



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

SAMUEL GARY JR & ASSOC. INC.

HAGER TRUST et al 1-11

1515 WYNKOOP SUITE 700
DENVER CO. 80202

11-5s-23w Norton,KS

ATTN: CLAYTON CAMOZZI

Job Ticket: 55859

DST#: 1

Test Start: 2013.11.15 @ 14:05:00

GENERAL INFORMATION:

Formation: **LANS. "D-E"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:56:15

Time Test Ended: 21:12:45

Test Type: Conventional Bottom Hole (Initial)

Tester: BOB HAMEL

Unit No: 44

Interval: 3438.00 ft (KB) To 3475.00 ft (KB) (TVD)

Reference Elevations: 2190.00 ft (KB)

Total Depth: 3475.00 ft (KB) (TVD)

2182.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8879 Outside

Press@RunDepth: 23.19 psig @ 3440.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.15 End Date: 2013.11.15

Last Calib.: 2013.11.15

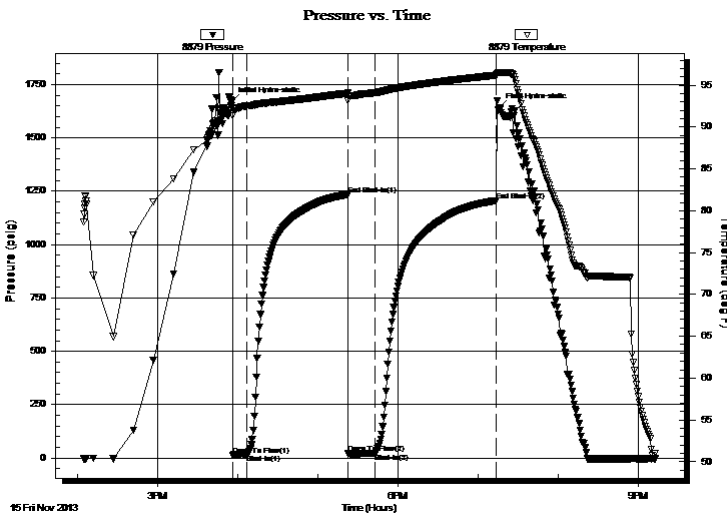
Start Time: 14:05:05 End Time: 21:12:44

Time On Btm: 2013.11.15 @ 15:55:45

Time Off Btm: 2013.11.15 @ 19:15:45

TEST COMMENT: I.F. - 10 - W.S.B. BUILT TO (1/2 " IN 10 MIN.)
I.S.I. - 75 - NO B.B.
F.F. - 20 - NO INT. BLOW BUILT TO (1/2 " IN 20 MIN.)
F.S.I. - 90 - NO B.B.

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1670.45 | 92.53 | Initial Hydro-static |
| 1 | 13.21 | 91.34 | Open To Flow (1) |
| 12 | 15.14 | 92.50 | Shut-In(1) |
| 87 | 1234.51 | 94.04 | End Shut-In(1) |
| 87 | 20.24 | 93.18 | Open To Flow (2) |
| 107 | 23.19 | 94.10 | Shut-In(2) |
| 198 | 1206.44 | 96.18 | End Shut-In(2) |
| 200 | 1639.80 | 96.52 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------------|--------------|
| 5.00 | OCM 40% OIL 60% MUD | 0.02 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

SAMUEL GARY JR & ASSOC. INC.

HAGER TRUST et al 1-11

1515 WYNKOOP SUITE 700
DENVER CO. 80202

11-5s-23w Norton,KS

Job Ticket: 55859

DST#: 1

ATTN: CLAYTON CAMOZZI

Test Start: 2013.11.15 @ 14:05:00

GENERAL INFORMATION:

Formation: **LANS. "D-E"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:56:15

Time Test Ended: 21:12:45

Test Type: Conventional Bottom Hole (Initial)

Tester: BOB HAMEL

Unit No: 44

Interval: 3438.00 ft (KB) To 3475.00 ft (KB) (TVD)

Reference Elevations: 2190.00 ft (KB)

Total Depth: 3475.00 ft (KB) (TVD)

2182.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8875 Fluid

Press@RunDepth: psig @ 3409.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.15 End Date: 2013.11.15

Last Calib.: 2013.11.15

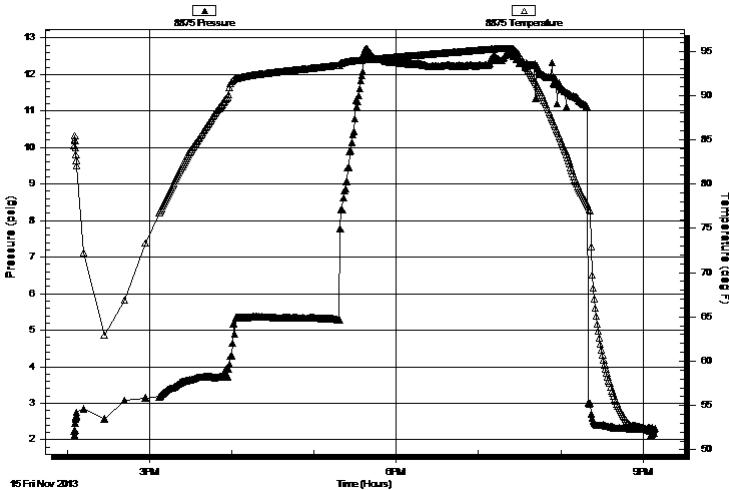
Start Time: 14:05:05 End Time: 21:08:59

Time On Btm:

Time Off Btm:

TEST COMMENT: I.F. - 10 - W.S.B. BUILT TO (1/2 " IN 10 MIN.)
I.S.I. - 75 - NO B.B.
F.F. - 20 - NO INT. BLOW BUILT TO (1/2 " IN 20 MIN.)
F.S.I. - 90 - NO B.B.

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------------|--------------|
| 5.00 | OCM 40% OIL 60% MUD | 0.02 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

SAMUEL GARY JR & ASSOC. INC.

HAGER TRUST et al 1-11

1515 WYNKOOP SUITE 700
DENVER CO. 80202

11-5s-23w Norton,KS

Job Ticket: 55859

DST#: 1

ATTN: CLAYTON CAMOZZI

Test Start: 2013.11.15 @ 14:05:00

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: 64.00 sec/qt | Cushion Volume: bbl | | |
| Water Loss: 8.79 in ³ | Gas Cushion Type: | | |
| Resistivity: ohm.m | Gas Cushion Pressure: psig | | |
| Salinity: 500.00 ppm | | | |
| Filter Cake: inches | | | |

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|---------------------|---------------|
| 5.00 | OCM 40% OIL 60% MUD | 0.025 |

Total Length: 5.00 ft Total Volume: 0.025 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: NO CLEAN OIL

SAMPLER RECOVERY = 500 M.L. TOTAL FLUID
200 M.L. OIL / 300 M.L. MUD

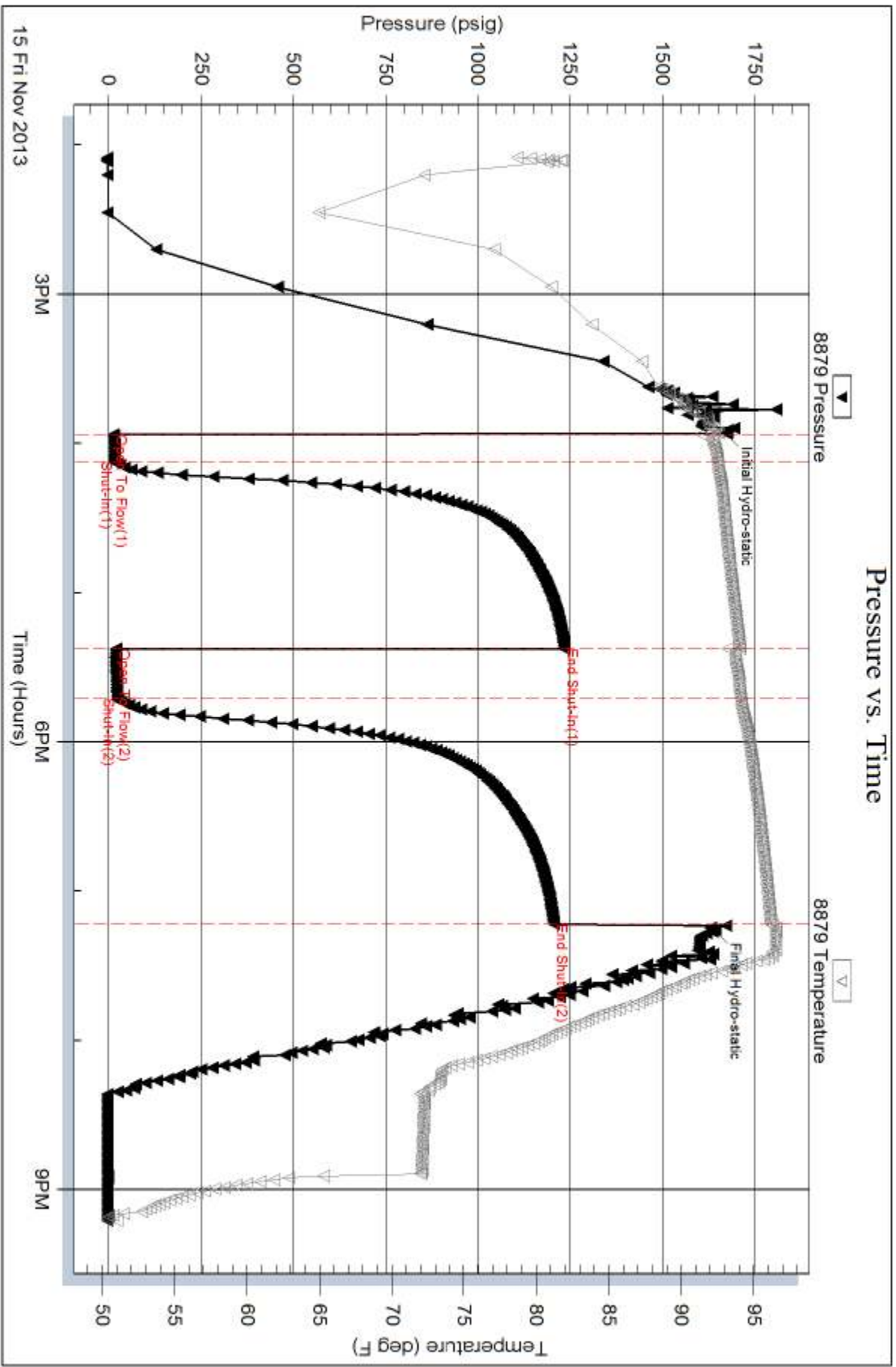
P.S.I. = 50

Serial #: 8879

Outside SAMUEL GARY JR & ASSOC. INC.

11-55-23w Norton, KS

DST Test Number: 1



Serial #: 8875

Fluid

SAMUEL GARY JR & ASSOC. INC.

11-55-23w Norton, KS

DST Test Number: 1

