



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Charles N Griffin**

PO Box 347
Pratt, KS 67124

ATTN: Bruce Reed

34-32S-12W Barber,KS

Ash #1

Start Date: 2011.05.30 @ 06:21:18

End Date: 2011.05.30 @ 14:10:03

Job Ticket #: 042449 DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Charles N Griffin

Ash #1

PO Box 347
Pratt, KS 67124

34-32S-12W Barber, KS

ATTN: Bruce Reed

Job Ticket: 042449 DST#: 1

Test Start: 2011.05.30 @ 06:21:18

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:47:03

Time Test Ended: 14:10:03

Test Type: Conventional Bottom Hole

Tester: Leal Cason

Unit No: 45

Interval: 4432.00 ft (KB) To 4488.00 ft (KB) (TVD)

Total Depth: 4488.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1588.00 ft (KB)

1580.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6798

Inside

Press@RunDepth: 37.97 psig @ 4433.00 ft (KB)

Start Date: 2011.05.30

End Date:

2011.05.30

Capacity: 8000.00 psig

Last Calib.: 2011.05.30

Start Time: 06:21:19

End Time:

14:10:03

Time On Btm: 2011.05.30 @ 09:45:18

Time Off Btm: 2011.05.30 @ 11:48:18

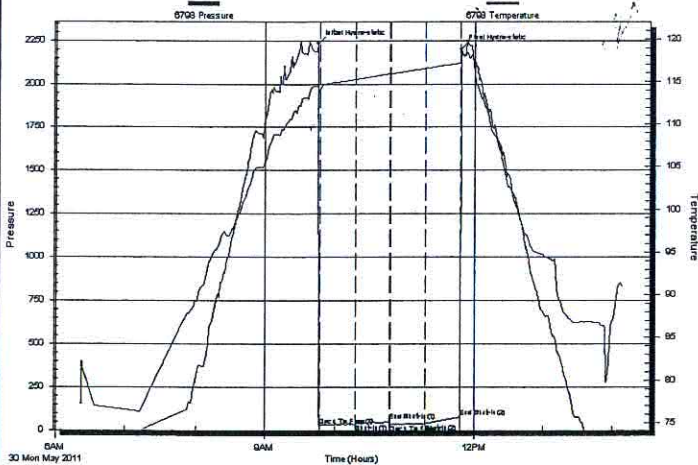
TEST COMMENT: IF: Fair Blow, BOB in 14 minutes

IS: Bled Off, No Blow back

FF: Fair Blow, 5 inches

FS: Bled Off, No Blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2232.67	114.36	Initial Hydro-static
2	28.85	114.01	Open To Flow (1)
32	36.28	115.21	Shut-In(1)
62	53.50	115.89	End Shut-In(1)
63	32.02	115.89	Open To Flow (2)
92	37.97	116.50	Shut-In(2)
123	76.02	117.14	End Shut-In(2)
123	2202.91	117.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud	0.10

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charles N Griffin

Ash #1

PO Box 347
Pratt, KS 67124

34-32S-12W Barber, KS

Job Ticket: 042449

DST#: 1

ATTN: Bruce Reed

Test Start: 2011.05.30 @ 06:21:18

Tool Information

Drill Pipe:	Length: 4299.00 ft	Diameter: 3.80 inches	Volume: 60.30 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 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: 60.91 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 61000.00 lb
Depth to Top Packer:	4432.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	56.00 ft			
Tool Length:	75.00 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			4418.00	
Hydraulic tool	5.00			4423.00	
Packer	5.00			4428.00	19.00 Bottom Of Top Packer
Packer	4.00			4432.00	
Stubb	1.00			4433.00	
Recorder	0.00	6798	Inside	4433.00	
Recorder	0.00	8367	Outside	4433.00	
Perforations	13.00			4446.00	
Change Over Sub	1.00			4447.00	
Drill Pipe	32.00			4479.00	
Change Over Sub	1.00			4480.00	
Perforations	5.00			4485.00	
Bullnose	3.00			4488.00	56.00 Bottom Packers & Anchor

Total Tool Length: 75.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charles N Griffin

Ash #1

PO Box 347
Pratt, KS 67124

34-32S-12W Barber,KS

Job Ticket: 042449

DST#: 1

ATTN: Bruce Reed

Test Start: 2011.05.30 @ 06:21:18

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: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 18.76 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	Mud	0.098

Total Length: 20.00 ft

Total Volume: 0.098 bbl

Num Fluid Samples: 0

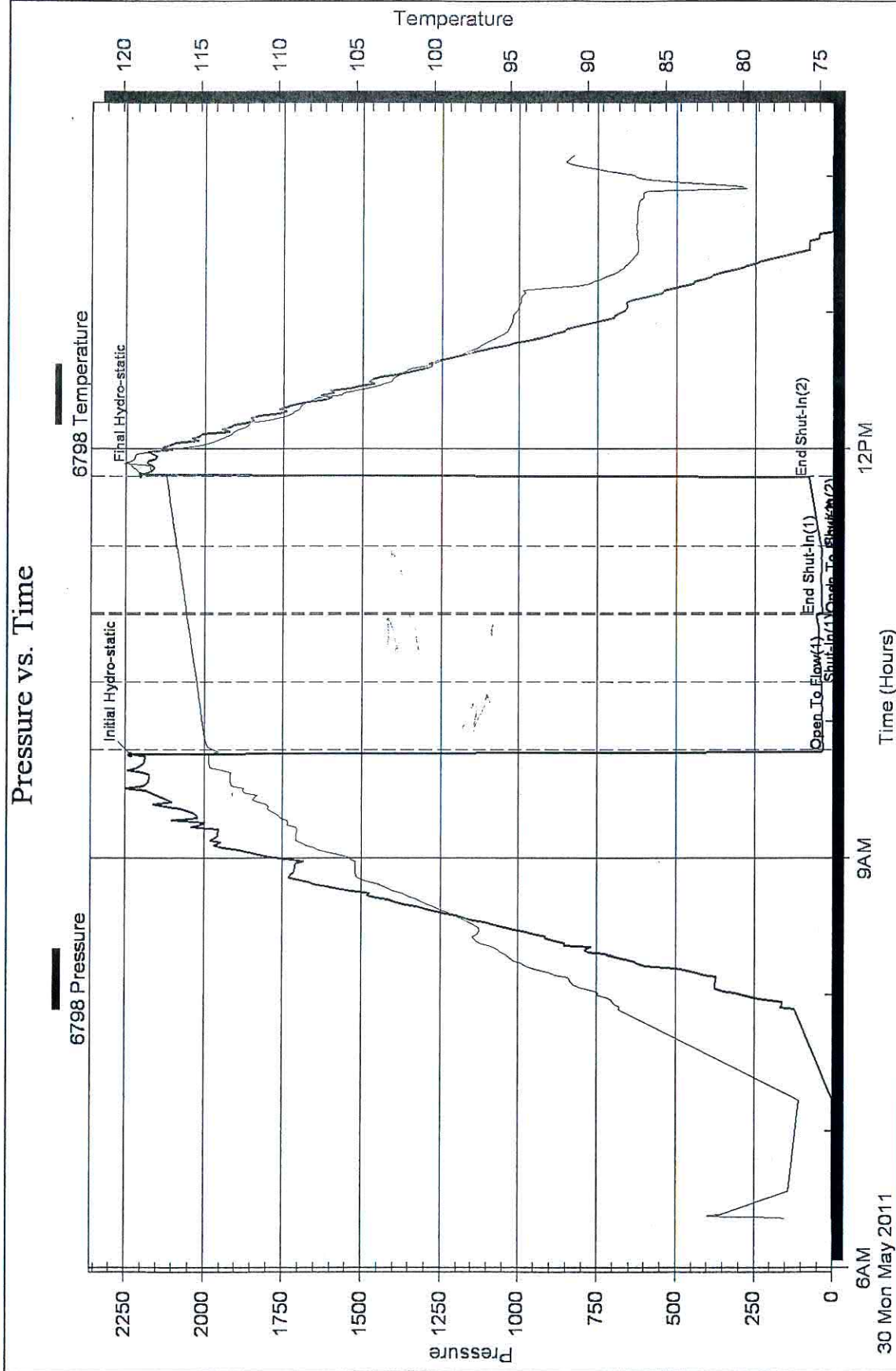
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Charles N Griffin**

PO Box 347
Pratt, KS 67124

ATTN: Bruce Reed

34-32S-12W Barber,KS

Ash #1

Start Date: 2011.05.31 @ 21:25:48

End Date: 2011.06.01 @ 09:24:18

Job Ticket #: 042450 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Charles N Griffin

Ash #1

34-32S-12W Barber,KS

DST # 2

Simpson

2011.05.31



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Charles N Griffin

Ash #1

PO Box 347
Pratt, KS 67124

34-32S-12W Barber, KS

ATTN: Bruce Reed

Job Ticket: 042450

DST#: 2

Test Start: 2011.05.31 @ 21:25:48

GENERAL INFORMATION:

Formation: **Simpson**

Deviated: No Whipstock ft (KB)

Time Tool Opened: 23:55:48

Time Test Ended: 09:24:18

Test Type: Conventional Bottom Hole

Tester: Leal Cason

Unit No: 45

Interval: 4818.00 ft (KB) To 4840.00 ft (KB) (TVD)

Total Depth: 4840.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1588.00 ft (KB)

1580.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6798

Inside

Press@RunDepth: 710.53 psig @ 4819.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.05.31

End Date:

2011.06.01

Last Calib.: 2011.06.01

Start Time: 21:25:49

End Time:

09:24:18

Time On Btm: 2011.05.31 @ 23:54:18

Time Off Btm: 2011.06.01 @ 02:59:18

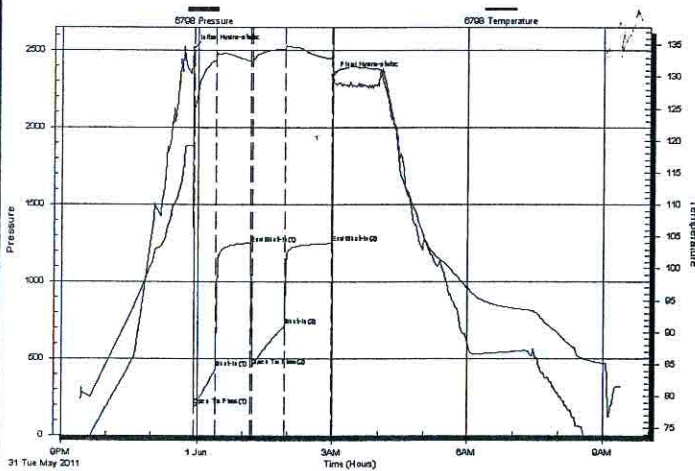
TEST COMMENT: IF: Strong Blow, BOB in 30 seconds, GTS in 10 minutes, Gauged Gas & Caught Sample

IS: Bled Off, Blow back Built To BOB in 10 minutes

FF: Strong Blow, BOB & GTS Immediate, Gauged Gas

FS: Bled Off,

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2513.68	119.29	Initial Hydro-static
2	194.88	124.69	Open To Flow (1)
31	435.33	132.70	Shut-In(1)
77	1245.71	132.35	End Shut-In(1)
79	446.81	132.39	Open To Flow (2)
122	710.53	134.35	Shut-In(2)
184	1247.44	132.84	End Shut-In(2)
185	2340.34	131.10	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	2197 GIP	0.00
240.00	Salt Water	1.66
453.00	GSY OMCW 25%G 5%O 24%M 46%W	6.35
315.00	GSY WCM 52%G 10%W 14%M 24%O	4.42
1613.00	GSY O 20%G 80%O	22.63

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.50	6.00	137.61
Last Gas Rate	0.25	3.00	27.60
Max. Gas Rate	0.50	6.00	137.61



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charles N Griffin

Ash #1

PO Box 347
Pratt, KS 67124

34-32S-12W Barber,KS

Job Ticket: 042450

DST#: 2

ATTN: Bruce Reed

Test Start: 2011.05.31 @ 21:25:48

Tool Information

Drill Pipe:	Length: 4631.00 ft	Diameter: 3.80 inches	Volume: 64.96 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 187.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose: 74000.00 lb
		Total Volume: 65.88 bbl		Tool Chased ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 69000.00 lb
Depth to Top Packer:	4818.00 ft			Final 73000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	22.00 ft			
Tool Length:	49.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4796.00	
Hydraulic tool	5.00			4801.00	
Jars	5.00			4806.00	
Safety Joint	2.00			4808.00	
Packer	5.00			4813.00	27.00 Bottom Of Top Packer
Packer	5.00			4818.00	
Stubb	1.00			4819.00	
Recorder	0.00	6798	Inside	4819.00	
Recorder	0.00	8367	Outside	4819.00	
Perforations	18.00			4837.00	
Bullnose	3.00			4840.00	22.00 Bottom Packers & Anchor

Total Tool Length: 49.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charles N Griffin

Ash #1

PO Box 347
Pratt, KS 67124

34-32S-12W Barber,KS

Job Ticket: 042450

DST#: 2

ATTN: Bruce Reed

Test Start: 2011.05.31 @ 21:25:48

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

45.8 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

90000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	2197 GIP	0.000
240.00	Salt Water	1.663
453.00	GSY OMCW 25%G 5%O 24%M 46%W	6.354
315.00	GSY WCM 52%G 10%W 14%M 24%O	4.419
1613.00	GSY O 20%G 80%O	22.626

Total Length: 2621.00 ft Total Volume: 35.062 bbl

Num Fluid Samples: 1

Num Gas Bombs: 0

Serial #:

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments: Gravity 47 @ 72 degrees (45.8 Corrected)

RW .09 @ 70 degrees



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

GAS RATES

Charles N Griffin

Ash #1

PO Box 347
Pratt, KS 67124

34-32S-12W Barber, KS

Job Ticket: 042450

DST#: 2

ATTN: Bruce Reed

Test Start: 2011.05.31 @ 21:25:48

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	20	0.50	6.00	137.61
1	20	0.50	6.00	137.61
1	30	0.25	4.00	29.19
2	5	0.25	2.00	26.02
2	10	0.25	2.00	26.02
2	20	0.25	2.00	26.02
2	30	0.25	3.00	27.60
2	40	0.25	3.00	27.60

