



DRILL STEM TEST REPORT

Prepared For: **Captiva**

2717 Canal Blvd. Suite C
Hays Kansas 67601

ATTN: Charlie Sturdavant

7/22S/16W Pawnee

Eakin Unit # 1-7

Start Date: 2011.01.21 @ 14:16:00

End Date: 2011.01.21 @ 21:15:07

Job Ticket #: 16020 DST #: 3

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

Printed: 2011.01.21 @ 21:32:51

Captiva Eakin Unit # 1-7 7/22S/16W Pawnee DST # 3 LANSING H ZONE 2011.01.21



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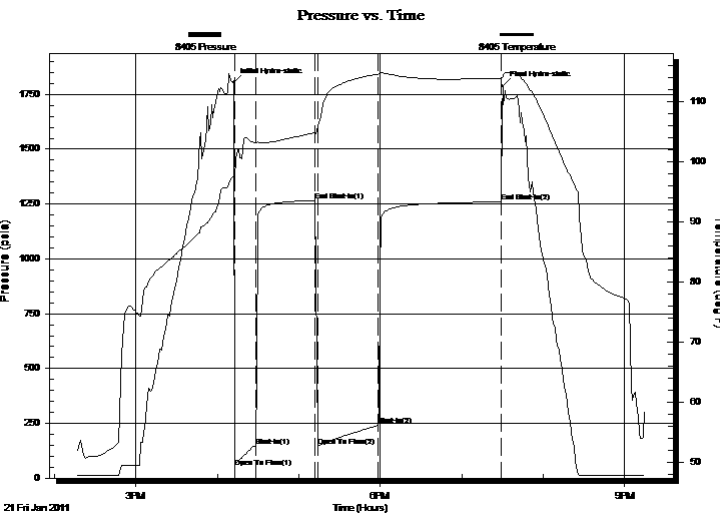
Eakin Unit # 1-7
7/22S/16W Pawnee
 Job Ticket: 16020 **DST#: 3**
 Test Start: 2011.01.21 @ 14:16:00

GENERAL INFORMATION:

Formation: **LANSING H ZONE**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 16:12:37
 Time Test Ended: 21:15:07
 Interval: **3660.00 ft (KB) To 3678.00 ft (KB) (TVD)**
 Total Depth: 3678.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: JARED SCHECK
 Unit No: 3345-GREAT BEND-50
 Reference Elevations: 2018.00 ft (KB)
 2007.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8405 Inside
 Press@RunDepth: 240.67 psia @ 3674.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2011.01.21 End Date: 2011.01.21 Last Calib.: 2011.01.21
 Start Time: 14:16:00 End Time: 21:15:07 Time On Btm: 2011.01.21 @ 16:12:07
 Time Off Btm: 2011.01.21 @ 19:30:07

TEST COMMENT: 15/INITIAL OPEN:FAIR BLOW BUILT BOTTOM OF BUCKET IN 12 MINUTES
 45/INITIAL SHUT IN:VERY WEAK SURFACE BLOW
 45/FINAL OPEN:FAIR BLOW BUILT BOTTOM OF BUCKET IN 16 MINUTES
 90/FINAL SHUT IN:NO BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1804.02	97.50	Initial Hydro-static
1	48.23	97.14	Open To Flow (1)
16	146.64	103.13	Shut-In(1)
60	1265.38	104.87	End Shut-In(1)
62	146.30	105.88	Open To Flow (2)
106	240.67	114.62	Shut-In(2)
197	1260.12	113.87	End Shut-In(2)
198	1788.41	114.17	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
360.00	WATER 15%MD 85%WATER	2.69
0.00	CHLORIDES 50,000	0.00
0.00	RESISTIVITY .2 @ 70 DEGREES	0.00

Gas Rates

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



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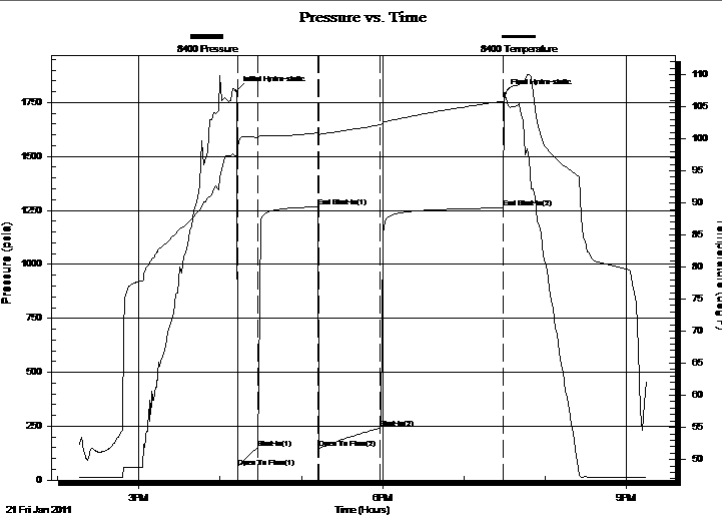
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 Test Type: Conventional Bottom Hole (Initial)
 Tester: JARED SCHECK
 Unit No: 3345-GREAT BEND-50
 Reference Elevations: 2018.00 ft (KB)
 2007.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8400 Outside
 Press@RunDepth: 1260.92 psia @ 3675.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2011.01.21 End Date: 2011.01.21 Last Calib.: 2011.01.21
 Start Time: 14:16:00 End Time: 21:15:30 Time On Btm: 2011.01.21 @ 16:12:00
 Time Off Btm: 2011.01.21 @ 19:30:00

TEST COMMENT: 15/INITIAL OPEN:FAIR BLOW BUILT BOTTOM OF BUCKET IN 12 MINUTES
 45/INITIAL SHUT IN:VERY WEAK SURFACE BLOW
 45/FINAL OPEN:FAIR BLOW BUILT BOTTOM OF BUCKET IN 16 MINUTES
 90/FINAL SHUT IN:NO BLOW BACK



PRESSURE SUMMARY			
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1804.48	97.24	Initial Hydro-static
1	60.33	98.79	Open To Flow (1)
16	146.99	100.20	Shut-In(1)
60	1266.10	100.92	End Shut-In(1)
61	146.79	100.68	Open To Flow (2)
106	242.22	102.19	Shut-In(2)
197	1260.92	105.84	End Shut-In(2)
198	1790.01	106.00	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
360.00	WATER 15%MD 85%WATER	2.69
0.00	CHLORIDES 50,000	0.00
0.00	RESISTIVITY .2 @ 70 DEGREES	0.00

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



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TOOL DIAGRAM

Captiva
 2717 Canal Blvd. Suite C
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Eakin Unit # 1-7
7/22S/16W Pawnee
 Job Ticket: 16020 **DST#: 3**
 Test Start: 2011.01.21 @ 14:16:00

Tool Information

Drill Pipe:	Length: 3383.00 ft	Diameter: 3.80 inches	Volume: 47.45 bbl	Tool Weight:	1000.00 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: 259.00 ft	Diameter: 2.25 inches	Volume: 1.27 bbl	Weight to Pull Loose:	84000.00 lb
			<u>Total Volume: 48.72 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial	70000.00 lb
Depth to Top Packer:	3660.00 ft			Final	71500.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	18.00 ft				
Tool Length:	47.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3632.00	
Shut-In Tool	5.00			3637.00	
Hydraulic Tool	5.00			3642.00	
Jars	6.00			3648.00	
Safety Joint	2.00			3650.00	
Packer	5.00			3655.00	29.00 Bottom Of Top Packer
Packer	5.00			3660.00	
Perforations	13.00			3673.00	
Recorder	1.00	8405	Inside	3674.00	
Recorder	1.00	8400	Outside	3675.00	
Bullnose	3.00			3678.00	18.00 Bottom Packers & Anchor

Total Tool Length: 47.00



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FLUID SUMMARY

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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: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.40 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 7800.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
360.00	WATER 15%MD 85%WATER	2.690
0.00	CHLORIDES 50,000	0.000
0.00	RESISTIVITY .2 @ 70 DEGREES	0.000

Total Length: 360.00 ft Total Volume: 2.690 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: CHLORIDES 50,000

Serial #: 8405

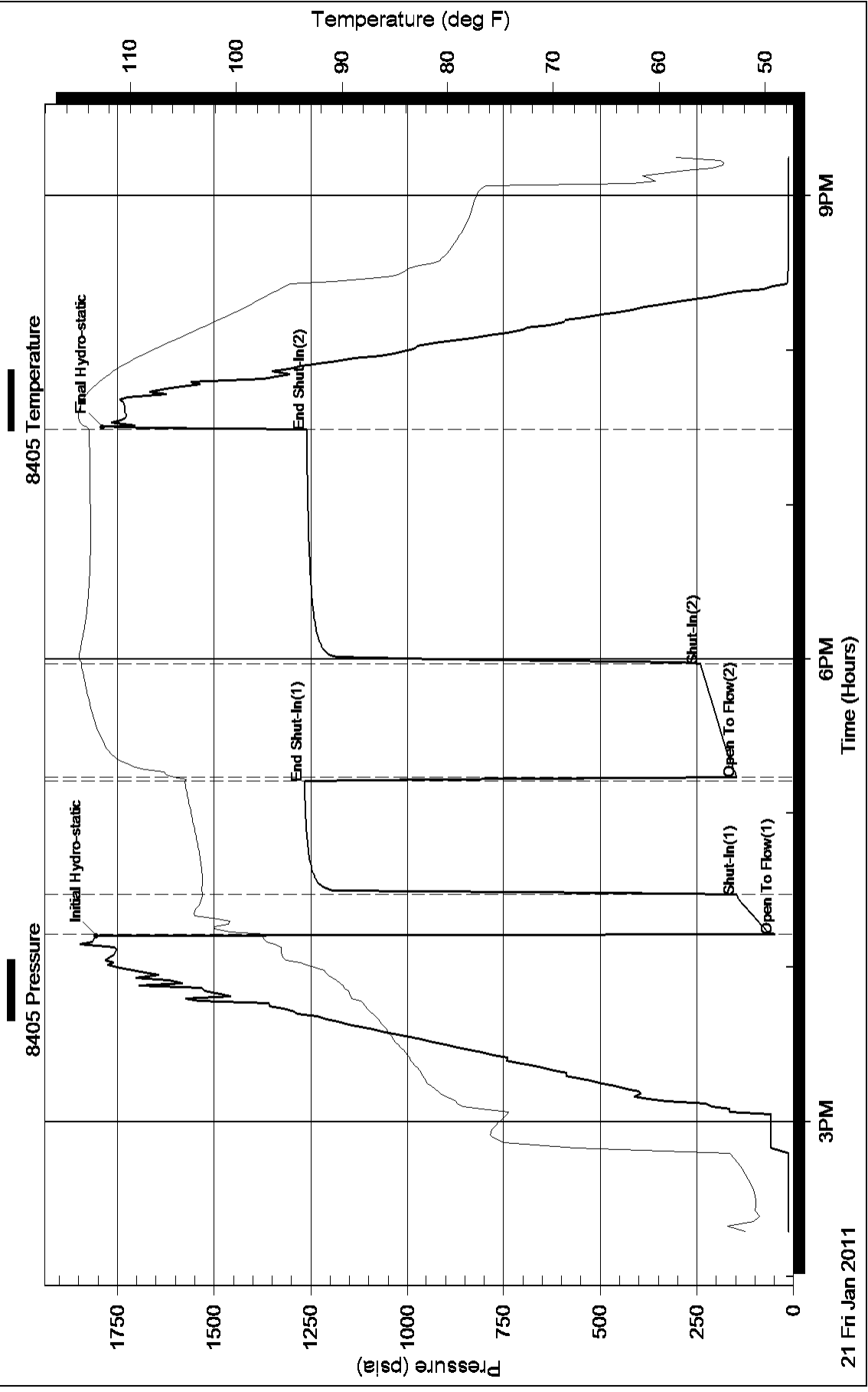
Inside

Captiva

7/22S/16W Paw nee

DST Test Number: 3

Pressure vs. Time



Serial #: 8400

Outside Captiva

7/22S/16W Pawnee

DST Test Number: 3

Pressure vs. Time

