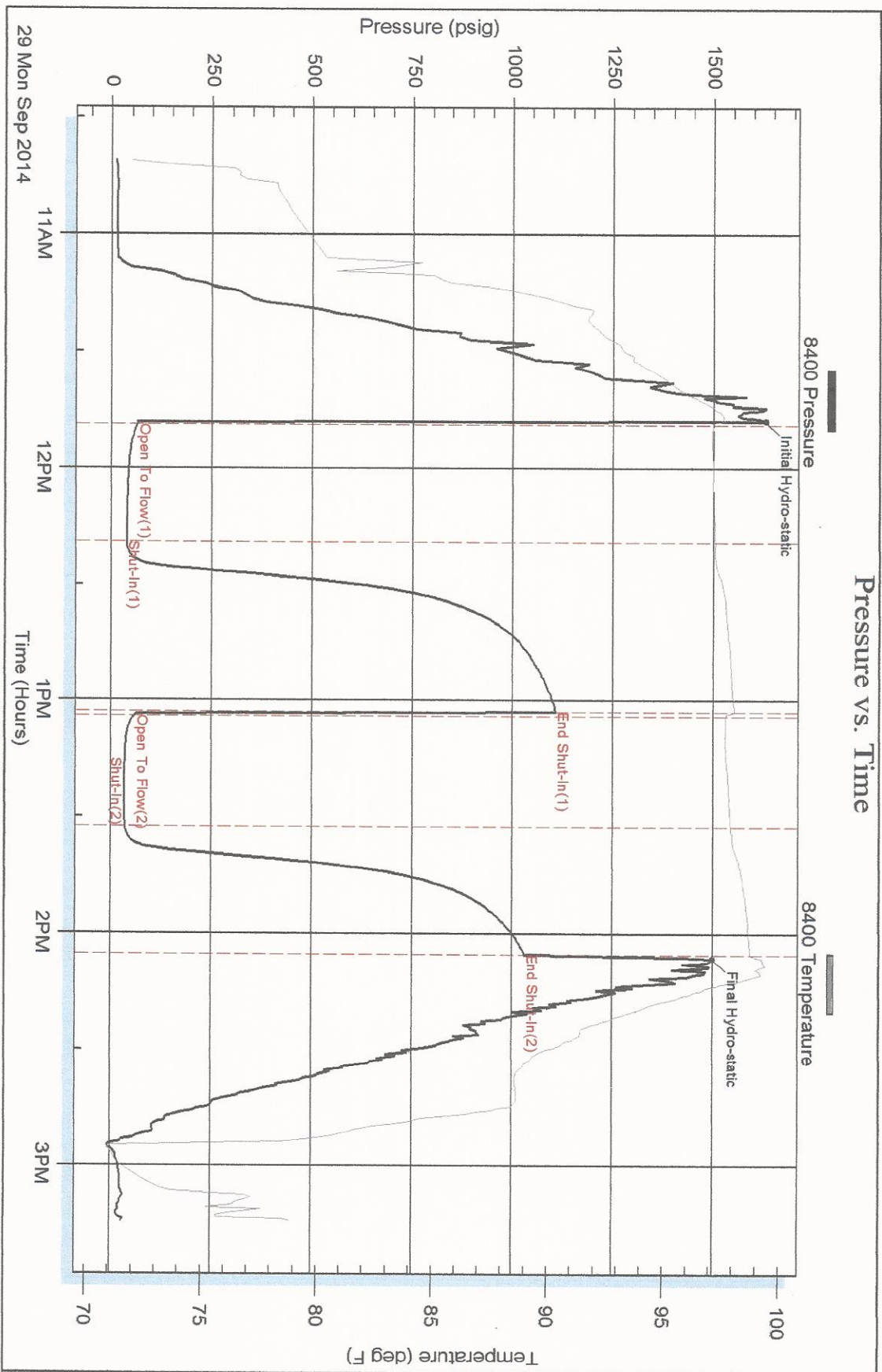
Serial #: 8400

Bennett & Schulte Oil

Zvolanek Heirs 33-1

DST Test Number: 2

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 60444

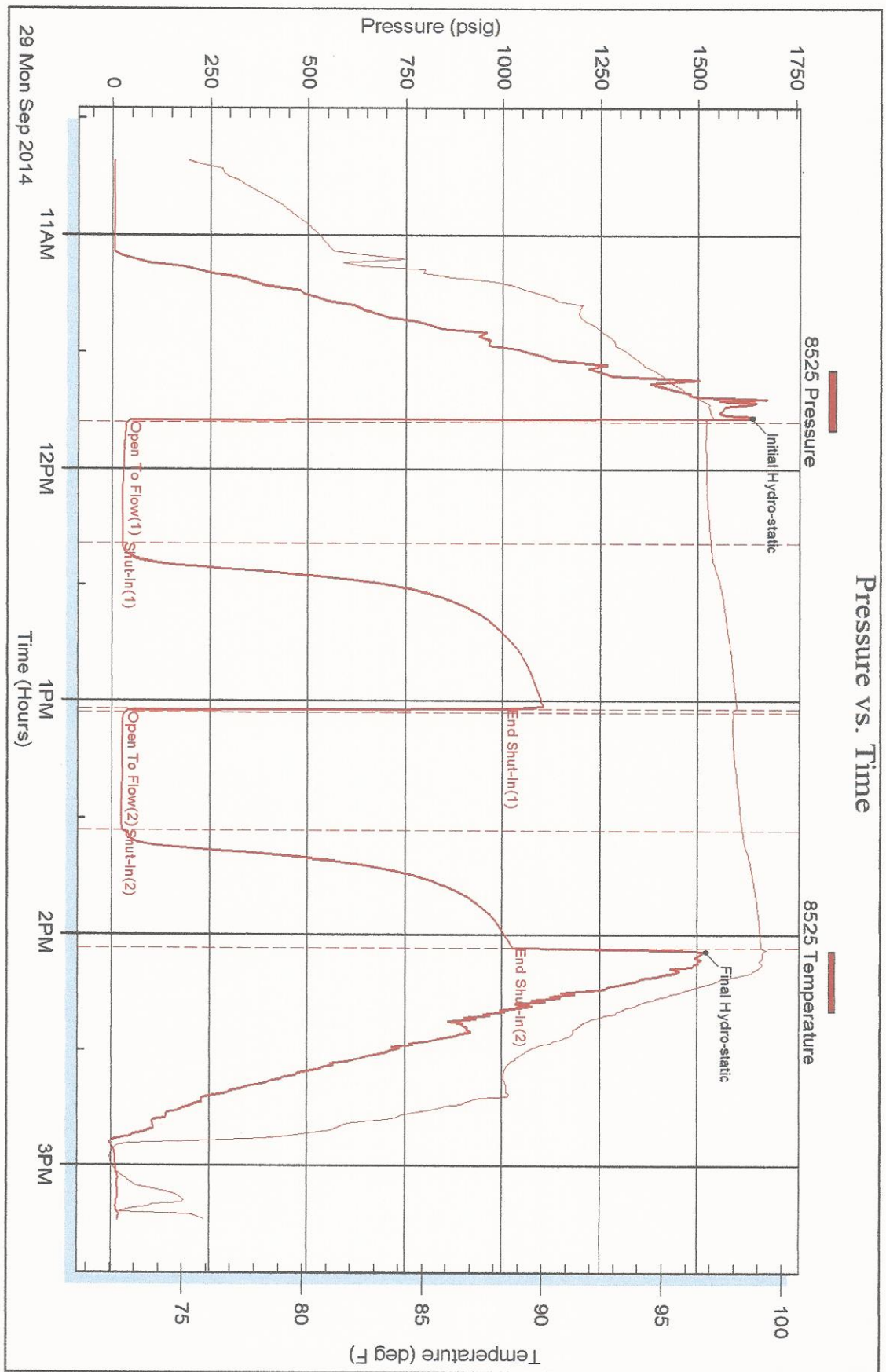
Printed: 2014.09.29 @ 15:33:27

Serial #: 8525

Benbrett & Schulte Oil

Zvolanek Heirs 33-1

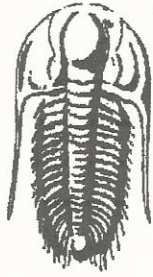
DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 60444

Printed: 2014.09.29 @ 15:33:27



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Benbnett & Schulte Oil**

PO Box 329 Russell KS 67665+0329

ATTN: Bob Hopkins

Zvolanek Heirs 33-1

33-15-10 Ellsworth

Start Date: 2014.09.29 @ 21:30:00

End Date: 2014.09.30 @ 04:12:00

Job Ticket #: 60445 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.09.30 @ 04:27:31

Benbnett & Schulte Oil

33-15-10 Ellsworth

Zvolanek Heirs 33-1

DST # 3

Arbuckle

2014.09.29



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Benbnett & Schulte Oil
PO Box 329 Russell KS 67665+0329
ATTN: Bob Hopkins

33-15-10 Ellsworth
Zvolanek Heirs 33-1
Job Ticket: 60445 **DST#: 3**
Test Start: 2014.09.29 @ 21:30:00

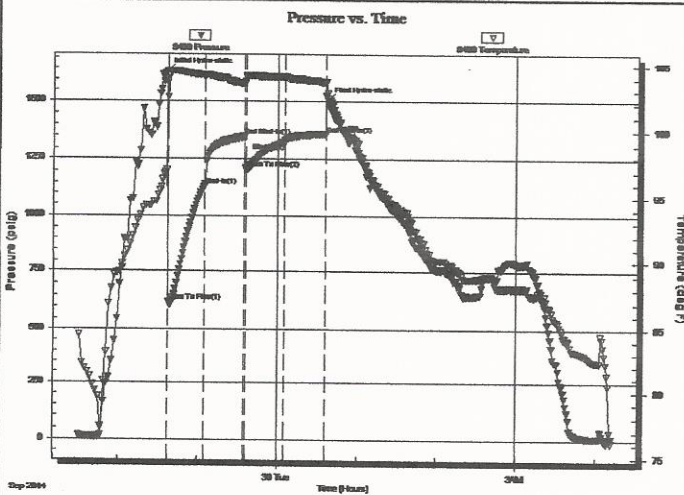
GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: **No Whipstock:** **ft (KB)**
Time Tool Opened: **22:37:30**
Time Test Ended: **04:12:00**
Interval: **3233.00 ft (KB) To 3262.00 ft (KB) (TVD)**
Total Depth: **3262.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches**Hole Condition: **Fair**

Test Type: **Conventional Bottom Hole (Initial)**
Tester: **Jared Scheck**
Unit No: **S5-Great Bend-70**
Reference Elevations: **1750.00 ft (KB)**
 1743.00 ft (CF)
KB to GR/CF: **7.00 ft**

Serial #: 8400 Inside
Press@RunDepth: **1326.16 psig @ 3234.00 ft (KB)**
Start Date: **2014.09.29** End Date: **2014.09.30**
Start Time: **21:30:00** End Time: **04:12:00**
Capacity: **5000.00 psig**
Last Calib.: **2014.09.30**
Time On Btm: **2014.09.29 @ 22:36:30**
Time Off Btm: **2014.09.30 @ 00:37:30**

TEST COMMENT: FFP-30Minutes-Strong blow built bottom of bucket in 30 sec
ISIP-30Minutes-No blow back
FFP-30Minutes-Strong blow built bottom of bucket in less then 1 minute
FSIP-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1637.16	97.11	Initial Hydro-static
1	621.45	102.52	Open To Flow (1)
29	1137.24	104.23	Shut-In(1)
59	1348.13	103.63	End Shut-In(1)
60	1209.61	104.12	Open To Flow (2)
89	1326.16	104.11	Shut-In(2)
120	1359.10	103.65	End Shut-In(2)
121	1503.55	102.83	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2760.00	Oil Water 15%oil 85%w ater	38.72
0.00	chlorides 28,000 .2@65degrees	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Benbrett & Schulte Oil
PO Box 329 Russell KS 67665+0329
ATTN: Bob Hopkins

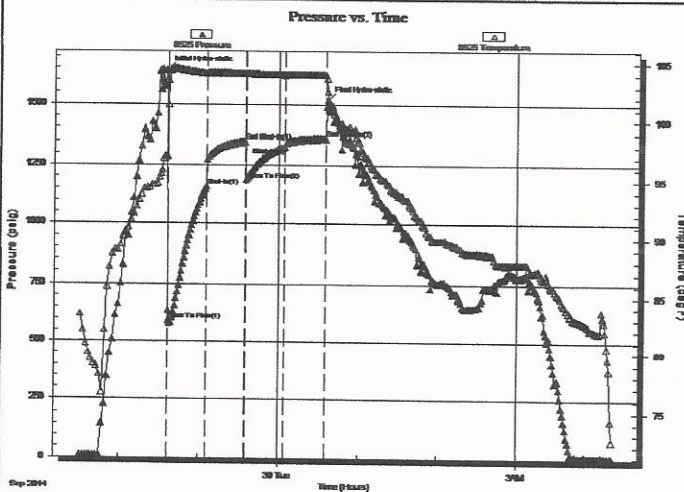
33-15-10 Ellsworth
Zvolanek Heirs 33-1
Job Ticket: 60445 **DST#: 3**
Test Start: 2014.09.29 @ 21:30:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 22:37:30
Time Test Ended: 04:12:00
Interval: **3233.00 ft (KB) To 3262.00 ft (KB) (TVD)**
Total Depth: 3262.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Initial)
Tester: Jared Scheck
Unit No: S5-Great Bend-70
Reference Elevations: 1750.00 ft (KB)
1743.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8525 Outside
Press@RunDepth: 1360.50 psig @ 3235.00 ft (KB) Capacity: 5000.00 psig
Start Date: 2014.09.29 End Date: 2014.09.30 Last Calib.: 2014.09.30
Start Time: 21:30:00 End Time: 04:12:00 Time On Btm: 2014.09.29 @ 22:36:00
Time Off Btm: 2014.09.30 @ 00:37:00

TEST COMMENT: IFP-30Minutes-Strong blow built bottom of bucket in 30 sec
ISIP-30Minutes-No blow back
FFP-30Minutes-Strong blow built bottom of bucket in less then 1 minute
FSIP-No blow back



PRESSURE SUMMARY

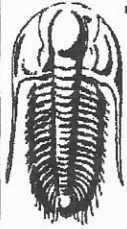
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1642.73	97.11	Initial Hydro-static
1	591.65	101.42	Open To Flow (1)
30	1156.16	104.10	Shut-In(1)
59	1349.12	104.09	End Shut-In(1)
60	1186.55	104.07	Open To Flow (2)
89	1327.04	103.97	Shut-In(2)
120	1360.50	104.00	End Shut-In(2)
121	1519.46	102.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2760.00	Oil Water 15%oil 85%w ater	38.72
0.00	chlorides 28,000 .2@65degrees	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Benbnett & Schulte Oil
PO Box 329 Russell KS 67665+0329
ATTN: Bob Hopkins

33-15-10 Ellsworth
Zvolanek Heirs 33-1
Job Ticket: 60445 **DST#: 3**
Test Start: 2014.09.29 @ 21:30:00

Tool Information

Drill Pipe:	Length: 3216.00 ft	Diameter: 3.80 inches	Volume: 45.11 bbl	Tool Weight: 1000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 45.11 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3233.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	29.00 ft			
Tool Length:	49.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Shut In Tool	5.00			3218.00	
Hydraulic tool	5.00			3223.00	
Packer	5.00			3228.00	20.00 Bottom Of Top Packer
Packer	5.00			3233.00	
Recorder	1.00	8400	Inside	3234.00	
Recorder	1.00	8525	Outside	3235.00	
Anchor	24.00			3259.00	
Bullnose	3.00			3262.00	29.00 Bottom Packers & Anchor

Total Tool Length: 49.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Benbnett & Schulte Oil

33-15-10 Ellsworth

PO Box 329 Russell KS 67665+0329

Zvolanek Heirs 33-1

Job Ticket: 60445

DST#: 3

ATTN: Bob Hopkins

Test Start: 2014.09.29 @ 21:30:00

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: 9.20 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 6000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2760.00	Oil Water 15%oil 85%w ater	38.716
0.00	chlorides 28,000 .2@65degrees	0.000

Total Length: 2760.00 ft Total Volume: 38.716 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

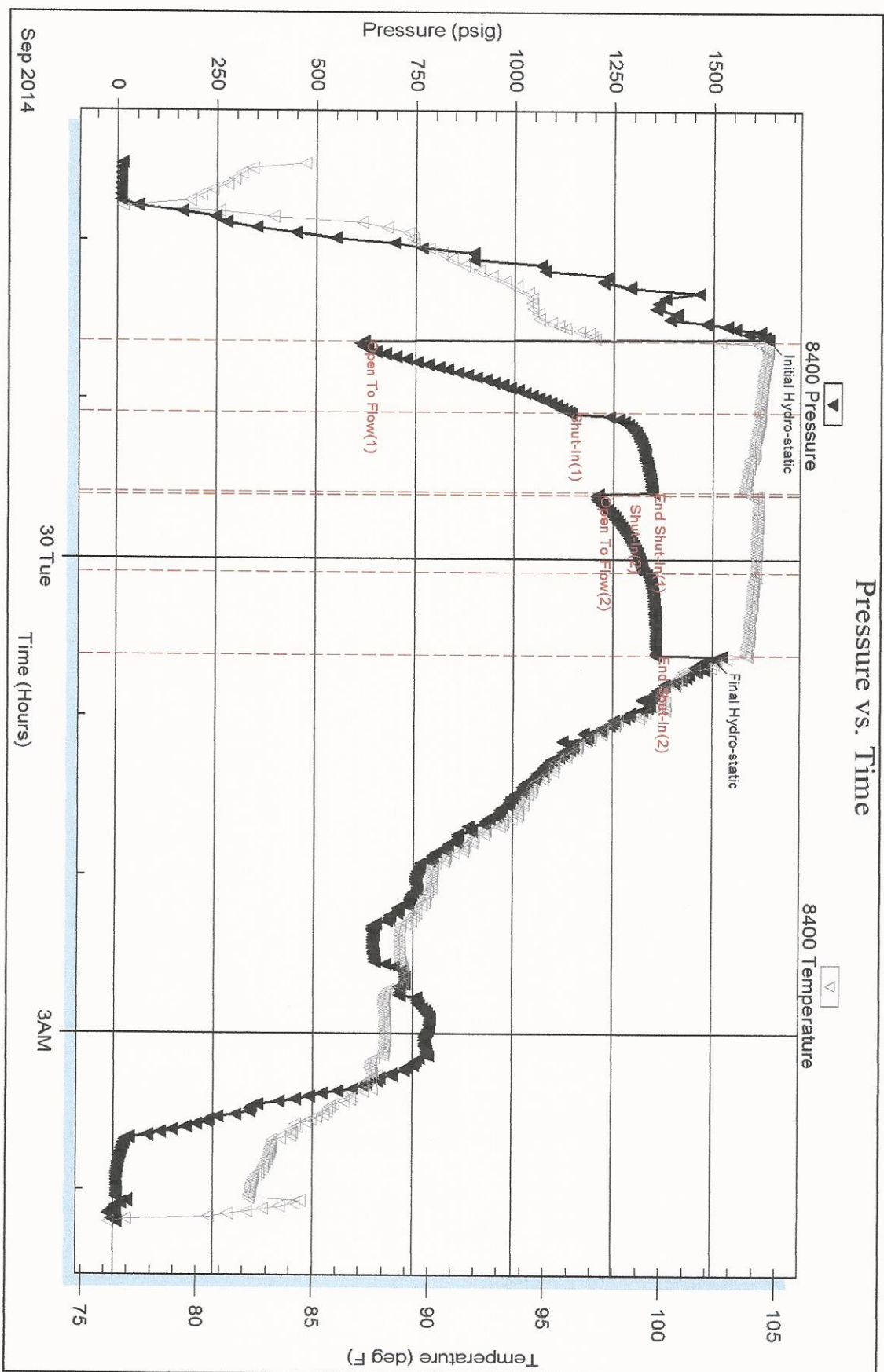
Serial #: 8400

Inside

Bennett & Schulte Oil

Zvolanek Heirs 33-1

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 60445

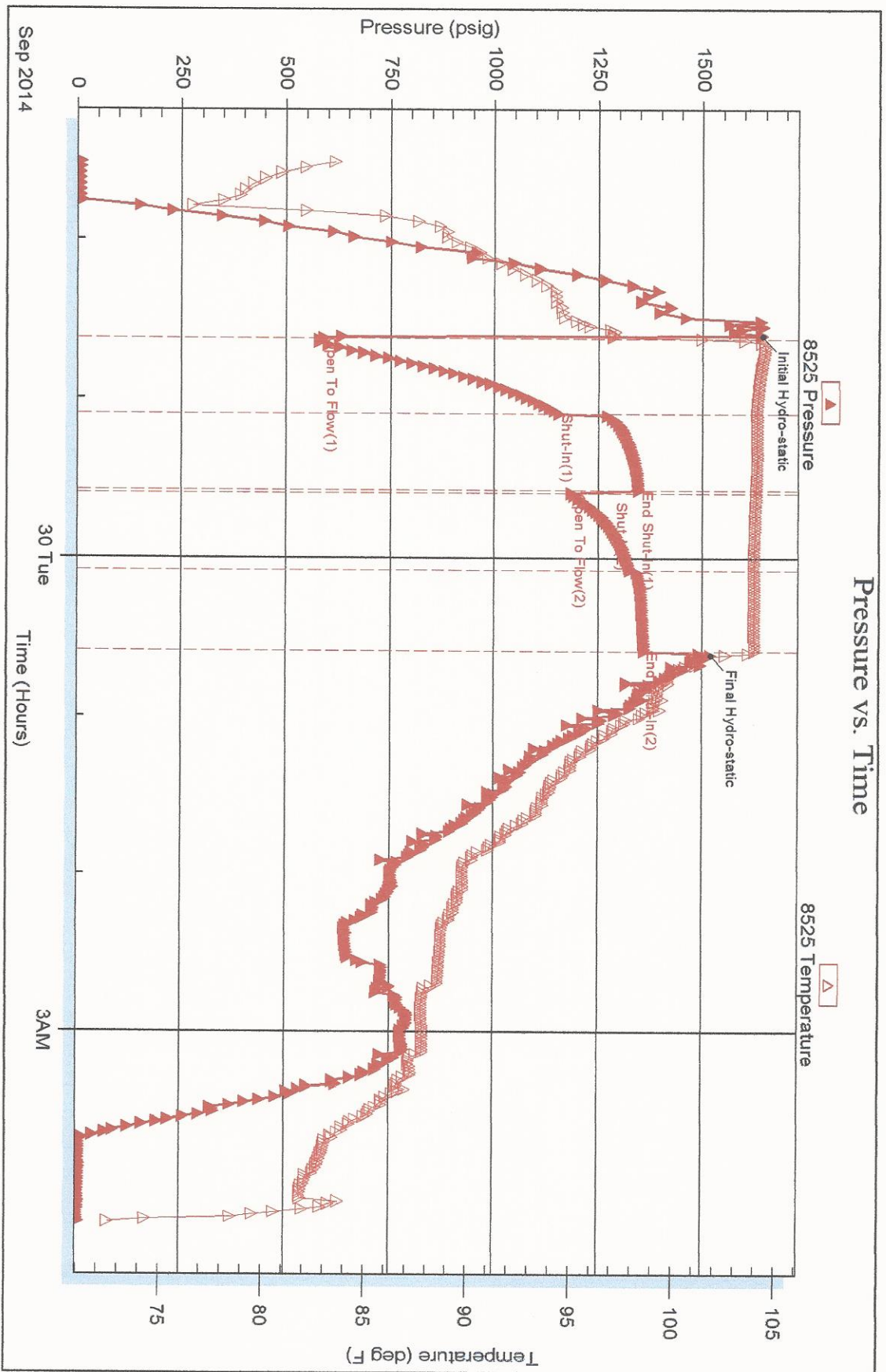
Printed: 2014.09.30 @ 04:27:32

Serial #: 8525

Outside Bennett & Schulte Oil

Zvolanek Heirs 33-1

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 60445

Printed: 2014.09.30 @ 04:27:32