



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Ritchie Exploration Inc
8100 E 22ND St N #700
PO Box 783188
Wichita KS 67278
ATTN: Justin Clegg/ Mac Ar

32-24s-24w

Rebein #1

Job Ticket: 49656

DST#: 1

Test Start: 2012.09.27 @ 03:15:24

GENERAL INFORMATION:

Formation: **Huck**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:48:09
 Time Test Ended: 13:37:54
 Interval: **4718.00 ft (KB) To 4782.00 ft (KB) (TVD)**
 Total Depth: 4782.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Chris Staats
 Unit No: 47
 Reference Elevations: 2495.00 ft (KB)
 2484.00 ft (CF)
 KB to GR/CF: 11.00 ft

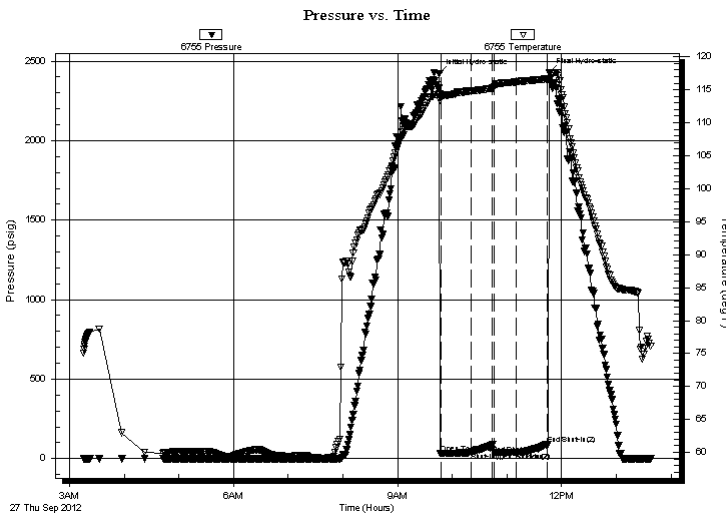
Serial #: 6755

Inside

Press @ Run Depth: 38.72 psig @ 4719.00 ft (KB)
 Start Date: 2012.09.27 End Date: 2012.09.27
 Start Time: 03:15:29 End Time: 13:37:54
 Capacity: 8000.00 psig
 Last Calib.: 2012.09.27
 Time On Btm: 2012.09.27 @ 09:45:54
 Time Off Btm: 2012.09.27 @ 11:46:24

TEST COMMENT: IF: Weak surface blow Blow died
 IS: No blow back
 FF: No blow Flushed tool
 FS: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2420.23	114.37	Initial Hydro-static
3	34.35	113.98	Open To Flow (1)
35	40.95	114.81	Shut-In(1)
58	85.95	115.23	End Shut-In(1)
60	37.38	115.43	Open To Flow (2)
85	38.72	116.18	Shut-In(2)
119	90.30	116.65	End Shut-In(2)
121	2429.52	117.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Mud w iyh oil spots 1%oil 99% mud	0.21

Gas Rates

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



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FLUID SUMMARY

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32-24s-24w

8100 E 22ND St N #700
PO Box 783188
Wichita KS 67278

Rebein #1

Job Ticket: 49656

DST#: 1

ATTN: Justin Clegg/ Mac Ar

Test Start: 2012.09.27 @ 03:15:24

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: 47.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6300.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
15.00	Mud w iyh oil spots 1%oil 99% mud	0.210

Total Length: 15.00 ft Total Volume: 0.210 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6755

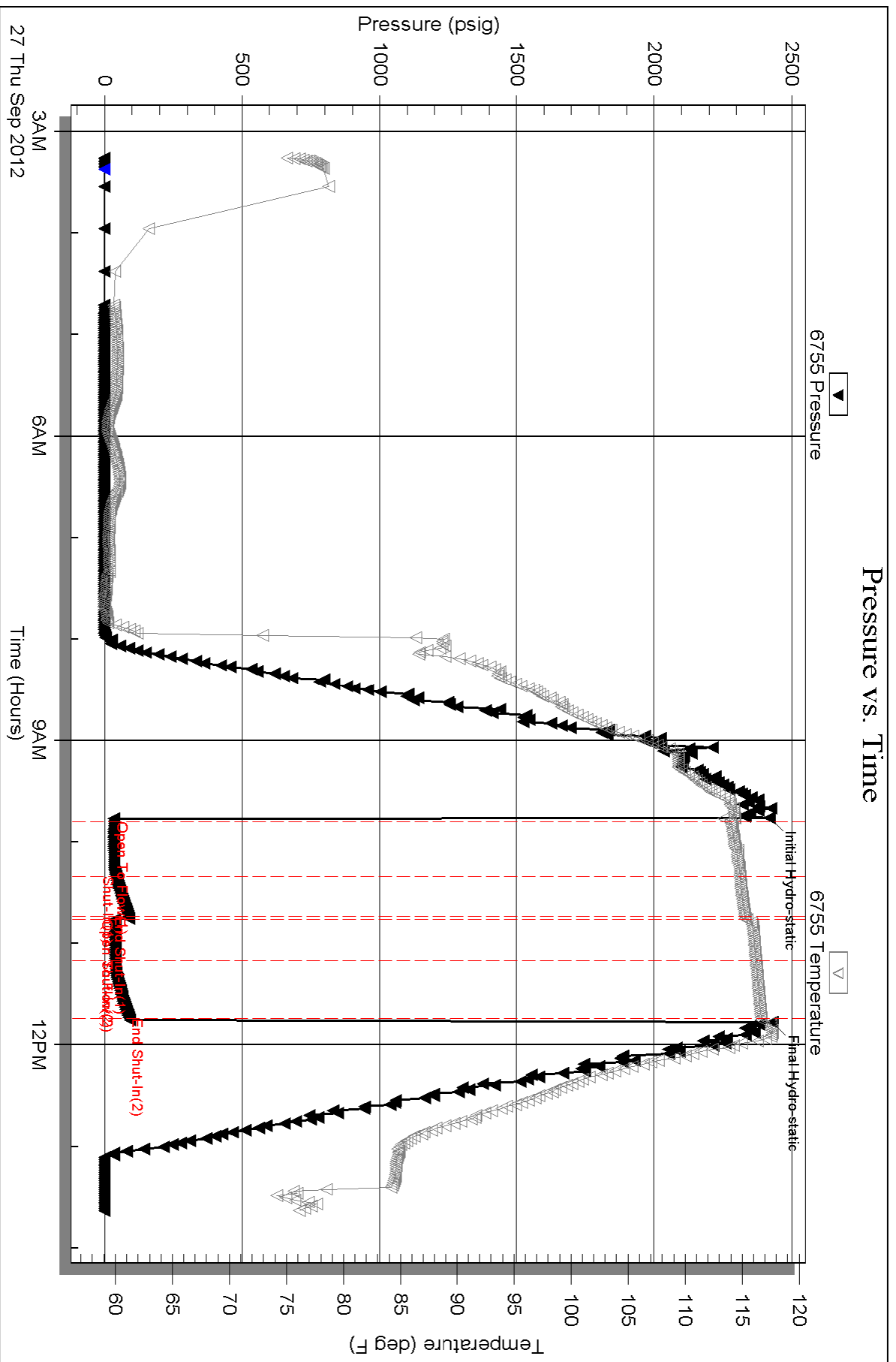
Inside

Richie Exploration Inc

Rebein #1

DST Test Number: 1

Pressure vs. Time





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration Inc
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 PO Box 783188
 Wichita KS 67278
 ATTN: Justin Clegg/ Mac Ar

32-24s-24w

Rebein #1

Job Ticket: 49657

DST#: 2

Test Start: 2012.09.28 @ 00:50:35

GENERAL INFORMATION:

Formation: **Morrow/ Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:47:20

Time Test Ended: 10:25:50

Test Type: Conventional Bottom Hole (Reset)

Tester: Chris Staats

Unit No: 47

Interval: 4780.00 ft (KB) To 4830.00 ft (KB) (TVD)

Reference Elevations: 2495.00 ft (KB)

Total Depth: 4830.00 ft (KB) (TVD)

2484.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 6773 Outside

Press @ Run Depth: 71.41 psig @ 4781.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.09.28 End Date: 2012.09.28

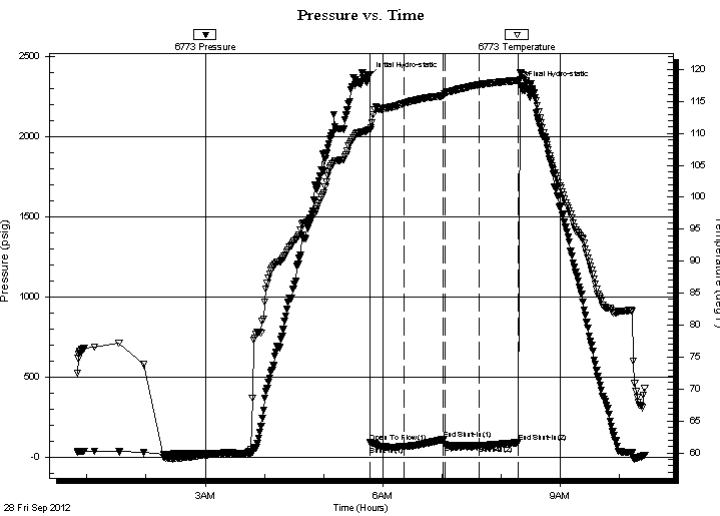
Last Calib.: 2012.09.28

Start Time: 00:50:40 End Time: 10:25:50

Time On Btm: 2012.09.28 @ 05:45:35

Time Off Btm: 2012.09.28 @ 08:19:50

TEST COMMENT: IF: Weak blow 1"
 IS: No blow back
 FF: No blow
 FS: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2375.81	110.53	Initial Hydro-static
2	90.95	110.63	Open To Flow (1)
37	65.81	114.72	Shut-In(1)
76	111.86	115.87	End Shut-In(1)
77	77.60	116.24	Open To Flow (2)
113	71.41	117.62	Shut-In(2)
152	91.16	118.28	End Shut-In(2)
155	2318.67	119.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
35.00	Mud w ith oil spots 1% oil 99% mud	0.49

* Recovery from multiple tests

Gas Rates

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



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32-24s-24w

8100 E 22ND St N #700
PO Box 783188
Wichita KS 67278

Rebein #1

Job Ticket: 49657

DST#: 2

ATTN: Justin Clegg/ Mac Ar

Test Start: 2012.09.28 @ 00:50:35

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: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.18 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5600.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
35.00	Mud with oil spots 1% oil 99% mud	0.491

Total Length: 35.00 ft Total Volume: 0.491 bbl

Num Fluid Samples: 0

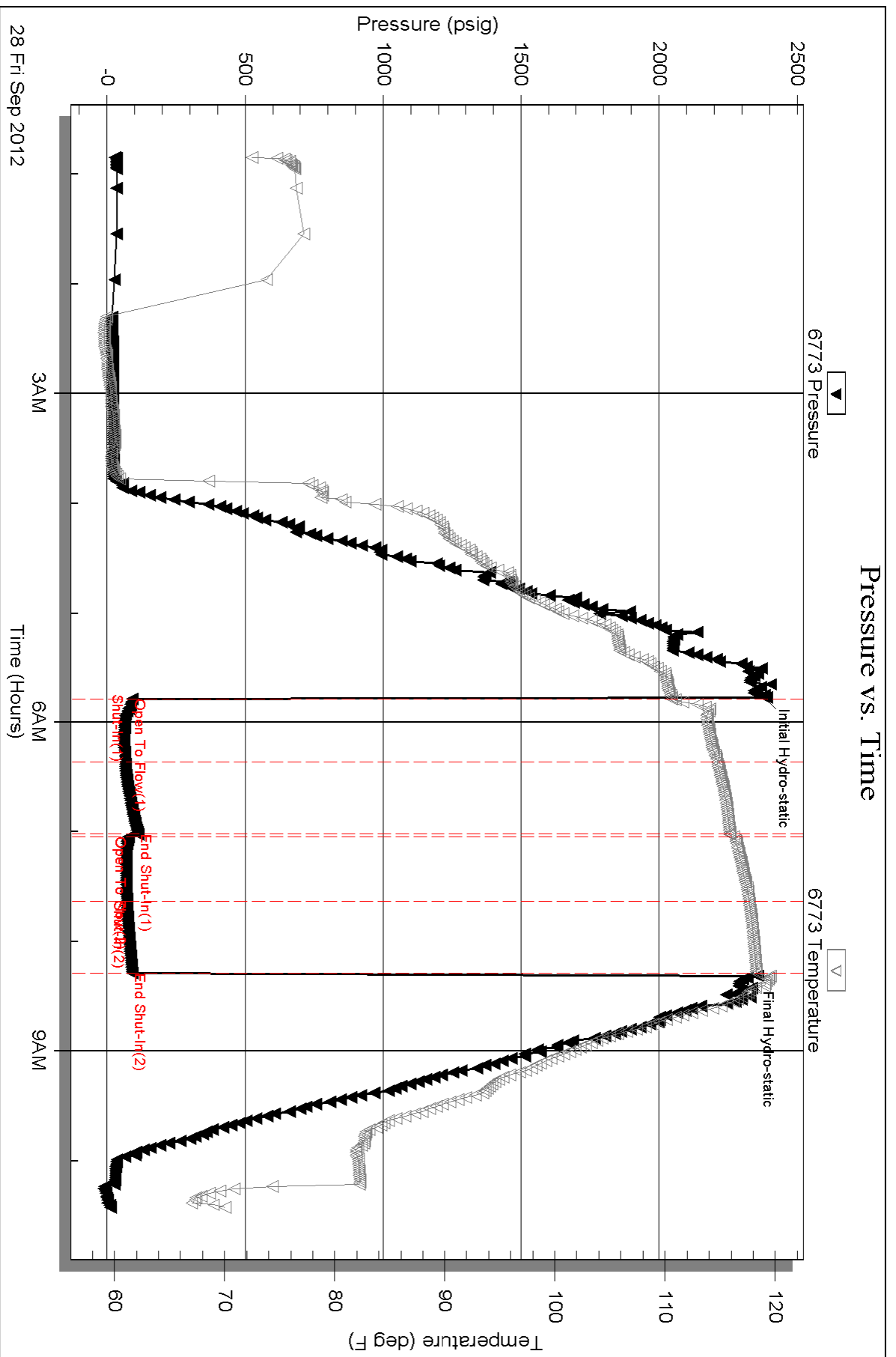
Num Gas Bombs: 0

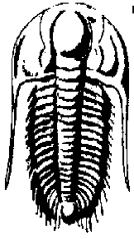
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





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 ATTN: Justin Clegg/ Mac Ar

32-24s-24w

Rebein #1

Job Ticket: 49658

DST#: 3

Test Start: 2012.09.28 @ 17:59:00

GENERAL INFORMATION:

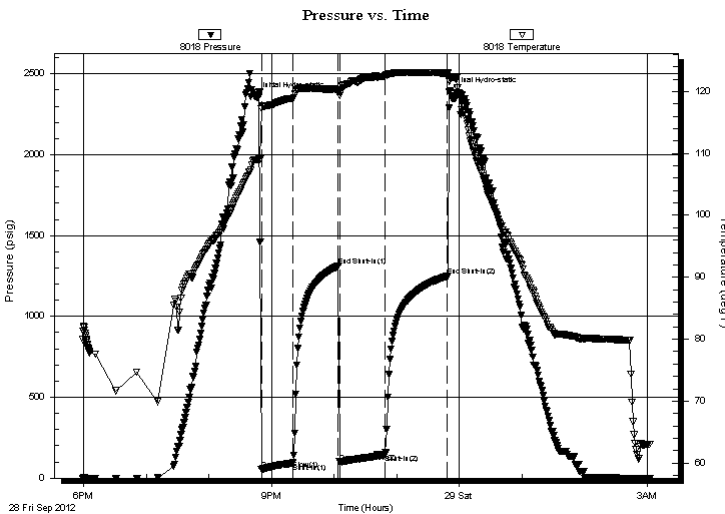
Formation: **Mississippi**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 20:50:15
 Time Test Ended: 03:02:45
 Interval: **4830.00 ft (KB) To 4854.00 ft (KB) (TVD)**
 Total Depth: 44854.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Chris Staats
 Unit No: 47
 Reference Elevations: 2495.00 ft (KB)
 2484.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8018

Press @ Run Depth: 147.42 psig @ ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.09.28 End Date: 2012.09.29 Last Calib.: 2012.09.29
 Start Time: 17:59:05 End Time: 03:02:45 Time On Btm: 2012.09.28 @ 20:45:15
 Time Off Btm: 2012.09.28 @ 23:50:30

TEST COMMENT: IF: Strong blow BOB 13 min
 IS: Weak surface blow back
 FF: Strong blow BOB 19 min
 FS: Weak blow back 1/4"

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2357.86	108.94	Initial Hydro-static
5	55.03	117.25	Open To Flow (1)
36	94.21	118.88	Shut-In(1)
79	1310.83	120.32	End Shut-In(1)
81	100.20	119.79	Open To Flow (2)
123	147.42	122.43	Shut-In(2)
183	1249.17	122.96	End Shut-In(2)
186	2387.94	121.70	Final Hydro-static

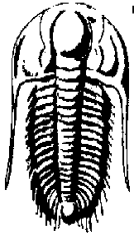
Recovery

Length (ft)	Description	Volume (bbl)
125.00	Clean oil 100%	1.75
90.00	G,O,W,M 5%gas 20%oil25%water50%ml	1.26
90.00	O,M,W 10% oil 40% water 50% mud	1.26

* Recovery from multiple tests

Gas Rates

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



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Rebein #1

Job Ticket: 49658

DST#: 3

ATTN: Justin Clegg/ Mac Ar

Test Start: 2012.09.28 @ 17:59:00

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:

ppm

Viscosity: 46.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.99 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5700.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
125.00	Clean oil 100%	1.753
90.00	G,O,W,M 5%gas 20%oil25%water50%mud	1.262
90.00	O,M,W 10% oil 40% water 50% mud	1.262

Total Length: 305.00 ft Total Volume: 4.277 bbl

Num Fluid Samples: 0

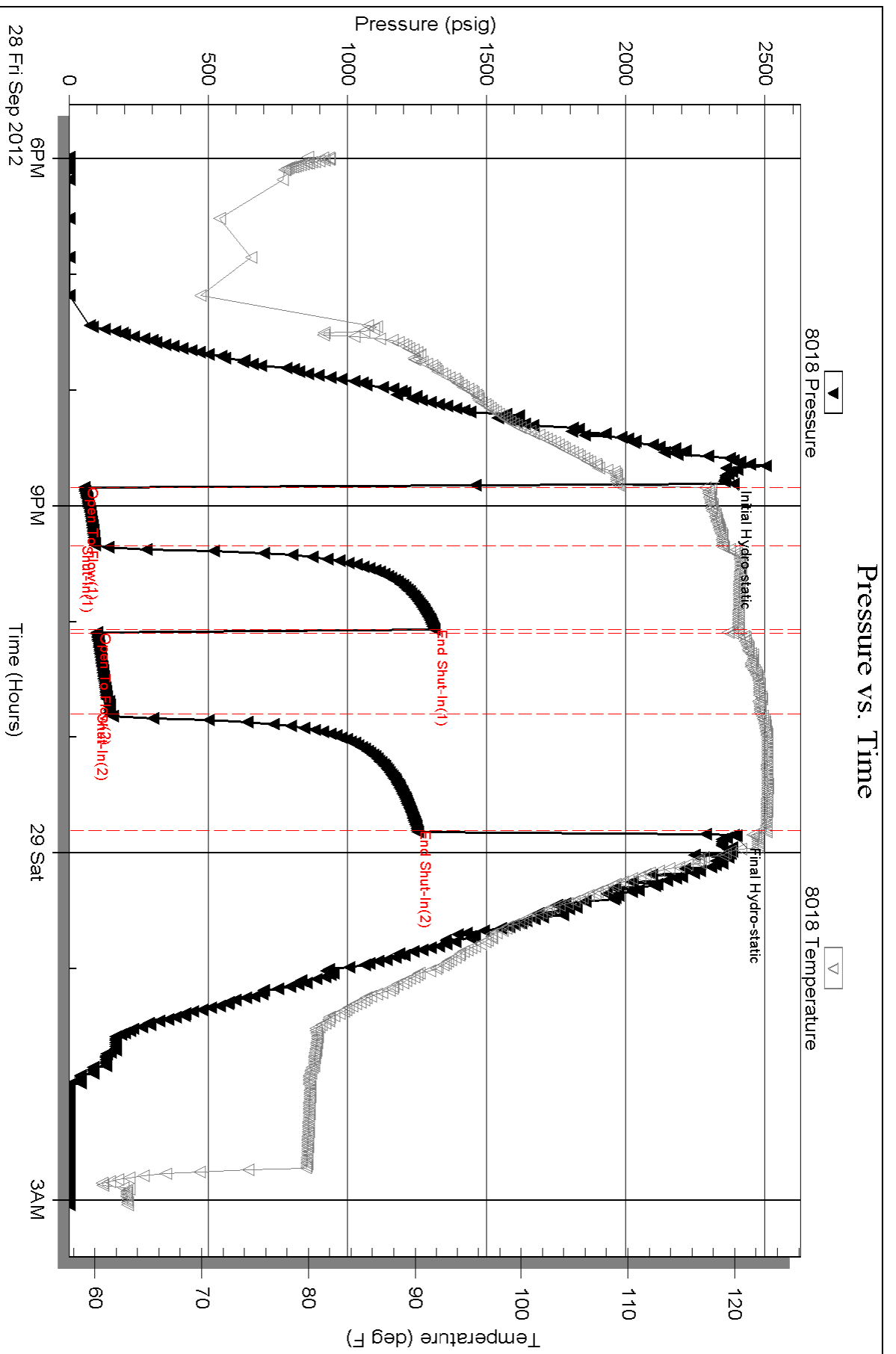
Num Gas Bombs: 0

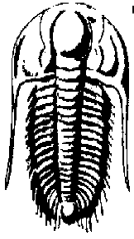
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





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32-24s-24w

Rebein #1

Job Ticket: 49659

DST#: 4

Test Start: 2012.09.29 @ 13:44:08

GENERAL INFORMATION:

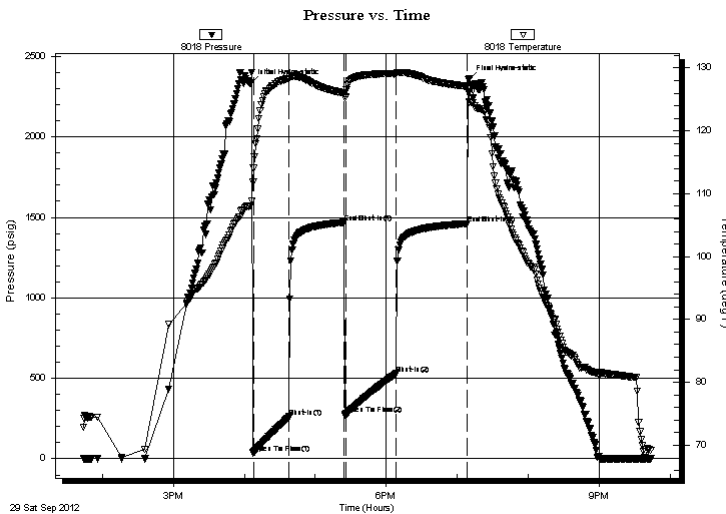
Formation: **Mississippi**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 16:07:38
 Time Test Ended: 21:43:53
 Interval: **4860.00 ft (KB) To 4882.00 ft (KB) (TVD)**
 Total Depth: 4882.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Chris Staats
 Unit No: 47
 Reference Elevations: 2495.00 ft (KB)
 2484.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8018

Press @ Run Depth: 528.02 psig @ ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.09.29 End Date: 2012.09.29 Last Calib.: 2012.09.29
 Start Time: 13:44:13 End Time: 21:43:52 Time On Btm: 2012.09.29 @ 16:05:08
 Time Off Btm: 2012.09.29 @ 19:09:38

TEST COMMENT: IF: Strong blow BOB 8 min
 IS: No blow back
 FF: Strong blow BOB 9 min
 FS: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2332.99	108.04	Initial Hydro-static
3	37.40	114.07	Open To Flow (1)
33	260.80	128.32	Shut-In(1)
79	1468.70	125.99	End Shut-In(1)
81	275.03	125.48	Open To Flow (2)
123	528.02	129.12	Shut-In(2)
183	1461.31	127.08	End Shut-In(2)
185	2356.64	126.15	Final Hydro-static

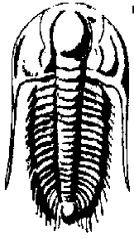
Recovery

Length (ft)	Description	Volume (bbl)
1180.00	Water 100%	16.55

Gas Rates

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

* Recovery from multiple tests



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8100 E 22ND St N #700

Rebein #1

PO Box 783188

Job Ticket: 49659

DST#: 4

Wichita KS 67278

Test Start: 2012.09.29 @ 13:44:08

ATTN: Justin Clegg/ Mac Ar

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: 47.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.76 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 6300.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
1180.00	Water 100%	16.552

Total Length: 1180.00 ft Total Volume: 16.552 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

