



## DRILL STEM TEST REPORT

Prepared For: **Cla-Mar Oil Co.**

PO Box 1197  
Hays KS 67601

ATTN: Randy Killian

**C.M Hadley #8**

**32-11s-17w Ellis,KS**

Start Date: 2013.07.08 @ 10:45:00

End Date: 2013.07.08 @ 16:14:30

Job Ticket #: 54286                      DST #: 1

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

Printed: 2013.07.11 @ 14:13:04



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Cla-Mar Oil Co.

**32-11s-17w Ellis, KS**

PO Box 1197  
Hays KS 67601

**C.M Hadley #8**

Job Ticket: 54286

**DST#: 1**

ATTN: Randy Killian

Test Start: 2013.07.08 @ 10:45:00

## GENERAL INFORMATION:

Formation: **Tor-LKC C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:36:30

Time Test Ended: 16:14:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Brett D/Brannan L

Unit No: 59

**Interval: 3236.00 ft (KB) To 3330.00 ft (KB) (TVD)**

Reference Elevations: 2060.00 ft (KB)

Total Depth: 3330.00 ft (KB) (TVD)

2054.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 6.00 ft

**Serial #: 6753**

**Inside**

Press @ Run Depth: 22.85 psig @ 3307.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.07.08

End Date:

2013.07.08

Last Calib.:

2013.07.08

Start Time: 10:45:05

End Time:

16:14:29

Time On Btm:

2013.07.08 @ 12:35:00

Time Off Btm:

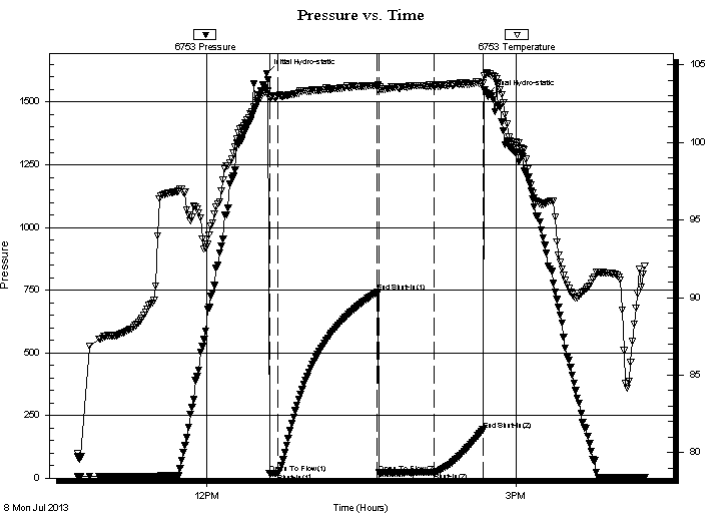
2013.07.08 @ 14:43:00

TEST COMMENT: IF-1/8"

ISI-No blow

FF-No blow

FSI-No blow



## PRESSURE SUMMARY

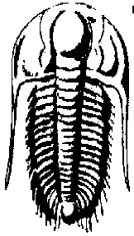
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1614.91	103.25	Initial Hydro-static
2	19.66	102.87	Open To Flow (1)
7	20.21	103.03	Shut-In(1)
64	741.29	103.68	End Shut-In(1)
65	21.09	103.33	Open To Flow (2)
97	22.85	103.61	Shut-In(2)
126	192.85	103.82	End Shut-In(2)
128	1529.12	104.51	Final Hydro-static

## 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

Cla-Mar Oil Co.

**32-11s-17w Ellis,KS**

PO Box 1197  
Hays KS 67601

**C.M Hadley #8**

Job Ticket: 54286

**DST#: 1**

ATTN: Randy Killian

Test Start: 2013.07.08 @ 10:45:00

## GENERAL INFORMATION:

Formation: **Tor-LKC C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:36:30

Time Test Ended: 16:14:30

**Interval: 3236.00 ft (KB) To 3330.00 ft (KB) (TVD)**

Total Depth: 3330.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Initial)

Tester: Brett D/Brannan L

Unit No: 59

Reference Elevations: 2060.00 ft (KB)

2054.00 ft (CF)

KB to GR/CF: 6.00 ft

**Serial #: 8166 Outside**

Press @ Run Depth: psig @ 3307.00 ft (KB)

Start Date: 2013.07.08

End Date: 2013.07.08

Start Time: 10:45:05

End Time: 16:14:29

Capacity: 8000.00 psig

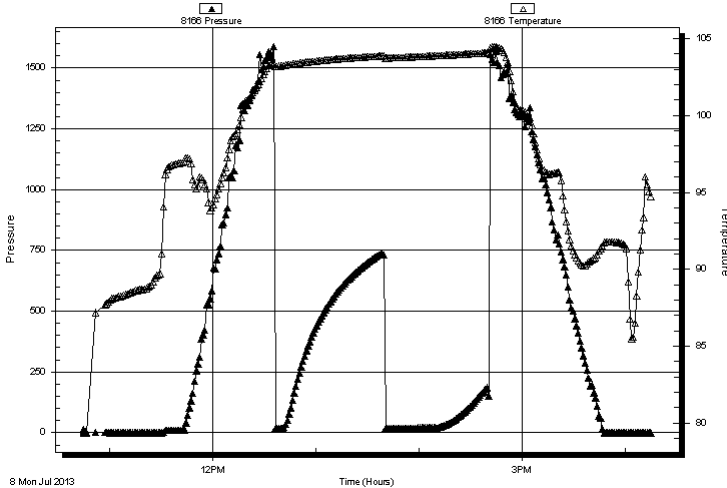
Last Calib.: 2013.07.08

Time On Btm:

Time Off Btm:

TEST COMMENT: IF-1/8"  
IS-No blow  
FF-No blow  
FS-No blow

Pressure vs. Time



## 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**

Cla-Mar Oil Co.

**32-11s-17w Ellis,KS**

PO Box 1197  
Hays KS 67601

**C.M Hadley #8**

Job Ticket: 54286

**DST#: 1**

ATTN: Randy Killian

Test Start: 2013.07.08 @ 10:45:00

## Tool Information

Drill Pipe:	Length: 3234.00 ft	Diameter: 3.80 inches	Volume: 45.36 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 250000.0 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			Total Volume: 45.36 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	3236.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	94.00 ft			
Tool Length:	117.00 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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Change Over Sub	1.00			3214.00	
Shut In Tool	5.00			3219.00	
Hydraulic tool	5.00			3224.00	
Safety Joint	2.00			3226.00	
Packer	5.00			3231.00	23.00 Bottom Of Top Packer
Packer	5.00			3236.00	
Stubb	1.00			3237.00	
Perforations	5.00			3242.00	
Change Over Sub	1.00			3243.00	
Drill Pipe	63.00			3306.00	
Change Over Sub	1.00			3307.00	
Recorder	0.00	6753	Inside	3307.00	
Recorder	0.00	8166	Outside	3307.00	
Perforations	20.00			3327.00	
Bullnose	3.00			3330.00	94.00 Bottom Packers & Anchor

**Total Tool Length: 117.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Cla-Mar Oil Co.

**32-11s-17w Ellis,KS**

PO Box 1197  
Hays KS 67601

**C.M Hadley #8**

Job Ticket: 54286

**DST#: 1**

ATTN: Randy Killian

Test Start: 2013.07.08 @ 10:45:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 8.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.55 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 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:

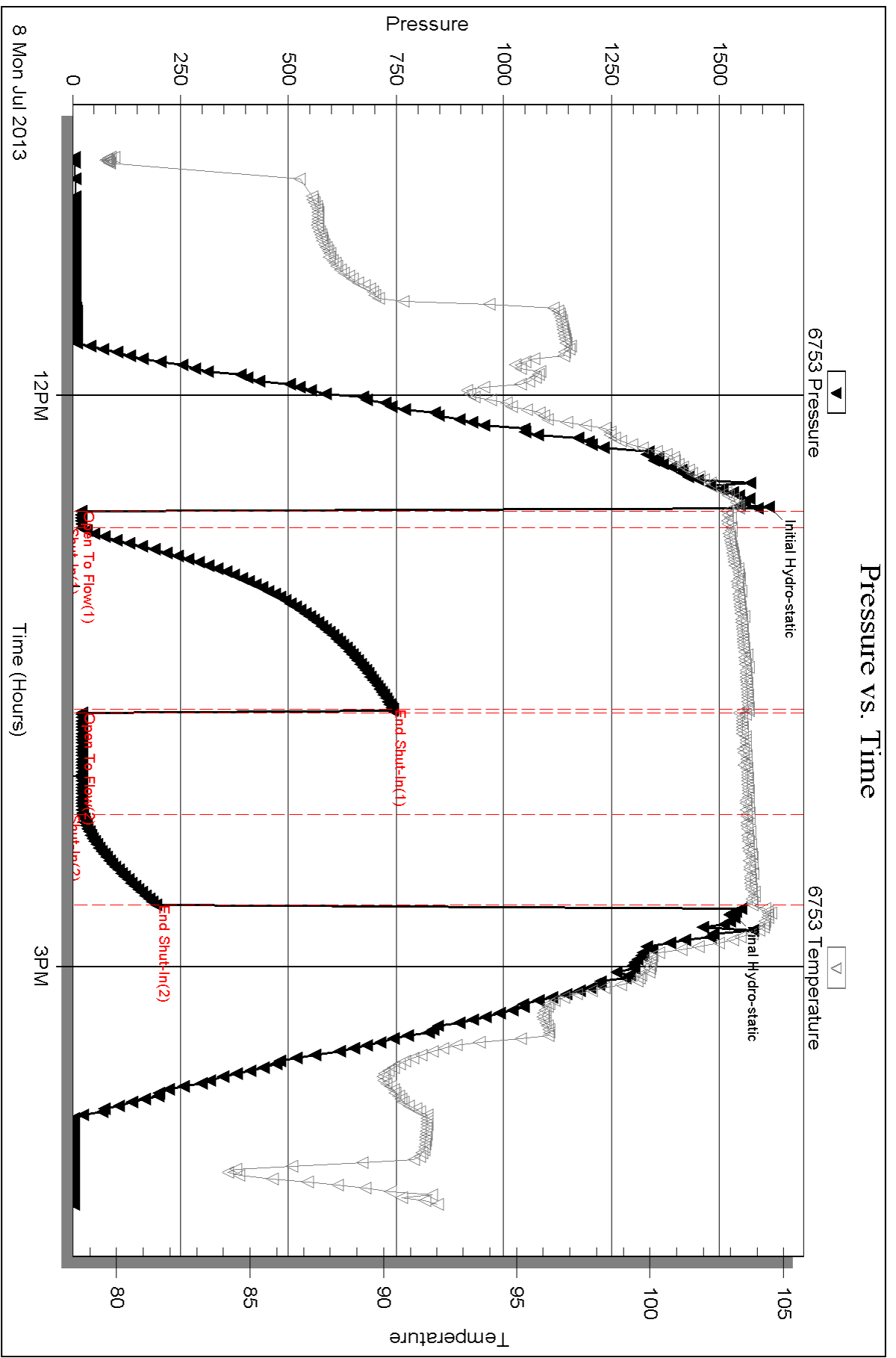
Serial #: 6753

Inside

Clu-Mar Oil Co.

CM Hadley #8

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 54286

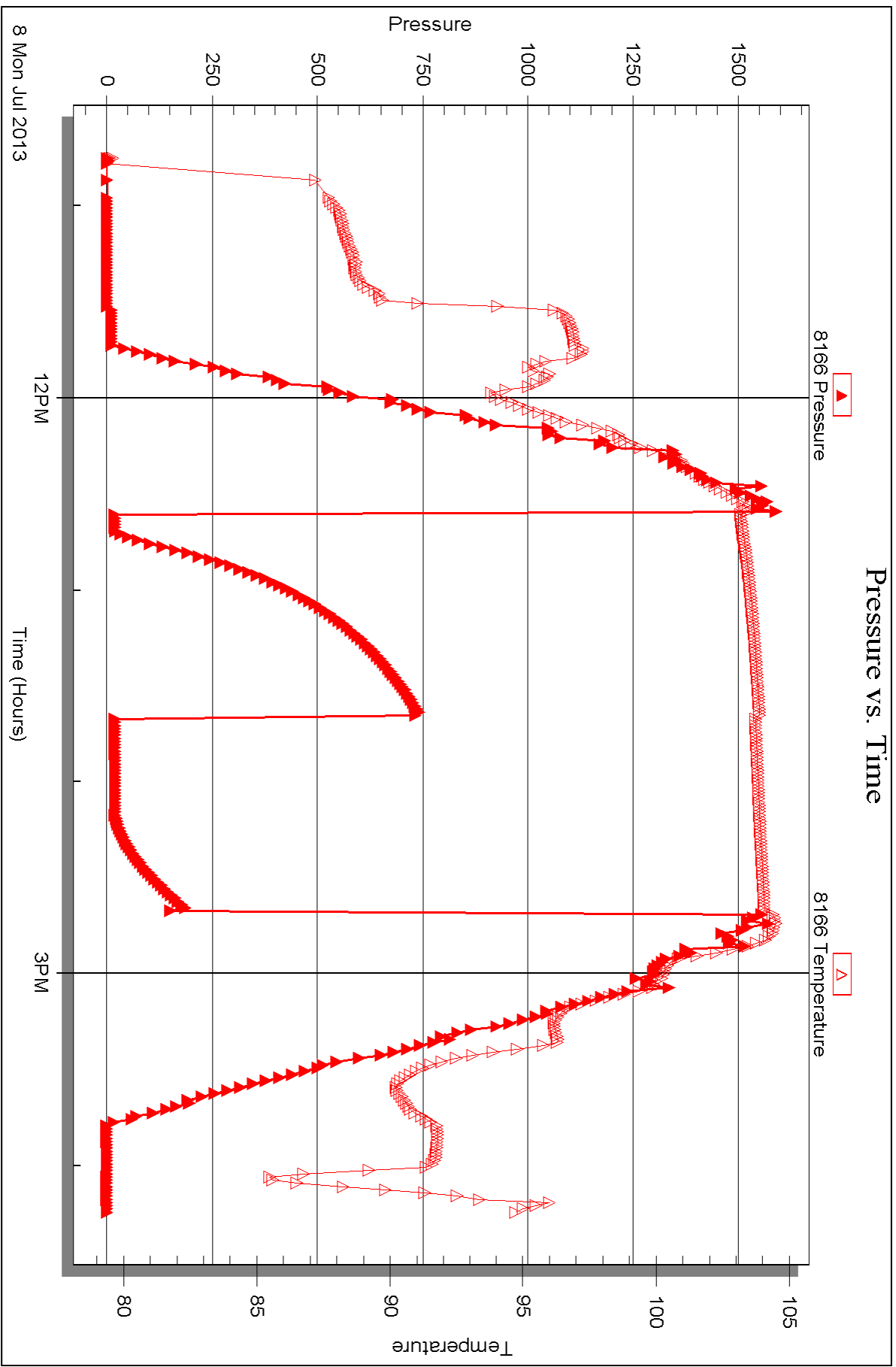
Printed: 2013.07.11 @ 14:13:07

Serial #: 8166

Outside Cla-Mar Oil Co.

CM Hadley #8

DST Test Number: 1





## DRILL STEM TEST REPORT

Prepared For: **Cla-Mar Oil Co.**

PO Box 1197  
Hays KS 67601

ATTN: Randy Killian

**C.M Hadley #8**

**32-11s-17w Ellis,KS**

Start Date: 2013.07.09 @ 00:25:00

End Date: 2013.07.09 @ 05:29:30

Job Ticket #: 54287                      DST #: 2

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

Printed: 2013.07.11 @ 14:12:22





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Cla-Mar Oil Co.

**32-11s-17w Ellis,KS**

PO Box 1197  
Hays KS 67601

**C.M Hadley #8**

Job Ticket: 54287

**DST#: 2**

ATTN: Randy Killian

Test Start: 2013.07.09 @ 00:25:00

## GENERAL INFORMATION:

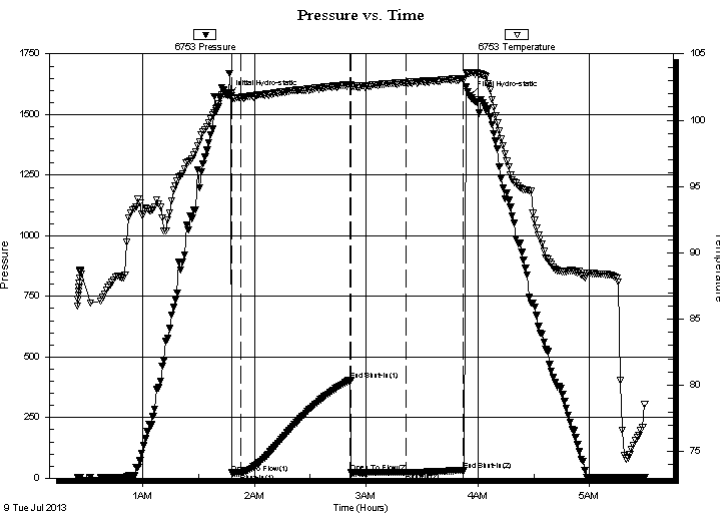
Formation: **KC**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 01:48:00  
 Time Test Ended: 05:29:30  
 Interval: **3329.00 ft (KB) To 3390.00 ft (KB) (TVD)**  
 Total Depth: 3390.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Brett D/Brannan L  
 Unit No: 59  
 Reference Elevations: 2060.00 ft (KB)  
 2054.00 ft (CF)  
 KB to GR/CF: 6.00 ft

## Serial #: 6753

Inside

Press @ Run Depth: 23.14 psig @ 3369.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2013.07.09 End Date: 2013.07.09 Last Calib.: 2013.07.09  
 Start Time: 00:25:05 End Time: 05:29:29 Time On Btm: 2013.07.09 @ 01:46:00  
 Time Off Btm: 2013.07.09 @ 03:55:30

TEST COMMENT: IF-1" blow  
 IS- No blow  
 FF- No blow  
 FS- No blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1582.87	101.97	Initial Hydro-static
2	21.71	101.65	Open To Flow (1)
7	21.63	101.64	Shut-In(1)
65	404.73	102.69	End Shut-In(1)
66	22.03	102.50	Open To Flow (2)
96	23.14	102.74	Shut-In(2)
126	33.55	103.14	End Shut-In(2)
130	1577.67	103.51	Final Hydro-static

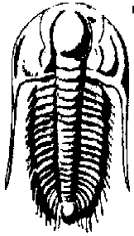
## Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud	0.07

\* Recovery from multiple tests

## Gas Rates

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



# TRILOBITE TESTING, INC.

## DRILL STEM TEST REPORT

Cla-Mar Oil Co.

32-11s-17w Ellis, KS

PO Box 1197  
Hays KS 67601

C.M Hadley #8

Job Ticket: 54287

DST#: 2

ATTN: Randy Killian

Test Start: 2013.07.09 @ 00:25:00

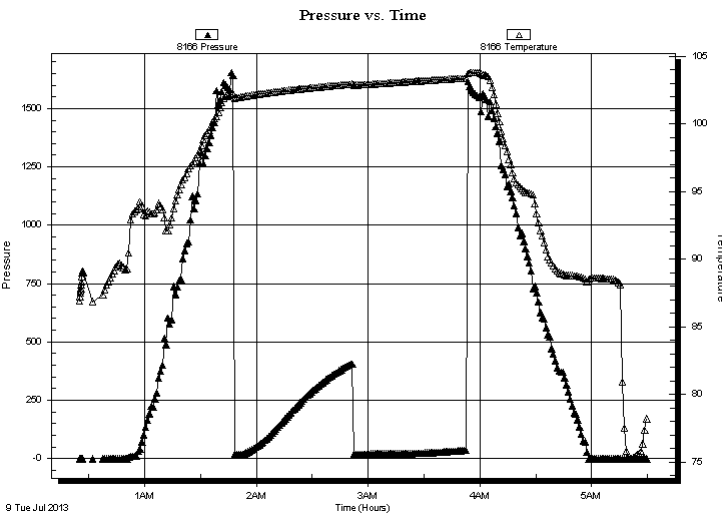
### GENERAL INFORMATION:

Formation: <b>KC</b>				Test Type: Conventional Bottom Hole (Reset)
Deviated: No Whipstock:	ft (KB)			Tester: Brett D/Brannan L
Time Tool Opened: 01:48:00				Unit No: 59
Time Test Ended: 05:29:30				Reference Elevations: 2060.00 ft (KB)
<b>Interval: 3329.00 ft (KB) To 3390.00 ft (KB) (TVD)</b>				2054.00 ft (CF)
Total Depth: 3390.00 ft (KB) (TVD)				KB to GR/CF: 6.00 ft
Hole Diameter: 7.88 inches	Hole Condition: Fair			

### Serial #: 8166 Outside

Press @ Run Depth: psig @ 3369.00 ft (KB)	Capacity: 8000.00 psig
Start Date: 2013.07.09	End Date: 2013.07.09
Start Time: 00:25:05	End Time: 05:29:59
	Last Calib.: 2013.07.09
	Time On Btm:
	Time Off Btm:

TEST COMMENT: IF-1" blow  
 IS- No blow  
 FF- No blow  
 FS- No blow



### PRESSURE SUMMARY

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

### Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud	0.07

\* Recovery from multiple tests

### Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Cla-Mar Oil Co.

**32-11s-17w Ellis,KS**

PO Box 1197  
Hays KS 67601

**C.M Hadley #8**

Job Ticket: 54287

**DST#: 2**

ATTN: Randy Killian

Test Start: 2013.07.09 @ 00:25:00

## Tool Information

Drill Pipe:	Length: 3331.00 ft	Diameter: 3.80 inches	Volume: 46.73 bbl	Tool Weight: 2000.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 68000.00 lb
			Total Volume: 46.73 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	3329.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	61.00 ft			
Tool Length:	84.00 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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Change Over Sub	1.00			3307.00	
Shut In Tool	5.00			3312.00	
Hydraulic tool	5.00			3317.00	
Safety Joint	2.00			3319.00	
Packer	5.00			3324.00	23.00 Bottom Of Top Packer
Packer	5.00			3329.00	
Stubb	1.00			3330.00	
Perforations	5.00			3335.00	
Change Over Sub	1.00			3336.00	
Drill Pipe	32.00			3368.00	
Change Over Sub	1.00			3369.00	
Recorder	0.00	6753	Inside	3369.00	
Recorder	0.00	8166	Outside	3369.00	
Perforations	18.00			3387.00	
Bullnose	3.00			3390.00	61.00 Bottom Packers & Anchor

**Total Tool Length: 84.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Cla-Mar Oil Co.

**32-11s-17w Ellis,KS**

PO Box 1197  
Hays KS 67601

**C.M Hadley #8**

Job Ticket: 54287

**DST#: 2**

ATTN: Randy Killian

Test Start: 2013.07.09 @ 00:25:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 8.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.55 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud	0.070

Total Length: 5.00 ft      Total Volume: 0.070 bbl

Num Fluid Samples: 0

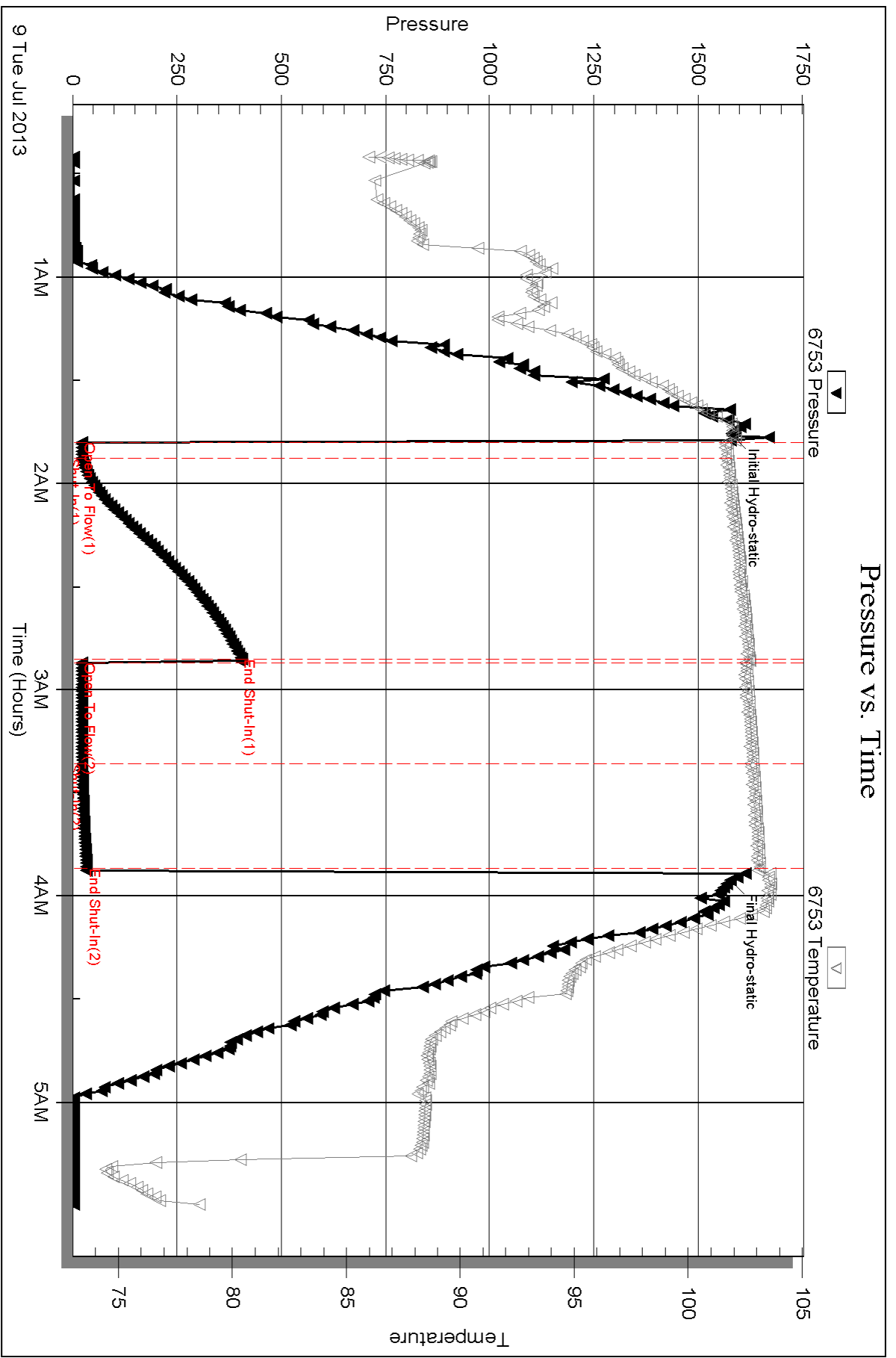
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

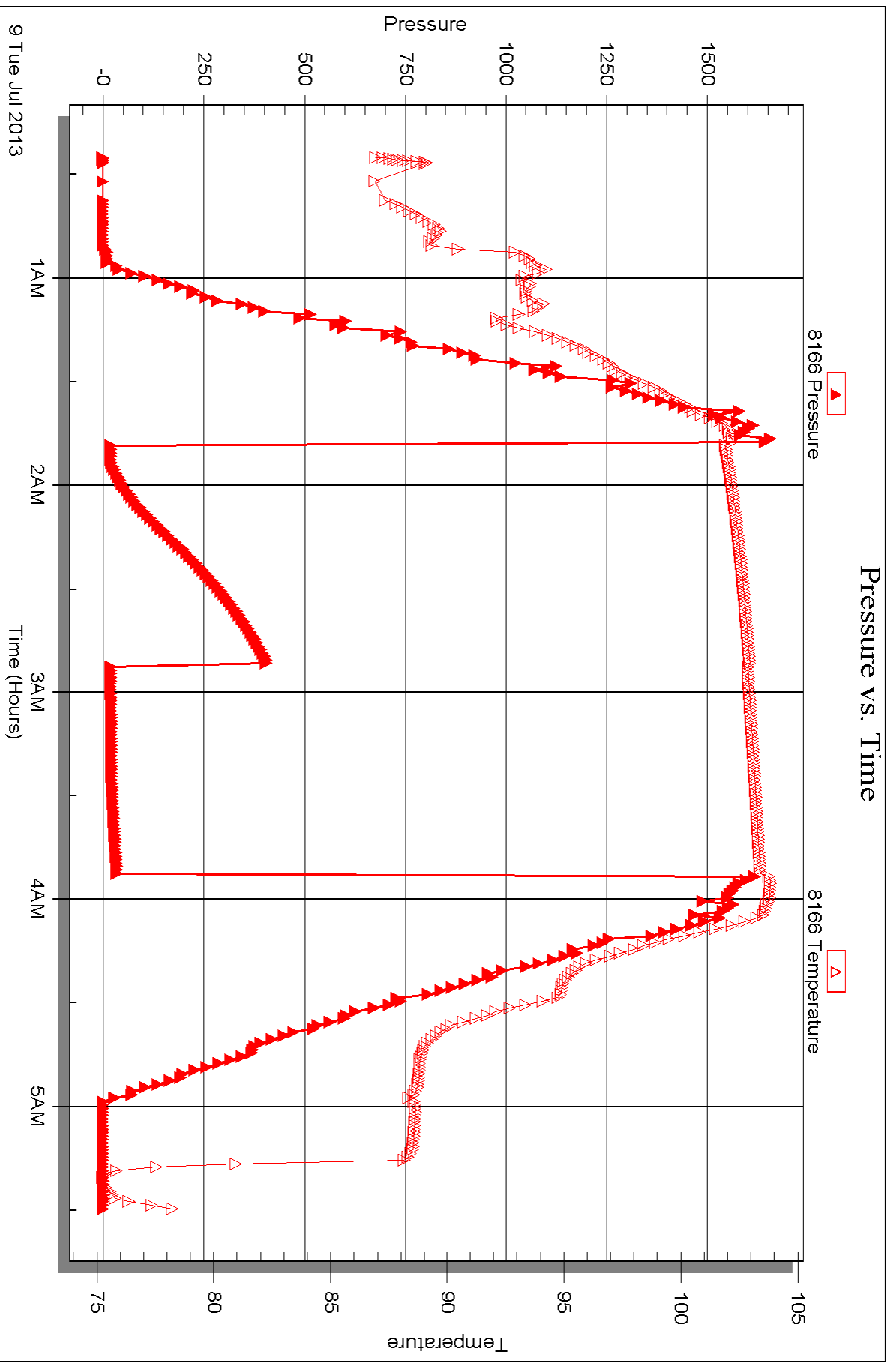


Serial #: 8166

Outside Cla-Mar Oil Co.

CM Hadley #8

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 54287

Printed: 2013.07.11 @ 14:12:25



## DRILL STEM TEST REPORT

Prepared For: **Cla-Mar Oil Co.**

PO Box 1197  
Hays KS 67601

ATTN: Randy Killian

**C.M Hadley #8**

**32-11s-17w Ellis,KS**

Start Date: 2013.07.10 @ 06:15:51

End Date: 2013.07.10 @ 13:46:45

Job Ticket #: 54288                      DST #: 3

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

Printed: 2013.07.11 @ 14:11:34



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Cla-Mar Oil Co.

**32-11s-17w Ellis, KS**

PO Box 1197  
Hays KS 67601

**C.M Hadley #8**

Job Ticket: 54288

**DST#: 3**

ATTN: Randy Killian

Test Start: 2013.07.10 @ 06:15:51

## GENERAL INFORMATION:

Formation: **Arb**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 07:50:16  
 Time Test Ended: 13:46:45  
 Interval: **3531.00 ft (KB) To 3588.00 ft (KB) (TVD)**  
 Total Depth: 3645.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Straddle (Reset)  
 Tester: Ray Schwager/Brannan  
 Unit No: 59  
 Reference Elevations: 2060.00 ft (KB)  
 2054.00 ft (CF)  
 KB to GR/CF: 6.00 ft

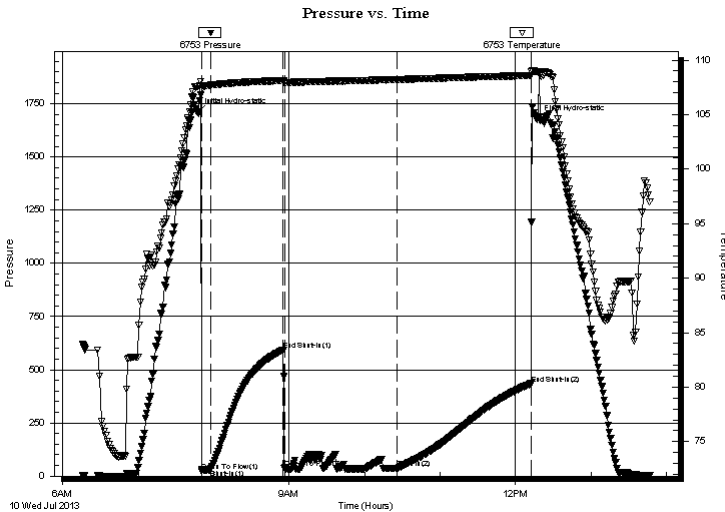
## Serial #: 6753

Inside

Press @ Run Depth: 36.00 psig @ 3574.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2013.07.10 End Date: 2013.07.10 Last Calib.: 2013.07.10  
 Start Time: 06:15:51 End Time: 13:46:45 Time On Btm: 2013.07.10 @ 07:47:16  
 Time Off Btm: 2013.07.10 @ 12:17:15

TEST COMMENT: 5-IFP-1/4" to 1 1/4" bl  
 60-ISIP-no bl  
 90-FFP-no bl  
 105-FSIP-no bl

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1708.43	107.58	Initial Hydro-static
3	23.82	107.27	Open To Flow (1)
11	31.58	107.73	Shut-In(1)
68	593.35	108.14	End Shut-In(1)
69	38.20	107.97	Open To Flow (2)
159	36.00	108.22	Shut-In(2)
265	434.29	108.60	End Shut-In(2)
270	1675.86	108.94	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud	0.42

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Cla-Mar Oil Co.

**32-11s-17w Ellis,KS**

PO Box 1197  
Hays KS 67601

**C.M Hadley #8**

Job Ticket: 54288

**DST#: 3**

ATTN: Randy Killian

Test Start: 2013.07.10 @ 06:15:51

## GENERAL INFORMATION:

Formation: **Arb**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:50:16

Time Test Ended: 13:46:45

Test Type: Conventional Straddle (Reset)

Tester: Ray Schwager/Brannan

Unit No: 59

**Interval: 3531.00 ft (KB) To 3588.00 ft (KB) (TVD)**

Reference Elevations: 2060.00 ft (KB)

Total Depth: 3645.00 ft (KB) (TVD)

2054.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 6.00 ft

**Serial #: 8319 Below (Straddle)**

Press @ Run Depth: psig @ 3613.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.07.10 End Date: 2013.07.10

Last Calib.: 2013.07.10

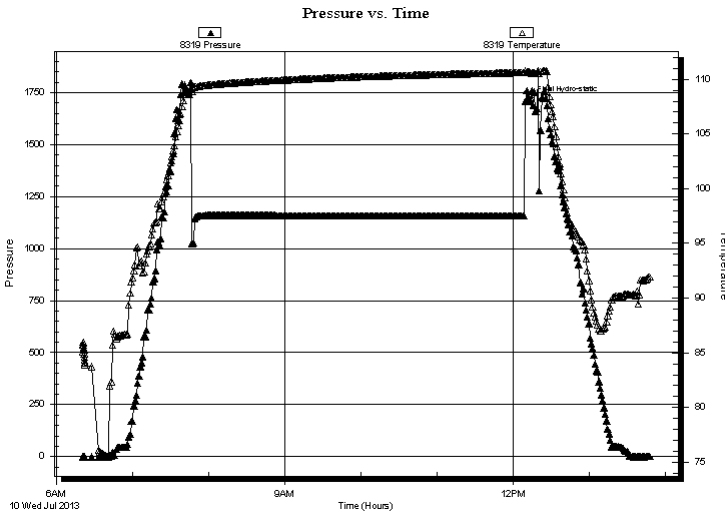
Start Time: 06:20:20 End Time: 13:47:44

Time On Btm:

Time Off Btm: 2013.07.10 @ 12:13:45

**TEST COMMENT:** 5-IFP-1/4" to 1 1/4" bl  
60-ISIP-no bl  
90-FFP-no bl  
105-FSIP-no bl

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1708.81	110.64	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud	0.42

## Gas Rates

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

\* Recovery from multiple tests





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Cla-Mar Oil Co.

**32-11s-17w Ellis,KS**

PO Box 1197  
Hays KS 67601

**C.M Hadley #8**

Job Ticket: 54288

**DST#: 3**

ATTN: Randy Killian

Test Start: 2013.07.10 @ 06:15:51

### Tool Information

Drill Pipe:	Length: 3518.00 ft	Diameter: 3.80 inches	Volume: 49.35 bbl	Tool Weight: 2000.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 80000.00 lb
			Total Volume: 49.35 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	3531.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	3588.00 ft			
Interval between Packers:	57.00 ft			
Tool Length:	141.00 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			3509.00	
Shut In Tool	5.00			3514.00	
Hydraulic tool	5.00			3519.00	
Safety Joint	2.00			3521.00	
Packer	5.00			3526.00	23.00 Bottom Of Top Packer
Packer	5.00			3531.00	
Stubb	1.00			3532.00	
Perforations	9.00			3541.00	
Change Over Sub	1.00			3542.00	
Drill Pipe	31.00			3573.00	
Change Over Sub	1.00			3574.00	
Recorder	0.00	8166	Inside	3574.00	
Recorder	0.00	6753	Inside	3574.00	
Perforations	10.00			3584.00	
Blank Off Sub	1.00			3585.00	
Blank Spacing	3.00			3588.00	57.00 Tool Interval
Packer	5.00			3593.00	
Stubb	1.00			3594.00	
Perforations	19.00			3613.00	
Recorder	0.00	8319	Below	3613.00	
Blank Spacing	33.00			3646.00	
Bullnose	3.00			3649.00	61.00 Bottom Packers & Anchor

**Total Tool Length: 141.00**



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Cla-Mar Oil Co.

**32-11s-17w Ellis,KS**

PO Box 1197  
Hays KS 67601

**C.M Hadley #8**

Job Ticket: 54288

**DST#: 3**

ATTN: Randy Killian

Test Start: 2013.07.10 @ 06:15:51

**Mud and Cushion Information**

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 8.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.56 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
30.00	Mud	0.421

Total Length: 30.00 ft      Total Volume: 0.421 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6753

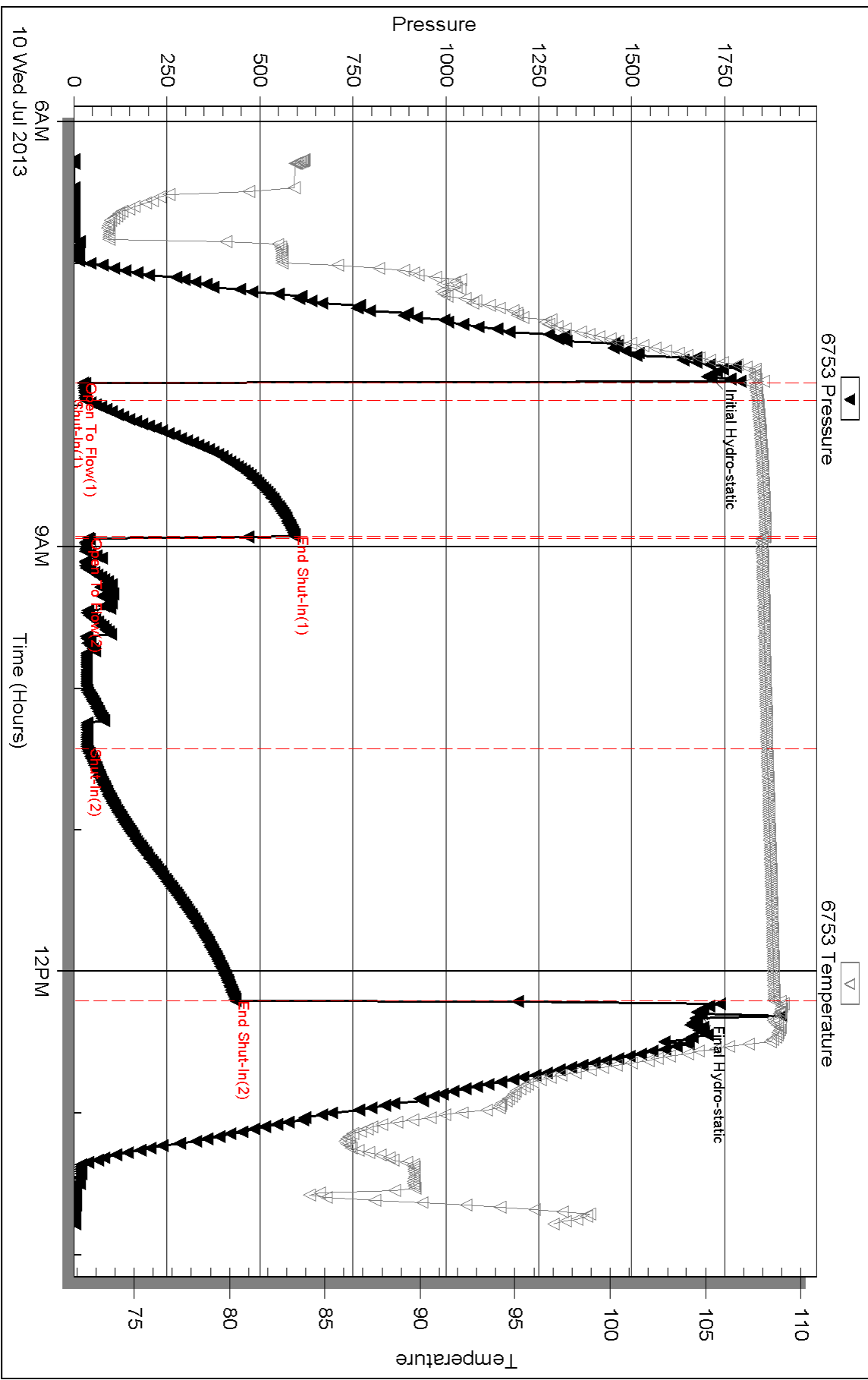
Inside

Cl-Mar Oil Co.

CM Hadley #8

DST Test Number: 3

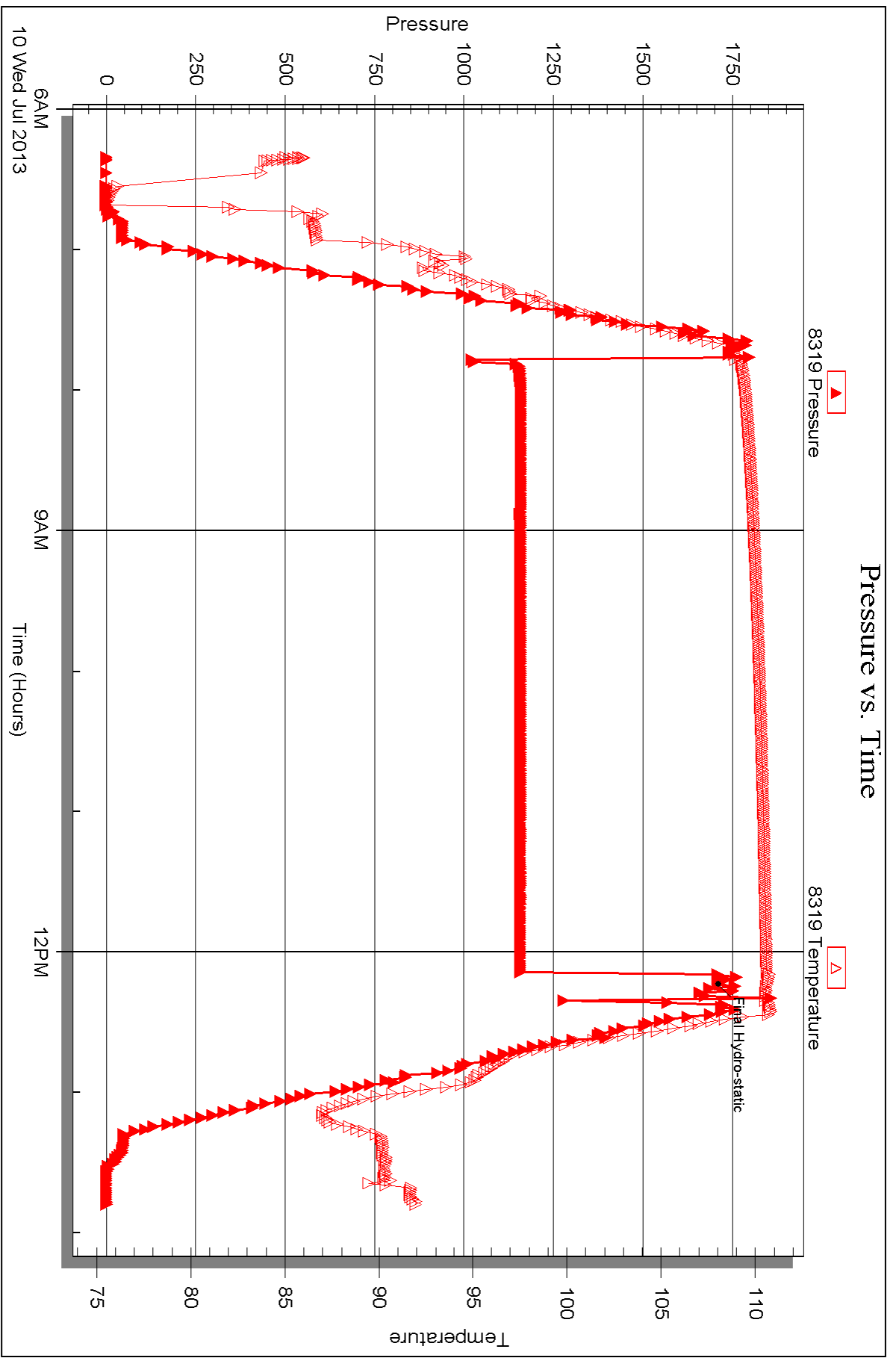
### Pressure vs. Time



Triobite Testing, Inc

Ref. No: 54288

Printed: 2013.07.11 @ 14:11:39



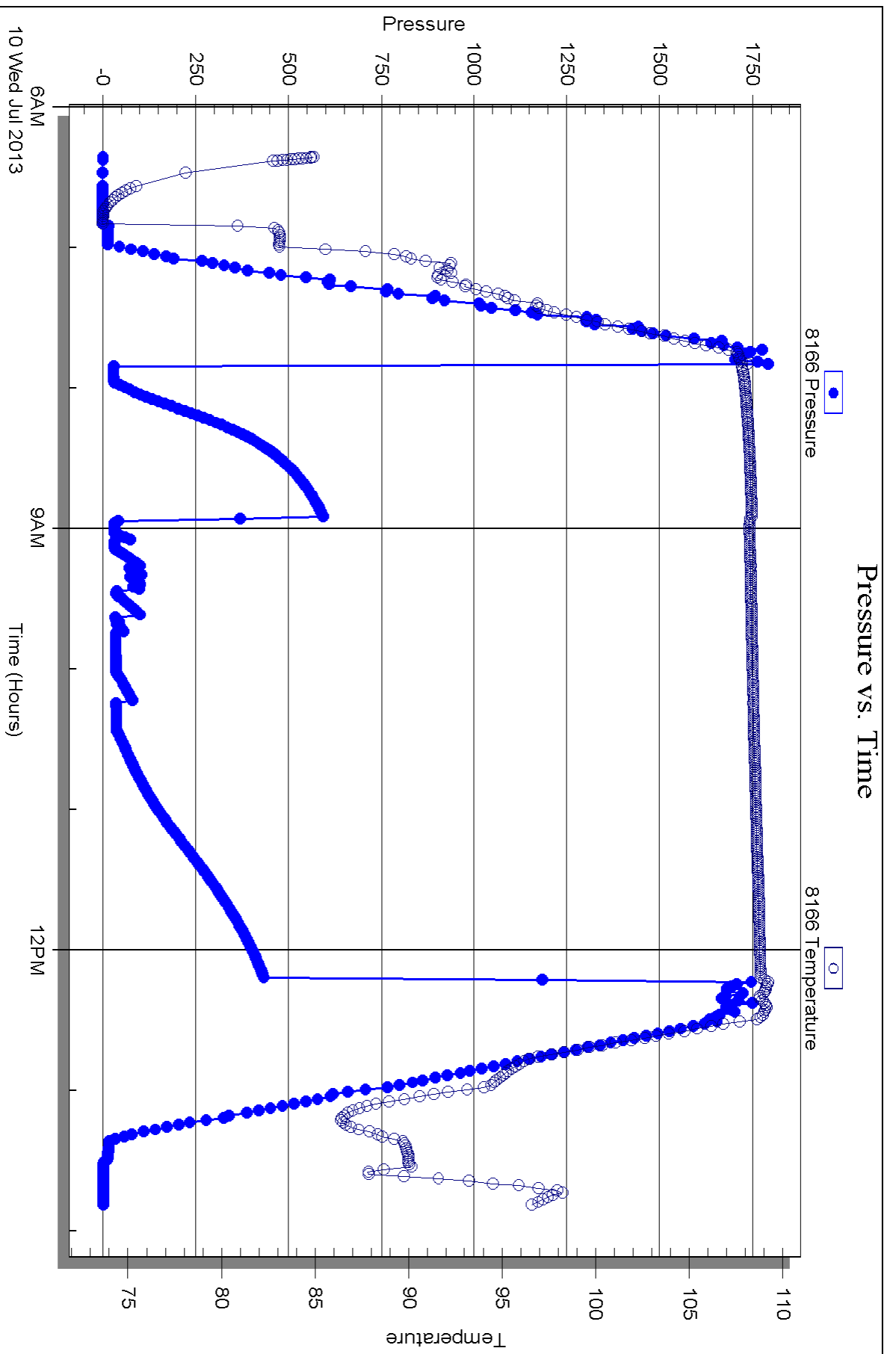
Serial #: 8166

Inside

Clair-Mar Oil Co.

CM Hadley #8

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 54288

Printed: 2013.07.11 @ 14:11:40



## DRILL STEM TEST REPORT

Prepared For: **Cla-Mar Oil Co.**

PO Box 1197  
Hays KS 67601

ATTN: Randy Killian

**C.M Hadley #8**

**32-11s-17w Ellis,KS**

Start Date: 2013.07.10 @ 17:55:30

End Date: 2013.07.10 @ 21:29:55

Job Ticket #: 54289                      DST #: 4

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

Printed: 2013.07.11 @ 14:08:28





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Cla-Mar Oil Co.

PO Box 1197  
Hays KS 67601

ATTN: Randy Killian

**32-11s-17w Ellis,KS**

**C.M Hadley #8**

Job Ticket: 54289

**DST#: 4**

Test Start: 2013.07.10 @ 17:55:30

## GENERAL INFORMATION:

Formation: **Arbuckle**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 19:30:00  
Time Test Ended: 21:29:55

Test Type: Conventional Straddle (Reset)  
Tester: Ray Schwager/Brannan  
Unit No: 59

Interval: **3585.00 ft (KB) To 3620.00 ft (KB) (TVD)**  
Total Depth: 3645.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair

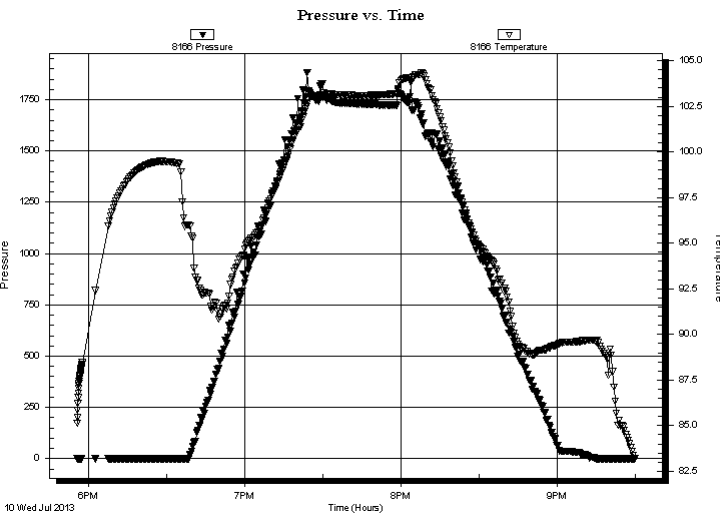
Reference Elevations: 2060.00 ft (KB)  
2054.00 ft (CF)  
KB to GR/CF: 6.00 ft

**Serial #: 8166 Below (Straddle)**

Press @ Run Depth: psig @ 3626.00 ft (KB)  
Start Date: 2013.07.10 End Date: 2013.07.10  
Start Time: 17:55:30 End Time: 21:29:55

Capacity: 8000.00 psig  
Last Calib.: 2013.07.10  
Time On Btm:  
Time Off Btm:

TEST COMMENT: no packer seat pull tool



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
20.00	mud	0.28

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Cla-Mar Oil Co.

**32-11s-17w Ellis,KS**

PO Box 1197  
Hays KS 67601

**C.M Hadley #8**

Job Ticket: 54289

**DST#: 4**

ATTN: Randy Killian

Test Start: 2013.07.10 @ 17:55:30

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:30:00

Time Test Ended: 21:29:55

Test Type: Conventional Straddle (Reset)

Tester: Ray Schwager/Brannan

Unit No: 59

**Interval: 3585.00 ft (KB) To 3620.00 ft (KB) (TVD)**

Reference Elevations: 2060.00 ft (KB)

Total Depth: 3645.00 ft (KB) (TVD)

2054.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 6.00 ft

**Serial #: 6753 Inside**

Press @ RunDepth: psig @ 3606.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.07.10

End Date:

2013.07.10

Last Calib.:

2013.07.10

Start Time: 17:55:49

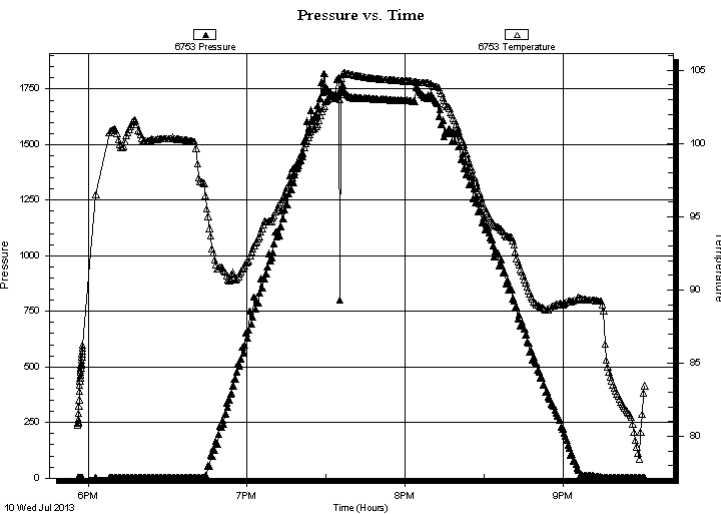
End Time:

21:30:44

Time On Btm:

Time Off Btm:

TEST COMMENT: no packer seat pull tool



## PRESSURE SUMMARY

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

## Gas Rates

Length (ft)	Description	Volume (bbl)
20.00	mud	0.28

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

\* Recovery from multiple tests



**TRILOBITE**  
**TESTING, INC.**

# DRILL STEM TEST REPORT

Cla-Mar Oil Co.

**32-11s-17w Ellis,KS**

PO Box 1197  
Hays KS 67601

**C.M Hadley #8**

Job Ticket: 54289

**DST#: 4**

ATTN: Randy Killian

Test Start: 2013.07.10 @ 17:55:30

### GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:30:00

Time Test Ended: 21:29:55

Test Type: Conventional Straddle (Reset)

Tester: Ray Schwager/Brannan

Unit No: 59

**Interval: 3585.00 ft (KB) To 3620.00 ft (KB) (TVD)**

Reference Elevations: 2060.00 ft (KB)

Total Depth: 3645.00 ft (KB) (TVD)

2054.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 6.00 ft

**Serial #: 8319 Outside**

Press @ Run Depth: psig @ 3606.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.07.10

End Date:

2013.07.10

Last Calib.:

2013.07.10

Start Time: 17:56:03

End Time:

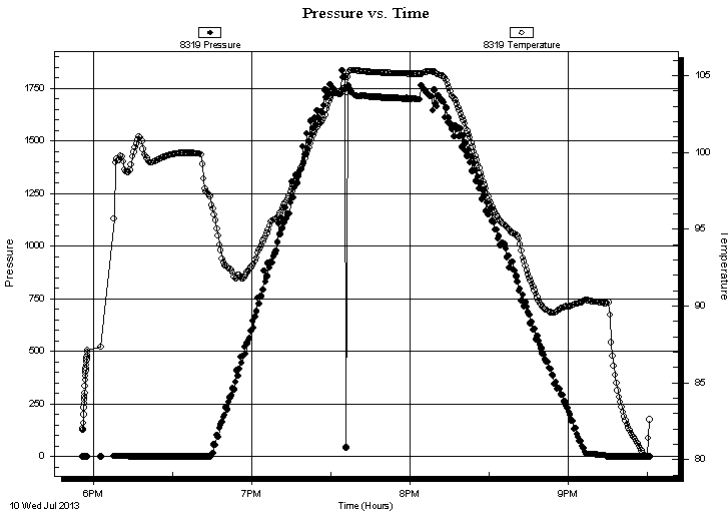
21:30:58

Time On Btm:

Time Off Btm:

TEST COMMENT: no packer seat pull tool

### PRESSURE SUMMARY



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

### Recovery

Length (ft)	Description	Volume (bbl)
20.00	mud	0.28

\* Recovery from multiple tests

### Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Cla-Mar Oil Co.

**32-11s-17w Ellis,KS**

PO Box 1197  
Hays KS 67601

**C.M Hadley #8**

Job Ticket: 54289

**DST#: 4**

ATTN: Randy Killian

Test Start: 2013.07.10 @ 17:55:30

### Tool Information

Drill Pipe:	Length: 3578.00 ft	Diameter: 3.80 inches	Volume: 50.19 bbl	Tool Weight: 2000.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 50.19 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	3585.00 ft			Final 71000.00 lb
Depth to Bottom Packer:	3620.00 ft			
Interval between Packers:	35.00 ft			
Tool Length:	85.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3563.00	
Shut In Tool	5.00			3568.00	
Hydraulic tool	5.00			3573.00	
Safety Joint	2.00			3575.00	
Packer	5.00			3580.00	23.00 Bottom Of Top Packer
Packer	5.00			3585.00	
Stubb	1.00			3586.00	
Perforations	20.00			3606.00	
Recorder	0.00	6753	Inside	3606.00	
Recorder	0.00	8319	Outside	3606.00	
Perforations	10.00			3616.00	
Blank Off Sub	1.00			3617.00	
Blank Spacing	3.00			3620.00	35.00 Tool Interval
Packer	5.00			3625.00	
Stubb	1.00			3626.00	
Recorder	0.00	8166	Below	3626.00	
Perforations	18.00			3644.00	
Bullnose	3.00			3647.00	27.00 Bottom Packers & Anchor

**Total Tool Length: 85.00**



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Cla-Mar Oil Co.

**32-11s-17w Ellis,KS**

PO Box 1197  
Hays KS 67601

**C.M Hadley #8**

Job Ticket: 54289

**DST#: 4**

ATTN: Randy Killian

Test Start: 2013.07.10 @ 17:55:30

**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: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.16 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8000.00 ppm

Filter Cake: 1.00 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
20.00	mud	0.281

Total Length: 20.00 ft      Total Volume: 0.281 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

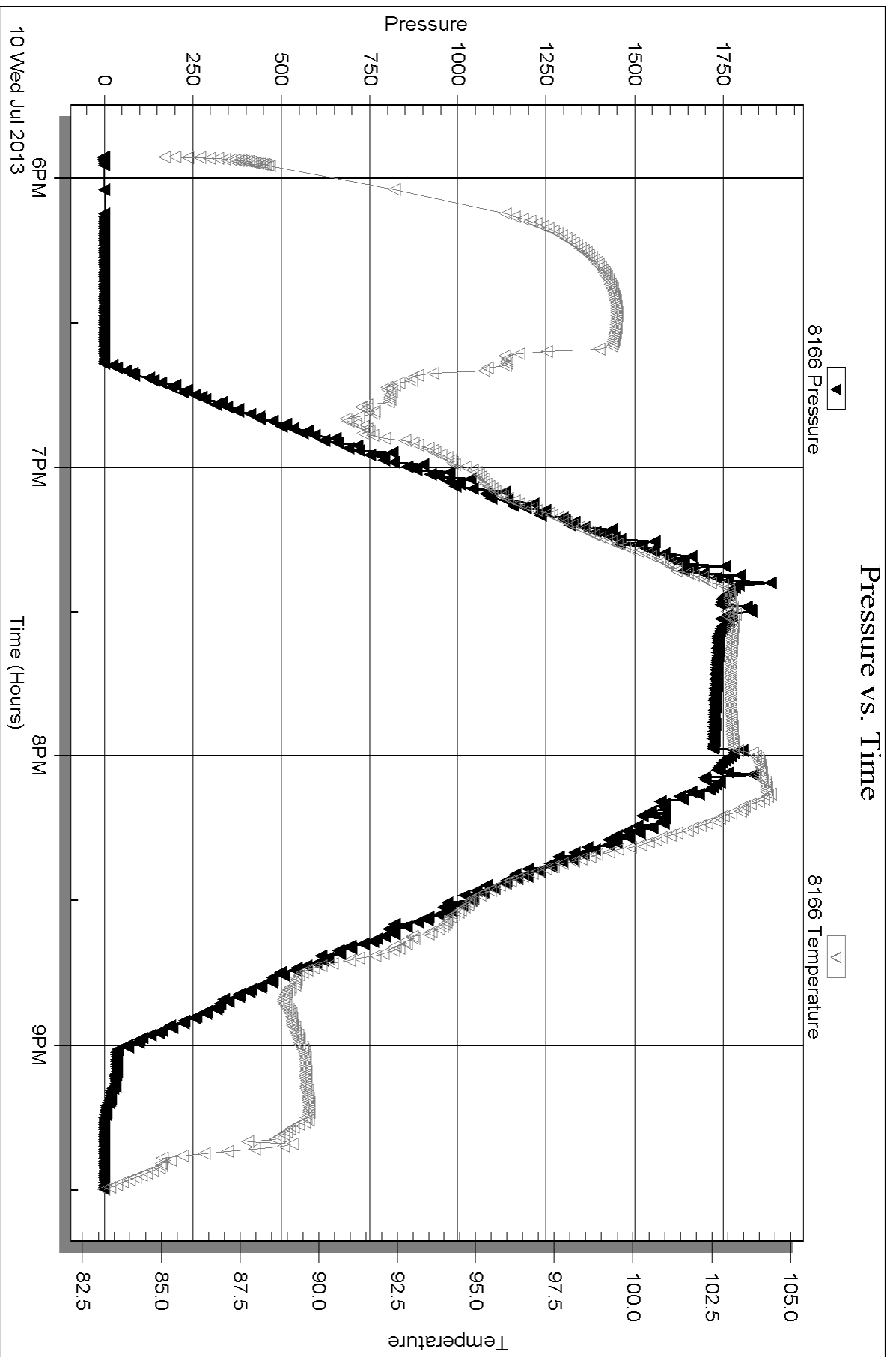
Recovery Comments:

Serial #: 8166

Below (Stratfield) Oil Co.

CM Hadley #8

DST Test Number: 4



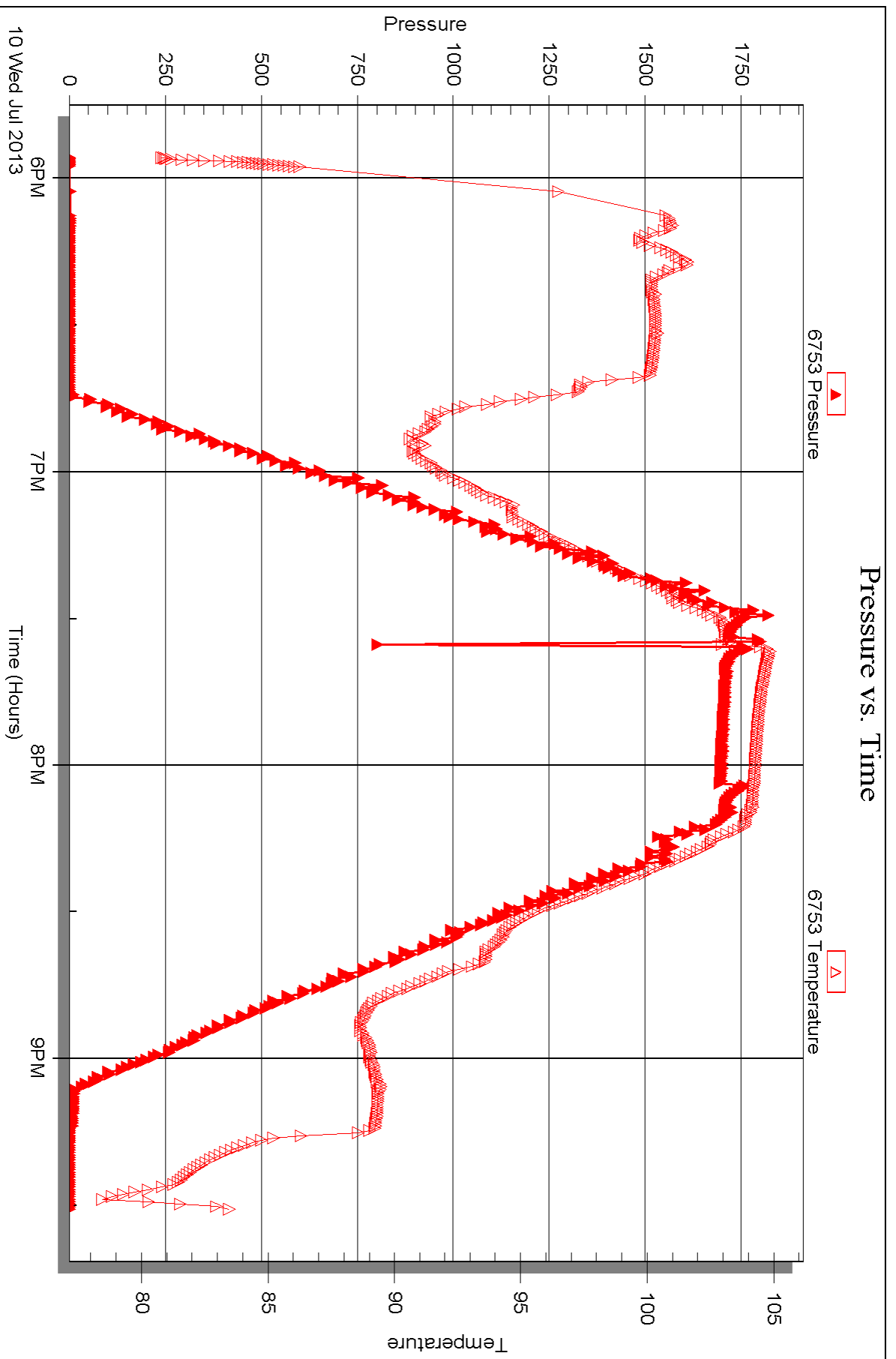
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Inside

Clu-Mar Oil Co.

CM Hadley #8

DST Test Number: 4



Triobite Testing, Inc

Ref. No: 54289

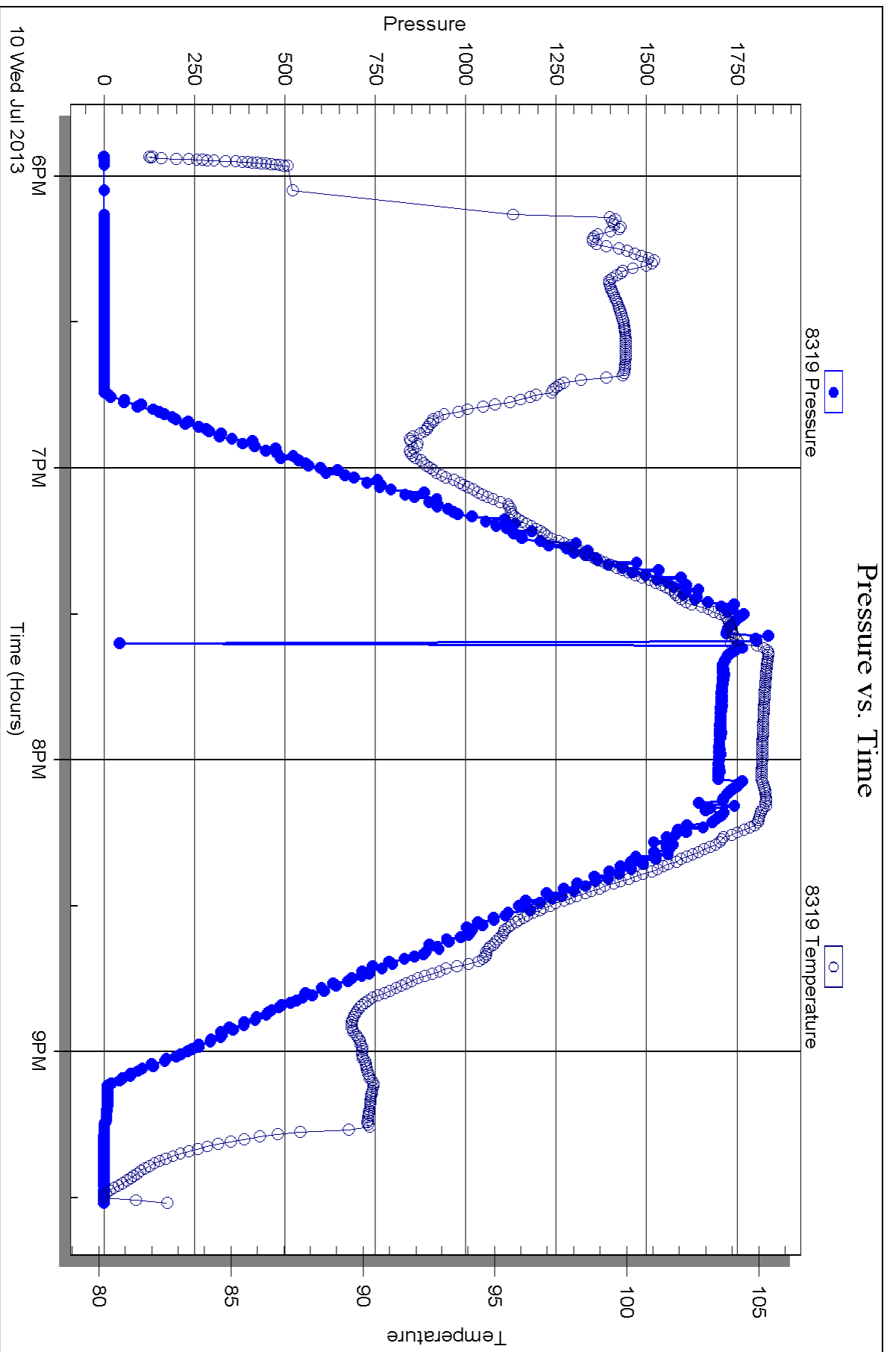
Printed: 2013.07.11 @ 14:08:31

Serial #: 8319

Outside Cla-Mar Oil Co.

CM Hadley #8

DST Test Number: 4







## DRILL STEM TEST REPORT

Prepared For: **Cla-Mar Oil Co.**

PO Box 1197  
Hays KS 67601

ATTN: Randy Killian

**C.M Hadley #8**

**32-11s-17w Ellis,KS**

Start Date: 2013.07.10 @ 21:50:42

End Date: 2013.07.11 @ 04:52:42

Job Ticket #: 54290                      DST #: 5

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

Printed: 2013.07.11 @ 14:07:43



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Cla-Mar Oil Co.

**32-11s-17w Ellis,KS**

PO Box 1197  
Hays KS 67601

**C.M Hadley #8**

Job Ticket: 54290

**DST#: 5**

ATTN: Randy Killian

Test Start: 2013.07.10 @ 21:50:42

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:03:12

Time Test Ended: 04:52:42

Test Type: Conventional Straddle (Reset)

Tester: Ray Schwager/Brannan

Unit No: 59

**Interval: 3531.00 ft (KB) To 3620.00 ft (KB) (TVD)**

Reference Elevations: 2060.00 ft (KB)

Total Depth: 3645.00 ft (KB) (TVD)

2054.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 6.00 ft

**Serial #: 6753 Inside**

Press @ Run Depth: 55.39 psig @ 3606.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.07.10

End Date:

2013.07.11

Last Calib.:

2013.07.11

Start Time: 21:50:47

End Time:

04:52:41

Time On Btm:

2013.07.10 @ 23:00:12

Time Off Btm:

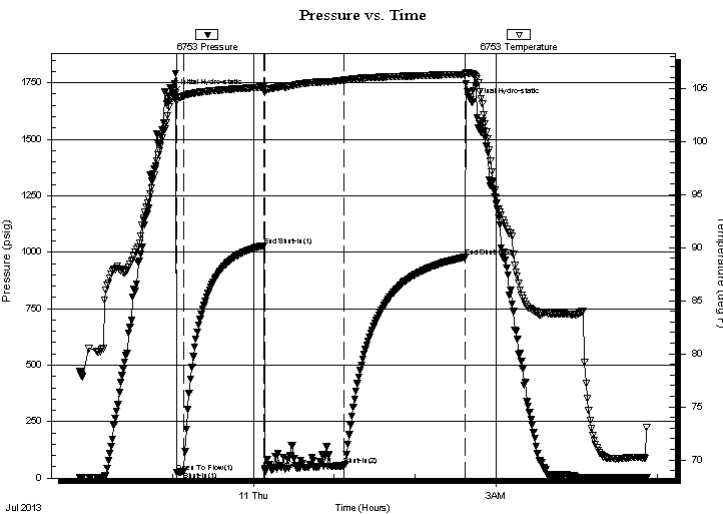
2013.07.11 @ 02:42:42

TEST COMMENT: 5-IFP-Wk bl 1 1/4"

60-ISIP-No bl

60-FFP-w k bl 1/2" bl

90-FSIP-no bl



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1702.06	104.01	Initial Hydro-static
3	25.81	103.85	Open To Flow (1)
8	28.52	104.25	Shut-In(1)
68	1029.45	105.12	End Shut-In(1)
69	34.23	104.85	Open To Flow (2)
127	55.39	105.75	Shut-In(2)
217	977.76	106.32	End Shut-In(2)
223	1662.16	106.41	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
65.00	Thin mud	0.91

## Gas Rates

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

\* Recovery from multiple tests







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Cla-Mar Oil Co.

**32-11s-17w Ellis,KS**

PO Box 1197  
Hays KS 67601

**C.M Hadley #8**

Job Ticket: 54290

**DST#: 5**

ATTN: Randy Killian

Test Start: 2013.07.10 @ 21:50:42

## Tool Information

Drill Pipe:	Length: 3516.00 ft	Diameter: 3.80 inches	Volume: 49.32 bbl	Tool Weight: 2000.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 49.32 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	3531.00 ft			Final 71000.00 lb
Depth to Bottom Packer:	3620.00 ft			
Interval between Packers:	89.00 ft			
Tool Length:	141.00 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			3509.00	
Shut In Tool	5.00			3514.00	
Hydraulic tool	5.00			3519.00	
Safety Joint	2.00			3521.00	
Packer	5.00			3526.00	23.00 Bottom Of Top Packer
Packer	5.00			3531.00	
Stubb	1.00			3532.00	
Perforations	9.00			3541.00	
Drill Pipe	65.00			3606.00	
Recorder	0.00	6753	Inside	3606.00	
Recorder	0.00	8166	Outside	3606.00	
Perforations	10.00			3616.00	
Blank Off Sub	1.00			3617.00	
Blank Spacing	3.00			3620.00	89.00 Tool Interval
Packer	5.00			3625.00	
Stubb	1.00			3626.00	
Recorder	0.00	8319	Below	3626.00	
Perforations	20.00			3646.00	
Bullnose	3.00			3649.00	29.00 Bottom Packers & Anchor

**Total Tool Length: 141.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Cla-Mar Oil Co.

**32-11s-17w Ellis,KS**

PO Box 1197  
Hays KS 67601

**C.M Hadley #8**

Job Ticket: 54290

**DST#: 5**

ATTN: Randy Killian

Test Start: 2013.07.10 @ 21:50:42

## 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: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.16 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	Thin mud	0.912

Total Length: 65.00 ft      Total Volume: 0.912 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

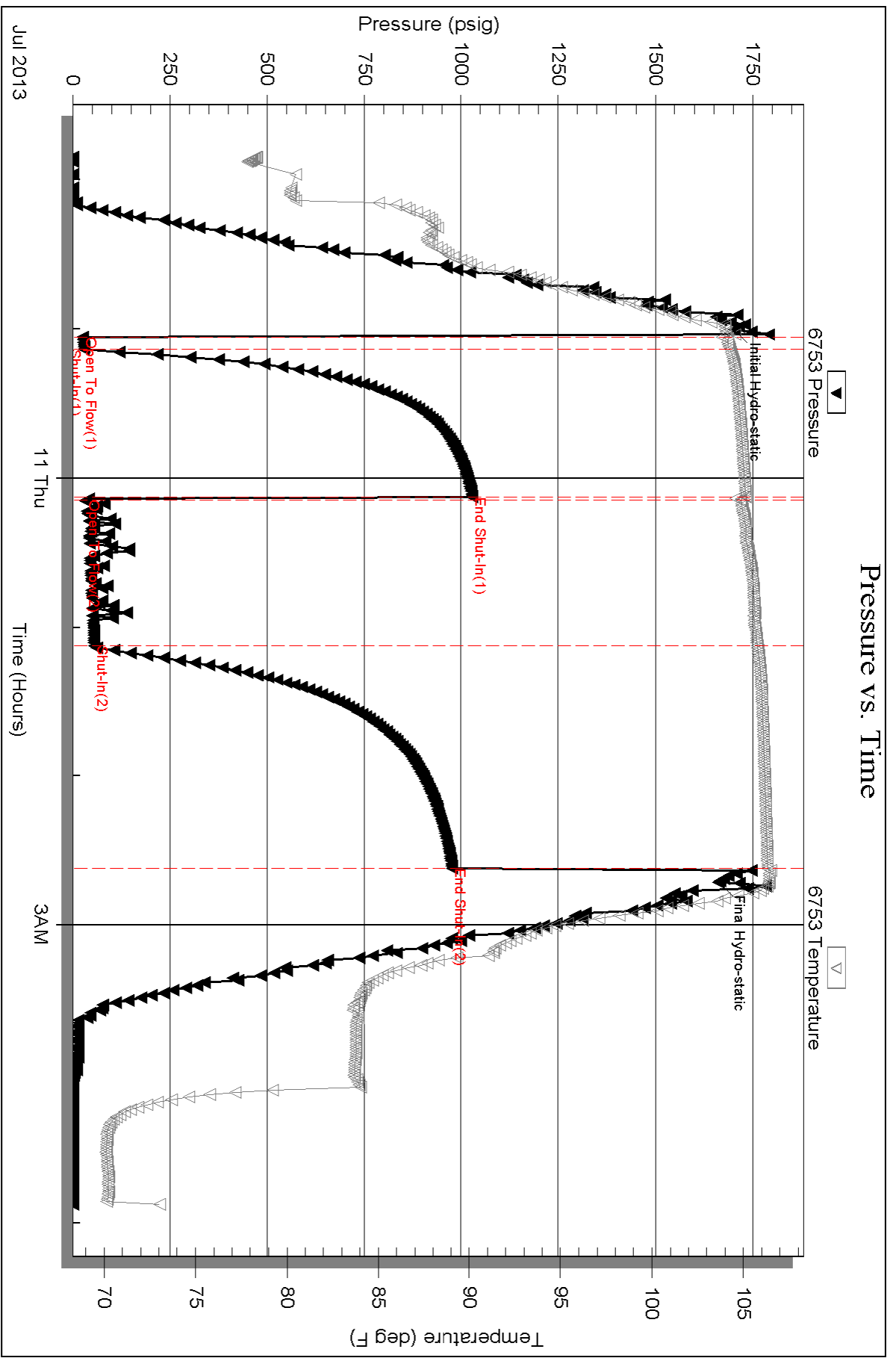
Serial #: 6753

Inside

Clair-Mar Oil Co.

CM Hadley #8

DST Test Number: 5



Triobite Testing, Inc

Ref. No: 54290

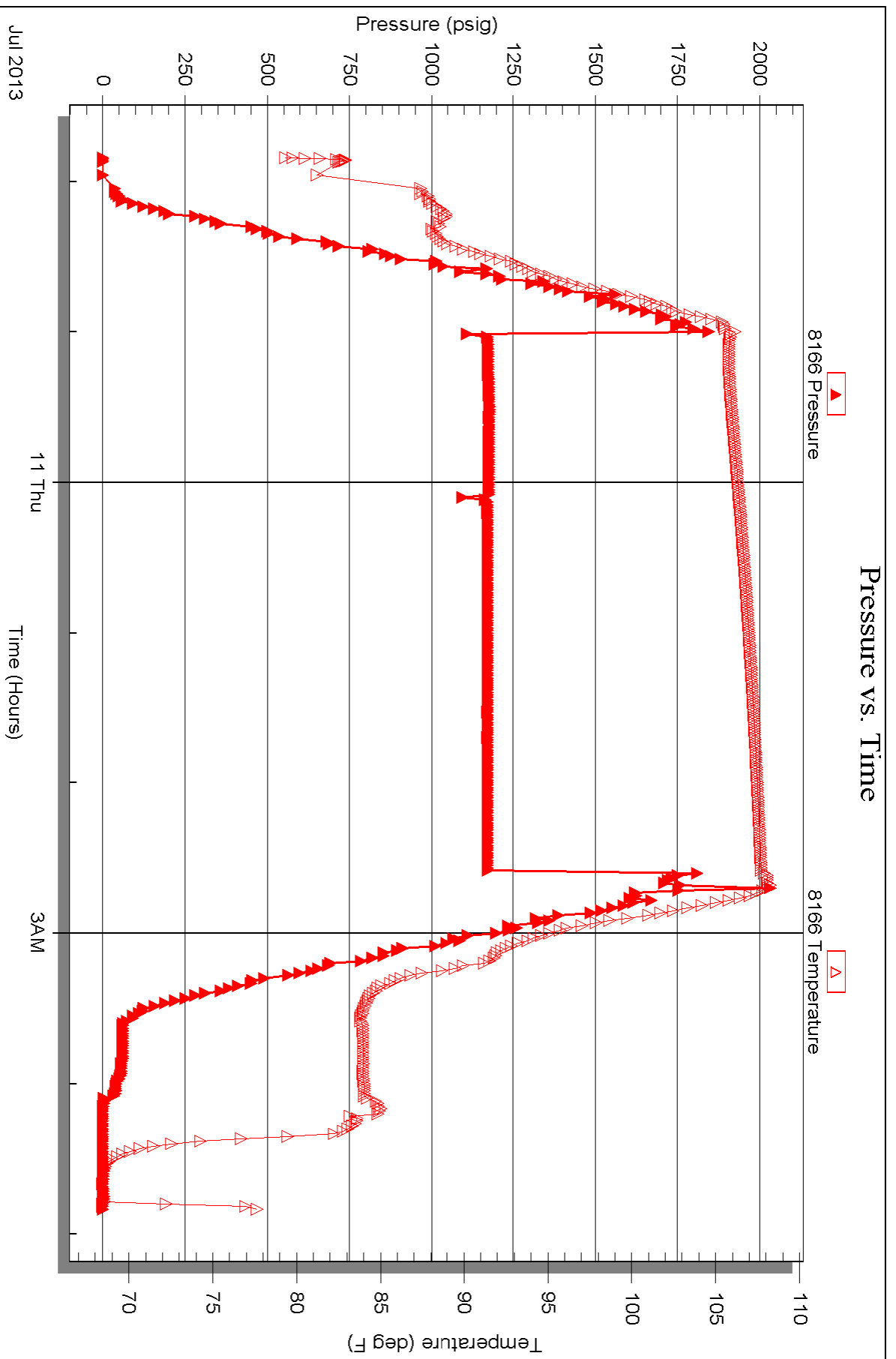
Printed: 2013.07.11 @ 14:07:46

Serial #: 8166

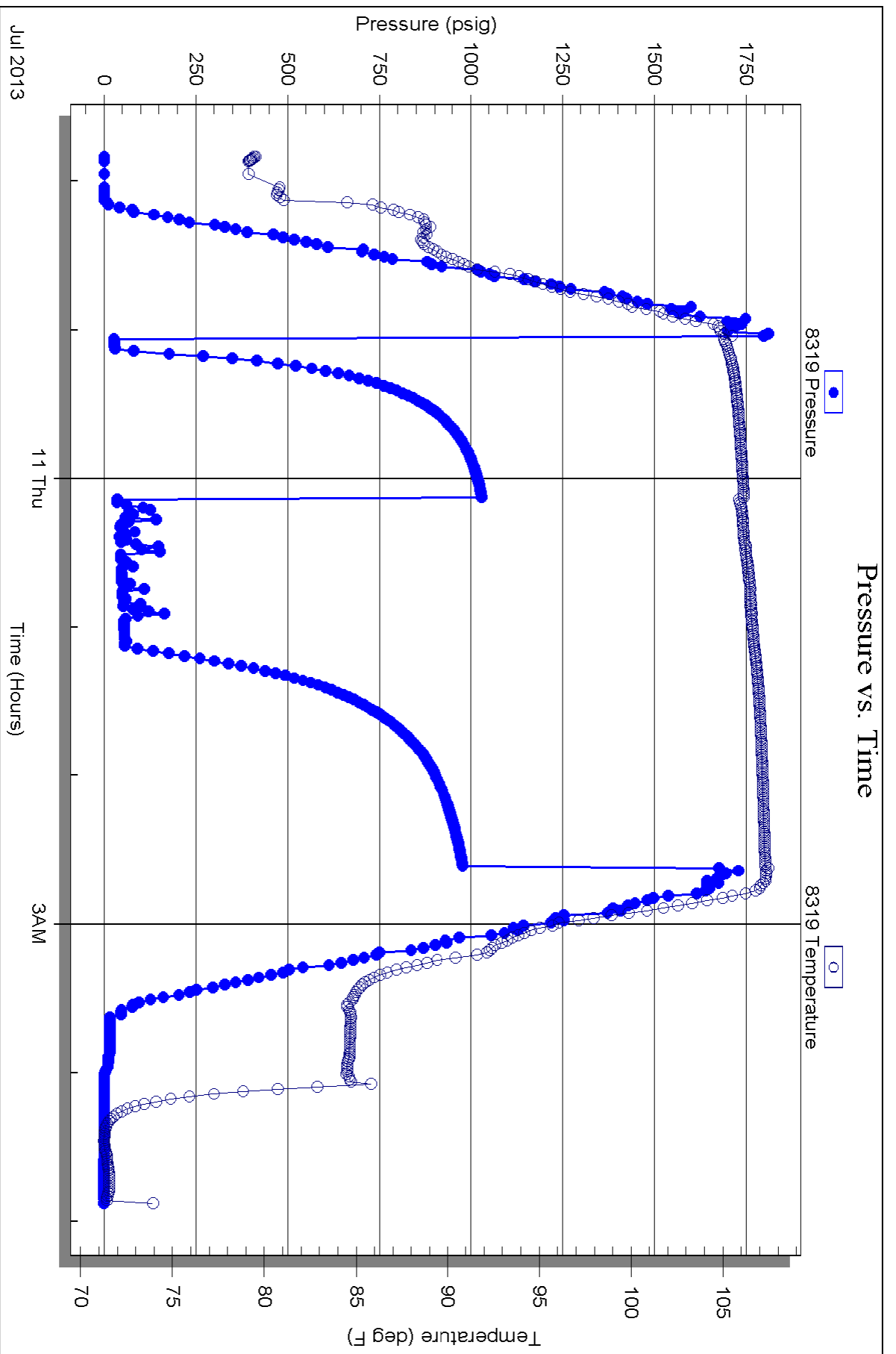
Outside Cla-Mar Oil Co.

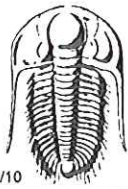
CM Hadley #8

DST Test Number: 5









# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 54286

Well Name & No. C.M Hadley #8 Test No. 1 Date 7/8/13  
 Company Clg-Mar Oil, Co. Elevation 2060 KB 2054 GL  
 Address PO Box 1197 Hays, KS 67601  
 Co. Rep / Geo. Randy Killian Rig Royal #1  
 Location: Sec. 32 Twp. 11 Rge. 17 Co. Ellis State KS

Interval Tested 3236 - 3330 Zone Tested Tor - C  
 Anchor Length 94 Drill Pipe Run 3234 Mud Wt. 8.5  
 Top Packer Depth 8231 Drill Collars Run — Vis 52  
 Bottom Packer Depth 3236 Wt. Pipe Run — WL 7.6  
 Total Depth 3330 Chlorides 1000 ppm System LCM 3#

Blow Description IF - 1/2 in blow  
ISI - No blow  
FF - No blow  
FST - No blow

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

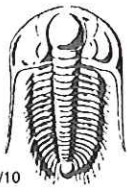
Rec Total 2 BHT 104 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 4615  Test 1150 T-On Location 10:00  
 (B) First Initial Flow 20  Jars \_\_\_\_\_ T-Started 10:45  
 (C) First Final Flow 20  Safety Joint 75 T-Open 12:34  
 (D) Initial Shut-In 741  Circ Sub \_\_\_\_\_ T-Pulled 14:39  
 (E) Second Initial Flow 21  Hourly Standby \_\_\_\_\_ T-Out 16:15  
 (F) Second Final Flow 23  Mileage 36.2 ct 55.80 Comments \_\_\_\_\_  
 (G) Final Shut-In 193  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 6529  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_

Initial Open 5  Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Initial Shut-In 60  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Final Flow 30  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Shut-In 30  Day Standby \_\_\_\_\_ Total 1280.80  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1280.80

Approved By \_\_\_\_\_ Our Representative Brett D. Brennool

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. 54287

Well Name & No. CM Hadley #8 Test No. 2 Date 7/9/13  
 Company Cl-Mor Oil Co. Elevation 2060 KB 2054 GL  
 Address PO Box 1197 Hays, KS 67601  
 Co. Rep / Geo. Randy Killian Rig Royal #1  
 Location: Sec. 32 Twp. 11 Rge. 17 Co. Ellis State KS

Interval Tested 3329-3390 Zone Tested KC  
 Anchor Length 61 Drill Pipe Run 3331 Mud Wt. 8.5  
 Top Packer Depth 3324 Drill Collars Run — Vis 52  
 Bottom Packer Depth 3329 Wt. Pipe Run — WL 7.6  
 Total Depth 3390 Chlorides 1000 ppm System LCM 3#

Blow Description IF-1"  
ISI - No blow  
FF - No blow  
FSI - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>5'</u>	<u>Mud</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

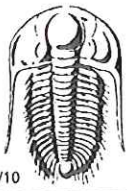
Rec Total \_\_\_\_\_ BHT 103 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 1583  Test 1150 T-On Location 23:55  
 (B) First Initial Flow 22  Jars \_\_\_\_\_ T-Started 00:25  
 (C) First Final Flow 22  Safety Joint 75 T-Open 01:45  
 (D) Initial Shut-In 405  Circ Sub \_\_\_\_\_ T-Pulled 03:50  
 (E) Second Initial Flow 22  Hourly Standby \_\_\_\_\_ T-Out 03:30  
 (F) Second Final Flow ~~33~~ 23  Mileage 36 RT 55.80 Comments \_\_\_\_\_  
 (G) Final Shut-In 34  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1,578  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_

Initial Open 5  Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Initial Shut-In 60  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Final Flow 30  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Shut-In 30  Day Standby \_\_\_\_\_ Total 1280.80  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1280.80

Approved By \_\_\_\_\_ Our Representative Brannon L / BRETT D.

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. 54288

4/10

Well Name & No. C.M. Hadley #8 Test No. 3 Date 7-10-13  
 Company CLA-MAR OIL Co Elevation 2060 KB 2054 GL  
 Address P.O. Box 1197 Hays Ks 67601  
 Co. Rep / Geo. Randy Killian Rig Royalrig1  
 Location: Sec. 32 Twp. 11 Rge. 17 Co. Ellis State Ks

Interval Tested 3531-3588 Zone Tested Arbuckle  
 Anchor Length 57 Drill Pipe Run 3518 Mud Wt. 9  
 Top Packer Depth 3531-3526 Drill Collars Run — Vis 54  
 Bottom Packer Depth 3588 Wt. Pipe Run — WL 9  
 Total Depth 3645 Chlorides \_\_\_\_\_ ppm System LCM 1 1/2

Blow Description IFP - Weak Blow 1/4" to 1/4" Blow  
ISIP - NO Blow  
FFP - NO Blow  
FSTP - NO Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>Mud</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 30 BHT 108 Gravity — API RW — @ — °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>1708</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>0515</u>
(B) First Initial Flow <u>23</u>	<input type="checkbox"/> Jars _____	T-Started <u>0615</u>
(C) First Final Flow <u>31</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>0745</u>
(D) Initial Shut-In <u>593</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>1205</u>
(E) Second Initial Flow <u>38</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>1346</u>
(F) Second Final Flow <u>36</u>	<input checked="" type="checkbox"/> Mileage <u>36RT</u> 55.80	Comments _____
(G) Final Shut-In <u>434</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1675</u>	<input checked="" type="checkbox"/> Straddle <u>600</u>	<input type="checkbox"/> Ruined Shale Packer _____

Initial Open 50  
 Initial Shut-In 60  
 Final Flow 90  
 Final Shut-In 105

Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_

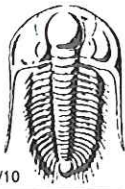
Ruined Packer \_\_\_\_\_  
 Extra Copies \_\_\_\_\_  
 Sub Total 0  
 Total 1880.80  
 MP/DST Disc't \_\_\_\_\_

Sub Total 1880.80

Approved By \_\_\_\_\_

Our Representative Ray Schurrer - Brandon

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. 54289

Well Name & No. CM Hadley #8 Test No. 4 Date 7-10-13  
 Company CLA-MAR OIL CO Elevation 2060 KB 2054 GL  
 Address PO Box 1197 Hays, Ko 67601  
 Co. Rep / Geo. Randy Killian Rig Royal rig 1  
 Location: Sec. 32 Twp. 11 Rge. 17 Co. Ellis State Ko

Interval Tested 3585-3620 Zone Tested Arbuckle  
 Anchor Length 35 Drill Pipe Run 3578 Mud Wt. 9.3  
 Top Packer Depth 3585-3580 Drill Collars Run - Vis 49  
 Bottom Packer Depth 3620 Wt. Pipe Run - WL 10.2  
 Total Depth 3645 Chlorides 8000 ppm System LCM 1 1/2 #  
 Blow Description TFP - NO packer seat, pull tool  
ISIP -  
FFP -  
FSIP -

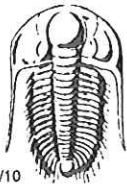
Rec	Feet of	%gas	%oil	%water	%mud
<u>20</u>	<u>Mud</u>				
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total \_\_\_\_\_ BHT \_\_\_\_\_ Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic \_\_\_\_\_  Test 950 T-On Location 1730  
 (B) First Initial Flow \_\_\_\_\_  Jars \_\_\_\_\_ T-Started 1755  
 (C) First Final Flow \_\_\_\_\_  Safety Joint 75 T-Open 1930  
 (D) Initial Shut-In \_\_\_\_\_  Circ Sub \_\_\_\_\_ T-Pulled 1935  
 (E) Second Initial Flow \_\_\_\_\_  Hourly Standby \_\_\_\_\_ T-Out \_\_\_\_\_  
 (F) Second Final Flow \_\_\_\_\_  Mileage 36RT 55.80 Comments \_\_\_\_\_  
 (G) Final Shut-In \_\_\_\_\_  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic \_\_\_\_\_  Straddle 600  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Open \_\_\_\_\_  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Initial Shut-In \_\_\_\_\_  Day Standby \_\_\_\_\_ Total 1680.80  
 Final Flow \_\_\_\_\_  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Final Shut-In \_\_\_\_\_ Sub Total 1680.80

Approved By \_\_\_\_\_ Our Representative Rayschwarz/Brandon

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 54290

Well Name & No. CM Hedley #8 Test No. 5 Date 7-10-13  
 Company Cla-Mar Oil Co Elevation 2060 KB 2054 GL  
 Address PO Box 1197 Hays, KS 67601  
 Co. Rep / Geo. Randy Killian Rig Royal #1  
 Location: Sec. 32 Twp. 11 Rge. 17 Co. Ellis State KS

Interval Tested 3531-3620 Zone Tested Arbuckle  
 Anchor Length 89 Drill Pipe Run 3516 Mud Wt. 9.3  
 Top Packer Depth 3531-3526 Drill Collars Run - Vis 49  
 Bottom Packer Depth 3620 Wt. Pipe Run - WL 10.2  
 Total Depth 3645 Chlorides 8000 ppm System LCM 1 1/2 #

Blow Description FFP - Weak Blow, 1 1/4" Blow  
ISIP - NO Blow  
FFP - Weak Blow 1/2" Blow  
FSIP - NO Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>65</u>	<u>Thin Mud</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 \_\_\_\_\_ BHT \_\_\_\_\_ Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 1702  Test 1150 T-On Location 2130  
 (B) First Initial Flow 25  Jars \_\_\_\_\_ T-Started 2150  
 (C) First Final Flow 28  Safety Joint 75 T-Open 2300  
 (D) Initial Shut-In 1029  Circ Sub \_\_\_\_\_ T-Pulled 0235  
 (E) Second Initial Flow 34  Hourly Standby \_\_\_\_\_ T-Out 0452  
 (F) Second Final Flow 35  Mileage ~~36 RT~~ Comments \_\_\_\_\_  
 (G) Final Shut-In 977  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1662  Straddle 600  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1825  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1825

Initial Open 5  
 Initial Shut-In 60  
 Final Flow 60  
 Final Shut-In 90

Approved By \_\_\_\_\_ Our Representative Ray Schuenger / Brandon

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