



**CONSOLIDATED**  
Oil Well Services, LLC

PO Box 884, Chanute, KS 66720  
620-431-9210 or 800-467-8676

TICKET NUMBER 46095

LOCATION El Dorado

FOREMAN Fuzz4

**FIELD TICKET & TREATMENT REPORT**  
**CEMENT**

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY	
6-2-15	6285	Osage-Nemaha #1	35	215	3E	Marion	
CUSTOMER <u>Palomino Pet</u>		FLORENCE WOW		TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS		MAY 50 TO 80th		446	JOSH		
CITY		112 W S-I-W		681	TRACEY		
STATE		ZIP CODE					

JOB TYPE <u>Surface</u>	HOLE SIZE <u>12 1/4</u>	HOLE DEPTH <u>264'</u>	CASING SIZE & WEIGHT <u>8 5/8</u>
CASING DEPTH <u>264'</u>	DRILL PIPE	TUBING	OTHER
SLURRY WEIGHT <u>14.7</u>	SLURRY VOL <u>41.1</u>	WATER gal/sk <u>6.5</u>	CEMENT LEFT in CASING <u>20'</u>
DISPLACEMENT <u>15.5</u>	DISPLACEMENT PSI	MIX PSI	RATE

REMARKS: Safety meeting on Southwind #8, Rig up and circulate  
Mix 170SKS CLASS A' 390cc 29gel w/1/2# Poly Flake per  
SK. Displace 15.5 Barrels and shut in.

Cement did circulate in cell A

Thanks Fuzz4  
+ crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401c	1	PUMP CHARGE	870.00	870.00
5406	40	MILEAGE	4.20	168.00
5407	8 TON	Tow mileage Delivery	1.41	451.20
1104s	170SKS	Class A	15.70	2669.00
1102	500#	Calcium Chloride	.78	390.00
1118B	350#	Gel	1.22	77.00
1107	100#	Poly. Flake	2.47	247.00
		subtotal		4872.20
		less discount		1014.90
		subtotal		3857.30
		SALES TAX		
		ESTIMATED TOTAL		

Ravin 3737

AUTHORIZATION William L...

TITLE

DATE

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form



**CONSOLIDATED**  
Oil Well Services, LLC

PO Box 884, Chanute, KS 66720  
620-431-9210 or 800-467-8676

NET NUMBER 46096

LOCATION Ch Dorado

FOREMAN Tuzza

**FIELD TICKET & TREATMENT REPORT**  
**CEMENT**

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY	
6-8-15		Osage-Nemaha #1	35	215	36	McPherson	
CUSTOMER		FLOUENCE WEST		TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS		TOSTA CREEK P.O. 112 W S.W.		760	CHRIS		
CITY		STATE	ZIP CODE	775	TERRY		
				692	MARK		

JOB TYPE PTA HOLE SIZE 7 7/8 HOLE DEPTH 3010' CASING SIZE & WEIGHT \_\_\_\_\_  
 CASING DEPTH \_\_\_\_\_ DRILL PIPE 4 1/2 X TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 1.441 SLURRY VOL 31.3 WATER gal/sk 2.1 CEMENT LEFT in CASING \_\_\_\_\_  
 DISPLACEMENT \_\_\_\_\_ DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE \_\_\_\_\_

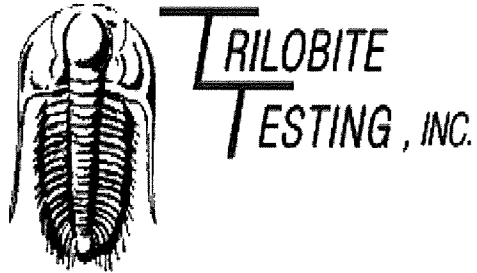
REMARKS: Safety meeting on Southwind #8. Rig up and circulate + land hole  
Plus as ordered

35 sks @ 2904' 12 sks 60/40 pos 4000 w/ 1/4"  
35 sks @ 313' poly flake  
25 sks Top of Surface  
30 sks BH  
Thanks Tuzza crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5405N	1	PUMP CHARGE	1085 <sup>00</sup>	1085 <sup>00</sup>
5406	40	MILEAGE	420	168 <sup>00</sup>
5407	5.4 hrs	Ten mile/day Delivery (min)	141	368 <sup>00</sup>
5502c	6 hrs	90 min water truck	90 <sup>00</sup>	N/C
1131	12 sks	60/40 pos	131 <sup>50</sup>	1647 <sup>50</sup>
118B	450#	Gel	122	99 <sup>00</sup>
1107	50#	Poly flake	242	123 <sup>50</sup>
1123	3000 gal	city water	173 <sup>00</sup>	N/C
		subtotal		3491 <sup>00</sup>
		disc		561 <sup>00</sup>
		subtotal		2930 <sup>00</sup>
		SALES TAX		
		ESTIMATED TOTAL		

AUTHORIZATION [Signature] TITLE \_\_\_\_\_ DATE \_\_\_\_\_

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form



## DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum**

4924 SE 84th St  
Newton, KS 67114

ATTN: Sean Deenihan

### **Osage-Nemaha #1**

#### **35-21S-2E Marion,KS**

Start Date: 2015.06.06 @ 12:43:55

End Date: 2015.06.06 @ 17:28:10

Job Ticket #: 59766                      DST #: 1

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.06.10 @ 13:48:26

Palomino Petroleum

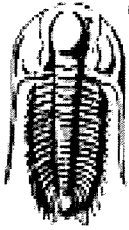
35-21S-2E Marion,KS

Osage-Nemaha #1

DST # 1

Hunton

2015.06.06



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Palomino Petroleum

**35-21S-2E Marion,KS**

4924 SE 84th St  
Newton, KS 67114

**Osage-Nemaha #1**

Job Ticket: 59766

**DST#: 1**

ATTN: Sean Deenihan

Test Start: 2015.06.06 @ 12:43:55

## GENERAL INFORMATION:

Formation: **Hunton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:11:25

Time Test Ended: 17:28:10

Test Type: Conventional Bottom Hole (Initial)

Tester: Leal Cason

Unit No: 74

Interval: **2540.00 ft (KB) To 2687.00 ft (KB) (TVD)**

Reference Elevations: 1363.00 ft (KB)

Total Depth: 2687.00 ft (KB) (TVD)

1354.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

**Serial #: 6798**

**Inside**

Press@RunDepth: 18.72 psig @ 2541.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.06.06 End Date: 2015.06.06

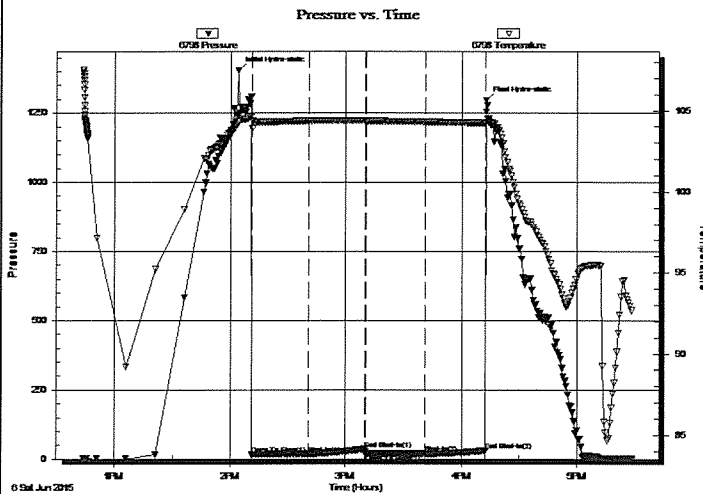
Last Calib.: 2015.06.06

Start Time: 12:43:56 End Time: 17:28:10

Time On Btm: 2015.06.06 @ 14:04:10

Time Off Btm: 2015.06.06 @ 16:12:40

TEST COMMENT: IF: Weak Surface Blow  
IS: No Blow Back  
FF: Weak Surface Blow  
FS: No Blow Back



## PRESSURE SUMMARY

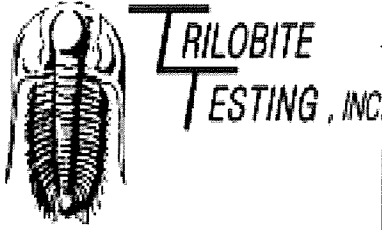
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1404.41	104.28	Initial Hydro-static
8	16.33	103.89	Open To Flow (1)
37	17.07	104.35	Shut-In(1)
66	35.47	104.36	End Shut-In(1)
67	17.03	104.35	Open To Flow (2)
97	18.72	104.29	Shut-In(2)
129	30.33	104.22	End Shut-In(2)
129	1296.68	104.90	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
2.00	Mud	0.03

## Gas Rates

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



# DRILL STEM TEST REPORT

Palomino Petroleum  
 4924 SE 84th St  
 Newton, KS 67114  
 ATTN: Sean Deenihan

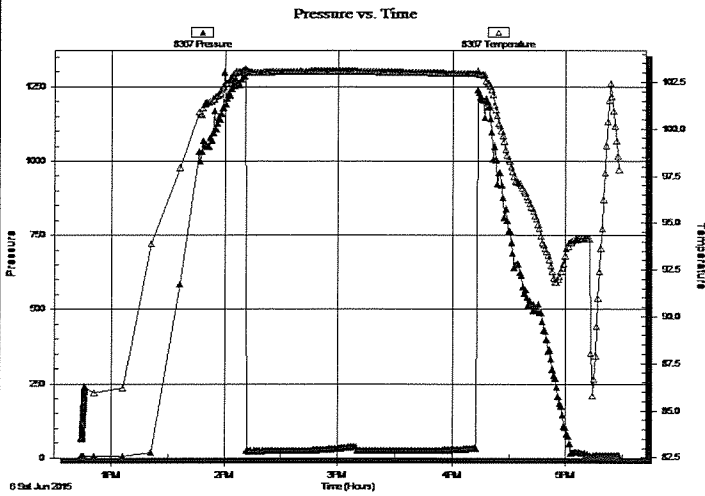
**35-21S-2E Marion, KS**  
**Osage-Nemaha #1**  
 Job Ticket: 59766 DST#: 1  
 Test Start: 2015.06.06 @ 12:43:55

## GENERAL INFORMATION:

Formation: **Hunton**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 14:11:25  
 Time Test Ended: 17:28:10  
 Interval: **2540.00 ft (KB) To 2687.00 ft (KB) (TVD)**  
 Total Depth: 2687.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches  
 Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Leal Cason  
 Unit No: 74  
 Reference Elevations: 1363.00 ft (KB)  
 1354.00 ft (CF)  
 KB to GR/CF: 9.00 ft

**Serial #: 8367** **Outside**  
 Press@RunDepth: psig @ 2541.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2015.06.06 End Date: 2015.06.06 Last Callb.: 2015.06.06  
 Start Time: 12:43:56 End Time: 17:28:40 Time On Btm:  
 Time Off Btm:

TEST COMMENT: IF: Weak Surface Blow  
 IS: No Blow Back  
 FF: Weak Surface Blow  
 FS: No Blow Back



### PRESSURE SUMMARY

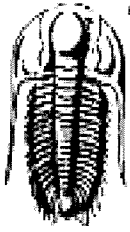
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

### Recovery

Length (ft)	Description	Volume (bbl)
2.00	Mud	0.03

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Palomino Petroleum

**35-21S-2E Marion,KS**

4924 SE 84th St  
New ton, KS 67114

**Osage-Nemaha #1**

Job Ticket: 59766

**DST#: 1**

ATTN: Sean Deenihan

Test Start: 2015.06.06 @ 12:43:55

### Tool Information

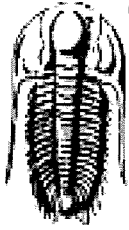
Drill Pipe:	Length: 2528.00 ft	Diameter: 3.80 inches	Volume: 35.46 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 46000.00 lb
			<u>Total Volume: 35.46 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 32000.00 lb
Depth to Top Packer:	2540.00 ft			Final 32000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	147.00 ft			
Tool Length:	166.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			2526.00	
Hydraulic tool	5.00			2531.00	
Packer	5.00			2536.00	19.00 Bottom Of Top Packer
Packer	4.00			2540.00	
Stubb	1.00			2541.00	
Recorder	0.00	6798	Inside	2541.00	
Recorder	0.00	8367	Outside	2541.00	
Perforations	4.00			2545.00	
Change Over Sub	1.00			2546.00	
Drill Pipe	127.00			2673.00	
Change Over Sub	1.00			2674.00	
Perforations	10.00			2684.00	
Bullnose	3.00			2687.00	147.00 Bottom Packers & Anchor

**Total Tool Length: 166.00**



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Palomino Petroleum

**35-21S-2E Marion, KS**

4924 SE 84th St  
New ton, KS 67114

**Osage-Nemaha #1**

Job Ticket: 59766

**DST#: 1**

ATTN: Sean Deenihan

Test Start: 2015.06.06 @ 12:43:55

### 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: ppm

Viscosity: 60.00 sec/qt

Cushion Volume: bbl

Water Loss: 8.98 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 1900.00 ppm

Filter Cake: 0.02 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	Mud	0.028

Total Length: 2.00 ft      Total Volume: 0.028 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6798

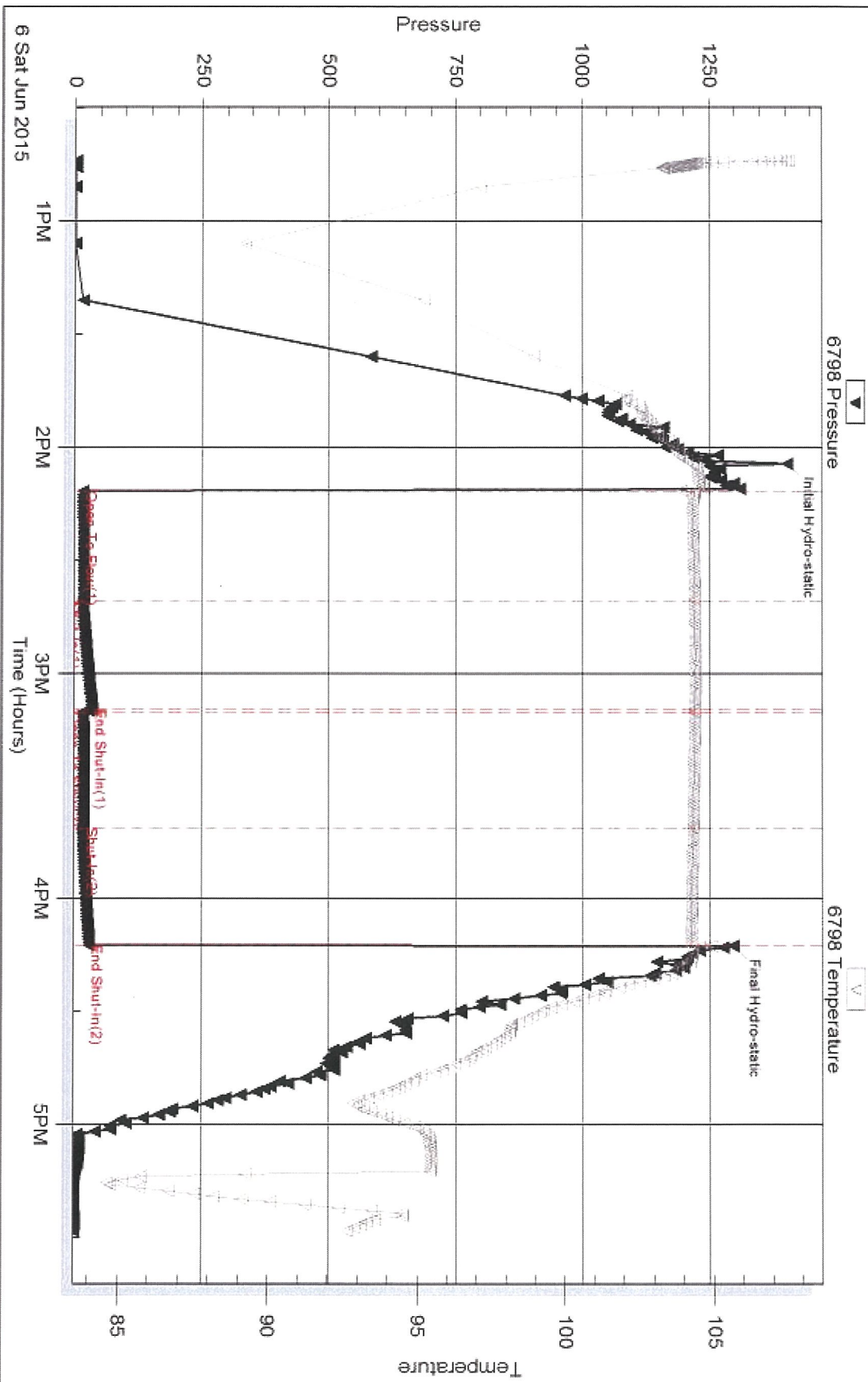
Inside

Palomino Petroleum

Osage-Nemaha #1

DST Test Number: 1

### Pressure vs. Time



Trioble Testing, Inc

Ref. No: 59766

Printed: 2015.06.10 @ 13:48:28



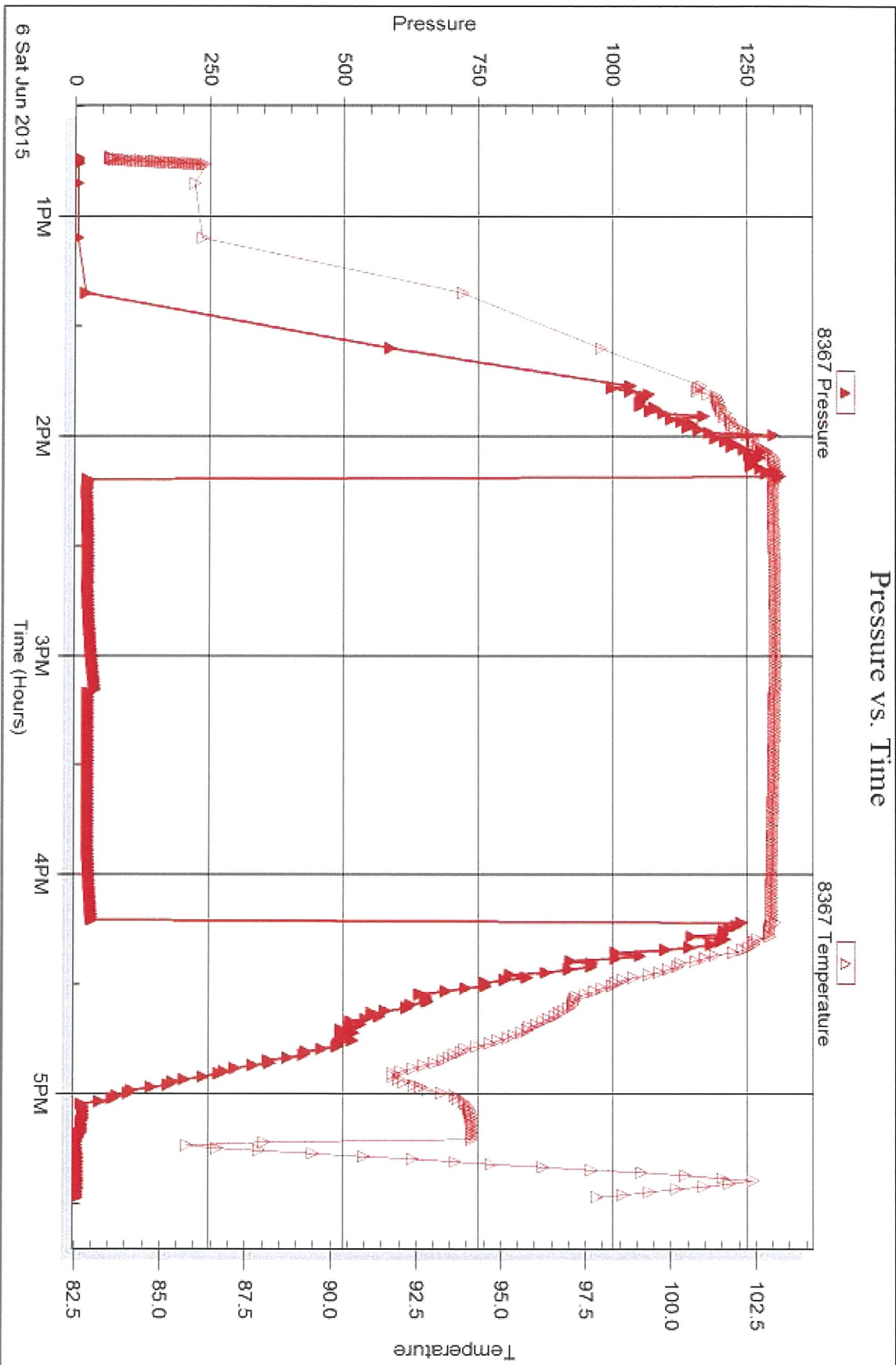
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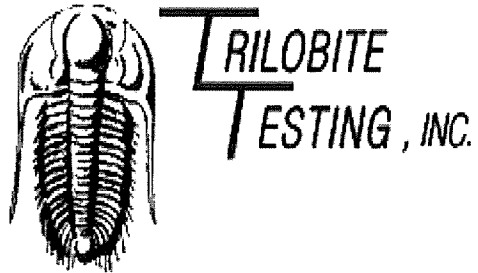
Outside

Palomino Petroleum

Osage-Namaha #1

DST Test Number: 1





## DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum**

4924 SE 84th St  
Newton, KS 67114

ATTN: Sean Deenihan

### **Osage-Nemaha #1**

#### **35-21S-2E Marion,KS**

Start Date: 2015.06.07 @ 03:08:42

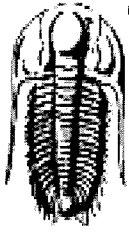
End Date: 2015.06.07 @ 08:42:42

Job Ticket #: 59767                      DST #: 2

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.06.10 @ 13:48:06

Palomino Petroleum  
35-21S-2E Marion,KS  
Osage-Nemaha #1  
DST # 2  
Hunton  
2015.06.07



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Palomino Petroleum

**35-21S-2E Marion,KS**

4924 SE 84th St  
Newton, KS 67114

**Osage-Nemaha #1**

Job Ticket: 59767

**DST#: 2**

ATTN: Sean Deenihan

Test Start: 2015.06.07 @ 03:08:42

## GENERAL INFORMATION:

Formation: **Hunton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:31:27

Time Test Ended: 08:42:42

Test Type: Conventional Bottom Hole (Reset)

Tester: Leal Cason

Unit No: 74

Interval: **2540.00 ft (KB) To 2755.00 ft (KB) (TVD)**

Total Depth: 2755.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1363.00 ft (KB)

1354.00 ft (CF)

KB to GR/CF: 9.00 ft

**Serial #: 6798**

**Inside**

Press@RunDepth: 989.49 psig @ 2541.00 ft (KB)

Start Date: 2015.06.07

End Date:

2015.06.07

Start Time: 03:08:43

End Time:

08:42:42

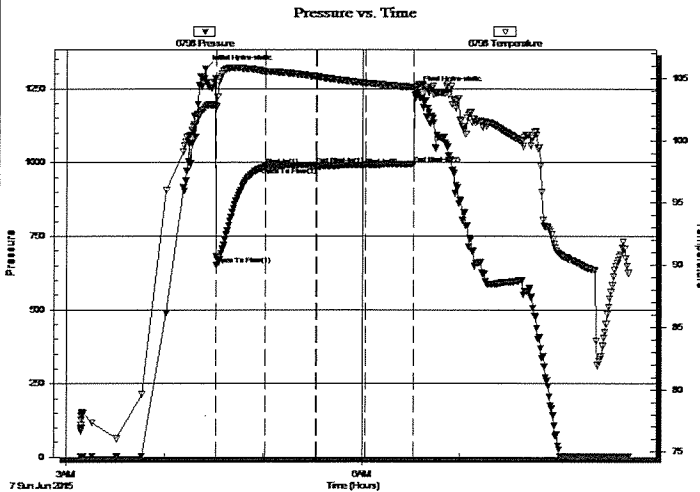
Capacity: 8000.00 psig

Last Calib.: 2015.06.07

Time On Btm: 2015.06.07 @ 04:24:27

Time Off Btm: 2015.06.07 @ 06:33:12

TEST COMMENT: IF: Strong Blow , BOB in 30 seconds  
IS: No Blow Back  
FF: Weak Surface Blow , Dead @ 5 minutes  
FS: No Blow Back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1318.46	102.68	Initial Hydro-static
7	653.01	102.78	Open To Flow (1)
37	987.25	105.55	Shut-In(1)
68	991.97	105.16	End Shut-In(1)
68	986.11	105.15	Open To Flow (2)
98	989.49	104.64	Shut-In(2)
127	994.20	104.27	End Shut-In(2)
129	1246.94	104.35	Final Hydro-static

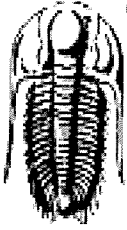
## Recovery

Length (ft)	Description	Volume (bbl)
1519.00	Water	21.31
126.00	MCW 10%M 90%W	1.77
567.00	WCM 30%W 70%M	7.95

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

Palomino Petroleum

**35-21S-2E Marion,KS**

4924 SE 84th St  
New ton, KS 67114

**Osage-Nemaha #1**

Job Ticket: 59767

**DST#: 2**

ATTN: Sean Deenihan

Test Start: 2015.06.07 @ 03:08:42

### GENERAL INFORMATION:

Formation: **Hunton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:31:27

Time Test Ended: 08:42:42

Test Type: Conventional Bottom Hole (Reset)

Tester: Leal Cason

Unit No: 74

**Interval: 2540.00 ft (KB) To 2755.00 ft (KB) (TVD)**

Reference Elevations: 1363.00 ft (KB)

Total Depth: 2755.00 ft (KB) (TVD)

1354.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 9.00 ft

**Serial #: 8367 Outside**

Press@RunDepth: psig @ 2541.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.06.07

End Date:

2015.06.07

Last Calib.:

2015.06.07

Start Time: 03:08:43

End Time:

08:42:42

Time On Btm:

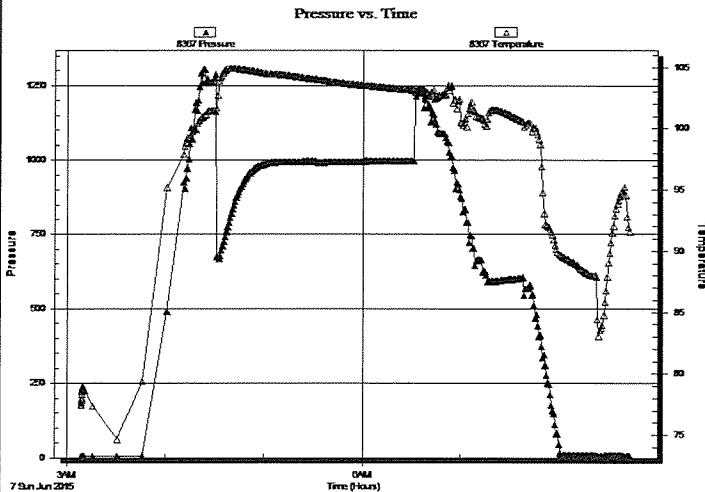
Time Off Btm:

TEST COMMENT: IF: Strong Blow , BOB in 30 seconds

IS: No Blow Back

FF: Weak Surface Blow , Dead @ 5 minutes

FS: No Blow Back



### PRESSURE SUMMARY

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

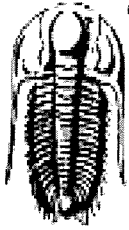
### Recovery

Length (ft)	Description	Volume (bbl)
1519.00	Water	21.31
126.00	MCW 10%M 90%WV	1.77
567.00	WCM 30%W 70%M	7.95

\* Recovery from multiple tests

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Palomino Petroleum

**35-21S-2E Marion,KS**

4924 SE 84th St  
New ton, KS 67114

**Osage-Nemaha #1**

Job Ticket: 59767

**DST#: 2**

ATTN: Sean Deenihan

Test Start: 2015.06.07 @ 03:08:42

### Tool Information

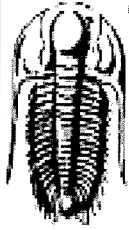
Drill Pipe:	Length: 2527.00 ft	Diameter: 3.80 inches	Volume: 35.45 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 35.45 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 32000.00 lb
Depth to Top Packer:	2540.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	215.00 ft			
Tool Length:	234.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Dropped Bar

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			2526.00	
Hydraulic tool	5.00			2531.00	
Packer	5.00			2536.00	19.00 Bottom Of Top Packer
Packer	4.00			2540.00	
Stubb	1.00			2541.00	
Recorder	0.00	6798	Inside	2541.00	
Recorder	0.00	8367	Outside	2541.00	
Perforations	4.00			2545.00	
Change Over Sub	1.00			2546.00	
Drill Pipe	190.00			2736.00	
Change Over Sub	1.00			2737.00	
Perforations	15.00			2752.00	
Bullnose	3.00			2755.00	215.00 Bottom Packers & Anchor

**Total Tool Length: 234.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Palomino Petroleum

**35-21S-2E Marion,KS**

4924 SE 84th St  
New ton, KS 67114

**Osage-Nemaha #1**

Job Ticket: 59767

**DST#: 2**

ATTN: Sean Deenihan

Test Start: 2015.06.07 @ 03:08:42

**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: 27000 ppm

Viscosity: 60.00 sec/qt

Cushion Volume: bbl

Water Loss: 8.97 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 1900.00 ppm

Filter Cake: 0.02 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
1519.00	Water	21.308
126.00	MCW 10%M 90%W	1.767
567.00	WCM 30%W 70%M	7.954

Total Length: 2212.00 ft      Total Volume: 31.029 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW w as .22 @ 81 degrees

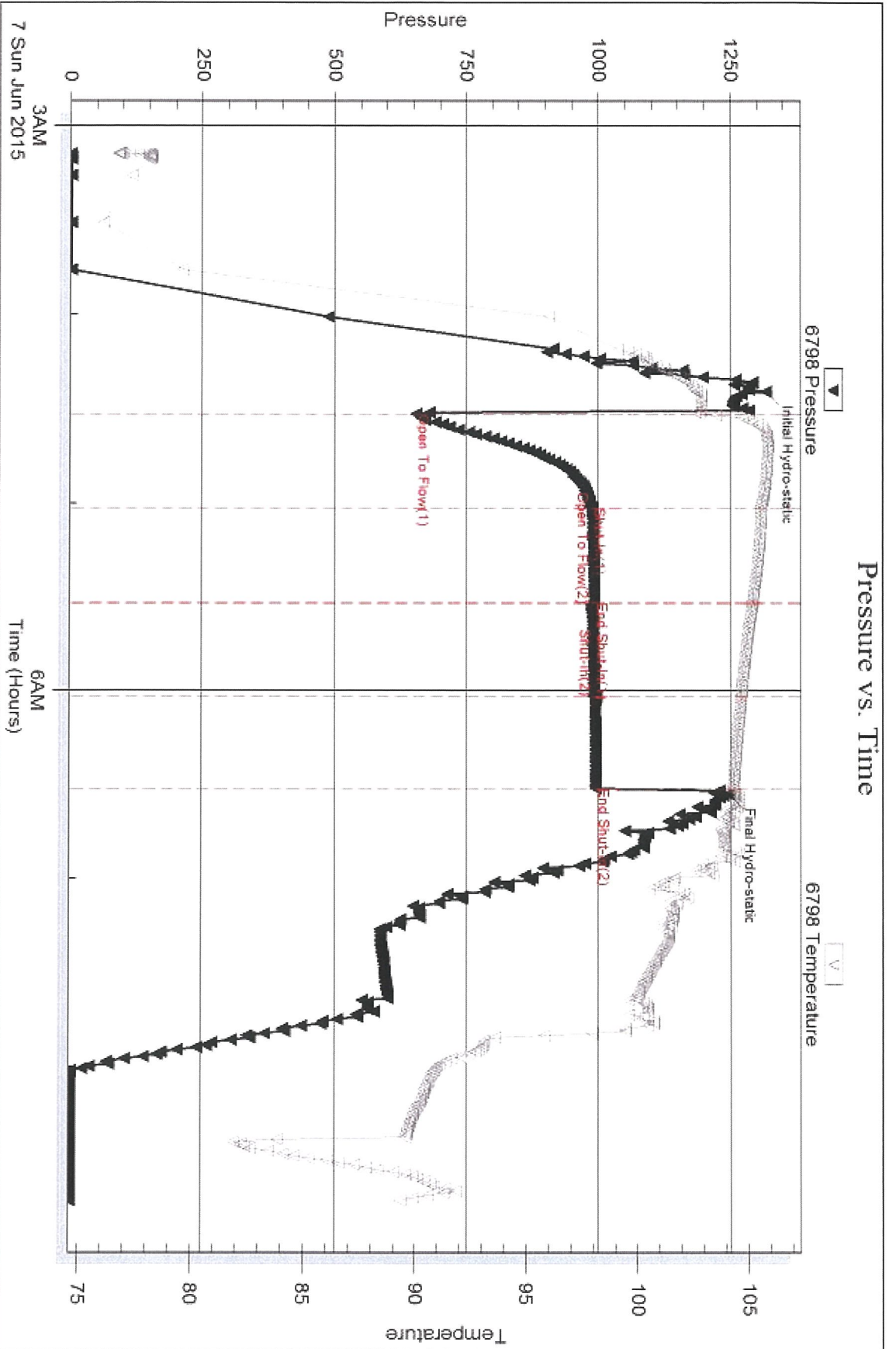
Serial #: 6798

Inside

Palomino Petroleum

Osage-Nemaha #1

DST Test Number: 2



Tribble Testing, Inc

Ref. No: 59767

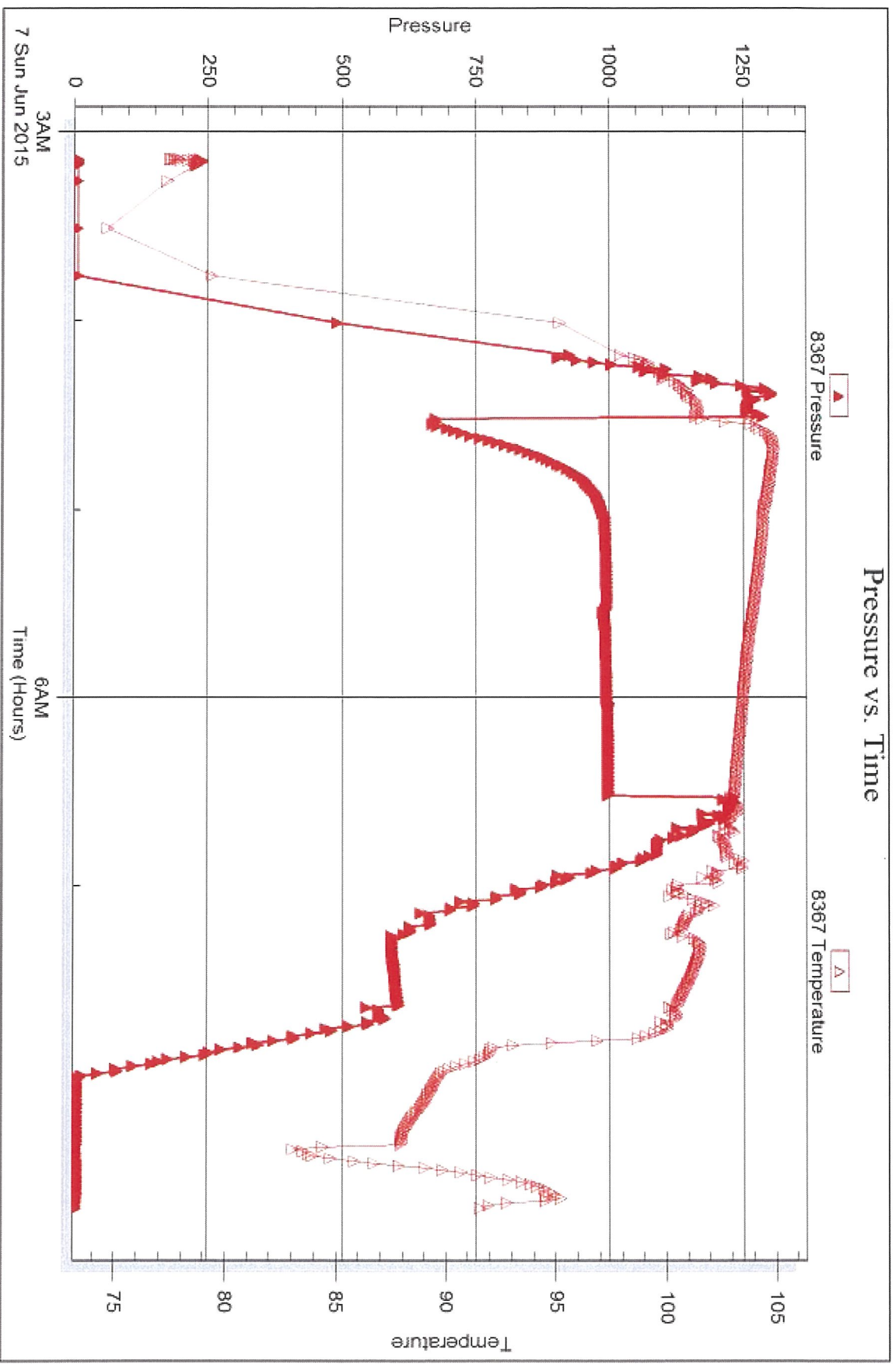
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Serial #: 8367

Outside Palomino Petroleum

Osage-Nemaha #1

DST Test Number: 2

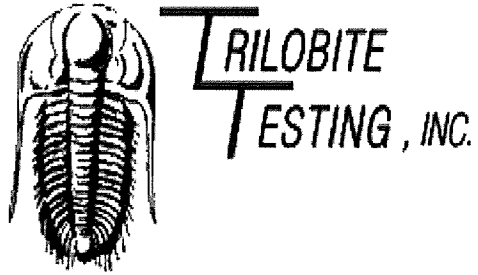


Tribble Testing, Inc

Ref. No: 59767

Printed: 2015.06.10 @ 13:48:07





## DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum**

4924 SE 84th St  
Newton, KS 67114

ATTN: Sean Deenihan

### **Osage-Nemaha #1**

#### **35-21S-2E Marion,KS**

Start Date: 2015.06.07 @ 22:49:59

End Date: 2015.06.08 @ 04:42:44

Job Ticket #: 59768                      DST #: 3

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.06.10 @ 13:41:33

Palomino Petroleum

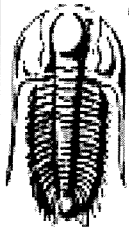
35-21S-2E Marion,KS

Osage-Nemaha #1

DST # 3

Simpson

2015.06.07



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Palomino Petroleum

**35-21S-2E Marion,KS**

4924 SE 84th St  
Newton, KS 67114

**Osage-Nemaha #1**

Job Ticket: 59768

**DST#: 3**

ATTN: Sean Deenihan

Test Start: 2015.06.07 @ 22:49:59

## GENERAL INFORMATION:

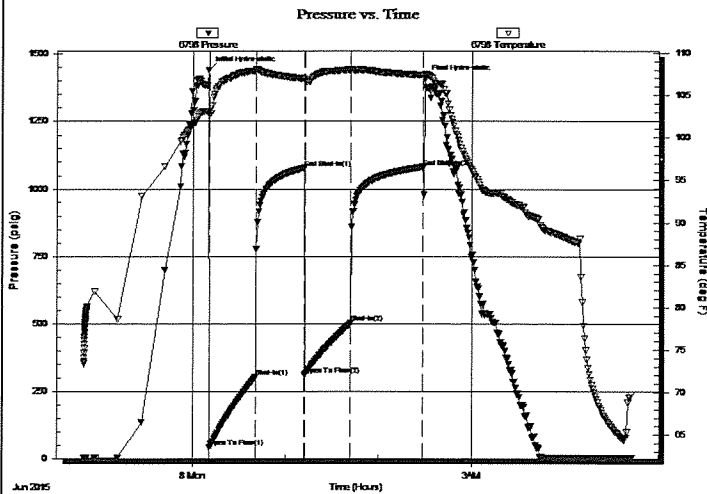
Formation: **Simpson**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 00:10:59  
 Tester: Leal Cason  
 Time Test Ended: 04:42:44  
 Unit No: 74  
 Interval: **2847.00 ft (KB) To 2898.00 ft (KB) (TVD)**  
 Reference Elevations: 1363.00 ft (KB)  
 Total Depth: 2898.00 ft (KB) (TVD)  
 1354.00 ft (CF)  
 Hole Diameter: 7.88 inches  
 Hole Condition: Good  
 KB to GR/CF: 9.00 ft

## Serial #: 6798

Inside

Press@RunDepth: 501.30 psig @ 2848.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2015.06.07 End Date: 2015.06.08 Last Calib.: 2015.06.08  
 Start Time: 22:50:00 End Time: 04:42:44 Time On Btm: 2015.06.08 @ 00:10:14  
 Time Off Btm: 2015.06.08 @ 02:29:44

TEST COMMENT: IF: Weak Blow , BOB in 10 minutes  
 IS: No Blow Back  
 FF: Weak Blow , Built to 7",Died Off to 3" by 30 minutes  
 FS: No Blow Back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1441.76	103.06	Initial Hydro-static
1	43.11	102.61	Open To Flow (1)
31	302.28	107.88	Shut-In(1)
62	1078.72	106.96	End Shut-In(1)
62	309.88	106.69	Open To Flow (2)
92	501.30	108.01	Shut-In(2)
139	1082.10	107.39	End Shut-In(2)
140	1406.84	107.55	Final Hydro-static

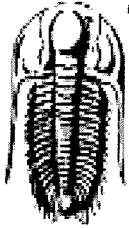
## Recovery

Length (ft)	Description	Volume (bbl)
882.00	Water	12.37
262.00	MCW 30%M 70%W	3.68

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Palomino Petroleum  
4924 SE 84th St  
Newton, KS 67114  
ATTN: Sean Deenihan

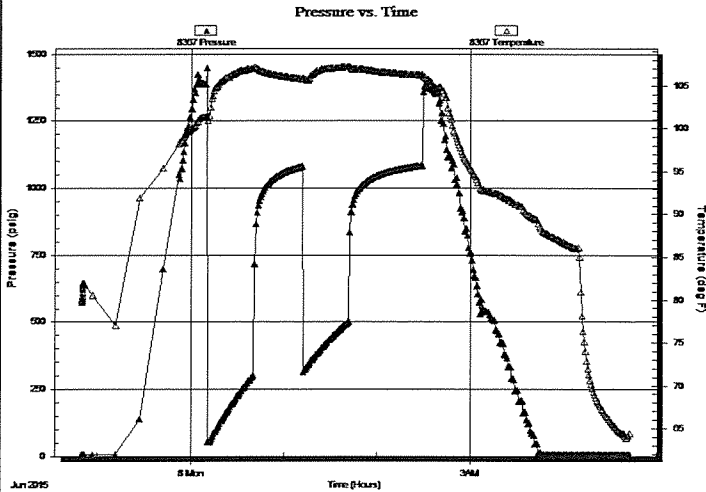
**35-21S-2E Marion,KS**  
**Osage-Nemaha #1**  
Job Ticket: 59768      **DST#: 3**  
Test Start: 2015.06.07 @ 22:49:59

**GENERAL INFORMATION:**

Formation: **Simpson**  
Deviated: No      Whipstock:                      ft (KB)  
Time Tool Opened: 00:10:59  
Time Test Ended: 04:42:44  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Leal Cason  
Unit No: 74  
Interval: **2847.00 ft (KB) To 2898.00 ft (KB) (TVD)**  
Reference Elevations:      1363.00 ft (KB)  
Total Depth: 2898.00 ft (KB) (TVD)                      1354.00 ft (CF)  
Hole Diameter: 7.88 inches      Hole Condition: Good                      KB to GR/CF: 9.00 ft

**Serial #: 8367      Outside**  
Press@RunDepth:                      psig @      2848.00 ft (KB)      Capacity:                      8000.00 psig  
Start Date: 2015.06.07      End Date: 2015.06.08      Last Calib.: 2015.06.08  
Start Time: 22:50:00      End Time: 04:42:44      Time On Btm:  
Time Off Btm:

TEST COMMENT: IF: Weak Blow , BOB in 10 minutes  
IS: No Blow Back  
FF: Weak Blow , Built to 7",Died Off to 3" by 30 minutes  
FS: No Blow Back



**PRESSURE SUMMARY**

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

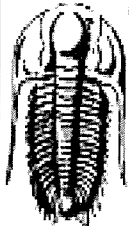
**Recovery**

Length (ft)	Description	Volume (bbl)
882.00	Water	12.37
262.00	M CW 30% M 70% W	3.68

**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

**35-21S-2E Marion,KS**

4924 SE 84th St  
Newton, KS 67114

**Osage-Nemaha #1**

Job Ticket: 59768

**DST#: 3**

ATTN: Sean Deenihan

Test Start: 2015.06.07 @ 22:49:59

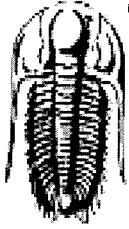
### Tool Information

Drill Pipe:	Length: 2845.00 ft	Diameter: 3.80 inches	Volume: 39.91 bbl	Tool Weight: 2100.00 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: 40000.00 lb
			<u>Total Volume: 39.91 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 32000.00 lb
Depth to Top Packer:	2847.00 ft			Final 37000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	51.00 ft			
Tool Length:	70.00 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			2833.00	
Hydraulic tool	5.00			2838.00	
Packer	5.00			2843.00	19.00 Bottom Of Top Packer
Packer	4.00			2847.00	
Stubb	1.00			2848.00	
Recorder	0.00	6798	Inside	2848.00	
Recorder	0.00	8367	Outside	2848.00	
Perforations	4.00			2852.00	
Change Over Sub	1.00			2853.00	
Drill Pipe	31.00			2884.00	
Change Over Sub	1.00			2885.00	
Perforations	10.00			2895.00	
Bullnose	3.00			2898.00	51.00 Bottom Packers & Anchor

**Total Tool Length: 70.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Palomino Petroleum

**35-21S-2E Marion,KS**

4924 SE 84th St  
Newton, KS 67114

**Osage-Nemaha #1**

Job Ticket: 59768

**DST#: 3**

ATTN: Sean Deenihan

Test Start: 2015.06.07 @ 22:49:59

**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: 8500 ppm

Viscosity: 60.00 sec/qt

Cushion Volume: bbl

Water Loss: 8.98 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 1900.00 ppm

Filter Cake: 0.02 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
882.00	Water	12.372
262.00	MCW 30%M 70%W	3.675

Total Length: 1144.00 ft      Total Volume: 16.047 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW w as .6 @ 83 degrees

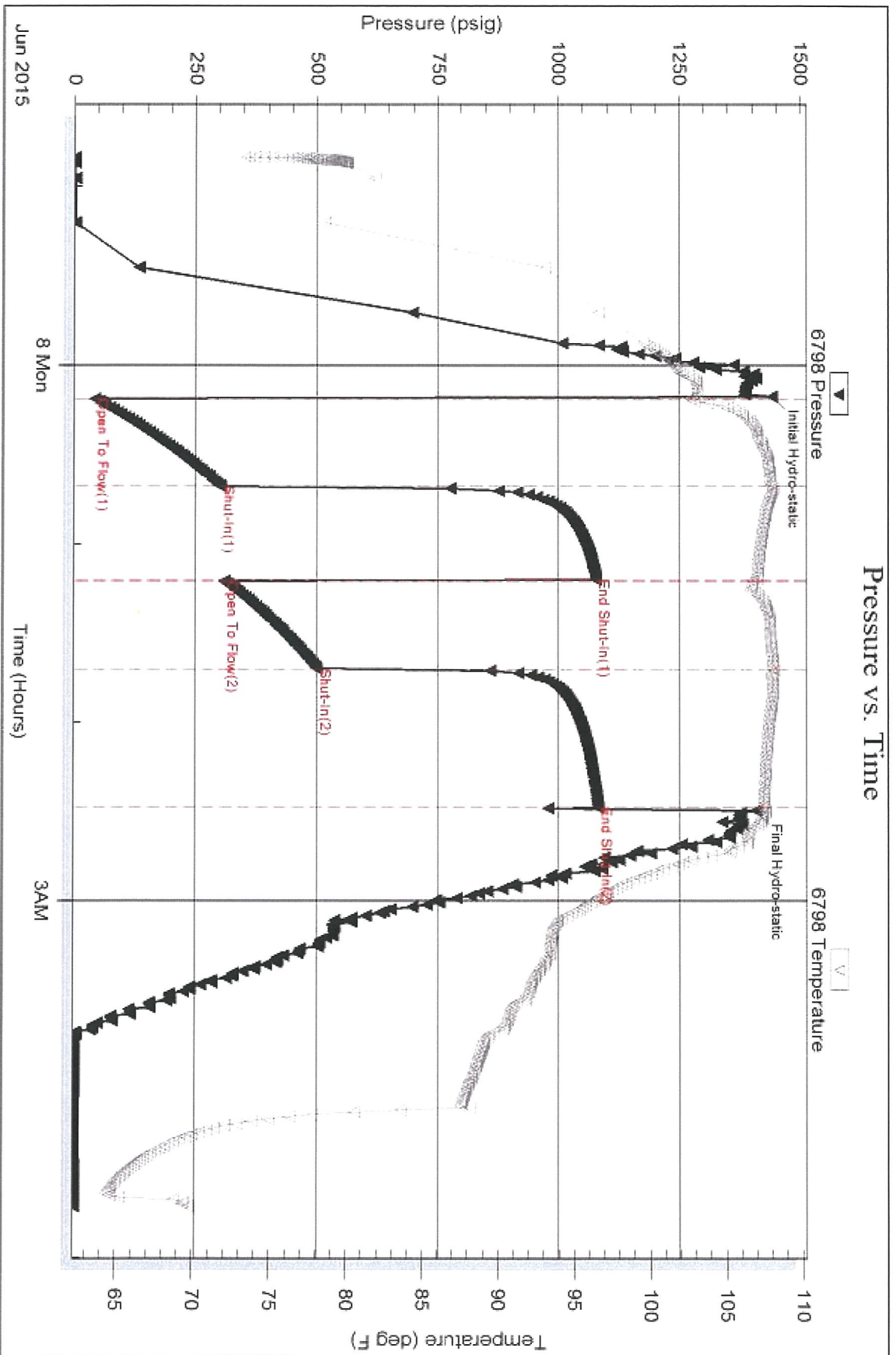
Serial #: 6798

Inside

Palomino Petroleum

Osage-Nemaha #1

DST Test Number: 3



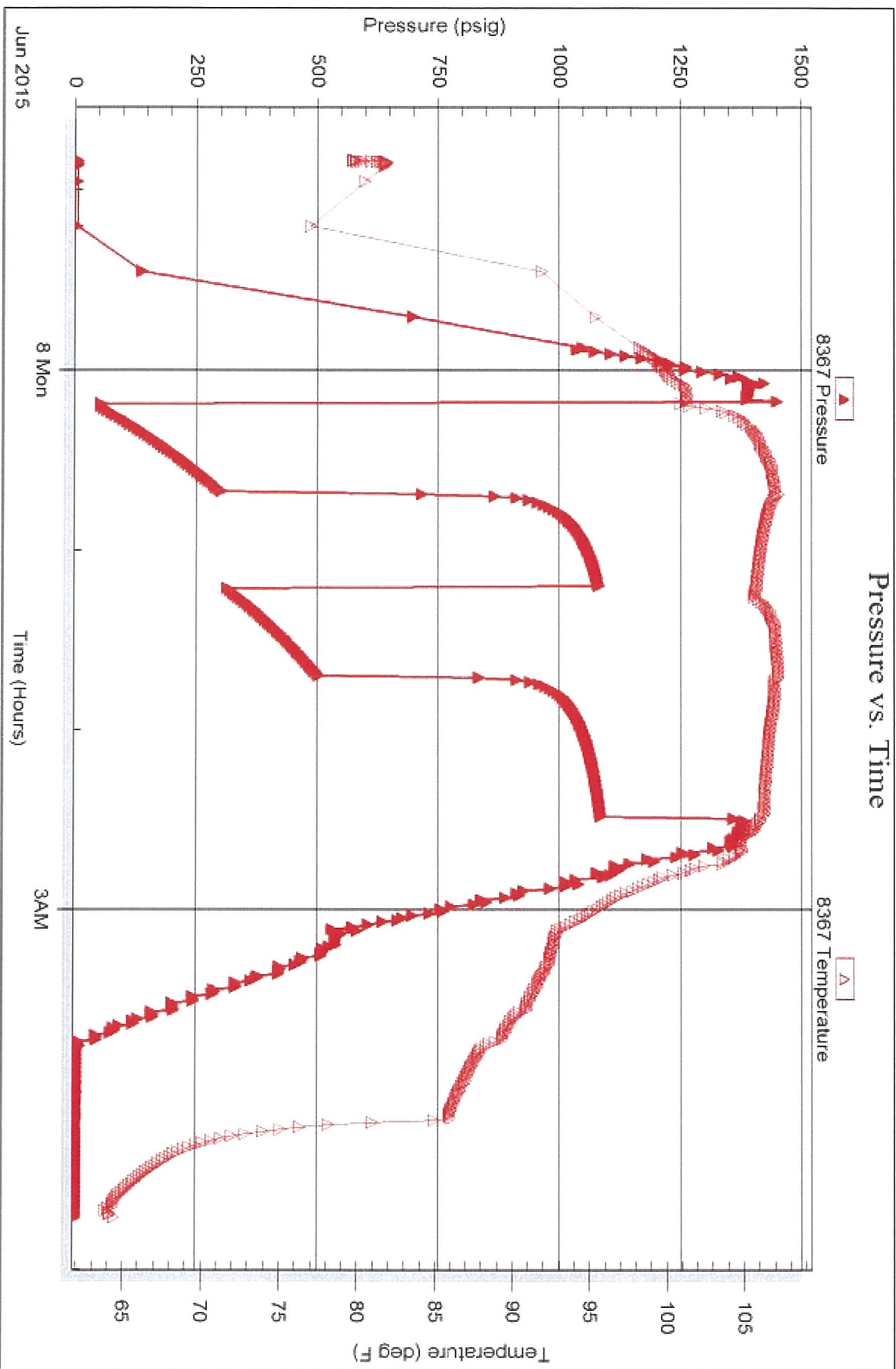
Serial #: 8367

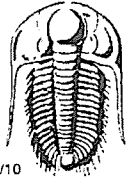
Outside

Palomino Petroleum

Osage-Nemaha #1

DST Test Number: 3





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 59786

Well Name & No. Osage - Nemaha 1 Test No. 1 Date 06/06/15  
 Company Palomino Petroleum Elevation 1363 KB 1354 GL  
 Address 4924 SE 24th St Newton, KS 67114  
 Co. Rep / Geo. Sean Deenihan Rig Southwind 8  
 Location: Sec. 35 Twp. 21S Rge. 2E Co. Marion State KS

Interval Tested 2540 - 2687 Zone Tested HUNTON  
 Anchor Length 147 Drill Pipe Run 2528 Mud Wt. 9.6  
 Top Packer Depth 2535 Drill Collars Run 0 Vis 60  
 Bottom Packer Depth 2540 Wt. Pipe Run 0 WL 9.0  
 Total Depth 2687 Chlorides 1900 ppm System LCM 3

Blow Description IF: weak surface Blow  
ISI: No Blow Back  
FF: weak surface Blow  
FSI: No Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>2</u>	<u>mud</u>				

Rec Total 2 BHT 104 Gravity N/C API RW N/C @ N/C °F Chlorides N/C ppm

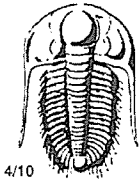
(A) Initial Hydrostatic 1404  Test 1050 T-On Location 11:30  
 (B) First Initial Flow 16  Jars \_\_\_\_\_ T-Started 12:43  
 (C) First Final Flow 17  Safety Joint \_\_\_\_\_ T-Open 14:11  
 (D) Initial Shut-In 35  Circ Sub \_\_\_\_\_ T-Pulled 16:12  
 (E) Second Initial Flow 17  Hourly Standby \_\_\_\_\_ T-Out 17:28  
 (F) Second Final Flow 19  Mileage 230 230 Comments motor  
 (G) Final Shut-In 30  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1297  Straddle \_\_\_\_\_

Initial Open 30  Ruined Shale Packer \_\_\_\_\_  
 Initial Shut-In 30  Ruined Packer \_\_\_\_\_  
 Final Flow 30  Extra Packer \_\_\_\_\_  
 Final Shut-In 30  Extra Recorder \_\_\_\_\_  
 Sub Total 1280  Day Standby \_\_\_\_\_  
 Total 1280  Accessibility \_\_\_\_\_  
 MP/DST Disc't \_\_\_\_\_

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.





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 59167

Well Name & No. Osage - Nemaha 1 Test No. 2 Date 06/07/15  
 Company Palomino Petroleum Elevation 1363 KB 1354 GL  
 Address 4924 SE 84th St Newton, KS 67114  
 Co. Rep / Geo. Pat Deenihan Rig Southwind 8  
 Location: Sec. 35 Twp. 21S Rge. 2E Co. Marion State KS

Interval Tested 2540 - 2755 Zone Tested Hunton  
 Anchor Length 215 Drill Pipe Run 2527 Mud Wt. 9.6  
 Top Packer Depth 2535 Drill Collars Run 0 Vis 60  
 Bottom Packer Depth 2540 Wt. Pipe Run 0 WL 9.0  
 Total Depth 2755 Chlorides 1900 ppm System LCM 3#

Blow Description IF: strong Blow, BOB in 30 seconds  
ISI: NO Blow Back  
FF: weak surface Blow, Dead @ 5 minutes  
FSI: NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>567</u>	<u>WCM</u>			<u>30</u>	<u>70</u>
<u>126</u>	<u>MCW</u>			<u>90</u>	<u>10</u>
<u>1519</u>	<u>Water</u>				

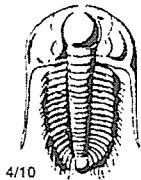
Rec Total 2212 BHT 104 Gravity N/C API RW .22 @ 81 °F Chlorides 27000 ppm

(A) Initial Hydrostatic 1318  Test 1050 T-On Location 02:45  
 (B) First Initial Flow 653  Jars \_\_\_\_\_ T-Started 03:08  
 (C) First Final Flow 987  Safety Joint \_\_\_\_\_ T-Open 04:31  
 (D) Initial Shut-In 992  Circ Sub \_\_\_\_\_ T-Pulled 06:31  
 (E) Second Initial Flow 986  Hourly Standby \_\_\_\_\_ T-Out 08:42  
 (F) Second Final Flow 989  Mileage 230 230 Comments Dropped Bar  
 (G) Final Shut-In 994  Sampler \_\_\_\_\_ NOTE!  
 (H) Final Hydrostatic 1247  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_

Initial Open 30  Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Initial Shut-In 30  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Final Flow 30  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Shut-In 30  Day Standby \_\_\_\_\_ Total 1280  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1280

Approved By Patrick Deenihan 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.



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 59768

Well Name & No. Osage - Memaha 1 Test No. 3 Date 06/07/15  
 Company Palomino Petroleum Elevation 1363 KB 1354 GL  
 Address 4924 SE 84th St Newton, KS 67114  
 Co. Rep / Geo. Pat Deenihan Rig Southwind 8  
 Location: Sec. 35 Twp. 21S Rge. 2E Co. Marion State KS

Interval Tested 2847 - 2898 Zone Tested Simpson  
 Anchor Length 51 Drill Pipe Run 2845 Mud Wt. 9.5  
 Top Packer Depth 2842 Drill Collars Run 0 Vis 46  
 Bottom Packer Depth 2847 Wt. Pipe Run 0 WL 9.2  
 Total Depth 2898 Chlorides 2100 ppm System LCM 3

Blow Description IF: weak Blow, BOB in 10 minutes  
ISI: NO Blow Back  
FF: weak Blow, Built to 7 inches, Died off to 3 inches by 30 minutes  
FSI: NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>262</u>	<u>MCW</u>		<u>70</u>	<u>30</u>	
<u>982</u>	<u>Water</u>				

Rec Total 1144 BHT 107 Gravity N/C API RW 6 @ 83 °F Chlorides 2500 ppm

(A) Initial Hydrostatic 1442  Test 1050 T-On Location 21:30  
 (B) First Initial Flow 43 ~~302~~  Jars \_\_\_\_\_ T-Started 22:49  
 (C) First Final Flow 302 ~~1079~~  Safety Joint \_\_\_\_\_ T-Open 00:10  
 (D) Initial Shut-In 1079  Circ Sub \_\_\_\_\_ T-Pulled 02:28  
 (E) Second Initial Flow 310  Hourly Standby \_\_\_\_\_ T-Out 04:42  
 (F) Second Final Flow 501  Mileage 230 230 Comments NOTE 1  
 (G) Final Shut-In 1082  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1407  Straddle \_\_\_\_\_

Initial Open 30  Ruined Shale Packer \_\_\_\_\_  
 Initial Shut-In 30  Ruined Packer \_\_\_\_\_  
 Final Flow 30  Extra Packer \_\_\_\_\_  
 Final Shut-In 45  Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_ Sub Total 0  
 Accessibility \_\_\_\_\_ Total 1280  
 Sub Total 1280 MP/DST Disc't \_\_\_\_\_

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

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