



DRILL STEM TEST REPORT

Prepared For: **Carrie Exploration and Development L.L.C.**

210 West 22nd Street
Hays ,Kansas 67601

ATTN: Herb Deines

25-19s-11w

Lundgren #C-1

Start Date: 2010.12.21 @ 10:00:00

End Date: 2010.12.21 @ 00:00:00

Job Ticket #: 15578 DST #: 5

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

Printed: 2010.12.21 @ 15:24:59

Carrie Exploration and Development L.L.C.
Lundgren #C-1
25-19s-11w
DST # 5
Arbuckle
2010.12.21



DRILL STEM TEST REPORT

Carrie Exploration and Development L.L.C.

Lundgren #C-1

210 West 22nd Street
Hays ,Kansas 67601

25-19s-11w

Job Ticket: 15578

DST#: 5

ATTN: Herb Deines

Test Start: 2010.12.21 @ 10:00:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:00:00

Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Gene Budiig

Unit No: 3335-18

Interval: 3300.00 ft (KB) To 3321.00 ft (KB) (TVD)

Reference Elevations: 1776.00 ft (KB)

Total Depth: 3420.00 ft (KB) (TVD)

1766.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8405 Outside

Press @ RunDepth: 1083.47 psia @ 3321.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2010.12.21

End Date:

2010.12.21

Last Calib.:

2010.12.21

Start Time: 10:00:00

End Time:

14:52:56

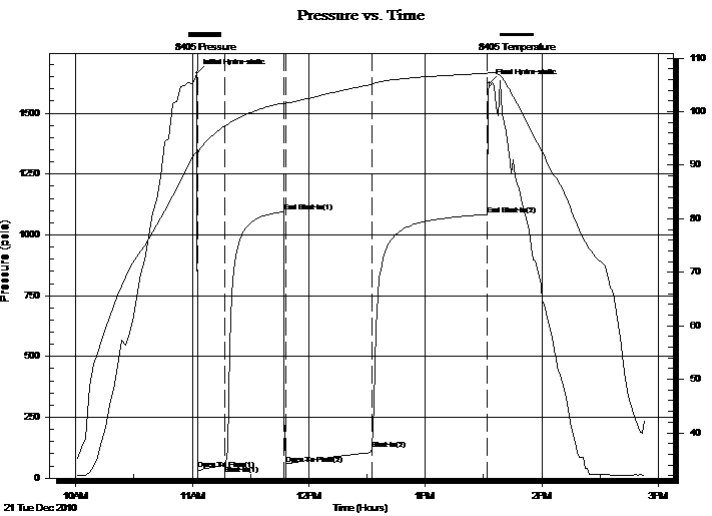
Time On Btm:

2010.12.21 @ 11:02:26

Time Off Btm:

2010.12.21 @ 13:32:56

TEST COMMENT: 1st Opening 15 Minutes-Weak building blow built to 6 inches into the water
 1st Shut-In 30 Minutes-no blow back
 2nd Opening 45 Minutes Weak building blow built to 3 inches and decreased to a weak surface blow
 2nd Shut-In 60 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1664.51	92.53	Initial Hydro-static
1	34.71	92.10	Open To Flow (1)
15	52.77	97.28	Shut-In(1)
45	1094.04	101.62	End Shut-In(1)
46	56.87	101.48	Open To Flow (2)
90	117.62	105.11	Shut-In(2)
150	1083.47	107.17	End Shut-In(2)
151	1622.98	107.30	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	Slightly oil cut muddy w ater	1.26
0.00	3%Oil 47%Water 50%mud	0.00
60.00	Slightly oil and mud cut w ater	0.84
0.00	3%Oil 10% Mud 87%Water chlorides	16(0.00)

Gas Rates

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



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Test Type: Conventional Bottom Hole (Initial)

Tester: Gene Budiig

Unit No: 3335-18

Interval: 3300.00 ft (KB) To 3321.00 ft (KB) (TVD)

Reference Elevations: 1776.00 ft (KB)

Total Depth: 3420.00 ft (KB) (TVD)

1766.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8400 Inside

Press @ RunDepth: 1083.32 psia @ 3320.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2010.12.21

End Date:

2010.12.21

Last Calib.:

2010.12.21

Start Time: 10:00:00

End Time:

14:54:30

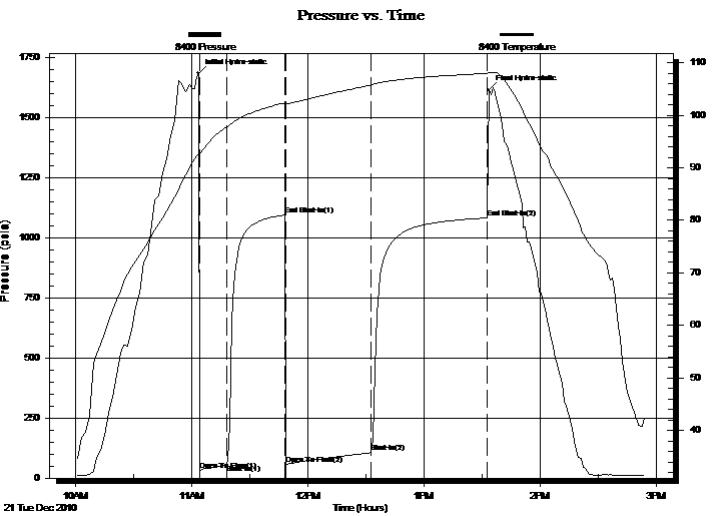
Time On Btm:

2010.12.21 @ 11:03:30

Time Off Btm:

2010.12.21 @ 13:33:30

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 1st Shut-In 30 Minutes-no blow back
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 2nd Shut-In 60 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1685.45	92.75	Initial Hydro-static
1	34.22	92.62	Open To Flow (1)
15	58.44	97.73	Shut-In(1)
45	1094.29	102.35	End Shut-In(1)
45	57.39	102.13	Open To Flow (2)
89	105.86	105.71	Shut-In(2)
150	1083.32	107.98	End Shut-In(2)
150	1616.07	108.12	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	Slightly oil cut muddy w ater	1.26
0.00	3%Oil 47%Water 50%mud	0.00
60.00	Slightly oil and mud cut w ater	0.84
0.00	3%Oil 10% Mud 87%Water chlorides	16(0.00)

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Carrie Exploration and Development L.L.C.

Lundgren #C-1

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25-19s-11w

Job Ticket: 15578

DST#: 5

ATTN: Herb Deines

Test Start: 2010.12.21 @ 10:00:00

Tool Information

Drill Pipe:	Length: 3300.00 ft	Diameter: 3.80 inches	Volume: 46.29 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.76 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 39000.00 lb
			<u>Total Volume: 46.29 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 32000.00 lb
Depth to Top Packer:	3300.00 ft			Final 32000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	124.68 ft			
Tool Length:	139.68 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			3290.00	
Hydraulic Tool	5.00			3295.00	
Packer	5.00			3300.00	15.00 Bottom Of Top Packer
Perforations	19.00			3319.00	
Recorder	1.00	8400	Inside	3320.00	
Recorder	1.00	8405	Outside	3321.00	124.68 Tool Interval
Packer	5.00			3326.00	
Change Over Sub	0.75			3326.75	
Drill Pipe	93.18			3419.93	
Change Over Sub	0.75			3420.68	
Recorder	1.00	8524	Outside	3421.68	
Bullnose	3.00			3424.68	1000138.68 Bottom Packers & Anchor

Total Tool Length: 139.68



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FLUID SUMMARY

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Test Start: 2010.12.21 @ 10:00:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 47.00 sec/qt

Water Loss: 9.60 in³

Resistivity: ohm.m

Salinity: 4500.00 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	Slightly oil cut muddy w ater	1.262
0.00	3%Oil 47%Water 50%mud	0.000
60.00	Slightly oil and mud cut w ater	0.842
0.00	3%Oil 10% Mud 87%Water chlorides 16000	0.000

Total Length: 150.00 ft

Total Volume: 2.104 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

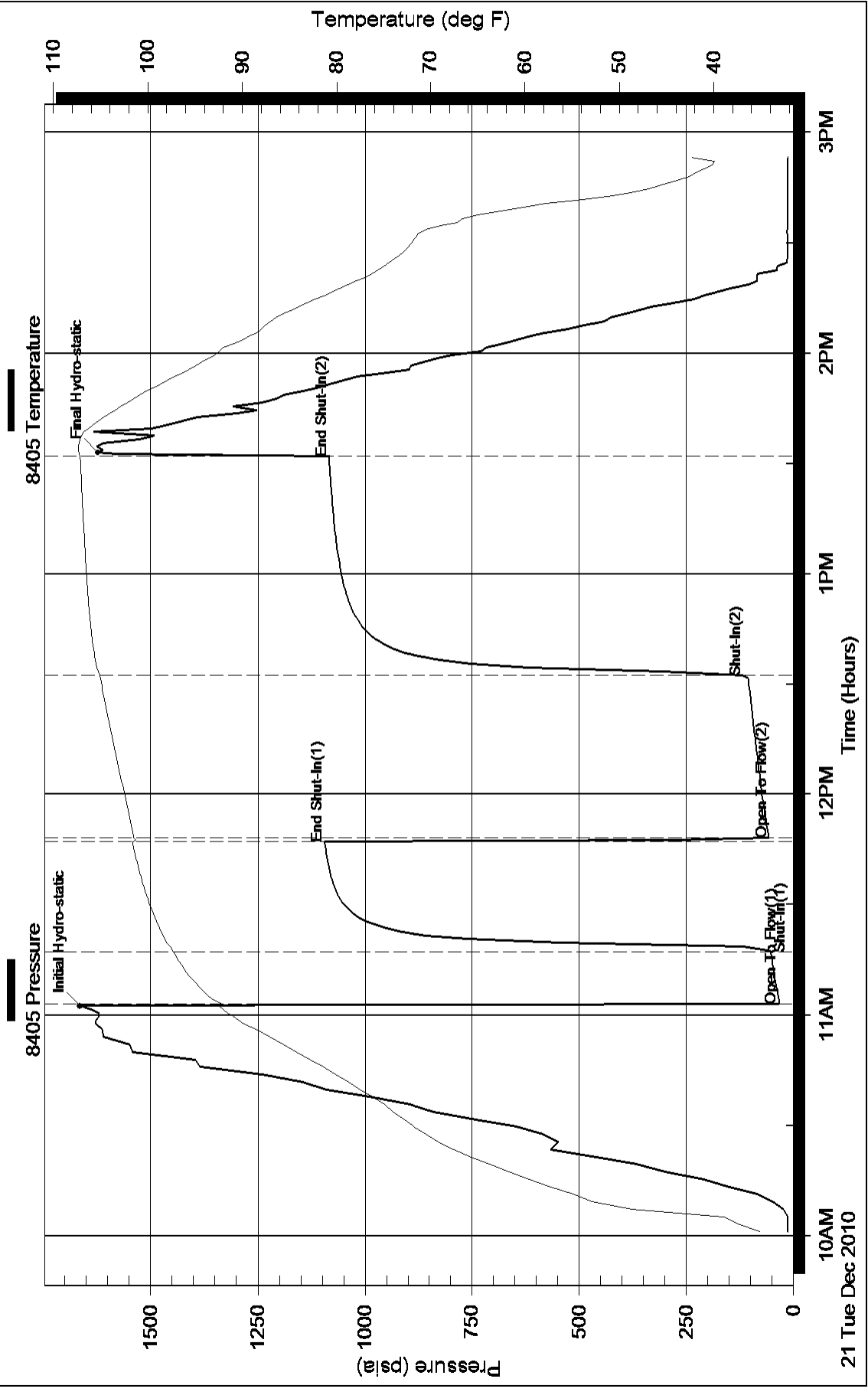
Serial #:

Laboratory Name:

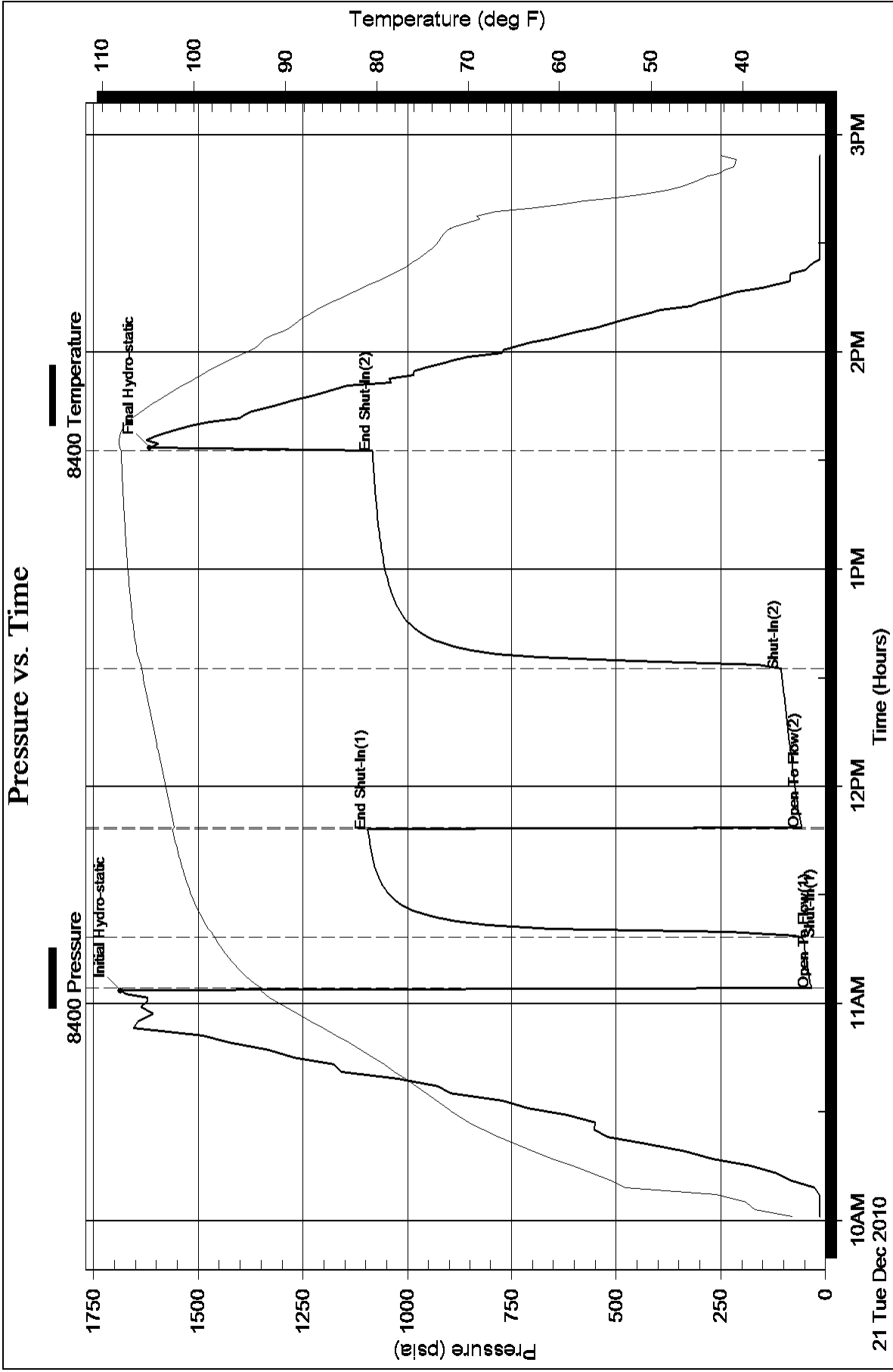
Laboratory Location:

Recovery Comments:

Pressure vs. Time



Pressure vs. Time



Pressure vs. Time

