

DRILL STEM TEST REPORT

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

PO Box 87
Schoenchen, KS 67667

ATTN: Jerry Green

Juenemann #1

29-3s-24w Norton,KS

Start Date: 2013.12.05 @ 09:08:00

End Date: 2013.12.05 @ 16:25:45

Job Ticket #: 55878 DST #: 1

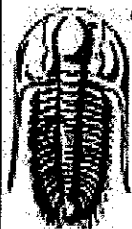
Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.12.06 @ 10:53:47

Castle Resources, Inc. 29-3s-24w Norton,KS Juenemann #1 DST # 1 Reagan Sand - Granit 2013.12.05



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Castle Resources, Inc.

29-3s-24w Norton, KS

PO Box 87
Schoenchen, KS 67667

Juenemann #1

Job Ticket: 55878

DST#: 1

ATTN: Jerry Green

Test Start: 2013.12.05 @ 09:08:00

GENERAL INFORMATION:

Formation: Reagan Sand - Granit

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:40:30

Time Test Ended: 16:25:45

Test Type: Conventional Bottom Hole (Initial)

Tester: James Winder

Unit No: 57

Interval: 3566.00 ft (KB) To 3725.00 ft (KB) (TVD)

Total Depth: 3725.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2354.00 ft (KB)

2349.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8671

Inside

Press@RunDepth: psig @ 3567.00 ft (KB)

Start Date: 2013.12.05 End Date: 2013.12.05

Start Time: 09:08:05 End Time: 16:25:44

Capacity: 8000.00 psig

Last Calib.: 2013.12.05

Time On Btm: 2013.12.05 @ 12:40:00

Time Off Btm: 2013.12.05 @ 13:31:00

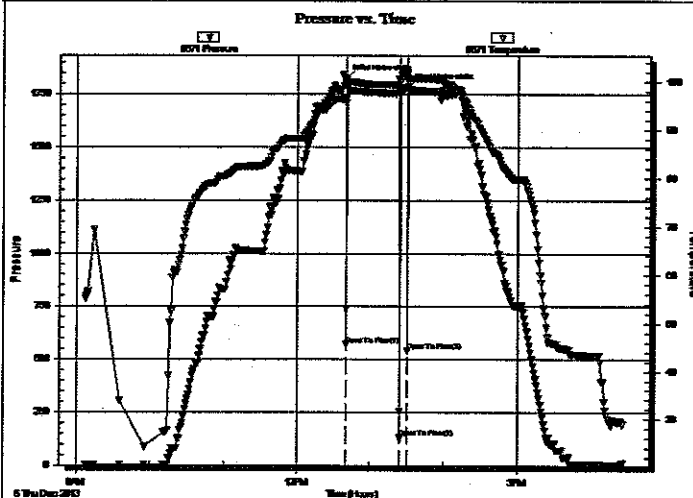
TEST COMMENT:

Mis-Run

Packers didn't hold

Reset tool & tried 2 more times - packers still didn't hold

Pulled tool



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1821.80	96.34	Initial Hydro-static
1	571.67	96.76	Open To Flow (1)
45	129.58	99.85	Open To Flow (2)
51	542.63	100.74	Open To Flow (3)
51	1784.56	100.76	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
245.00	Mud 100%	3.44

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Castle Resources, Inc.

PO Box 87
Schoenchen, KS 67667

ATTN: Jerry Green

29-3s-24w Norton, KS

Juenemann #1

Job Ticket: 55878

DST#: 1

Test Start: 2013.12.05 @ 09:08:00

GENERAL INFORMATION:

Formation: Reagan Sand - Granit

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:40:30

Time Test Ended: 16:25:45

Test Type: Conventional Bottom Hole (Initial)

Tester: James Winder

Unit No: 57

Interval: 3566.00 ft (KB) To 3725.00 ft (KB) (TVD)

Total Depth: 3725.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2354.00 ft (KB)

2349.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8320

Outside

Press@RunDepth: psig @ 3567.00 ft (KB)

Start Date: 2013.12.05 End Date: 2013.12.05

Start Time: 09:08:05 End Time: 16:26:44

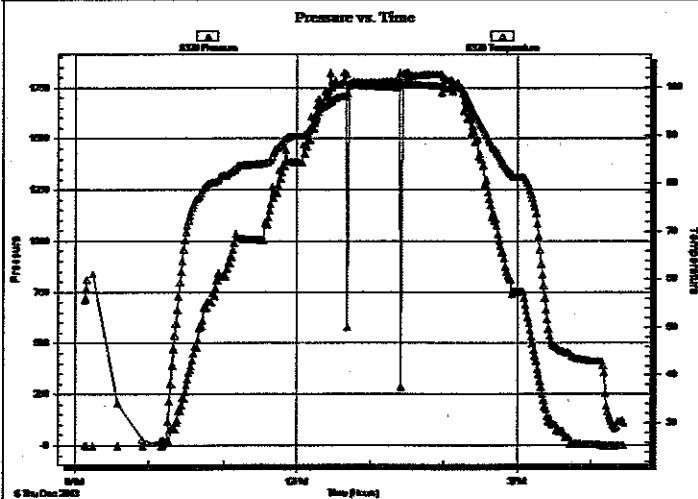
Capacity: 8000.00 psig

Last Calib.: 2013.12.05

Time On Btm:

Time Off Btm:

TEST COMMENT: Mis-Run
Packers didn't hold
Reset tool & tried 2 more times - packers still didn't hold
Pulled tool



PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
245.00	Mud 100%	3.44

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Castle Resources, Inc.

29-3s-24w Norton, KS

PO Box 87
Schoenchen, KS 67667

Juenemann #1

Job Ticket: 55878

DST#: 1

ATTN: Jerry Green

Test Start: 2013.12.05 @ 09:08:00

Tool Information

Drill Pipe:	Length: 3550.00 ft	Diameter: 3.80 inches	Volume: 49.80 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: 30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 42000.00 lb
			Total Volume: 49.80 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3566.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	159.00 ft			
Tool Length:	179.00 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			3551.00	
Hydraulic tool	5.00			3556.00	
Packer	5.00			3561.00	20.00 Bottom Of Top Packer
Packer	5.00			3566.00	
Stubb	1.00			3567.00	
Recorder	0.00	8671	Inside	3567.00	
Recorder	0.00	8320	Outside	3567.00	
Perforations	30.00			3597.00	
Blank Spacing	123.00			3720.00	
Perforations	2.00			3722.00	
Bullnose	3.00			3725.00	159.00 Bottom Packers & Anchor

Total Tool Length: 179.00

Serial #: 8671

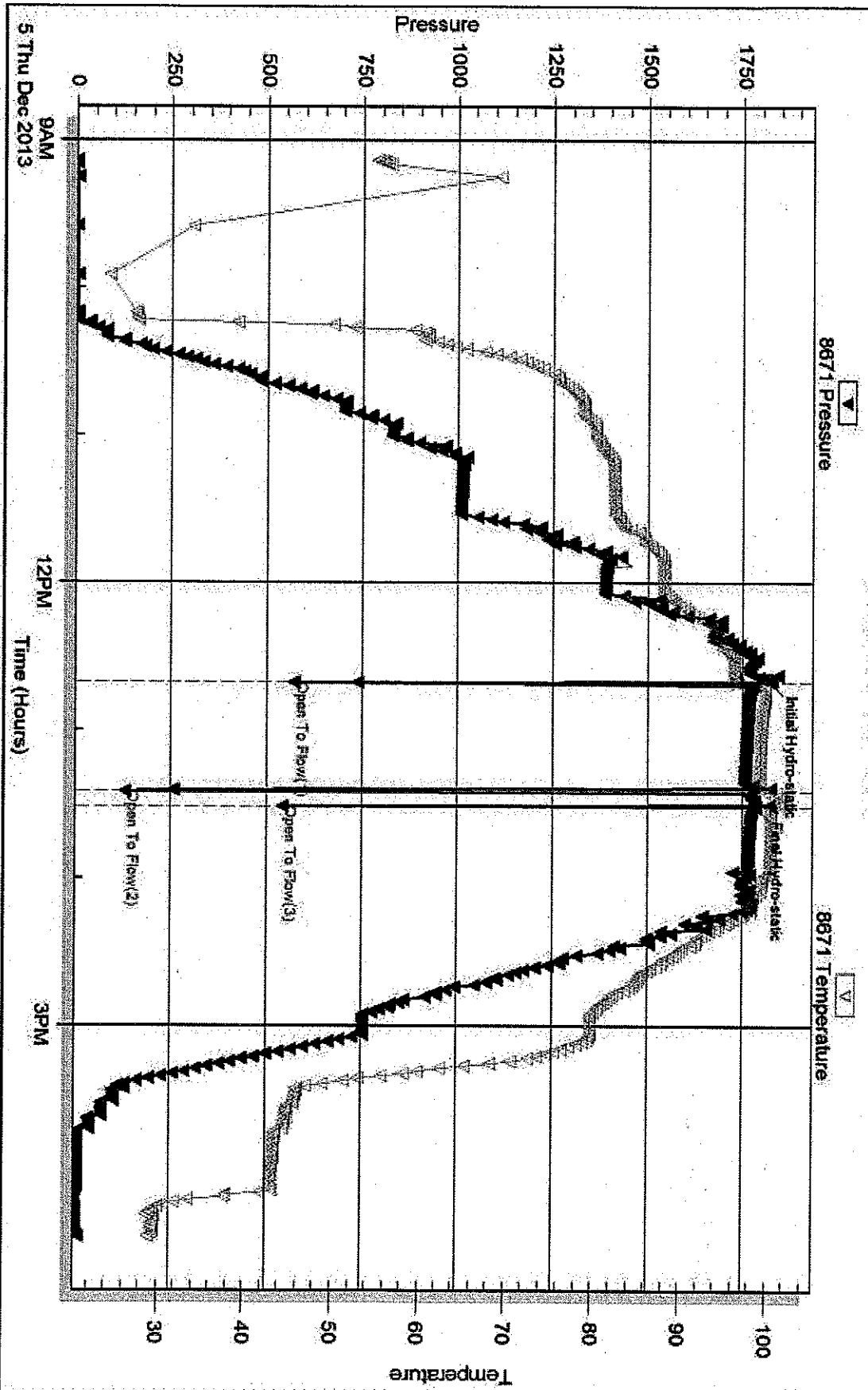
Inside

Castle Resources, Inc.

Juettmann #1

DST Test Number: 1

Pressure vs. Time

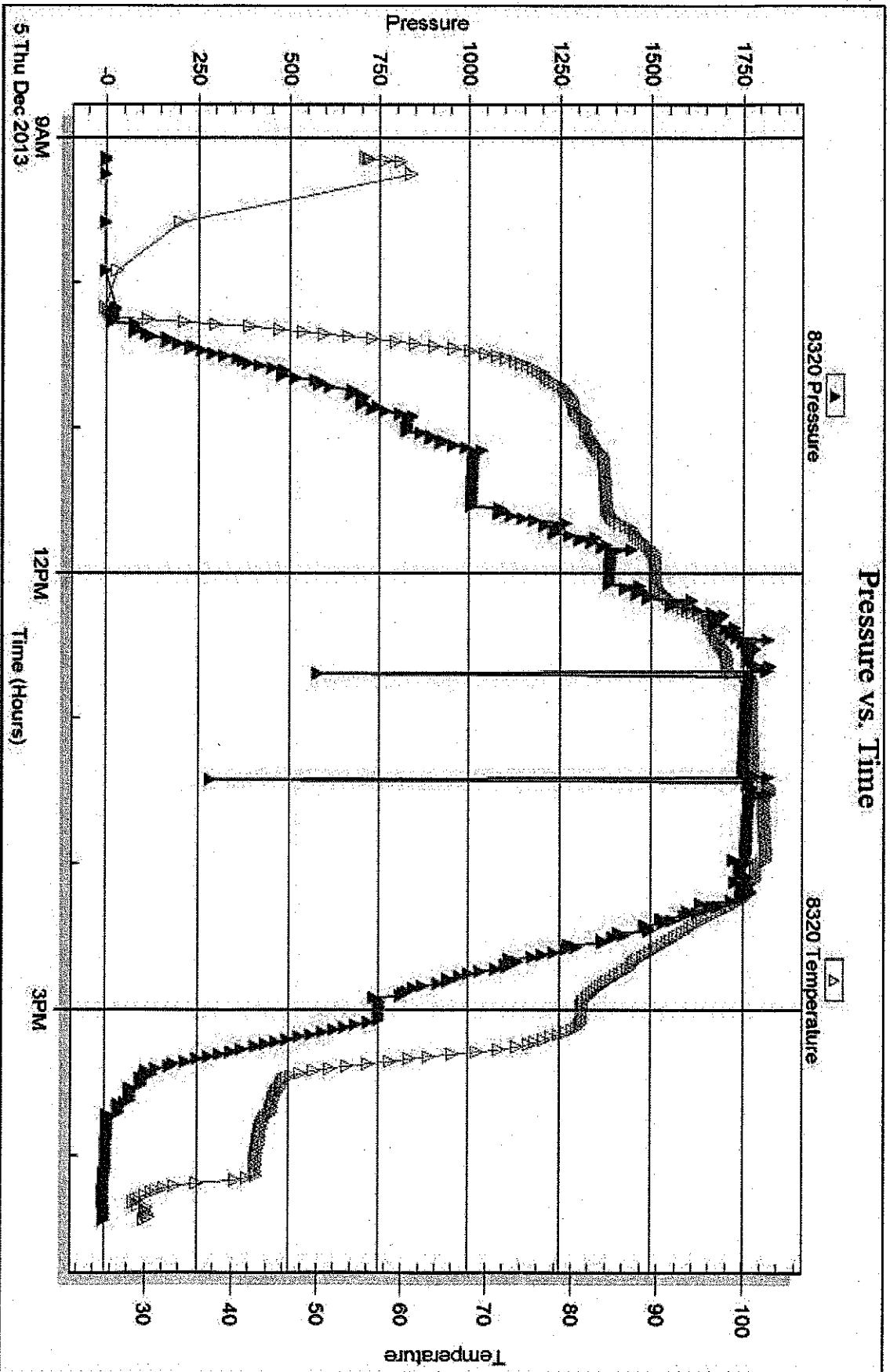


Serial #: 8320

Outside Castle Resources, Inc.

Run #1

DST Test Number: 1





DRILL STEM TEST REPORT

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

PO Box 87
Schoenchen, KS 67667

ATTN: Jerry Green

Juenemann #1

29-3s-24w Norton,KS

Start Date: 2013.12.05 @ 17:11:00

End Date: 2013.12.06 @ 00:53:45

Job Ticket #: 55879 DST #: 2

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

Printed: 2013.12.06 @ 10:49:01

Castle Resources, Inc.

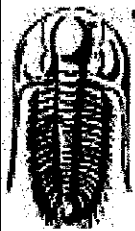
29-3s-24w Norton,KS

Juenemann #1

DST # 2

Reagan Sand

2013.12.05



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Castle Resources, Inc.

29-3s-24w Norton, KS

PO Box 87
Schoenchen, KS 67667

Juenemann #1

Job Ticket: 55879

DST#: 2

ATTN: Jerry Green

Test Start: 2013.12.05 @ 17:11:00

GENERAL INFORMATION:

Formation: Reagan Sand

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:35:15

Time Test Ended: 00:53:45

Test Type: Conventional Straddle (Reset)

Tester: James Winder

Unit No: 57

Interval: 3662.00 ft (KB) To 3676.00 ft (KB) (TVD)

Total Depth: 3725.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2354.00 ft (KB)

2349.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8671

Inside

Press@RunDepth: 91.41 psig @ 3663.00 ft (KB)

Start Date: 2013.12.05

End Date:

2013.12.06

Capacity: 8000.00 psig

Last Calib.: 2013.12.06

Start Time: 17:11:05

End Time:

00:53:44

Time On Btm: 2013.12.05 @ 19:34:45

Time Off Btm: 2013.12.05 @ 21:40:15

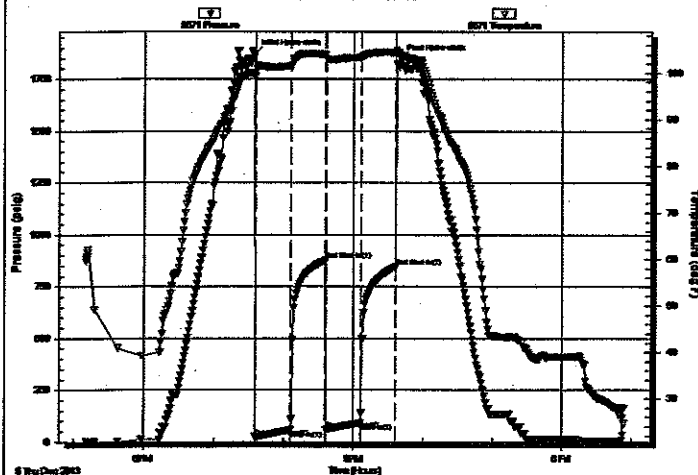
TEST COMMENT: 30 - IF: Blow built to BOB (11") in 11 min.

30 - IS: Blow back built to about 1/4"

30 - FF: Blow built to BOB in 20 min.

30 - FS: Blow back built to just over 1/4"

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1873.28	99.74	Initial Hydro-static
1	24.32	99.38	Open To Flow (1)
31	57.50	101.49	Shut-In(1)
61	875.41	103.98	End Shut-In(1)
62	59.29	103.09	Open To Flow (2)
91	91.41	103.38	Shut-In(2)
122	844.34	104.44	End Shut-In(2)
126	1850.36	103.96	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	WM w/oil spots 47% _m , 44% _w , 6% _g , 3% _c 0.56	
145.00	CGO 85% _o , 13% _g , 2% _m	2.03
65.00	CGO 50% _g , 49% _o , 1% _m	0.91
0.00	GIP = 60%	0.00

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Castle Resources, Inc.

29-3s-24w Norton, KS

PO Box 87
Schoenchen, KS 67667

Juenemann #1

Job Ticket: 55879

DST#: 2

ATTN: Jerry Green

Test Start: 2013.12.05 @ 17:11:00

GENERAL INFORMATION:

Formation: Reagan Sand

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:35:15

Time Test Ended: 00:53:45

Test Type: Conventional Straddle (Reset)

Tester: James Winder

Unit No: 57

Interval: 3662.00 ft (KB) To 3676.00 ft (KB) (TVD)

Total Depth: 3725.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2354.00 ft (KB)

2349.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8320 Outside

Press@RunDepth: psig @ 3663.00 ft (KB)

Start Date: 2013.12.05

End Date:

2013.12.06

Capacity: 8000.00 psig

Start Time: 17:11:05

End Time:

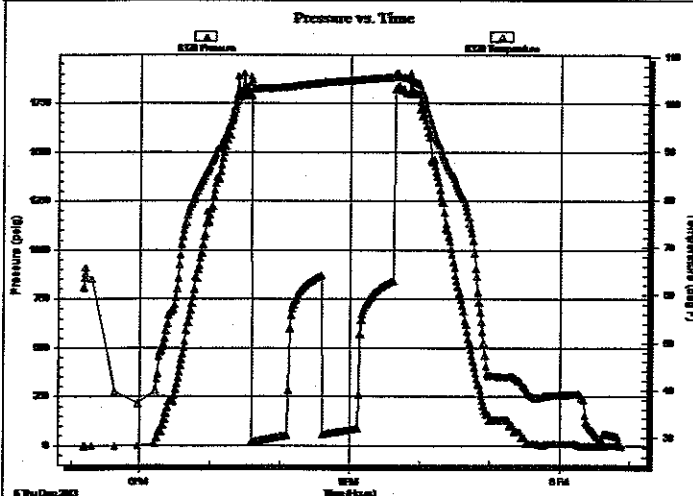
00:52:29

Last Calib.: 2013.12.06

Time On Btm:

Time Off Btm:

TEST COMMENT: 30 - IF: Blow built to BOB (11") in 11 min.
30 - IS: Blow back built to about 1/4"
30 - FF: Blow built to BOB in 20 min.
30 - FSI: Blow back built to just over 1/4"



PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
40.00	WM w/oil spots 47% _m , 44% _w , 6% _g , 3% _c 0.56	
145.00	CGO 85% _o , 13% _g , 2% _m	2.03
65.00	CGO 50% _g , 49% _o , 1% _m	0.91
0.00	GIP = 60%	0.00

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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Castle Resources, Inc.

ATTN: Jerry Green

Juenemann #1

Job Ticket: 55879

DST#: 2

Test Start: 2013.12.05 @ 17:11:00

Formation: Reagan Sand

Formation: Reagan Sand

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:35:15

Time Test Ended: 00:53:45

Test Type: Conventional Straddle (Reset)

Tester: James Winder

Unit No: 57

Interval: 3662.00 ft (KB) To 3676.00 ft (KB) (TVD)

Total Depth: 3725.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2354.00 ft (KB)

2349.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8366 Below (Straddle)

Press@RunDepth: psig @ 3677.00 ft (KB)

Start Date: 2013.12.05 End Date: 2013.12.06

Start Time: 17:11:05 End Time: 00:51:44

Capacity: 8000.00 psig

Last Calib.: 2013.12.06

Time On Btm:

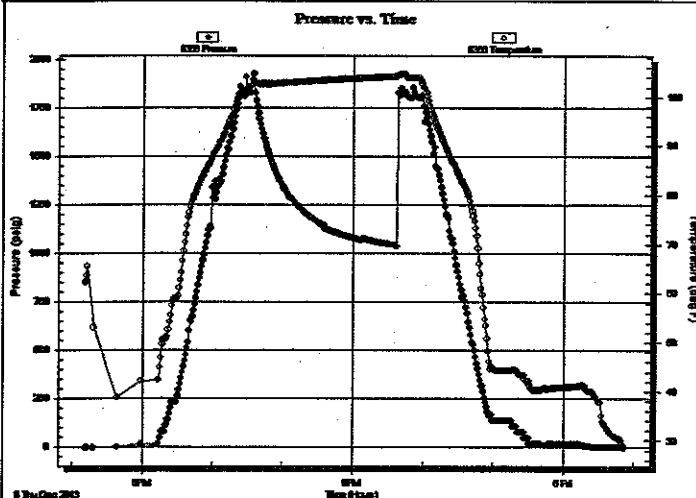
Time Off Btm:

TEST COMMENT: 30 - IF: Blow built to BOB (11") in 11 min.

30 - ISI: Blow back built to about 1/4"

30 - FF: Blow built to BOB in 20 min.

30 - FS: Blow back built to just over 1/4"



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
40.00	WM w/oil spots 47% <i>m</i> , 44% <i>w</i> , 6% <i>g</i> , 3% <i>c</i>	0.56
145.00	CGO 85% <i>o</i> , 13% <i>g</i> , 2% <i>m</i>	2.03
65.00	CGO 50% <i>g</i> , 49% <i>o</i> , 1% <i>m</i>	0.91
0.00	GIP = 60%	0.00

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Castle Resources, Inc.

29-3s-24w Norton, KS

PO Box 87
Schoenchen, KS 67667

Juenemann #1

Job Ticket: 55879

DST#: 2

ATTN: Jerry Green

Test Start: 2013.12.05 @ 17:11:00

Tool Information

Drill Pipe:	Length: 3640.00 ft	Diameter: 3.80 inches	Volume: 51.06 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: 30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 44000.00 lb
			Total Volume: 51.06 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3662.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	3676.00 ft			
Interval between Packers:	14.00 ft			
Tool Length:	91.00 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			3639.00	
Hydraulic tool	5.00			3644.00	
Jars	5.00			3649.00	
Safety Joint	3.00			3652.00	
Packer	5.00			3657.00	28.00 Bottom Of Top Packer
Packer	5.00			3662.00	
Packer - Shale	0.00			3662.00	
Stubb	1.00			3663.00	
Recorder	0.00	8671	Inside	3663.00	
Recorder	0.00	8320	Outside	3663.00	
Perforations	8.00			3671.00	
Blank Off Sub	1.00			3672.00	
Blank Spacing	4.00			3676.00	14.00 Tool Interval
Packer	0.00			3676.00	
Stubb	1.00			3677.00	
Recorder	0.00	8366	Below	3677.00	
Perforations	10.00			3687.00	
Blank Spacing	33.00			3720.00	
Perforations	2.00			3722.00	
Bullnose	3.00			3725.00	49.00 Bottom Packers & Anchor

Total Tool Length: 91.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Castle Resources, Inc.

29-3s-24w Norton, KS

PO Box 87
Schoenchen, KS 67667

Juenemann #1

Job Ticket: 55879

DST#: 2

ATTN: Jerry Green

Test Start: 2013.12.05 @ 17:11:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 51.00 sec/qt

Water Loss: 8.77 in³

Resistivity: ohm.m

Salinity: 500.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

26.8 deg API

Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	WM w/oil spots 47% m, 44% w, 6% g, 3% o	0.561
145.00	CGO 85% o, 13% g, 2% m	2.034
65.00	CGO 50% g, 49% o, 1% m	0.912
0.00	GIP = 60%	0.000

Total Length: 250.00 ft Total Volume: 3.507 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: gravity = 24 api @ 32 deg F
corrected gravity = 26.8 api

Serial #: 8671

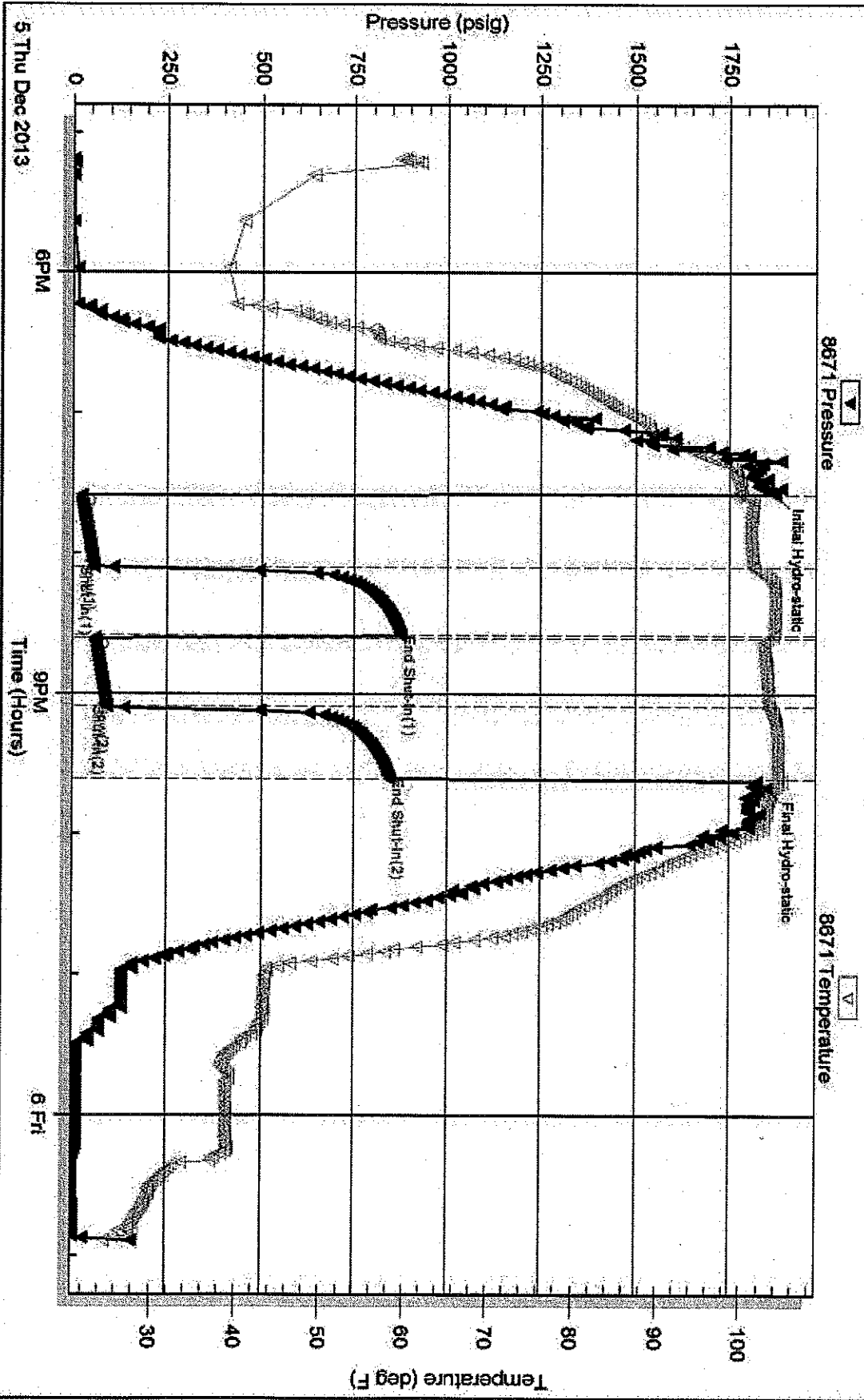
Inside

Castle Resources, Inc.

Wellbore #1

DST Test Number: 2

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 55879

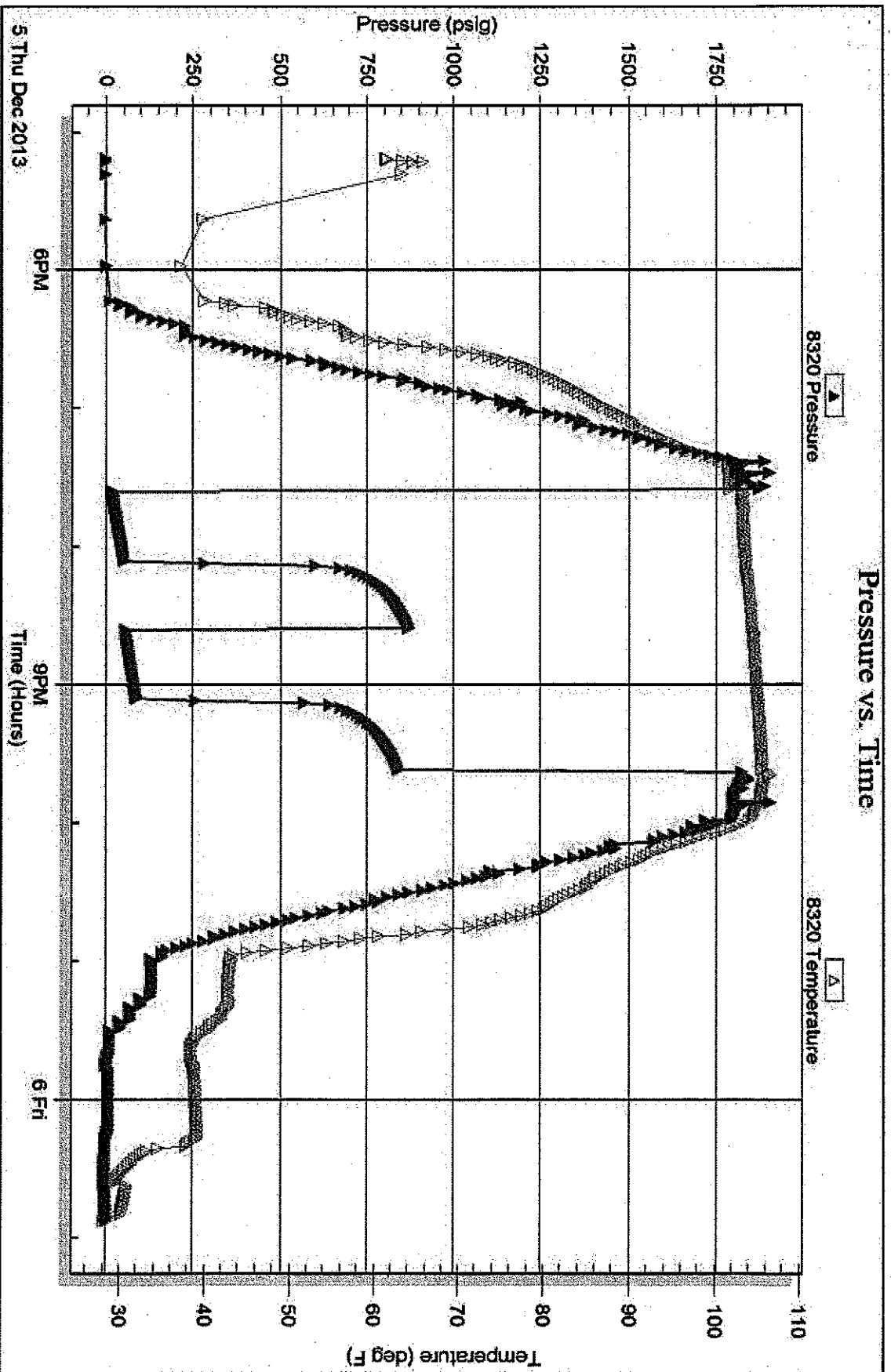
Printed: 2013.12.06 @ 10:49:03

Serial #: 8320

Outside Castle Resources, Inc.

Runnam #1

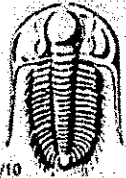
DSI Test Number: 2



Trioble Testing, Inc.

Ref. No: 55679

Printed: 2013.12.06 @ 10:48:03



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 55878

Well Name & No. Juenemann #1 Test No. 1 Date 12-5-13
Company Castle Resources Inc. Elevation 2354 KB 2349 GL
Address PO Box 87 Schoenchen KS 67667
Co. Rep / Geo. Jerry Green Rig White Knife #1
Location: Sec. 29 Twp. 3s Rge. 24W Co. Norton State KS

Interval Tested 3566 - 3725 Zone Tested Reagan Sand / Granite Wash
Anchor Length 159 Drill Pipe Run _____ Mud Wt. 9.4
Top Packer Depth 3561 Drill Collars Run - Vis 51
Bottom Packer Depth 3566 Wt. Pipe Run - WL 8.8
Total Depth 3725 Chlorides 500 ppm System LCM 41
Blow Description Mis-Run

Packers didn't hold

Reset tool + tried 2 more times - still didn't hold

Pulled tool

Rec	Feet of	%gas	%oil	%water	%mud
<u>245</u>	<u>Mud</u>			<u>100</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 <u>245</u>	BHT _____	Gravity _____	API RW _____	@ _____ °F	Chlorides _____ ppm

(A) Initial Hydrostatic _____
(B) First Initial Flow _____
(C) First Final Flow _____
(D) Initial Shut-In _____
(E) Second Initial Flow _____
(F) Second Final Flow _____
(G) Final Shut-In _____
(H) Final Hydrostatic _____

☐ Test ★ 950
☒ Jars _____
☒ Safety Joint _____
☒ Circ Sub AMA _____
☒ Hourly Standby _____
☐ Mileage 72RT 111.60
☒ Sampler _____
☒ Straddle _____
☒ Shale Packer _____
☒ Extra Packer _____
☒ Extra Recorder _____
☒ Day Standby _____
☒ Accessibility _____
Sub Total 1061.60

T-On Location 8:15
T-Started 9:08
T-Open 12:40
T-Pulled 13:30
T-Out 16:30
Comments _____
☒ Ruined Shale Packer _____
☒ Ruined Packer _____
☒ Extra Copies _____
Sub Total 0
Total 1061.60
MP/DST Disc't _____

Initial Open _____
Initial Shut-In _____
Final Flow _____
Final Shut-In _____

Approved By _____

Our Representative James Winkler

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.