

**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Ritchie Exploration Inc.

20-28s-23w Ford Ks.

8100 E.22nd St. N#700
Wichita Ks. 67278

Malone-Hansch#1

ATTN: Mike Engelbrecht

Job Ticket: 44010

DST#: 1

Test Start: 2011.10.20 @ 12:03:19

GENERAL INFORMATION:

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:04:49

Time Test Ended: 19:11:34

Test Type: Conventional Bottom Hole (Initial)

Tester: Gary Pevoteaux

Unit No: 56

Interval: 4964.00 ft (KB) To 4993.00 ft (KB) (TVD)

Reference Elevations: 2510.00 ft (KB)

Total Depth: 4993.00 ft (KB) (TVD)

2499.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 11.00 ft

Serial #: 8167 Inside

Press @ Run Depth: 45.25 psig @ 4965.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.10.20

End Date: 2011.10.20

Last Calib.: 2011.10.20

Start Time: 12:03:24

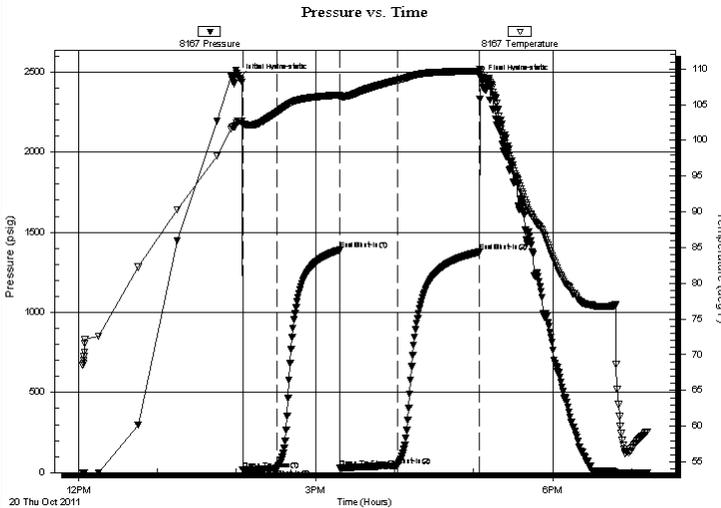
End Time: 19:11:33

Time On Btm: 2011.10.20 @ 14:01:49

Time Off Btm: 2011.10.20 @ 17:05:49

TEST COMMENT: IF:Weak to fair blow . Increase to 8".
IS:No blow .
FF:Weak to fair blow . Increase to 10".
FS:No blow .

PRESSURE SUMMARY



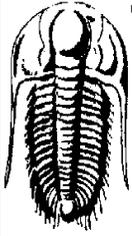
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2461.60	102.72	Initial Hydro-static
3	19.09	102.24	Open To Flow (1)
30	26.14	103.94	Shut-In(1)
77	1390.22	106.38	End Shut-In(1)
77	27.79	106.04	Open To Flow (2)
121	45.25	108.42	Shut-In(2)
183	1377.20	109.73	End Shut-In(2)
184	2454.11	109.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
32.00	SOCMW 3%o 15% m 82% w Rw .14ohms (0.45)eg	
32.00	M&WCO 33% m 33% w 34% o	0.45
0.00	375 ft.of GIP	0.00

Gas Rates

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



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Malone-Hansch#1

Job Ticket: 44010

DST#: 1

ATTN: Mike Engelbrecht

Test Start: 2011.10.20 @ 12:03:19

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:

60500 ppm

Viscosity: 65.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.18 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5800.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
32.00	SOCMW 3%o 15%m 82%w Rw .14ohms @64	0.449
32.00	M&WCO 33%m 33%w 34%o	0.449
0.00	375 ft.of GIP	0.000

Total Length: 64.00 ft

Total Volume: 0.898 bbl

Num Fluid Samples: 0

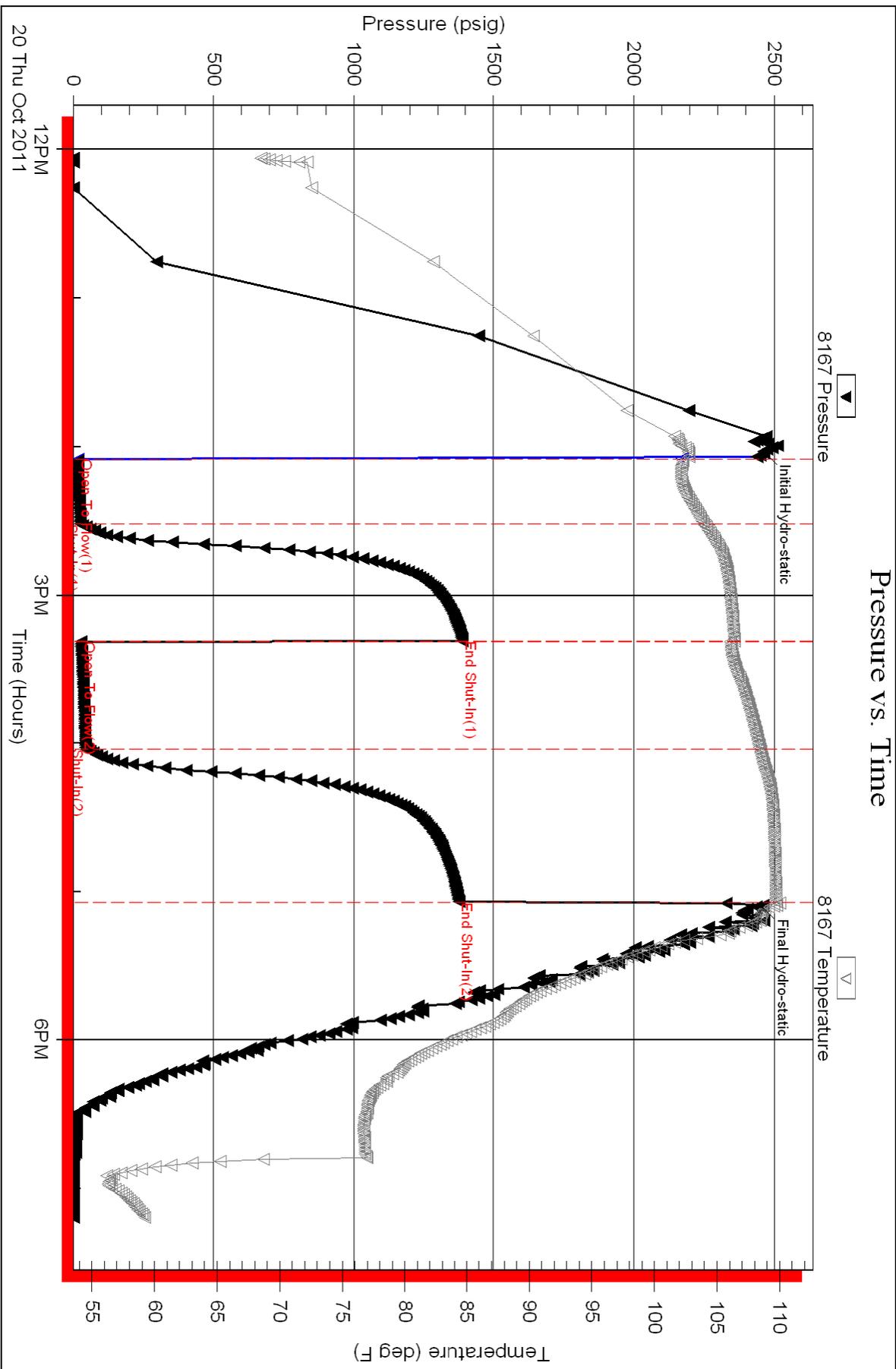
Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:





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Malone-Hansch#1

ATTN: Mike Engelbrecht

Job Ticket: 44011

DST#: 2

Test Start: 2011.10.21 @ 22:08:11

GENERAL INFORMATION:

Formation: **Cherokee - Morrow**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:28:56

Time Test Ended: 06:03:26

Test Type: Conventional Bottom Hole (Reset)

Tester: Gary Pevoteaux

Unit No: 56

Interval: 5034.00 ft (KB) To 5139.00 ft (KB) (TVD)

Reference Elevations: 2510.00 ft (KB)

Total Depth: 5139.00 ft (KB) (TVD)

2499.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 11.00 ft

Serial #: 8167

Inside

Press @ Run Depth: 21.18 psig @ 5035.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.10.21

End Date:

2011.10.22

Last Calib.:

2011.10.22

Start Time: 22:08:16

End Time:

06:03:25

Time On Btm:

2011.10.22 @ 00:26:56

Time Off Btm:

2011.10.22 @ 03:48:11

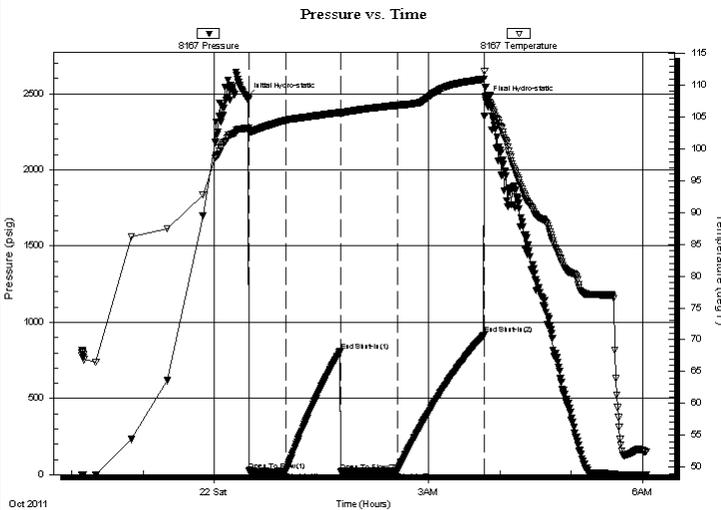
TEST COMMENT: IF: Fair to strong blow . B.O.B. in 16 mins.

IS: No blow .

FF: Strong blow . BO.B. in 3 secs.

FS: No blow .

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2475.35	103.23	Initial Hydro-static
2	24.56	102.67	Open To Flow (1)
33	21.13	104.45	Shut-In(1)
79	808.88	105.68	End Shut-In(1)
80	19.35	105.49	Open To Flow (2)
127	21.18	106.81	Shut-In(2)
200	918.47	110.92	End Shut-In(2)
202	2459.66	107.95	Final Hydro-static

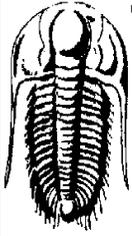
Recovery

Length (ft)	Description	Volume (bbl)
25.00	Drig.mud	0.35
0.00	3000 ft.of GIP	0.00

* Recovery from multiple tests

Gas Rates

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



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Malone-Hansch#1

Job Ticket: 44011

DST#: 2

ATTN: Mike Engelbrecht

Test Start: 2011.10.21 @ 22:08:11

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:

11300 ppm

Viscosity: 64.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.59 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 11300.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
25.00	Drig.mud	0.351
0.00	3000 ft.of GIP	0.000

Total Length: 25.00 ft Total Volume: 0.351 bbl

Num Fluid Samples: 0

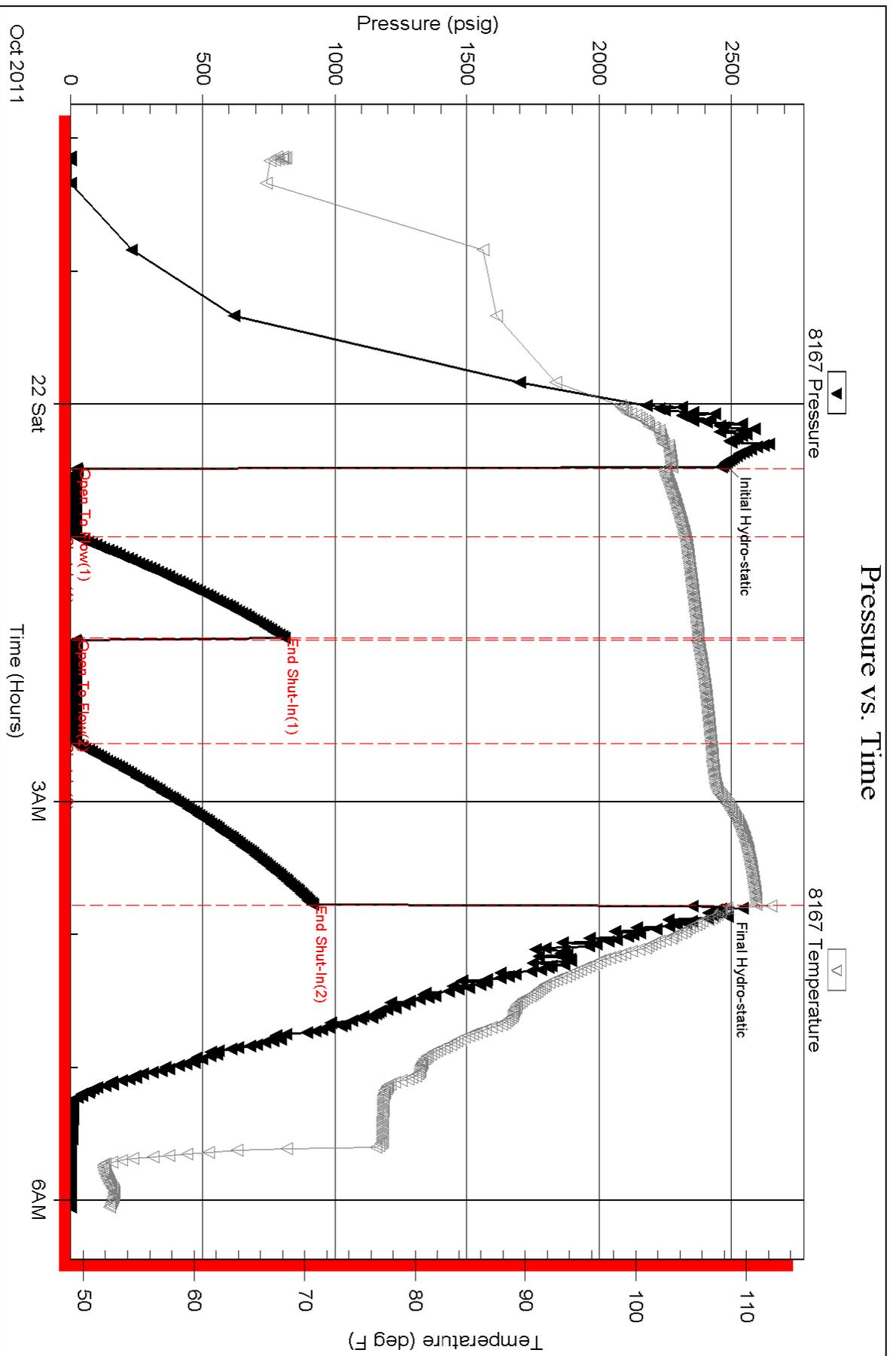
Num Gas Bombs: 0

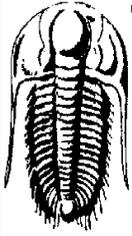
Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:





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Malone-Hansch#1

ATTN: Mike Engelbrecht

Job Ticket: 44012

DST#: 3

Test Start: 2011.10.22 @ 17:26:12

GENERAL INFORMATION:

Formation: **Miss.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:08:27

Time Test Ended: 23:54:12

Test Type: Conventional Bottom Hole (Reset)

Tester: Gary Pevoteaux

Unit No: 56

Interval: 5116.00 ft (KB) To 5198.00 ft (KB) (TVD)

Reference Elevations: 2510.00 ft (KB)

Total Depth: 5198.00 ft (KB) (TVD)

2499.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 11.00 ft

Serial #: 8167 Inside

Press @ Run Depth: 54.34 psig @ 5117.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.10.22 End Date: 2011.10.22

Last Calib.: 2011.10.22

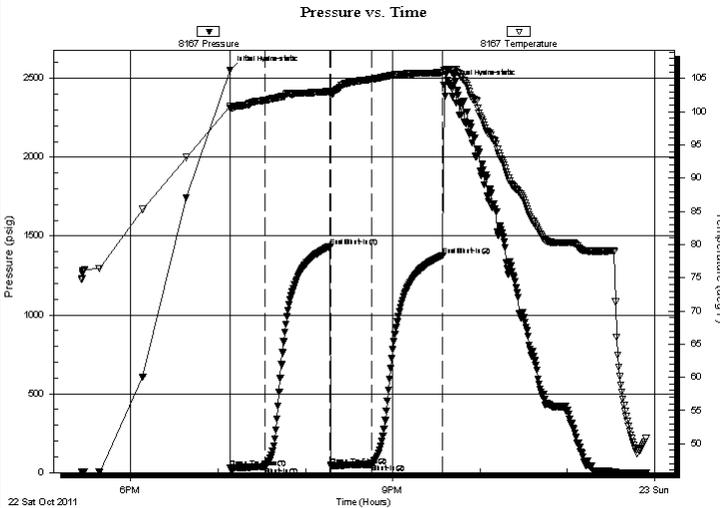
Start Time: 17:26:17 End Time: 23:54:11

Time On Btm: 2011.10.22 @ 19:08:12

Time Off Btm: 2011.10.22 @ 21:38:27

TEST COMMENT: IF:Weak blow . 1/2 - 2".
IS:No blow .
FF:Weak blow . 1/4 - 1".
FS:No blow .

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2554.07	100.86	Initial Hydro-static
1	27.56	100.50	Open To Flow (1)
24	39.00	101.76	Shut-In(1)
69	1435.34	103.06	End Shut-In(1)
70	42.07	102.77	Open To Flow (2)
98	54.34	104.92	Shut-In(2)
146	1377.76	105.88	End Shut-In(2)
151	2465.20	106.42	Final Hydro-static

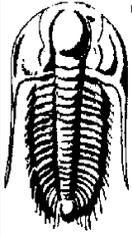
Recovery

Length (ft)	Description	Volume (bbl)
82.00	Heavy mud	1.15

* Recovery from multiple tests

Gas Rates

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



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Malone-Hansch#1

Job Ticket: 44012

DST#: 3

ATTN: Mike Engelbrecht

Test Start: 2011.10.22 @ 17:26:12

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:

12300 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.59 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 12300.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
82.00	Heavy mud	1.150

Total Length: 82.00 ft Total Volume: 1.150 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments:

