



DRILL STEM TEST REPORT

Prepared For: **Charles N Griffin**

PO Box 347
Pratt, KS 67124

ATTN: Bruce Reed

31-33S-8W Harper KS

#1 Leysa

Start Date: 2010.12.31 @ 15:29:52

End Date: 2010.12.31 @ 20:54:07

Job Ticket #: 039267 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

#1 Leysa

PO Box 347
Pratt, KS 67124

31-33S-8W Harper KS

Job Ticket: 039267

DST#: 1

ATTN: Bruce Reed

Test Start: 2010.12.31 @ 15:29:52

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:01:07

Time Test Ended: 20:54:07

Test Type: Conventional Bottom Hole

Tester: Leal Cason

Unit No: 45

Interval: 4445.00 ft (KB) To 4515.00 ft (KB) (TVD)

Total Depth: 4515.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1316.00 ft (KB)

1305.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6798

Inside

Press@RunDepth: psig @ 4446.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.12.31

End Date: 2010.12.31

Last Calib.: 2010.12.31

Start Time: 15:29:53

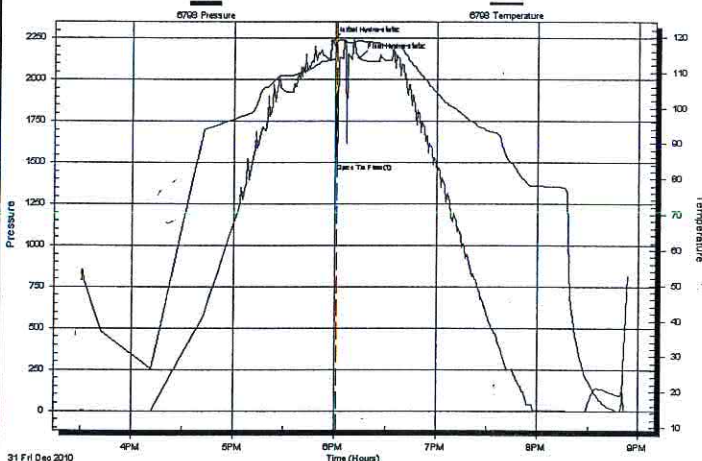
End Time: 20:54:07

Time On Btm: 2010.12.31 @ 17:57:52

Time Off Btm: 2010.12.31 @ 18:13:52

TEST COMMENT: Packer Failure, tried to set 3 times, then pulled test

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2234.15	113.61	Initial Hydro-static
4	1441.57	119.25	Open To Flow (1)
16	2133.75	118.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
420.00	DRLG Mud	5.89

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charles N Griffin

#1 Leysa

PO Box 347
Pratt, KS 67124

31-33S-8W Harper KS

Job Ticket: 039267

DST#: 1

ATTN: Bruce Reed

Test Start: 2010.12.31 @ 15:29:52

Tool Information

Drill Pipe:	Length: 4451.00 ft	Diameter: 3.80 inches	Volume: 62.44 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: 40000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 62.44 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 61000.00 lb
Depth to Top Packer:	4445.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	70.00 ft			
Tool Length:	90.00 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			4430.00	
Hydraulic tool	5.00			4435.00	
Packer	5.00			4440.00	20.00 Bottom Of Top Packer
Packer	5.00			4445.00	
Stubb	1.00			4446.00	
Recorder	0.00	6798	Inside	4446.00	
Recorder	0.00	8367	Outside	4446.00	
Perforations	3.00			4449.00	
Drill Pipe	32.00			4481.00	
Perforations	31.00			4512.00	
Bullnose	3.00			4515.00	70.00 Bottom Packers & Anchor

Total Tool Length: 90.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charles N Griffin

#1 Leysa

PO Box 347
Pratt, KS 67124

31-33S-8W Harper KS

Job Ticket: 039267

DST#: 1

ATTN: Bruce Reed

Test Start: 2010.12.31 @ 15:29:52

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 45.00 sec/qt

Water Loss: 12.58 in³

Resistivity: ohm.m

Salinity: 9000.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API: deg API

Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
420.00	DRLG Mud	5.891

Total Length: 420.00 ft Total Volume: bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

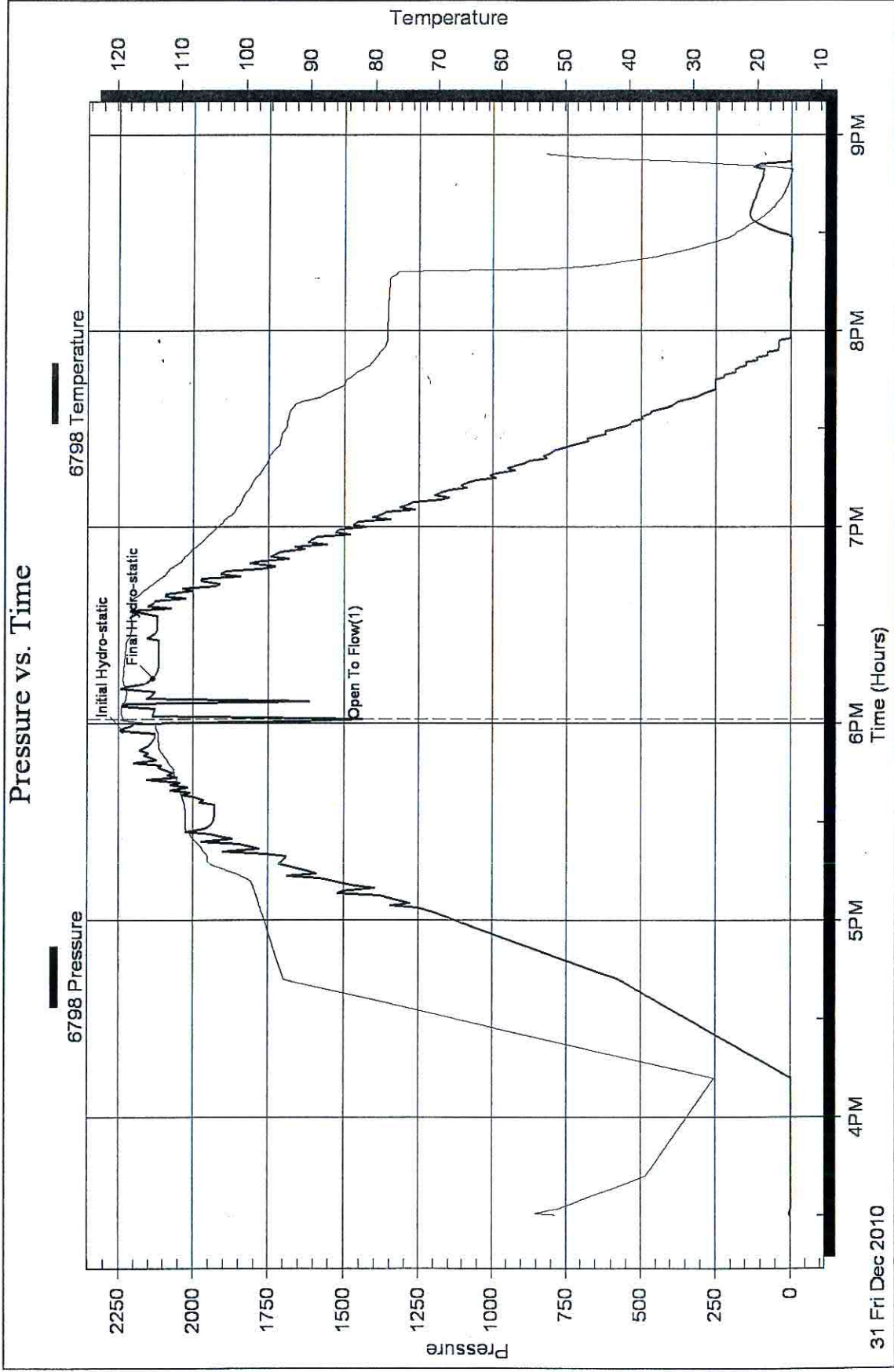
Serial #: 6798

Inside

Charles N Griffin

31-33S-8W Harper KS

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Charles N Griffin**

PO Box 347
Pratt, KS 67124

ATTN: Bruce Reed

31-33S-8W Harper KS

#1 Leysa

Start Date: 2011.01.01 @ 04:05:16

End Date: 2011.01.01 @ 11:15:01

Job Ticket #: 039268 DST #: 2

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

#1 Leysa

PO Box 347
Pratt, KS 67124

31-33S-8W Harper KS

Job Ticket: 039268

DST#: 2

ATTN: Bruce Reed

Test Start: 2011.01.01 @ 04:05:16

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:30:46

Time Test Ended: 11:15:01

Test Type: Conventional Bottom Hole

Tester: Leal Cason

Unit No: 45

Interval: 4502.00 ft (KB) To 4515.00 ft (KB) (TVD)

Reference Elevations: 1316.00 ft (KB)

Total Depth: 4515.00 ft (KB) (TVD)

1305.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 6798

Inside

Press@RunDepth: 47.46 psig @ 4503.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.01.01 End Date: 2011.01.01

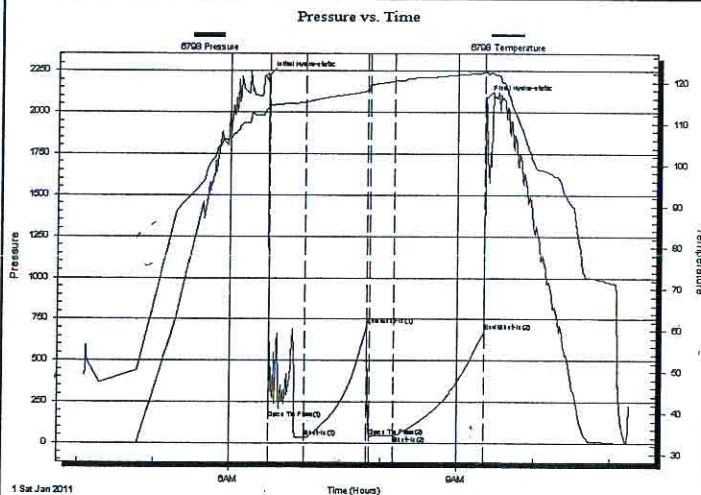
Last Calib.: 2011.01.01

Start Time: 04:05:17 End Time: 11:15:01

Time On Btm: 2011.01.01 @ 06:30:01

Time Off Btm: 2011.01.01 @ 09:21:46

TEST COMMENT: IF: Weak Blow, Built to 4 1/2 inches
IS: Bled Off, No Blow back
FF: Weak Blow, Built To 2 1/2 inches
FS: Bled Off, No Blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2223.27	113.92	Initial Hydro-static
1	143.77	114.13	Open To Flow (1)
30	36.15	115.19	Shut-In(1)
79	710.13	117.86	End Shut-In(1)
81	42.53	119.58	Open To Flow (2)
100	47.46	120.34	Shut-In(2)
172	674.44	122.28	End Shut-In(2)
172	2082.71	122.57	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	VSOSM <1% O >99%M	0.84
20.00	SGCM 2%g 98%M	0.28

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Charles N Griffin

#1 Leysa

PO Box 347
Pratt, KS 67124

31-33S-8W Harper KS

Job Ticket: 039268

DST#: 2

ATTN: Bruce Reed

Test Start: 2011.01.01 @ 04:05:16

Tool Information

Drill Pipe:	Length: 4489.00 ft	Diameter: 3.80 inches	Volume: 62.97 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 62.97 bbl</u>	Tool Chased: ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4502.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	13.00 ft			
Tool Length:	33.00 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			4487.00	
Hydraulic tool	5.00			4492.00	
Packer	5.00			4497.00	20.00 Bottom Of Top Packer
Packer	5.00			4502.00	
Stubb	1.00			4503.00	
Recorder	0.00	6798	Inside	4503.00	
Recorder	0.00	8367	Outside	4503.00	
Perforations	9.00			4512.00	
Bullnose	3.00			4515.00	13.00 Bottom Packers & Anchor
Total Tool Length:	33.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charles N Griffin

#1 Leysa

PO Box 347
Pratt, KS 67124

31-33S-8W Harper KS

Job Ticket: 039268 **DST#: 2**

ATTN: Bruce Reed

Test Start: 2011.01.01 @ 04:05:16

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: 74.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 14.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 13500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	VSOSM <1% O >99%M	0.842
20.00	SGCM 2%g 98%M	0.281

Total Length: 80.00 ft

Total Volume: 1.123 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

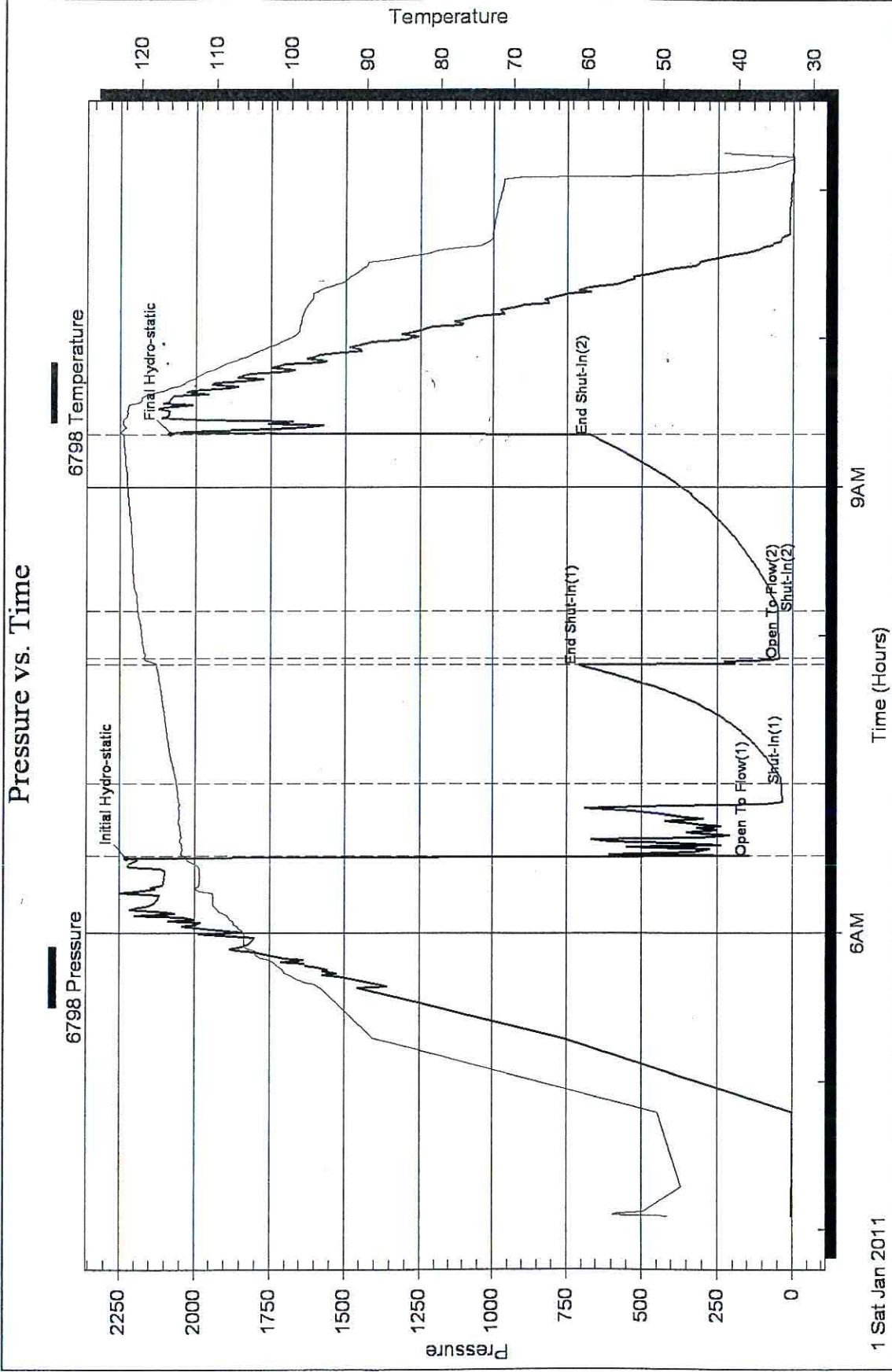
Serial #: 6798

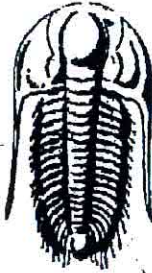
Inside Charles N Griffin

31-33S-8W Harper KS

DST Test Number: 2

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Charles N Griffin**

PO Box 347
Pratt, KS 67124

ATTN: Bruce Reed

31-33S-8W Harper KS

#1 Leysa

Start Date: 2011.01.01 @ 21:07:09

End Date: 2011.01.02 @ 04:48:54

Job Ticket #: 039269 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Charles N Griffin

#1 Leysa

31-33S-8W Harper KS

DST # 3

Mississippi

2011.01.01



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Charles N Griffin

#1 Leysa

PO Box 347
Pratt, KS 67124

31-33S-8W Harper KS

Job Ticket: 039269

DST#: 3

ATTN: Bruce Reed

Test Start: 2011.01.01 @ 21:07:09

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:16:54

Time Test Ended: 04:48:54

Test Type: Conventional Bottom Hole

Tester: Leal Cason

Unit No: 45

Interval: 4530.00 ft (KB) To 4550.00 ft (KB) (TVD)

Reference Elevations: 1316.00 ft (KB)

Total Depth: 4550.00 ft (KB) (TVD)

1305.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 6798

Inside

Press@RunDepth: 23.63 psig @ 4531.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.01.01

End Date: 2011.01.02

Last Calib.: 2011.01.02

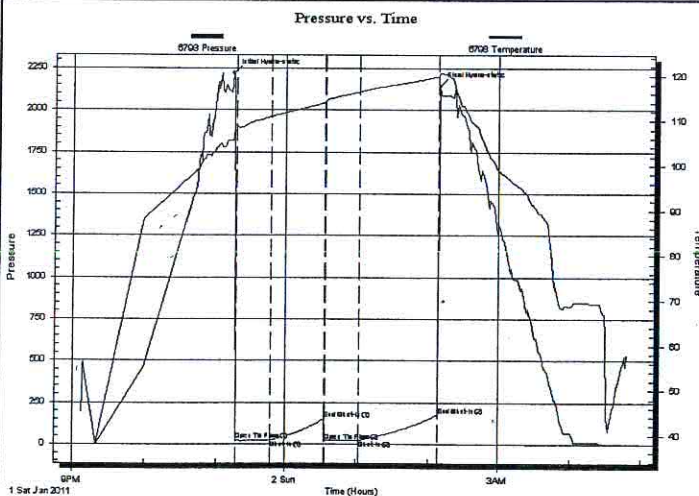
Start Time: 21:07:10

End Time: 04:48:54

Time On Btm: 2011.01.01 @ 23:14:39

Time Off Btm: 2011.01.02 @ 02:09:09

TEST COMMENT: IF: Weak Blow, 2 inches
IS: Bled Off, No Blow back
FF: Weak Blow, 1 1/2 inches
FS: Bled Off, No Blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2221.62	106.07	Initial Hydro-static
3	22.11	107.54	Open To Flow (1)
33	22.61	110.95	Shut-In(1)
79	152.08	114.03	End Shut-In(1)
79	19.53	114.00	Open To Flow (2)
108	23.63	116.49	Shut-In(2)
174	176.59	119.83	End Shut-In(2)
175	2145.95	120.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud	0.28

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charles N Griffin

#1 Leysa

PO Box 347
Pratt, KS 67124

31-33S-8W Harper KS

Job Ticket: 039269

DST#: 3

ATTN: Bruce Reed

Test Start: 2011.01.01 @ 21:07:09

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: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 14.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 13500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	Mud	0.281

Total Length: 20.00 ft

Total Volume: 0.281 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6798

Inside

Charles N Griffin

31-33S-8W Harper KS

DST Test Number: 3

Pressure vs. Time

