

DRILL STEM TEST REPORT

Prepared For: **Rictchie Explorations Inc.**

8100 East 22nd Street North
700 Wichita Kansas 67278

ATTN: Terry

Joseph #2

30-13s-31w-Gove

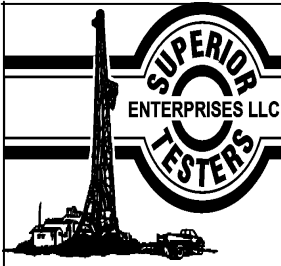
Start Date: 2012.01.31 @ 02:15:00

End Date: 2012.01.31 @ 09:17:30

Job Ticket #: 17251 DST #: 1

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

Printed: 2012.01.31 @ 09:48:04



DRILL STEM TEST REPORT

Ritchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17251

DST#: 1

ATTN: Terry

Test Start: 2012.01.31 @ 02:15:00

GENERAL INFORMATION:

Formation: **Lancing 'C'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:17:30

Time Test Ended: 09:17:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 3315-Scott city-60 m

Interval: 3954.00 ft (KB) To 3978.00 ft (KB) (TVD)

Reference Elevations: 2905.00 ft (KB)

Total Depth: 3978.00 ft (KB) (TVD)

2895.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6999

Inside

Press @ Run Depth: 734.47 psia @ 3974.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.01.31

End Date:

2012.01.31

Last Calib.:

2012.01.31

Start Time:

02:15:00

End Time:

09:17:30

Time On Btm:

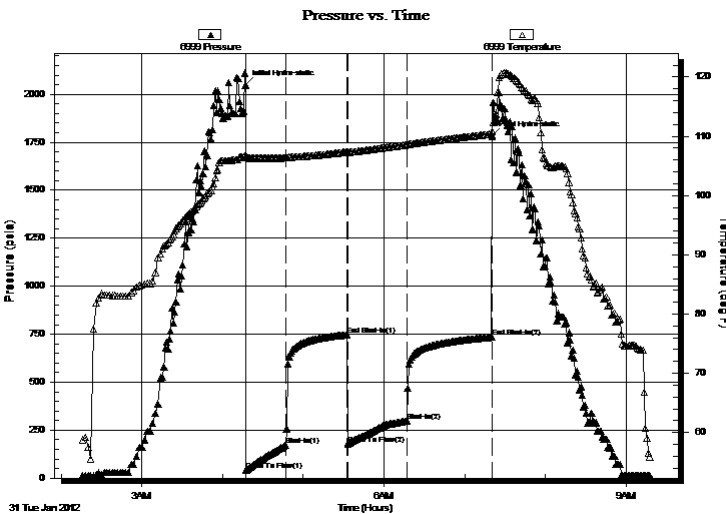
2012.01.31 @ 04:17:00

Time Off Btm:

2012.01.31 @ 07:20:30

TEST COMMENT: 1st Open 30 minutes Fair building blow built to bottom of bucket in 24 minutes
1st Shut in 45 minutes No blow back
2nd Open 45 minutes Fair building blow built to bottom of bucket in 32 minutes
2nd Shut in 60 minutes No blow back

PRESSURE SUMMARY



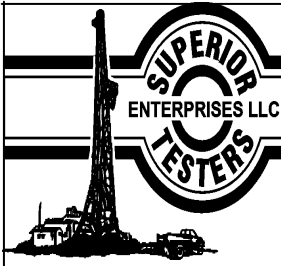
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2048.44	106.84	Initial Hydro-static
1	40.21	106.52	Open To Flow (1)
30	171.35	106.34	Shut-In(1)
76	747.61	107.36	End Shut-In(1)
76	178.27	107.31	Open To Flow (2)
120	298.29	108.56	Shut-In(2)
183	734.47	110.38	End Shut-In(2)
184	1782.38	110.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	Muddy water 5% Mudd 95% Water	0.44
490.00	Muddy water 15% Mudd 85% Water	2.46
0.00	Chlorides 42,000 @40 Degrees	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Rictchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17251

DST#: 1

ATTN: Terry

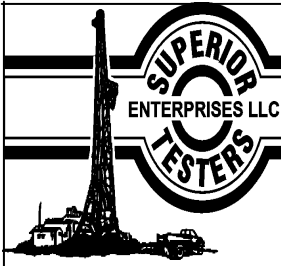
Test Start: 2012.01.31 @ 02:15:00

Tool Information

Drill Pipe:	Length: 3378.00 ft	Diameter: 3.80 inches	Volume: 47.38 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: 574.25 ft	Diameter: 2.25 inches	Volume: 2.82 bbl	Weight to Pull Loose: 83000.00 lb
			<u>Total Volume: 50.20 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.25 ft			String Weight: Initial 80000.00 lb
Depth to Top Packer:	3954.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 ft			
Tool Length:	46.00 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			3937.00	
Hydraulic Tool	5.00			3942.00	
Jars	0.00			3942.00	
Safety Joint	2.00			3944.00	
Packer	5.00			3949.00	22.00 Bottom Of Top Packer
Packer	5.00			3954.00	
Perforations	19.00			3973.00	
Recorder	1.00	6999	Inside	3974.00	
Recorder	1.00	6663	Outside	3975.00	
Bull Plug	3.00			3978.00	24.00 Bottom Packers & Anchor
Total Tool Length:	46.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17251

DST#: 1

ATTN: Terry

Test Start: 2012.01.31 @ 02:15:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 17.00 sec/qt

Water Loss: 6.40 in³

Resistivity: 0.20 ohm.m

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psia

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	Muddy w ater 5% Mudd 95%Water	0.443
490.00	Muddy w ater 15%Mudd 85% Water	2.462
0.00	Chlorides 42,000 @40 Degrees	0.000

Total Length: 580.00 ft Total Volume: 2.905 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

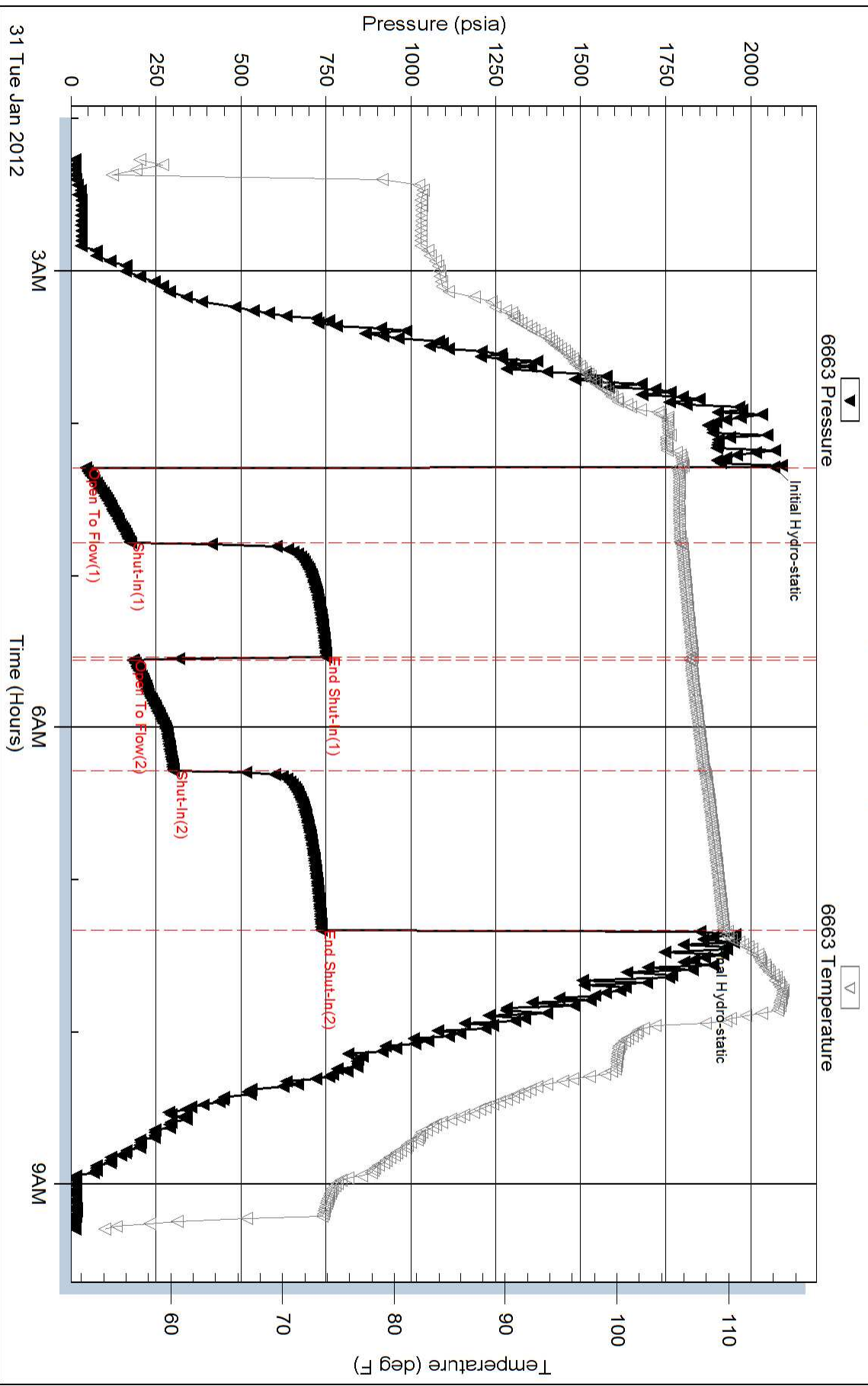
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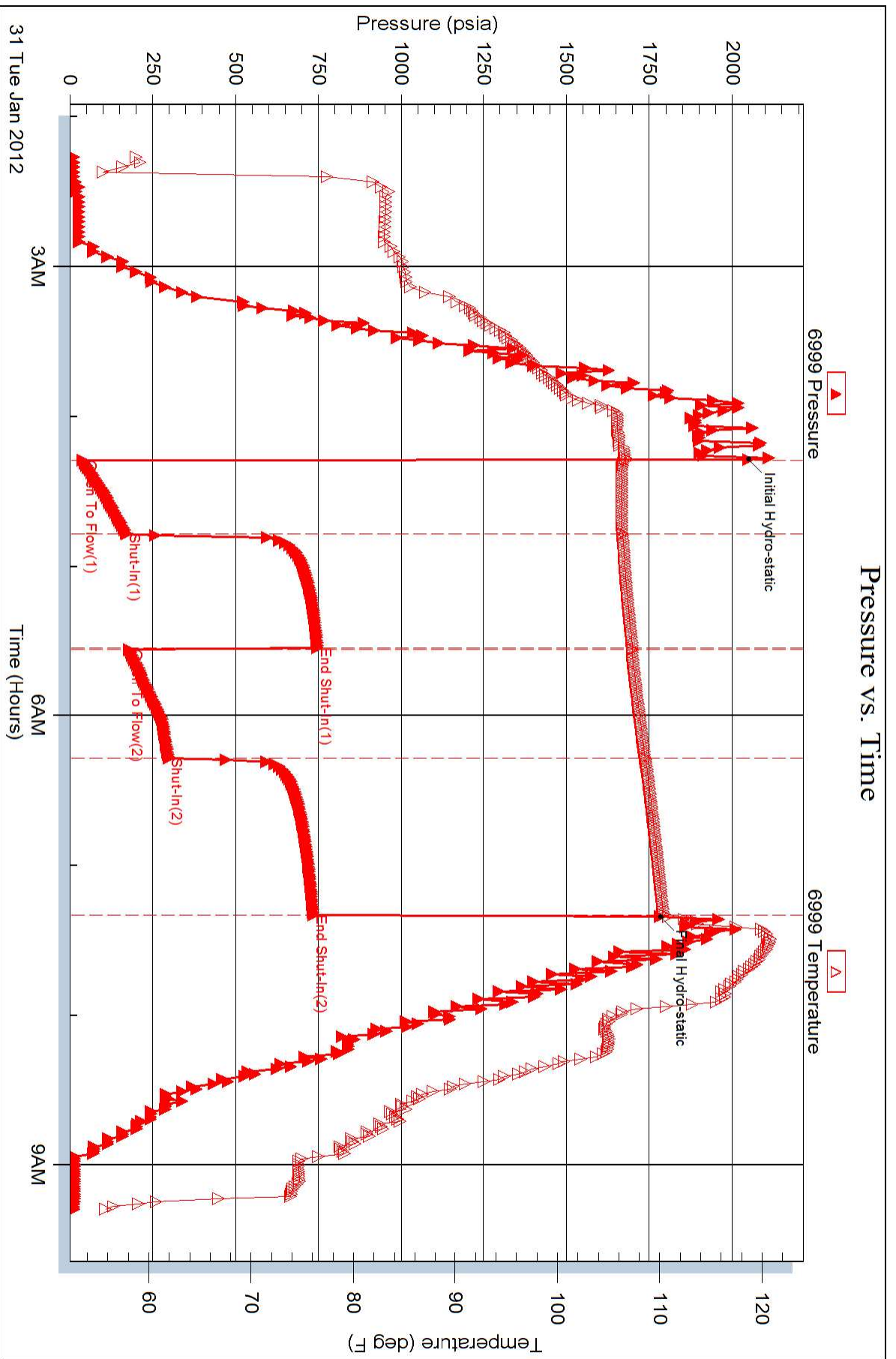
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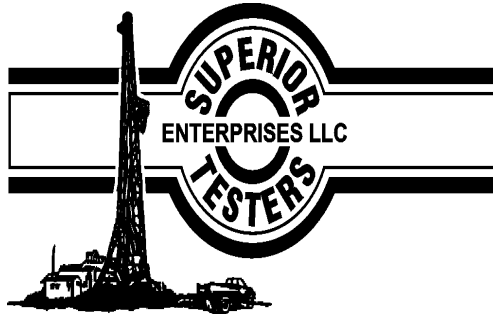
Laboratory Location:

Recovery Comments:

Pressure vs. Time







DRILL STEM TEST REPORT

Prepared For: **Rictchie Explorations Inc.**

8100 East 22nd Street North
700 Wichita Kansas 67278

ATTN: Terry

Joseph #2

30-13s-31w-Gove

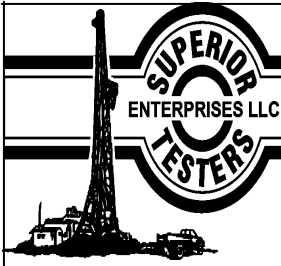
Start Date: 2012.01.31 @ 05:00:00

End Date: 2012.01.31 @ 10:27:00

Job Ticket #: 17252 DST #: 2

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

Printed: 2012.01.31 @ 23:18:33



DRILL STEM TEST REPORT

Ritchie Explorations Inc.
 8100 East 22nd Street North
 700 Wichita Kansas 67278
 ATTN: Terry

30-13s-31w-Gove
Joseph #2
 Job Ticket: 17252 **DST#: 2**
 Test Start: 2012.01.31 @ 05:00:00

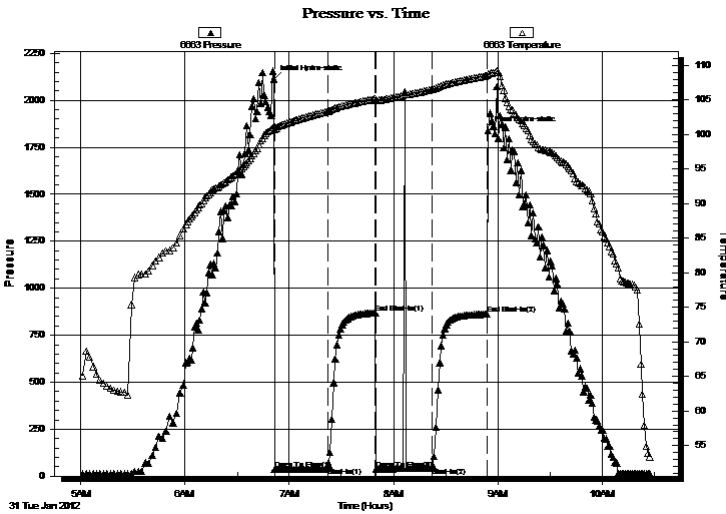
GENERAL INFORMATION:

Formation: **Lancing 'E'**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 06:51:30
 Time Test Ended: 10:27:00
 Interval: **3993.00 ft (KB) To 4012.00 ft (KB) (TVD)**
 Total Depth: 4012.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Scott City-60
 Reference Elevations: 2905.00 ft (KB)
 2895.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 6663 Outside
 Press @ RunDepth: 862.47 psia @ 4009.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.01.31 End Date: 2012.01.31 Last Calib.: 2012.01.31
 Start Time: 05:01:00 End Time: 10:27:30 Time On Btm: 2012.01.31 @ 06:51:00
 Time Off Btm: 2012.01.31 @ 08:54:30

TEST COMMENT: 1st Open 30 minutes Weak surface blow
 1st Shut in 30 minutes No blow
 2nd Open 30 minutes Very weak blow then died off.
 2nd Shut in 30 minutes No blow back

PRESSURE SUMMARY



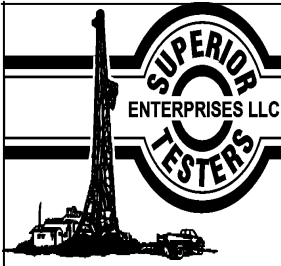
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2112.74	101.06	Initial Hydro-static
1	36.07	100.74	Open To Flow (1)
31	47.66	103.33	Shut-In(1)
59	869.35	105.16	End Shut-In(1)
60	38.35	104.94	Open To Flow (2)
91	44.15	106.49	Shut-In(2)
123	862.47	108.52	End Shut-In(2)
124	1838.99	108.72	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Slightly oil cut mud 1%Oil Mud 99%	0.02

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17252

DST#: 2

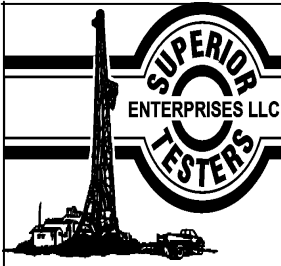
ATTN: Terry

Test Start: 2012.01.31 @ 05:00:00

Tool Information

Drill Pipe:	Length: 3412.00 ft	Diameter: 3.80 inches	Volume: 47.86 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: 574.25 ft	Diameter: 2.25 inches	Volume: 2.82 bbl	Weight to Pull Loose: 83000.00 lb
			<u>Total Volume: 50.68 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.25 ft			String Weight: Initial 80000.00 lb
Depth to Top Packer:	3993.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	19.00 ft			
Tool Length:	41.00 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			3976.00	
Hydraulic Tool	5.00			3981.00	
Jars	0.00			3981.00	
Safety Joint	2.00			3983.00	
Packer	5.00			3988.00	22.00 Bottom Of Top Packer
Packer	5.00			3993.00	
Perforations	14.00			4007.00	
Recorder	1.00	6999	Inside	4008.00	
Recorder	1.00	6663	Outside	4009.00	
Bull Plug	3.00			4012.00	19.00 Bottom Packers & Anchor
Total Tool Length:	41.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17252

DST#: 2

ATTN: Terry

Test Start: 2012.01.31 @ 05:00:00

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: 19.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.60 in³

Gas Cushion Type:

Resistivity: 2800.00 ohm.m

Gas Cushion Pressure:

psia

Salinity: ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Slightly oil cut mud 1%Oil Mud 99%	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

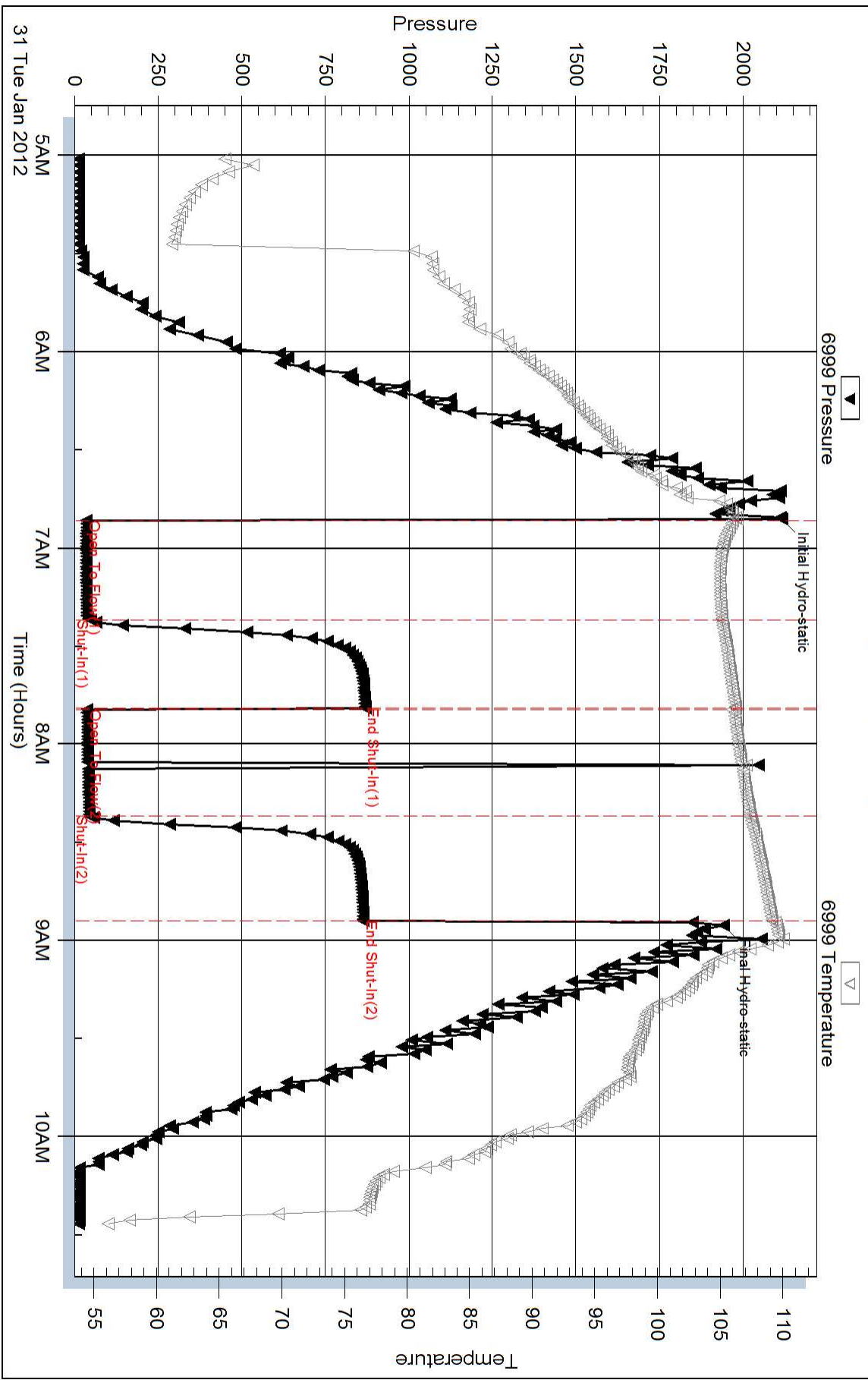
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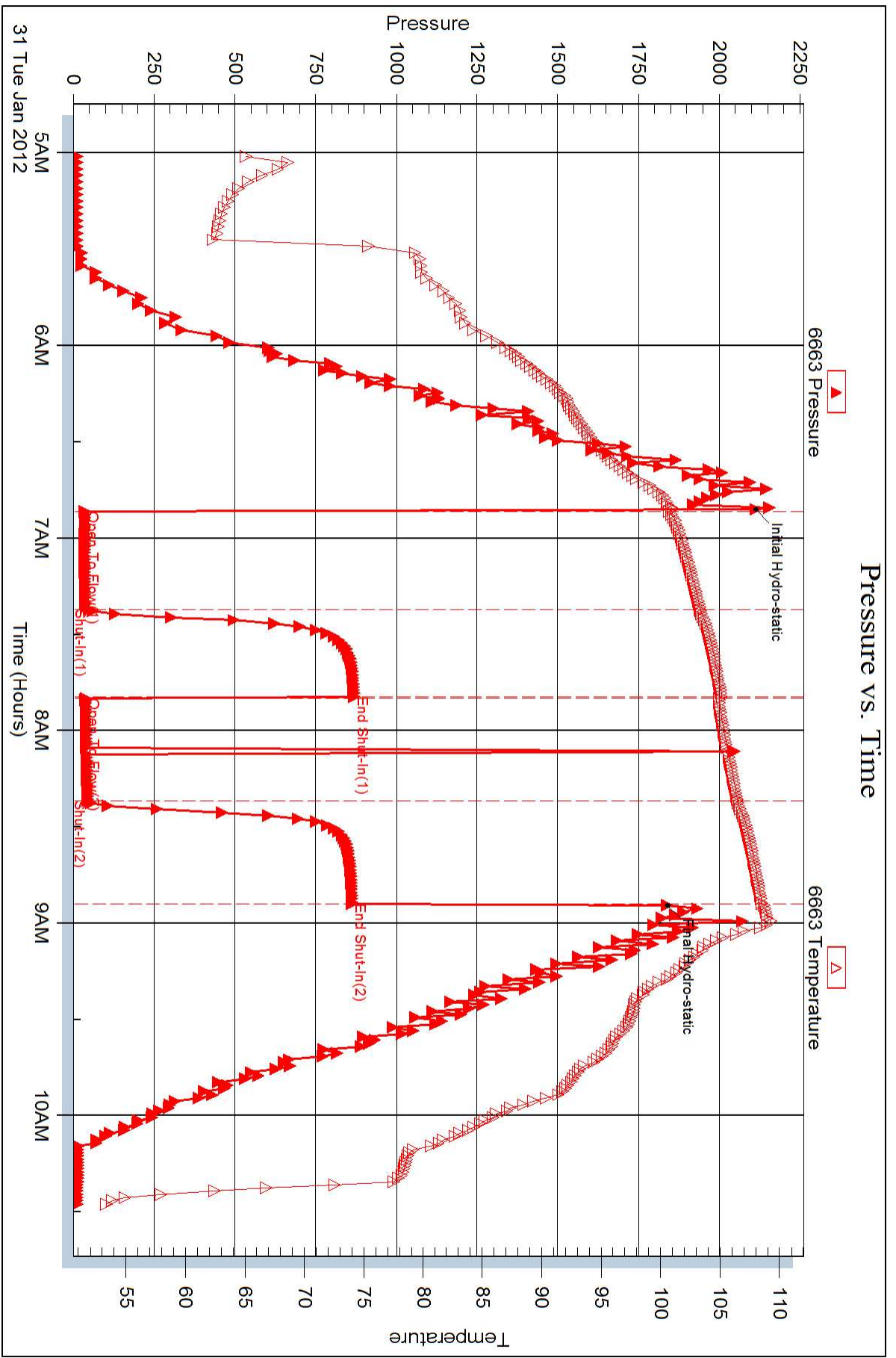
Laboratory Name:

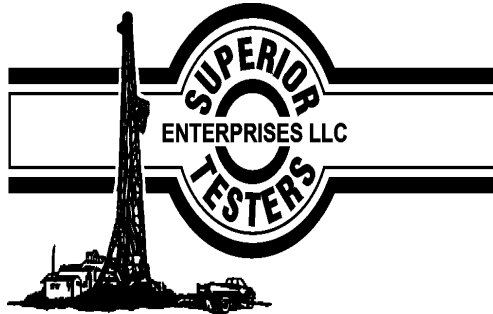
Laboratory Location:

Recovery Comments:

Pressure vs. Time







DRILL STEM TEST REPORT

Prepared For: **Rictchie Explorations Inc.**

8100 East 22nd Street North
700 Wichita Kansas 67278

ATTN: Terry Mcleod

Joseph #2

30-13s-31w-Gove

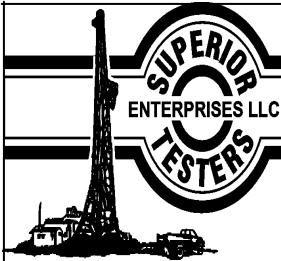
Start Date: 2012.01.02 @ 11:20:00

End Date: 2012.01.02 @ 17:38:00

Job Ticket #: 17253 DST #: 3

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

Printed: 2012.02.01 @ 17:53:39



DRILL STEM TEST REPORT

Ritchie Explorations Inc.
 8100 East 22nd Street North
 700 Wichita Kansas 67278
 ATTN: Terry Mcleod

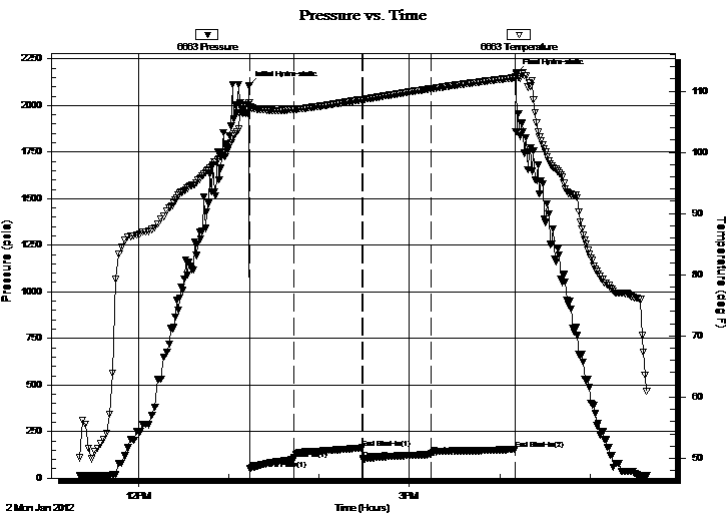
30-13s-31w-Gove
Joseph #2
 Job Ticket: 17253 **DST#: 3**
 Test Start: 2012.01.02 @ 11:20:00

GENERAL INFORMATION:

Formation: **Lancing 'H'**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 13:14:00
 Time Test Ended: 17:38:00
 Interval: **4069.00 ft (KB) To 4110.00 ft (KB) (TVD)**
 Total Depth: 4110.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Scott City-60 m
 Reference Elevations: 2905.00 ft (KB)
 2895.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 6663 Outside
 Press @ RunDepth: 126.25 psia @ 4107.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.01.02 End Date: 2012.01.02 Last Calib.: 2012.02.01
 Start Time: 11:20:00 End Time: 17:38:00 Time On Btm: 2012.01.02 @ 13:13:30
 Time Off Btm: 2012.01.02 @ 16:11:00

TEST COMMENT: 1st Open 30 minutes Fair building blow built to bottom of bucket in 12 minutes
 1st Shut in 45 minutes No blow back
 2nd Open 45 minutes Fair building blow built to bottom of bucket in 15 minutes
 2nd Shut in 60 minutes No blow back



PRESSURE SUMMARY

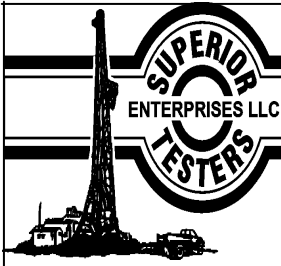
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2108.44	108.06	Initial Hydro-static
1	49.51	107.50	Open To Flow (1)
30	99.69	107.01	Shut-In(1)
75	162.26	108.64	End Shut-In(1)
76	102.30	108.64	Open To Flow (2)
121	126.25	110.39	Shut-In(2)
177	154.70	112.22	End Shut-In(2)
178	2173.17	112.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	Oil cut mud 10% Oil 90% Mud	0.44
90.00	Oil cut mud 5% Oil 95% Mud	0.44

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Rictchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17253

DST#: 3

ATTN: Terry Mcleod

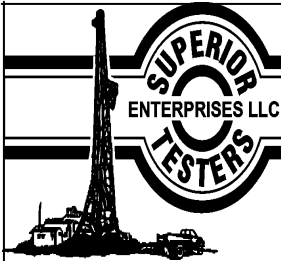
Test Start: 2012.01.02 @ 11:20:00

Tool Information

Drill Pipe:	Length: 3505.00 ft	Diameter: 3.80 inches	Volume: 49.17 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: 574.25 ft	Diameter: 2.25 inches	Volume: 2.82 bbl	Weight to Pull Loose: 83000.00 lb
			<u>Total Volume: 51.99 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.25 ft			String Weight: Initial 80000.00 lb
Depth to Top Packer:	4069.00 ft			Final 81000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	41.00 ft			
Tool Length:	63.00 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			4052.00	
Hydraulic Tool	5.00			4057.00	
Jars	0.00			4057.00	
Safety Joint	2.00			4059.00	
Packer	5.00			4064.00	22.00 Bottom Of Top Packer
Packer	5.00			4069.00	
Perforations	36.00			4105.00	
Recorder	1.00	6999	Inside	4106.00	
Recorder	1.00	6663	Outside	4107.00	
Bull Plug	3.00			4110.00	41.00 Bottom Packers & Anchor
Total Tool Length:	63.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17253

DST#: 3

ATTN: Terry Mcleod

Test Start: 2012.01.02 @ 11:20:00

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:

bbbl

Water Loss: 7.60 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psia

Salinity: 2800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
90.00	Oil cut mud 10% Oil 90% Mud	0.443
90.00	Oil cut mud 5% Oil 95% Mud	0.443

Total Length: 180.00 ft Total Volume: 0.886 bbl

Num Fluid Samples: 0

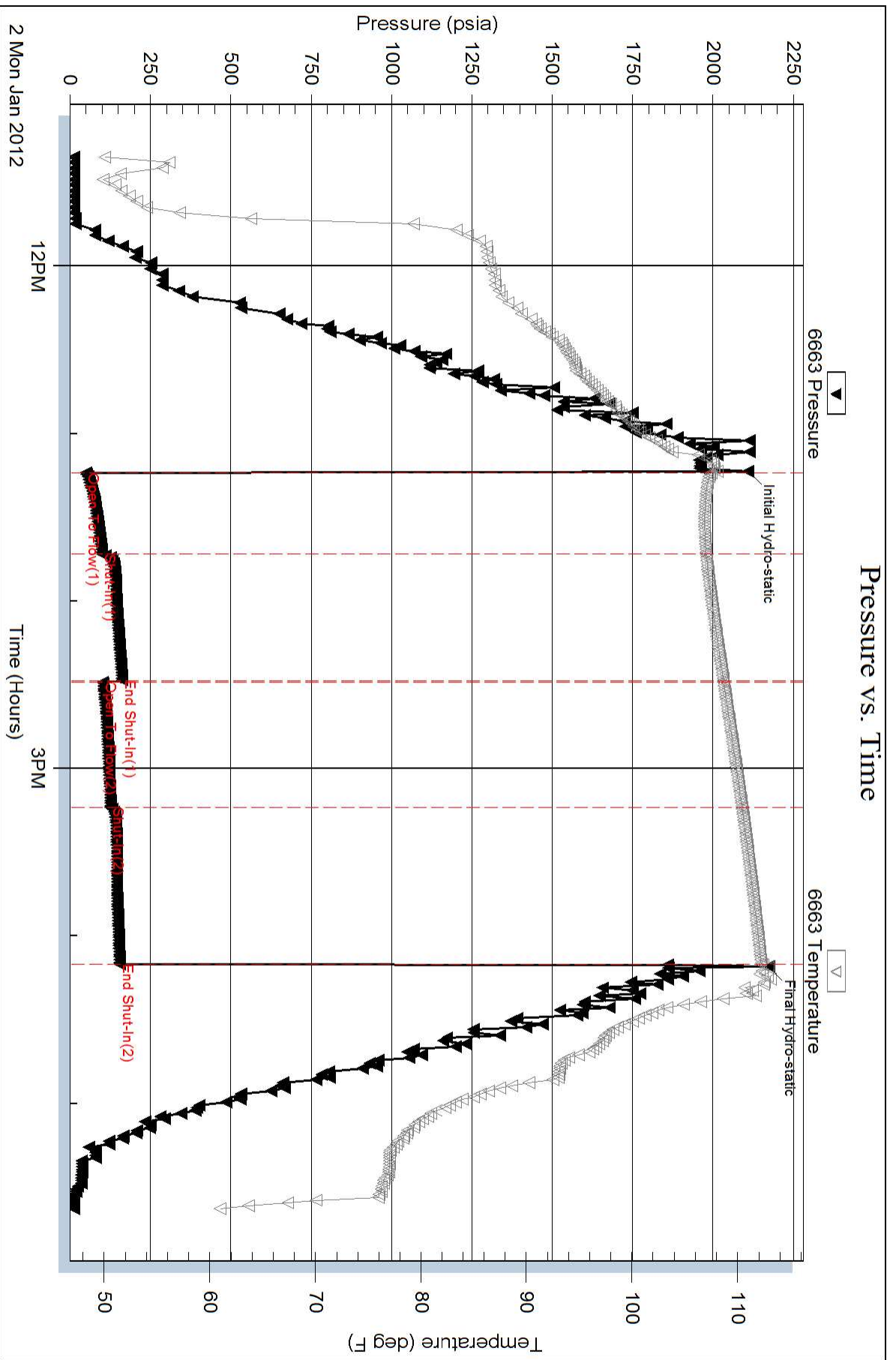
Num Gas Bombs: 0

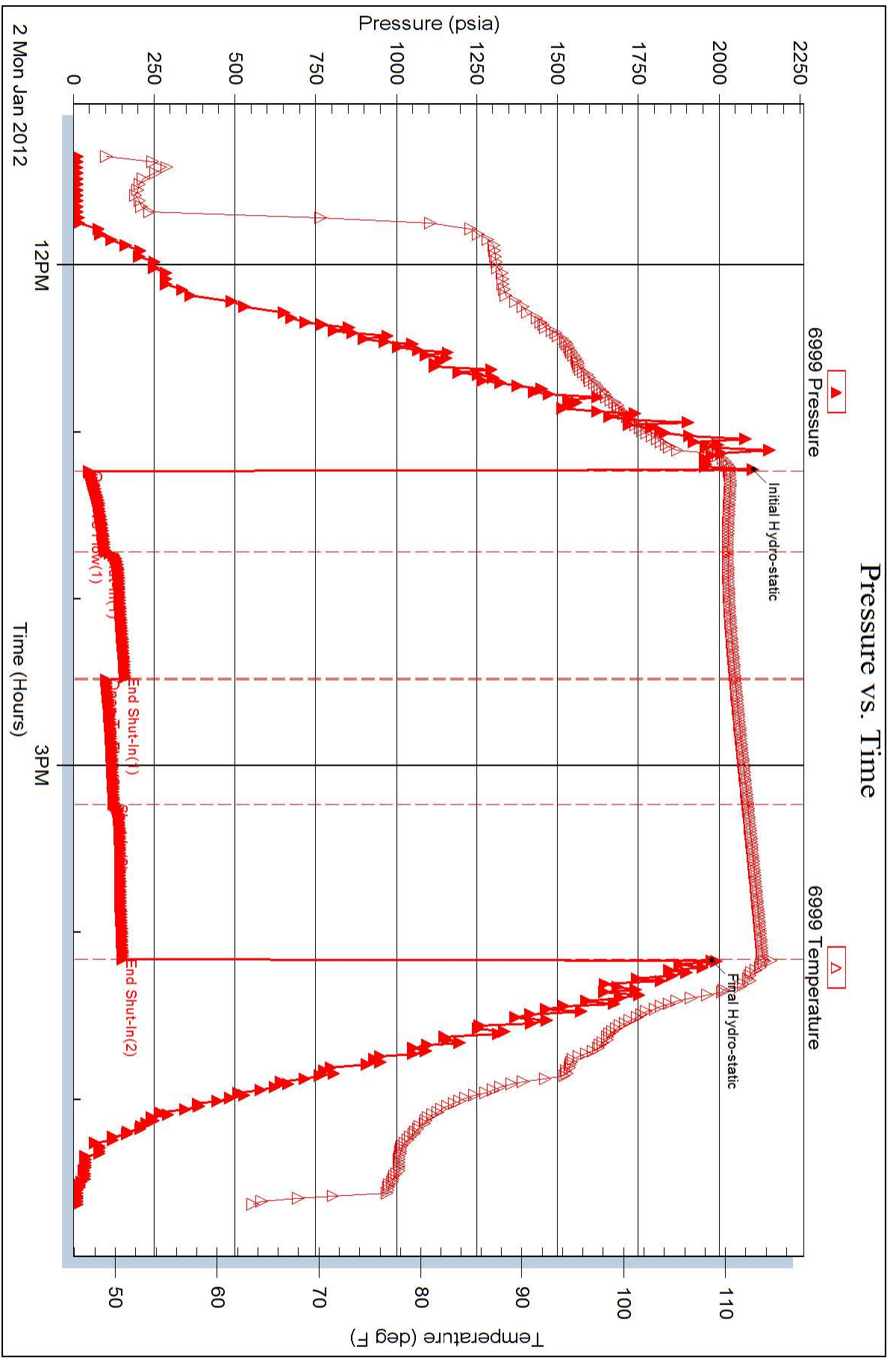
Serial #:

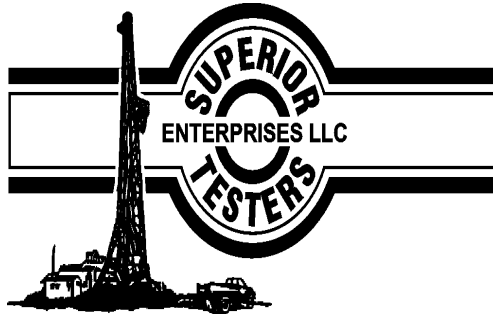
Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Rictchie Explorations Inc.**

8100 East 22nd Street North
700 Wichita Kansas 67278

ATTN: Terry Mcleod

Joseph #2

30-13s-31w-Gove

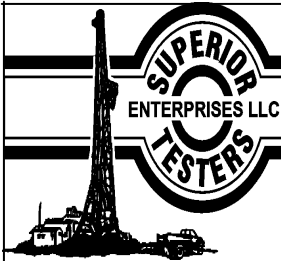
Start Date: 2012.01.02 @ 11:42:00

End Date: 2012.01.02 @ 18:36:30

Job Ticket #: 17254 DST #: 4

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

Printed: 2012.02.02 @ 06:53:31



DRILL STEM TEST REPORT

Ritchie Explorations Inc.
 8100 East 22nd Street North
 700 Wichita Kansas 67278
 ATTN: Terry Mcleod

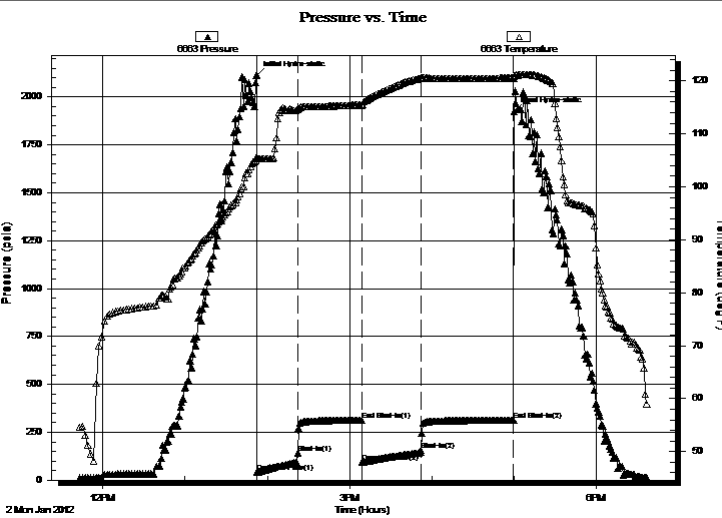
30-13s-31w-Gove
Joseph #2
 Job Ticket: 17254 **DST#: 4**
 Test Start: 2012.01.02 @ 11:42:00

GENERAL INFORMATION:

Formation: **Lancing 'I'**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 13:52:00
 Time Test Ended: 18:36:30
 Interval: **4108.00 ft (KB) To 4137.00 ft (KB) (TVD)**
 Total Depth: 4137.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Scott City-60
 Reference Elevations: 2905.00 ft (KB)
 2895.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 6663 Outside
 Press @ RunDepth: 312.06 psia @ 4134.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.01.02 End Date: 2012.01.02 Last Calib.: 2012.02.02
 Start Time: 11:42:00 End Time: 18:36:30 Time On Btm: 2012.01.02 @ 13:52:00
 Time Off Btm: 2012.01.02 @ 17:00:00

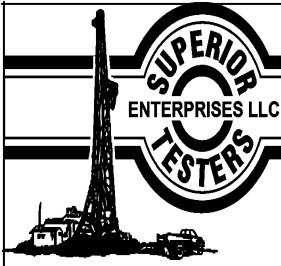
TEST COMMENT: 1st Open 30 minutes Fair bulding blow blew 5 inches.
 1st shut in 45 minutes No blow back
 2nd Open 45 minutes Fair building blow blew 4.5 inces
 2nd Shut in 60 minutes No blow back



PRESSURE SUMMARY			
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2113.92	105.59	Initial Hydro-static
1	41.12	105.31	Open To Flow (1)
30	142.72	114.68	Shut-In(1)
77	312.26	115.50	End Shut-In(1)
77	93.38	115.42	Open To Flow (2)
120	156.88	120.51	Shut-In(2)
188	312.06	120.51	End Shut-In(2)
188	1924.88	120.92	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
190.00	Muddy Water 10%w ater 90%mud	0.93

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Rictchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17254

DST#: 4

ATTN: Terry Mcleod

Test Start: 2012.01.02 @ 11:42:00

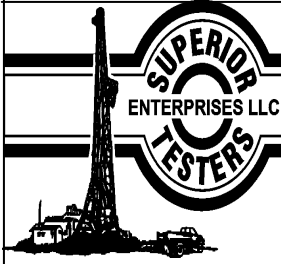
Tool Information

Drill Pipe:	Length: 3538.00 ft	Diameter: 3.80 inches	Volume: 49.63 bbl	Tool Weight: 20000.00 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: 574.25 ft	Diameter: 2.25 inches	Volume: 2.82 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 52.45 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.25 ft			String Weight: Initial 76000.00 lb
Depth to Top Packer:	4108.00 ft			Final 77000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	29.00 ft			
Tool Length:	51.00 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			4091.00	
Hydraulic Tool	5.00			4096.00	
Jars	0.00			4096.00	
Safety Joint	2.00			4098.00	
Packer	5.00			4103.00	22.00 Bottom Of Top Packer
Packer	5.00			4108.00	
Perforations	24.00			4132.00	
Recorder	1.00	6999	Inside	4133.00	
Recorder	1.00	6663	Outside	4134.00	
Bull Plug	3.00			4137.00	29.00 Bottom Packers & Anchor
Total Tool Length:	51.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17254

DST#: 4

ATTN: Terry Mcleod

Test Start: 2012.01.02 @ 11:42:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 59.00 sec/qt

Water Loss: 7.20 in³

Resistivity: ohm.m

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psia

Oil API:

Water Salinity: ppm

deg API

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
190.00	Muddy Water 10%w ater 90%mud	0.934

Total Length: 190.00 ft Total Volume: 0.934 bbl

Num Fluid Samples: 0

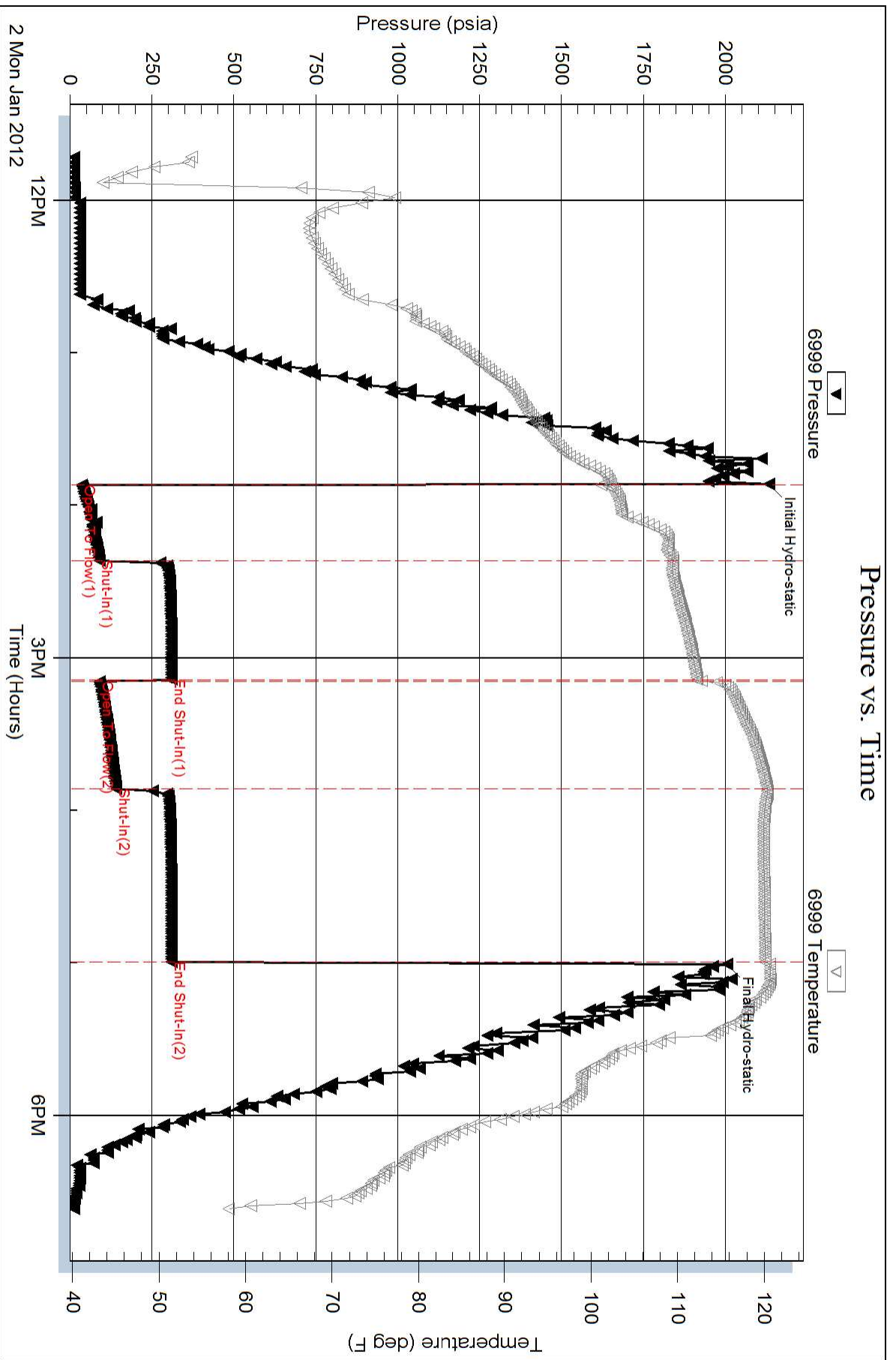
Num Gas Bombs: 0

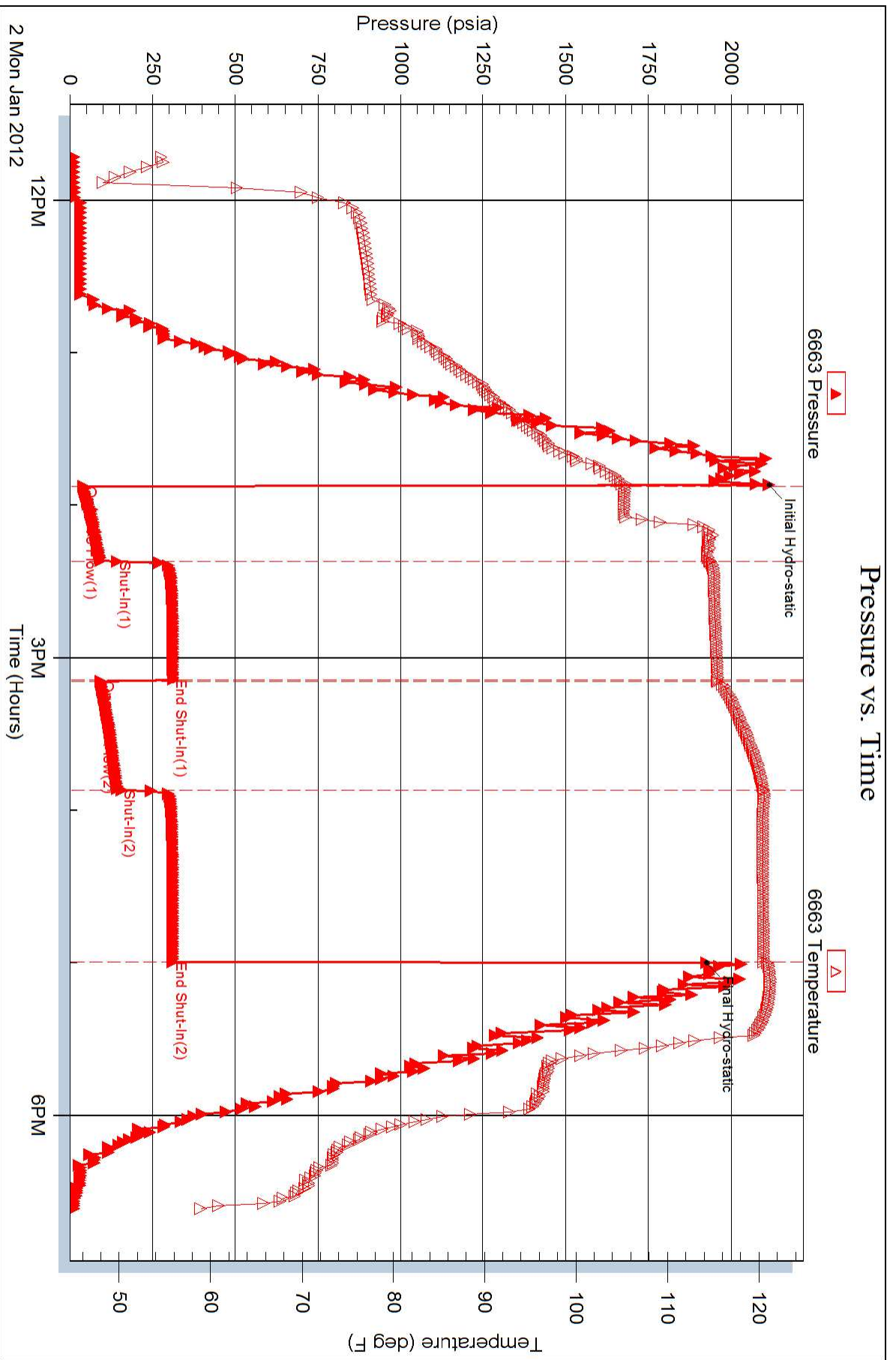
Serial #:

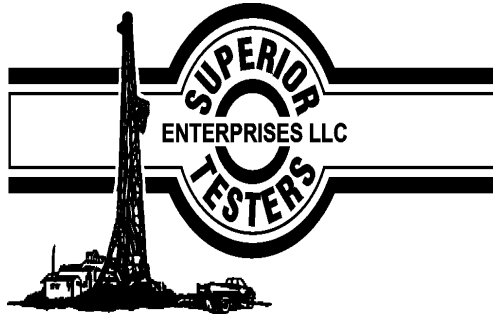
Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Rictchie Explorations Inc.**

8100 East 22nd Street North
700 Wichita Kansas 67278

ATTN: Terry Mcleod

Joseph #2

30-13s-31w-Gove

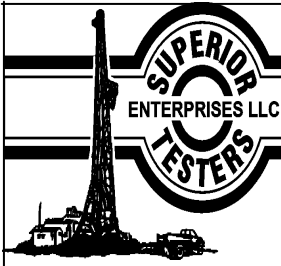
Start Date: 2012.02.02 @ 12:53:00

End Date: 2012.02.02 @ 19:09:00

Job Ticket #: 17255 DST #: 5

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

Printed: 2012.02.02 @ 19:26:12



DRILL STEM TEST REPORT

Ritchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17255

DST#: 5

ATTN: Terry Mcleod

Test Start: 2012.02.02 @ 12:53:00

GENERAL INFORMATION:

Formation: **Lancing 'J'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:34:00

Time Test Ended: 19:09:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 3315-Scott City-60

Interval: 4142.00 ft (KB) To 4160.00 ft (KB) (TVD)

Reference Elevations: 2905.00 ft (KB)

Total Depth: 4160.00 ft (KB) (TVD)

2895.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6999 Inside

Press @ RunDepth: 65.04 psia @ 4156.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.02.02

End Date: 2012.02.02

Last Calib.: 2012.02.02

Start Time: 12:53:00

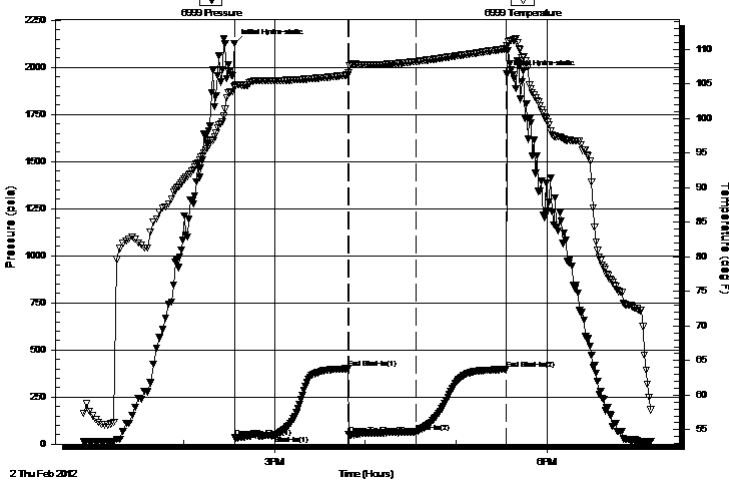
End Time: 19:09:00

Time On Btm: 2012.02.02 @ 14:33:30

Time Off Btm: 2012.02.02 @ 17:33:30

TEST COMMENT: 1st Open 30 minutes Weak blow blew 2 inches into 5 gallon bucket of water
1st Shut in 45 minutes No blow back
2nd Open 45 minutes Fair building blow blew 6 inches
2nd Shut in 60 minutes No blow back

Pressure vs. Time



PRESSURE SUMMARY

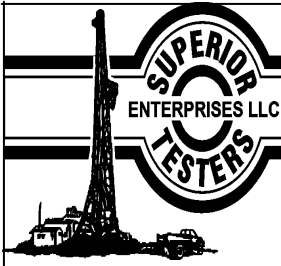
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2126.54	104.51	Initial Hydro-static
1	33.85	104.74	Open To Flow (1)
27	47.50	105.49	Shut-In(1)
75	400.71	106.28	End Shut-In(1)
76	53.69	106.66	Open To Flow (2)
120	65.04	108.25	Shut-In(2)
180	397.47	110.09	End Shut-In(2)
180	1964.03	110.48	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Gassy Oil cut mud 90% mud 5% oil 5% gas	0.07
0.00	180 Ft. Gas in pipe	0.00

Gas Rates

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



DRILL STEM TEST REPORT

Ritchie Explorations Inc.
 8100 East 22nd Street North
 700 Wichita Kansas 67278
 ATTN: Terry Mcleod

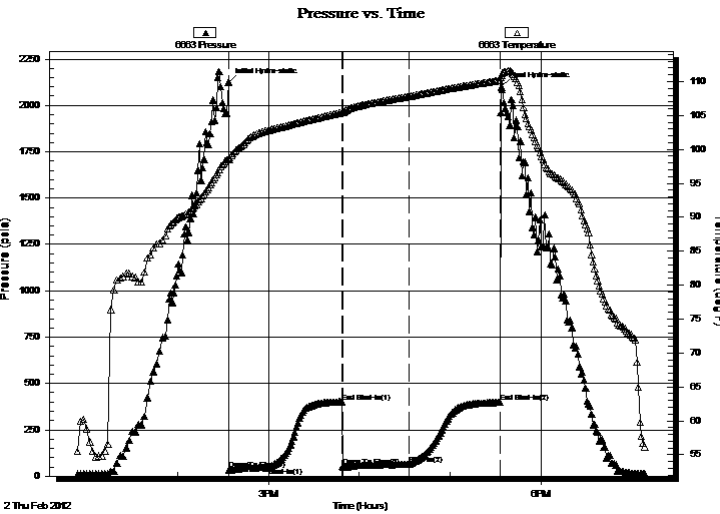
30-13s-31w-Gove
Joseph #2
 Job Ticket: 17255 **DST#: 5**
 Test Start: 2012.02.02 @ 12:53:00

GENERAL INFORMATION:

Formation: **Lancing 'J'**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:34:00
 Time Test Ended: 19:09:00
 Interval: **4142.00 ft (KB) To 4160.00 ft (KB) (TVD)**
 Total Depth: 4160.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Scott City-60
 Reference Elevations: 2905.00 ft (KB)
 2895.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 6663 Outside
 Press @ RunDepth: 398.12 psia @ 4157.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.02.02 End Date: 2012.02.02 Last Calib.: 2012.02.02
 Start Time: 12:53:00 End Time: 19:09:00 Time On Btm: 2012.02.02 @ 14:33:30
 Time Off Btm: 2012.02.02 @ 17:34:00

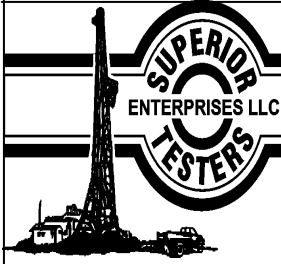
TEST COMMENT: 1st Open 30 minutes Weak blow blew 2 inches into 5 gallon bucket of water
 1st Shut in 45 minutes No blow back
 2nd Open 45 minutes Fair building blow blew 6 inches
 2nd Shut in 60 minutes No blow back



PRESSURE SUMMARY			
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2125.11	98.67	Initial Hydro-static
1	34.55	98.50	Open To Flow (1)
27	48.33	102.82	Shut-In(1)
75	401.37	105.46	End Shut-In(1)
76	51.62	105.38	Open To Flow (2)
120	65.97	107.82	Shut-In(2)
180	398.12	110.18	End Shut-In(2)
181	2099.48	110.94	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
15.00	Gassy Oil cut mud 90% mud 5%oil 5%ga	0.07
0.00	180 Ft. Gas in pipe	0.00

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



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17255

DST#: 5

ATTN: Terry Mcleod

Test Start: 2012.02.02 @ 12:53:00

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: 19.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.40 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psia

Salinity: 3200.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	Gassy Oil cut mud 90%mud 5%oil 5%gas	0.074
0.00	180 Ft. Gas in pipe	0.000

Total Length: 15.00 ft Total Volume: 0.074 bbl

Num Fluid Samples: 0

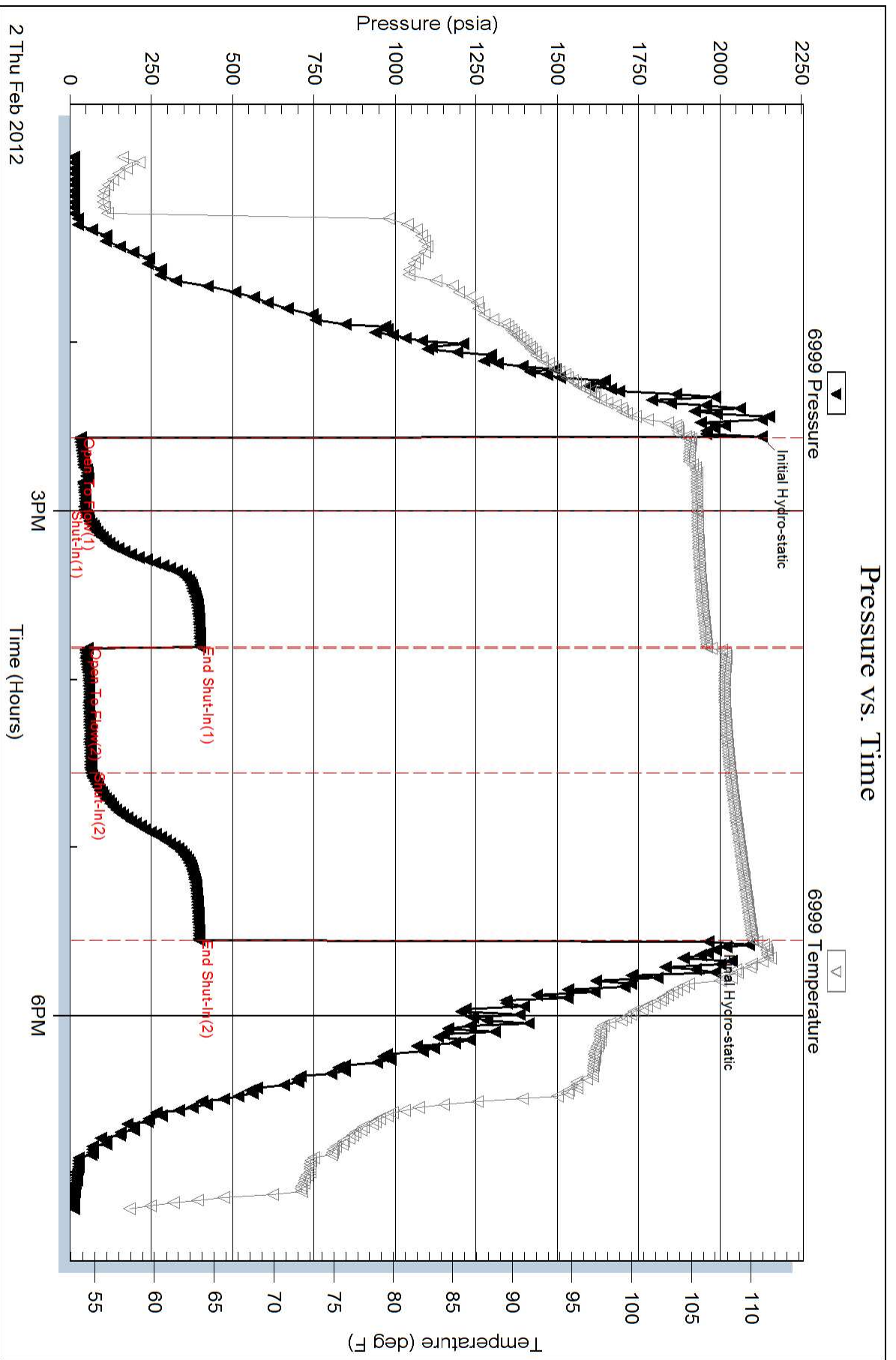
Num Gas Bombs: 0

Serial #:

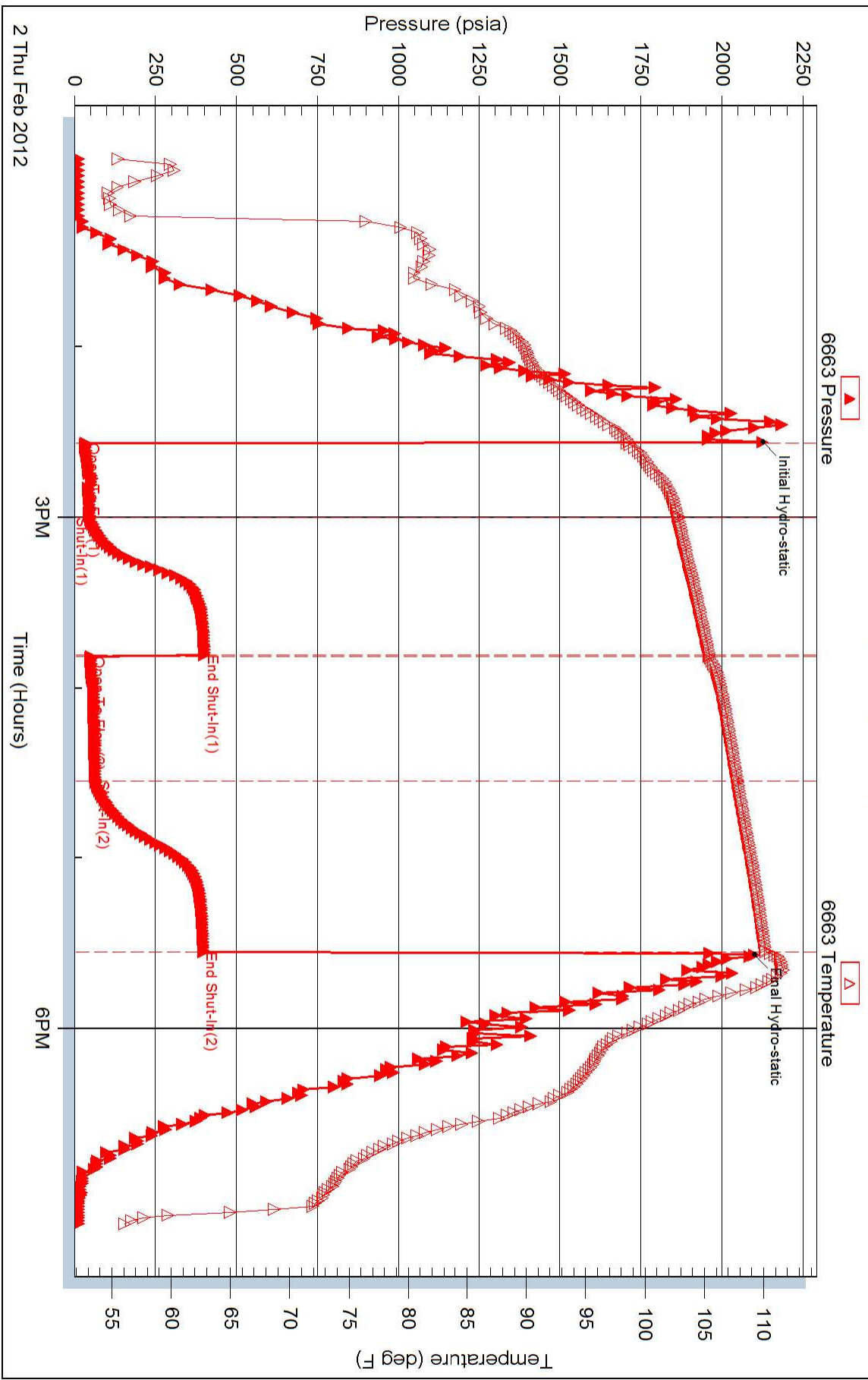
Laboratory Name:

Laboratory Location:

Recovery Comments:



Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Rictchie Explorations Inc.**

8100 East 22nd Street North
700 Wichita Kansas 67278

ATTN: Terry Mcleod

Joseph #2

30-13s-31w-Gove

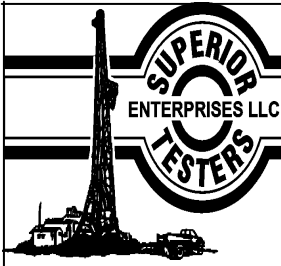
Start Date: 2012.02.03 @ 06:05:00

End Date: 2012.02.03 @ 13:48:00

Job Ticket #: 17256 DST #: 6

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

Printed: 2012.02.03 @ 14:40:35



DRILL STEM TEST REPORT

Ritchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17256

DST#: 6

ATTN: Terry Mcleod

Test Start: 2012.02.03 @ 06:05:00

GENERAL INFORMATION:

Formation: **Lancing KL'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:12:00

Time Test Ended: 13:48:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 3315-Scott City-60 m

Interval: 4165.00 ft (KB) To 42456.0 ft (KB) (TVD)

Reference Elevations: 2905.00 ft (KB)

Total Depth: 4265.00 ft (KB) (TVD)

2895.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6999 Inside

Press @ Run Depth: 898.12 psia @ 4241.89 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.02.03

End Date: 2012.02.03

Last Calib.: 2012.02.03

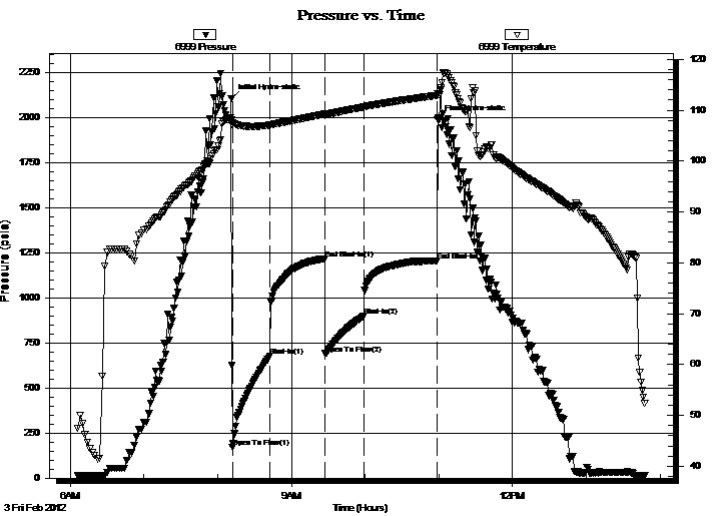
Start Time: 06:05:00

End Time: 13:48:00

Time On Btm: 2012.02.03 @ 08:11:00

Time Off Btm: 2012.02.03 @ 10:59:00

TEST COMMENT: 1st Open 30 minutes Strong blow blew bottom of bucket 1 minute
1st Shut in 45 minutes Yes blow back
2nd Open 30 minutes Strong blow blew bottom of bucket 3 minutes
2nd Shut in 60 minutes Yes blow back



PRESSURE SUMMARY

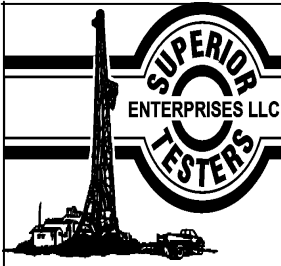
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2105.54	108.04	Initial Hydro-static
1	170.60	107.53	Open To Flow (1)
32	675.64	107.07	Shut-In(1)
76	1214.84	109.23	End Shut-In(1)
77	690.13	109.05	Open To Flow (2)
108	898.12	110.61	Shut-In(2)
168	1204.65	112.91	End Shut-In(2)
168	1988.82	113.13	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
540.00	Oil cut muddy w ater	2.66
0.00	oil 30% mud 30% w ater40%	0.00
540.00	Oil cut w ater	7.26
0.00	20%oil 80%w ater	0.00
720.00	Muddy w ater	10.10
0.00	30%mud 70%w ater	0.00

Gas Rates

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



DRILL STEM TEST REPORT

Ritchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17256

DST#: 6

ATTN: Terry Mcleod

Test Start: 2012.02.03 @ 06:05:00

GENERAL INFORMATION:

Formation: **Lancing KL'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:12:00

Time Test Ended: 13:48:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 3315-Scott City-60 m

Interval: 4165.00 ft (KB) To 42456.0 ft (KB) (TVD)

Reference Elevations: 2905.00 ft (KB)

Total Depth: 4265.00 ft (KB) (TVD)

2895.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6663 Outside

Press @ RunDepth: 1206.33 psia @ 4242.89 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.02.03

End Date: 2012.02.03

Last Calib.: 2012.02.03

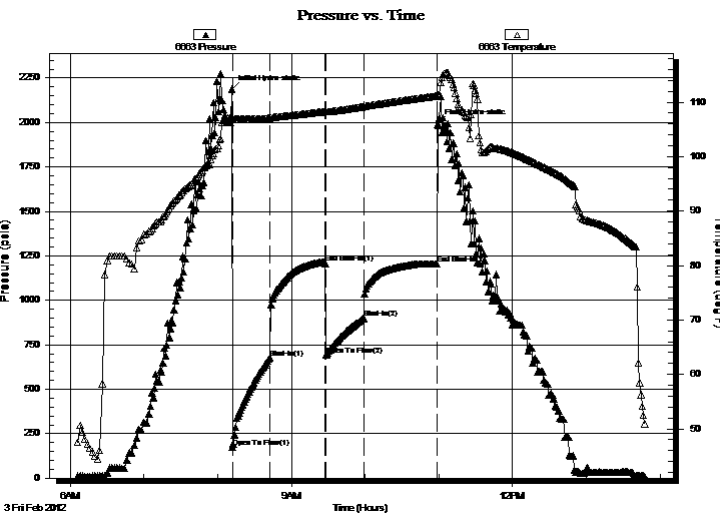
Start Time: 06:05:00

End Time: 13:48:00

Time On Btm: 2012.02.03 @ 08:11:30

Time Off Btm: 2012.02.03 @ 10:59:00

TEST COMMENT: 1st Open 30 minutes Strong blow blew bottom of bucket 1 minute
1st Shut in 45 minutes Yes blow back
2nd Open 30 minutes Strong blow blew bottom of bucket 3 minutes
2nd Shut in 60 minutes Yes blow back



PRESSURE SUMMARY

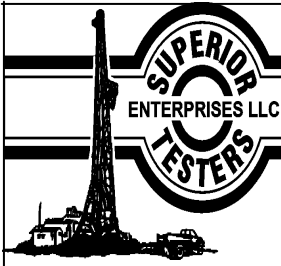
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2187.34	107.28	Initial Hydro-static
1	172.00	106.85	Open To Flow (1)
31	677.13	107.07	Shut-In(1)
76	1207.73	108.32	End Shut-In(1)
77	691.53	108.22	Open To Flow (2)
108	899.98	109.17	Shut-In(2)
167	1206.33	111.16	End Shut-In(2)
168	1991.62	111.34	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
540.00	Oil cut muddy w ater	2.66
0.00	oil 30% mud 30% w ater40%	0.00
540.00	Oil cut w ater	7.26
0.00	20%oil 80%w ater	0.00
720.00	Muddy w ater	10.10
0.00	30%mud 70%w ater	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17256

DST#: 6

ATTN: Terry Mcleod

Test Start: 2012.02.03 @ 06:05:00

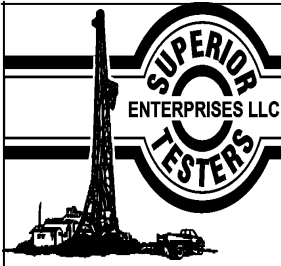
Tool Information

Drill Pipe:	Length: 3594.00 ft	Diameter: 3.80 inches	Volume: 50.41 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: 574.25 ft	Diameter: 2.25 inches	Volume: 2.82 bbl	Weight to Pull Loose: 120000.0 lb
			<u>Total Volume: 53.23 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.25 ft			String Weight: Initial 82000.00 lb
Depth to Top Packer:	4165.00 ft			Final 92000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	80.89 ft			
Tool Length:	108.89 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			4142.00	
Hydraulic Tool	5.00			4147.00	
Jars	6.00			4153.00	
Safety Joint	2.00			4155.00	
Packer	5.00			4160.00	28.00 Bottom Of Top Packer
Packer	5.00			4165.00	
Perforations	5.00			4170.00	
Change Over Sub	0.75			4170.75	
Drill Pipe	63.39			4234.14	
Change Over Sub	0.75			4234.89	
Perforations	6.00			4240.89	
Recorder	1.00	6999	Inside	4241.89	
Recorder	1.00	6663	Outside	4242.89	
Bull Plug	3.00			4245.89	80.89 Bottom Packers & Anchor

Total Tool Length: 108.89



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17256

DST#: 6

ATTN: Terry Mcleod

Test Start: 2012.02.03 @ 06:05:00

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: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.80 in³

Gas Cushion Type:

Resistivity: 0.20 ohm.m

Gas Cushion Pressure:

psia

Salinity: 3500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
540.00	Oil cut muddy w ater	2.656
0.00	oil 30% mud 30% w ater40%	0.000
540.00	Oil cut w ater	7.263
0.00	20%oil 80%w ater	0.000
720.00	Muddy w ater	10.100
0.00	30%mud 70%w ater	0.000

Total Length: 1800.00 ft Total Volume: 20.019 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

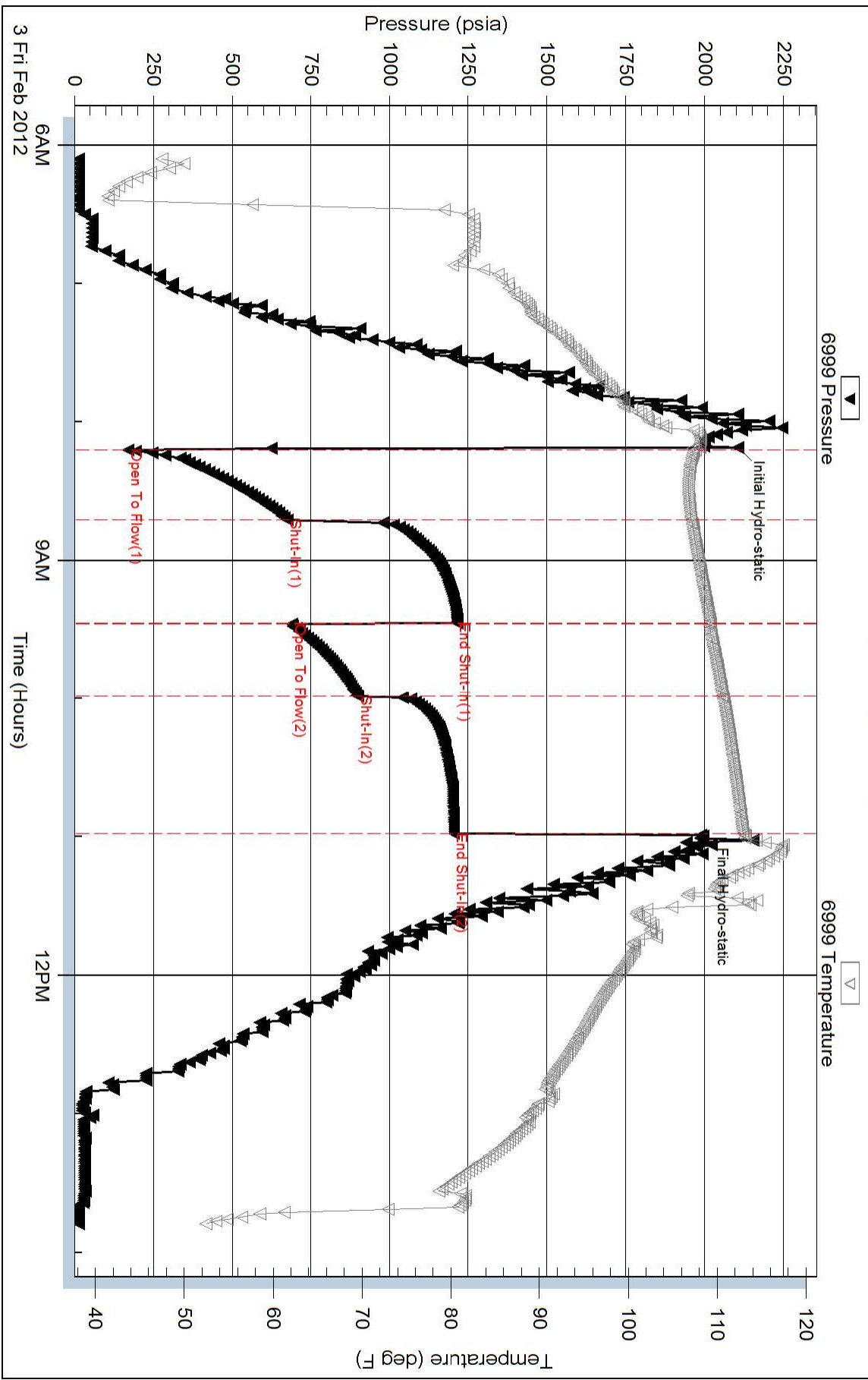
Serial #:

Laboratory Name:

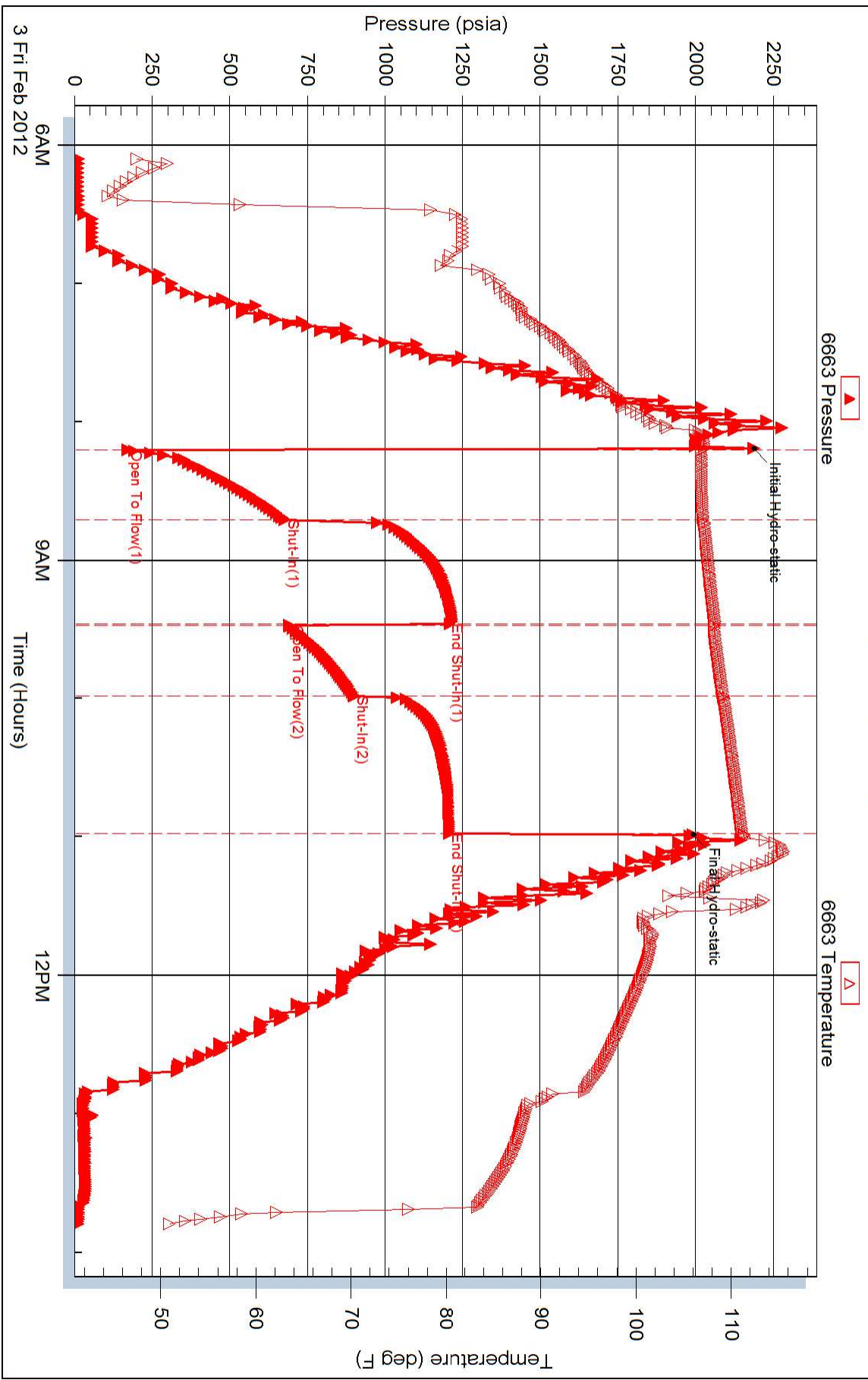
Laboratory Location:

Recovery Comments:

Pressure vs. Time



Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Rictchie Explorations Inc.**

8100 East 22nd Street North
700 Wichita Kansas 67278

ATTN: Terry Mcleod

Joseph #2

30-13s-31w-Gove

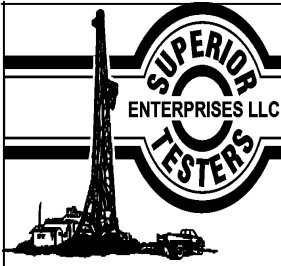
Start Date: 2012.02.04 @ 08:13:00

End Date: 2012.02.04 @ 15:15:30

Job Ticket #: 17257 DST #: 7

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

Printed: 2012.02.04 @ 15:47:30



DRILL STEM TEST REPORT

Ritchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17257

DST#: 7

ATTN: Terry Mcleod

Test Start: 2012.02.04 @ 08:13:00

GENERAL INFORMATION:

Formation: **Myric&Fort Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:18:00

Time Test Ended: 15:15:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Ellis

Unit No: 3315-Scott City-60 m

Interval: 4383.00 ft (KB) To 4440.00 ft (KB) (TVD)

Reference Elevations: 2905.00 ft (KB)

Total Depth: 4440.00 ft (KB) (TVD)

2895.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6999 Inside

Press @ RunDepth: 531.60 psia @ 4436.21 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.02.04

End Date:

2012.02.04

Last Calib.:

2012.02.04

Start Time: 08:13:00

End Time:

15:15:30

Time On Btm:

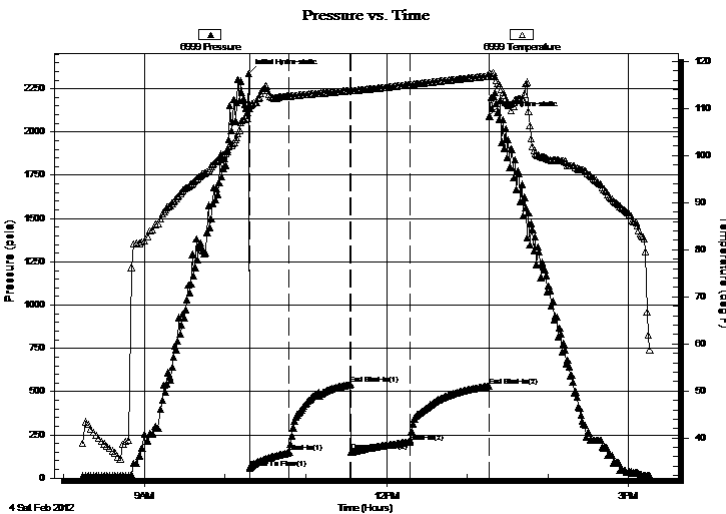
2012.02.04 @ 10:17:30

Time Off Btm:

2012.02.04 @ 13:16:30

TEST COMMENT: 1st Open 30 minutes Fair building blow blew bottom of bucket in 24 minutes
1st Shut in 45 minutes No blow back
2nd Open 45 minutes Fair building blow built to bottom bucket 23 minutes.2
2nd Shut in 60 minutes No blow back

PRESSURE SUMMARY



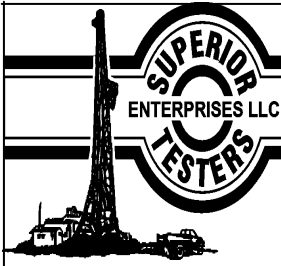
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2339.82	110.04	Initial Hydro-static
1	59.44	109.91	Open To Flow (1)
30	150.89	112.63	Shut-In(1)
76	541.83	113.82	End Shut-In(1)
76	152.40	113.75	Open To Flow (2)
120	209.42	115.05	Shut-In(2)
179	531.60	116.89	End Shut-In(2)
179	2092.79	117.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Clean oil 100%	0.05
90.00	Mud cut oil 10%Oil 90%Mud	0.44
180.00	Oil and gas cut mud 10%Gas 45%Oil 45%	0.891
90.00	Oil and gas cut mud 20%Gas 40%Oil 40%	0.441
0.00	Gravity of oil 32 corrected	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17257

DST#: 7

ATTN: Terry Mcleod

Test Start: 2012.02.04 @ 08:13:00

Tool Information

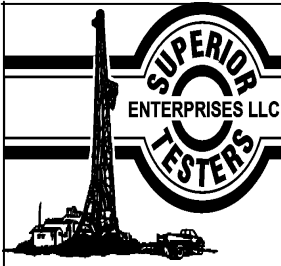
Drill Pipe:	Length: 3793.00 ft	Diameter: 3.80 inches	Volume: 53.21 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 574.25 ft	Diameter: 2.25 inches	Volume: 2.82 bbl	Weight to Pull Loose: 83000.00 lb
			<u>Total Volume: 56.03 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.25 ft			String Weight: Initial 81000.00 lb
Depth to Top Packer:	4383.00 ft			Final 82000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	57.21 ft			
Tool Length:	79.21 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut-In Tool	5.00			4366.00	
Hydraulic Tool	5.00			4371.00	
Jars	0.00			4371.00	
Safety Joint	2.00			4373.00	
Packer	5.00			4378.00	22.00 Bottom Of Top Packer
Packer	5.00			4383.00	
Perforations	3.00			4386.00	
Change Over Sub	0.75			4386.75	
Drill Pipe	31.71			4418.46	
Change Over Sub	0.75			4419.21	
Perforations	16.00			4435.21	
Recorder	1.00	6999	Inside	4436.21	
Recorder	1.00	6663	Outside	4437.21	
Bull Plug	3.00			4440.21	57.21 Bottom Packers & Anchor

Total Tool Length: 79.21



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17257

DST#: 7

ATTN: Terry Mcleod

Test Start: 2012.02.04 @ 08:13:00

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: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.00 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 bbbl
10.00	Clean oil 100%	0.049
90.00	Mud cut oil 10%Oil 90%Mud	0.443
180.00	Oil and gas cut mud 10%Gas 45%Oil 45%Mur	0.885
90.00	Oil and gas cut mud 20%Gas 40%Oil 40%Mur	0.443
0.00	Gravity of oil 32 corrected	0.000

Total Length: 370.00 ft

Total Volume: 1.820 bbl

Num Fluid Samples: 0

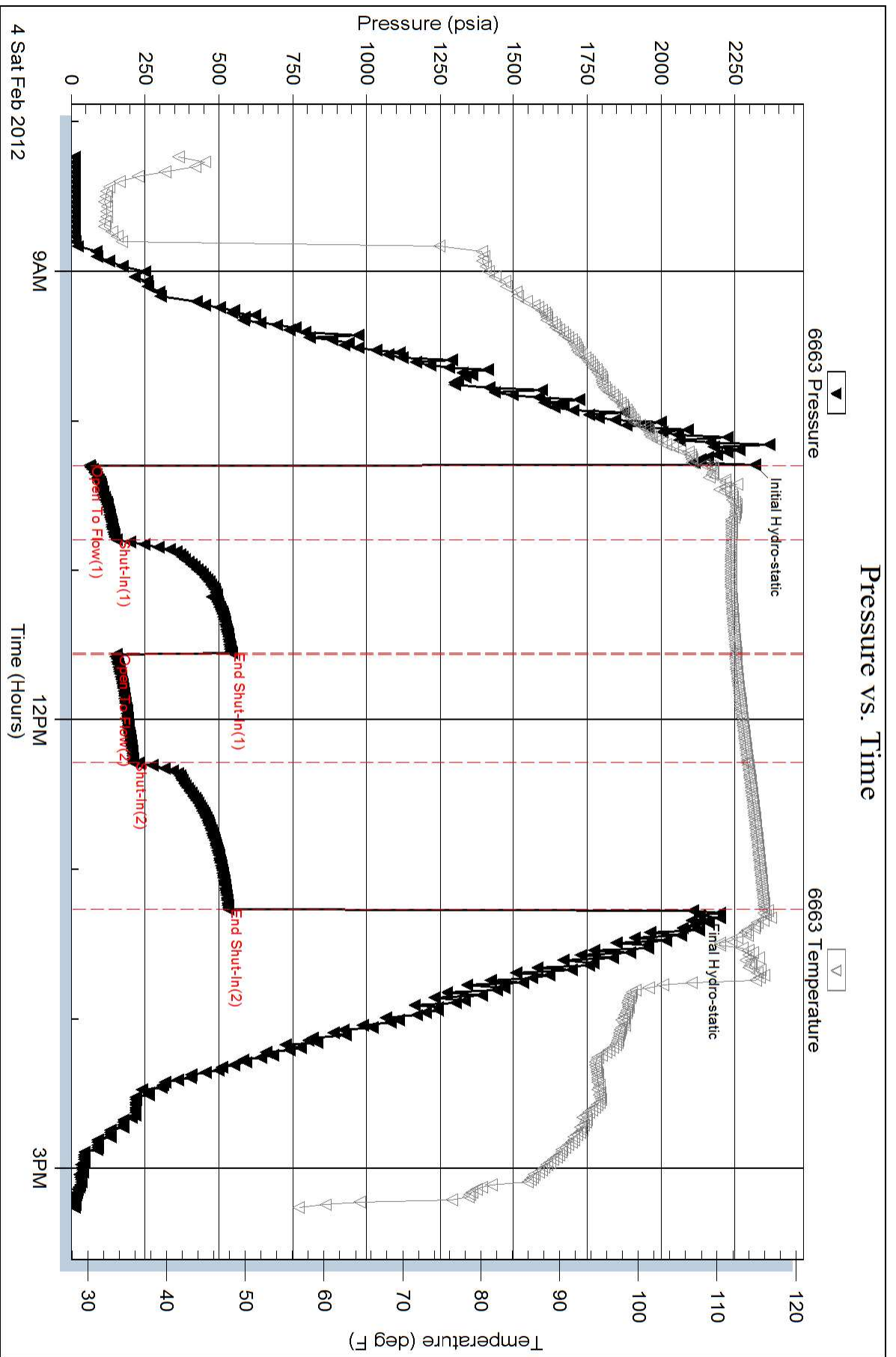
Num Gas Bombs: 0

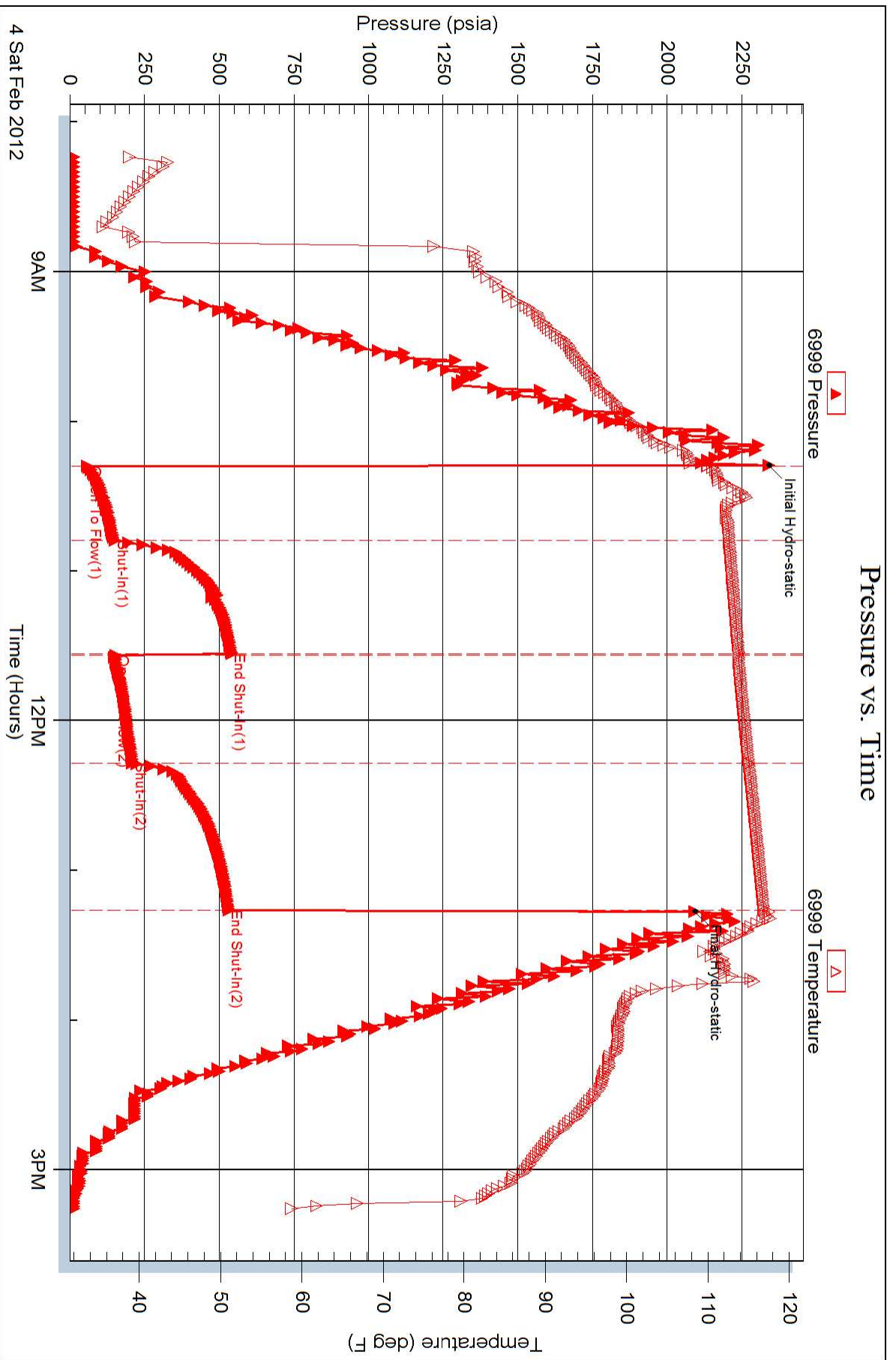
Serial #:

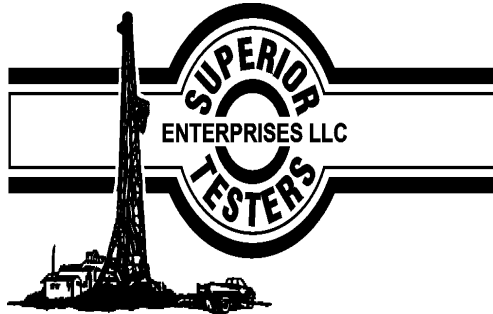
Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Rictchie Explorations Inc.**

8100 East 22nd Street North
700 Wichita Kansas 67278

ATTN: Terry Mcleod

Joseph #2

30-13s-31w-Gove

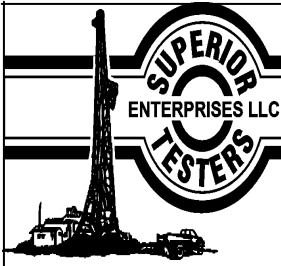
Start Date: 2012.02.04 @ 11:05:00

End Date: 2012.02.04 @ 17:53:00

Job Ticket #: 17258 DST #: 8

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

Printed: 2012.02.05 @ 06:21:48



DRILL STEM TEST REPORT

Ritchie Explorations Inc.
 8100 East 22nd Street North
 700 Wichita Kansas 67278
 ATTN: Terry Mcleod

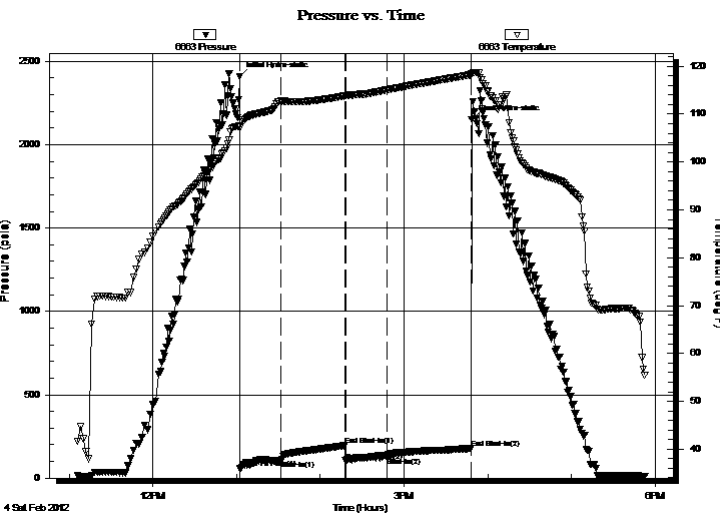
30-13s-31w-Gove
Joseph #2
 Job Ticket: 17258 **DST#: 8**
 Test Start: 2012.02.04 @ 11:05:00

GENERAL INFORMATION:

Formation: **Johnson**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 13:02:30 Tester: Dustin Ellis
 Time Test Ended: 17:53:00 Unit No: 3315-Scott City-60 m
 Interval: **4464.00 ft (KB) To 4495.00 ft (KB) (TVD)** Reference Elevations: 2905.00 ft (KB)
 Total Depth: 4495.00 ft (KB) (TVD) 2895.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 10.00 ft

Serial #: 6663 Outside
 Press @ RunDepth: 125.17 psia @ 4492.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.02.04 End Date: 2012.02.04 Last Calib.: 2012.02.05
 Start Time: 11:05:00 End Time: 17:53:00 Time On Btm: 2012.02.04 @ 13:02:00
 Time Off Btm: 2012.02.04 @ 15:48:30

TEST COMMENT: 1st Open 30 minutes Strong blow blew bottom of bucket 4 minutes
 1st Shut in 45 minutes No blow back
 2nd Open 30 minutes Strong blow blew bottom of bucket instantly.
 2nd Shut in 60 minutes No blow back



PRESSURE SUMMARY

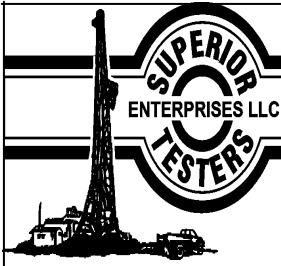
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2408.18	107.57	Initial Hydro-static
1	56.17	107.23	Open To Flow (1)
30	106.75	112.69	Shut-In(1)
76	195.15	113.78	End Shut-In(1)
76	103.87	113.79	Open To Flow (2)
106	125.17	115.06	Shut-In(2)
166	177.46	118.20	End Shut-In(2)
167	2150.15	118.48	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
100.00	Oil & gas cut mud 80% mud 20% gas	0.49
90.00	Oil spotted mud 5% oil 95% mud	0.44
90.00	Oil spotted mud 2% oil 98% mud	0.44

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Rictchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17258

DST#: 8

ATTN: Terry Mcleod

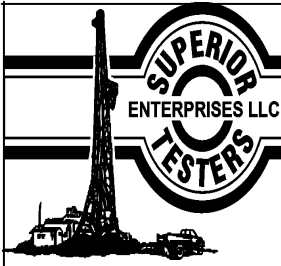
Test Start: 2012.02.04 @ 11:05:00

Tool Information

Drill Pipe:	Length: 3889.00 ft	Diameter: 3.80 inches	Volume: 54.55 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: 574.25 ft	Diameter: 2.25 inches	Volume: 2.82 bbl	Weight to Pull Loose:	95000.00 lb
			<u>Total Volume: 57.37 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	21.25 ft			String Weight: Initial	80000.00 lb
Depth to Top Packer:	4464.00 ft			Final	82000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	31.00 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
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Shut-In Tool	5.00			4447.00	
Hydraulic Tool	5.00			4452.00	
Jars	0.00			4452.00	
Safety Joint	2.00			4454.00	
Packer	5.00			4459.00	22.00 Bottom Of Top Packer
Packer	5.00			4464.00	
Perforations	26.00			4490.00	
Recorder	1.00	6999	Inside	4491.00	
Recorder	1.00	6663	Outside	4492.00	
Bull Plug	3.00			4495.00	31.00 Bottom Packers & Anchor
Total Tool Length:	53.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Explorations Inc.

30-13s-31w-Gove

8100 East 22nd Street North
700 Wichita Kansas 67278

Joseph #2

Job Ticket: 17258

DST#: 8

ATTN: Terry Mcleod

Test Start: 2012.02.04 @ 11:05:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 18.00 sec/qt

Water Loss: 8.00 in³

Resistivity: ohm.m

Salinity: 3800.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psia

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
100.00	Oil & gas cut mud 80% mud 20% gas	0.492
90.00	Oil spotted mud 5% oil 95% mud	0.443
90.00	Oil spotted mud 2% oil 98% mud	0.443

Total Length: 280.00 ft Total Volume: 1.378 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

