



DRILL STEM TEST REPORT

Prepared For: **Castelli Exploration, Inc.**

6908 NW 112th
Oklahoma City OK 73162

ATTN: Rick Popp

Einsel A #4

24-33s-17w Comanche, KS

Start Date: 2014.01.19 @ 20:40:00

End Date: 2014.01.20 @ 07:30:15

Job Ticket #: 55499 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.01.23 @ 14:03:48



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Castelli Exploration, Inc.
 6908 NW 112th
 Oklahoma City OK 73162
 ATTN: Rick Popp

24-33s-17w Comanche, KS

Einsel A #4

Job Ticket: 55499

DST#: 1

Test Start: 2014.01.19 @ 20:40:00

GENERAL INFORMATION:

Formation: **Miss**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:53:00
 Time Test Ended: 07:30:15
 Interval: **5215.00 ft (KB) To 5270.00 ft (KB) (TVD)**
 Total Depth: 5700.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Straddle (Initial)
 Tester: Brett Dickinson
 Unit No: 59
 Reference Elevations: 1854.00 ft (KB)
 1842.00 ft (CF)
 KB to GR/CF: 12.00 ft

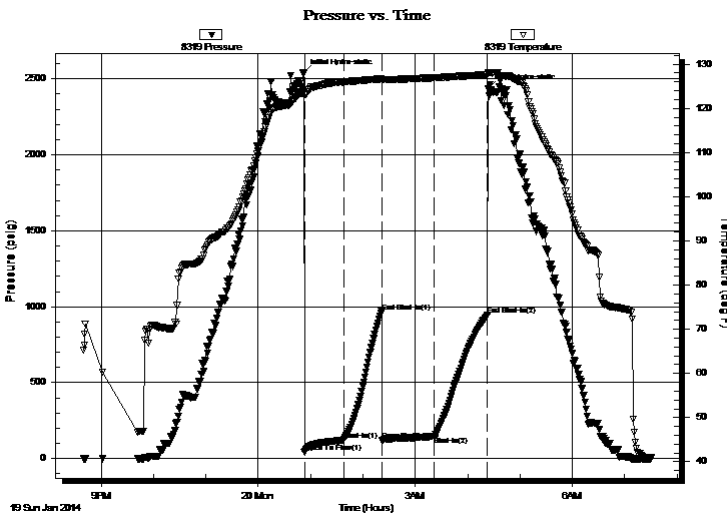
Serial #: 8319

Inside

Press@RunDepth: 145.17 psig @ 5266.00 ft (KB)
 Start Date: 2014.01.19 End Date: 2014.01.20
 Start Time: 20:40:05 End Time: 07:30:15
 Capacity: 8000.00 psig
 Last Calib.: 2014.01.20
 Time On Btm: 2014.01.20 @ 00:52:30
 Time Off Btm: 2014.01.20 @ 04:24:00

TEST COMMENT: IF-9" blow
 IS-No blow
 FF-6" blow
 FS-No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2538.82	123.72	Initial Hydro-static
1	41.62	123.06	Open To Flow (1)
46	122.30	126.00	Shut-In(1)
89	968.65	126.70	End Shut-In(1)
90	119.66	126.45	Open To Flow (2)
150	145.17	126.94	Shut-In(2)
211	946.95	127.60	End Shut-In(2)
212	2437.38	128.06	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
230.00	WCM 20%W 80%M	1.13

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Castelli Exploration, Inc.
 6908 NW 112th
 Oklahoma City OK 73162
 ATTN: Rick Popp

24-33s-17w Comanche, KS
Einsel A #4
 Job Ticket: 55499 **DST#: 1**
 Test Start: 2014.01.19 @ 20:40:00

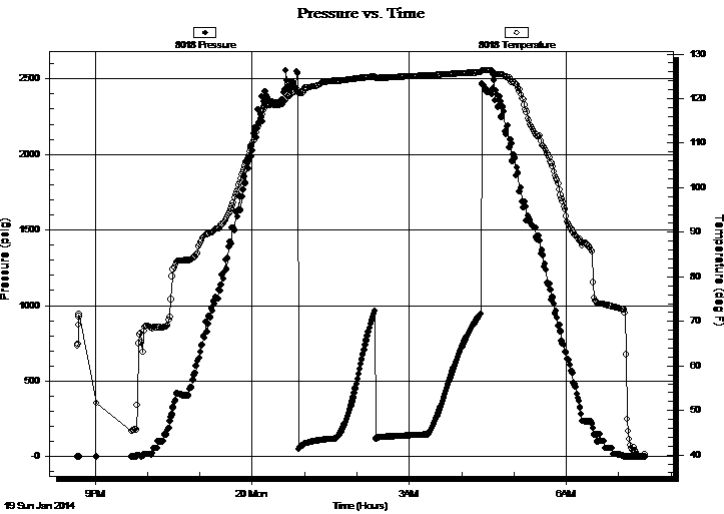
GENERAL INFORMATION:

Formation: **Miss**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Straddle (Initial)
 Time Tool Opened: 00:53:00 Tester: Brett Dickinson
 Time Test Ended: 07:30:15 Unit No: 59
Interval: 5215.00 ft (KB) To 5270.00 ft (KB) (TVD)
 Reference Elevations: 1854.00 ft (KB)
 Total Depth: 5700.00 ft (KB) (TVD) 1842.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 12.00 ft

Serial #: 8018 Outside

Press@RunDepth: psig @ 5266.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.01.19 End Date: 2014.01.20 Last Calib.: 2014.01.20
 Start Time: 20:40:05 End Time: 07:30:00 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF-9" blow
 IS-No blow
 FF-6" blow
 FS-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
230.00	WCM 20%W 80%M	1.13

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Castelli Exploration, Inc.

24-33s-17w Comanche, KS

6908 NW 112th
Oklahoma City OK 73162

Einsel A #4

Job Ticket: 55499

DST#: 1

ATTN: Rick Popp

Test Start: 2014.01.19 @ 20:40:00

Tool Information

Drill Pipe:	Length: 4915.00 ft	Diameter: 3.80 inches	Volume: 68.94 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 279.00 ft	Diameter: 2.25 inches	Volume: 1.37 bbl	Weight to Pull Loose: 110000.0 lb
			<u>Total Volume: 70.31 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 101000.0 lb
Depth to Top Packer:	5215.00 ft			Final 101000.0 lb
Depth to Bottom Packer:	5270.00 ft			
Interval between Packers:	55.00 ft			
Tool Length:	516.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description

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

Change Over Sub	1.00			5188.00	
Shut In Tool	5.00			5193.00	
Hydraulic tool	5.00			5198.00	
Jars	5.00			5203.00	
Safety Joint	3.00			5206.00	
Packer	4.00			5210.00	28.00 Bottom Of Top Packer
Packer	5.00			5215.00	
Stubb	1.00			5216.00	
Perforations	5.00			5221.00	
change Over Sub	1.00			5222.00	
Blank Spacing	32.00			5254.00	
Change Over Sub	1.00			5255.00	
Perforations	11.00			5266.00	
Recorder	0.00	8319	Inside	5266.00	
Recorder	0.00	8018	Outside	5266.00	
Blank Off Sub	4.00			5270.00	55.00 Tool Interval
Packer	4.00			5274.00	
Stubb	1.00			5275.00	
Recorder	0.00	8736	Below	5275.00	
perforations	15.00			5290.00	
Change Over Sub	1.00			5291.00	
Blank Spacing	406.00			5697.00	
Change Over Sub	1.00			5698.00	
Perforations	2.00			5700.00	
Bullnose	3.00			5703.00	433.00 Bottom Packers & Anchor

Total Tool Length: 516.00



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FLUID SUMMARY

Castelli Exploration, Inc.

24-33s-17w Comanche, KS

6908 NW 112th
Oklahoma City OK 73162

Einsel A #4

Job Ticket: 55499

DST#: 1

ATTN: Rick Popp

Test Start: 2014.01.19 @ 20:40:00

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:

55000 ppm

Viscosity: 63.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
230.00	WCM 20%W 80%M	1.131

Total Length: 230.00 ft Total Volume: 1.131 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

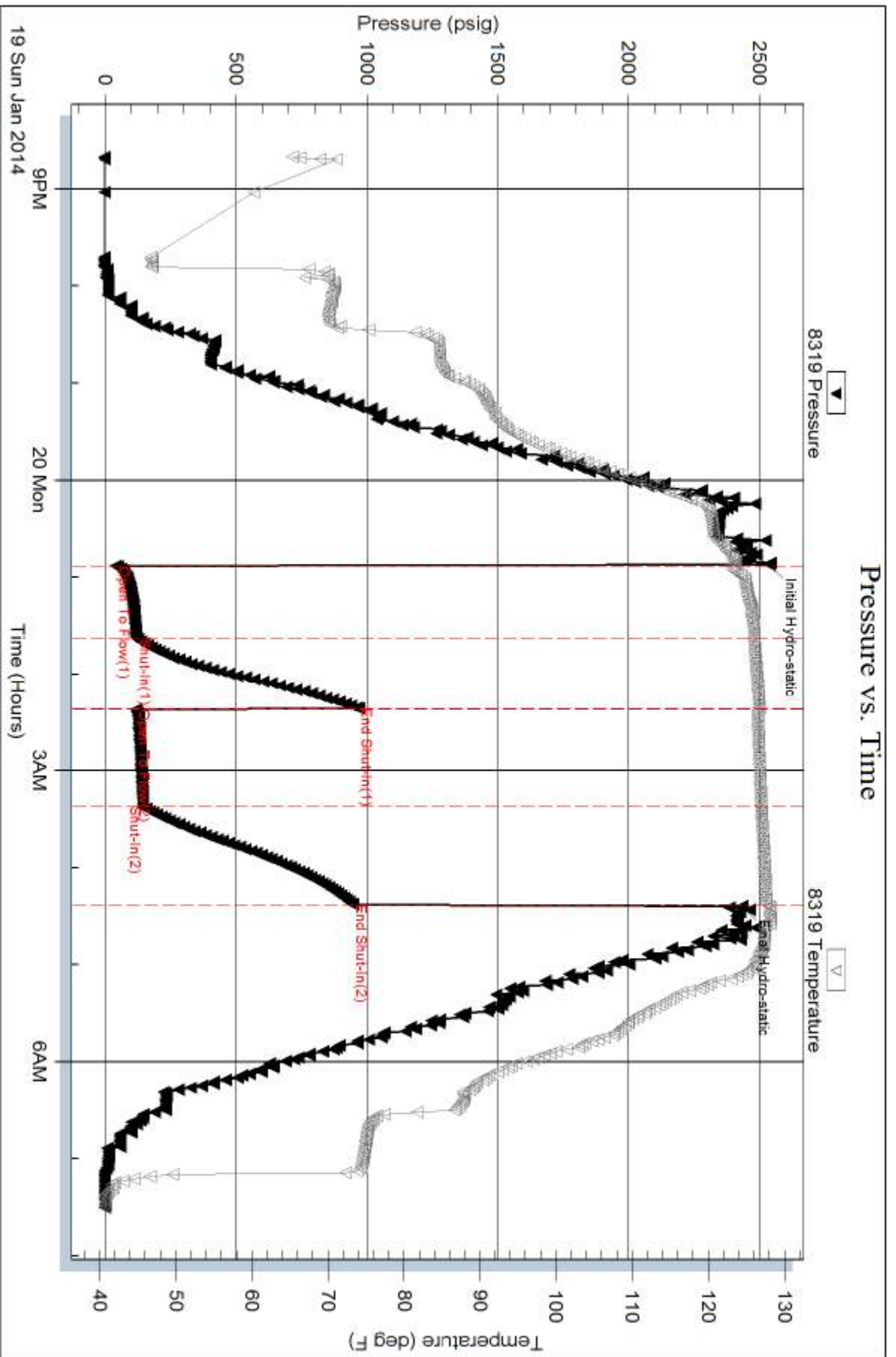
Serial #: 8319

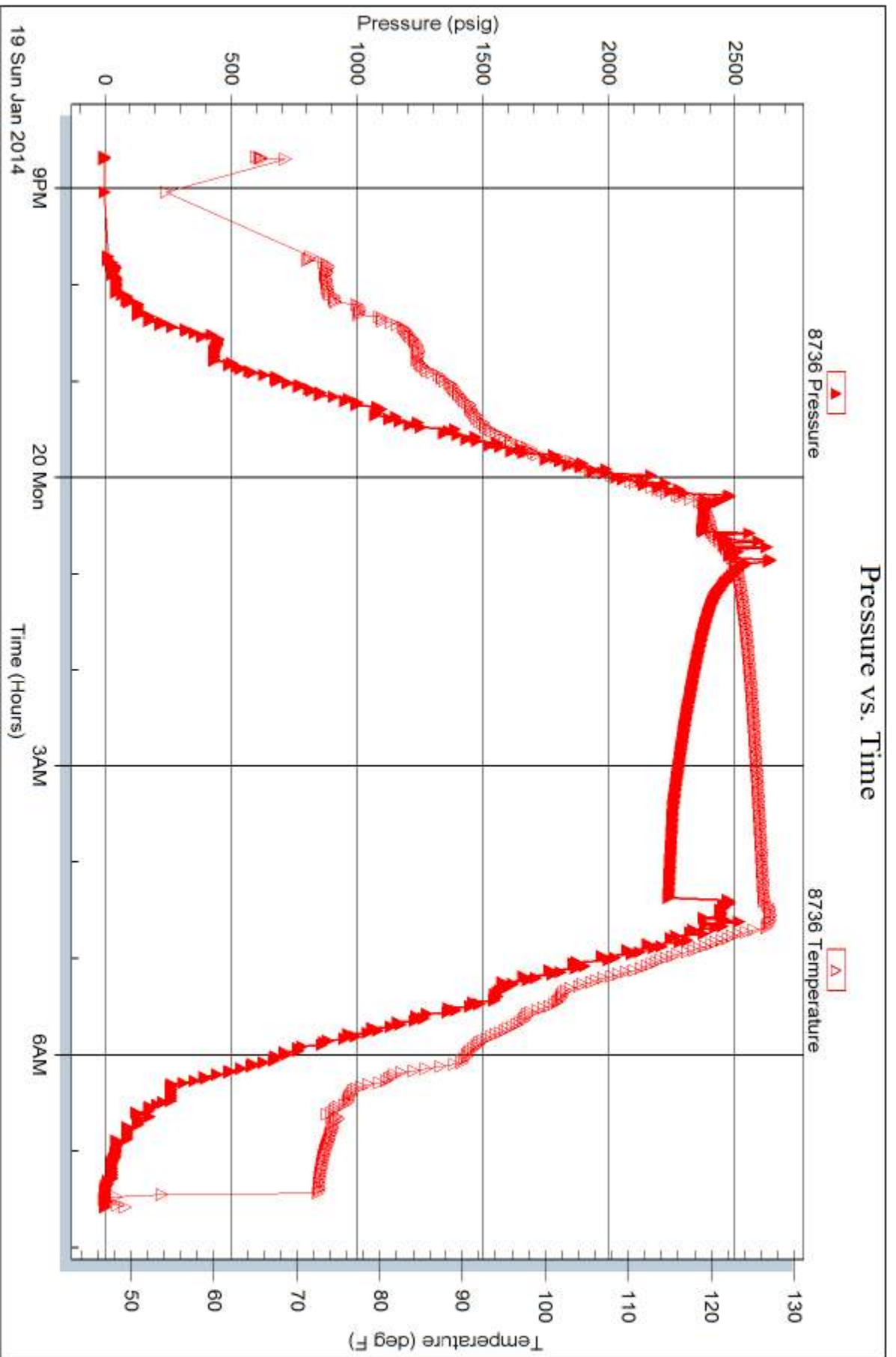
Inside

Castelli Exploration, Inc.

Ensel A #4

DST Test Number: 1



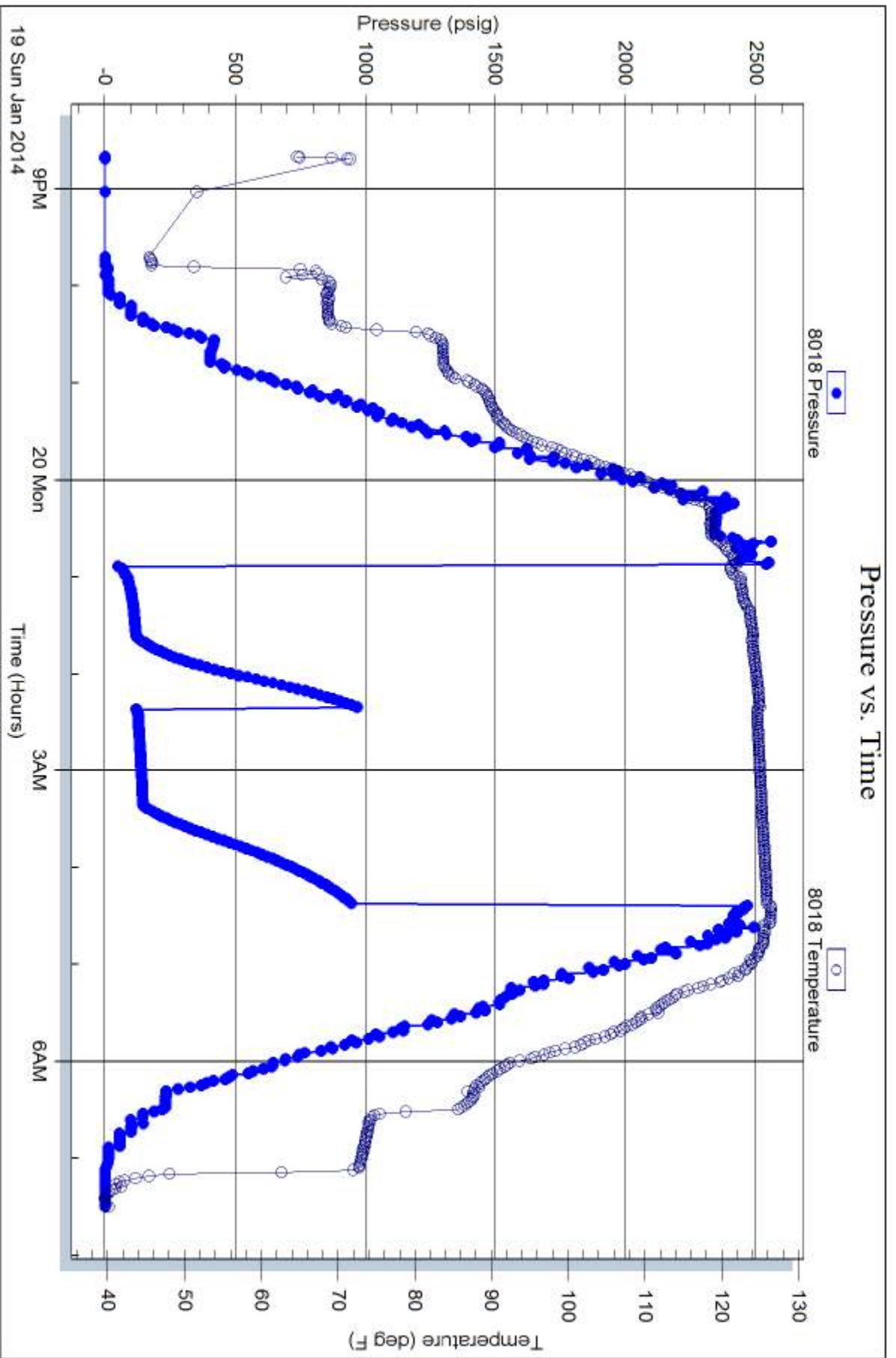


Serial #: 8018

Outside Castell Exploration, Inc.

Ensel A #4

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 55499

Printed: 2014.01.23 @ 14:03:50



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 55499

4/10

Well Name & No. Einsel A #4 Test No. 1 Date 1/19/14
 Company Castelli Exploration, Inc Elevation 1854 KB 1842 GL
 Address 6908 NW 112th Oklahoma City OK 73162
 Co. Rep / Geo. Popp Rig Duke #6
 Location: Sec. 24 Twp. 33 Rge. 17 Co. Comanche State KS

Interval Tested 5215 - 5270 Zone Tested Miss
 Anchor Length 55 Drill Pipe Run 4915 Mud Wt. 9.3
 Top Packer Depth 5210, 5215 Drill Collars Run 279 Vis 63
 Bottom Packer Depth 5270 Wt. Pipe Run - WL 9.0
 Total Depth 5700 Chlorides 3000 ppm System LCM 7#

Blow Description IF-9in blow
ISZ - No blow
FF-6in blow
PSZ - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>230</u>	<u>wcm</u>			<u>70</u>	<u>80</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 230 BHT 128 Gravity _____ API RW .25 @ 40 °F Chlorides 33,000 ppm

(A) Initial Hydrostatic 2539 Test 1350 T-On Location 20:10
 (B) First Initial Flow 42 Jars 250 T-Started 20:40
 (C) First Final Flow 122 Safety Joint 75 T-Open :49
 (D) Initial Shut-In 969 Circ Sub _____ T-Pulled 4:19
 (E) Second Initial Flow 120 Hourly Standby _____ T-Out 7:30
 (F) Second Final Flow 145 Mileage 27607 126rt 195.30
 (G) Final Shut-In 947 Sampler _____
 (H) Final Hydrostatic 2437 Straddle 600
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 45
 Initial Shut-In 75
 Final Flow 60
 Final Shut-In 60

Sub Total 2470.30

Comments _____
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Sub Total 0
 Total 2470.30
 MP/DST Disc't _____

Approved By _____ Our Representative [Signature]
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