



DRILL STEM TEST REPORT

Prepared For: **Shelby Resources**

2717 Canal Blvd. Hays Kansas 67601

ATTN: Keith Reavis

WFYOG #2-3

3-22s-16w-Pawnee

Start Date: 2013.05.19 @ 04:30:00

End Date: 2013.05.19 @ 12:55:00

Job Ticket #: 18376 DST #: 1

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

Printed: 2013.05.21 @ 07:30:41



DRILL STEM TEST REPORT

Shelby Resources
 2717 Canal Blvd. Hays Kansas 67601
 ATTN: Keith Reavis

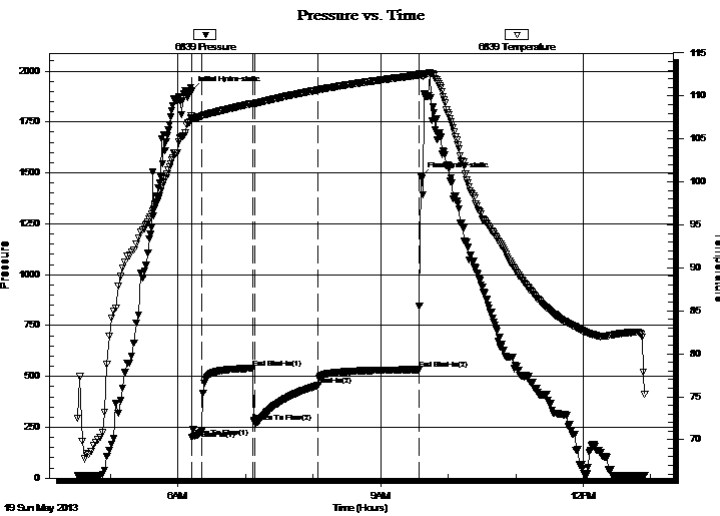
3-22s-16w-Pawnee
WFYOG #2-3
 Job Ticket: 18376 **DST#: 1**
 Test Start: 2013.05.19 @ 04:30:00

GENERAL INFORMATION:

Formation: **Conglomerate/Simpson**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 06:12:30
 Time Test Ended: 12:55:00
 Interval: **3787.00 ft (KB) To 3837.00 ft (KB) (TVD)**
 Total Depth: 3837.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Great Bend-46
 Reference Elevations: 1999.00 ft (KB)
 1986.00 ft (CF)
 KB to GR/CF: 13.00 ft

Serial #: 6839 Inside
 Press @ RunDepth: 455.54 psia @ 3833.38 ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.05.19 End Date: 2013.05.19 Last Calib.: 2013.05.19
 Start Time: 04:31:00 End Time: 12:55:00 Time On Btm: 2013.05.19 @ 06:12:00
 Time Off Btm: 2013.05.19 @ 09:35:30

TEST COMMENT: 1st Open 10 minutes Strong Building blow blew off bottom of a 5 gallon bucket of water in 3 minutes.
 1st Shut in 45 minutes Yes 1/2 inch blow back
 2nd Open 60 minutes Strong blow blew off bottom bucket 2.5 minutes.
 2nd Shut in 90 minutes Yes blow back bottom bucket.



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1902.29	107.71	Initial Hydro-static
1	200.91	107.36	Open To Flow (1)
10	233.23	107.66	Shut-In(1)
55	539.72	109.15	End Shut-In(1)
56	274.44	109.12	Open To Flow (2)
113	455.54	110.70	Shut-In(2)
202	533.30	112.42	End Shut-In(2)
204	1482.49	112.44	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
813.00	Clean gassy oil 100%	8.03
627.00	Oil cut gassy mud	8.80
0.00	Gas 10% Oil 60% Mud 30%	0.00
0.00	2330 gas in pipe.	0.00
0.00	Gravity of oil 39 corrected	0.00

Gas Rates

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



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Shelby Resources
 2717 Canal Blvd. Hays Kansas 67601
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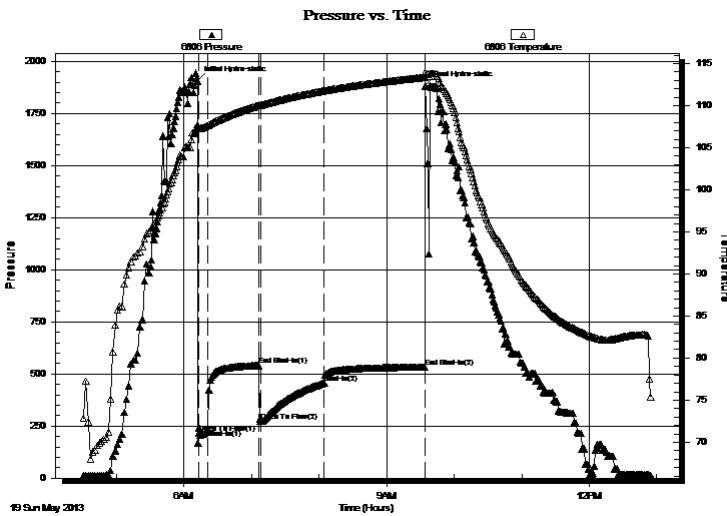
3-22s-16w-Pawnee
WFYOG #2-3
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 Total Depth: 3837.00 ft (KB) (TVD)
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 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Great Bend-46
 Reference Elevations: 1999.00 ft (KB)
 1986.00 ft (CF)
 KB to GR/CF: 13.00 ft

Serial #: 6806 Inside
 Press @ RunDepth: 533.53 psia @ 3834.38 ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.05.19 End Date: 2013.05.19 Last Calib.: 2013.05.19
 Start Time: 04:31:00 End Time: 12:54:30 Time On Btm: 2013.05.19 @ 06:12:00
 Time Off Btm: 2013.05.19 @ 09:34:30

TEST COMMENT: 1st Open 10 minutes Strong Building blow blew off bottom of a 5 gallon bucket of water in 3 minutes.
 1st Shut in 45 minutes Yes 1/2 inch blow back
 2nd Open 60 minutes Strong blow blew off bottom bucket 2.5 minutes.
 2nd Shut in 90 minutes Yes blow back bottom bucket.



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1906.01	107.73	Initial Hydro-static
1	216.13	107.37	Open To Flow (1)
10	234.11	107.63	Shut-In(1)
55	540.22	110.03	End Shut-In(1)
56	275.15	110.02	Open To Flow (2)
113	456.07	111.75	Shut-In(2)
203	533.53	113.36	End Shut-In(2)
203	1881.92	113.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
813.00	Clean gassy oil 100%	8.03
627.00	Oil cut gassy mud	8.80
0.00	Gas10% Oil60% Mud30%	0.00
0.00	2330 gas in pipe.	0.00
0.00	Gravity of oil 39 corrected	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Shelby Resources
 2717 Canal Blvd. Hays Kansas 67601
 ATTN: Keith Reavis

3-22s-16w-Pawnee
WFYOG #2-3
 Job Ticket: 18376 **DST#: 1**
 Test Start: 2013.05.19 @ 04:30:00

Tool Information

Drill Pipe:	Length: 3401.00 ft	Diameter: 3.80 inches	Volume: 47.71 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: 370.71 ft	Diameter: 2.25 inches	Volume: 1.82 bbl	Weight to Pull Loose:	93000.00 lb
			<u>Total Volume: 49.53 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	12.71 ft			String Weight: Initial	71000.00 lb
Depth to Top Packer:	3787.00 ft			Final	78000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	50.38 ft				
Tool Length:	78.38 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			3764.00	
Hydraulic Tool	5.00			3769.00	
Safety Joint	2.00			3771.00	
Jars	6.00			3777.00	
Packer	5.00			3782.00	28.00 Bottom Of Top Packer
Packer	5.00			3787.00	
Anchor	5.00			3792.00	
Change Over Sub	0.75			3792.75	
Drill Pipe	31.88			3824.63	
Change Over Sub	0.75			3825.38	
Anchor	7.00			3832.38	
Recorder	1.00	6839	Inside	3833.38	
Recorder	1.00	6806	Inside	3834.38	
Bullnose	3.00			3837.38	50.38 Bottom Packers & Anchor

Total Tool Length: 78.38



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FLUID SUMMARY

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3-22s-16w-Pawnee
WFYOG #2-3
 Job Ticket: 18376 **DST#: 1**
 Test Start: 2013.05.19 @ 04:30:00

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: 49.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.35 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 4900.00 ppm			
Filter Cake: 1.00 inches			

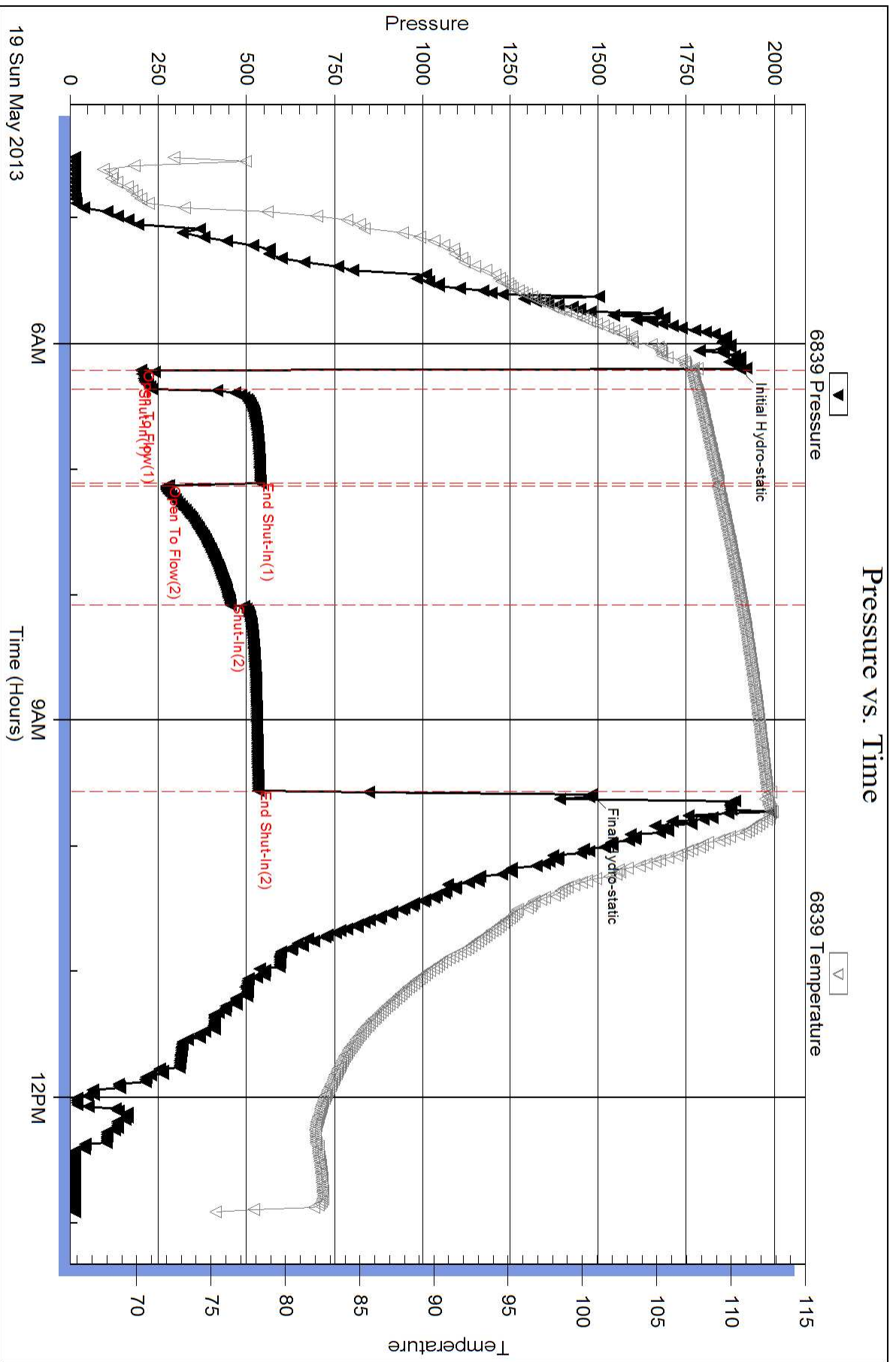
Recovery Information

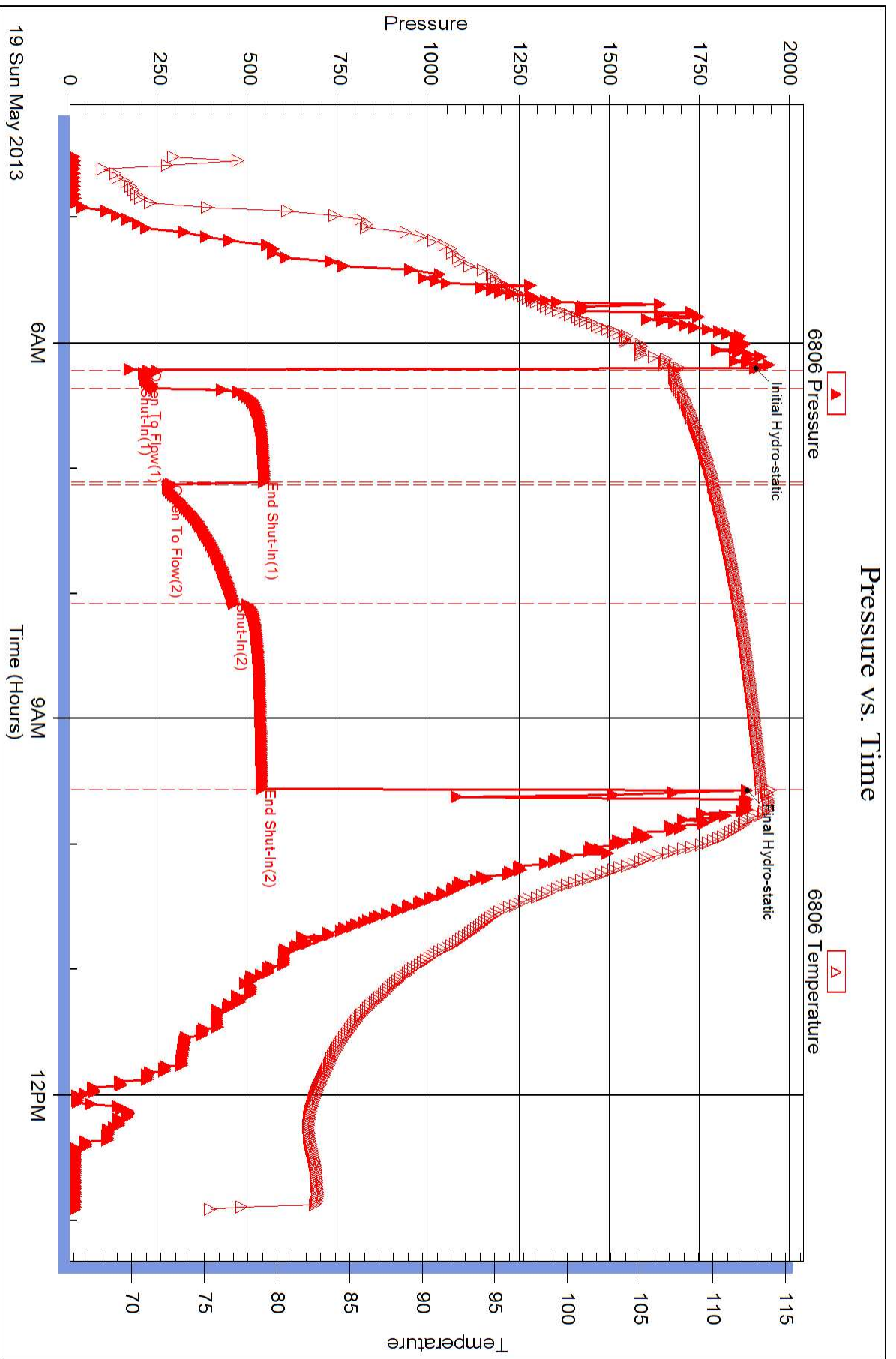
Recovery Table

Length ft	Description	Volume bbl
813.00	Clean gassy oil 100%	8.027
627.00	Oil cut gassy mud	8.795
0.00	Gas 10% Oil 60% Mud 30%	0.000
0.00	2330 gas in pipe.	0.000
0.00	Gravity of oil 39 corrected	0.000

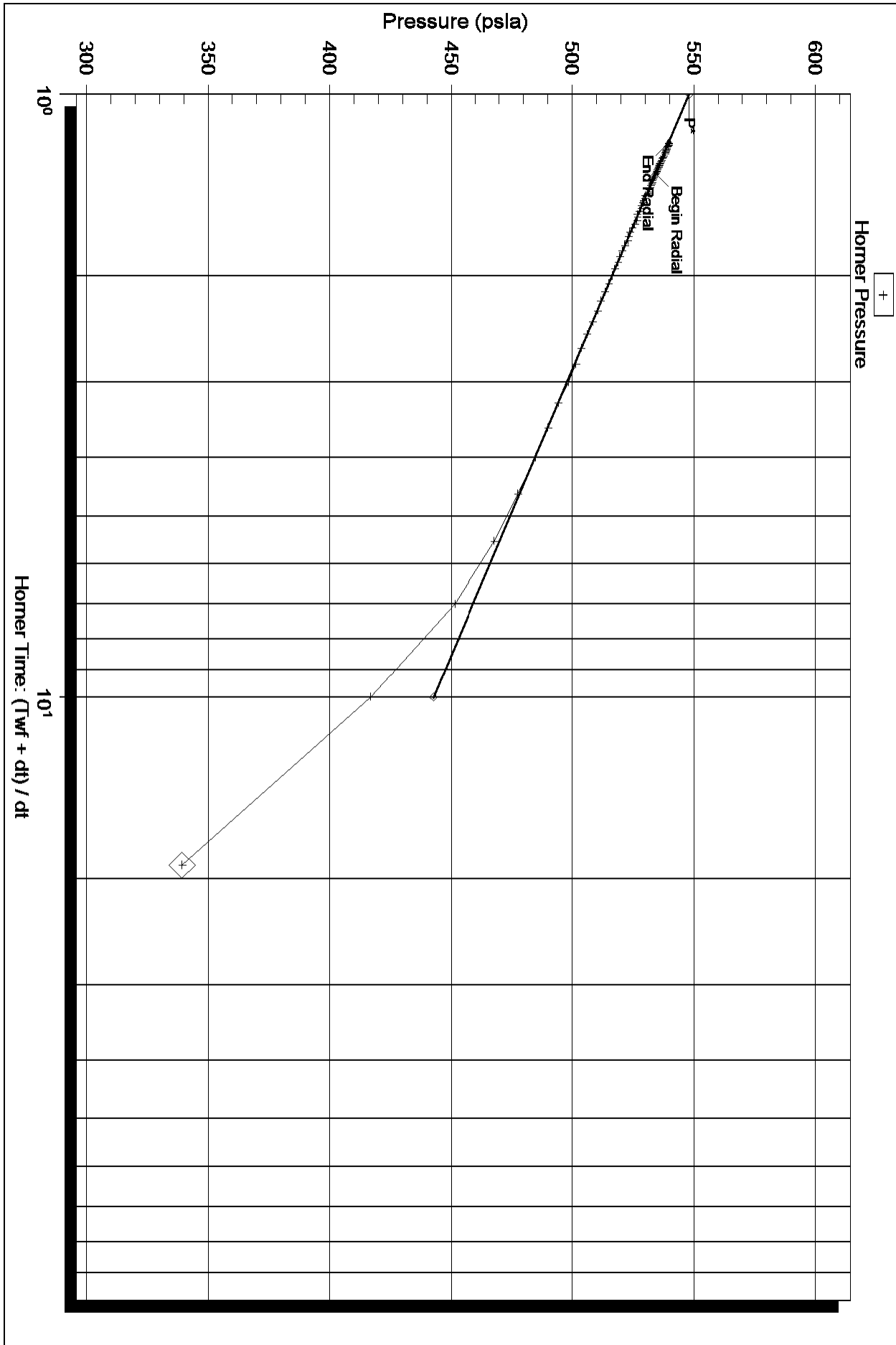
Total Length: 1440.00 ft Total Volume: 16.822 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Pressure vs. Time





Horner Plot



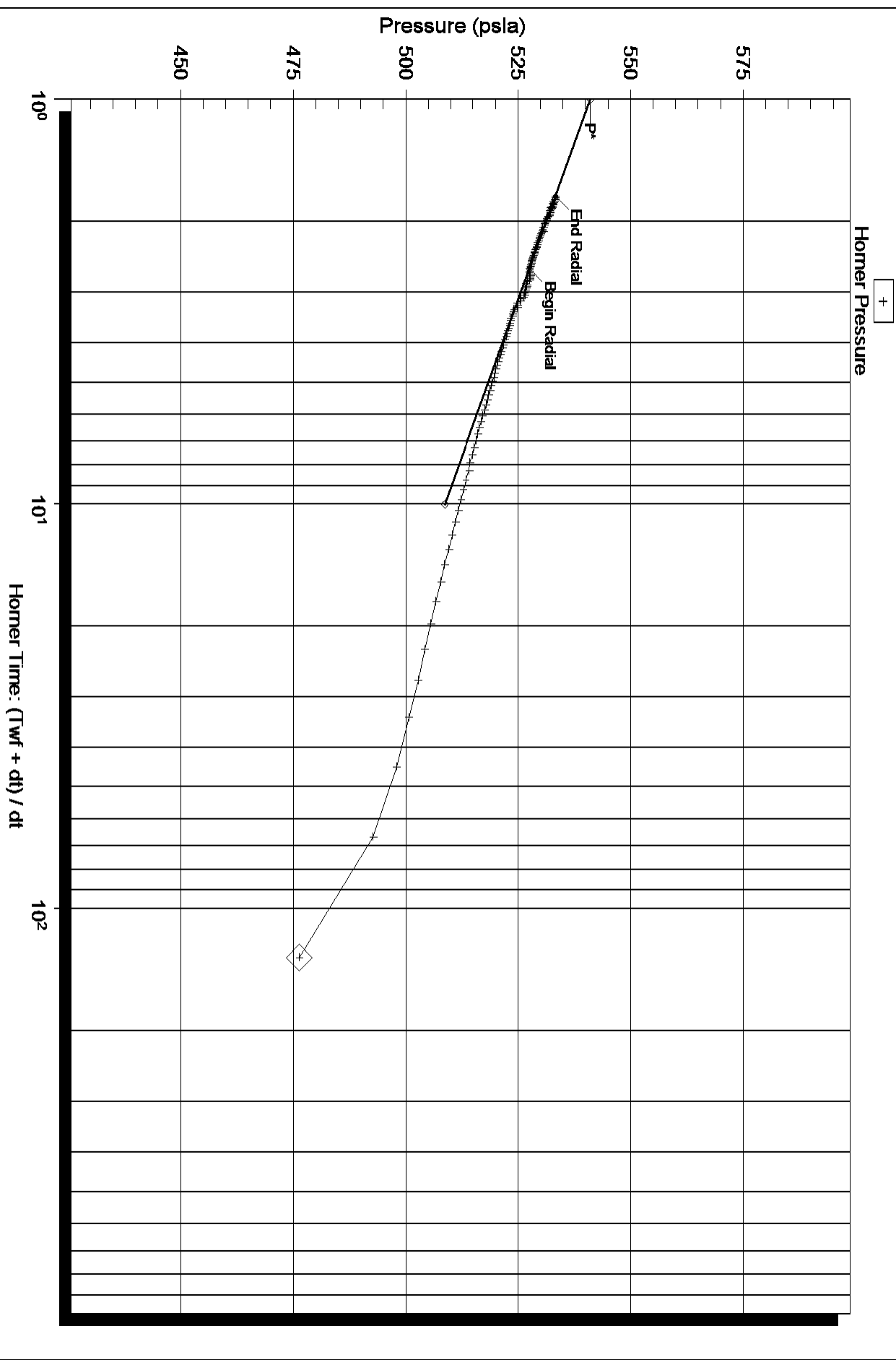
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P* : 548.11

Slope (m) : 105.37 kpa/log cycle

Flow Cycle: 1

Horner Plot



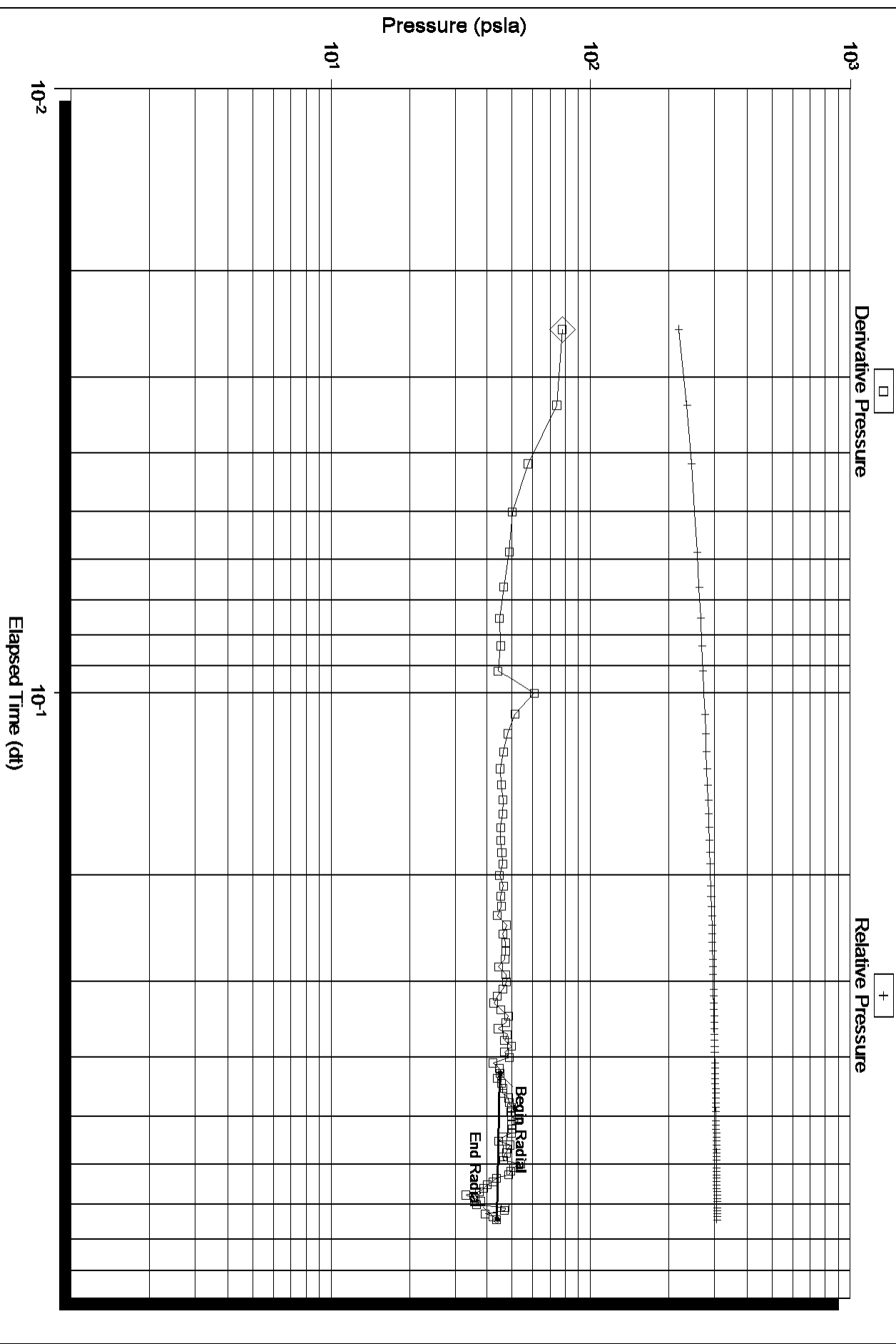
Serial Number: 6839 (Inside)

P* : 541.07

Slope (m) : 32.41 kpa/log cycle

Flow Cycle: 2

Log-Log and Pseudo-Derivative



Log-Log and Pseudo-Derivative

