

DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Incorporated**

PO Box 713188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

Phillips 19D #3

19/13S/31W/Gove

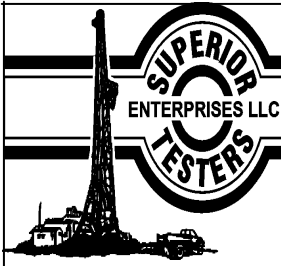
Start Date: 2012.02.25 @ 15:09:00

End Date: 2012.02.25 @ 20:24:00

Job Ticket #: 17162 DST #: 1

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

Printed: 2012.02.25 @ 20:35:57



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17162

DST#: 1

Test Start: 2012.02.25 @ 15:09:00

GENERAL INFORMATION:

Formation: **Lansing/Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:56:30

Time Test Ended: 20:24:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/70

Interval: 3961.00 ft (KB) To 3985.00 ft (KB) (TVD)

Reference Elevations: 2911.00 ft (KB)

Total Depth: 3985.00 ft (KB) (TVD)

2901.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6748

Inside

Press @ Run Depth: 54.72 psia @ 3981.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.02.25 End Date: 2012.02.25

Last Calib.: 2012.02.25

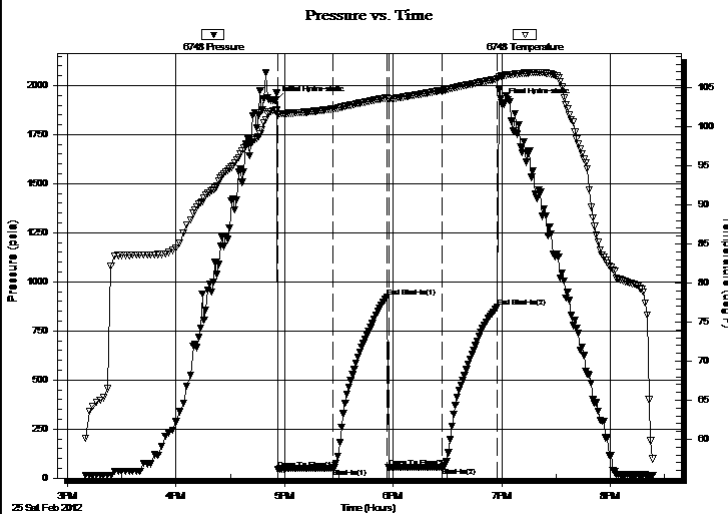
Start Time: 15:09:00 End Time: 20:24:00

Time On Btm: 2012.02.25 @ 16:55:00

Time Off Btm: 2012.02.25 @ 19:00:00

TEST COMMENT: 1ST Open 30 Minutes/Weak blow /Blow built to 1/4 inch
1ST Shut In 30 Mintues/No blow back
2ND Open 30 Minutes/No blow
2ND Shut In 30 Minutes/No blow back

PRESSURE SUMMARY



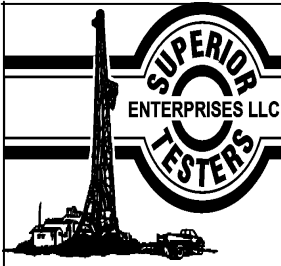
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1924.86	102.06	Initial Hydro-static
2	45.84	101.49	Open To Flow (1)
32	51.11	102.26	Shut-In(1)
62	921.71	103.70	End Shut-In(1)
63	53.04	103.53	Open To Flow (2)
92	54.72	104.63	Shut-In(2)
123	870.84	106.07	End Shut-In(2)
125	1913.49	106.47	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud w with show of oil in tool/ Mud 100%	0.02

Gas Rates

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



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Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17162

DST#: 1

Test Start: 2012.02.25 @ 15:09:00

GENERAL INFORMATION:

Formation: **Lansing/Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:56:30

Time Test Ended: 20:24:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/70

Interval: 3961.00 ft (KB) To 3985.00 ft (KB) (TVD)

Reference Elevations: 2911.00 ft (KB)

Total Depth: 3985.00 ft (KB) (TVD)

2901.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6749 Outside

Press @ RunDepth: 864.78 psia @ 3982.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.02.25 End Date: 2012.02.25

Last Calib.: 2012.02.25

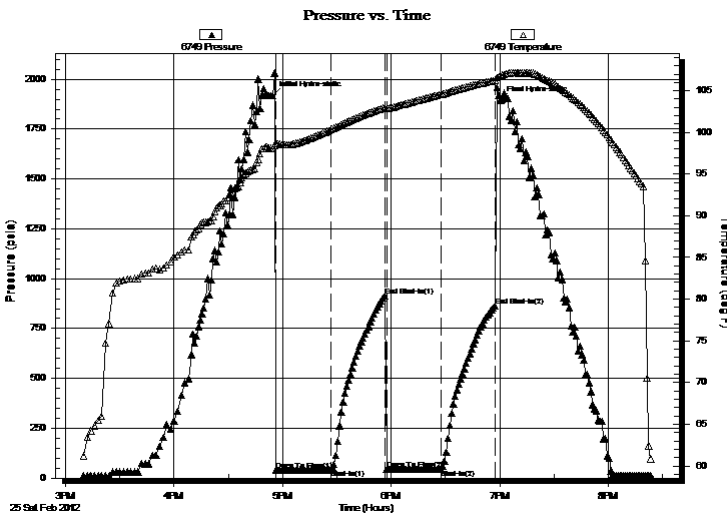
Start Time: 15:09:00 End Time: 20:24:00

Time On Btm: 2012.02.25 @ 16:54:30

Time Off Btm: 2012.02.25 @ 19:00:30

TEST COMMENT: 1ST Open 30 Minutes/Weak blow /Blow built to 1/4 inch
1ST Shut In 30 Mintues/No blow back
2ND Open 30 Minutes/No blow
2ND Shut In 30 Minutes/No blow back

PRESSURE SUMMARY



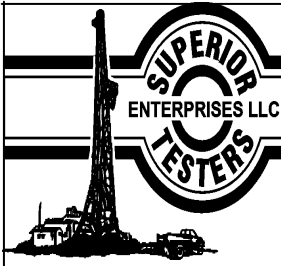
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1918.36	98.07	Initial Hydro-static
2	38.69	98.68	Open To Flow (1)
33	41.65	100.32	Shut-In(1)
62	914.34	102.99	End Shut-In(1)
63	42.85	102.85	Open To Flow (2)
94	45.54	104.55	Shut-In(2)
123	864.78	106.26	End Shut-In(2)
126	1892.15	106.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud w with show of oil in tool/ Mud 100%	0.02

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
 8100 East 22ND Street North
 #700
 ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17162

DST#: 1

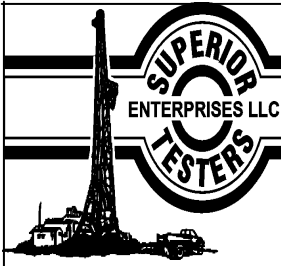
Test Start: 2012.02.25 @ 15:09:00

Tool Information

Drill Pipe:	Length: 3414.00 ft	Diameter: 3.88 inches	Volume: 49.93 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: 90000.00 lb
			<u>Total Volume: 52.59 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 82000.00 lb
Depth to Top Packer:	3961.00 ft			Final 82000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 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			3939.00	
Hydraulic Tool	5.00			3944.00	
Jars	5.00			3949.00	
Safety Joint	2.00			3951.00	
Packer	5.00			3956.00	27.00 Bottom Of Top Packer
Packer	5.00			3961.00	
Anchor	19.00			3980.00	
Recorder	1.00	6748	Inside	3981.00	
Recorder	1.00	6749	Outside	3982.00	
Bullnose	3.00			3985.00	24.00 Bottom Packers & Anchor
Total Tool Length:	51.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700

Phillips 19D #3

Job Ticket: 17162

DST#: 1

ATTN: Ted Jochems

Test Start: 2012.02.25 @ 15:09:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 66.00 sec/qt
Water Loss: 6.40 in³
Resistivity: ohm.m
Salinity: 2500.00 ppm
Filter Cake: 1.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psia

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud with show of oil in tool/ Mud 100%	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

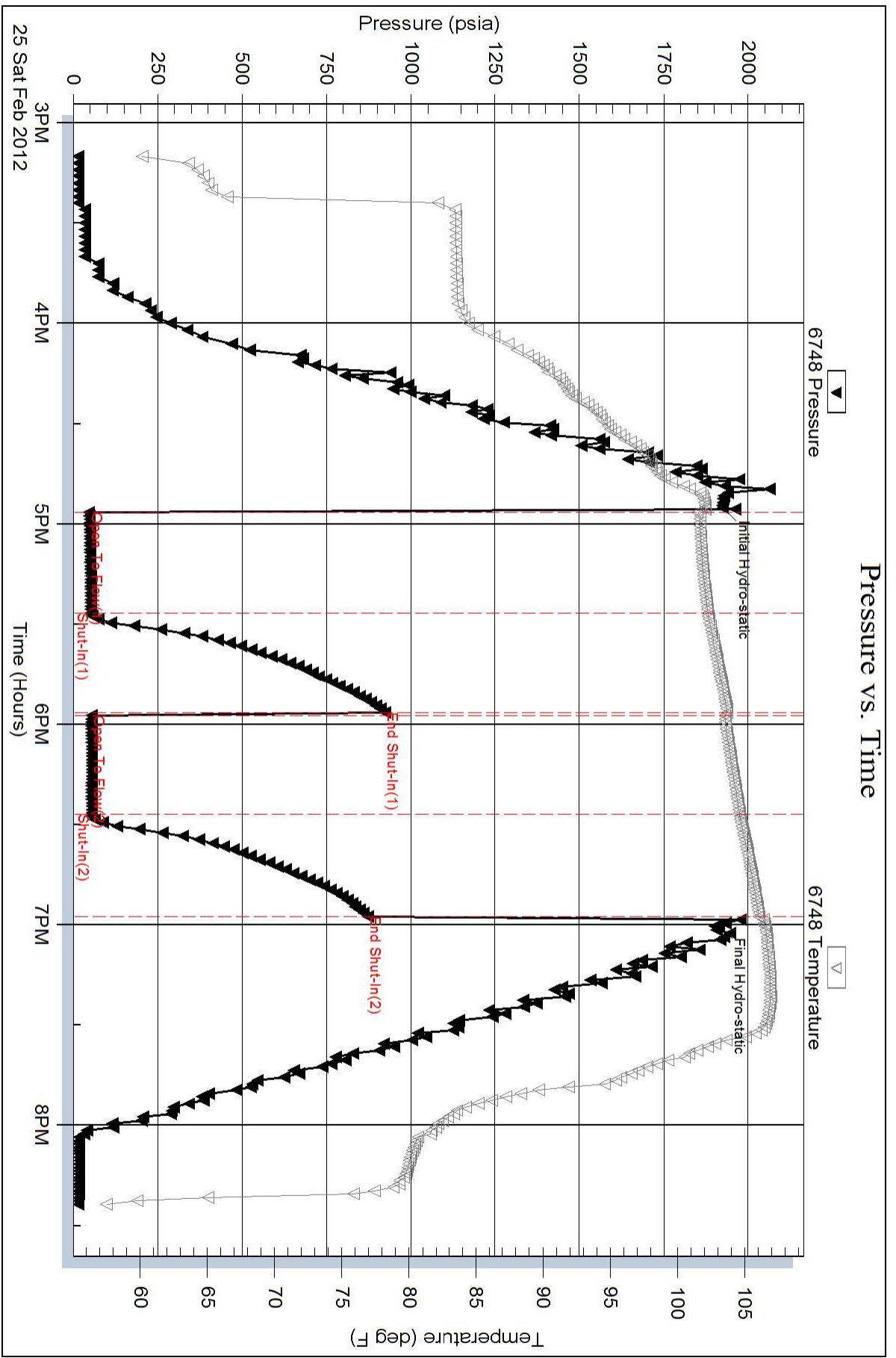
Serial #: 6748

Inside

Ritchie Exploration Incorporated

Phillips 19D #3

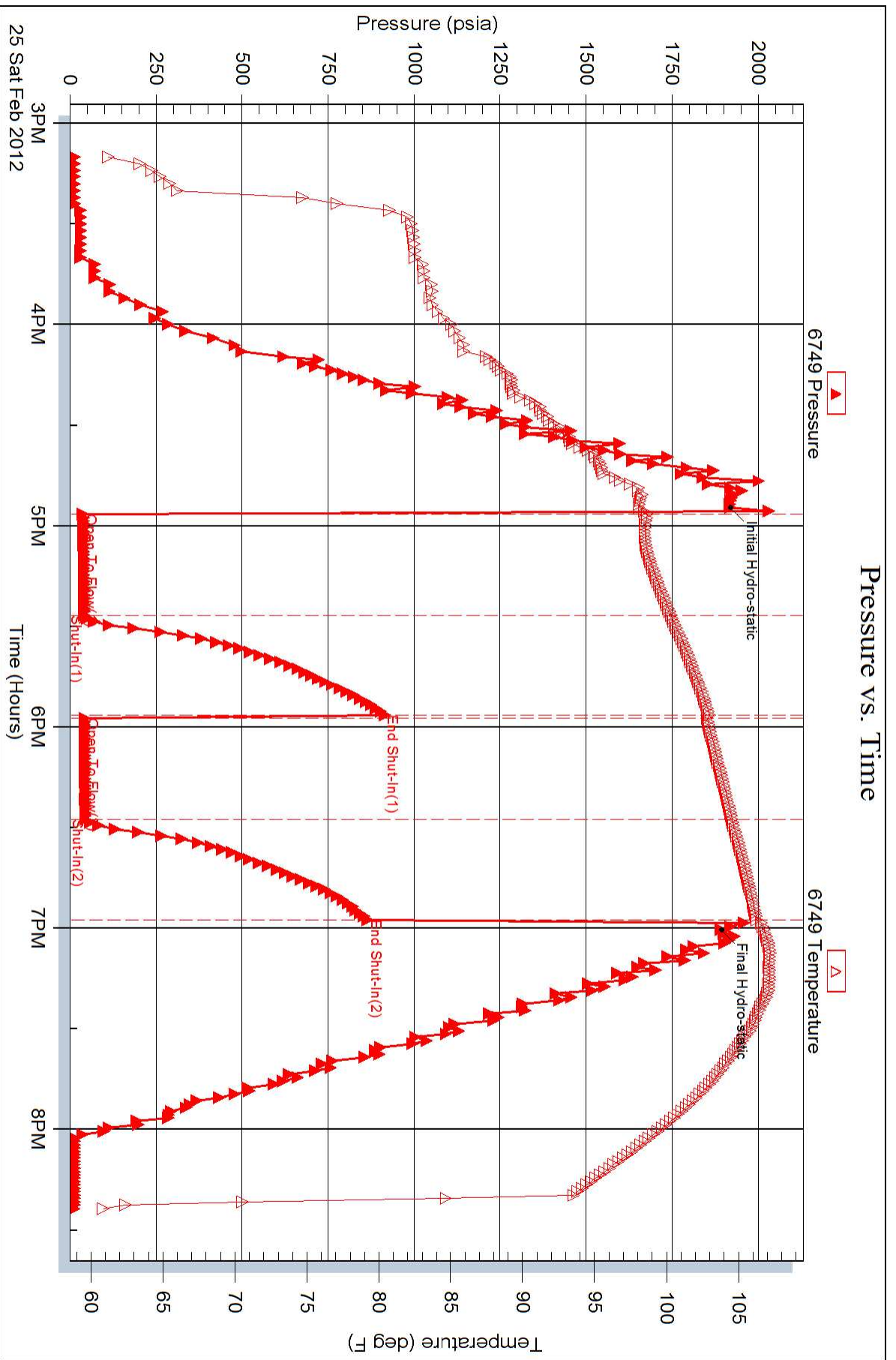
DST Test Number: 1

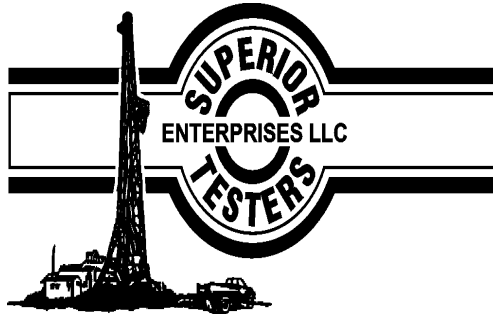


Superior Testers Enterprises LLC

Ref. No: 17162

Printed: 2012.02.25 @ 20:35:58





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Incorporated**

PO Box 713188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

Phillips 19D #3

19/13S/31W/Gove

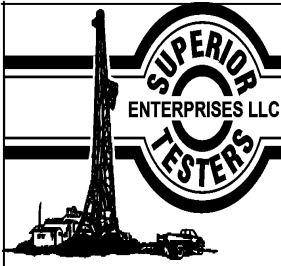
Start Date: 2012.02.26 @ 16:28:00

End Date: 2012.02.26 @ 23:09:30

Job Ticket #: 17163 DST #: 2

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

Printed: 2012.02.26 @ 23:31:50



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17163

DST#: 2

Test Start: 2012.02.26 @ 16:28:00

GENERAL INFORMATION:

Formation: **Lansing/Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:22:30

Time Test Ended: 23:09:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/70

Interval: 4086.00 ft (KB) To 4118.00 ft (KB) (TVD)

Reference Elevations: 2911.00 ft (KB)

Total Depth: 4118.00 ft (KB) (TVD)

2901.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6749 Inside

Press @ RunDepth: 221.16 psia @ 4114.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.02.26

End Date: 2012.02.26

Last Calib.: 2012.02.26

Start Time: 16:28:00

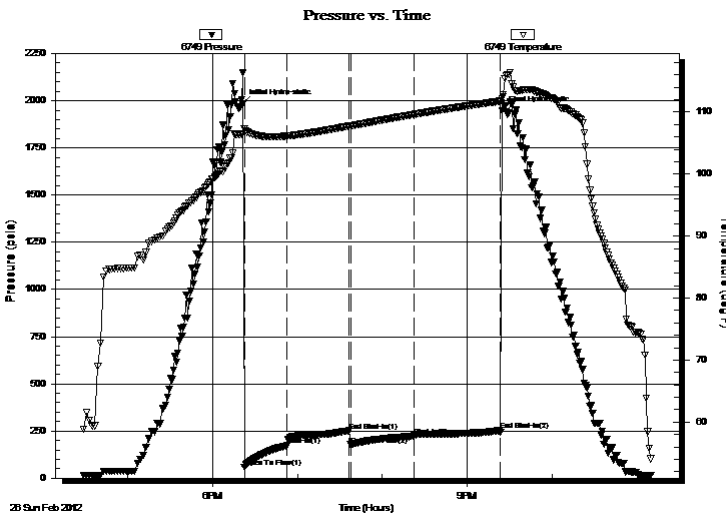
End Time: 23:09:30

Time On Btm: 2012.02.26 @ 18:21:00

Time Off Btm: 2012.02.26 @ 21:24:30

TEST COMMENT: 1ST Open 30 Minutes/Good blow/Blow built to bottom of bucket in 25 minutes
1ST Shut In 45 Minutes/Blow back built to 1/2 inch
2ND Open 45 Minutes/Fair blow/Blow built to 9 inches
2ND Shut In 60 Minutes/Weak surface blow back

PRESSURE SUMMARY



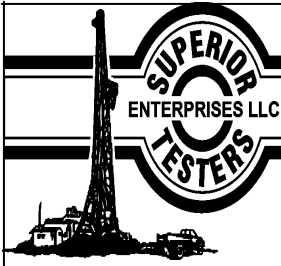
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1982.09	106.44	Initial Hydro-static
2	56.74	107.29	Open To Flow (1)
32	172.02	106.13	Shut-In(1)
76	250.81	107.74	End Shut-In(1)
77	177.02	107.76	Open To Flow (2)
121	221.16	109.61	Shut-In(2)
182	251.94	111.74	End Shut-In(2)
184	1948.97	112.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Clean gassy oil	0.02
0.00	Gas 20% Oil 80%	0.00
360.00	Slightly oil cut w atery mud	1.77
0.00	Oil 5% Water 40% Mud 55%	0.00
0.00	Recovery chlorides 41000 ppm	0.00

Gas Rates

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



DRILL STEM TEST REPORT

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19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17163

DST#: 2

Test Start: 2012.02.26 @ 16:28:00

GENERAL INFORMATION:

Formation: **Lansing/Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:22:30

Time Test Ended: 23:09:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/70

Interval: 4086.00 ft (KB) To 4118.00 ft (KB) (TVD)

Reference Elevations: 2911.00 ft (KB)

Total Depth: 4118.00 ft (KB) (TVD)

2901.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6748 Outside

Press @ RunDepth: 255.88 psia @ 4115.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.02.26

End Date: 2012.02.26

Last Calib.: 2012.02.26

Start Time: 16:28:00

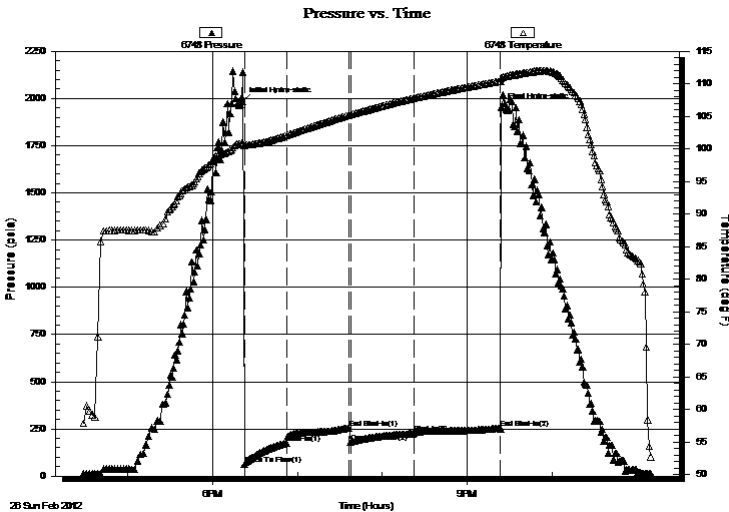
End Time: 23:09:30

Time On Btm: 2012.02.26 @ 18:21:00

Time Off Btm: 2012.02.26 @ 21:24:00

TEST COMMENT: 1ST Open 30 Minutes/Good blow/Blow built to bottom of bucket in 25 minutes
1ST Shut In 45 Minutes/Blow back built to 1/2 inch
2ND Open 45 Minutes/Fair blow/Blow built to 9 inches
2ND Shut In 60 Minutes/Weak surface blow back

PRESSURE SUMMARY



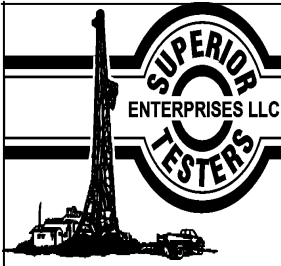
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1984.16	100.91	Initial Hydro-static
2	61.69	100.53	Open To Flow (1)
32	175.86	102.11	Shut-In(1)
76	254.57	105.23	End Shut-In(1)
77	181.19	105.28	Open To Flow (2)
121	225.20	107.79	Shut-In(2)
182	255.88	110.43	End Shut-In(2)
183	1953.79	110.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Clean gassy oil	0.02
0.00	Gas 20% Oil 80%	0.00
360.00	Slightly oil cut w atery mud	1.77
0.00	Oil 5% Water 40% Mud 55%	0.00
0.00	Recovery chlorides 41000 ppm	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
 8100 East 22ND Street North
 #700
 ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17163

DST#: 2

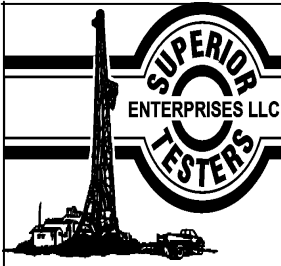
Test Start: 2012.02.26 @ 16:28:00

Tool Information

Drill Pipe:	Length: 3539.00 ft	Diameter: 3.88 inches	Volume: 51.76 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: 11000.00 lb
			<u>Total Volume: 54.42 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 82000.00 lb
Depth to Top Packer:	4086.00 ft			Final 83000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 ft			
Tool Length:	59.00 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			4064.00	
Hydraulic Tool	5.00			4069.00	
Jars	5.00			4074.00	
Safety Joint	2.00			4076.00	
Packer	5.00			4081.00	27.00 Bottom Of Top Packer
Packer	5.00			4086.00	
Anchor	27.00			4113.00	
Recorder	1.00	6749	Inside	4114.00	
Recorder	1.00	6748	Outside	4115.00	
Bullnose	3.00			4118.00	32.00 Bottom Packers & Anchor
Total Tool Length:	59.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700

Phillips 19D #3

Job Ticket: 17163

DST#: 2

ATTN: Ted Jochems

Test Start: 2012.02.26 @ 16:28:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 55.00 sec/qt
Water Loss: 11.19 in³
Resistivity: ohm.m
Salinity: 3000.00 ppm
Filter Cake: 2.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psia

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

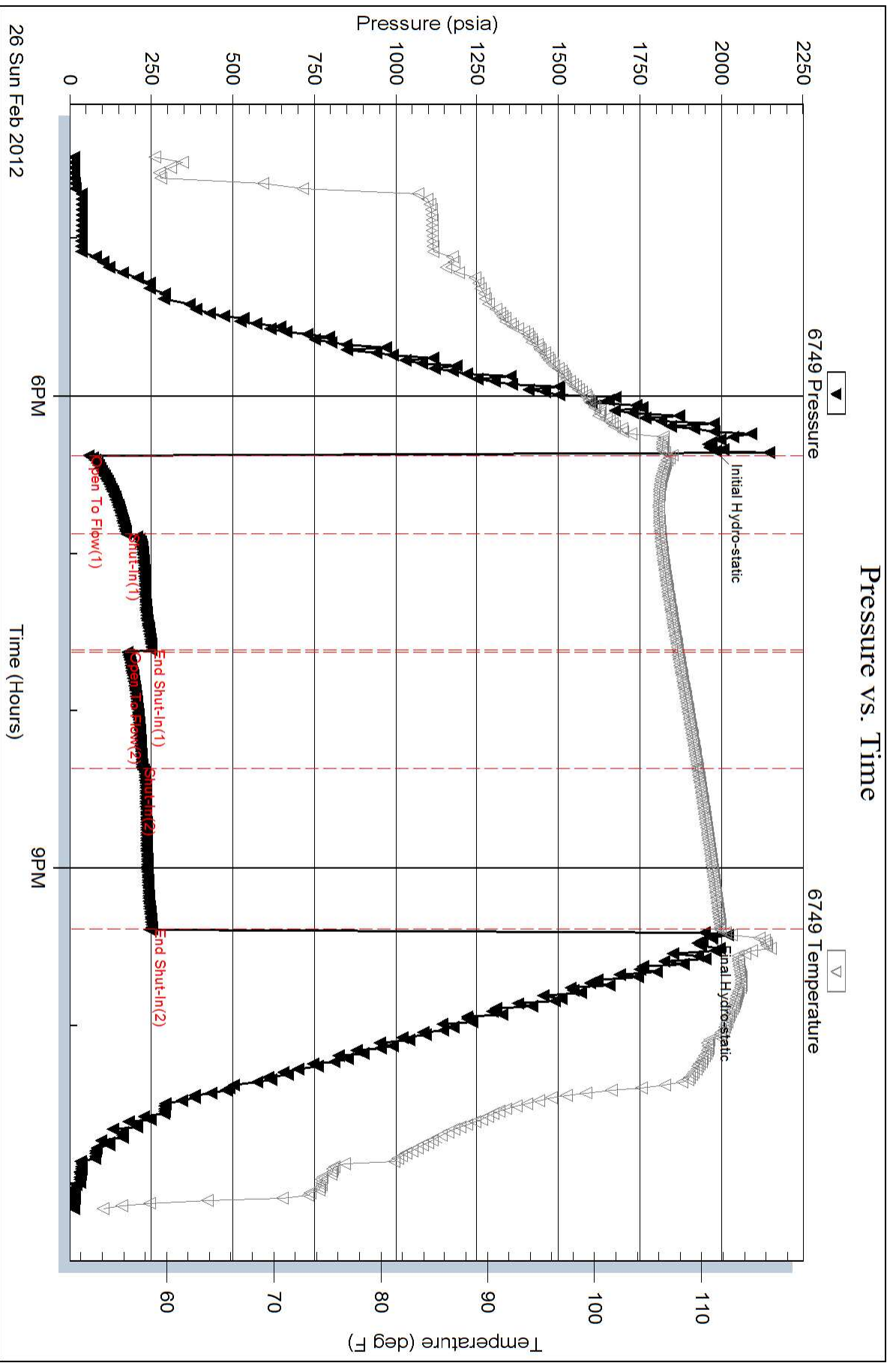
Length ft	Description	Volume bbl
5.00	Clean gassy oil	0.025
0.00	Gas 20% Oil 80%	0.000
360.00	Slightly oil cut watery mud	1.770
0.00	Oil 5% Water 40% Mud 55%	0.000
0.00	Recovery chlorides 41000 ppm	0.000

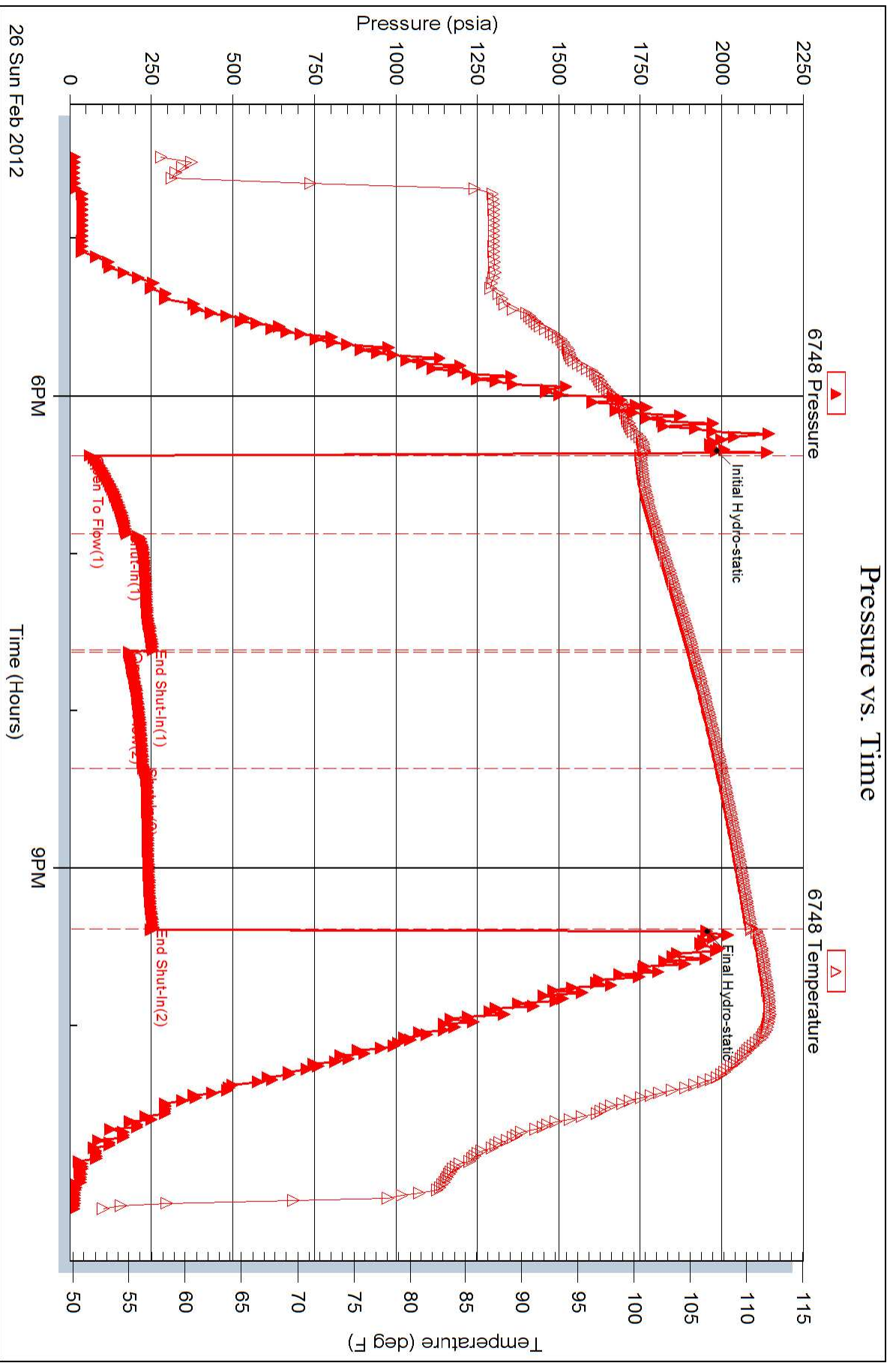
Total Length: 365.00 ft Total Volume: 1.795 bbl

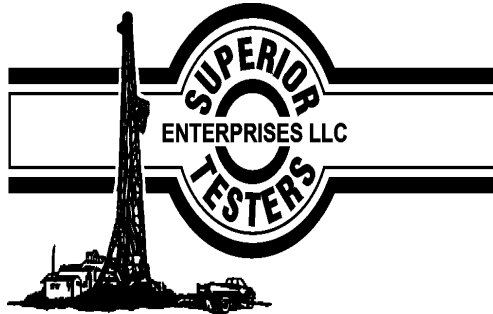
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

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#700

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Phillips 19D #3

19/13S/31W/Gove

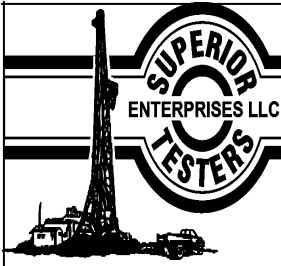
Start Date: 2012.02.27 @ 07:57:00

End Date: 2012.02.27 @ 15:27:00

Job Ticket #: 17164 DST #: 3

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

Printed: 2012.02.27 @ 15:57:00



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17164

DST#: 3

Test Start: 2012.02.27 @ 07:57:00

GENERAL INFORMATION:

Formation: **Lansing/Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:12:30

Time Test Ended: 15:27:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/70

Interval: 4120.00 ft (KB) To 4144.00 ft (KB) (TVD)

Reference Elevations: 2911.00 ft (KB)

Total Depth: 4144.00 ft (KB) (TVD)

2901.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6749

Inside

Press @ Run Depth: 604.09 psia @ 4140.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.02.27

End Date: 2012.02.27

Last Calib.: 2012.02.27

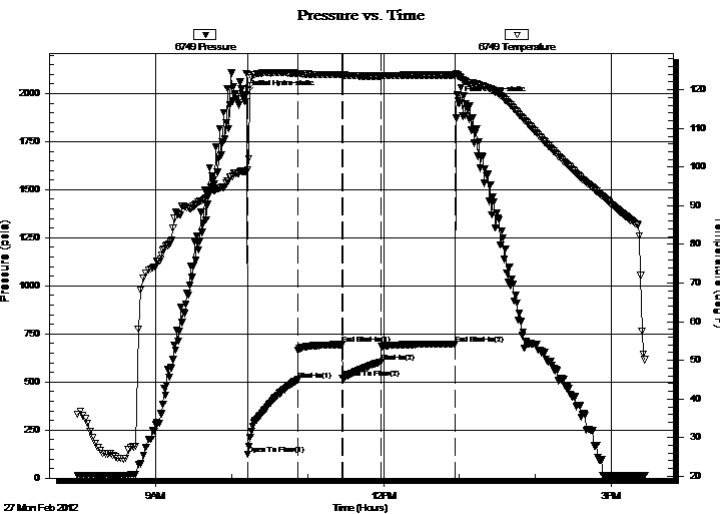
Start Time: 07:57:00

End Time: 15:27:00

Time On Btm: 2012.02.27 @ 10:11:00

Time Off Btm: 2012.02.27 @ 12:59:00

TEST COMMENT: 1ST Open 30 Minutes/Strong blow /Blow to bottom of bucket in 2 minutes
1ST Shut In 45 Minutes/Blow back built to 10 inches
2ND Open 30 Minutes/Strong blow /Blow built to bottom of bucket in 5 1/2 minutes
2ND Shut In 60 Minutes/Blow back built to bottom of bucket in 27 minutes



PRESSURE SUMMARY

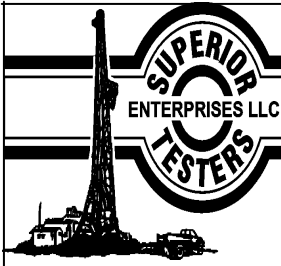
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1992.22	98.86	Initial Hydro-static
2	125.58	99.27	Open To Flow (1)
41	511.44	124.21	Shut-In(1)
76	694.67	123.86	End Shut-In(1)
77	518.57	123.80	Open To Flow (2)
107	604.09	123.59	Shut-In(2)
166	697.56	123.77	End Shut-In(2)
168	1962.27	123.61	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
810.00	Clean Gassy Oil	6.60
0.00	Gas 20% Oil 80%	0.00
540.00	Oil cut Muddy Water	7.90
0.00	Oil 15% Mud 30% Water 55%	0.00
270.00	Muddy Water	3.95
0.00	Mud 15% Water 85%	0.00

Gas Rates

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



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17164

DST#: 3

Test Start: 2012.02.27 @ 07:57:00

GENERAL INFORMATION:

Formation: **Lansing/Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:12:30

Time Test Ended: 15:27:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/70

Interval: 4120.00 ft (KB) To 4144.00 ft (KB) (TVD)

Reference Elevations: 2911.00 ft (KB)

Total Depth: 4144.00 ft (KB) (TVD)

2901.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6748 Outside

Press @ RunDepth: 706.67 psia @ 4141.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.02.27

End Date: 2012.02.27

Last Calib.: 2012.02.27

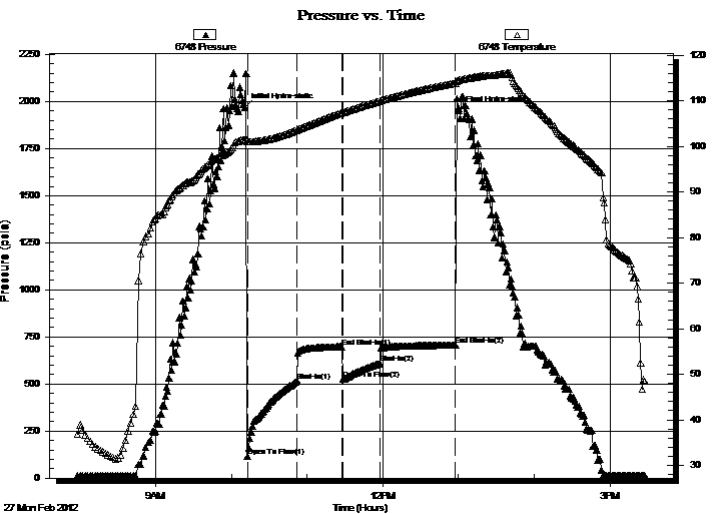
Start Time: 07:57:00

End Time: 15:27:30

Time On Btm: 2012.02.27 @ 10:10:30

Time Off Btm: 2012.02.27 @ 13:00:00

TEST COMMENT: 1ST Open 30 Minutes/Strong blow /Blow to bottom of bucket in 2 minutes
1ST Shut In 45 Minutes/Blow back built to 10 inches
2ND Open 30 Minutes/Strong blow /Blow built to bottom of bucket in 5 1/2 minutes
2ND Shut In 60 Minutes/Blow back built to bottom of bucket in 27 minutes



PRESSURE SUMMARY

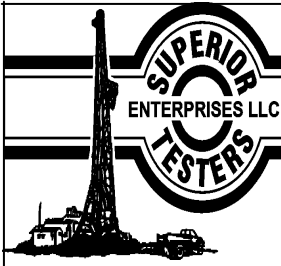
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1965.93	101.43	Initial Hydro-static
2	116.32	100.95	Open To Flow (1)
42	515.95	103.55	Shut-In(1)
78	695.15	107.39	End Shut-In(1)
78	524.95	107.43	Open To Flow (2)
108	609.03	109.92	Shut-In(2)
167	706.67	113.85	End Shut-In(2)
170	1952.35	114.47	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
810.00	Clean Gassy Oil	6.60
0.00	Gas 20% Oil 80%	0.00
540.00	Oil cut Muddy Water	7.90
0.00	Oil 15% Mud 30% Water 55%	0.00
270.00	Muddy Water	3.95
0.00	Mud 15% Water 85%	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
 8100 East 22ND Street North
 #700
 ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17164

DST#: 3

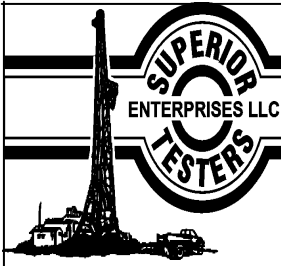
Test Start: 2012.02.27 @ 07:57:00

Tool Information

Drill Pipe:	Length: 3571.00 ft	Diameter: 3.88 inches	Volume: 52.22 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:	98000.00 lb
			<u>Total Volume: 54.88 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial	83000.00 lb
Depth to Top Packer:	4120.00 ft			Final	89000.00 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			4103.00	
Hydraulic Tool	5.00			4108.00	
Safety Joint	2.00			4110.00	
Packer	5.00			4115.00	22.00 Bottom Of Top Packer
Packer	5.00			4120.00	
Anchor	19.00			4139.00	
Recorder	1.00	6749	Inside	4140.00	
Recorder	1.00	6748	Outside	4141.00	
Bullnose	3.00			4144.00	24.00 Bottom Packers & Anchor
Total Tool Length:	46.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
 8100 East 22ND Street North
 #700
 A TTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17164

DST#: 3

Test Start: 2012.02.27 @ 07:57:00

Mud and Cushion Information

Mud Type: Gel Chem
 Mud Weight: 9.00 lb/gal
 Viscosity: 59.00 sec/qt
 Water Loss: 9.60 in³
 Resistivity: ohm.m
 Salinity: 35000.00 ppm
 Filter Cake: 1.00 inches

Cushion Type:
 Cushion Length: ft
 Cushion Volume: bbl
 Gas Cushion Type:
 Gas Cushion Pressure: psia

Oil API: deg API
 Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
810.00	Clean Gassy Oil	6.604
0.00	Gas 20% Oil 80%	0.000
540.00	Oil cut Muddy Water	7.897
0.00	Oil 15% Mud 30% Water 55%	0.000
270.00	Muddy Water	3.949
0.00	Mud 15% Water 85%	0.000
0.00	Recovery Chlorides 47000 ppm	0.000
0.00	Recov. Resist. .34 ohms @ 45 deg.	0.000
0.00	Corrected Specific Gravity 39	0.000

Total Length: 1620.00 ft Total Volume: 18.450 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6749

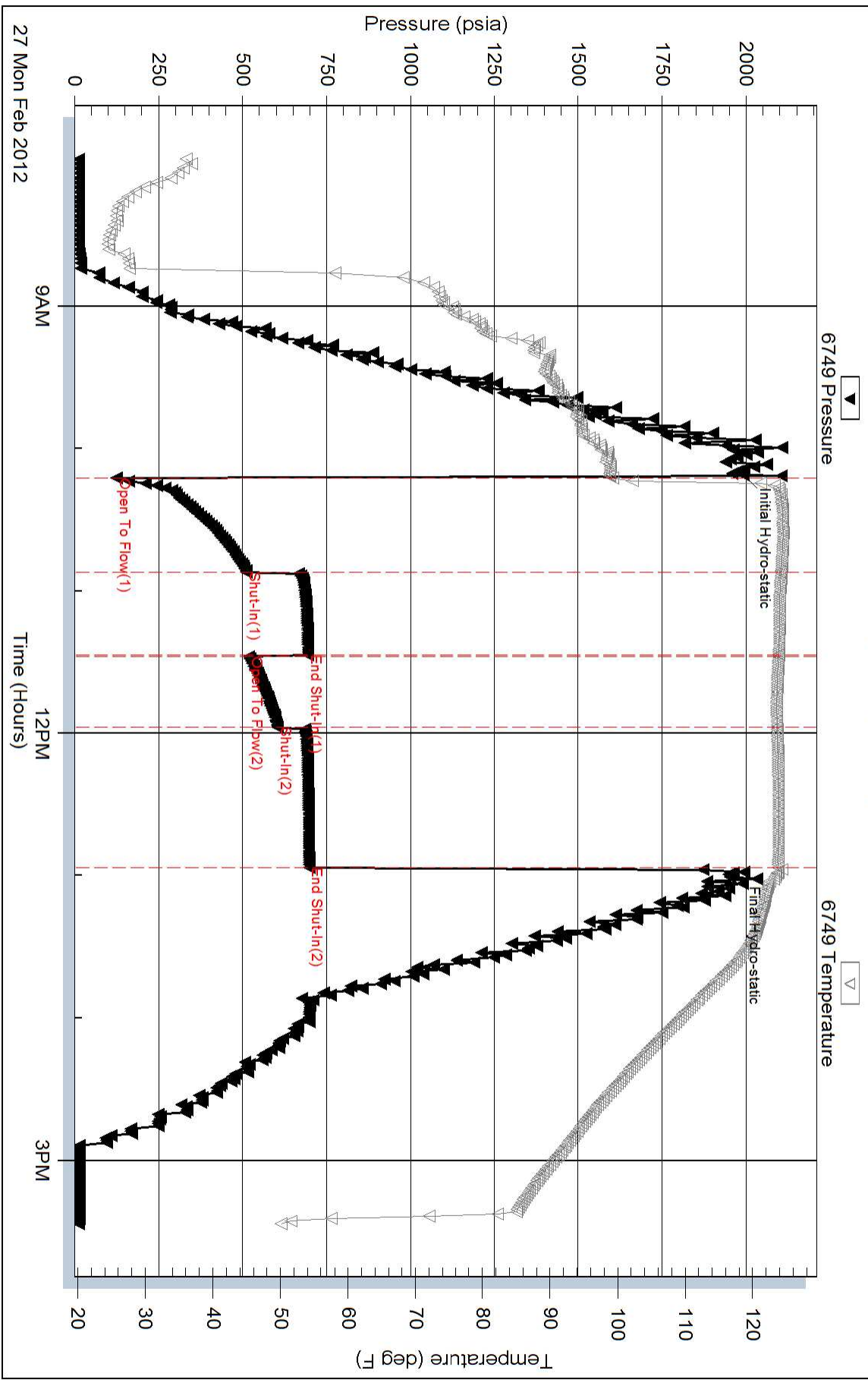
Inside

Ritchie Exploration Incorporated

Phillips 19D#3

DST Test Number: 3

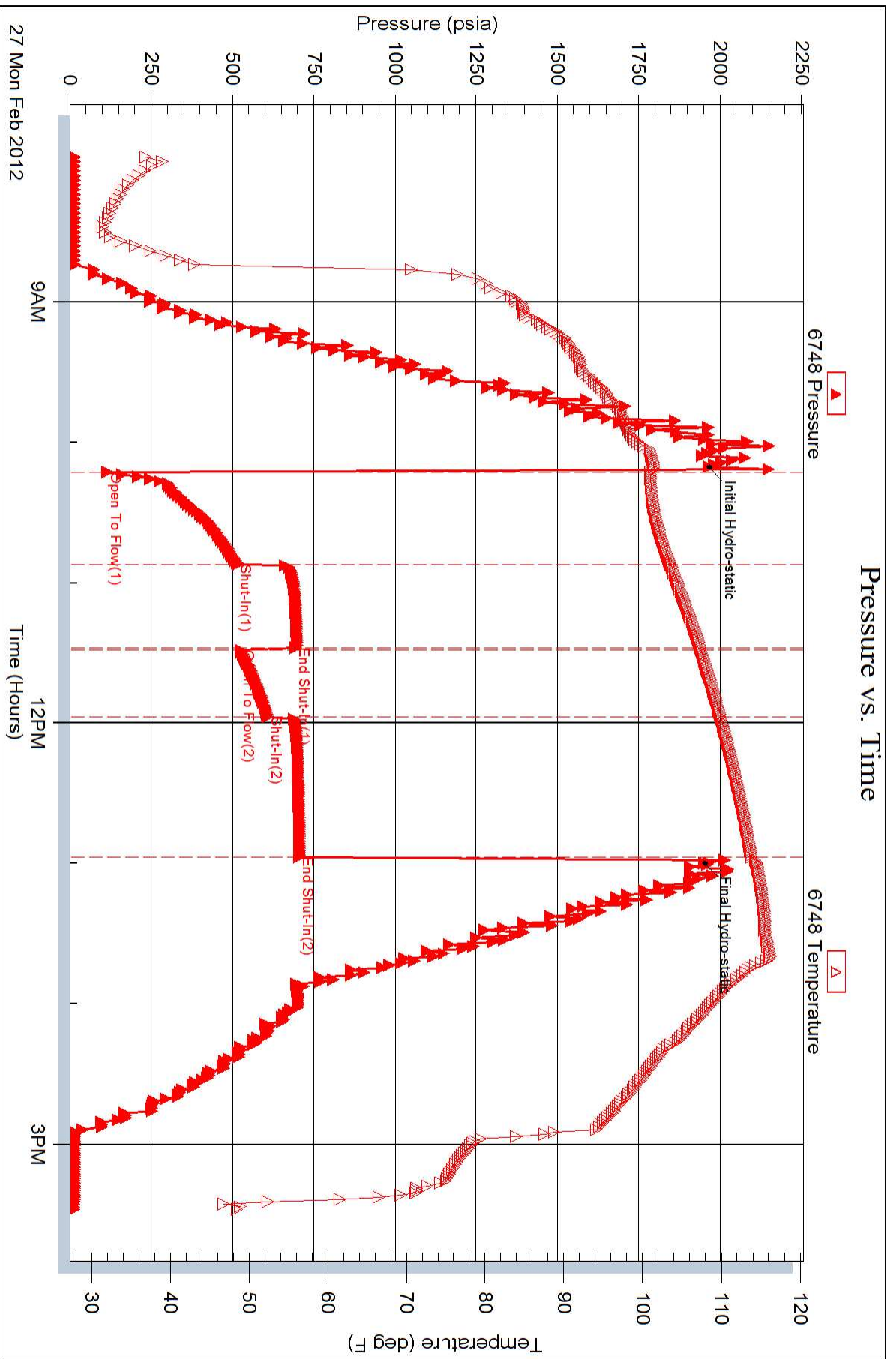
Pressure vs. Time

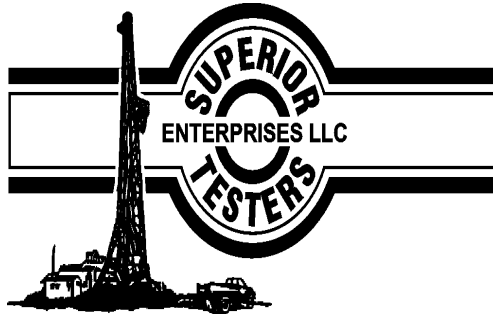


Superior Testers Enterprises LLC

Ref. No: 17164

Printed: 2012.02.27 @ 15:57:01





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Incorporated**

PO Box 713188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

Phillips 19D #3

19/13S/31W/Gove

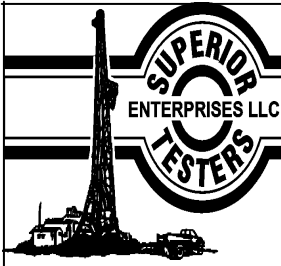
Start Date: 2012.02.27 @ 23:57:00

End Date: 2012.02.28 @ 07:00:00

Job Ticket #: 17165 DST #: 4

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

Printed: 2012.02.28 @ 07:22:35



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17165 **DST#: 4**
Test Start: 2012.02.27 @ 23:57:00

GENERAL INFORMATION:

Formation: **Lansing/Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:58:30

Time Test Ended: 07:00:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/70

Interval: 4144.00 ft (KB) To 4168.00 ft (KB) (TVD)

Reference Elevations: 2911.00 ft (KB)

Total Depth: 4168.00 ft (KB) (TVD)

2901.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6749 Inside

Press @ RunDepth: 143.90 psia @ 4164.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.02.27 End Date: 2012.02.28

Last Calib.: 2012.02.28

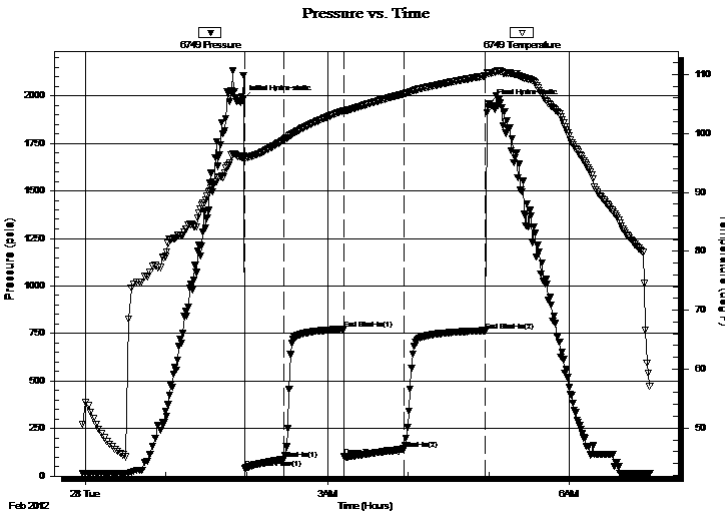
Start Time: 23:57:00 End Time: 07:00:00

Time On Btm: 2012.02.28 @ 01:57:00

Time Off Btm: 2012.02.28 @ 05:00:30

TEST COMMENT: 1ST Open 30 Minutes/Fair blow/Blow built to 8 inches
1ST Shut In 45 Minutes/No blow back
2ND Open 45 Minutes/Fair blow/Blow built to 7 inches
2ND Shut In 60 Minutes/Surface blow back

PRESSURE SUMMARY



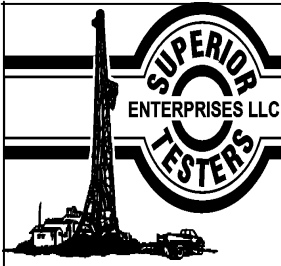
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1977.87	95.96	Initial Hydro-static
2	40.07	95.89	Open To Flow (1)
31	89.13	98.88	Shut-In(1)
75	773.20	103.86	End Shut-In(1)
76	102.27	103.69	Open To Flow (2)
120	143.90	106.71	Shut-In(2)
181	765.24	109.78	End Shut-In(2)
184	1959.48	110.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Clean oil 100%	0.07
195.00	Oil cut Watery Mud	0.96
0.00	Oil 5% Water 25% Mud 70%	0.00
0.00	Recovery chlorides 40000 ppm	0.00

Gas Rates

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



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17165

DST#: 4

Test Start: 2012.02.27 @ 23:57:00

GENERAL INFORMATION:

Formation: **Lansing/Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:58:30

Time Test Ended: 07:00:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/70

Interval: 4144.00 ft (KB) To 4168.00 ft (KB) (TVD)

Reference Elevations: 2911.00 ft (KB)

Total Depth: 4168.00 ft (KB) (TVD)

2901.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6748 Outside

Press @ RunDepth: 768.94 psia @ 4165.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.02.27 End Date: 2012.02.28

Last Calib.: 2012.02.28

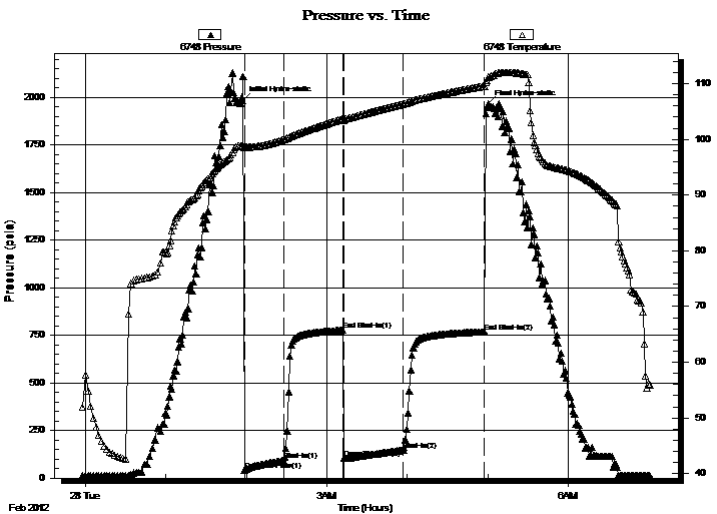
Start Time: 23:57:00 End Time: 07:00:30

Time On Btm: 2012.02.28 @ 01:57:00

Time Off Btm: 2012.02.28 @ 05:00:30

TEST COMMENT: 1ST Open 30 Minutes/Fair blow/Blow built to 8 inches
1ST Shut In 45 Minutes/No blow back
2ND Open 45 Minutes/Fair blow/Blow built to 7 inches
2ND Shut In 60 Minutes/Surface blow back

PRESSURE SUMMARY



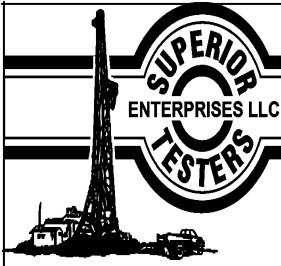
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1982.05	98.90	Initial Hydro-static
2	43.21	98.57	Open To Flow (1)
31	92.13	99.92	Shut-In(1)
75	776.44	103.69	End Shut-In(1)
76	105.73	103.44	Open To Flow (2)
120	147.46	106.36	Shut-In(2)
181	768.94	109.59	End Shut-In(2)
184	1964.55	111.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Clean oil 100%	0.07
195.00	Oil cut Watery Mud	0.96
0.00	Oil 5% Water 25% Mud 70%	0.00
0.00	Recovery chlorides 40000 ppm	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
 8100 East 22ND Street North
 #700
 ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17165

DST#: 4

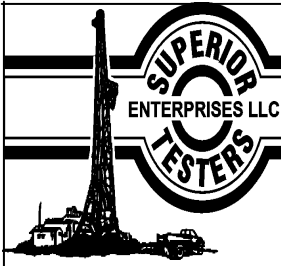
Test Start: 2012.02.27 @ 23:57:00

Tool Information

Drill Pipe:	Length: 3604.00 ft	Diameter: 3.88 inches	Volume: 52.71 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: 104000.0 lb
			<u>Total Volume: 55.37 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 83000.00 lb
Depth to Top Packer:	4144.00 ft			Final 83000.00 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
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Shut In Tool	5.00			4127.00	
Hydraulic Tool	5.00			4132.00	
Safety Joint	2.00			4134.00	
Packer	5.00			4139.00	22.00 Bottom Of Top Packer
Packer	5.00			4144.00	
Anchor	19.00			4163.00	
Recorder	1.00	6749	Inside	4164.00	
Recorder	1.00	6748	Outside	4165.00	
Bullnose	3.00			4168.00	24.00 Bottom Packers & Anchor
Total Tool Length:	46.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700

Phillips 19D #3

Job Ticket: 17165

DST#: 4

ATTN: Ted Jochems

Test Start: 2012.02.27 @ 23:57:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 59.00 sec/qt
Water Loss: 9.59 in³
Resistivity: ohm.m
Salinity: 3500.00 ppm
Filter Cake: 1.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psia

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

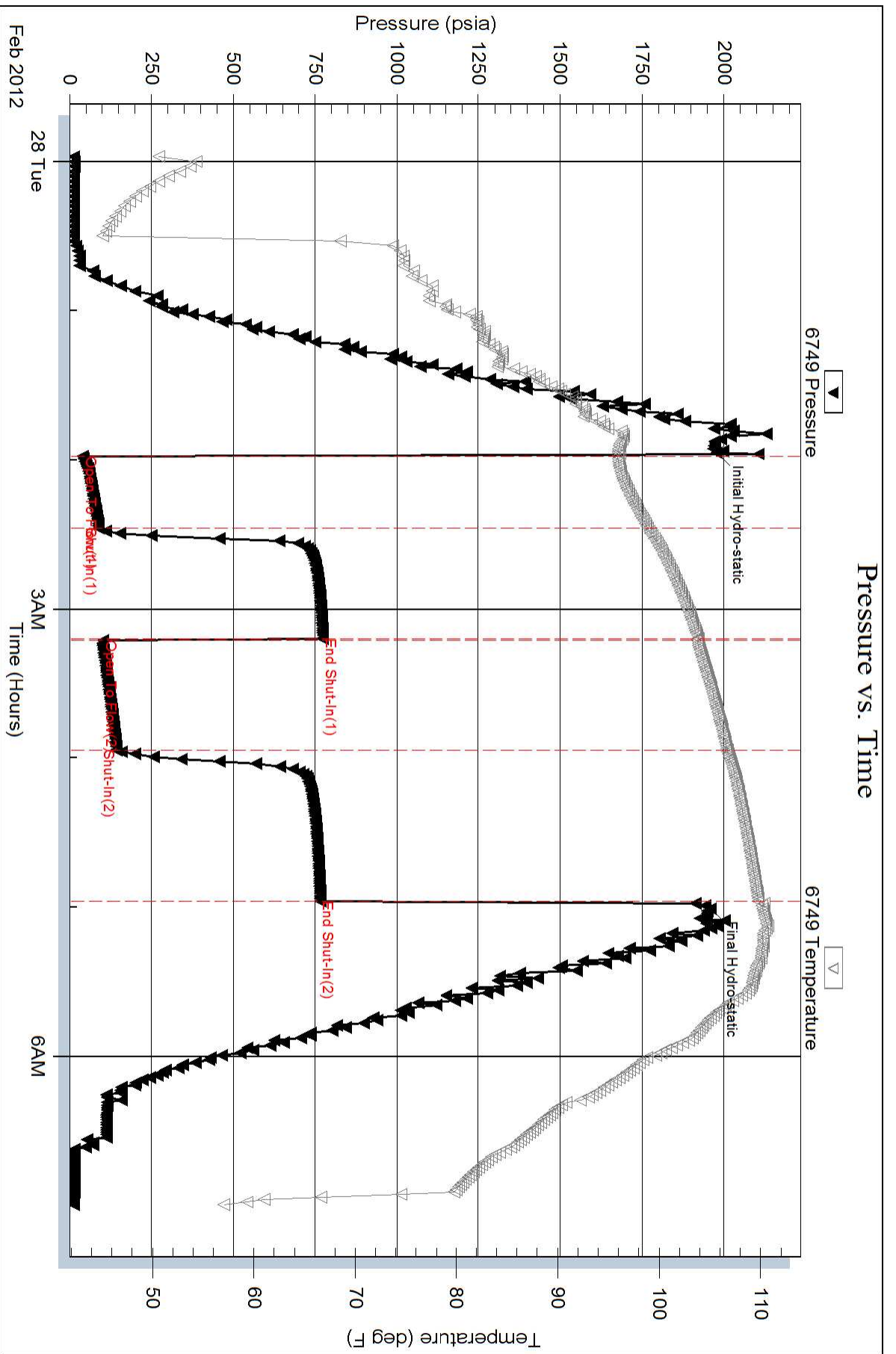
Length ft	Description	Volume bbl
15.00	Clean oil 100%	0.074
195.00	Oil cut Watery Mud	0.959
0.00	Oil 5% Water 25% Mud 70%	0.000
0.00	Recovery chlorides 40000 ppm	0.000

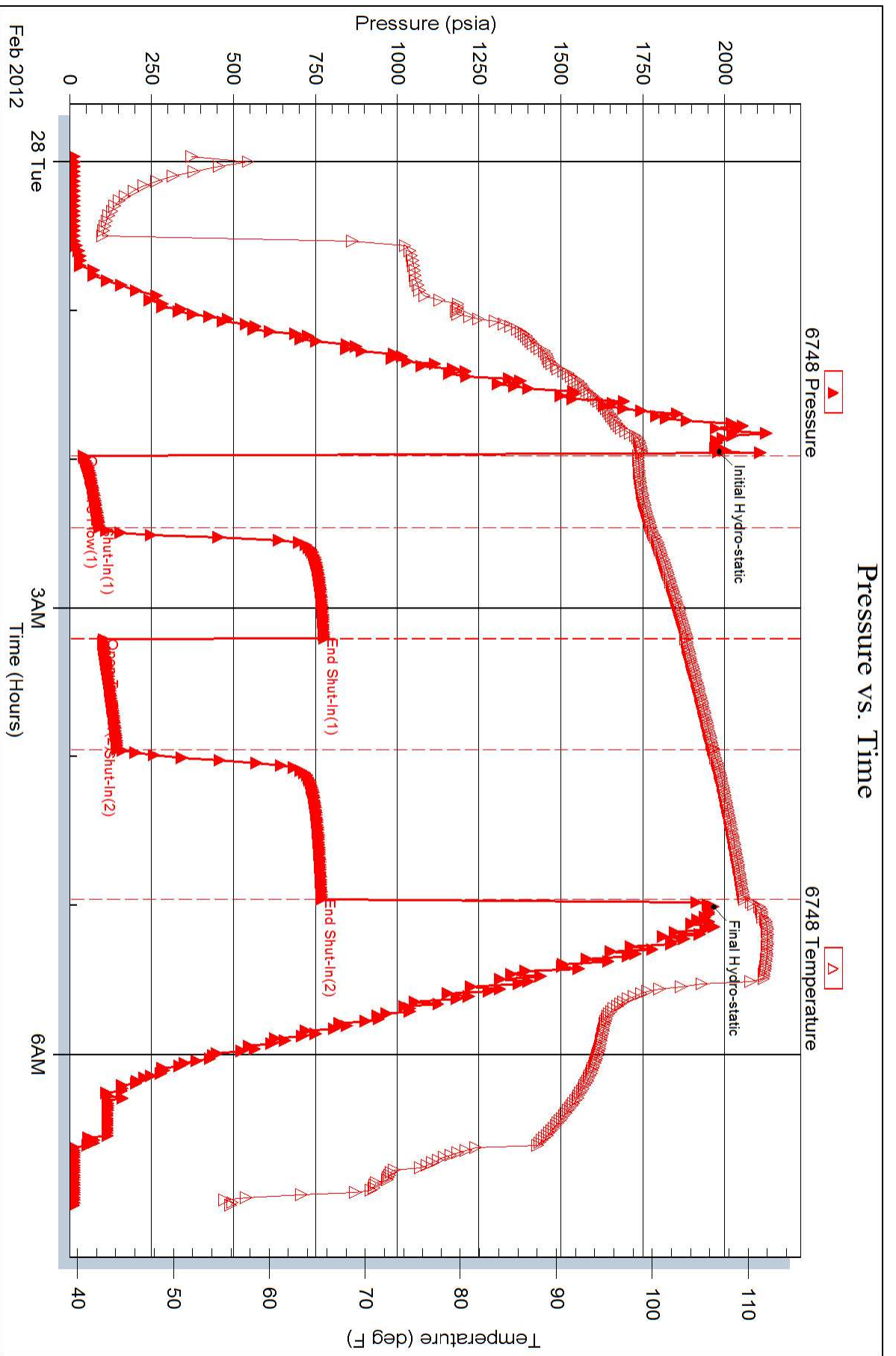
Total Length: 210.00 ft Total Volume: 1.033 bbl

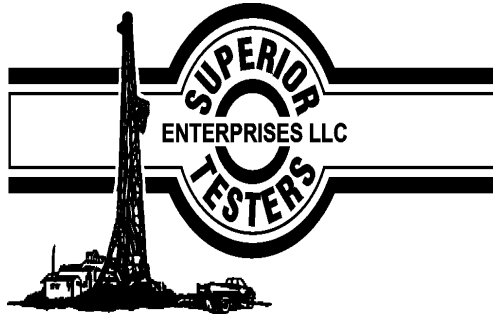
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Incorporated**

PO Box 713188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

Phillips 19D #3

19/13S/31W/Gove

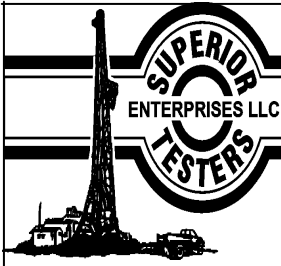
Start Date: 2012.02.28 @ 21:20:00

End Date: 2012.02.29 @ 05:09:30

Job Ticket #: 17166 DST #: 5

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

Printed: 2012.02.29 @ 05:44:46



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17166

DST#: 5

Test Start: 2012.02.28 @ 21:20:00

GENERAL INFORMATION:

Formation: **Lansing/Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:34:30

Time Test Ended: 05:09:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/70

Interval: 4168.00 ft (KB) To 4204.00 ft (KB) (TVD)

Reference Elevations: 2911.00 ft (KB)

Total Depth: 4204.00 ft (KB) (TVD)

2901.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6749 Inside

Press @ Run Depth: 658.04 psia @ 4200.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.02.28

End Date:

2012.02.29

Last Calib.:

2012.02.29

Start Time: 21:20:00

End Time:

05:09:30

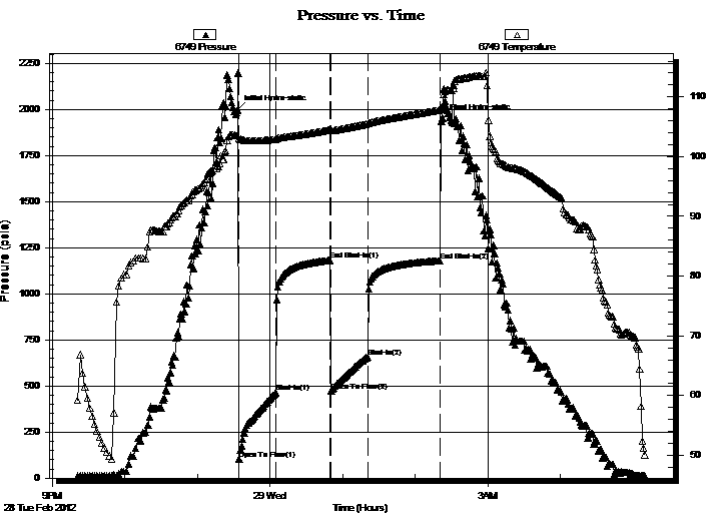
Time On Btm:

2012.02.28 @ 23:33:00

Time Off Btm:

2012.02.29 @ 02:22:30

TEST COMMENT: 1ST Open 30 Minutes/Strong blow/Bottom of bucket in 3 min/Gas to surface in 7 min/Too weak to gauge
1ST Shut In 45 Minutes/Blow back built to 10 inches
2ND Open 45 Minutes/Strong blow /Bottom of bucket in 2 min/Gas gauged/Would not burn
2ND Shut In 60 Minutes/Blow back built to bottom of bucket in 44 minutes



PRESSURE SUMMARY

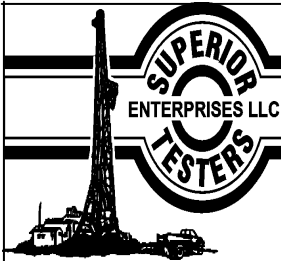
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1996.18	103.49	Initial Hydro-static
2	101.49	102.99	Open To Flow (1)
32	464.08	102.89	Shut-In(1)
77	1181.62	104.48	End Shut-In(1)
78	474.28	104.36	Open To Flow (2)
108	658.04	105.49	Shut-In(2)
168	1179.04	107.82	End Shut-In(2)
170	1951.68	108.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
360.00	Slightly oil cut muddy w water	1.77
0.00	Oil 1% Mud 10% Water 89%	0.00
540.00	Oil cut Gassy Muddy Water	6.15
0.00	Oil 10% Gas 15% Mud 30% Water 45%	0.00
585.00	Clean Gassy Oil	8.56
0.00	Gas 20% Oil 80%	0.00

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.13	2.44	0.91
Last Gas Rate	0.13	4.01	1.50
Max. Gas Rate	0.13	4.01	1.50



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17166

DST#: 5

Test Start: 2012.02.28 @ 21:20:00

GENERAL INFORMATION:

Formation: **Lansing/Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:34:30

Time Test Ended: 05:09:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/70

Interval: 4168.00 ft (KB) To 4204.00 ft (KB) (TVD)

Reference Elevations: 2911.00 ft (KB)

Total Depth: 4204.00 ft (KB) (TVD)

2901.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6748 Outside

Press @ RunDepth: 1183.20 psia @ 4201.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.02.28

End Date:

2012.02.29

Last Calib.:

2012.02.29

Start Time: 21:20:00

End Time:

05:09:30

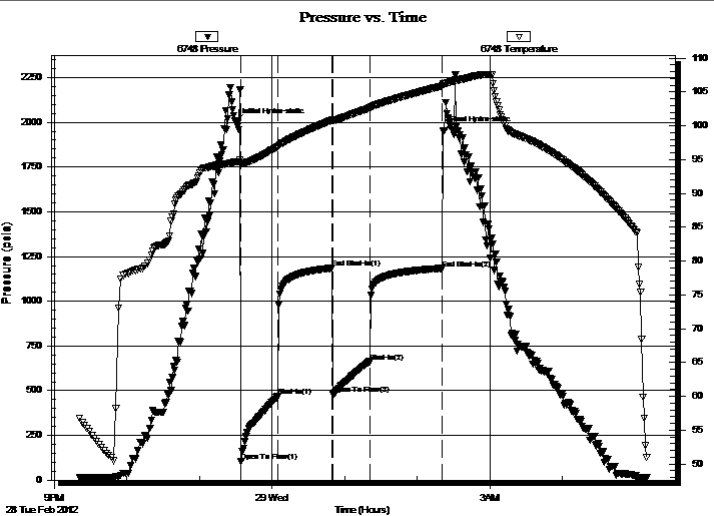
Time On Btm:

2012.02.28 @ 23:30:00

Time Off Btm:

2012.02.29 @ 02:21:30

TEST COMMENT: 1ST Open 30 Minutes/Strong blow/Bottom of bucket in 3 min/Gas to surface in 7 min/Too weak to gauge
1ST Shut In 45 Minutes/Blow back built to 10 inches
2ND Open 45 Minutes/Strong blow/Bottom of bucket in 2 min/Gas gauged/Would not burn
2ND Shut In 60 Minutes/Blow back built to bottom of bucket in 44 minutes



PRESSURE SUMMARY

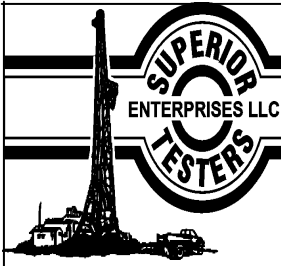
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2001.04	94.68	Initial Hydro-static
5	105.63	94.43	Open To Flow (1)
35	467.04	96.88	Shut-In(1)
80	1185.22	100.83	End Shut-In(1)
81	477.81	100.73	Open To Flow (2)
111	661.92	102.63	Shut-In(2)
171	1183.20	105.89	End Shut-In(2)
172	1953.05	106.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
360.00	Slightly oil cut muddy w ater	1.77
0.00	Oil 1% Mud 10% Water 89%	0.00
540.00	Oil cut Gassy Muddy Water	6.15
0.00	Oil 10% Gas 15% Mud 30% Water 45%	0.00
585.00	Clean Gassy Oil	8.56
0.00	Gas 20% Oil 80%	0.00

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.13	2.44	0.91
Last Gas Rate	0.13	4.01	1.50
Max. Gas Rate	0.13	4.01	1.50



DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
 8100 East 22ND Street North
 #700
 ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17166

DST#: 5

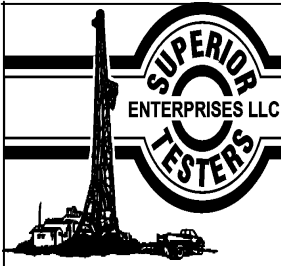
Test Start: 2012.02.28 @ 21:20:00

Tool Information

Drill Pipe:	Length: 3637.00 ft	Diameter: 3.88 inches	Volume: 53.19 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
			<u>Total Volume: 55.85 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 83000.00 lb
Depth to Top Packer:	4168.00 ft			Final 89000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	36.00 ft			
Tool Length:	58.00 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			4151.00	
Hydraulic Tool	5.00			4156.00	
Safety Joint	2.00			4158.00	
Packer	5.00			4163.00	22.00 Bottom Of Top Packer
Packer	5.00			4168.00	
Anchor	31.00			4199.00	
Recorder	1.00	6749	Inside	4200.00	
Recorder	1.00	6748	Outside	4201.00	
Bullnose	3.00			4204.00	36.00 Bottom Packers & Anchor
Total Tool Length:	58.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
 8100 East 22ND Street North
 #700
 A TTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17166

DST#: 5

Test Start: 2012.02.28 @ 21:20:00

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: 55.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 3000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
360.00	Slightly oil cut muddy w ater	1.770
0.00	Oil 1% Mud 10% Water 89%	0.000
540.00	Oil cut Gassy Muddy Water	6.150
0.00	Oil 10% Gas 15% Mud 30% Water 45%	0.000
585.00	Clean Gassy Oil	8.555
0.00	Gas 20% Oil 80%	0.000
0.00	Recovery Chlorides 42000 ppm	0.000
0.00	Rec. resist. .39 ohms @ 46 degrees	0.000
0.00	Corrected specific gravity 38	0.000

Total Length: 1485.00 ft Total Volume: 16.475 bbl

Num Fluid Samples: 0

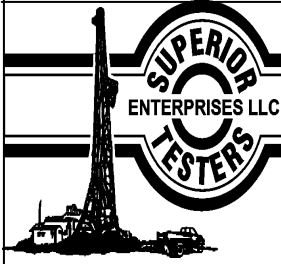
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



DRILL STEM TEST REPORT

GAS RATES

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17166

DST#: 5

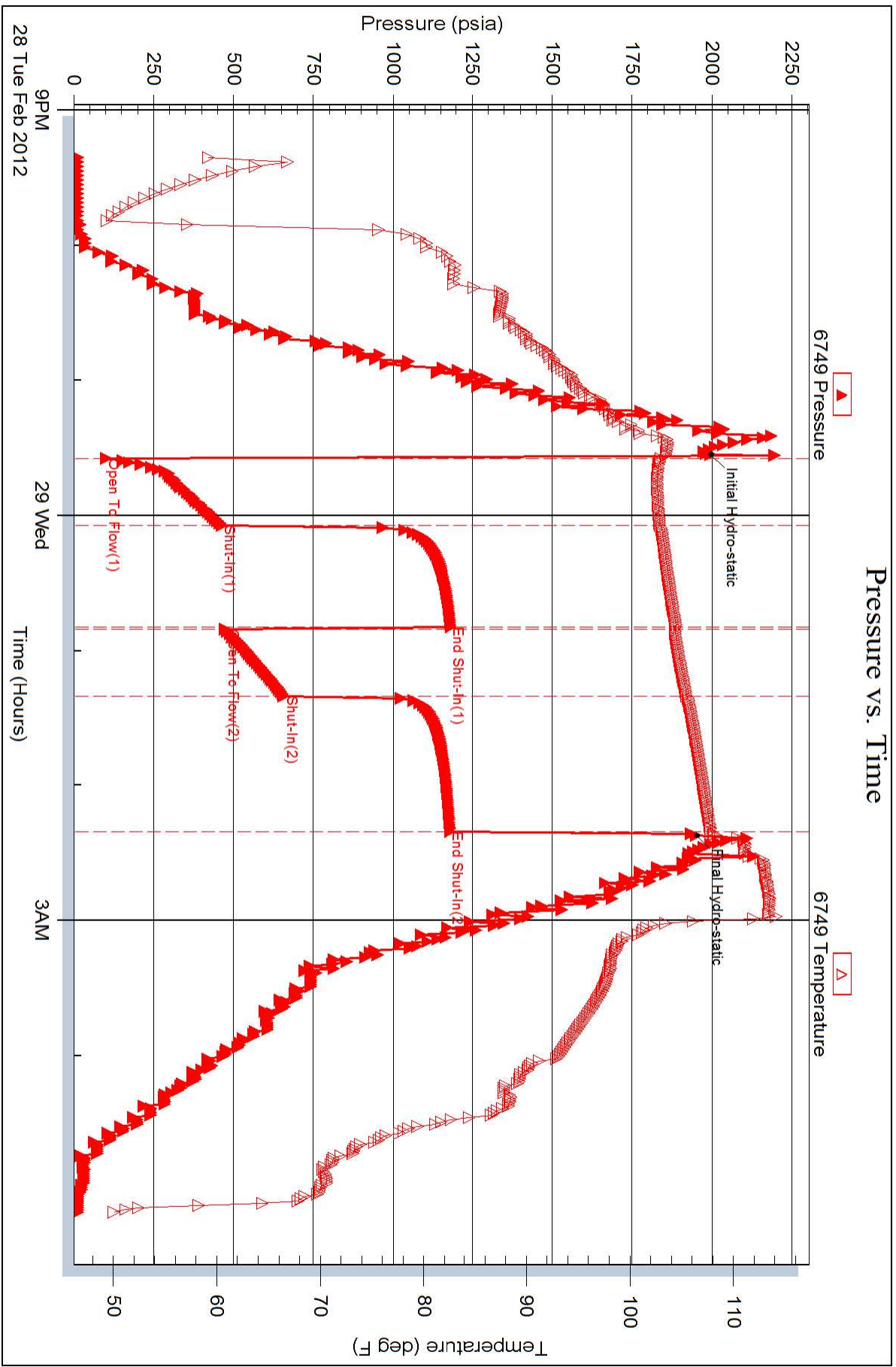
Test Start: 2012.02.28 @ 21:20:00

Gas Rates Information

Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
2	10	0.13	2.44	0.91
2	10	0.13	2.44	0.91
2	20	0.13	4.01	1.50



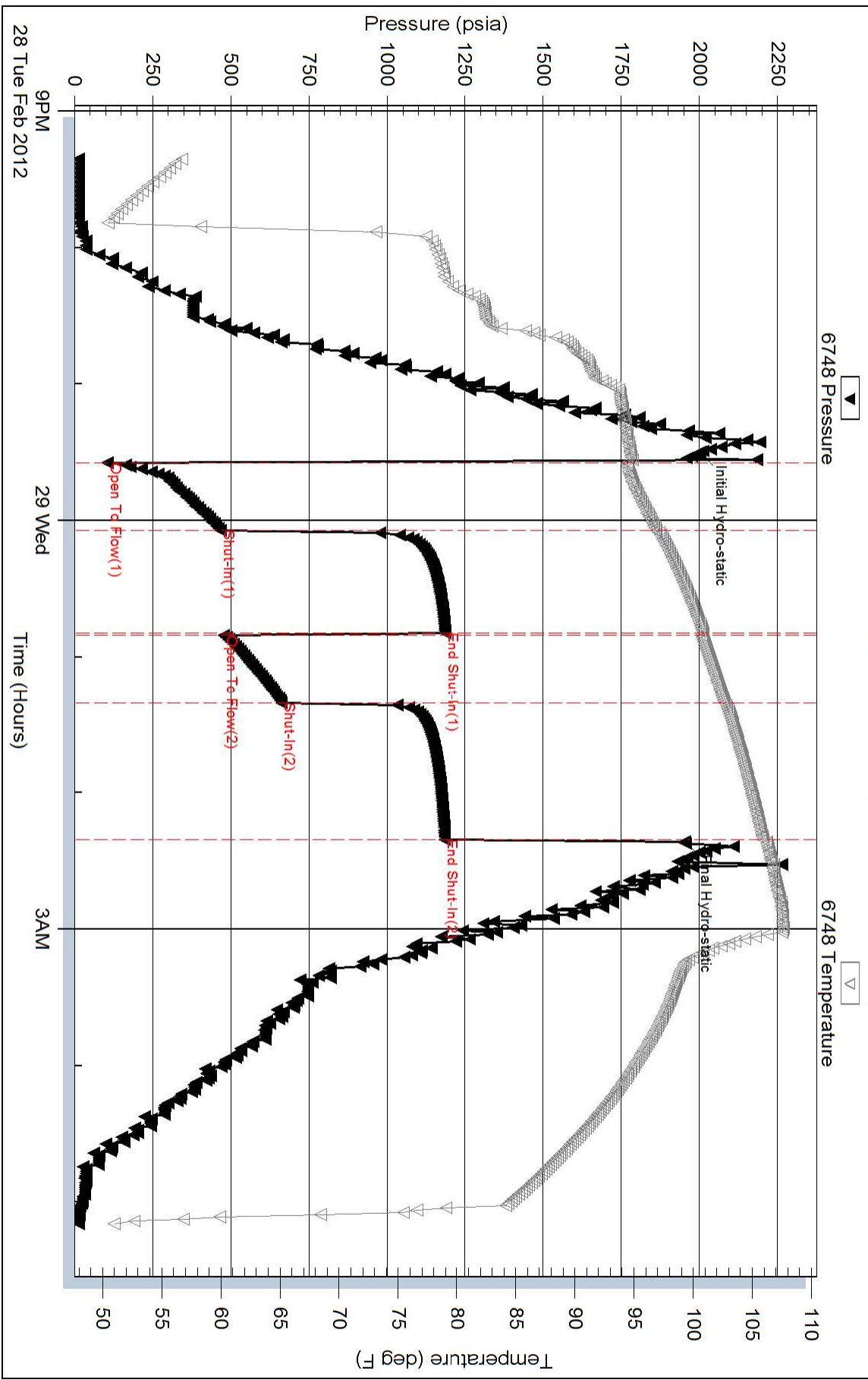
Serial #: 6748

Outside Ritchie Exploration Incorporated

Phillips 19D #3

DST Test Number: 5

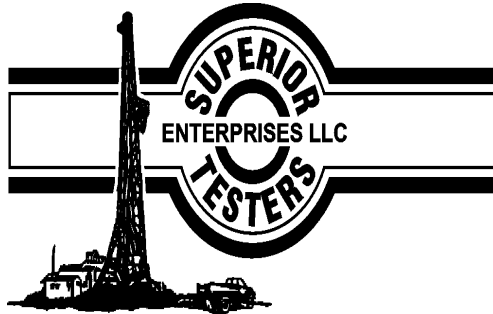
Pressure vs. Time



Superior Testers Enterprises LLC

Ref. No: 17166

Printed: 2012.02.29 @ 05:44:48



DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Incorporated**

PO Box 713188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

Phillips 19D #3

19/13S/31W/Gove

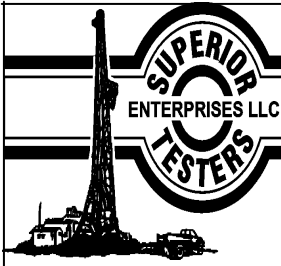
Start Date: 2012.02.29 @ 19:20:00

End Date: 2012.03.01 @ 02:13:30

Job Ticket #: 17167 DST #: 6

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

Printed: 2012.03.01 @ 02:42:54



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17167

DST#: 6

Test Start: 2012.02.29 @ 19:20:00

GENERAL INFORMATION:

Formation: **Lansing/KC zone L/Ma**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:57:30

Time Test Ended: 02:13:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/70

Interval: 4228.00 ft (KB) To 4270.00 ft (KB) (TVD)

Reference Elevations: 2911.00 ft (KB)

Total Depth: 4270.00 ft (KB) (TVD)

2901.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6749

Inside

Press @ RunDepth: 385.56 psia @ 4266.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.02.29

End Date: 2012.03.01

Last Calib.: 2012.03.01

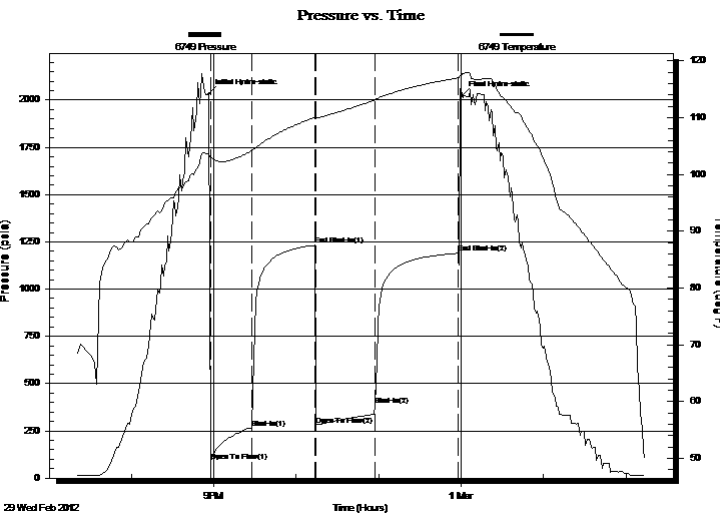
Start Time: 19:20:00

End Time: 02:13:30

Time On Btm: 2012.02.29 @ 20:56:30

Time Off Btm: 2012.03.01 @ 00:01:00

TEST COMMENT: 1ST Open 30 Minutes/Good blow/Blow built to bottom of bucket in 6 minutes 45 seconds
1ST Shut In 45 Minutes/Blow back built to 8 inches
2ND Open 45 Minutes/Good blow/Blow built to bottom of bucket in 9 minutes/Gas to surface in 42 minutes
2ND Shut In 60 Minutes/Blow back built to bottom of bucket in 27 minutes



PRESSURE SUMMARY

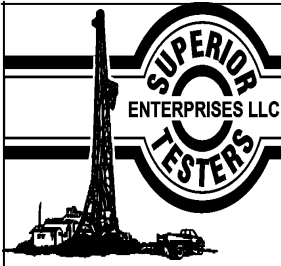
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2032.15	103.48	Initial Hydro-static
1	90.78	103.02	Open To Flow (1)
31	264.33	104.16	Shut-In(1)
77	1232.03	110.05	End Shut-In(1)
78	281.37	109.88	Open To Flow (2)
121	385.56	113.14	Shut-In(2)
182	1189.84	117.03	End Shut-In(2)
185	2023.47	117.74	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	Oil cut Muddy Water	0.89
0.00	Oil 10% Mud 25% Water 65%	0.00
270.00	Oil and Gas cut Muddy Water	1.33
0.00	Oil 15% Gas 15% Mud 35% Water 35%	0.00
270.00	Mud cut Gassy Oil	2.97
0.00	Mud 15% Gas 30% Oil 55%	0.00

Gas Rates

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



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17167

DST#: 6

Test Start: 2012.02.29 @ 19:20:00

GENERAL INFORMATION:

Formation: **Lansing/KC zone L/Ma**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:57:30

Time Test Ended: 02:13:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/70

Interval: 4228.00 ft (KB) To 4270.00 ft (KB) (TVD)

Reference Elevations: 2911.00 ft (KB)

Total Depth: 4270.00 ft (KB) (TVD)

2901.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6748 Outside

Press @ RunDepth: 1196.35 psia @ 4267.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.02.29

End Date: 2012.03.01

Last Calib.: 2012.03.01

Start Time: 19:20:00

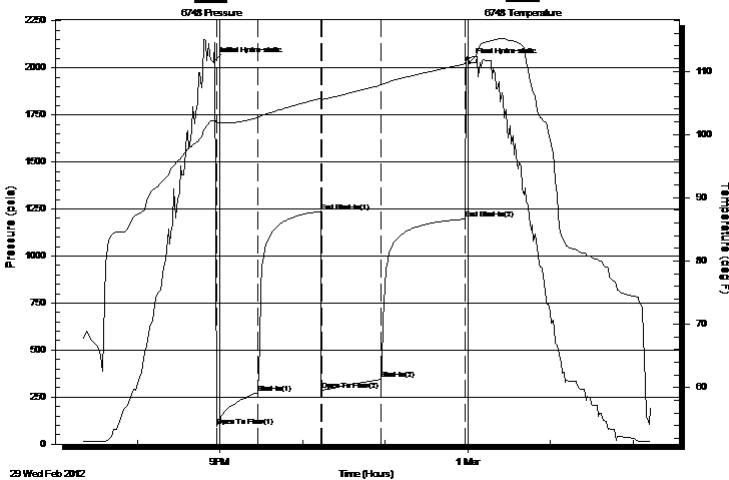
End Time: 02:12:30

Time On Btm: 2012.02.29 @ 20:55:30

Time Off Btm: 2012.03.01 @ 00:01:00

TEST COMMENT: 1ST Open 30 Minutes/Good blow/Blow built to bottom of bucket in 6 minutes 45 seconds
1ST Shut In 45 Minutes/Blow back built to 8 inches
2ND Open 45 Minutes/Good blow/Blow built to bottom of bucket in 9 minutes/Gas to surface in 42 minutes
2ND Shut In 60 Minutes/Blow back built to bottom of bucket in 27 minutes

Pressure vs. Time



PRESSURE SUMMARY

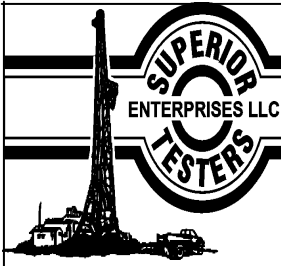
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2033.33	102.22	Initial Hydro-static
2	95.44	101.82	Open To Flow (1)
32	269.82	102.63	Shut-In(1)
78	1237.24	105.71	End Shut-In(1)
79	285.63	105.53	Open To Flow (2)
122	345.25	107.80	Shut-In(2)
183	1196.35	111.11	End Shut-In(2)
186	2027.72	112.09	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	Oil cut Muddy Water	0.89
0.00	Oil 10% Mud 25% Water 65%	0.00
270.00	Oil and Gas cut Muddy Water	1.33
0.00	Oil 15% Gas 15% Mud 35% Water 35%	0.00
270.00	Mud cut Gassy Oil	2.97
0.00	Mud 15% Gas 30% Oil 55%	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
 8100 East 22ND Street North
 #700
 ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17167

DST#: 6

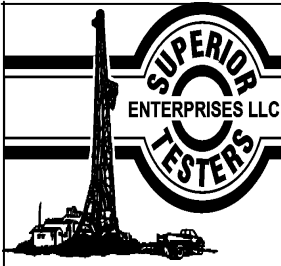
Test Start: 2012.02.29 @ 19:20:00

Tool Information

Drill Pipe:	Length: 3697.00 ft	Diameter: 3.80 inches	Volume: 51.86 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: 540.00 ft	Diameter: 2.25 inches	Volume: 2.66 bbl	Weight to Pull Loose: 102000.0 lb
			<u>Total Volume: 54.52 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 84000.00 lb
Depth to Top Packer:	4228.00 ft			Final 84000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	42.00 ft			
Tool Length:	64.00 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			4211.00	
Hydraulic Tool	5.00			4216.00	
Safety Joint	2.00			4218.00	
Packer	5.00			4223.00	22.00 Bottom Of Top Packer
Packer	5.00			4228.00	
Anchor	37.00			4265.00	
Recorder	1.00	6749	Inside	4266.00	
Recorder	1.00	6748	Outside	4267.00	
Bullnose	3.00			4270.00	42.00 Bottom Packers & Anchor
Total Tool Length:	64.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
 8100 East 22ND Street North
 #700
 ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17167

DST#: 6

Test Start: 2012.02.29 @ 19:20:00

Mud and Cushion Information

Mud Type: Gel Chem
 Mud Weight: 9.00 lb/gal
 Viscosity: 61.00 sec/qt
 Water Loss: 7.19 in³
 Resistivity: ohm.m
 Salinity: 3400.00 ppm
 Filter Cake: 1.00 inches

Cushion Type:
 Cushion Length: ft
 Cushion Volume: bbl
 Gas Cushion Type:
 Gas Cushion Pressure: psia

Oil API: deg API
 Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	Oil cut Muddy Water	0.885
0.00	Oil 10% Mud 25% Water 65%	0.000
270.00	Oil and Gas cut Muddy Water	1.328
0.00	Oil 15% Gas 15% Mud 35% Water 35%	0.000
270.00	Mud cut Gassy Oil	2.968
0.00	Mud 15% Gas 30% Oil 55%	0.000
0.00	Recovery Chlorides 38000 ppm	0.000

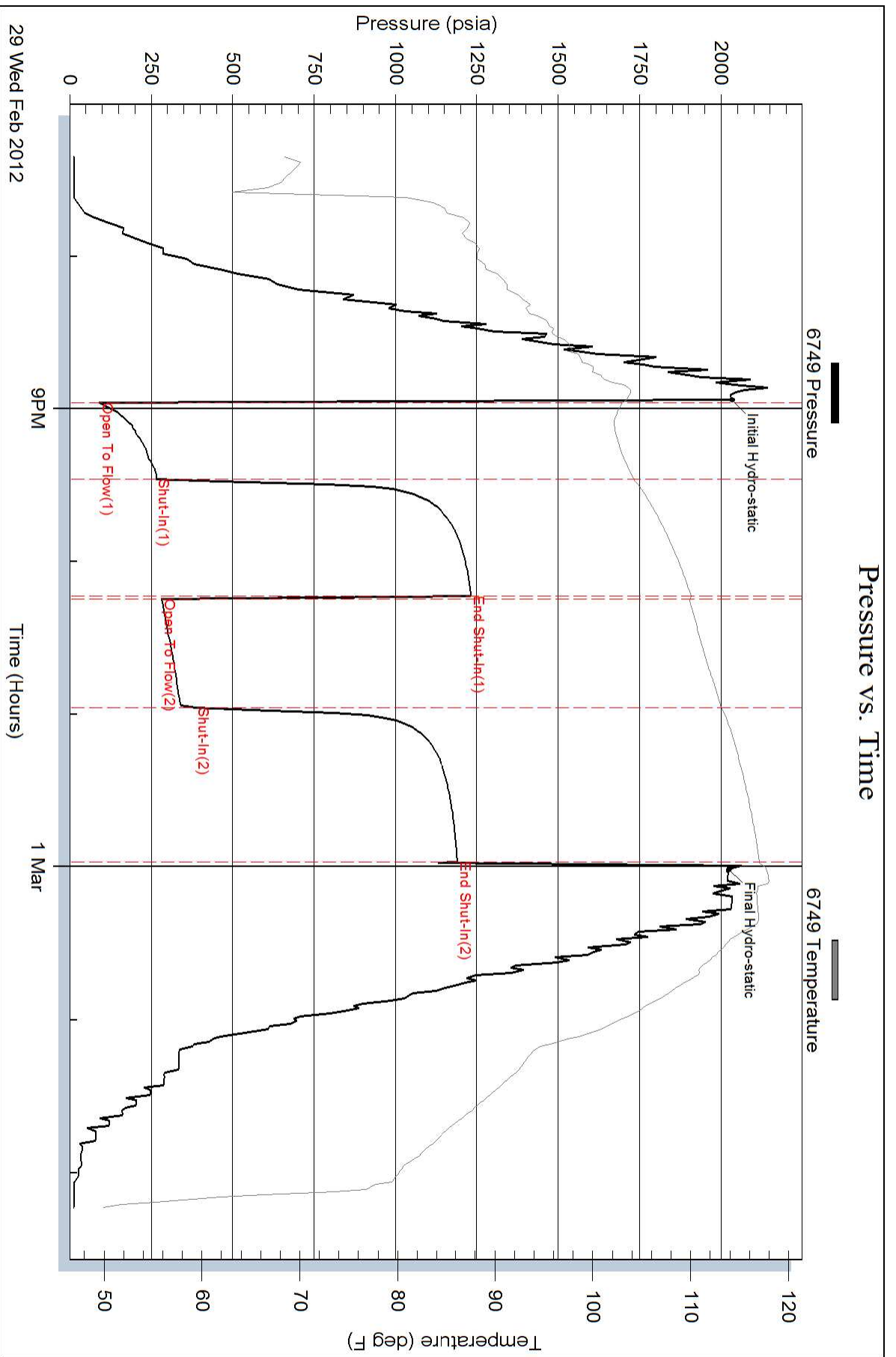
Total Length: 720.00 ft Total Volume: 5.181 bbl

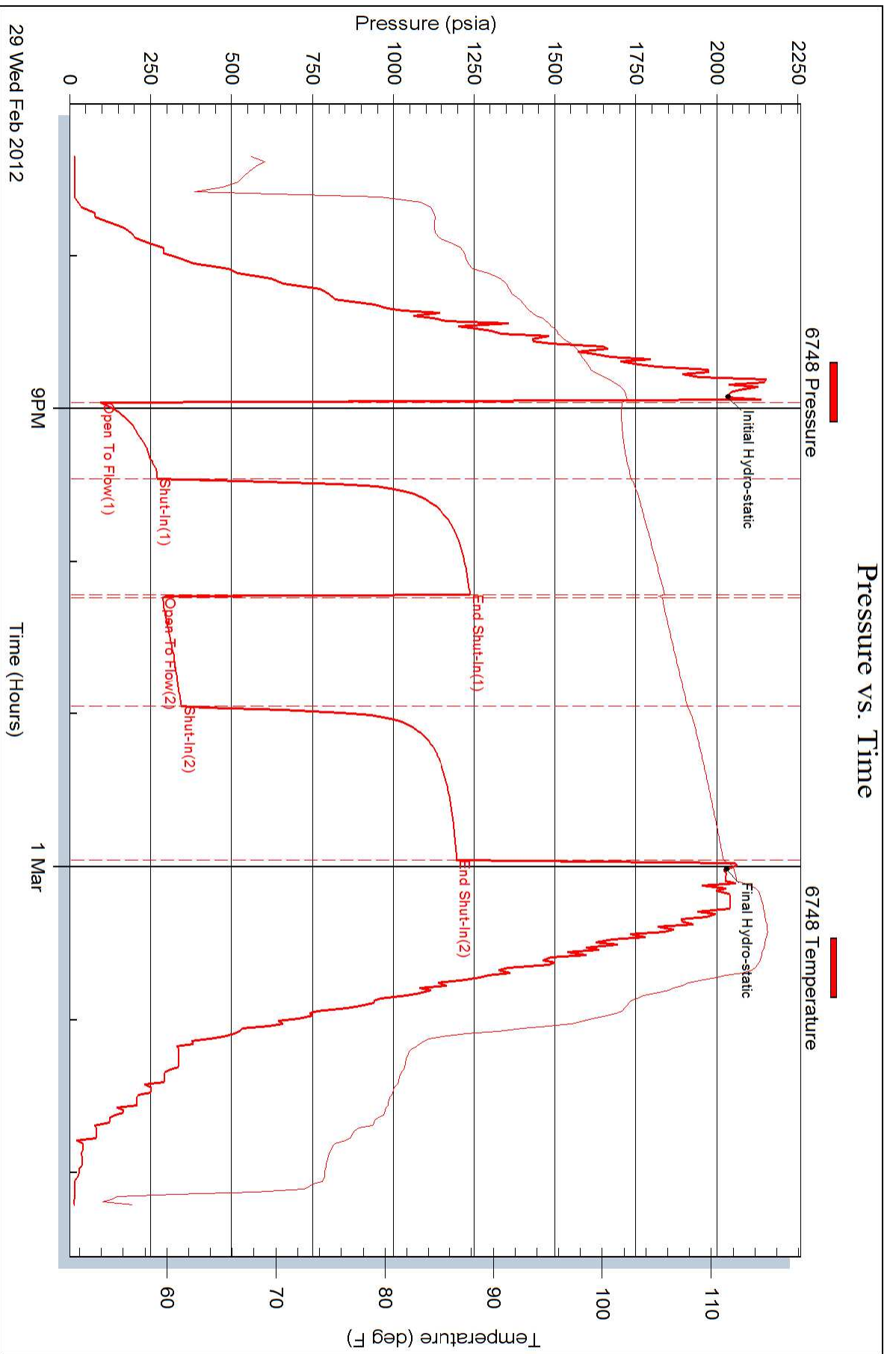
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

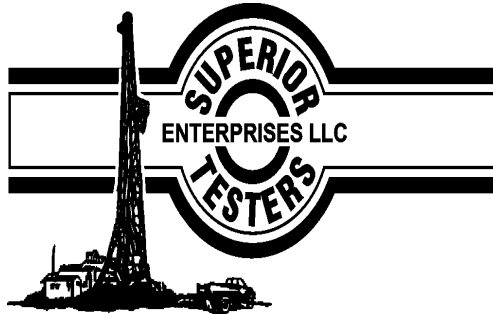
Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time







DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Incorporated**

PO Box 713188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

Phillips 19D #3

19/13S/31W/Gove

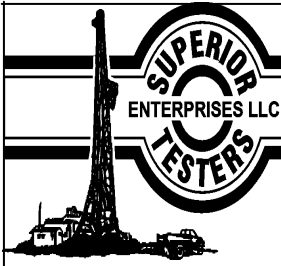
Start Date: 2012.03.01 @ 16:15:00

End Date: 2012.03.01 @ 23:33:30

Job Ticket #: 17168 DST #: 7

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

Printed: 2012.03.02 @ 00:03:17



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17168

DST#: 7

Test Start: 2012.03.01 @ 16:15:00

GENERAL INFORMATION:

Formation: **Altamont zones B&C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:17:30

Time Test Ended: 23:33:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/70

Interval: 4302.00 ft (KB) To 4350.00 ft (KB) (TVD)

Reference Elevations: 2911.00 ft (KB)

Total Depth: 4350.00 ft (KB) (TVD)

2901.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6749

Inside

Press @ Run Depth: 228.51 psia @ 4346.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.03.01

End Date:

2012.03.01

Last Calib.:

2012.03.01

Start Time:

16:15:00

End Time:

23:33:30

Time On Btm:

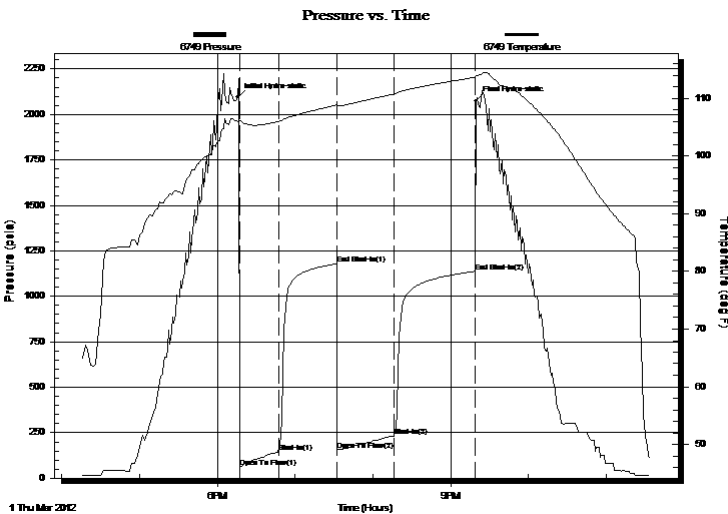
2012.03.01 @ 18:15:30

Time Off Btm:

2012.03.01 @ 21:19:30

TEST COMMENT: 1ST Open 30 Minutes/Good blow/Blow built to bottom of bucket in 18 minutes
1ST Shut In 45 Minutes/Blow back built to 5 inches
2ND Open 45 Minutes/Good blow/Blow built to bottom of bucket in 17 minutes
2ND Shut In 60 Minutes/Blow back built to bottom of bucket in 39 minutes

PRESSURE SUMMARY



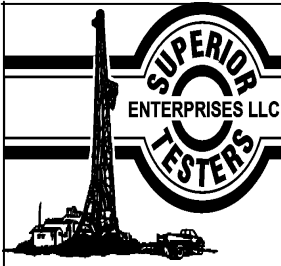
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2094.85	106.00	Initial Hydro-static
2	57.63	106.06	Open To Flow (1)
32	141.91	105.99	Shut-In(1)
77	1178.27	108.88	End Shut-In(1)
77	155.77	108.61	Open To Flow (2)
121	228.51	110.76	Shut-In(2)
183	1136.72	113.64	End Shut-In(2)
184	2075.51	113.90	Final Hydro-static

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
450.00	Muddy Gassy Oil	2.21
0.00	Mud 30% Gas 30% Oil 40%	0.00
5.00	Clean Gassy Oil	0.02
0.00	Gas 5% Oil 95%	0.00
0.00	625 feet Gas in pipe	0.00

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



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17168 **DST#: 7**
Test Start: 2012.03.01 @ 16:15:00

GENERAL INFORMATION:

Formation: **Altamont zones B&C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:17:30

Time Test Ended: 23:33:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/70

Interval: 4302.00 ft (KB) To 4350.00 ft (KB) (TVD)

Reference Elevations: 2911.00 ft (KB)

Total Depth: 4350.00 ft (KB) (TVD)

2901.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6748 Outside

Press @ RunDepth: 1144.36 psia @ 4347.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.03.01

End Date: 2012.03.01

Last Calib.: 2012.03.01

Start Time: 16:15:00

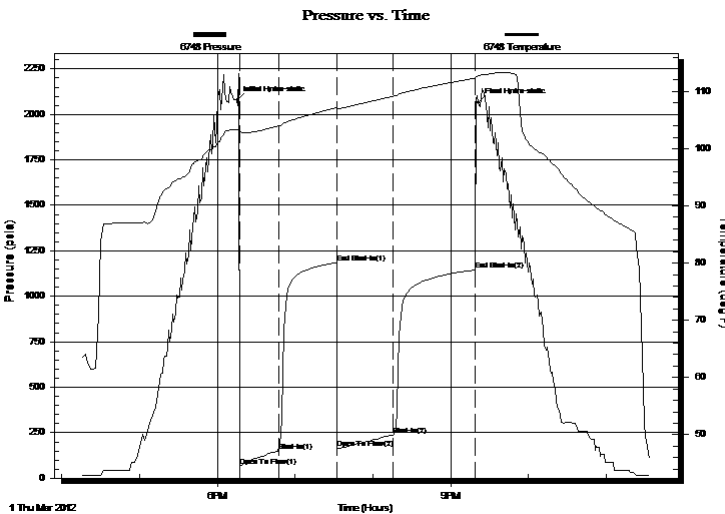
End Time: 23:33:30

Time On Btm: 2012.03.01 @ 18:15:00

Time Off Btm: 2012.03.01 @ 21:21:30

TEST COMMENT: 1ST Open 30 Minutes/Good blow/Blow built to bottom of bucket in 18 minutes
1ST Shut In 45 Minutes/Blow back built to 5 inches
2ND Open 45 Minutes/Good blow/Blow built to bottom of bucket in 17 minutes
2ND Shut In 60 Minutes/Blow back built to bottom of bucket in 39 minutes

PRESSURE SUMMARY



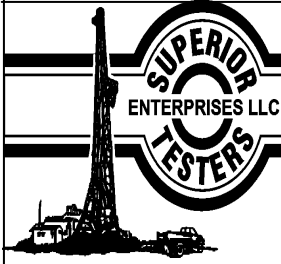
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2076.05	103.34	Initial Hydro-static
3	62.80	102.89	Open To Flow (1)
32	147.42	103.99	Shut-In(1)
77	1184.40	107.19	End Shut-In(1)
78	162.07	106.84	Open To Flow (2)
121	235.45	109.15	Shut-In(2)
184	1144.36	112.30	End Shut-In(2)
187	2064.82	112.72	Final Hydro-static

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
450.00	Muddy Gassy Oil	2.21
0.00	Mud 30% Gas 30% Oil 40%	0.00
5.00	Clean Gassy Oil	0.02
0.00	Gas 5% Oil 95%	0.00
0.00	625 feet Gas in pipe	0.00

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
 8100 East 22ND Street North
 #700
 ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17168

DST#: 7

Test Start: 2012.03.01 @ 16:15:00

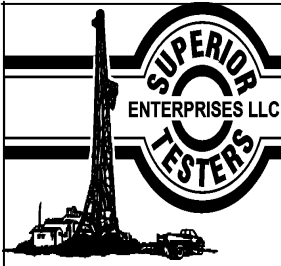
Tool Information

Drill Pipe:	Length: 3760.00 ft	Diameter: 3.88 inches	Volume: 54.99 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: 89000.00 lb
			<u>Total Volume: 57.65 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 80000.00 lb
Depth to Top Packer:	4302.00 ft			Final 82000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	48.00 ft			
Tool Length:	70.00 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			4285.00	
Hydraulic Tool	5.00			4290.00	
Safety Joint	2.00			4292.00	
Packer	5.00			4297.00	22.00 Bottom Of Top Packer
Packer	5.00			4302.00	
Anchor	43.00			4345.00	
Recorder	1.00	6749	Inside	4346.00	
Recorder	1.00	6748	Outside	4347.00	
Bullnose	3.00			4350.00	48.00 Bottom Packers & Anchor
Total Tool Length:	70.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700

Phillips 19D #3

Job Ticket: 17168

DST#: 7

ATTN: Ted Jochems

Test Start: 2012.03.01 @ 16:15:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 58.00 sec/qt
Water Loss: 7.20 in³
Resistivity: ohm.m
Salinity: 2800.00 ppm
Filter Cake: 1.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psia

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
450.00	Muddy Gassy Oil	2.213
0.00	Mud 30% Gas 30% Oil 40%	0.000
5.00	Clean Gassy Oil	0.025
0.00	Gas 5% Oil 95%	0.000
0.00	625 feet Gas in pipe	0.000

Total Length: 455.00 ft Total Volume: 2.238 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

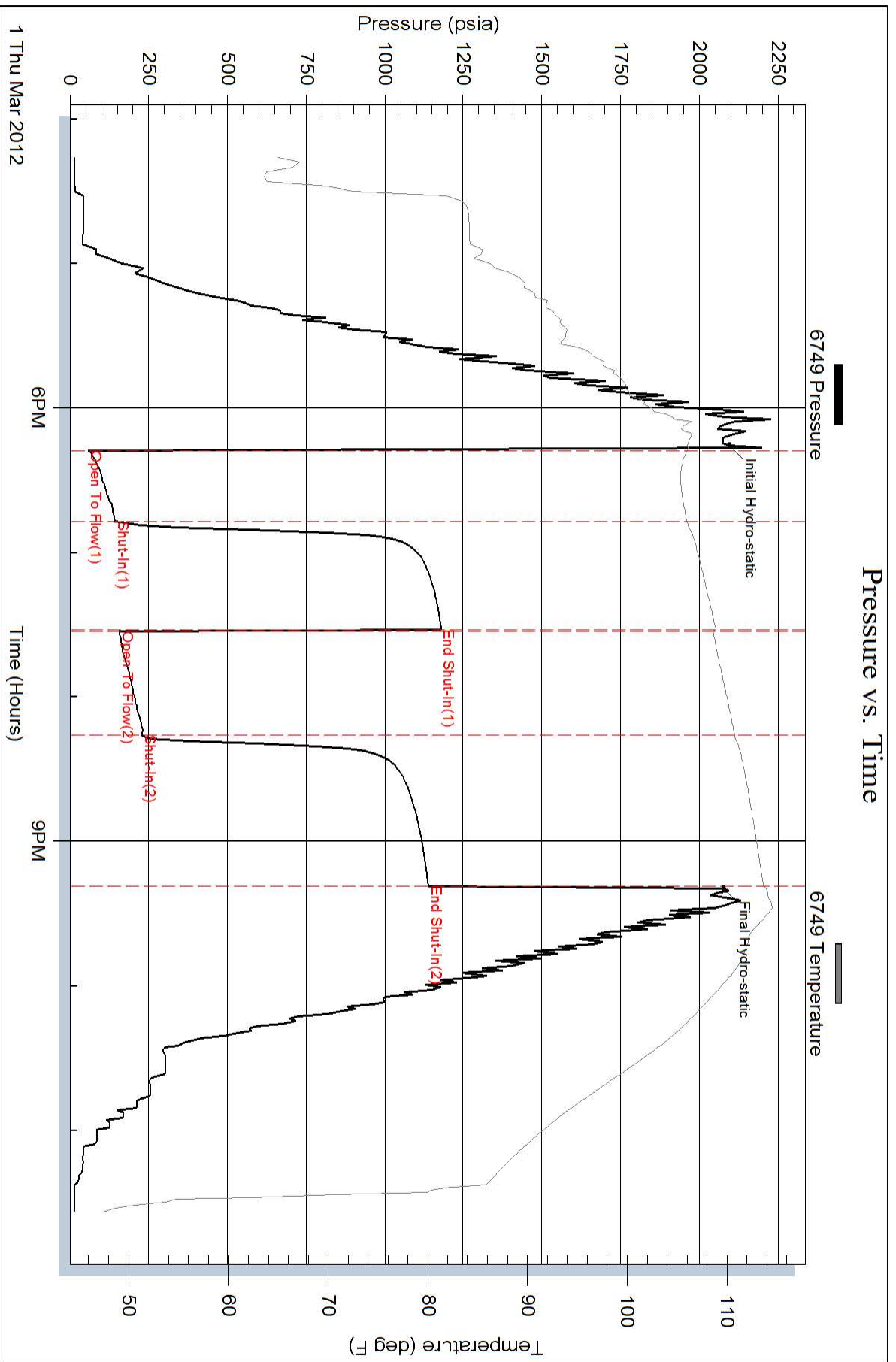
Serial #:

Laboratory Name:

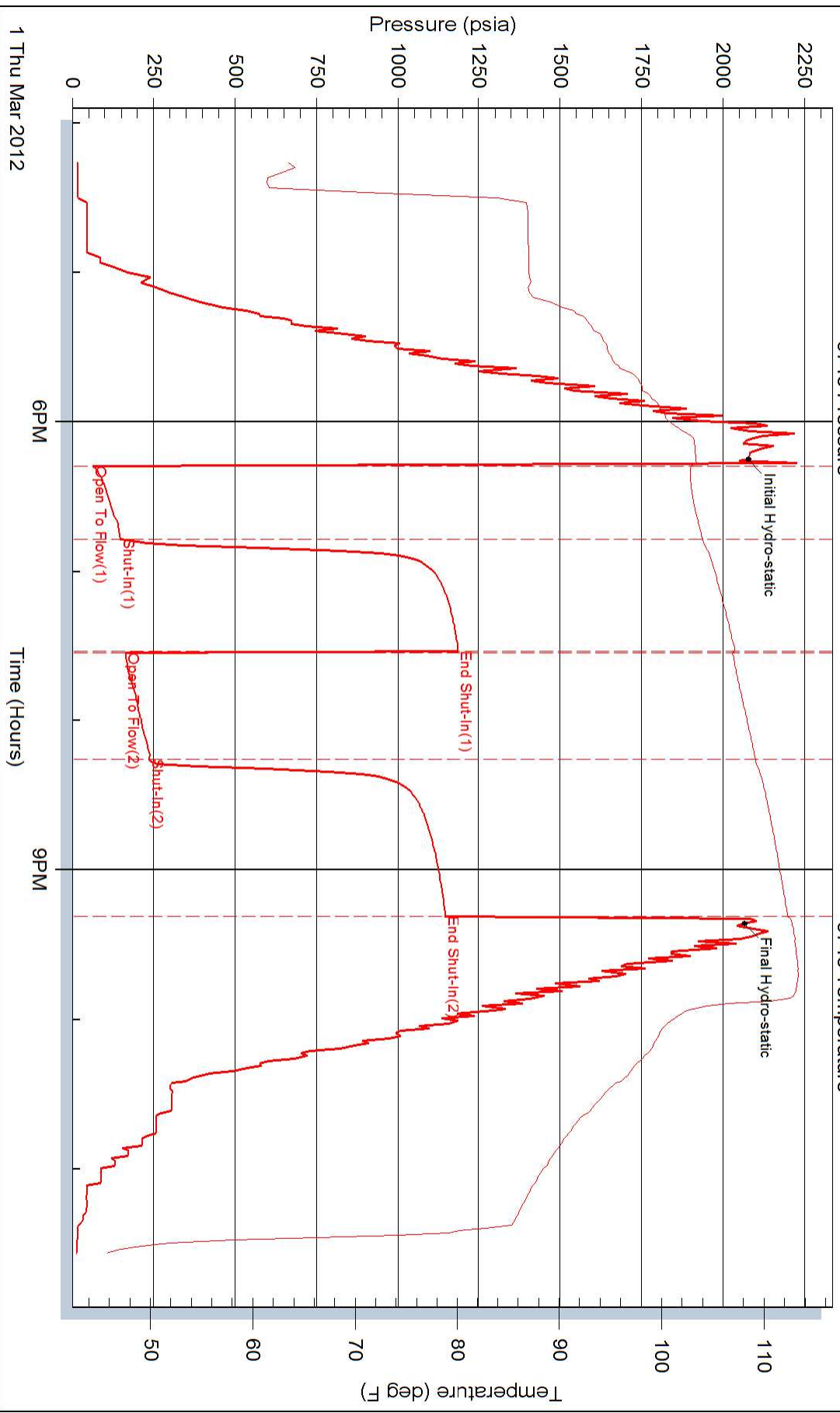
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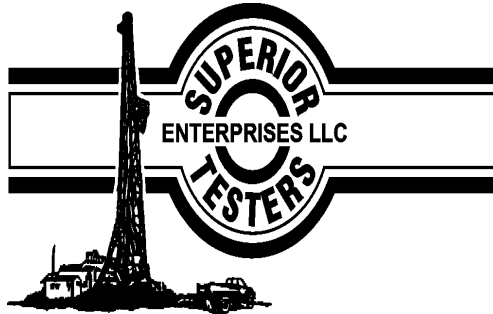
Recovery Comments:

Pressure vs. Time



Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Incorporated**

PO Box 713188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

Phillips 19D #3

19/13S/31W/Gove

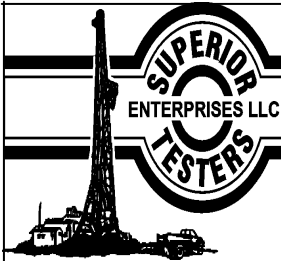
Start Date: 2012.03.03 @ 17:06:00

End Date: 2012.03.04 @ 00:26:30

Job Ticket #: 17169 DST #: 8

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

Printed: 2012.03.03 @ 00:53:05



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17169

DST#: 8

Test Start: 2012.03.03 @ 17:06:00

GENERAL INFORMATION:

Formation: **Pawnee thru Fort Sco**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:04:30

Time Test Ended: 00:26:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/70

Interval: **4360.00 ft (KB) To 4448.00 ft (KB) (TVD)**

Reference Elevations: 2911.00 ft (KB)

Total Depth: 4448.00 ft (KB) (TVD)

2901.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6749

Inside

Press @ Run Depth: 416.11 psia @ 4443.82 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.03.03

End Date:

2012.03.04

Last Calib.:

2012.03.03

Start Time:

17:06:00

End Time:

00:26:30

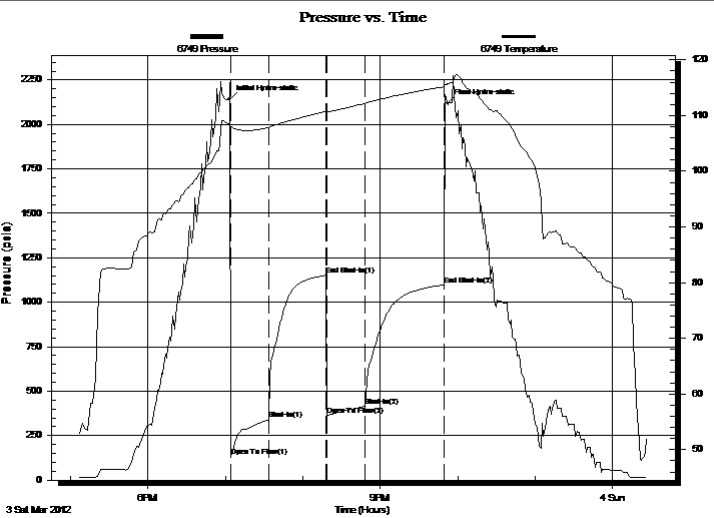
Time On Btm:

2012.03.03 @ 19:03:00

Time Off Btm:

2012.03.03 @ 21:52:00

TEST COMMENT: 1ST Open 30 Minutes/Strong blow/Blow built to bottom of bucket in 2 1/2 minutes
1ST Shut In 45 Minutes/Blow back built to bottom of bucket in 9 minutes
2ND Open 30 Minutes/Good blow/Blow built to bottom of bucket in 7 minutes
2ND Shut In 60 Minutes/Blow back built to bottom of bucket in 18 minutes



PRESSURE SUMMARY

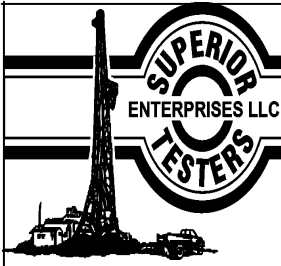
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2141.83	108.43	Initial Hydro-static
2	134.67	108.03	Open To Flow (1)
31	340.44	107.88	Shut-In(1)
75	1152.16	110.80	End Shut-In(1)
76	364.94	110.66	Open To Flow (2)
106	416.11	112.19	Shut-In(2)
167	1098.19	115.19	End Shut-In(2)
169	2118.10	115.65	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
270.00	Oily Gassy Mud	1.33
0.00	Oil 25% Gas 25% Mud 50%	0.00
450.00	Mud cut Gassy Oil	3.96
0.00	Mud 20% Gas 20% Oil 60%	0.00
195.00	Clean Gassy Oil	2.85
0.00	Gas 35% Oil 65%	0.00

Gas Rates

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



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17169 **DST#: 8**
Test Start: 2012.03.03 @ 17:06:00

GENERAL INFORMATION:

Formation: **Pawnee thru Fort Sco**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:04:30

Time Test Ended: 00:26:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/70

Interval: 4360.00 ft (KB) To 4448.00 ft (KB) (TVD)

Reference Elevations: 2911.00 ft (KB)

Total Depth: 4448.00 ft (KB) (TVD)

2901.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6748 Outside

Press @ Run Depth: 1106.59 psia @ 4444.82 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.03.03

End Date: 2012.03.04

Last Calib.: 2012.03.03

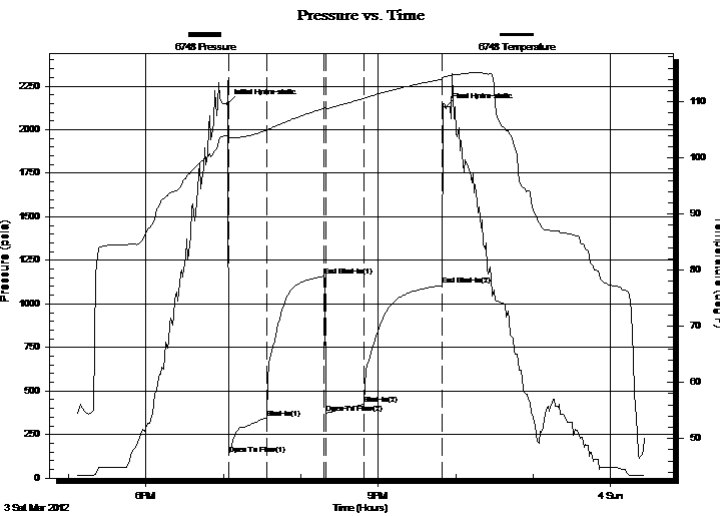
Start Time: 17:06:00

End Time: 00:27:00

Time On Btm: 2012.03.03 @ 19:03:00

Time Off Btm: 2012.03.03 @ 21:52:00

TEST COMMENT: 1ST Open 30 Minutes/Strong blow/Blow built to bottom of bucket in 2 1/2 minutes
1ST Shut In 45 Minutes/Blow back built to bottom of bucket in 9 minutes
2ND Open 30 Minutes/Good blow/Blow built to bottom of bucket in 7 minutes
2ND Shut In 60 Minutes/Blow back built to bottom of bucket in 18 minutes



PRESSURE SUMMARY

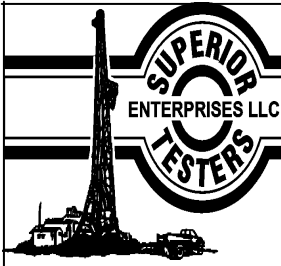
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2149.20	104.07	Initial Hydro-static
2	136.68	103.60	Open To Flow (1)
31	345.50	104.95	Shut-In(1)
75	1158.59	108.85	End Shut-In(1)
77	371.39	108.75	Open To Flow (2)
106	423.19	110.62	Shut-In(2)
167	1106.59	114.07	End Shut-In(2)
169	2128.08	114.49	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
270.00	Oily Gassy Mud	1.33
0.00	Oil 25% Gas 25% Mud 50%	0.00
450.00	Mud cut Gassy Oil	3.96
0.00	Mud 20% Gas 20% Oil 60%	0.00
195.00	Clean Gassy Oil	2.85
0.00	Gas 35% Oil 65%	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
 8100 East 22ND Street North
 #700
 ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17169

DST#: 8

Test Start: 2012.03.03 @ 17:06:00

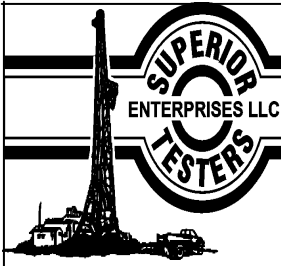
Tool Information

Drill Pipe:	Length: 3825.00 ft	Diameter: 3.88 inches	Volume: 55.94 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: 89000.00 lb
			<u>Total Volume: 58.60 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 84000.00 lb
Depth to Top Packer:	4360.00 ft			Final 85000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	87.82 ft			
Tool Length:	109.82 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			4343.00	
Hydraulic Tool	5.00			4348.00	
Safety Joint	2.00			4350.00	
Packer	5.00			4355.00	22.00 Bottom Of Top Packer
Packer	5.00			4360.00	
Change Over Sub	0.75			4360.75	
Drill Pipe	63.32			4424.07	
Change Over Sub	0.75			4424.82	
Anchor	18.00			4442.82	
Recorder	1.00	6749	Inside	4443.82	
Recorder	1.00	6748	Outside	4444.82	
Bullnose	3.00			4447.82	87.82 Bottom Packers & Anchor

Total Tool Length: 109.82



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17169

DST#: 8

Test Start: 2012.03.03 @ 17:06:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 61.00 sec/qt
Water Loss: 5.60 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: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
270.00	Oily Gassy Mud	1.328
0.00	Oil 25% Gas 25% Mud 50%	0.000
450.00	Mud cut Gassy Oil	3.960
0.00	Mud 20% Gas 20% Oil 60%	0.000
195.00	Clean Gassy Oil	2.852
0.00	Gas 35% Oil 65%	0.000
0.00	975 feet Gas in pipe	0.000
0.00	Corrected Specific Gravity of oil 32	0.000

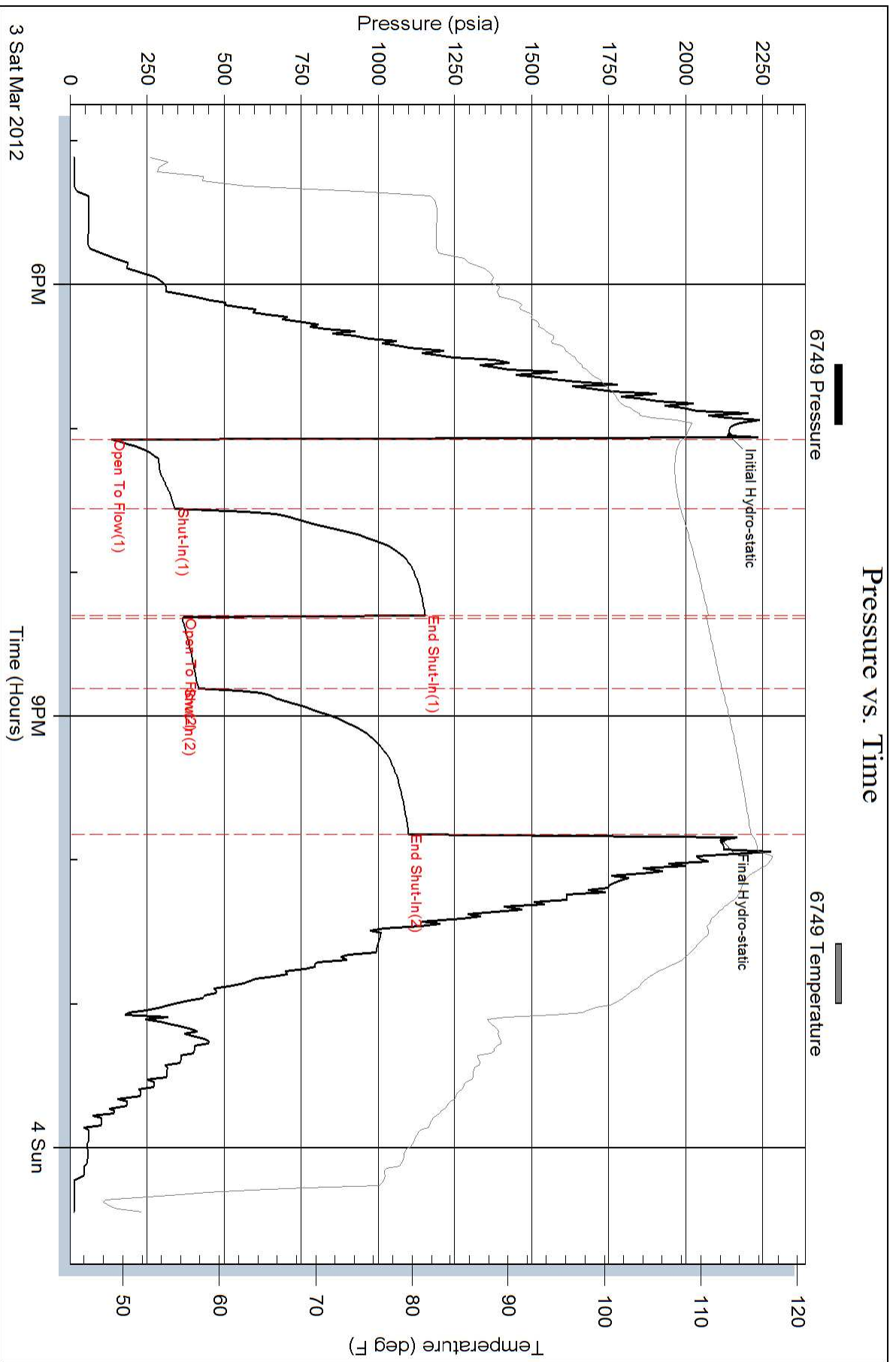
Total Length: 915.00 ft Total Volume: 8.140 bbl

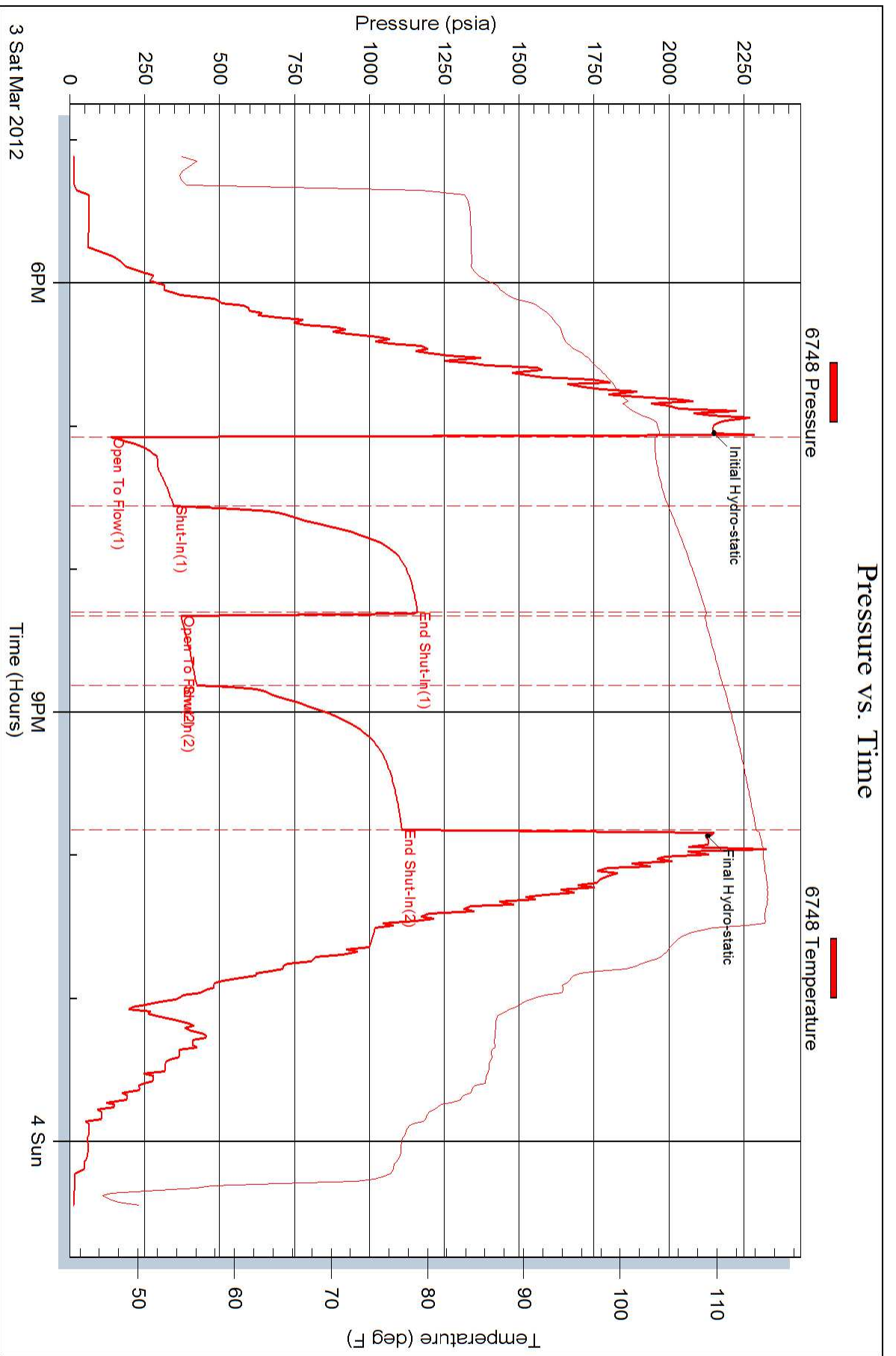
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

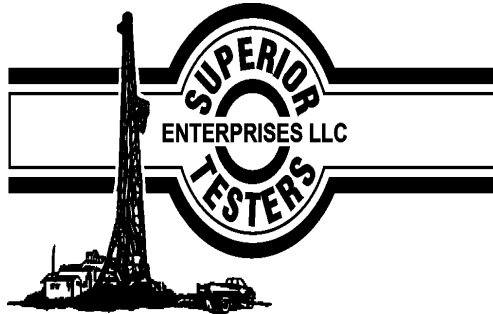
Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time







DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Incorporated**

PO Box 713188
8100 East 22ND Street North
#700

ATTN: Ted Jochems

Phillips 19D #3

19/13S/31W/Gove

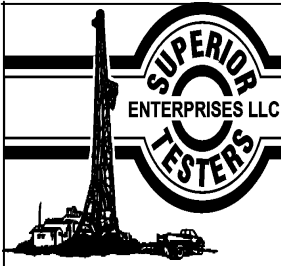
Start Date: 2012.03.03 @ 13:30:00

End Date: 2012.03.03 @ 20:42:00

Job Ticket #: 17170 DST #: 9

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

Printed: 2012.03.03 @ 21:07:47



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17170

DST#: 9

Test Start: 2012.03.03 @ 13:30:00

GENERAL INFORMATION:

Formation: **Cherokee Lime & John**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:44:30

Time Test Ended: 20:42:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/70

Interval: 4453.00 ft (KB) To 4505.00 ft (KB) (TVD)

Reference Elevations: 2911.00 ft (KB)

Total Depth: 4505.00 ft (KB) (TVD)

2901.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6749

Inside

Press @ RunDepth: 166.11 psia @ 4501.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.03.03

End Date: 2012.03.03

Last Calib.: 2012.03.03

Start Time: 13:30:00

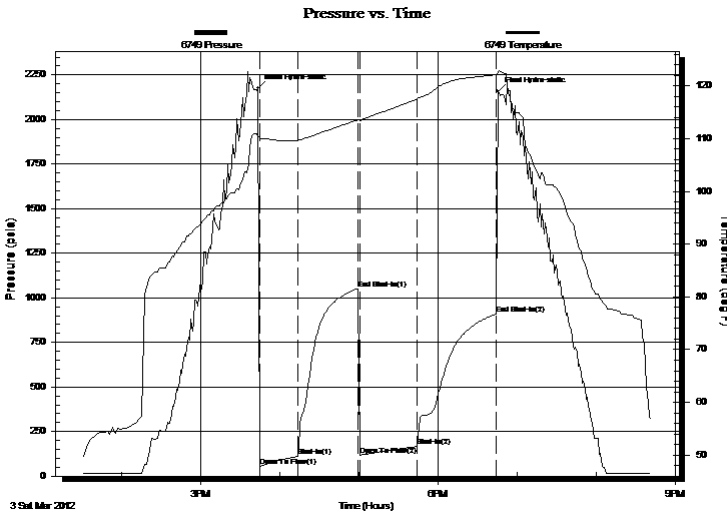
End Time: 20:42:00

Time On Btm: 2012.03.03 @ 15:43:30

Time Off Btm: 2012.03.03 @ 18:45:30

TEST COMMENT: 1ST Open 30 Minutes/Fair blow/Blow built to 7 inches
1ST Shut In 45 Minutes/Slight surface blow back
2ND Open 30 Minutes/Fair blow/Blow built to 6 1/2 inches
2ND Shut In 60 Minutes/Slight surface blow back

PRESSURE SUMMARY



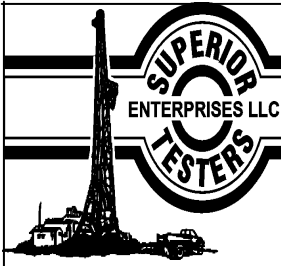
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2173.18	110.38	Initial Hydro-static
1	53.64	110.07	Open To Flow (1)
31	112.03	109.69	Shut-In(1)
76	1050.41	113.50	End Shut-In(1)
77	117.65	113.36	Open To Flow (2)
121	166.11	117.51	Shut-In(2)
181	910.62	122.12	End Shut-In(2)
182	2157.88	122.52	Final Hydro-static

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
10.00	Clean Oil 100%	0.05
260.00	Oil cut Watery Mud	1.28
0.00	Oil 5% Water 40% Mud 55%	0.00
0.00	Recovery chlorides 32000 ppm	0.00

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



DRILL STEM TEST REPORT

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700
ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17170

DST#: 9

Test Start: 2012.03.03 @ 13:30:00

GENERAL INFORMATION:

Formation: **Cherokee Lime & John**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:44:30

Time Test Ended: 20:42:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Scott City/70

Interval: 4453.00 ft (KB) To 4505.00 ft (KB) (TVD)

Reference Elevations: 2911.00 ft (KB)

Total Depth: 4505.00 ft (KB) (TVD)

2901.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6748 Outside

Press @ Run Depth: 918.48 psia @ 4502.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2012.03.03

End Date: 2012.03.03

Last Calib.: 2012.03.03

Start Time: 13:30:00

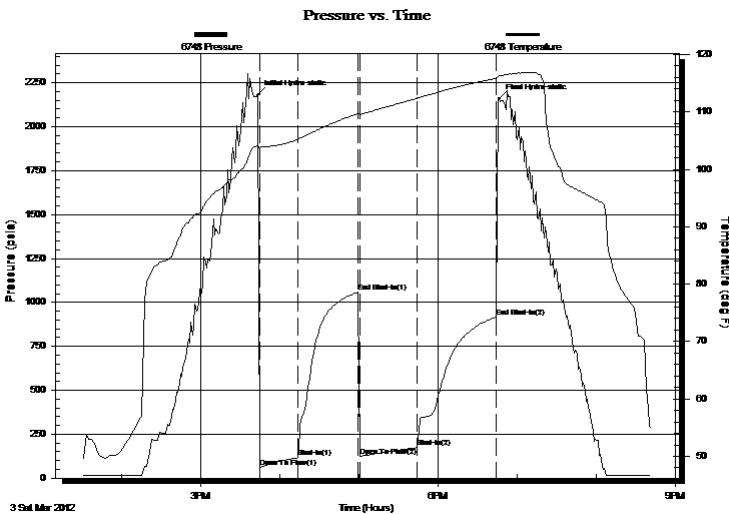
End Time: 20:42:00

Time On Btm: 2012.03.03 @ 15:43:30

Time Off Btm: 2012.03.03 @ 18:46:30

TEST COMMENT: 1ST Open 30 Minutes/Fair blow/Blow built to 7 inches
1ST Shut In 45 Minutes/Slight surface blow back
2ND Open 30 Minutes/Fair blow/Blow built to 6 1/2 inches
2ND Shut In 60 Minutes/Slight surface blow back

PRESSURE SUMMARY



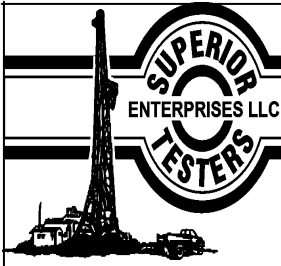
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2179.68	104.10	Initial Hydro-static
1	59.53	103.51	Open To Flow (1)
31	118.14	105.27	Shut-In(1)
76	1056.97	109.70	End Shut-In(1)
77	124.20	109.56	Open To Flow (2)
121	173.29	112.37	Shut-In(2)
181	918.48	115.86	End Shut-In(2)
183	2158.48	116.26	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Clean Oil 100%	0.05
260.00	Oil cut Watery Mud	1.28
0.00	Oil 5% Water 40% Mud 55%	0.00
0.00	Recovery chlorides 32000 ppm	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
 8100 East 22ND Street North
 #700
 ATTN: Ted Jochems

Phillips 19D #3

Job Ticket: 17170

DST#: 9

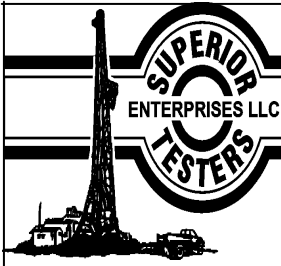
Test Start: 2012.03.03 @ 13:30:00

Tool Information

Drill Pipe:	Length: 3921.00 ft	Diameter: 3.88 inches	Volume: 57.34 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: 110000.0 lb
			<u>Total Volume: 60.00 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 85000.00 lb
Depth to Top Packer:	4453.00 ft			Final 85000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	52.00 ft			
Tool Length:	74.00 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			4436.00	
Hydraulic Tool	5.00			4441.00	
Safety Joint	2.00			4443.00	
Packer	5.00			4448.00	22.00 Bottom Of Top Packer
Packer	5.00			4453.00	
Anchor	47.00			4500.00	
Recorder	1.00	6749	Inside	4501.00	
Recorder	1.00	6748	Outside	4502.00	
Bullnose	3.00			4505.00	52.00 Bottom Packers & Anchor
Total Tool Length:	74.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Incorporated

19/13S/31W/Gove

PO Box 713188
8100 East 22ND Street North
#700

Phillips 19D #3

Job Ticket: 17170

DST#: 9

ATTN: Ted Jochems

Test Start: 2012.03.03 @ 13:30:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 58.00 sec/qt
Water Loss: 7.19 in³
Resistivity: ohm.m
Salinity: 3400.00 ppm
Filter Cake: 1.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psia

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Clean Oil 100%	0.049
260.00	Oil cut Watery Mud	1.279
0.00	Oil 5% Water 40% Mud 55%	0.000
0.00	Recovery chlorides 32000 ppm	0.000

Total Length: 270.00 ft Total Volume: 1.328 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time

