Schlumberger

Company: SAVIA PERU S.A.

Well: LO6-27D

Field: LOBITOS

Rig Name: PEPESA-40 Country: PERU

XPT PRESSURE POINTS LOG

XPT-GR

SCALE 1in/60sec

Rig Name: PEPESA-40
Field: LOBITOS
Location: LOBITOS
Well: LO6-27D
Company: SAVIA PERU S.A.

Location:			
LOBITOS		Elev. K.B.	50.00 ft
N: 9508655.23		G.L.	-335.00 ft
E: 459043.07		D.F.	50.00 ft
Permanent Datum:	Mean Sea Level	Elev.:	0.00 ft
Log Measured From:	Drill Floor	50.00 ft	above Perm.Datum
Drilling Measured From:	Drill Floor		

State:	Max.Hole Deviation	Longitude:	Latitude:
PIURA	49.2 deg	81° 22' 9.012" W	4° 26' 42.606" S

Logging Date			11-Feb-2013			
Run Number			2			
Depth Driller			8008.00 ft			
Schlumberger Depth			8008.00 ft			
Bottom Log Interval			5015.00 ft			
Top Log Interval			3822.00 ft			
Casing Driller Size @ Depth			9.625 in @ 3614.00 ft			
Casing Schlumberger			3614 ft			
Bit Size			8.5 in			
Type Fluid In Hole			Water			
MUD	Density	Viscosity	11.2 lbm/gal	46 s		
	Fluid Loss	PH	4 cm3	9.5		
	Source of Sample		Mud Pit			
RM @ Meas Temp			2.6 ohm.m @ 88.3 degF			
RMF @ Meas Temp			2.48 ohm.m @ 91 degF			
RMC @ Meas Temp			6.04 ohm.m @ 83.8 degF			
Source RMF	RMC		Pressed	Pressed		
RM @ BHT	RMF @ BHT		1.13 @ 212	1.11 @ 212		
Max Recorded Temperatures			114 degF			
Circulation Stopped	Time		11-Feb-2013	13:00:00		
Logger on Bottom	Time		11-Feb-2013	22:05:00		
Unit Number	Location:		826	PETA		
Recorded By			S. Roman / G. Tejada			
Witnessed By			Jose Coronado			

Disclaimer

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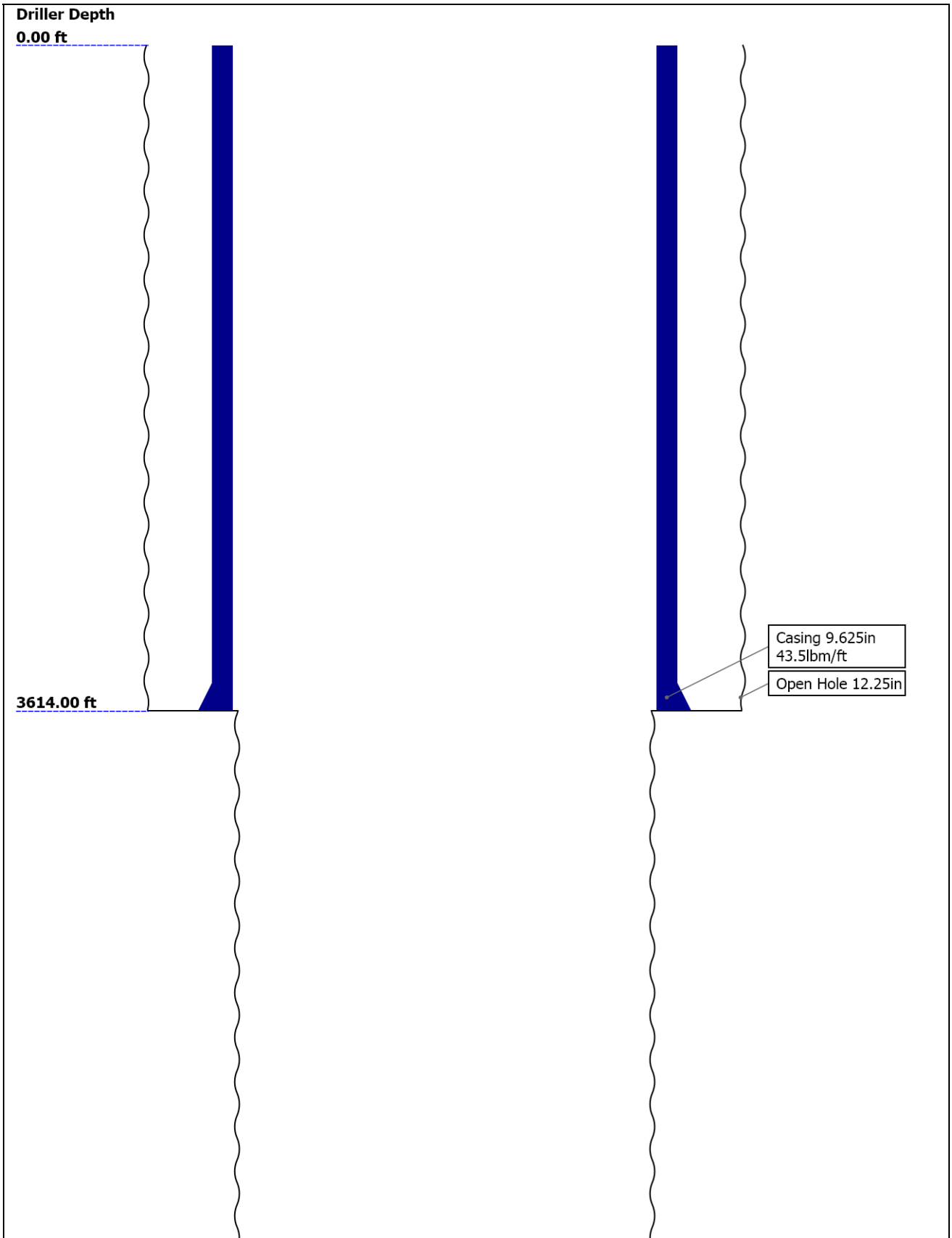
Contents

Well Sketch


Driller Depth
0.00 ft
3614.00 ft
Casing 9.625in
43.5lbm/ft
Open Hole 12.25in

Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	12.25	8.5				
Top Driller (ft)	0	3614				
Top Logger (ft)	0	3614				
Bottom Driller (ft)	3614	8008				
Bottom Logger (ft)	3614	8008				
Casing						
Size (in)	9.625					
Weight (lbm/ft)	43.5					
Inner Diameter (in)	8.758					
Grade	N80					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	3614					
Bottom Logger (ft)	3614					

Operational Run Summary

Parameter (unit)	2					
Date Log Started	11-Feb-2013					
Time Log Started	15:16:50					
Date Log Finished	12-Feb-2013					
Time Log Finished	02:28:48					
Top Log Interval (ft)	3822.00					
Bottom Log Interval (ft)	5015.00					
Total Depth (ft)	8008.00					
Max Hole Deviation (deg)	49.20					
Azimuth of Max Deviation (deg)	194.60					
Bit Size (in)	8.500					
Logging Unit Number	826					
Logging Unit Location	PETA					
Recorded By	S. Roman / G. Tejada					
Witnessed By	Jose Coronado					

Service Order Number	BYWR-34					

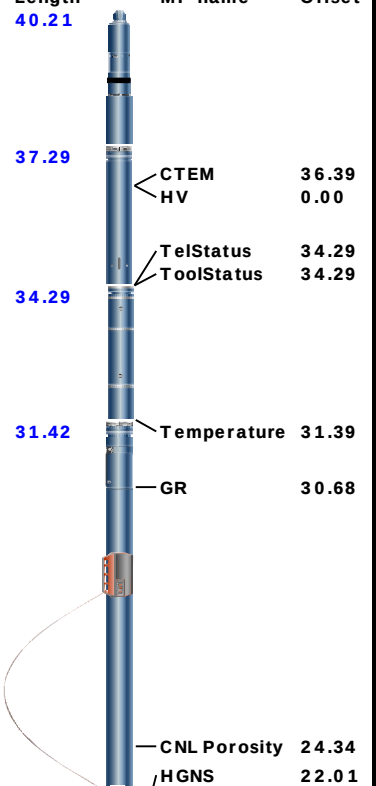
Borehole Fluids

Parameter(unit)	2					
Fluid Type	Water					
Max Recorded Temperatures (degF)	114					
Source of Sample	Mud Pit					
Salinity (ppm)	1737.48					
Density (lbm/gal)	11.2					
Funnel Viscosity (s)	46					
Fluid Loss (cm3)	4					
PH	9.5					
Date/Time Circulation Stopped	11-Feb-2013 13:00:00					
Date Logger on Bottom	11-Feb-2013					
Time Logger on Bottom	22:05:00					
Source RMF	Pressed					
RMC	Pressed					
RM @ Meas Temp (ohm.m@degF)	2.6 @ 88.3					
RMF @ Meas Temp (ohm.m@degF)	2.48 @ 91					
RMC @ Meas Temp (ohm.m@degF)	6.04 @ 83.8					
RM @ BHT (ohm.m@degF)	1.13 @ 212					
RMF @ BHT (ohm.m@degF)	1.11 @ 212					
RMC @ BHT (ohm.m@degF)	2.5 @ 212					
Total Solid (%)						
High Gravity Solids (%)						

Remarks and Equipment Summary

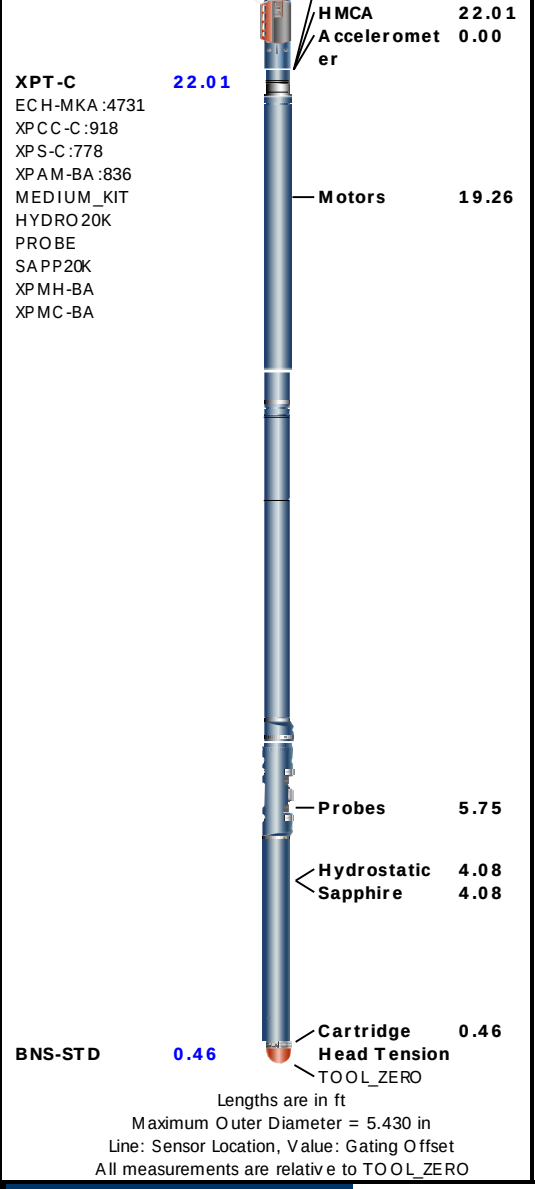
2: Toolstring

Equip name	Length	MP name	Offset
LEH-QT LEH-QT	40.21		
DTC-H:8280 ECH-KC DTC-H:8280	37.29	**CTEM** **HV**	**36.39** **0.00**
		TelStatus **ToolStatus**	**34.29** **34.29**
SAH-E:918	34.29		
HGNS-H:4750 HGNH:3842 NSR-F:5167 NPV-N HACCZ-H:5287 HGNS-H:4750 HMCA-H	31.42	**Temperature** **GR**	**31.39** **30.68**
		CNL Porosity **HGNS**	**24.34** **22.01**



2: Remarks

1. Objective: Perform Pressure Points in well LO6-27D.
2. Tool ran as per tool sketch. Distance from XPT probe to bottom of tool 5.7ft.
3. Total depth not reached.
4. A total of 15 points were attemped as per client request.
5. Total of 5 good seals and 10 lost seals.
6. XPT configuration with Quartz Gauge and Sapphire Gauge pressure sensors.



Lengths are in ft
Maximum Outer Diameter = 5.430 in
Line: Sensor Location, Value: Gating Offset
All measurements are relative to TOOL_ZERO

Depth Summary

Depth Control Parameters	2		
Conveyance Type	Wireline		
Log Sequence	Subsequent Run in Hole		
Depth Remark Parameters	2		
Depth Remark 1	All Schlumberger depth control procedures followed.		
Depth Remark 2	IDW used as primary depth control; Z-Chart used as secondary.		
Depth Measuring Device	2		
Type	IDW-JA		
Serial Number	4889		
Calibration Date	04-FEB-2013		
Calibrator Serial Number	10		
Calibration Cable Type	7-46ZVXS		
Wheel Correction 1	1		
Wheel Correction 2	0		
Tension Device	2		
Type	CMTD-B/A		
Serial Number	2087		
Calibration Date	09-FEB-2013		
Calibrator Serial Number	1002		
Calibration Points	10		

Calibration Points	10		
Calibration RMS	43		
Calibration Peak Error	82		
Logging Cable	2		
Type	7-46ZV-XS		
Serial Number	U712148		
Logging Cable Length (ft)	24000.00		

Test Point Table

File No.	Test No.	Probe MD	Probe TVD	DD Mobility	Mud Pres. Before	Mud Pres. After	Last BU Pres.	Formation Pres.	Temp. After	Gauge Type	Packer/Probe Type	Pretest Type
		ft	ft	mD/cP	psi	psi	psi	psi	degF			
2	6	5015.00	3982.42		2229.777	2223.516	2224.138		100.78	CP_SAP	Conventional	Volumetric Drawdown
3	9	4861.00	3878.37		2157.385	2154.950	2155.025		100.83	CP_SAP	Conventional	Volumetric Drawdown
4	11	4626.04	3719.89	0.12	2055.476	2045.925	1128.984	1128.984	100.21	CP_SAP	Conventional	Volumetric Drawdown
5	13	4830.00	3857.29		2121.719	2118.184	2118.619		100.18	CP_SAP	Conventional	Volumetric Drawdown
6	14	4738.01	3794.93		2076.493	2074.758	2075.268		100.45	CP_SAP	Conventional	Volumetric Drawdown
7	16	4543.02	3664.06		2041.654	2037.186	2037.952		99.76	CP_SAP	Conventional	Volumetric Drawdown
8	18	4542.48	3663.70		2029.833	2016.568	1393.842	1393.842	98.77	CP_SAP	Conventional	Volumetric Drawdown
9	19	4627.00	3720.54	0.30	2046.517	2042.172	978.555	978.555	98.8	CP_SAP	Conventional	Volumetric Drawdown
10	21	4518.98	3647.91		1993.652	1991.303	1991.718		98.60	CP_SAP	Conventional	Volumetric Drawdown
11	22	4517.99	3647.24		1986.584	1985.323	1985.802		98.35	CP_SAP	Conventional	Volumetric Drawdown
12	23	4179.98	3415.76		1837.807	1836.701	1837.037		97.56	CP_SAP	Conventional	Volumetric Drawdown
13	24	4181.00	3416.46		1833.546	1832.340	1832.659		97.15	CP_SAP	Conventional	Volumetric Drawdown
14	26	3920.00	3237.07		1720.633	1718.697	1718.958		96.52	CP_SAP	Conventional	Volumetric Drawdown
15	27	3920.99	3237.74	0.02	1716.694	1710.046	1298.345	1298.345	96.32	CP_SAP	Conventional	Volumetric Drawdown
16	28	3822.01	3170.81	0.06	1667.471	1660.933	1340.964	1340.964	95.95	CP_SAP	Conventional	Volumetric Drawdown

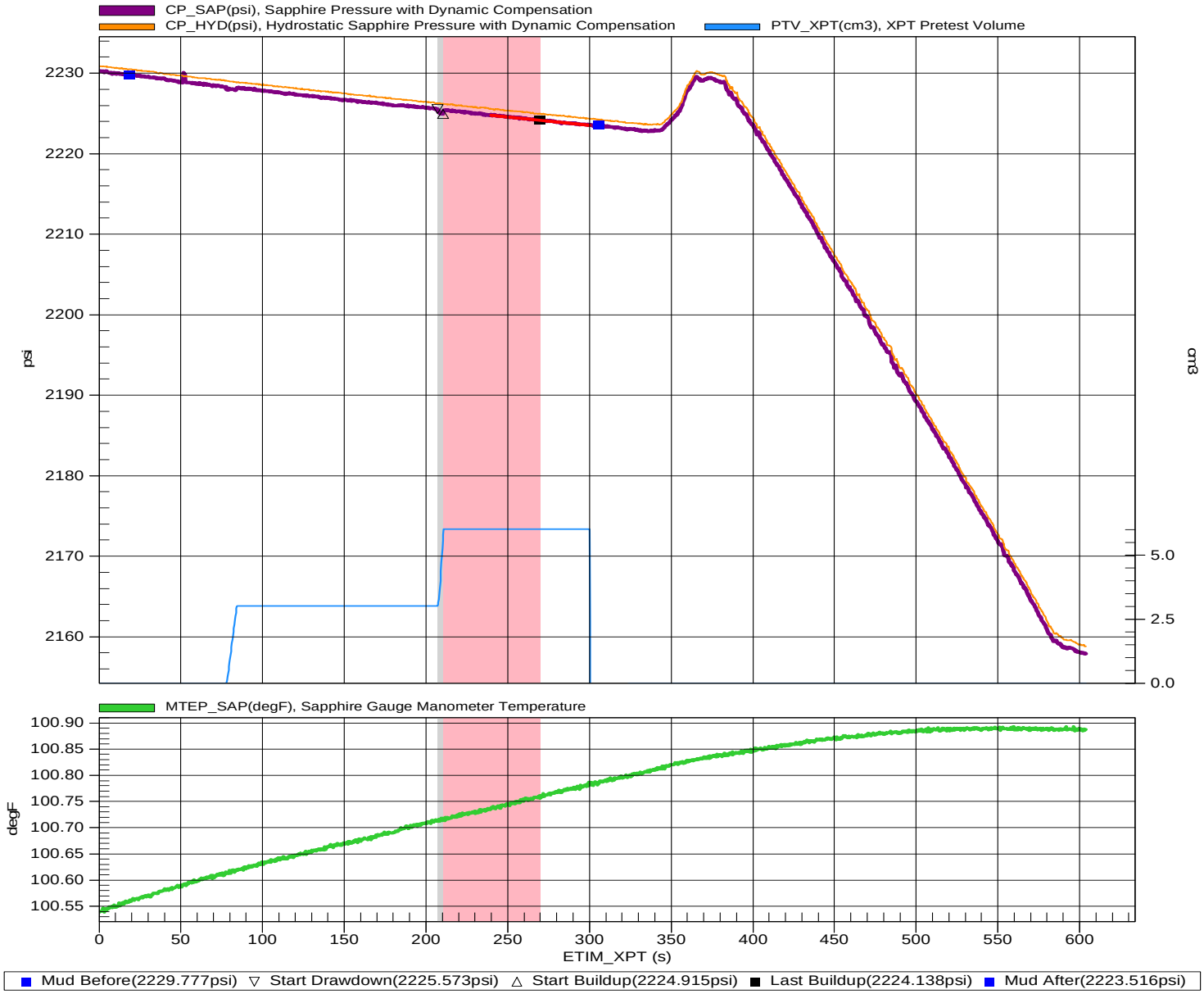
Pretest Station: File 2 @ 5015 (ft) MD

Pressure vs. Time Plot

Run No:4 Test No:6 Probe MD:5015ft Probe TVD:3982.42ft

12-FEB-2013 SAVIA PERU S.A. LOBITOS

MaxWell_2Dlis LO6-27D



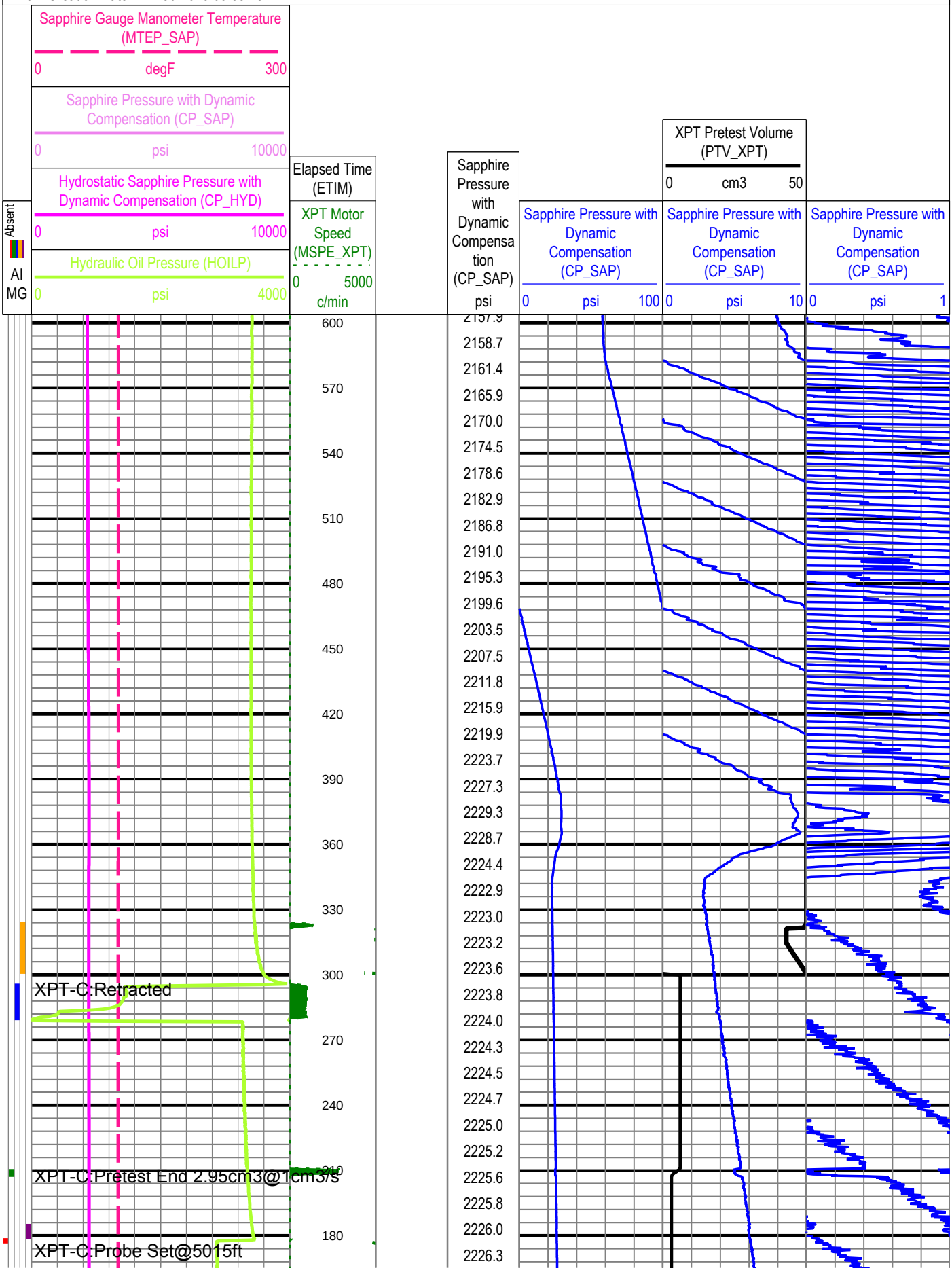
Tool Type:	XPT	**Pretest Type:**	Volumetric Drawdown Pretest	**Pretest Status:**	No Seal
Packer/Probe Type:	Conventional probe	**Primary Gauge:**	CP_SAP	**Formation Pressure:**	
Last Read Buildup Pressure:	2224.138 (psi)	**Drawdown Mobility:**		**Mud Pressure Before:**	2229.777 (psi)
Mud Pressure After:	2223.516 (psi)	**Temperature Before:**	100.56 (degF)	**Temperature After:**	100.78 (degF)
Pretest Rate:	0.78 (cm3/s)	**Pretest Volume:**	2.57 (cm3)		

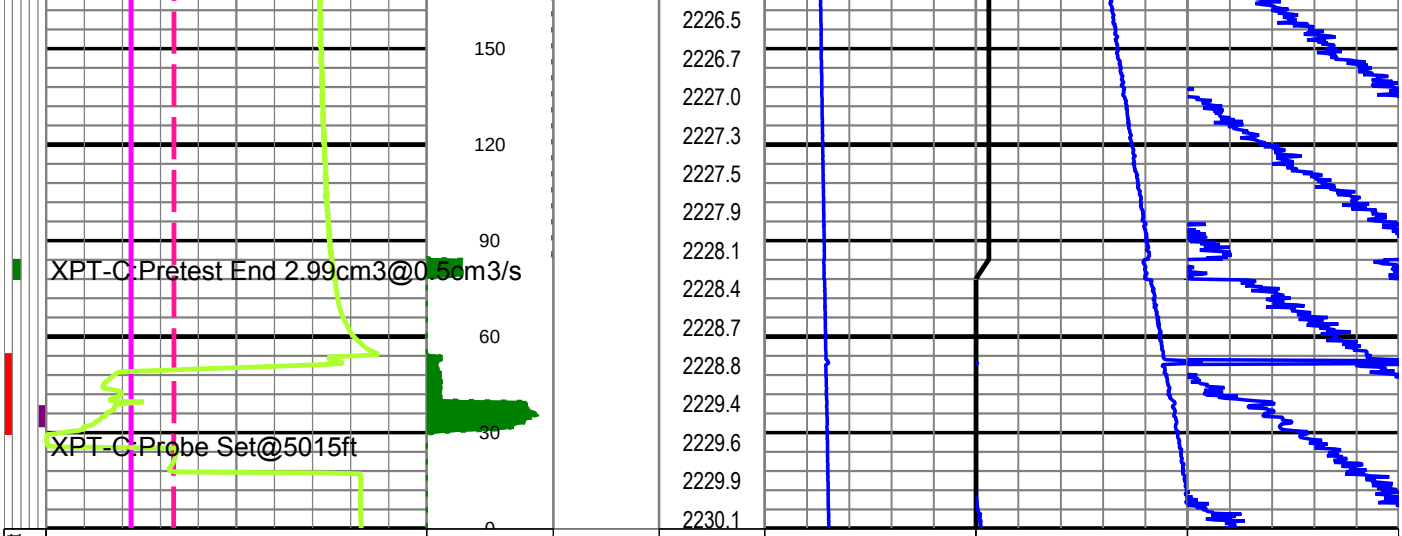
Comments:

Elapsed Time (s)	Event Summary
55.2	Probe set @ 5015 ft
84.3	Pretest 2.99 cm3 @ 0.5 cm3/s (Volumetric Drawdown Pretest)
176.7	Probe setting @ 5015 ft
211.2	Pretest 2.95 cm3 @ 1 cm3/s (Volumetric Drawdown Pretest)
297	Retracted

Log | MaxWell_2Dlis XPT-C@5015 (ft) MD

Description: File No.MaxWell_2Dlis Probe MD 5015 ft Probe TVD 3982.42 ft Format: InSitu Pro XPT Time IndexLog Index Scale: 1 in per 60 s Index Type: Time Creation Date: 12-Feb-2013 09:53:28





Absent

AI

MG

Sapphire Gauge Manometer Temperature (MTEP_SAP)

0 degF 300

Sapphire Pressure with Dynamic Compensation (CP_SAP)

0 psi 10000

Hydrostatic Sapphire Pressure with Dynamic Compensation (CP_HYD)

0 psi 10000

Hydraulic Oil Pressure (HOILP)

0 psi 4000

XPT Motor Speed (MSPE_XPT)

0 5000 c/min

Elapsed Time (ETIM)

Sapphire Pressure with Dynamic Compensation (CP_SAP) psi

Sapphire Pressure with Dynamic Compensation (CP_SAP)

0 psi 100

XPT Pretest Volume (PTV_XPT)

0 cm3 50

Sapphire Pressure with Dynamic Compensation (CP_SAP)

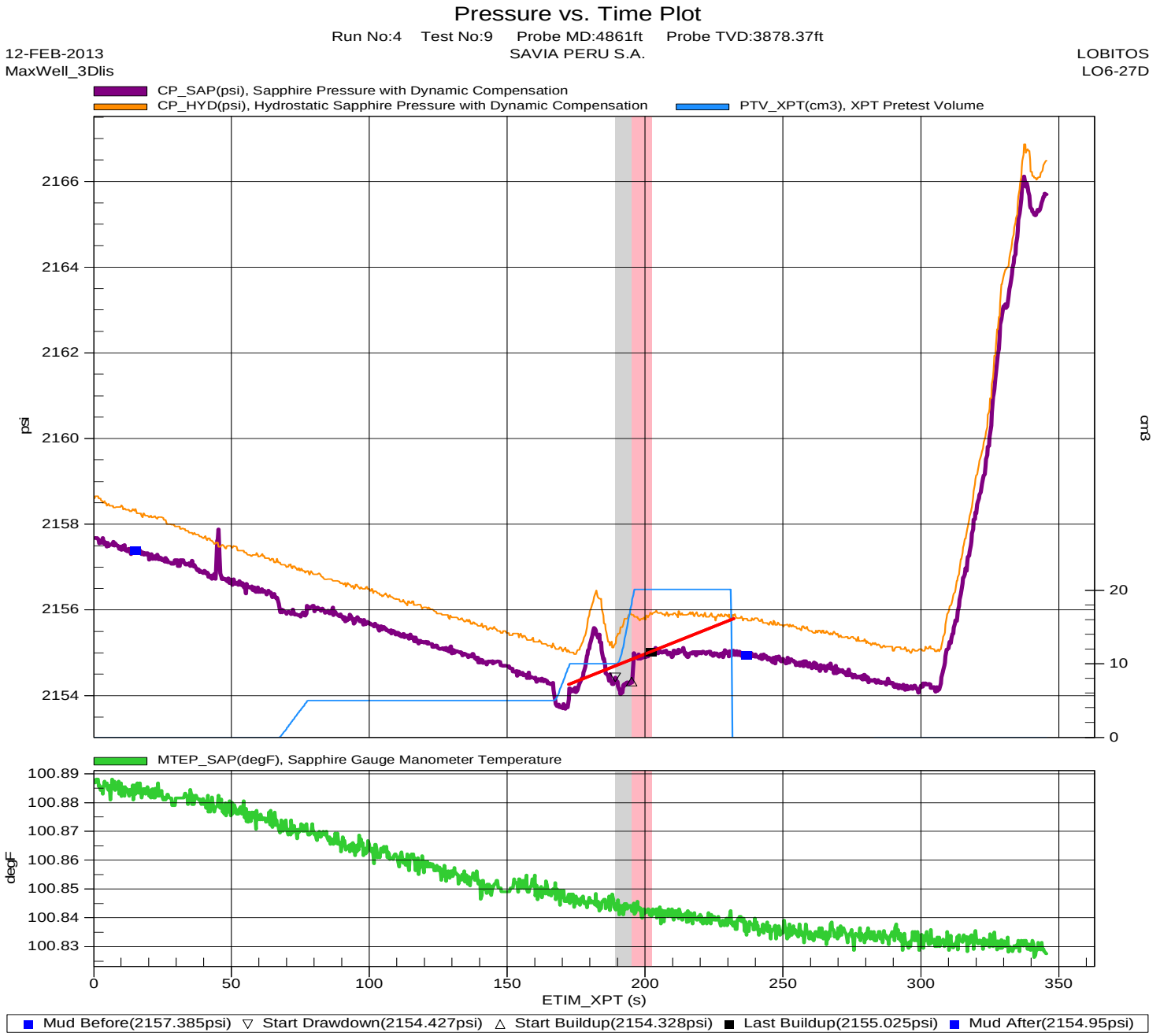
0 psi 10

Sapphire Pressure with Dynamic Compensation (CP_SAP)

0 psi 1

Description: File No.MaxWell_2Dlis Probe MD 5015 ft Probe TVD 3982.42 ft Format: InSitu Pro XPT Time IndexLog Index Scale: 1 in per 60 s Index Type: Time Creation Date: 12-Feb-2013 09:53:28

Pretest Station: File 3 @ 4861 (ft) MD



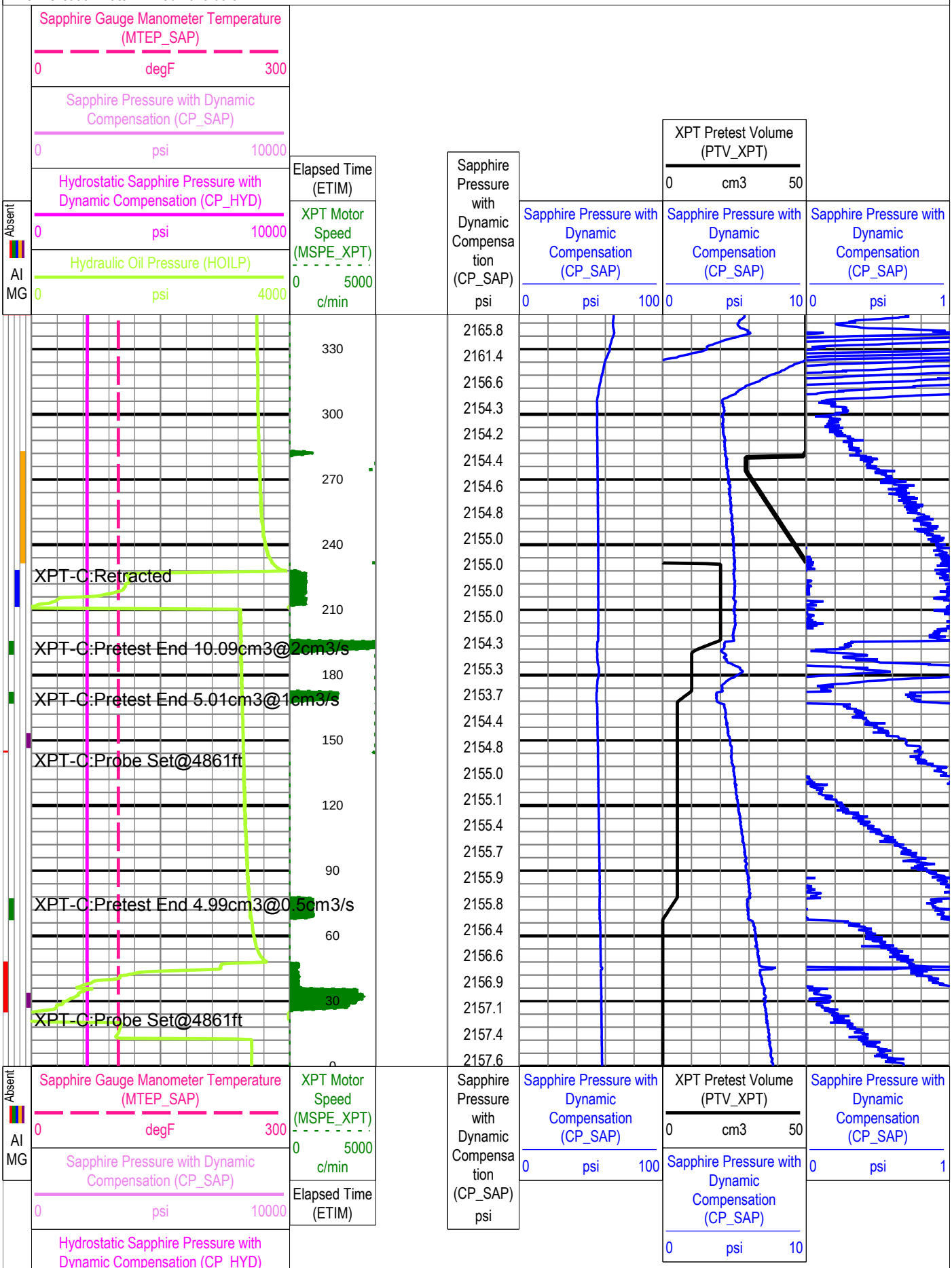
Tool Type:	XPT	**Pretest Type:**	Volumetric Drawdown Pretest	**Pretest Status:**	No Seal
Packer/Probe Type:	Conventional probe	**Primary Gauge:**	CP_SAP	**Formation Pressure:**	
Last Read Buildup Pressure:	2155.025 (psi)	**Drawdown Mobility:**		**Mud Pressure Before:**	2157.385 (psi)
Mud Pressure After:	2154.95 (psi)	**Temperature Before:**	100.89 (degF)	**Temperature After:**	100.83 (degF)
Pretest Rate:	1.34 (cm3/s)	**Pretest Volume:**	8.04 (cm3)		

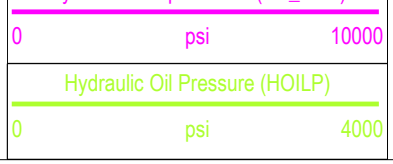
Comments:

Elapsed Time (s)	Event Summary
48.6	Probe set @ 4861 ft
78.3	Pretest 4.99 cm3 @ 0.5 cm3/s (Volumetric Drawdown Pretest)
144.6	Probe setting @ 4861 ft
172.8	Pretest 5.01 cm3 @ 1 cm3/s (Volumetric Drawdown Pretest)
196.2	Pretest 10.09 cm3 @ 2 cm3/s (Volumetric Drawdown Pretest)
229.5	Retracted

Log | MaxWell_3Dlis XPT-C@4861 (ft) MD

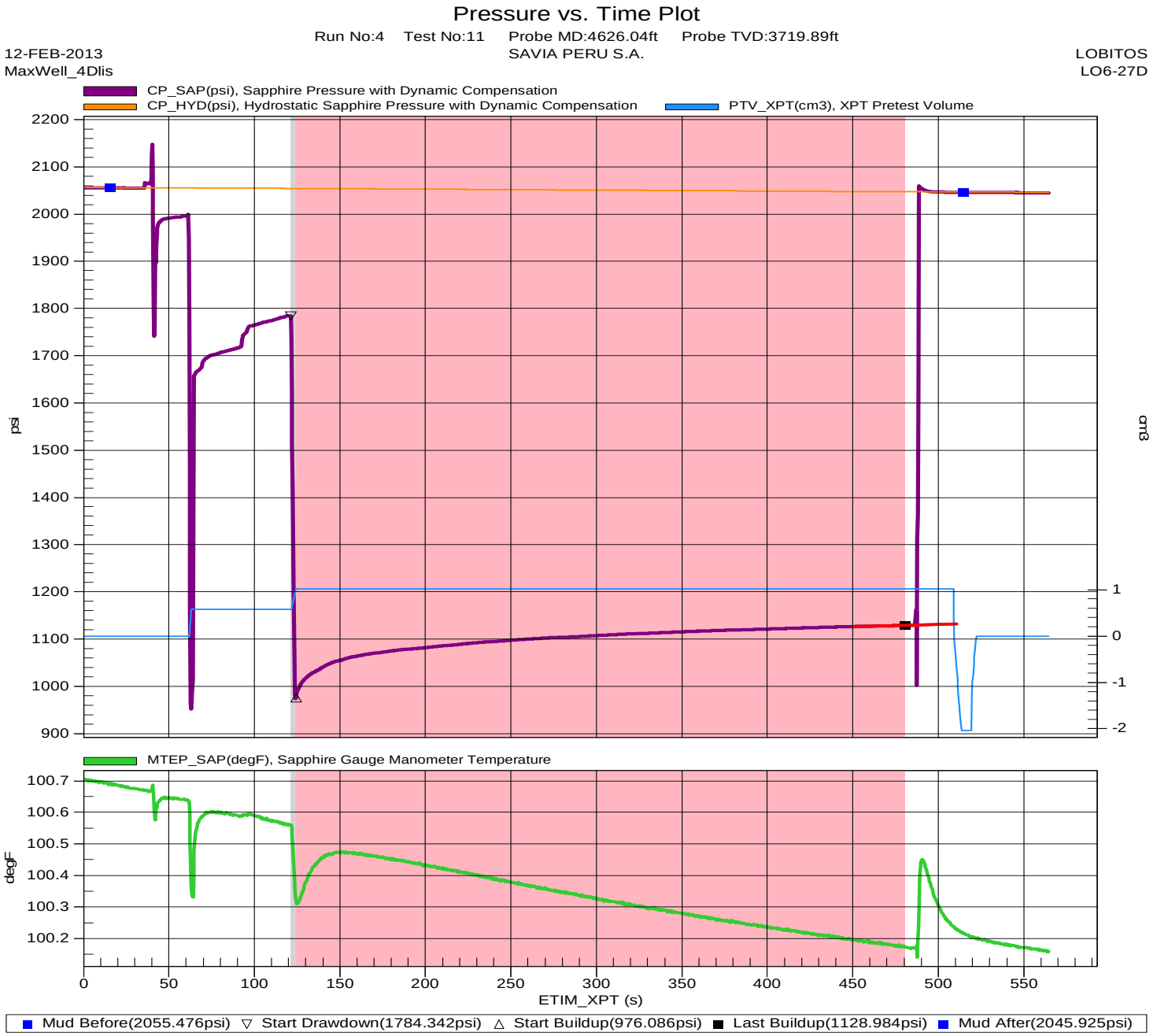
Description: File No.MaxWell_3Dlis Probe MD 4861 ft Probe TVD 3878.37 ft Format: InSitu Pro XPT Time IndexLog Index Scale: 1 in per 60 s Index Type: Time Creation Date: 12-Feb-2013 09:54:21





Description: File No.MaxWell_3Dlis Probe MD 4861 ft Probe TVD 3878.37 ft Format: InSitu Pro XPT Time IndexLog Index Scale: 1 in per 60 s Index Type: Time Creation Date: 12-Feb-2013 09:54:21

Pretest Station: File 4 @ 4626.04 (ft) MD

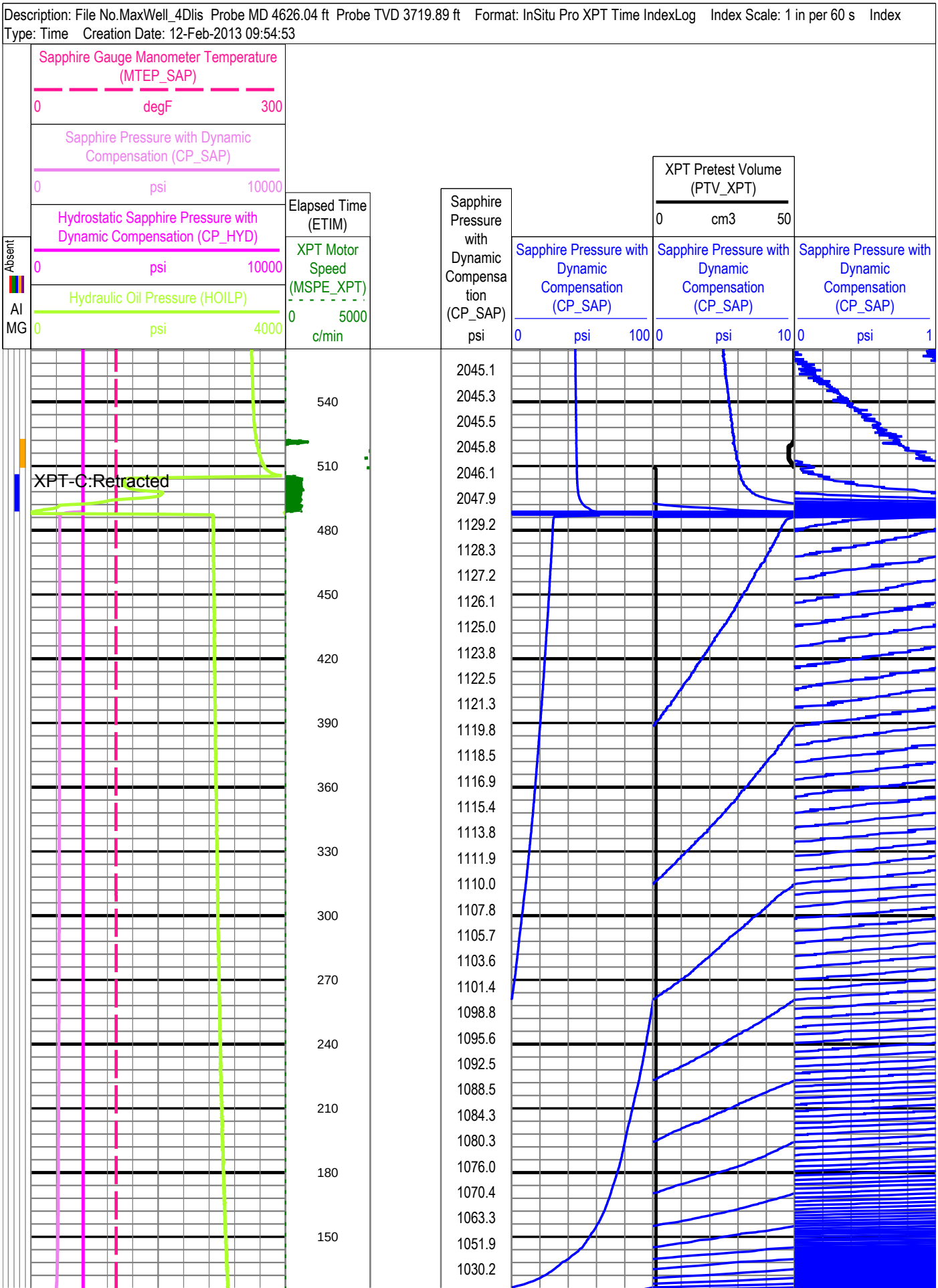


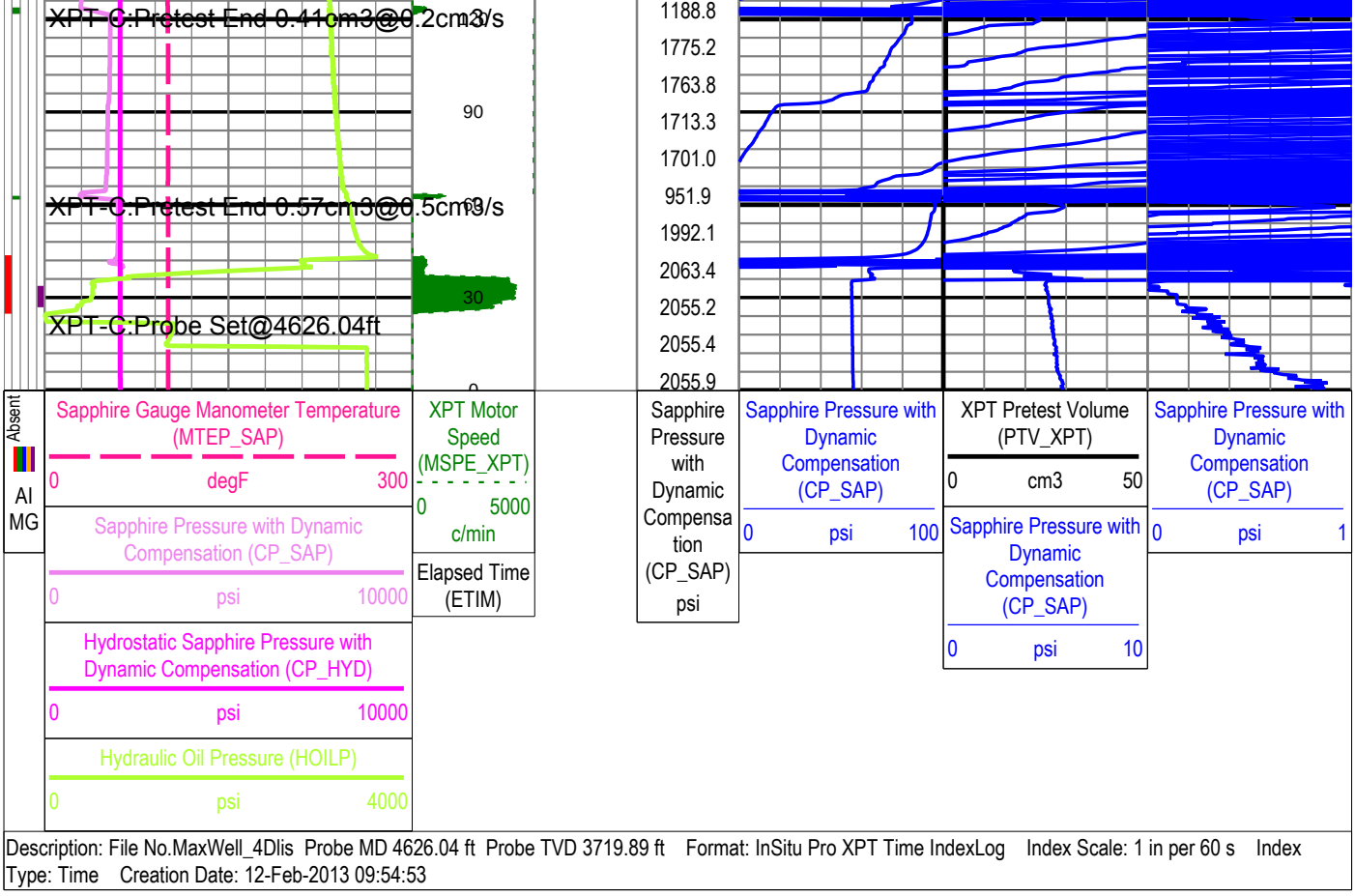
Tool Type:	XPT	**Pretest Type:**	Volumetric Drawdown Pretest	**Pretest Status:**	Valid Test
Packer/Probe Type:	Conventional probe	**Primary Gauge:**	CP_SAP	**Formation Pressure:**	1128.984 (psi)
Last Read Buildup Pressure:	1128.984 (psi)	**Drawdown Mobility:**	0.12 (mD/cP)	**Mud Pressure Before:**	2055.476 (psi)
Mud Pressure After:	2045.925 (psi)	**Temperature Before:**	100.69 (degF)	**Temperature After:**	100.21 (degF)
Pretest Rate:	0.14 (cm3/s)	**Pretest Volume:**	0.43 (cm3)		

Comments:

Elapsed Time (s)	Event Summary
44.1	Probe set @ 4626.04 ft
63.3	Pretest 0.57 cm3 @ 0.5 cm3/s (Volumetric Drawdown Pretest)
124.2	Pretest 0.41 cm3 @ 0.2 cm3/s (Volumetric Drawdown Pretest)
507	Retracted

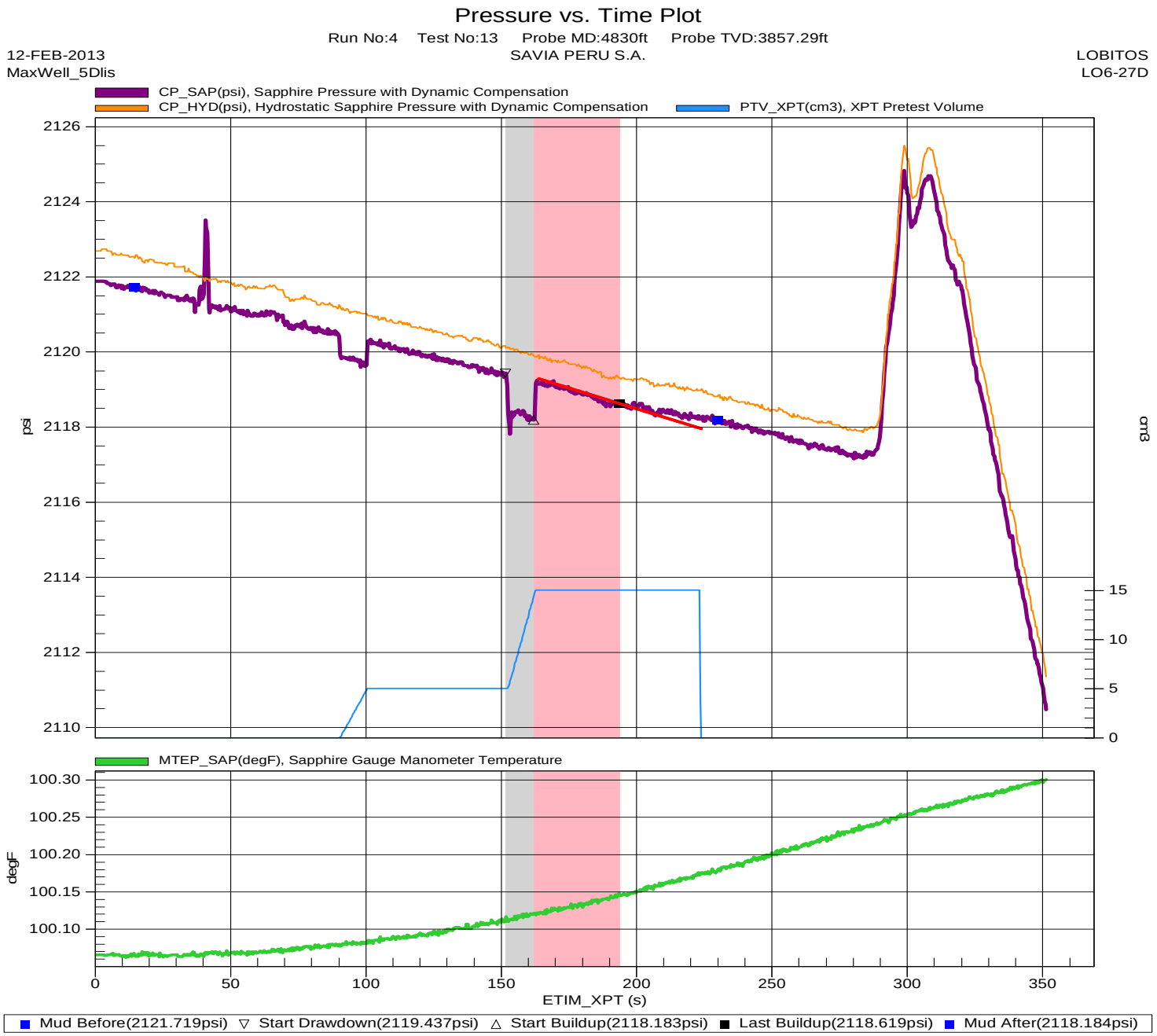
Log | MaxWell_4Dlis XPT-C@4626.04 (ft) MD





Description: File No.MaxWell_4Dlis Probe MD 4626.04 ft Probe TVD 3719.89 ft Format: InSitu Pro XPT Time IndexLog Index Scale: 1 in per 60 s Index Type: Time Creation Date: 12-Feb-2013 09:54:53

Pretest Station: File 5 @ 4830 (ft) MD



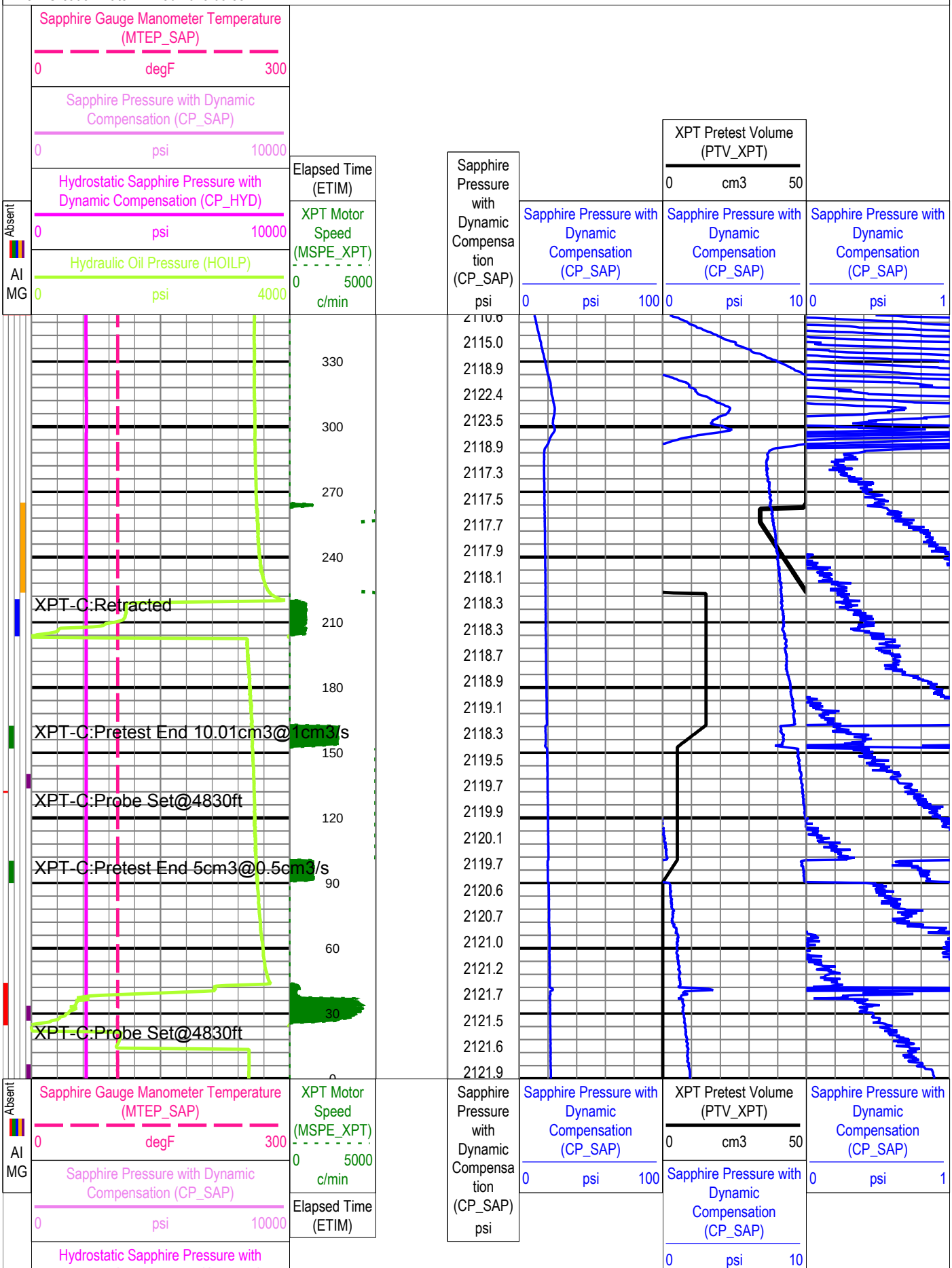
Tool Type:	XPT	**Pretest Type:**	Volumetric Drawdown Pretest	**Pretest Status:**	No Seal
Packer/Probe Type:	Conventional probe	**Primary Gauge:**	CP_SAP	**Formation Pressure:**	
Last Read Buildup Pressure:	2118.619 (psi)	**Drawdown Mobility:**		**Mud Pressure Before:**	2121.719 (psi)
Mud Pressure After:	2118.184 (psi)	**Temperature Before:**	100.07 (degF)	**Temperature After:**	100.18 (degF)
Pretest Rate:	0.89 (cm3/s)	**Pretest Volume:**	9.36 (cm3)		

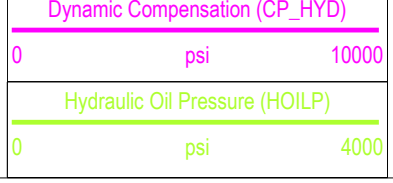
Comments:

Elapsed Time (s)	Event Summary
44.4	Probe set @ 4830 ft
100.8	Pretest 5 cm3 @ 0.5 cm3/s (Volumetric Drawdown Pretest)
131.7	Probe setting @ 4830 ft
163.2	Pretest 10.01 cm3 @ 1 cm3/s (Volumetric Drawdown Pretest)
221.7	Retracted

Log | MaxWell_5Dlis XPT-C@4830 (ft) MD

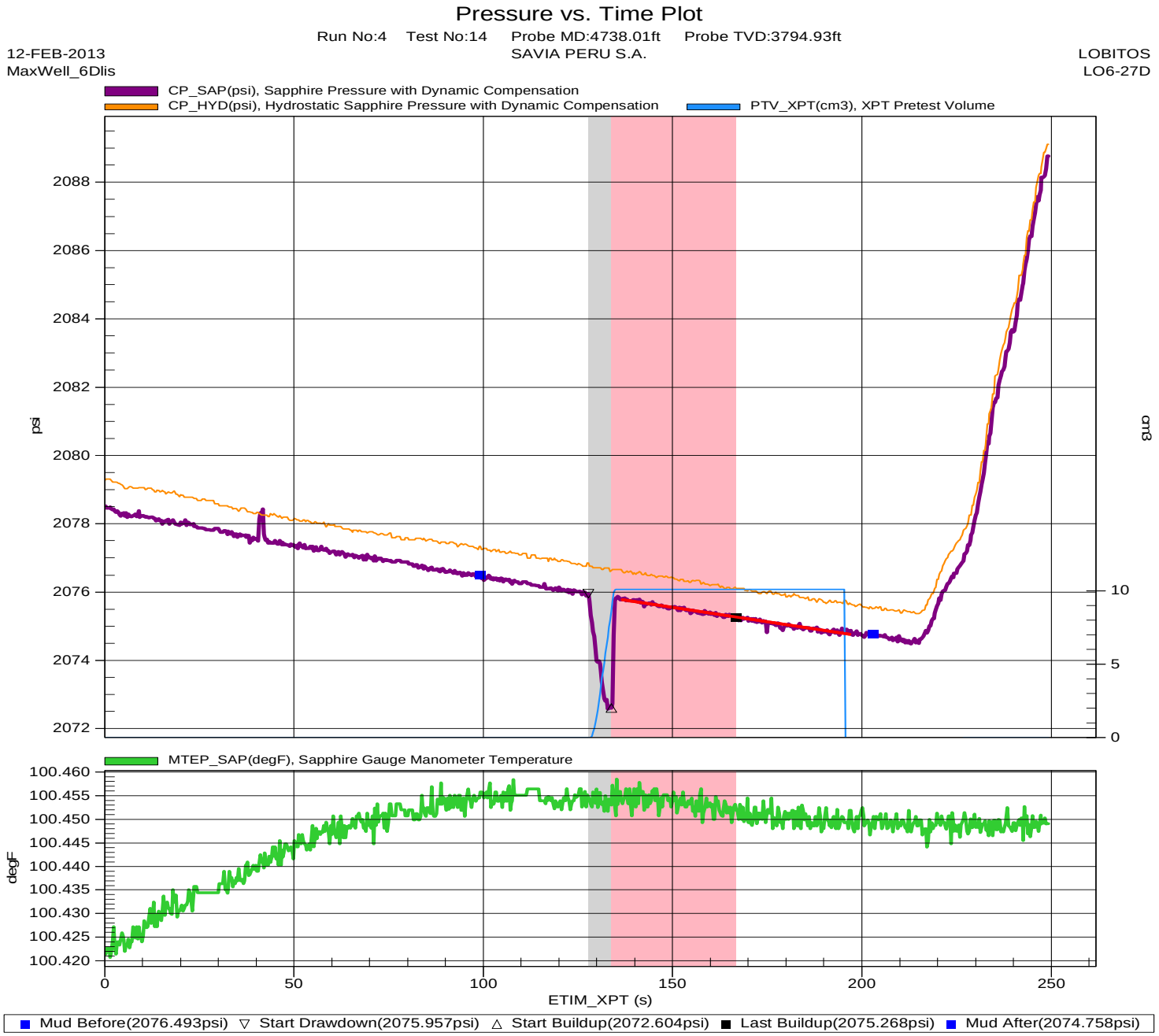
Description: File No.MaxWell_5Dlis Probe MD 4830 ft Probe TVD 3857.29 ft Format: InSitu Pro XPT Time IndexLog Index Scale: 1 in per 60 s Index Type: Time Creation Date: 12-Feb-2013 09:55:12





Description: File No.MaxWell_5Dlis Probe MD 4830 ft Probe TVD 3857.29 ft Format: InSitu Pro XPT Time IndexLog Index Scale: 1 in per 60 s Index Type: Time Creation Date: 12-Feb-2013 09:55:12

Pretest Station: File 6 @ 4738.01 (ft) MD

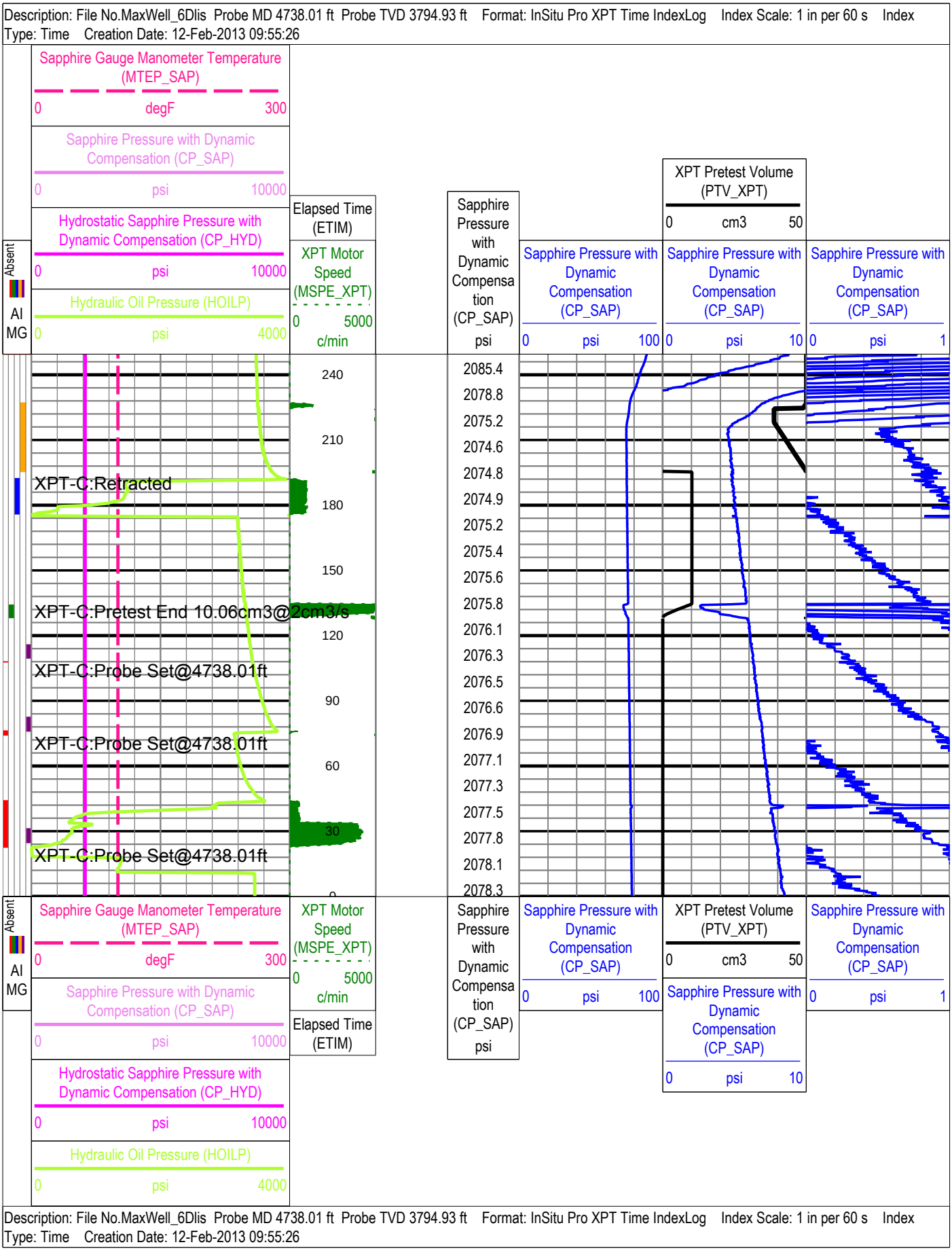


Tool Type:	XPT	**Pretest Type:**	Volumetric Drawdown Pretest	**Pretest Status:**	No Seal
Packer/Probe Type:	Conventional probe	**Primary Gauge:**	CP_SAP	**Formation Pressure:**	
Last Read Buildup Pressure:	2075.268 (psi)	**Drawdown Mobility:**		**Mud Pressure Before:**	2076.493 (psi)
Mud Pressure After:	2074.758 (psi)	**Temperature Before:**	100.46 (degF)	**Temperature After:**	100.45 (degF)
Pretest Rate:	1.43 (cm3/s)	**Pretest Volume:**	8.59 (cm3)		

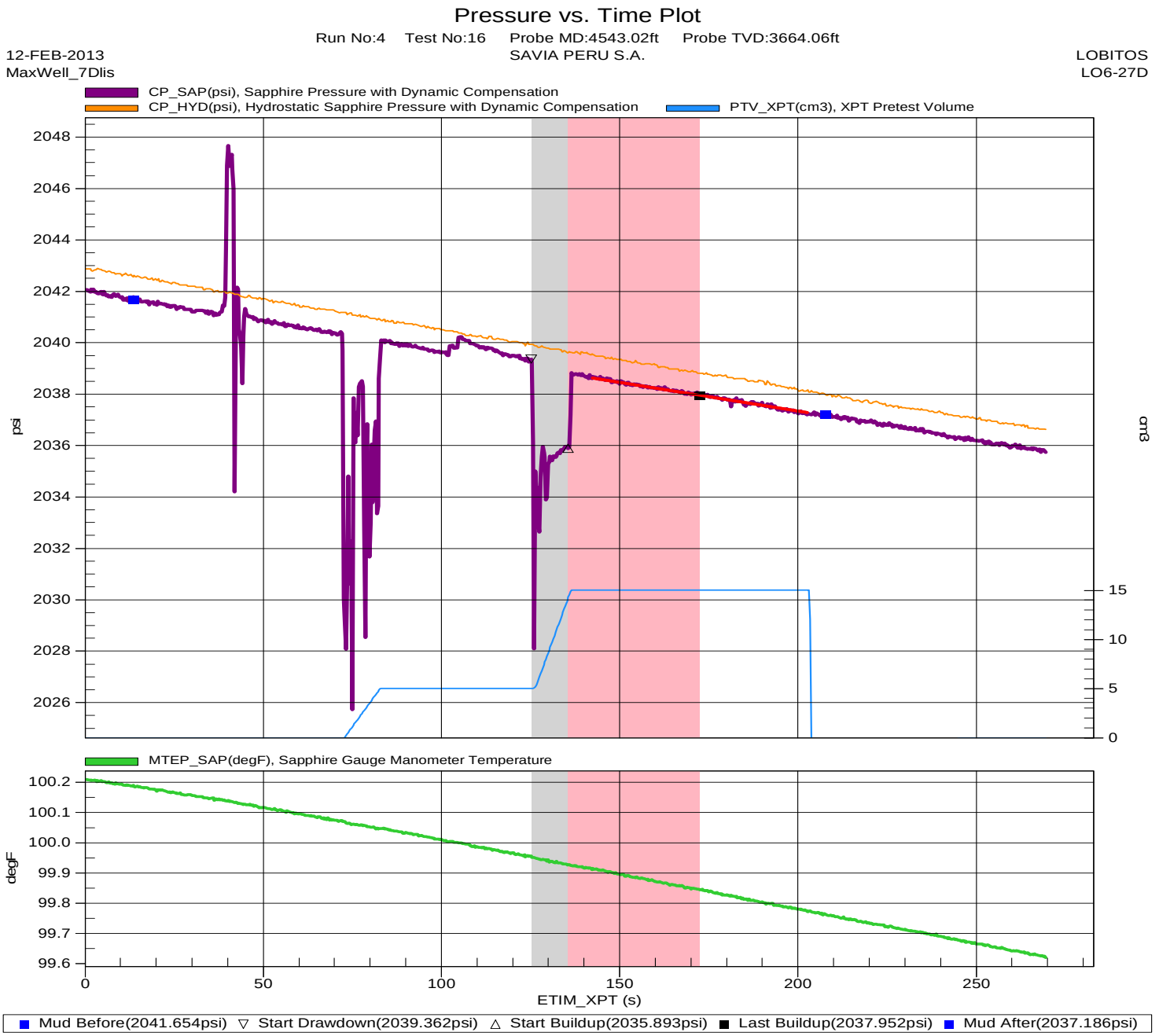
Comments:

Elapsed Time (s)	Event Summary
44.7	Probe set @ 4738.01 ft
74.1	Probe setting @ 4738.01 ft
107.7	Probe setting @ 4738.01 ft
134.7	Pretest 10.06 cm3 @ 2 cm3/s (Volumetric Drawdown Pretest)
193.8	Retracted

Log | MaxWell_6Dlis XPT-C@4738.01 (ft) MD



Pretest Station: File 7 @ 4543.02 (ft) MD



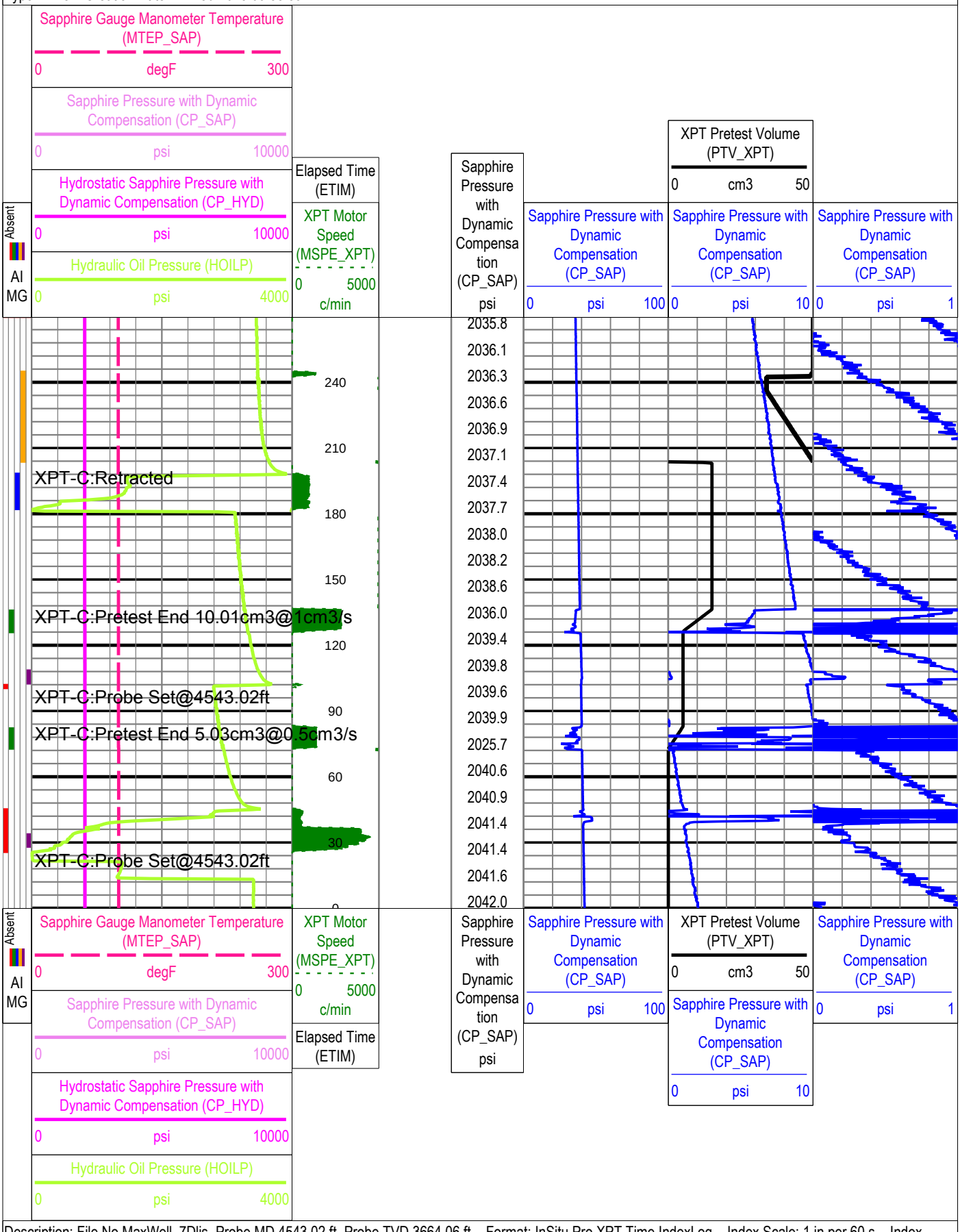
Tool Type:	XPT	**Pretest Type:**	Volumetric Drawdown Pretest	**Pretest Status:**	No Seal
Packer/Probe Type:	Conventional probe	**Primary Gauge:**	CP_SAP	**Formation Pressure:**	
Last Read Buildup Pressure:	2037.952 (psi)	**Drawdown Mobility:**		**Mud Pressure Before:**	2041.654 (psi)
Mud Pressure After:	2037.186 (psi)	**Temperature Before:**	100.19 (degF)	**Temperature After:**	99.76 (degF)
Pretest Rate:	0.88 (cm3/s)	**Pretest Volume:**	9.29 (cm3)		

Comments:

Elapsed Time (s)	Event Summary
46.2	Probe set @ 4543.02 ft
83.4	Pretest 5.03 cm3 @ 0.5 cm3/s (Volumetric Drawdown Pretest)
100.2	Probe setting @ 4543.02 ft
136.8	Pretest 10.01 cm3 @ 1 cm3/s (Volumetric Drawdown Pretest)
200.1	Retracted

Log | MaxWell_7Dlis XPT-C@4543.02 (ft) MD

Description: File No.MaxWell_7Dlis Probe MD 4543.02 ft Probe TVD 3664.06 ft Format: InSitu Pro XPT Time IndexLog Index Scale: 1 in per 60 s Index Type: Time Creation Date: 12-Feb-2013 09:55:39



Description: File No.MaxWell_7Dlis Probe MD 4543.02 ft Probe TVD 3664.06 ft Format: InSitu Pro XPT Time IndexLog Index Scale: 1 in per 60 s Index Type: Time Creation Date: 12-Feb-2013 09:55:39

Pretest Station: File 10 @ 4518.98 (ft) MD

Pressure vs. Time Plot

Run No:4 Test No:21 Probe MD:4518.98ft Probe TVD:3647.91ft

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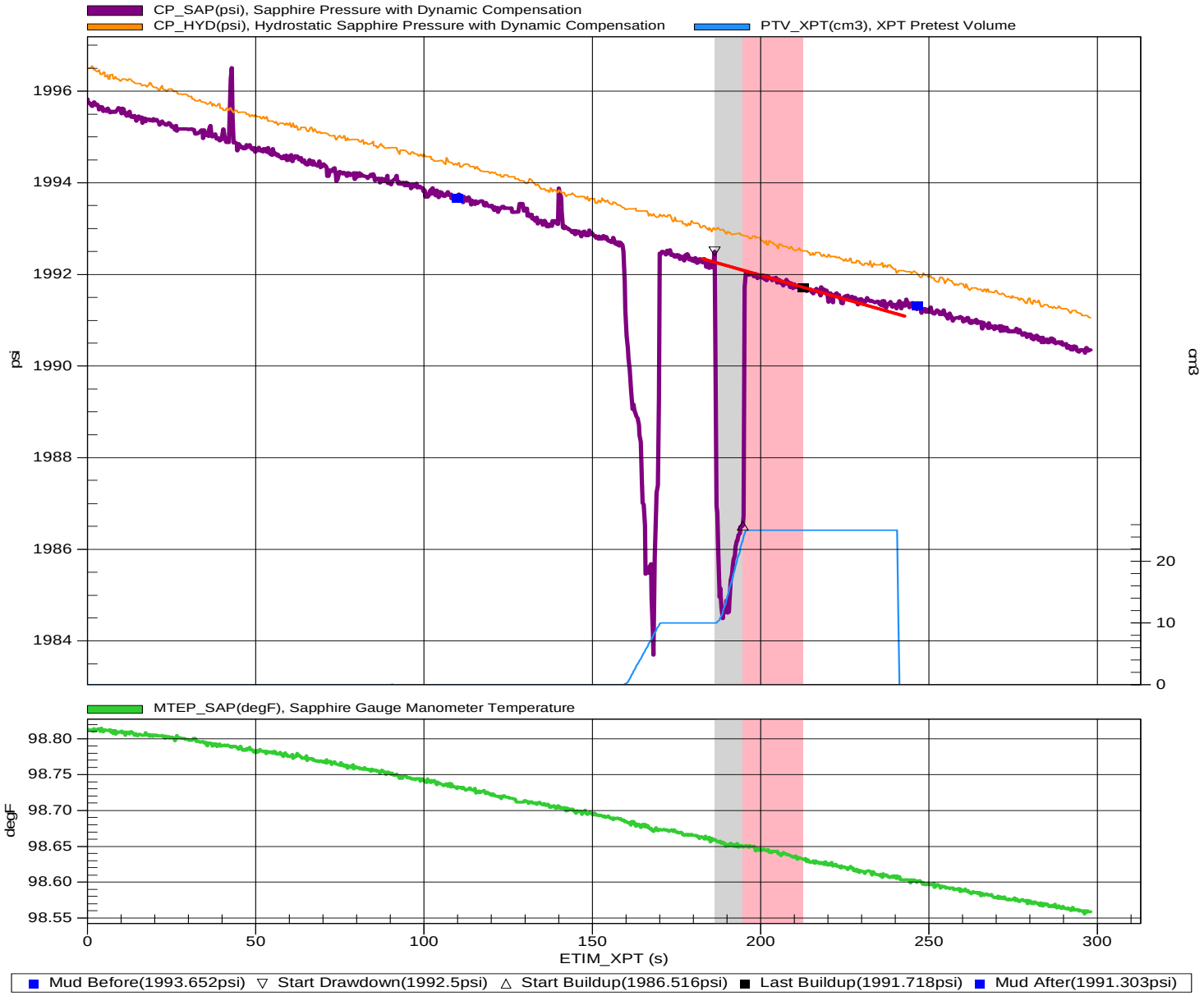
MaxWell_10Dlis LO6-27D



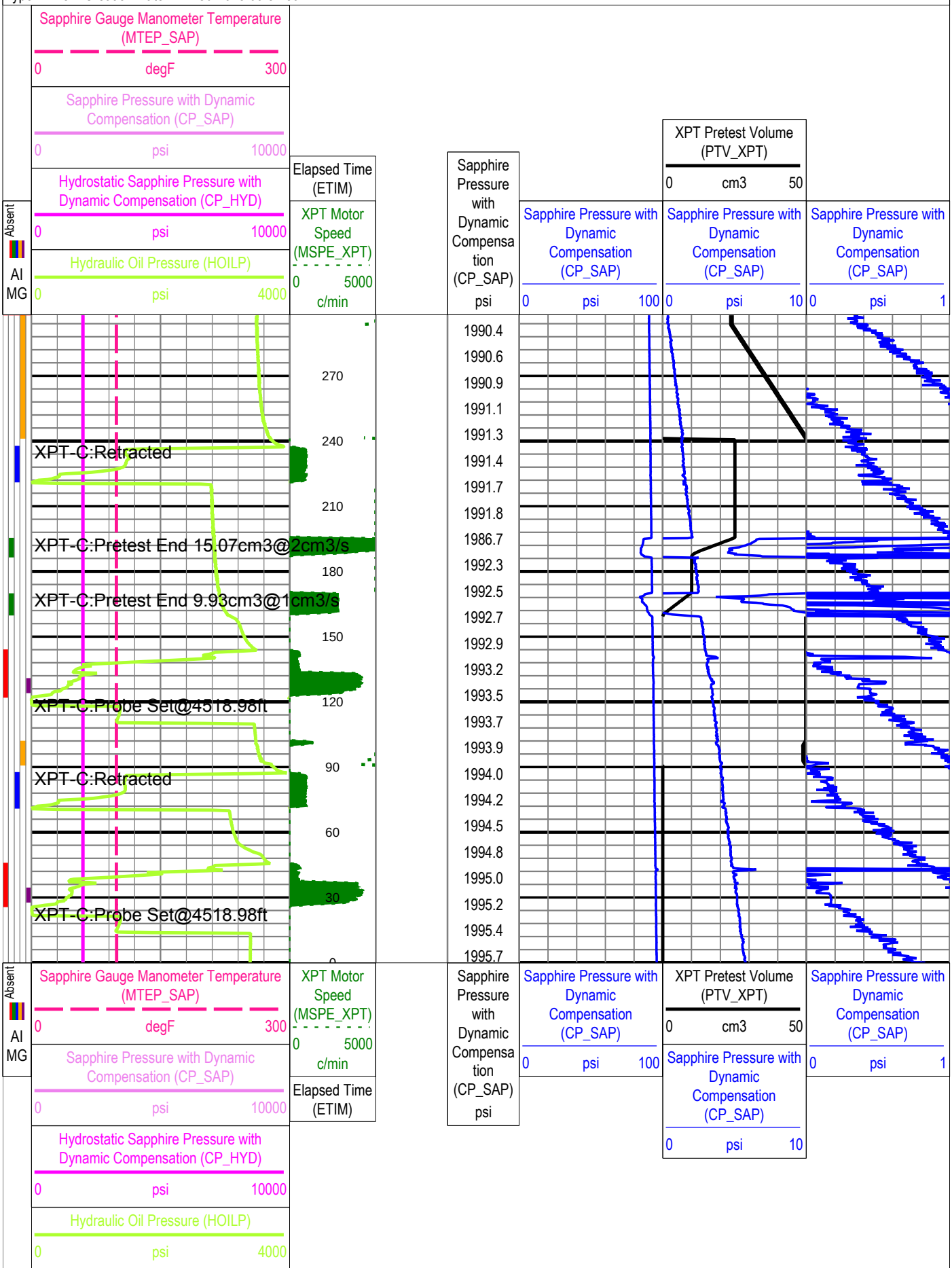
Tool Type:	XPT	**Pretest Type:**	Volumetric Drawdown Pretest	**Pretest Status:**	No Seal
Packer/Probe Type:	Conventional probe	**Primary Gauge:**	CP_SAP	**Formation Pressure:**	
Last Read Buildup Pressure:	1991.718 (psi)	**Drawdown Mobility:**		**Mud Pressure Before:**	1993.652 (psi)
Mud Pressure After:	1991.303 (psi)	**Temperature Before:**	98.73 (degF)	**Temperature After:**	98.6 (degF)
Pretest Rate:	1.6 (cm3/s)	**Pretest Volume:**	13.4 (cm3)		

Comments:

Elapsed Time (s)	Event Summary
46.5	Probe set @ 4518.98 ft
88.5	Retracted
144.3	Probe set @ 4518.98 ft
170.7	Pretest 9.93 cm3 @ 1 cm3/s (Volumetric Drawdown Pretest)
195.9	Pretest 15.07 cm3 @ 2 cm3/s (Volumetric Drawdown Pretest)
238.8	Retracted

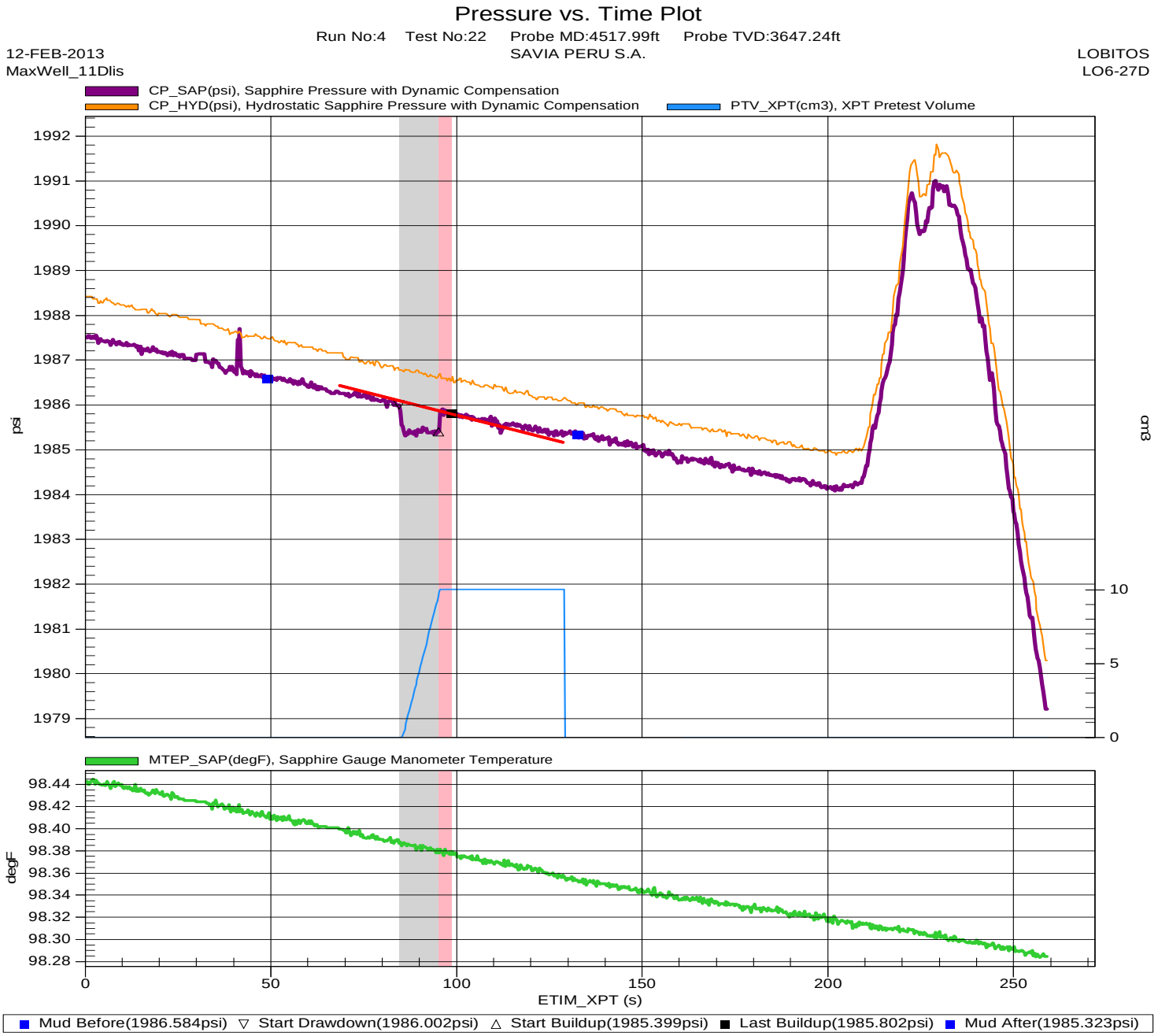
Log | MaxWell_10Dlis XPT-C@4518.98 (ft) MD

Description: File No.MaxWell_10Dlis Probe MD 4518.98 ft Probe TVD 3647.91 ft Format: InSitu Pro XPT Time IndexLog Index Scale: 1 in per 60 s Index Type: Time Creation Date: 12-Feb-2013 09:57:59



Description: File No.MaxWell_10Dlis Probe MD 4518.98 ft Probe TVD 3647.91 ft Format: InSitu Pro XPT Time IndexLog Index Scale: 1 in per 60 s Index Type: Time Creation Date: 12-Feb-2013 09:57:59

Pretest Station: File 11 @ 4517.99 (ft) MD



Tool Type:	XPT	**Pretest Type:**	Volumetric Drawdown Pretest	**Pretest Status:**	No Seal
Packer/Probe Type:	Conventional probe	**Primary Gauge:**	CP_SAP	**Formation Pressure:**	
Last Read Buildup Pressure:	1985.802 (psi)	**Drawdown Mobility:**		**Mud Pressure Before:**	1986.584 (psi)
Mud Pressure After:	1985.323 (psi)	**Temperature Before:**	98.41 (degF)	**Temperature After:**	98.35 (degF)
Pretest Rate:	0.91 (cm3/s)	**Pretest Volume:**	9.54 (cm3)		

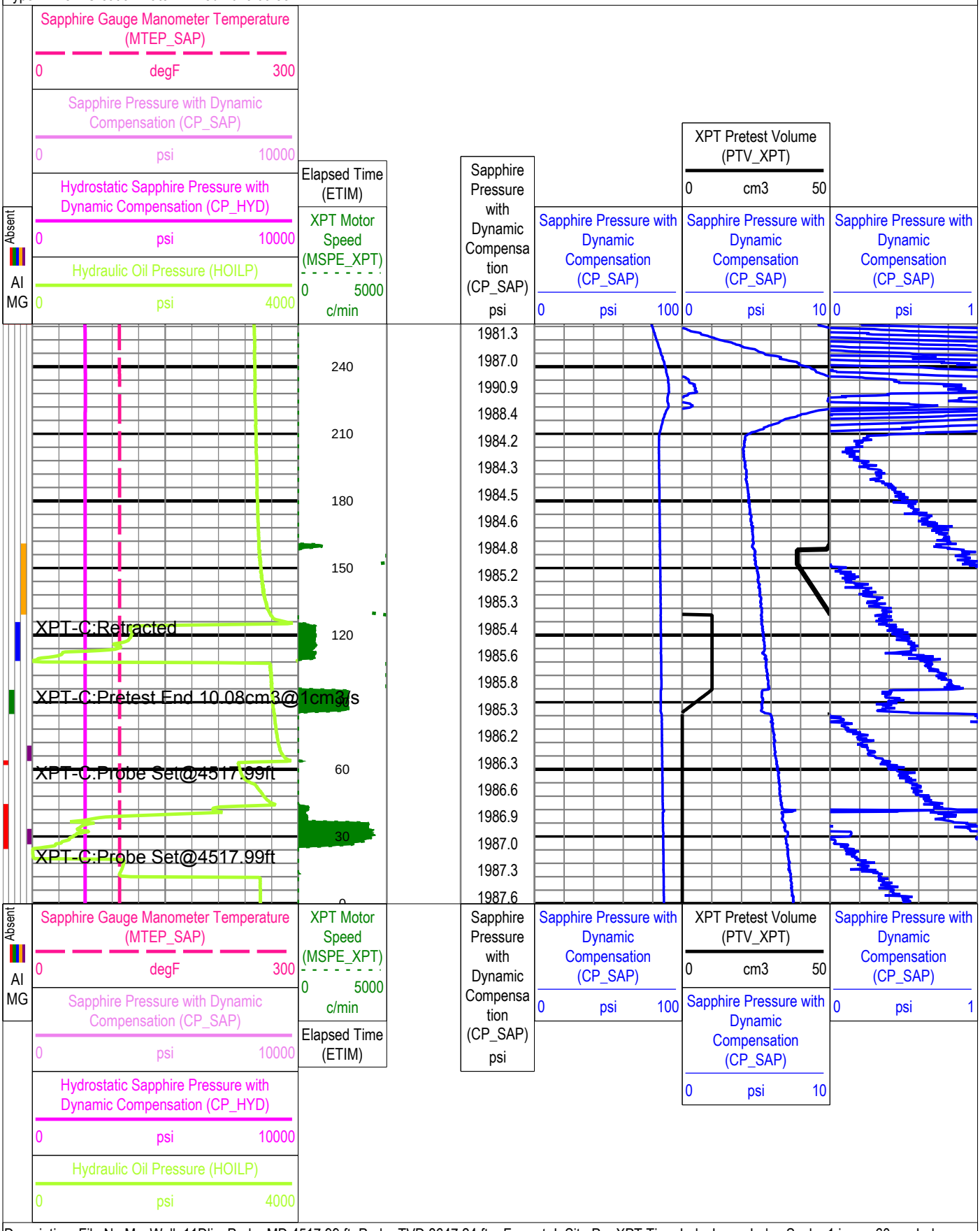
Comments:

Elapsed Time (s)	Event Summary
44.7	Probe set @ 4517.99 ft
62.1	Probe setting @ 4517.99 ft
96	Pretest 10.08 cm3 @ 1 cm3/s (Volumetric Drawdown Pretest)
127.2	Retracted

Log

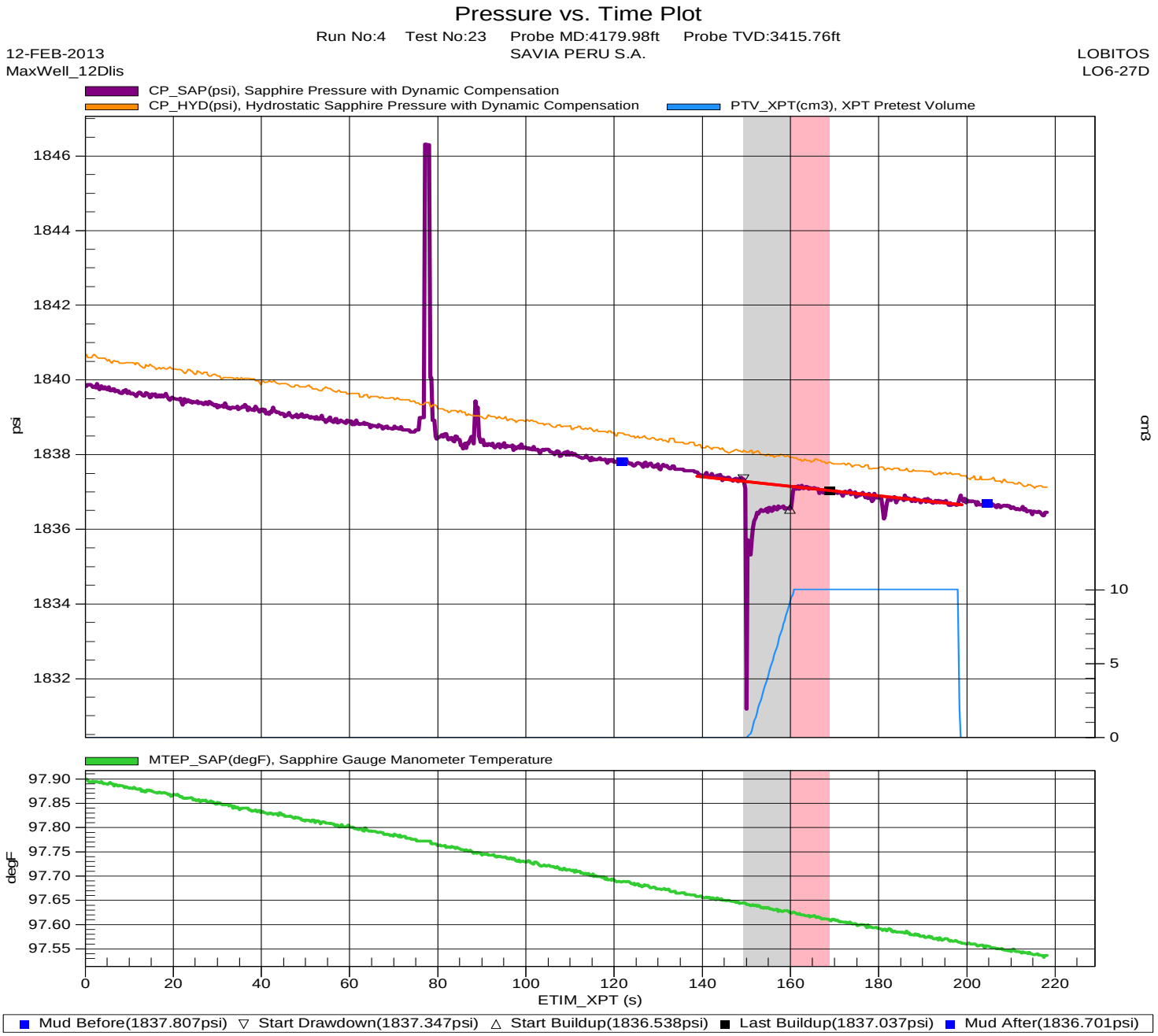
MaxWell_11Dlis XPT-C@4517.99 (ft) MD

Description: File No.MaxWell_11Dlis Probe MD 4517.99 ft Probe TVD 3647.24 ft Format: InSitu Pro XPT Time IndexLog Index Scale: 1 in per 60 s Index Type: Time Creation Date: 12-Feb-2013 09:58:21



Description: File No.MaxWell_11Dlis Probe MD 4517.99 ft Probe TVD 3647.24 ft Format: InSitu Pro XPT Time IndexLog Index Scale: 1 in per 60 s Index Type: Time Creation Date: 12-Feb-2013 09:58:21

Pretest Station: File 12 @ 4179.98 (ft) MD



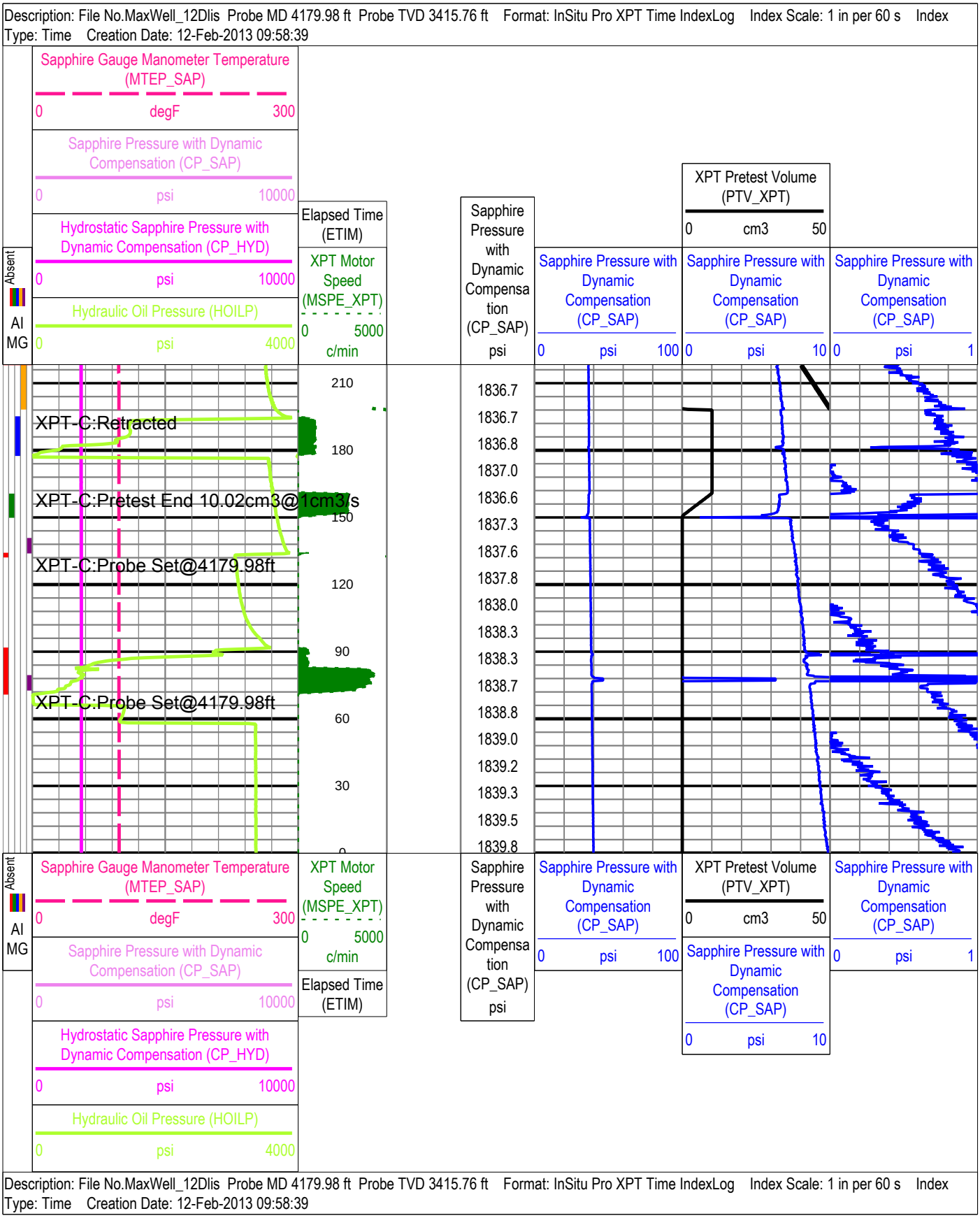
Tool Type:	XPT	**Pretest Type:**	Volumetric Drawdown Pretest	**Pretest Status:**	No Seal
Packer/Probe Type:	Conventional probe	**Primary Gauge:**	CP_SAP	**Formation Pressure:**	
Last Read Buildup Pressure:	1837.037 (psi)	**Drawdown Mobility:**		**Mud Pressure Before:**	1837.807 (psi)
Mud Pressure After:	1836.701 (psi)	**Temperature Before:**	97.69 (degF)	**Temperature After:**	97.56 (degF)
Pretest Rate:	0.87 (cm3/s)	**Pretest Volume:**	9.14 (cm3)		

Comments:

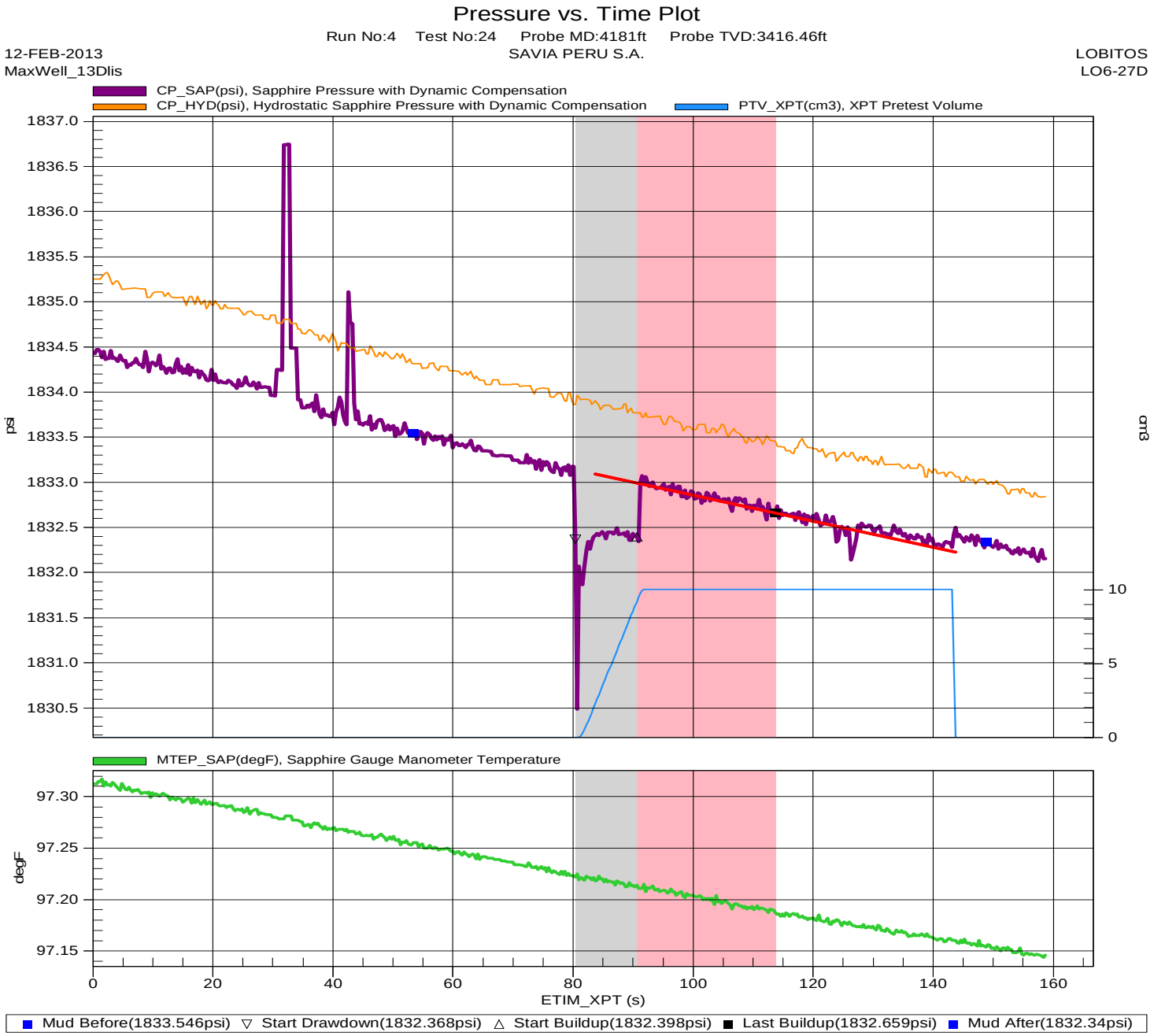
Elapsed Time (s)	Event Summary
92.4	Probe set @ 4179.98 ft
132.3	Probe setting @ 4179.98 ft
161.4	Pretest 10.02 cm3 @ 1 cm3/s (Volumetric Drawdown Pretest)
196.2	Retracted

Log

MaxWell_12Dlis XPT-C@4179.98 (ft) MD



Pretest Station: File 13 @ 4181 (ft) MD



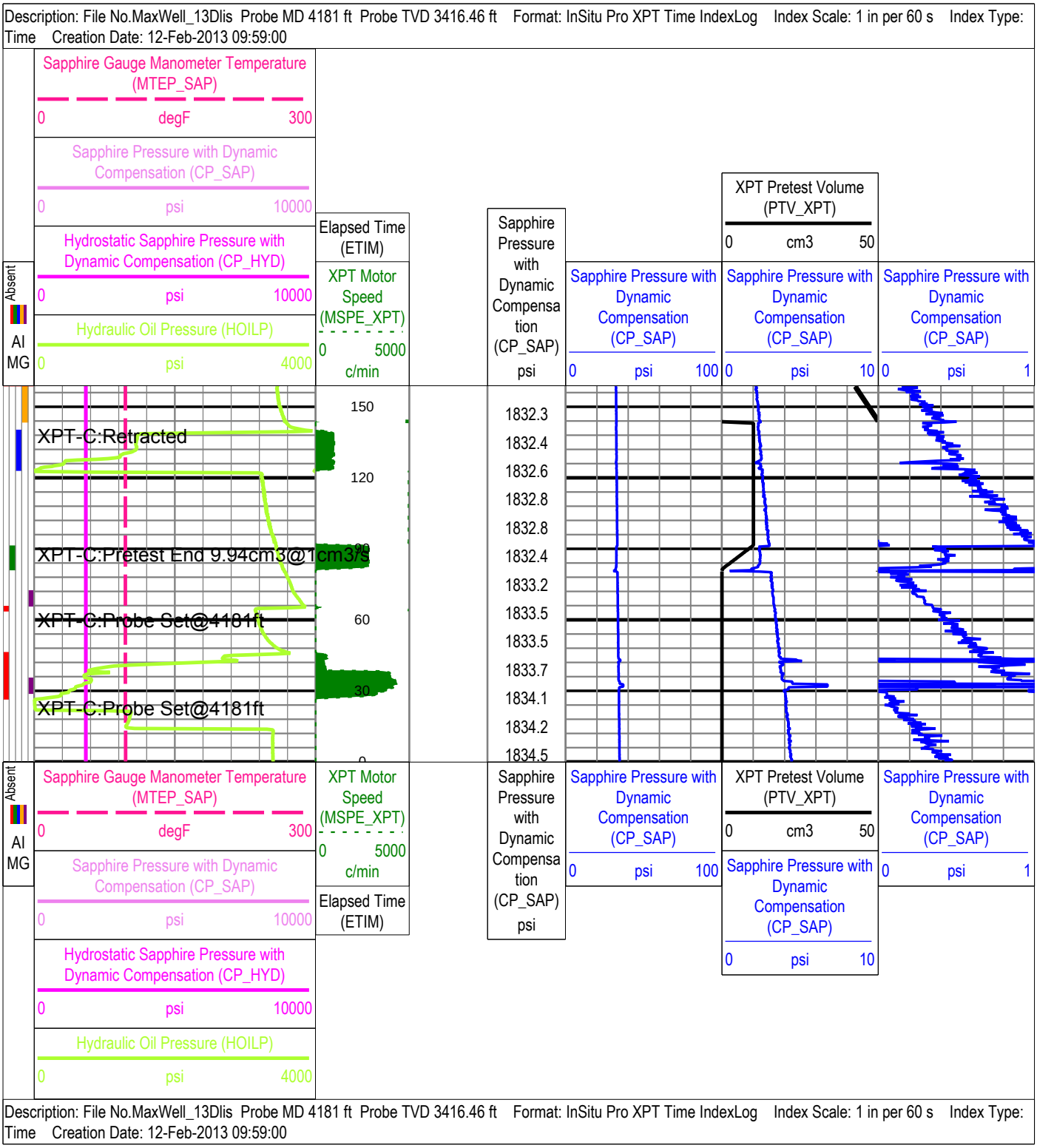
Tool Type:	XPT	**Pretest Type:**	Volumetric Drawdown Pretest	**Pretest Status:**	No Seal
Packer/Probe Type:	Conventional probe	**Primary Gauge:**	CP_SAP	**Formation Pressure:**	
Last Read Buildup Pressure:	1832.659 (psi)	**Drawdown Mobility:**		**Mud Pressure Before:**	1833.546 (psi)
Mud Pressure After:	1832.34 (psi)	**Temperature Before:**	97.26 (degF)	**Temperature After:**	97.15 (degF)
Pretest Rate:	0.9 (cm3/s)	**Pretest Volume:**	9.14 (cm3)		

Comments:

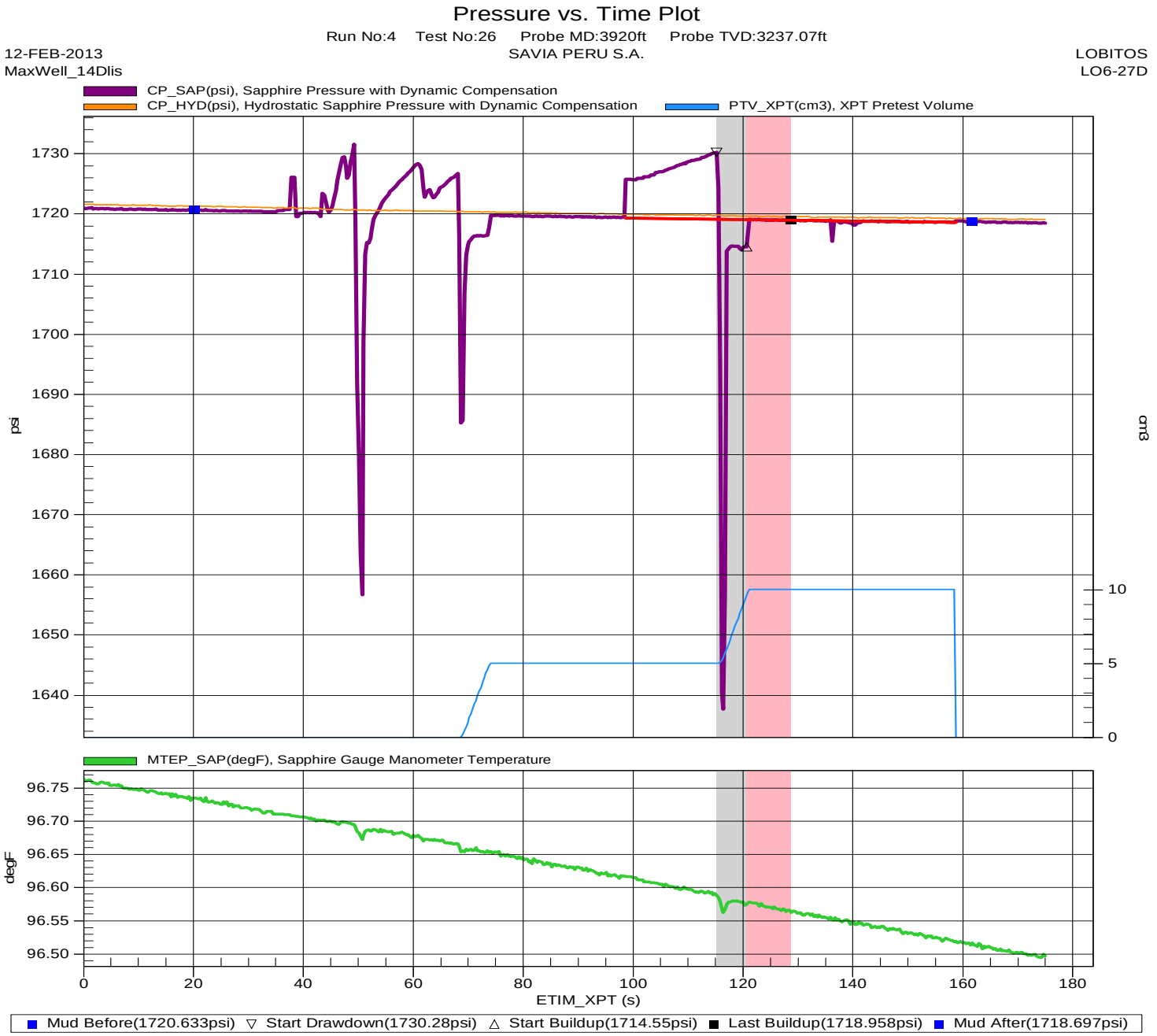
Elapsed Time (s)	Event Summary
46.8	Probe set @ 4181 ft
63.6	Probe setting @ 4181 ft
91.5	Pretest 9.94 cm3 @ 1 cm3/s (Volumetric Drawdown Pretest)
141.3	Retracted

Log

MaxWell_13Dlis XPT-C@4181 (ft) MD



Pretest Station: File 14 @ 3920 (ft) MD



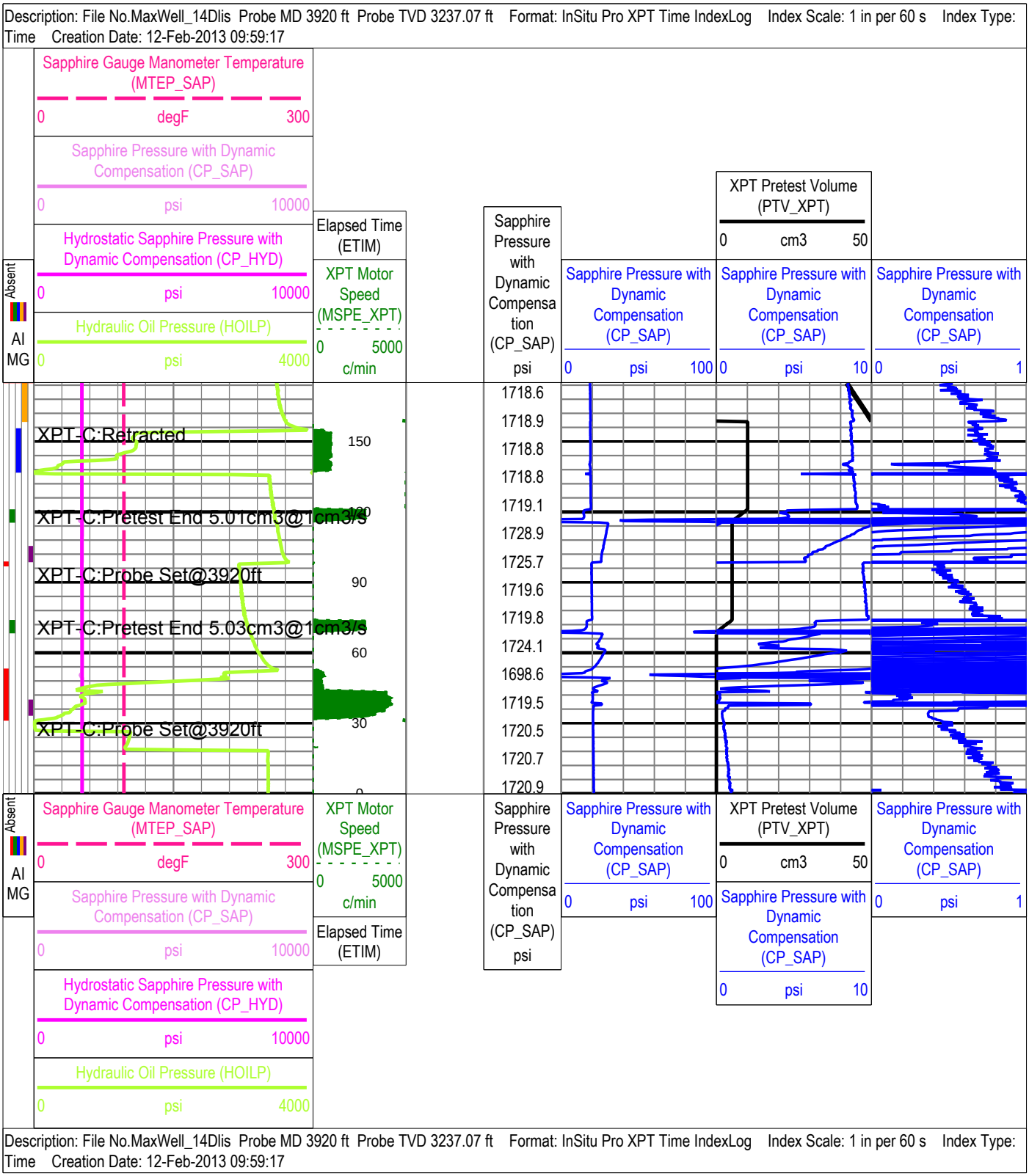
Tool Type:	XPT	**Pretest Type:**	Volumetric Drawdown Pretest	**Pretest Status:**	No Seal
Packer/Probe Type:	Conventional probe	**Primary Gauge:**	CP_SAP	**Formation Pressure:**	
Last Read Buildup Pressure:	1718.958 (psi)	**Drawdown Mobility:**		**Mud Pressure Before:**	1720.633 (psi)
Mud Pressure After:	1718.697 (psi)	**Temperature Before:**	96.73 (degF)	**Temperature After:**	96.52 (degF)
Pretest Rate:	0.85 (cm3/s)	**Pretest Volume:**	4.59 (cm3)		

Comments:

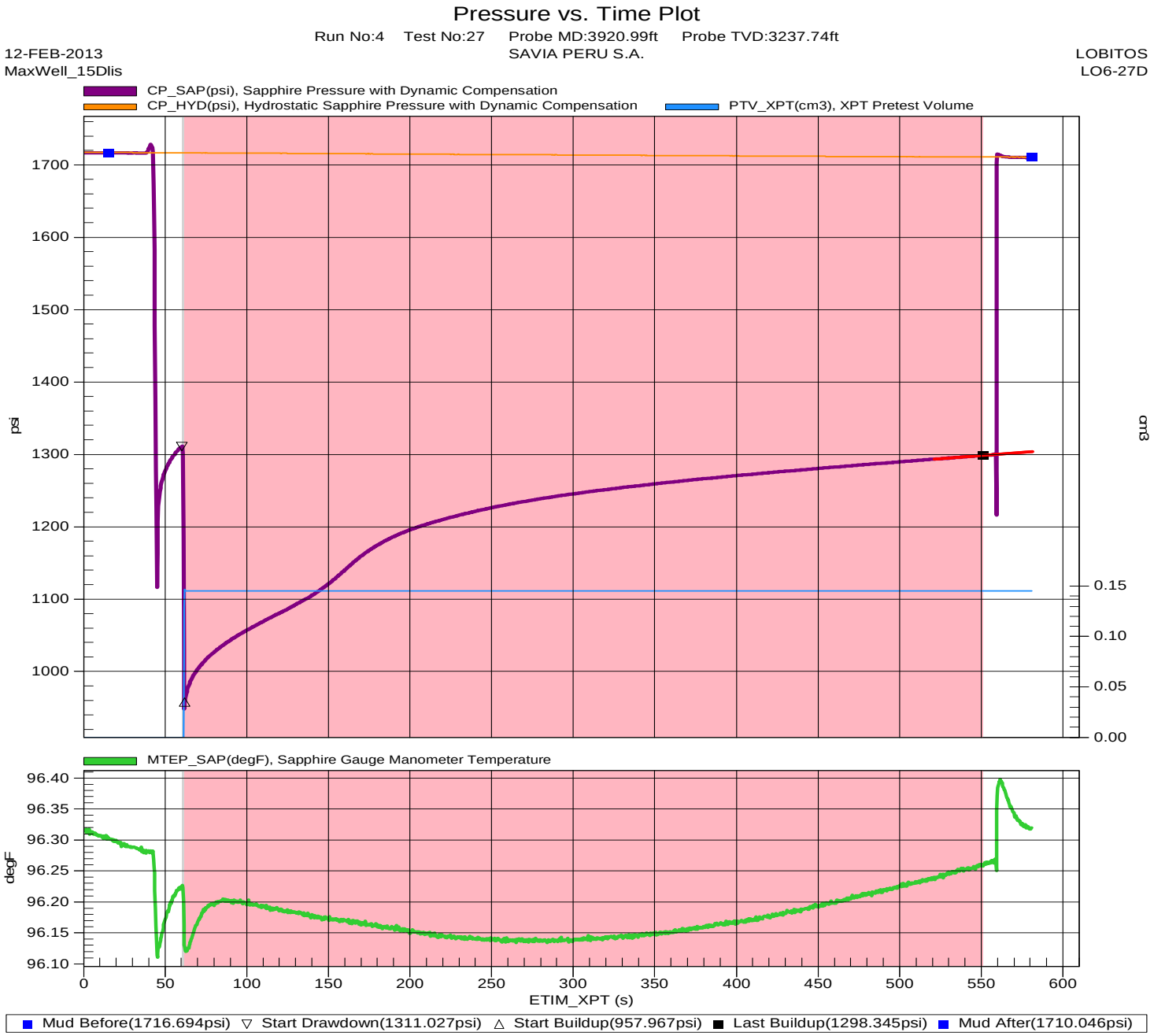
Elapsed Time (s)	Event Summary
53.7	Probe set @ 3920 ft
74.4	Pretest 5.03 cm3 @ 1 cm3/s (Volumetric Drawdown Pretest)
96.9	Probe setting @ 3920 ft
121.5	Pretest 5.01 cm3 @ 1 cm3/s (Volumetric Drawdown Pretest)
156.6	Retracted

Log

MaxWell_14Dlis XPT-C@3920 (ft) MD



Pretest Station: File 15 @ 3920.99 (ft) MD



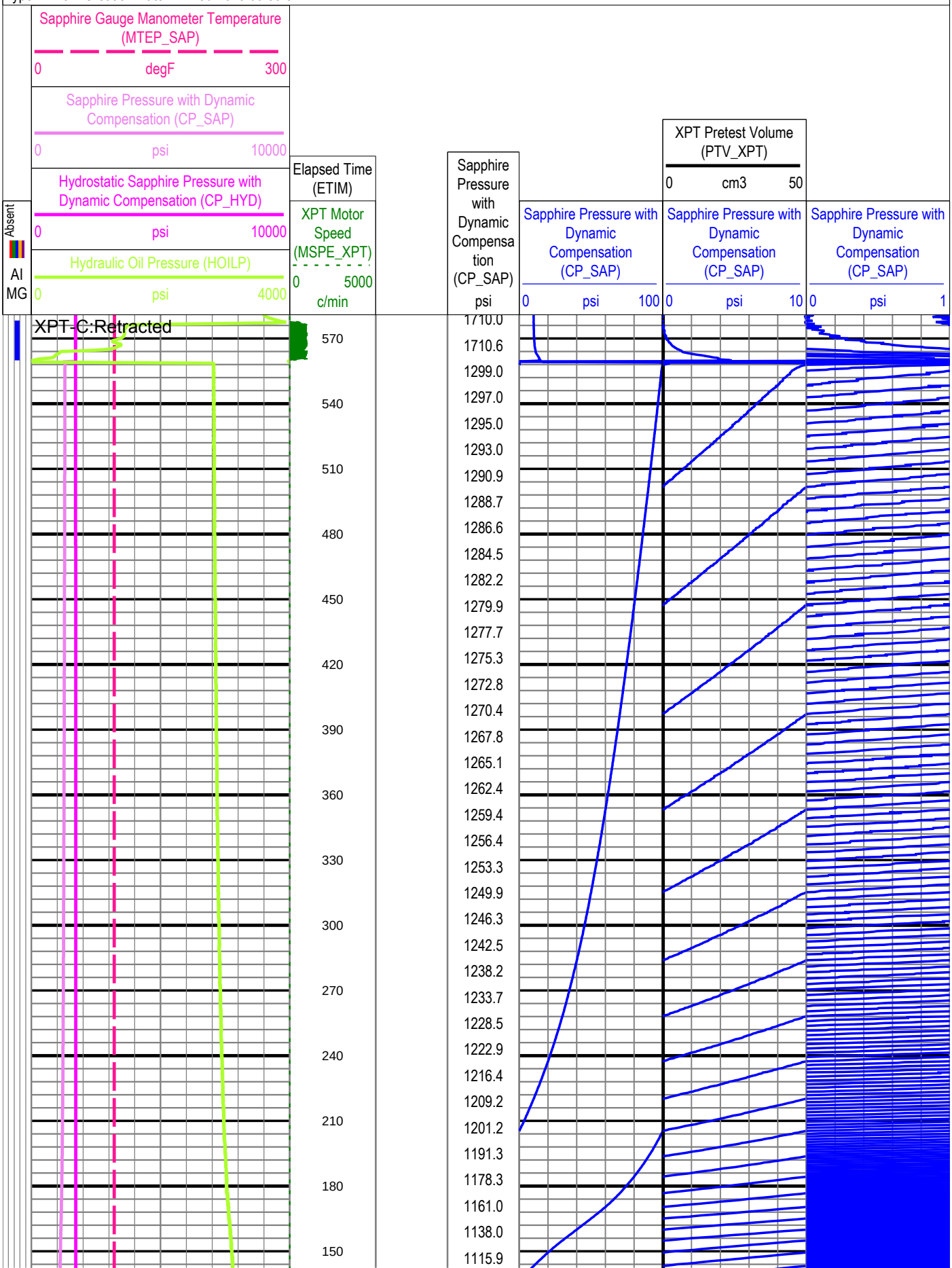
Tool Type:	XPT	**Pretest Type:**	Volumetric Drawdown Pretest	**Pretest Status:**	Unstabilized
Packer/Probe Type:	Conventional probe	**Primary Gauge:**	CP_SAP	**Formation Pressure:**	1298.345 (psi)
Last Read Buildup Pressure:	1298.345 (psi)	**Drawdown Mobility:**	0.02 (mD/cP)	**Mud Pressure Before:**	1716.694 (psi)
Mud Pressure After:	1710.046 (psi)	**Temperature Before:**	96.3 (degF)	**Temperature After:**	96.32 (degF)
Pretest Rate:	0.08 (cm3/s)	**Pretest Volume:**	0.15 (cm3)		

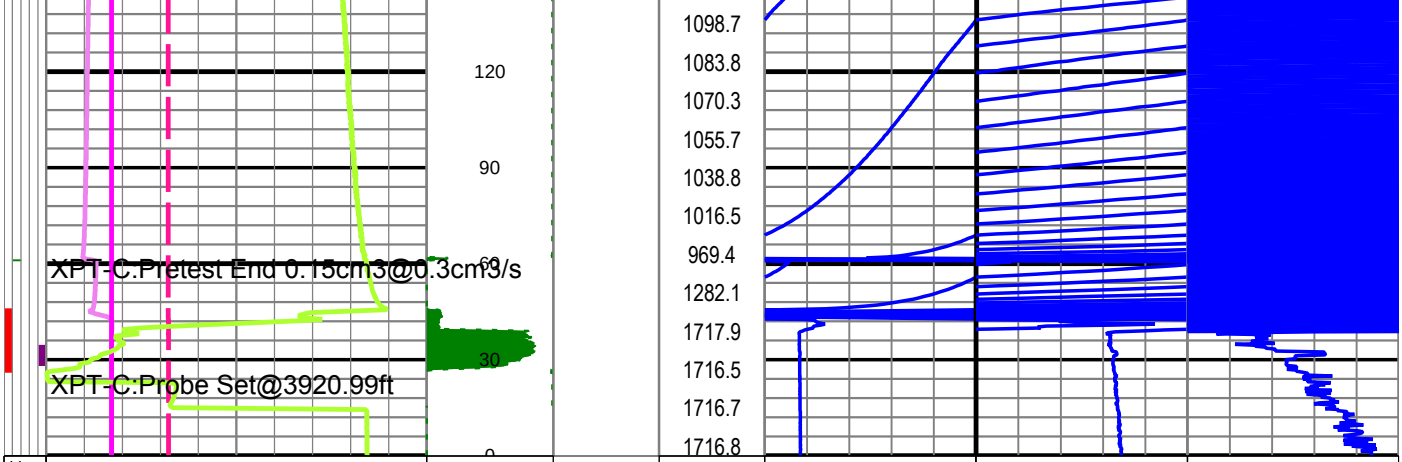
Comments:

Elapsed Time (s)	Event Summary
46.5	Probe set @ 3920.99 ft
62.1	Pretest 0.15 cm3 @ 0.3 cm3/s (Volumetric Drawdown Pretest)
579.3	Retracted

Log | MaxWell_15Dlis XPT-C@3920.99 (ft) MD

Description: File No.MaxWell_15Dlis Probe MD 3920.99 ft Probe TVD 3237.74 ft Format: InSitu Pro XPT Time IndexLog Index Scale: 1 in per 60 s Index Type: Time Creation Date: 12-Feb-2013 09:59:34





Absent

AI

MG

Sapphire Gauge Manometer Temperature (MTEP_SAP)
0 degF 300

Sapphire Pressure with Dynamic Compensation (CP_SAP)
0 psi 10000

Hydrostatic Sapphire Pressure with Dynamic Compensation (CP_HYD)
0 psi 10000

Hydraulic Oil Pressure (HOILP)
0 psi 4000

XPT Motor Speed (MSPE_XPT)
0 5000
c/min

Elapsed Time (ETIM)

Sapphire Pressure with Dynamic Compensation (CP_SAP)
psi

Sapphire Pressure with Dynamic Compensation (CP_SAP)
0 psi 100

XPT Pretest Volume (PTV_XPT)
0 cm3 50

Sapphire Pressure with Dynamic Compensation (CP_SAP)
0 psi 10

Sapphire Pressure with Dynamic Compensation (CP_SAP)
0 psi 1

Description: File No.MaxWell_15Dlis Probe MD 3920.99 ft Probe TVD 3237.74 ft Format: InSitu Pro XPT Time IndexLog Index Scale: 1 in per 60 s Index Type: Time Creation Date: 12-Feb-2013 09:59:34

Pretest Station: File 16 @ 3822.01 (ft) MD

Pressure vs. Time Plot

Run No:4 Test No:28 Probe MD:3822.01ft Probe TVD:3170.81ft

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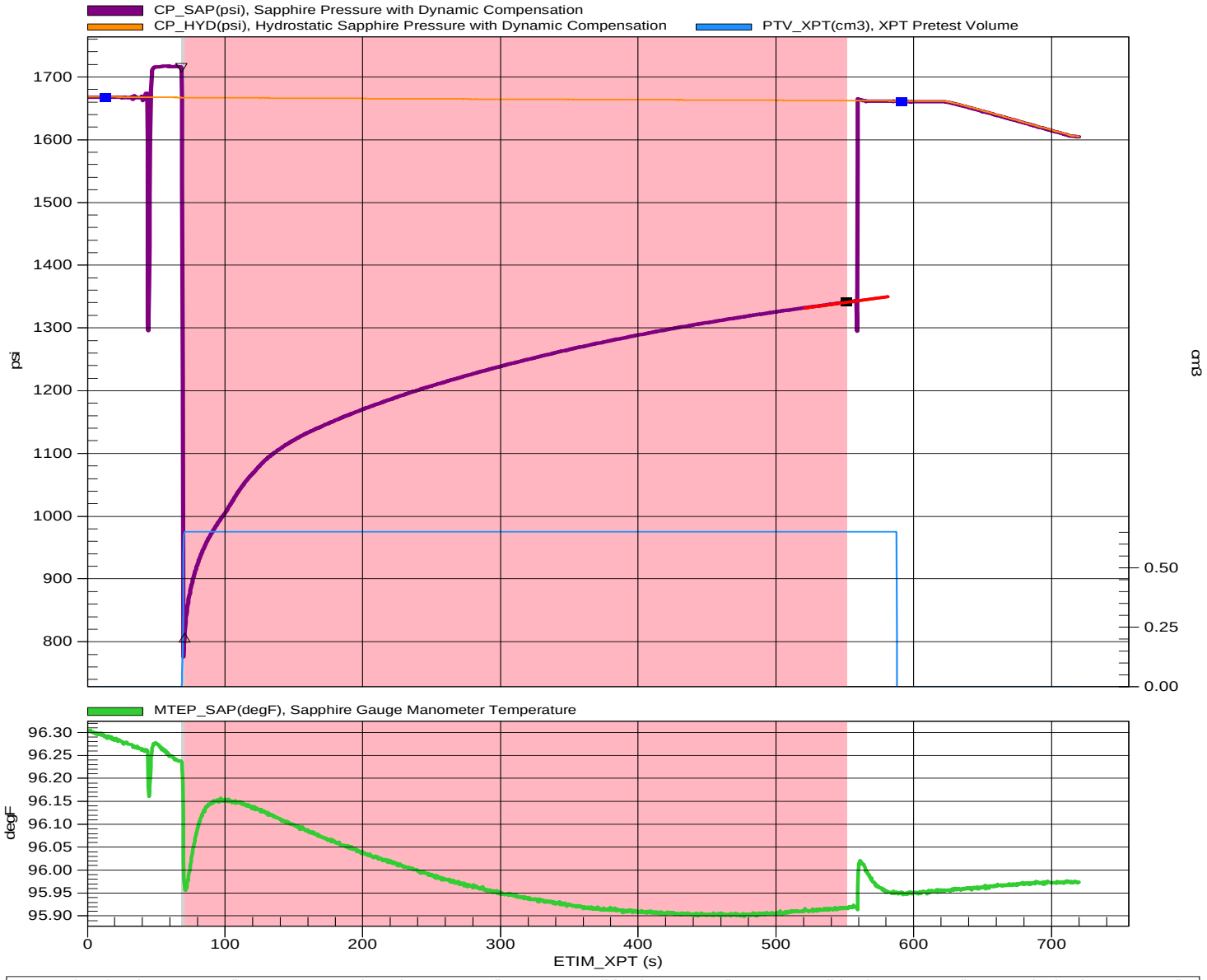
MaxWell_16Dlis LO6-27D



Tool Type:	XPT	**Pretest Type:**	Volumetric Drawdown Pretest	**Pretest Status:**	Unstabilized
Packer/Probe Type:	Conventional probe	**Primary Gauge:**	CP_SAP	**Formation Pressure:**	1340.964 (psi)
Last Read Buildup Pressure:	1340.964 (psi)	**Drawdown Mobility:**	0.06 (mD/cP)	**Mud Pressure Before:**	1667.471 (psi)
Mud Pressure After:	1660.933 (psi)	**Temperature Before:**	96.29 (degF)	**Temperature After:**	95.95 (degF)
Pretest Rate:	0.31 (cm3/s)	**Pretest Volume:**	0.65 (cm3)		

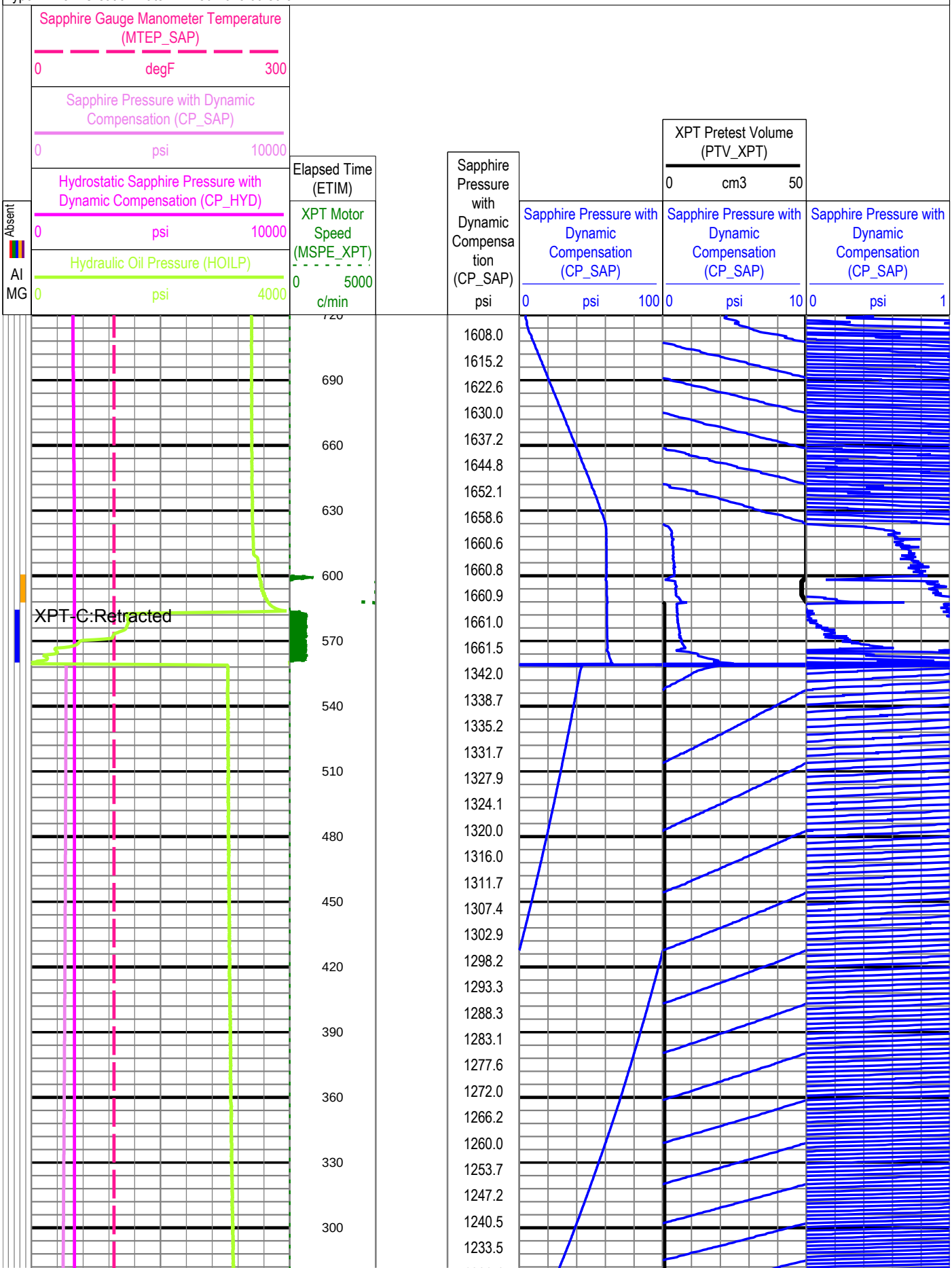
Comments:

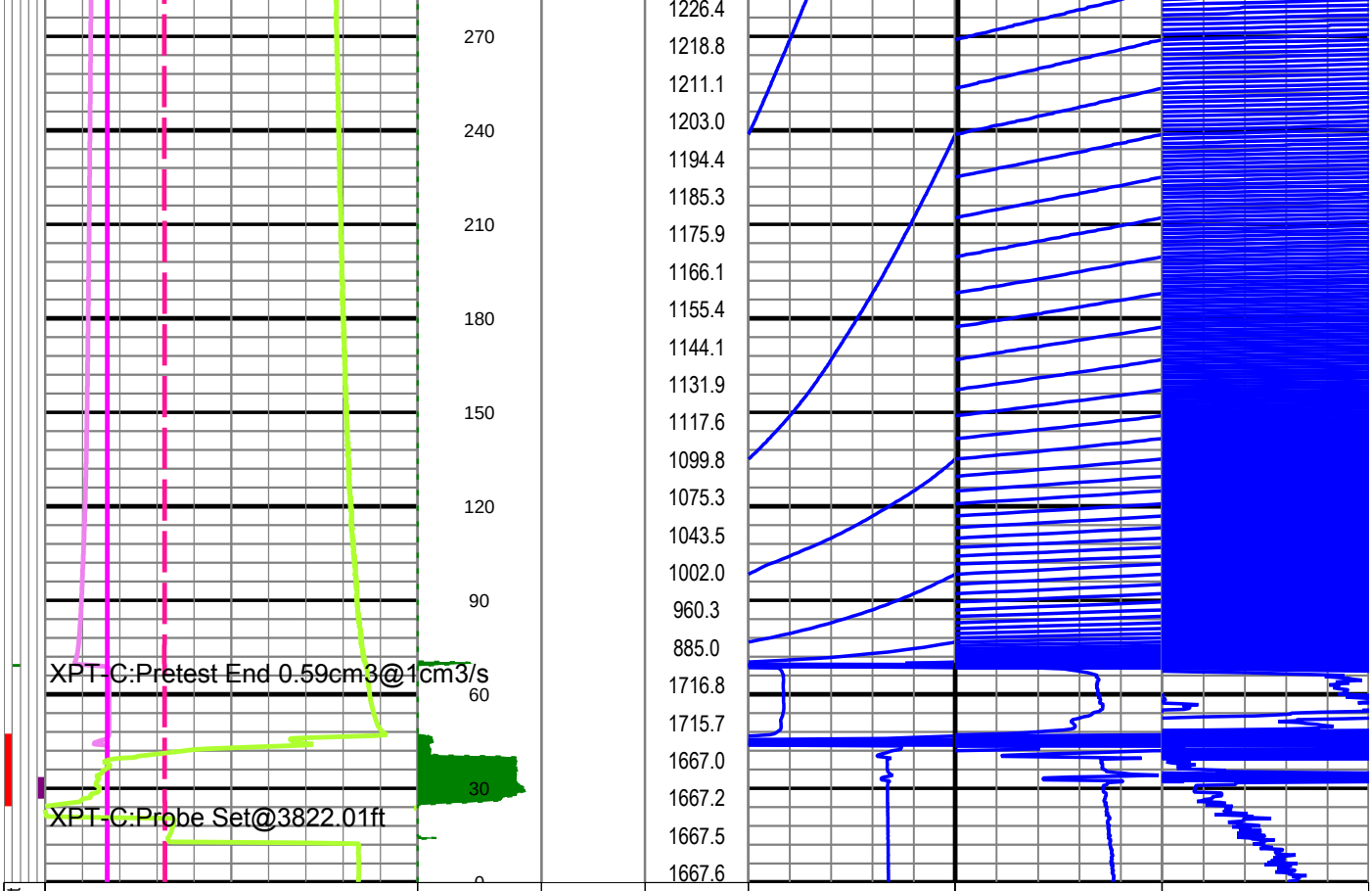
Elapsed Time (s)	Event Summary
48	Probe set @ 3822.01 ft
70.5	Pretest 0.59 cm3 @ 1 cm3/s (Volumetric Drawdown Pretest)
585.3	Retracted

Log

MaxWell_16Dlis XPT-C@3822.01 (ft) MD

Description: File No.MaxWell_16Dlis Probe MD 3822.01 ft Probe TVD 3170.81 ft Format: InSitu Pro XPT Time IndexLog Index Scale: 1 in per 60 s Index Type: Time Creation Date: 12-Feb-2013 09:59:51





Absent

AI

MG

Sapphire Gauge Manometer Temperature (MTEP_SAP)

0 degF 300

Sapphire Pressure with Dynamic Compensation (CP_SAP)

0 psi 10000

Hydrostatic Sapphire Pressure with Dynamic Compensation (CP_HYD)

0 psi 10000

Hydraulic Oil Pressure (HOILP)

0 psi 4000

XPT Motor Speed (MSPE_XPT)

0 5000 c/min

Elapsed Time (ETIM)

Sapphire Pressure with Dynamic Compensation (CP_SAP) psi

Sapphire Pressure with Dynamic Compensation (CP_SAP)

0 psi 100

XPT Pretest Volume (PTV_XPT)

0 cm3 50

Sapphire Pressure with Dynamic Compensation (CP_SAP)

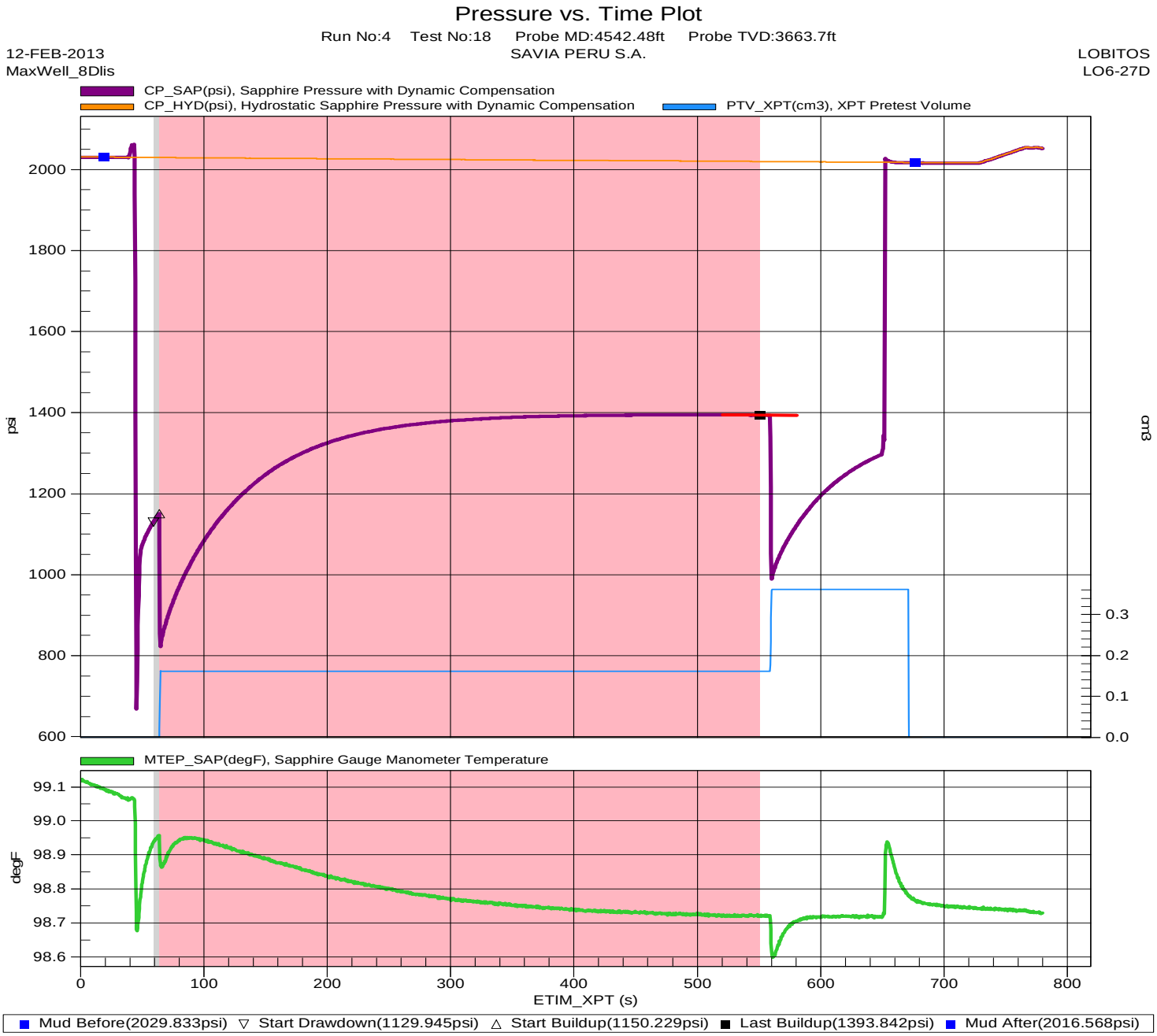
0 psi 10

Sapphire Pressure with Dynamic Compensation (CP_SAP)

0 psi 1

Description: File No.MaxWell_16Dlis Probe MD 3822.01 ft Probe TVD 3170.81 ft Format: InSitu Pro XPT Time IndexLog Index Scale: 1 in per 60 s Index Type: Time Creation Date: 12-Feb-2013 09:59:51

Pretest Station: File 8 @ 4542.48 (ft) MD

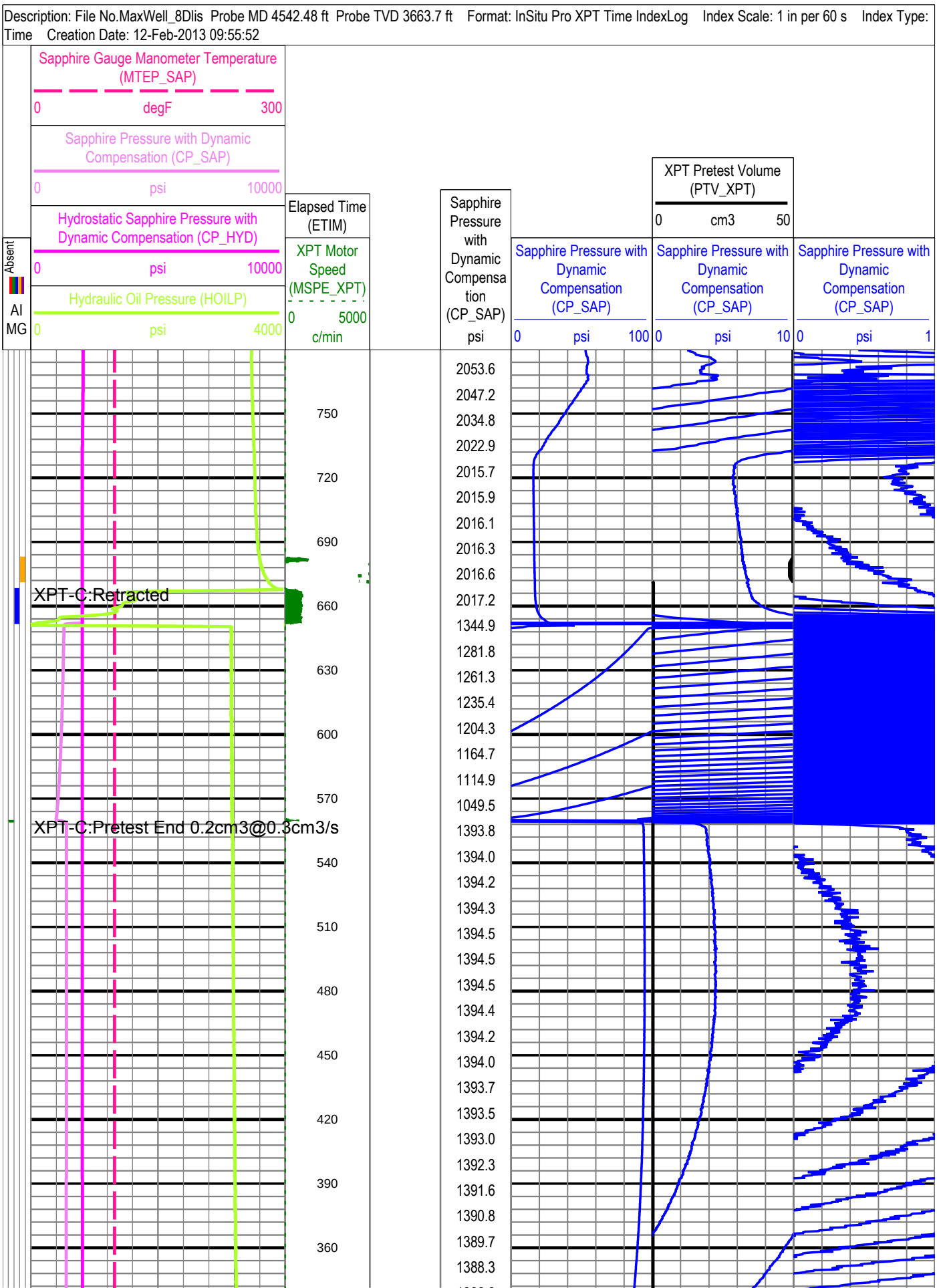


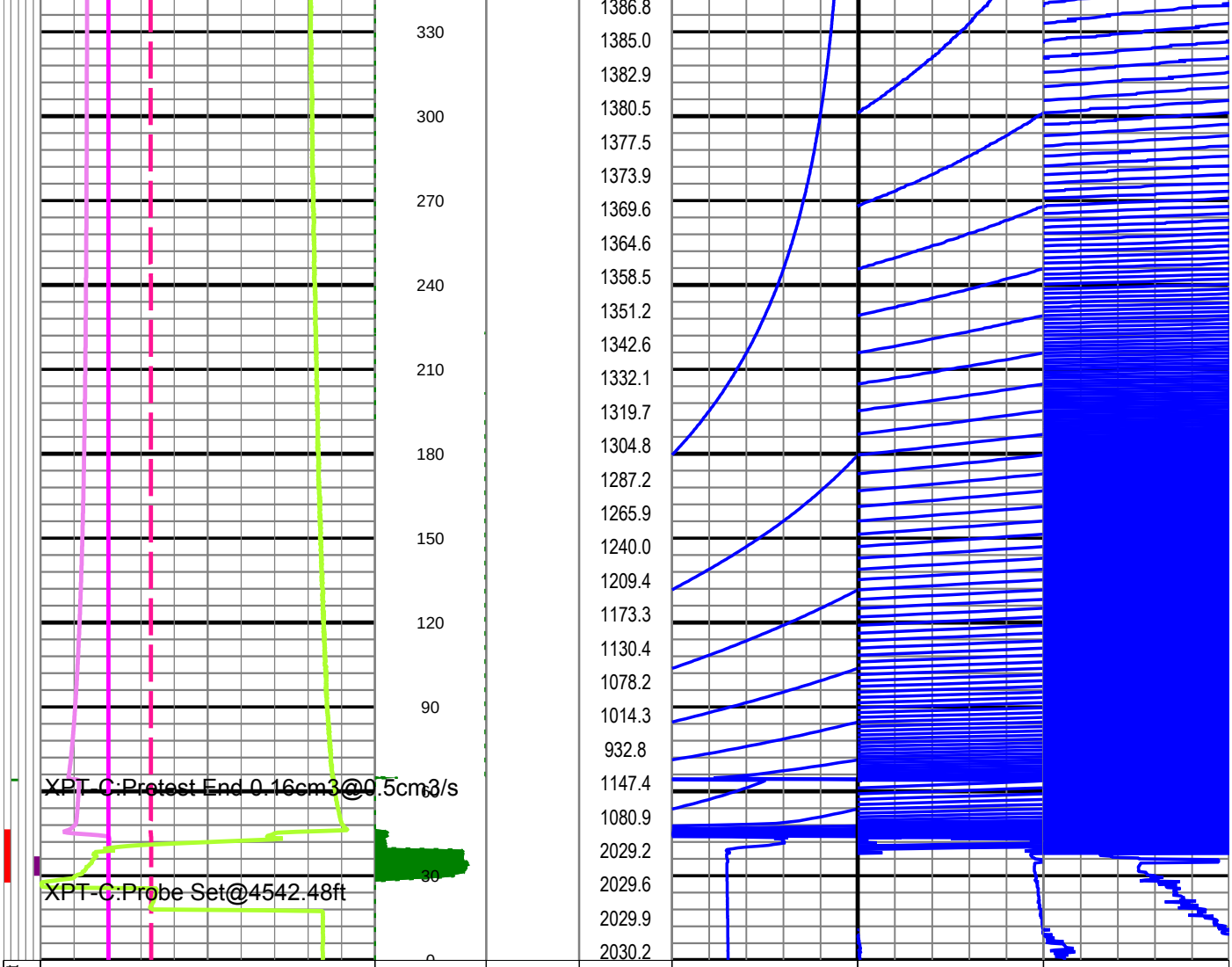
Tool Type:	XPT	**Pretest Type:**	Volumetric Drawdown Pretest	**Pretest Status:**	Valid Test
Packer/Probe Type:	Conventional probe	**Primary Gauge:**	CP_SAP	**Formation Pressure:**	1393.842 (psi)
Last Read Buildup Pressure:	1393.842 (psi)	**Drawdown Mobility:**		**Mud Pressure Before:**	2029.833 (psi)
Mud Pressure After:	2016.568 (psi)	**Temperature Before:**	99.09 (degF)	**Temperature After:**	98.77 (degF)
Pretest Rate:	0 (cm3/s)	**Pretest Volume:**	0 (cm3)		

Comments:

Elapsed Time (s)	Event Summary
47.1	Probe set @ 4542.48 ft
65.1	Pretest 0.16 cm3 @ 0.5 cm3/s (Volumetric Drawdown Pretest)
560.4	Pretest 0.2 cm3 @ 0.3 cm3/s (Volumetric Drawdown Pretest)
669.3	Retracted

Log | MaxWell_8Dlis XPT-C@4542.48 (ft) MD





Absent

AI

MG

Sapphire Gauge Manometer Temperature (MTEP_SAP)

0 degF 300

Sapphire Pressure with Dynamic Compensation (CP_SAP)

0 psi 10000

Hydrostatic Sapphire Pressure with Dynamic Compensation (CP_HYD)

0 psi 10000

Hydraulic Oil Pressure (HOILP)

0 psi 4000

XPT Motor Speed (MSPE_XPT)

0 5000 c/min

Elapsed Time (ETIM)

Sapphire Pressure with Dynamic Compensation (CP_SAP) psi

Sapphire Pressure with Dynamic Compensation (CP_SAP)

0 psi 100

XPT Pretest Volume (PTV_XPT)

0 cm3 50

Sapphire Pressure with Dynamic Compensation (CP_SAP)

0 psi 10

Sapphire Pressure with Dynamic Compensation (CP_SAP)

0 psi 1

Description: File No.MaxWell_8Dlis Probe MD 4542.48 ft Probe TVD 3663.7 ft Format: InSitu Pro XPT Time IndexLog Index Scale: 1 in per 60 s Index Type: Time Creation Date: 12-Feb-2013 09:55:52

Pretest Station: File 9 @ 4627 (ft) MD

Pressure vs. Time Plot

Run No:4 Test No:19 Probe MD:4627ft Probe TVD:3720.54ft

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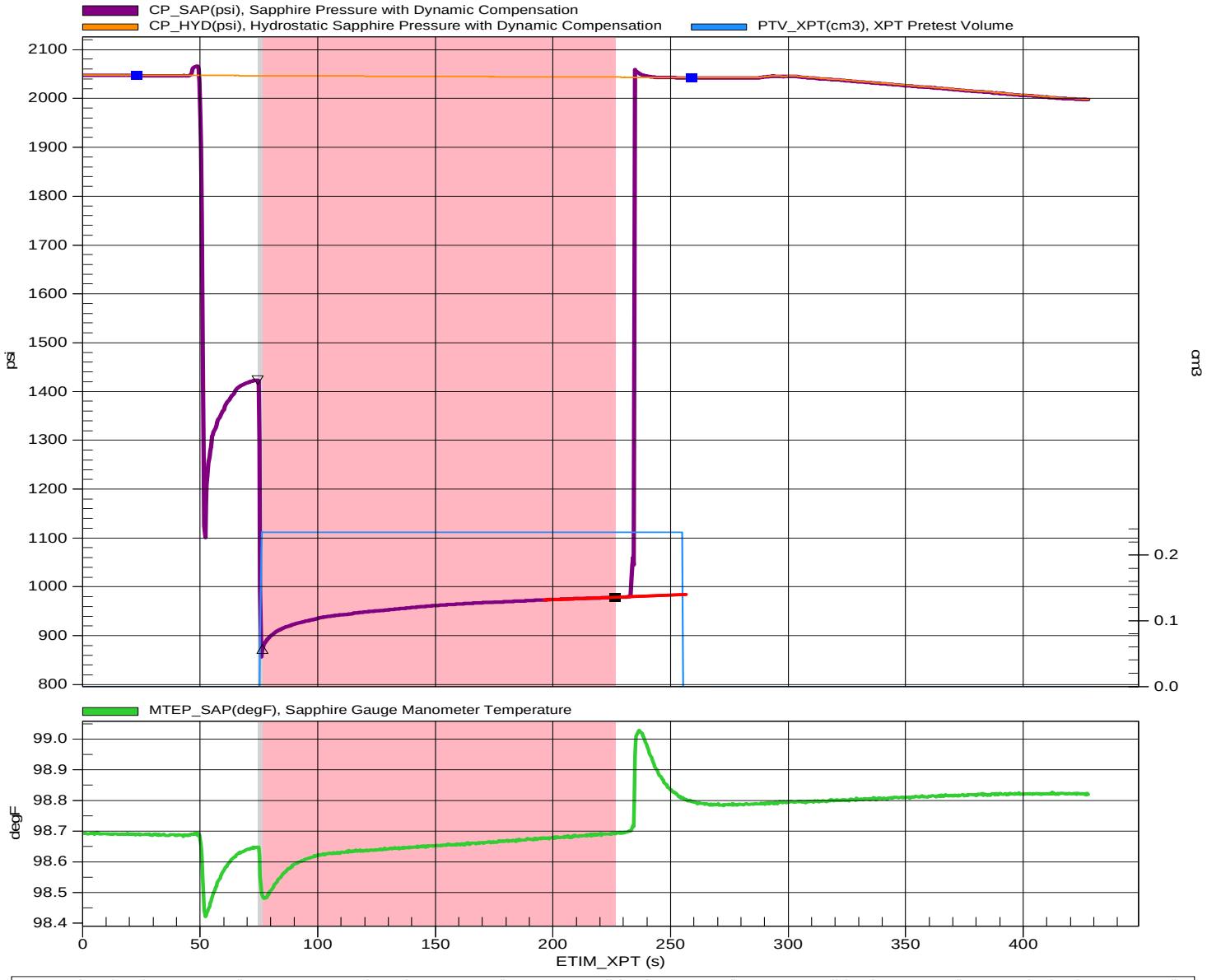
MaxWell_9Dlis LO6-27D

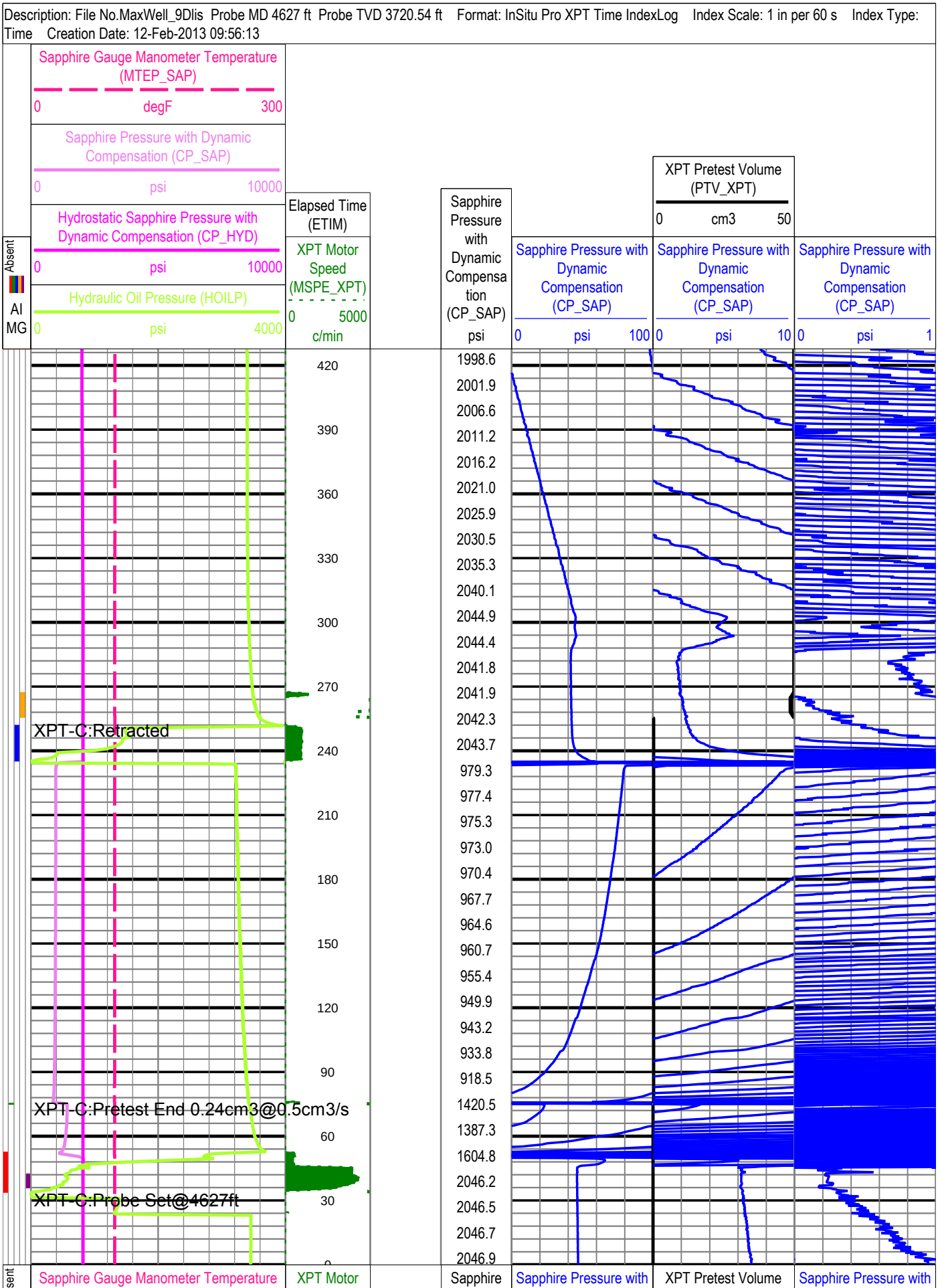


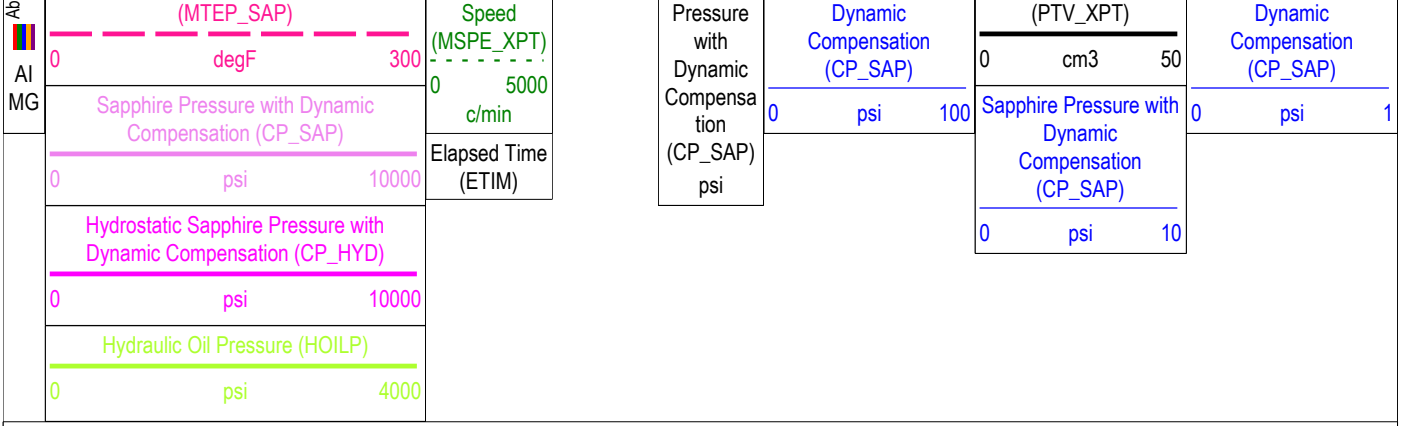
Tool Type:	XPT	**Pretest Type:**	Volumetric Drawdown Pretest	**Pretest Status:**	Valid Test
Packer/Probe Type:	Conventional probe	**Primary Gauge:**	CP_SAP	**Formation Pressure:**	978.555 (psi)
Last Read Buildup Pressure:	978.555 (psi)	**Drawdown Mobility:**	0.3 (mD/cP)	**Mud Pressure Before:**	2046.517 (psi)
Mud Pressure After:	2042.172 (psi)	**Temperature Before:**	98.69 (degF)	**Temperature After:**	98.8 (degF)
Pretest Rate:	0.11 (cm3/s)	**Pretest Volume:**	0.23 (cm3)		

Comments:

Elapsed Time (s)	Event Summary
53.4	Probe set @ 4627 ft
76.5	Pretest 0.24 cm3 @ 0.5 cm3/s (Volumetric Drawdown Pretest)
253.2	Retracted

Log | MaxWell_9Dlis XPT-C@4627 (ft) MD





Description: File No.MaxWell_9Dlis Probe MD 4627 ft Probe TVD 3720.54 ft Format: InSitu Pro XPT Time IndexLog Index Scale: 1 in per 60 s Index Type: Time Creation Date: 12-Feb-2013 09:56:13

Calibration Report

XPT-C (Xpress Pressure Tool -C) Calibration - Run 2

Primary Equipment :

XPT Hydrostatic Element 20K	HYDRO20K
XPT Sapphire Element 20K	SAPP20K

Sapphire Hydrostatic Master Calibration

Master (EEPROM): 00:00:00 14-Jun-2012

SAP_PRES_MODEL (Master) SAP Pressure Model Coefficients

	Temp**0	Temp**1	Temp**2	Temp**3	Temp**4	Temp**5
Pres**0	1267.537	-2754.583	-2499.412	2625.512	-850.8961	0
Pres**1	8387.479	45636.35	-26133.38	20808.69	-6804.315	0
Pres**2	13.08191	2030.13	-3736.648	-1246.247	0	0
Pres**3	-830.8827	1276.699	3863.011	0	0	0
Pres**4	324.7745	-3977.586	0	0	0	0
Pres**5	1193.159	0	0	0	0	0

SAP_TEMP_MODEL (Master) SAP Temperature Model Coefficients

	Pres**0	Pres**1	Pres**2	Pres**3	Pres**4	Pres**5
Temp**0	-248.9043	0.007157754	2.192205	-5.196338	2.528128	0
Temp**1	425.4825	-0.5015742	-1.818039	8.462954	-4.395265	0
Temp**2	24.95497	3.948071	-2.49961	0	0	0
Temp**3	15.52377	0.1128641	0	0	0	0
Temp**4	0	0	0	0	0	0
Temp**5	0	0	0	0	0	0

SAP_BTEMP_MODEL (Master) SAP Board Temperature Model Coefficients

	Temp**0	Temp**1	Temp**2	Temp**3	Temp**4	Temp**5
Row**1	-247.508	419.69	27.687	25.809	-13.422	4.256

Sapphire Formation Master Calibration

Master (EEPROM): 00:00:00 14-Jun-2012

SAP_PRES_MODEL (Master) SAP Pressure Model Coefficients

	Temp**0	Temp**1	Temp**2	Temp**3	Temp**4	Temp**5
Pres**0	1123.246	-1735.78	-5045.897	5157.25	-1785.088	0
Pres**1	6641.389	50540.18	-30097.31	22891.2	-7233.207	0
Pres**2	163.1028	942.1625	-1691.263	-2065.406	0	0
Pres**3	-142.8702	271.3508	3773.066	0	0	0
Pres**4	-268.0103	-3150.318	0	0	0	0
Pres**5	1240.992	0	0	0	0	0

SAP_TEMP_MODEL (Master) SAP Temperature Model Coefficients

	Pres**0	Pres**1	Pres**2	Pres**3	Pres**4	Pres**5
Temp**0	-248.6744	0.481379	2.77975	-5.566207	2.035559	0
Temp**1	425.1191	-2.862809	-2.268682	8.867901	-3.608035	0
Temp**2	25.40515	7.097475	-2.955801	0	0	0
Temp**3	15.73281	-0.9209355	0	0	0	0
Temp**4	0	0	0	0	0	0
Temp**5	0	0	0	0	0	0

Temp**5						
	0	0	0	0	0	0

SAP_BTEMP_MODEL (Master)	SAP Board Temperature Model Coefficients					
	Temp**0	Temp**1	Temp**2	Temp**3	Temp**4	Temp**5
Row**1	-247.508	419.69	27.687	25.809	-13.422	4.256

HGNS-H (HILT Gamma-Ray and Neutron Sonde, 150 degC) Calibration - Run 2

Primary Equipment :

HILT Gamma-Ray and Neutron Sonde, 150 degC	HGNS-H	4750

Auxiliary Equipment :

HGNS Accelerometer, 150 degC	HACCZ-H	5287
AmBe Neutron Logging Source	NSR-F	5167

Calibration Parameter :

Water Temperature	
Housing Size	
JIG-BKG (Jig minus background reference)	160

HGNS Accelerometer Calibration - Accelerometer Accumulations

Before (Measured): 21:39:33 11-Feb-2013

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
AZ Vertical Measurement	ft/s2	Before	32.2	31.5	32.0	32.8

HGNS Accelerometer EEPROM - Accelerometer EEPROM Read

Master (EEPROM): 00:00:00 15-Aug-2006

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
Accelerometer Manufacturer		Master			QAT_160	
Accelerometer Reference Temperature	degF	Master		30.2	77.0	122.0
Accelerometer Coefficients - 0		Master	-----	-----	-1434.000	-----
Accelerometer Coefficients - 1		Master	-----	-----	-44.490	-----
Accelerometer Coefficients - 2		Master	-----	-----	0.028	-----
Accelerometer Coefficients - 3		Master	-----	-----	0.000	-----
Accelerometer Coefficients - 4		Master	-----	-----	2.761	-----
Accelerometer Coefficients - 5		Master	-----	-----	0.000	-----
Accelerometer Coefficients - 6		Master	-----	-----	0.000	-----
Accelerometer Coefficients - 7		Master	-----	-----	0.000	-----
Accelerometer Coefficients - 8		Master	-----	-----	298.300	-----
Accelerometer Coefficients - 9		Master	-----	-----	0.996	-----

HGNS Neutron Calibration - HGNS Neutron Accumulations

Master (EEPROM): 21:21:08 08-Feb-2013 Before (Measured): 15:10:14 10-Feb-2013 Expired by 1 days After (Measured): 22:29:51 10-Feb-2013

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
Near Zero Measurement	1/s	Master	0	5.0	27.3	40.0
		Before	0	5.0	26.7	40.0
		After	0	5.0	27.6	40.0
		Before-Master	-----	-4.1	-0.6	4.1
		After-Before	-----	-4.0	0.9	4.0
Far Zero Measurement	1/s	Master	0	5.0	26.8	40.0
		Before	0	5.0	27.2	40.0
		After	0	5.0	28.4	40.0
		Before-Master	-----	-4.0	0.4	4.0
		After-Before	-----	-4.1	1.2	4.1
Near Plus Measurement - 0	1/s	Master	6031.0	4700.0	5343.0	6900.0
		Before	-----	-----	-----	-----
		After	-----	-----	-----	-----
		Before-Master	-----	-----	-----	-----
		After-Before	-----	-----	-----	-----
Far Plus Measurement - 0	1/s	Master	2793.0	1900.0	2260.0	2900.0
		Before	-----	-----	-----	-----
		After	-----	-----	-----	-----
		Before-Master	-----	-----	-----	-----

		After-Before	-----	-----	-----	-----	
Near Corrected Plus Measurement - 0	1/s	Master		4700.0	5239.0	6900.0	
		Before	-----	-----	-----	-----	
		After	-----	-----	-----	-----	
		Before-Master	-----	-----	-----	-----	
		After-Before	-----	-----	-----	-----	
Far Corrected Plus Measurement - 0	1/s	Master		1900.0	2182.0	2900.0	
		Before	-----	-----	-----	-----	
		After	-----	-----	-----	-----	
		Before-Master	-----	-----	-----	-----	
		After-Before	-----	-----	-----	-----	

HGNS Gamma-Ray Calibration - Gamma-Ray Accumulations

Before (Measured): 21:37:39 11-Feb-2013 After (Measured): 02:19:49 12-Feb-2013

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
RGR Zero Measurement	gAPI	Before	30.0	0	4.9	120.0
		After	30.0	0	4.6	120.0
		After-Before	-----	-----	-0.3	-----
RGR Plus Measurement	gAPI	Before	179.8	152.4	167.6	200.0
		After	179.8	152.4	159.7	200.0
		After-Before	-----	-----	-7.9	-----
GR Calibration Gain		Before	0.89	0.80	0.95	1.05
		After	-----	-----	-----	-----
		After-Before	-----	-----	-----	-----

Company: SAVIA PERU S.A.

Schlumberger

Well: LO6-27D

Field: LOBITOS

Rig Name: PEPESA-40

Country: PERU

XPT PRESSURE POINTS LOG

XPT-GR

SCALE 1in/60sec