Schlumberger

Job Summary
Patterson Petroleum
DST #2

J.F. Cooper 19 St. 1

Service Order Number : 10625835
Test Date : 26-Mar-04

Company Rep	Nolan Von Roeder	**SWS Rep**	Jeremy Cates

Test Information

Test Number	1	Formation	~~Clear Fork~~ Blinebery
		Interval (MD ft)	42' 6874-6832

Well Location

Well	J.F. Cooper 19 St. 1	Rig	Patterson 56
Field		State	Lea - New Mexico

Wellbore Configuration

		Cushion	None
Total Depth (MD/TVD ft)	6874	Wellbore Radius (ft)	8.75
Casing / Liner ID (in)	9.625	Mud Weight (lb/gal)	8.6
Top of Liner (md- ft)	4840	Mud Type	Water
		Mud: Chloride/Resistivity	34000/.128

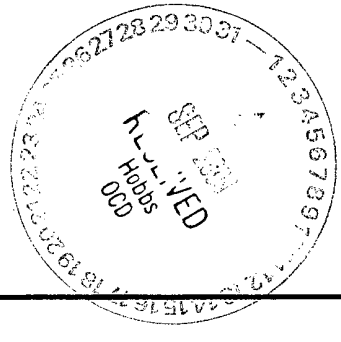
Test String Configuration

Pipe Length (ft) / ID (in)	6055	Gauge Depth (MD)	6874
Pipe Length (ft) / ID (in)		Gauge Depth (TVD)	6874
Drill Collar Length (ft) / ID (in)	737.15	Test Valve Type	MFE
Packer Depths (ft MD)	6826 / 6832	Test Valve Depth (ft) (MD)	6806

Key Information

Initial Hydrostatic Pressure	3086	Final Shut In Pressure	434
Init. Hyd Grad & Density	0.449 psi/ft / 8.63 lb/gal	FinalShut In Grad & Density	0.063 psi/ft / 1.21 lb/gal
Final Hydrostatic Pressure	3133	Final Flowing Pressure	130
Final Hyd Grad & Density	0.456 psi/ft / 8.76 lb/gal	Final Flow Rate (MCF)	
Bottom Hole Temp	108	Productivity Index (MCF / psi)	

This is DST #2. The Clear Fork formation was evaluated from 6874 to 6832. The test was conclusive. There was no gas to surface during the test. The recovery was less than 90 feet of heavey emulsified oil consistancy of shaving cream.The final shut in was missed do to being stuck above the tool. At the end of the final flow we had to drop the bar and pump with the Kelly to get unstuck. Please direct any questions about this test to the Hobbs Testing District. Thank You for choosing Schlumberger.



Schlumberger Crew

Jeremy Cates

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Sample Chamber Data

Patterson Petroleum

DST

J.F. Cooper 19 St. 1 — 10625835

26-Mar-04

Sample Chamber Capacity (cc) 2500

Measured Fluid Recovery

			Temp (F)	Press (psia)
Oil (cc)	250 Heavey Er	API Gravity	75	25.0
Water (cc)		Res. (ohms) ...	75	25.0
Mud (cc)		Res. (ohms) ...		
Total Liquid Recovery (cc)				
Gas (ft3)	0.851		75	25.0

Corrected Sample Chamber Gas Recovery

Bottomhole Temperature (F)	108	Assumed SC Gas Gravity	0.650
Final Flowing Pressure (psia)	130	Est Z Value @ Pwf and Tres	0.982
Corrected Gas Recovery (scf)	#VALUE!		

Sample Chamber Fluid Ratios

Sample Chamber Water Cut	#VALUE!
GOR Using Corrected Gas Recovery ...	#VALUE!
GLR Using Corrected Gas Recovery	#VALUE!

Pipe Recovery

Description	Recovery feet	Pipe ID (in)	Recovery bbl	Oil Density API	RES ohm	CHL ppm
Heavey emulsified oil	less than 90					

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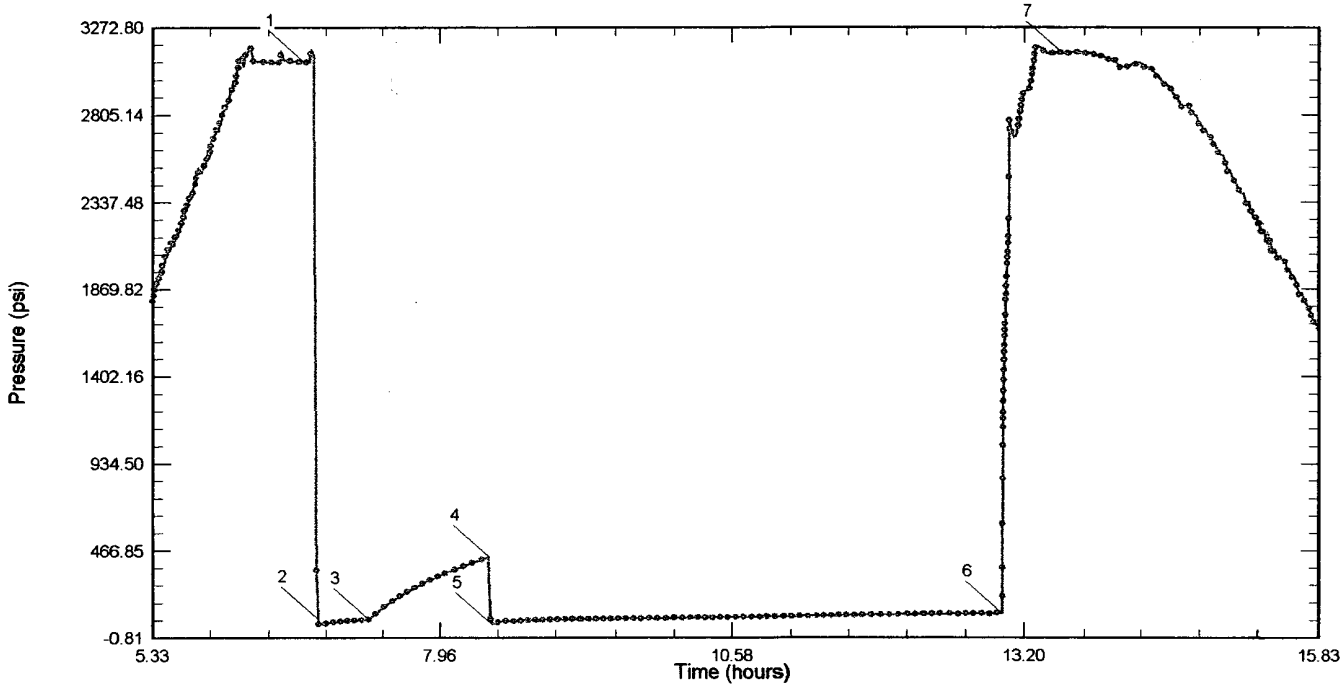
Label Point Data

Patterson Petroleum

DST

J.F. Cooper 19 St. 1 | **10625835** | **26-Mar-04**



Label Point / Comments	Date (dd-mmm-yy)	Time (hh:mm:ss)	Gauge ET (hours)	BHP (psia)	Rate (MCF)
Label Point Summary					
1) Hydrostatic Pressure	26-Mar-04	6:03:36	6.710	3086.29	0
2) Start Flow	26-Mar-04	6:10:30	6.825	104.95	1
3) End Flow & Start Shut-in	26-Mar-04	6:39:21	7.306	95.35	0
4) End Shut-in	26-Mar-04	7:45:12	8.403	434.36	0
5) Start Flow	26-Mar-04	7:46:36	8.427	72.40	1
6) End Flow	26-Mar-04	12:21:15	13.004	129.67	0
7) Hydrostatic Pressure	26-Mar-04	12:53:45	13.546	3132.70	0

Schlumberger	*Sequence of Events* **Patterson Petroleum** **DST**	
J.F. Cooper 19 St. 1		**10625835** **26-Mar-04**

Date (dd-mmm-yy)	Time (hh:mm:ss)	Comments
26-Mar-04	6:10	Start Flow open to 1/8" bubble hose 1"
	6:11	5"
	6:12	B.O.B.
	6:13	20oz
	6:14	2#
	6:15	2.25#
	6:20	2.5#
	6:30	3#
	6:40	End Flow Start Shut in 3#
	6:40	End Shut in
	7:45	Start Flow open to 1/8" bubble hose 10oz
	7:46	B.O.B.
	7:47	2.5#
	7:48	2.5#
	7:50	2.25#
	8:25	2.25#
	8:45	2#
	8:45	Missed shut in do to being stuck above the tool.

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TESTING SERVICES REPORT

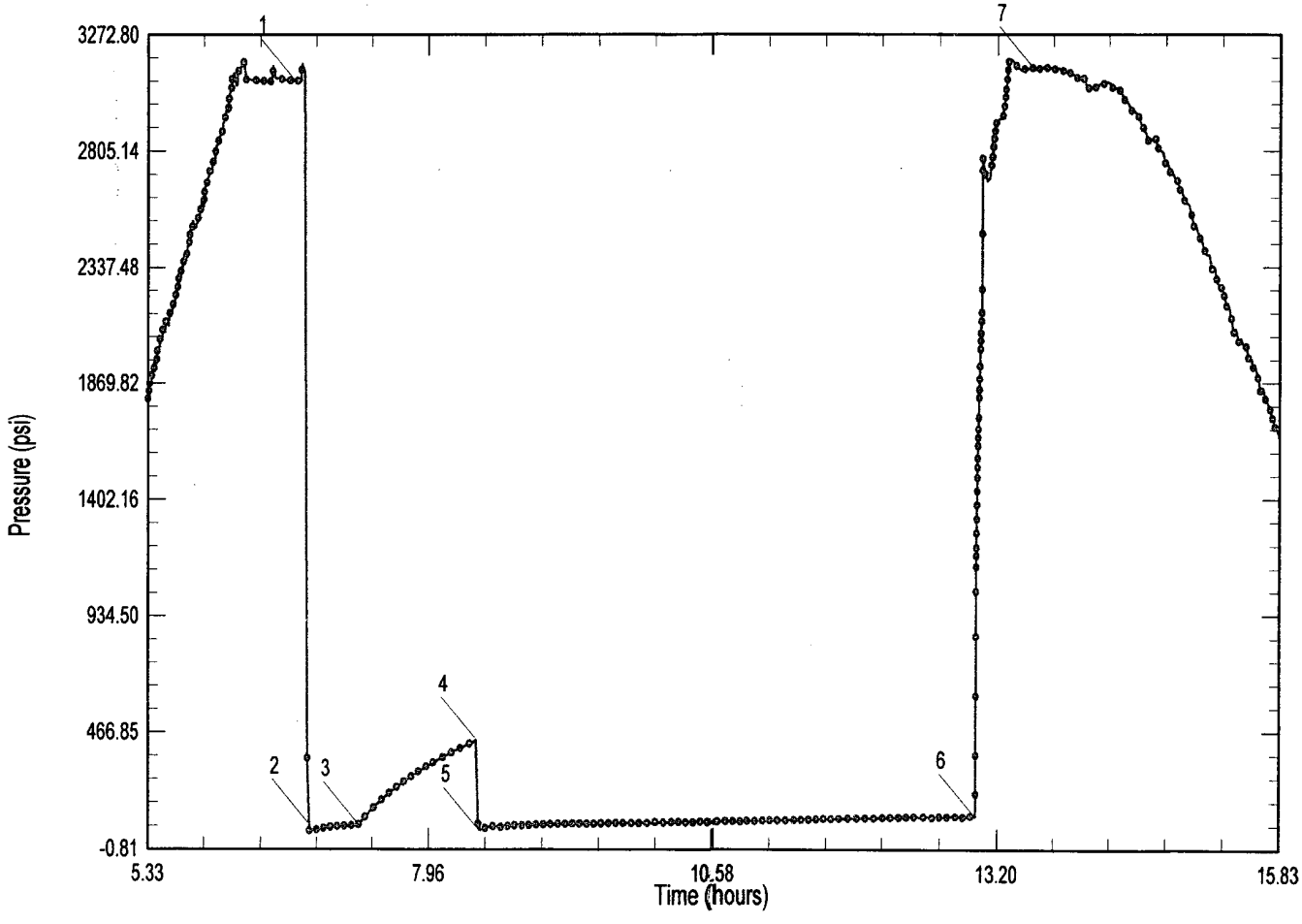
Report Number
10625835
Test Date
26-Mar-04
Report Date
26-Mar-04

Patterson Petroleum

DST

J.F. Cooper 19 St. - 1

Rig : Patterson 56
Lea - New Mexico



Report Contents

Job Summary, Comments Page, Sequence of Events, Label Point Information, Plots, Summary Data Printout, Distribution

Schlumberger Testing Services

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Data Plots

Patterson Petroleum

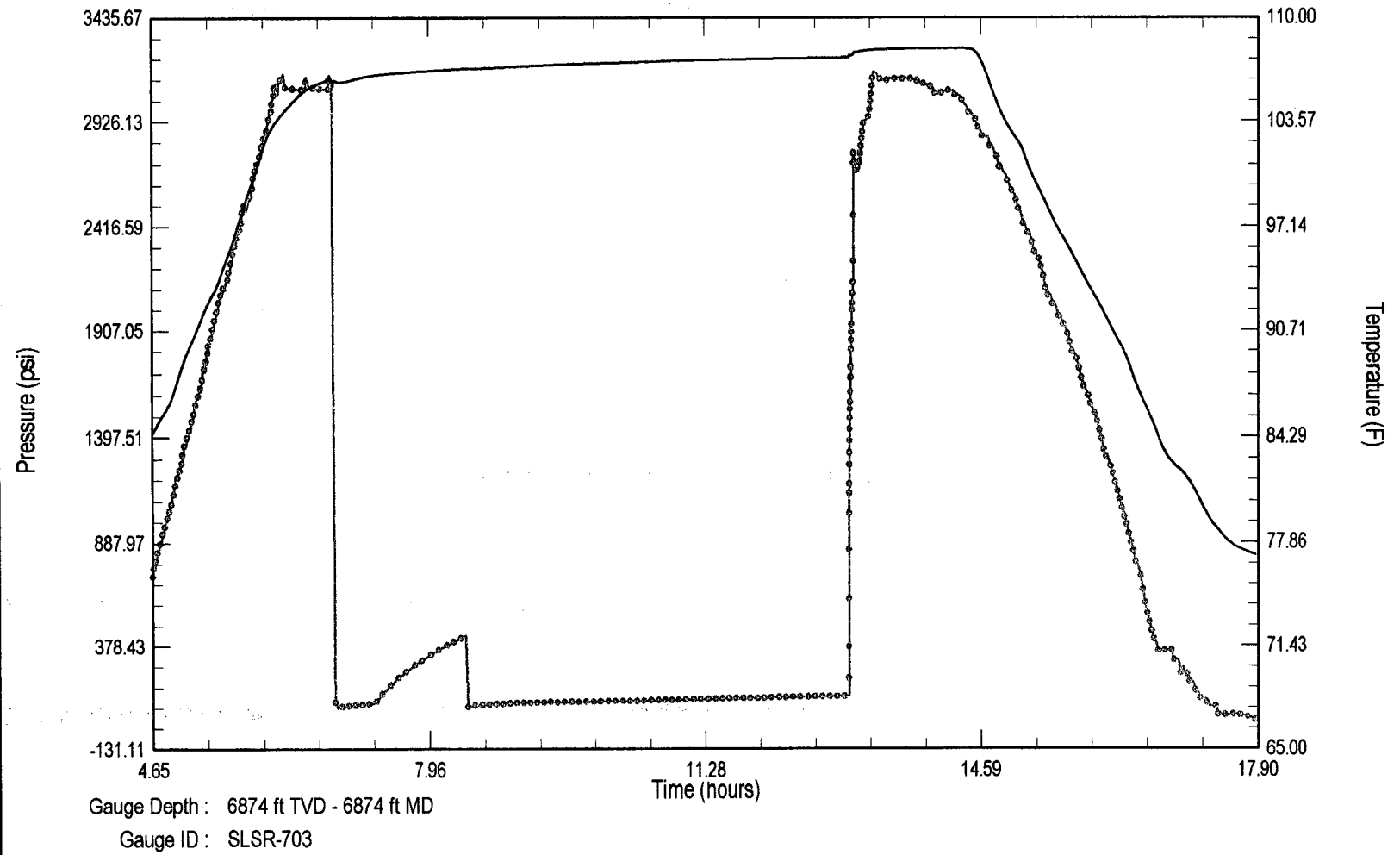
DST

J.F. Cooper 19 St. 1

10625835

26-Mar-04

Bottomhole Pressure and Temperature Log



Gauge Depth : 6874 ft TVD - 6874 ft MD

Gauge ID : SLSR-703

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Quicklook Plots

Patterson Petroleum

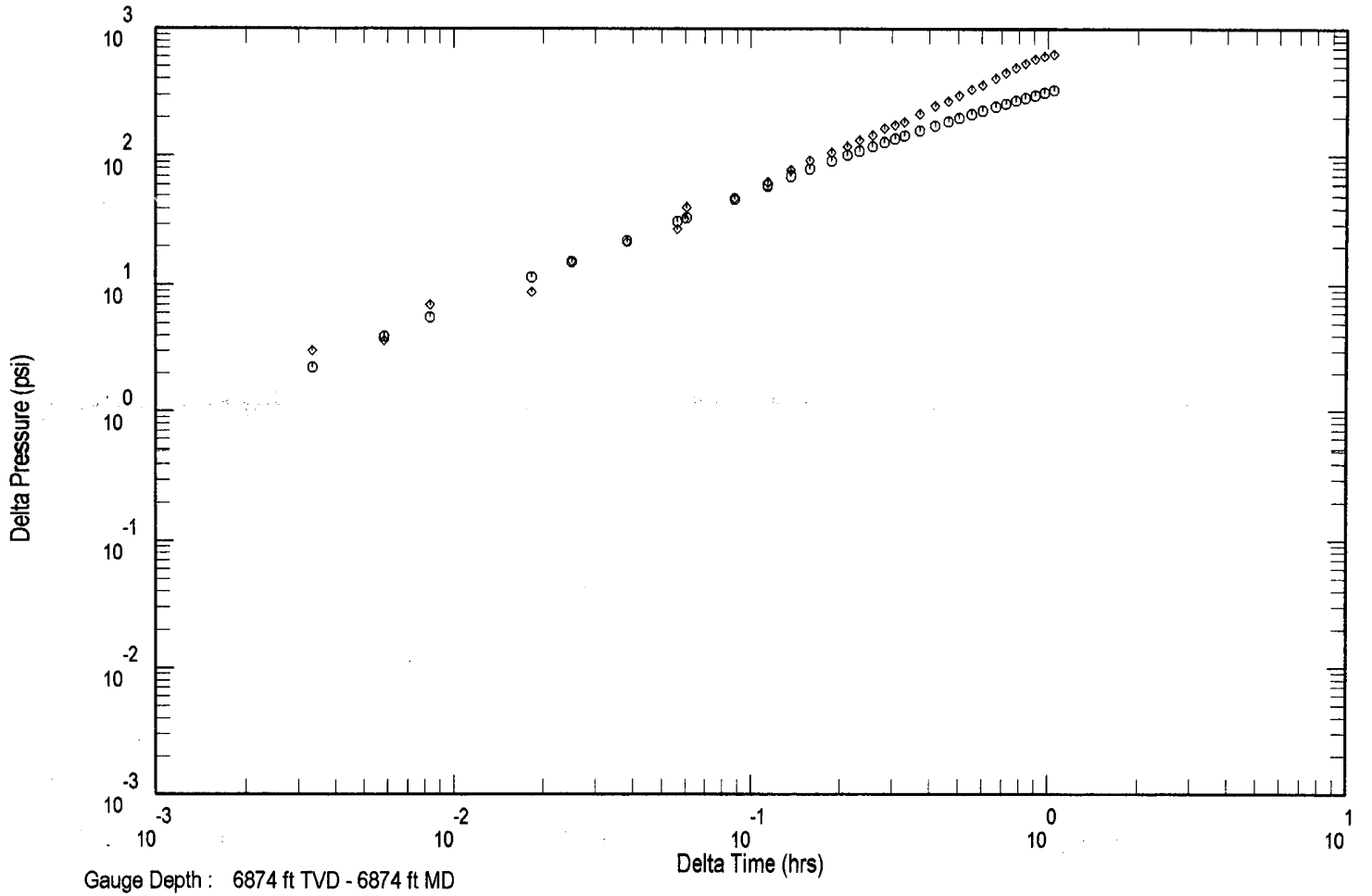
DST

J.F. Cooper 19 St. 1

10625835

26-Mar-04

Log-log Plot - Initial Shutin Period



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Quicklook Plots

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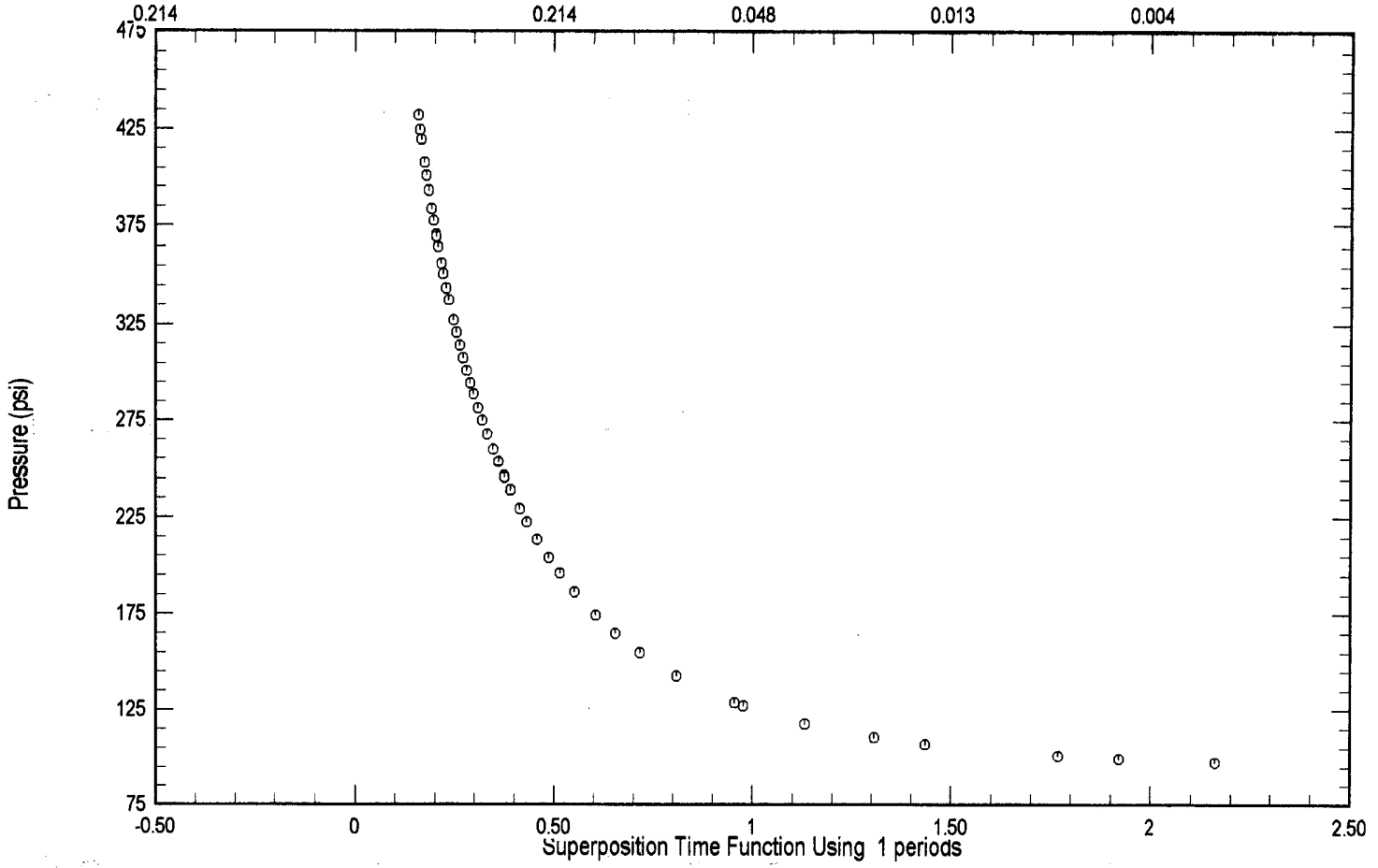
10625835

26-Mar-04

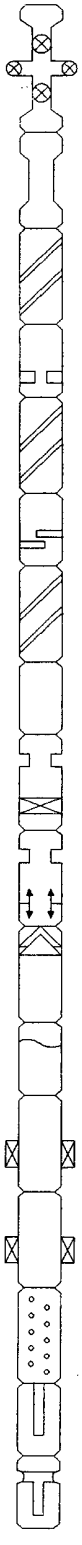
Semi-log Plot - Initial Shutin Period



Gauge Depth : 6874 ft TVD - 6874 ft MD

Gauge ID : SLSR-703

Patterson Petroleum
J.F. Cooper 1
TOOL STRING SCHEMATIC



TOOL DESCRIPTION	OD	ID	LENGTH	DEPTH
SURFACE FLOWHEAD				0
Drill Pipe			6055	6055
DRILL COLLARS	6.25	2.25	557.1	6612.1
PUMPOUT DISK REVERSING VALVE	6.19	3.125	1.02	6613.12
DRILL COLLARS	6.25	2.25	90.95	6704.07
BREAKOFF PIN REVERSING VALVE	6.25	3.25	1.08	6705.15
DRILL COLLARS	6.25	2.25	90.03	6795.18
CROSS OVER SUB	6.00	2.125	1.44	6796.62
MFE (Multiflow Evaluator)	5.00	1.00	9.88	6806.5
BYPASS	5.00	1.00	3.00	6809.5
DC Hydraulic Jars	4.75	1.88	7.06	6816.56
Safety Joint	4.75	1.5	3.00	6819.56
BOB TAIL PACKER	8.00	1.50	6.22	6825.78
BOB TAIL PACKER	8.00	1.50	6.22	6832
PERFORATED ANCHOR	4.75	2.25	28.00	6860
INSIDE RECORDER CARRIER	4.88	2.25	7.33	6867.33
Outside Recorder Carrier	4.75	2.25	6.67	6874

Report Number: 10625835
Test Date: 26-MAR-2004

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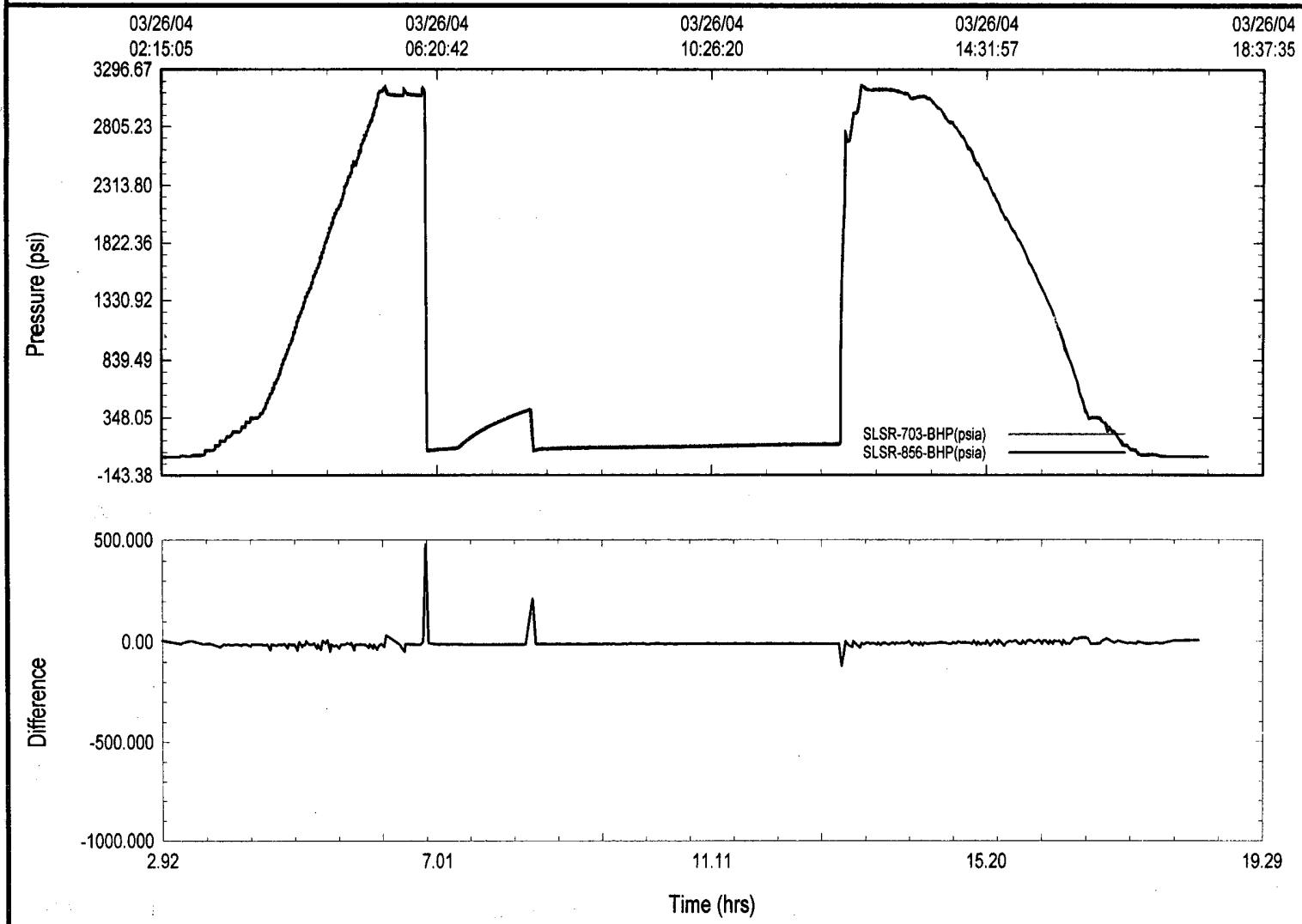
Gauge Comparison

Patterson Petroleum

DST

J.F. Cooper 19 St. 1 **10625835**

26-Mar-04



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Gauge Data

Patterson Petroleum

DST

J.F. Cooper 19 St. 1 | Gauge Serial # SLSR-703 | 10625835

March 26, 2004

Date (dd-mmm-yy)	Time (hh:mm:ss)	Elapsed Time (hrs)	BHP (psia)	BHT (Deg F)	Comments
Initial Flow					
26-Mar-04	6:10:30	6.82500	104.954	106.11	
26-Mar-04	6:16:18	6.92167	77.446	106.03	
26-Mar-04	6:22:09	7.01917	85.049	106.14	
26-Mar-04	6:27:57	7.11583	89.752	106.27	
26-Mar-04	6:33:45	7.21250	92.689	106.38	
Initial Shut-in					
26-Mar-04	6:39:21	7.30583	95.349	106.45	
26-Mar-04	6:39:33	7.30917	97.586	106.45	
26-Mar-04	6:46:12	7.42000	154.772	106.52	
26-Mar-04	6:52:03	7.51750	196.055	106.57	
26-Mar-04	6:59:09	7.63583	239.038	106.61	
26-Mar-04	7:05:21	7.73917	272.389	106.66	
26-Mar-04	7:11:15	7.83750	301.149	106.70	
26-Mar-04	7:19:30	7.97500	337.592	106.74	
26-Mar-04	7:25:06	8.06833	360.568	106.77	
26-Mar-04	7:32:27	8.19083	388.568	106.81	
26-Mar-04	7:38:12	8.28667	409.458	106.84	
Second Flow					
26-Mar-04	7:46:36	8.42667	72.396	106.88	
26-Mar-04	8:14:06	8.88500	94.759	106.97	
26-Mar-04	8:41:45	9.34583	101.449	107.06	
26-Mar-04	9:09:48	9.81333	104.265	107.15	
26-Mar-04	9:37:18	10.27167	107.377	107.24	
26-Mar-04	10:04:57	10.73250	110.327	107.31	
26-Mar-04	10:32:27	11.19083	113.696	107.37	
26-Mar-04	11:00:03	11.65083	119.548	107.42	
26-Mar-04	11:27:39	12.11083	122.844	107.46	