



DRILL STEM TEST REPORT

Prepared For: **Castle Resources, Inc.**

PO Box 87
Schoenchen, KS 67667

ATTN: Jerry Green

Pfannenstiel #1

11-5s-18w Phillips KS

Start Date: 2013.10.22 @ 12:25:00

End Date: 2013.10.22 @ 18:32:15

Job Ticket #: 55007 DST #: 1

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

Printed: 2013.10.25 @ 09:51:54

Castle Resources, Inc.

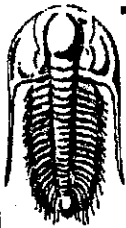
11-5s-18w Phillips KS

Pfannenstiel #1

DST # 1

LKC "A"

2013.10.22



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Castle Resources, Inc.
 PO Box 87
 Schoenchen, KS 67667
 ATTN: Jerry Green

11-5s-18w Phillips KS

Pfannenstiel.#1

Job Ticket: 55007

DST#: 1

Test Start: 2013.10.22 @ 12:25:00

GENERAL INFORMATION:

Formation: LKC "A"
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:34:45
 Time Test Ended: 18:32:15

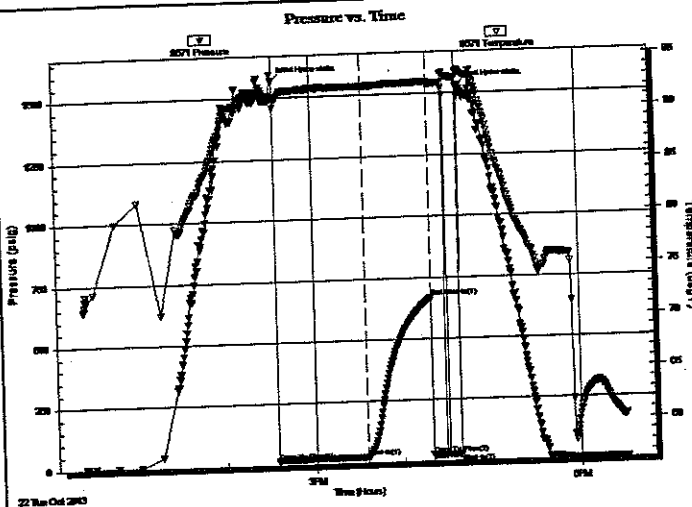
Test Type: Conventional Straddle (Initial)
 Tester: James Winder
 Unit No: 57

Interval: 3046.00 ft (KB) To 3104.00 ft (KB) (TVD)
 Total Depth: 3500.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1914.00 ft (KB)
 1909.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8671 Inside Capacity: 8000.00 psig
 Press@RunDepth: 23.08 psig @ 3047.00 ft (KB) Last Calib.: 2013.10.22
 Start Date: 2013.10.22 End Date: 2013.10.22
 Start Time: 12:25:05 End Time: 18:32:14 Time On Btm: 2013.10.22 @ 14:34:30
 Time Off Btm: 2013.10.22 @ 16:41:00

TEST COMMENT: 60 - IF: Blow built to 1", then slowly died back to 1/2" blow at close
 45 - IS: No blow back
 20 - FF: No blow, flushed tool at 10 min., surge then no blow
 Pulled tool



PRESSURE SUMMARY

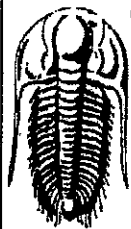
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1569.71	91.39	Initial Hydro-static
1	15.49	90.40	Open To Flow (1)
61	23.08	92.26	Shut-In(1)
106	667.97	92.52	End Shut-In(1)
106	25.36	92.22	Open To Flow (2)
125	28.07	92.82	Shut-In(2)
127	1533.34	93.65	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
25.00	Mud w/Oil spots 96% m, 3% o, 1% g	0.35

Gas Rates

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



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DRILL STEM TEST REPORT

Castle Resources, Inc.
 PO Box 87
 Schoenchen, KS 67667
 ATTN: Jerry Green

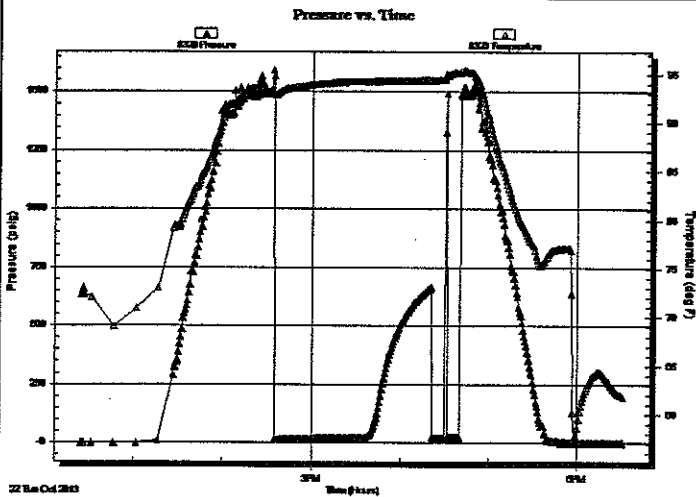
11-5s-18w Phillips KS
Pfannenstiel #1
 Job Ticket: 55007 DST#: 1
 Test Start: 2013.10.22 @ 12:25:00

GENERAL INFORMATION:

Formation: LKC "A"
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:34:45
 Time Test Ended: 18:32:15
 Interval: 3046.00 ft (KB) To 3104.00 ft (KB) (TVD)
 Total Depth: 3500.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Straddle (Initial)
 Tester: James Winder
 Unit No: 57
 Reference Elevations: 1914.00 ft (KB)
 1909.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8320 Outside
 Press@RunDepth: psig @ 3047.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.10.22 End Date: 2013.10.22 Last Calib.: 2013.10.22
 Start Time: 12:25:05 End Time: 18:32:14 Time On Btm:
 Time Off Btm:

TEST COMMENT: 60 - IF: Blow built to 1", then slowly died back to 1/2" blow at close
 45 - IS: No blow back
 20 - FF: No blow, flushed tool at 10 min., surge then no blow
 Pulled tool



PRESSURE SUMMARY

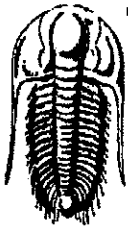
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
25.00	Mud w/Oil spots 96% m, 3% o, 1% g	0.35

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Castle Resources, Inc.
PO Box 87
Schoenchen, KS 67667

ATTN: Jerry Green

11-5s-18w Phillips KS
Pfannenstiel #1
Job Ticket: 55007 **DST#: 1**
Test Start: 2013.10.22 @ 12:25:00

GENERAL INFORMATION:

Formation: **LKC "A"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:34:45
Time Test Ended: 18:32:15

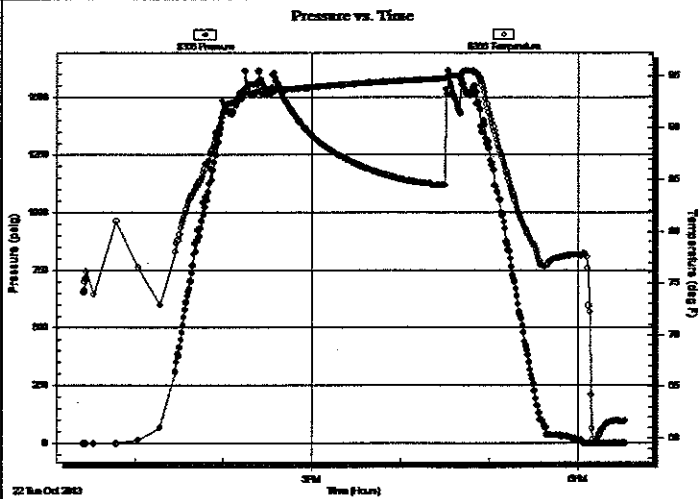
Interval: **3046.00 ft (KB) To 3104.00 ft (KB) (TVD)**
Total Depth: 3500.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Straddle (Initial)
Tester: James Winder
Unit No: 57

Reference Elevations: 1914.00 ft (KB)
1909.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8366 Below (Straddle)
Press@RunDepth: psig @ 3105.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.10.22 End Date: 2013.10.22 Last Calib.: 2013.10.22
Start Time: 12:25:05 End Time: 18:32:44 Time On Btm:
Time Off Btm:

TEST COMMENT: 60 - IF: Blow built to 1", then slowly died back to 1/2" blow at close
45 - IS: No blow back
20 - FF: No blow, flushed tool at 10 min., surge then no blow
Pulled tool



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

Recovery		
Length (ft)	Description	Volume (bbl)
25.00	Mud w/Oil spots 96%m, 3%o, 1%g	0.35

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Castle Resources, Inc.
PO Box 87
Schoenchen, KS 67667
ATTN: Jerry Green

11-5s-18w Phillips KS
Pfannenstiel #1
Job Ticket: 55007 DST#: 1
Test Start: 2013.10.22 @ 12:25:00

Tool Information

Drill Pipe:	Length: 3043.00 ft	Diameter: 3.80 inches	Volume: 42.69 bbl	Tool Weight: 2500.00 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: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 44000.00 lb
			<u>Total Volume: 42.69 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3046.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	3104.00 ft			
Interval between Packers:	58.00 ft			
Tool Length:	474.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3031.00	
Hydraulic tool	5.00			3036.00	
Packer	5.00			3041.00	20.00 Bottom Of Top Packer
Packer	5.00			3046.00	
Packer - Shale	0.00			3046.00	
Stubb	1.00			3047.00	
Recorder	0.00	8671	Inside	3047.00	
Recorder	0.00	8320	Outside	3047.00	
Perforations	15.00			3062.00	
Blank Spacing	34.00			3096.00	
Perforations	3.00			3099.00	
Blank Off Sub	1.00			3100.00	
Blank Spacing	4.00			3104.00	58.00 Tool Interval
Packer	0.00			3104.00	
Stubb	1.00			3105.00	
Recorder	0.00	8366	Below	3105.00	
Perforations	15.00			3120.00	
Blank Spacing	377.00			3497.00	
Bullnose	3.00			3500.00	396.00 Bottom Packers & Anchor
Total Tool Length:	474.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Castle Resources, Inc.

11-5s-18w Phillips KS

PO Box 87
Schoenchen, KS 67667

Pfannenstiel #1

Job Ticket: 55007

DST#: 1

ATTN: Jerry Green

Test Start: 2013.10.22 @ 12:25:00

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:	ppm
Viscosity: 59.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 900.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
25.00	Mud w/Oil spots 96%m, 3%o, 1%g	0.351

Total Length: 25.00 ft Total Volume: 0.351 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

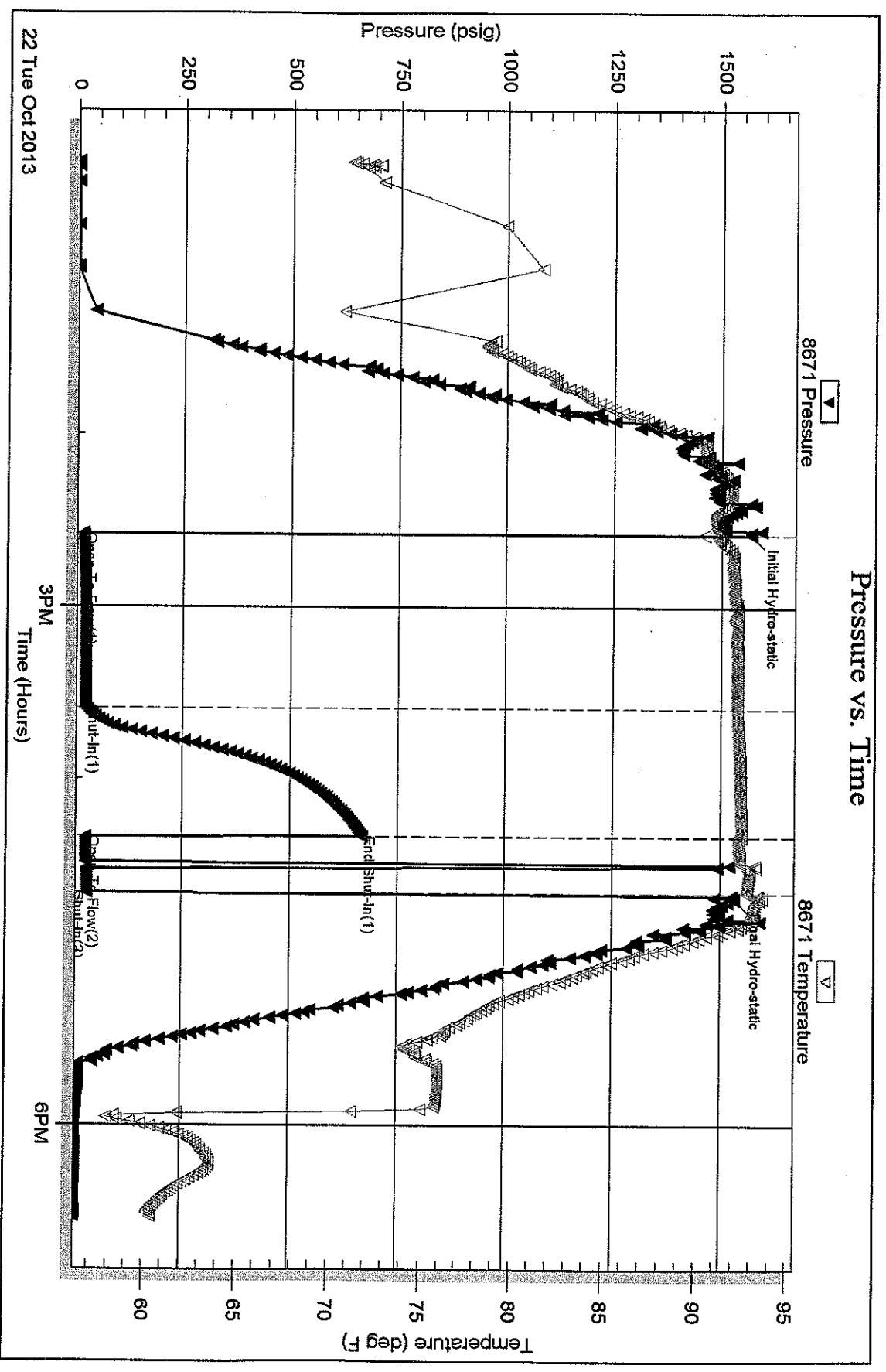
Serial #: 8671

Inside

Castle Resources, Inc.

Fracturing #1

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 55007

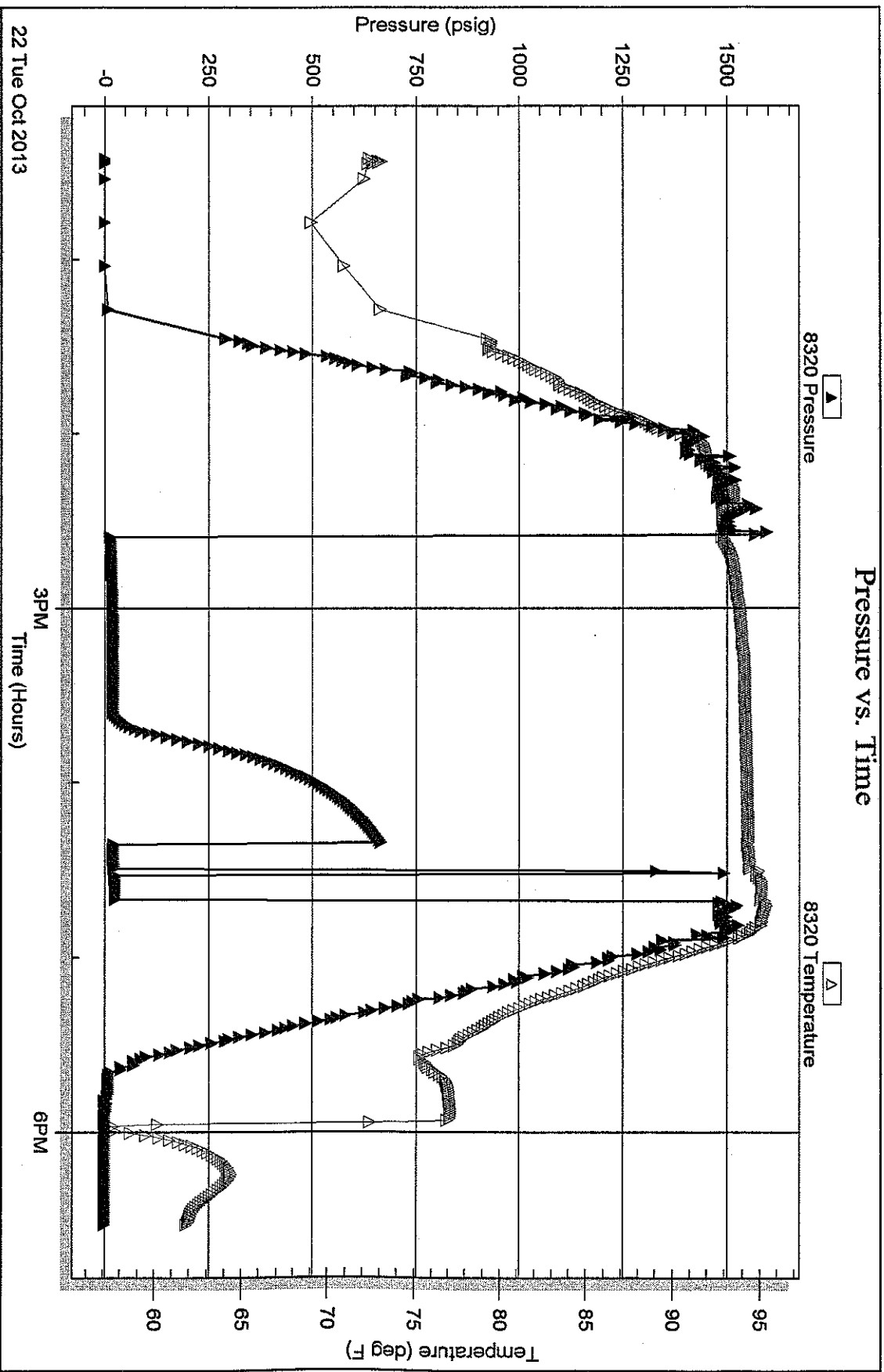
Printed: 2013.10.25 @ 09:51:56

Serial #: 8320

Outside Castle Resources, Inc.

Pfannenstiel #1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 55007

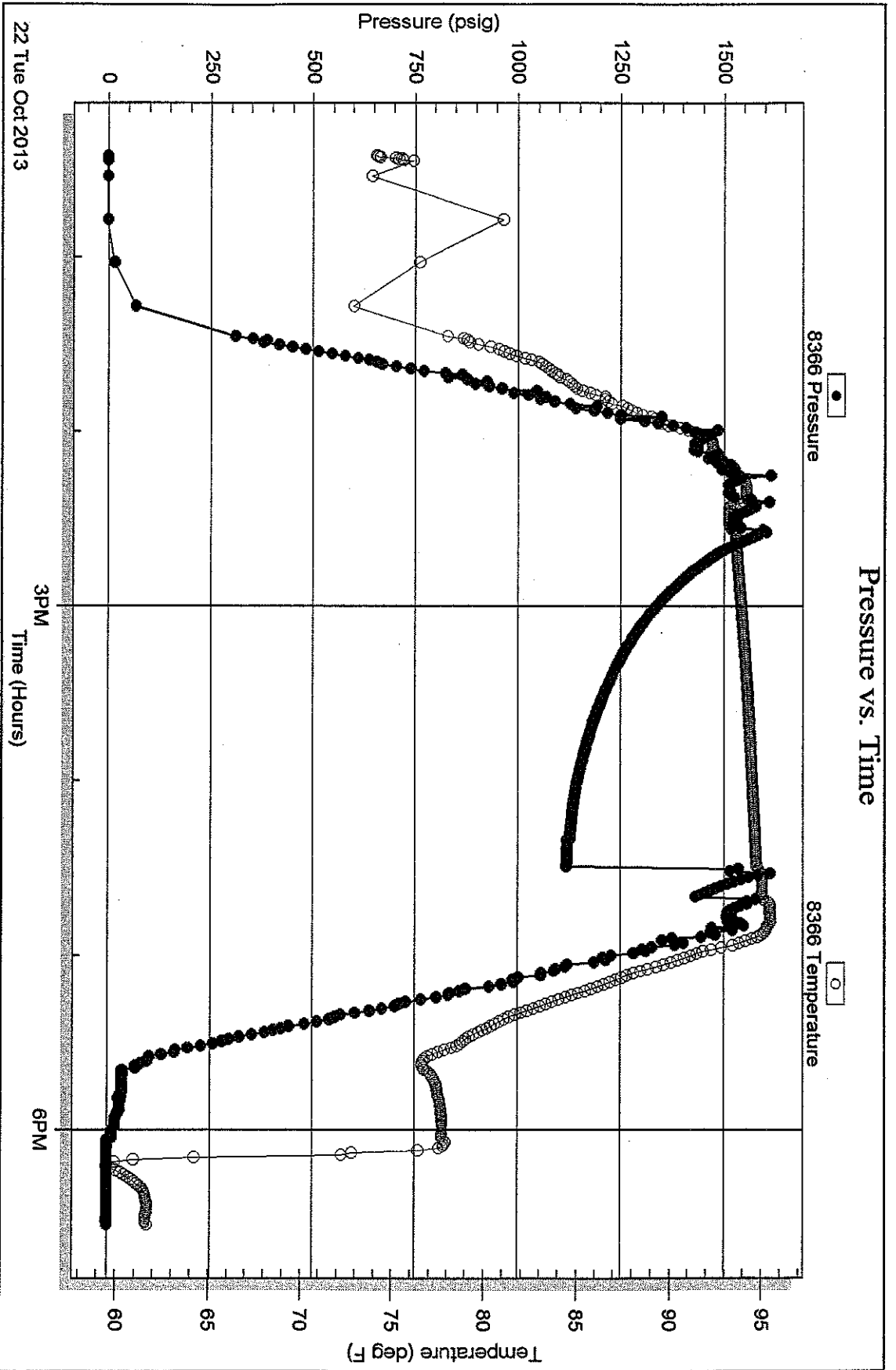
Printed: 2013.10.25 @ 09:51:56

Serial #: 8366

Below (Stratified) Resources, Inc.

Flammenstiel #1

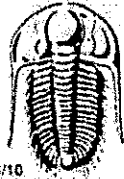
DST Test Number: 1



Triobite Testing, Inc

Ref. No: 55007

Printed: 2013.10.25 @ 09:51:56



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 55007

Well Name & No. Pfannenstiel #1 Test No. 1 Date 10-22-13
 Company Castle Resources Inc. Elevation 1914 KB 1909 GL
 Address P.O. Box 87 Schoenchen, KS 67667
 Co. Rep / Geo. Jerry Green Rig White Knight
 Location: Sec. 11 Twp. 5s Rge. 18w Co. Phillips State KS

Interval Tested 3046 - 3104 Zone Tested LKC "A"
 Anchor Length 58 Anchor 396 Tail Drill Pipe Run 3043 Mud Wt. 9.2
 Top Packer Depth 3041 3046 (shale) Drill Collars Run - Vis 59
 Bottom Packer Depth 3104 Wt. Pipe Run - WL 5.8
 Total Depth 3500 Chlorides 900 ppm System LCM 1
 Blow Description IF: Blow built to 1" then slowly died back to 1/2" at close
IST: No blowback
FF: No blow, Flushed tool at 10min., Surge then No blow
Pulled tool

Rec	Feet of	%gas	%oil	%water	%mud
<u>25</u>	<u>Mud w/oil spots</u>	<u>1</u>	<u>3</u>	<u>-</u>	<u>96</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 25 BHT _____ Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1570 Test * 1150 T-On Location 10:30
 (B) First Initial Flow 15 Jars _____ T-Started 12:25
 (C) First Final Flow 23 Safety Joint _____ T-Open 14:34
 (D) Initial Shut-In 668 Circ Sub *NA T-Pulled 16:39
 (E) Second Initial Flow 25 Hourly Standby _____ T-Out 18:30
 (F) Second Final Flow 28 Mileage 114 RT 176.70 Comments _____
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic 1533 Straddle * 600 Ruined Shale Packer _____
 Shale Packer * 250 Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 2176.70
 Accessibility _____ MP/DST Disc't _____
 Sub Total 2176.70

Approved By _____ Our Representative James Winder
 TriLOBITE TESTING Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.