

**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **James P. Williams Enterprise, Inc.**

PO Box 226
Palco KS 67657

ATTN: Randy Kilian

Wanker #1

8-10S-20W Rooks,KS

Start Date: 2017.07.11 @ 08:52:00

End Date: 2017.07.11 @ 15:05:15

Job Ticket #: 62987 DST #: 1

Trilobite Testing, Inc

1515 Commerce Parkway Hays, KS 67601

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

Printed: 2017.07.12 @ 09:52:33

James P. Williams Enterprise, Inc.

8-10S-20W Rooks,KS

Wanker #1

DST # 1

Simpson-Arbuckle

2017.07.11



**TRILOBITE
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DRILL STEM TEST REPORT

James P. Williams Enterprise, Inc.

8-10S-20W Rooks,KS

PO Box 226
Palco KS 67657

Wanker #1

Job Ticket: 62987

DST#: 1

ATTN: Randy Kilian

Test Start: 2017.07.11 @ 08:52:00

GENERAL INFORMATION:

Formation: **Simpson-Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:24:45

Time Test Ended: 15:05:15

Test Type: Conventional Straddle (Initial)

Tester: Spencer J. Staab

Unit No: 84

Interval: **3780.00 ft (KB) To 3842.00 ft (KB) (TVD)**

Total Depth: 3900.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2250.00 ft (KB)

2243.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8934

Inside

Press@RunDepth: 665.49 psig @ 3781.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.07.11

End Date: 2017.07.11

Last Calib.: 2017.07.11

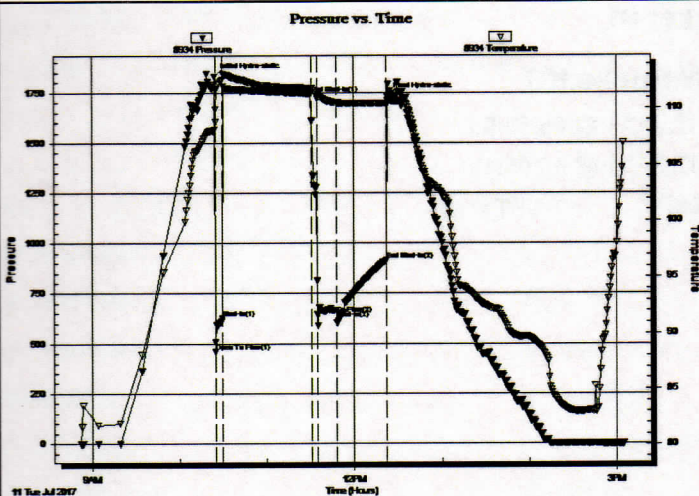
Start Time: 08:52:15

End Time: 15:05:15

Time On Btm: 2017.07.11 @ 10:24:15

Time Off Btm: 2017.07.11 @ 12:23:00

TEST COMMENT: 5-IF-Strong Blow ; BOB in 20 secs
60-ISI-No Return
15-FF-Strong Blow ; BOB in 5 secs
30-FSI-No Return



PRESSURE SUMMARY

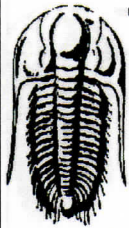
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1830.17 | 108.15 | Initial Hydro-static |
| 1 | 460.41 | 108.79 | Open To Flow (1) |
| 6 | 628.74 | 112.57 | Shut-In(1) |
| 67 | 1745.48 | 111.79 | End Shut-In(1) |
| 71 | 646.82 | 111.00 | Open To Flow (2) |
| 84 | 665.49 | 110.52 | Shut-In(2) |
| 118 | 916.77 | 110.45 | End Shut-In(2) |
| 119 | 1730.70 | 110.69 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-----------------------|--------------|
| 945.00 | Muddy Water 50%M 50%W | 11.18 |
| 440.00 | WCM 10%W 90%M | 6.17 |
| | | |
| | | |
| | | |

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

James P. Williams Enterprise, Inc.

8-10S-20W Rooks,KS

PO Box 226
Palco KS 67657

Wanker #1

Job Ticket: 62987

DST#: 1

ATTN: Randy Kilian

Test Start: 2017.07.11 @ 08:52:00

GENERAL INFORMATION:

Formation: **Simpson-Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:24:45

Time Test Ended: 15:05:15

Test Type: Conventional Straddle (Initial)

Tester: Spencer J. Staab

Unit No: 84

Interval: **3780.00 ft (KB) To 3842.00 ft (KB) (TVD)**

Reference Elevations: 2250.00 ft (KB)

Total Depth: 3900.00 ft (KB) (TVD)

2243.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 9120 Inside

Press@RunDepth: psig @ 3781.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.07.11

End Date:

2017.07.11

Last Calib.:

2017.07.11

Start Time: 08:52:15

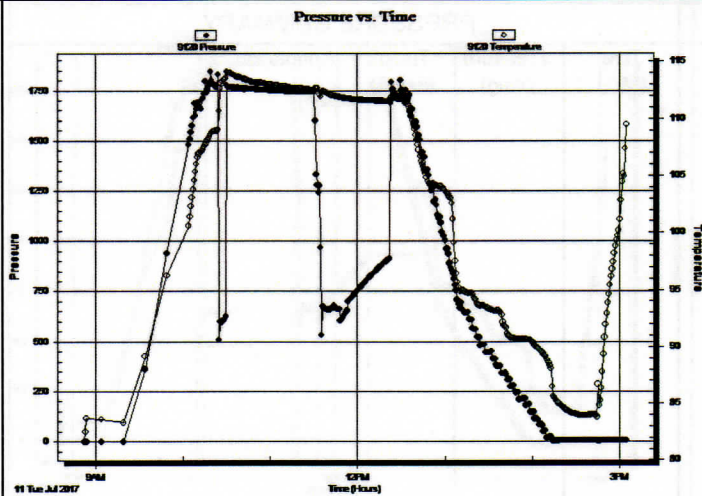
End Time:

15:05:15

Time On Btm:

Time Off Btm:

TEST COMMENT: 5-IF-Strong Blow ; BOB in 20 secs
60-ISI-No Return
15-FF-Strong Blow ; BOB in 5 secs
30-FSI-No Return



PRESSURE SUMMARY

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

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-----------------------|--------------|
| 945.00 | Muddy Water 50%M 50%W | 11.18 |
| 440.00 | WCM 10%W 90%M | 6.17 |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

James P. Williams Enterprise, Inc.

8-10S-20W Rooks, KS

PO Box 226
Palco KS 67657

Wanker #1

Job Ticket: 62987

DST#: 1

ATTN: Randy Kilian

Test Start: 2017.07.11 @ 08:52:00

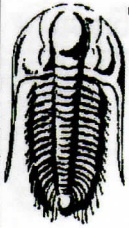
Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3468.00 ft | Diameter: 3.80 inches | Volume: 48.65 bbl | Tool Weight: 2500.00 lb |
| Heavy Wt. Pipe: | Length: 310.00 ft | Diameter: 2.75 inches | Volume: 2.28 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: 66000.00 lb |
| | | | <u>Total Volume: 50.93 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 26.00 ft | | | String Weight: Initial 54000.00 lb |
| Depth to Top Packer: | 3780.00 ft | | | Final 62000.00 lb |
| Depth to Bottom Packer: | 3842.00 ft | | | |
| Interval between Packers: | 62.00 ft | | | |
| Tool Length: | 148.00 ft | | | |
| Number of Packers: | 1 | Diameter: 6.75 inches | | |

Tool Comments:

Tool Description

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|---------------------------|---------------|------------|----------|------------|-------------------------------|
| Change Over Sub | 1.00 | | | 3753.00 | |
| Shut In Tool | 5.00 | | | 3758.00 | |
| Hydraulic tool | 5.00 | | | 3763.00 | |
| Jars | 5.00 | | | 3768.00 | |
| Safety Joint | 3.00 | | | 3771.00 | |
| Packer | 5.00 | | | 3776.00 | 28.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 3780.00 | |
| Stubb | 1.00 | | | 3781.00 | |
| Recorder | 0.00 | 9120 | Inside | 3781.00 | |
| Recorder | 0.00 | 8934 | Inside | 3781.00 | |
| Change Over Sub | 1.00 | | | 3782.00 | |
| Drill Pipe | 32.00 | | | 3814.00 | |
| Change Over Sub | 1.00 | | | 3815.00 | |
| Perforations | 23.00 | | | 3838.00 | |
| Blank Off Sub | 1.00 | | | 3839.00 | |
| top of s.packer | 3.00 | | | 3842.00 | 62.00 Tool Interval |
| Packer | 0.00 | | | 3842.00 | |
| Stubb | 1.00 | | | 3843.00 | |
| Change Over Sub | 1.00 | | | 3844.00 | |
| Recorder | 0.00 | 8353 | Below | 3844.00 | |
| Drill Pipe | 32.00 | | | 3876.00 | |
| Change Over Sub | 1.00 | | | 3877.00 | |
| Perforations | 19.00 | | | 3896.00 | |
| Bullnose | 4.00 | | | 3900.00 | 58.00 Bottom Packers & Anchor |
| Total Tool Length: | 148.00 | | | | |



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

James P. Williams Enterprise, Inc.

8-10S-20W Rooks,KS

PO Box 226
Palco KS 67657

Wanker #1

Job Ticket: 62987

DST#: 1

ATTN: Randy Kilian

Test Start: 2017.07.11 @ 08:52:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

9700 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9700.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-----------------------|---------------|
| 945.00 | Muddy Water 50%M 50%W | 11.185 |
| 440.00 | WCM 10%W 90%M | 6.172 |

Total Length: 1385.00 ft

Total Volume: 17.357 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 4#LCM

RW=.179@110degrees

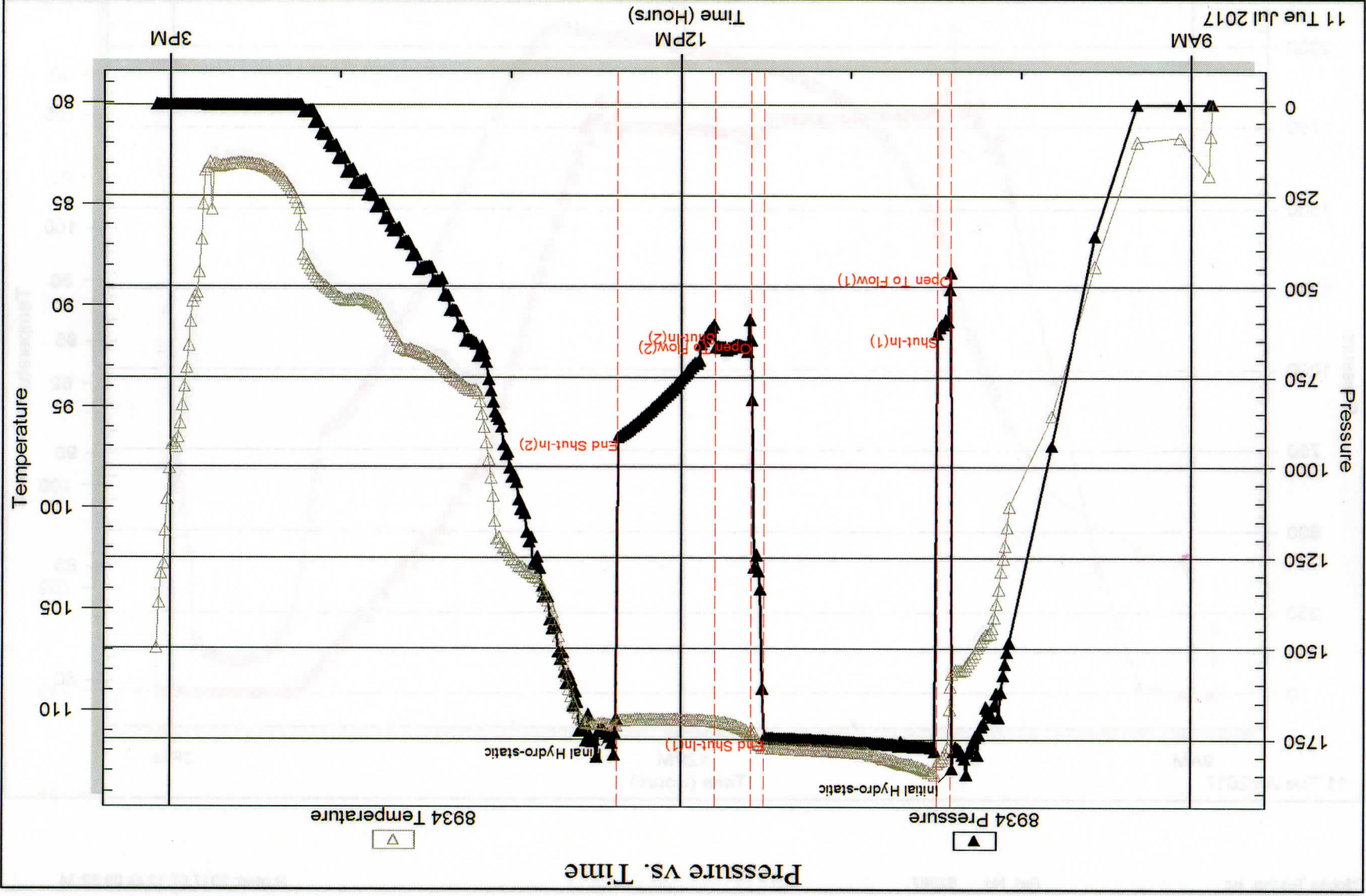
Serial #: 8934

Inside

James P. Williams Enterprise, Inc.

Wanker #1

DST Test Number: 1



Triolite Testing, Inc

Ref. No: 62987

Printed: 2017.07.12 @ 09:52:33

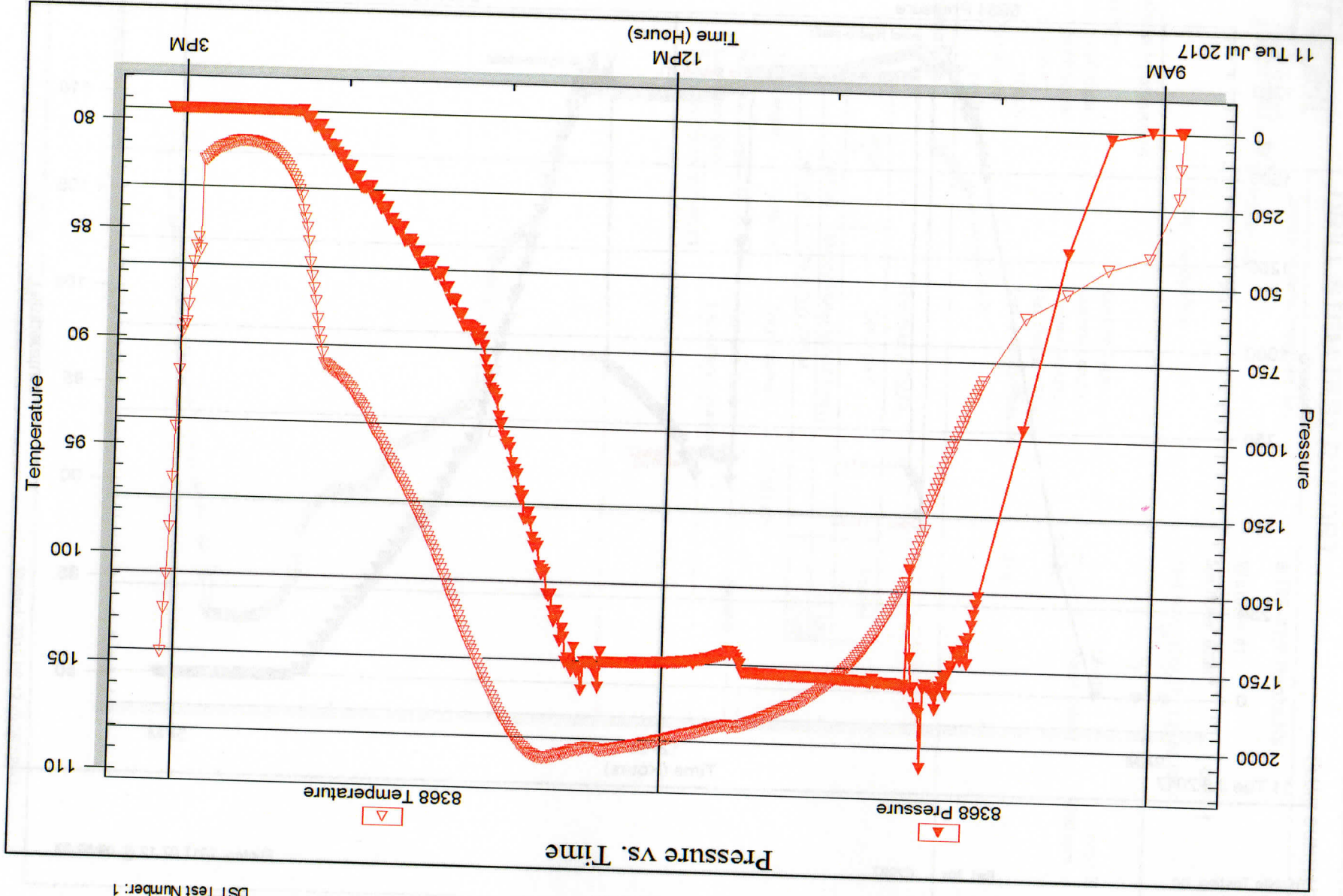
11 Tue Jul 2017

Serial #: 8368

James P. Williams Enterprise, Inc.

Wanker #1

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 62987

Printed: 2017.07.12 @ 09:52:34

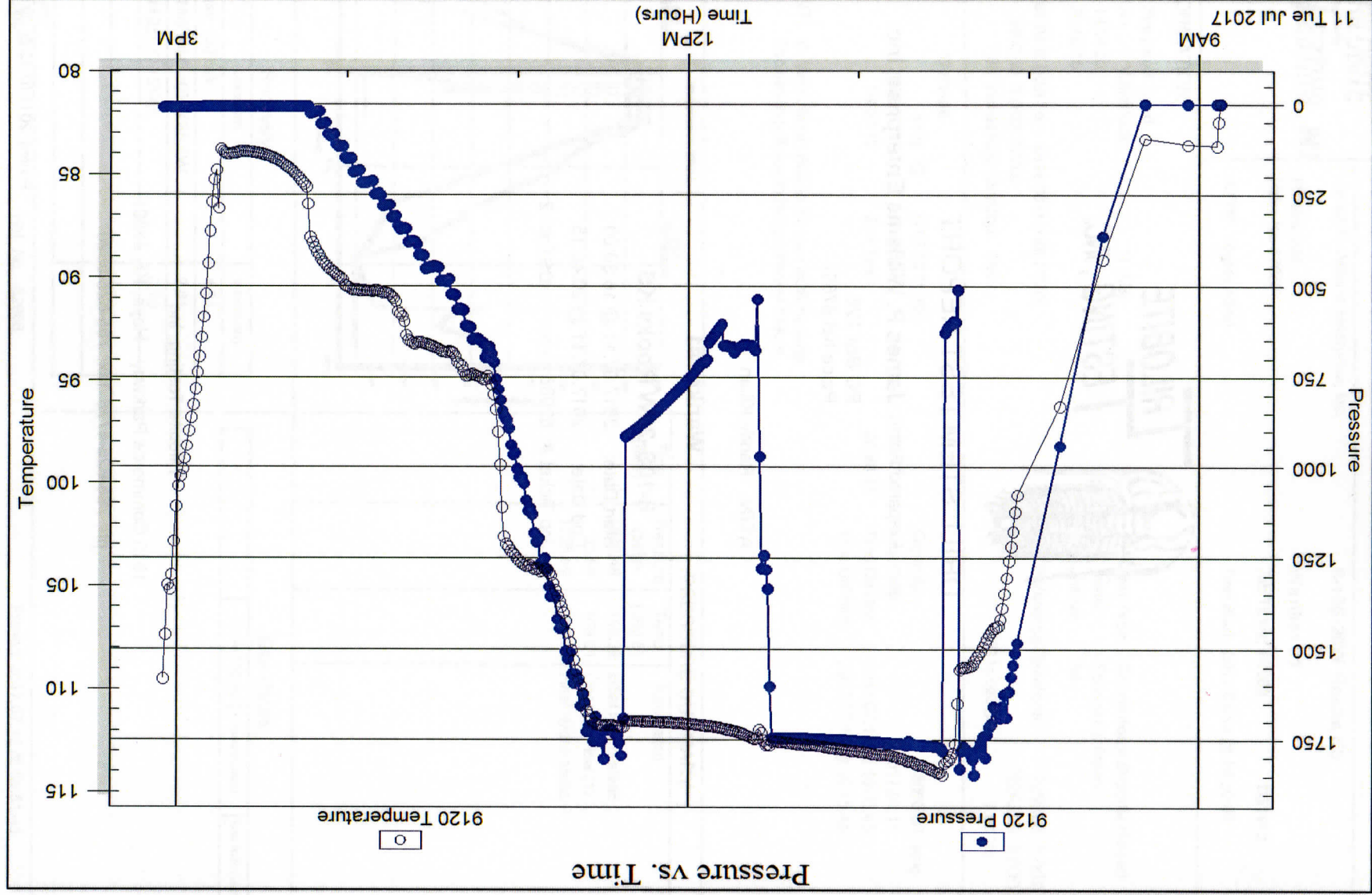
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Inside

James P. Williams Enterprise, Inc.

Wanker #1

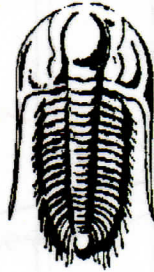
DST Test Number: 1



Triolite Testing, Inc

Ref. No: 62987

Printed: 2017.07.12 @ 09:52:34



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **James P. Williams Enterprise, Inc.**

PO Box 226
Palco KS 67657

ATTN: Randy Kilian

Wanker #1

8-10S-20W Rooks,KS

Start Date: 2017.07.11 @ 16:30:00

End Date: 2017.07.11 @ 20:48:15

Job Ticket #: 62988 DST #: 2

Trilobite Testing, Inc

1515 Commerce Parkway Hays, KS 67601

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

Printed: 2017.07.12 @ 09:51:45



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

James P. Williams Enterprise, Inc.

8-10S-20W Rooks, KS

PO Box 226
Palco KS 67657

Wanker #1

Job Ticket: 62988

DST#: 2

ATTN: Randy Kilian

Test Start: 2017.07.11 @ 16:30:00

GENERAL INFORMATION:

Formation: **Simpson Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:04:00

Time Test Ended: 20:48:15

Test Type: Conventional Straddle (Reset)

Tester: Spencer J. Staab

Unit No: 84

Interval: **3781.00 ft (KB) To 3814.00 ft (KB) (TVD)**

Total Depth: 3900.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2250.00 ft (KB)

2243.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8934 Outside

Press@RunDepth: psig @ 3787.00 ft (KB)

Start Date: 2017.07.11 End Date: 2017.07.11

Start Time: 16:30:15 End Time: 20:48:15

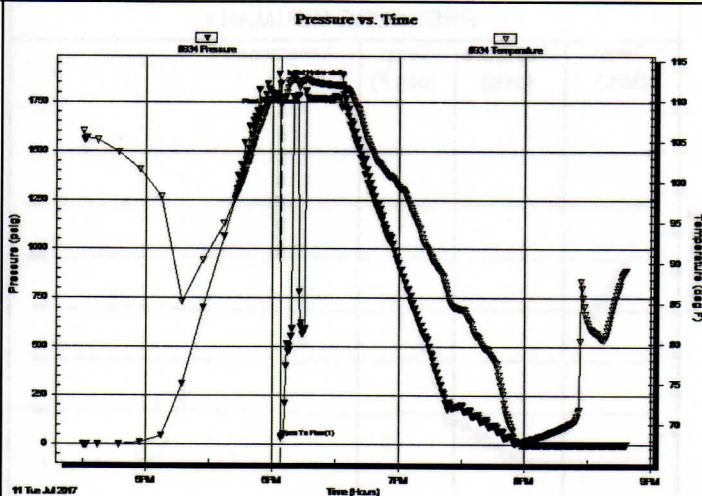
Capacity: 8000.00 psig

Last Calib.: 2017.07.11

Time On Btm: 2017.07.11 @ 18:03:45

Time Off Btm: 2017.07.11 @ 18:15:45

TEST COMMENT: IF- Weak Blow ; Built to 3"; then BOB instantly
Decided to pull due to Bottom Packer Failure



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1842.48 | 110.39 | Initial Hydro-static |
| 1 | 35.69 | 109.51 | Open To Flow (1) |
| 12 | 1805.69 | 113.34 | Final Hydro-static |

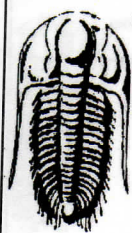
Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|--------------------|--------------|
| 500.00 | Water 100%W | 4.94 |
| 200.00 | OCMW 5%O 10%M 85%W | 2.81 |
| 50.00 | OCM 25%O 75%M | 0.70 |
| | | |
| | | |

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

James P. Williams Enterprise, Inc.

8-10S-20W Rooks, KS

PO Box 226
Palco KS 67657

Wanker #1

Job Ticket: 62988

DST#: 2

ATTN: Randy Kilian

Test Start: 2017.07.11 @ 16:30:00

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|-------------------|------------------------------------|
| Drill Pipe: | Length: 3469.00 ft | Diameter: 3.80 inches | Volume: 48.66 bbl | Tool Weight: 2500.00 lb |
| Heavy Wt. Pipe: | Length: 310.00 ft | Diameter: 2.75 inches | Volume: 2.28 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: 61000.00 lb |
| | | Total Volume: | 50.94 bbl | Tool Chased 5.00 ft |
| Drill Pipe Above KB: | 26.00 ft | | | String Weight: Initial 57000.00 lb |
| Depth to Top Packer: | 3781.00 ft | | | Final 60000.00 lb |
| Depth to Bottom Packer: | 3814.00 ft | | | |
| Interval between Packers: | 33.00 ft | | | |
| Tool Length: | 148.00 ft | | | |
| Number of Packers: | 1 | Diameter: 6.75 inches | | |

Tool Comments:

Tool Description

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|---------------------------|---------------|------------|----------|------------|-------------------------------|
| Change Over Sub | 1.00 | | | 3754.00 | |
| Shut In Tool | 5.00 | | | 3759.00 | |
| Hydraulic tool | 5.00 | | | 3764.00 | |
| Jars | 5.00 | | | 3769.00 | |
| Safety Joint | 3.00 | | | 3772.00 | |
| Packer | 5.00 | | | 3777.00 | 28.00 Bottom Of Top Packer |
| Packer | 4.00 | | | 3781.00 | |
| Stubb | 1.00 | | | 3782.00 | |
| Perforations | 5.00 | | | 3787.00 | |
| Recorder | 0.00 | 9120 | Inside | 3787.00 | |
| Recorder | 0.00 | 8934 | Outside | 3787.00 | |
| Perforations | 23.00 | | | 3810.00 | |
| Blank Off Sub | 1.00 | | | 3811.00 | |
| top of s.packer | 3.00 | | | 3814.00 | 33.00 Tool Interval |
| Packer | 0.00 | | | 3814.00 | |
| Stubb | 1.00 | | | 3815.00 | |
| Perforations | 2.00 | | | 3817.00 | |
| Change Over Sub | 1.00 | | | 3818.00 | |
| Recorder | 0.00 | 8368 | Below | 3818.00 | |
| Drill Pipe | 63.00 | | | 3881.00 | |
| Change Over Sub | 1.00 | | | 3882.00 | |
| Perforations | 15.00 | | | 3897.00 | |
| Bullnose | 4.00 | | | 3901.00 | 87.00 Bottom Packers & Anchor |
| Total Tool Length: | 148.00 | | | | |



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

James P. Williams Enterprise, Inc.

8-10S-20W Rooks,KS

PO Box 226
Palco KS 67657

Wanker #1

Job Ticket: 62988

DST#: 2

ATTN: Randy Kilian

Test Start: 2017.07.11 @ 16:30:00

Mud and Cushion Information

| | | | |
|----------------------------------|----------------------------|-----------------|-----------|
| Mud Type: Gel Chem | Cushion Type: | Oil API: | deg API |
| Mud Weight: 9.00 lb/gal | Cushion Length: ft | Water Salinity: | 12000 ppm |
| Viscosity: 54.00 sec/qt | Cushion Volume: bbl | | |
| Water Loss: 7.99 in ³ | Gas Cushion Type: | | |
| Resistivity: ohm.m | Gas Cushion Pressure: psig | | |
| Salinity: 9700.00 ppm | | | |
| Filter Cake: inches | | | |

Recovery Information

Recovery Table

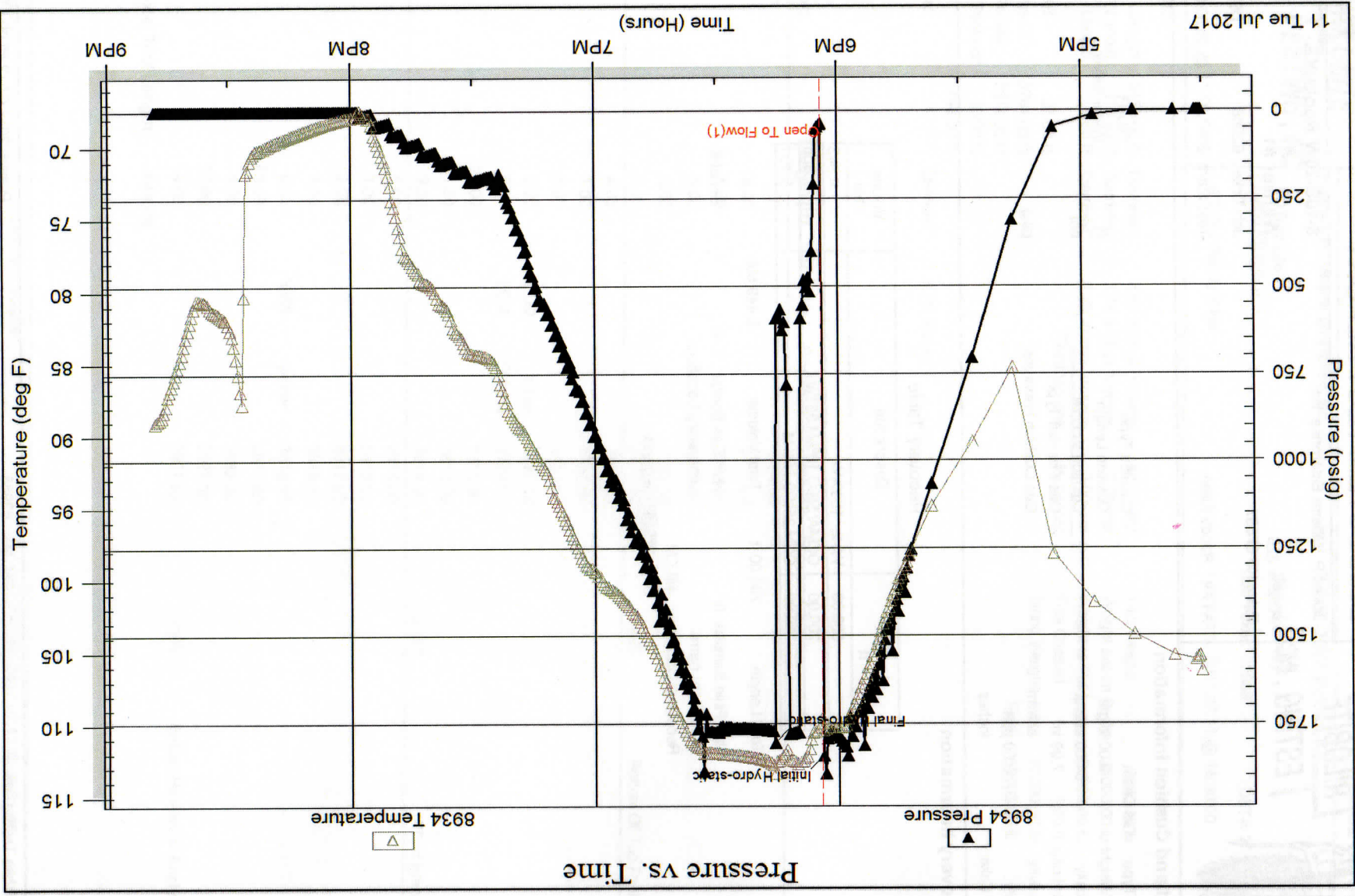
| Length ft | Description | Volume bbl |
|--------------|--------------------|---------------|
| 500.00 | Water 100%W | 4.943 |
| 200.00 | OCMV 5%O 10%M 85%W | 2.805 |
| 50.00 | OCM 25%O 75%M | 0.701 |

Total Length: 750.00 ft Total Volume: 8.449 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: 4#LCM
RW=.189@87degrees



11 Tue Jul 2017

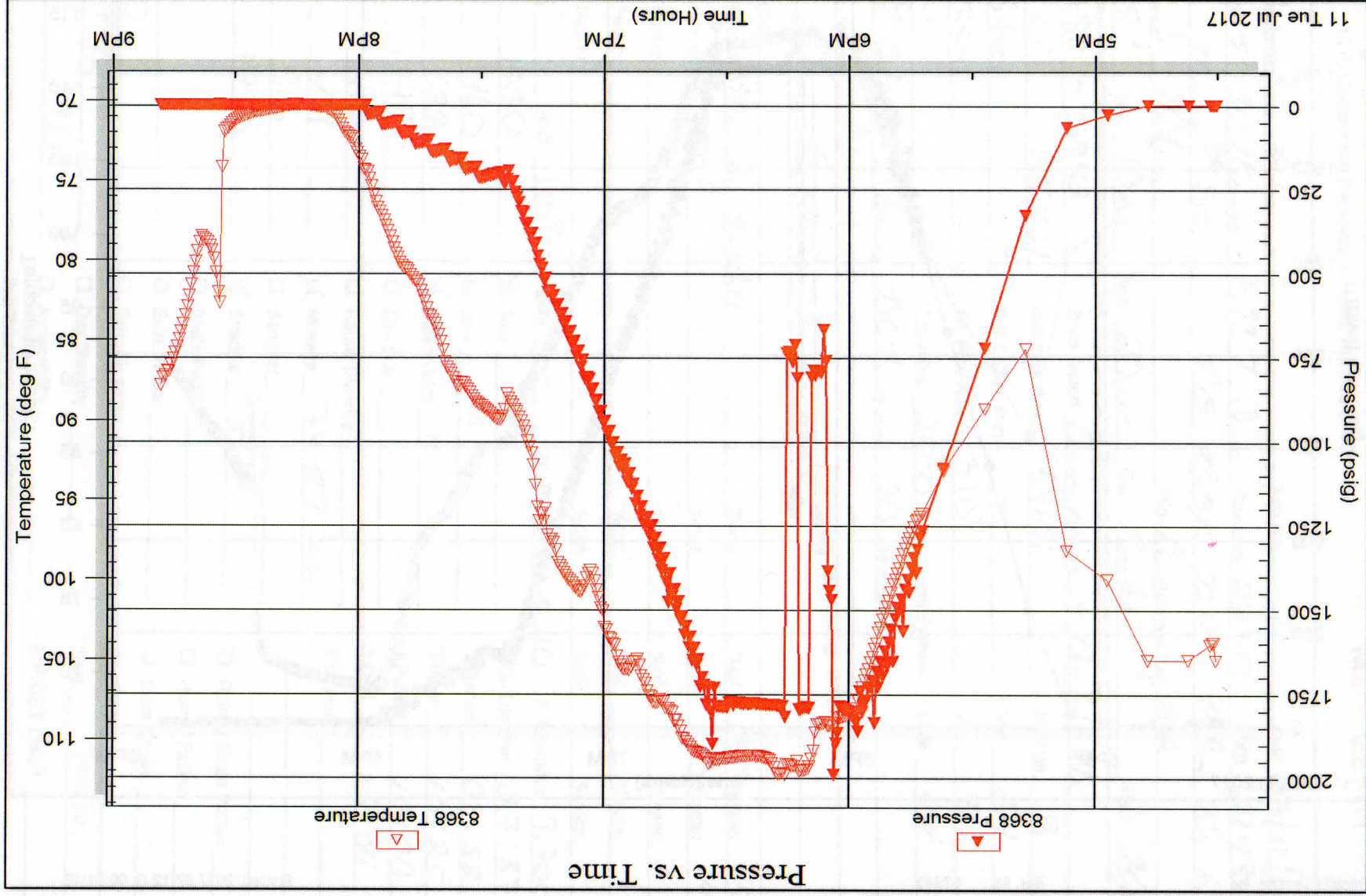
Pressure vs. Time

Serial #: 8368

Below (Straddle) P. Williams Enterprise, Inc.

Wanker #1

DST Test Number: 2

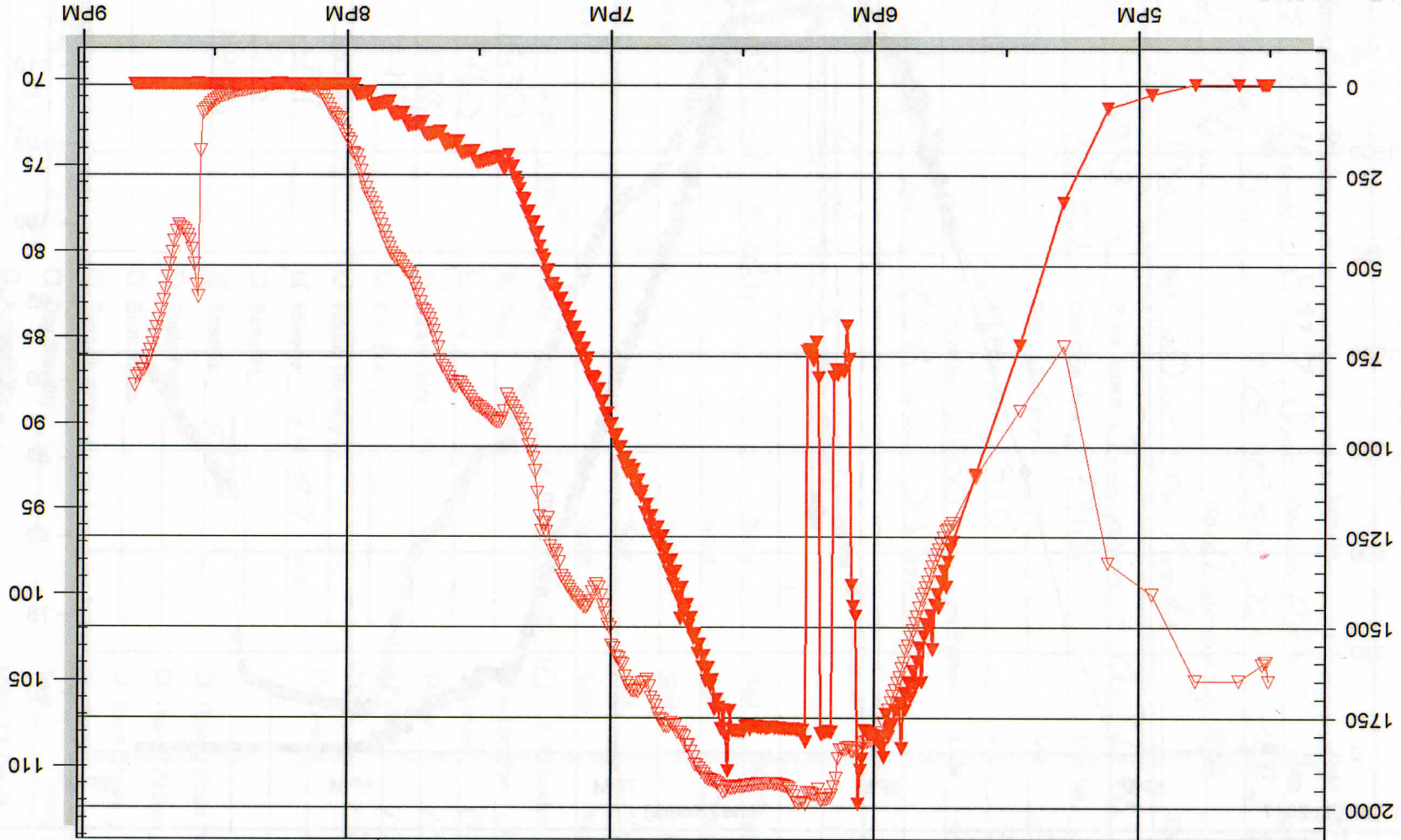


11 Tue Jul 2017

Time (Hours)

Temperature (deg F)

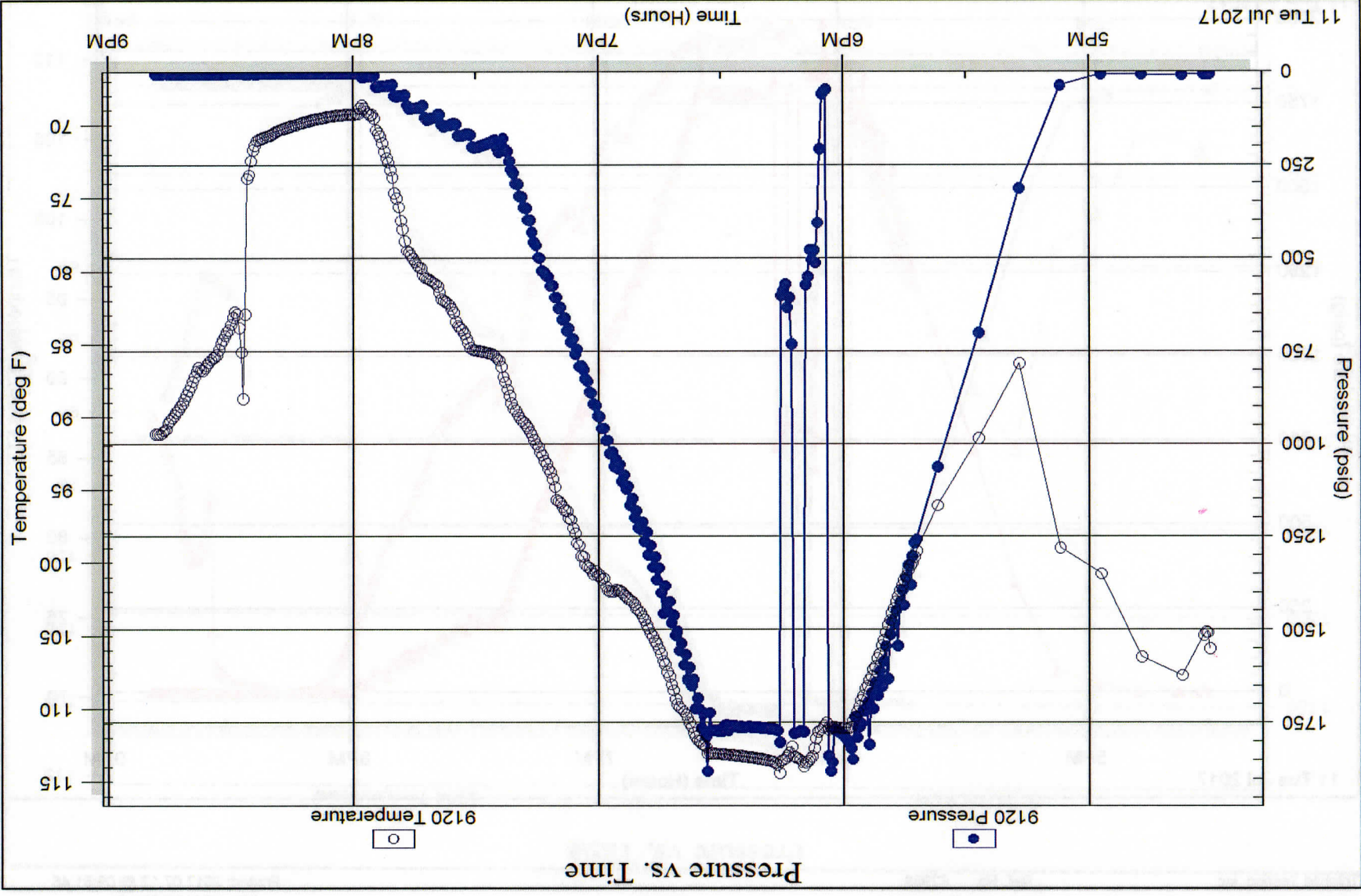
Pressure (psig)



Ref. No: 62988

Triobite Testing, Inc

Printed: 2017.07.12 @ 09:51:46





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 62987

Well Name & No. Wamber #1 Test No. 1 Date 07/11/2017
 Company James P. Williams ENT, Inc. Elevation 2250 KB 2243 GL
 Address 802 Main St PO BOX 226 Palo Ks 67654
 Co. Rep / Geo. Randy Hilian Rig Discovery #2
 Location: Sec. 8 Twp. 10s Rge. 20w Co. Rooks State Ks

Interval Tested 3780' - 3842' Zone Tested Simpson - Arbuckle
 Anchor Length 62' 58' tail Drill Pipe Run 3468' Mud Wt. 9
 Top Packer Depth 3780' Drill Collars Run - Vis 54
 Bottom Packer Depth 3842' Wt. Pipe Run 310' WL 8.0
 Total Depth 3900' Chlorides 2500 ppm System LCM 4#

Blow Description 77- Strong Blow; BOB in 20 seconds
75J - No Return
77- Strong Blow; BOB in 5 seconds
75J - No Return

| Rec | Feet of | %gas | %oil | %water | %mud |
|-------------|--------------------|------|------|------------|------------|
| <u>945'</u> | <u>Muddy Water</u> | | | <u>50%</u> | <u>50%</u> |
| <u>440'</u> | <u>WCM</u> | | | <u>10%</u> | <u>90%</u> |
| | | | | | |
| | | | | | |

Rec Total 1385' BHT 110° Gravity - API RW .179 @ 110° F Chlorides 9,700 ppm
 (A) Initial Hydrostatic 1830' Test 1050 T-On Location 07:37
 (B) First Initial Flow 460 Jars 250 T-Started 08:52
 (C) First Final Flow 628 Safety Joint 75 T-Open 10:25
 (D) Initial Shut-In 1745 Circ Sub _____ T-Pulled 12:20
 (E) Second Initial Flow 646 Hourly Standby _____ T-Out 15:04
 (F) Second Final Flow 601 Mileage 7427 55.50 Comments _____
 (G) Final Shut-In 916 Sampler _____
 (H) Final Hydrostatic 1730 Straddle 600 Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 2030.50
 Accessibility _____ MP/DST Disc't _____
 Sub Total 2030.50

Approved By _____ Our Representative James J. Jacob Thanks!
 Trilobite Testing Inc. shall not be liable for damaged or destroyed 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.
 JRC-JCA-MSL