



DRILL STEM TEST REPORT

Prepared For: **Phillips Exploration Co. LC**

1601 Sagebrush
Wichita Ks 67230-7010

ATTN: James B. Phillips

7 18S 24W Ness KS

Miner 2-7

Start Date: 2010.07.25 @ 13:58:30

End Date: 2010.07.25 @ 20:34:30

Job Ticket #: 36210 DST #: 1

Trilobite Testing, Inc
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TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Phillips Exploration Co. LC

Miner 2-7

1601 Sagebrush
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ATTN: James B. Phillips

Job Ticket: 36210

DST#: 1

Test Start: 2010.07.25 @ 13:58:30

GENERAL INFORMATION:

Formation: **Cherokee Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:43:30

Time Test Ended: 20:34:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Jeff Brown

Unit No: 44

Interval: 4286.00 ft (KB) To 4366.00 ft (KB) (TVD)

Reference Elevations: 2338.00 ft (KB)

Total Depth: 4366.00 ft (KB) (TVD)

2333.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8321

Inside

Press@RunDepth: 40.22 psig @ 4289.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.07.25

End Date:

2010.07.25

Last Calib.:

2010.07.25

Start Time: 13:58:31

End Time:

20:34:30

Time On Btm:

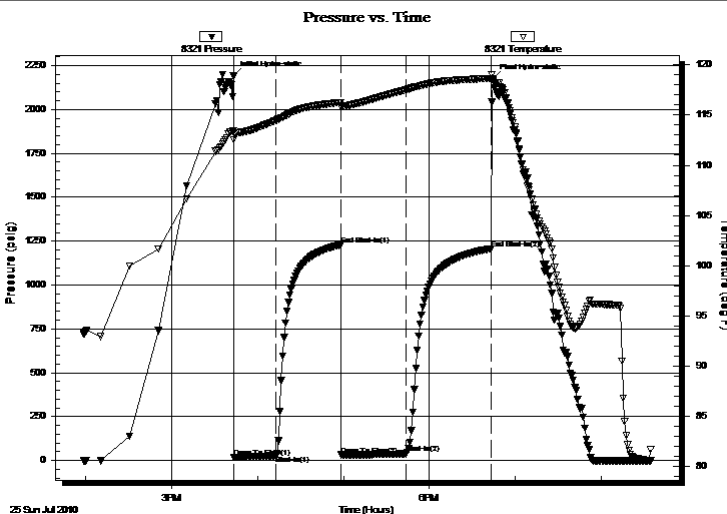
2010.07.25 @ 15:43:00

Time Off Btm:

2010.07.25 @ 18:44:30

TEST COMMENT: IFP-Weak blow built to 1 1/4 in
ISI-Dead no blow back
FFP-Weak blow built to 1/4 in
FSI-Dead no blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2191.32	113.43	Initial Hydro-static
1	18.44	112.57	Open To Flow (1)
30	27.50	114.47	Shut-In(1)
75	1228.98	116.26	End Shut-In(1)
76	31.82	115.83	Open To Flow (2)
121	40.22	117.52	Shut-In(2)
180	1207.58	118.65	End Shut-In(2)
182	2174.60	118.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	WM45%W55%M	0.15
21.00	MW35%M 65%W	0.29

Gas Rates

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



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TOOL DIAGRAM

Phillips Exploration Co. LC

Miner 2-7

1601 Sagebrush
Wichita Ks 67230-7010

7 18S 24W Ness KS

Job Ticket: 36210

DST#: 1

ATTN: James B. Phillips

Test Start: 2010.07.25 @ 13:58:30

Tool Information

Drill Pipe:	Length: 4248.00 ft	Diameter: 3.80 inches	Volume: 59.59 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 27.00 inches	Volume: 0.00 bbl	Weight set on Packer: 2500.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 64000.00 lb
			<u>Total Volume: 59.74 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4286.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	80.00 ft			
Tool Length:	109.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4258.00	
Shut In Tool	5.00			4263.00	
Hydraulic tool	5.00			4268.00	
Jars	5.00			4273.00	
Safety Joint	3.00			4276.00	
Packer	5.00			4281.00	29.00 Bottom Of Top Packer
Packer	5.00			4286.00	
Stubb	1.00			4287.00	
Perforations	1.00			4288.00	
Change Over Sub	1.00			4289.00	
Recorder	0.00	8321	Inside	4289.00	
Recorder	0.00	8672	Outside	4289.00	
Drill Pipe	63.00			4352.00	
Change Over Sub	1.00			4353.00	
Perforations	10.00			4363.00	
Bullnose	3.00			4366.00	80.00 Bottom Packers & Anchor
Total Tool Length:	109.00				



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FLUID SUMMARY

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Miner 2-7

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7 18S 24W Ness KS

Job Ticket: 36210

DST#: 1

ATTN: James B. Phillips

Test Start: 2010.07.25 @ 13:58:30

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

18000 ppm

Viscosity: 49.00 sec/l

Cushion Volume:

bbbl

Water Loss: 9.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4600.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
30.00	WM45%W55%M	0.148
21.00	MW35%M 65%W	0.295

Total Length: 51.00 ft Total Volume: 0.443 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

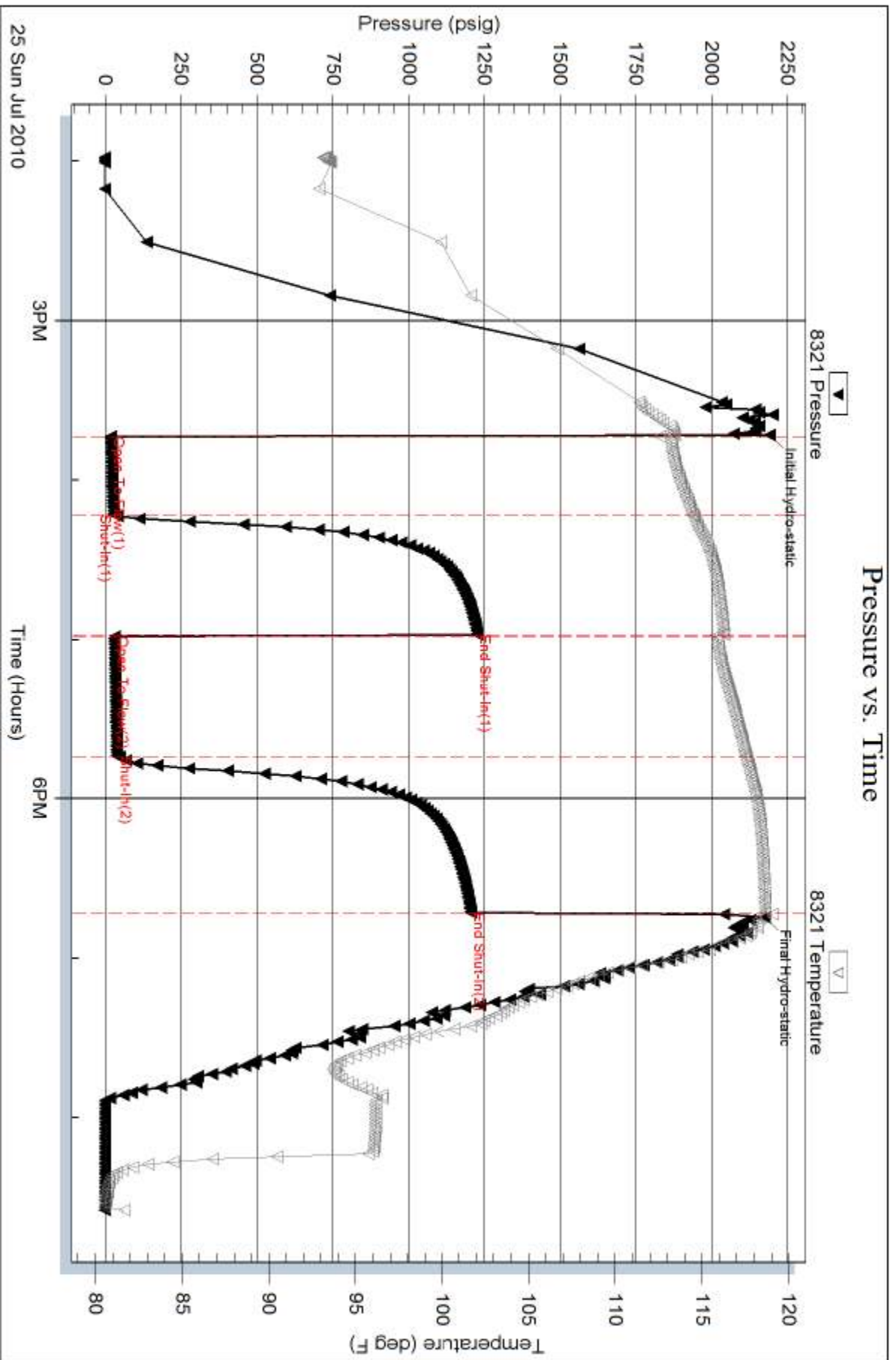
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .328 @ 80.1F = 18000 chlorides

Pressure vs. Time

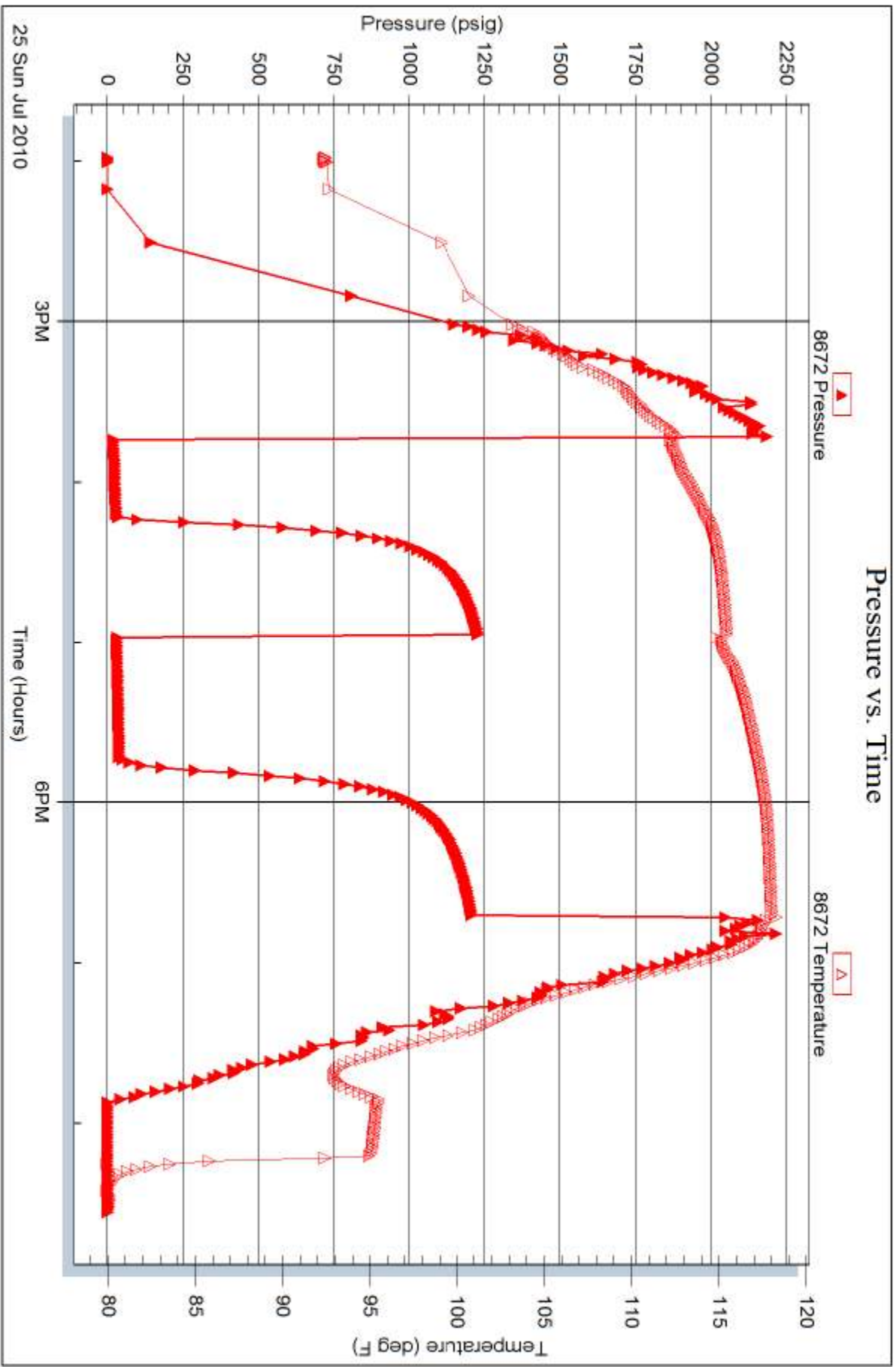


Serial #: 8672

Outside Phillips Exploration Co. LC

7 18S 24W Ness KS

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 36210

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