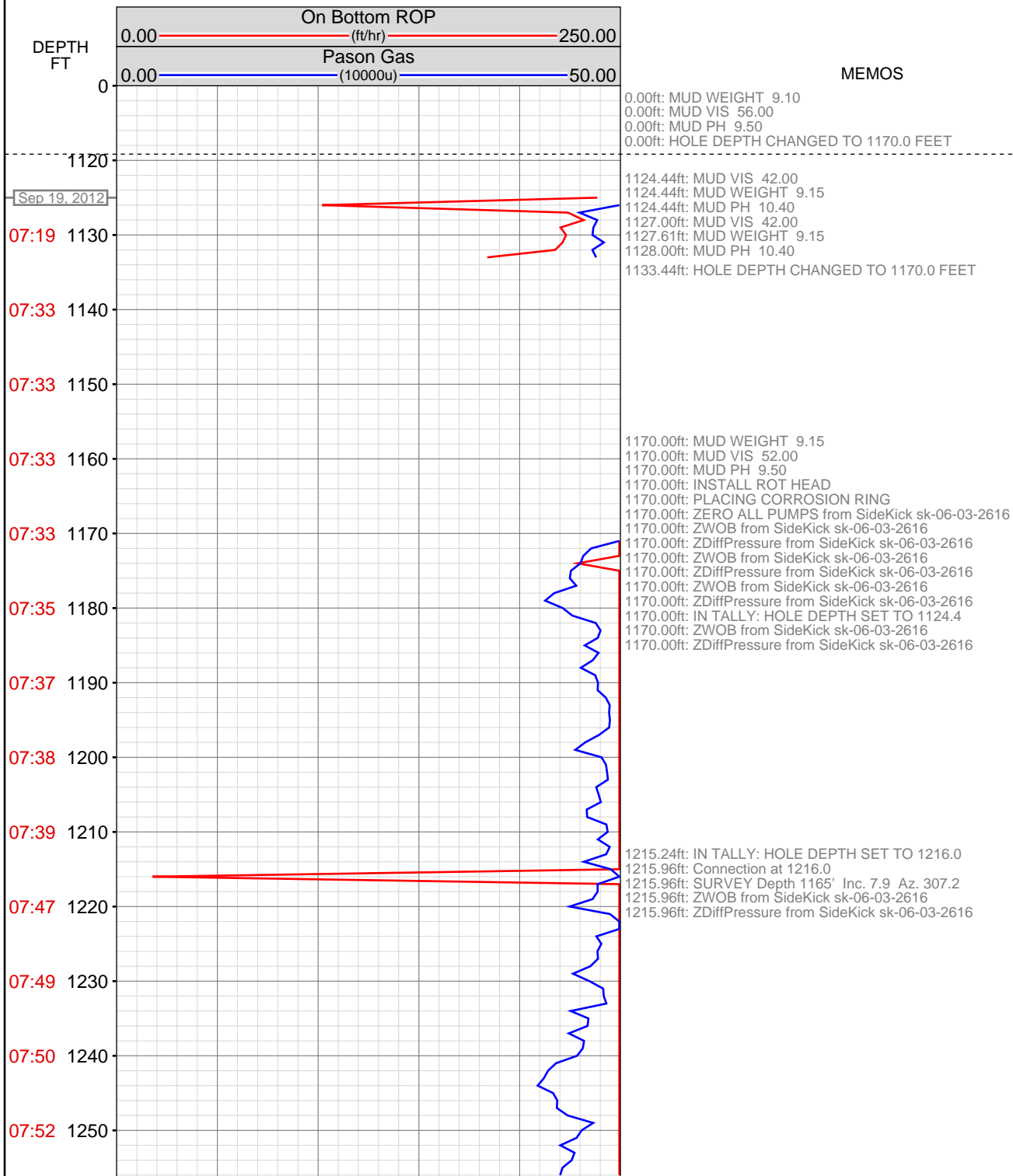
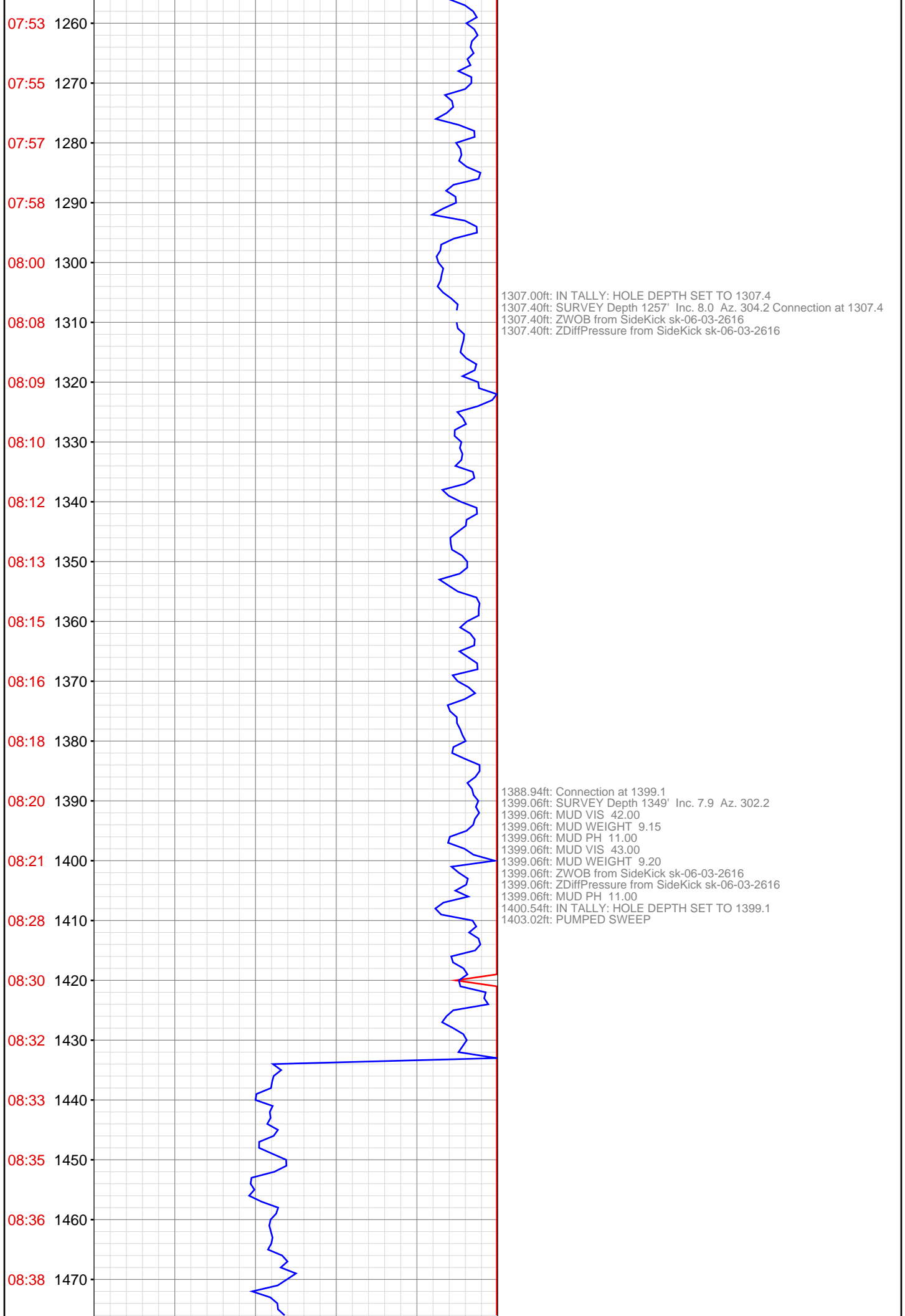
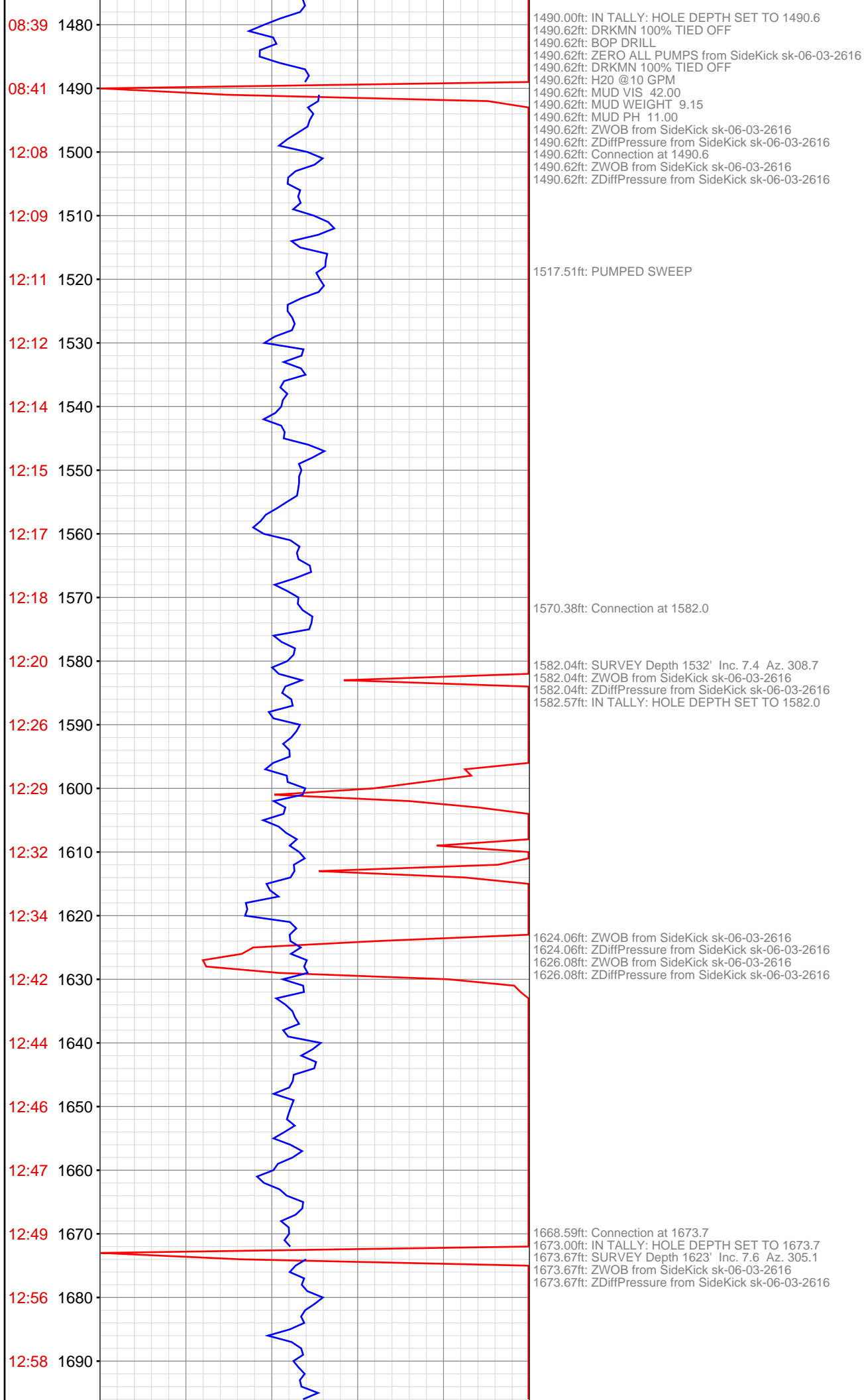


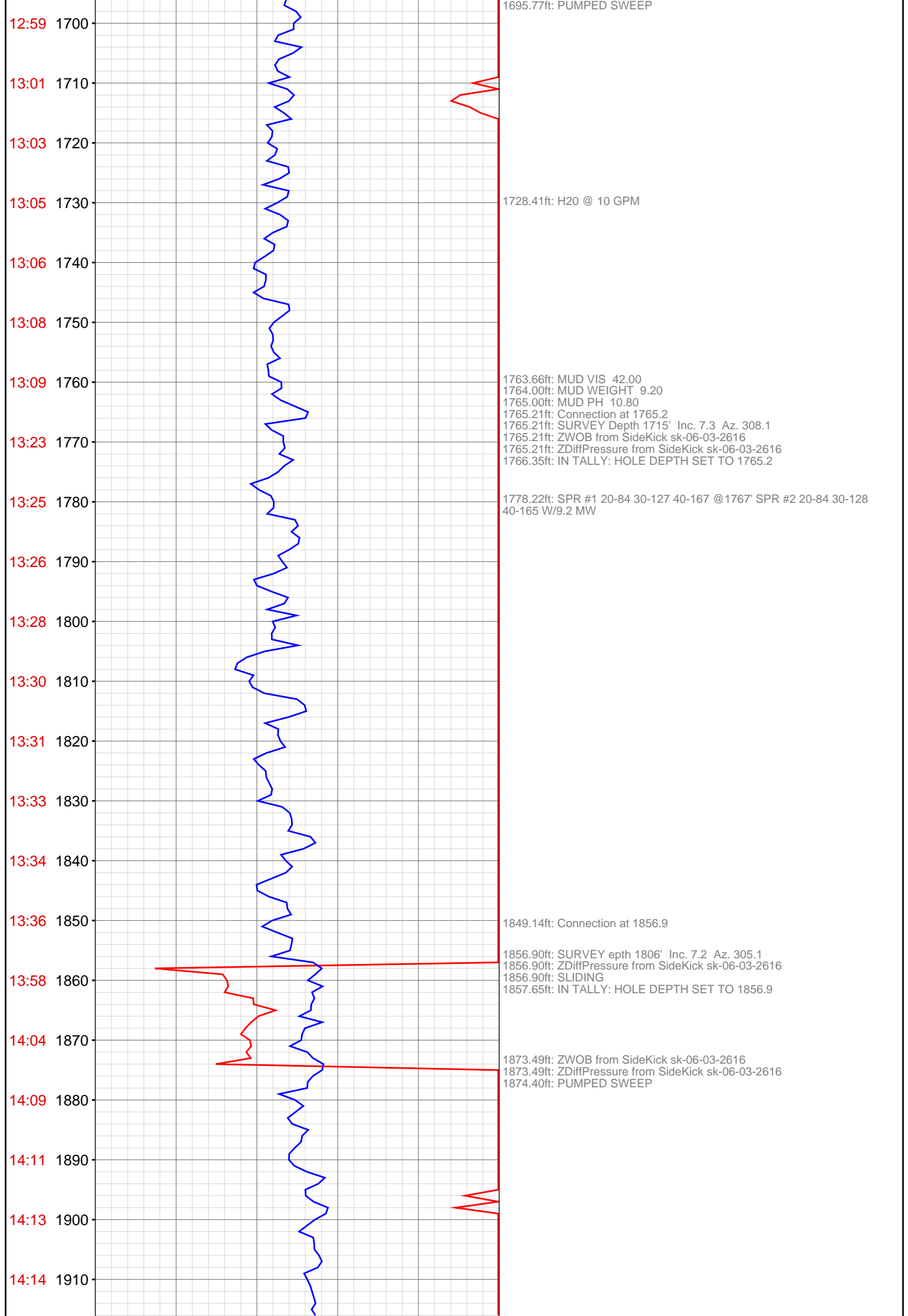
**OPERATOR:** EnCana Oil & Gas (USA), Inc.  
**WELL:** MCU 16-13A  
**FIELD:**  
**LOCATION:** SE/SW SEC.16 TS7S RG 93W  
**COUNTRY:** USA  
**RIG:** Pat-UTI 308

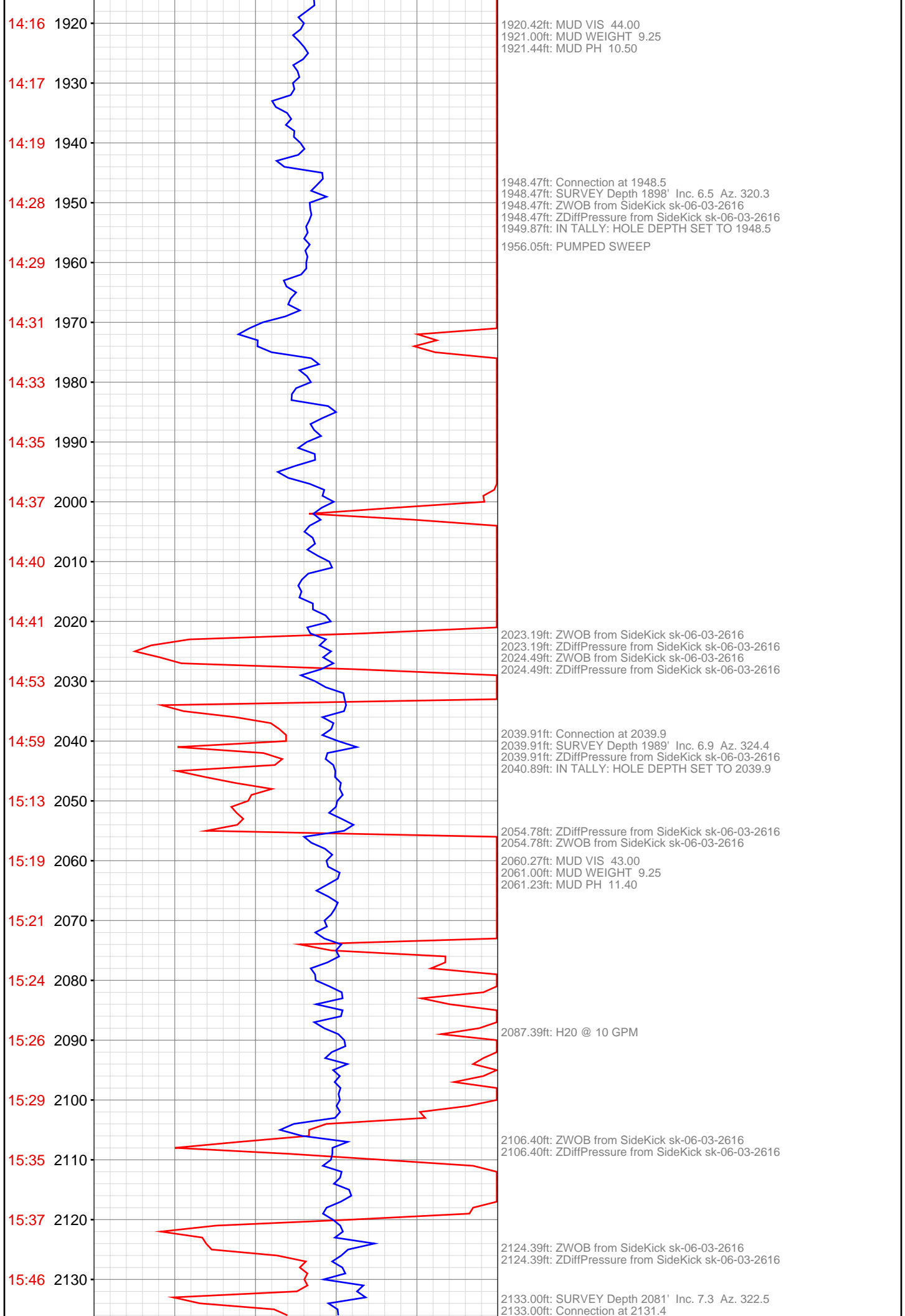
**CONTRACTOR:** Patterson-UTI Drilling Company  
**UNIQUE WELL ID:** 05-045-20606-00  
**SPUD DATE:** Sep 19, 2012 08:00  
**RELEASE DATE:** Sep 26, 2012 03:00

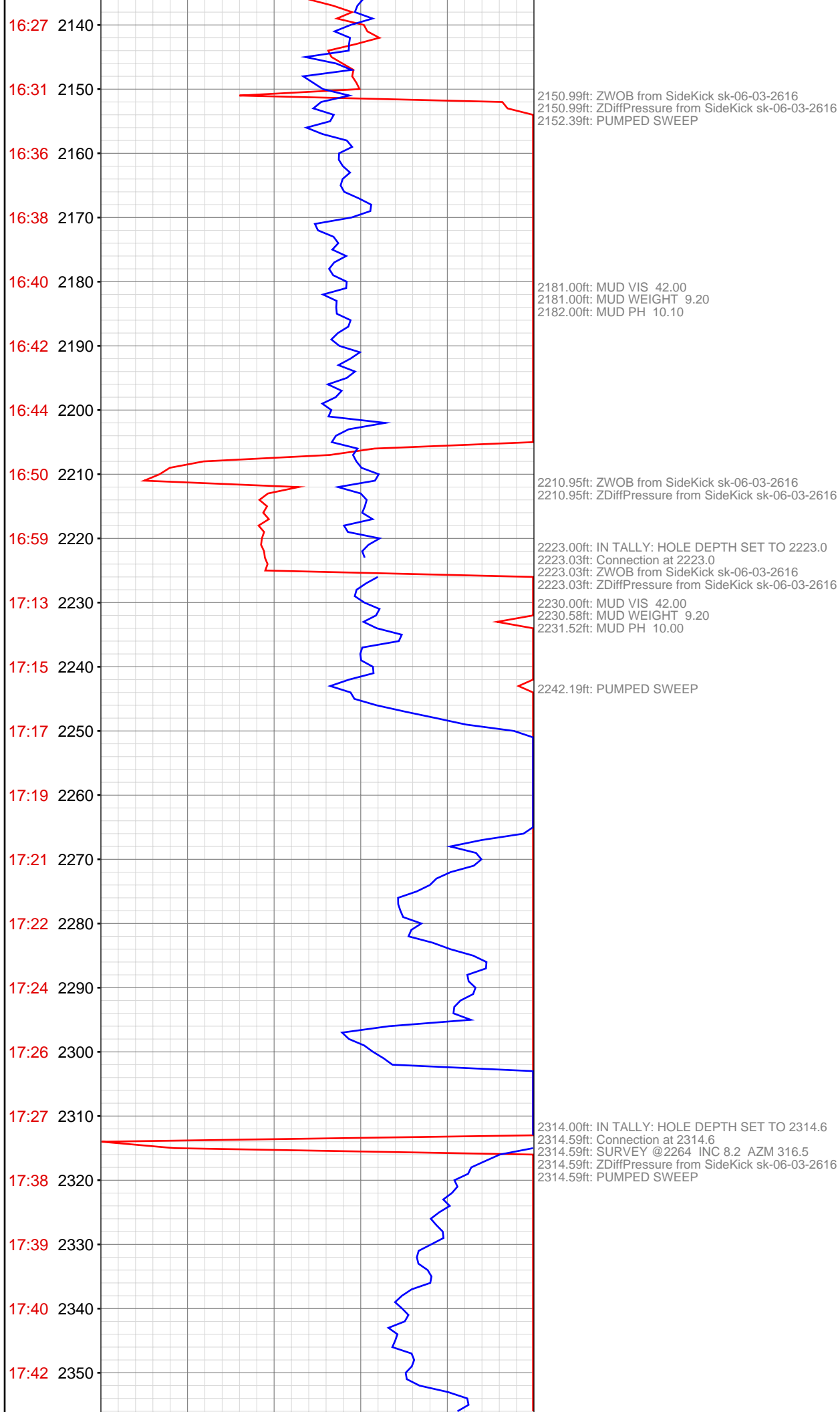


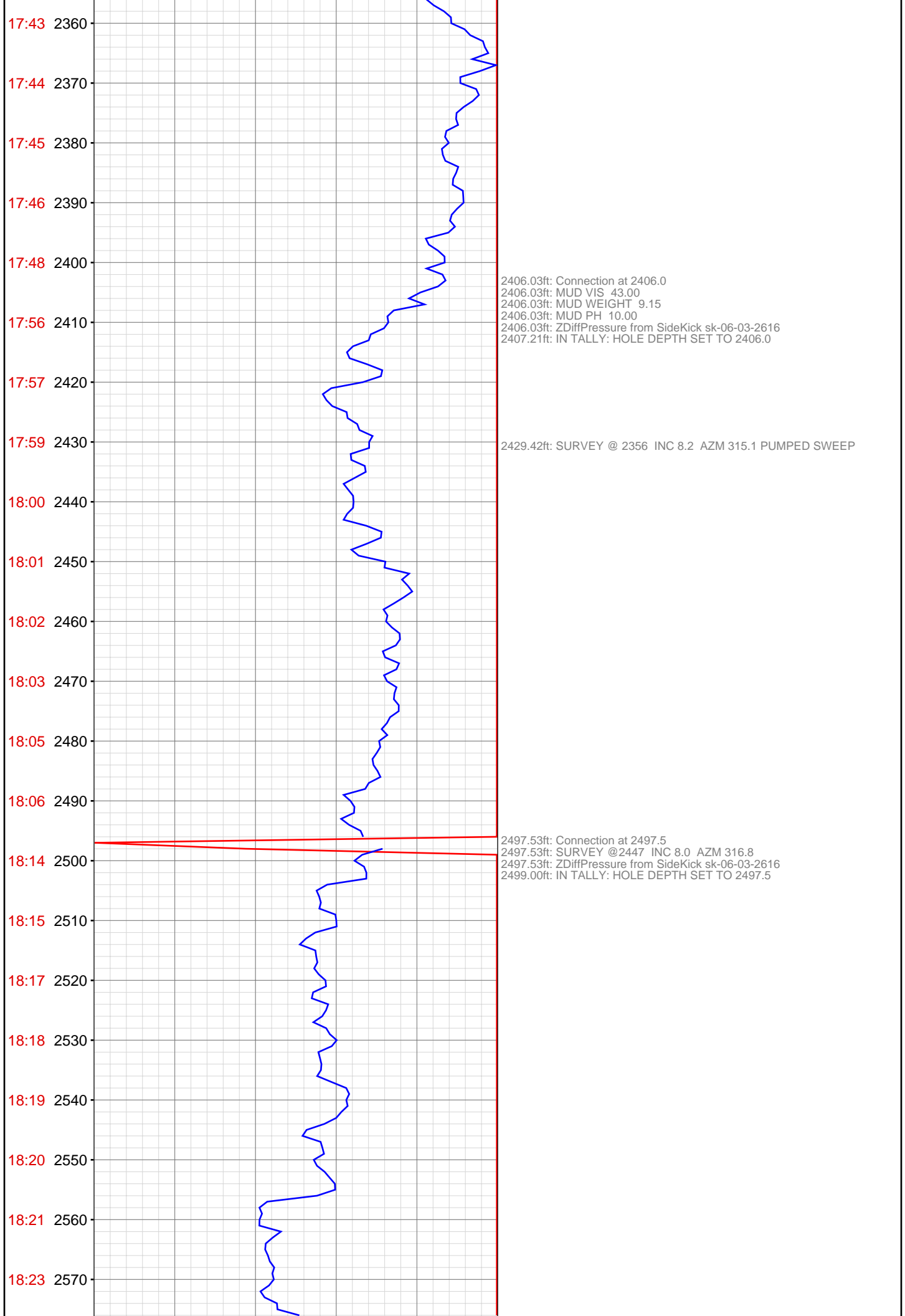


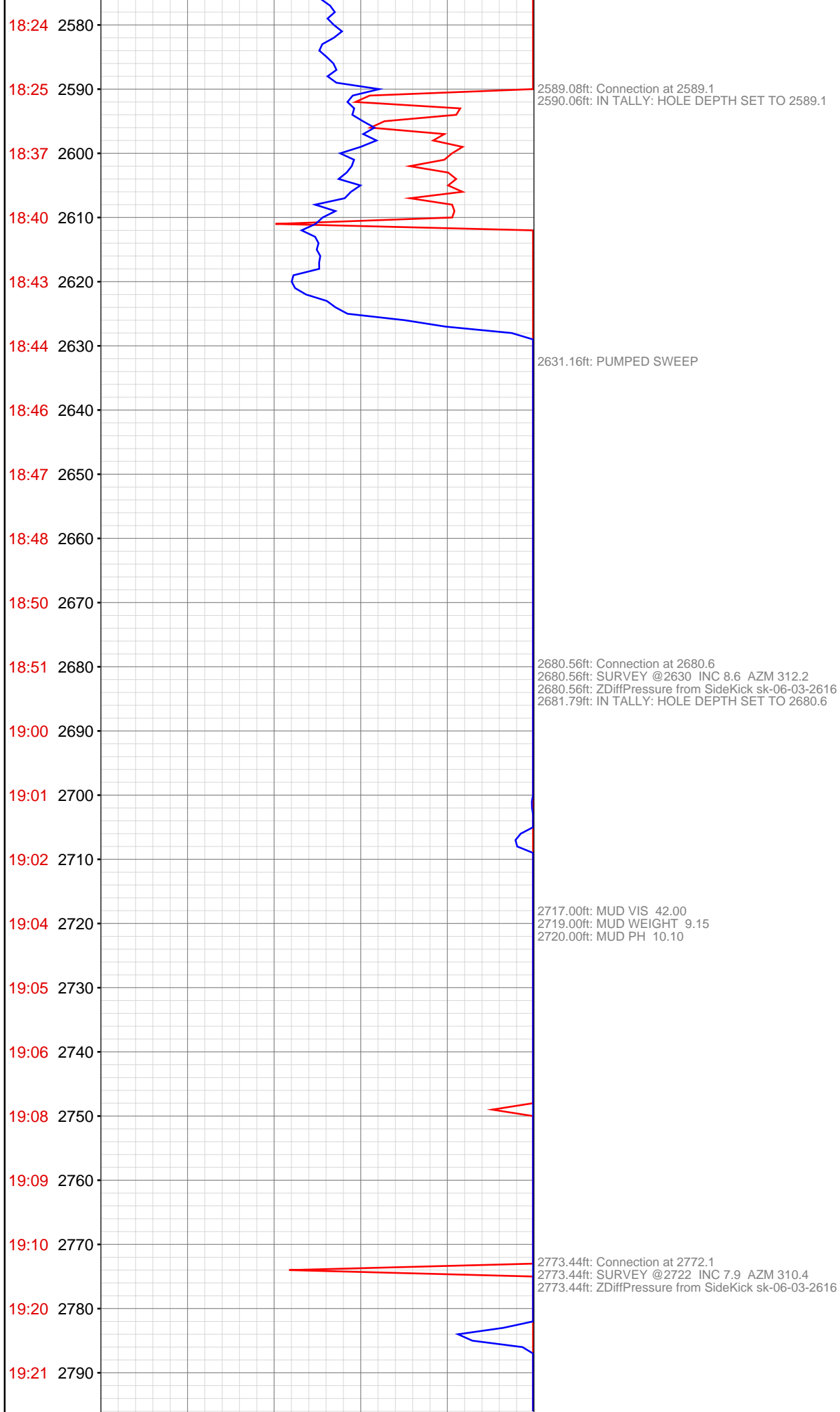


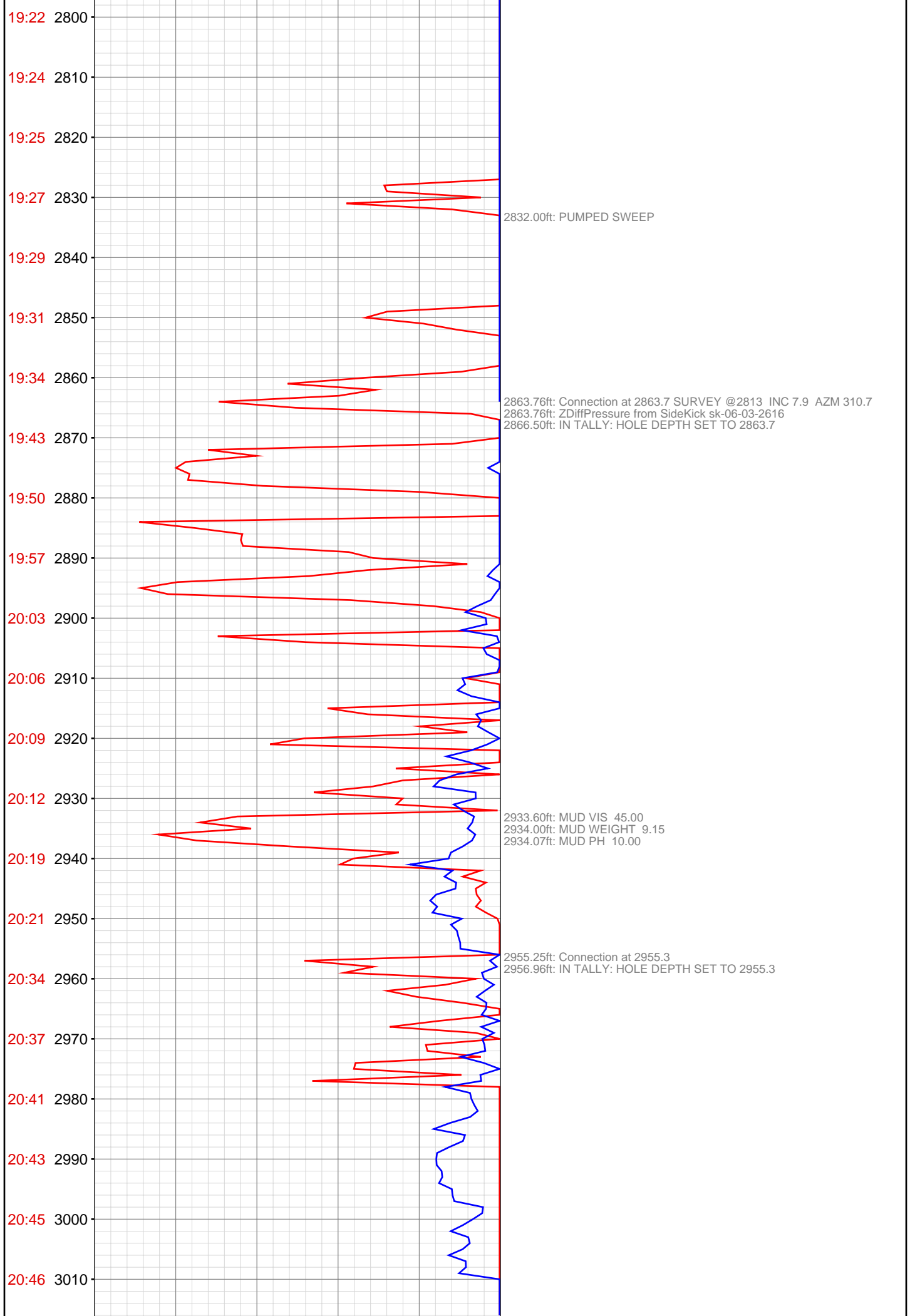


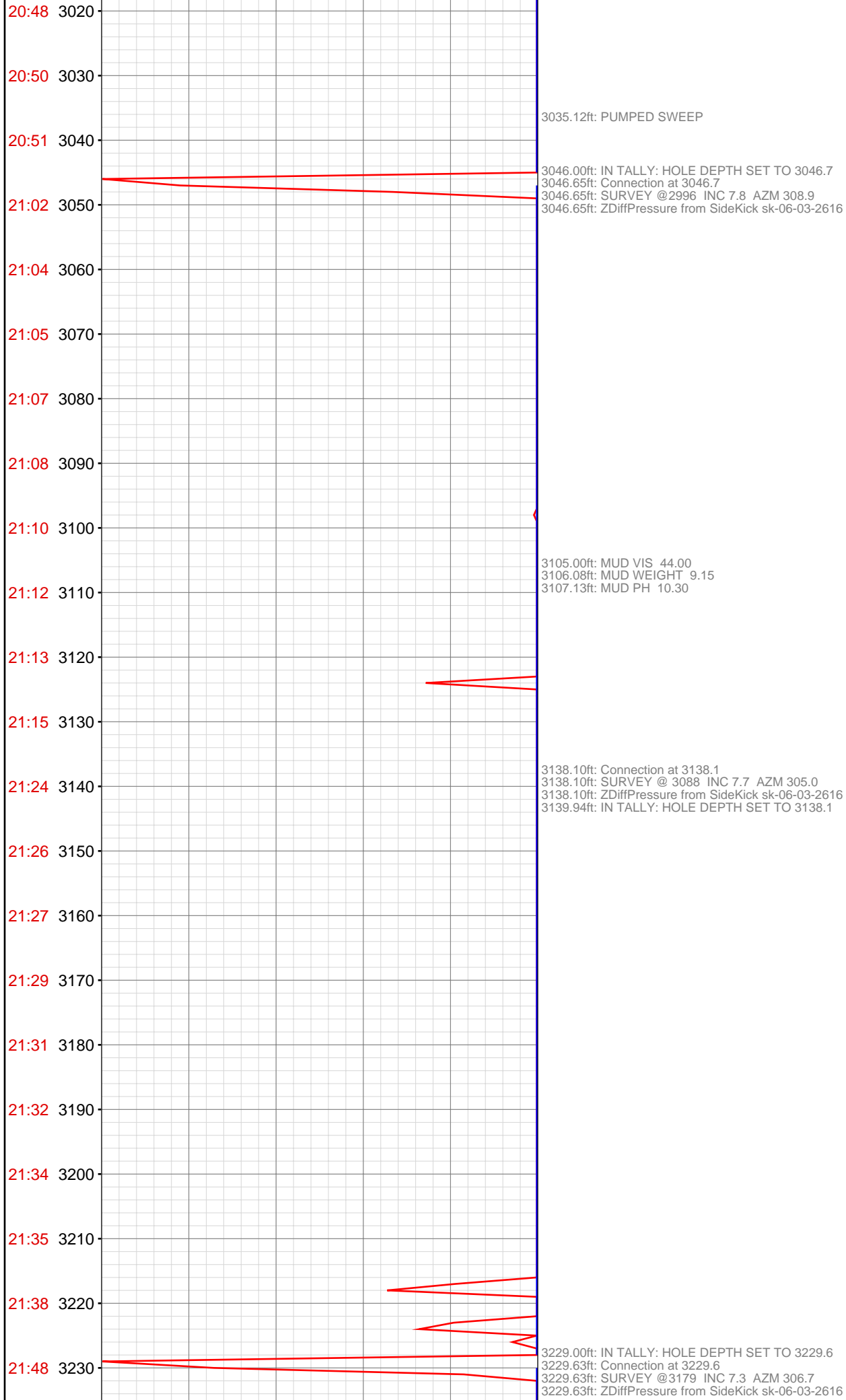


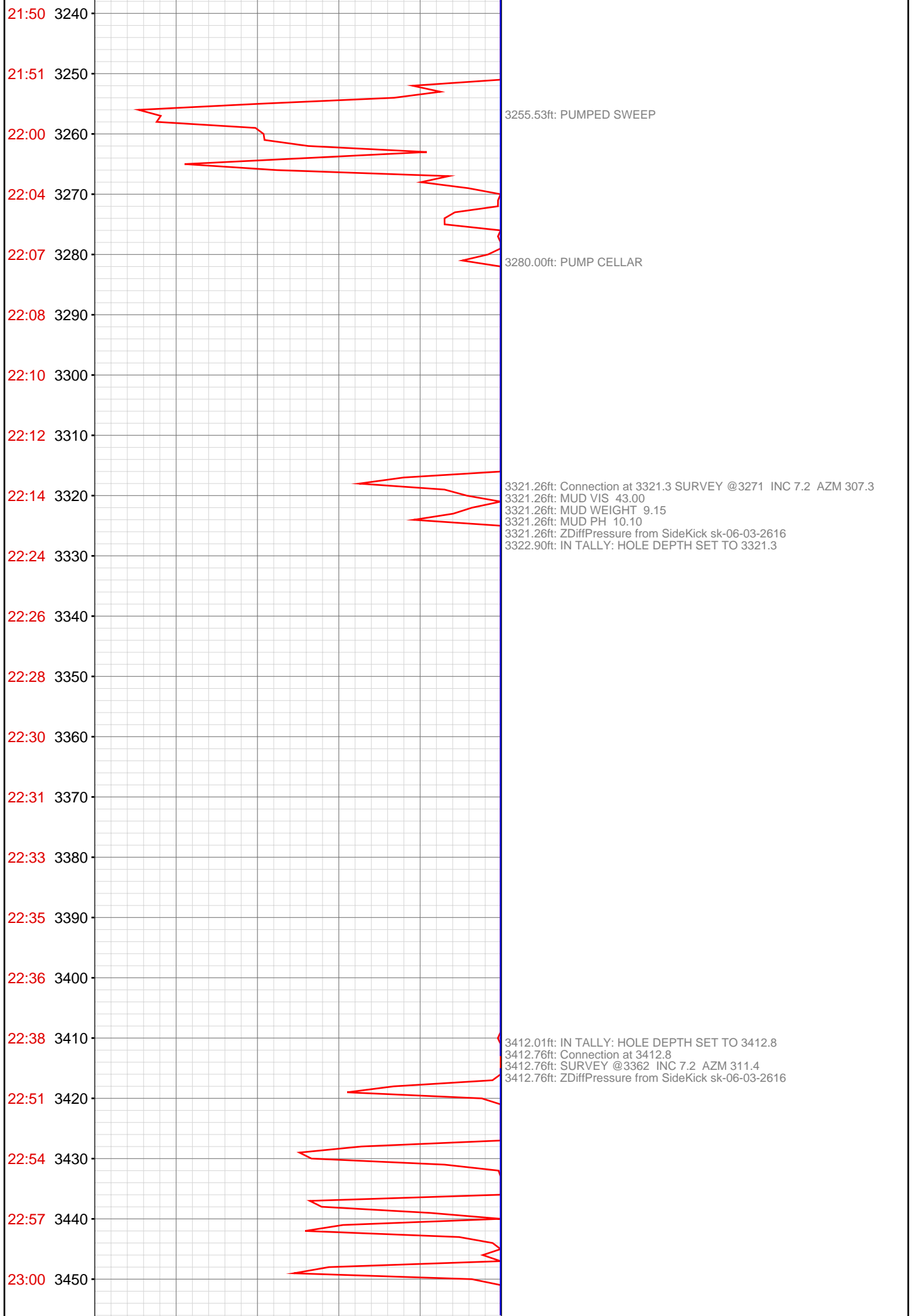












23:02 3460

23:03 3470

23:05 3480

23:07 3490

23:08 3500

23:21 3510

23:25 3520

23:28 3530

23:32 3540

23:34 3550

23:36 3560

23:40 3570

23:45 3580

23:49 3590

Sep 20, 2012

00:02 3600

00:04 3610

00:13 3620

00:16 3630

00:20 3640

00:25 3650

00:30 3660

00:34 3670

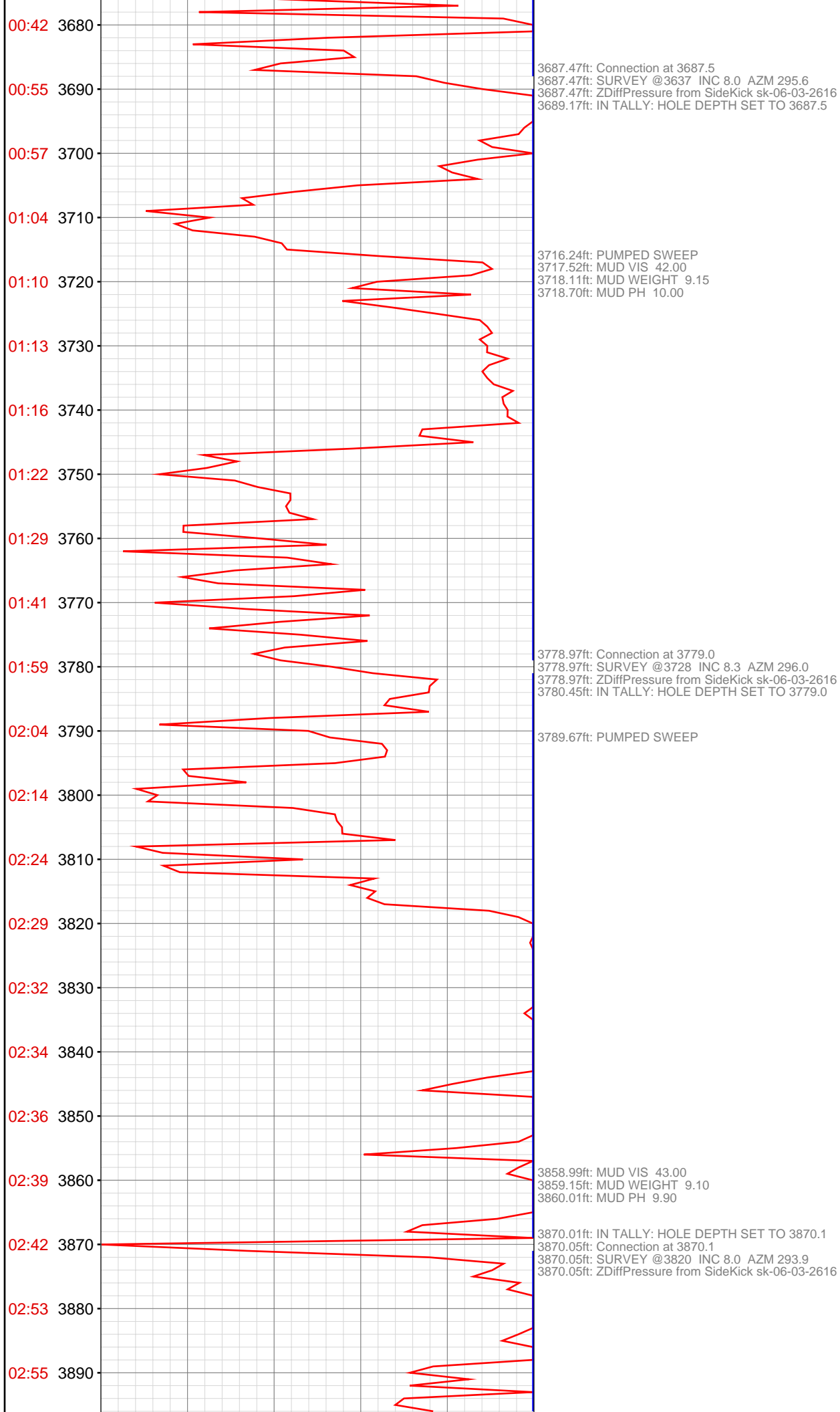
3502.00ft: MUD VIS 42.00  
3502.99ft: MUD WEIGHT 9.15  
3504.00ft: IN TALLY: HOLE DEPTH SET TO 3504.5  
3504.46ft: Connection at 3504.4  
3504.99ft: MUD PH 10.30

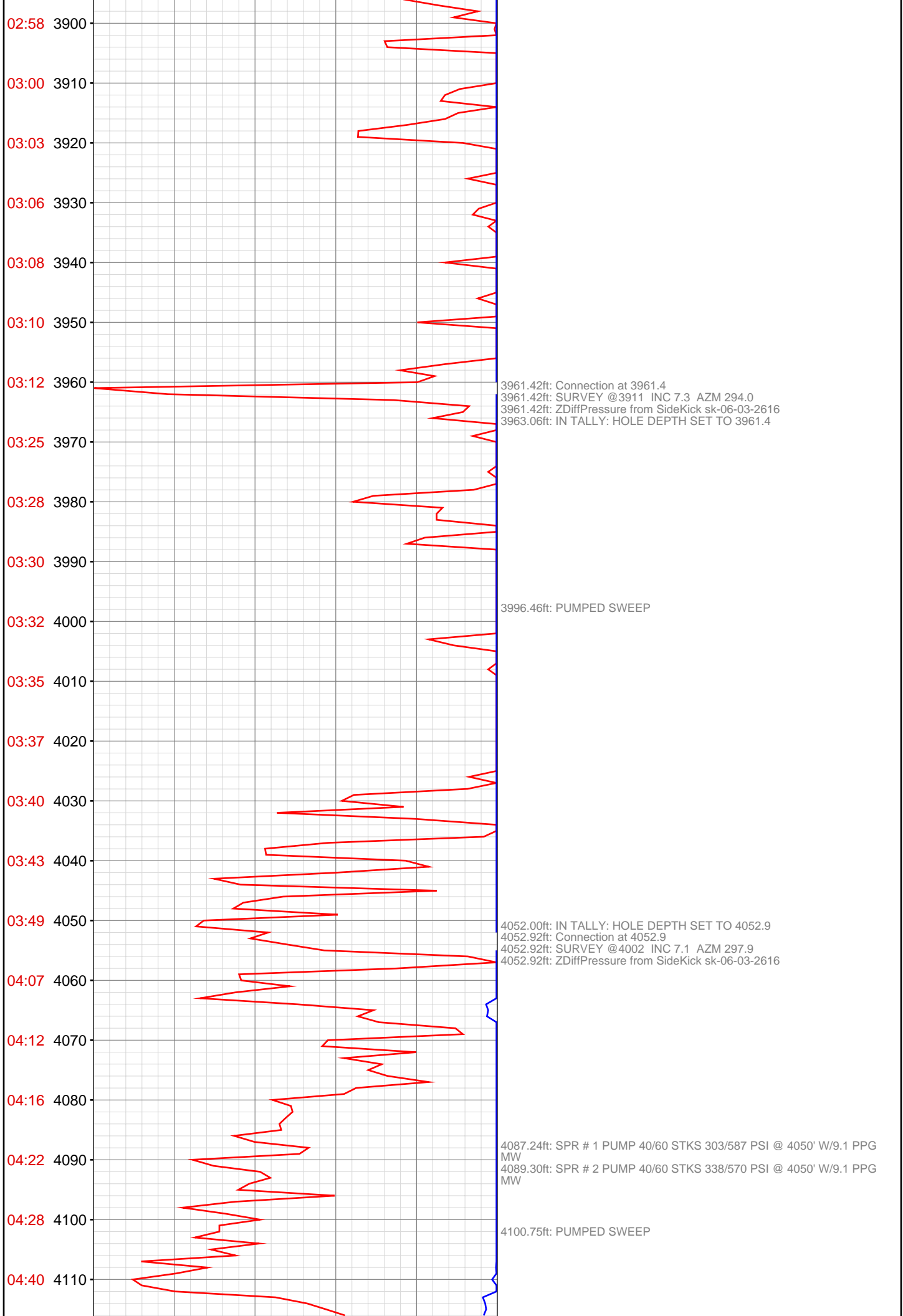
3533.56ft: ZDiffPressure from SideKick sk-06-03-2616

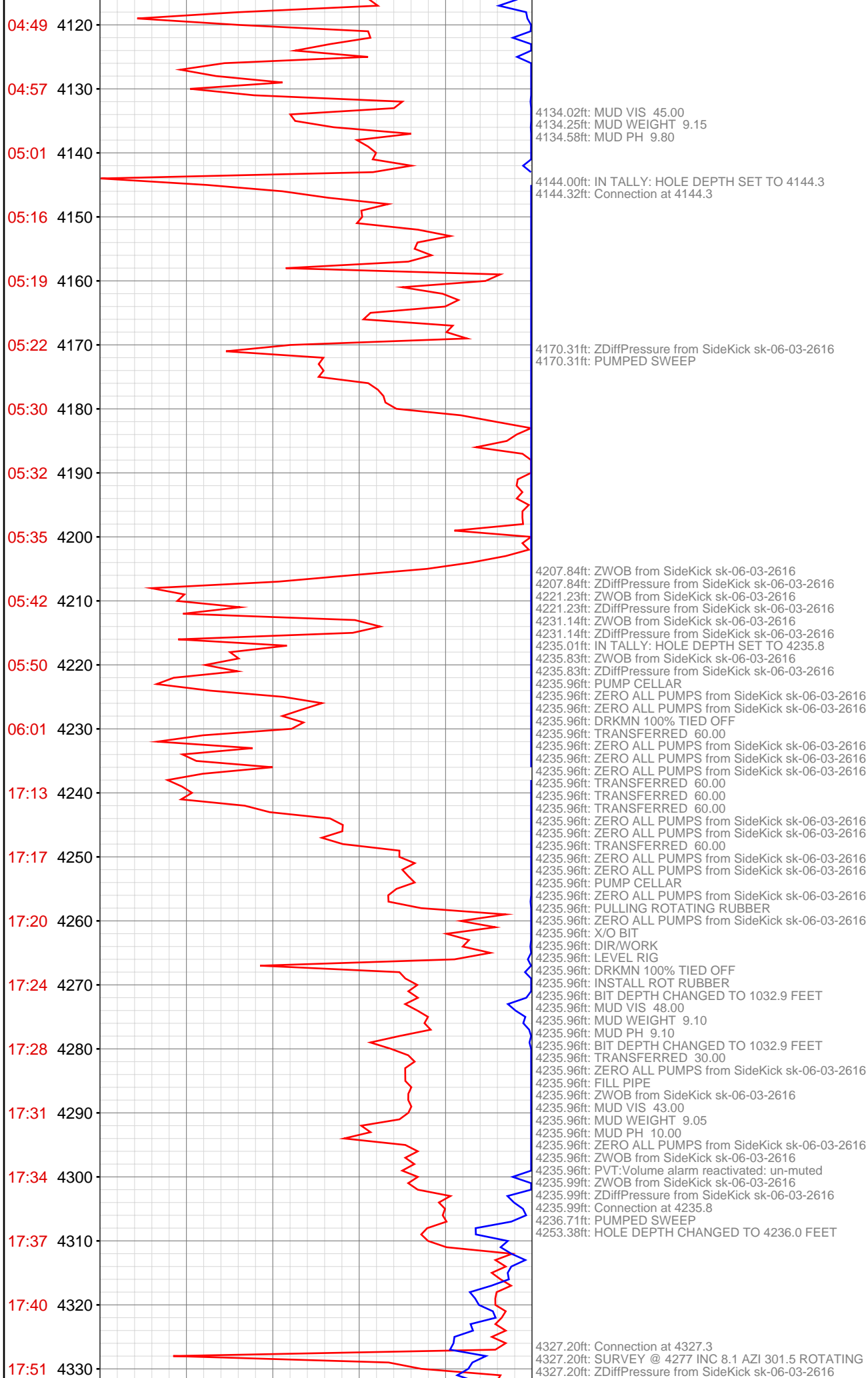
3596.03ft: Connection at 3596.0  
3596.03ft: SURVEY @3546 INC 8.1 AZM 301.2  
3596.03ft: ZDiffPressure from SideKick sk-06-03-2616  
3597.21ft: IN TALLY: HOLE DEPTH SET TO 3596.0

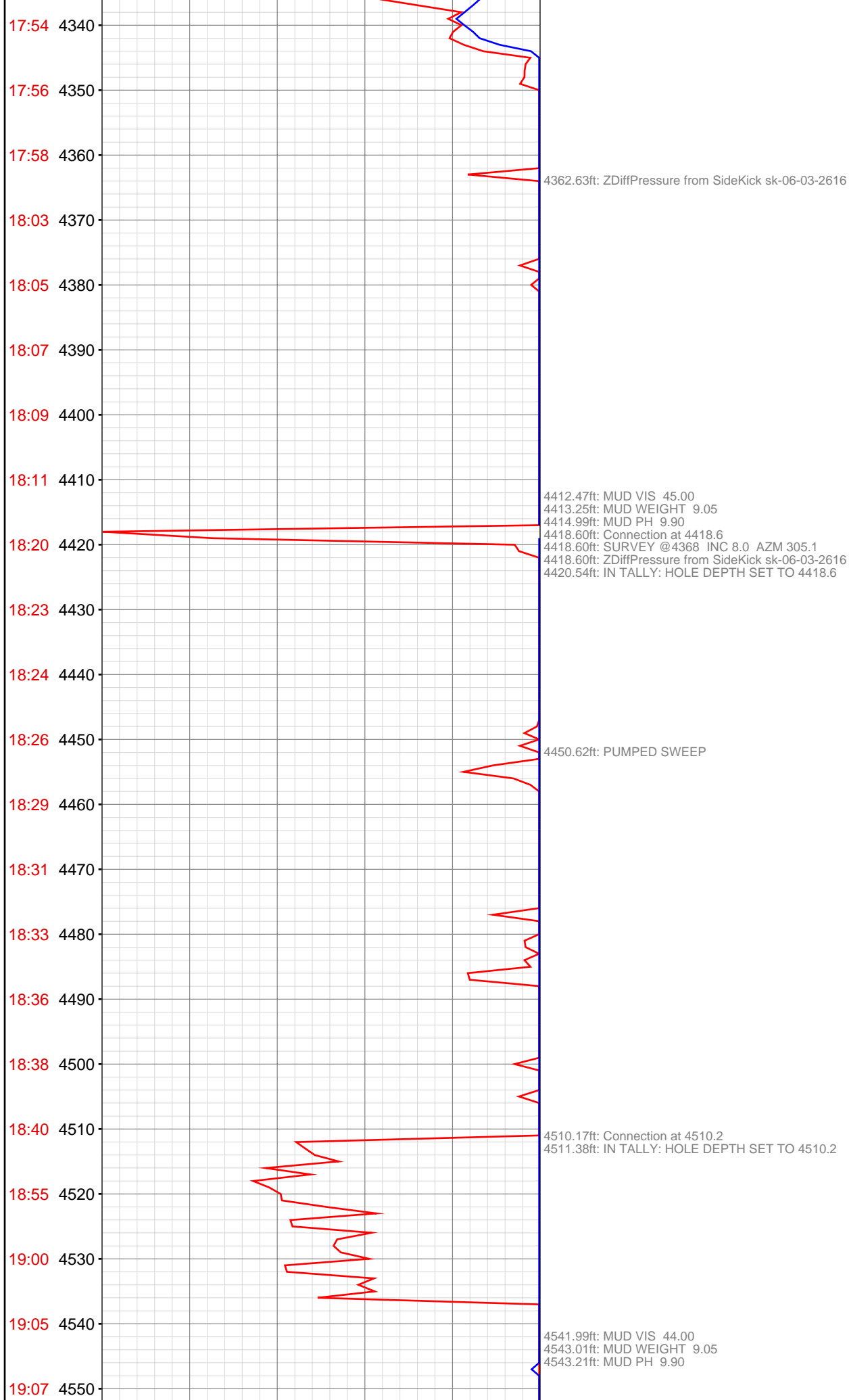
3613.75ft: MUD VIS 44.00  
3613.75ft: MUD WEIGHT 9.15  
3613.75ft: MUD PH 10.00

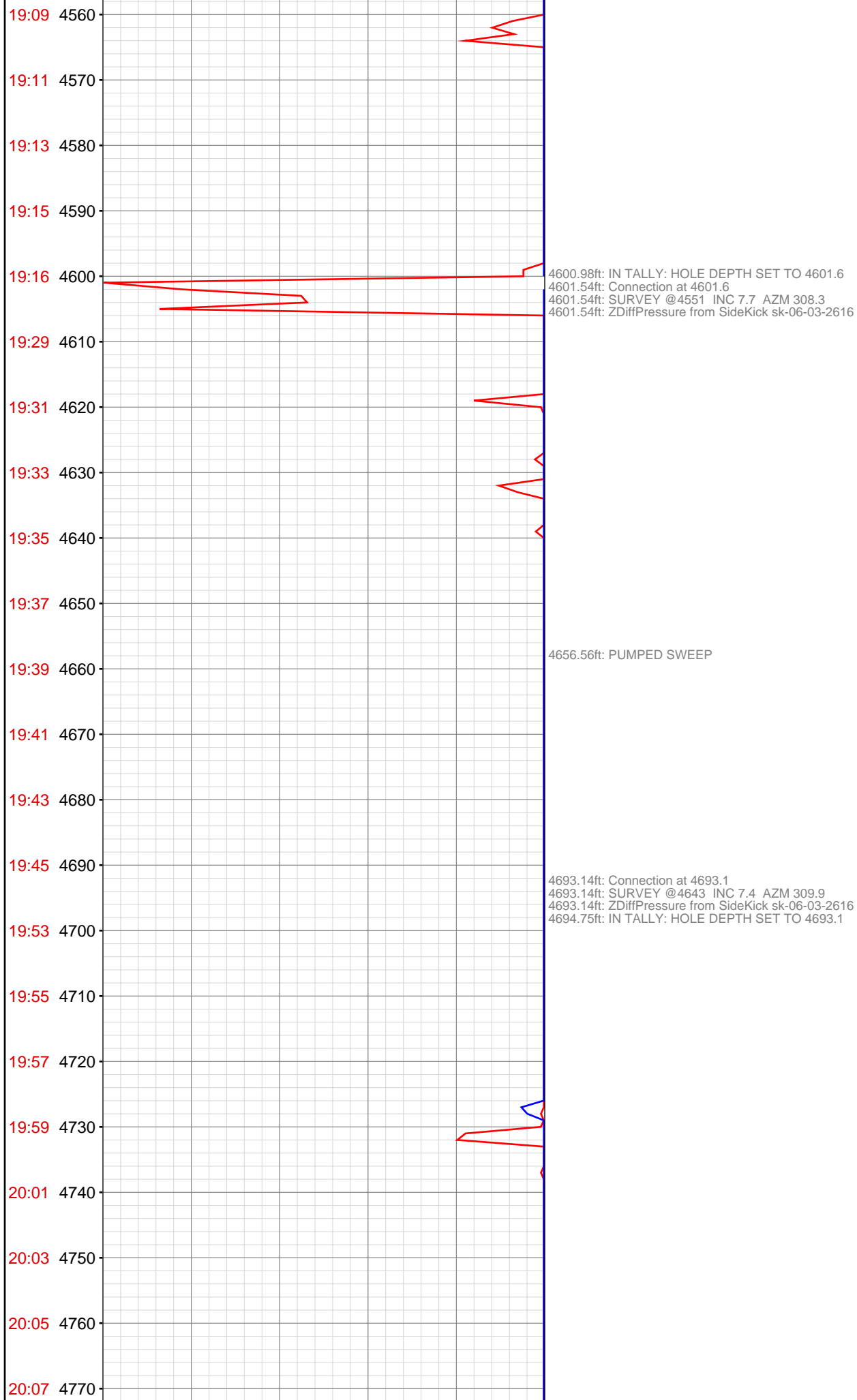
3642.42ft: PUMPED SWEEP

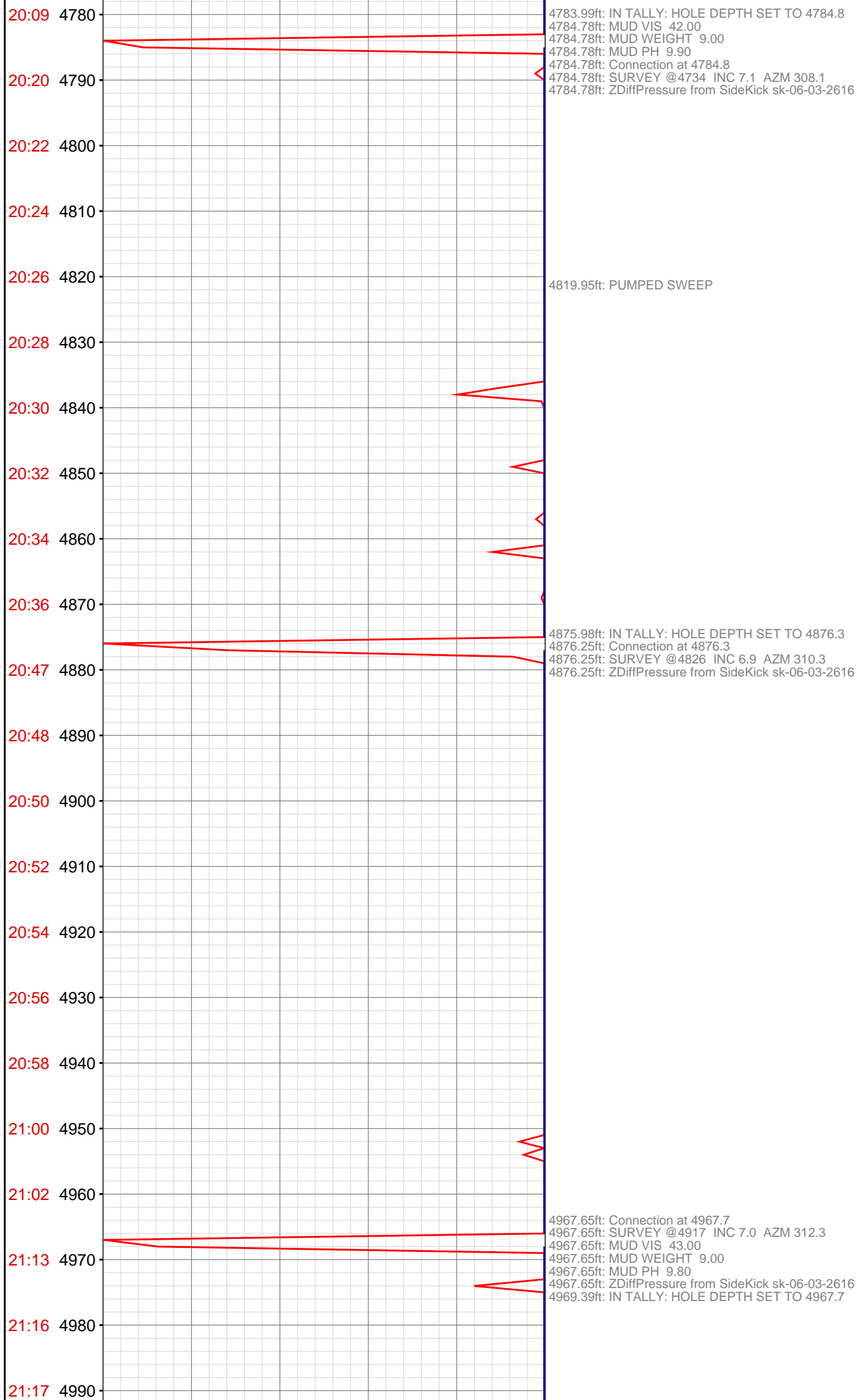












21:19 5000  
21:21 5010  
21:23 5020  
21:25 5030  
21:27 5040  
21:28 5050  
21:30 5060  
21:41 5070  
21:43 5080  
21:45 5090  
21:47 5100  
21:49 5110  
21:51 5120  
21:52 5130  
21:54 5140  
21:57 5150  
22:06 5160  
22:08 5170  
22:11 5180  
22:13 5190  
22:14 5200  
22:16 5210

5059.19ft: Connection at 5059.2  
5059.19ft: SURVEY @5009 INC 7.0 AZM 309.2  
5059.19ft: ZDiffPressure from SideKick sk-06-03-2616  
5059.97ft: IN TALLY: HOLE DEPTH SET TO 5059.2

5150.00ft: IN TALLY: HOLE DEPTH SET TO 5150.8  
5150.82ft: Connection at 5150.8  
5150.82ft: SURVEY @5100 INC 6.8 AZM 311.4  
5150.82ft: ZDiffPressure from SideKick sk-06-03-2616

5161.68ft: PUMPED SWEEP

5173.26ft: MUD VIS 44.00  
5174.05ft: MUD WEIGHT 9.00  
5174.05ft: MUD PH 9.90

22:18 5220

22:20 5230

22:22 5240

22:31 5250

22:32 5260

22:34 5270

22:37 5280

22:38 5290

22:40 5300

22:42 5310

22:44 5320

22:46 5330

22:57 5340

22:58 5350

23:00 5360

23:02 5370

23:04 5380

23:06 5390

23:08 5400

23:10 5410

23:12 5420

23:21 5430

5242.59ft: Connection at 5242.6  
5242.59ft: SURVEY @5192 INC 6.8 AZM 313.0  
5242.59ft: ZDiffPressure from SideKick sk-06-03-2616  
5243.73ft: IN TALLY: HOLE DEPTH SET TO 5242.6

5334.19ft: Connection at 5334.2  
5334.19ft: SURVEY @5284 INC 6.6 AZM 309.4  
5334.19ft: ZDiffPressure from SideKick sk-06-03-2616  
5335.56ft: IN TALLY: HOLE DEPTH SET TO 5334.2

5426.87ft: SURVEY @5375 INC 6.9 AZM 309.5 Connection at 5425.8  
5426.87ft: ZDiffPressure from SideKick sk-06-03-2616

5435.99ft: MUD VIS. 43.00

5436.65ft: MUD WEIGHT 9.00  
5437.01ft: MUD PH 9.80

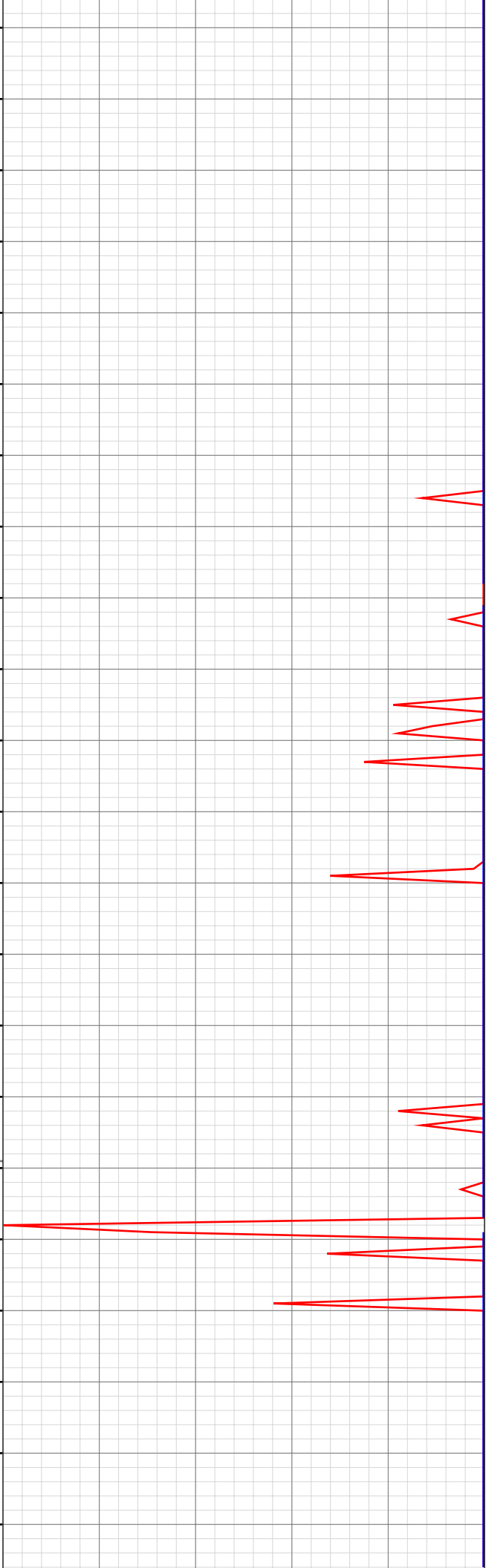
5517.16ft: Connection at 5517.2  
5517.16ft: SURVEY @5467 INC 6.5 AZM 305.9  
5517.16ft: ZDiffPressure from SideKick sk-06-03-2616  
5520.05ft: IN TALLY: HOLE DEPTH SET TO 5517.2

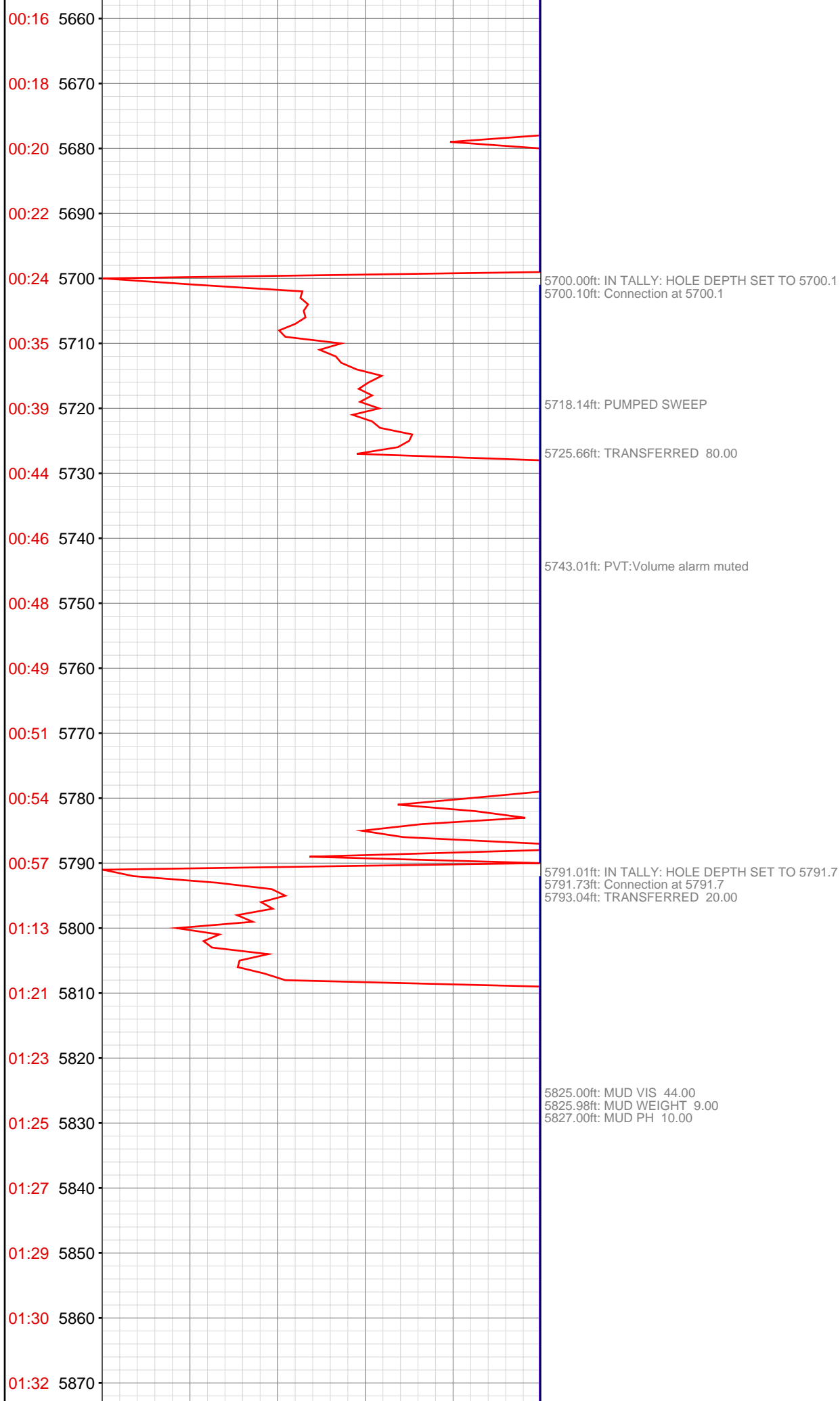
5531.63ft: PUMPED SWEEP

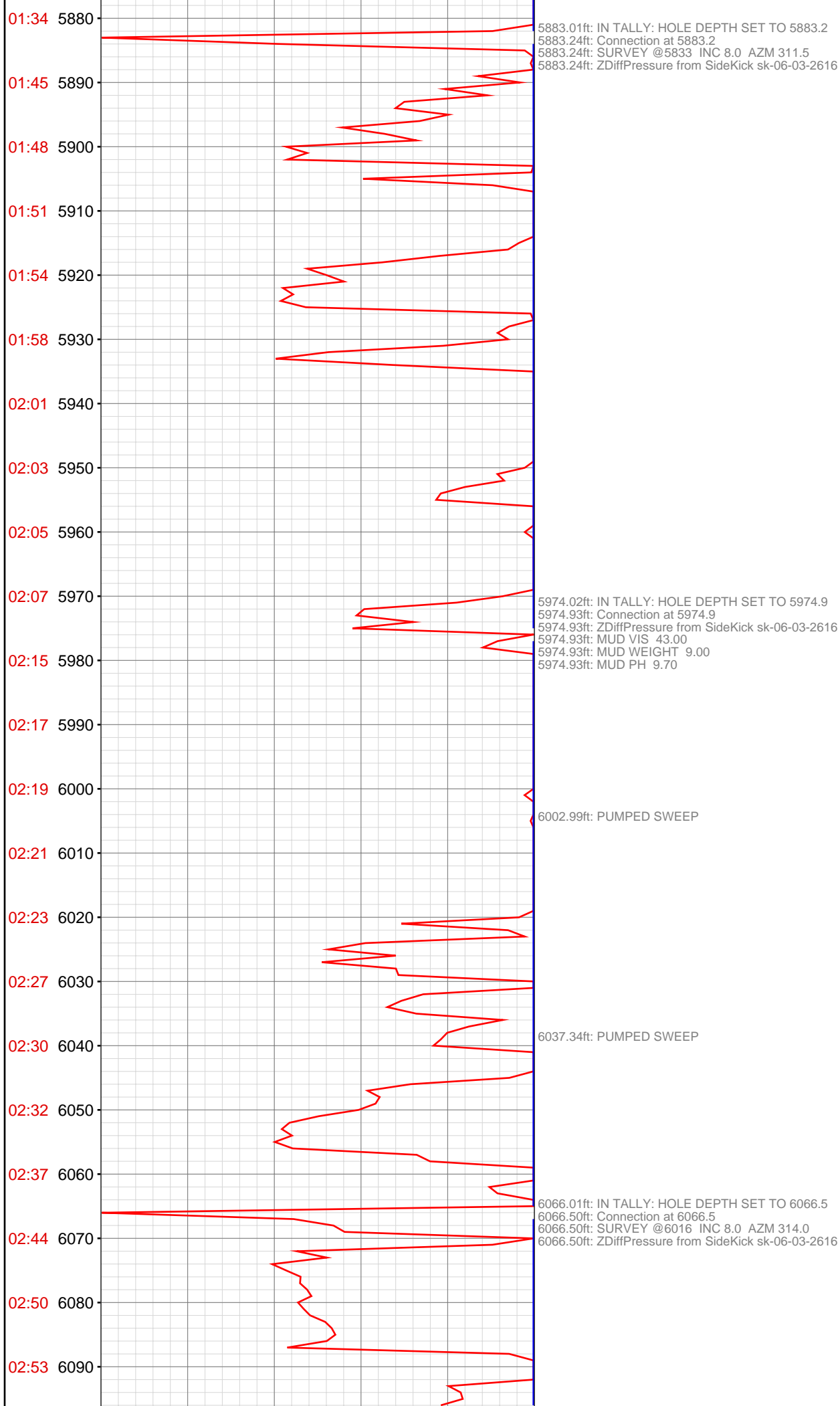
5608.01ft: IN TALLY: HOLE DEPTH SET TO 5608.7  
5608.69ft: Connection at 5608.7  
5608.69ft: SURVEY @5558 INC 6.6 AZM 308.0  
5608.69ft: ZDiffPressure from SideKick sk-06-03-2616

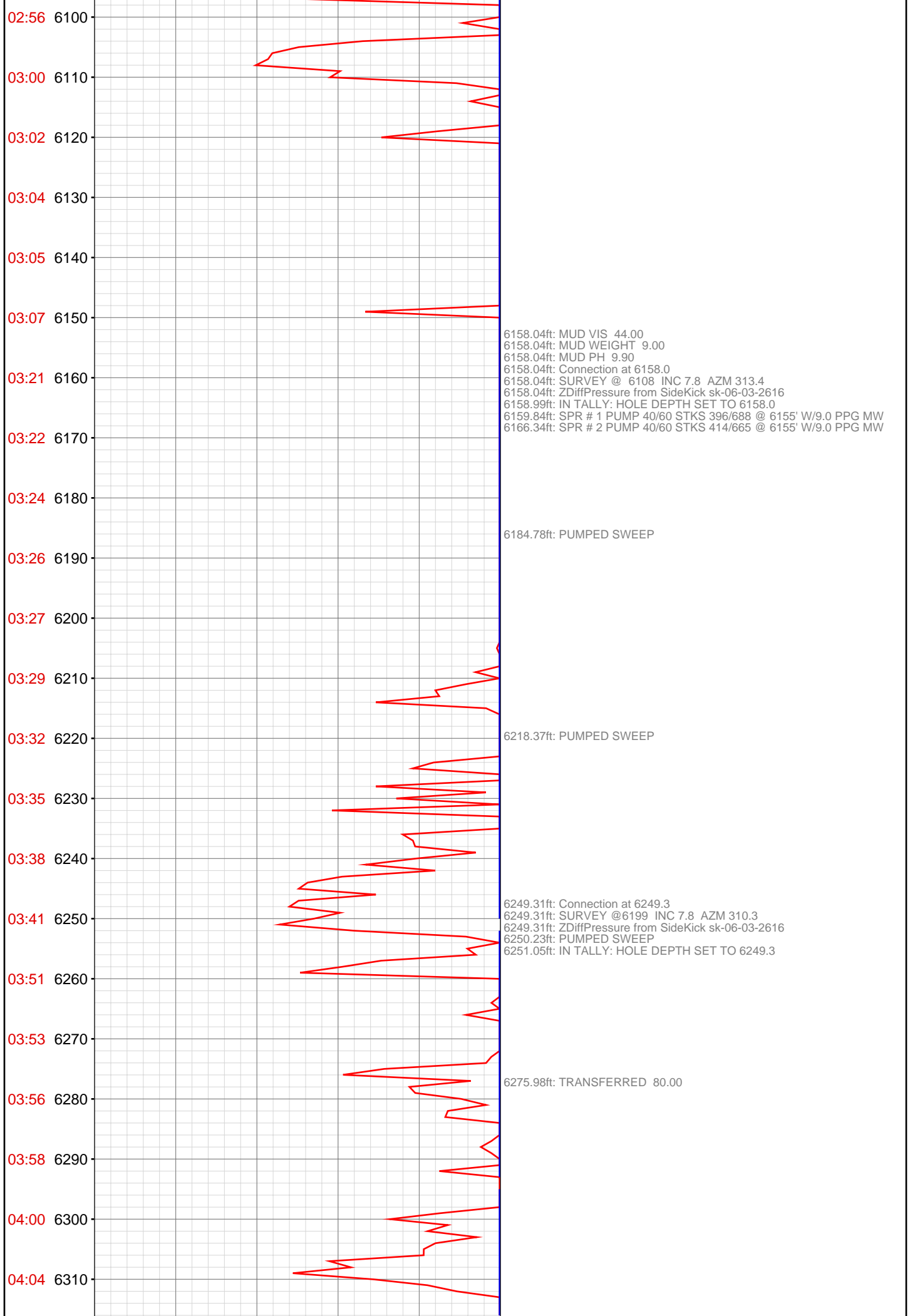
23:23 5440  
23:25 5450  
23:26 5460  
23:28 5470  
23:30 5480  
23:32 5490  
23:33 5500  
23:36 5510  
23:37 5520  
23:46 5530  
23:49 5540  
23:50 5550  
23:53 5560  
23:54 5570  
23:56 5580  
23:58 5590  
00:00 5600  
00:07 5610  
00:09 5620  
00:11 5630  
00:13 5640  
00:15 5650

Sep 21, 2012









04:06 6320  
04:08 6330  
04:10 6340  
04:19 6350  
04:21 6360  
04:24 6370  
04:27 6380  
04:30 6390  
04:32 6400  
04:35 6410  
04:38 6420  
04:41 6430  
04:52 6440  
04:54 6450  
04:57 6460  
04:59 6470  
05:02 6480  
05:05 6490  
05:07 6500  
05:09 6510  
05:12 6520  
05:23 6530

6339.99ft: IN TALLY: HOLE DEPTH SET TO 6340.8  
6340.81ft: Connection at 6340.8  
6340.81ft: SURVEY @6290 INC 7.5 AZM 310.2  
6340.81ft: ZDiffPressure from SideKick sk-06-03-2616

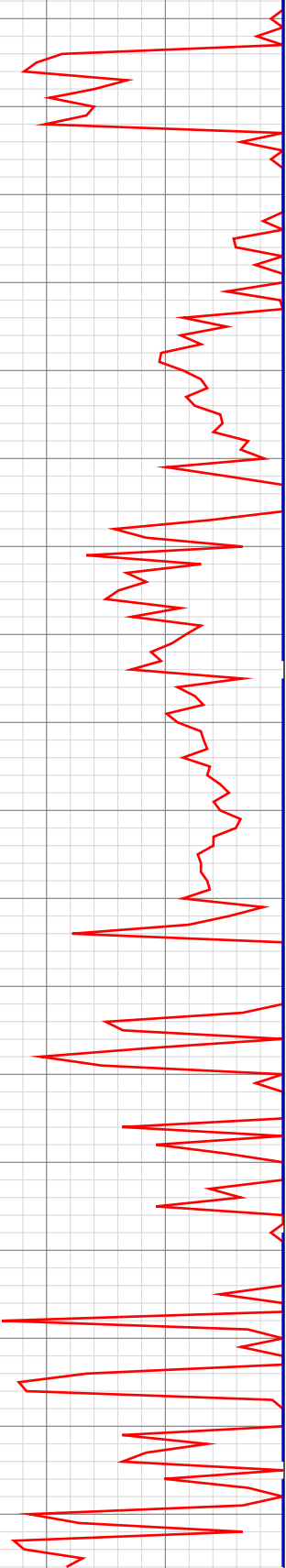
6385.30ft: MUD VIS 44.00  
6386.12ft: MUD WEIGHT 9.00  
6386.91ft: MUD PH 9.90

6431.99ft: IN TALLY: HOLE DEPTH SET TO 6432.3  
6432.35ft: Connection at 6432.3  
6432.35ft: SURVEY @6382 INC 6.9 AZM 309.8  
6432.35ft: ZDiffPressure from SideKick sk-06-03-2616

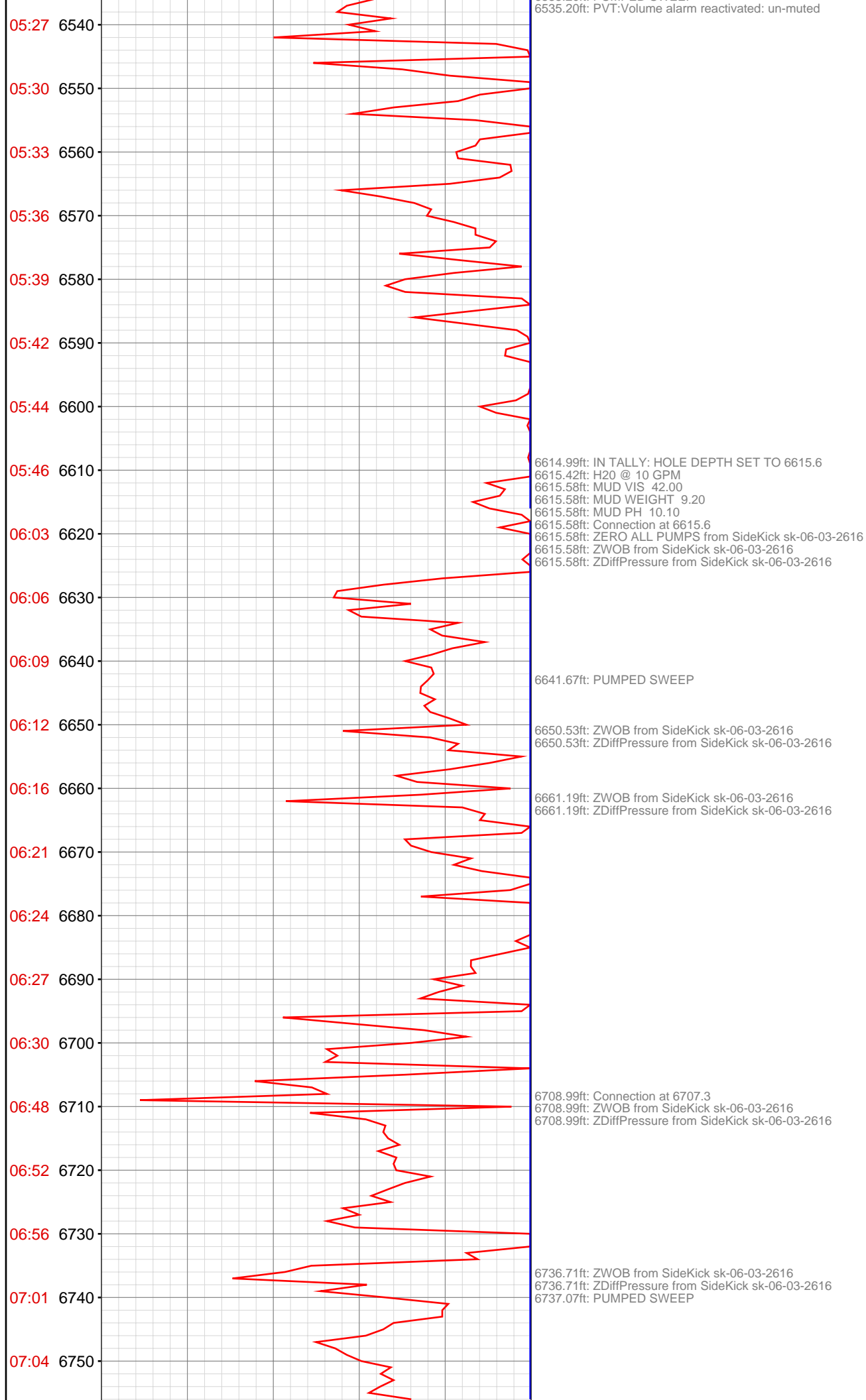
6514.99ft: MUD VIS 43.00  
6515.29ft: MUD WEIGHT 9.05  
6515.68ft: MUD PH 9.70

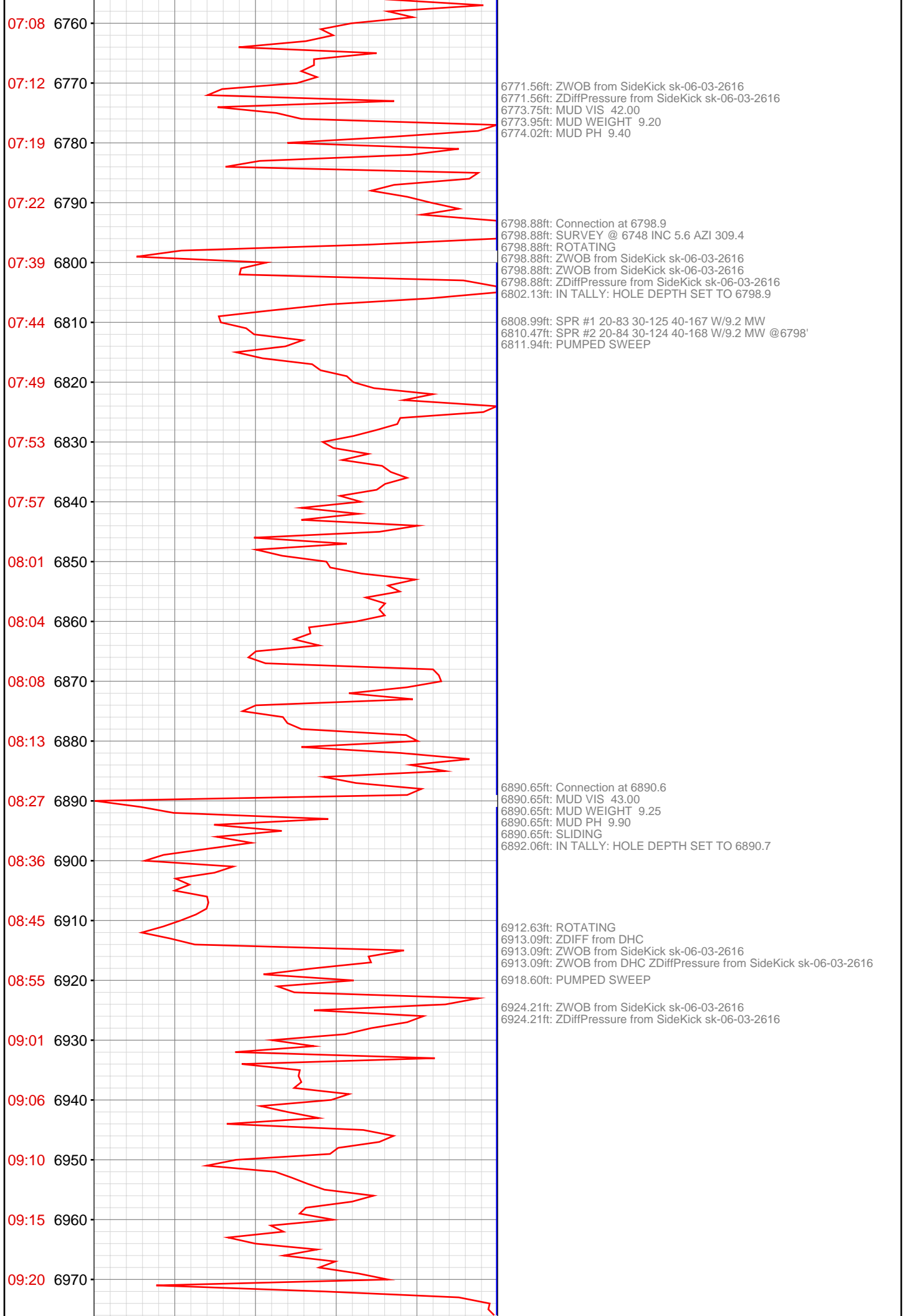
6523.00ft: IN TALLY: HOLE DEPTH SET TO 6524.0  
6523.98ft: Connection at 6524.0  
6523.98ft: SURVEY @6473 INC 6.8 AZM 308.7  
6523.98ft: ZDiffPressure from SideKick sk-06-03-2616

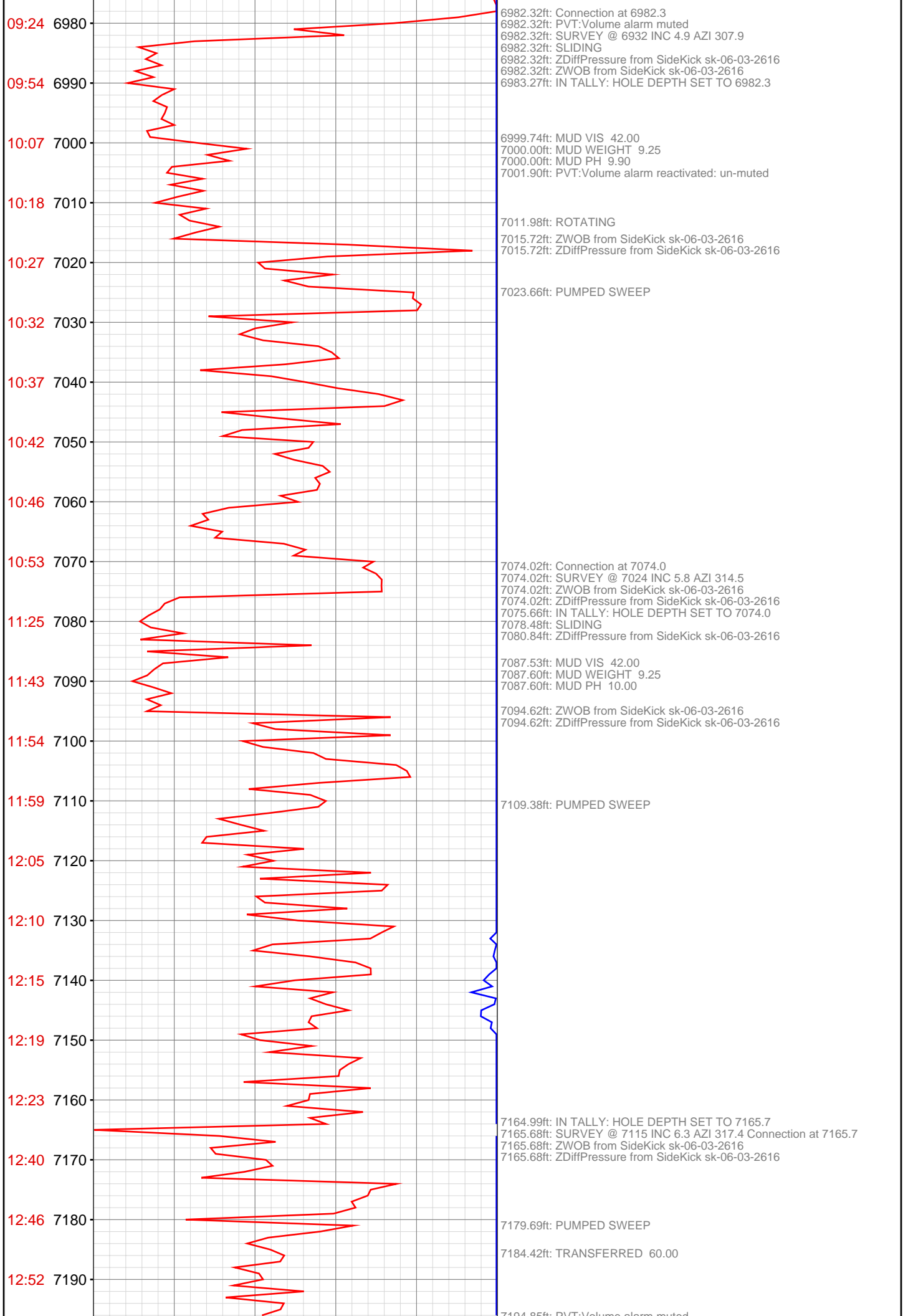
6535.20ft: PUMPED SWEEP



6535.20ft: PVT:Volume alarm reactivated: un-muted







7194.63ft: PVT:Volume alarm muted

7257.35ft: Connection at 7257.4  
7257.35ft: SLIDING  
7258.96ft: IN TALLY: HOLE DEPTH SET TO 7257.4

7273.26ft: PVT:Volume alarm reactivated: un-muted  
7276.64ft: MUD VIS 43.00  
7276.64ft: MUD WEIGHT 9.25  
7277.03ft: MUD PH 10.10

7282.94ft: H2O @ 10 GPM

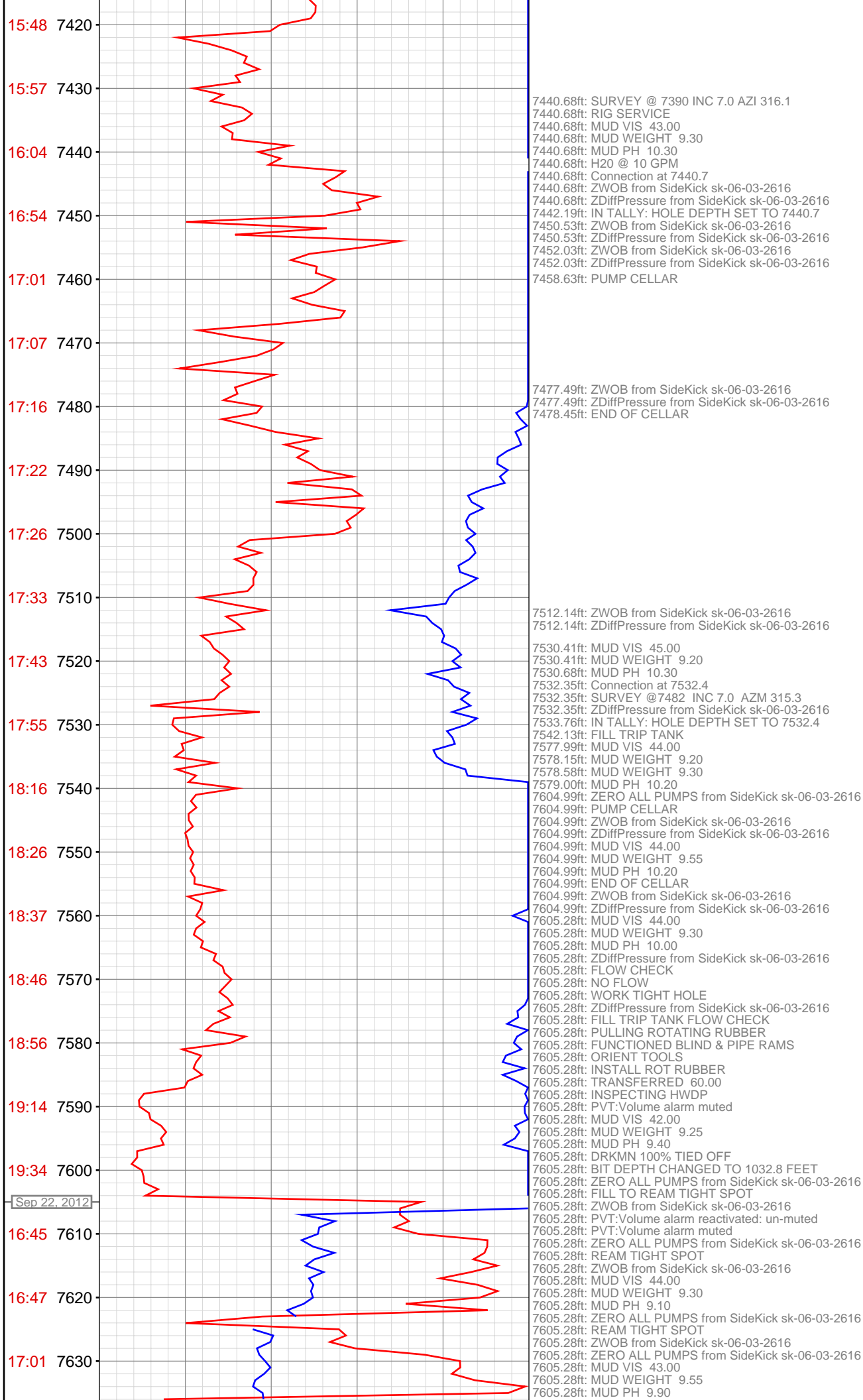
7290.78ft: ROTATING  
7290.81ft: ZDiffPressure from SideKick sk-06-03-2616  
7290.81ft: ZWOB from SideKick sk-06-03-2616  
7293.90ft: PUMPED SWEEP

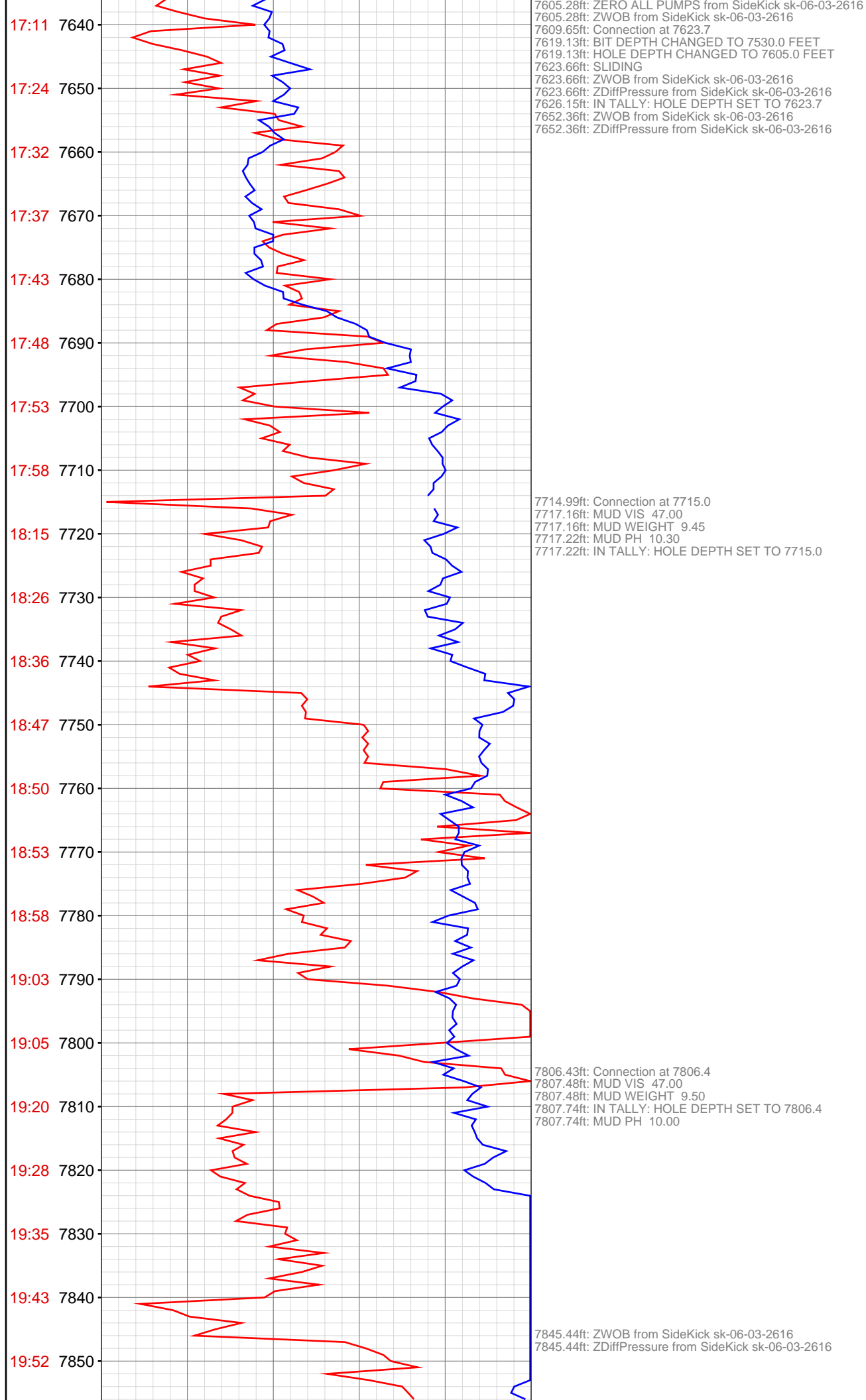
7349.08ft: Connection at 7349.1  
7349.08ft: SURVEY @ 7299 INC 7.7 AZI 320.6  
7349.08ft: ZWOB from SideKick sk-06-03-2616  
7349.08ft: ZDiffPressure from SideKick sk-06-03-2616  
7349.08ft: ROTATING  
7350.30ft: IN TALLY: HOLE DEPTH SET TO 7349.1  
7354.00ft: PVT:Volume alarm muted

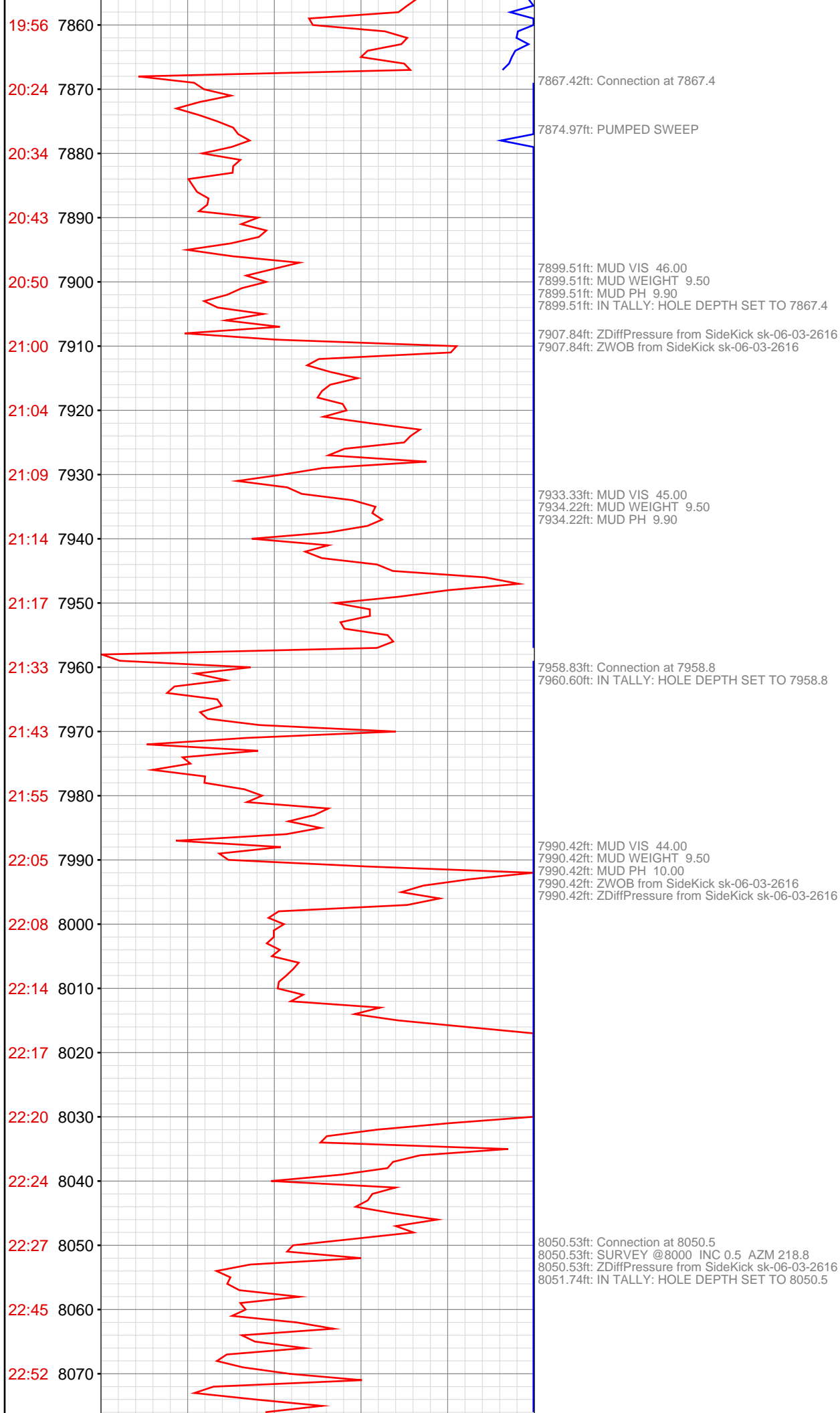
7362.34ft: PVT:Volume alarm reactivated: un-muted

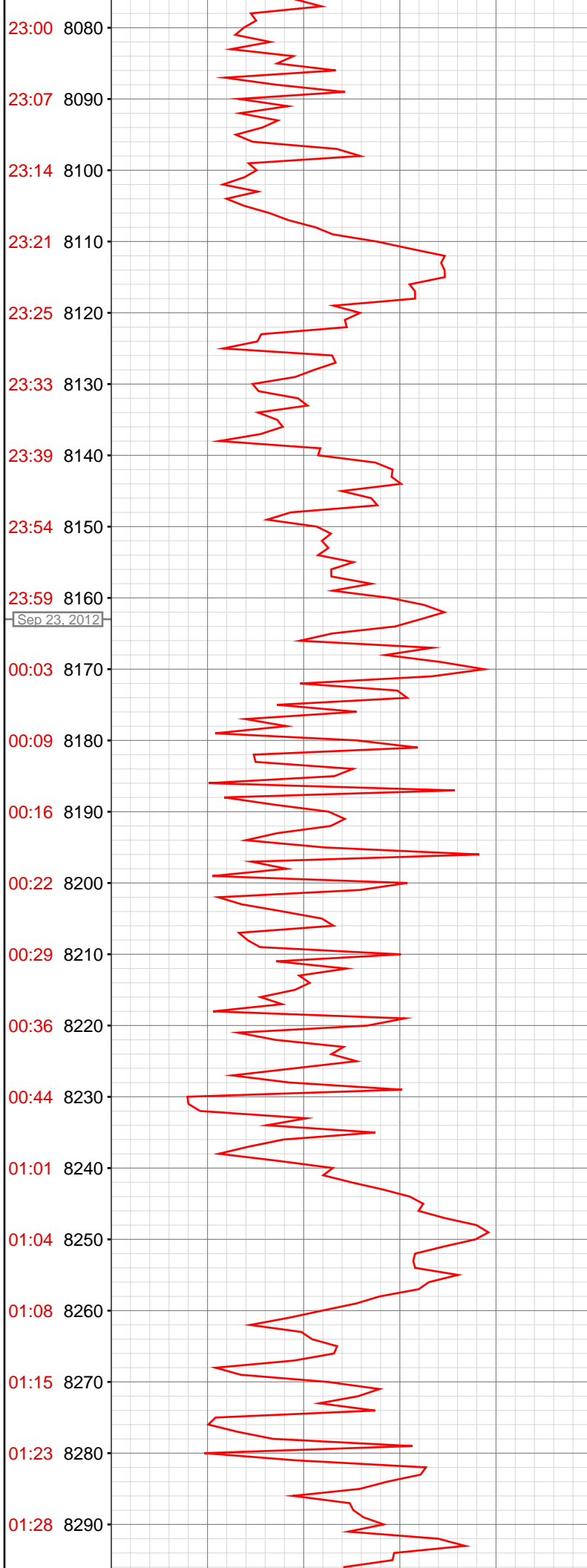
7375.16ft: H2O @ 10 GPM  
7379.13ft: MUD VIS 44.00  
7379.56ft: MUD WEIGHT 9.25  
7379.56ft: MUD PH 10.30

7394.62ft: PUMPED SWEEP







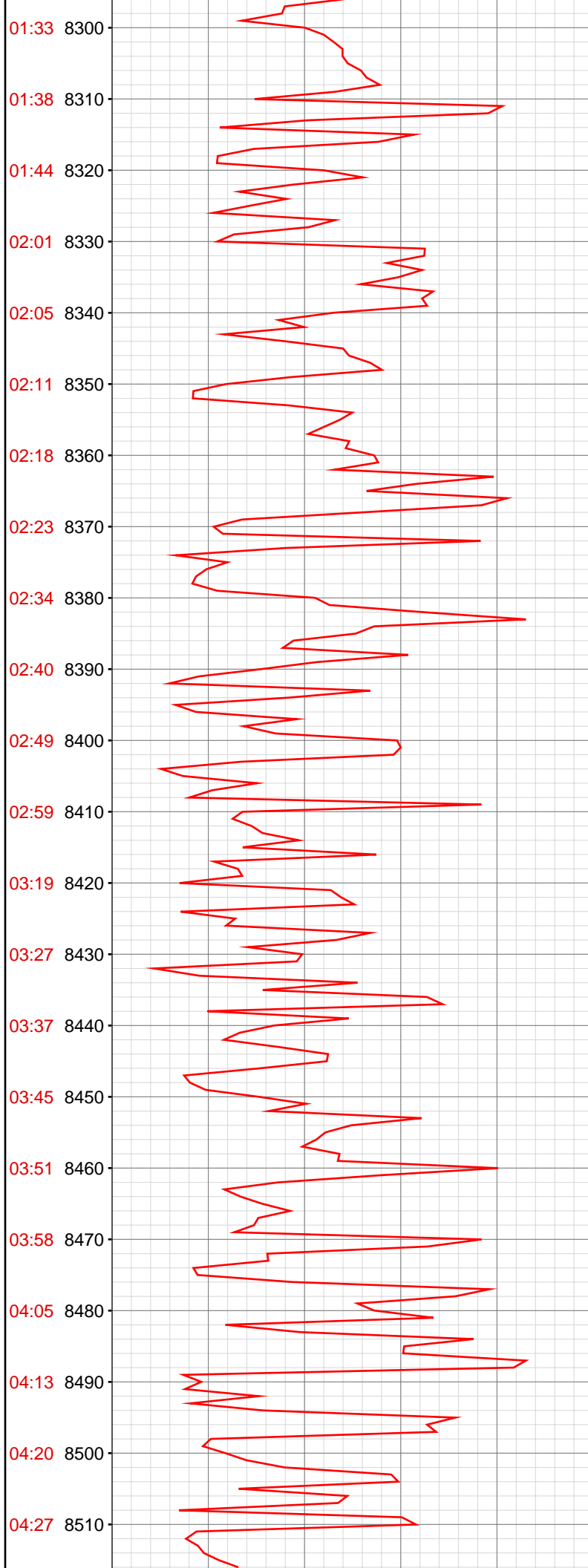


8142.19ft: Connection at 8142.2  
8142.19ft: SURVEY @8092 INC 0.6 AZM 258.5  
8142.19ft: ZDiffPressure from SideKick sk-06-03-2616  
8143.90ft: IN TALLY: HOLE DEPTH SET TO 8142.2

8149.84ft: PUMPED SWEEP

8155.48ft: MUD VIS 0.43  
8155.81ft: MUD VIS 43.00  
8156.00ft: MUD WEIGHT 9.50  
8156.14ft: MUD PH 9.90

8234.09ft: Connection at 8234.1  
8234.09ft: SURVEY @8184 INC 1.0 AZM 238.7  
8234.09ft: ZDiffPressure from SideKick sk-06-03-2616  
8235.47ft: IN TALLY: HOLE DEPTH SET TO 8234.1  
8236.38ft: PUMPED SWEEP



8325.95ft: Connection at 8326.0  
8325.95ft: ZDiffPressure from SideKick sk-06-03-2616  
8325.95ft: SURVEY @8275 INC 1.0 AZM 254.3  
8327.20ft: IN TALLY: HOLE DEPTH SET TO 8326.0  
8328.51ft: PUMPED SWEEP

8415.22ft: MUD VIS 43.00  
8415.65ft: MUD WEIGHT 9.55  
8416.04ft: MUD PH 9.90  
8417.00ft: IN TALLY: HOLE DEPTH SET TO 8417.6  
8417.59ft: Connection at 8417.6  
8417.59ft: SURVEY @ 8367 INC 0.7 AZM 239.0  
8417.59ft: ZDiffPressure from SideKick sk-06-03-2616

8461.68ft: PUMPED SWEEP

8471.65ft: MUD VIS 44.00  
8471.79ft: MUD WEIGHT 9.55  
8471.95ft: MUD PH 10.10

8509.29ft: SPR # 1 PUMP 40/60 STKS 375/700 PSI @ 8506' W/9.5 PPG MW  
8509.29ft: SPR # 2 PUMP 40/60 STKS 378/701 PSI @ 8506' W/9.5 PPG MW  
8509.29ft: Connection at 8509.3  
8510.23ft: IN TALLY: HOLE DEPTH SET TO 8509.3

8510.73ft: IN TALLY: HOLE DEPTH SET TO 8509.3

8524.02ft: MUD VIS 43.00  
8524.05ft: MUD WEIGHT 9.60  
8524.05ft: MUD PH 9.90

8536.32ft: ZDiffPressure from SideKick sk-06-03-2616  
8536.32ft: ZWOB from SideKick sk-06-03-2616

8581.99ft: PVT:Volume alarm reactivated: un-muted

8600.00ft: IN TALLY: HOLE DEPTH SET TO 8600.7  
8600.72ft: Connection at 8600.7  
8600.72ft: H2O @ 9 GPM  
8600.72ft: MUD VIS 43.00  
8600.72ft: MUD WEIGHT 9.70  
8600.72ft: MUD PH 10.00  
8600.72ft: ZWOB from SideKick sk-06-03-2616  
8600.72ft: ZDiffPressure from SideKick sk-06-03-2616  
8611.22ft: ZWOB from SideKick sk-06-03-2616  
8611.22ft: PUMPED SWEEP  
8611.22ft: ZDiffPressure from SideKick sk-06-03-2616

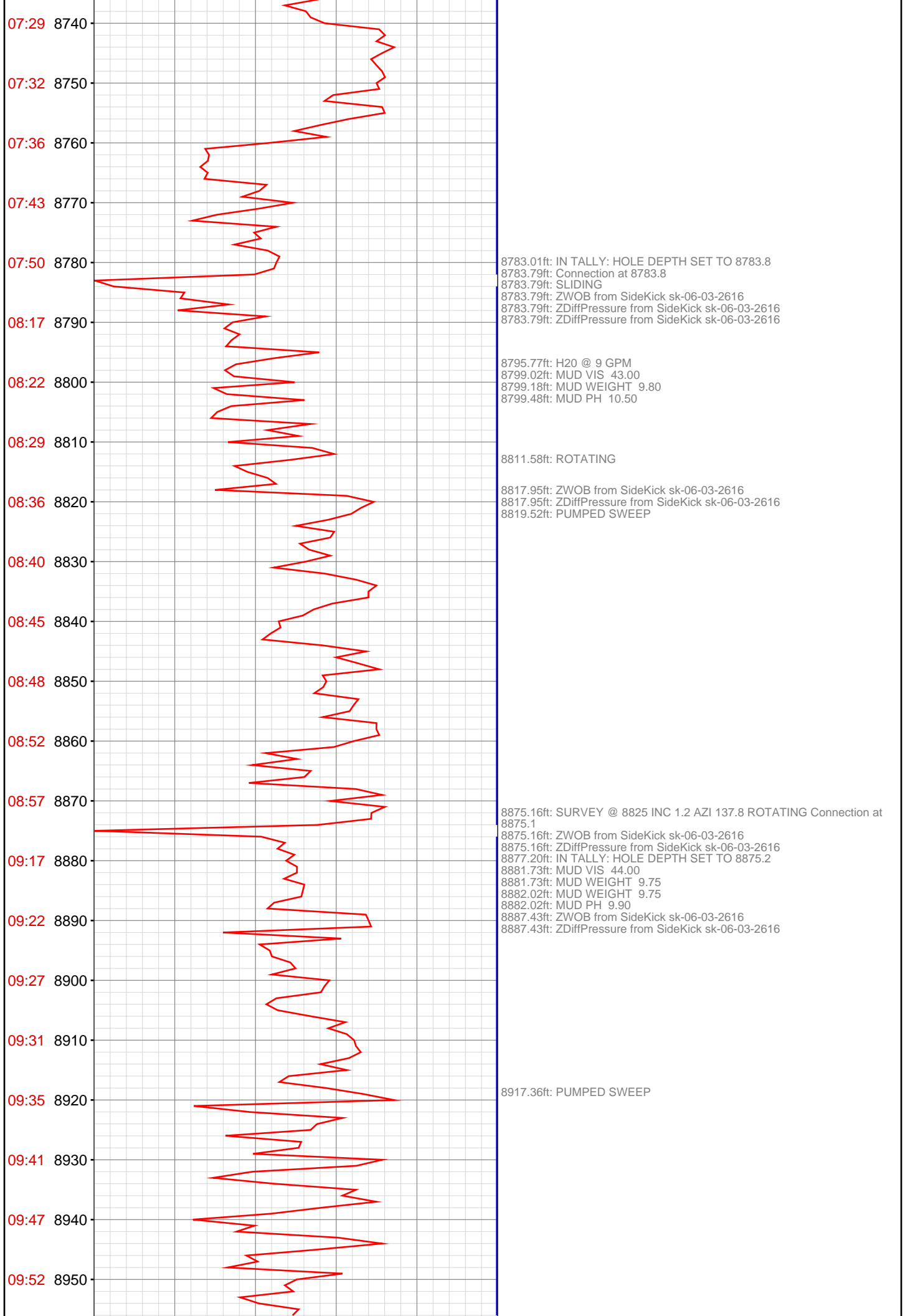
8641.27ft: SPR#1 20-83 30-125 40-170 W/9.7 MW  
8642.45ft: SPR#2 20-83 30-124 40-169 W/9.7 MW @8600'

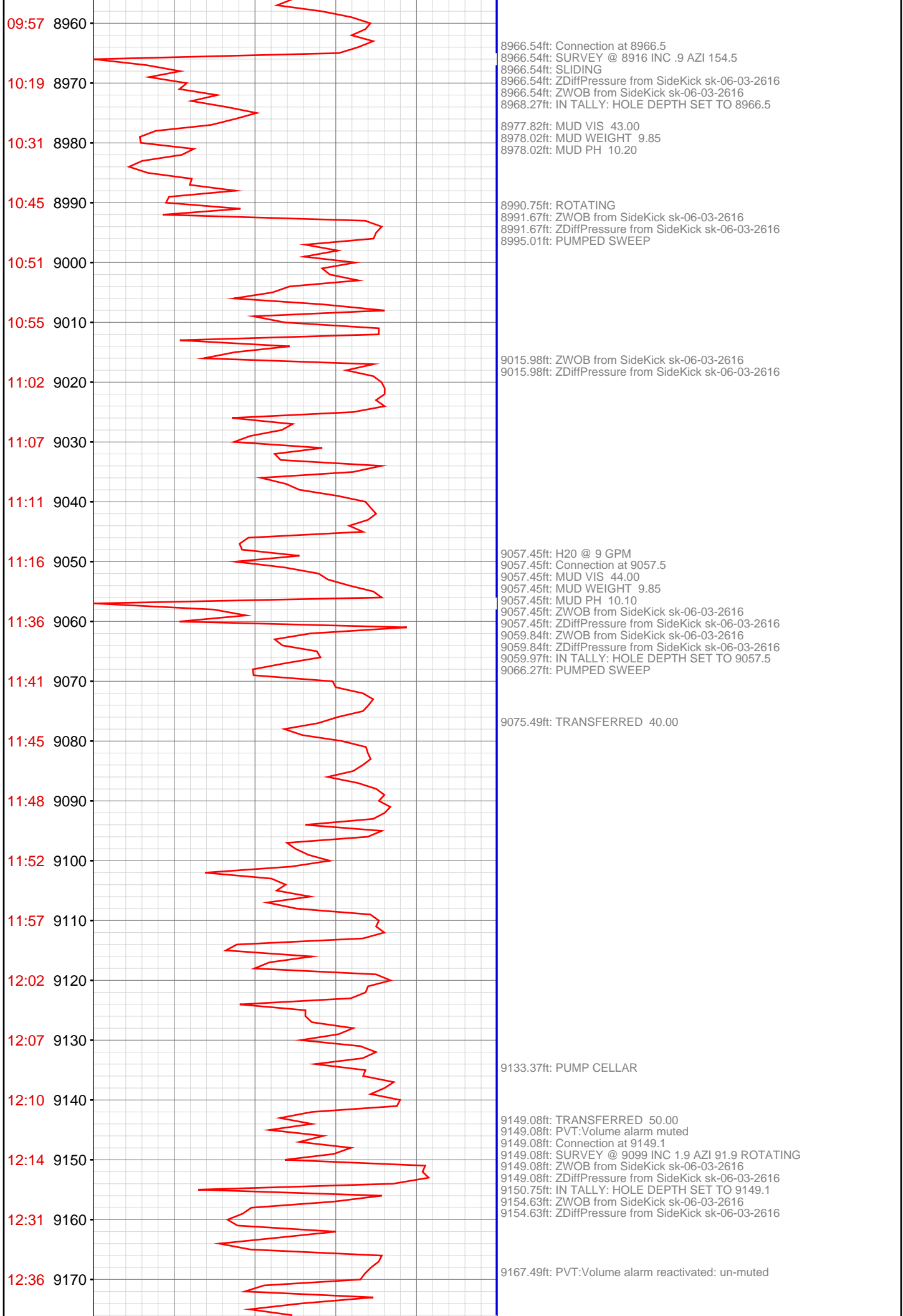
8692.49ft: SURVEY @ 8642 INC .4 AZI 165.4  
8692.49ft: Connection at 8692.5  
8692.49ft: ROTATING  
8692.49ft: ZWOB from SideKick sk-06-03-2616  
8692.49ft: ZDiffPressure from SideKick sk-06-03-2616  
8693.96ft: IN TALLY: HOLE DEPTH SET TO 8692.5  
8694.03ft: ZWOB from SideKick sk-06-03-2616  
8694.03ft: ZDiffPressure from SideKick sk-06-03-2616  
8703.25ft: PUMPED SWEEP

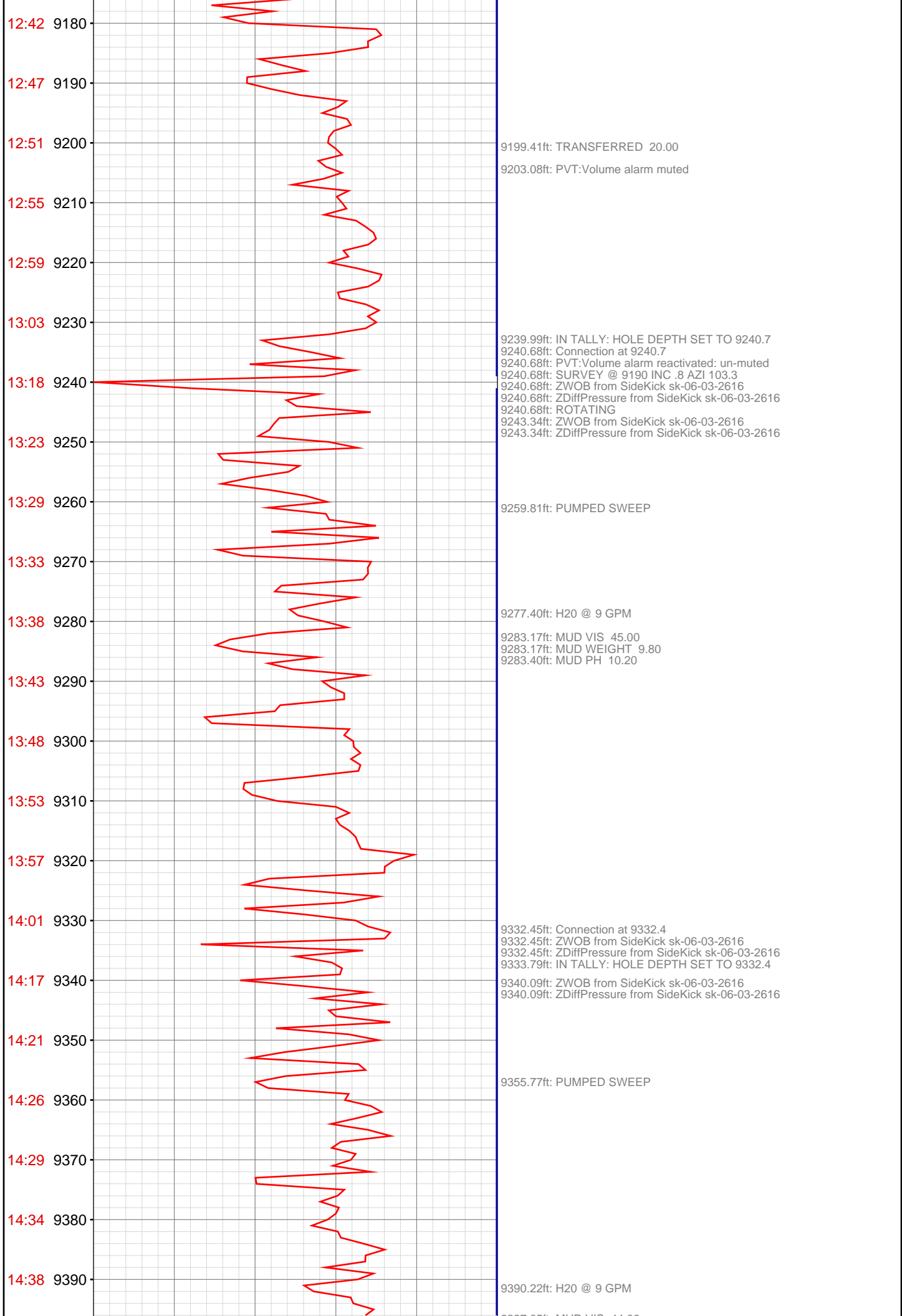
8709.61ft: H2O @ 9 GPM

8717.09ft: MUD VIS 43.00  
8717.32ft: MUD WEIGHT 9.70  
8717.32ft: MUD PH 9.90

8728.87ft: ZWOB from SideKick sk-06-03-2616  
8728.87ft: ZDiffPressure from SideKick sk-06-03-2616







9397.05ft: MUD VIS 44.00  
9397.05ft: MUD WEIGHT 9.80  
9397.47ft: MUD PH 9.50

9423.00ft: IN TALLY: HOLE DEPTH SET TO 9423.9  
9423.92ft: Connection at 9423.9  
9423.92ft: SURVEY @ 9373 INC .4 AZI 115.6  
9423.92ft: ROTATING  
9424.21ft: ZWOB from SideKick sk-06-03-2616  
9424.21ft: ZDiffPressure from SideKick sk-06-03-2616  
9432.22ft: ZWOB from SideKick sk-06-03-2616  
9432.22ft: ZDiffPressure from SideKick sk-06-03-2616  
9434.65ft: SPR#1 20-86 30-127 40-170 W/9.8 MW  
9437.17ft: SPR#2 20-85 30-126 40-169 W/9.8 MW @9423'

9449.41ft: PUMPED SWEEP

9514.99ft: IN TALLY: HOLE DEPTH SET TO 9515.5  
9515.52ft: RIG SERVICE  
9515.52ft: MUD VIS 45.00  
9515.52ft: MUD WEIGHT 9.80  
9515.52ft: MUD PH 10.30  
9515.52ft: H2O @ 9 GPM  
9515.52ft: Connection at 9515.5  
9515.52ft: ZWOB from SideKick sk-06-03-2616  
9515.52ft: ZDiffPressure from SideKick sk-06-03-2616  
9517.75ft: ZWOB from SideKick sk-06-03-2616  
9517.75ft: ZDiffPressure from SideKick sk-06-03-2616

9539.37ft: PUMPED SWEEP

9576.05ft: ZWOB from SideKick sk-06-03-2616  
9576.05ft: ZDiffPressure from SideKick sk-06-03-2616

9596.79ft: H2O @ 9 GPM

9605.09ft: MUD VIS 45.00  
9605.54ft: MUD WEIGHT 9.80  
9606.04ft: MUD PH 9.70  
9607.22ft: Connection at 9607.2  
9608.92ft: IN TALLY: HOLE DEPTH SET TO 9607.2

