

Schlumberger

Company: **Nalcor Energy Oil and Gas**

Well: **Nalcor et al Seamus 1**

Field: Parson's Pond

Rig: **Stoneham #11** Province: **Newfoundland**

MODULAR DYNAMIC TOOL

DUAL PACKER

LFA

FINAL PRINT

LOCATION			
Latitude: 49.98 N		Elev.:	K.B. 26.99 m
Longitude: 57.70 W			G.L. 20.69 m
			D.F. 26.69 m
Permanent Datum:	Ground Level	Elev.:	20.69 m
Log Measured From:	Kelly Bushing		
Drilling Measured From:	Kelly Bushing		
API Serial No.	Latitude 49.98 N	Longitude 57.70 W	

Rig: Stoneham #11
 Field: Parson's Pond
 Location: Latitude: 49.98 N
 Well: Nalcor et al Seamus 1
 Company: Nalcor Energy Oil and Gas

[illegible]

Logging Date	16-May-2010			
Run Number	Run 3			
Depth Driller	3160 m			
Schlumberger Depth	2625 m			
Bottom Log Interval	2602 m			
Top Log Interval	2599.6 m			
Casing Driller Size @ Depth	244.500 mm		@	2292.4 m
Casing Schlumberger	2292.5 m			
Bit Size	216.000 mm			
Type Fluid In Hole	Gel Chem			
Density	Viscosity	1170 kg/m ³	60 s	
Fluid Loss	PH	7.6 cm3	9.7	
Source Of Sample	Mud Pit			
RM @ Measured Temperature	0.950 ohm.m		@	21 degC
RMF @ Measured Temperature	0.710 ohm.m		@	21 degC
RMC @ Measured Temperature	1.450 ohm.m		@	21 degC
Source RMF	RMC	Calculated	Calculated	
RM @ MRT	RMF @ MRT	0.546 @ 53	0.408 @ 53	@
Maximum Recorded Temperatures	53 degC			
Circulation Stopped	Time	15-May-2010		8:30
Logger On Bottom	Time	16-May-2010		15:00
Unit Number	Location	6061	St.John's	
Recorded By	Hinchev			
Witnessed By	R. Strickland			

Logging Date					
Run Number					
Depth Driller					
Schlumberger Depth					
Bottom Log Interval					
Top Log Interval					
Casing Driller Size @ Depth			@		
Casing Schlumberger					
Bit Size					
Type Fluid In Hole					
Density	Viscosity				
Fluid Loss	PH				
Source Of Sample					
RM @ Measured Temperature			@		
RMF @ Measured Temperature			@		
RMC @ Measured Temperature			@		
Source RMF	RMC				
RM @ MRT	RMF @ MRT	@		@	
Maximum Recorded Temperatures					
Circulation Stopped	Time				
Logger On Bottom	Time				
Unit Number	Location				
Recorded By					
Witnessed By					

[illegible]

DEPTH SUMMARY LISTING

Date Created: 15-MAY-2010 20:27:47

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW–JA	Type:	CMTD–B/A	Type:	7–46P XS
Serial Number:	6530	Serial Number:	2345	Serial Number:	708186
Calibration Date:	30–MAR–2010	Calibration Date:	14–MAY–201	Length:	9060 M
Calibrator Serial Number:	4	Calibrator Serial Number:	153155	Conveyance Method:	Wireline
Calibration Cable Type:	7–46P XS	Number of Calibration Points:	10	Rig Type:	LAND
Wheel Correction 1:	–6	Calibration RMS:	10		
Wheel Correction 2:	–4	Calibration Peak Error:	18		

Depth Control Parameters	
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Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	Nalcor_Energy_Seamus_#1_Intermediate_Nuclear_vF
Reference Log Run Number:	Run 1
Reference Log Date:	21-APR-2010
Subsequent Trip Down Log Correction:	0.30 M

Depth Control Remarks	
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1. Schlumberger depth control policy followed
2. IDW used as primary depth control
3. Z-Chart used as secondary depth control
4. Log correlated to Nalcor_Energy_Seamus#1_Intermediate_Nuclear_vF
5. Log correlated with reference log from 2270 m to 2279 m
- 6.

DISCLAIMER

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OTHER SERVICES1

OS1:	PEX-AIT
OS2:	DSI-FMI
OS3:	MDT
OS4:	VSP
OS5:	

REMARKS: RUN NUMBER 1

All tools run as per tool sketch

MDT run to measure formation pressure

2 points attempted, no successful formation pressure obtained






[illegible]

Dual packer run with MRJA to give a 1.4m packer spacing.
LFA to assist in fluid identification if sampling attempted

No samples were attempted, as both locations of packer set proved to be tight.

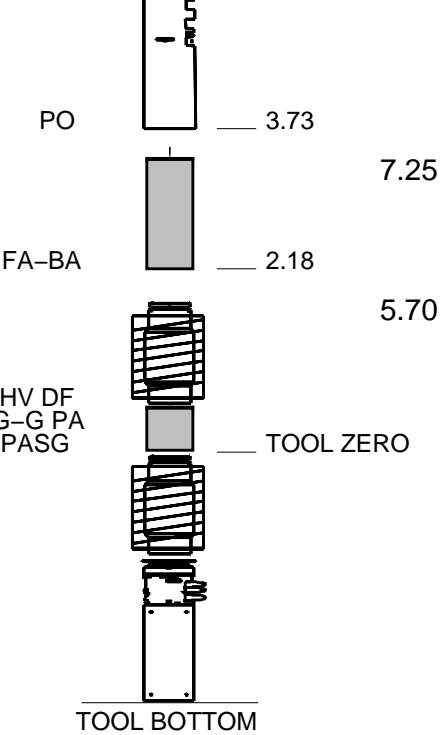
RUN 1			RUN 2		
SERVICE ORDER #:			SERVICE ORDER #:		
PROGRAM VERSION:			PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1			RUN 2		
SURFACE EQUIPMENT					
MRPP-AA GSR-U/Y WITM (DTS)-A					
DOWNHOLE EQUIPMENT					
LEH-QT 2693 LEH-QT		21.34			
ACTS-B 1780 ACTS-B		20.45			
DTC-H ECH-KC 10147 DTCH0-A	CTEM TelStatus ToolStatu	15.42 14.79			
SGT-N SGH-K 10012 SGC-TB 10012 SGD-TAB	Gamma Ray	14.51			
EDTA-A 8216 HECH-KA	EDTA Stat	12.50			
MRPC MRPC-CA 224	PC	10.98			
MRMS_1 BOTT_6-AA BOTT_5-AA BOTT_4-AA BOTT_3-AA BOTT_2-AA BOTT_1-AA MRMS_1-CA 68		14.51			
MS1		6.96			
MRPO MRPO-DU-AA MRPO-CA 172		10.49			

LFA
MRFA-EA 8191

MRPA-22
MRMU-DA 83
ADAPTER-ADAPTER 9
MRML-DAZ
MRPA-E 22
CQG_G_MRPA
SG_MRPA1
KLEBER_675-UPPER
KLEBER_675-LOWER

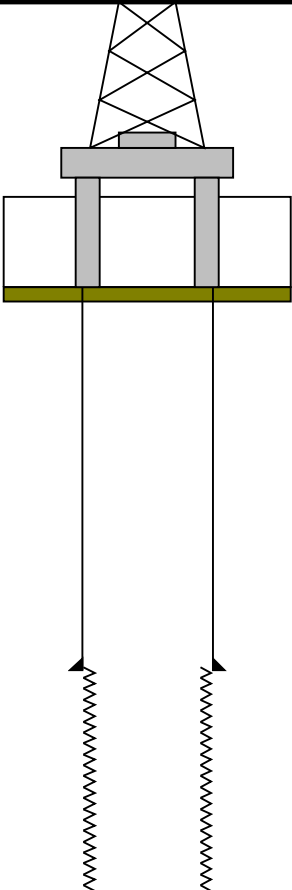


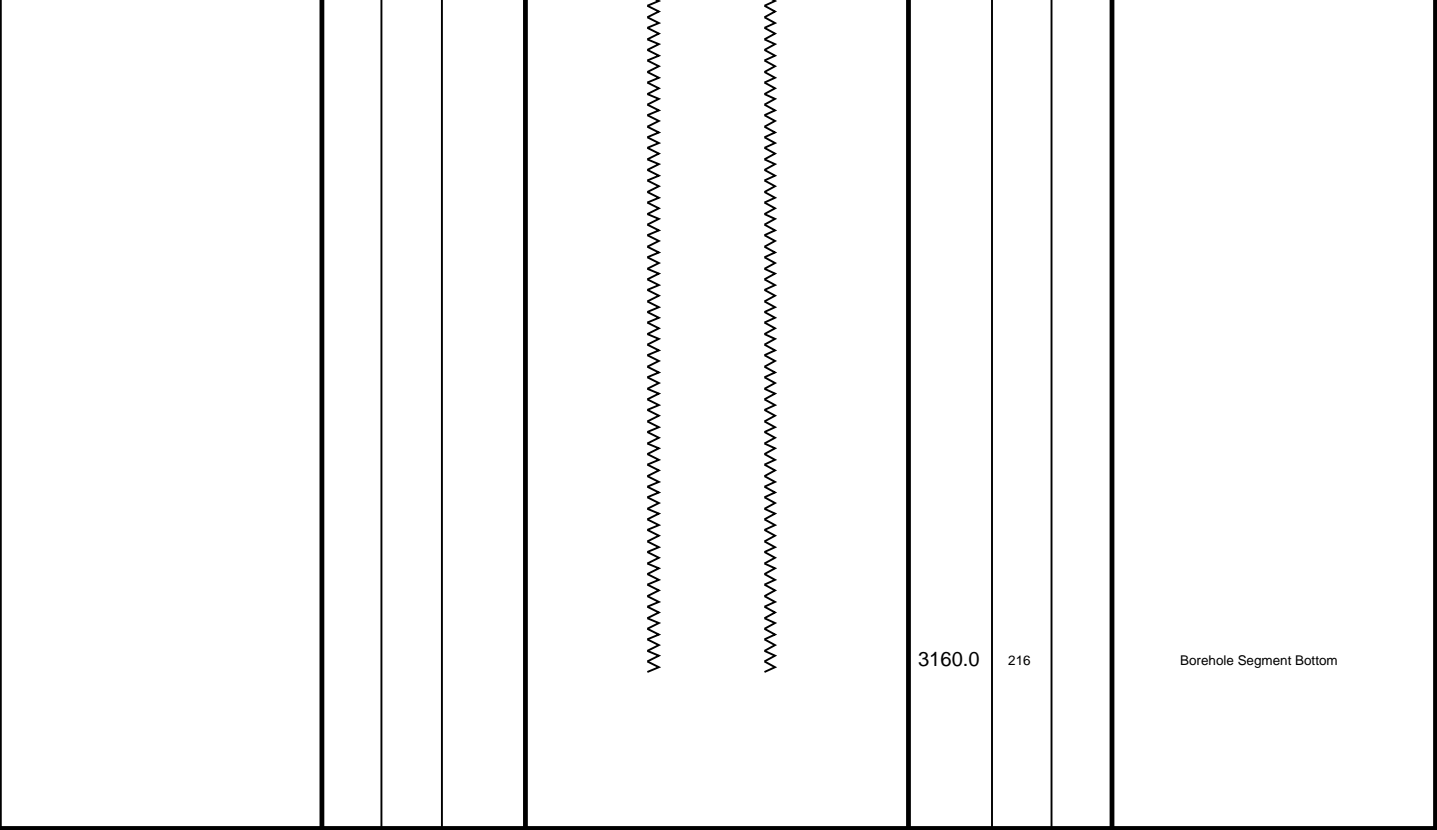
MAXIMUM STRING DIAMETER 171 MM
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

Client: Nalcor Energy Oil and Gas
Well: Nalcor et al Seamus 1
Field: Parson's Pond
State: Newfoundland
Country:

Drawing Date: 5/16/2010
API #:

Rig Name: Stoneham #11
Reference Datum: Kelly Bushing
Elevation: 26.9 m

Production String	(mm)		(m)	Well Schematic	(m)		(mm)	Casing String
	OD	ID	MD		MD	OD	ID	
					0.0	244		Casing String
					2292.4 2292.4	244 216		Casing Shoe Borehole Segment



All Depth's Drillers



PACKER SET at 2602m

MAXIS Field Log

Company: Well:

Output DLIS Files

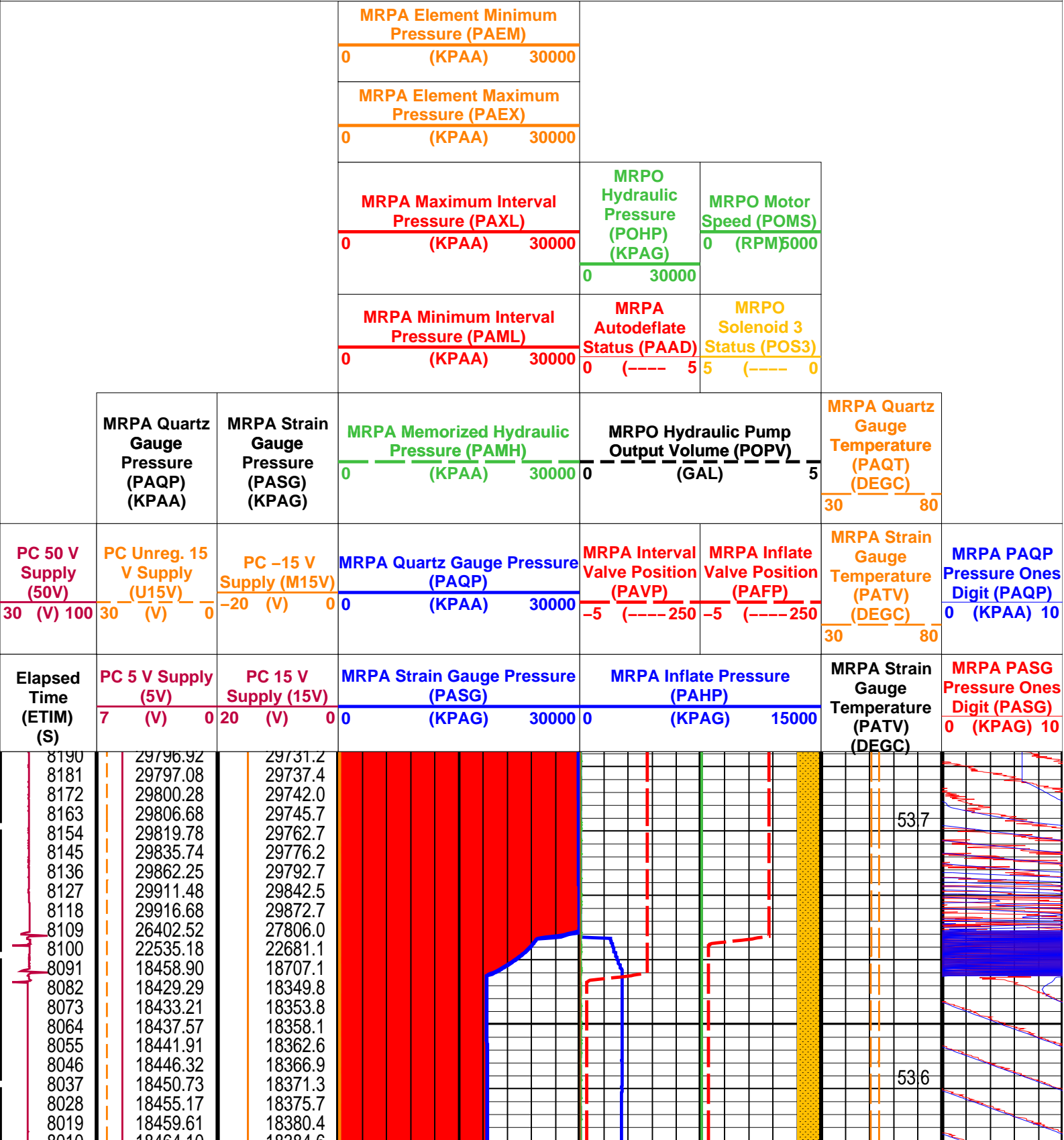
DEFAULT MDT_OFA_075LTP FN:97 PRODUCER 16-May-2010 15:19 2602.0 M

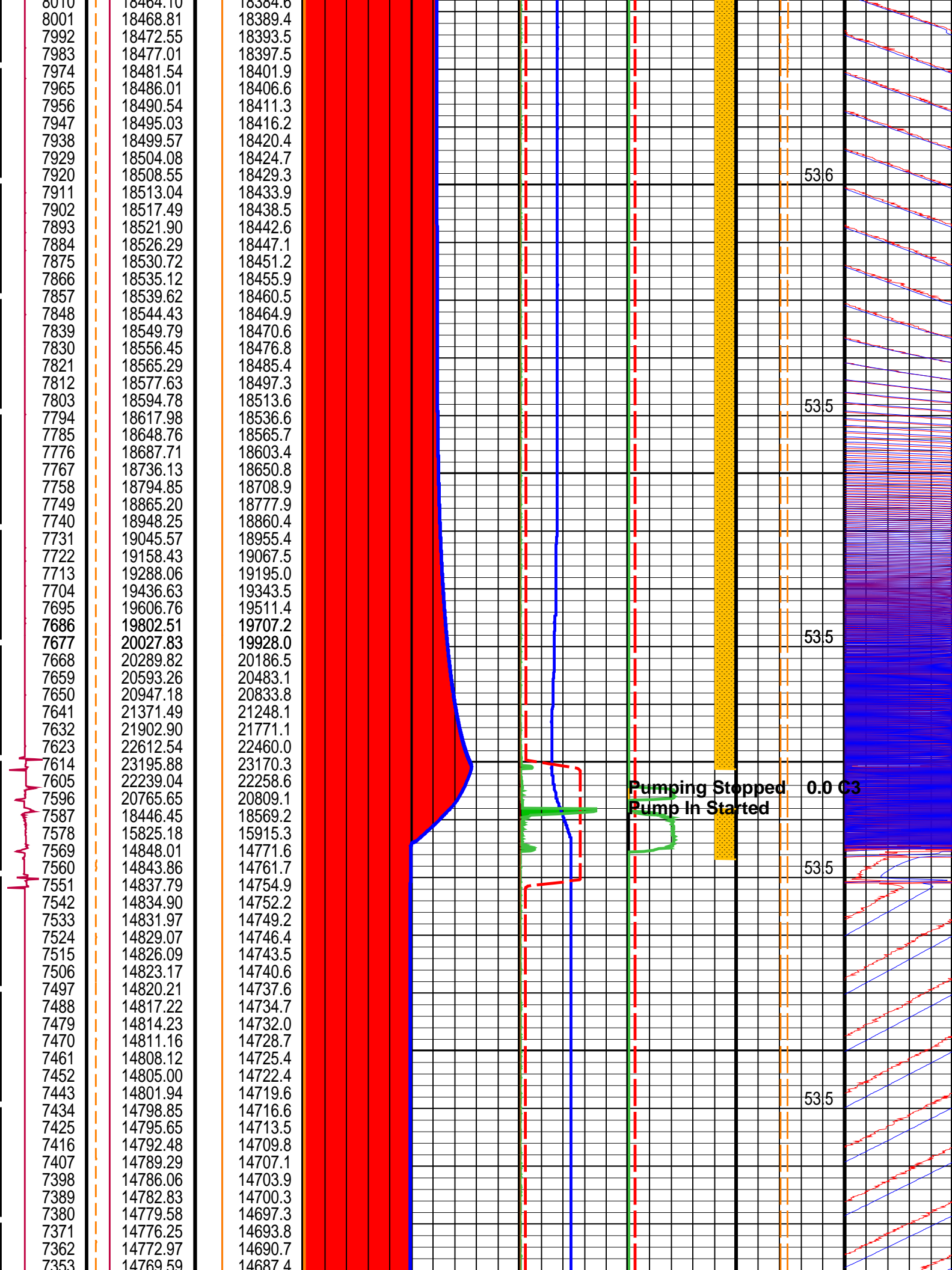
Elapsed Time (s)	Event Summary
7605.3	Pumping Stopped 0.0 C3 Dual Pumpout Module (MRPO)
7594.8	Pump In Started Dual Pumpout Module (MRPO)
7091.4	Pumping Stopped 3395.0 C3 Dual Pumpout Module (MRPO)
6491.7	Pump Out Started Dual Pumpout Module (MRPO)

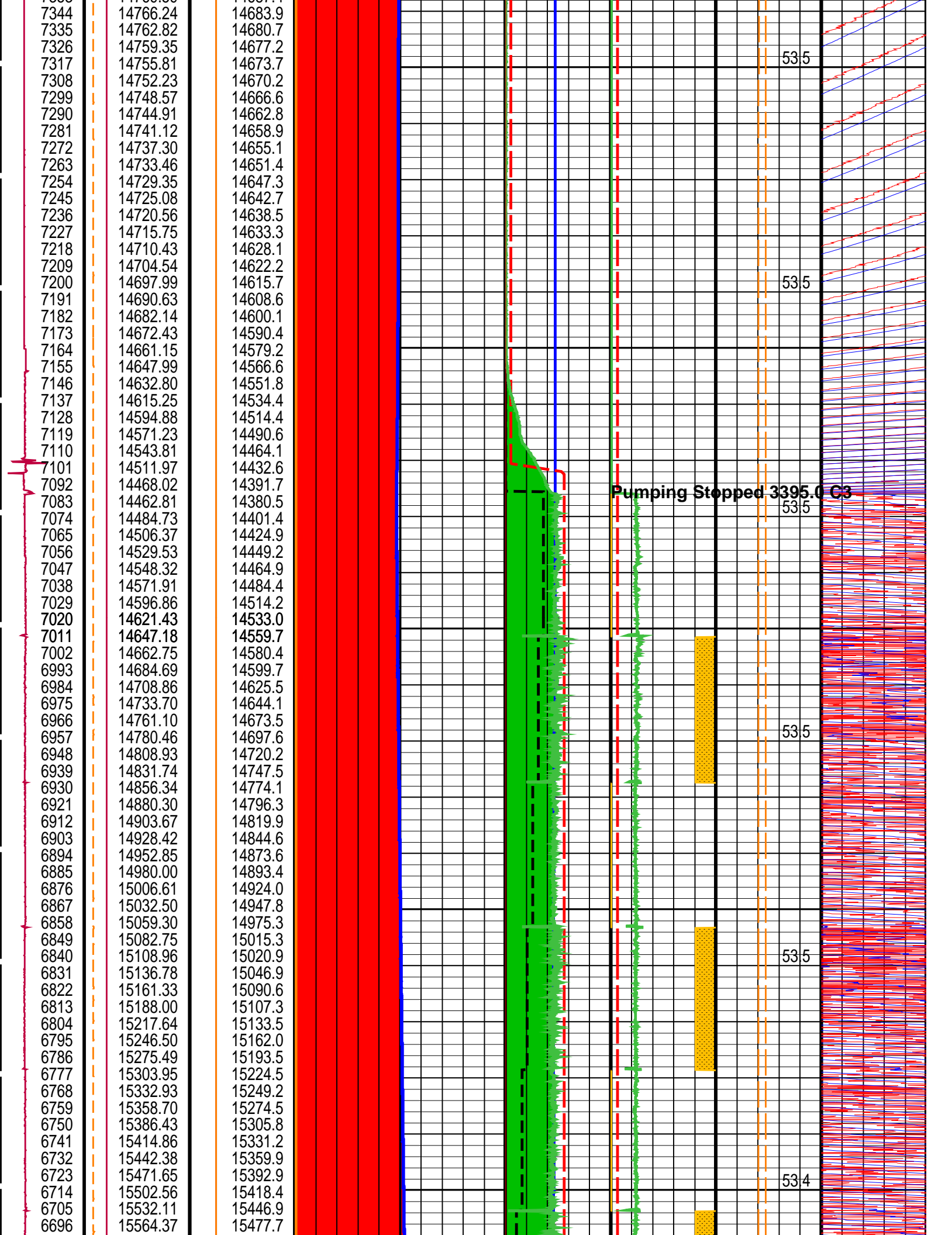
4123.5	Pumping Stopped 14065.0 C3 Dual Pumpout Module (MRPO)
1983.6	Pump Out Started Dual Pumpout Module (MRPO)
1914.6	Pumping Stopped 485.0 C3 Dual Pumpout Module (MRPO)
1733.7	Pump In Started Dual Pumpout Module (MRPO)
1197.9	Pumping Stopped 16975.0 C3 Dual Pumpout Module (MRPO)
36.6	Pump In Started Dual Pumpout Module (MRPO)

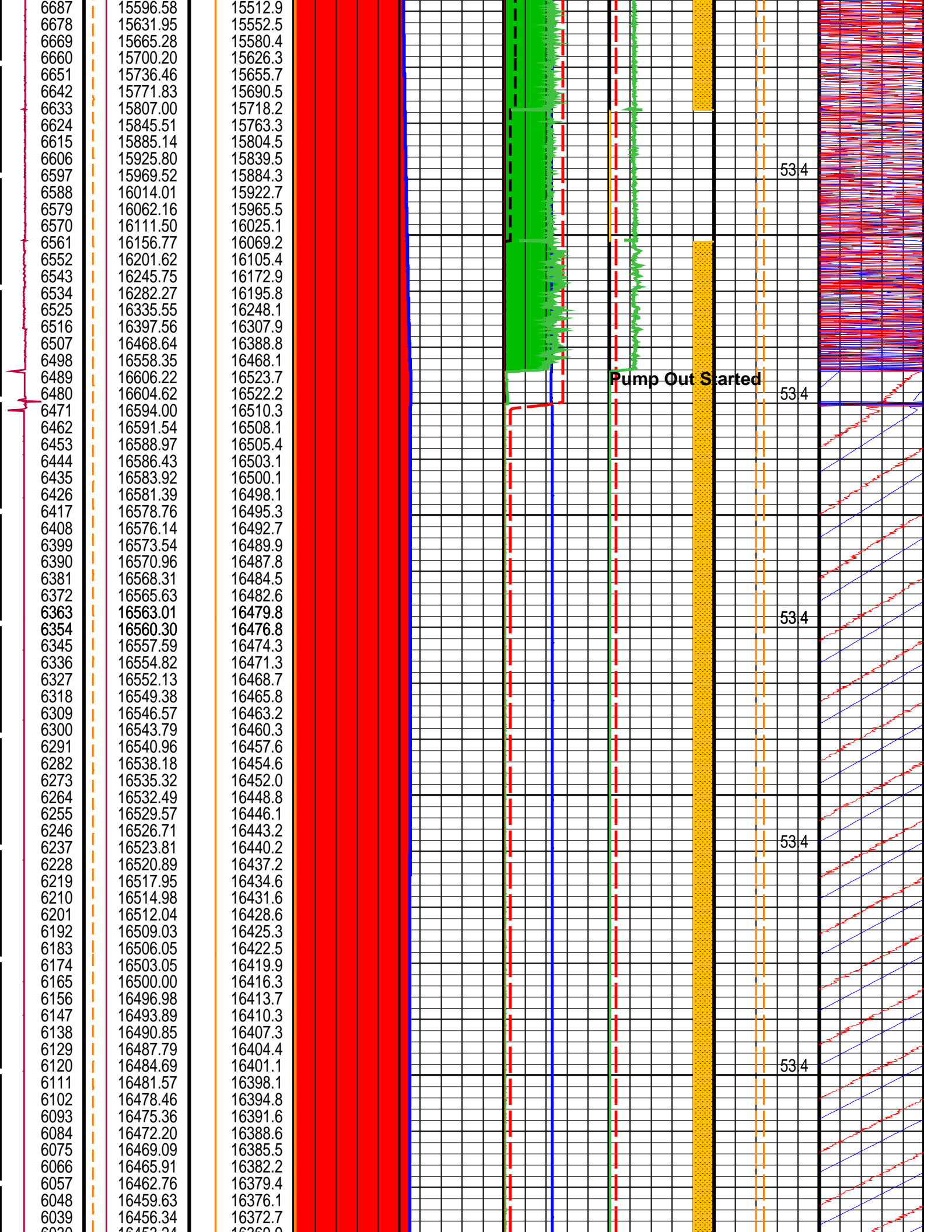
Time Mark Every 60 S

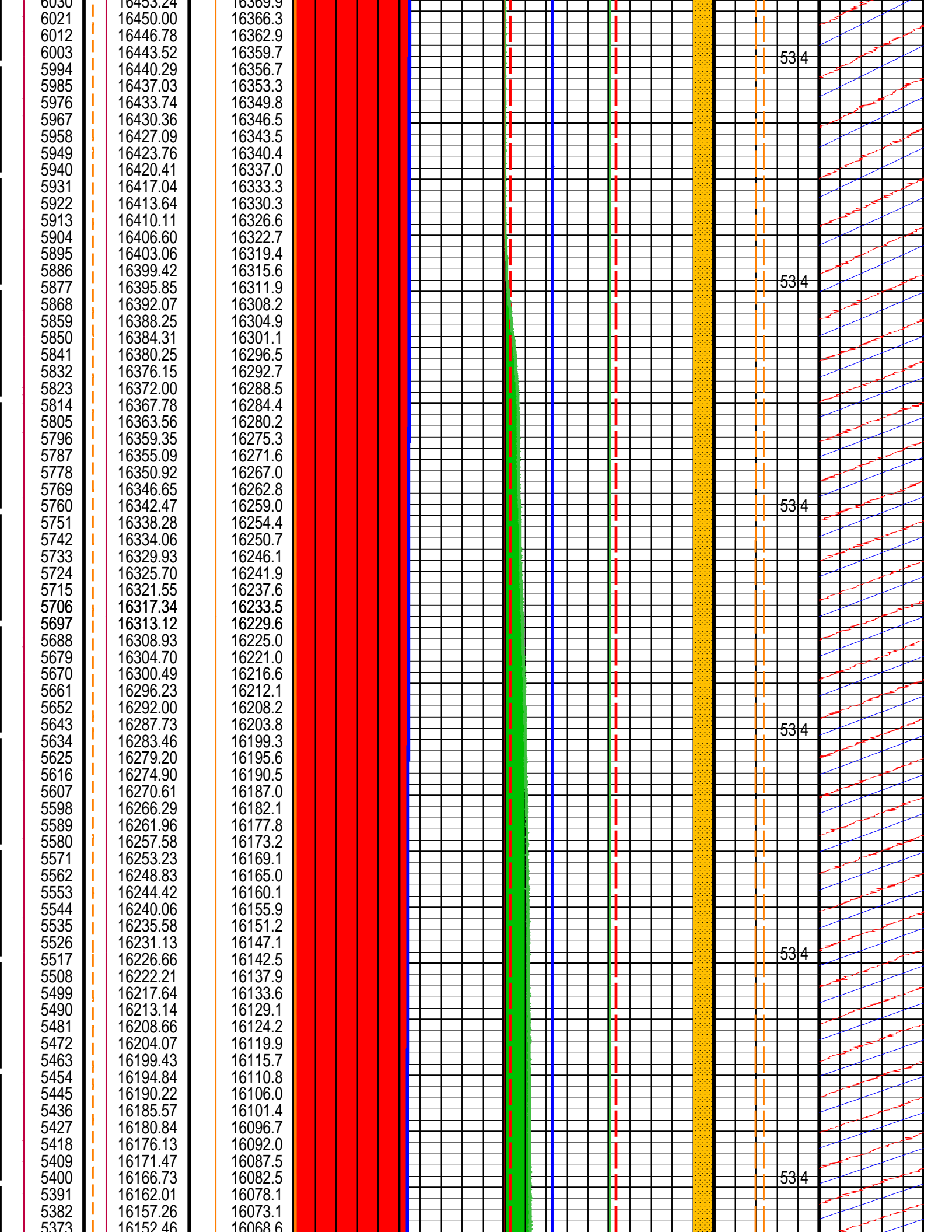
PIP SUMMARY

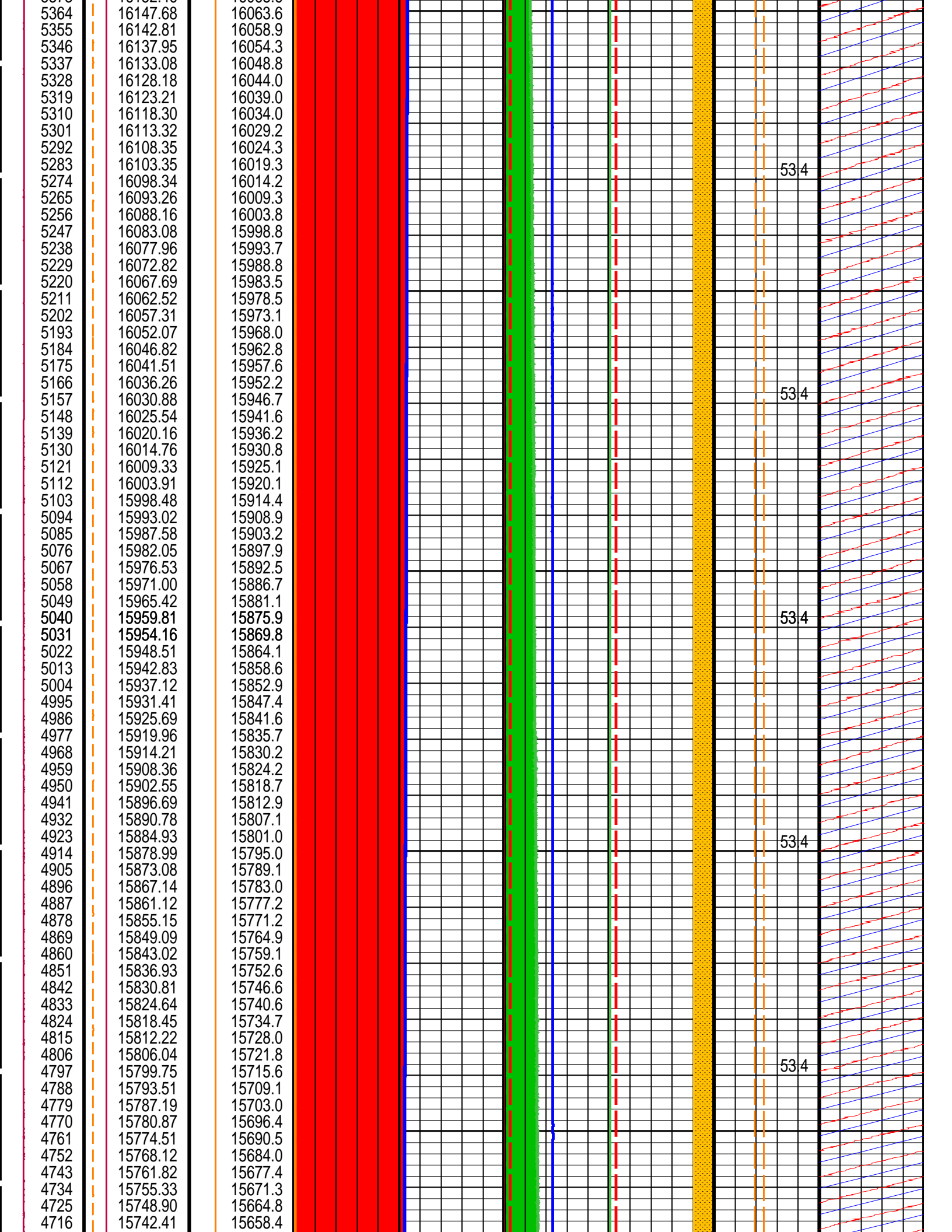


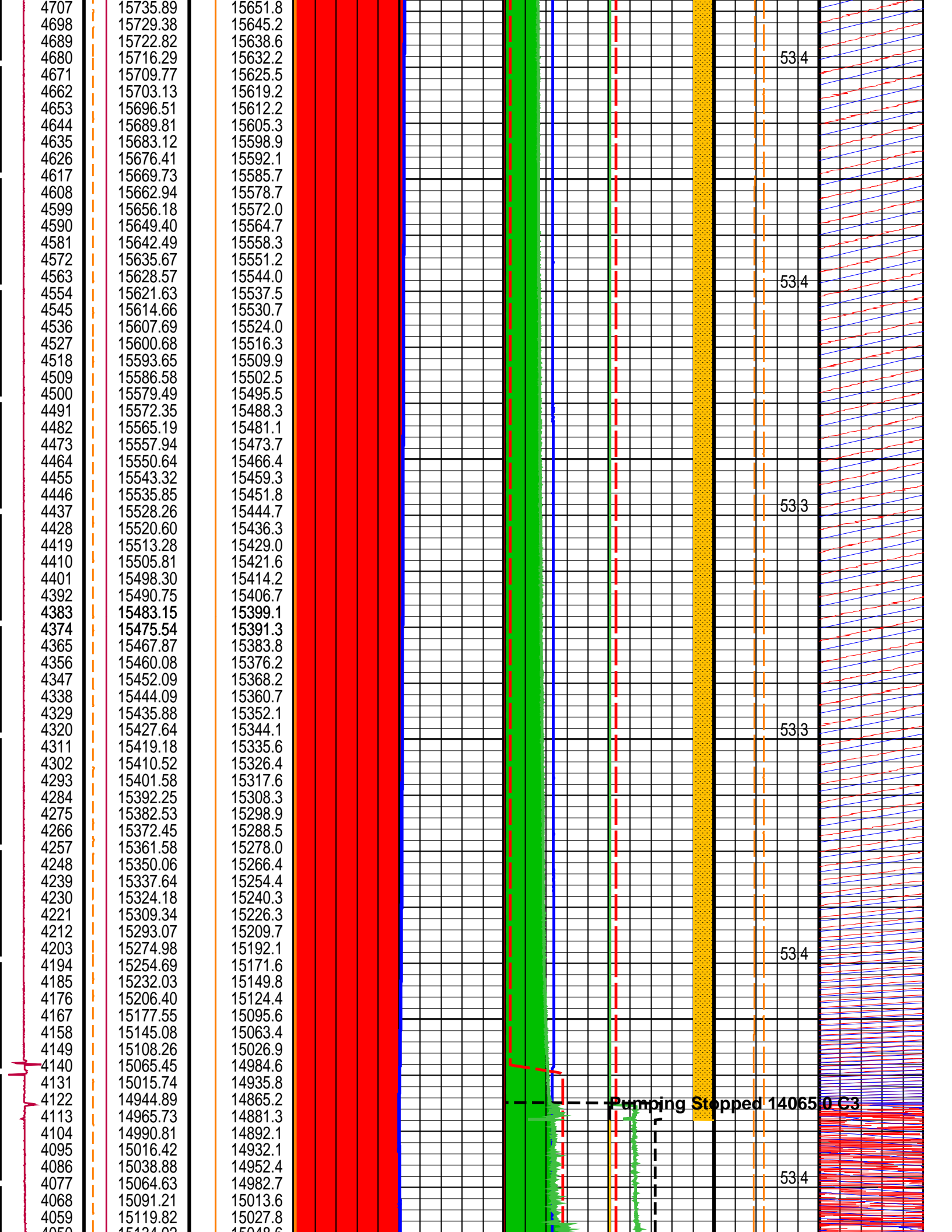




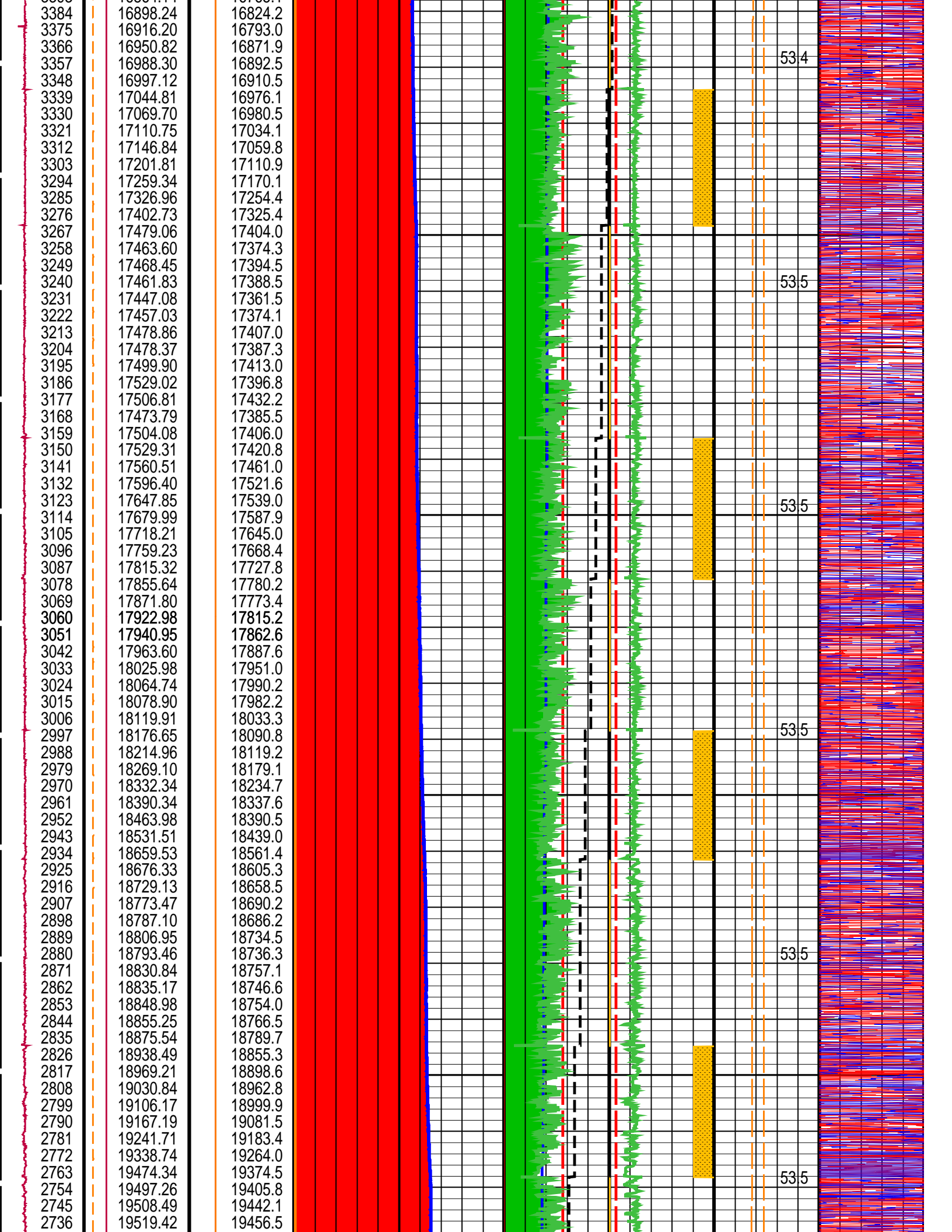




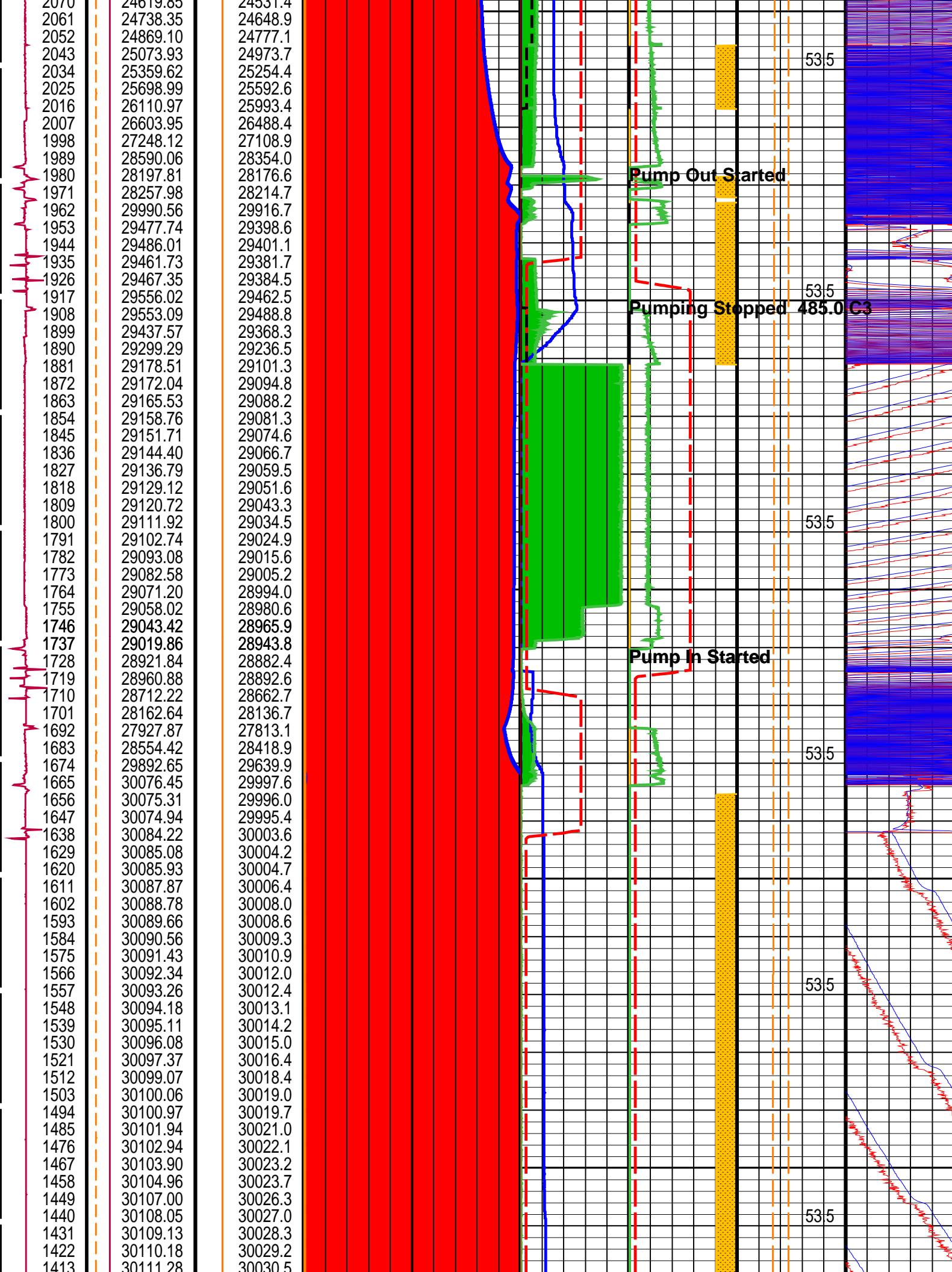


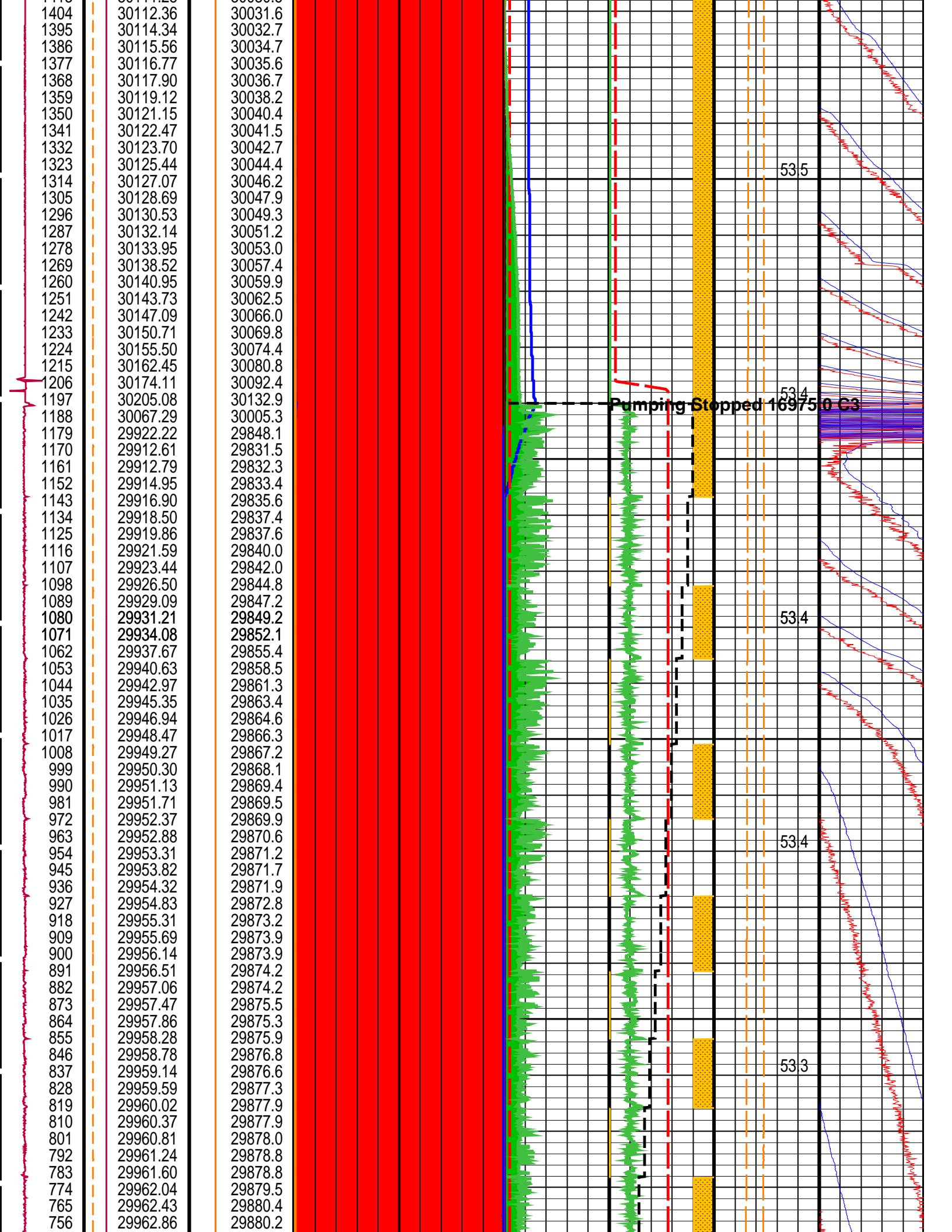


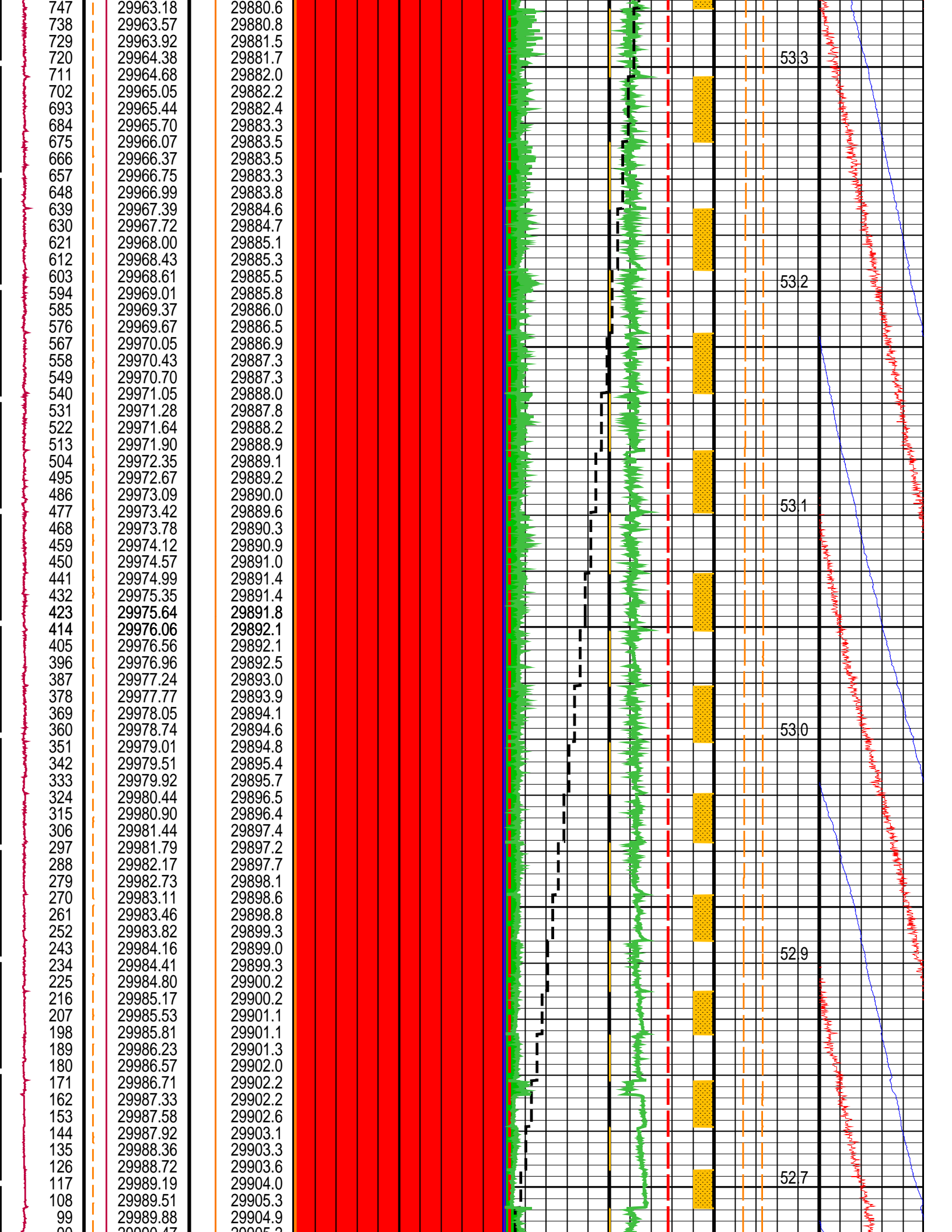
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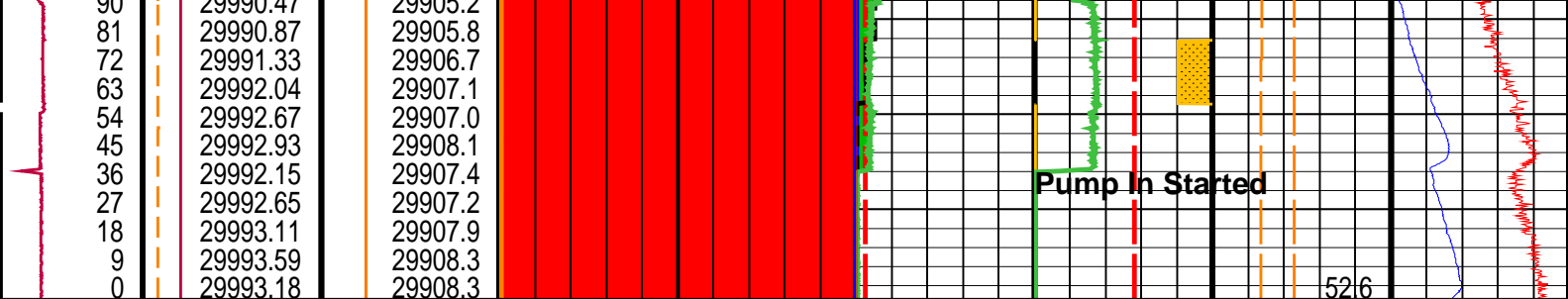


ID	Value 1	Value 2
2727	19526.98	19460.8
2718	19524.90	19450.7
2709	19551.51	19447.3
2700	19504.16	19421.6
2691	19527.35	19434.9
2682	19539.84	19453.6
2673	19540.96	19417.7
2664	19525.69	19452.5
2655	19567.46	19495.2
2646	19625.62	19529.8
2637	19682.96	19616.7
2628	19762.62	19655.0
2619	19836.15	19757.2
2610	19938.32	19855.0
2601	20062.30	19974.8
2592	20177.69	20109.5
2583	20147.57	20080.5
2574	20204.33	20131.9
2565	20218.66	20034.7
2556	20211.45	20109.8
2547	20240.40	20166.2
2538	20277.65	20207.6
2529	20297.84	20217.6
2520	20346.90	20252.7
2511	20363.57	20324.3
2502	20460.93	20349.3
2493	20533.35	20458.6
2484	20624.17	20544.0
2475	20740.08	20635.8
2466	20854.49	20754.5
2457	21003.27	20913.1
2448	21150.72	21071.3
2439	21191.38	21040.1
2430	21194.95	21130.4
2421	21216.82	21154.9
2412	21197.54	21131.6
2403	21210.66	21118.6
2394	21264.47	21172.1
2385	21295.19	21178.2
2376	21353.72	21258.6
2367	21377.48	21297.4
2358	21476.26	21367.9
2349	21597.55	21514.4
2340	21676.61	21584.5
2331	21761.74	21667.7
2322	21901.52	21801.9
2313	22047.61	21949.2
2304	22248.29	22167.6
2295	22244.32	22177.9
2286	22269.73	22206.4
2277	22268.42	22164.1
2268	22307.13	22232.8
2259	22319.09	22245.6
2250	22378.05	22307.2
2241	22410.85	22330.8
2232	22478.36	22385.7
2223	22573.59	22479.6
2214	22690.50	22596.2
2205	22813.84	22722.8
2196	22949.26	22856.5
2187	23141.79	23044.0
2178	23223.71	23135.2
2169	23304.31	23234.5
2160	23387.97	23300.4
2151	23462.44	23374.1
2142	23555.30	23462.8
2133	23630.63	23540.8
2124	23759.72	23668.0
2115	23898.18	23806.5
2106	24042.54	23948.8
2097	24245.42	24147.8
2088	24389.77	24302.5
2079	24496.33	24408.0
2070	24619.85	24521.4









Elapsed Time (ETIM) (S)	PC 5 V Supply (5V)		PC 15 V Supply (15V)		MRPA Strain Gauge Pressure (PASG)		MRPA Inflate Pressure (PAHP)		MRPA Strain Gauge Temperature (PATV) (DEGC)	MRPA PASG Pressure Ones Digit (PASG) (KPAG)	
	7 (V)	0	20 (V)	0	0 (KPAG)	30000	0 (KPAG)	15000			
PC 50 V Supply (50V)	PC Unreg. 15 V Supply (U15V)		PC -15 V Supply (M15V)		MRPA Quartz Gauge Pressure (PAQP)		MRPA Interval Valve Position (PAVP)	MRPA Inflate Valve Position (PAFP)	MRPA Strain Gauge Temperature (PATV) (DEGC)	MRPA PAQP Pressure Ones Digit (PAQP) (KPAA)	
	30 (V)	100	30 (V)	0	-20 (V)	0	0 (KPAA)	30000			-5 (----250)
	MRPA Quartz Gauge Pressure (PAQP) (KPAA)	MRPA Strain Gauge Pressure (PASG) (KPAG)	MRPA Memorized Hydraulic Pressure (PAMH)			MRPO Hydraulic Pump Output Volume (POPV) (GAL)			MRPA Quartz Gauge Temperature (PAQT) (DEGC)		
			0 (KPAA)	30000	0 (GAL)	5					
			MRPA Minimum Interval Pressure (PAML)			MRPA Autodeflate Status (PAAD)		MRPO Solenoid 3 Status (POS3)			
			0 (KPAA)	30000	0 (----5)	5 (----0)					
			MRPA Maximum Interval Pressure (PAXL)			MRPO Hydraulic Pressure (POHP) (KPAG)		MRPO Motor Speed (POMS)			
			0 (KPAA)	30000	0 (RPM)	5000					
			0 (KPAA)	30000							
MRPA Element Maximum Pressure (PAEX)			0 (KPAA)			30000					
MRPA Element Minimum Pressure (PAEM)			0 (KPAA)			30000					

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
MRPA: Dual Packer Module (MRPA)			
QGCA	Quartz Gauge Pressure Correction Applied	BOTH	
QGDA	Quartz Gauge Deviation Angle	0	DEG
QGFD	Quartz Gauge Flow Line Density	1000	K/M3
LFA: Live Fluid Analyzer			
PDCO	Probe Depth Correction Offset	0	M
MRPO: Dual Pumpout Module (MRPO)			
PODISPVOL	MRPO Displacement Unit Stroke Volume	485	
MRPC: Power Cartridge			
PDCO	Probe Depth Correction Offset	0	M

Format: MRPA_Station Vertical Scale: 1" per 60S

Graphics File Created: 16-May-2010 15:19

OP System Version: 17C0-154

MRPA	17C0-154	LFA	17C0-154
MRPO	17C0-154	MRMS_1	17C0-154
MRPC	17C0-154	EDTA_A	17C0-154

MRPC
SGT-N

17C0-154
17C0-154

EDTA-A
DTC-H

17C0-154
17C0-154

Output DLIS Files

DEFAULTMDT_OFA_075LTPFN:97PRODUCER16-May-2010 15:19

Schlumberger

PACKER SET at 2599.6m

MAXIS Field Log

Company:Well:

Output DLIS Files

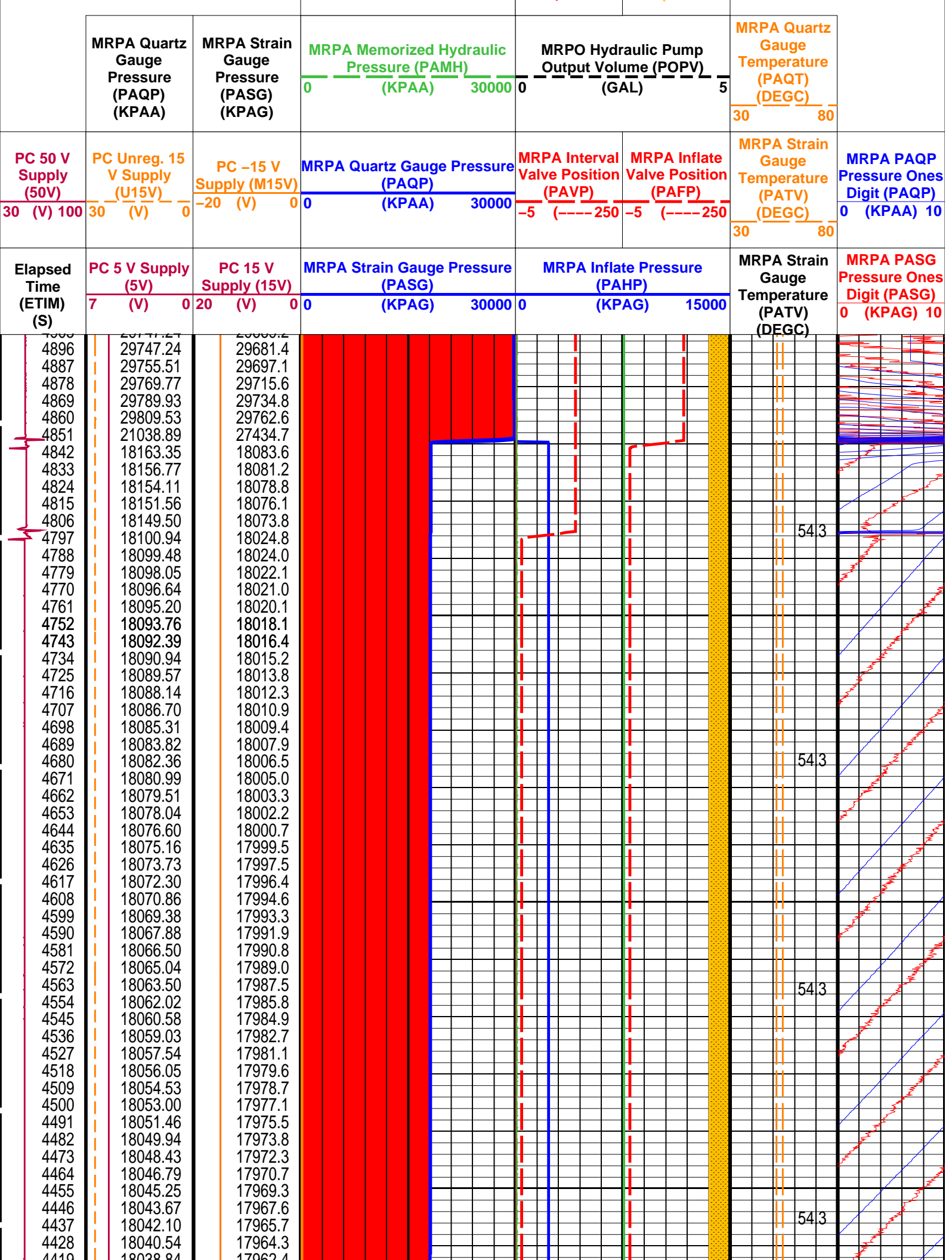
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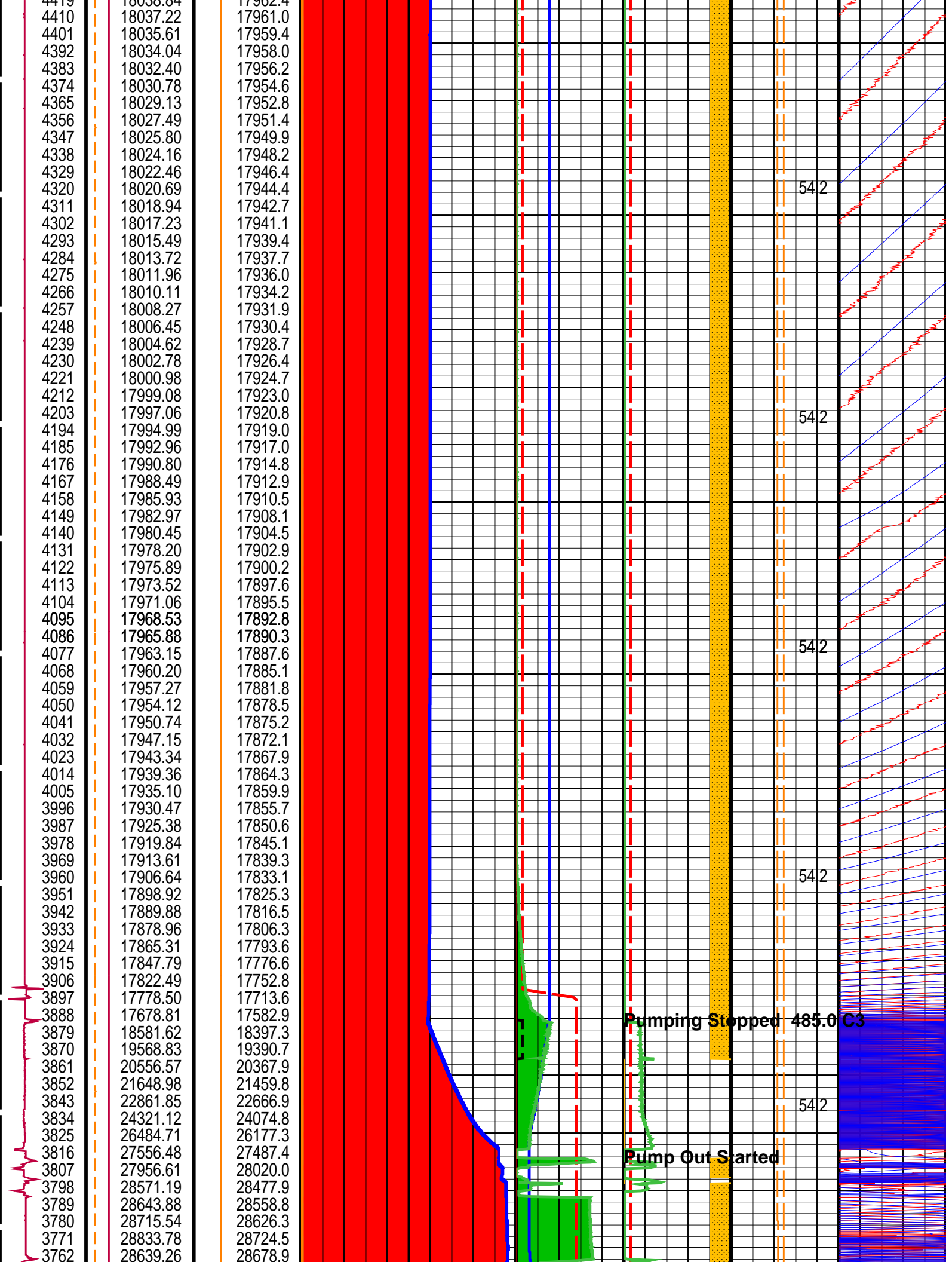
Elapsed Time (s)	Event Summary
3888.6	Pumping Stopped 485.0 C3 Dual Pumpout Module (MRPO)
3817.2	Pump Out Started Dual Pumpout Module (MRPO)
3147.0	Pumping Stopped 485.0 C3 Dual Pumpout Module (MRPO)
3009.3	Pump Out Started Dual Pumpout Module (MRPO)
2995.2	Pumping Stopped 485.0 C3 Dual Pumpout Module (MRPO)
2949.9	Pump Out Started Dual Pumpout Module (MRPO)
1407.6	Pumping Stopped 970.0 C3 Dual Pumpout Module (MRPO)
1308.3	Pump Out Started Dual Pumpout Module (MRPO)
1254.9	Pumping Stopped 15520.0 C3 Dual Pumpout Module (MRPO)
45.6	Pump In Started Dual Pumpout Module (MRPO)

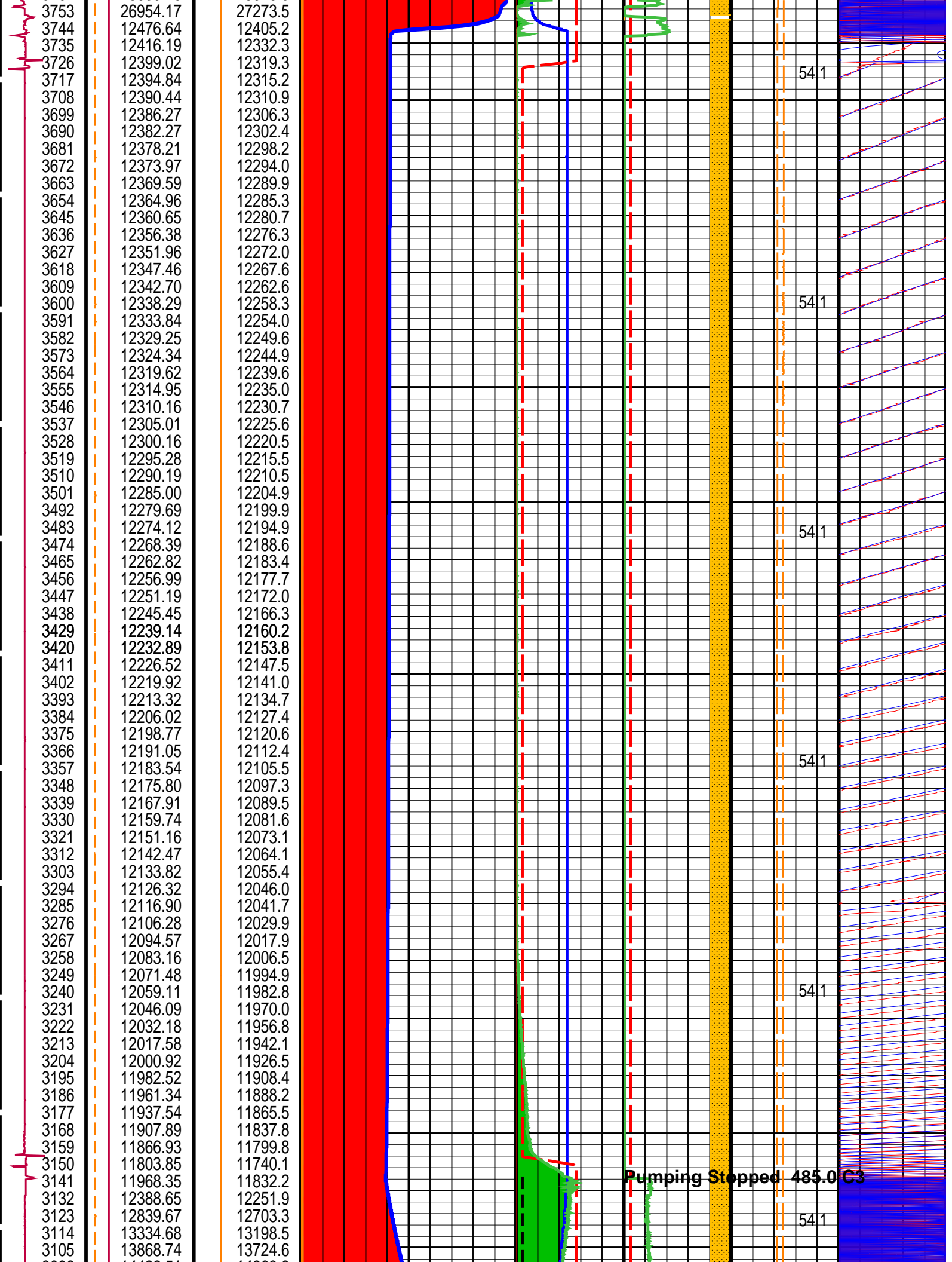
PIP SUMMARY

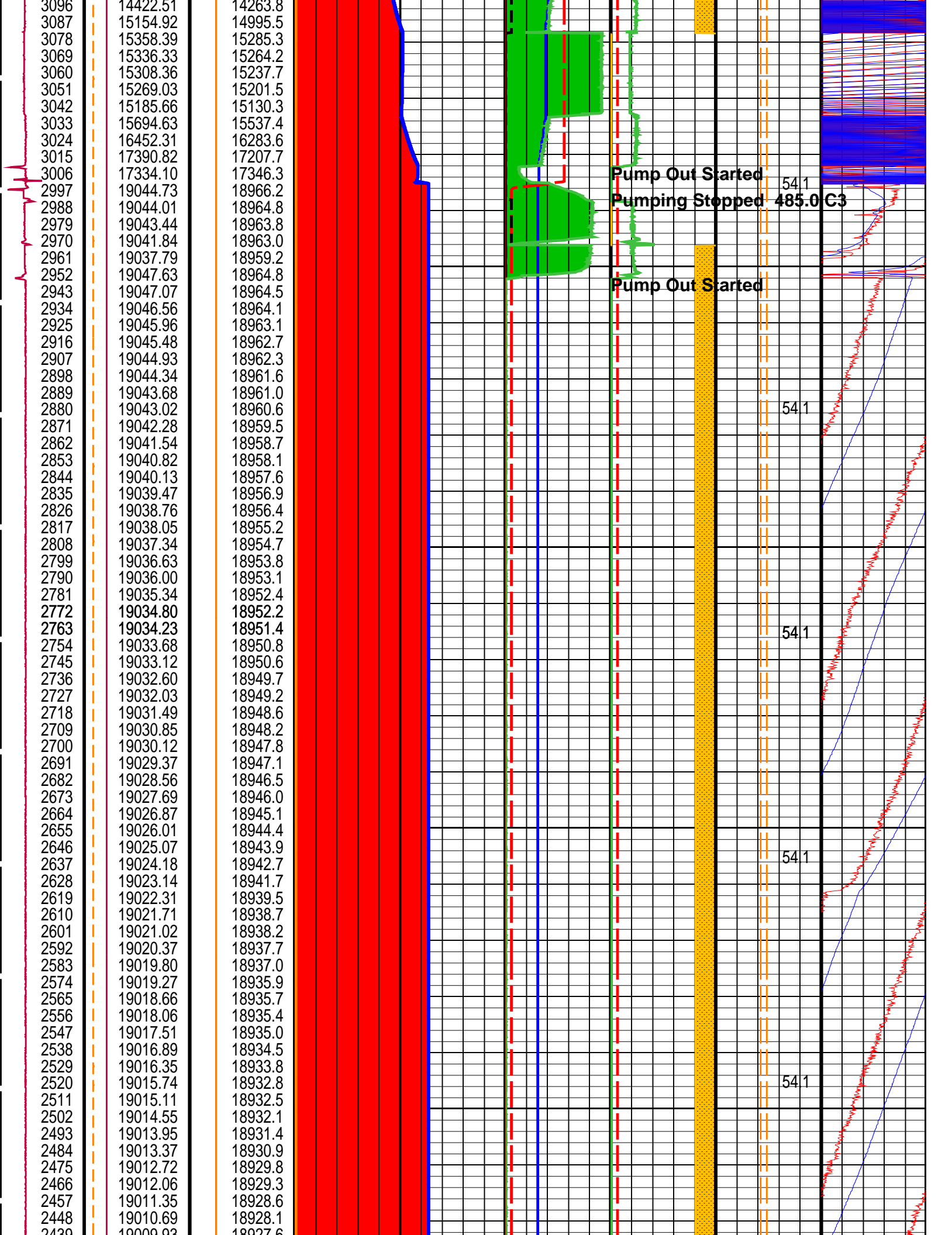
Time Mark Every 60 S

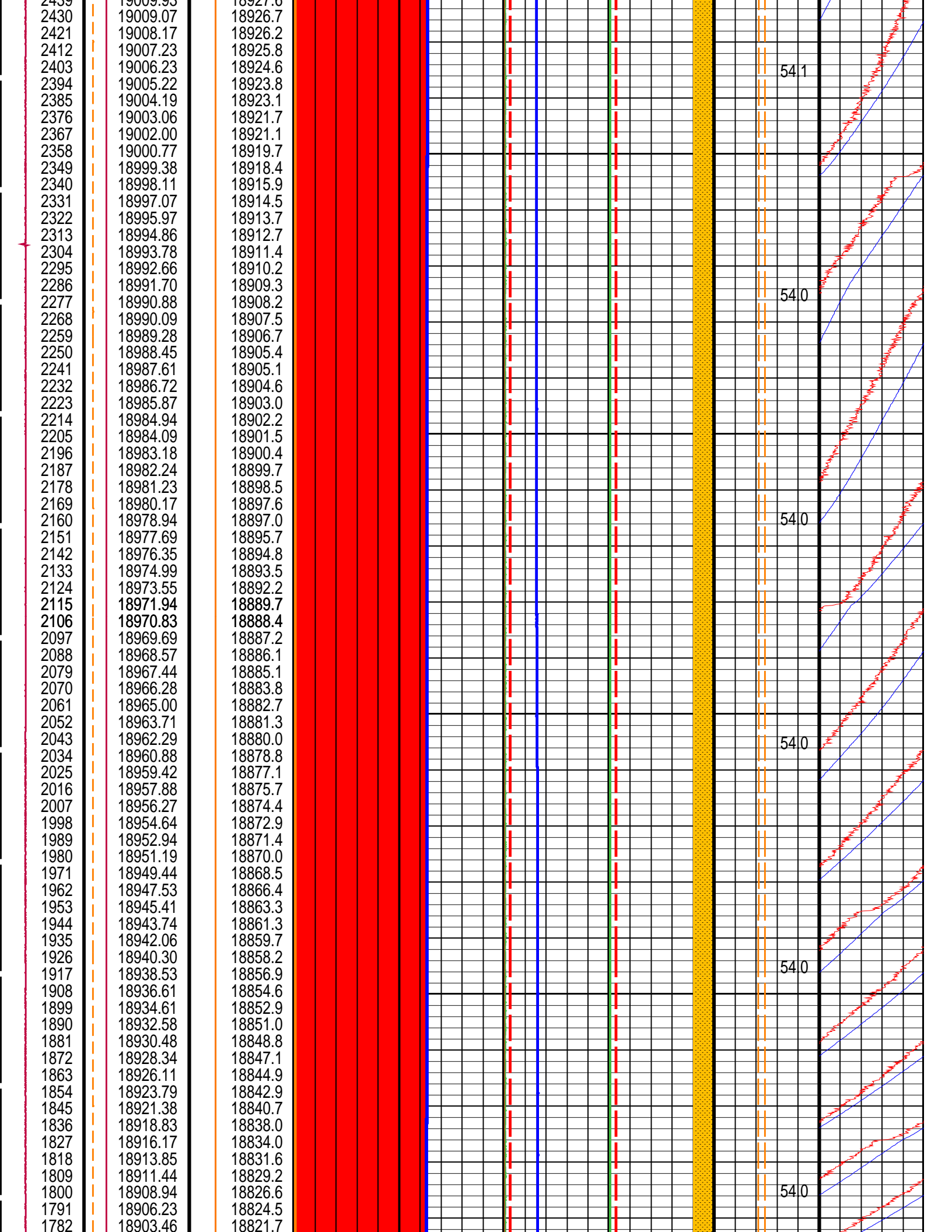
MRPA Element Minimum Pressure (PAEM)		
0	(KPAA)	30000
MRPA Element Maximum Pressure (PAEX)		
0	(KPAA)	30000
MRPA Maximum Interval Pressure (PAXL)		MRPO Hydraulic Pressure (POHP) (KPAG)
0	(KPAA)	
		MRPO Motor Speed (POMS)
		0 (RPM)5000
MRPA Minimum Interval Pressure (PAML)		MRPA Autodeflate Status (PAAD)
0	(KPAA)	30000
		MRPO Solenoid 3 Status (POS3)
		0 (----) 5 5 (----) 0

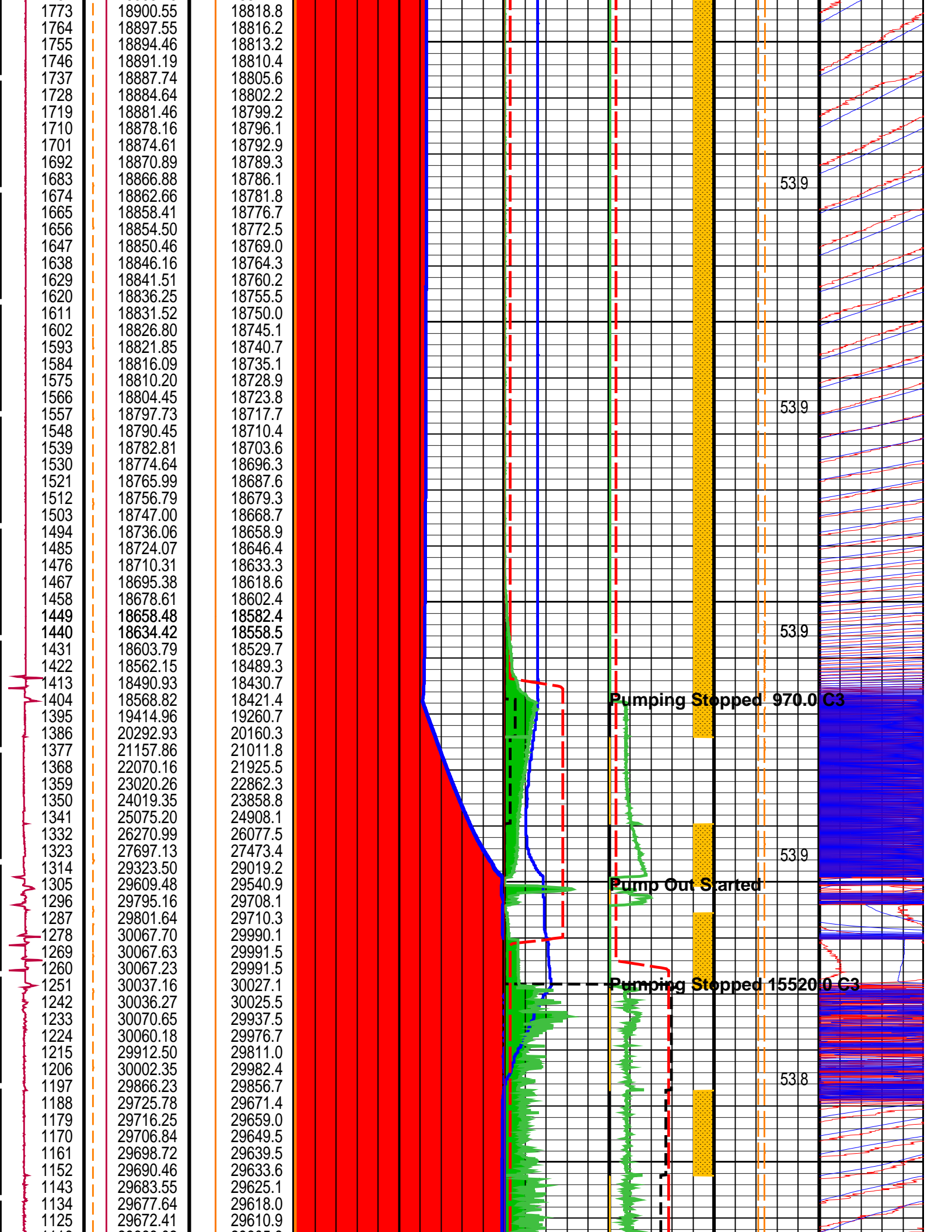


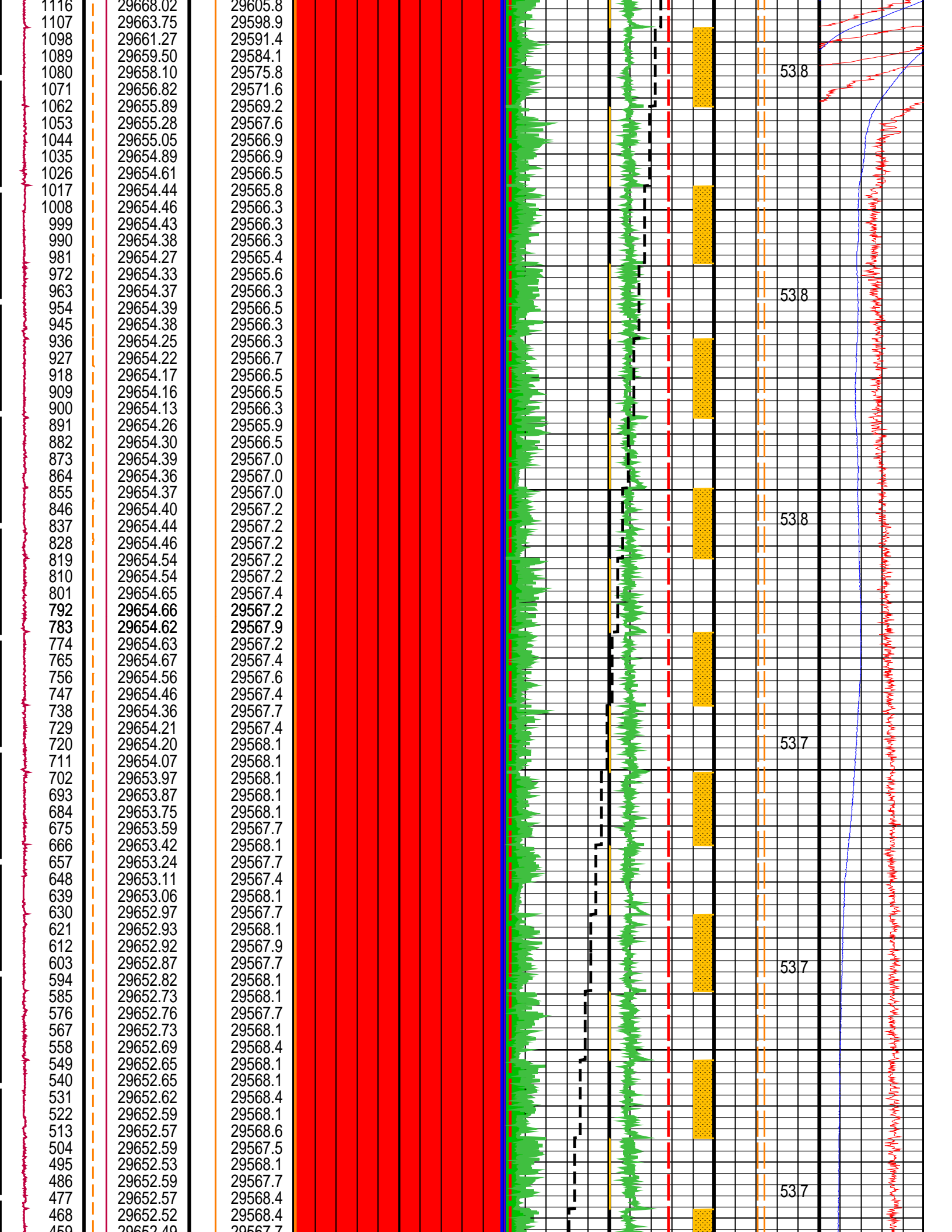


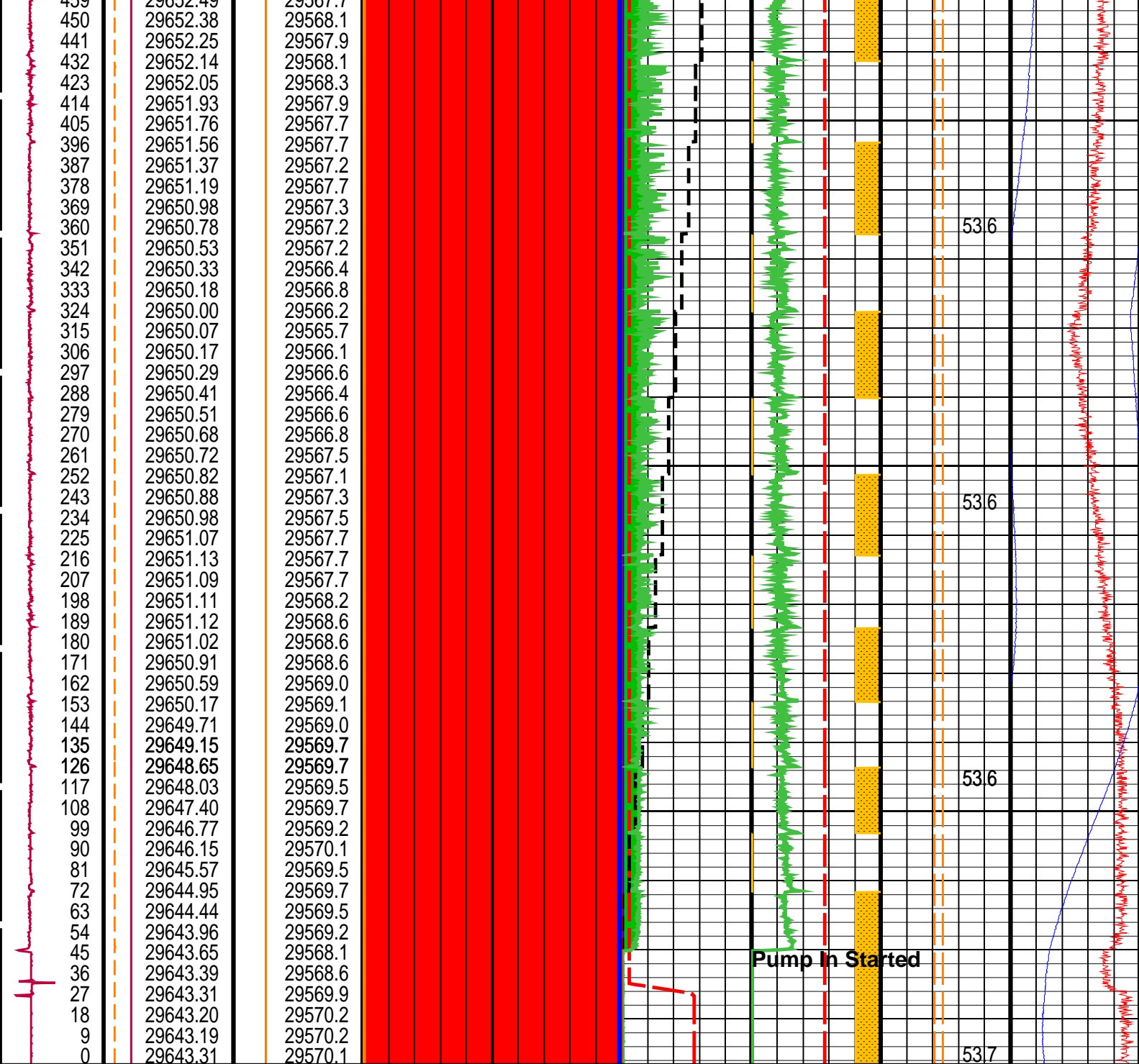












Elapsed Time (ETIM) (S)	PC 5 V Supply (5V) (V)	PC 15 V Supply (15V) (V)	MRPA Strain Gauge Pressure (PASG) (KPAG)		MRPA Inflate Pressure (PAHP) (KPAG)		MRPA Strain Gauge Temperature (PATV) (DEGC)	MRPA PASG Pressure Ones Digit (PASG) (KPAG)
	7	20	0	30000	0	15000		0
PC 50 V Supply (50V) (V)	PC Unreg. 15 V Supply (U15V) (V)	PC -15 V Supply (M15V) (V)	MRPA Quartz Gauge Pressure (PAQP) (KPAA)		MRPA Interval Valve Position (PAVP) (-----)	MRPA Inflate Valve Position (PAFP) (-----)	MRPA Strain Gauge Temperature (PATV) (DEGC)	MRPA PAQP Pressure Ones Digit (PAQP) (KPAA)
30	30	-20	0	30000	-5	-5	30	0
			MRPA Quartz Gauge Pressure (PAQP) (KPAA)		MRPA Strain Gauge Pressure (PASG) (KPAG)		MRPA Quartz Gauge Temperature (PAQT) (DEGC)	
			0	30000	0	5	30	80
			MRPA Minimum Interval Pressure (PAML) (KPAA)		MRPA Autodeflate Status (PAAD)	MRPO Solenoid 3 Status (POS3)		
			0	30000				

0	(KPA)	30000	0	(----	55	(----	0
MRPA Maximum Interval Pressure (PAXL)			MRPO Hydraulic Pressure (POHP) (KPA)		MRPO Motor Speed (POMS)		
0	(KPA)	30000	0		0 (RPM)5000		
			0		30000		
MRPA Element Maximum Pressure (PAEX)							
0	(KPA)	30000					
MRPA Element Minimum Pressure (PAEM)							
0	(KPA)	30000					

PIP SUMMARY


Time Mark Every 60 S


Parameters			
DLIS Name	Description	Value	
MRPA: Dual Packer Module (MRPA)			
QGCA	Quartz Gauge Pressure Correction Applied	BOTH	
QGDA	Quartz Gauge Deviation Angle	0	DEG
QGFD	Quartz Gauge Flow Line Density	1000	K/M3
LFA: Live Fluid Analyzer			
PDCO	Probe Depth Correction Offset	0	M
MRPO: Dual Pumpout Module (MRPO)			
PODISPVOL	MRPO Displacement Unit Stroke Volume	485	
MRPC: Power Cartridge			
PDCO	Probe Depth Correction Offset	0	M

Format: MRPA_Station Vertical Scale: 1" per 60S Graphics File Created: 16-May-2010 17:44

OP System Version: 17C0-154			
MRPA	17C0-154	LFA	17C0-154
MRPO	17C0-154	MRMS_1	17C0-154
MRPC	17C0-154	EDTA-A	17C0-154
SGT-N	17C0-154	DTC-H	17C0-154

Output DLIS Files			
DEFAULT	MDT_OFA_076LTP	FN:98	PRODUCER 16-May-2010 17:43

	Gauge Calibrations	
	MAXIS Field Log	

	MDT Gauge Calibrations	
	MAXIS Field Log	

MASTER CALIBRATION SUMMARY: Quartz Gauge (Packer Module)

Calibration Pressure Unit: PSIA
Calibration Temperature Unit: DEGC
Sensor Comment: :
Sensor Serial Number: 1581
Sensor Calibration Date (DDMMYY): 070909
Pressure Model: $P=F(Fc,Fb)$
Pressure Matrix: 66
Pressure CRC: D5DD
Temperature Model: $T=F(Fb,Fc)$
Temperature Matrix: 66
Temperature CRC: AEC1
Clock Comment: :
Clock Serial Number: 627
Clock Calibration Date (DDMMYY): 250809
Clock Model: $Fclk=F(Fb'-Fc')$
Clock Matrix: 16
Clock CRC: 2BA3
Fc Offset: +.514400000000E+07 Hz
Fb Offset: +.558800000000E+07 Hz
R Offset: +.470000000000E+06 Hz

Pressure Coefficients

	Fb**0	Fb**1	Fb**2	Fb**3
Fc**0	+.647680118921E+0	+.824320952970E-0	-.660768939613E-0	-.889068105092E-1
Fc**1	-.106394815160E+0	-.129650589263E-0	-.997490896717E-1	+.127921578165E-1
Fc**2	+.113927198477E-0	+.478895849545E-1	+.116172754140E-1	+.667228352535E-1
Fc**3	+.372727281284E-1	-.161957699489E-1	+.563514517529E-1	+.117191148482E-2
Fc**4	+.138724664006E-1	+.476176976966E-1	-.486493438053E-2	-.152799103126E-2
Fc**5	+.134995663379E-1	+.789546730892E-2	-.103793435870E-2	-.278187662877E-3

	Fb**4	Fb**5
Fc**0	-.162769306441E-1	-.228236480647E-1
Fc**1	+.320652677791E-1	+.122695924491E-2
Fc**2	-.840965312450E-2	-.334808868174E-2
Fc**3	-.462604693384E-2	-.859280529417E-3
Fc**4	+.411599036537E-3	+.995034736936E-3
Fc**5	+.898058344264E-3	+.189819291503E-3

Temperature Coefficients

	Fc**0	Fc**1	Fc**2	Fc**3
Fb**0	+.105312040557E+0	-.323356488116E-0	+.697612774810E-0	+.275408724277E-1
Fb**1	-.610971965820E-0	+.185396372782E-0	+.127494189958E-1	+.303552270240E-1

Fb**2	-.328500898301E-0	+386817273825E-1	+128922903731E-1	+236090641007E-2
Fb**3	-.311153576182E-1	+120847198964E-1	+143380543327E-2	-.233058088561E-2
Fb**4	-.321972785321E-1	+304589228816E-2	-.812530533828E-2	-.851926360757E-3
Fb**5	+273666790727E-2	-.238117177341E-2	-.906986232147E-2	+144892149287E-3
Fc**4		Fc**5		
Fb**0	+603703037371E-1	-.612874985603E-2		
Fb**1	+108737364517E-2	-.121379241401E-2		
Fb**2	-.198292709710E-2	-.500529014318E-2		
Fb**3	-.252043332124E-2	+342148234078E-3		
Fb**4	+146616529043E-3	+801755014223E-3		
Fb**5	+148336073619E-3	-.242576718726E-4		
Clock Coefficients				
F'b/F'c**0	+.517533926317E+0			
F'b/F'c**1	+.626791783496E-0			
F'b/F'c**2	+.621848513793E-0			
F'b/F'c**3	-.659852875809E-1			
F'b/F'c**4	-.495935932401E-1			
F'b/F'c**5	+.325638835183E-2			

Strain Gauge (Packer Module)

Serial Number:	231423
Range:	10K
Calibration Date:	09/26/09
Mean Quadratic Deviation:	0.6620
Offset:	0.0000 PSI
Calibration Pressure Unit:	PSI
Calibration Temperature Unit:	DEGC

	G	H	I	J
0	-4.223506e+002	1.008492e+000	-5.119791e-007	4.539291e-012
1	6.760804e-001	-2.333008e-004	1.775342e-008	-7.072673e-013
2	-1.195799e-003	1.472915e-006	-1.910747e-010	5.654586e-015
3	7.307673e-006	-5.061745e-009	4.406477e-013	0.000000e+000

MAXIS Field Log

Company:

Well:

Input DLIS Files

DEFAULT

MDT_OFA_073LUP

FN:95

PRODUCER

16-May-2010 15:00

2624.9 M

2572.5 M

Output DLIS Files

DEFAULT

MDT_OFA_074PUP

FN:96

PRODUCER

16-May-2010 15:06

2624.8 M

2572.4 M

OP System Version: 17C0-154

MRPA

17C0-154

LFA

17C0-154

MRPO

17C0-154

MRMS_1

17C0-154

MRPC

17C0-154

EDTA-A

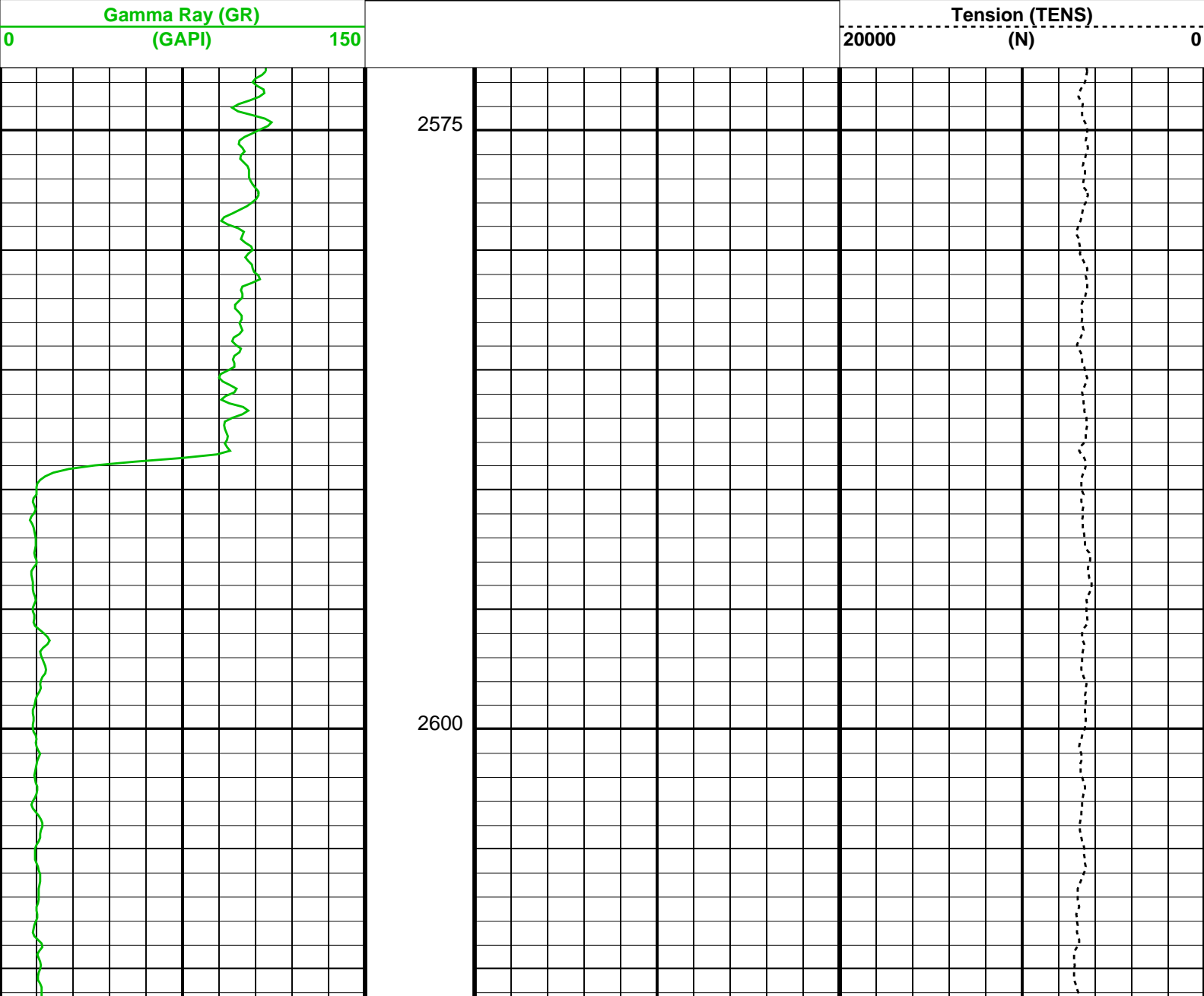
17C0-154

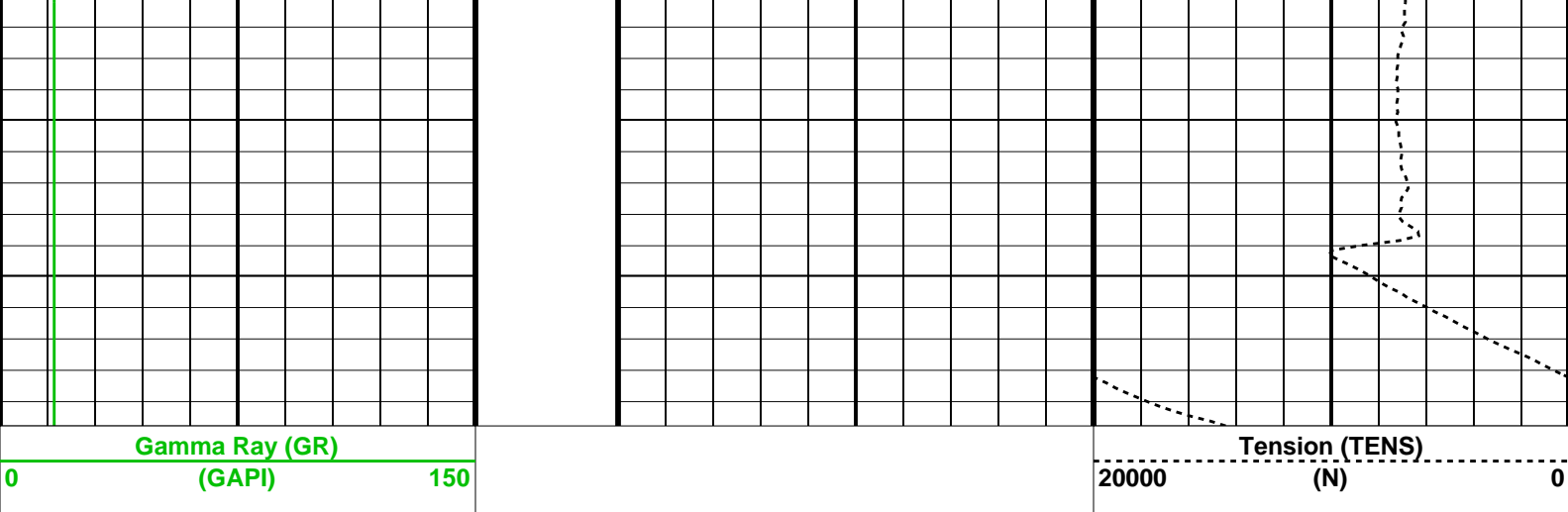
SGT-N

17C0-154

DTC-H

17C0-154






Parameters		
DLIS Name	Description	Value
PDCO	LFA: Live Fluid Analyzer	
	Probe Depth Correction Offset	0 M
PDCO	MRPC: Power Cartridge	
	Probe Depth Correction Offset	0 M
DO PP	System and Miscellaneous	
	Depth Offset for Playback Playback Processing	-0.2 M NORMAL

Format: CORRELATION Vertical Scale: 1:240 Graphics File Created: 16-May-2010 15:06

OP System Version: 17C0-154			
MRPA	17C0-154	LFA	17C0-154
MRPO	17C0-154	MRMS_1	17C0-154
MRPC	17C0-154	EDTA-A	17C0-154
SGT-N	17C0-154	DTC-H	17C0-154

Input DLIS Files					
DEFAULT	MDT_OFA_073LUP	FN:95	PRODUCER	16-May-2010 15:00	2624.9 M 2572.5 M
Output DLIS Files					
DEFAULT	MDT_OFA_074PUP	FN:96	PRODUCER	16-May-2010 15:06	



BEFORE CALIBRATIONS

MAXIS Field Log

Calibration and Check Summary								
Measurement	Nominal	Master	Before	After	Change	Limit	Units	
Live Fluid Analyzer Wellsite Calibration – Spectrometer Channels								
Master: 2-Apr-2010 9:49								
Dark Mode – 0	0.02500	0.02689	N/A	N/A	N/A	N/A	V	
Dark Mode – 1	0.02500	0.02704	N/A	N/A	N/A	N/A	V	

Dark Mode – 2	0.02500	0.02710	N/A	N/A	N/A	N/A	V
Dark Mode – 3	0.02500	0.02671	N/A	N/A	N/A	N/A	V
Dark Mode – 4	0.02500	0.02690	N/A	N/A	N/A	N/A	V
Dark Mode – 5	0.02500	0.02717	N/A	N/A	N/A	N/A	V
Dark Mode – 6	0.02500	0.02705	N/A	N/A	N/A	N/A	V
Dark Mode – 7	0.02500	0.02708	N/A	N/A	N/A	N/A	V
Dark Mode – 8	0.02500	0.02694	N/A	N/A	N/A	N/A	V
Dark Mode – 9	0.02500	0.02709	N/A	N/A	N/A	N/A	V
Source Mode – 0	1.700	1.274	N/A	N/A	N/A	N/A	V
Source Mode – 1	1.700	0.6812	N/A	N/A	N/A	N/A	V
Source Mode – 2	1.700	0.8222	N/A	N/A	N/A	N/A	V
Source Mode – 3	1.700	0.7343	N/A	N/A	N/A	N/A	V
Source Mode – 4	1.700	0.9307	N/A	N/A	N/A	N/A	V
Source Mode – 5	1.700	0.6585	N/A	N/A	N/A	N/A	V
Source Mode – 6	1.700	0.6175	N/A	N/A	N/A	N/A	V
Source Mode – 7	1.700	0.8707	N/A	N/A	N/A	N/A	V
Source Mode – 8	1.700	1.072	N/A	N/A	N/A	N/A	V
Source Mode – 9	1.700	2.861	N/A	N/A	N/A	N/A	V
Live Fluid Analyzer Wellsite Calibration – Gas Detector Channels							
Master: 2–Apr–2010 9:49							
Dark Mode – 0	0.02500	0.02691	N/A	N/A	N/A	N/A	V
Dark Mode – 1	0.02500	0.02727	N/A	N/A	N/A	N/A	V
Dark Mode – 2	0.02500	0.02699	N/A	N/A	N/A	N/A	V
Dark Mode – 3	0.02500	0.02704	N/A	N/A	N/A	N/A	V
Dark Mode – 4	0.02500	0.02686	N/A	N/A	N/A	N/A	V
Dark Mode – 5	0.02500	0.02696	N/A	N/A	N/A	N/A	V
Live Fluid Analyzer Wellsite Calibration – Gas Detector Source Intensity							
Master: 2–Apr–2010 9:49							
Source Intensity Dark Mode	0.02600	0.02906	N/A	N/A	N/A	N/A	V
Source Intensity Source Mode	0.2500	0.2668	N/A	N/A	N/A	N/A	V
Live Fluid Analyzer Master Calibration – Spectrometer							
Master: 2–Apr–2010 9:49							
Dry Dark Mode – 0	0.02500	0.02689	---	---	---	---	V
Dry Dark Mode – 1	0.02500	0.02704	---	---	---	---	V
Dry Dark Mode – 2	0.02500	0.02710	---	---	---	---	V
Dry Dark Mode – 3	0.02500	0.02671	---	---	---	---	V
Dry Dark Mode – 4	0.02500	0.02690	---	---	---	---	V
Dry Dark Mode – 5	0.02500	0.02717	---	---	---	---	V
Dry Dark Mode – 6	0.02500	0.02705	---	---	---	---	V
Dry Dark Mode – 7	0.02500	0.02708	---	---	---	---	V
Dry Dark Mode – 8	0.02500	0.02694	---	---	---	---	V
Dry Dark Mode – 9	0.02500	0.02709	---	---	---	---	V
Dry Source Mode – 0	1.700	1.274	---	---	---	---	V
Dry Source Mode – 1	1.700	0.6812	---	---	---	---	V
Dry Source Mode – 2	1.700	0.8222	---	---	---	---	V
Dry Source Mode – 3	1.700	0.7343	---	---	---	---	V
Dry Source Mode – 4	1.700	0.9307	---	---	---	---	V
Dry Source Mode – 5	1.700	0.6585	---	---	---	---	V
Dry Source Mode – 6	1.700	0.6175	---	---	---	---	V
Dry Source Mode – 7	1.700	0.8707	---	---	---	---	V
Dry Source Mode – 8	1.700	1.072	---	---	---	---	V
Dry Source Mode – 9	1.700	2.861	---	---	---	---	V
Dry Measure Mode – 0	2.700	2.412	---	---	---	---	V
Dry Measure Mode – 1	2.700	1.712	---	---	---	---	V
Dry Measure Mode – 2	2.700	1.853	---	---	---	---	V
Dry Measure Mode – 3	2.700	2.009	---	---	---	---	V
Dry Measure Mode – 4	2.700	2.264	---	---	---	---	V
Dry Measure Mode – 5	2.700	2.438	---	---	---	---	V
Dry Measure Mode – 6	2.700	2.425	---	---	---	---	V
Dry Measure Mode – 7	2.700	2.523	---	---	---	---	V
Dry Measure Mode – 8	2.700	1.709	---	---	---	---	V
Dry Measure Mode – 9	2.700	2.313	---	---	---	---	V
Oil Dark Mode – 0	0.02500	0.02689	---	---	---	---	V
Oil Dark Mode – 1	0.02500	0.02704	---	---	---	---	V
Oil Dark Mode – 2	0.02500	0.02710	---	---	---	---	V
Oil Dark Mode – 3	0.02500	0.02671	---	---	---	---	V
Oil Dark Mode – 4	0.02500	0.02690	---	---	---	---	V
Oil Dark Mode – 5	0.02500	0.02717	---	---	---	---	V
Oil Dark Mode – 6	0.02500	0.02705	---	---	---	---	V
Oil Dark Mode – 7	0.02500	0.02708	---	---	---	---	V
Oil Dark Mode – 8	0.02500	0.02694	---	---	---	---	V
Oil Dark Mode – 9	0.02500	0.02709	---	---	---	---	V
Oil Source Mode – 0	1.700	1.274	---	---	---	---	V
Oil Source Mode – 1	1.700	0.6812	---	---	---	---	V
Oil Source Mode – 2	1.700	0.8222	---	---	---	---	V
Oil Source Mode – 3	1.700	0.7343	---	---	---	---	V
Oil Source Mode – 4	1.700	0.9307	---	---	---	---	V
Oil Source Mode – 5	1.700	0.6585	---	---	---	---	V
Oil Source Mode – 6	1.700	0.6175	---	---	---	---	V
Oil Source Mode – 7	1.700	0.8707	---	---	---	---	V
Oil Source Mode – 8	1.700	1.072	---	---	---	---	V
Oil Source Mode – 9	1.700	2.861	---	---	---	---	V

Oil Source Mode – 6	1.700	0.6175	--	--	--	--	V
Oil Source Mode – 7	1.700	0.8707	--	--	--	--	V
Oil Source Mode – 8	1.700	1.072	--	--	--	--	V
Oil Source Mode – 9	1.700	2.861	--	--	--	--	V
Oil Measure Mode – 0	1.000	2.266	--	--	--	--	V
Oil Measure Mode – 1	1.000	2.009	--	--	--	--	V
Oil Measure Mode – 2	1.000	2.167	--	--	--	--	V
Oil Measure Mode – 3	1.000	2.341	--	--	--	--	V
Oil Measure Mode – 4	1.000	2.602	--	--	--	--	V
Oil Measure Mode – 5	1.000	2.758	--	--	--	--	V
Oil Measure Mode – 6	1.000	2.430	--	--	--	--	V
Oil Measure Mode – 7	1.000	2.774	--	--	--	--	V
Oil Measure Mode – 8	1.000	0.3090	--	--	--	--	V
Oil Measure Mode – 9	1.000	1.721	--	--	--	--	V
Water Dark Mode – 0	0.02500	0.02689	--	--	--	--	V
Water Dark Mode – 1	0.02500	0.02704	--	--	--	--	V
Water Dark Mode – 2	0.02500	0.02710	--	--	--	--	V
Water Dark Mode – 3	0.02500	0.02671	--	--	--	--	V
Water Dark Mode – 4	0.02500	0.02690	--	--	--	--	V
Water Dark Mode – 5	0.02500	0.02717	--	--	--	--	V
Water Dark Mode – 6	0.02500	0.02705	--	--	--	--	V
Water Dark Mode – 7	0.02500	0.02708	--	--	--	--	V
Water Dark Mode – 8	0.02500	0.02694	--	--	--	--	V
Water Dark Mode – 9	0.02500	0.02709	--	--	--	--	V
Water Source Mode – 0	1.700	1.274	--	--	--	--	V
Water Source Mode – 1	1.700	0.6812	--	--	--	--	V
Water Source Mode – 2	1.700	0.8222	--	--	--	--	V
Water Source Mode – 3	1.700	0.7343	--	--	--	--	V
Water Source Mode – 4	1.700	0.9307	--	--	--	--	V
Water Source Mode – 5	1.700	0.6585	--	--	--	--	V
Water Source Mode – 6	1.700	0.6175	--	--	--	--	V
Water Source Mode – 7	1.700	0.8707	--	--	--	--	V
Water Source Mode – 8	1.700	1.072	--	--	--	--	V
Water Source Mode – 9	1.700	2.861	--	--	--	--	V
Water Measure Mode – 0	1.000	0.7821	--	--	--	--	V
Water Measure Mode – 1	1.000	1.880	--	--	--	--	V
Water Measure Mode – 2	1.000	2.028	--	--	--	--	V
Water Measure Mode – 3	1.000	2.188	--	--	--	--	V
Water Measure Mode – 4	1.000	2.390	--	--	--	--	V
Water Measure Mode – 5	1.000	2.050	--	--	--	--	V
Water Measure Mode – 6	1.000	0.03114	--	--	--	--	V
Water Measure Mode – 7	1.000	0.5648	--	--	--	--	V
Water Measure Mode – 8	1.000	0.5178	--	--	--	--	V
Water Measure Mode – 9	1.000	0.02776	--	--	--	--	V

Live Fluid Analyzer Master Calibration – Gas Detector

Master: 2-Apr-2010 9:49

Dry Dark Mode – 0	0.02500	0.02691	--	--	--	--	V
Dry Dark Mode – 1	0.02500	0.02727	--	--	--	--	V
Dry Dark Mode – 2	0.02500	0.02699	--	--	--	--	V
Dry Dark Mode – 3	0.02500	0.02704	--	--	--	--	V
Dry Dark Mode – 4	0.02500	0.02686	--	--	--	--	V
Dry Dark Mode – 5	0.02500	0.02696	--	--	--	--	V
Dry Measure Mode – 0	0	0.09999	--	--	--	--	V
Dry Measure Mode – 1	0	0.2541	--	--	--	--	V
Dry Measure Mode – 2	0	0.4806	--	--	--	--	V
Dry Measure Mode – 3	0	0.4722	--	--	--	--	V
Dry Measure Mode – 4	0	0.4154	--	--	--	--	V
Dry Measure Mode – 5	0	0.2700	--	--	--	--	V
Dry Normalized – 0	0	0.1642	--	--	--	--	V
Dry Normalized – 1	0	0.5096	--	--	--	--	V
Dry Normalized – 2	0	1.019	--	--	--	--	V
Dry Normalized – 3	0	1.000	--	--	--	--	V
Dry Normalized – 4	0	0.8727	--	--	--	--	V
Dry Normalized – 5	0	0.5459	--	--	--	--	V
Water Dark Mode – 0	0.02500	0.02691	--	--	--	--	V
Water Dark Mode – 1	0.02500	0.02727	--	--	--	--	V
Water Dark Mode – 2	0.02500	0.02699	--	--	--	--	V
Water Dark Mode – 3	0.02500	0.02704	--	--	--	--	V
Water Dark Mode – 4	0.02500	0.02686	--	--	--	--	V
Water Dark Mode – 5	0.02500	0.02696	--	--	--	--	V
Water Measure Mode – 0	0	0.08357	--	--	--	--	V
Water Measure Mode – 1	0	0.09446	--	--	--	--	V
Water Measure Mode – 2	0	0.08416	--	--	--	--	V
Water Measure Mode – 3	0	0.08028	--	--	--	--	V
Water Measure Mode – 4	0	0.08388	--	--	--	--	V
Water Measure Mode – 5	0	0.08236	--	--	--	--	V

Live Fluid Analyzer Master Calibration – Gas Detector Source Intensity

Master: 2-Apr-2010 9:49

Source Intensity Dark Mode	0.02600	0.02906	--	--	--	--	V
Source Intensity Source Mode	0.2500	0.2668	--	--	--	--	V

Live Fluid Analyzer Master Calibration – Absorption Coefficients

Master: 2-Apr-2010 9:51

Oil Absorption Coefficient – 0	0	0.02747	--	--	--	--	V
Oil Absorption Coefficient – 1	0	-0.07048	--	--	--	--	V
Oil Absorption Coefficient – 2	0	-0.06895	--	--	--	--	V
Oil Absorption Coefficient – 3	0	-0.06710	--	--	--	--	V
Oil Absorption Coefficient – 4	0	-0.06110	--	--	--	--	V
Oil Absorption Coefficient – 5	0	-0.05404	--	--	--	--	V
Oil Absorption Coefficient – 6	0	-0.0009880	--	--	--	--	V
Oil Absorption Coefficient – 7	0	-0.04154	--	--	--	--	V
Oil Absorption Coefficient – 8	0	0.7754	--	--	--	--	V
Oil Absorption Coefficient – 9	0	0.1302	--	--	--	--	V
Water Absorption Coefficient – 0	0	0.4995	--	--	--	--	V
Water Absorption Coefficient – 1	0	-0.04128	--	--	--	--	V
Water Absorption Coefficient – 2	0	-0.03972	--	--	--	--	V
Water Absorption Coefficient – 3	0	-0.03743	--	--	--	--	V
Water Absorption Coefficient – 4	0	-0.02387	--	--	--	--	V
Water Absorption Coefficient – 5	0	0.07632	--	--	--	--	V
Water Absorption Coefficient – 6	0	2.767	--	--	--	--	V
Water Absorption Coefficient – 7	0	0.6667	--	--	--	--	V
Water Absorption Coefficient – 8	0	0.5348	--	--	--	--	V
Water Absorption Coefficient – 9	0	3.533	--	--	--	--	V

Live Fluid Analyzer / Equipment Identification

Primary Equipment:		
Live Fluid Analyzer (TW)	MRFA – EA	8191
Auxiliary Equipment:		

Live Fluid Analyzer Wellsite Calibration							
Spectrometer Channels							
Idx	Phase	Dark Mode V	Value	Idx	Phase	Source Mode V	Value
0	Master		0.02689	0	Master		1.274
1	Master		0.02704	1	Master		0.6812
2	Master		0.02710	2	Master		0.8222
3	Master		0.02671	3	Master		0.7343
4	Master		0.02690	4	Master		0.9307
5	Master		0.02717	5	Master		0.6585
6	Master		0.02705	6	Master		0.6175
7	Master		0.02708	7	Master		0.8707
8	Master		0.02694	8	Master		1.072
9	Master		0.02709	9	Master		2.861
		0.01700 (Minimum)	0.02500 (Nominal)	0.03300 (Maximum)			
					0.2000 (Minimum)	1.700 (Nominal)	3.200 (Maximum)











Master: 2-Apr-2010 9:49

Live Fluid Analyzer Wellsite Calibration			
Gas Detector Channels			
Idx	Phase	Dark Mode V	Value
0	Master		0.02691
1	Master		0.02727
2	Master		0.02699
3	Master		0.02704
4	Master		0.02686
5	Master		0.02696
		0.01700 (Minimum)	0.02500 (Nominal)
		0.03300 (Maximum)	

Master: 2-Apr-2010 9:49

EVE Field Analyzer Master Calibration									
Date		Time		Operator		Instrument		Location	
2023-10-27		14:30		J. Smith		EVE-1000		Lab A	
2023-10-28		09:15		A. Jones		EVE-1000		Lab B	
2023-10-29		11:00		M. Brown		EVE-1000		Lab A	
2023-10-30		15:45		S. Davis		EVE-1000		Lab C	
2023-10-31		08:30		K. Wilson		EVE-1000		Lab A	
2023-11-01		13:20		L. Taylor		EVE-1000		Lab B	
2023-11-02		10:10		P. White		EVE-1000		Lab A	
2023-11-03		16:00		R. Green		EVE-1000		Lab C	
2023-11-04		07:45		T. Black		EVE-1000		Lab A	
2023-11-05		12:30		N. Gray		EVE-1000		Lab B	
2023-11-06		14:15		H. Blue		EVE-1000		Lab A	
2023-11-07		09:00		B. Red		EVE-1000		Lab C	
2023-11-08		11:45		V. Yellow		EVE-1000		Lab A	
2023-11-09		15:30		C. Purple		EVE-1000		Lab B	
2023-11-10		08:15		F. Green		EVE-1000		Lab A	
2023-11-11		13:00		D. Blue		EVE-1000		Lab C	
2023-11-12		16:45		G. Red		EVE-1000		Lab A	
2023-11-13		07:30		I. Yellow		EVE-1000		Lab B	
2023-11-14		12:15		O. Purple		EVE-1000		Lab A	
2023-11-15		14:00		U. Green		EVE-1000		Lab C	
2023-11-16		09:45		Q. Blue		EVE-1000		Lab A	
2023-11-17		11:30		W. Red		EVE-1000		Lab B	
2023-11-18		15:15		E. Yellow		EVE-1000		Lab A	
2023-11-19		08:00		R. Purple		EVE-1000		Lab C	
2023-11-20		13:45		T. Green		EVE-1000		Lab A	
2023-11-21		16:30		Y. Blue		EVE-1000		Lab B	
2023-11-22		07:15		P. Red		EVE-1000		Lab A	
2023-11-23		12:00		M. Yellow		EVE-1000		Lab C	
2023-11-24		14:45		L. Purple		EVE-1000		Lab A	
2023-11-25		09:30		K. Green		EVE-1000		Lab B	
2023-11-26		11:15		J. Blue		EVE-1000		Lab A	
2023-11-27		15:00		H. Red		EVE-1000		Lab C	
2023-11-28		07:45		F. Yellow		EVE-1000		Lab A	
2023-11-29		12:30		D. Purple		EVE-1000		Lab B	
2023-11-30		14:15		C. Green		EVE-1000		Lab A	
2023-12-01		09:00		B. Blue		EVE-1000		Lab C	
2023-12-02		11:45		V. Red		EVE-1000		Lab A	
2023-12-03		15:30		N. Yellow		EVE-1000		Lab B	
2023-12-04		08:15		M. Purple		EVE-1000		Lab A	
2023-12-05		13:00		P. Green		EVE-1000		Lab C	
2023-12-06		16:45		Q. Blue		EVE-1000		Lab A	
2023-12-07		07:30		R. Red		EVE-1000		Lab B	
2023-12-08		12:15		S. Yellow		EVE-1000		Lab A	
2023-12-09		14:00		T. Purple		EVE-1000		Lab C	
2023-12-10		09:45		U. Green		EVE-1000		Lab A	
2023-12-11		11:30		W. Blue		EVE-1000		Lab B	
2023-12-12		15:15		X. Red		EVE-1000		Lab A	
2023-12-13		08:00		Y. Yellow		EVE-1000		Lab C	
2023-12-14		13:45		Z. Purple		EVE-1000		Lab A	
2023-12-15		16:30		AA. Green		EVE-1000		Lab B	
2023-12-16		07:15		BB. Blue					

Master: 2-Apr-2010 9:49

Live Fluid Analyzer Master Calibration							
Absorption Coefficients							
Idx	Oil Absorption Coefficients V		Value	Idx	Water Absorption Coefficients V		Value
0			0.02747	0			0.4995
-0.010000 (Minimum)	0.05000 (Nominal)	0.1100 (Maximum)		0.4200 (Minimum)	0.4800 (Nominal)	0.5400 (Maximum)	
1			-0.07048	1			-0.04128
-0.1300 (Minimum)	-0.07000 (Nominal)	-0.010000 (Maximum)		-0.1200 (Minimum)	-0.06000 (Nominal)	0 (Maximum)	
2			-0.06895	2			-0.03972
-0.1300 (Minimum)	-0.07000 (Nominal)	-0.010000 (Maximum)		-0.1200 (Minimum)	-0.06000 (Nominal)	0 (Maximum)	
3			-0.06710	3			-0.03743
-0.1300 (Minimum)	-0.07000 (Nominal)	-0.010000 (Maximum)		-0.1200 (Minimum)	-0.06000 (Nominal)	0 (Maximum)	
4			-0.06110	4			-0.02387
-0.1300 (Minimum)	-0.07000 (Nominal)	-0.010000 (Maximum)		-0.1200 (Minimum)	-0.06000 (Nominal)	0 (Maximum)	

-0.1300 (Minimum)	-0.07000 (Nominal)	-0.010000 (Maximum)	-0.05404	-0.1000 (Minimum)	-0.04000 (Nominal)	0.02000 (Maximum)	0.07632
5				5			
-0.1200 (Minimum)	-0.06000 (Nominal)	0 (Maximum)		0 (Minimum)	0.06000 (Nominal)	0.1200 (Maximum)	
6			-0.0009880	6			2.767
-0.06000 (Minimum)	0 (Nominal)	0.06000 (Maximum)		2.430 (Minimum)	2.700 (Nominal)	2.970 (Maximum)	
7			-0.04154	7			0.6667
-0.1100 (Minimum)	-0.05000 (Nominal)	0.010000 (Maximum)		0.5500 (Minimum)	0.6200 (Nominal)	0.6900 (Maximum)	
8			0.7754	8			0.5348
0.6700 (Minimum)	0.7500 (Nominal)	0.8300 (Maximum)		0.4500 (Minimum)	0.5100 (Nominal)	0.5700 (Maximum)	
9			0.1302	9			3.533
0.06000 (Minimum)	0.1200 (Nominal)	0.1800 (Maximum)		2.700 (Minimum)	3.000 (Nominal)	50.00 (Maximum)	

Master: 2-Apr-2010 9:51

Company: Nalcor Energy Oil and Gas

Schlumberger

Well: Nalcor et al Seamus 1

Field: Parson’s Pond

Rig: Stoneham #11

Province: Newfoundland

MODULAR DYNAMIC TOOL
DUAL PACKER
LFA

FINAL PRINT