



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Charles N Griffin**

PO Box 347
Pratt KS 67124

ATTN: Charles Griffin / Bru

34-32s-12w Barber,KS

Randels # 1

Start Date: 2011.08.08 @ 17:01:47

End Date: 2011.08.09 @ 01:08:17

Job Ticket #: 42543 DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Charles N Griffin

Randels # 1

34-32s-12w Barber,KS

DST # 1

Mississippi

2011.08.08



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Charles N Griffin

Randels # 1

PO Box 347
Pratt KS 67124

34-32s-12w Barber,KS

Job Ticket: 42543

DST#: 1

ATTN: Charles Griffin / Bru 67124

Test Start: 2011.08.08 @ 17:01:47

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 20:14:17

Time Test Ended: 01:08:17

Test Type: **Conventional Bottom Hole**

Tester: **Chris Staats**

Unit No: **34**

Interval: **4362.00 ft (KB) To 4400.00 ft (KB) (TVD)**

Total Depth: **4400.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Poor**

Reference Elevations: **1524.00 ft (KB)**

1516.00 ft (CF)

KB to GR/CF: **8.00 ft**

Serial #: 8166

Outside

Press@RunDepth: **40.74 psig @ 4363.00 ft (KB)**

Start Date: **2011.08.08**

End Date:

2011.08.09

Capacity: **8000.00 psig**

Last Calib.: **2011.08.09**

Start Time: **17:01:52**

End Time:

01:08:16

Time On Btm: **2011.08.08 @ 20:12:02**

Time Off Btm: **2011.08.08 @ 23:18:02**

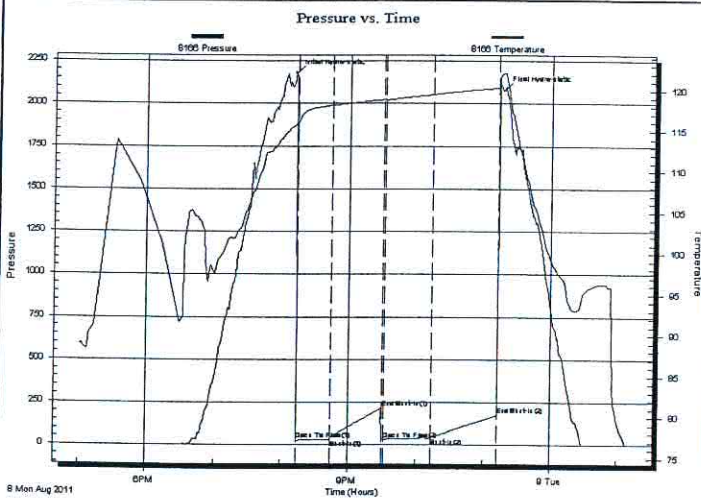
TEST COMMENT:

IF: Strong blow BOB 6 min

IS: No blow back

FF: Strong blow BOB 4 min

FS: No blow back



PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2178.93	115.82	Initial Hydro-static
3	27.16	115.88	Open To Flow (1)
32	28.68	118.17	Shut-In(1)
78	215.56	118.87	End Shut-In(1)
79	31.00	118.85	Open To Flow (2)
122	40.74	119.48	Shut-In(2)
181	174.89	120.31	End Shut-In(2)
186	2081.23	122.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	186' GIP	0.00
60.00	MUD	0.30

Gas Rates

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



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Charles N Griffin

Randels # 1

PO Box 347
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34-32s-12w Barber,KS

Job Ticket: 42543

DST#: 1

ATTN: Charles Griffin / Bru 67124

Test Start: 2011.08.08 @ 17:01:47

Tool Information

Drill Pipe:	Length: 4226.00 ft	Diameter: 3.80 inches	Volume: 59.28 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 59.89 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4362.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	38.00 ft			
Tool Length:	59.00 ft			
Number of Packers:	2	Diameter: 6.25 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4342.00	
Shut In Tool	5.00			4347.00	
Hydraulic tool	5.00			4352.00	
Packer	5.00			4357.00	21.00 Bottom Of Top Packer
Packer	5.00			4362.00	
Stubb	1.00			4363.00	
Recorder	0.00	6773	Outside	4363.00	
Recorder	0.00	8166	Outside	4363.00	
Perforations	3.00			4366.00	
Drill Pipe	31.00			4397.00	
Bullnose	3.00			4400.00	38.00 Bottom Packers & Anchor
Total Tool Length:	59.00				



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Charles N Griffin

Randels # 1

PO Box 347
Pratt KS 67124

34-32s-12w Barber, KS

Job Ticket: 42543

DST#: 1

ATTN: Charles Griffin / Bru 67124

Test Start: 2011.08.08 @ 17:01:47

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:	bbf		
Water Loss:	9.57 in ³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3000.00 ppm				
Filter Cake:	0.02 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
0.00	186' GIP	0.000
60.00	MUD	0.295

Total Length: 60.00 ft Total Volume: 0.295 bbf

Num Fluid Samples: 0

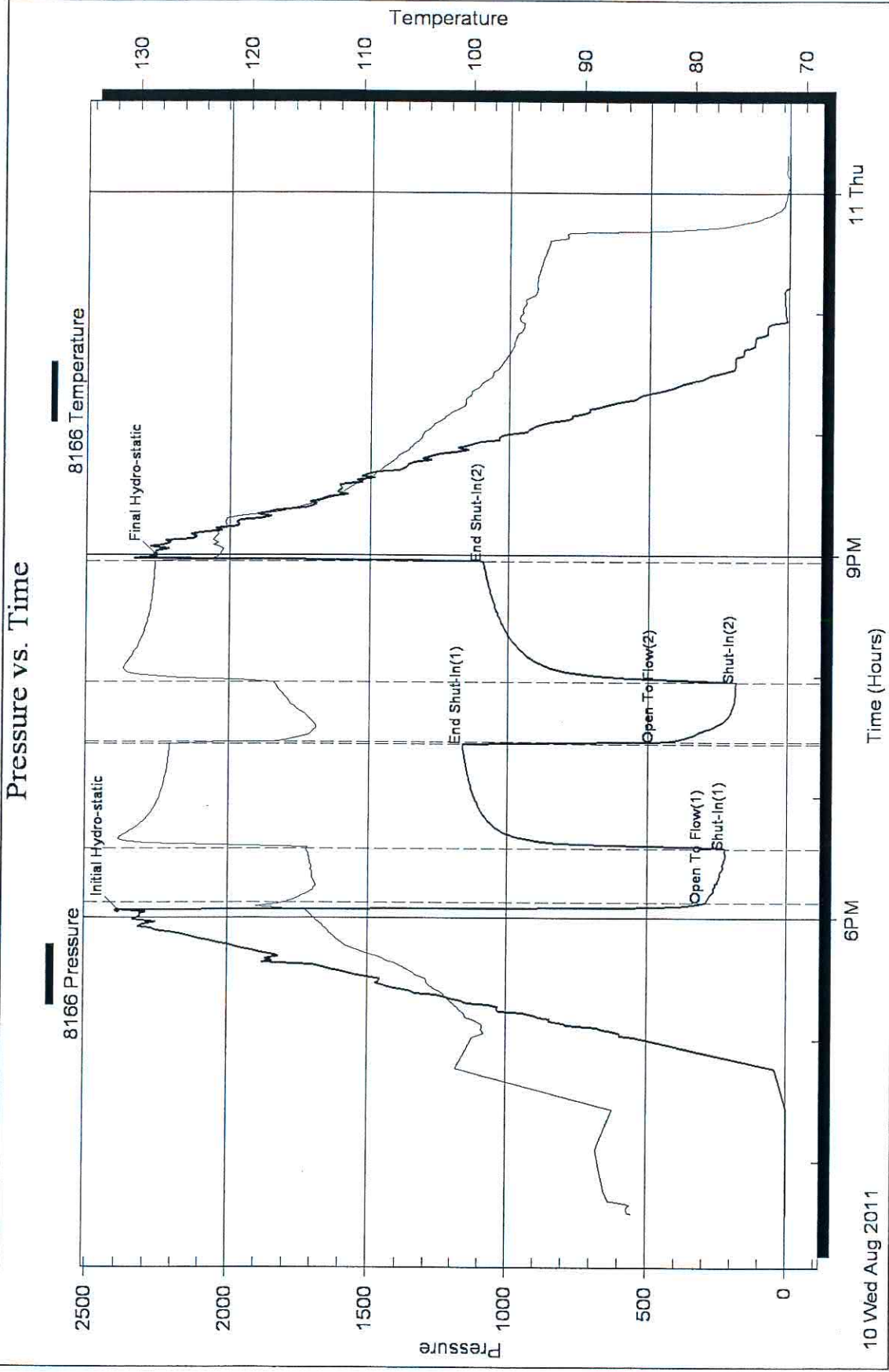
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





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DRILL STEM TEST REPORT

Prepared For: **Charles N Griffin**

PO Box 347
Pratt KS 67124

ATTN: Charles Griffin / Bru

34-32s-12w Barber,KS

Randels # 1

Start Date: 2011.08.10 @ 15:33:36

End Date: 2011.08.11 @ 00:19:21

Job Ticket #: 42544 DST #: 2

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Charles N Griffin

Randels # 1

34-32s-12w Barber,KS

DST # 2

Simpson

2011.08.10



**TRILOBITE
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DRILL STEM TEST REPORT

Charles N Griffin

Randels # 1

PO Box 347
Pratt KS 67124

34-32s-12w Barber,KS

Job Ticket: 42544

DST#: 2

ATTN: Charles Griffin / Bru 67124

Test Start: 2011.08.10 @ 15:33:36

GENERAL INFORMATION:

Formation: **Simpson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:07:36

Time Test Ended: 00:19:21

Test Type: Conventional Bottom Hole

Tester: Chris Staats

Unit No: 34

Interval: **4730.00 ft (KB) To 4782.00 ft (KB) (TVD)**

Reference Elevations: 1524.00 ft (KB)

Total Depth: 4782.00 ft (KB) (TVD)

1516.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8166 Outside

Press@RunDepth: 184.40 psig @ 4731.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.08.10

End Date: 2011.08.11

Last Calib.: 2011.08.11

Start Time: 15:33:41

End Time: 00:19:21

Time On Btm: 2011.08.10 @ 18:03:51

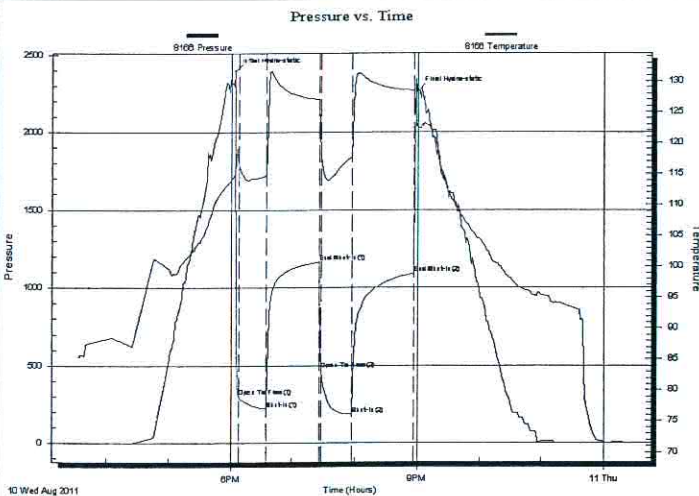
Time Off Btm: 2011.08.10 @ 20:59:51

TEST COMMENT: IF: Strong blow BOB 1 min GTS 3 min {see gas flow report}

IS: Weak blow back

FF: Strong blow BOB 1 sec {see gas flow report}

FSI: Strong 8" blow back



PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2392.55	114.82	Initial Hydro-static
4	297.70	116.80	Open To Flow (1)
31	220.42	114.64	Shut-In(1)
82	1164.31	127.08	End Shut-In(1)
84	471.84	117.97	Open To Flow (2)
113	184.40	117.73	Shut-In(2)
173	1091.34	128.48	End Shut-In(2)
176	2266.84	122.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
248.00	O,G,M 15%oil 20%gas 65% mud	2.35
186.00	M,G,O 10% mud 70%oil 20%gas	2.61
248.00	G,W,M,O 10%gas 10%water 15% mud	63.48

Gas Rates

	Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	1.00	15.00	845.22
Last Gas Rate	1.00	1.00	442.73
Max. Gas Rate	1.00	24.00	1103.95



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Charles N Griffin

Randels # 1

PO Box 347
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Job Ticket: 42544

DST#: 2

ATTN: Charles Griffin / Bru 67124

Test Start: 2011.08.10 @ 15:33:36

Tool Information

Drill Pipe:	Length: 4603.00 ft	Diameter: 3.80 inches	Volume: 64.57 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 65.18 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4730.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	52.00 ft			
Tool Length:	81.00 ft			
Number of Packers:	2	Diameter: 6.25 inches		

Tool Comments:

Tool Description

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

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4702.00	
Shut In Tool	5.00			4707.00	
Hydraulic tool	5.00			4712.00	
Jars	5.00			4717.00	
Safety Joint	3.00			4720.00	
Packer	5.00			4725.00	29.00 Bottom Of Top Packer
Packer	5.00			4730.00	
Stubb	1.00			4731.00	
Recorder	0.00	6773	Outside	4731.00	
Recorder	0.00	8166	Outside	4731.00	
Change Over Sub	1.00			4732.00	
Drill Pipe	32.00			4764.00	
Change Over Sub	1.00			4765.00	
Perforations	14.00			4779.00	
Bullnose	3.00			4782.00	52.00 Bottom Packers & Anchor

Total Tool Length: 81.00



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FLUID SUMMARY

Charles N Griffin

Randels # 1

PO Box 347
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Job Ticket: 42544 **DST#: 2**

ATTN: Charles Griffin / Bru 67124

Test Start: 2011.08.10 @ 15:33:36

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: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.38 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 6000.00 ppm			
Filter Cake: 0.02 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
248.00	O,G,M 15%oil 20%gas 65% mud	2.349
186.00	M,G,O 10%mud 70%oil 20%gas	2.609
248.00	G,W,M,O 10%gas 10%water 15%mud 65%oi	3.479

Total Length: 682.00 ft Total Volume: 8.437 bbl

Num Fluid Samples: 1 Num Gas Bombs: 1 Serial #: 1

Laboratory Name: Caraway Laboratory Location: Liberal, KS

Recovery Comments:



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DRILL STEM TEST REPORT

GAS RATES

Charles N Griffin

Randels # 1

PO Box 347
Pratt KS 67124

34-32s-12w Barber,KS

Job Ticket: 42544

DST#: 2

ATTN: Charles Griffin / Bru 67124

Test Start: 2011.08.10 @ 15:33:36

Gas Rates Information

Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
1	5	1.00	15.00	845.22
1	5	1.00	15.00	845.22
1	15	1.00	15.00	845.22
1	30	1.00	9.00	672.72
2	2	1.00	13.00	787.72
2	10	1.00	24.00	1103.95
2	15	1.00	12.00	758.97
2	20	1.00	1.00	442.73

