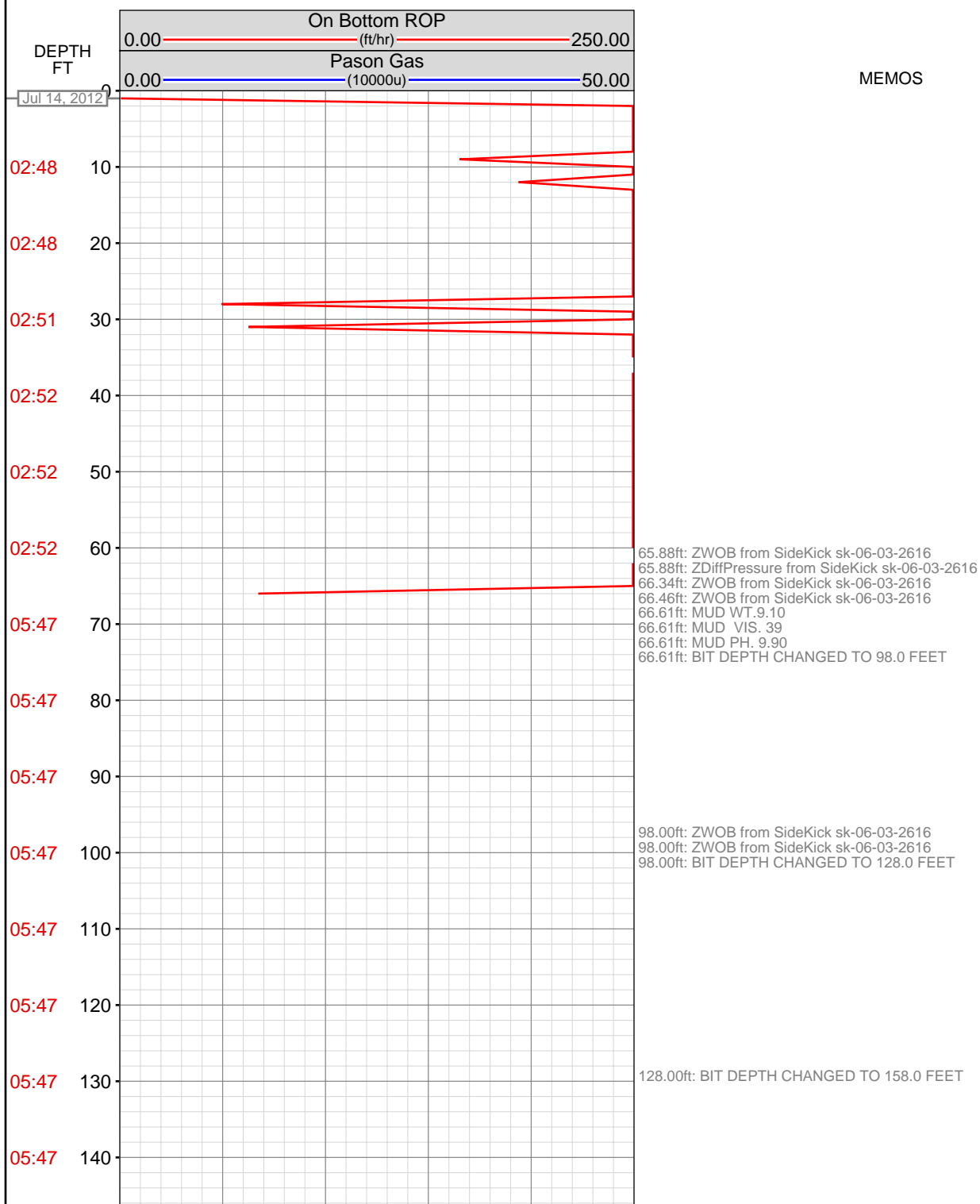
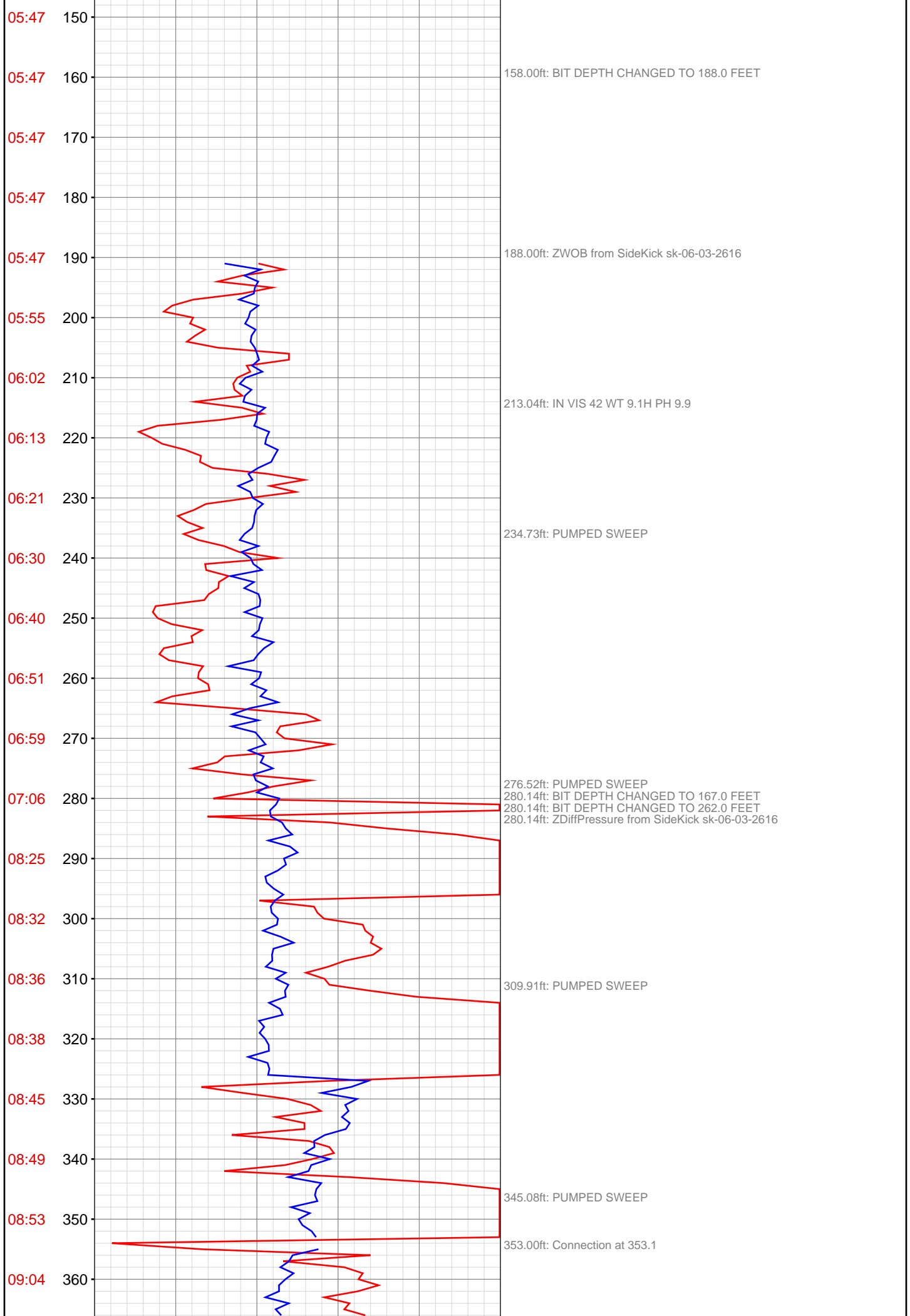
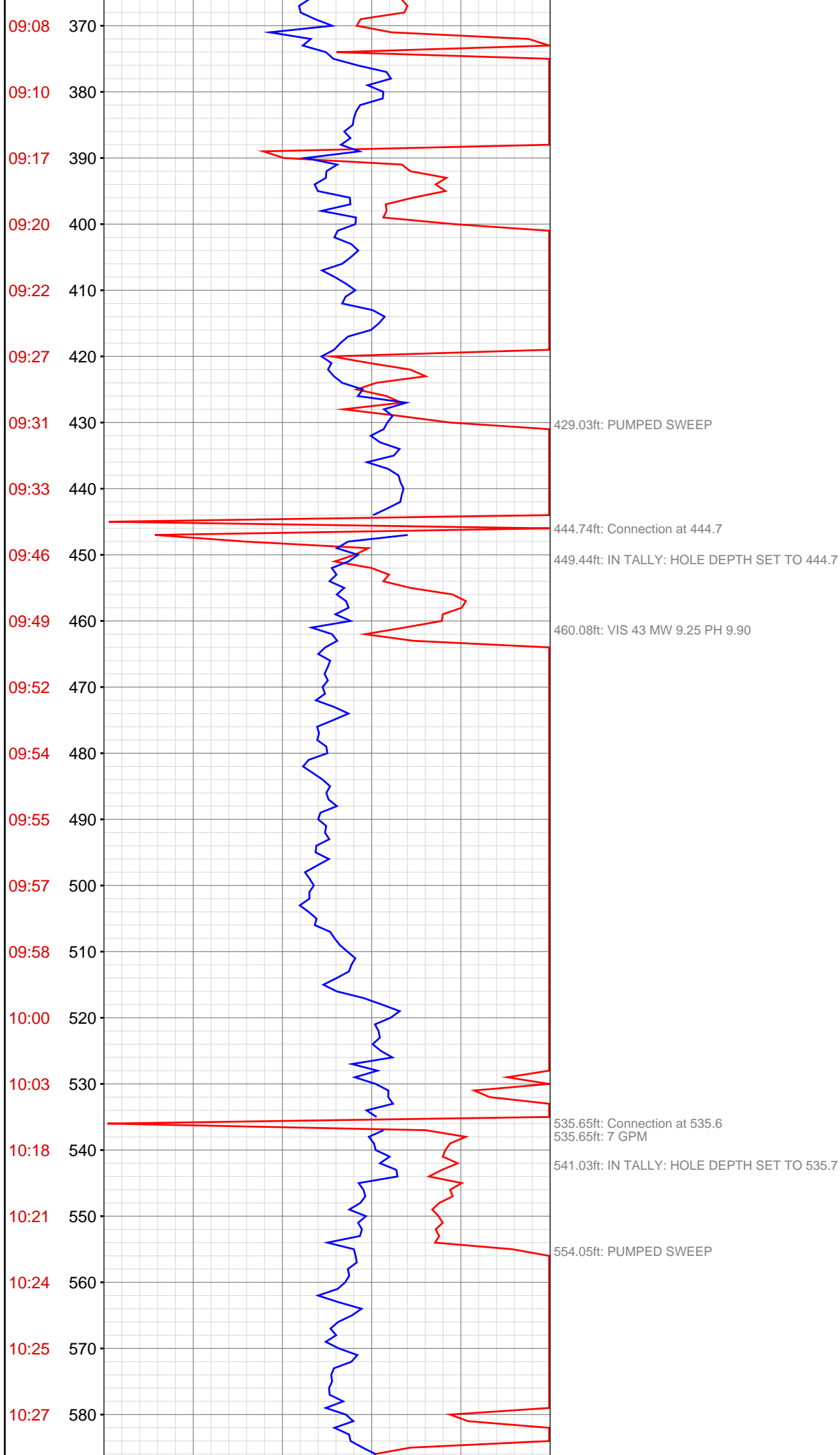


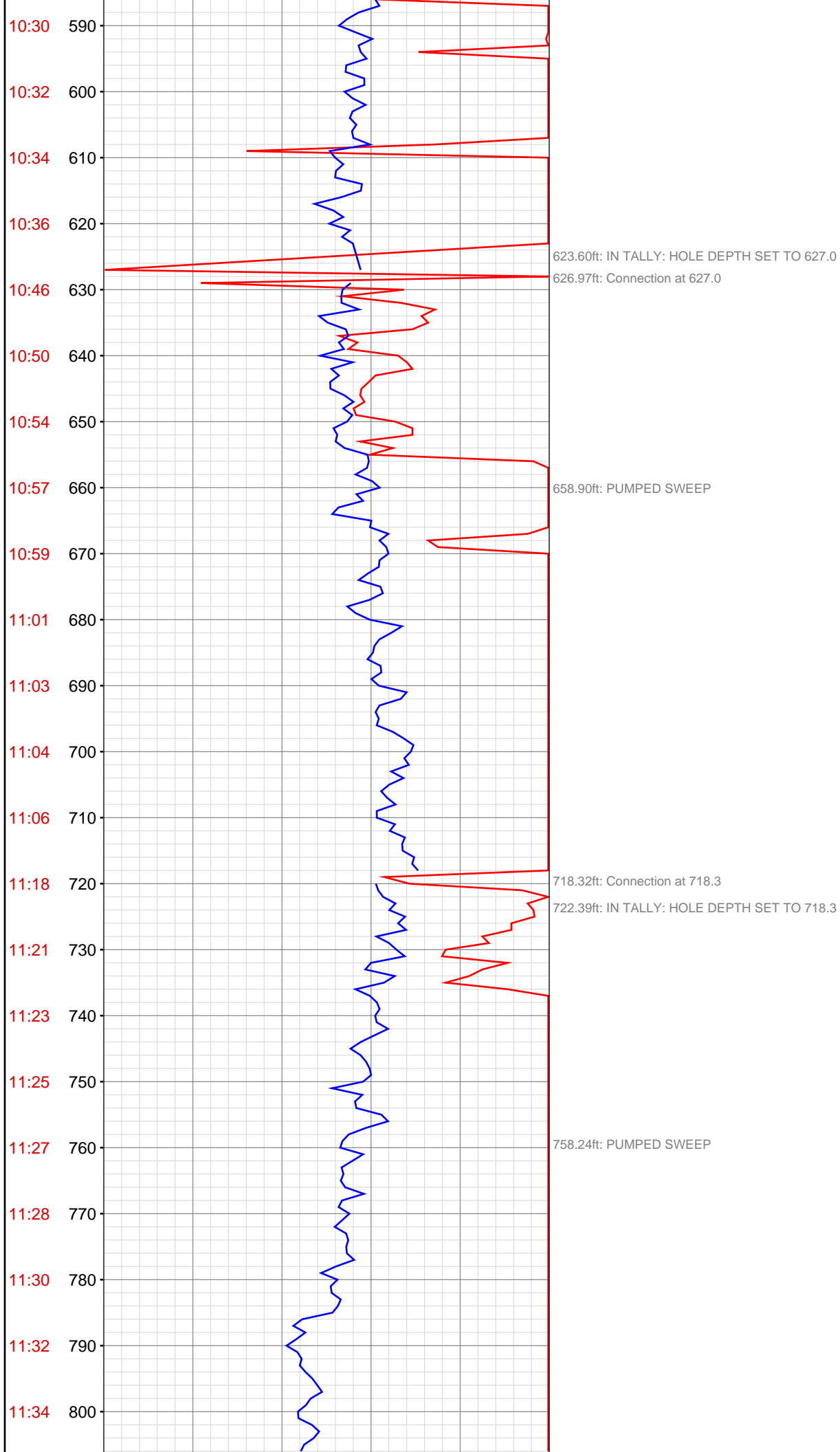
OPERATOR: EnCana Oil & Gas (USA), Inc.
WELL: MCU 21-3B
FIELD:
LOCATION: SE/SW SEC 16 TS7S
COUNTRY: USA
RIG: Pat-UTI 308

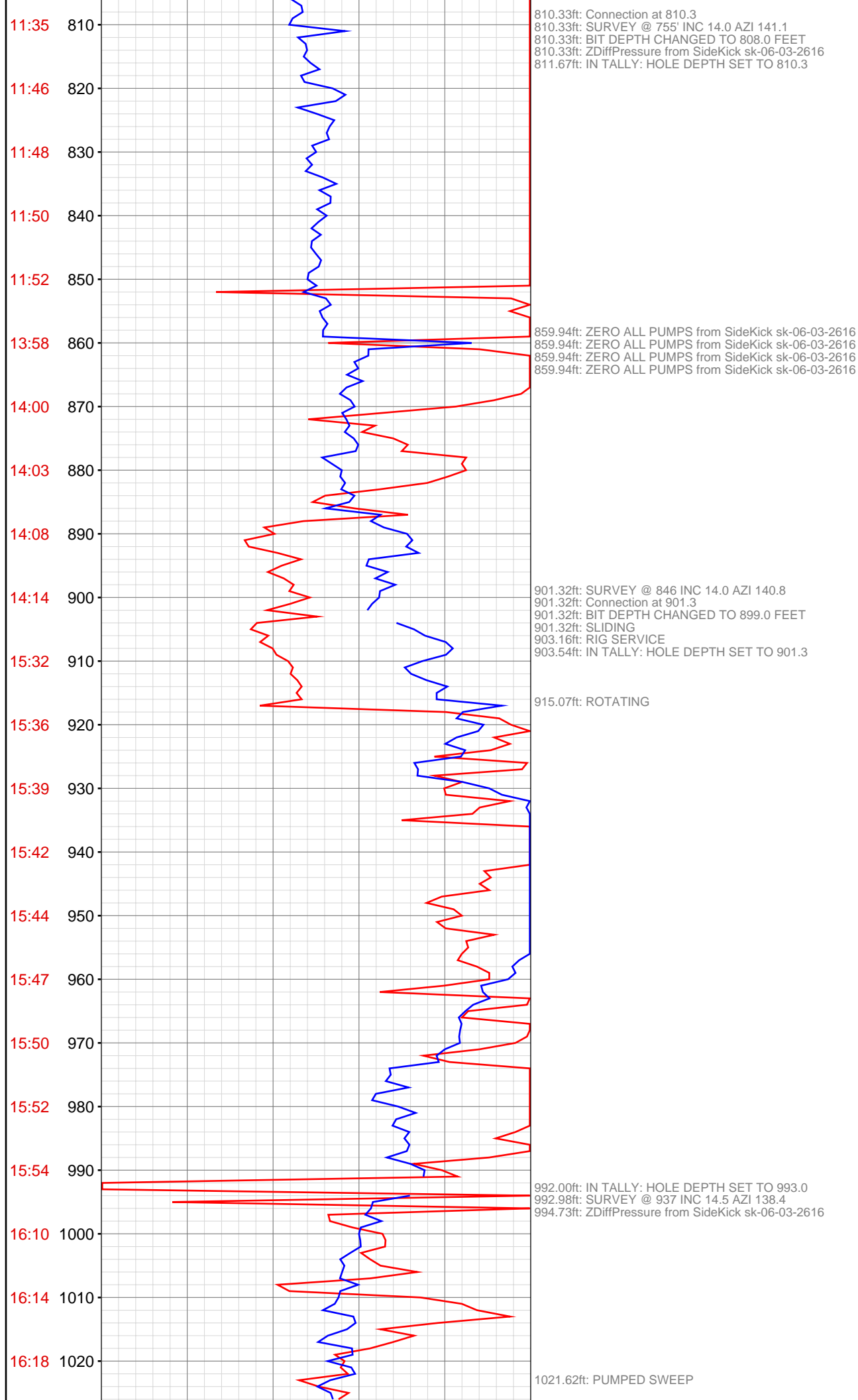
CONTRACTOR: Patterson-UTI Drilling Company
UNIQUE WELL ID: 0504520585
SPUD DATE: Jul 14, 2012 03:30
RELEASE DATE:

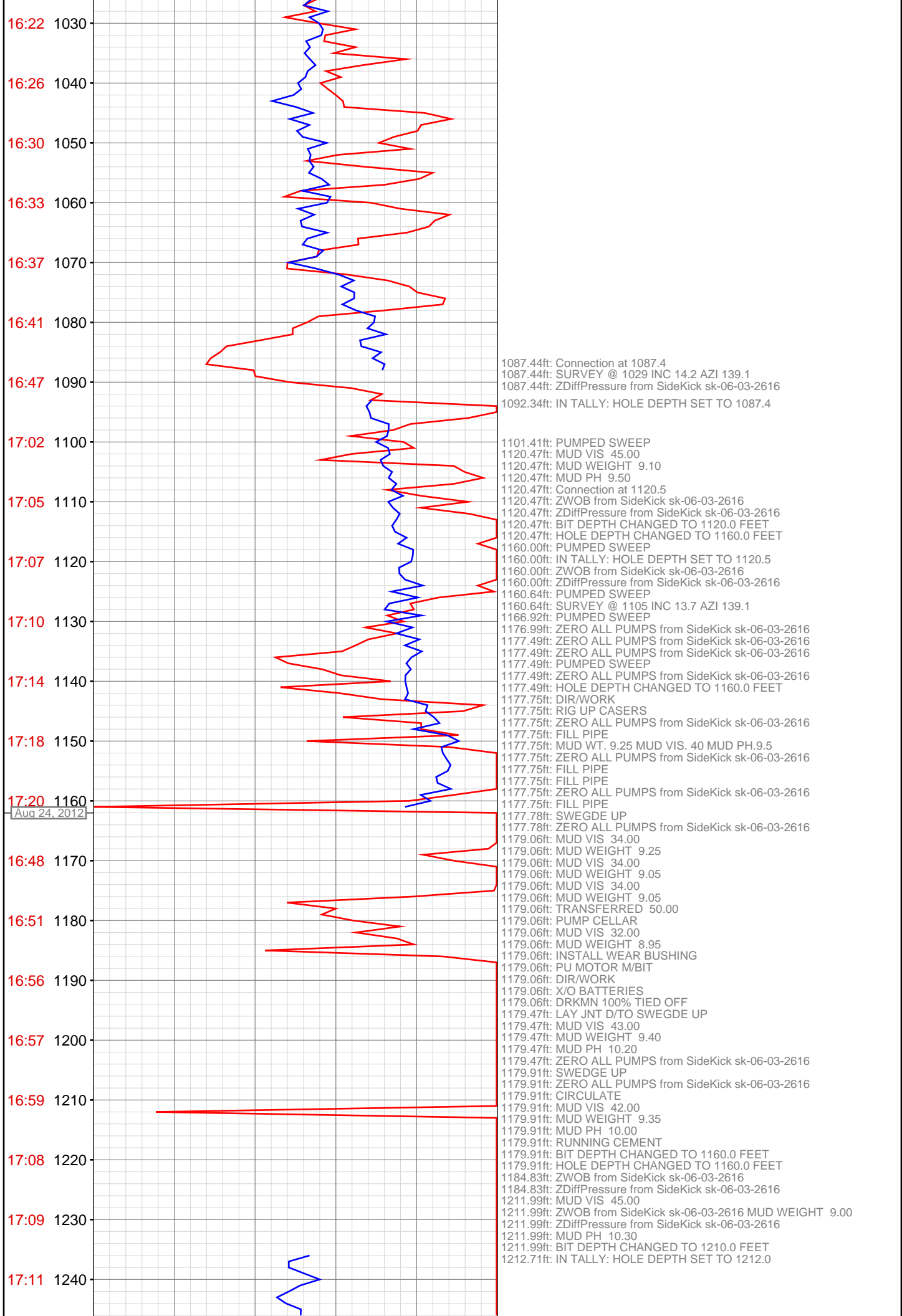


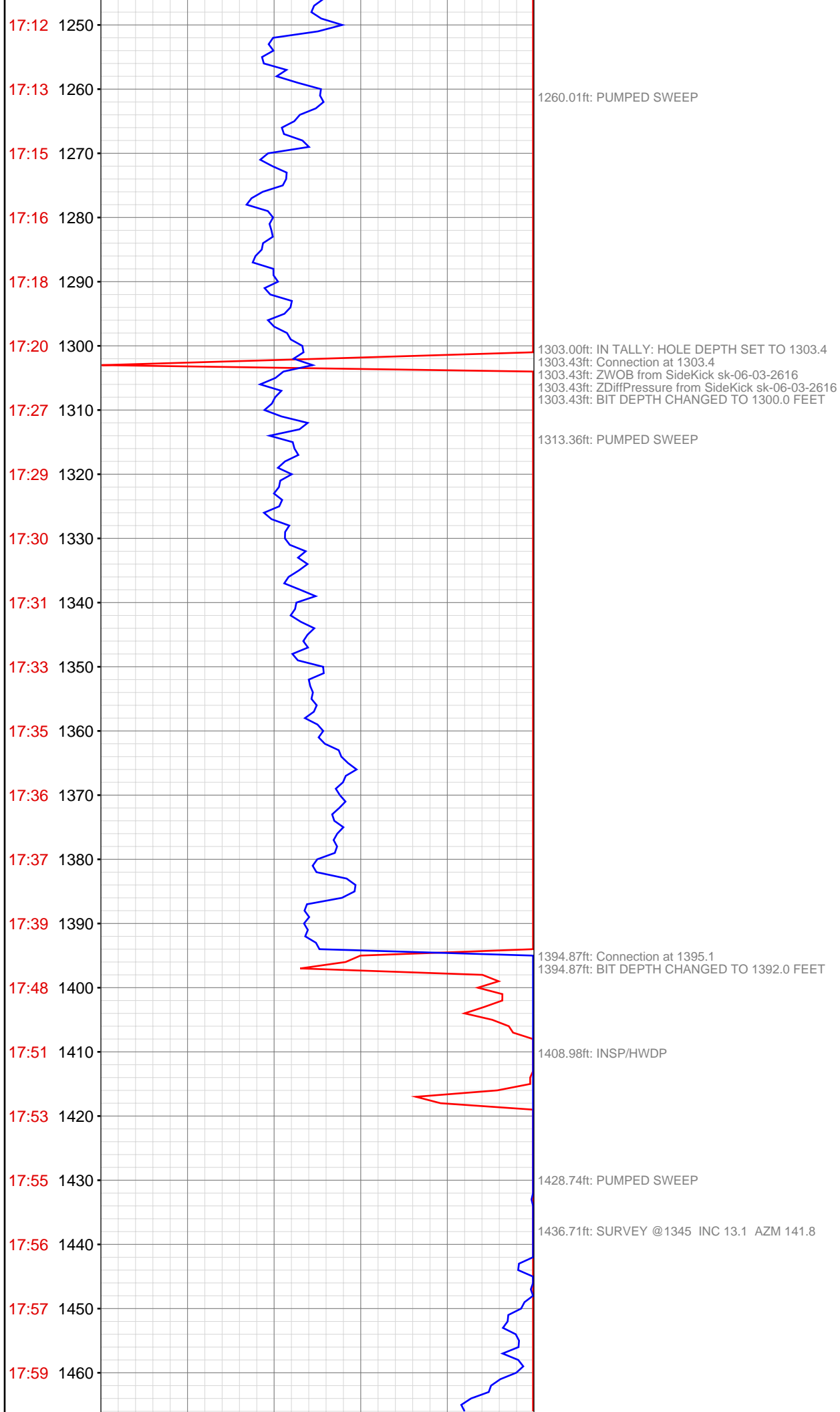


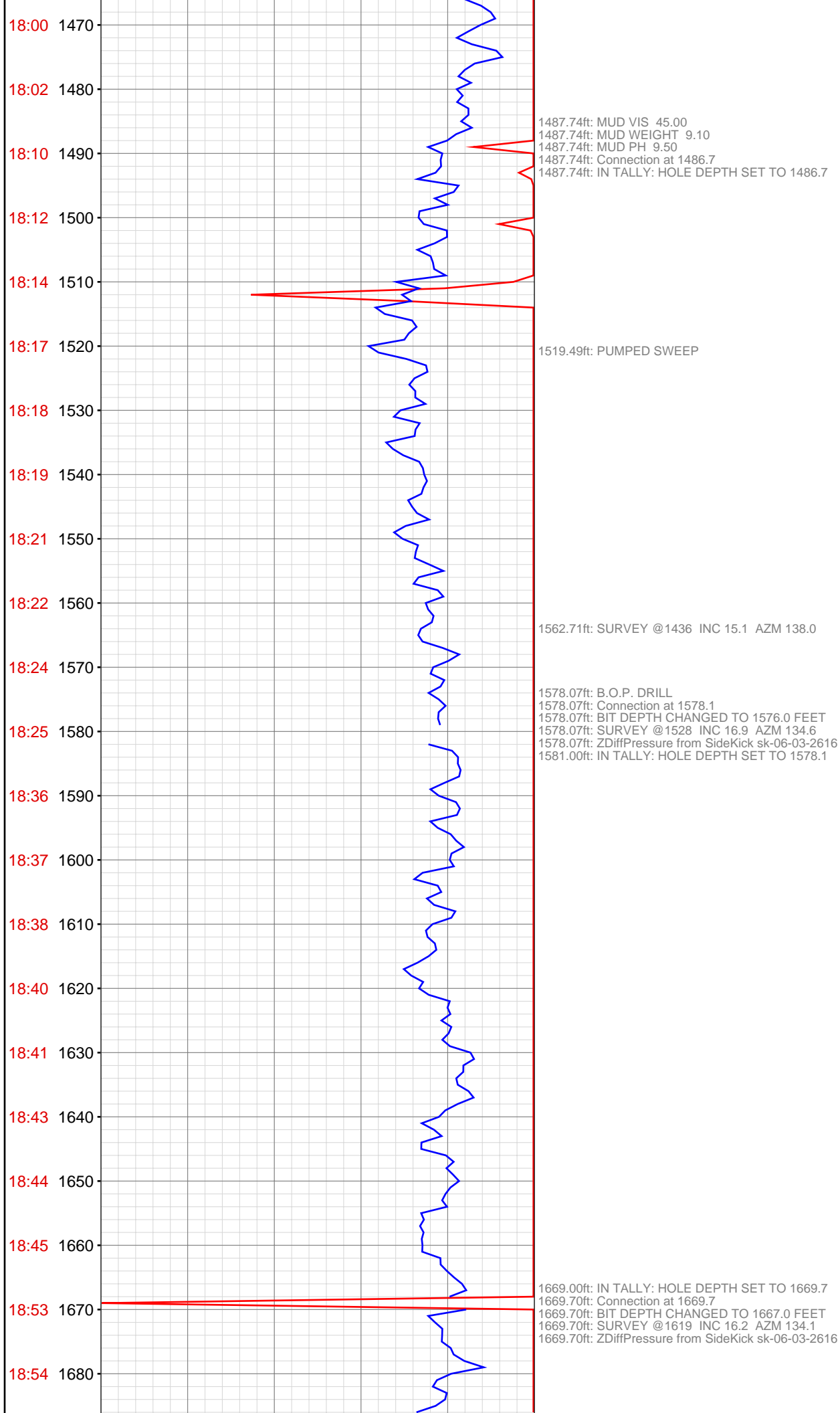


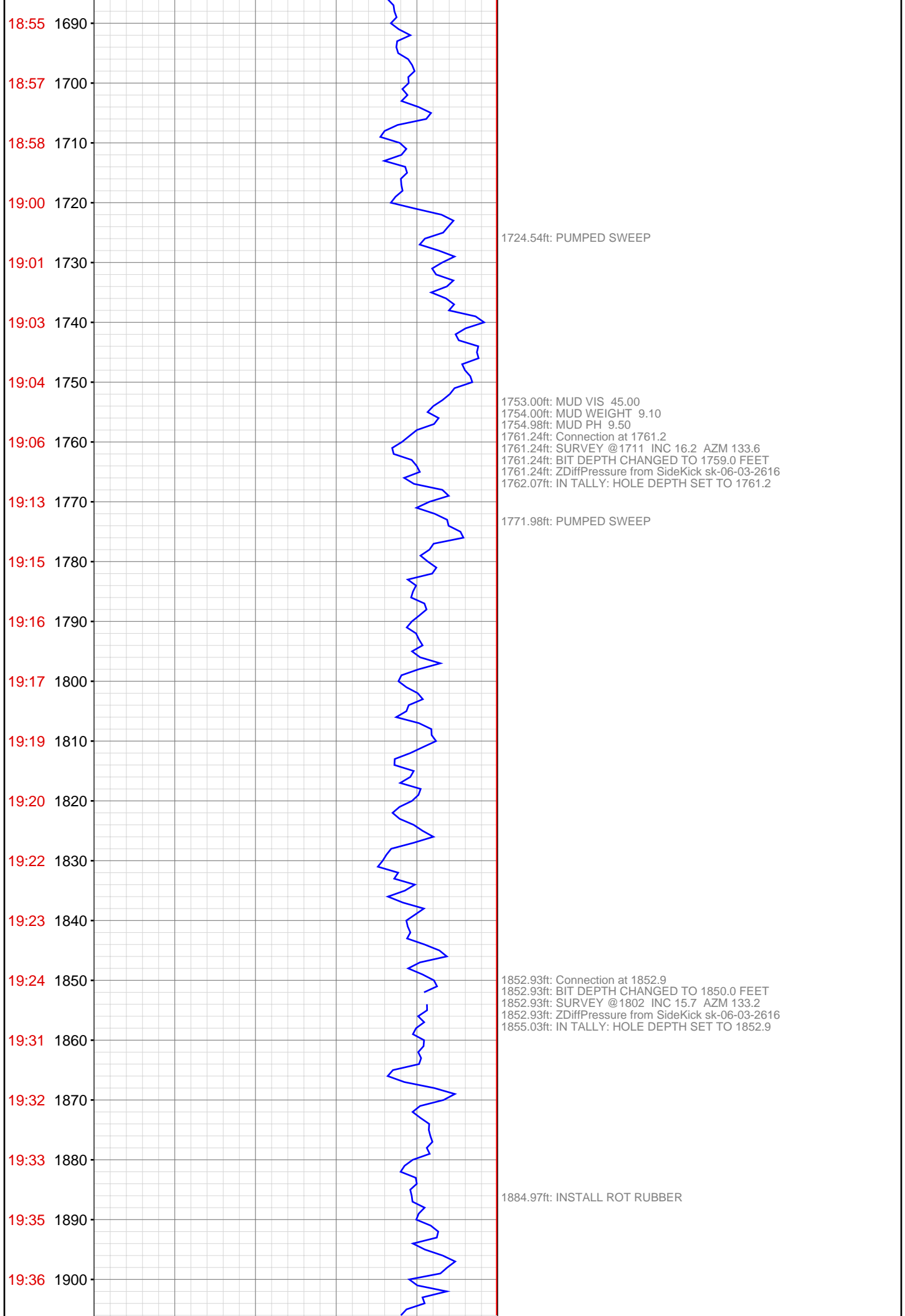


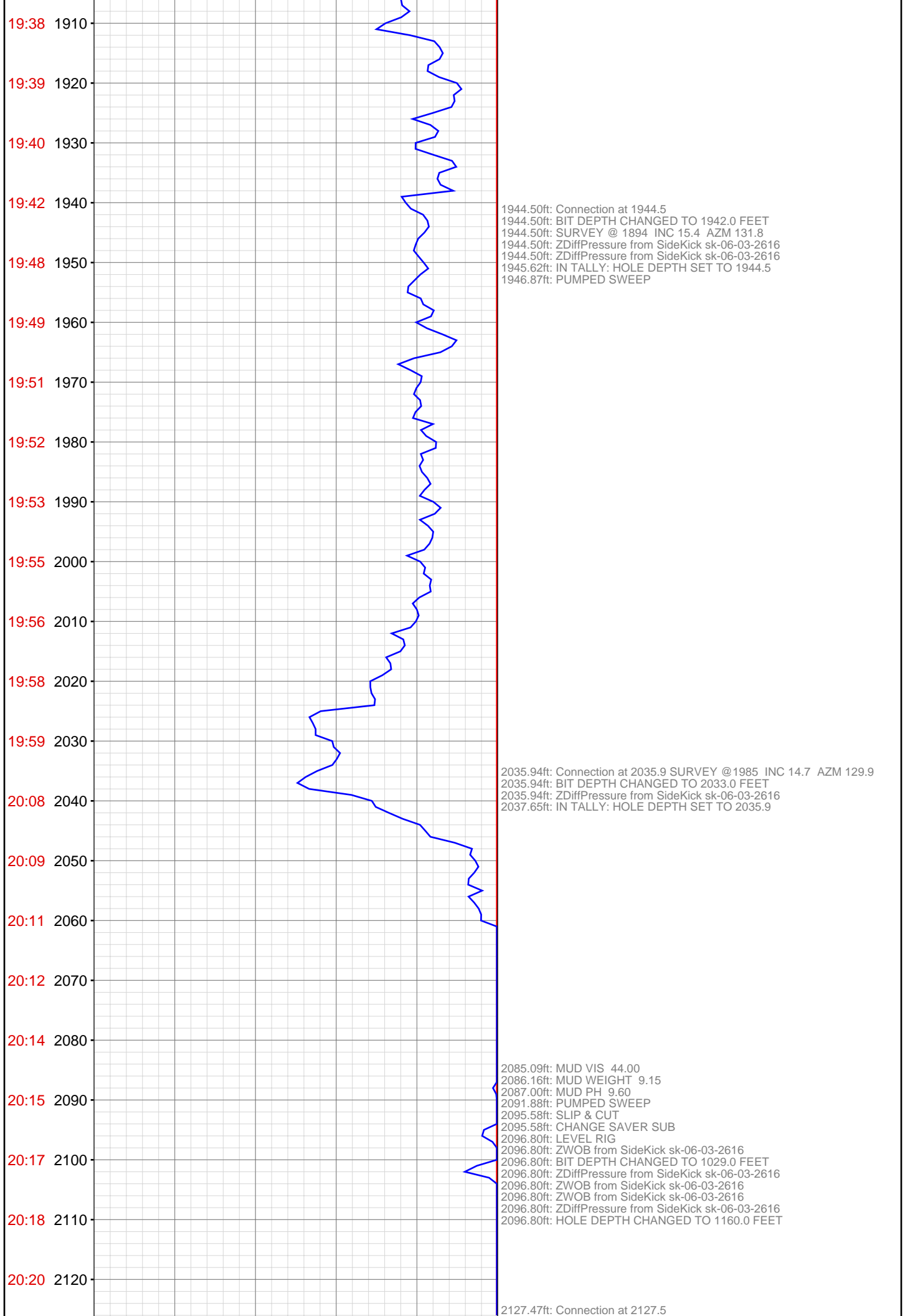


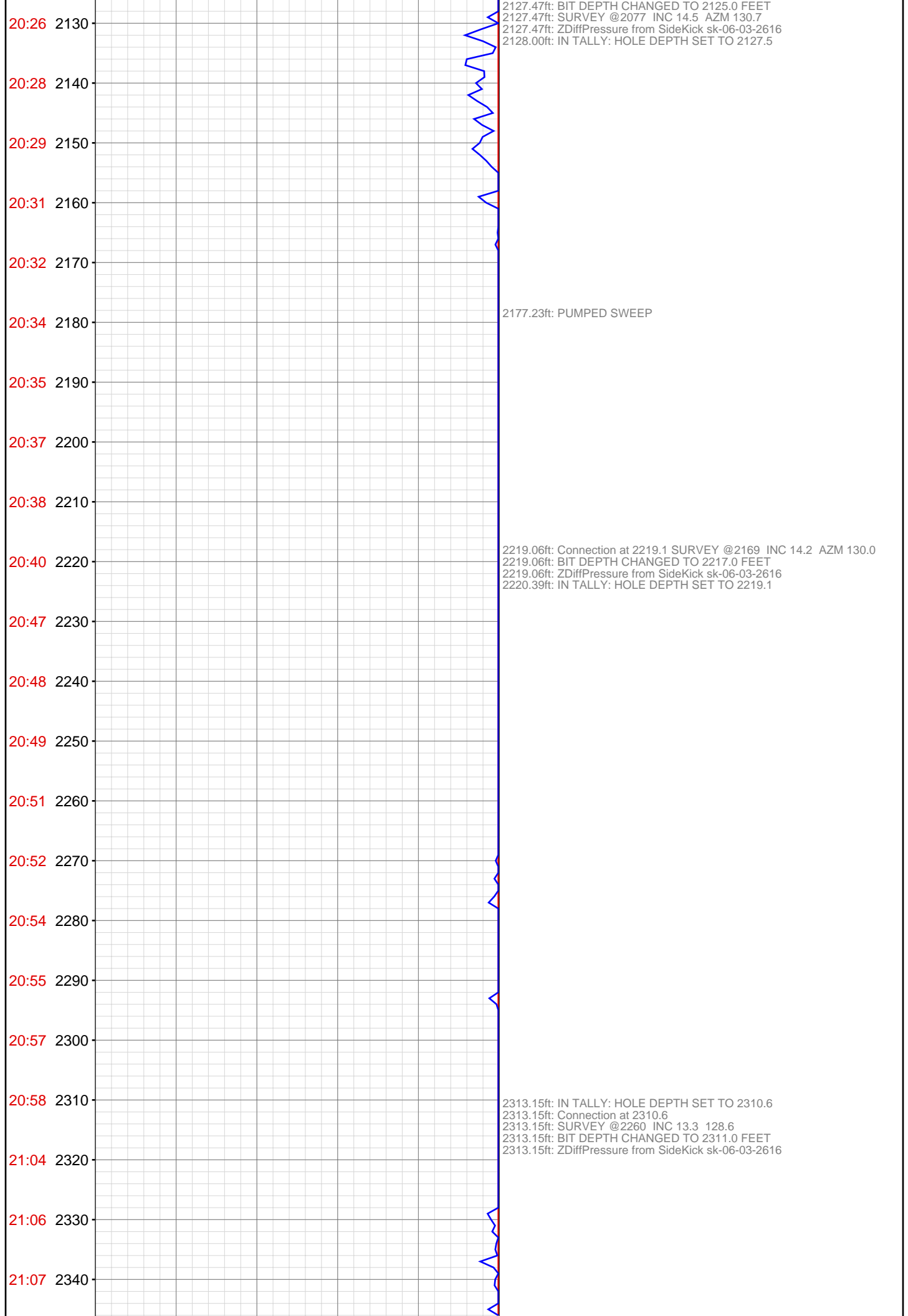


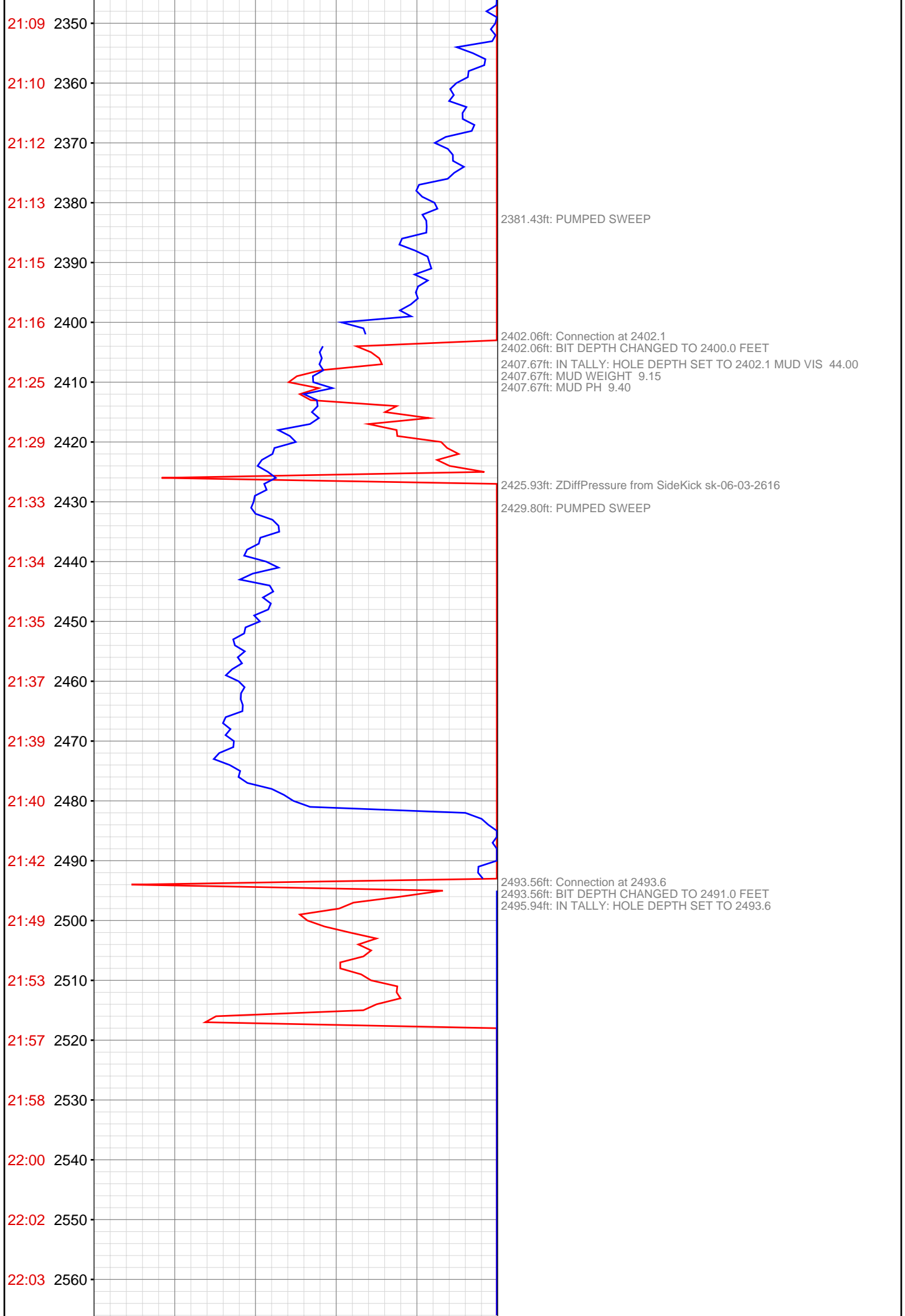


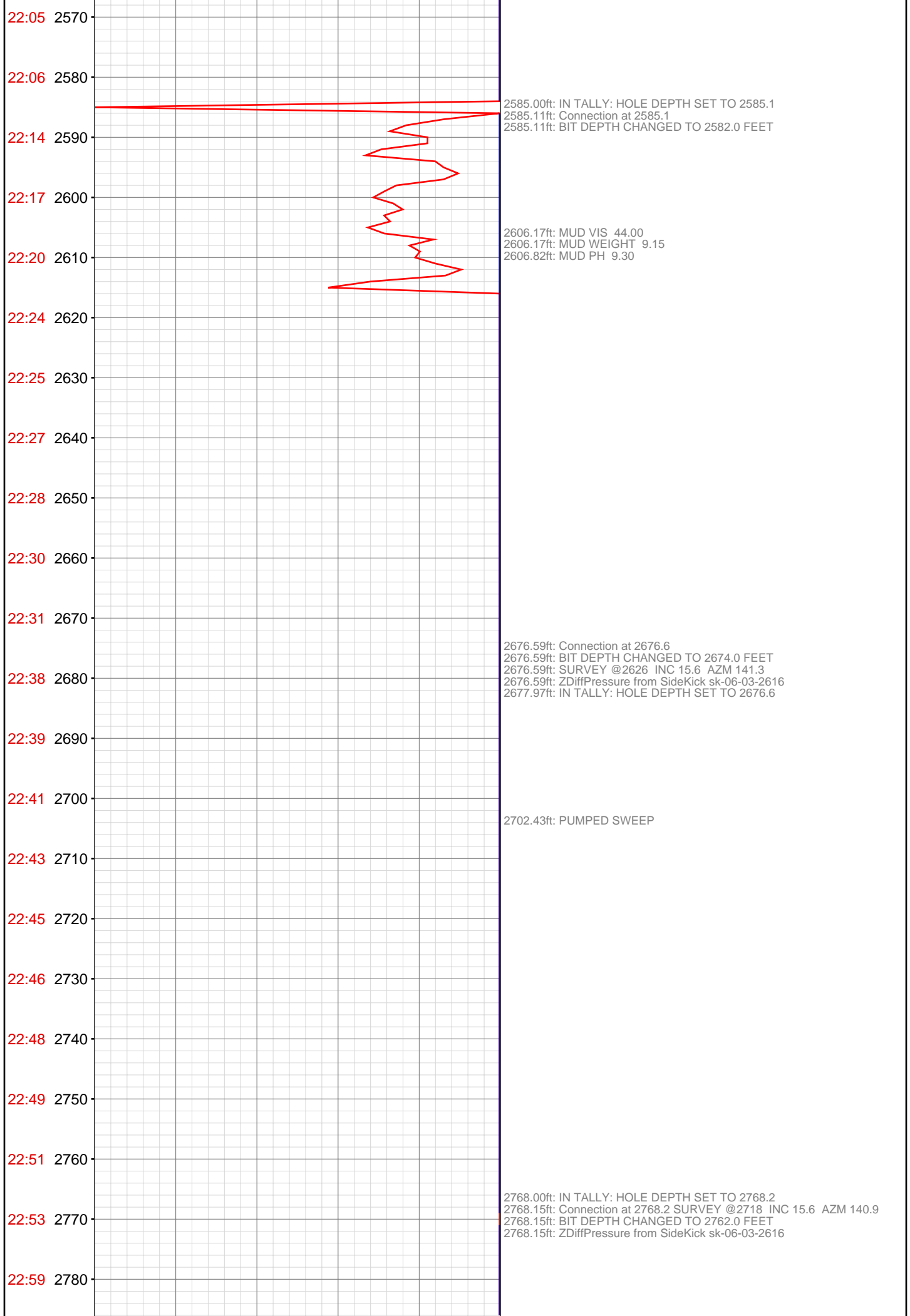


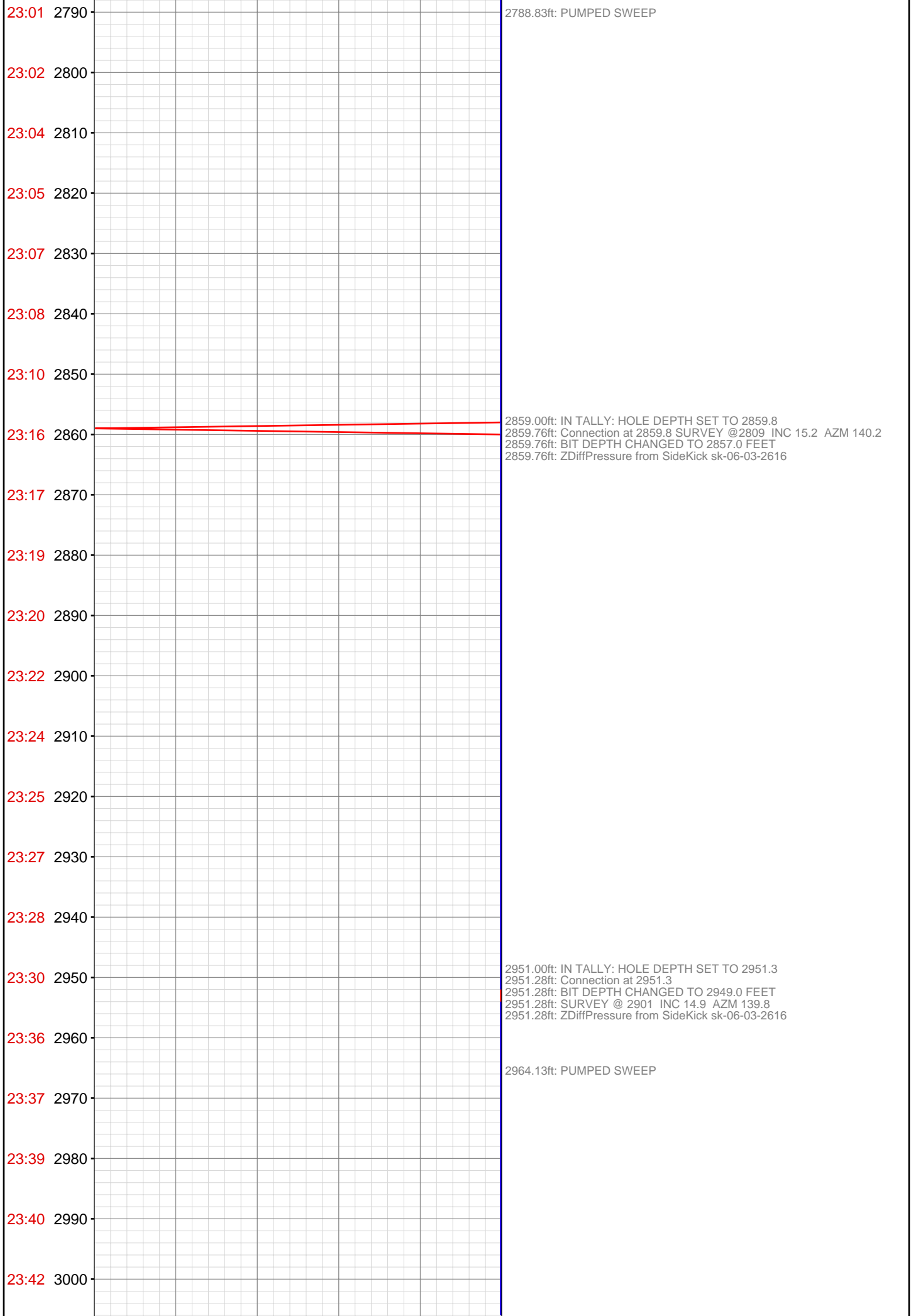












23:43 3010

23:45 3020

23:47 3030

23:48 3040

23:54 3050

23:56 3060

23:57 3070

23:59 3080

Aug 25, 2012

00:01 3090

00:02 3100

00:04 3110

00:05 3120

00:07 3130

00:13 3140

00:15 3150

00:17 3160

00:18 3170

00:20 3180

00:22 3190

00:23 3200

00:25 3210

00:27 3220

3023.28ft: MUD VIS 44.00
3024.33ft: MUD WEIGHT 9.15
3025.00ft: MUD PH 9.10

3042.68ft: Connection at 3042.7
3042.68ft: BIT DEPTH CHANGED TO 3040.0 FEET
3042.68ft: SURVEY @2992 INC 13.8 AZM 141.1
3042.68ft: ZDiffPressure from SideKick sk-06-03-2616
3045.24ft: IN TALLY: HOLE DEPTH SET TO 3042.7

3134.13ft: Connection at 3134.1
3134.13ft: SURVEY @3084 INC 12.7 AZM 139.8
3134.13ft: BIT DEPTH CHANGED TO 3132.0 FEET
3134.13ft: ZDiffPressure from SideKick sk-06-03-2616
3136.38ft: IN TALLY: HOLE DEPTH SET TO 3134.1

3164.37ft: PUMPED SWEEP

3225.00ft: IN TALLY: HOLE DEPTH SET TO 3225.7
3225.66ft: Connection at 3225.7
3225.66ft: MUD VIS 45.00
3225.66ft: BIT DEPTH CHANGED TO 3223.0 FEET

3225.66ft: MUD WEIGHT 9.25
3225.66ft: MUD PH 9.00
3225.66ft: SURVEY @ 3175 INC 12.1 AZM 141.1
3225.66ft: ZDiffPressure from SideKick sk-06-03-2616

3276.37ft: PUMPED SWEEP

3317.32ft: Connection at 3317.3
3317.32ft: BIT DEPTH CHANGED TO 3315.0 FEET
3319.09ft: IN TALLY: HOLE DEPTH SET TO 3317.3

3343.90ft: PUMPED SWEEP

3408.79ft: Connection at 3408.8
3408.79ft: BIT DEPTH CHANGED TO 3406.0 FEET
3409.42ft: IN TALLY: HOLE DEPTH SET TO 3408.8

3431.00ft: MUD VIS 45.00
3431.30ft: MUD WEIGHT 9.35
3432.25ft: MUD PH 9.00
3433.60ft: ZDiffPressure from SideKick sk-06-03-2616
3437.30ft: PUMPED SWEEP

01:39 3450

01:40 3460

01:42 3470

01:44 3480

01:45 3490

01:47 3500

01:53 3510

01:55 3520

01:57 3530

01:58 3540

02:00 3550

02:01 3560

02:03 3570

02:05 3580

02:06 3590

02:16 3600

02:21 3610

02:25 3620

02:26 3630

02:28 3640

02:30 3650

02:31 3660

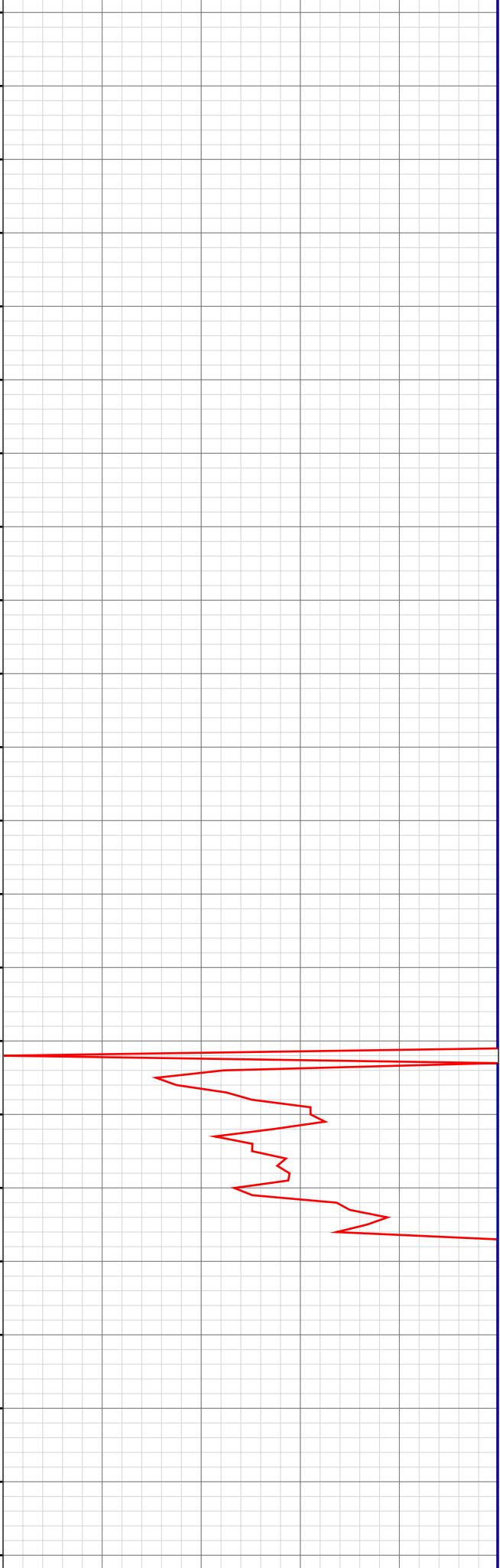
3500.49ft: Connection at 3500.5
3500.49ft: BIT DEPTH CHANGED TO 3498.0 FEET
3500.49ft: SURVEY @3450 INC 15.0 AZM 135.3
3500.49ft: ZDiffPressure from SideKick sk-06-03-2616
3501.35ft: IN TALLY: HOLE DEPTH SET TO 3500.5

3510.60ft: PUMPED SWEEP

3591.99ft: IN TALLY: HOLE DEPTH SET TO 3592.1
3592.06ft: Connection at 3592.1
3592.06ft: BIT DEPTH CHANGED TO 3590.0 FEET

3615.42ft: ZDiffPressure from SideKick sk-06-03-2616

3625.36ft: PUMPED SWEEP



02:33 3670

02:35 3680

02:41 3690

02:43 3700

02:45 3710

02:46 3720

02:48 3730

02:50 3740

02:51 3750

02:53 3760

02:54 3770

03:10 3780

03:11 3790

03:13 3800

03:14 3810

03:16 3820

03:18 3830

03:20 3840

03:21 3850

03:23 3860

03:24 3870

03:31 3880

3683.01ft: IN TALLY: HOLE DEPTH SET TO 3683.5
3683.50ft: Connection at 3683.5 SURVEY @3633 INC 16.0 AZM 134.2
3683.50ft: BIT DEPTH CHANGED TO 3681.0 FEET
3683.50ft: ZDiffPressure from SideKick sk-06-03-2616
3688.42ft: MUD VIS 44.00
3689.01ft: MUD WEIGHT 9.30
3689.44ft: MUD PH 9.10

3697.51ft: PUMPED SWEEP

3775.00ft: SPR # 1 PUMP 40/60 STKS 300/543 PSI @ 3771' W/9.3 PPG
MW
3775.00ft: SPR # 2 PUMP 40/60 STKS 335/557 PSI @ 3771' W/9.3 PPG
MW Connection at 3775.0
3775.00ft: BIT DEPTH CHANGED TO 3773.0 FEET SURVEY @3725 INC
15.6 AZM 134.1
3775.00ft: ZDiffPressure from SideKick sk-06-03-2616
3776.31ft: IN TALLY: HOLE DEPTH SET TO 3775.0

3866.08ft: Connection at 3866.1 SURVEY @3816 INC 14.9 AZM 133.9
3866.08ft: BIT DEPTH CHANGED TO 3864.0 FEET
3866.08ft: ZDiffPressure from SideKick sk-06-03-2616
3870.54ft: IN TALLY: HOLE DEPTH SET TO 3866.1

3875.56ft: PUMPED SWEEP

03:33 3890

03:34 3900

03:36 3910

03:37 3920

03:39 3930

03:41 3940

03:42 3950

03:44 3960

03:51 3970

03:53 3980

03:55 3990

03:56 4000

03:58 4010

04:00 4020

04:02 4030

04:04 4040

04:06 4050

04:13 4060

04:15 4070

04:17 4080

04:18 4090

04:20 4100

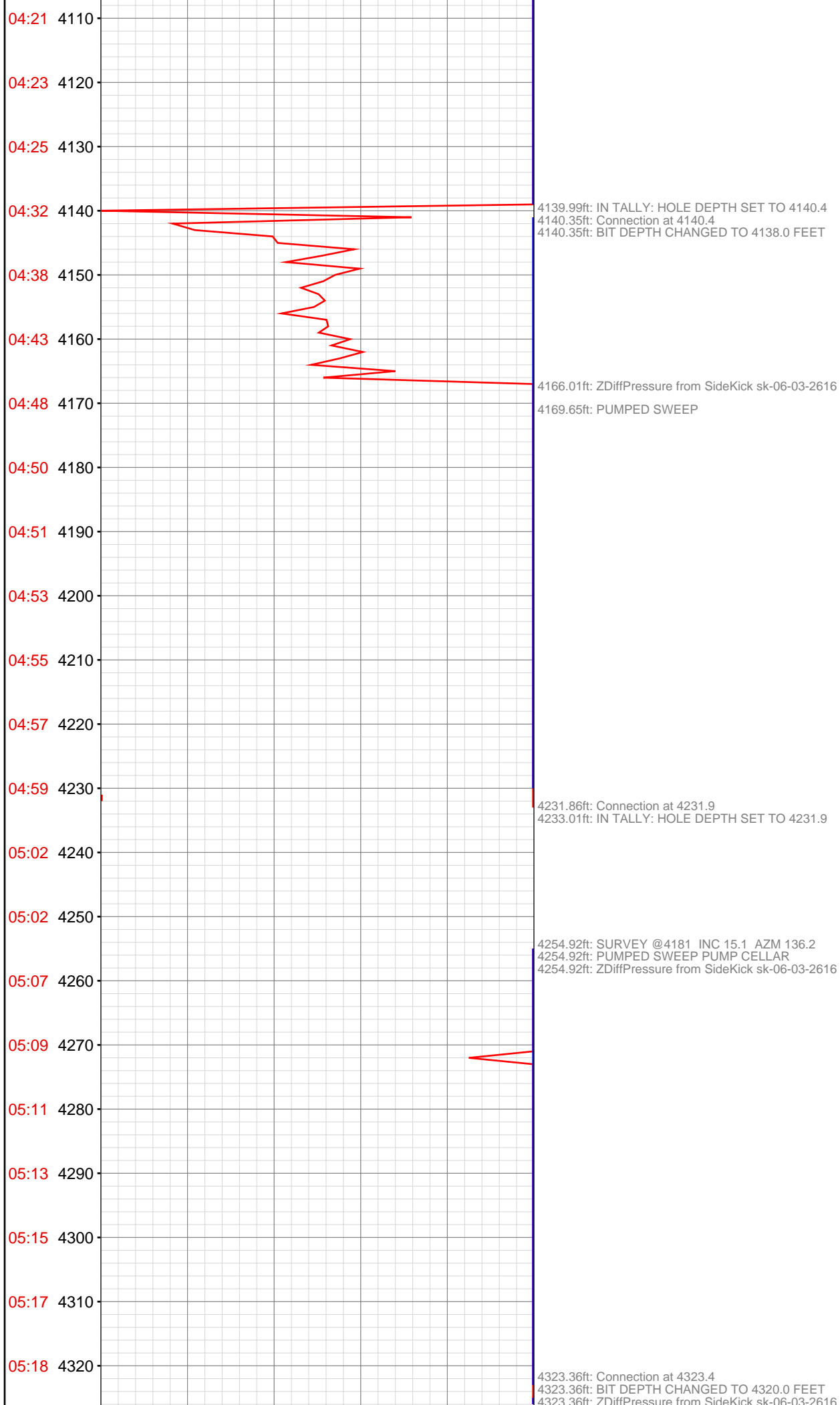
3957.45ft: Connection at 3957.5
3957.45ft: BIT DEPTH CHANGED TO 3955.0 FEET
3957.45ft: SURVEY @3907 INC 14.2 AZM 133.4
3957.45ft: ZDiffPressure from SideKick sk-06-03-2616
3960.01ft: IN TALLY: HOLE DEPTH SET TO 3957.5

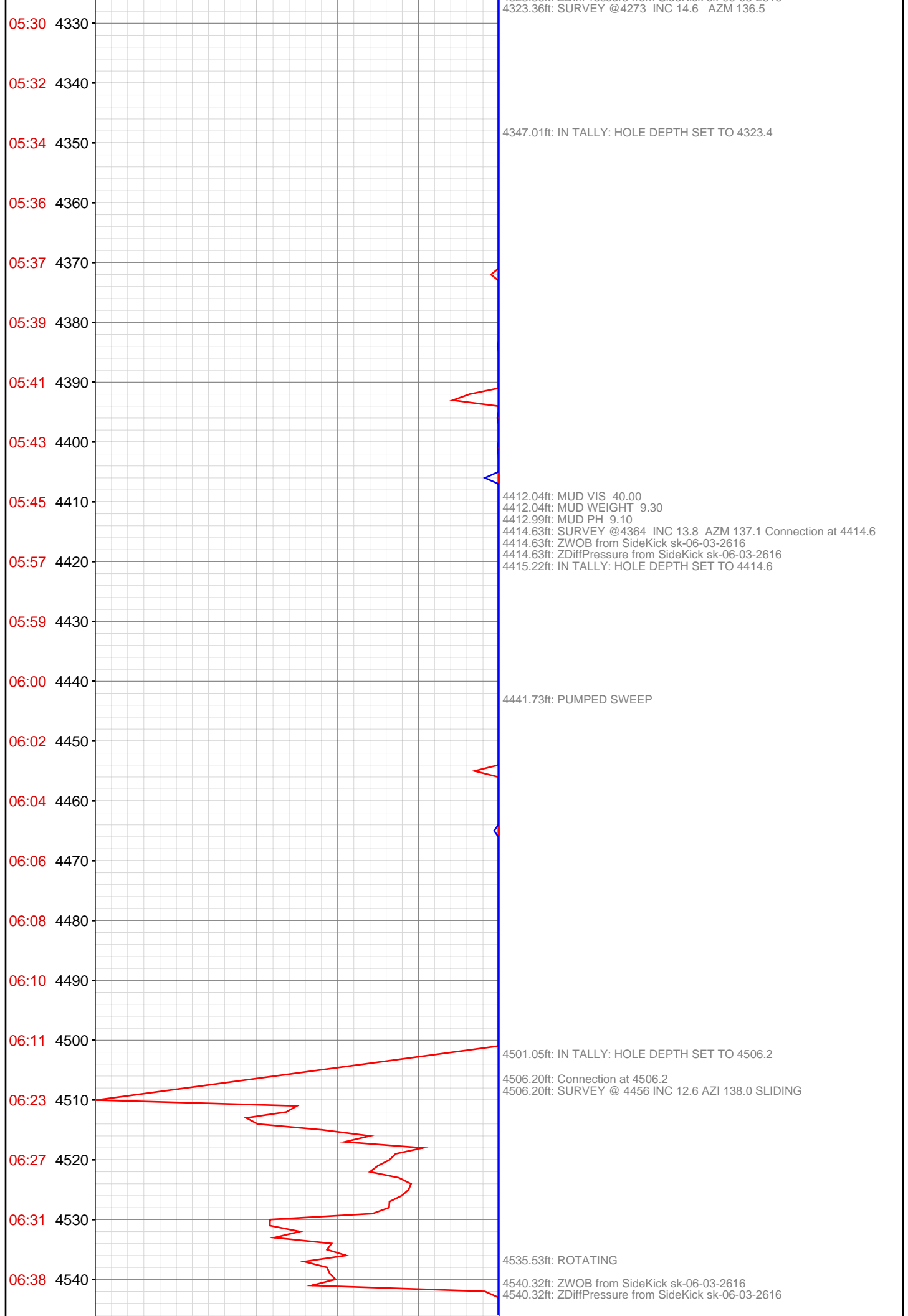
4018.41ft: PUMPED SWEEP

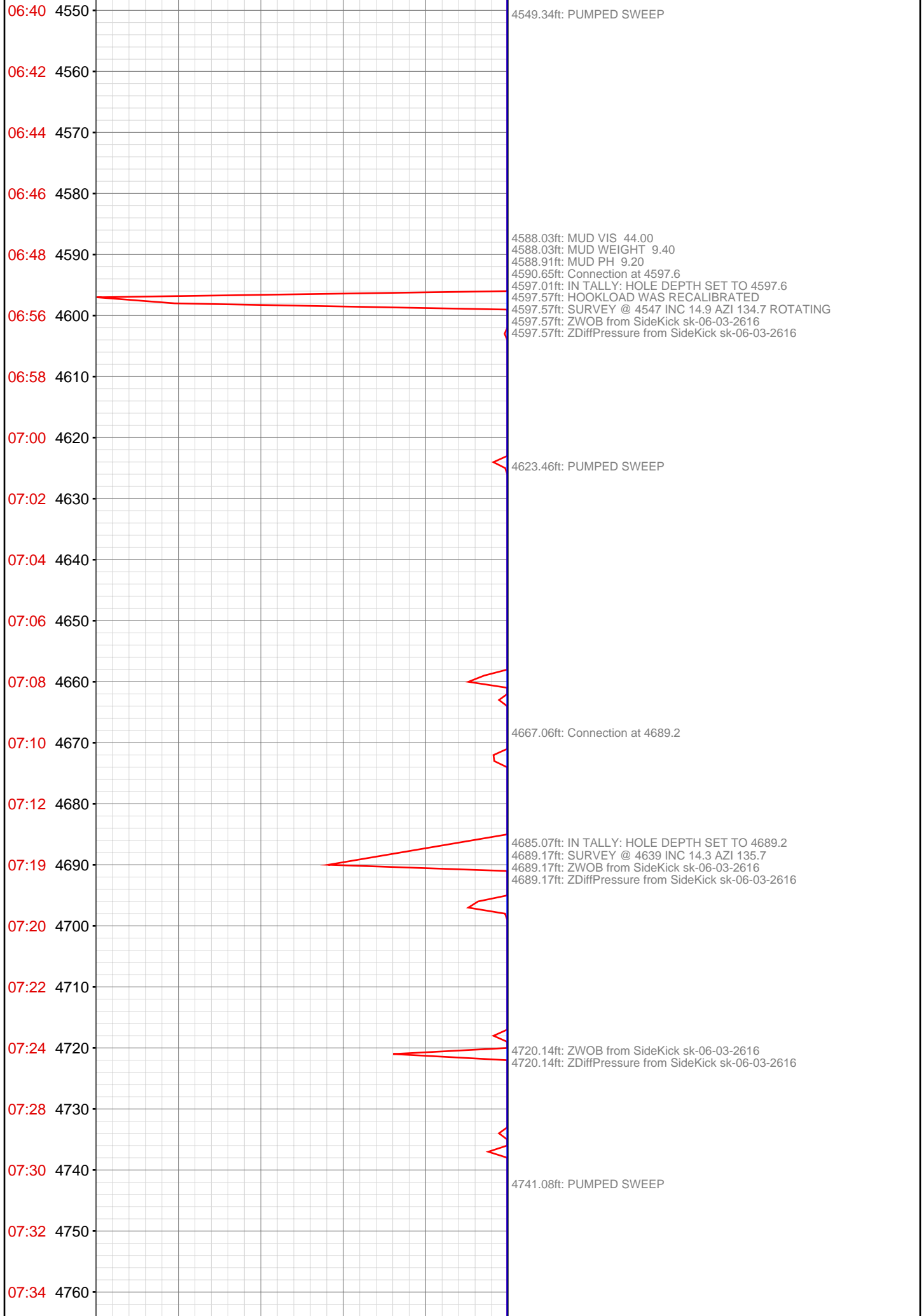
4048.95ft: Connection at 4048.9
4048.95ft: BIT DEPTH CHANGED TO 4047.0 FEET
4048.95ft: ZDiffPressure from SideKick sk-06-03-2616
4051.28ft: IN TALLY: HOLE DEPTH SET TO 4049.0
4053.08ft: SURVEY @3998 INC 13.2 AZM 134.4

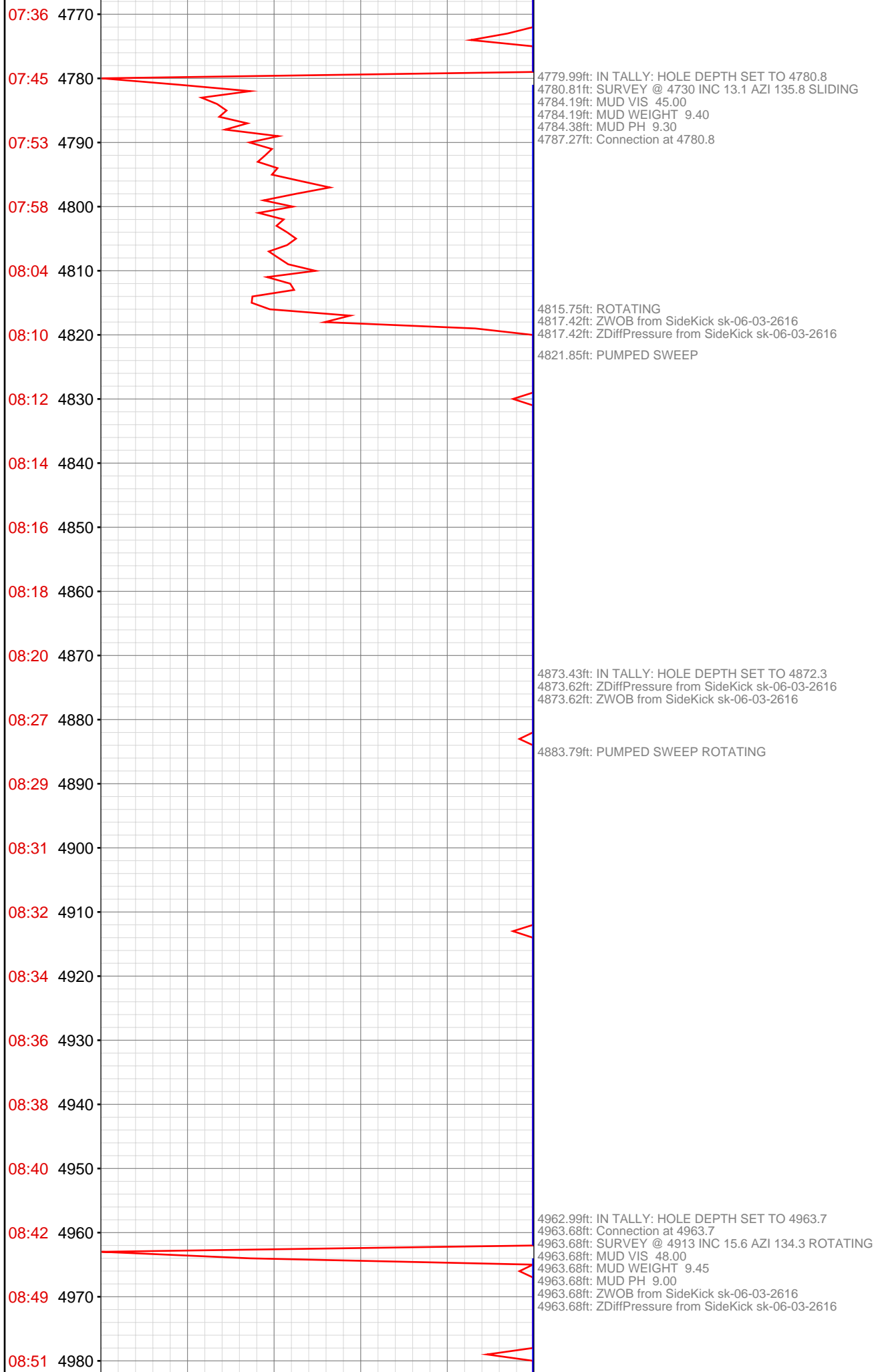
4084.15ft: MUD VIS 45.00
4084.15ft: MUD WEIGHT 9.30
4085.11ft: MUD PH 9.00

4091.63ft: PUMPED SWEEP









08:53 4990
08:55 5000
08:57 5010
08:59 5020
09:01 5030
09:03 5040
09:04 5050
09:12 5060
09:13 5070
09:15 5080
09:17 5090
09:19 5100
09:20 5110
09:22 5120
09:24 5130
09:27 5140
09:35 5150
09:37 5160
09:39 5170
09:41 5180
09:43 5190
09:44 5200

4993.54ft: PUMPED SWEEP

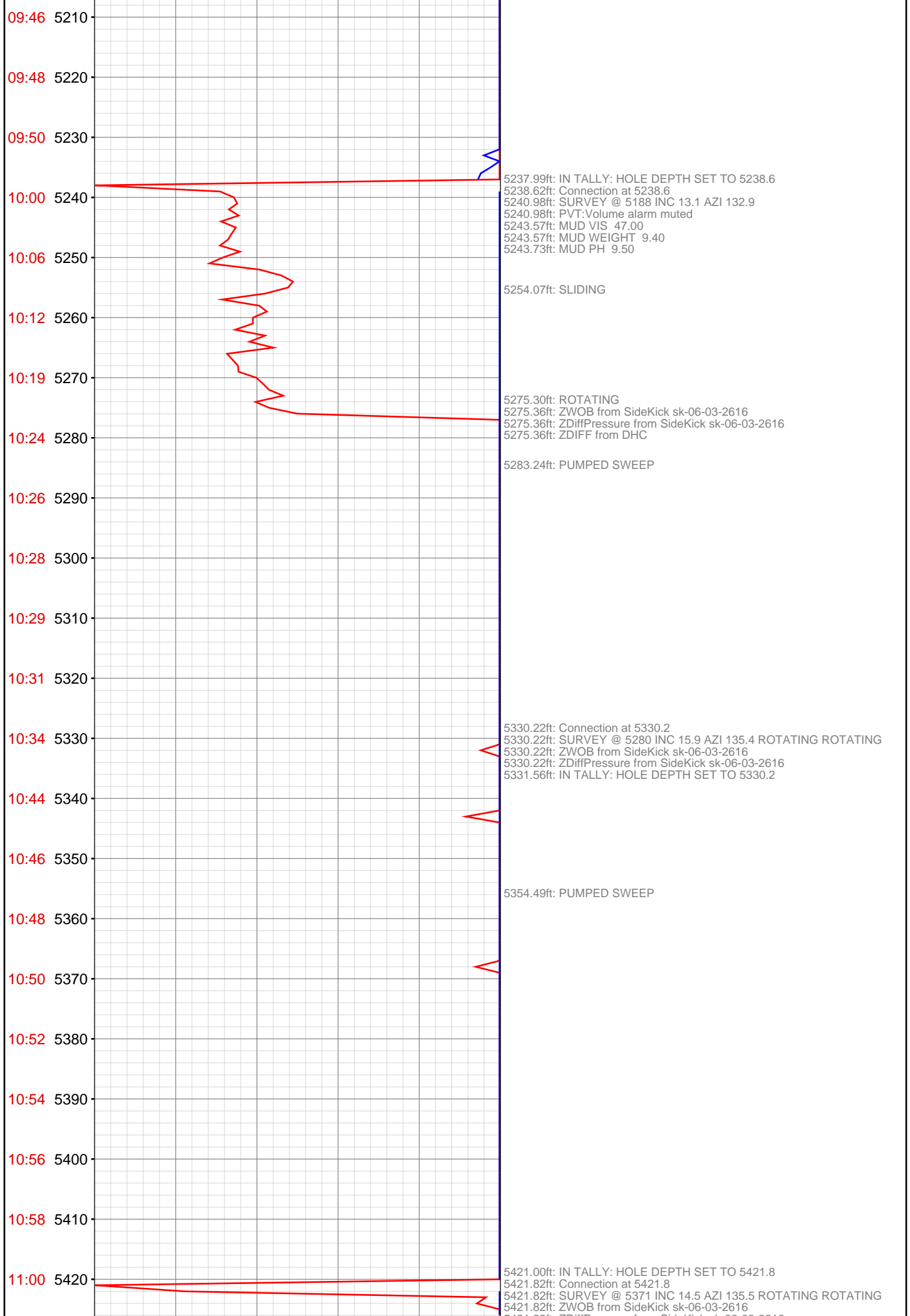


5051.51ft: Connection at 5055.2
5055.22ft: TRANSFERRED 60.00
5055.22ft: SURVEY @ 5005 INC 14.9 AZI 133.0
5055.22ft: ZWOB from SideKick sk-06-03-2616
5055.22ft: ZDiffPressure from SideKick sk-06-03-2616
5055.22ft: TRANSF COMPLETE
5056.86ft: IN TALLY: HOLE DEPTH SET TO 5055.2

5075.36ft: TRANSFER

5146.00ft: IN TALLY: HOLE DEPTH SET TO 5146.9
5146.85ft: Connection at 5146.9
5146.85ft: SURVEY @ 5096 INC 13.7 AZI 132.6
5146.85ft: ROTATING
5146.85ft: ZWOB from SideKick sk-06-03-2616
5146.85ft: ZDiffPressure from SideKick sk-06-03-2616
5154.99ft: PVT:Volume alarm reactivated: un-muted





11:08 5430

11:10 5440

11:12 5450

11:13 5460

11:15 5470

11:17 5480

11:19 5490

11:21 5500

11:23 5510

11:37 5520

11:42 5530

11:46 5540

11:50 5550

11:55 5560

11:57 5570

11:59 5580

12:01 5590

12:02 5600

12:10 5610

12:13 5620

12:15 5630

12:17 5640

5514.90ft: Connection at 5513.2
5514.90ft: SURVEY @ 5463 INC 13.3 AZI 137.3 Connection at 5513.2
5514.90ft: MUD VIS 49.00
5514.90ft: MUD WEIGHT 9.40
5514.90ft: MUD PH 8.90

5543.08ft: MUD VIS 56.00
5543.54ft: MUD WEIGHT 9.45
5543.54ft: MUD PH 9.00

5555.15ft: ROTATING
5555.45ft: ZWOB from SideKick sk-06-03-2616
5555.45ft: ZDiffPressure from SideKick sk-06-03-2616

5566.93ft: PUMPED SWEEP

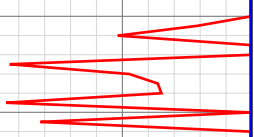
5604.72ft: Connection at 5604.7
5604.72ft: ZWOB from SideKick sk-06-03-2616
5604.72ft: ZDiffPressure from SideKick sk-06-03-2616
5608.01ft: IN TALLY: HOLE DEPTH SET TO 5604.7
5610.99ft: PUMPED SWEEP

5631.00ft: TRANSFERRED 60.00

12:19 5650
12:21 5660
12:23 5670
12:25 5680
12:27 5690
12:34 5700
12:36 5710
12:38 5720
12:40 5730
12:42 5740
12:44 5750
12:46 5760
12:49 5770
12:51 5780
12:59 5790
13:01 5800
13:03 5810
13:05 5820
13:07 5830
13:09 5840
13:11 5850
13:13 5860

5696.13ft: SURVEY @ 5646 INC 16.2 AZI 136.7
5696.13ft: ROTATING
5696.13ft: TRANSFERRED 80.00
5696.13ft: ZWOB from SideKick sk-06-03-2616
5696.13ft: ZDiffPressure from SideKick sk-06-03-2616
5696.13ft: Connection at 5787.8
5696.13ft: SURVEY @ 5737 INC 15.2 AZI 135.2
5696.13ft: ROTATING
5696.13ft: ZWOB from SideKick sk-06-03-2616
5696.13ft: ZDiffPressure from SideKick sk-06-03-2616
5696.49ft: IN TALLY: HOLE DEPTH SET TO 5787.8
5697.90ft: IN TALLY: HOLE DEPTH SET TO 5696.1

5788.39ft: IN TALLY: HOLE DEPTH SET TO 5696.1



13:14 5870
13:22 5880
13:27 5890
13:32 5900
13:37 5910
13:43 5920
13:44 5930
13:46 5940
13:48 5950
13:49 5960
13:51 5970
13:58 5980
14:00 5990
14:02 6000
14:04 6010
14:06 6020
14:10 6030
14:12 6040
14:14 6050
14:17 6060
14:25 6070
14:27 6080

5879.23ft: Connection at 5879.2
5879.23ft: SURVEY @ 5829 INC 13.8 AZI 136.5 SLIDING
5879.23ft: MUD VIS 46.00
5879.23ft: MUD WEIGHT 9.30
5879.23ft: MUD PH 9.50
5880.68ft: IN TALLY: HOLE DEPTH SET TO 5879.2

5905.18ft: SLIDING

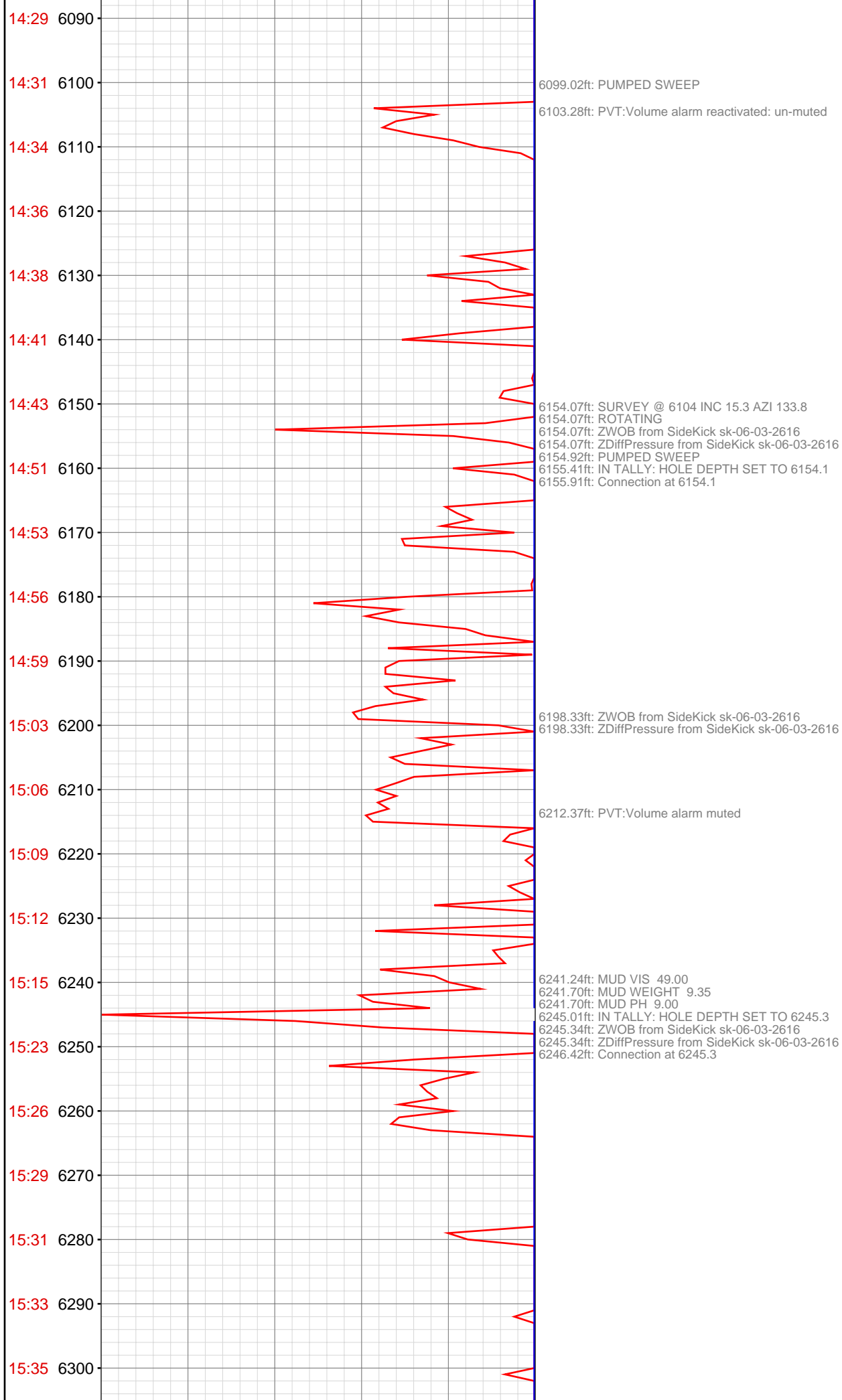
5917.09ft: ROTATING
5917.22ft: ZWOB from SideKick sk-06-03-2616
5917.22ft: ZDiffPressure from SideKick sk-06-03-2616

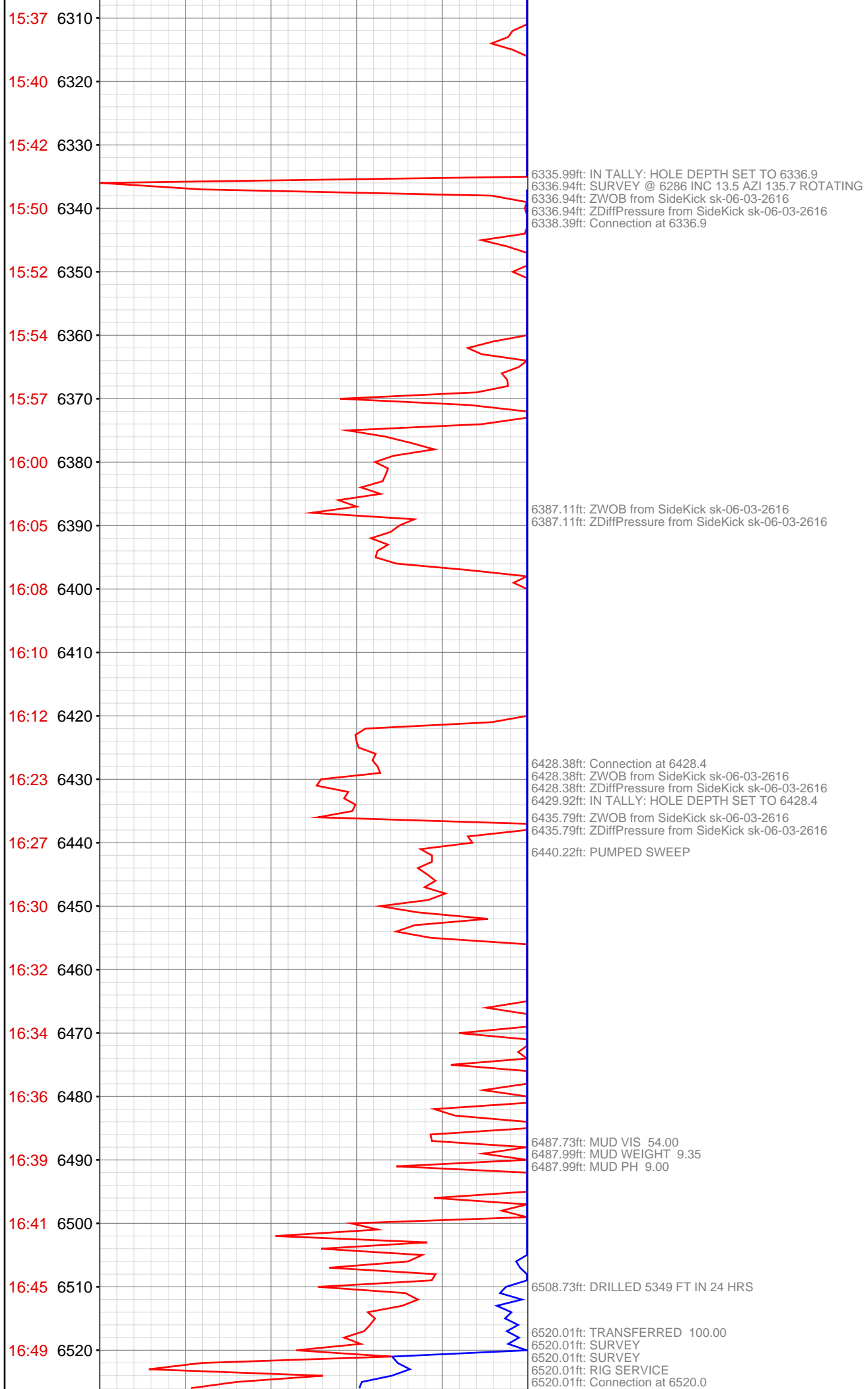
5970.01ft: IN TALLY: HOLE DEPTH SET TO 5971.0
5970.96ft: SURVEY 5921 INC 16.8 AZI 134.4 ROTATING
5970.96ft: Connection at 5970.9
5970.96ft: ZWOB from SideKick sk-06-03-2616
5970.96ft: ZDiffPressure from SideKick sk-06-03-2616

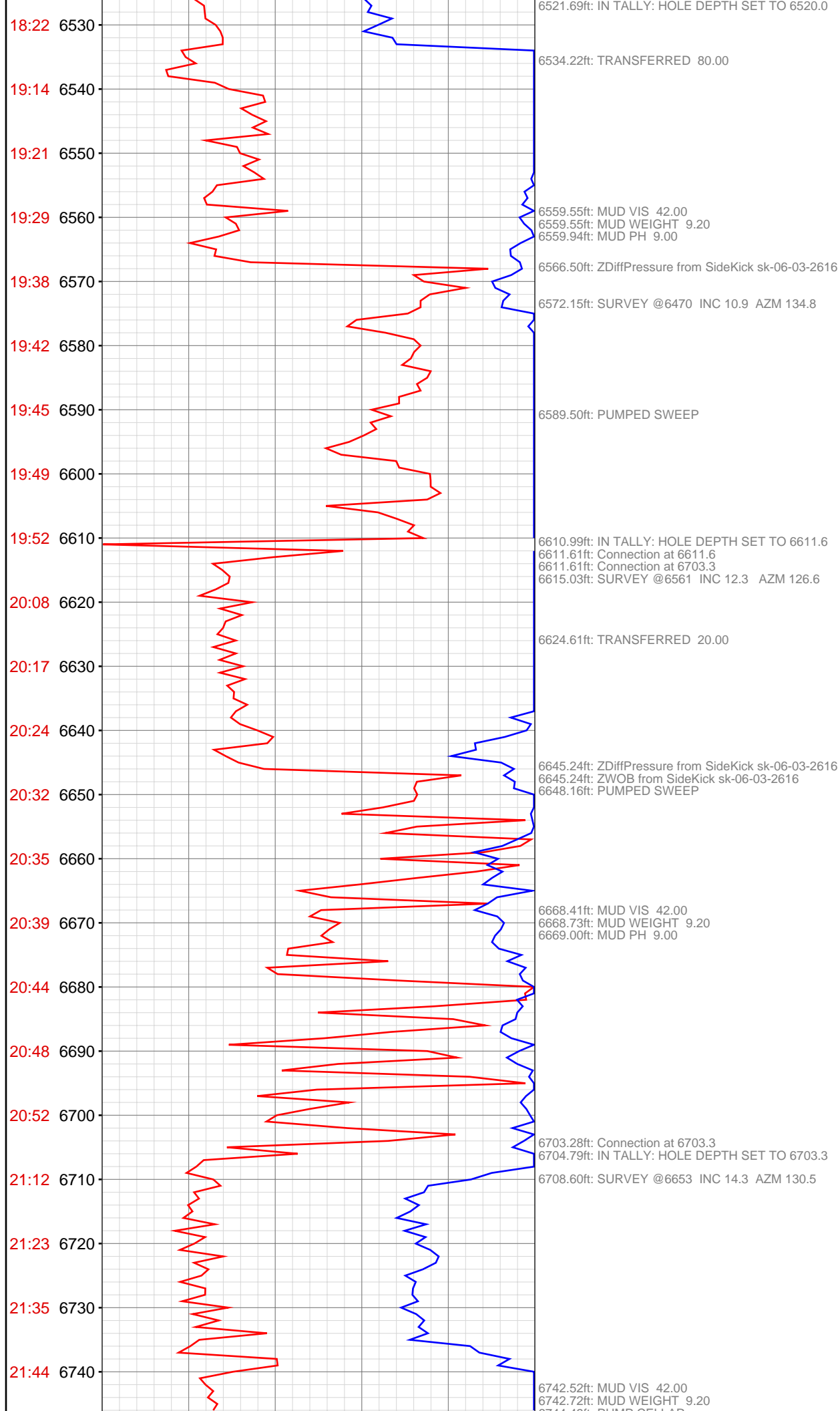
5982.22ft: PUMP CELLAR

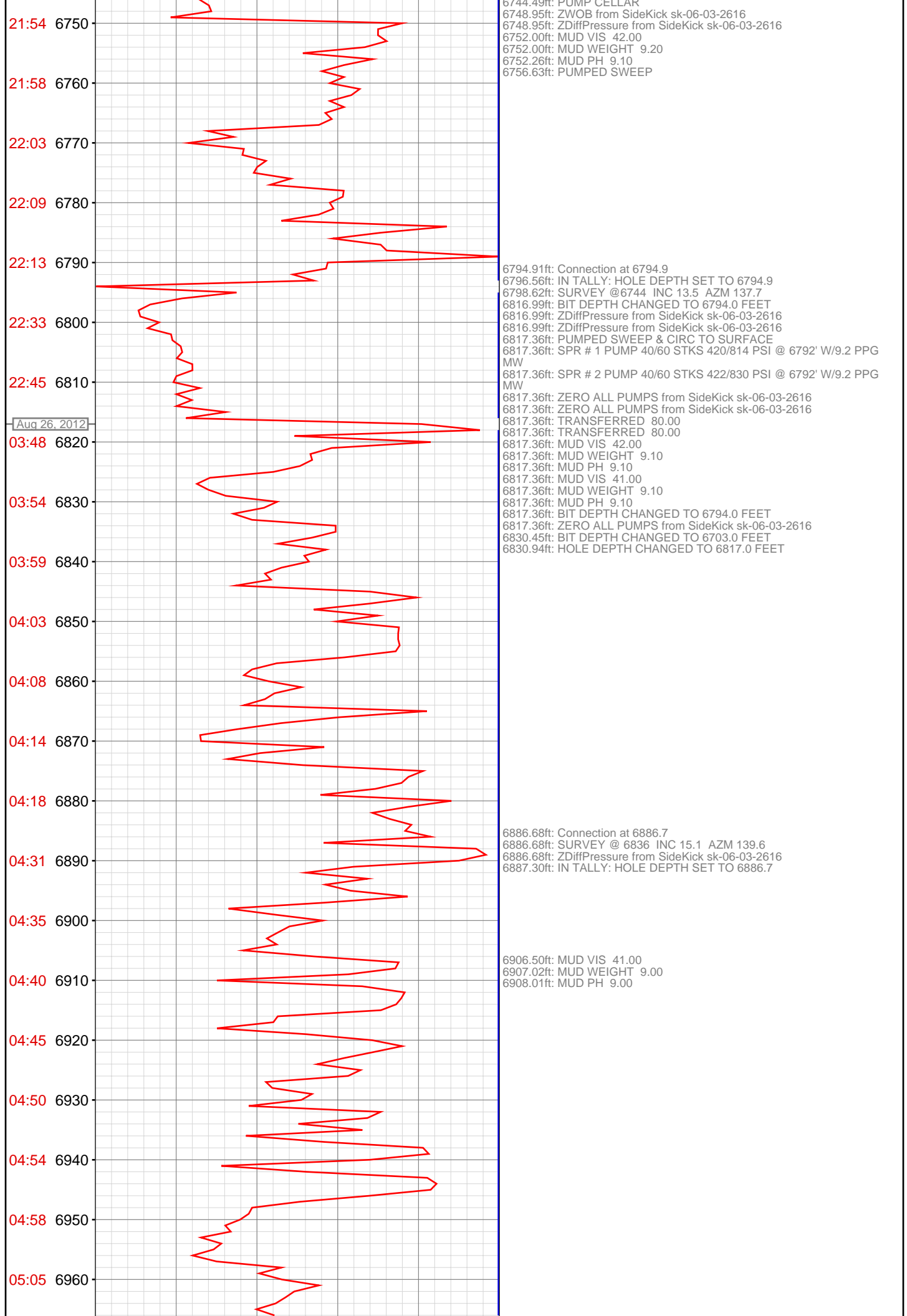
6028.12ft: ZWOB from SideKick sk-06-03-2616
6028.12ft: ZDiffPressure from SideKick sk-06-03-2616

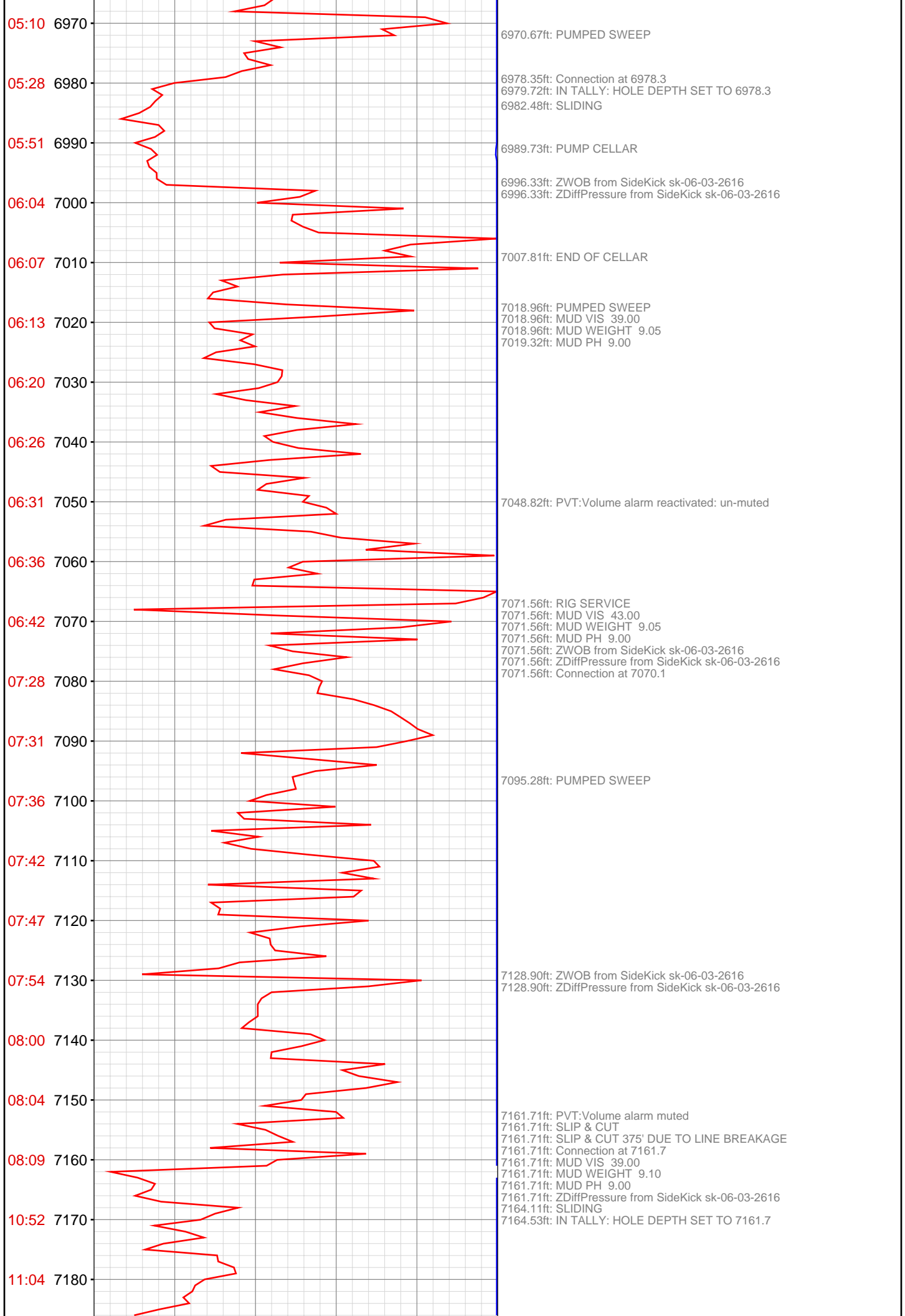
6063.62ft: IN TALLY: HOLE DEPTH SET TO 6062.5
6063.94ft: SURVEY @ 6012 INC 16.4 AZI 134.6 ROTATING
6063.94ft: Connection at 6062.5

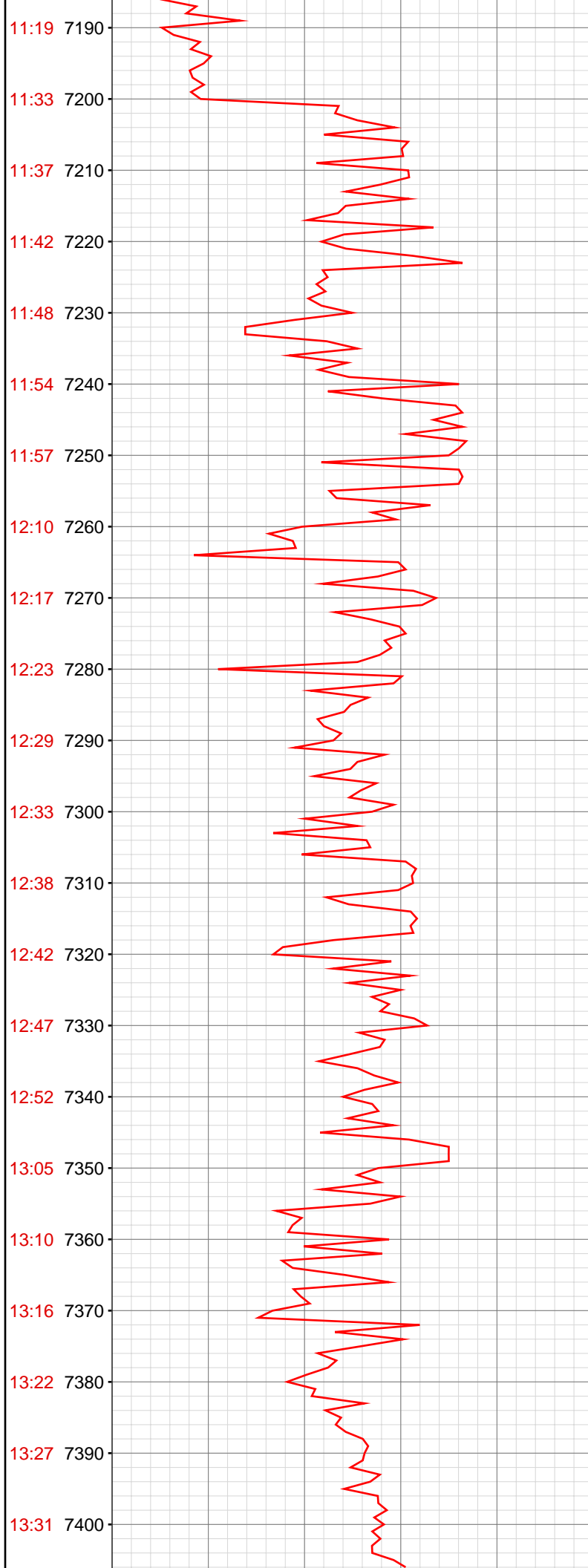












7198.95ft: ROTATING
7199.28ft: ZWOB from SideKick sk-06-03-2616
7199.28ft: ZDiffPressure from SideKick sk-06-03-2616

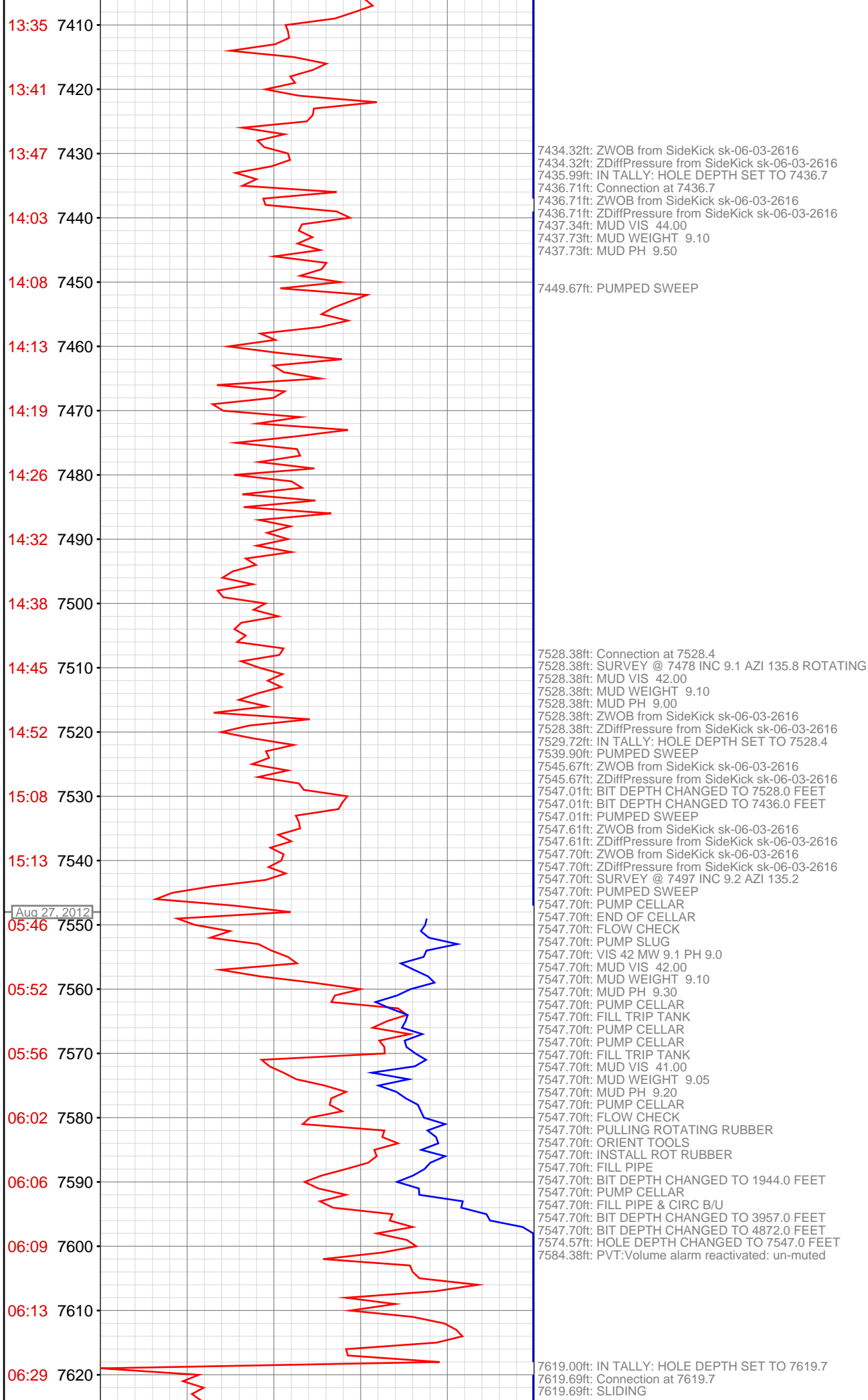
7215.49ft: MUD VIS 39.00
7215.81ft: MUD WEIGHT 9.05
7216.01ft: MUD PH 9.30
7216.86ft: PUMPED SWEEP

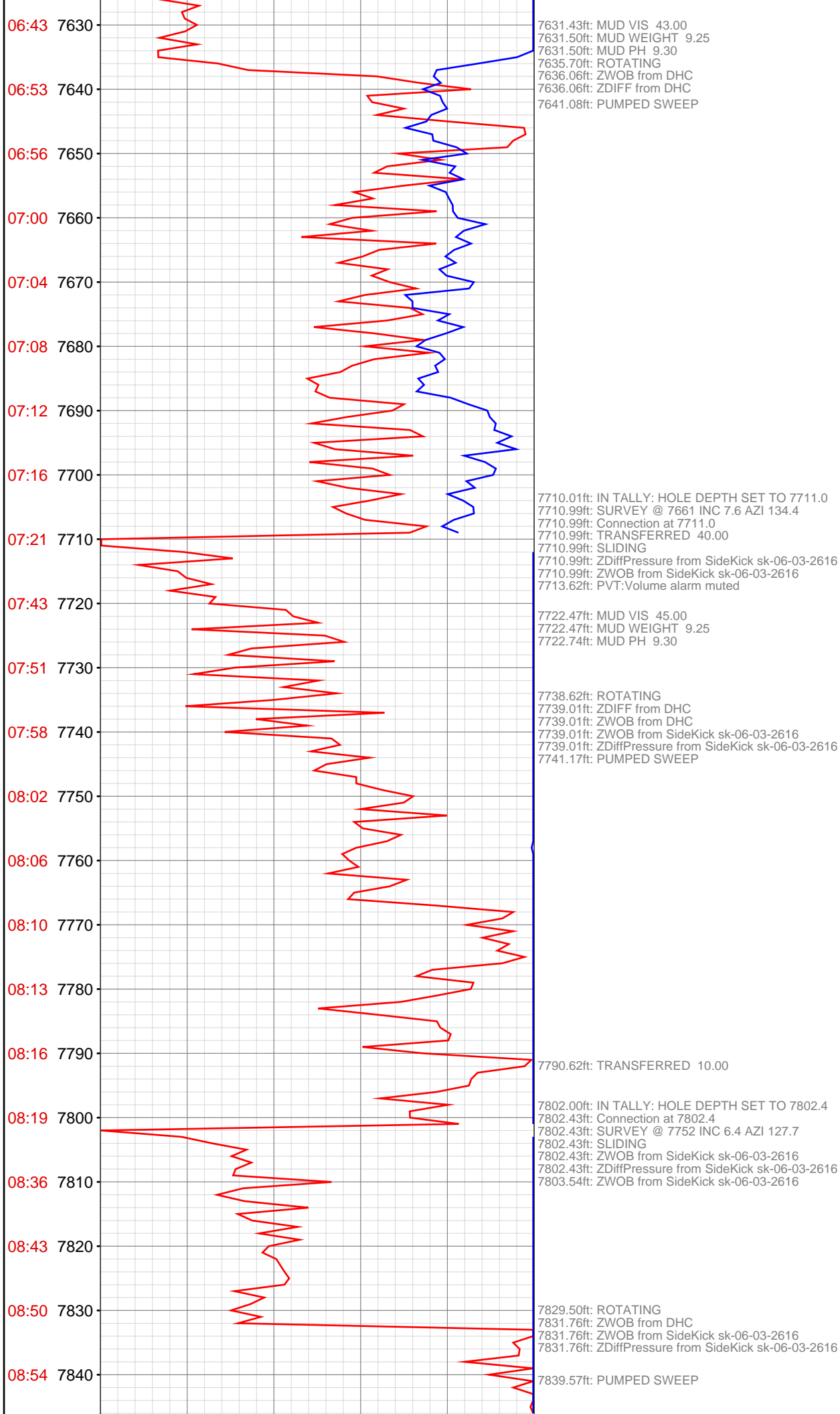
7253.41ft: Connection at 7253.4
7253.41ft: SURVEY @ 7203 INC 11.6 AZI 136.8
7253.41ft: ROTATING
7253.41ft: ZWOB from SideKick sk-06-03-2616
7253.41ft: ZDiffPressure from SideKick sk-06-03-2616
7254.30ft: IN TALLY: HOLE DEPTH SET TO 7253.4

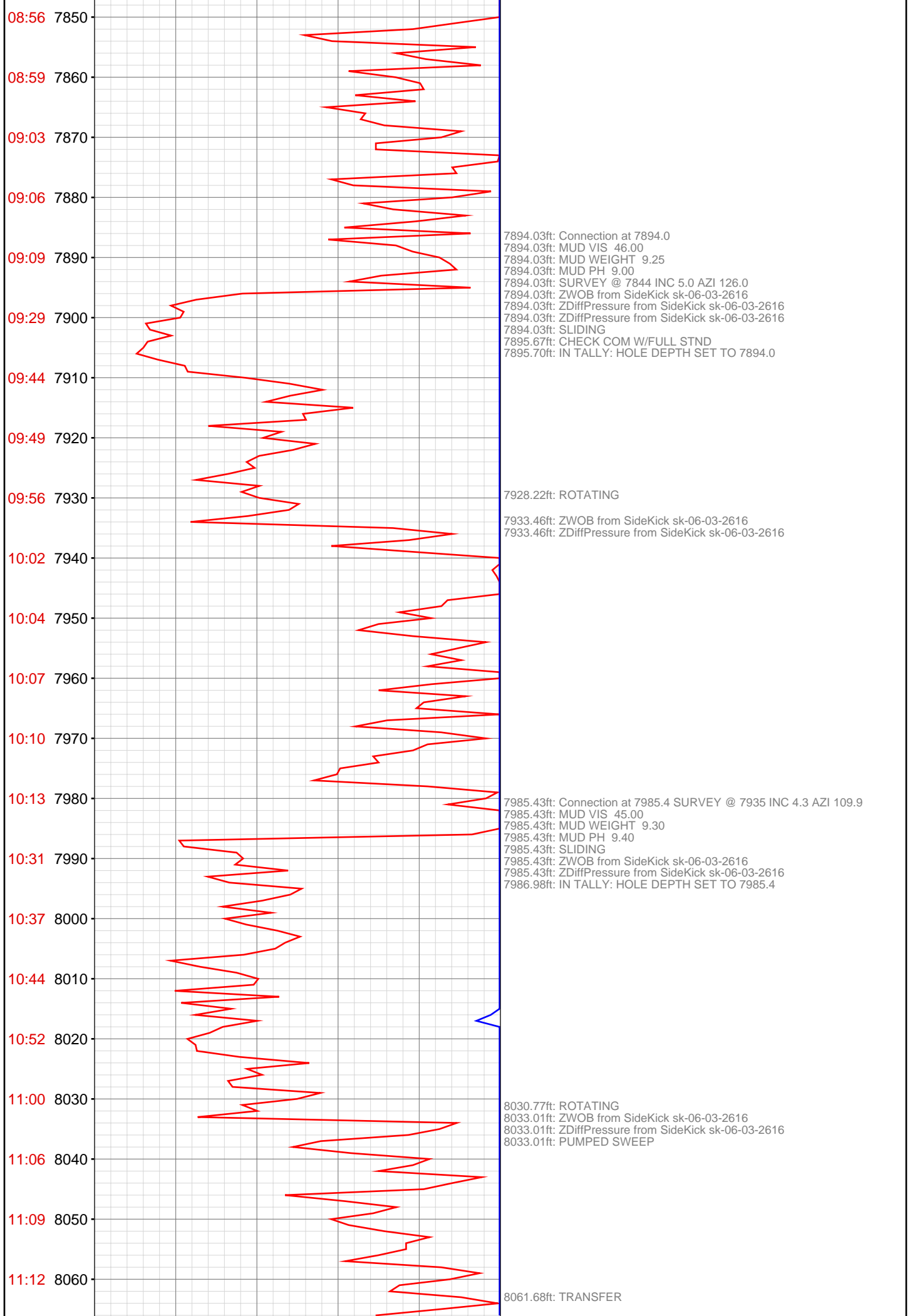
7263.48ft: ZWOB from SideKick sk-06-03-2616
7263.48ft: ZDiffPressure from SideKick sk-06-03-2616

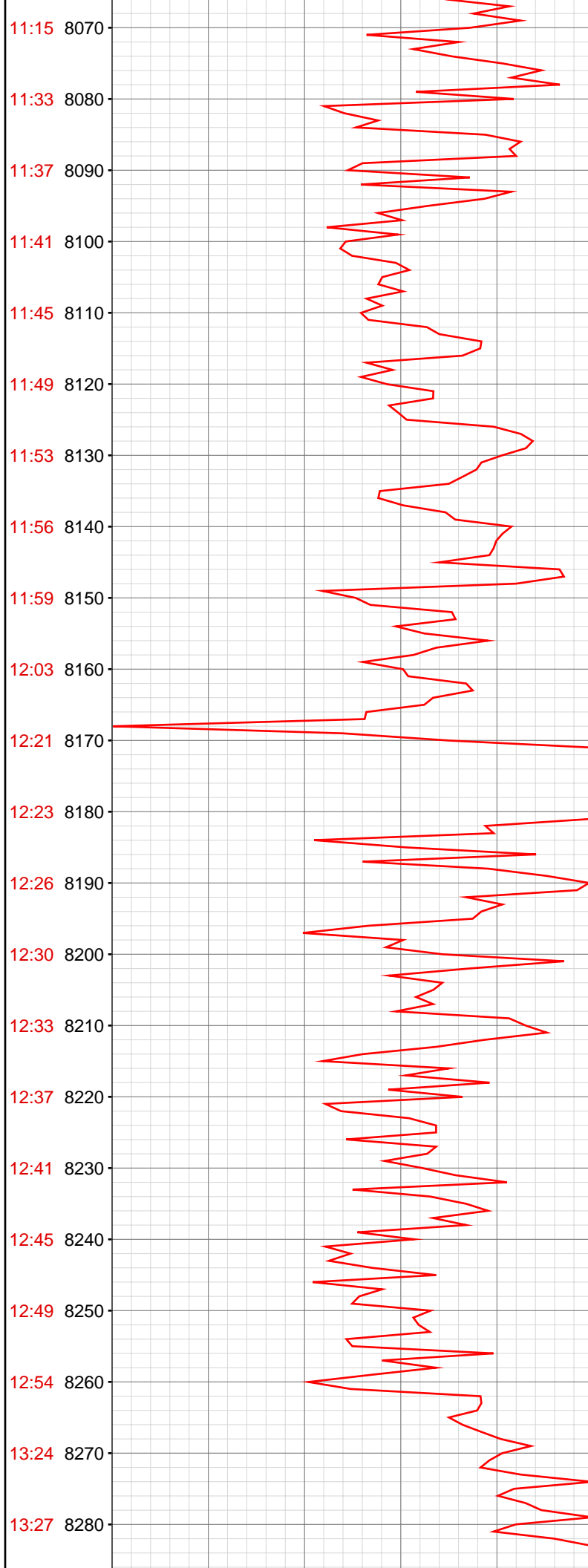
7279.82ft: ZWOB from SideKick sk-06-03-2616
7279.82ft: ZDiffPressure from SideKick sk-06-03-2616

7345.11ft: Connection at 7345.1
7345.11ft: SURVEY @ 7295 INC 11.0 AZI 139.6 ROTATING
7345.11ft: MUD VIS 43.00
7345.11ft: MUD WEIGHT 9.10
7345.11ft: MUD PH 9.00
7345.11ft: ZWOB from SideKick sk-06-03-2616
7345.11ft: ZDiffPressure from SideKick sk-06-03-2616
7346.23ft: IN TALLY: HOLE DEPTH SET TO 7345.1
7355.58ft: PUMPED SWEEP







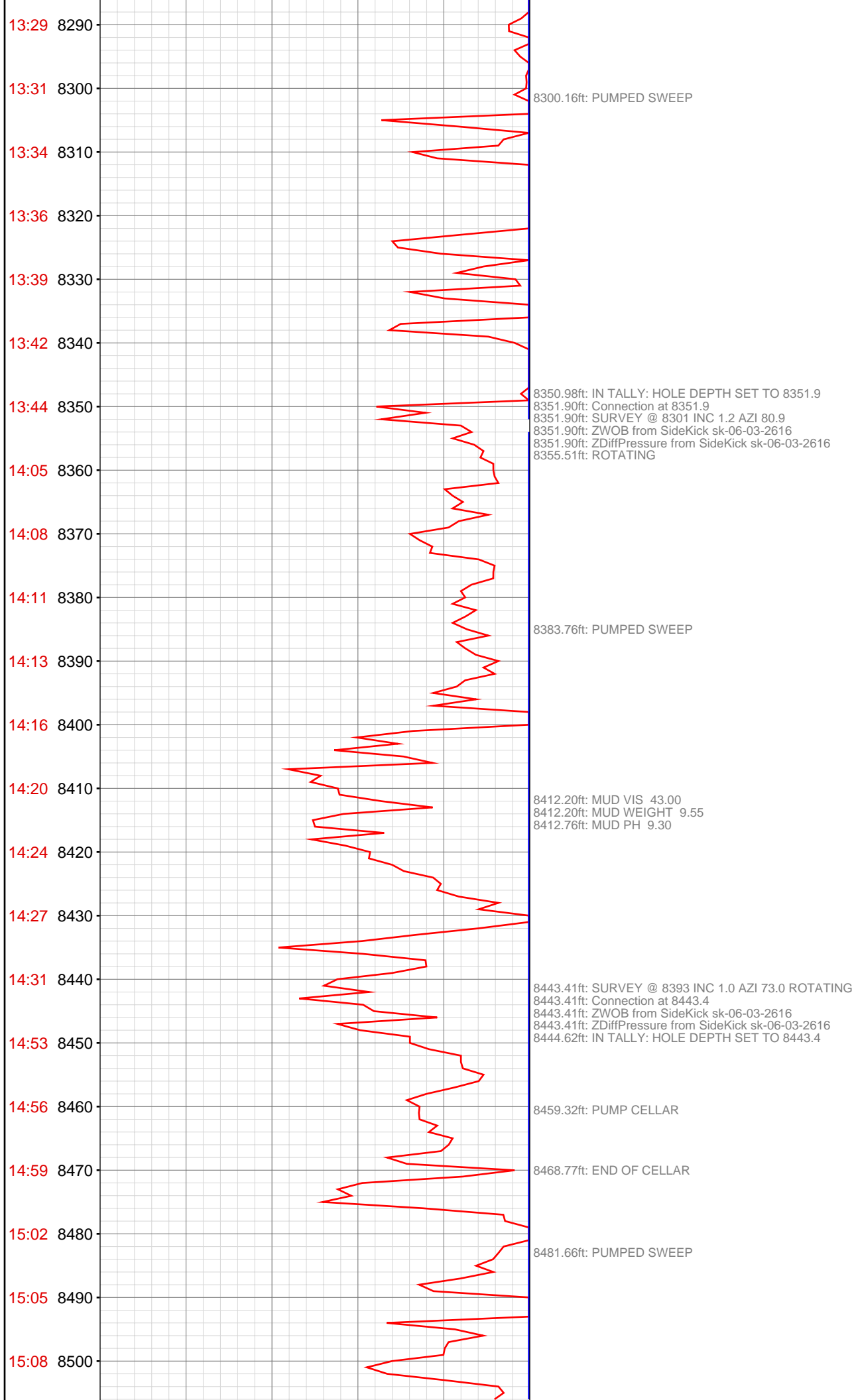


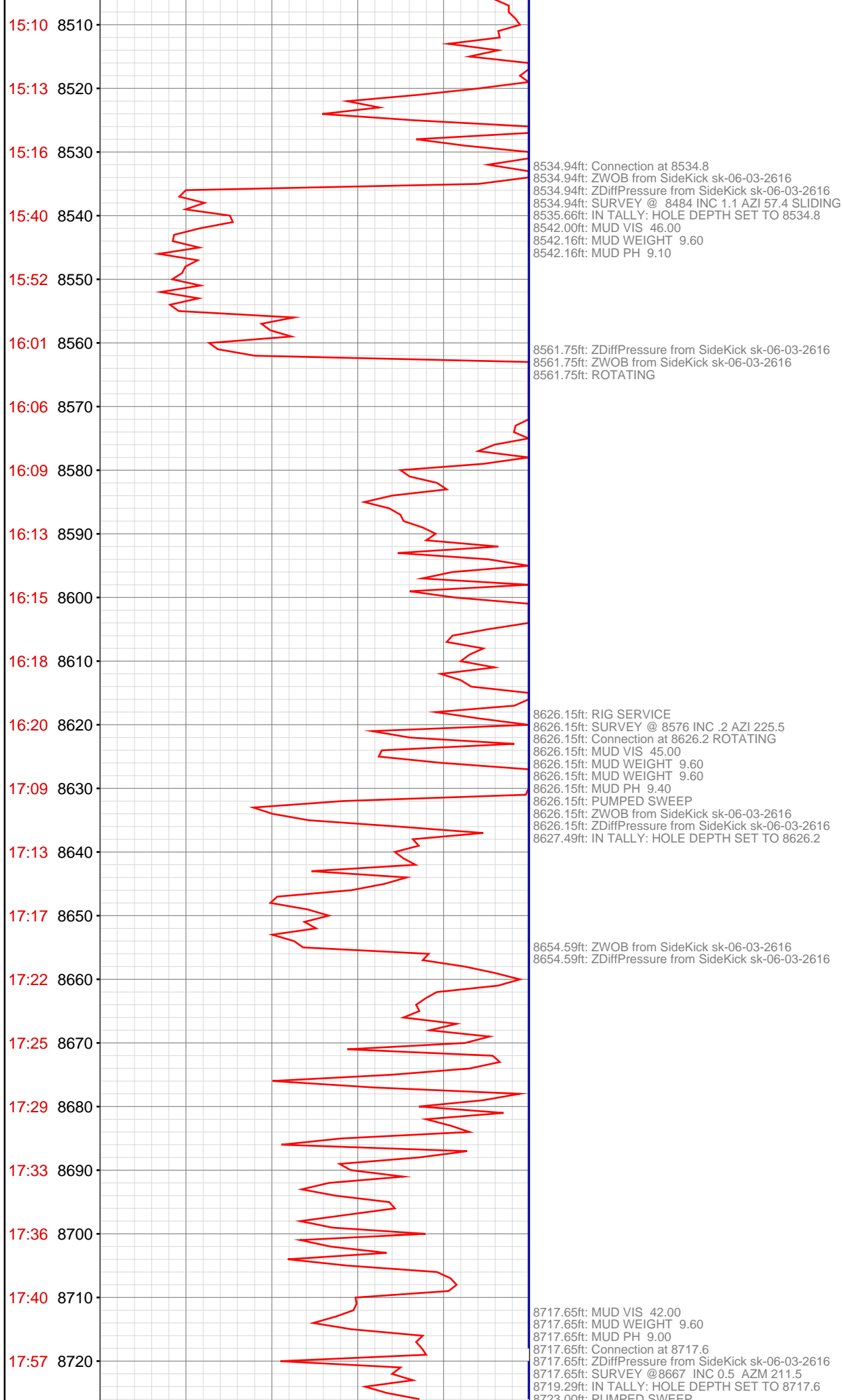
8077.10ft: Connection at 8077.1
8077.10ft: SURVEY @ 8027 INC 2.3 AZI 83.5
8077.10ft: ROTATING
8077.10ft: ZWOB from SideKick sk-06-03-2616
8077.10ft: ZDiffPressure from SideKick sk-06-03-2616
8078.28ft: IN TALLY: HOLE DEPTH SET TO 8077.1

8130.61ft: TRANSFER 70 BBLS
8133.99ft: MUD VIS 45.00
8134.09ft: MUD WEIGHT 9.40
8134.09ft: MUD PH 9.30

8168.01ft: IN TALLY: HOLE DEPTH SET TO 8168.8
8168.77ft: Connection at 8168.8
8168.77ft: SURVEY @ 8118 INC 2.1 AZI 78.4 ROTATING
8168.77ft: ZWOB from SideKick sk-06-03-2616
8168.77ft: ZDiffPressure from SideKick sk-06-03-2616

8260.43ft: PVT:Volume alarm reactivated: un-muted
8260.43ft: Connection at 8260.3
8260.43ft: MUD VIS 44.00
8260.43ft: MUD WEIGHT 9.45
8260.43ft: MUD PH 9.00
8260.43ft: SURVEY @ 8210 INC 1.8 AZI 79.2
8260.43ft: ZWOB from SideKick sk-06-03-2616
8260.43ft: ZDiffPressure from SideKick sk-06-03-2616
8261.84ft: IN TALLY: HOLE DEPTH SET TO 8260.3
8262.34ft: ROTATING





8723.60ft: PUMPED SWEEP

8809.22ft: Connection at 8809.2
8809.22ft: SURVEY @8759 INC 0.9 AZM 236.1
8809.22ft: ZDiffPressure from SideKick sk-06-03-2616
8810.53ft: IN TALLY: HOLE DEPTH SET TO 8809.2

8860.01ft: MUD VIS 43.00
8860.24ft: MUD WEIGHT 9.65
8860.24ft: MUD PH 9.00

8900.00ft: IN TALLY: HOLE DEPTH SET TO 8900.7
8900.69ft: Connection at 8900.7
8900.69ft: SURVEY @8850 INC 0.9 AZM 261.3
8900.69ft: ZDiffPressure from SideKick sk-06-03-2616

8924.54ft: PUMPED SWEEP

