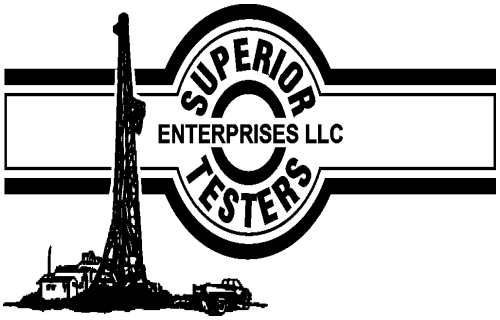


DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Incorperated**

PO Box 783188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

Eaton 13CD #2

13/13S/32W/Logan

Start Date: 2012.07.06 @ 16:24:00
End Date: 2012.07.06 @ 23:47:30
Job Ticket #: 17657 DST #: 1

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2012.07.07 @ 00:08:56

DRILL STEM TEST REPORT

Ritchie Exploration Incorperated

PO Box 783188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

13/13S/32W/Logan

Eaton 13CD #2

Job Ticket: 17657 **DST#: 1**

Test Start: 2012.07.06 @ 16:24:00

GENERAL INFORMATION:

Formation: **Lansing/Kansas City**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:46:30
Time Test Ended: 23:47:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 3325 Scott City/70

Interval: 3979.00 ft (KB) To 4027.00 ft (KB) (TVD)
Total Depth: 4027.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

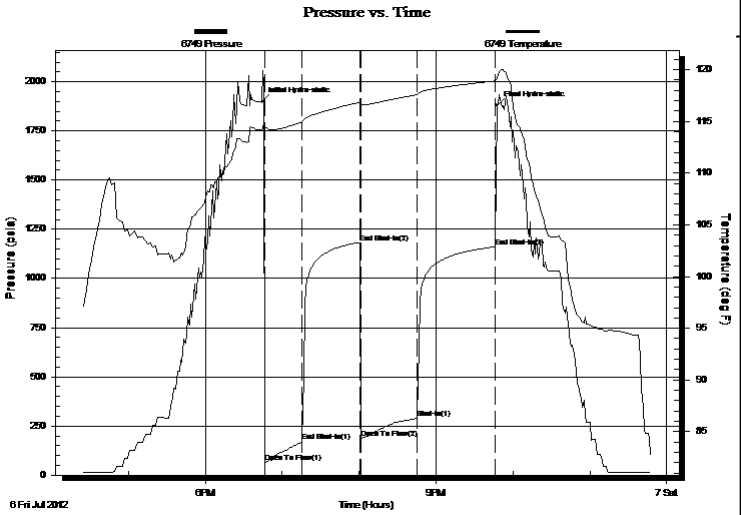
Reference Elevations: 2938.00 ft (KB)
2928.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6749 **Inside**

Press@RunDepth: 289.47 psia @ 4023.00 ft (KB)
Start Date: 2012.07.06 End Date: 2012.07.06
Start Time: 16:24:00 End Time: 23:47:30

Capacity: 5000.00 psia
Last Calib.: 2012.07.06
Time On Btm: 2012.07.06 @ 18:44:00
Time Off Btm: 2012.07.06 @ 21:47:30

TEST COMMENT: 1ST Open 30 Minutes/Good blow /Blow built to bottom of bucket in 23 minutes
1ST Shut In 45 Minutes/Blow back built to 1/4 inch
2ND Open 45 Minutes/Good blow /blow built to bottom of bucket in 30 minutes
2ND Shut In 60 Minutes/Blow back built to 1 3/4 inch



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1897.50	114.19	Initial Hydro-static
3	63.35	114.52	Open To Flow (1)
32	170.36	114.96	End Shut-In(1)
77	1182.75	116.84	End Shut-In(2)
78	186.29	116.61	Open To Flow (2)
121	289.47	117.58	Shut-In(1)
183	1161.43	118.92	End Shut-In(3)
184	1878.97	119.10	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
225.00	Clean gassy oil	1.11
0.00	Gas 5% Oil 95%	0.00
360.00	Oil cut watery mud	2.18
0.00	Oil 2% Water 38% Mud 70%	0.00
0.00	Recovery Chlorides 30,000 ppm	0.00
0.00	Corrected Specific Grav of oil 30	0.00

Gas Rates

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

DRILL STEM TEST REPORT

Ritchie Exploration Incorperated

PO Box 783188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

13/13S/32W/Logan

Eaton 13CD #2

Job Ticket: 17657 **DST#: 1**

Test Start: 2012.07.06 @ 16:24:00

GENERAL INFORMATION:

Formation: **Lansing/Kansas City**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:46:30
Time Test Ended: 23:47:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 3325 Scott City/70

Interval: 3979.00 ft (KB) To 4027.00 ft (KB) (TVD)
Total Depth: 4027.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

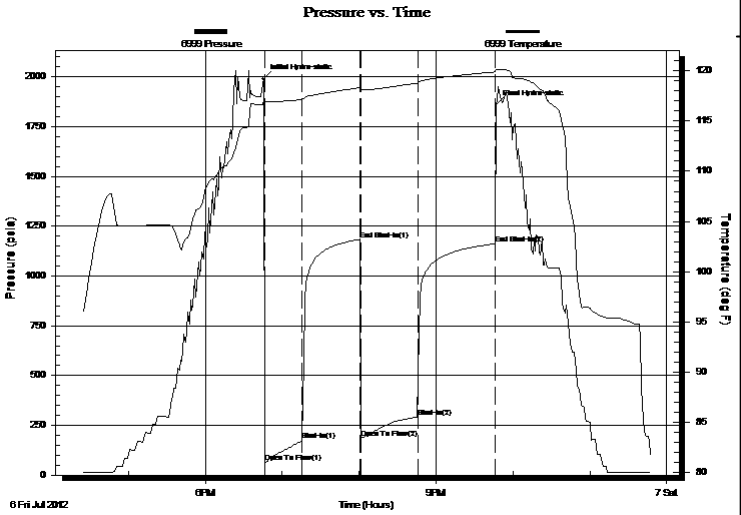
Reference Elevations: 2938.00 ft (KB)
2928.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6999 **Outside**

Press@RunDepth: 1161.80 psia @ 4024.00 ft (KB)
Start Date: 2012.07.06 End Date: 2012.07.06
Start Time: 16:24:00 End Time: 23:47:30

Capacity: 5000.00 psia
Last Calib.: 2012.07.06
Time On Btm: 2012.07.06 @ 18:45:30
Time Off Btm: 2012.07.06 @ 21:47:00

TEST COMMENT: 1ST Open 30 Minutes/Good blow /Blow built to bottom of bucket in 23 minutes
1ST Shut In 45 Minutes/Blow back built to 1/4 inch
2ND Open 45 Minutes/Good blow /blow built to bottom of bucket in 30 minutes
2ND Shut In 60 Minutes/Blow back built to 1 3/4 inch



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1989.20	117.06	Initial Hydro-static
1	62.93	116.94	Open To Flow (1)
30	173.01	117.15	Shut-In(1)
75	1183.60	118.32	End Shut-In(1)
76	185.66	118.10	Open To Flow (2)
120	292.81	118.77	Shut-In(2)
181	1161.80	119.89	End Shut-In(2)
182	1862.56	120.15	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
225.00	Clean gassy oil	1.11
0.00	Gas 5% Oil 95%	0.00
360.00	Oil cut watery mud	2.18
0.00	Oil 2% Water 38% Mud 70%	0.00
0.00	Recovery Chlorides 30,000 ppm	0.00
0.00	Corrected Specific Grav of oil 30	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Incorperated

PO Box 783188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

13/13S/32W/Logan

Eaton 13CD #2

Job Ticket: 17657 **DST#: 1**

Test Start: 2012.07.06 @ 16:24:00

Tool Information

Drill Pipe:	Length:	3442.00 ft	Diameter:	3.80 inches	Volume:	48.28 bbl	Tool Weight:		2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		20000.00 lb
Drill Collar:	Length:	540.00 ft	Diameter:	2.25 inches	Volume:	2.66 bbl	Weight to Pull Loose:		130000.0 lb
					Total Volume:	50.94 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		30.00 ft					String Weight:	Initial	79000.00 lb
Depth to Top Packer:		3979.00 ft						Final	80000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		48.00 ft							
Tool Length:		75.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut In Tool	5.00			3957.00		
Hydrolic Tool	5.00			3962.00		
Jars	5.00			3967.00		
Safety Joint	2.00			3969.00		
Packer	5.00			3974.00	27.00	Bottom Of Top Packer
Packer	5.00			3979.00		
Anchor	43.00			4022.00		
Recorder	1.00	6749	Inside	4023.00		
Recorder	1.00	6999	Outside	4024.00		
Bullnose	3.00			4027.00	48.00	Bottom Packers & Anchor
Total Tool Length:	**75.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Incorperated

PO Box 783188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

13/13S/32W/Logan

Eaton 13CD #2

Job Ticket: 17657 **DST#: 1**

Test Start: 2012.07.06 @ 16:24:00

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:	64.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.99 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psia		
Salinity:	3400.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
225.00	Clean gassy oil	1.107
0.00	Gas 5% Oil 95%	0.000
360.00	Oil cut watery mud	2.180
0.00	Oil 2% Water 38% Mud 70%	0.000
0.00	Recovery Chlorides 30,000 ppm	0.000
0.00	Corrected Specific Grav of oil 30	0.000

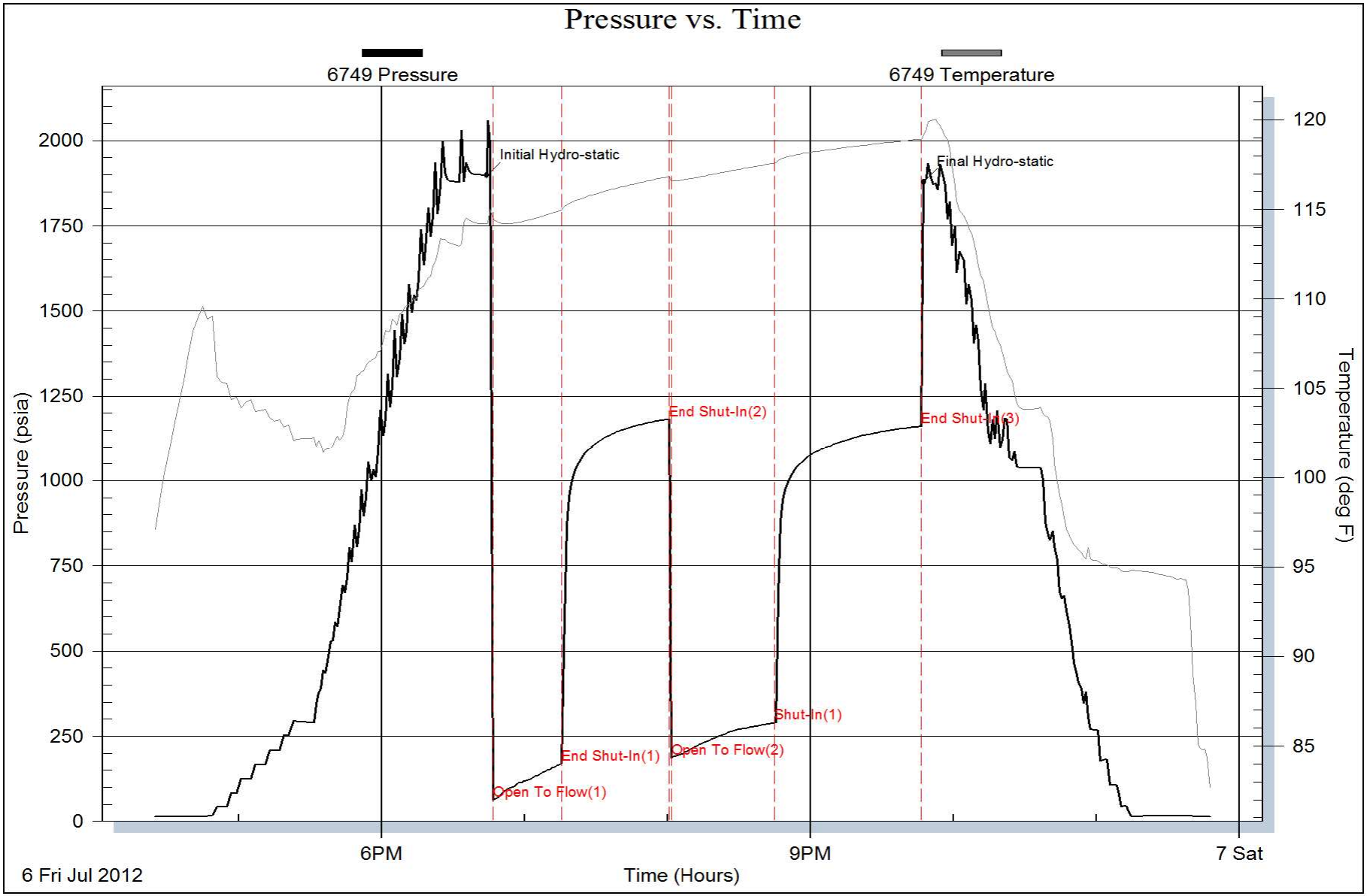
Total Length: 585.00 ft Total Volume: 3.287 bbl

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

Laboratory Name: Laboratory Location:

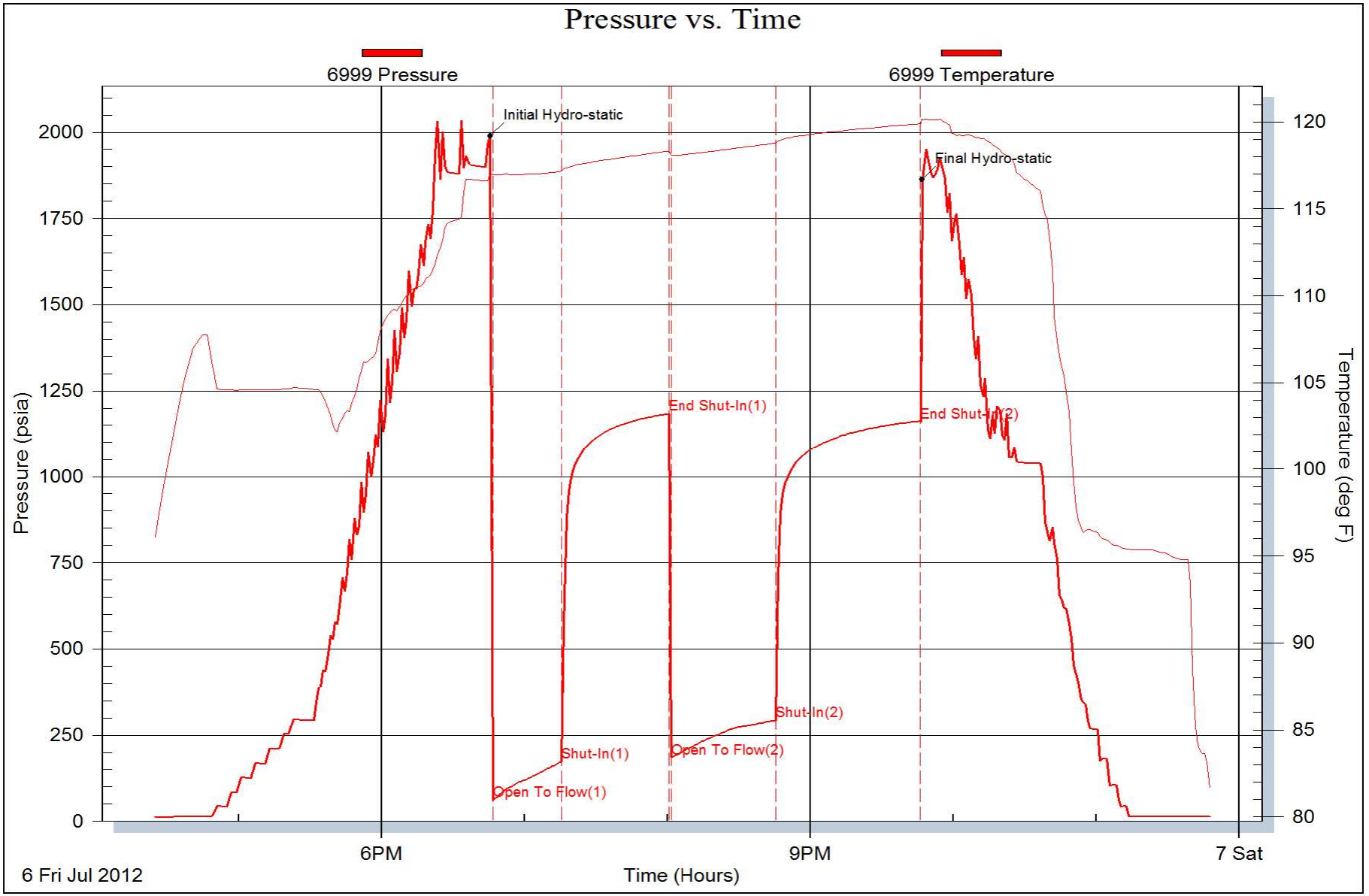
Recovery Comments:

Serial #: 6749 **Inside** Ritchie Exploration Incorperated Eaton 13CD #2 DST Test Number: 1

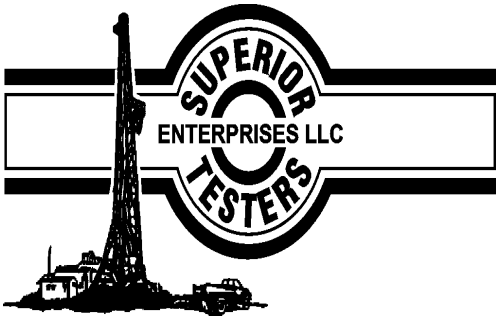


Superior Testers Enterprises LLC Ref. No: 17657 Printed: 2012.07.07 @ 00:08:57

Serial #: 6999 **Outside** Ritchie Exploration Incorperated Eaton 13CD #2 DST Test Number: 1



Superior Testers Enterprises LLC Ref. No: 17657 Printed: 2012.07.07 @ 00:08:57



DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Incorperated**

PO Box 783188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

Eaton 13CD #2

13/13S/32W/Logan

Start Date: 2012.07.07 @ 23:47:00
End Date: 2012.07.08 @ 05:27:30
Job Ticket #: 17658 DST #: 2

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2012.07.08 @ 05:42:01

DRILL STEM TEST REPORT

Ritchie Exploration Incorperated

PO Box 783188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

13/13S/32W/Logan

Eaton 13CD #2

Job Ticket: 17658 **DST#: 2**

Test Start: 2012.07.07 @ 23:47:00

GENERAL INFORMATION:

Formation: **Lansing/Kansas City**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:49:30
Time Test Ended: 05:27:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 3325 Scott City/70

Interval: 4160.00 ft (KB) To 4186.00 ft (KB) (TVD)
Total Depth: 4186.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

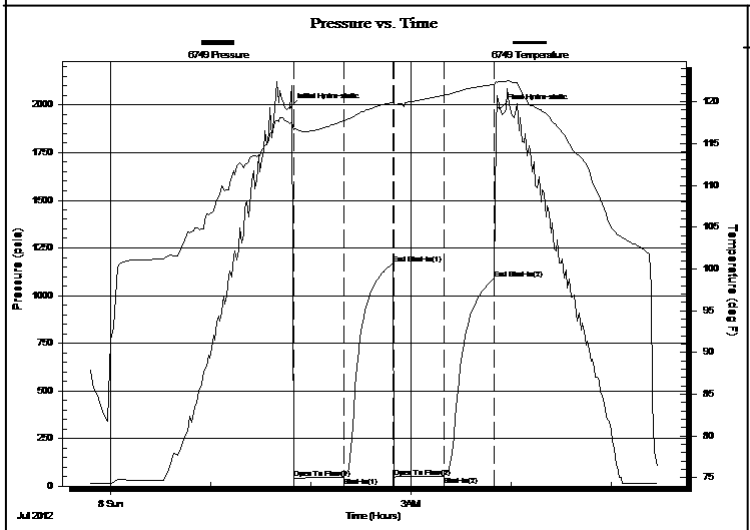
Reference Elevations: 2938.00 ft (KB)
2928.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6749 **Inside**

Press@RunDepth: 53.58 psia @ 4182.00 ft (KB)
Start Date: 2012.07.07 End Date: 2012.07.08
Start Time: 23:47:00 End Time: 05:27:30

Capacity: 5000.00 psia
Last Calib.: 2012.07.08
Time On Btm: 2012.07.08 @ 01:47:30
Time Off Btm: 2012.07.08 @ 03:53:00

TEST COMMENT:
1ST Open 30 Minutes/Weak blow /Blow built to 1/8 inch then died in 23 minutes
1ST Shut In 30 Minutes/No blow back
2ND Open 30 Minutes/No blow /Flush tool/Didnt help
2ND Shut In 30 Minutes/No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1984.18	117.41	Initial Hydro-static
2	41.42	116.62	Open To Flow (1)
32	46.70	117.69	Shut-In(1)
62	1166.99	119.96	End Shut-In(1)
62	48.36	119.67	Open To Flow (2)
93	53.58	120.75	Shut-In(2)
123	1089.37	122.05	End Shut-In(2)
126	1981.45	122.37	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud 100%	0.05

Gas Rates

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

DRILL STEM TEST REPORT

Ritchie Exploration Incorperated

PO Box 783188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

13/13S/32W/Logan

Eaton 13CD #2

Job Ticket: 17658 **DST#: 2**

Test Start: 2012.07.07 @ 23:47:00

GENERAL INFORMATION:

Formation: **Lansing/Kansas City**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:49:30
Time Test Ended: 05:27:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 3325 Scott City/70

Interval: 4160.00 ft (KB) To 4186.00 ft (KB) (TVD)
Total Depth: 4186.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

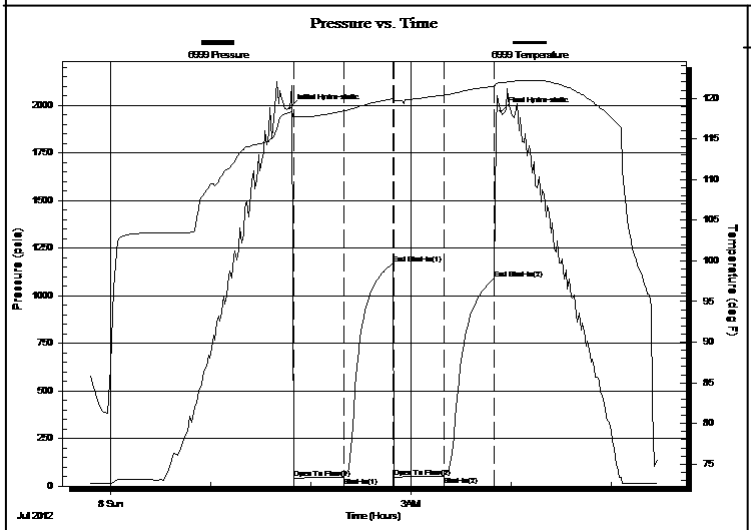
Reference Elevations: 2938.00 ft (KB)
2928.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6999 **Outside**

Press@RunDepth: 1089.85 psia @ 4183.00 ft (KB)
Start Date: 2012.07.07 End Date: 2012.07.08
Start Time: 23:47:00 End Time: 05:27:30

Capacity: 5000.00 psia
Last Calib.: 2012.07.08
Time On Btm: 2012.07.08 @ 01:47:30
Time Off Btm: 2012.07.08 @ 03:53:30

TEST COMMENT:
1ST Open 30 Minutes/Weak blow /Blow built to 1/8 inch then died in 23 minutes
1ST Shut In 30 Minutes/No blow back
2ND Open 30 Minutes/No blow /Flush tool/Didnt help
2ND Shut In 30 Minutes/No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1984.67	118.24	Initial Hydro-static
2	41.20	117.51	Open To Flow (1)
32	46.52	118.42	Shut-In(1)
62	1167.58	119.92	End Shut-In(1)
62	47.91	119.67	Open To Flow (2)
92	53.40	120.39	Shut-In(2)
123	1089.85	121.48	End Shut-In(2)
126	1966.83	121.91	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud 100%	0.05

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Incorperated

PO Box 783188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

13/13S/32W/Logan

Eaton 13CD #2

Job Ticket: 17658 **DST#: 2**

Test Start: 2012.07.07 @ 23:47:00

Tool Information

Drill Pipe:	Length:	3607.00 ft	Diameter:	3.80 inches	Volume:	50.60 bbl	Tool Weight:		2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		20000.00 lb
Drill Collar:	Length:	540.00 ft	Diameter:	2.25 inches	Volume:	2.66 bbl	Weight to Pull Loose:		85000.00 lb
					Total Volume:	53.26 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		14.00 ft					String Weight:	Initial	80000.00 lb
Depth to Top Packer:		4160.00 ft						Final	80000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		26.00 ft							
Tool Length:		53.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut In Tool	5.00			4138.00		
Hydrolic Tool	5.00			4143.00		
Jars	5.00			4148.00		
Safety Joint	2.00			4150.00		
Packer	5.00			4155.00	27.00	Bottom Of Top Packer
Packer	5.00			4160.00		
Anchor	21.00			4181.00		
Recorder	1.00	6749	Inside	4182.00		
Recorder	1.00	6999	Outside	4183.00		
Bullnose	3.00			4186.00	26.00	Bottom Packers & Anchor
Total Tool Length:	**53.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Incorperated

PO Box 783188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

13/13S/32W/Logan

Eaton 13CD #2

Job Ticket: 17658 **DST#: 2**

Test Start: 2012.07.07 @ 23:47:00

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:	56.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.79 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psia		
Salinity:	2600.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

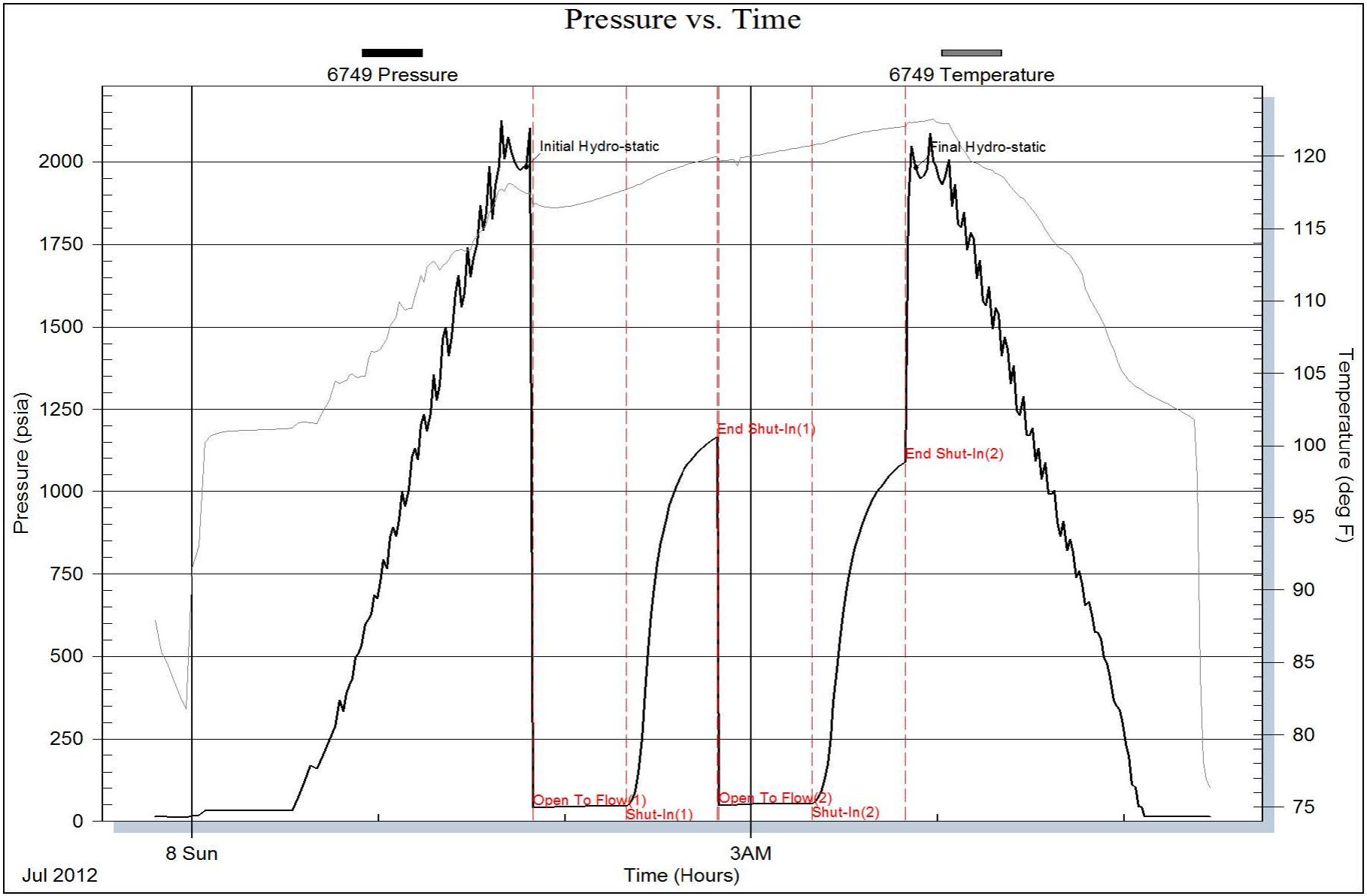
Recovery Table

Length ft	Description	Volume bbl
10.00	Mud 100%	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

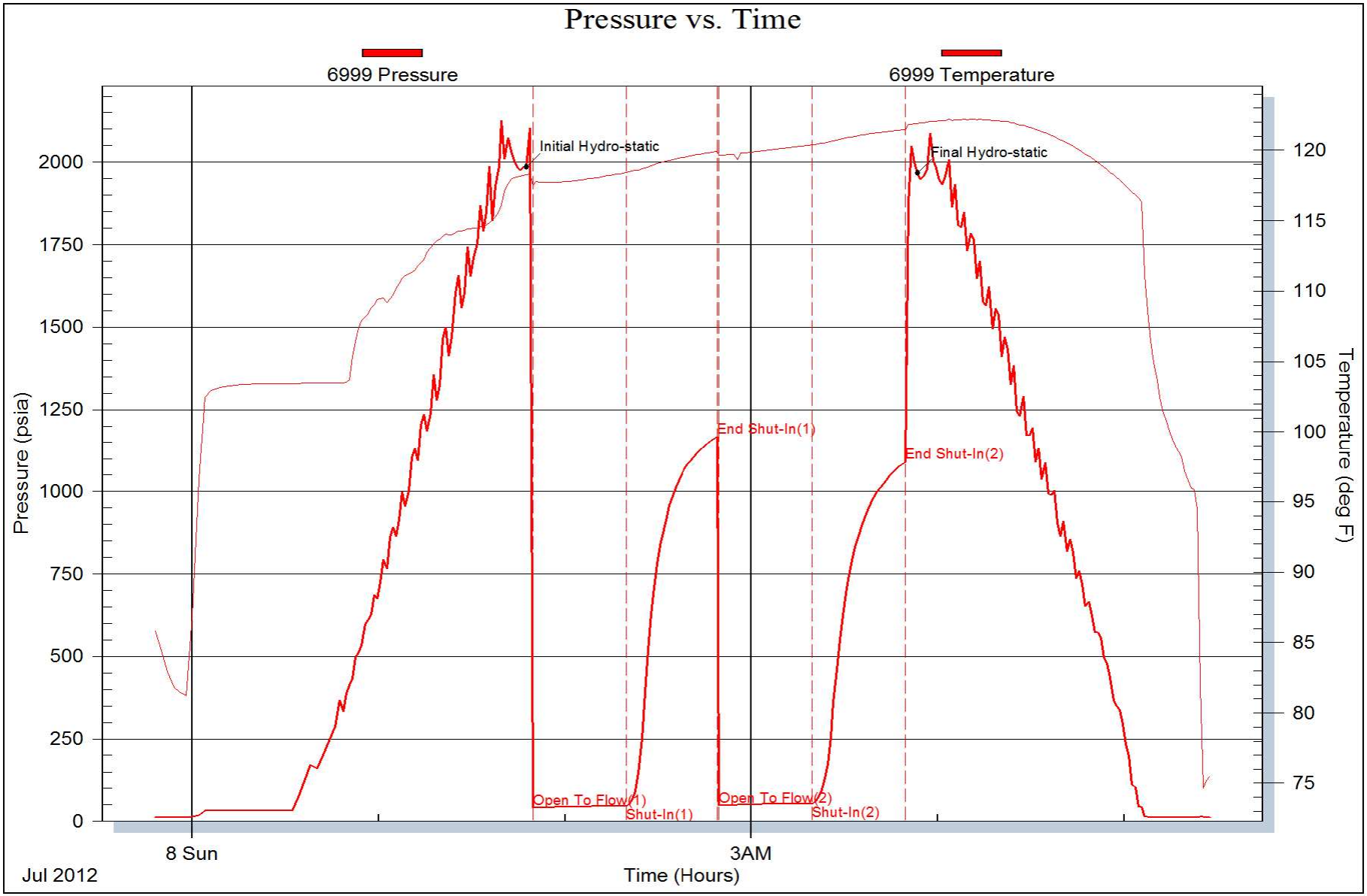
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6749 **Inside** Ritchie Exploration Incorperated Eaton 13CD #2 DST Test Number: 2

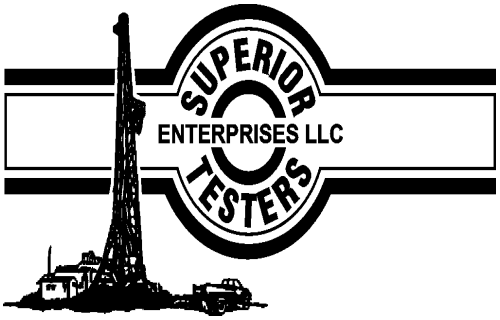


Superior Testers Enterprises LLC Ref. No: 17658 Printed: 2012.07.08 @ 05:42:02

Serial #: 6999 **Outside** Ritchie Exploration Incorperated Eaton 13CD #2 DST Test Number: 2



Superior Testers Enterprises LLC Ref. No: 17658 Printed: 2012.07.08 @ 05:42:02



DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Incorperated**

PO Box 783188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

Eaton 13CD #2

13/13S/32W/Logan

Start Date: 2012.07.08 @ 20:29:00
End Date: 2012.07.09 @ 03:02:00
Job Ticket #: 17659 DST #: 3

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2012.07.09 @ 03:21:38

DRILL STEM TEST REPORT

Ritchie Exploration Incorperated

PO Box 783188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

13/13S/32W/Logan

Eaton 13CD #2

Job Ticket: 17659 **DST#: 3**

Test Start: 2012.07.08 @ 20:29:00

GENERAL INFORMATION:

Formation: **Lansing/Kansas City**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 22:25:30
Time Test Ended: 03:02:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 3325 Scott City/70

Interval: 4230.00 ft (KB) To 4265.00 ft (KB) (TVD)
Total Depth: 4265.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

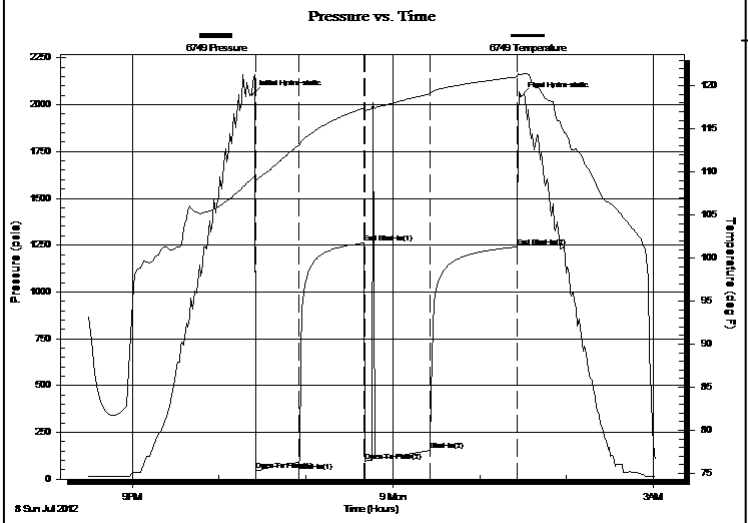
Reference Elevations: 2938.00 ft (KB)
2928.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6749 **Inside**

Press@RunDepth: 153.20 psia @ 4261.00 ft (KB)
Start Date: 2012.07.08 End Date: 2012.07.09
Start Time: 20:29:00 End Time: 03:02:00

Capacity: 5000.00 psia
Last Calib.: 2012.07.09
Time On Btm: 2012.07.08 @ 22:23:00
Time Off Btm: 2012.07.09 @ 01:28:30

TEST COMMENT: 1ST Open 30 Minutes/Weak blow /Blow built to 3 1/2 inches in bucket of water
1ST Shut In 45 Minutes/No blow back
2ND Open 45 Mnutes/No blow /Flush tool/Weak blow /Blow built to 2 3/4 inches in bucket of water
2ND Shut In 60 Minutes/No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2052.39	109.26	Initial Hydro-static
3	46.07	108.99	Open To Flow (1)
32	89.63	113.09	Shut-In(1)
77	1260.40	117.43	End Shut-In(1)
78	94.94	117.16	Open To Flow (2)
123	153.20	119.05	Shut-In(2)
183	1240.21	121.04	End Shut-In(2)
186	2045.75	121.32	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
225.00	Muddy Water	1.11
0.00	Mud 40% Water 60%	0.00
0.00	Recovery Chlorides 35000 ppm	0.00
0.00	Recov. Resist. .18 ohms @ 81 degrees	0.00

Gas Rates

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

DRILL STEM TEST REPORT

Ritchie Exploration Incorperated

PO Box 783188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

13/13S/32W/Logan

Eaton 13CD #2

Job Ticket: 17659 **DST#: 3**

Test Start: 2012.07.08 @ 20:29:00

GENERAL INFORMATION:

Formation: **Lansing/Kansas City**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 22:25:30
Time Test Ended: 03:02:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 3325 Scott City/70

Interval: 4230.00 ft (KB) To 4265.00 ft (KB) (TVD)
Total Depth: 4265.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

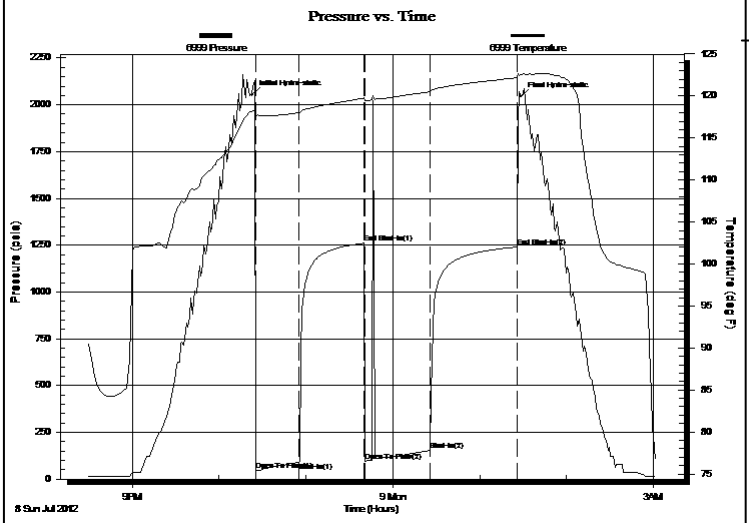
Reference Elevations: 2938.00 ft (KB)
2928.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6999 **Outside**

Press@RunDepth: 1240.15 psia @ 4262.00 ft (KB)
Start Date: 2012.07.08 End Date: 2012.07.09
Start Time: 20:29:00 End Time: 03:02:00

Capacity: 5000.00 psia
Last Calib.: 2012.07.09
Time On Btm: 2012.07.08 @ 22:23:00
Time Off Btm: 2012.07.09 @ 01:28:30

TEST COMMENT: 1ST Open 30 Minutes/Weak blow /Blow built to 3 1/2 inches in bucket of water
1ST Shut In 45 Minutes/No blow back
2ND Open 45 Mnutes/No blow /Flush tool/Weak blow /Blow built to 2 3/4 inches in bucket of water
2ND Shut In 60 Minutes/No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2052.56	118.18	Initial Hydro-static
3	45.81	117.60	Open To Flow (1)
32	89.32	118.00	Shut-In(1)
77	1260.24	119.75	End Shut-In(1)
78	94.37	119.48	Open To Flow (2)
123	153.14	120.51	Shut-In(2)
183	1240.15	122.17	End Shut-In(2)
186	2045.81	122.51	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
225.00	Muddy Water	1.11
0.00	Mud 40% Water 60%	0.00
0.00	Recovery Chlorides 35000 ppm	0.00
0.00	Recov. Resist. .18 ohms @ 81 degrees	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Incorperated

PO Box 783188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

13/13S/32W/Logan

Eaton 13CD #2

Job Ticket: 17659 **DST#: 3**

Test Start: 2012.07.08 @ 20:29:00

Tool Information

Drill Pipe:	Length:	3673.00 ft	Diameter:	3.80 inches	Volume:	51.52 bbl	Tool Weight:		2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		20000.00 lb
Drill Collar:	Length:	540.00 ft	Diameter:	2.25 inches	Volume:	2.66 bbl	Weight to Pull Loose:		105000.0 lb
					Total Volume:	54.18 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		5.00 ft					String Weight:	Initial	80000.00 lb
Depth to Top Packer:		4230.00 ft						Final	80000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		35.00 ft							
Tool Length:		57.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut In Tool	5.00			4213.00		
Hydrolic Tool	5.00			4218.00		
Safety Joint	2.00			4220.00		
Packer	5.00			4225.00	22.00	Bottom Of Top Packer
Packer	5.00			4230.00		
Anchor	30.00			4260.00		
Recorder	1.00	6749	Inside	4261.00		
Recorder	1.00	6999	Outside	4262.00		
Bullnose	3.00			4265.00	35.00	Bottom Packers & Anchor
Total Tool Length:	**57.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Incorperated

PO Box 783188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

13/13S/32W/Logan

Eaton 13CD #2

Job Ticket: 17659 **DST#: 3**

Test Start: 2012.07.08 @ 20:29:00

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:	44.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.99 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psia		
Salinity:	3800.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

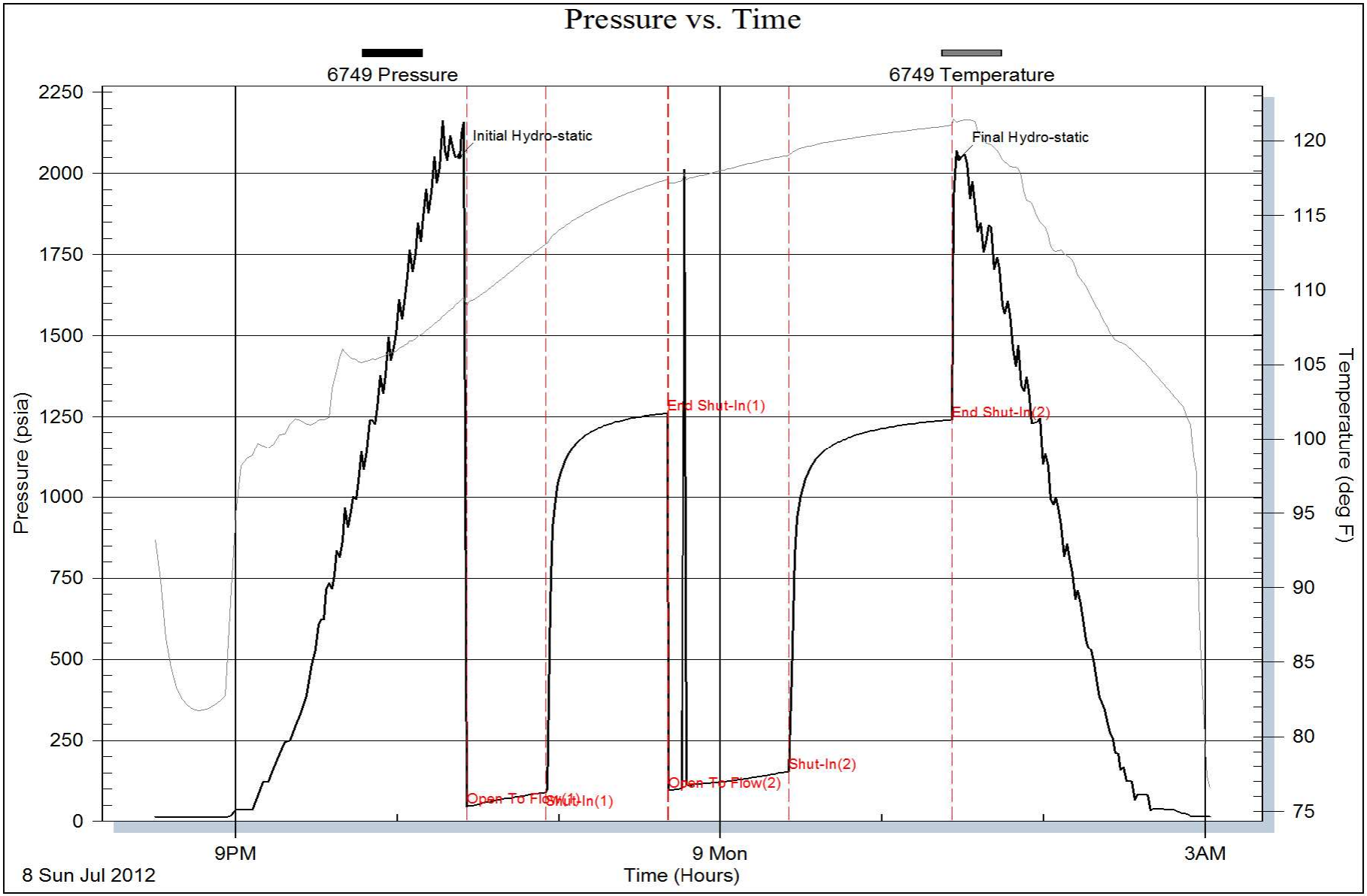
Recovery Table

Length ft	Description	Volume bbl
225.00	Muddy Water	1.107
0.00	Mud 40% Water 60%	0.000
0.00	Recovery Chlorides 35000 ppm	0.000
0.00	Recov. Resist. .18 ohms @ 81 degrees	0.000

Total Length: 225.00 ft Total Volume: 1.107 bbl

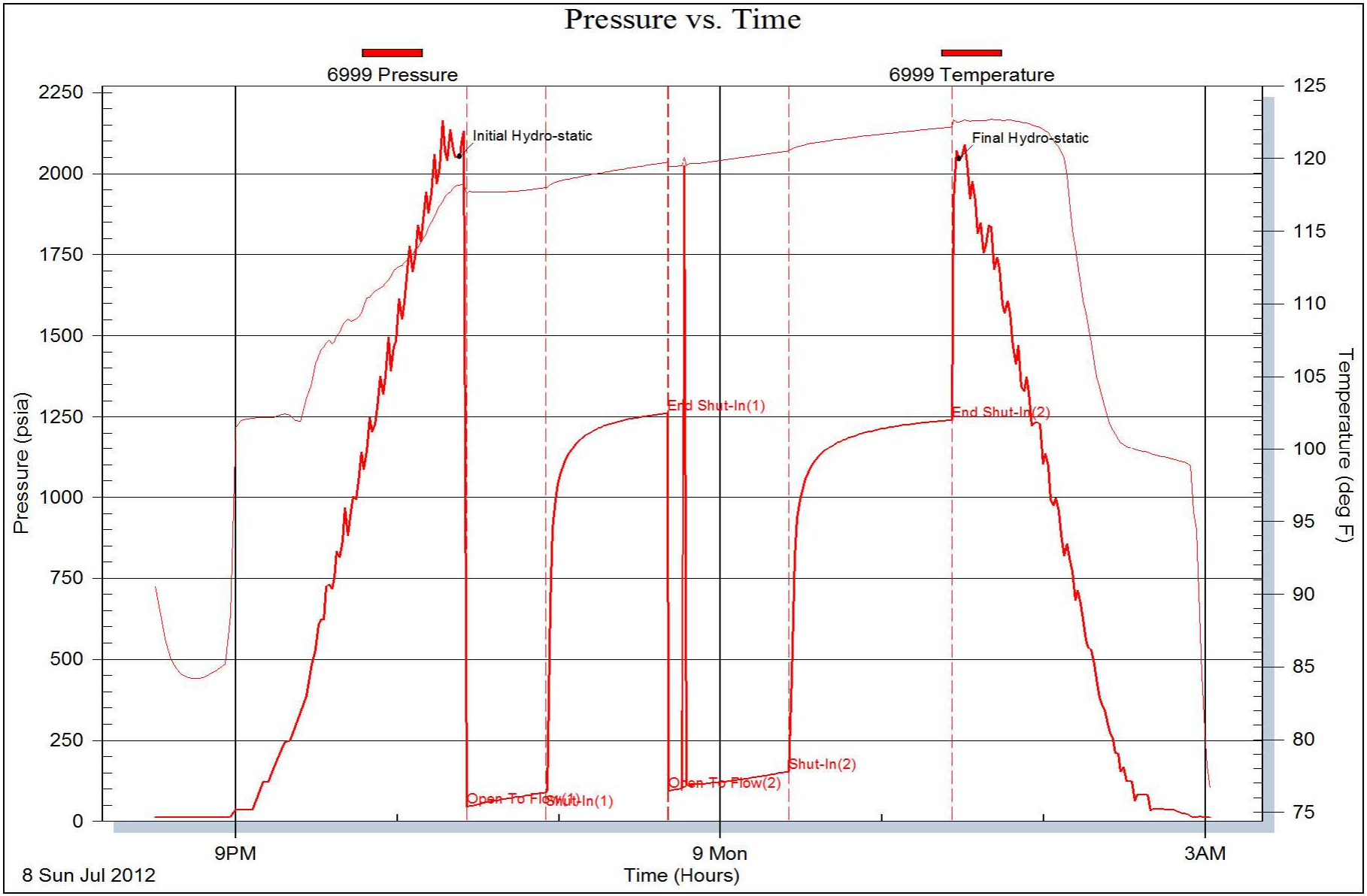
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6749 **Inside** Ritchie Exploration Incorperated Eaton 13CD #2 DST Test Number: 3

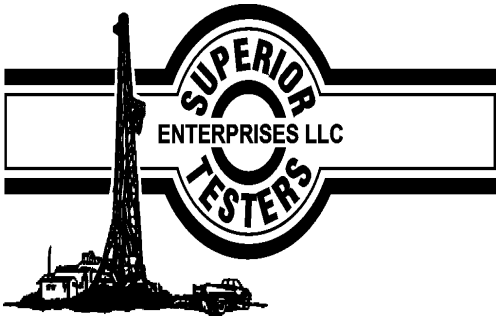


Superior Testers Enterprises LLC Ref. No: 17659 Printed: 2012.07.09 @ 03:21:39

Serial #: 6999 **Outside** Ritchie Exploration Incorperated Eaton 13CD #2 DST Test Number: 3



Superior Testers Enterprises LLC Ref. No: 17659 Printed: 2012.07.09 @ 03:21:39



DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Incorperated**

PO Box 783188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

Eaton 13CD #2

13/13S/32W/Logan

Start Date: 2012.07.10 @ 12:25:00
End Date: 2012.07.10 @ 18:32:00
Job Ticket #: 17660 DST #: 4

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2012.07.10 @ 18:43:48

DRILL STEM TEST REPORT

Ritchie Exploration Incorperated

PO Box 783188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

13/13S/32W/Logan

Eaton 13CD #2

Job Ticket: 17660 **DST#: 4**

Test Start: 2012.07.10 @ 12:25:00

GENERAL INFORMATION:

Formation: **Johnson**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:10:30
Time Test Ended: 18:32:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 3325 Scott City/70

Interval: 4490.00 ft (KB) To 4542.00 ft (KB) (TVD)
Total Depth: 4542.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

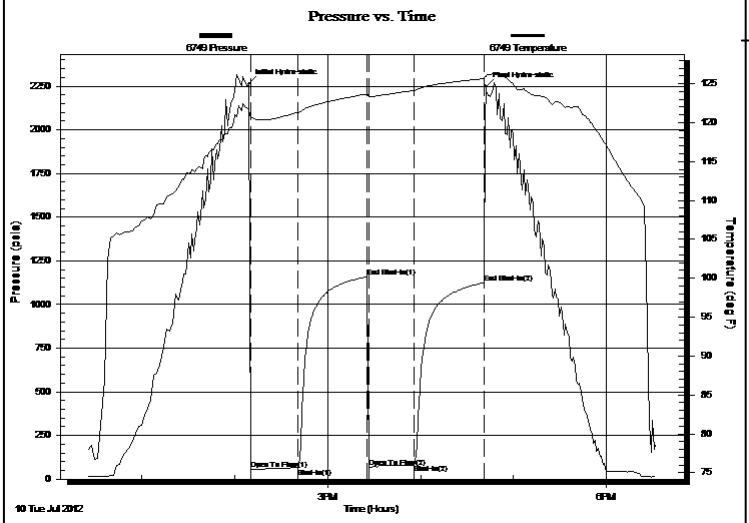
Reference Elevations: 2938.00 ft (KB)
2928.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6749 **Inside**

Press@RunDepth: 81.93 psia @ 4537.99 ft (KB)
Start Date: 2012.07.10 End Date: 2012.07.10
Start Time: 12:25:00 End Time: 18:32:00

Capacity: 5000.00 psia
Last Calib.: 2012.07.10
Time On Btm: 2012.07.10 @ 14:09:30
Time Off Btm: 2012.07.10 @ 16:42:00

TEST COMMENT:
1ST Open 30 Minutes/Weak blow /Blow built to 1/2 inch in bucket of water
1ST Shut In 45 Minutes/No blow back
2ND Open 30 Minutes/No blow /Flush tool/Didnt help
2ND Shut In 45 Minutes/No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2262.36	121.64	Initial Hydro-static
1	54.82	120.57	Open To Flow (1)
32	64.86	121.30	Shut-In(1)
76	1159.36	123.67	End Shut-In(1)
77	70.06	123.38	Open To Flow (2)
107	81.93	124.14	Shut-In(2)
152	1125.35	125.66	End Shut-In(2)
153	2248.82	125.96	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Mud with show of oil in tool Mud 100%	0.07

Gas Rates

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

DRILL STEM TEST REPORT

Ritchie Exploration Incorperated

PO Box 783188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

13/13S/32W/Logan

Eaton 13CD #2

Job Ticket: 17660 **DST#: 4**

Test Start: 2012.07.10 @ 12:25:00

GENERAL INFORMATION:

Formation: **Johnson**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:10:30
Time Test Ended: 18:32:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 3325 Scott City/70

Interval: 4490.00 ft (KB) To 4542.00 ft (KB) (TVD)
Total Depth: 4542.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

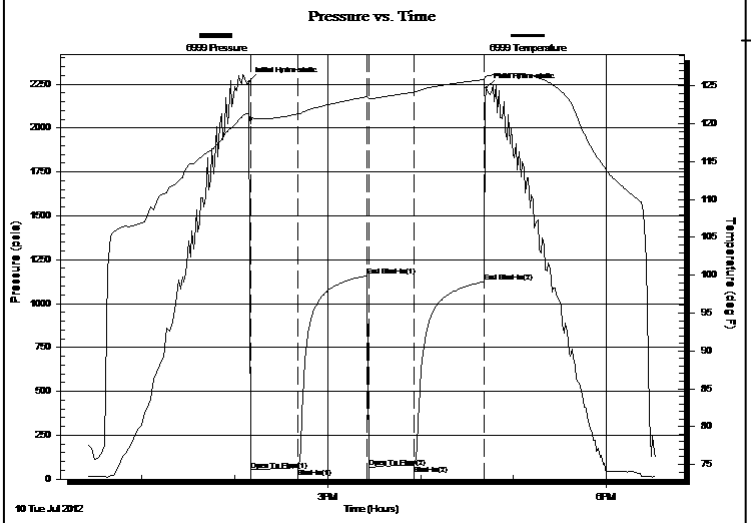
Reference Elevations: 2938.00 ft (KB)
2928.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6999 **Outside**

Press@RunDepth: 1125.32 psia @ 4538.99 ft (KB)
Start Date: 2012.07.10 End Date: 2012.07.10
Start Time: 12:25:00 End Time: 18:32:00

Capacity: 5000.00 psia
Last Calib.: 2012.07.10
Time On Btm: 2012.07.10 @ 14:09:30
Time Off Btm: 2012.07.10 @ 16:42:30

TEST COMMENT:
1ST Open 30 Minutes/Weak blow /Blow built to 1/2 inch in bucket of water
1ST Shut In 45 Minutes/No blow back
2ND Open 30 Minutes/No blow /Flush tool/Didnt help
2ND Shut In 45 Minutes/No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2264.16	121.38	Initial Hydro-static
1	51.64	119.97	Open To Flow (1)
32	64.17	121.30	Shut-In(1)
76	1159.38	123.58	End Shut-In(1)
77	68.27	123.34	Open To Flow (2)
107	81.05	124.19	Shut-In(2)
152	1125.32	125.86	End Shut-In(2)
153	2229.83	126.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Mud with show of oil in tool Mud 100%	0.07

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Incorperated

PO Box 783188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

13/13S/32W/Logan

Eaton 13CD #2

Job Ticket: 17660 **DST#: 4**

Test Start: 2012.07.10 @ 12:25:00

Tool Information

Drill Pipe:	Length:	3953.00 ft	Diameter:	3.80 inches	Volume:	55.45 bbl	Tool Weight:		2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		20000.00 lb
Drill Collar:	Length:	540.00 ft	Diameter:	2.25 inches	Volume:	2.66 bbl	Weight to Pull Loose:		105000.0 lb
					Total Volume:	58.11 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		25.00 ft					String Weight:	Initial	82000.00 lb
Depth to Top Packer:		4490.00 ft						Final	82000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		51.99 ft							
Tool Length:		73.99 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut In Tool	5.00			4473.00		
Hydrolic Tool	5.00			4478.00		
Safety Joint	2.00			4480.00		
Packer	5.00			4485.00	22.00	Bottom Of Top Packer
Packer	5.00			4490.00		
Change Over Sub	0.65			4490.65		
Drill Pipe	31.69			4522.34		
Change Over Sub	0.65			4522.99		
Anchor	14.00			4536.99		
Recorder	1.00	6749	Inside	4537.99		
Recorder	1.00	6999	Outside	4538.99		
Bullnose	3.00			4541.99	51.99	Bottom Packers & Anchor
Total Tool Length:	**73.99**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Incorperated

PO Box 783188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

13/13S/32W/Logan

Eaton 13CD #2

Job Ticket: 17660 **DST#: 4**

Test Start: 2012.07.10 @ 12:25:00

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:	68.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.40 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psia		
Salinity:	2400.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

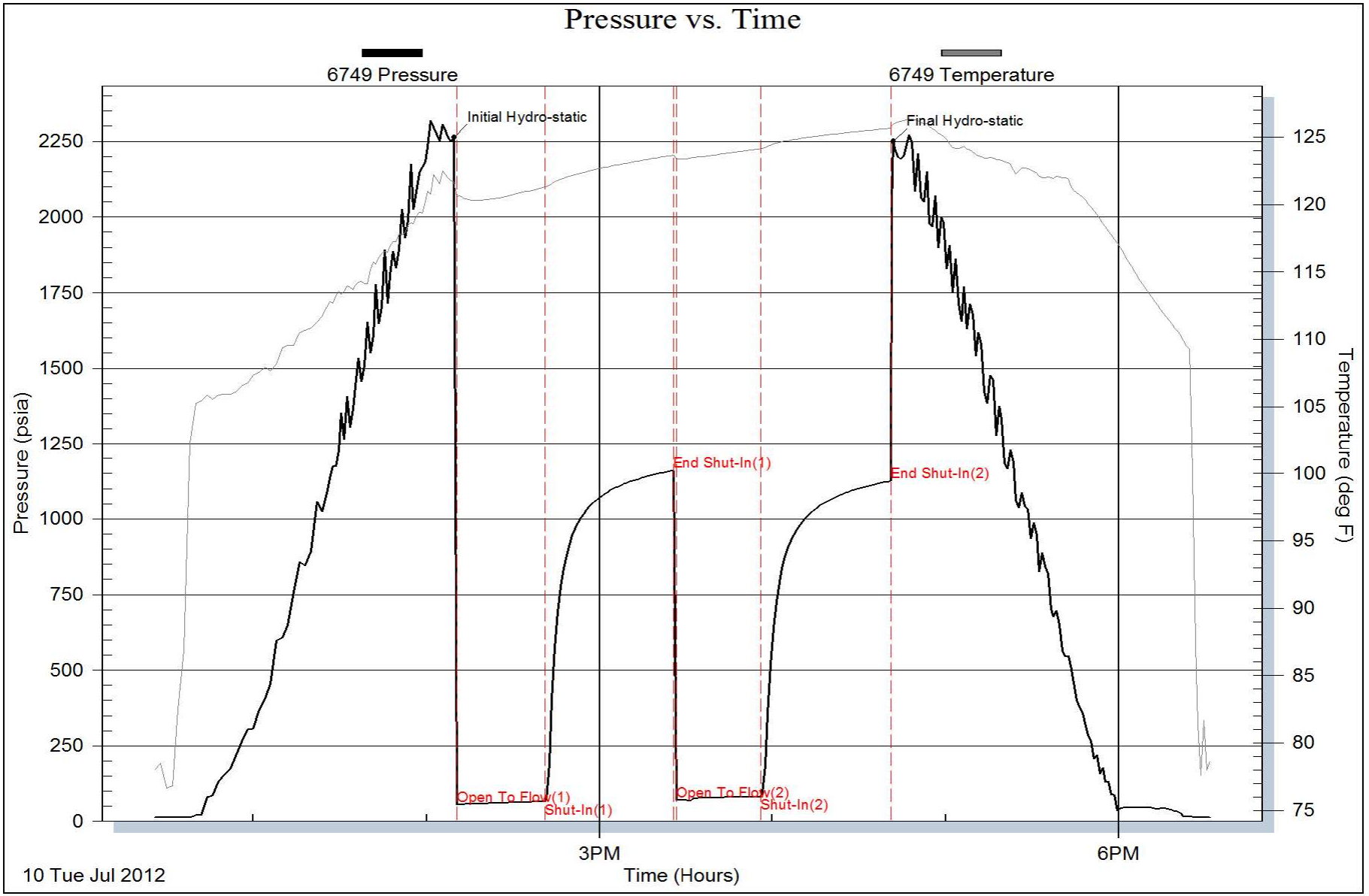
Recovery Table

Length ft	Description	Volume bbl
15.00	Mud with show of oil in tool Mud 100%	0.074

Total Length: 15.00 ft Total Volume: 0.074 bbl

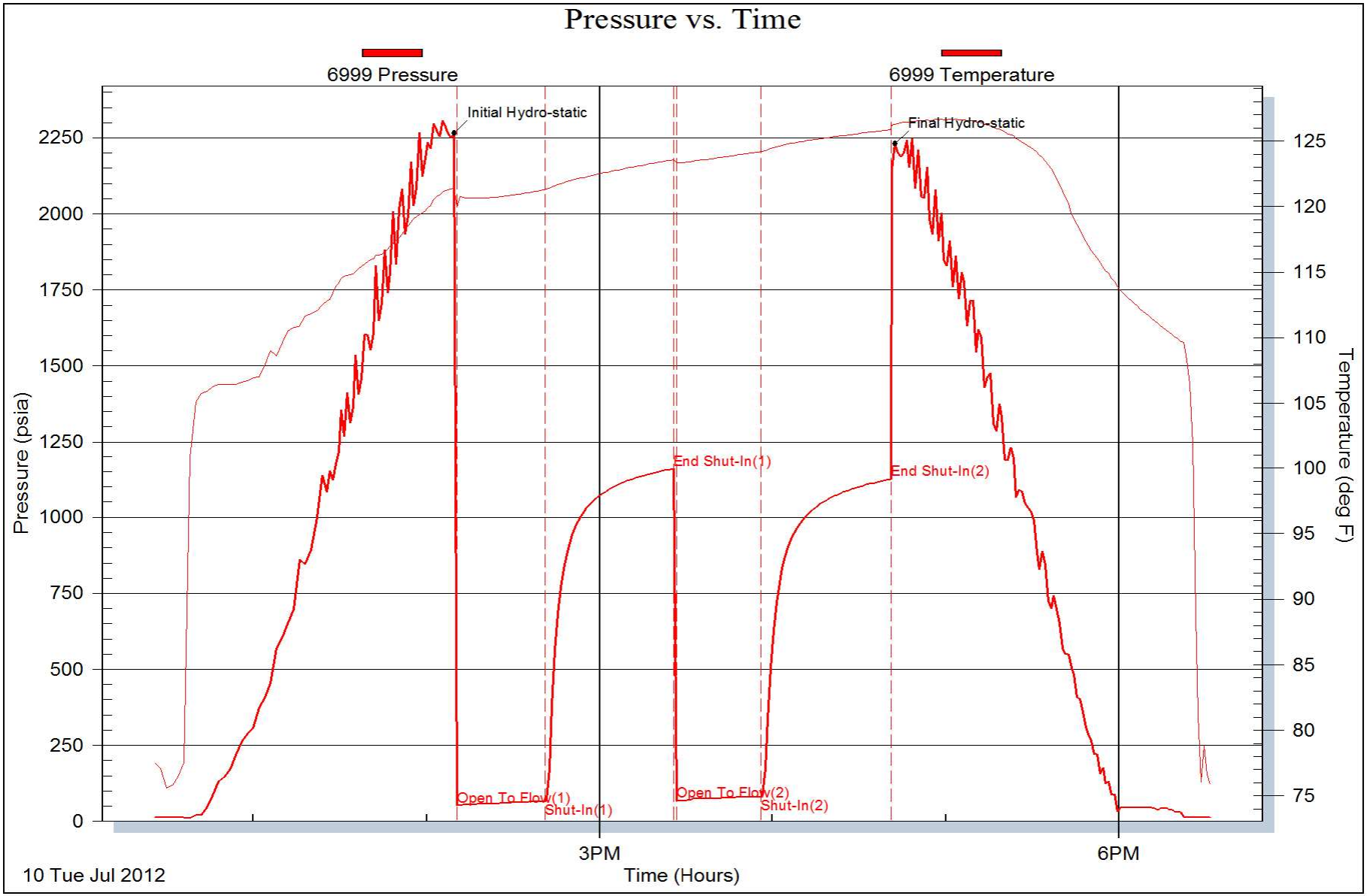
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6749 **Inside** Ritchie Exploration Incorperated Eaton 13CD #2 DST Test Number: 4



Superior Testers Enterprises LLC Ref. No: 17660 Printed: 2012.07.10 @ 18:43:49

Serial #: 6999 **Outside** Ritchie Exploration Incorperated Eaton 13CD #2 DST Test Number: 4



Superior Testers Enterprises LLC Ref. No: 17660 Printed: 2012.07.10 @ 18:43:49