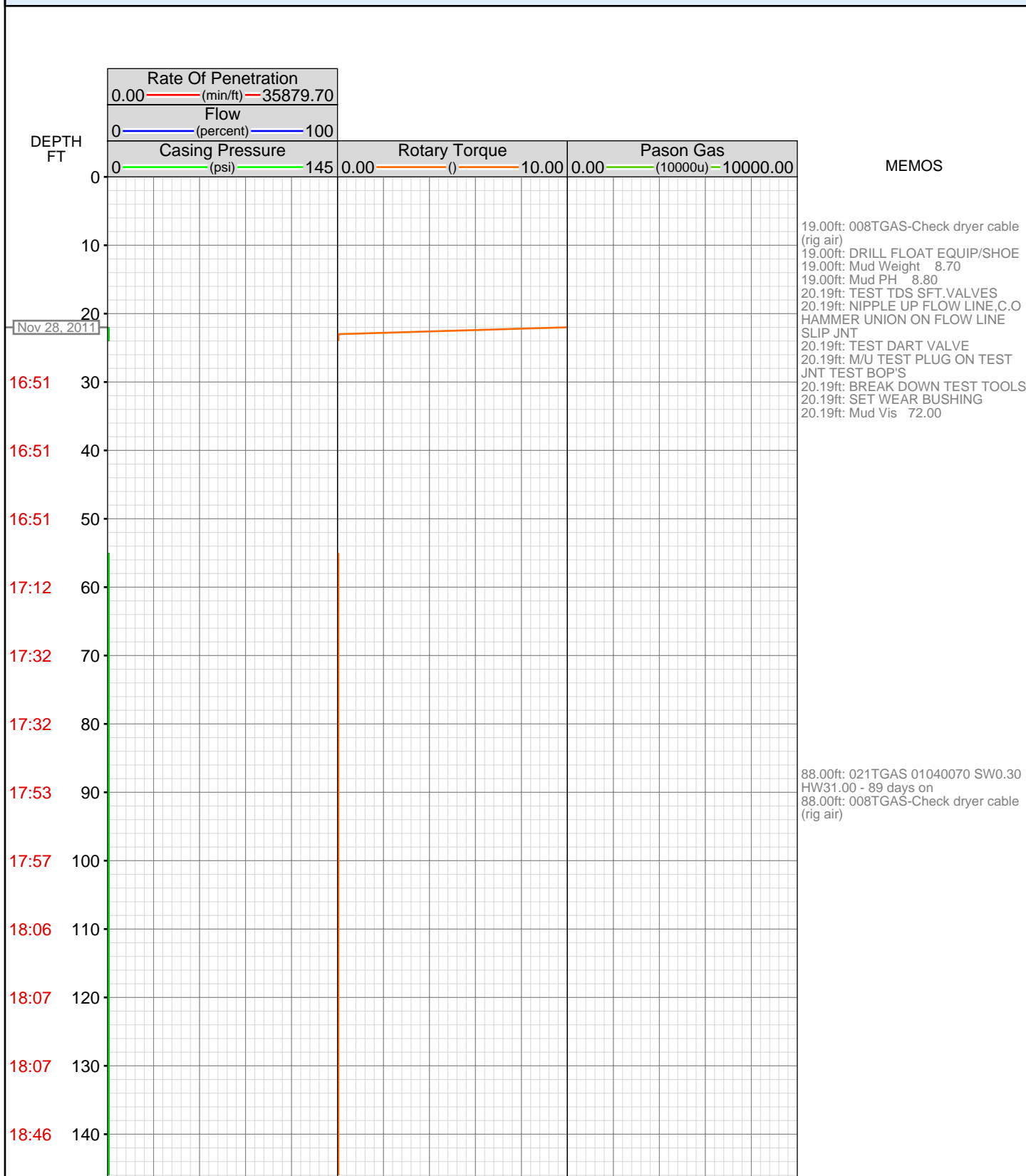


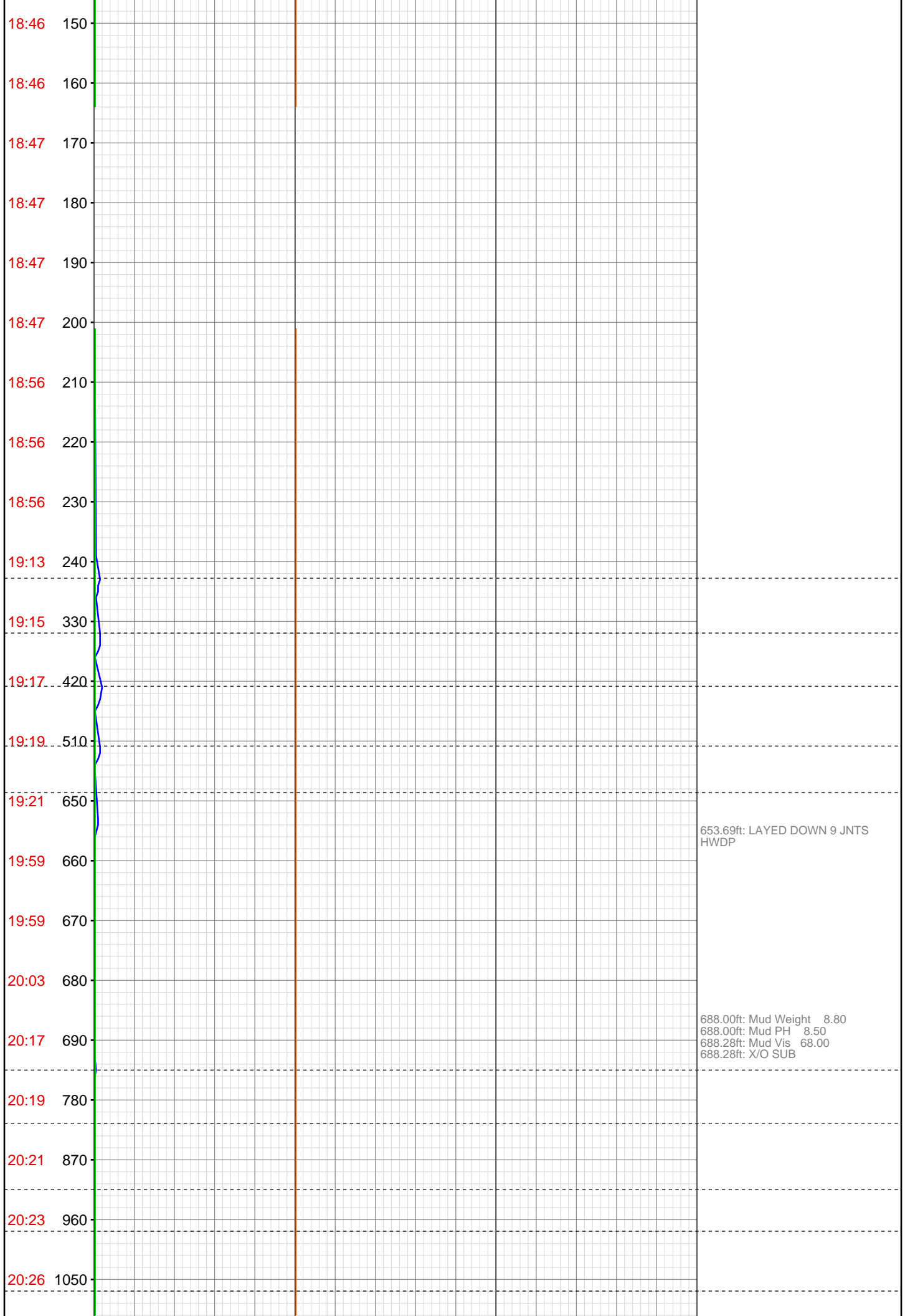
DataHub EDR Log

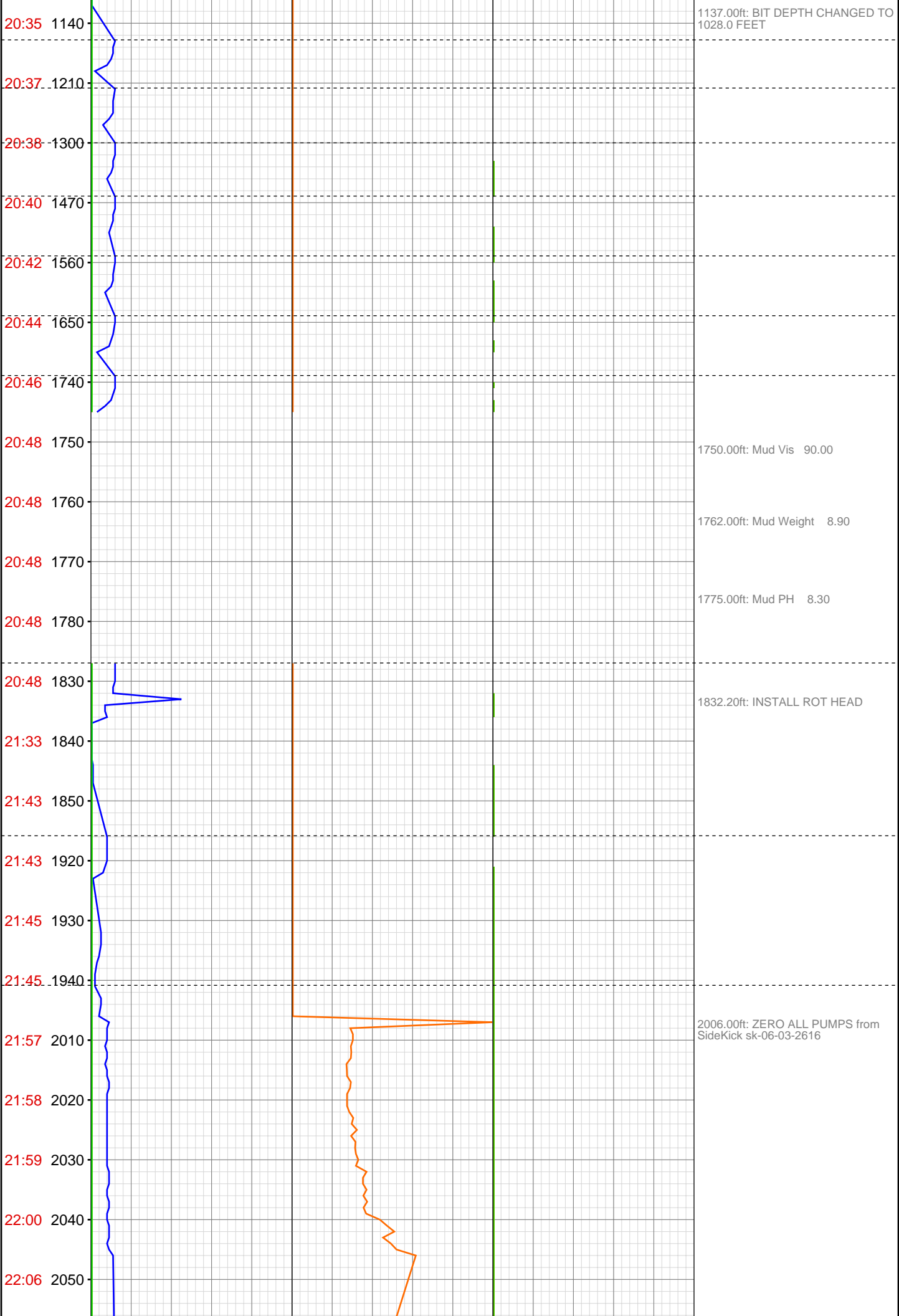
Wed Dec 07, 2011 10:18:31
Well Dossier 1322428946
Marilyn Tucker

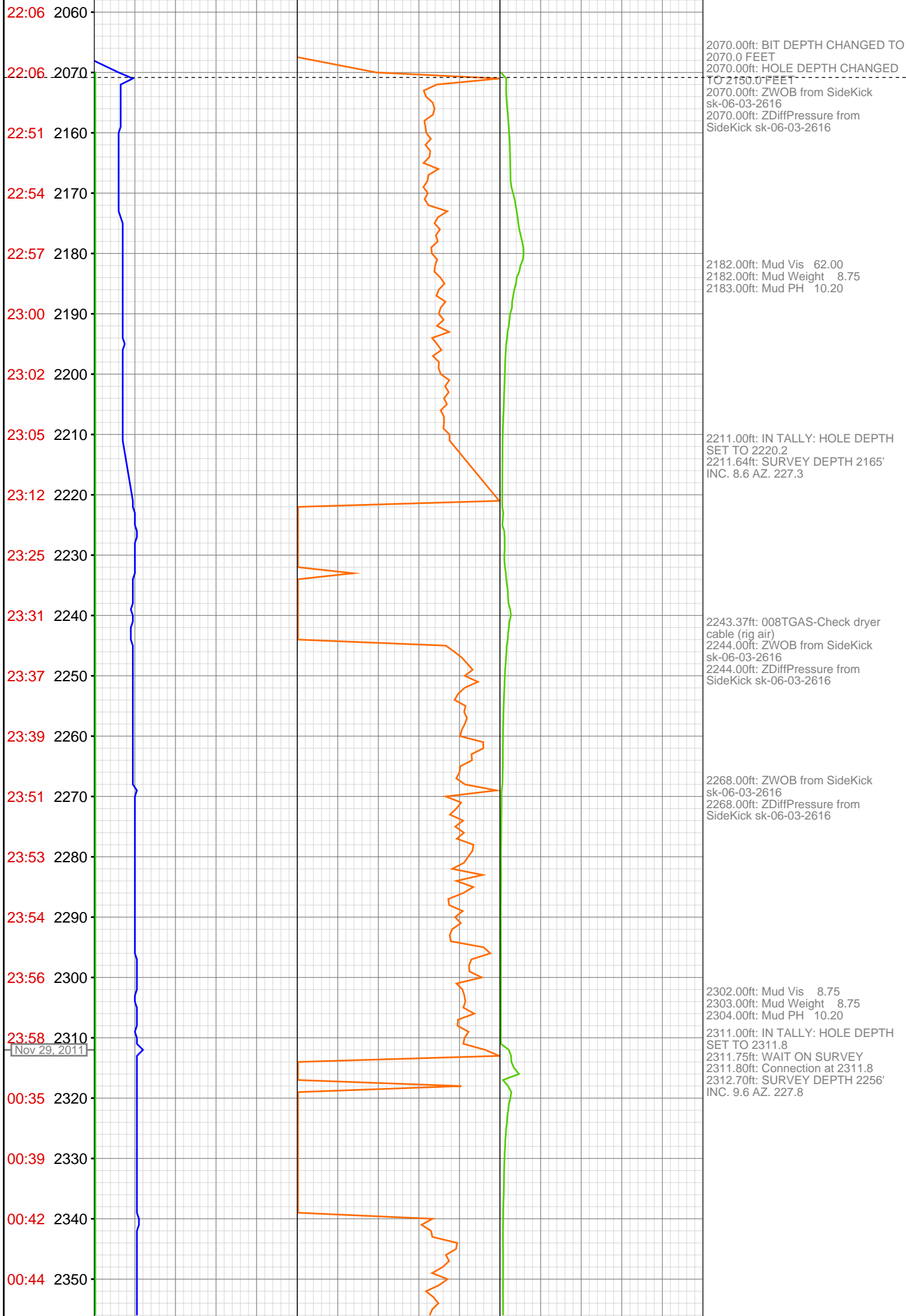
OPERATOR: EnCana Oil & Gas (USA), Inc.
WELL: DOUBLE WILLOW 8601A-33 P28 496
FIELD:
LOCATION: SEC.36 T4S RNG 96W
COUNTRY: USA
RIG: Pat-UTI 308

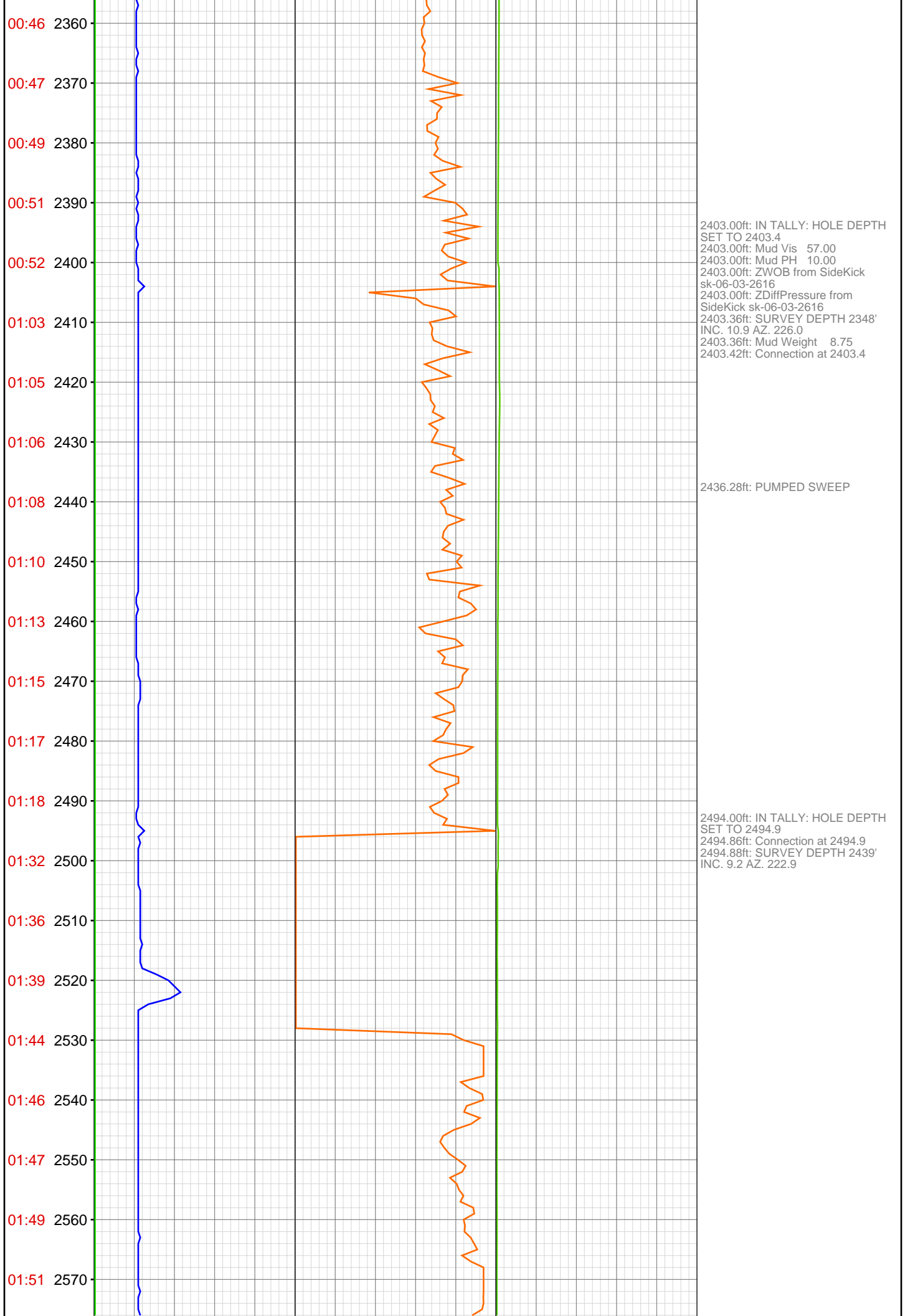
CONTRACTOR: Patterson-UTI Drilling Company
UNIQUE WELL ID: 05-045-20447
SPUD DATE: Nov 28, 2011 16:30
RELEASE DATE: Dec 05, 2011 22:00

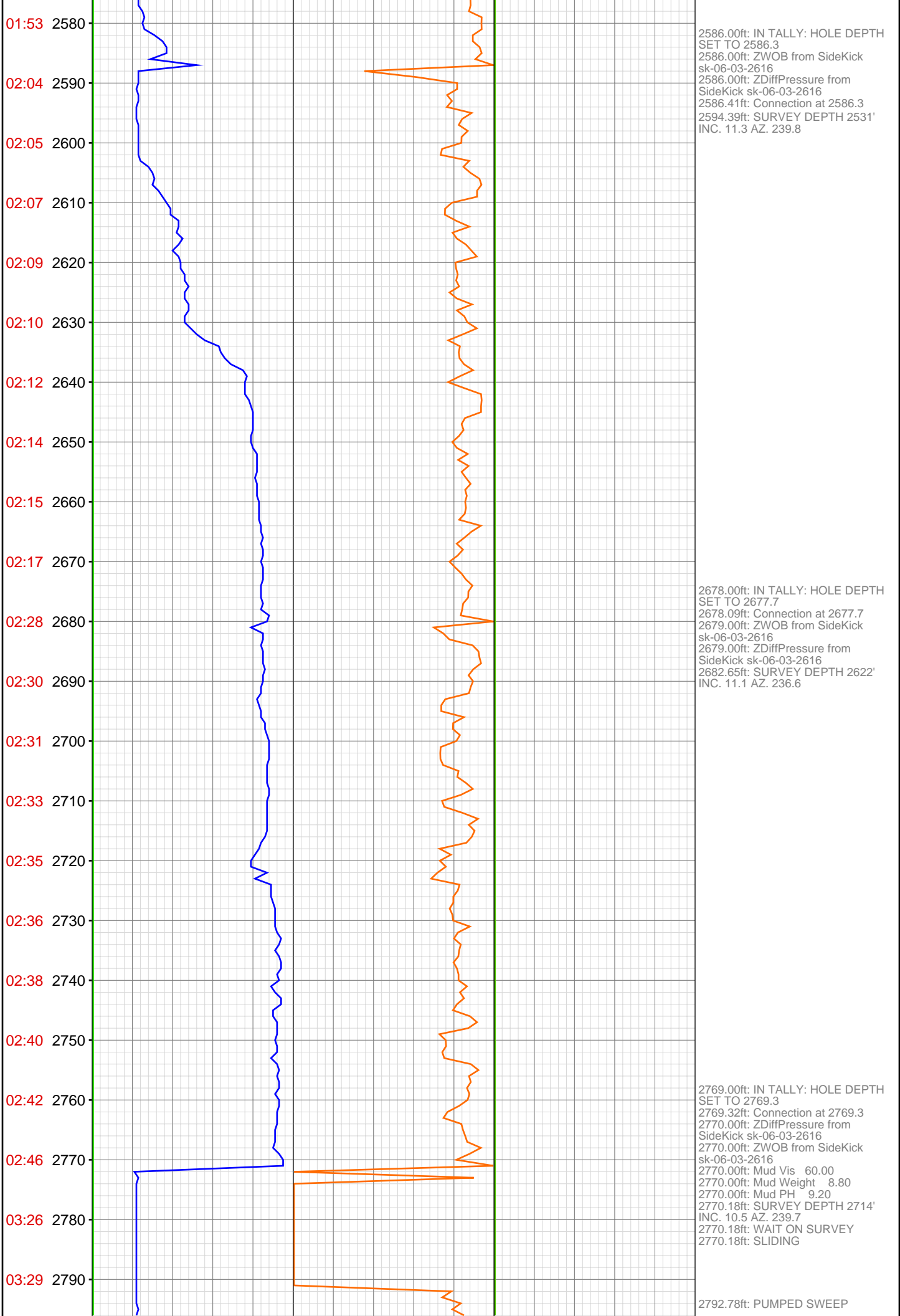


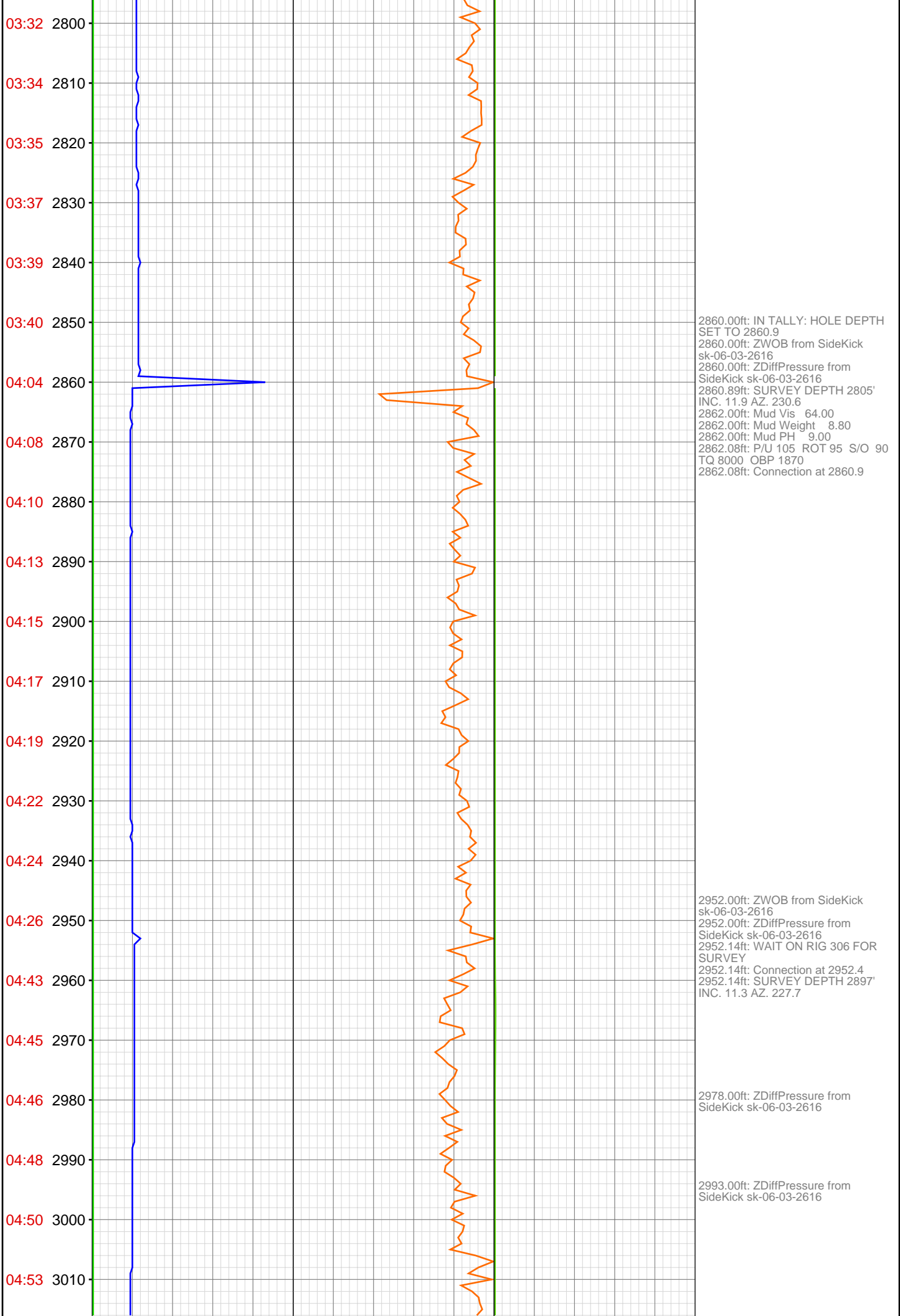


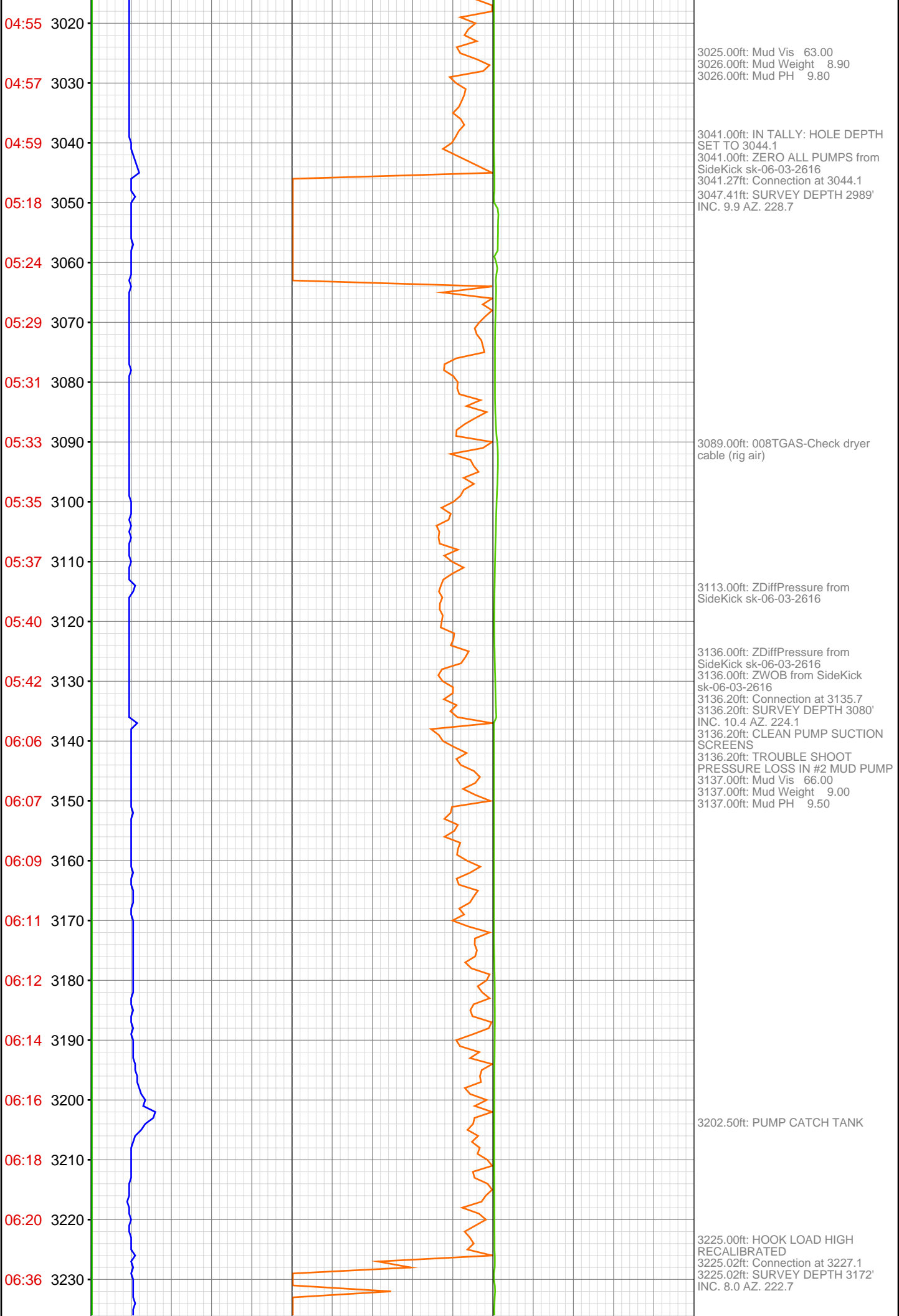


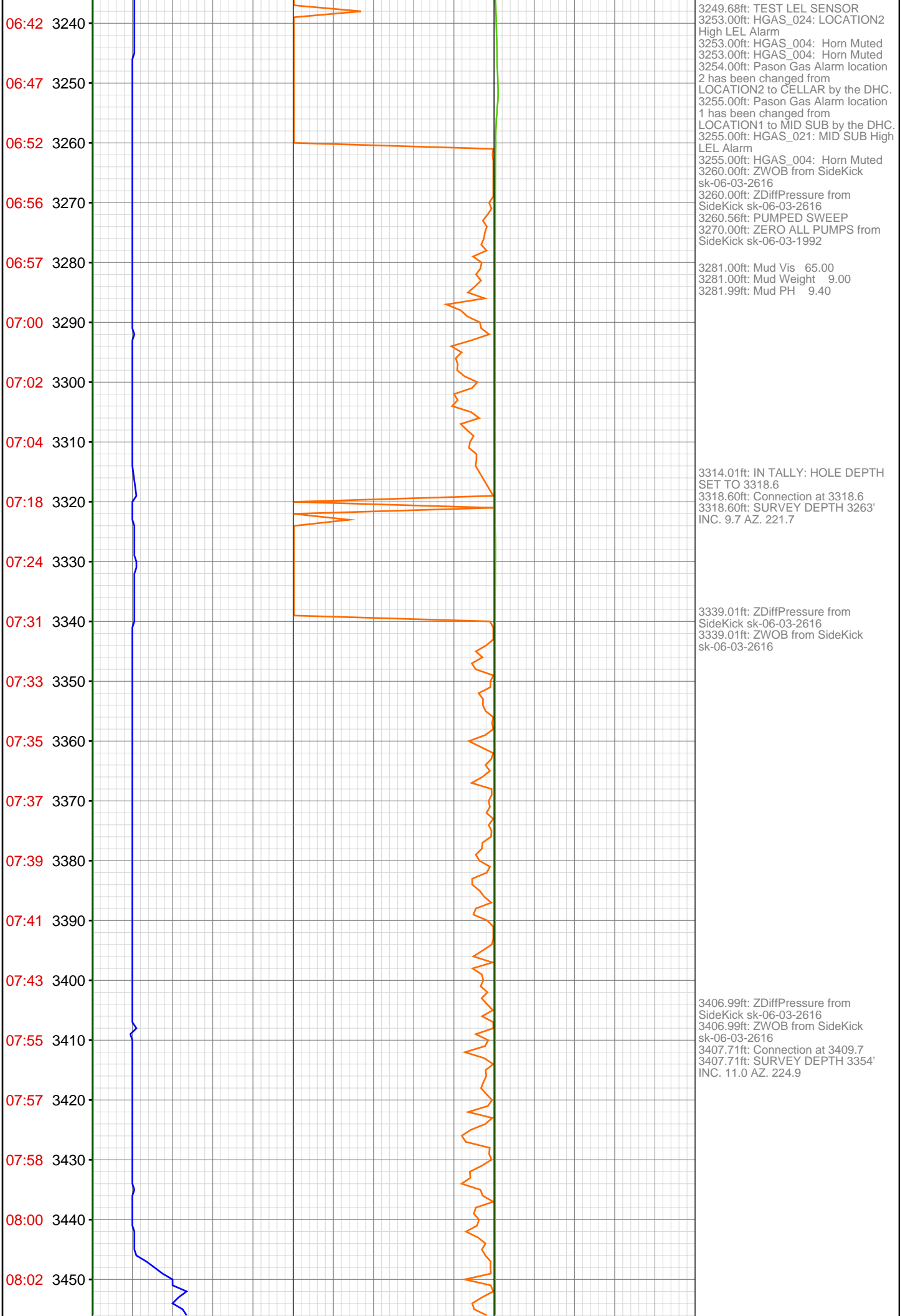


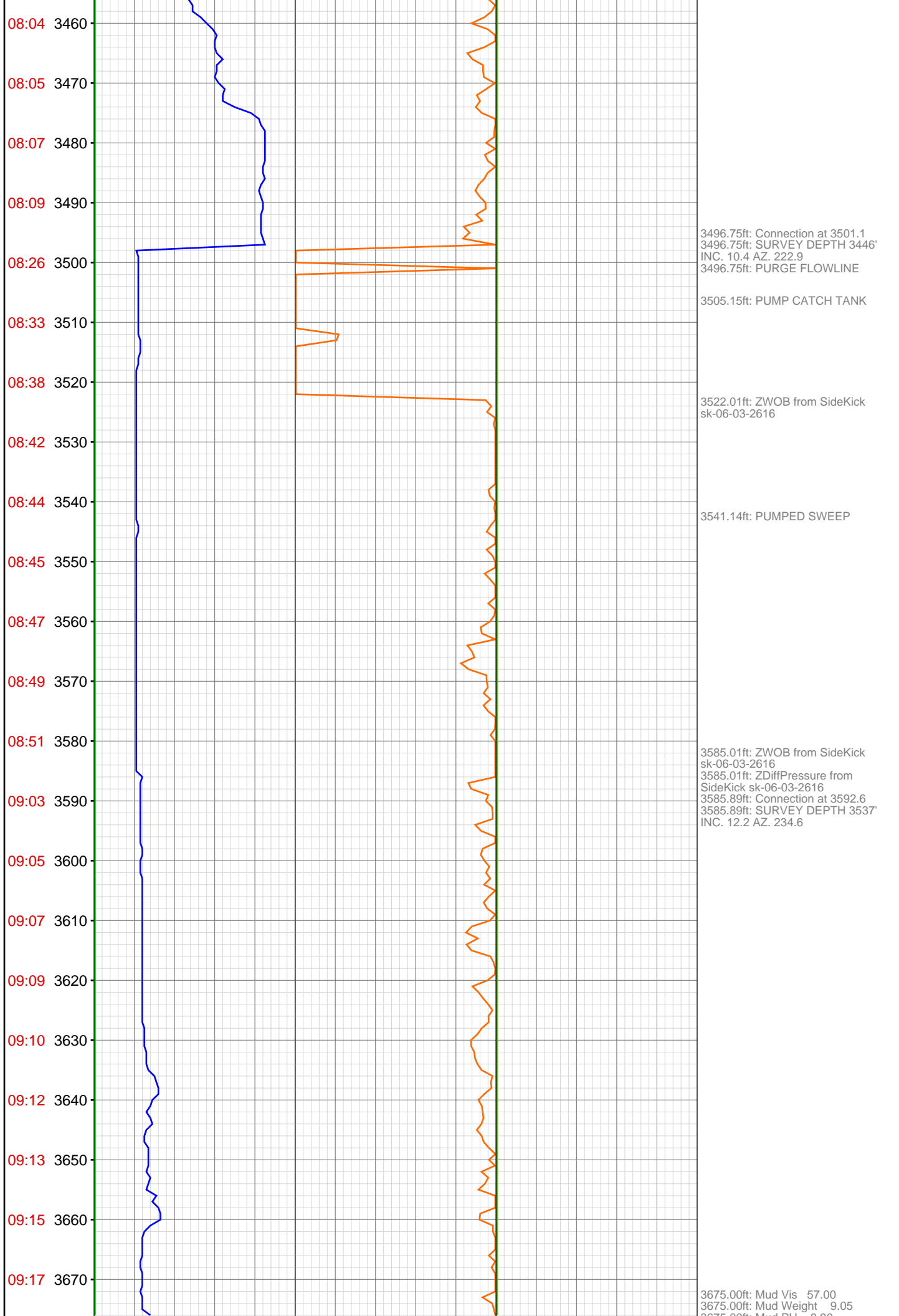


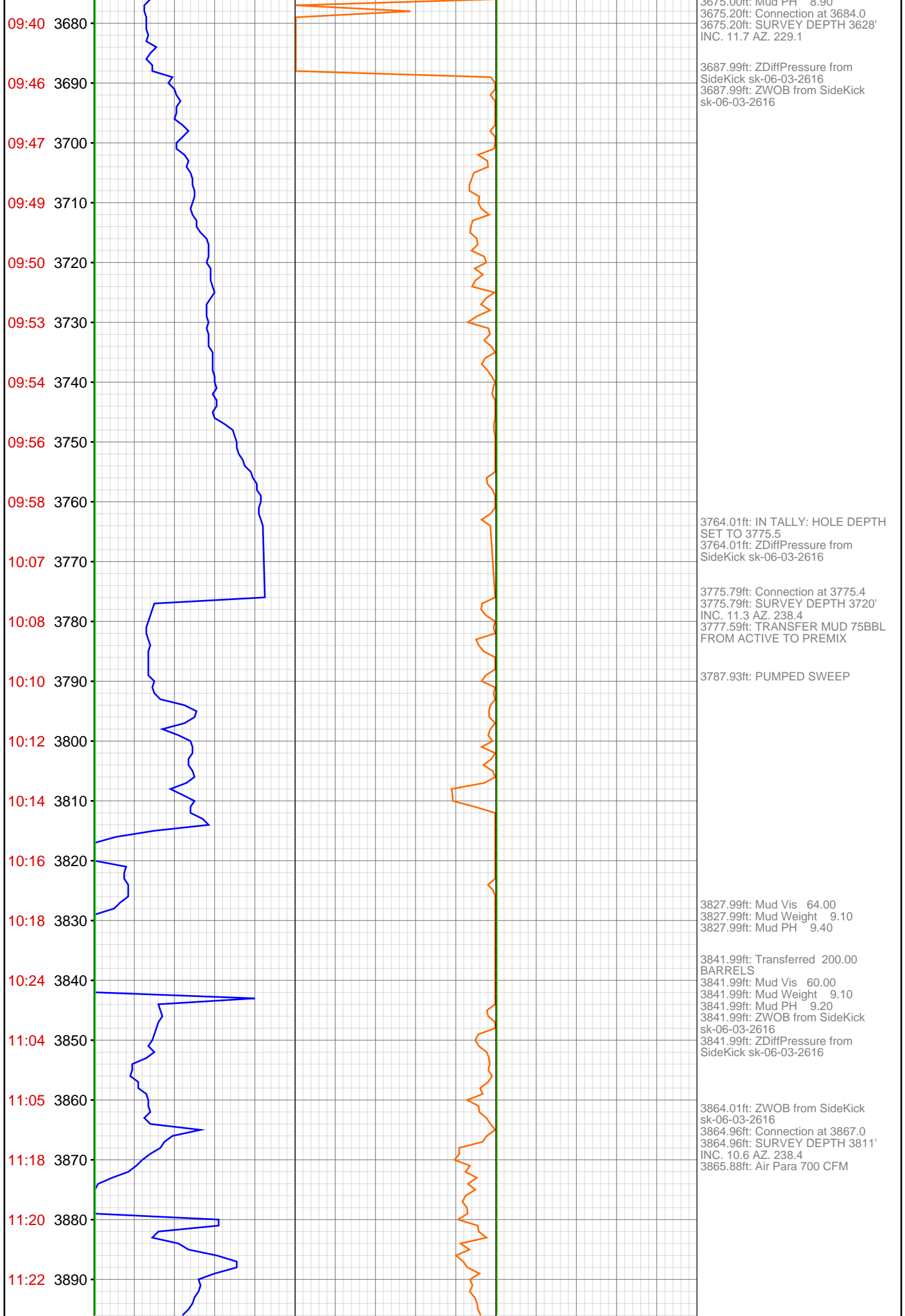


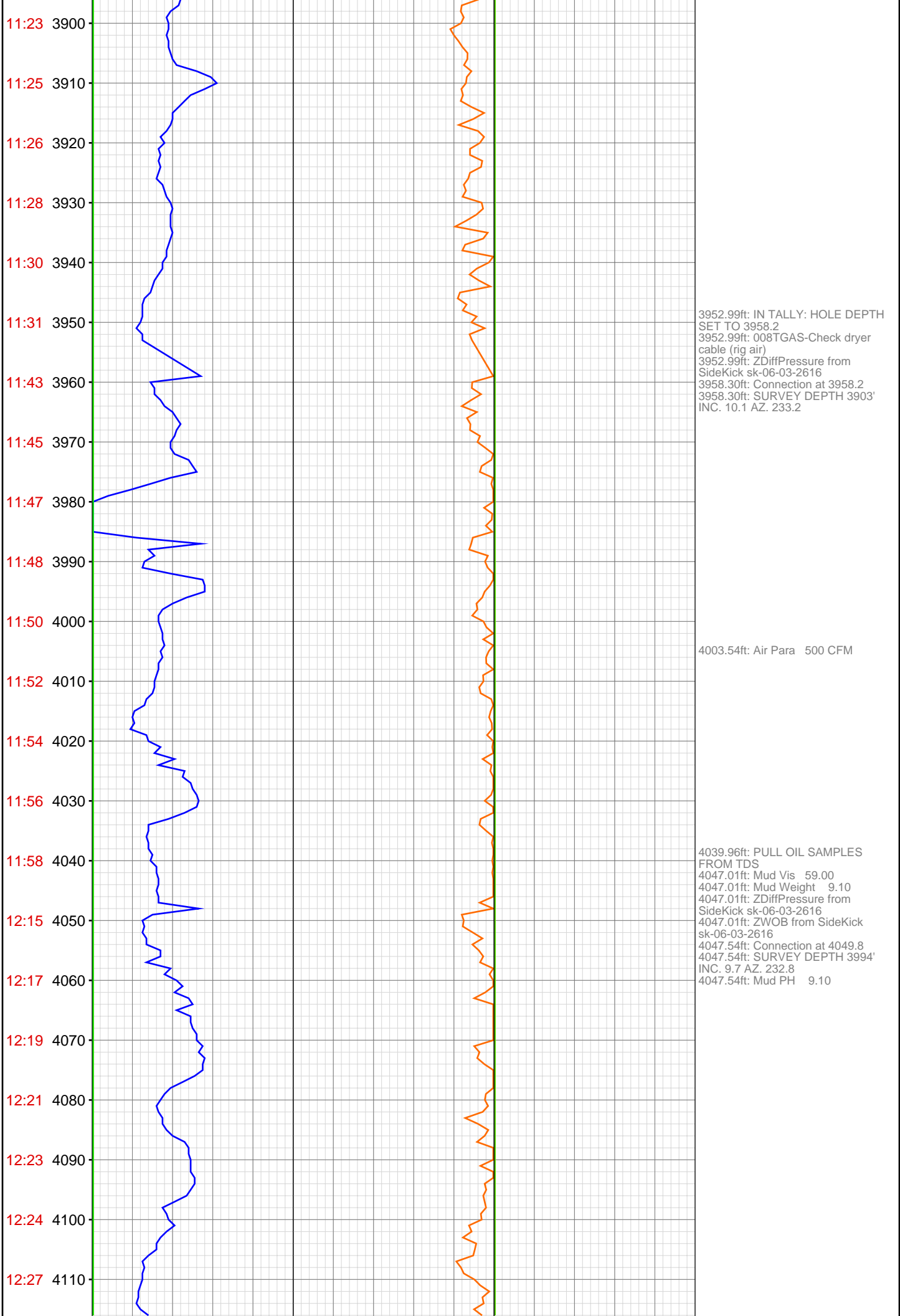


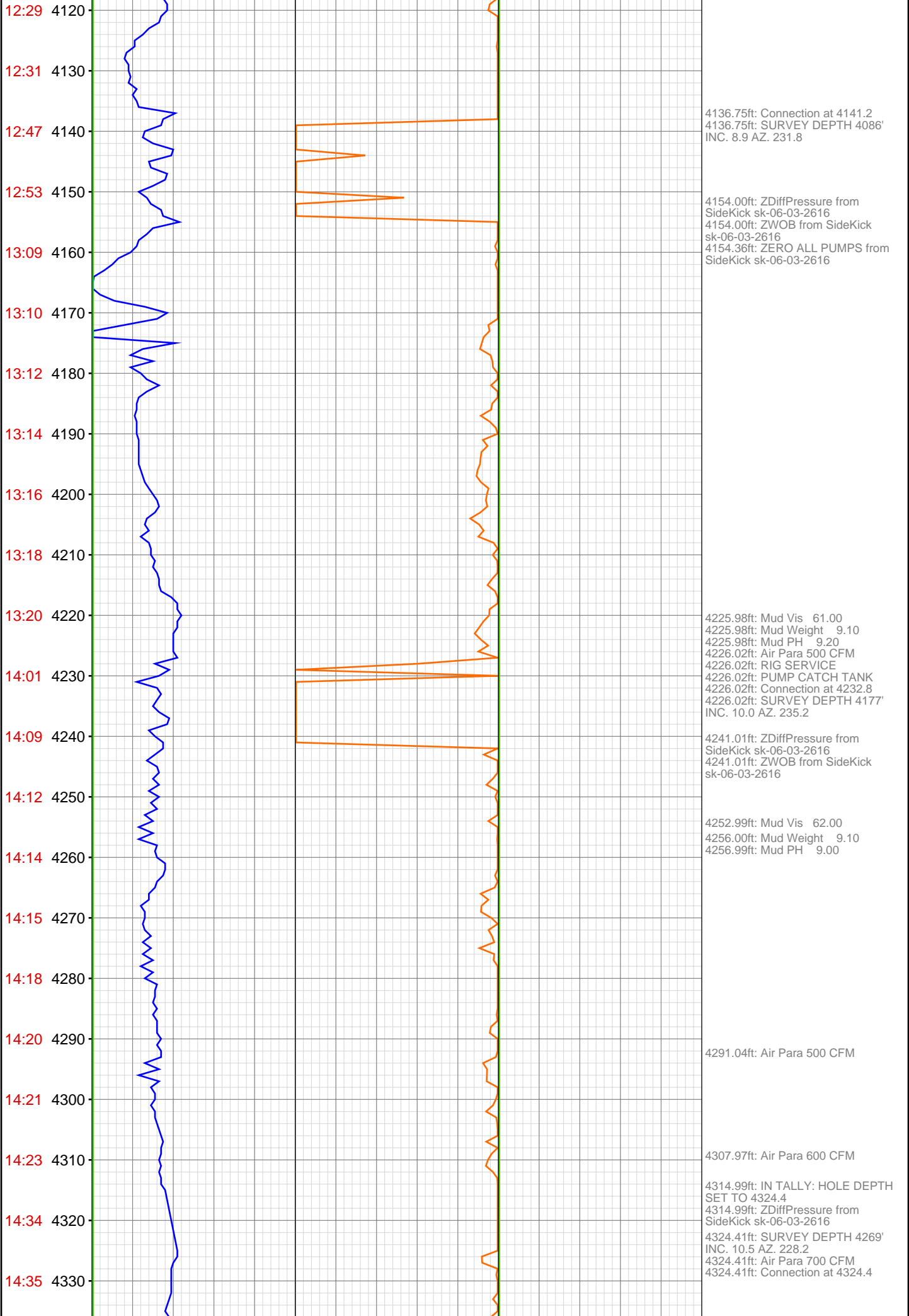


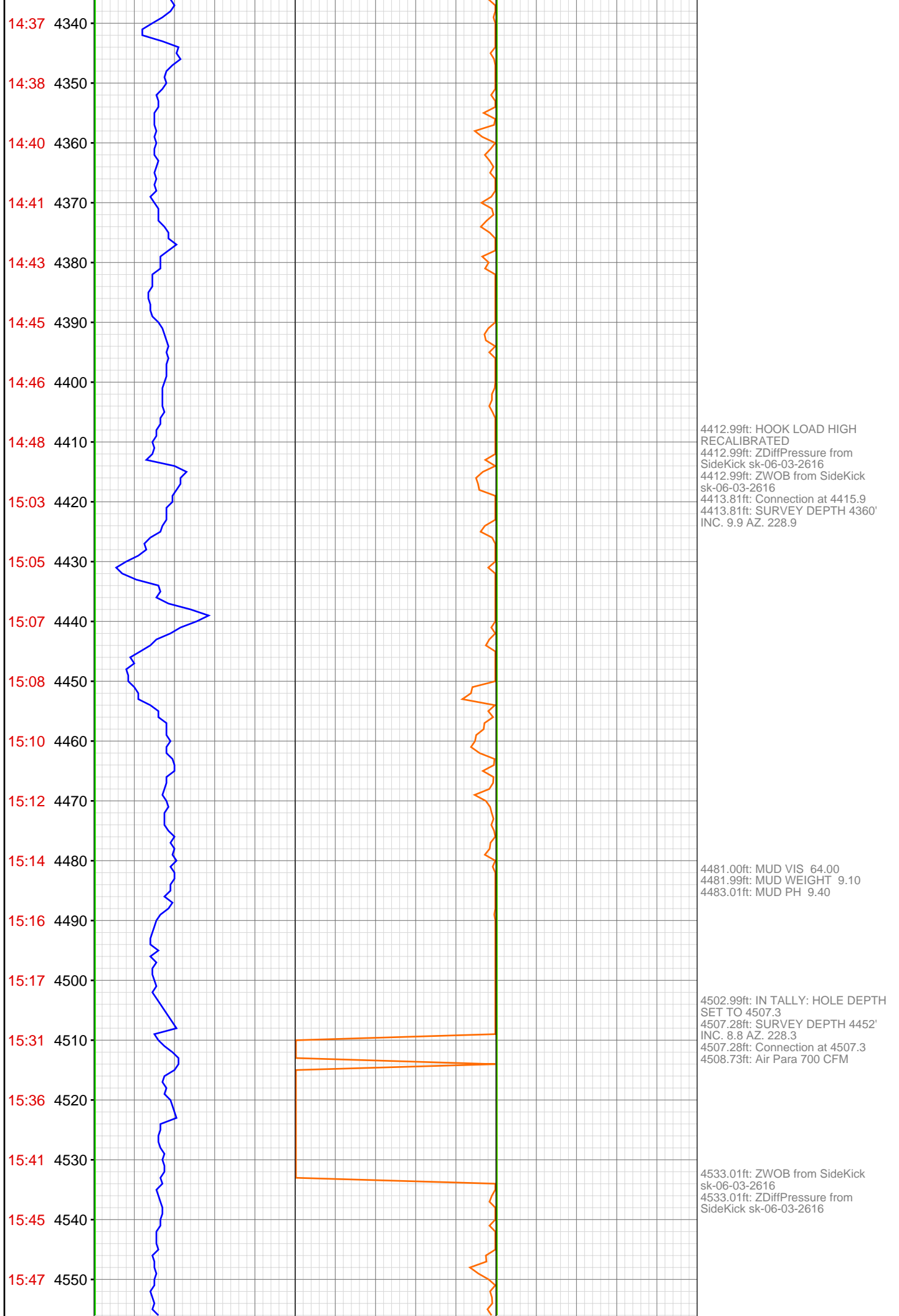


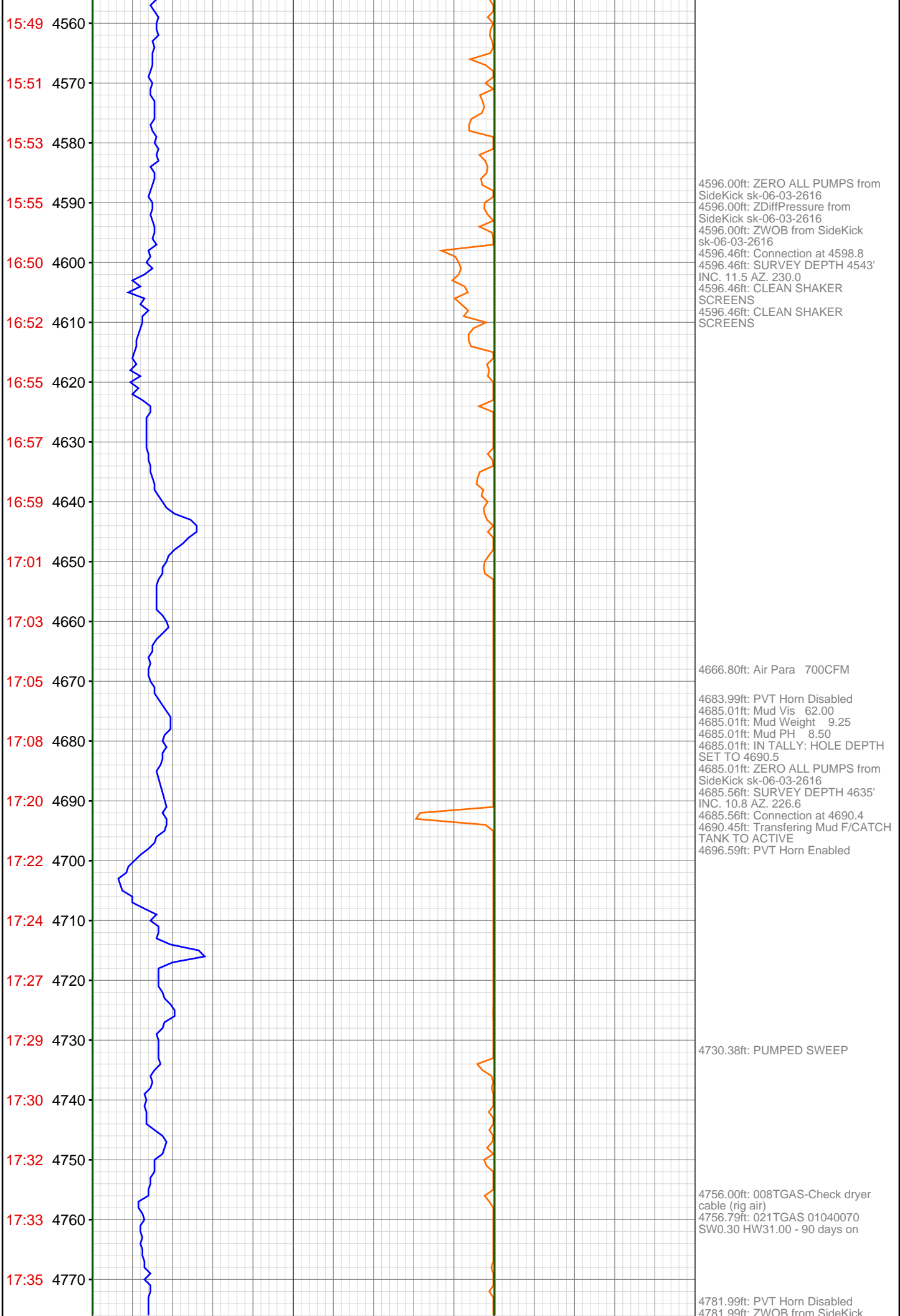


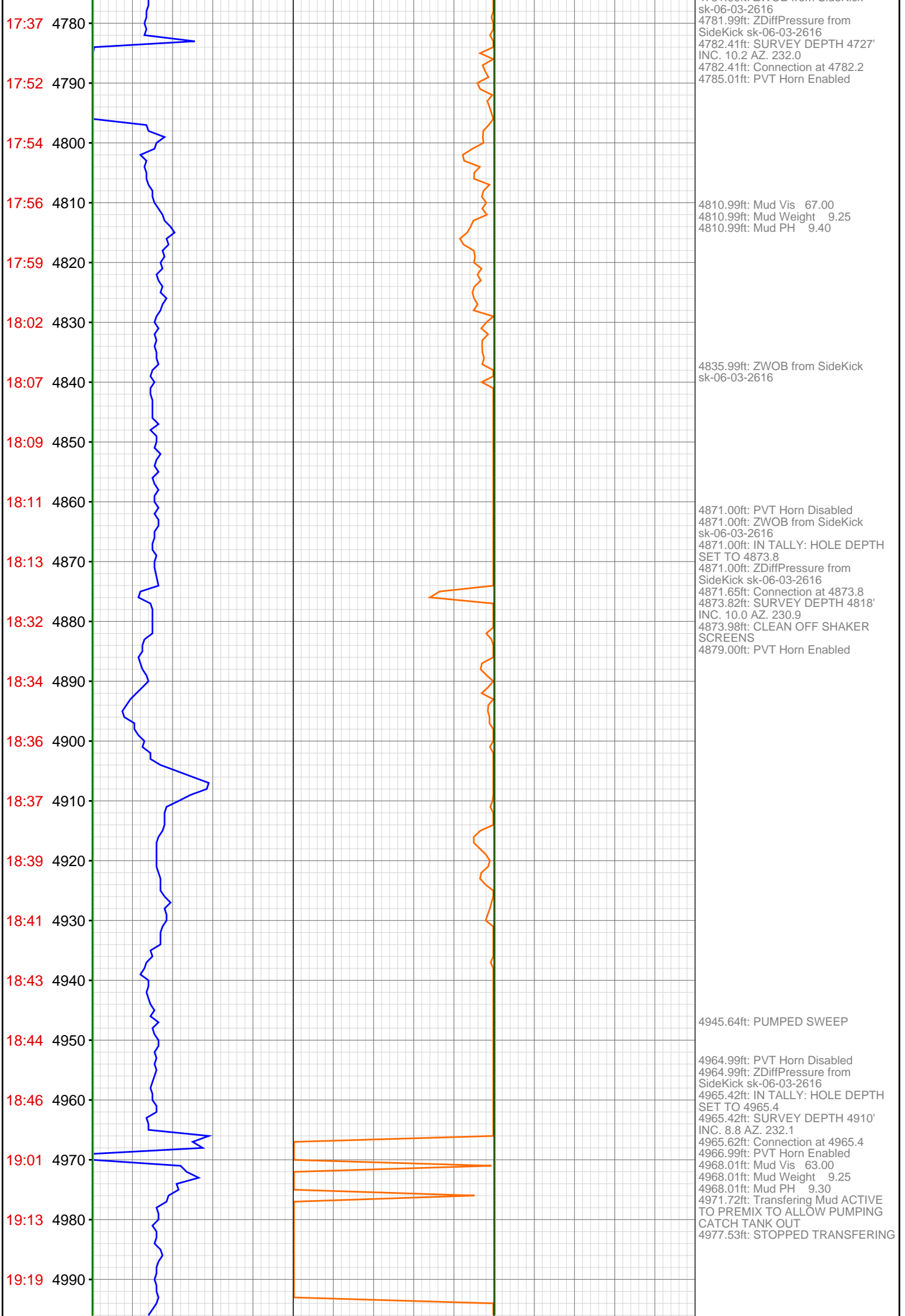




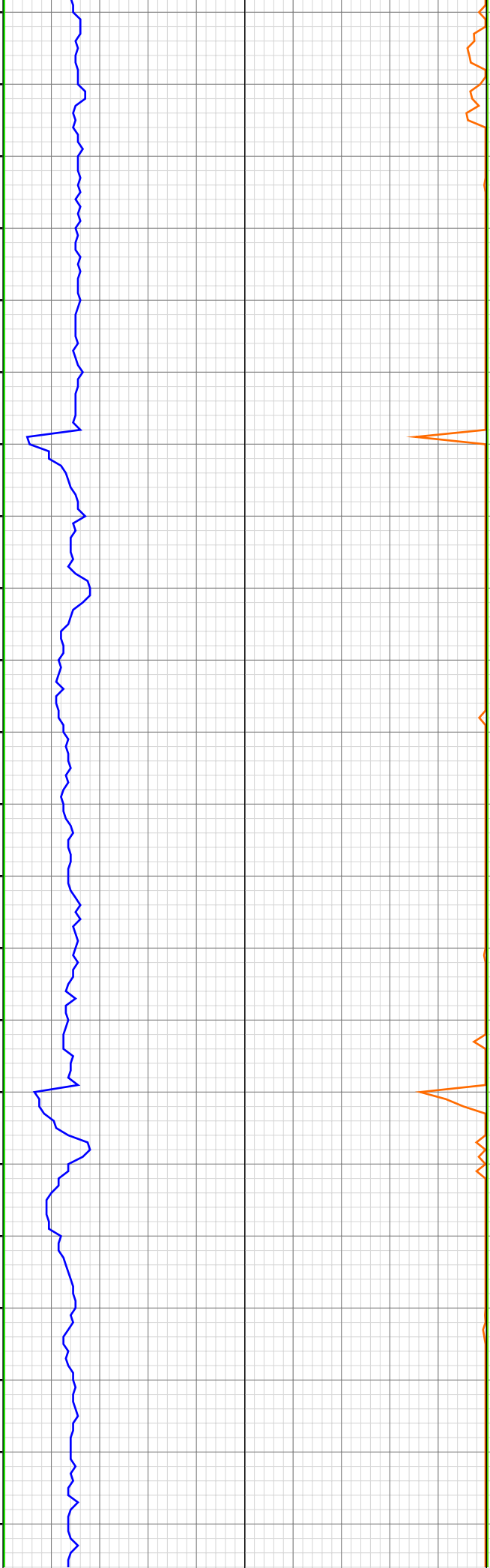








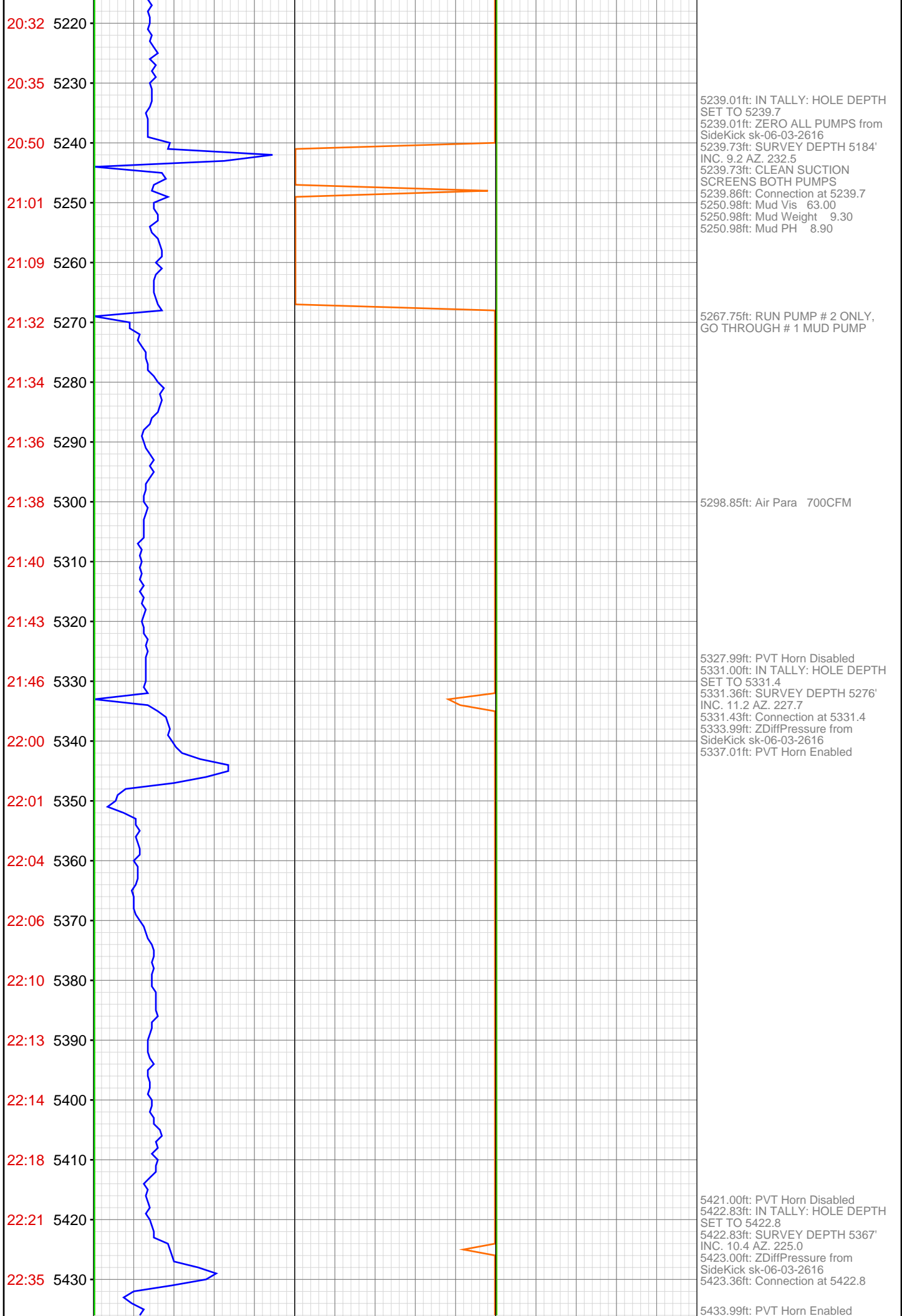
19:22 5000
19:24 5010
19:27 5020
19:30 5030
19:33 5040
19:35 5050
19:48 5060
19:50 5070
19:52 5080
19:54 5090
19:56 5100
19:58 5110
19:59 5120
20:01 5130
20:03 5140
20:15 5150
20:18 5160
20:20 5170
20:22 5180
20:25 5190
20:27 5200
20:30 5210

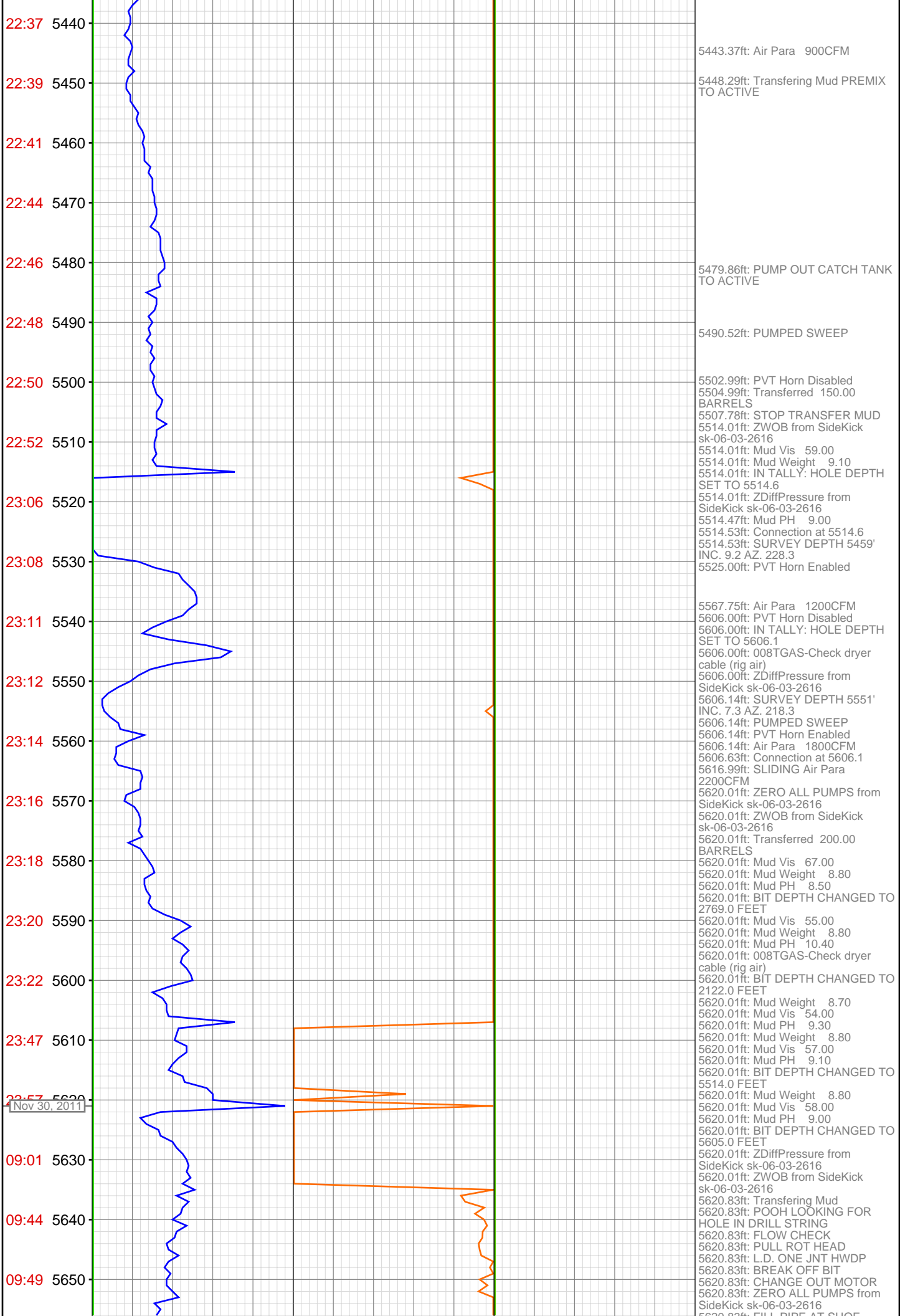


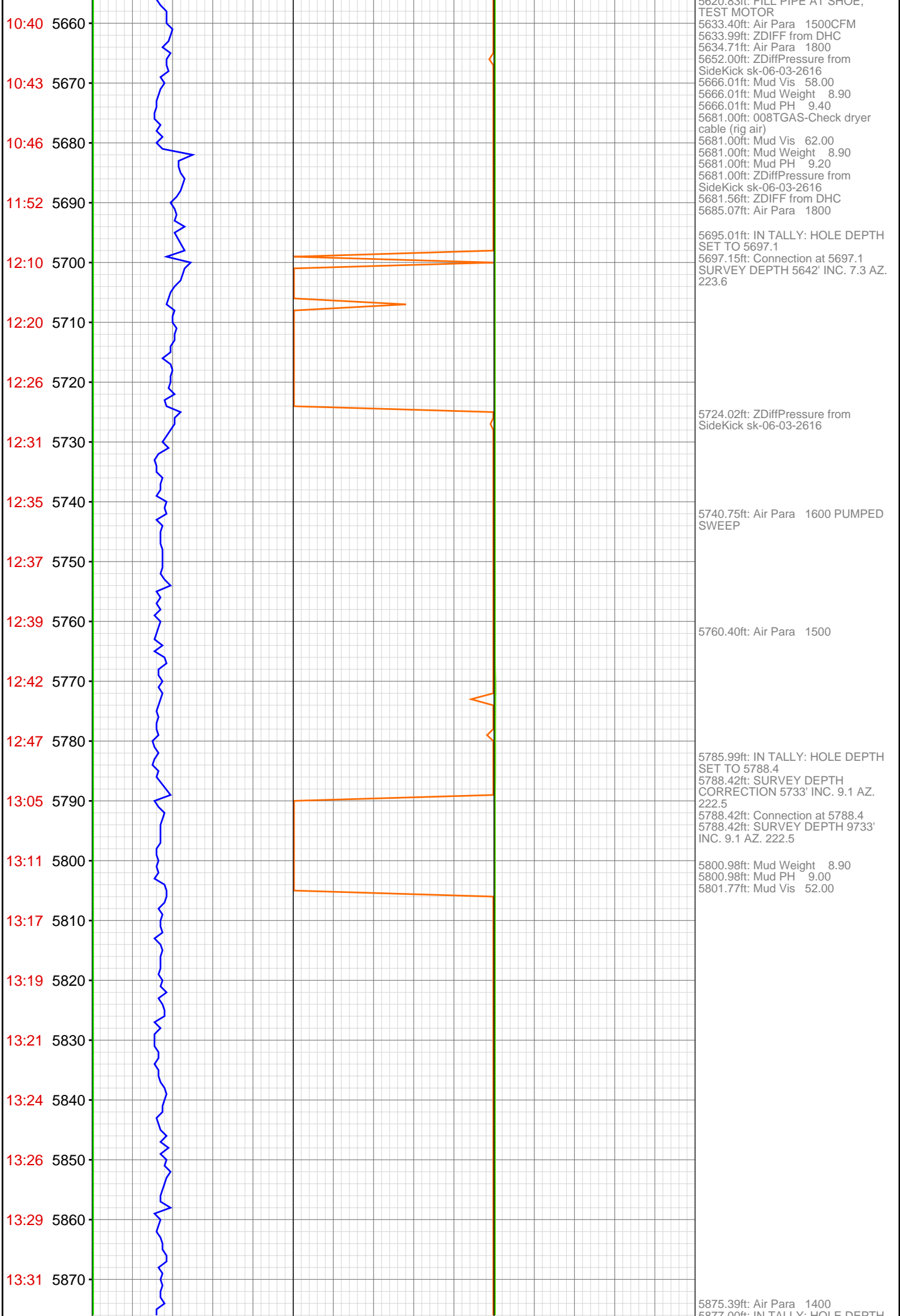
5056.79ft: SURVEY DEPTH 5001'
INC. 10.7 AZ. 226.6
5056.99ft: PVT Horn Disabled
5056.99ft: IN TALLY: HOLE DEPTH
SET TO 5056.8
5056.99ft: ZERO ALL PUMPS from
SideKick sk-06-03-2616
5057.35ft: Connection at 5056.8
5062.99ft: PVT Horn Enabled

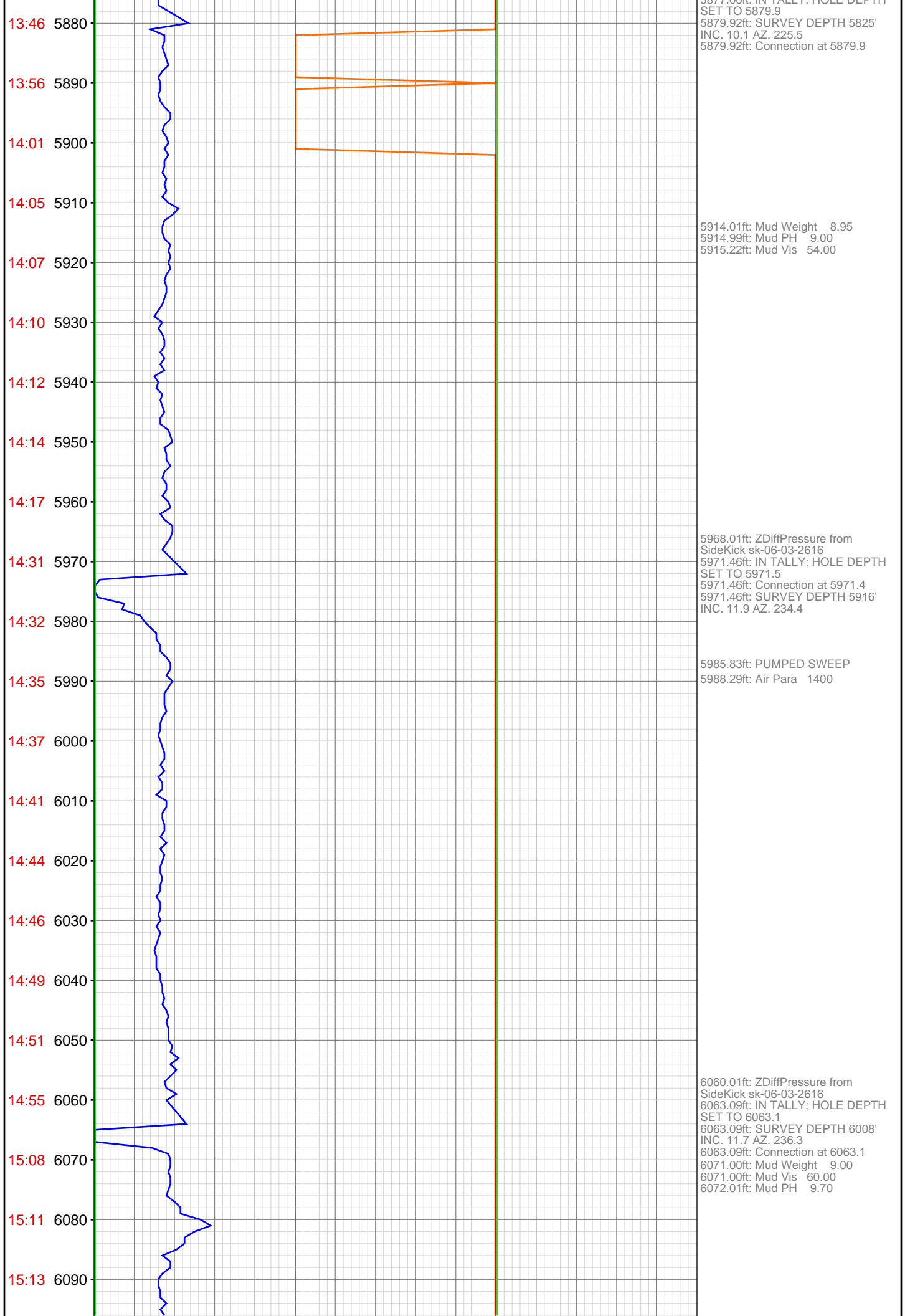
5141.01ft: PVT Horn Disabled
5148.00ft: ZWOB from SideKick
sk-06-03-2616
5148.00ft: ZERO ALL PUMPS from
SideKick sk-06-03-2616
5148.29ft: Connection at 5148.3
5148.33ft: IN TALLY: HOLE DEPTH
SET TO 5148.3
5148.33ft: SURVEY DEPTH 5093'
INC. 9.8 AZ. 230.8
5149.28ft: ZDiffPressure from
SideKick sk-06-03-2616
5152.99ft: PVT Horn Enabled
5158.69ft: Transferring Mud PREMIX
TO ACTIVE/PUMP SWEEP

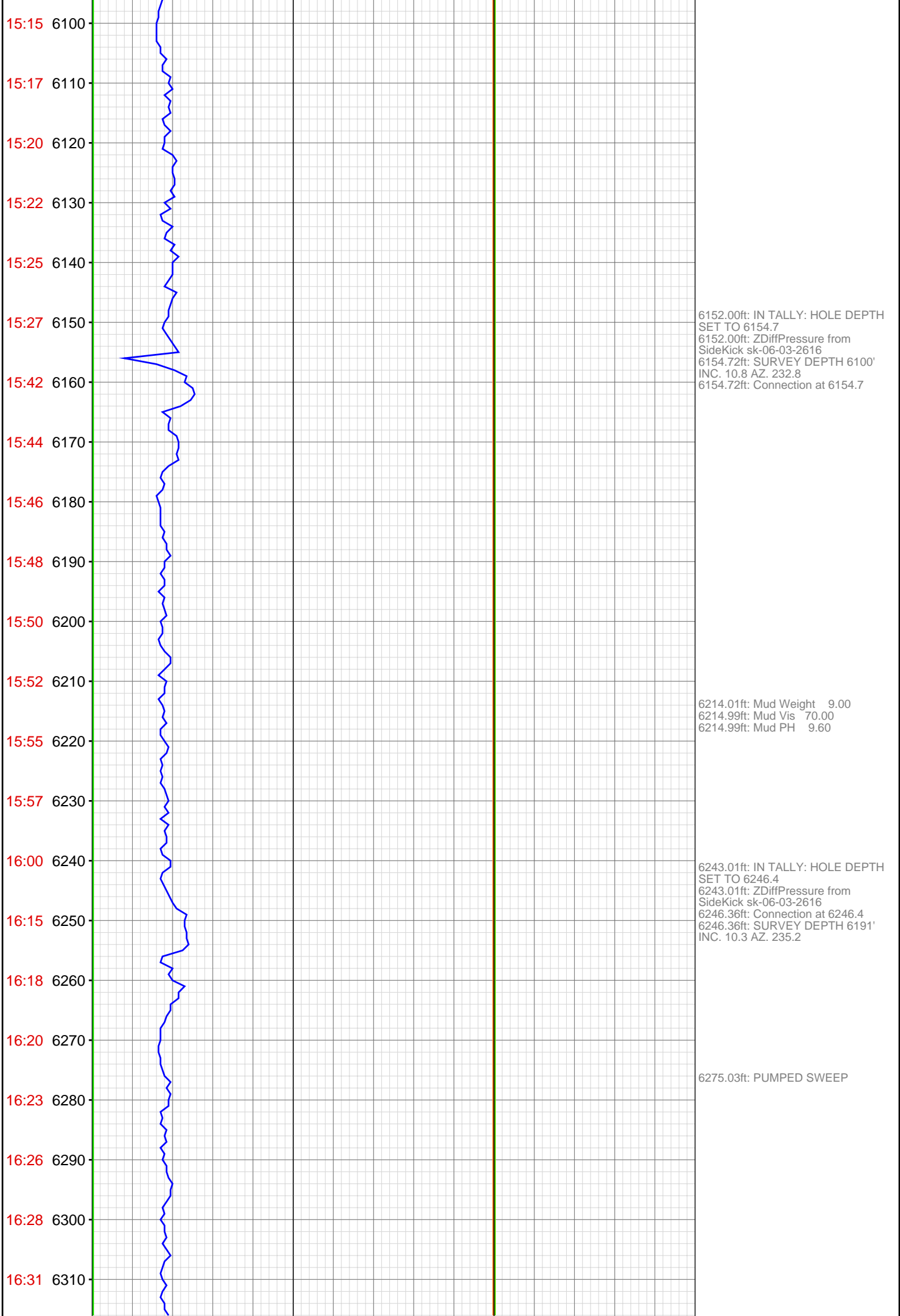
5191.77ft: STOPPED TRANSFERING











16:34 6320

16:37 6330

16:51 6340

16:53 6350

16:56 6360

16:58 6370

17:01 6380

17:03 6390

17:05 6400

17:08 6410

17:10 6420

17:25 6430

17:28 6440

17:30 6450

17:32 6460

17:35 6470

17:37 6480

17:40 6490

17:42 6500

17:45 6510

18:00 6520

18:03 6530



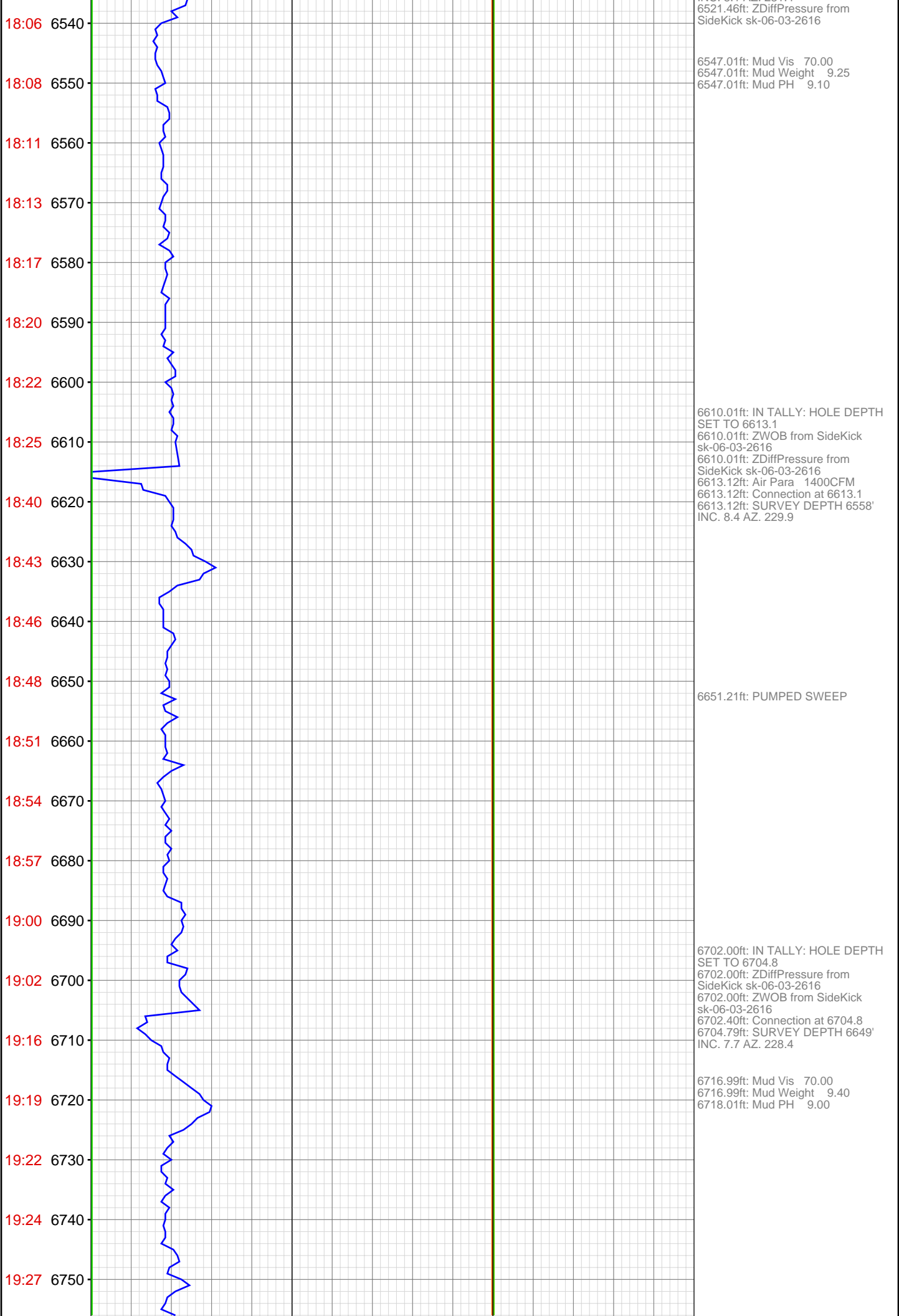
6337.99ft: IN TALLY: HOLE DEPTH
SET TO 6338.0
6337.99ft: Connection at 6338.0
6337.99ft: SURVEY DEPTH 6283'
INC. 9.9 AZ. 233.4
6337.99ft: ZDiffPressure from
SideKick sk-06-03-2616

6362.01ft: Mud Weight 9.10
6362.01ft: Mud Vis 73.00
6362.99ft: Mud PH 9.30

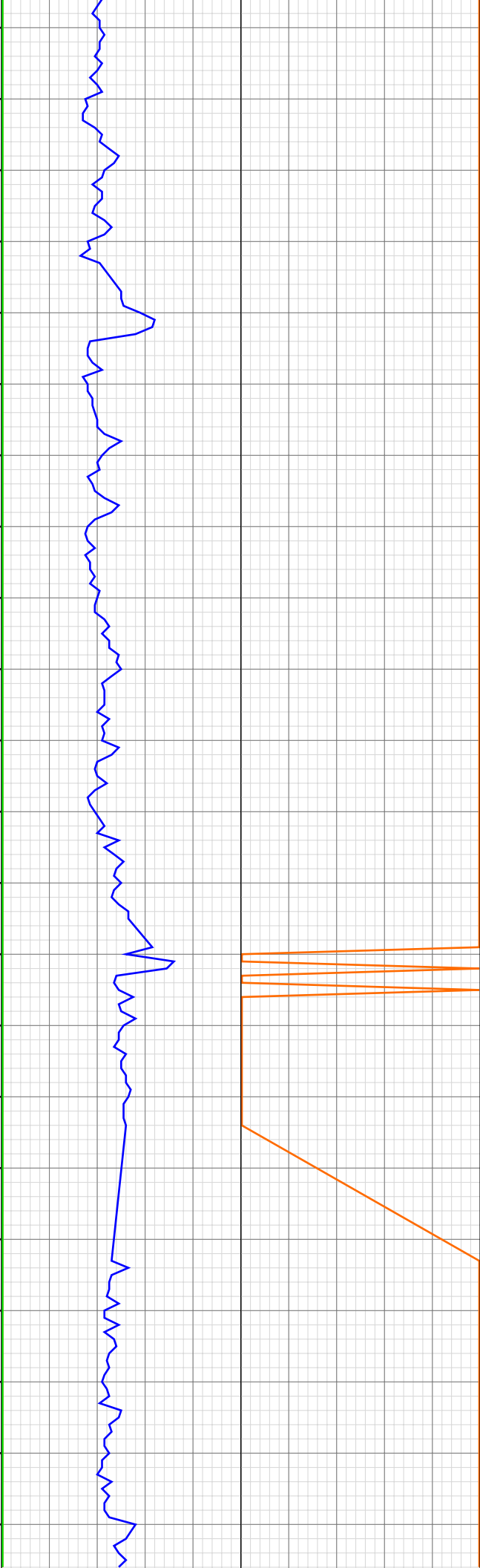
6425.98ft: IN TALLY: HOLE DEPTH
SET TO 6429.8
6425.98ft: ZDiffPressure from
SideKick sk-06-03-2616
6429.76ft: Connection at 6429.8
6429.76ft: SURVEY DEPTH 6374'
INC. 9.2 AZ. 234.2

6460.99ft: 021TGAS 01040070
SW0.30 HW31.00 - 91 days on
6462.01ft: 008TGAS-Check dryer
cable (rig air)

6518.01ft: IN TALLY: HOLE DEPTH
SET TO 6521.4
6518.01ft: ZDiffPressure from
SideKick sk-06-03-2616
6518.01ft: ZWOB from SideKick
sk-06-03-2616
6518.01ft: ZWOB from SideKick
sk-06-03-2616
6518.01ft: ZWOB from SideKick
sk-06-03-2616
6518.01ft: ZDiffPressure from
SideKick sk-06-03-2616
6518.01ft: ZWOB from SideKick
sk-06-03-2616
6521.46ft: Connection at 6521.4
6521.46ft: SURVEY DEPTH 6466'
INC. 8.1 AZ. 231.4



19:31 6760
19:35 6770
19:38 6780
19:42 6790
20:00 6800
20:06 6810
20:08 6820
20:11 6830
20:14 6840
20:16 6850
20:18 6860
20:21 6870
20:24 6880
20:43 6890
20:54 6900
21:02 6910
21:16 6920
21:16 6930
21:18 6940
21:20 6950
21:23 6960
21:25 6970



6768.27ft: PUMPED SWEEP
6771.65ft: Air Para 1400CFM

6793.01ft: IN TALLY: HOLE DEPTH SET TO 6796.5
6793.01ft: ZDiffPressure from SideKick sk-06-03-2616
6793.01ft: ZDiffPressure from SideKick sk-06-03-2616
6793.01ft: ZWOB from SideKick sk-06-03-2616
6796.46ft: ZWOB from SideKick sk-06-03-2616 Connection at 6796.5
6796.46ft: SURVEY DEPTH 6741' INC. 7.2 AZ. 231.8

6848.39ft: PUMPED SWEEP

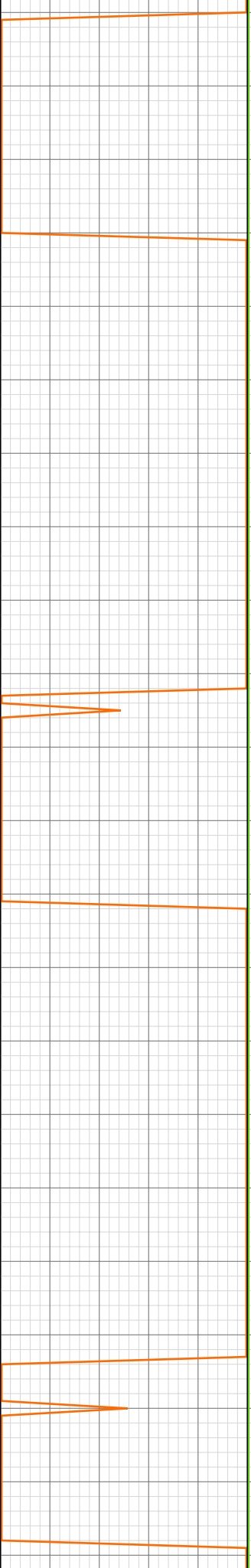
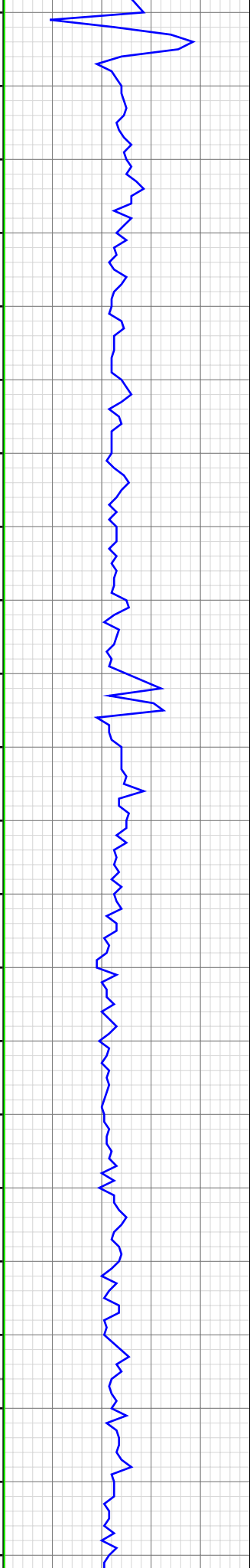
6872.01ft: Mud Vis 71.00
6872.01ft: Mud Weight 9.50
6872.01ft: Mud PH 9.80
6872.11ft: Air Para 1600CFM
6876.18ft: Connection at 6888.2
6885.01ft: ZWOB from SideKick sk-06-03-2616
6885.01ft: ZDiffPressure from SideKick sk-06-03-2616
6888.19ft: IN TALLY: HOLE DEPTH SET TO 6888.2
6888.19ft: SURVEY DEPTH 6833' INC. 7.6 AZ. 228.5
6892.19ft: Air Para 1800CFM

6914.01ft: ZWOB from SideKick sk-06-03-2616
6914.01ft: ZDiffPressure from SideKick sk-06-03-2616

6954.00ft: Mud Vis 75.00
6954.00ft: Mud Weight 9.60
6954.00ft: Mud PH 9.50

6974.15ft: Air Para 1800CFM
6977.00ft: IN TALLY: HOLE DEPTH

21:43 6980
21:52 6990
22:01 7000
22:13 7010
22:18 7020
22:22 7030
22:26 7040
22:30 7050
22:34 7060
22:50 7070
23:02 7080
23:14 7090
23:24 7100
23:30 7110
23:33 7120
23:36 7130
23:39 7140
23:41 7150
23:43 7160
Dec 01, 2011
00:10 7170
00:26 7180
00:33 7190



SET TO 6979.8
6977.00ft: ZDiffPressure from SideKick sk-06-03-2616
6977.00ft: ZWOB from SideKick sk-06-03-2616
6979.79ft: Connection at 6979.8
6979.79ft: SURVEY DEPTH 6924' INC. 5.1 AZ. 223.8
6981.00ft: Transferred 300.00 BARRELS

7004.72ft: Air Para 1800CFM
7010.01ft: ZWOB from SideKick sk-06-03-2616
7010.01ft: ZDiffPressure from SideKick sk-06-03-2616

7031.00ft: Mud Vis 73.00
7031.00ft: Mud Weight 9.70
7031.00ft: Mud PH 9.20

7055.51ft: PUMPED SWEEP

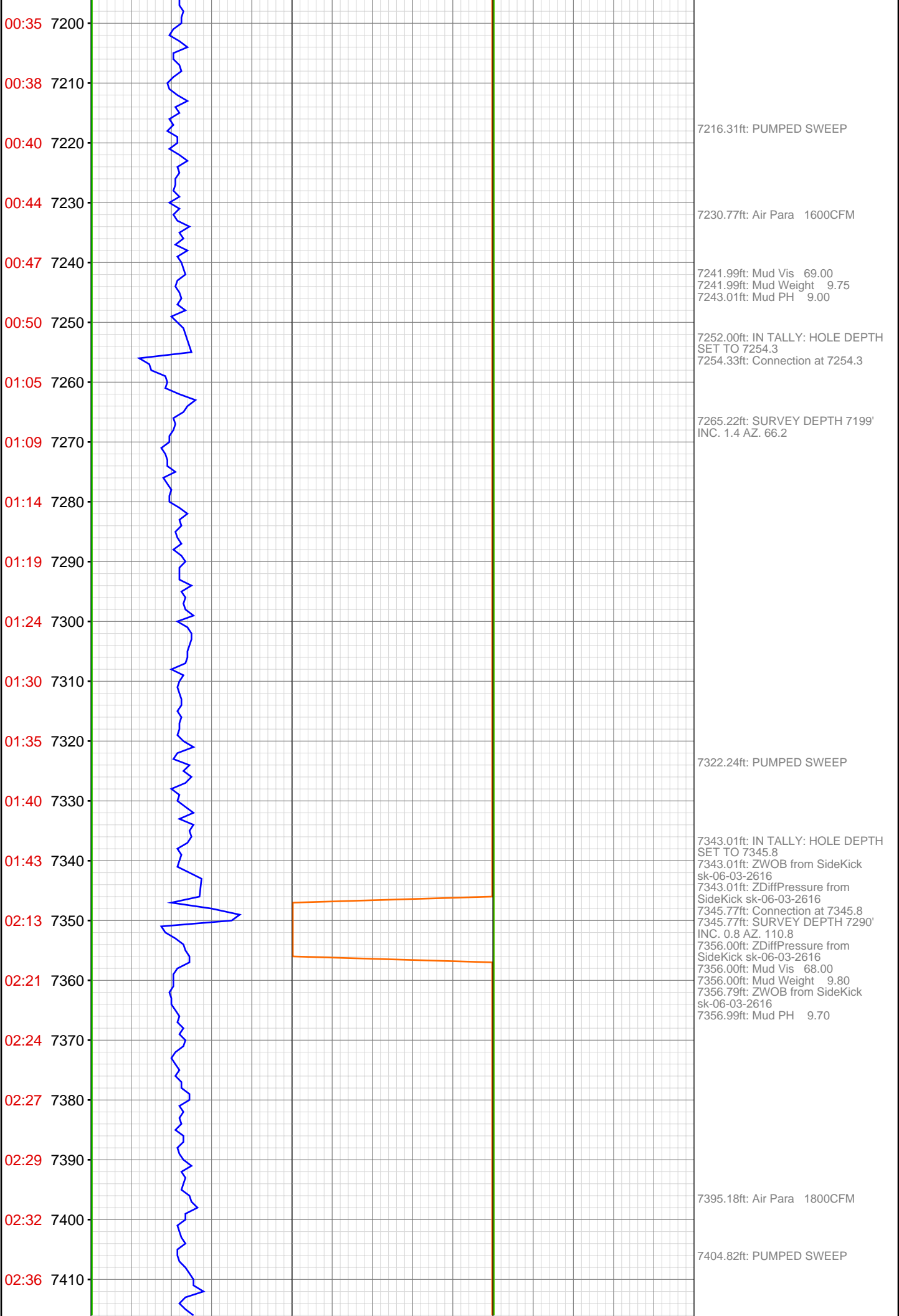
7069.00ft: IN TALLY: HOLE DEPTH SET TO 7071.5
7069.00ft: ZDiffPressure from SideKick sk-06-03-2616
7069.00ft: ZWOB from SideKick sk-06-03-2616
7071.46ft: Connection at 7071.5
7071.46ft: SURVEY DEPTH 7016' INC. 3.0 AZ. 220.9

7099.02ft: Mud Vis 65.00
7099.02ft: Mud Weight 9.75
7099.02ft: Mud PH 9.30
7100.98ft: ZWOB from SideKick sk-06-03-2616
7100.98ft: ZDiffPressure from SideKick sk-06-03-2616
7110.56ft: PUMPED SWEEP

7118.01ft: 008TGAS-Check dryer cable (rig air)

7160.01ft: IN TALLY: HOLE DEPTH SET TO 7163.0
7160.56ft: Connection at 7163.0
7162.99ft: SURVEY DEPTH 7108' INC. 0.5 AZ. 237.6

7187.99ft: ZDiffPressure from SideKick sk-06-03-2616
7188.55ft: ZWOB from SideKick sk-06-03-2616



02:40 7420
02:45 7430
03:02 7440
03:05 7450
03:10 7460
03:15 7470
03:20 7480
03:25 7490
03:28 7500
03:32 7510
03:35 7520
03:57 7530
04:17 7540
04:22 7550
04:27 7560
04:30 7570
04:34 7580
04:39 7590
04:43 7600
04:46 7610
05:04 7620
05:10 7630



7433.99ft: IN TALLY: HOLE DEPTH
SET TO 7437.4
7437.34ft: Connection at 7437.4
7437.34ft: SURVEY DEPTH 7382'
INC. 1.2 AZ. 74.3

7496.00ft: Mud Vis 78.00
7496.00ft: Mud Weight 9.75
7497.01ft: Mud PH 9.20

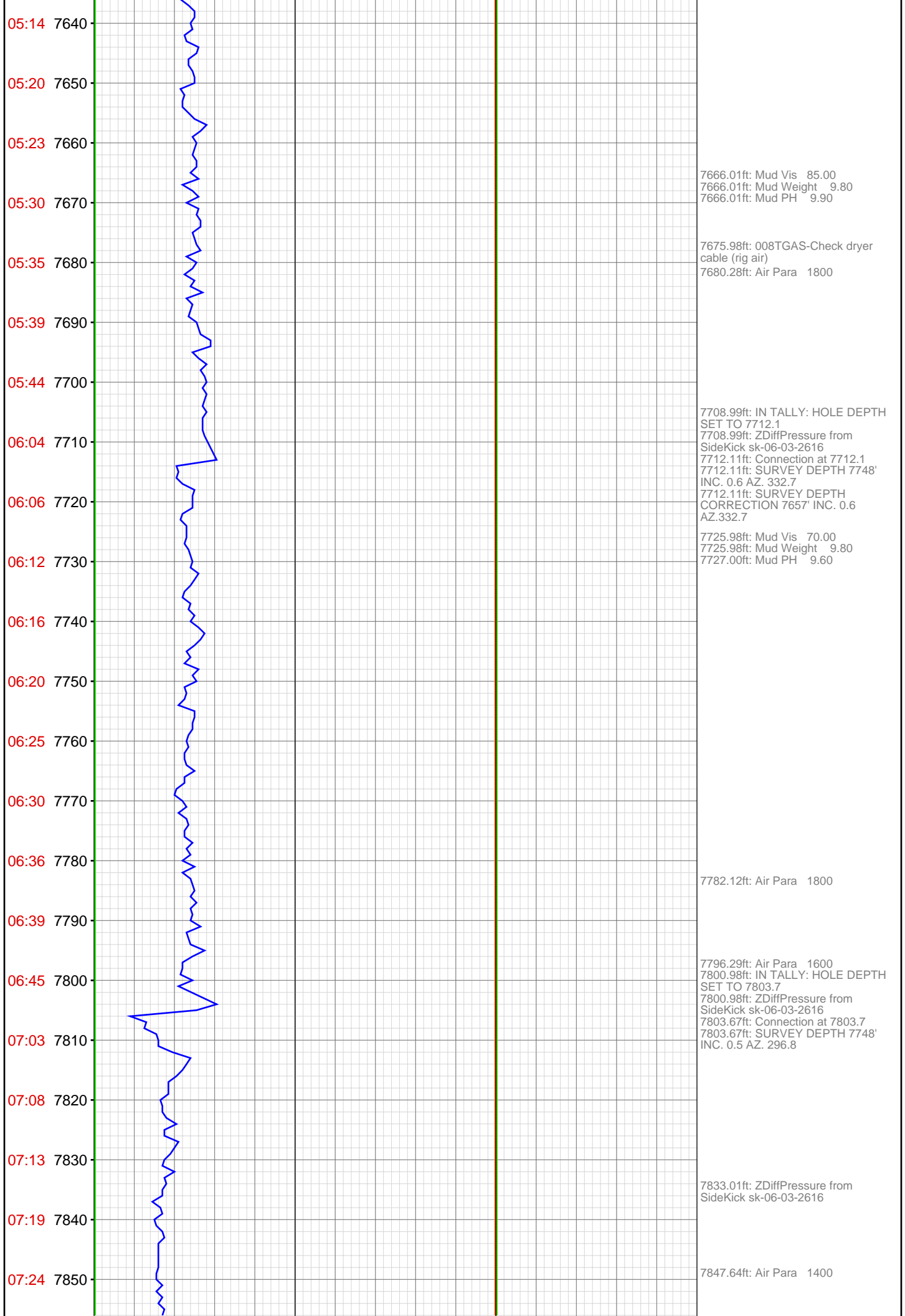
7525.98ft: ZWOB from SideKick
sk-06-03-2616
7528.77ft: IN TALLY: HOLE DEPTH
SET TO 7528.8
7528.77ft: Connection at 7528.8
7528.77ft: ZDiffPressure from
SideKick sk-06-03-2616
7528.77ft: SURVEY DEPTH 7473'
INC. 0.8 AZ. 125.5

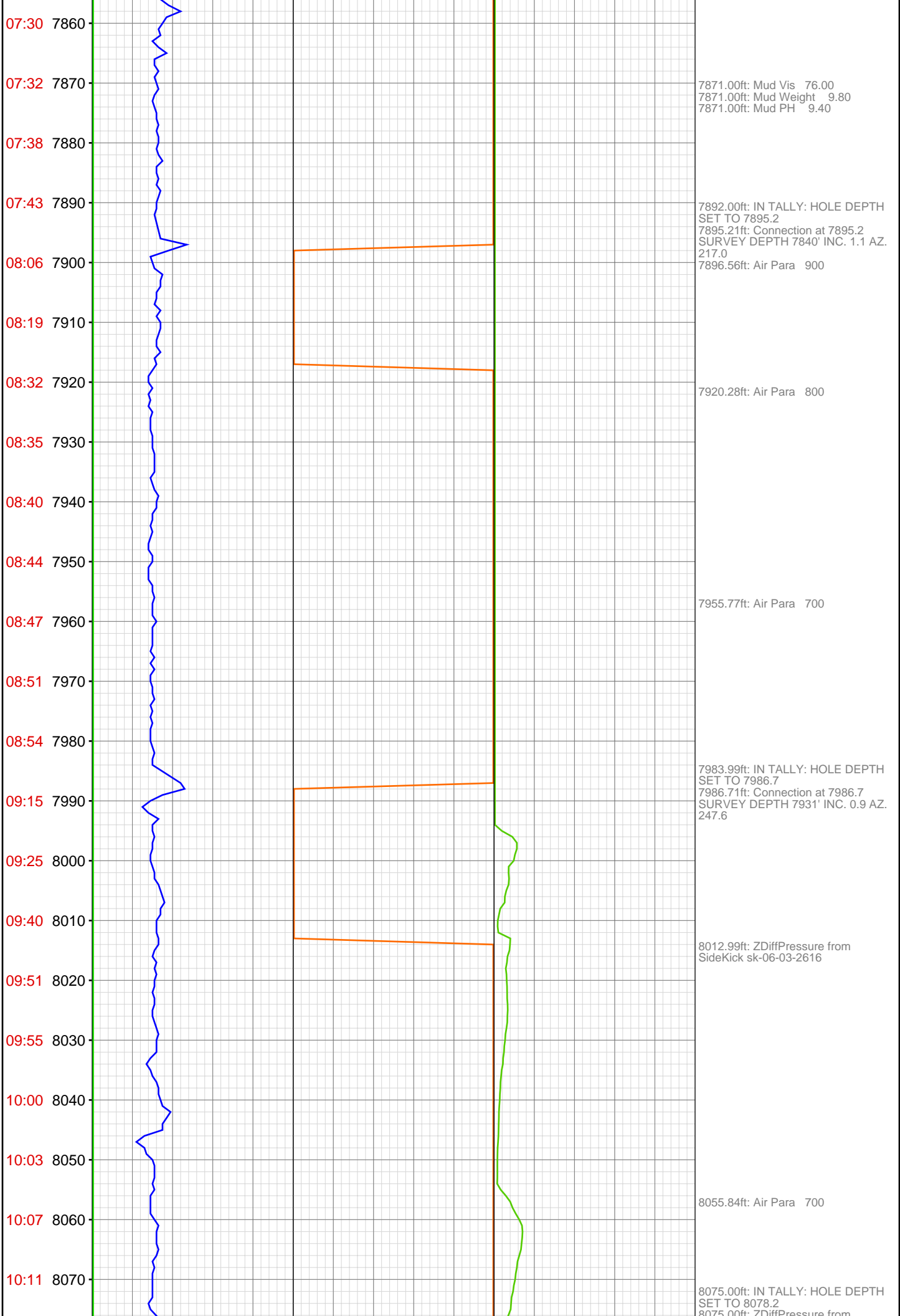
7541.01ft: ZDiffPressure from
SideKick sk-06-03-2616
7541.01ft: ZWOB from SideKick
sk-06-03-2616

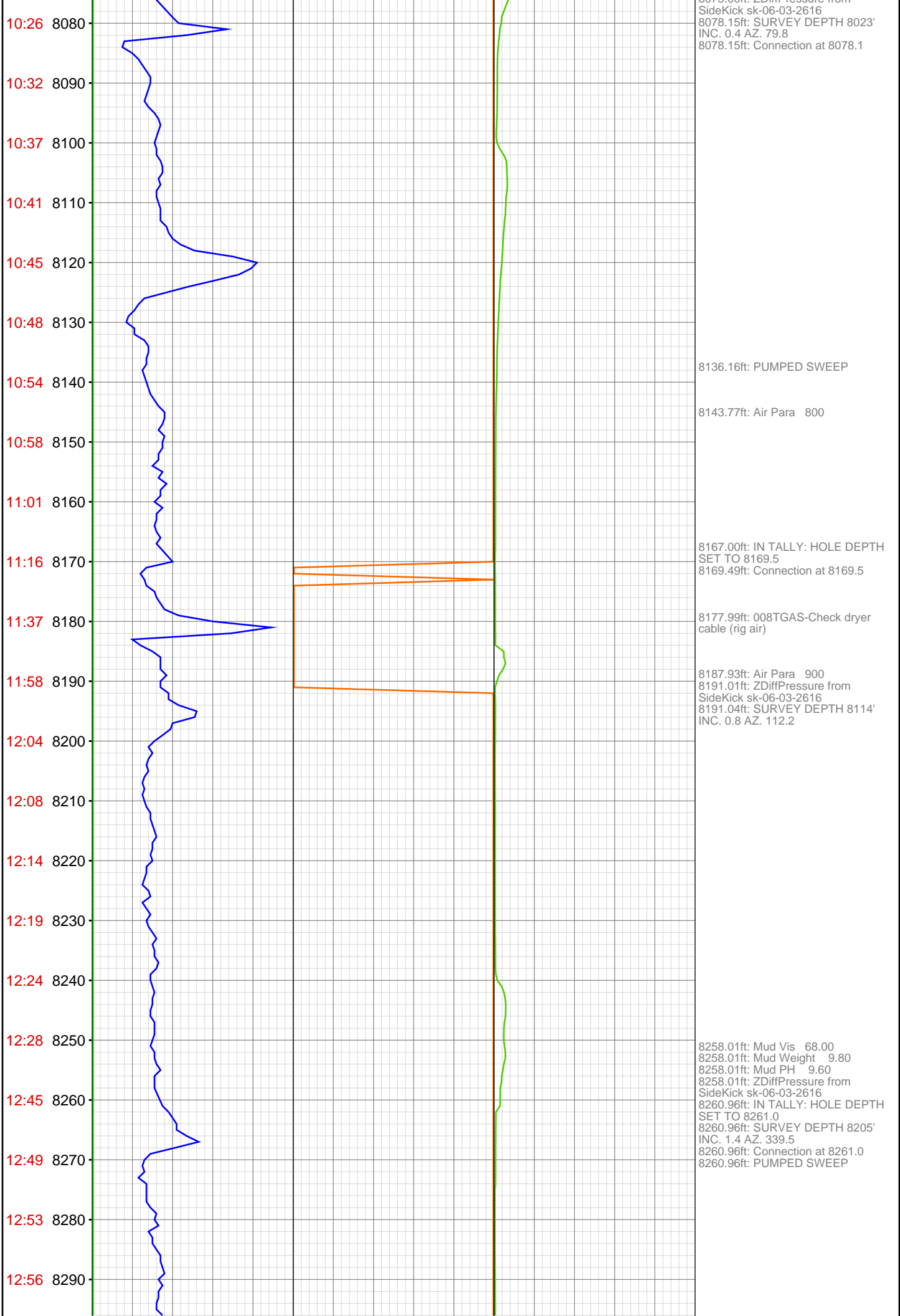
7560.99ft: Mud Vis 81.00
7560.99ft: Mud Weight 9.80
7561.45ft: Air Para 1800CFM
7562.01ft: Mud PH 9.00

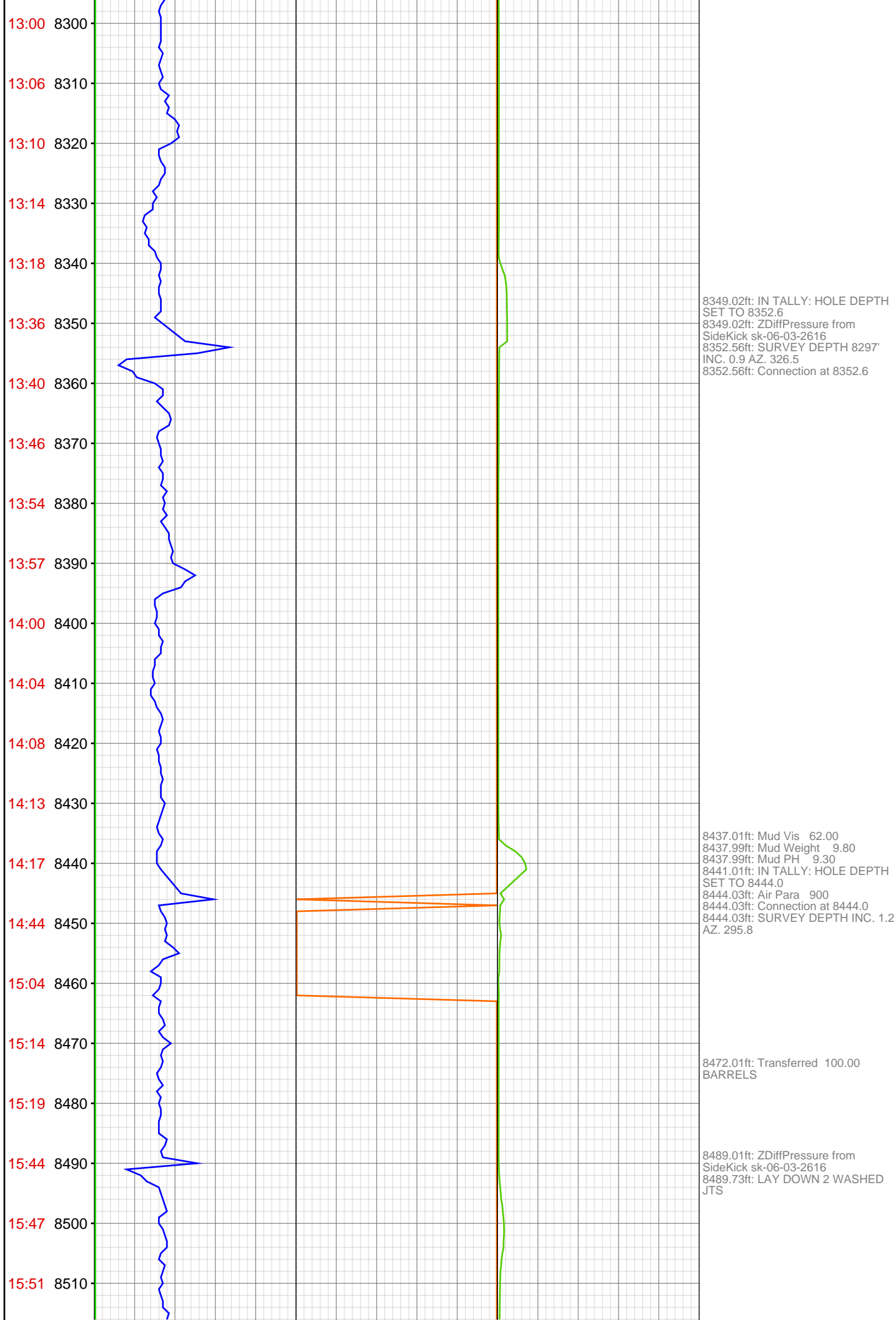
7572.01ft: Transferred 50.00
BARRELS

7616.99ft: IN TALLY: HOLE DEPTH
SET TO 7620.4
7616.99ft: ZWOB from SideKick
sk-06-03-2616
7616.99ft: ZDiffPressure from
SideKick sk-06-03-2616
7620.44ft: Connection at 7620.4
7620.44ft: SURVEY DEPTH 7565'
INC. 0.5 AZ. 55.3

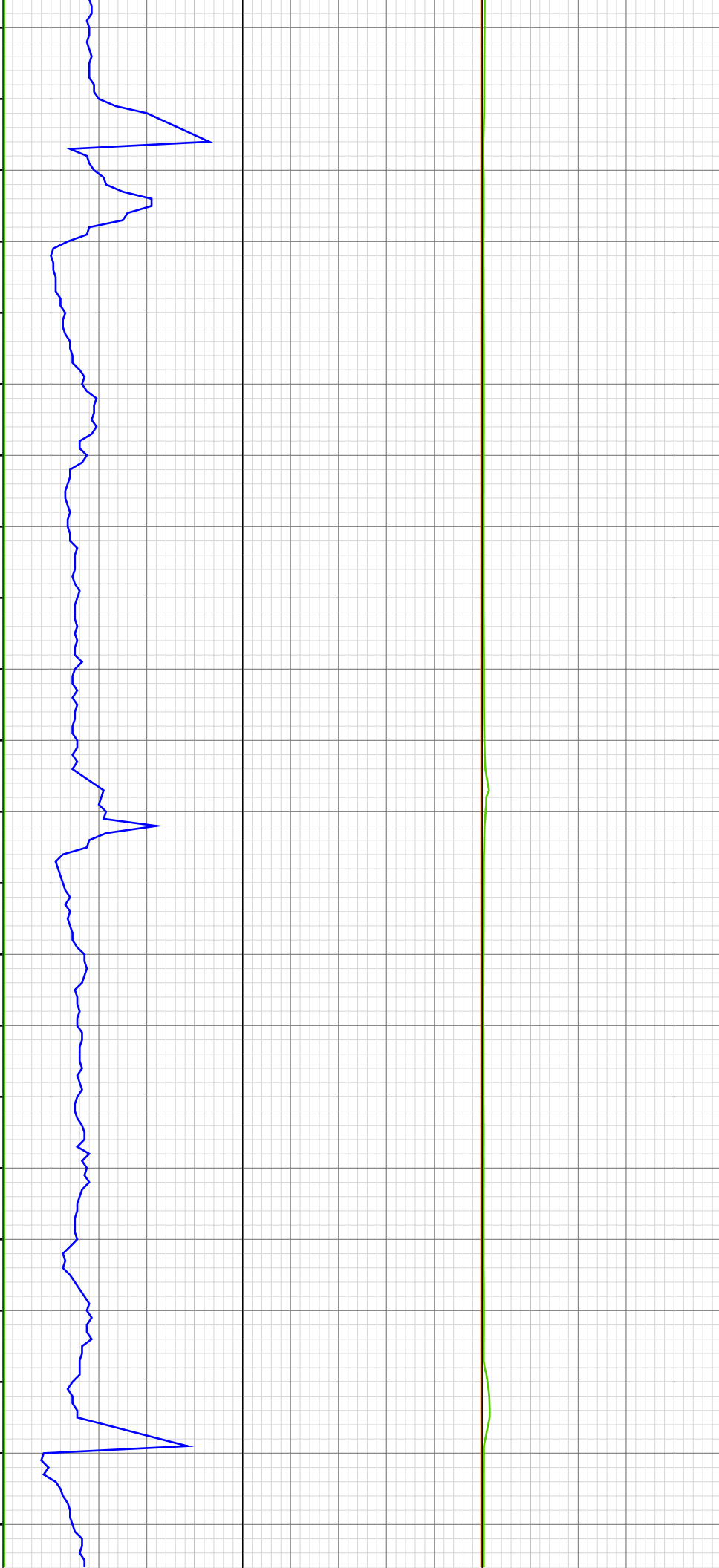








15:54 8520
15:59 8530
16:18 8540
16:22 8550
16:24 8560
16:27 8570
16:29 8580
16:32 8590
16:34 8600
16:38 8610
16:40 8620
17:00 8630
17:04 8640
17:07 8650
17:14 8660
17:18 8670
17:24 8680
17:29 8690
17:32 8700
17:40 8710
18:00 8720
18:04 8730



8531.99ft: IN TALLY: HOLE DEPTH
SET TO 8535.4
8531.99ft: ZDiffPressure from
SideKick sk-06-03-2616
8535.37ft: Connection at 8535.4
8535.37ft: SURVEY DEPTH 8480'
INC. 0.7 AZ. 21.4

8549.02ft: ZDiffPressure from
SideKick sk-06-03-2616

8603.74ft: PUMPED SWEEP

8624.02ft: IN TALLY: HOLE DEPTH
SET TO 8626.8
8624.02ft: Mud Vis 60.00
8624.02ft: Mud Weight 9.80
8624.02ft: Mud PH 9.20
8624.02ft: ZDiffPressure from
SideKick sk-06-03-2616
8624.02ft: ZWOB from DHC
8626.80ft: Connection at 8626.8
8626.80ft: SURVEY DEPTH 8571'
INC. 0.8 AZ. 359.6

8683.30ft: Air Para 900CFM

8700.00ft: 021TGAS 01040070
SW0.30 HW31.00 - 92 days on
8700.00ft: 008TGAS-Check dryer
cable (rig air)

8714.99ft: IN TALLY: HOLE DEPTH
SET TO 8718.3
8714.99ft: ZWOB from SideKick
sk-06-03-2616
8718.34ft: Connection at 8718.3
8718.34ft: ZDiffPressure from
SideKick sk-06-03-2616
8718.34ft: SURVEY DEPTH 8663'
INC. 0.5 AZ. 316.3

18:08 8740

18:13 8750

18:18 8760

18:22 8770

18:27 8780

18:31 8790

18:35 8800

18:54 8810

19:19 8820

19:33 8830

19:38 8840

19:42 8850

19:48 8860

19:53 8870

19:59 8880

20:05 8890

20:26 8900

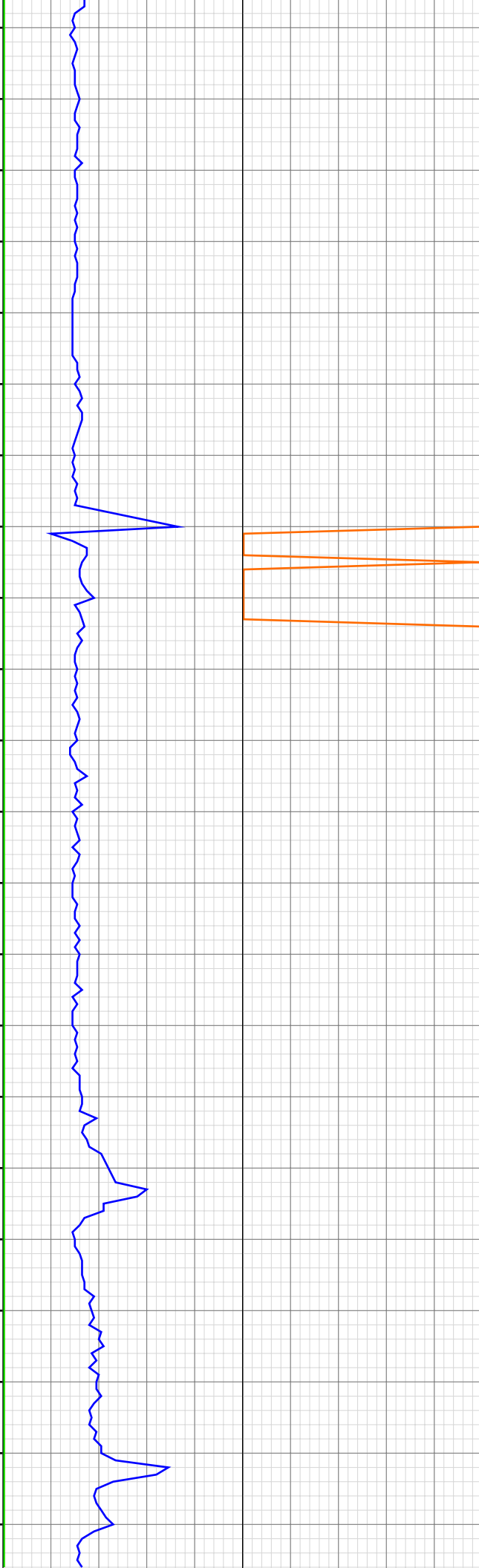
20:30 8910

20:35 8920

20:41 8930

20:46 8940

20:51 8950



8770.01ft: Mud Weight 9.85
8770.01ft: Mud PH 9.00
8770.64ft: Mud Vis 70.00

8806.99ft: IN TALLY: HOLE DEPTH
SET TO 8809.7
8809.71ft: Connection at 8809.7
8809.71ft: SURVEY DEPTH 8754'
INC. 0.4 AZ. 267.2

8842.00ft: Mud Weight 9.90
8842.62ft: Mud Vis 71.00
8843.01ft: Mud PH 9.70

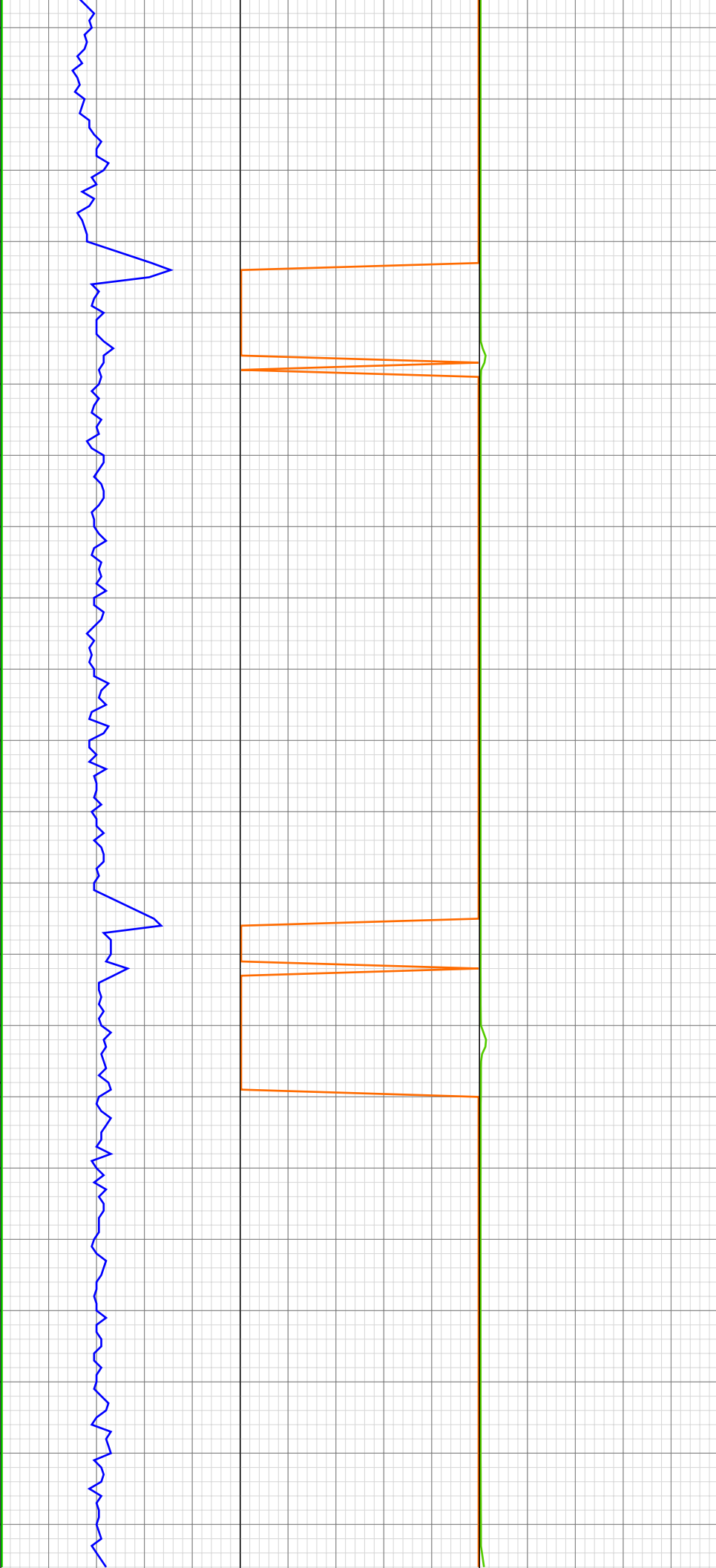
8852.99ft: PUMPED SWEEP

8897.08ft: Air Para 1200CFM
8898.00ft: IN TALLY: HOLE DEPTH
SET TO 8901.2
8898.00ft: Transferred 100.00
BARRELS
8898.00ft: ZDiffPressure from
SideKick sk-06-03-2616
8898.00ft: ZWOB from SideKick
sk-06-03-2616
8898.00ft: ZDiffPressure from
SideKick sk-06-03-2616
8901.18ft: Connection at 8901.2
8901.18ft: SURVEY DEPTH 8846'
INC. 0.5 AZ. 341.8

8921.26ft: Air Para 1200CFM

8939.99ft: Mud Vis 68.00
8939.99ft: Mud Weight 9.90
8939.99ft: Mud PH 9.70

20:56 8960
21:01 8970
21:06 8980
21:28 8990
21:41 9000
22:08 9010
22:14 9020
22:21 9030
22:26 9040
22:29 9050
22:37 9060
22:44 9070
22:50 9080
23:21 9090
23:43 9100
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00:09 9110
00:14 9120
00:19 9130
00:24 9140
00:28 9150
00:35 9160
00:39 9170



8989.99ft: IN TALLY: HOLE DEPTH
SET TO 8992.9
8989.99ft: ZDiffPressure from
SideKick sk-06-03-2616
8992.85ft: Connection at 8992.9
8992.85ft: ZWOB from SideKick
sk-06-03-2616
8992.85ft: SURVEY DEPTH 8937'
INC. 0.6 AZ. 293.5
9008.01ft: ZWOB from SideKick
sk-06-03-2616
9008.01ft: ZDiffPressure from
SideKick sk-06-03-2616
9008.01ft: Mud Weight 9.80
9008.01ft: Mud PH 9.40
9008.50ft: Mud Vis 68.00

9018.08ft: PUMPED SWEEP

9070.01ft: Air Para 1200CFM

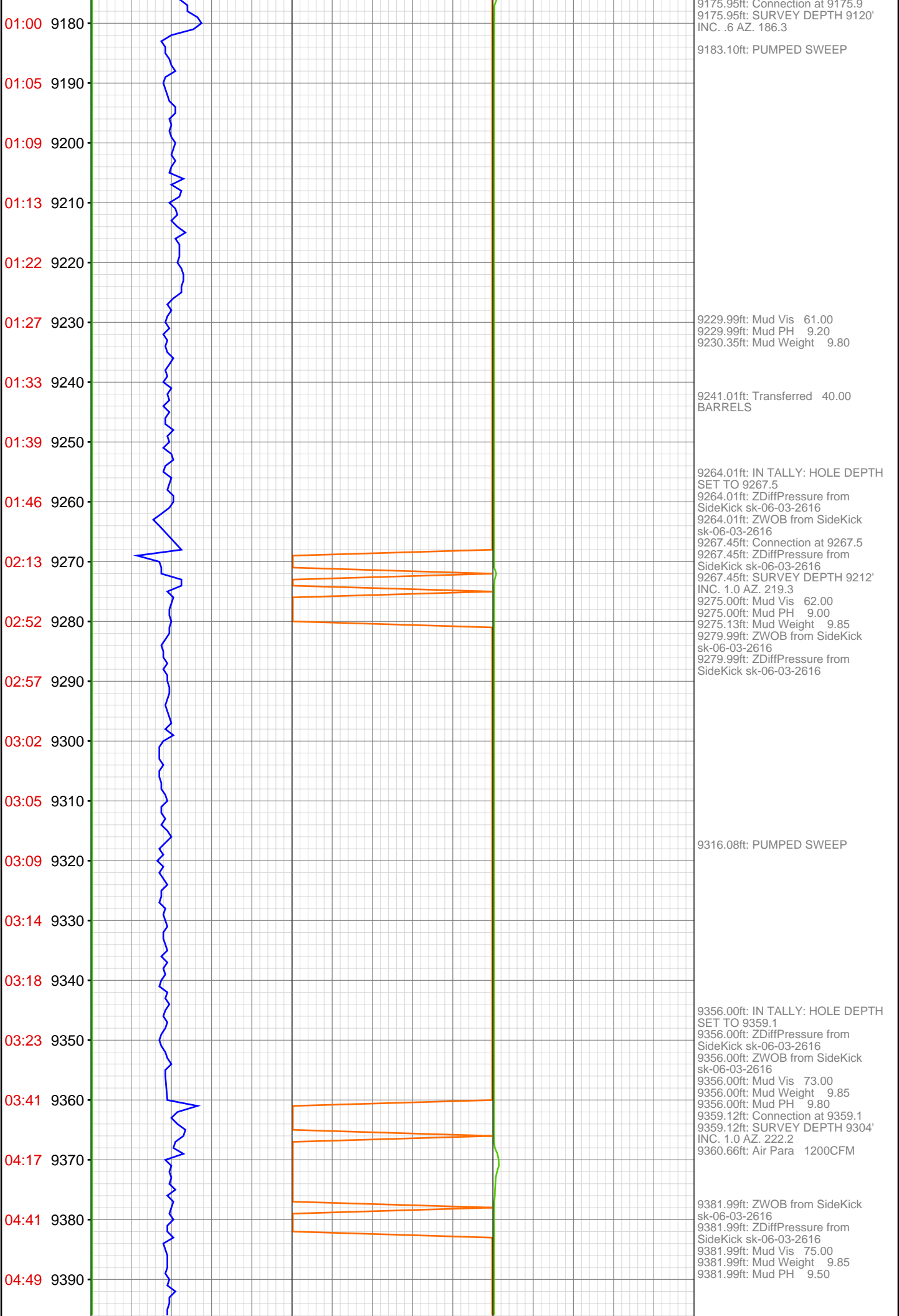
9081.00ft: IN TALLY: HOLE DEPTH
SET TO 9084.3
9081.92ft: Connection at 9084.3
9084.29ft: SURVEY DEPTH 9029'
INC. 0.9 AZ. 248.0
9089.01ft: Mud Vis 65.00
9089.01ft: Mud Weight 9.85
9089.01ft: Mud PH 9.10

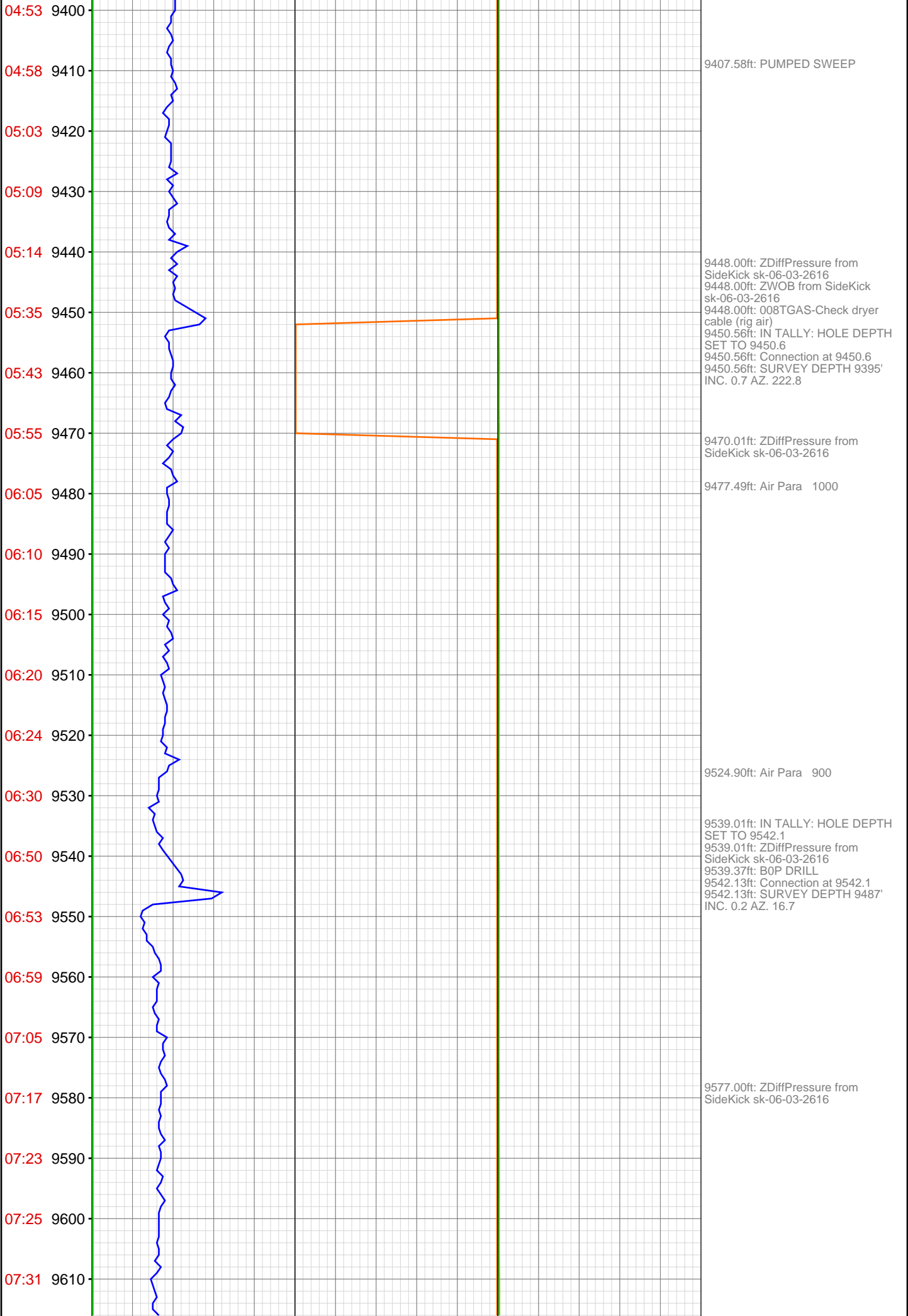
9095.01ft: 008TGAS-Check dryer
cable (rig air)

9101.21ft: Air Para 1200CFM

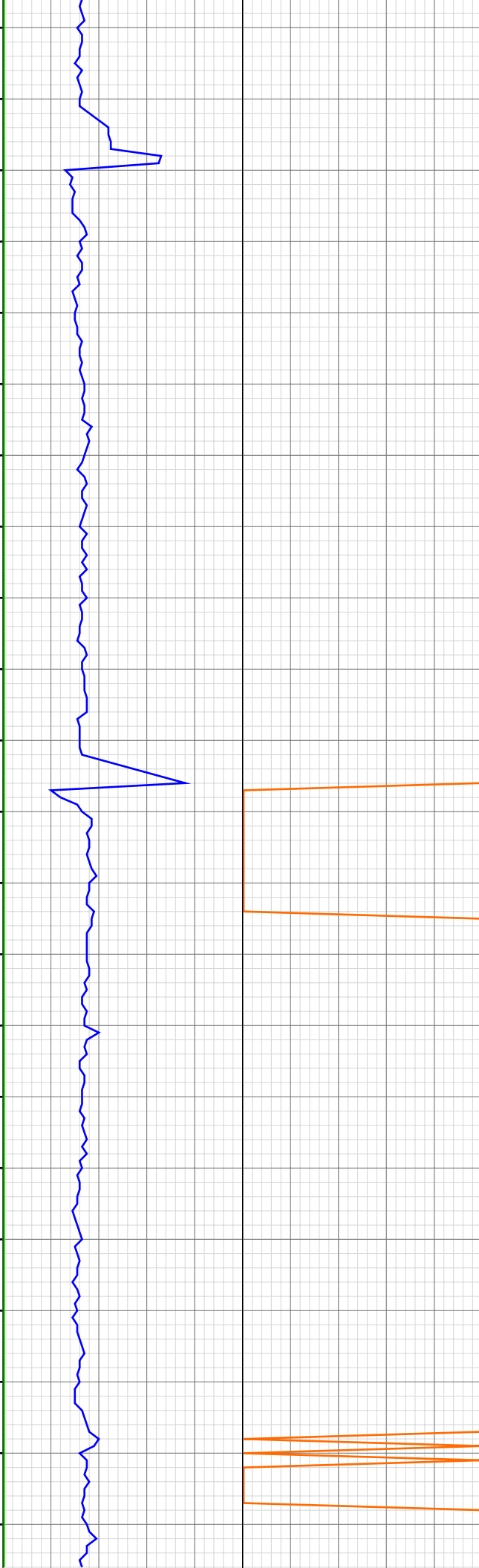
9108.99ft: ZDiffPressure from
SideKick sk-06-03-2616
9110.01ft: Mud Vis 67.00
9110.01ft: Mud Weight 9.80
9110.99ft: Mud PH 9.60

9173.00ft: IN TALLY: HOLE DEPTH
SET TO 9175.9





07:36 9620
07:41 9630
08:01 9640
08:06 9650
08:12 9660
08:17 9670
08:22 9680
08:26 9690
08:29 9700
08:33 9710
08:37 9720
09:01 9730
09:19 9740
09:29 9750
09:34 9760
09:42 9770
09:48 9780
09:55 9790
09:59 9800
10:03 9810
10:24 9820
11:22 9830



9631.00ft: IN TALLY: HOLE DEPTH
SET TO 9633.7
9631.00ft: ZDiffPressure from
SideKick sk-06-03-2616
9633.69ft: Connection at 9633.7
SURVEY DEPTH 9578' INC. 0.3 AZ.
190.9
9637.60ft: PUMPED SWEEP
9639.99ft: Mud Vis 70.00
9639.99ft: Mud Weight 9.85
9639.99ft: Mud PH 9.00

9654.99ft: ZDiffPressure from
SideKick sk-06-03-2616

9707.38ft: Air Para 800

9722.01ft: IN TALLY: HOLE DEPTH
SET TO 9725.3
9725.30ft: Connection at 9725.3
9725.30ft: SURVEY DEPTH 9670'
INC. 0.8 AZ. 224.1

9746.72ft: Air Para 900

9781.99ft: ZDiffPressure from
SideKick sk-06-03-2616

9814.01ft: IN TALLY: HOLE DEPTH
SET TO 9816.8
9816.80ft: Connection at 9816.8
9816.80ft: SURVEY DEPTH 9761'
INC. 1.8 AZ. 240.0
9821.52ft: Air Para 900
9822.01ft: Mud Vis 60.00
9822.01ft: Mud Weight 9.80
9822.01ft: Mud PH 9.00
9827.10ft: ZDiffPressure from
SideKick sk-06-03-2616
9844.06ft: PUMPED SWEEP
9849.02ft: 008TGAS-Check dryer
cable (rig air)
9849.02ft: ZDiffPressure from
SideKick sk-06-03-2616
9850.89ft: Air Para 800
9893.83ft: PUMPED SWEEP

