



## DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum Inc**

4924 SE 84th St.  
Newton, KS 67114

ATTN: Nick Gerstner

### **D&E Stutz #1**

### **18-17s-25w Ness, KS**

Start Date: 2012.08.28 @ 07:48:33

End Date: 2012.08.28 @ 13:14:03

Job Ticket #: 48414                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.09.06 @ 16:30:41



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Palomino Petroleum Inc  
 4924 SE 84th St.  
 Newton, KS 67114  
 ATTN: Nick Gerstner

**18-17s-25w Ness, KS**  
**D&E Stutz #1**  
 Job Ticket: 48414 **DST#: 1**  
 Test Start: 2012.08.28 @ 07:48:33

## GENERAL INFORMATION:

Formation: **Marmaton**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 09:29:03  
 Time Test Ended: 13:14:03  
 Interval: **4108.00 ft (KB) To 4270.00 ft (KB) (TVD)**  
 Total Depth: 4270.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Brandon Turley  
 Unit No: 60  
 Reference Elevations: 2507.00 ft (KB)  
 2502.00 ft (CF)  
 KB to GR/CF: 5.00 ft

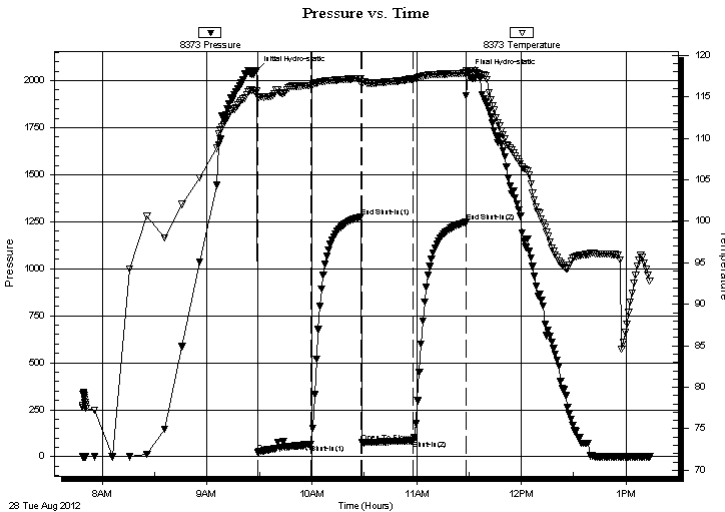
## Serial #: 8373

Inside

Press @ Run Depth: 85.31 psig @ 4109.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2012.08.28 End Date: 2012.08.28 Last Calib.: 2012.08.28  
 Start Time: 07:48:38 End Time: 13:14:02 Time On Btm: 2012.08.28 @ 09:28:33  
 Time Off Btm: 2012.08.28 @ 11:29:33

TEST COMMENT: IF: 1/4" blow built to 3".  
 IS: No return.  
 FF: Surface blow built to 2".  
 FS: No return.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2054.73	115.69	Initial Hydro-static
1	24.83	115.05	Open To Flow (1)
31	67.57	116.39	Shut-In(1)
60	1276.78	117.23	End Shut-In(1)
60	74.65	116.50	Open To Flow (2)
90	85.31	117.17	Shut-In(2)
120	1246.92	117.86	End Shut-In(2)
121	2037.84	118.19	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
62.00	mcw 80%w 20%m	0.30
93.00	w cm 20%w 80%m	0.74

## Gas Rates

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



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Palomino Petroleum Inc

**18-17s-25w Ness, KS**

4924 SE 84th St.  
New ton, KS 67114

**D&E Stutz #1**

Job Ticket: 48414

**DST#: 1**

ATTN: Nick Gerstner

Test Start: 2012.08.28 @ 07:48:33

## GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:29:03

Time Test Ended: 13:14:03

Test Type: Conventional Bottom Hole (Initial)

Tester: Brandon Turley

Unit No: 60

**Interval: 4108.00 ft (KB) To 4270.00 ft (KB) (TVD)**

Reference Elevations: 2507.00 ft (KB)

Total Depth: 4270.00 ft (KB) (TVD)

2502.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8356 Outside**

Press @ Run Depth: psig @ 4109.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.08.28

End Date: 2012.08.28

Last Calib.: 2012.08.28

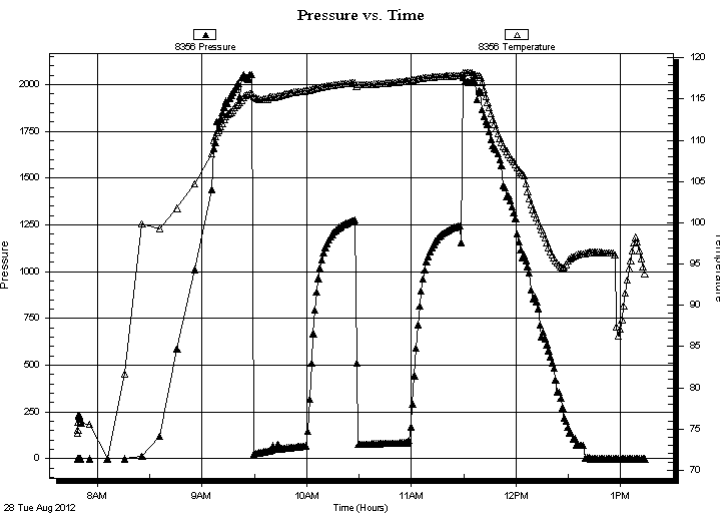
Start Time: 07:48:46

End Time: 13:14:10

Time On Btm:

Time Off Btm:

**TEST COMMENT:** IF: 1/4" blow built to 3".  
IS: No return.  
FF: Surface blow built to 2".  
FS: No return.



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
62.00	mcw 80%w 20%m	0.30
93.00	w cm 20%w 80%m	0.74

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Palomino Petroleum Inc

**18-17s-25w Ness, KS**

4924 SE 84th St.  
New ton, KS 67114

**D&E Stutz #1**

Job Ticket: 48414

**DST#: 1**

ATTN: Nick Gerstner

Test Start: 2012.08.28 @ 07:48:33

## Tool Information

Drill Pipe:	Length: 3986.00 ft	Diameter: 3.80 inches	Volume: 55.91 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: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 56.52 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4108.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	162.00 ft			
Tool Length:	190.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Stubb	1.00			4081.00	
Shut In Tool	5.00			4086.00	
Hydraulic tool	5.00			4091.00	
Jars	5.00			4096.00	
Safety Joint	3.00			4099.00	
Packer	5.00			4104.00	28.00 Bottom Of Top Packer
Packer	4.00			4108.00	
Stubb	1.00			4109.00	
Recorder	0.00	8373	Inside	4109.00	
Recorder	0.00	8356	Outside	4109.00	
Perforations	28.00			4137.00	
Change Over Sub	1.00			4138.00	
Drill Pipe	126.00			4264.00	
Change Over Sub	1.00			4265.00	
Bullnose	5.00			4270.00	162.00 Bottom Packers & Anchor

**Total Tool Length: 190.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Palomino Petroleum Inc  
4924 SE 84th St.  
New ton, KS 67114  
ATTN: Nick Gerstner

**18-17s-25w Ness, KS**  
**D&E Stutz #1**  
Job Ticket: 48414      **DST#: 1**  
Test Start: 2012.08.28 @ 07:48:33

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 19000 ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl	
Water Loss: 8.77 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig	
Salinity: 4700.00 ppm		
Filter Cake: 1.00 inches		

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	mcw 80%w 20%m	0.305
93.00	w cm 20%w 80%m	0.740

Total Length: 155.00 ft      Total Volume: 1.045 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments: .26@91=19000

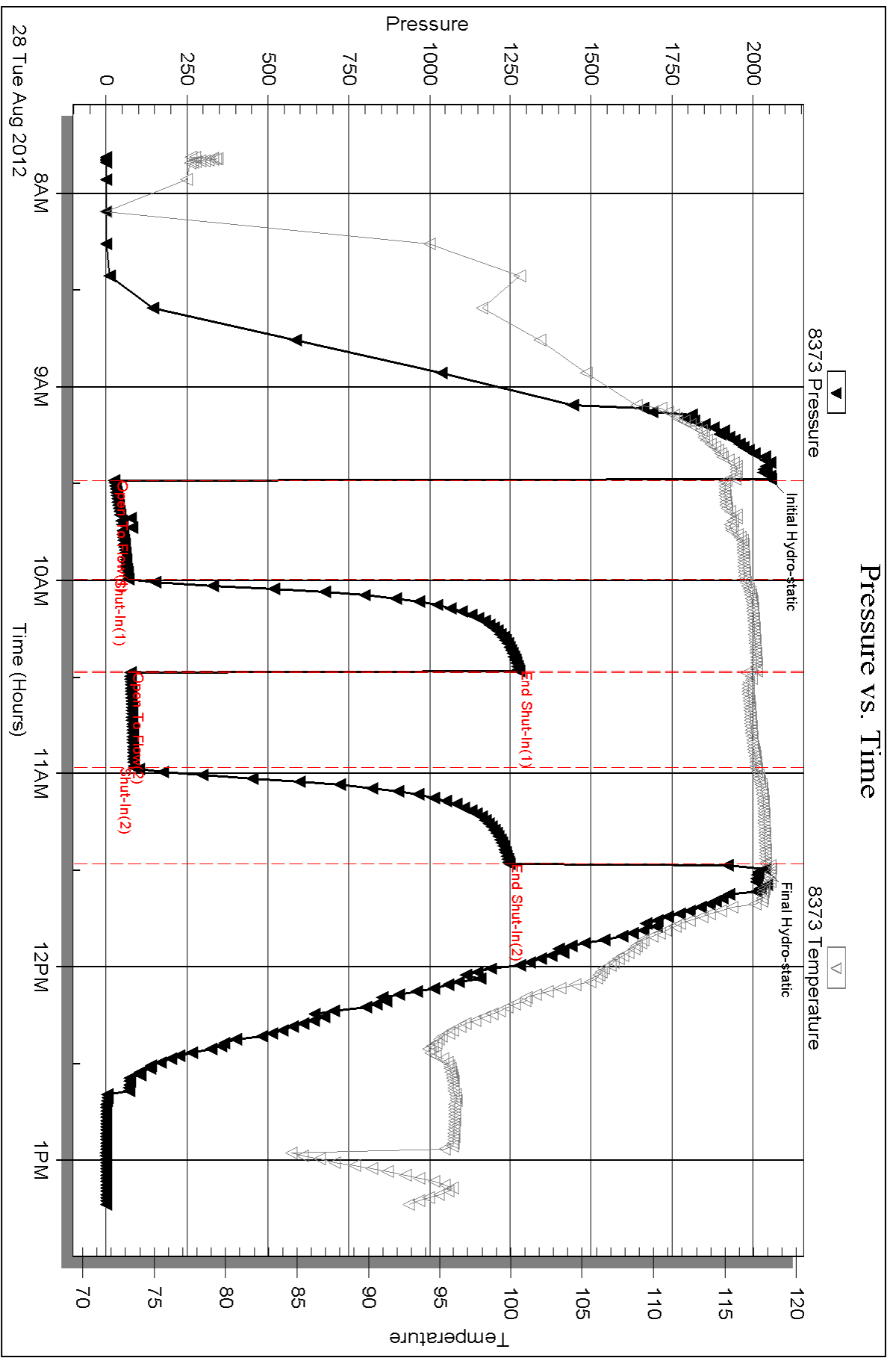
Serial #: 8373

Inside

Palomino Petroleum Inc

D&E Stutz #1

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 48414

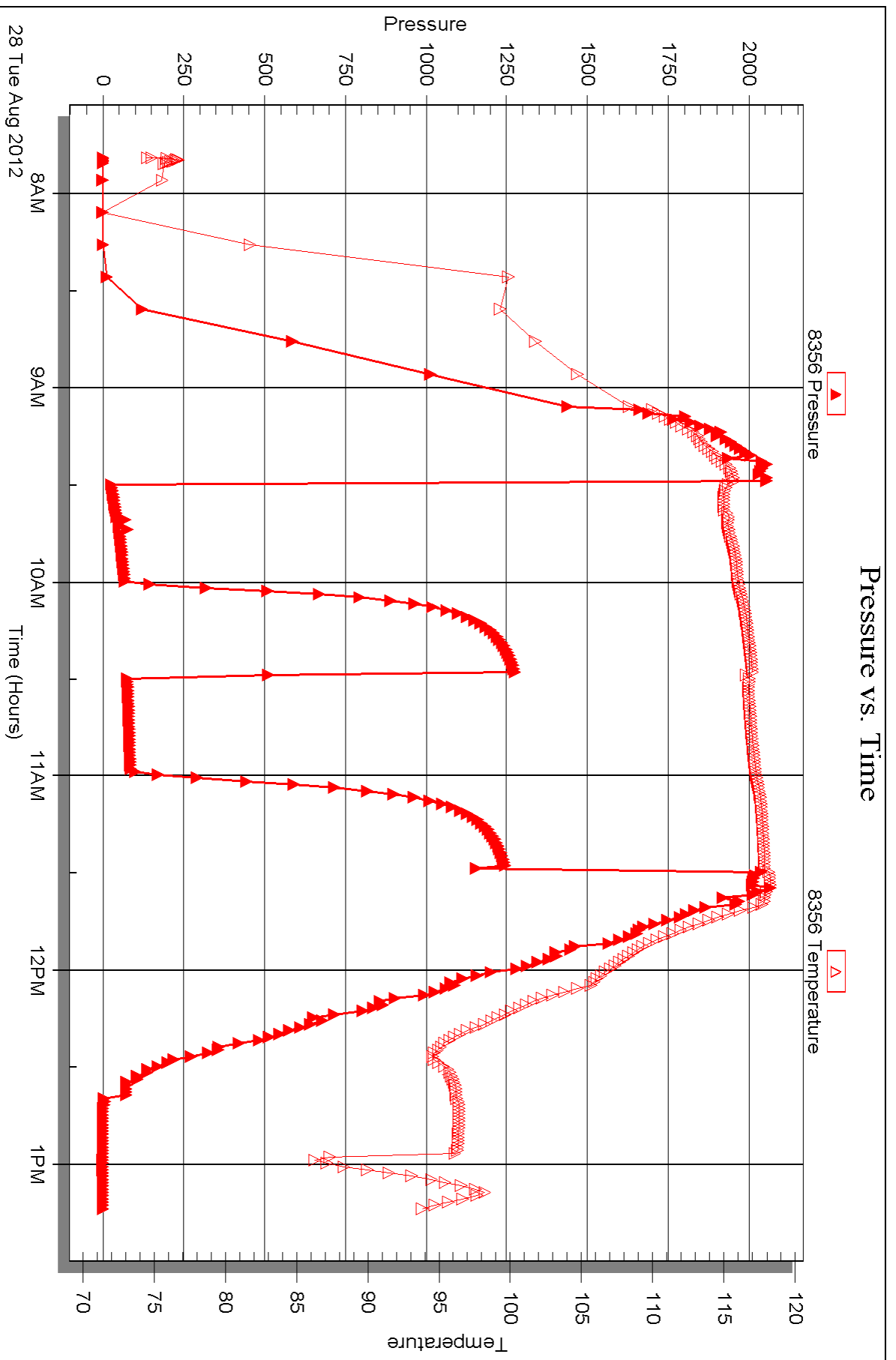
Printed: 2012.09.06 @ 16:30:45

Serial #: 8356

Outside Palomino Petroleum Inc

D&E Stutz #1

DST Test Number: 1





## DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum Inc**

4924 SE 84th St.  
Newton, KS 67114

ATTN: Nick Gerstner

### **D&E Stutz #1**

### **18-17s-25w Ness, KS**

Start Date: 2012.08.29 @ 08:50:11

End Date: 2012.08.29 @ 15:18:11

Job Ticket #: 48415                      DST #: 2

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

Printed: 2012.09.06 @ 16:29:52





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Palomino Petroleum Inc  
4924 SE 84th St.  
New ton, KS 67114  
ATTN: Nick Gerstner

**18-17s-25w Ness, KS**

**D&E Stutz #1**

Job Ticket: 48415

**DST#: 2**

Test Start: 2012.08.29 @ 08:50:11

## GENERAL INFORMATION:

Formation: **Miss**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 10:40:11  
Time Test Ended: 15:18:11  
Interval: **4357.00 ft (KB) To 4470.00 ft (KB) (TVD)**  
Total Depth: 4470.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Good  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Brandon Turley  
Unit No: 60  
Reference Elevations: 2507.00 ft (KB)  
2502.00 ft (CF)  
KB to GR/CF: 5.00 ft

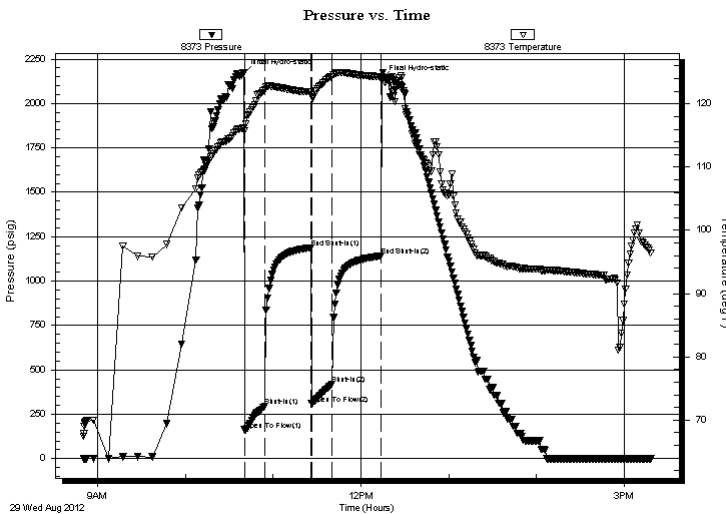
## Serial #: 8373

**Inside**

Press @ Run Depth: 418.92 psig @ 4358.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2012.08.29 End Date: 2012.08.29 Last Calib.: 2012.08.29  
Start Time: 08:50:16 End Time: 15:18:10 Time On Btm: 2012.08.29 @ 10:39:41  
Time Off Btm: 2012.08.29 @ 12:14:11

TEST COMMENT: IF: BOB in 2 min.  
IS: No return.  
FF: BOB in 2 min.  
FS: Weak surface blow built to 1/4".

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2170.37	116.18	Initial Hydro-static
1	162.57	115.73	Open To Flow (1)
15	296.25	122.16	Shut-In(1)
46	1188.46	121.89	End Shut-In(1)
47	309.56	121.07	Open To Flow (2)
61	418.92	124.35	Shut-In(2)
94	1141.44	124.26	End Shut-In(2)
95	2137.15	124.35	Final Hydro-static

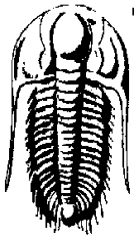
## Recovery

Length (ft)	Description	Volume (bbl)
310.00	mcgo 10%g 80%o 10%m	3.22
310.00	mcgo 30%g 50%o 20%m	4.35
186.00	mcgo 20%g 40%o 40%m	2.61
155.00	ocm 20%o 80%m	2.17
0.00	93 GIP	0.00

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Palomino Petroleum Inc

**18-17s-25w Ness, KS**

4924 SE 84th St.  
New ton, KS 67114

**D&E Stutz #1**

Job Ticket: 48415

**DST#: 2**

ATTN: Nick Gerstner

Test Start: 2012.08.29 @ 08:50:11

## GENERAL INFORMATION:

Formation: **Miss**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 10:40:11

Time Test Ended: 15:18:11

Test Type: **Conventional Bottom Hole (Reset)**

Tester: **Brandon Turley**

Unit No: **60**

**Interval: 4357.00 ft (KB) To 4470.00 ft (KB) (TVD)**

Reference Elevations: **2507.00 ft (KB)**

Total Depth: **4470.00 ft (KB) (TVD)**

**2502.00 ft (CF)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

KB to GR/CF: **5.00 ft**

**Serial #: 8356 Outside**

Press @ RunDepth: **psig @ 4358.00 ft (KB)**

Capacity: **8000.00 psig**

Start Date: **2012.08.29**

End Date: **2012.08.29**

Last Calib.: **2012.08.29**

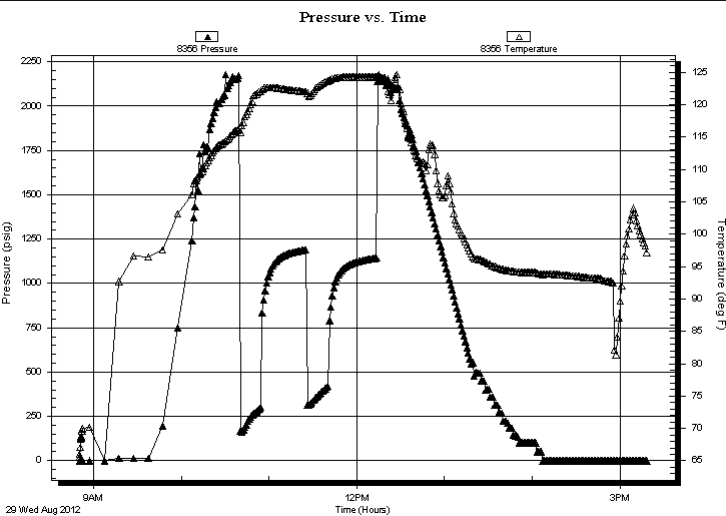
Start Time: **08:50:20**

End Time: **15:18:14**

Time On Btm:

Time Off Btm:

**TEST COMMENT:** IF: BOB in 2 min.  
IS: No return.  
FF: BOB in 2 min.  
FS: Weak surface blow built to 1/4".



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
310.00	mcgo 10%g 80%o 10%m	3.22
310.00	mcgo 30%g 50%o 20%m	4.35
186.00	mcgo 20%g 40%o 40%m	2.61
155.00	ocm 20%o 80%m	2.17
0.00	93 GIP	0.00

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Palomino Petroleum Inc

**18-17s-25w Ness, KS**

4924 SE 84th St.  
New ton, KS 67114

**D&E Stutz #1**

Job Ticket: 48415

**DST#: 2**

ATTN: Nick Gerstner

Test Start: 2012.08.29 @ 08:50:11

## Tool Information

Drill Pipe:	Length: 4235.00 ft	Diameter: 3.80 inches	Volume: 59.41 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: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 60.02 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4357.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	113.00 ft			
Tool Length:	141.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Stubb	1.00			4330.00	
Shut In Tool	5.00			4335.00	
Hydraulic tool	5.00			4340.00	
Jars	5.00			4345.00	
Safety Joint	3.00			4348.00	
Packer	5.00			4353.00	28.00 Bottom Of Top Packer
Packer	4.00			4357.00	
Stubb	1.00			4358.00	
Recorder	0.00	8373	Inside	4358.00	
Recorder	0.00	8356	Outside	4358.00	
Perforations	10.00			4368.00	
Change Over Sub	1.00			4369.00	
Drill Pipe	95.00			4464.00	
Change Over Sub	1.00			4465.00	
Bullnose	5.00			4470.00	113.00 Bottom Packers & Anchor

**Total Tool Length: 141.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Palomino Petroleum Inc  
4924 SE 84th St.  
New ton, KS 67114  
ATTN: Nick Gerstner

**18-17s-25w Ness, KS**  
**D&E Stutz #1**  
Job Ticket: 48415      **DST#: 2**  
Test Start: 2012.08.29 @ 08:50:11

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 37 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 0 ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl	
Water Loss: 8.39 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig	
Salinity: 3500.00 ppm		
Filter Cake: 1.00 inches		

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
310.00	mcgo 10%g 80%o 10%m	3.219
310.00	mcgo 30%g 50%o 20%m	4.348
186.00	mcgo 20%g 40%o 40%m	2.609
155.00	ocm 20%o 80%m	2.174
0.00	93 GIP	0.000

Total Length: 961.00 ft      Total Volume: 12.350 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments: 39@90=37

Serial #: 8373

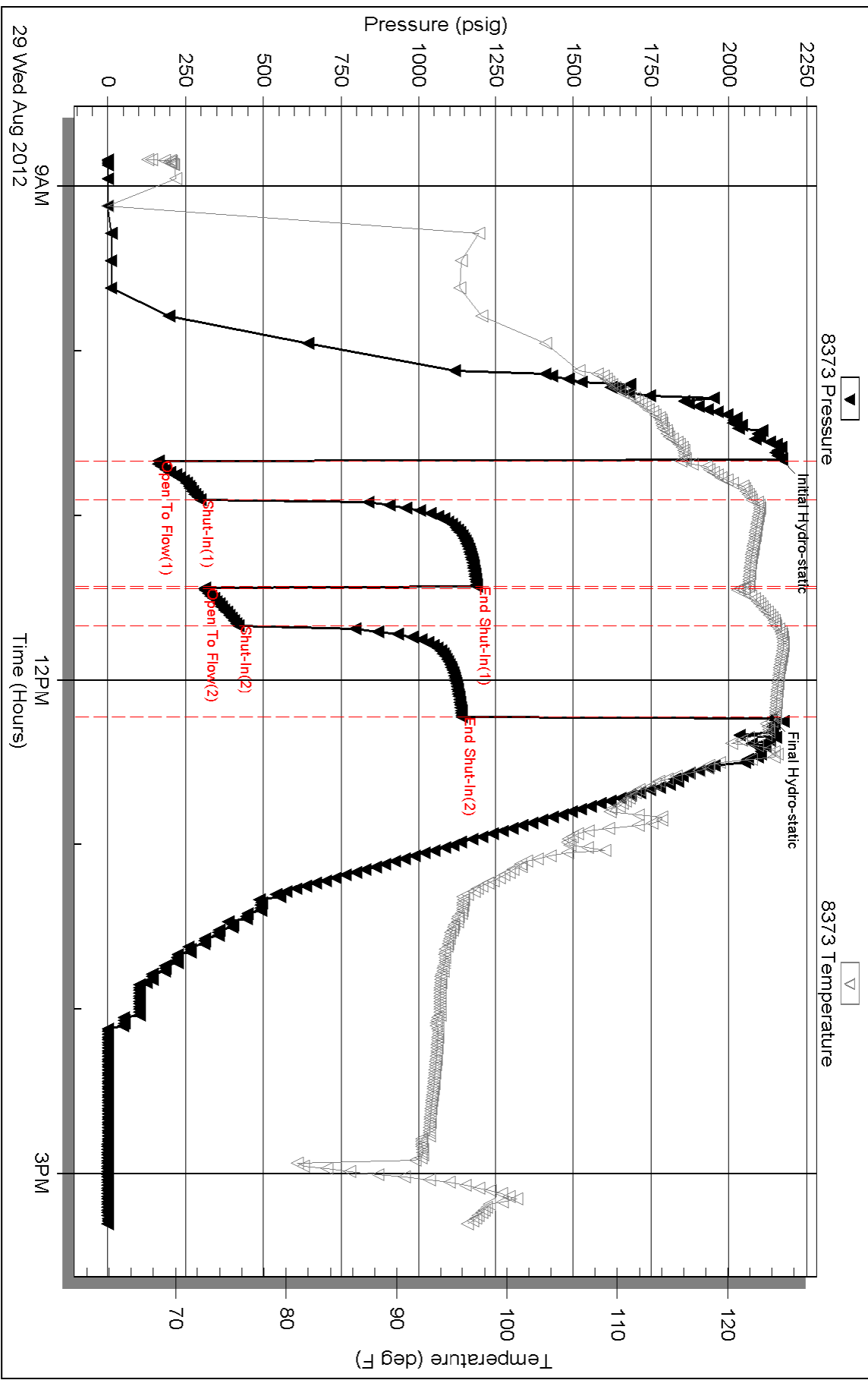
Inside

Palomino Petroleum Inc

D&E Stutz #1

DST Test Number: 2

### Pressure vs. Time

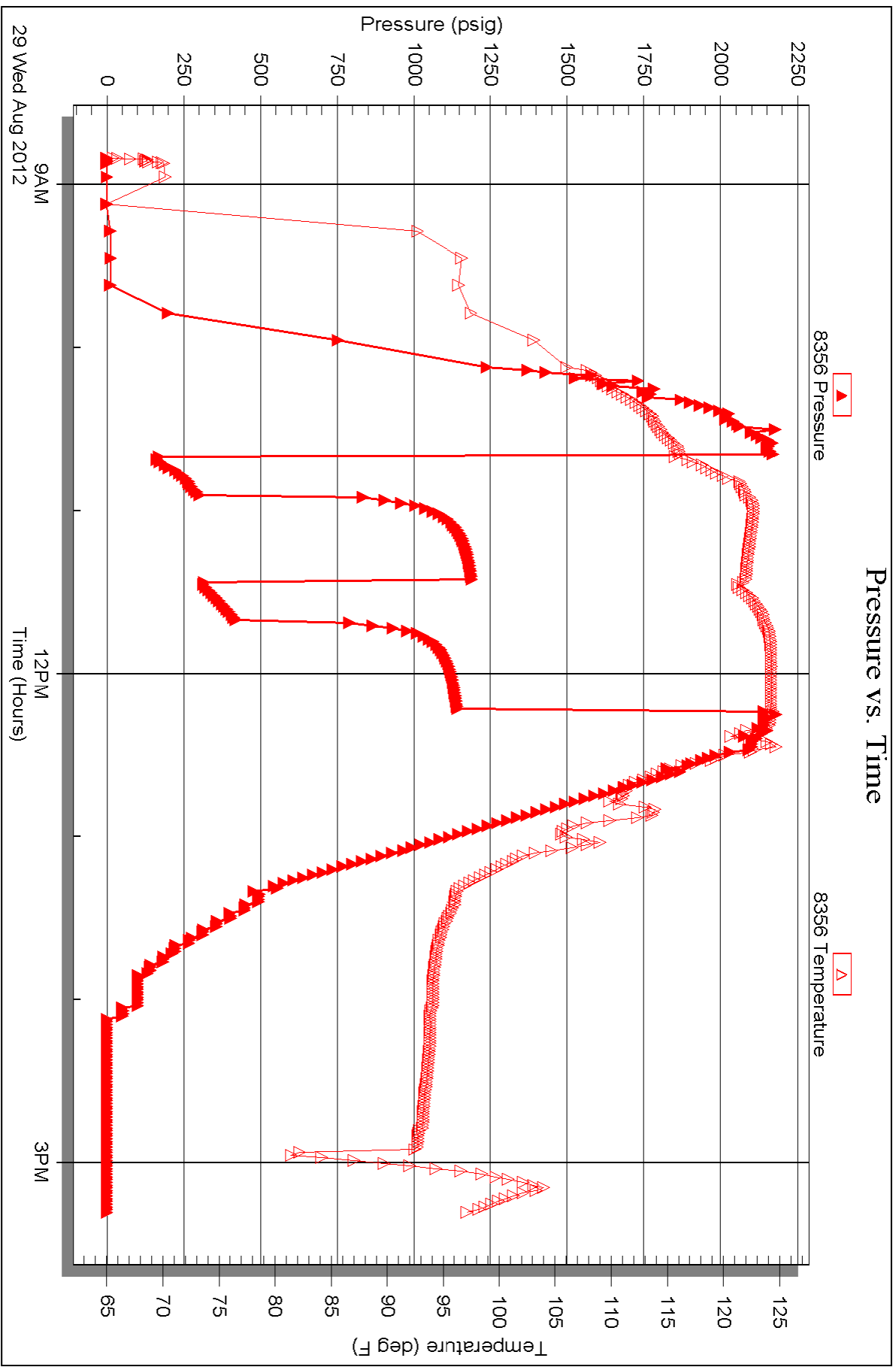


Serial #: 8356

Outside Palomino Petroleum Inc

D&E Stutz #1

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 48415

Printed: 2012.09.06 @ 16:29:57



# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

## Test Ticket

NO. 48414

Well Name & No. DdE Stutz #1 Test No. 1 Date 8-28-12  
 Company Palomino Petroleum Elevation 2507 KB 2502 GL  
 Address 4924 SE 84th St. Newton, KS 67114  
 Co. Rep / Geo. Nick Gerstner Rig WW#10  
 Location: Sec. 18 Twp. 17 Rge. 25 Co. Ness State KS

Interval Tested 4108 4270 Zone Tested Marmaton  
 Anchor Length 162 Drill Pipe Run 3986 Mud Wt. 9.3  
 Top Packer Depth 4103 Drill Collars Run 124 Vis 50  
 Bottom Packer Depth 4108 Wt. Pipe Run — WL 8.8  
 Total Depth 4270 Chlorides 4700 ppm System LCM Ø

Blow Description IF: 1/4 blow built to 3,  
IS: No return,  
IF: surface blow built to 2.  
FS: No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>93</u>	<u>wcm</u>		<u>20</u>	<u>80</u>	
<u>62</u>	<u>mcw</u>		<u>80</u>	<u>20</u>	

Rec Total 165 BHT 117 Gravity — API RW .26 @ 91 ° F Chlorides 19,000 ppm

(A) Initial Hydrostatic 2054  Test 1250 T-On Location 6:50  
 (B) First Initial Flow 24  Jars 250 T-Started 7:48  
 (C) First Final Flow 67  Safety Joint 75 T-Open 9:27  
 (D) Initial Shut-In 1276  Circ Sub NIC T-Pulled 11:27  
 (E) Second Initial Flow 74  Hourly Standby T-Out 13:15  
 (F) Second Final Flow 85  Mileage 110- 170.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 1246  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2037  Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_

Initial Open 30  
 Initial Shut-In 30  
 Final Flow 30  
 Final Shut-In 30  
 Sub Total 0  
 Total 1745.50  
 MP/DST Disc't \_\_\_\_\_  
 Sub Total 1745.50

Approved By \_\_\_\_\_ Our Representative

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.



# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

## Test Ticket

NO. 48415

Well Name & No. D & E Stutz #1 Test No. 2 Date 8-29-12  
 Company Palomino Petroleum Elevation 2567 KB 2562 GL  
 Address \_\_\_\_\_  
 Co. Rep / Geo. Nick Gerstner Rig WW #10  
 Location: Sec. 18 Twp. 17 Rge. 25 Co. Ness State KS

Interval Tested 4357 4470 Zone Tested M. 55  
 Anchor Length \_\_\_\_\_ Drill Pipe Run 4235 Mud Wt. 9.4  
 Top Packer Depth \_\_\_\_\_ Drill Collars Run 124 Vis 51  
 Bottom Packer Depth \_\_\_\_\_ Wt. Pipe Run \_\_\_\_\_ WL 8.4  
 Total Depth 4470 Chlorides 3500 ppm System LCM 0

Blow Description IF: BOB in 2 min.  
IS: No return,  
FF: BOB in 2 min.  
FS: Work surface blow built to 1/4.

Rec	Feet of	%gas	%oil	%water	%mud
<u>155</u>	<u>ocm</u>	<u>20</u>	<u>80</u>		
<u>186</u>	<u>mc90</u>	<u>20</u>	<u>40</u>	<u>40</u>	
<u>310</u>	<u>mc90</u>	<u>30</u>	<u>50</u>	<u>20</u>	
<u>310</u>	<u>mc90</u>	<u>10</u>	<u>80</u>	<u>10</u>	
<u>93</u>	<u>GFP</u>				

Rec Total 961 BHT 124 Gravity 37 API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic 2170  Test 1250 T-On Location 8:14  
 (B) First Initial Flow 162  Jars 250 T-Started 8:50  
 (C) First Final Flow 296  Safety Joint 75 T-Open 10:39  
 (D) Initial Shut-In 1188  Circ Sub N/C T-Pulled 12:09  
 (E) Second Initial Flow 309  Hourly Standby \_\_\_\_\_ T-Out 15:25  
 (F) Second Final Flow 418  Mileage 110 - 170.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 1141  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2137  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1745.50  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_

Initial Open 15  
 Initial Shut-In 30  
 Final Flow 15  
 Final Shut-In 30  
 Sub Total 1745.50

Approved By \_\_\_\_\_ Our Representative [Signature]

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.