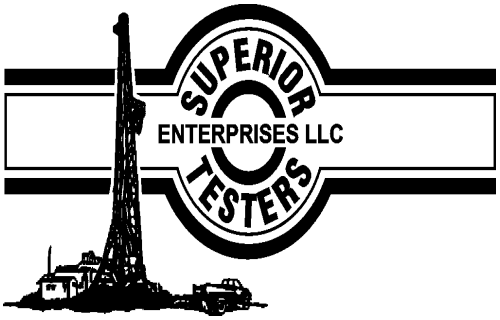


DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration**

8100 East 22nd St. North
#700 Wichita Kansas 67278

ATTN: Adam Eldani

York 31AB#1

31-15w-30s-Gove

Start Date: 2014.06.17 @ 03:10:00

End Date: 2014.06.17 @ 09:23:30

Job Ticket #: 18341 DST #: 1

Superior Testers Enterprises LLC

PO Box 138 Great Bend KS 67530

1-800-792-6902

Printed: 2014.06.17 @ 22:39:37

DRILL STEM TEST REPORT

Ritchie Exploration

8100 East 22nd St. North
#700 Wichita Kansas 67278

ATTN: Adam Eldani

31-15w-30s-Gove

York 31AB#1

Job Ticket: 18341 **DST#: 1**

Test Start: 2014.06.17 @ 03:10:00

GENERAL INFORMATION:

Formation: **Lansing A**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:55:00
Time Test Ended: 09:23:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Dustin Ellis
Unit No: 3315-Scott City-60

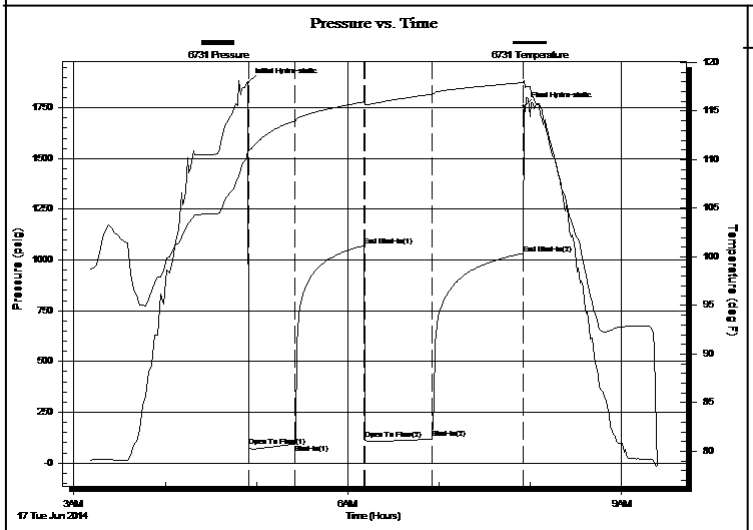
Interval: 3829.00 ft (KB) To 3854.00 ft (KB) (TVD)
Total Depth: 3854.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2765.00 ft (KB)
2760.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6731 **Inside**
Press@RunDepth: 123.33 psig @ 3849.00 ft (KB)
Start Date: 2014.06.17 End Date: 2014.06.17
Start Time: 03:10:00 End Time: 09:23:30

Capacity: 5000.00 psig
Last Calib.: 2014.06.17
Time On Btm: 2014.06.17 @ 04:54:30
Time Off Btm: 2014.06.17 @ 07:55:30

TEST COMMENT: 1st Open 30 minutes Weak building blow built to 3 inches into a 5 gallon bucket of water.
1st Shut in 45 minutes No blow back.
2nd Open 45 minutes Weak building blow buit to 3 inches into a 5 gallon bucket of water.
2nd Shut in 60 minutes No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1872.75	111.24	Initial Hydro-static
1	81.37	110.92	Open To Flow (1)
31	93.92	113.98	Shut-In(1)
76	1070.08	115.93	End Shut-In(1)
77	118.83	115.69	Open To Flow (2)
121	123.33	116.73	Shut-In(2)
181	1032.19	117.92	End Shut-In(2)
181	1757.31	118.16	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
150.00	Muddy water Mud 60% Water40%	1.00
0.00	Chlorides 49,000 .2ohms@56 degress	0.00

Gas Rates

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

DRILL STEM TEST REPORT

Ritchie Exploration

8100 East 22nd St. North
#700 Wichita Kansas 67278

ATTN: Adam Eldani

31-15w-30s-Gove

York 31AB#1

Job Ticket: 18341 **DST#: 1**

Test Start: 2014.06.17 @ 03:10:00

GENERAL INFORMATION:

Formation: **Lansing A**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:55:00
Time Test Ended: 09:23:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Dustin Ellis
Unit No: 3315-Scott City-60

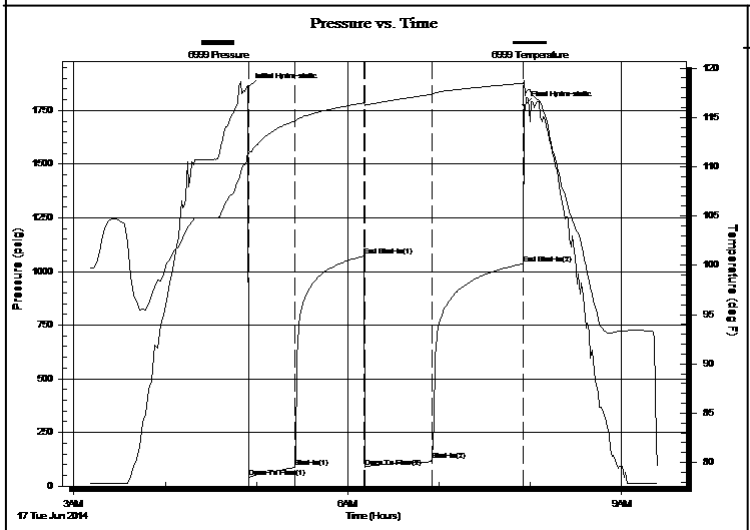
Interval: 3829.00 ft (KB) To 3854.00 ft (KB) (TVD)
Total Depth: 3854.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2765.00 ft (KB)
2760.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6999 **Outside**
Press@RunDepth: 1034.85 psig @ 3849.00 ft (KB)
Start Date: 2014.06.17 End Date: 2014.06.17
Start Time: 03:10:00 End Time: 09:23:30

Capacity: 5000.00 psig
Last Calib.: 2014.06.17
Time On Btm: 2014.06.17 @ 04:54:30
Time Off Btm: 2014.06.17 @ 07:55:30

TEST COMMENT: 1st Open 30 minutes Weak building blow built to 3 inches into a 5 gallon bucket of water.
1st Shut in 45 minutes No blow back.
2nd Open 45 minutes Weak building blow buit to 3 inches into a 5 gallon bucket of water.
2nd Shut in 60 minutes No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1857.32	111.74	Initial Hydro-static
1	41.08	111.30	Open To Flow (1)
31	86.08	114.62	Shut-In(1)
76	1071.60	116.47	End Shut-In(1)
77	89.85	116.22	Open To Flow (2)
121	122.59	117.33	Shut-In(2)
181	1034.85	118.45	End Shut-In(2)
181	1773.70	118.75	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
150.00	Muddy water Mud 60% Water40%	1.00
0.00	Chlorides 49,000 .2ohms@56 degress	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration

8100 East 22nd St. North
#700 Wichita Kansas 67278

ATTN: Adam Eldani

31-15w-30s-Gove

York 31AB#1

Job Ticket: 18341 **DST#: 1**

Test Start: 2014.06.17 @ 03:10:00

Tool Information

Drill Pipe:	Length:	3688.00 ft	Diameter:	3.80 inches	Volume:	51.73 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:	121.68 ft	Diameter:	2.25 inches	Volume:	0.60 bbl	Weight to Pull Loose:		82000.00 lb
					Total Volume:	52.33 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		8.68 ft					String Weight:	Initial	60000.00 lb
Depth to Top Packer:		3829.00 ft						Final	60000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		25.00 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			3806.00		
Hydraulic tool	5.00			3811.00		
Jars	6.00			3817.00		
Safety Joint	2.00			3819.00		
Top Packer	5.00			3824.00		
Packer	5.00			3829.00	28.00	Bottom Of Top Packer
Perforations	20.00			3849.00		
Recorder	0.00	6731	Inside	3849.00		
Recorder	0.00	6999	Outside	3849.00		
Bull Plug	5.00			3854.00	25.00	Anchor Tool
Total Tool Length:	**53.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration

8100 East 22nd St. North
#700 Wichita Kansas 67278

ATTN: Adam Eldani

31-15w-30s-Gove

York 31AB#1

Job Ticket: 18341 **DST#: 1**

Test Start: 2014.06.17 @ 03:10:00

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:	52.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.80 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1400.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
150.00	Muddy w ater Mud 60% Water40%	0.996
0.00	Chlorides 49,000 .2ohms@56 degress	0.000

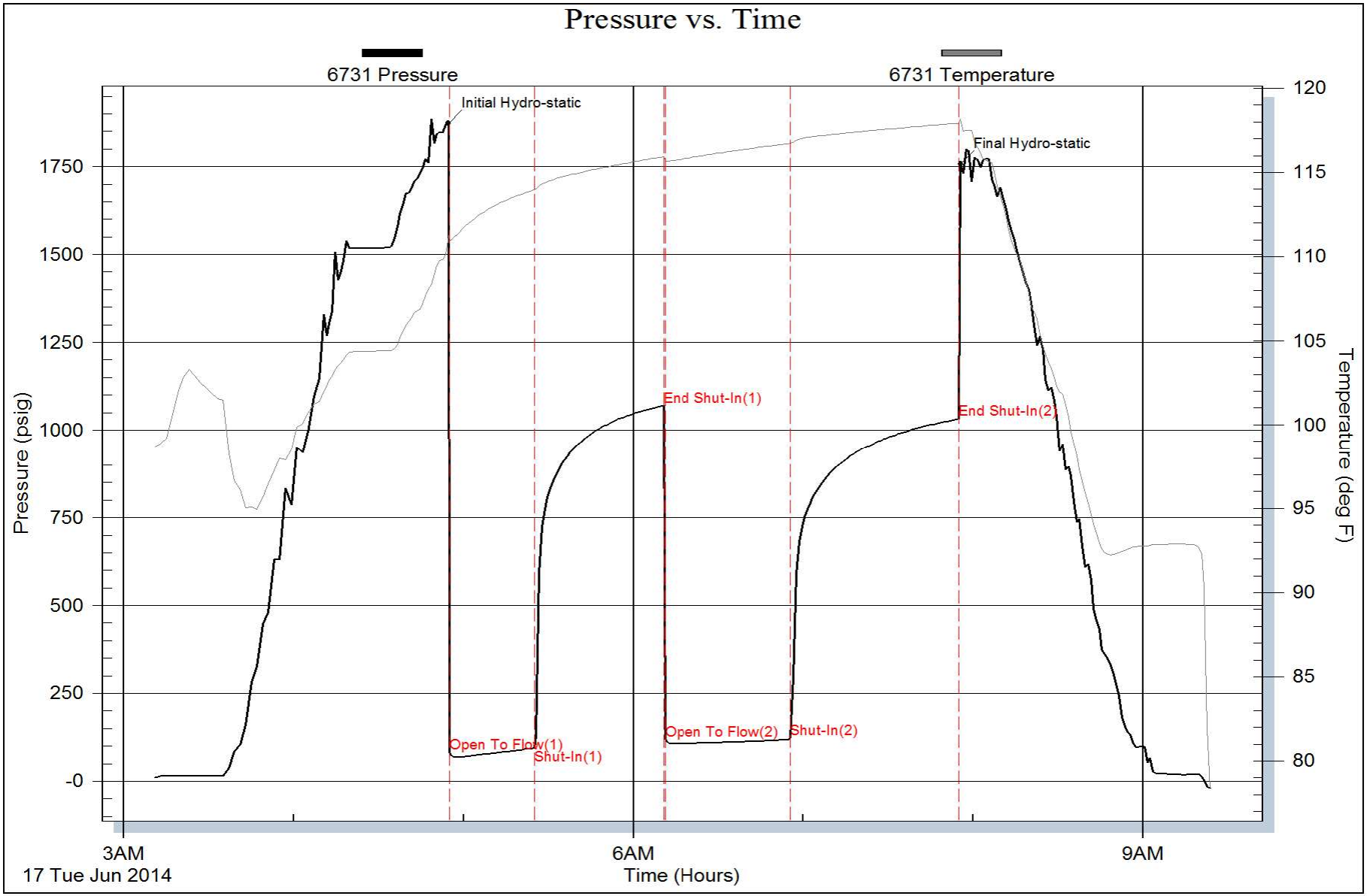
Total Length: 150.00 ft Total Volume: 0.996 bbl

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

Laboratory Name: Laboratory Location:

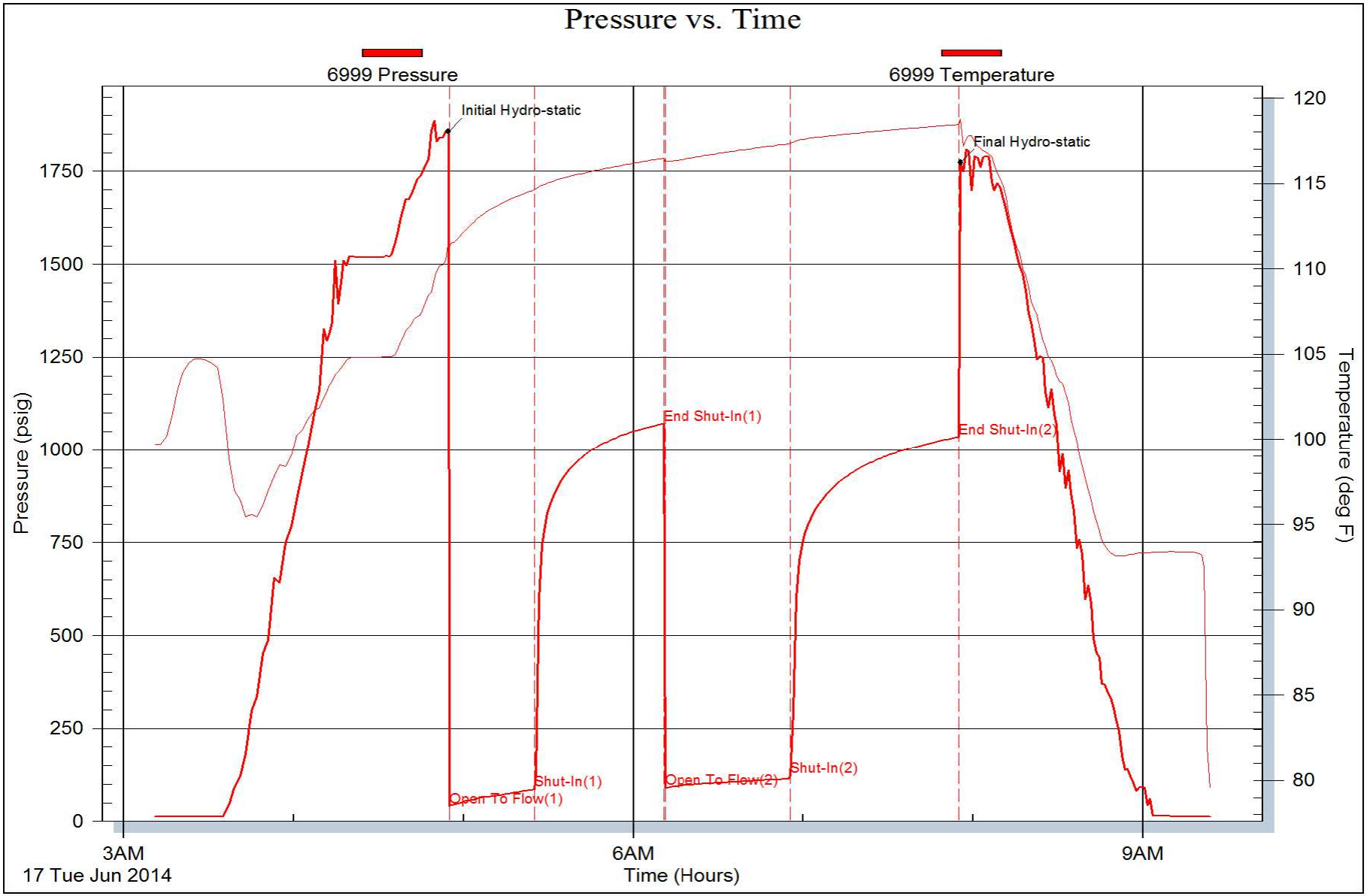
Recovery Comments:

Serial #: 6731 **Inside** Ritchie Exploration York 31AB#1 DST Test Number: 1

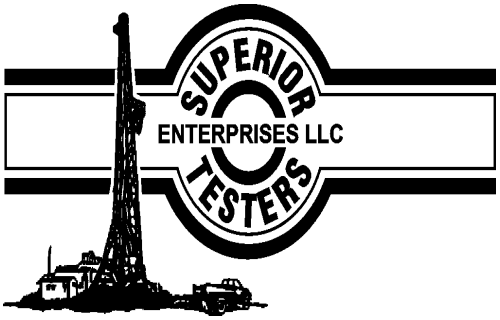


Superior Testers Enterprises LLC Ref. No: 18341 Printed: 2014.06.17 @ 22:39:39

Serial #: 6999 **Outside** Ritchie Exploration York 31AB#1 DST Test Number: 1



Superior Testers Enterprises LLC Ref. No: 18341 Printed: 2014.06.17 @ 22:39:39



DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration**

8100 East 22nd St. North
#700 Wichita Kansas 67278

ATTN: Adam Eldani

York 31AB#1

31-15w-30s-Gove

Start Date: 2014.06.18 @ 12:23:00

End Date: 2014.06.18 @ 19:19:00

Job Ticket #: 18342 DST #: 2

Superior Testers Enterprises LLC

PO Box 138 Great Bend KS 67530

1-800-792-6902

Printed: 2014.06.18 @ 20:29:34

DRILL STEM TEST REPORT

Ritchie Exploration

8100 East 22nd St. North
#700 Wichita Kansas 67278

ATTN: Adam Eldani

31-15w-30s-Gove

York 31AB#1

Job Ticket: 18342 **DST#: 2**

Test Start: 2014.06.18 @ 12:23:00

GENERAL INFORMATION:

Formation: **Lancing E-F**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:33:00
Time Test Ended: 19:19:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Dustin Ellis
Unit No: 3315-Scott City-60

Interval: 3908.00 ft (KB) To 3947.00 ft (KB) (TVD)
Total Depth: 3947.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

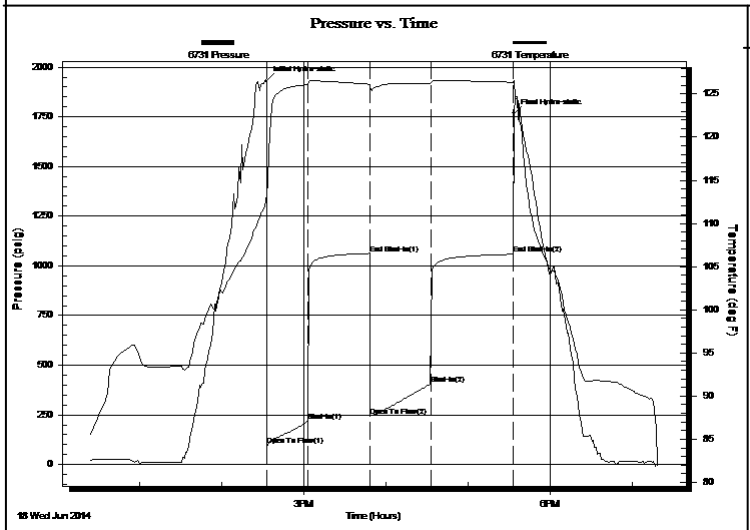
Reference Elevations: 2765.00 ft (KB)
2760.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6731 **Inside**

Press@RunDepth: 404.98 psig @ 3942.00 ft (KB)
Start Date: 2014.06.18 End Date: 2014.06.18
Start Time: 12:23:00 End Time: 19:19:00

Capacity: 5000.00 psig
Last Calib.: 2014.06.18
Time On Btm: 2014.06.18 @ 14:32:30
Time Off Btm: 2014.06.18 @ 17:33:30

TEST COMMENT: 1st Open 30 minutes Strong building blow built to the bottom of a 5 gallon bucket of water in 11 minutes.
1st Shut in 45 minutes No blow back
2nd Open 45 minutes Strong building blow built to the bottom of a 5 gallon bucket of water in 12 minutes.
2nd Shut in 60 minutes No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1930.84	113.37	Initial Hydro-static
1	96.14	113.58	Open To Flow (1)
31	217.68	126.07	Shut-In(1)
76	1062.53	126.12	End Shut-In(1)
76	244.92	125.68	Open To Flow (2)
120	404.98	126.21	Shut-In(2)
181	1058.43	126.36	End Shut-In(2)
181	1766.69	126.57	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
315.00	Muddy water mud 60% Water 40%	3.31
504.00	Water 100%	7.07
0.00	Chlorides 39,000 .2ohms@58 Degrees	0.00

Gas Rates

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

DRILL STEM TEST REPORT

Ritchie Exploration

8100 East 22nd St. North
#700 Wichita Kansas 67278

ATTN: Adam Eldani

31-15w-30s-Gove

York 31AB#1

Job Ticket: 18342 **DST#: 2**

Test Start: 2014.06.18 @ 12:23:00

GENERAL INFORMATION:

Formation: **Lancing E-F**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:33:00
Time Test Ended: 19:19:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Dustin Ellis
Unit No: 3315-Scott City-60

Interval: 3908.00 ft (KB) To 3947.00 ft (KB) (TVD)
Total Depth: 3947.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

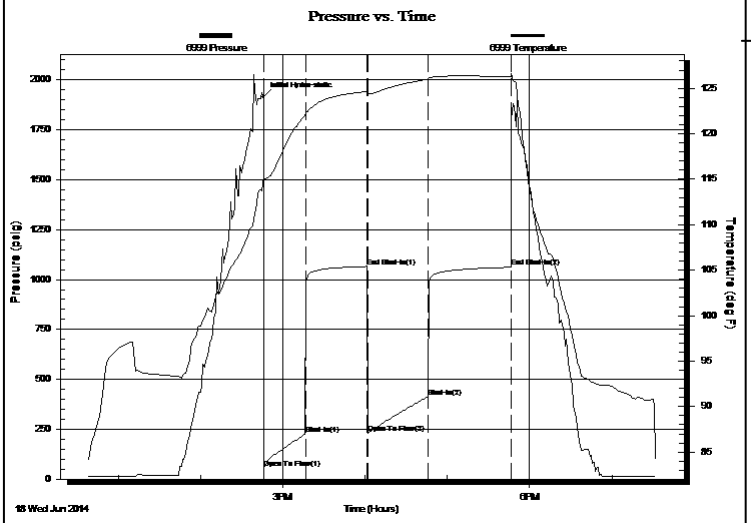
Reference Elevations: 2765.00 ft (KB)
2760.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6999 **Outside**

Press@RunDepth: 1061.35 psig @ 3942.00 ft (KB)
Start Date: 2014.06.18 End Date: 2014.06.18
Start Time: 12:38:00 End Time: 19:32:23

Capacity: 5000.00 psig
Last Calib.: 2014.06.18
Time On Btm: 2014.06.18 @ 14:45:53
Time Off Btm:

TEST COMMENT: 1st Open 30 minutes Strong building blow built to the bottom of a 5 gallon bucket of water in 11 minutes.
1st Shut in 45 minutes No blow back
2nd Open 45 minutes Strong building blow built to the bottom of a 5 gallon bucket of water in 12 minutes.
2nd Shut in 60 minutes No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1914.82	115.27	Initial Hydro-static
1	55.69	115.02	Open To Flow (1)
31	226.14	122.02	Shut-In(1)
76	1065.73	124.64	End Shut-In(1)
76	229.88	124.45	Open To Flow (2)
120	413.16	125.97	Shut-In(2)
181	1061.35	126.29	End Shut-In(2)

Recovery

Length (ft)	Description	Volume (bbl)
315.00	Muddy water mud 60% Water 40%	3.31
504.00	Water 100%	7.07
0.00	Chlorides 39,000 .2ohms@58 Degrees	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration

8100 East 22nd St. North
#700 Wichita Kansas 67278

ATTN: Adam Eldani

31-15w-30s-Gove

York 31AB#1

Job Ticket: 18342 **DST#: 2**

Test Start: 2014.06.18 @ 12:23:00

Tool Information

Drill Pipe:	Length:	3777.00 ft	Diameter:	3.80 inches	Volume:	52.98 bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	
Drill Collar:	Length:	121.68 ft	Diameter:	2.25 inches	Volume:	0.60 bbl	
					Total Volume:	53.58 bbl	

Drill Pipe Above KB:	18.68 ft
Depth to Top Packer:	3908.00 ft
Depth to Bottom Packer:	ft
Interval betw een Packers:	39.00 ft
Tool Length:	67.00 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:		2000.00 lb
Weight set on Packer:		20000.00 lb
Weight to Pull Loose:		64000.00 lb
Tool Chased		0.00 ft
String Weight:	Initial	60000.00 lb
	Final	61000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut In Tool	5.00			3885.00		
Hydraulic tool	5.00			3890.00		
Jars	6.00			3896.00		
Safety Joint	2.00			3898.00		
Top Packer	5.00			3903.00		
Packer	5.00			3908.00	28.00	Bottom Of Top Packer
Perforations	34.00			3942.00		
Recorder	0.00	6731	Inside	3942.00		
Recorder	0.00	6999	Outside	3942.00		
Bull Plug	5.00			3947.00	39.00	Anchor Tool
Total Tool Length:	**67.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration

8100 East 22nd St. North
#700 Wichita Kansas 67278

ATTN: Adam Eldani

31-15w-30s-Gove

York 31AB#1

Job Ticket: 18342 **DST#: 2**

Test Start: 2014.06.18 @ 12:23:00

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:	63.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.80 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2200.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
315.00	Muddy w ater mud 60% Water 40%	3.310
504.00	Water 100%	7.070
0.00	Chlorides 39,000 .2ohms@58 Degrees	0.000

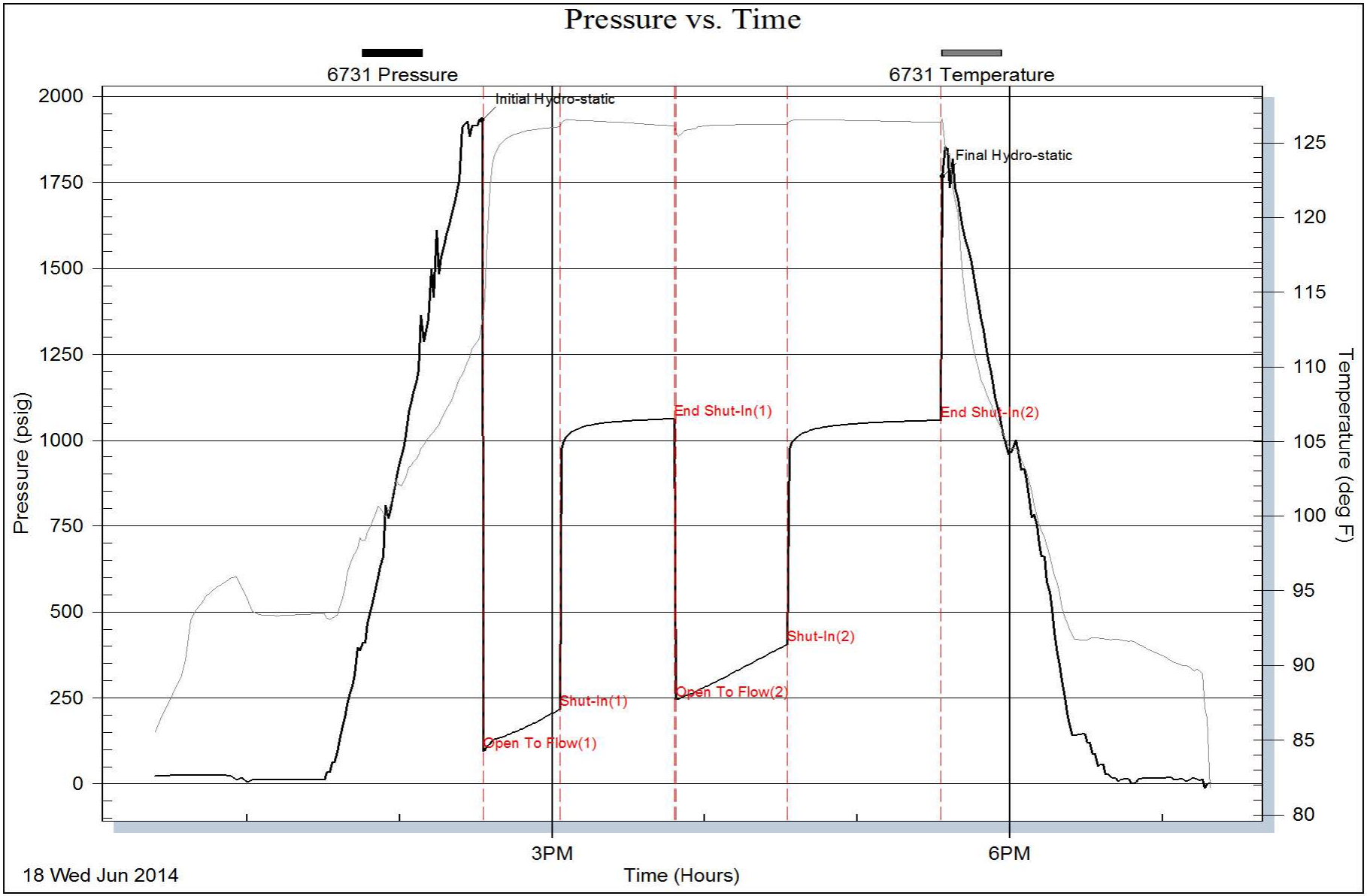
Total Length: 819.00 ft Total Volume: 10.380 bbl

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

Laboratory Name: Laboratory Location:

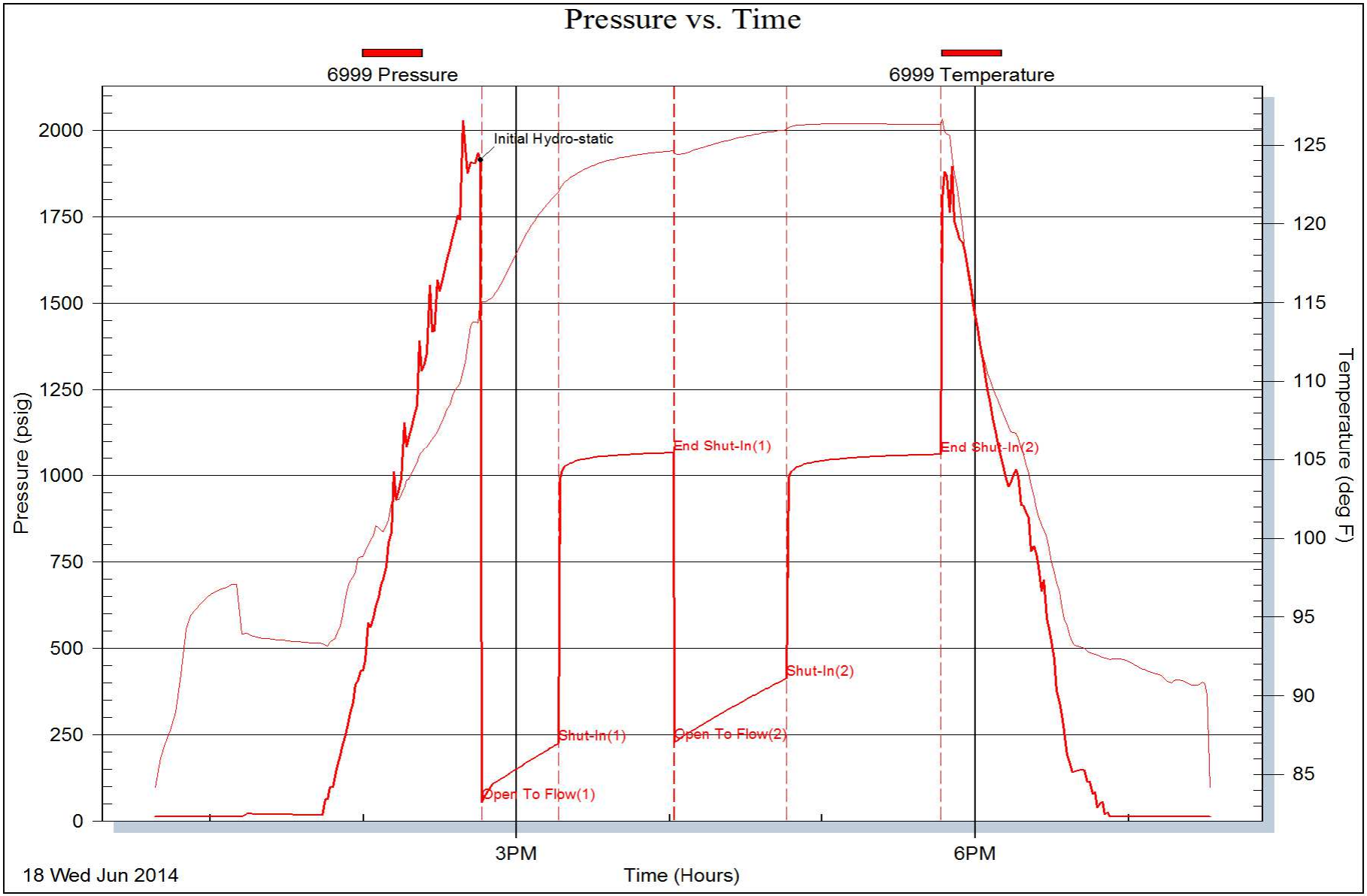
Recovery Comments:

Serial #: 6731 **Inside** Ritchie Exploration York 31AB#1 DST Test Number: 2

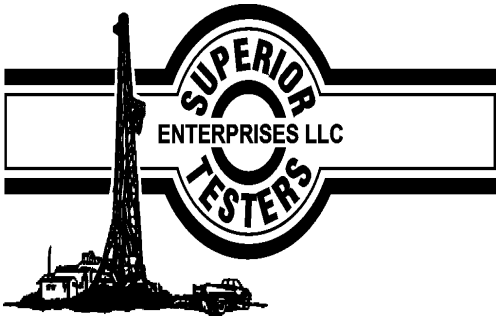


Superior Testers Enterprises LLC Ref. No: 18342 Printed: 2014.06.18 @ 20:29:34

Serial #: 6999 **Outside** Ritchie Exploration York 31AB#1 DST Test Number: 2



Superior Testers Enterprises LLC Ref. No: 18342 Printed: 2014.06.18 @ 20:29:35



DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration**

8100 East 22nd St. North
#700 Wichita Kansas 67278

ATTN: Adam Eldani

York 31AB#1

31-15w-30s-Gove

Start Date: 2014.06.21 @ 01:28:00

End Date: 2014.06.21 @ 08:02:00

Job Ticket #: 18343 DST #: 3

Superior Testers Enterprises LLC

PO Box 138 Great Bend KS 67530

1-800-792-6902

Printed: 2014.06.21 @ 09:23:57

DRILL STEM TEST REPORT

Ritchie Exploration

8100 East 22nd St. North
#700 Wichita Kansas 67278

ATTN: Adam Eldani

31-15w-30s-Gove

York 31AB#1

Job Ticket: 18343 **DST#: 3**

Test Start: 2014.06.21 @ 01:28:00

GENERAL INFORMATION:

Formation: **Johnson**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 03:12:30
Time Test Ended: 08:02:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 3315 Scott City/60

Interval: 4396.00 ft (KB) To 4444.00 ft (KB) (TVD)
Total Depth: 4444.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

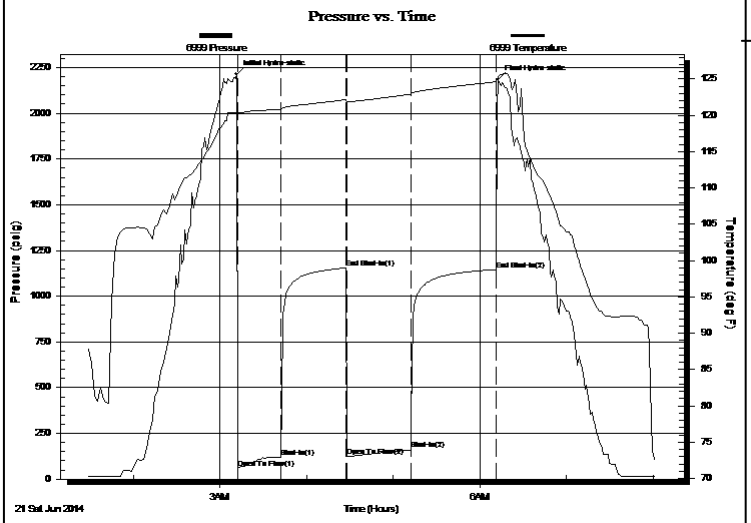
Reference Elevations: 2765.00 ft (KB)
2760.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6999 **Inside**

Press@RunDepth: 160.44 psig @ 4439.00 ft (KB)
Start Date: 2014.06.21 End Date: 2014.06.21
Start Time: 01:28:00 End Time: 08:02:00

Capacity: 5000.00 psig
Last Calib.: 2014.06.21
Time On Btm: 2014.06.21 @ 03:11:30
Time Off Btm: 2014.06.21 @ 06:12:30

TEST COMMENT:
1ST Open 30 Minutes/Weak blow /Blow built to 5 inches
1ST Shut In 45 Minutes/No blow back
2ND Open 45 Minutes/Weak blow /Blow built to 3 1/2 inches
2ND Shut In 60 Minutes/No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2213.42	120.47	Initial Hydro-static
1	60.53	120.33	Open To Flow (1)
31	121.52	120.84	Shut-In(1)
76	1154.16	122.14	End Shut-In(1)
76	123.00	121.75	Open To Flow (2)
121	160.44	122.89	Shut-In(2)
180	1145.69	124.61	End Shut-In(2)
181	2186.46	125.36	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
240.00	Muddy Water/Mud 30% Water 70%	2.26
0.00	Recov. Chlorides 27,000 ppm	0.00
0.00	Recov. Resist. .34 ohms @ 70deg	0.00

Gas Rates

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

DRILL STEM TEST REPORT

Ritchie Exploration

8100 East 22nd St. North
#700 Wichita Kansas 67278

ATTN: Adam Eldani

31-15w-30s-Gove

York 31AB#1

Job Ticket: 18343 **DST#: 3**

Test Start: 2014.06.21 @ 01:28:00

GENERAL INFORMATION:

Formation: **Johnson**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 03:12:30
Time Test Ended: 08:02:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 3315 Scott City/60

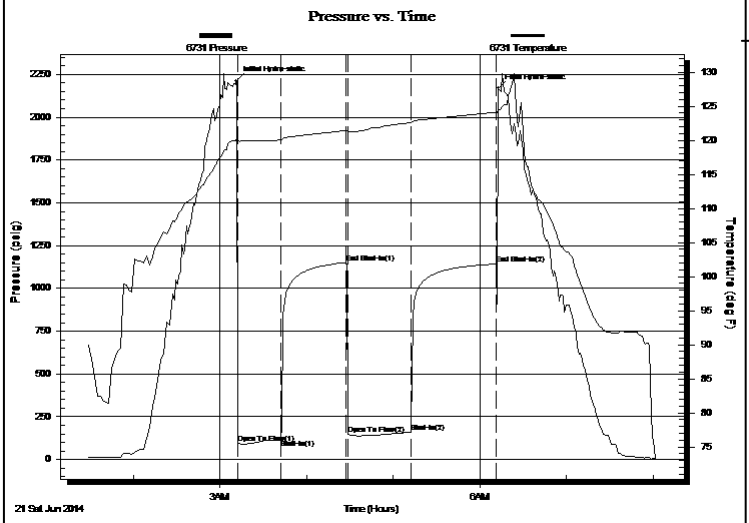
Interval: 4396.00 ft (KB) To 4444.00 ft (KB) (TVD)
Total Depth: 4444.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2765.00 ft (KB)
2760.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6731 **Outside**
Press@RunDepth: 1142.76 psig @ 4439.00 ft (KB)
Start Date: 2014.06.21 End Date: 2014.06.21
Start Time: 01:28:00 End Time: 08:02:00

Capacity: 5000.00 psig
Last Calib.: 2014.06.21
Time On Btm: 2014.06.21 @ 03:11:30
Time Off Btm: 2014.06.21 @ 06:12:30

TEST COMMENT:
1ST Open 30 Minutes/Weak blow /Blow built to 5 inches
1ST Shut In 45 Minutes/No blow back
2ND Open 45 Minutes/Weak blow /Blow built to 3 1/2 inches
2ND Shut In 60 Minutes/No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2213.81	120.36	Initial Hydro-static
1	96.73	119.87	Open To Flow (1)
31	118.59	120.05	Shut-In(1)
76	1149.99	121.47	End Shut-In(1)
77	148.82	121.22	Open To Flow (2)
121	159.68	122.61	Shut-In(2)
180	1142.76	124.11	End Shut-In(2)
181	2169.18	124.41	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
240.00	Muddy Water/Mud 30% Water 70%	2.26
0.00	Recov. Chlorides 27,000 ppm	0.00
0.00	Recov. Resist. .34 ohms @ 70deg	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration

8100 East 22nd St. North
#700 Wichita Kansas 67278

ATTN: Adam Eldani

31-15w-30s-Gove

York 31AB#1

Job Ticket: 18343 **DST#: 3**

Test Start: 2014.06.21 @ 01:28:00

Tool Information

Drill Pipe:	Length:	4255.00 ft	Diameter:	3.80 inches	Volume:	59.69 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:	121.68 ft	Diameter:	2.25 inches	Volume:	0.60 bbl	Weight to Pull Loose:		65000.00 lb
					Total Volume:	60.29 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		8.68 ft					String Weight:	Initial	58000.00 lb
Depth to Top Packer:		4396.00 ft						Final	58000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		48.00 ft							
Tool Length:		76.00 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			4373.00		
Hydraulic tool	5.00			4378.00		
Jars	6.00			4384.00		
Safety Joint	2.00			4386.00		
Top Packer	5.00			4391.00		
Packer	5.00			4396.00	28.00	Bottom Of Top Packer
Perforations	43.00			4439.00		
Recorder	0.00	6999	Inside	4439.00		
Recorder	0.00	6731	Outside	4439.00		
Bull Plug	5.00			4444.00	48.00	Anchor Tool
Total Tool Length:	**76.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration

8100 East 22nd St. North
#700 Wichita Kansas 67278

ATTN: Adam Eldani

31-15w-30s-Gove

York 31AB#1

Job Ticket: 18343 **DST#: 3**

Test Start: 2014.06.21 @ 01:28:00

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:	63.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.00 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1700.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
240.00	Muddy Water/Mud 30% Water 70%	2.258
0.00	Recov. Chlorides 27,000 ppm	0.000
0.00	Recov. Resist. .34 ohms @ 70deg	0.000

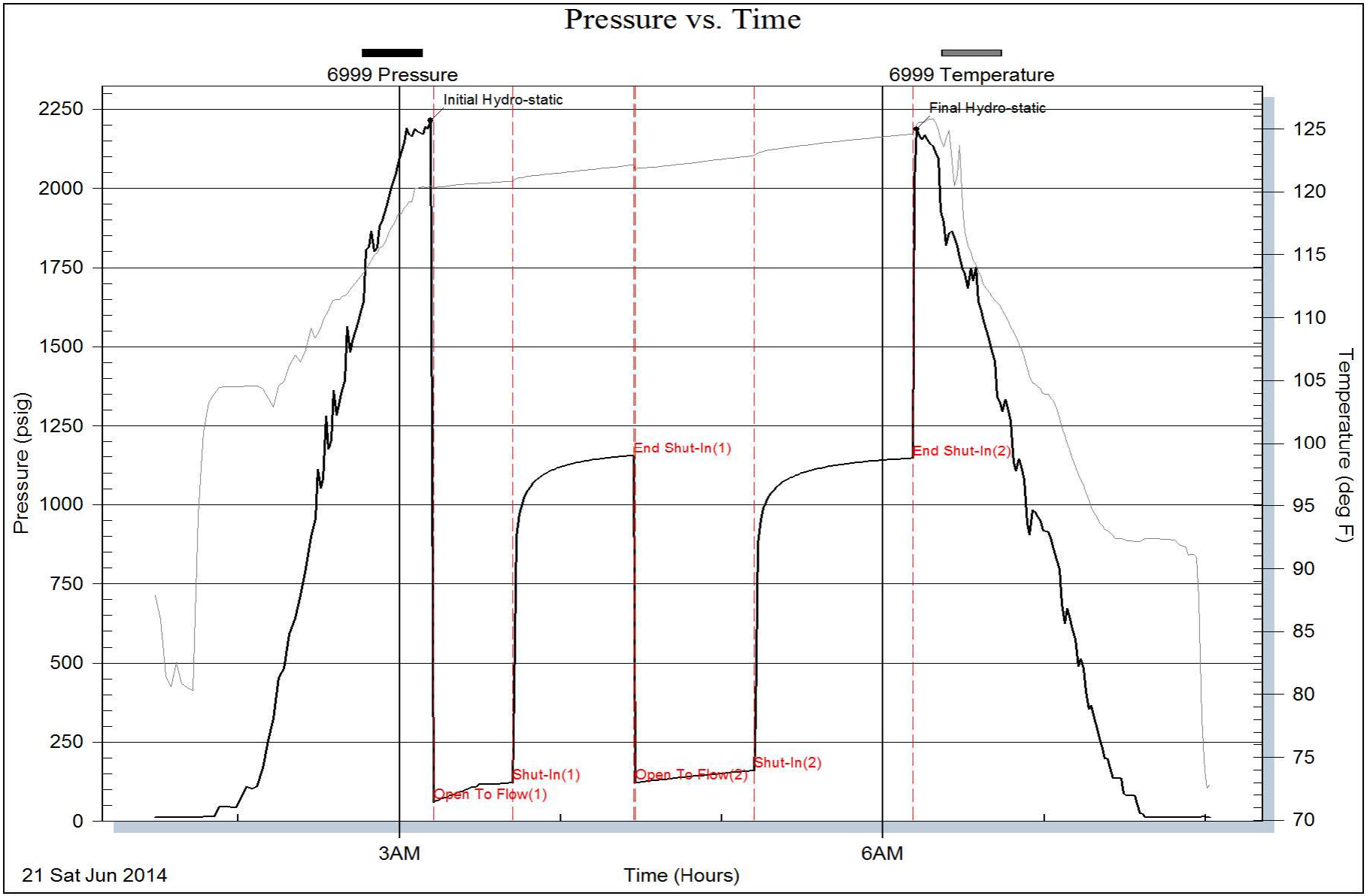
Total Length: 240.00 ft Total Volume: 2.258 bbl

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

Laboratory Name: Laboratory Location:

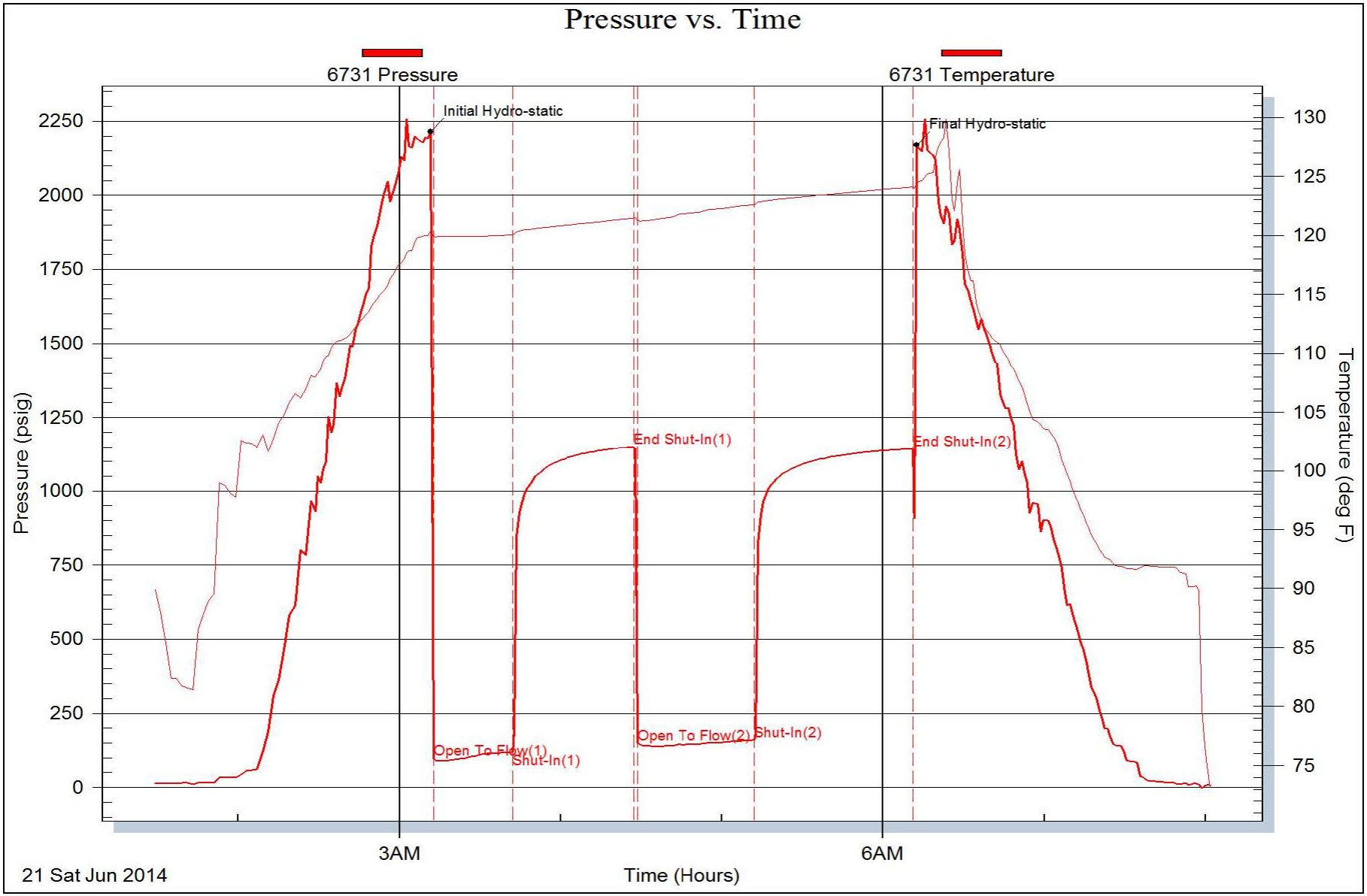
Recovery Comments:

Serial #: 6999 **Inside** Ritchie Exploration York 31AB#1 DST Test Number: 3



Superior Testers Enterprises LLC Ref. No: 18343 Printed: 2014.06.21 @ 09:23:58

Serial #: 6731 **Outside** Ritchie Exploration York 31AB#1 DST Test Number: 3



Superior Testers Enterprises LLC Ref. No: 18343 Printed: 2014.06.21 @ 09:23:58