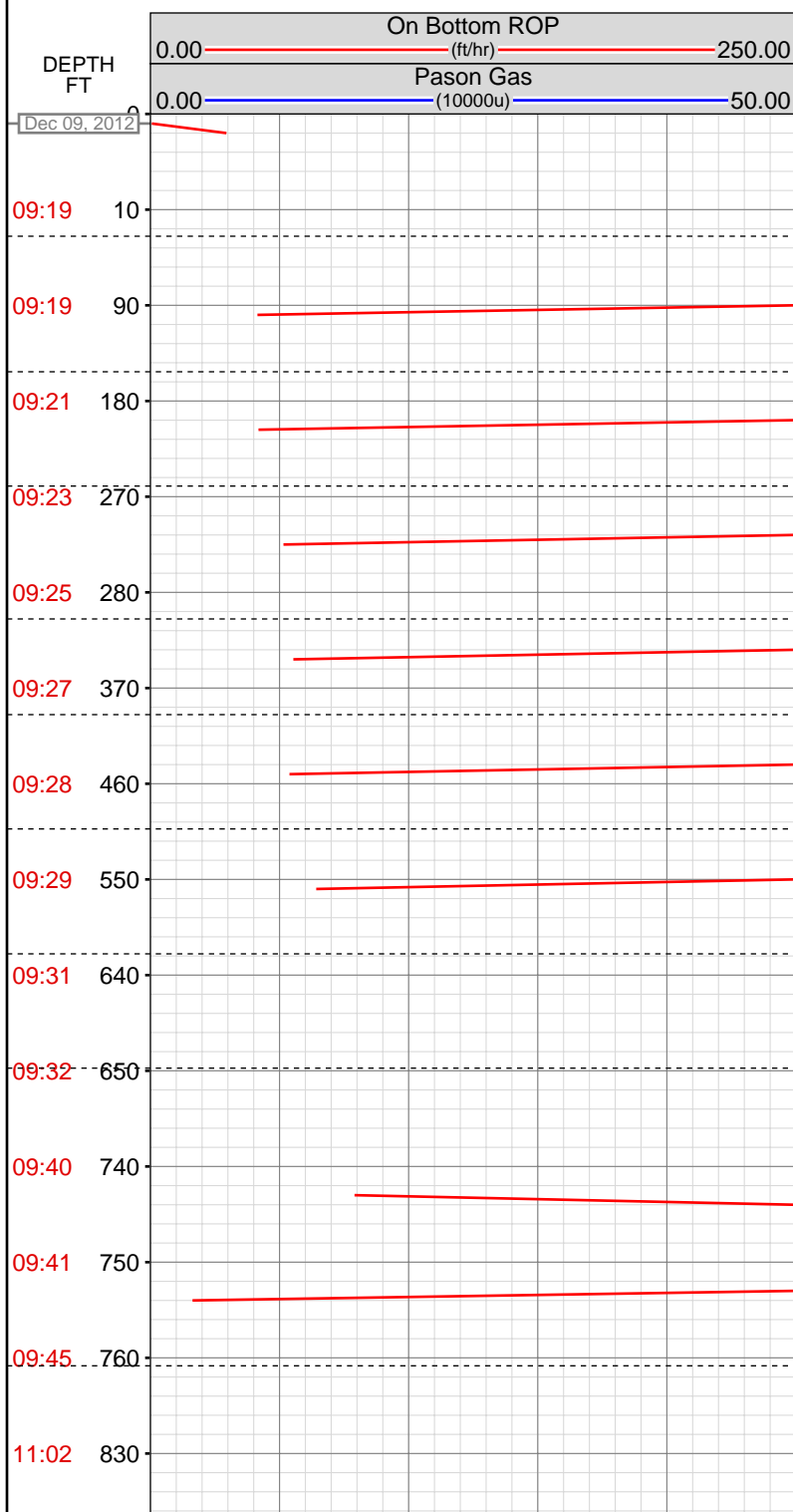


DataHub EDR Log

Fri Dec 14, 2012 10:06:49
Well Dossier 1355014429
Greg Veregin

OPERATOR: EnCana Oil & Gas (USA), Inc.
WELL: BENZEL FEDERAL 24-13G
FIELD:
LOCATION: SEC24 TWP 6S RNG 93W
COUNTRY: USA
RIG: Pat-UTI 308

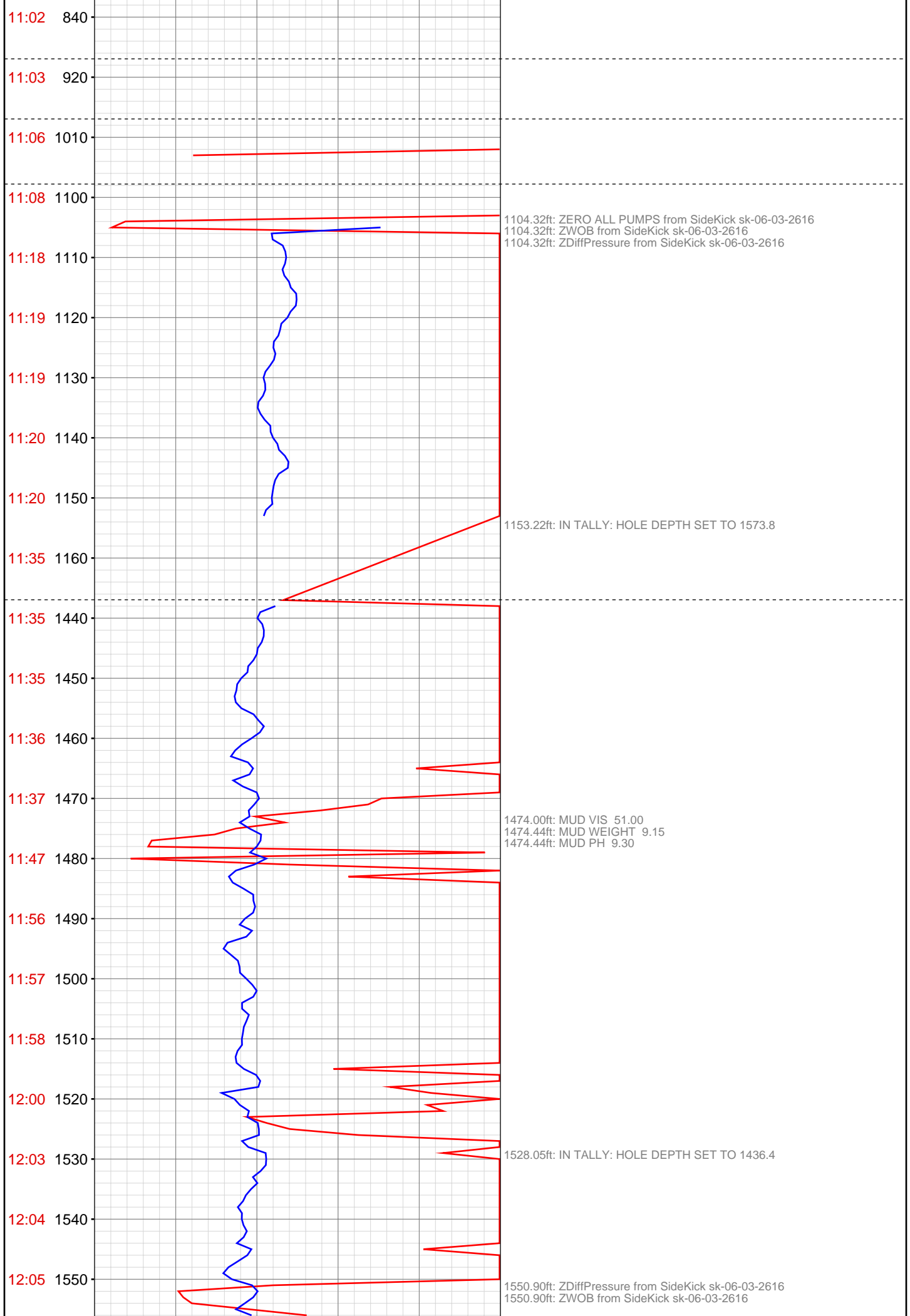
CONTRACTOR: Patterson-UTI Drilling Company
UNIQUE WELL ID: 05-045-20874
SPUD DATE: Dec 09, 2012 12:00
RELEASE DATE:

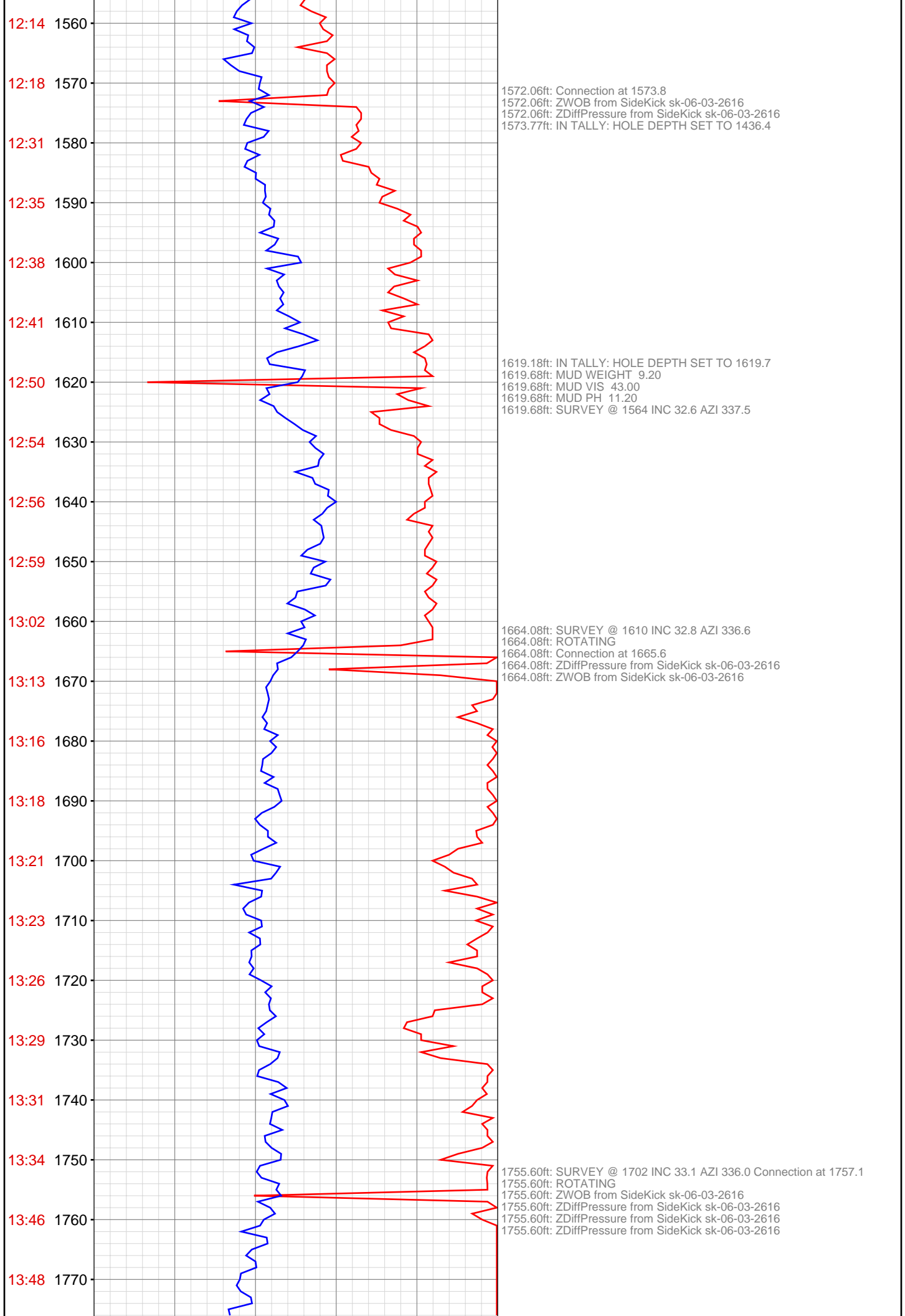


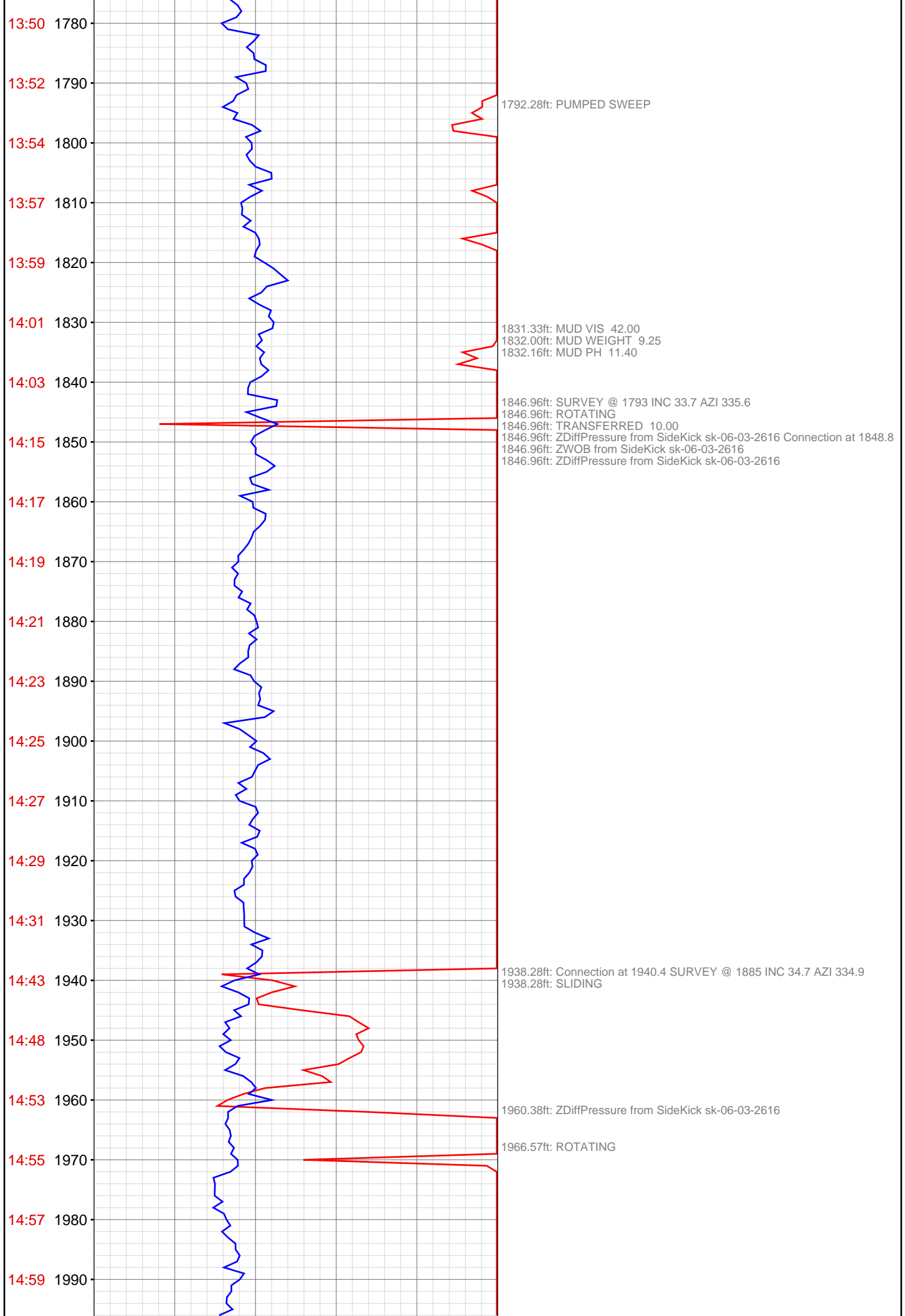
MEMOS

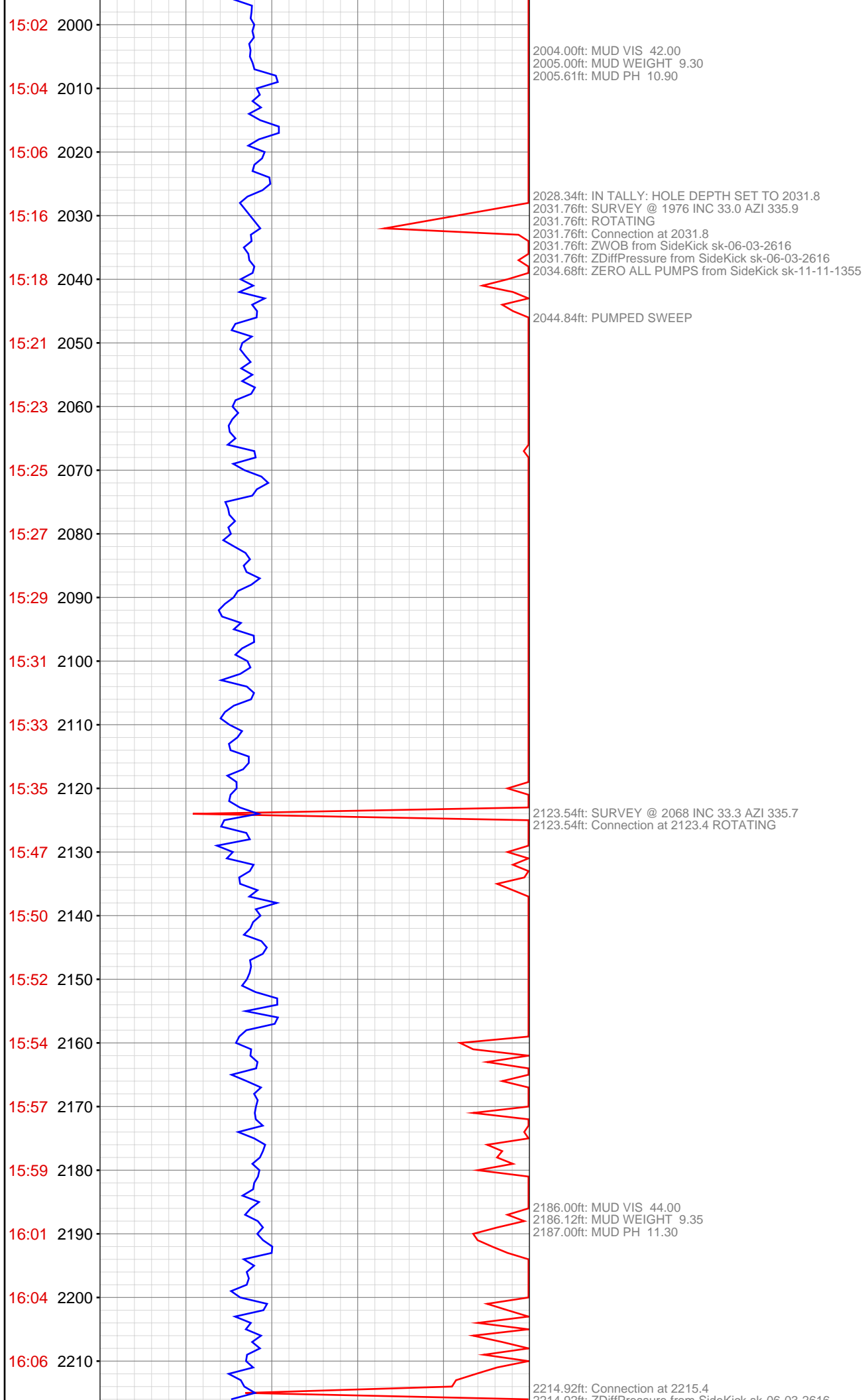
0.00ft: MUD WEIGHT 9.55
0.00ft: MUD VIS 53.00
0.00ft: MUD PH 8.70
0.00ft: MUD WEIGHT 9.50
0.00ft: MUD VIS 54.00
0.00ft: MUD PH 9.50
0.00ft: LAG CALCULATION PARAMETERS RESET @ DHC
0.00ft: GA - Zeroed
0.00ft: MUD WEIGHT 9.50
0.00ft: MUD VIS 48.00
0.00ft: MUD PH 9.40
0.00ft: MUD WEIGHT 9.70
0.00ft: MUD VIS 48.00
0.00ft: MUD PH 9.30
0.00ft: MUD VIS 60.00
0.00ft: MUD WEIGHT 9.20
0.00ft: MUD PH 9.40

826.00ft: MUD VIS 56.00
826.00ft: MUD WEIGHT 9.25
826.00ft: MUD PH 9.30









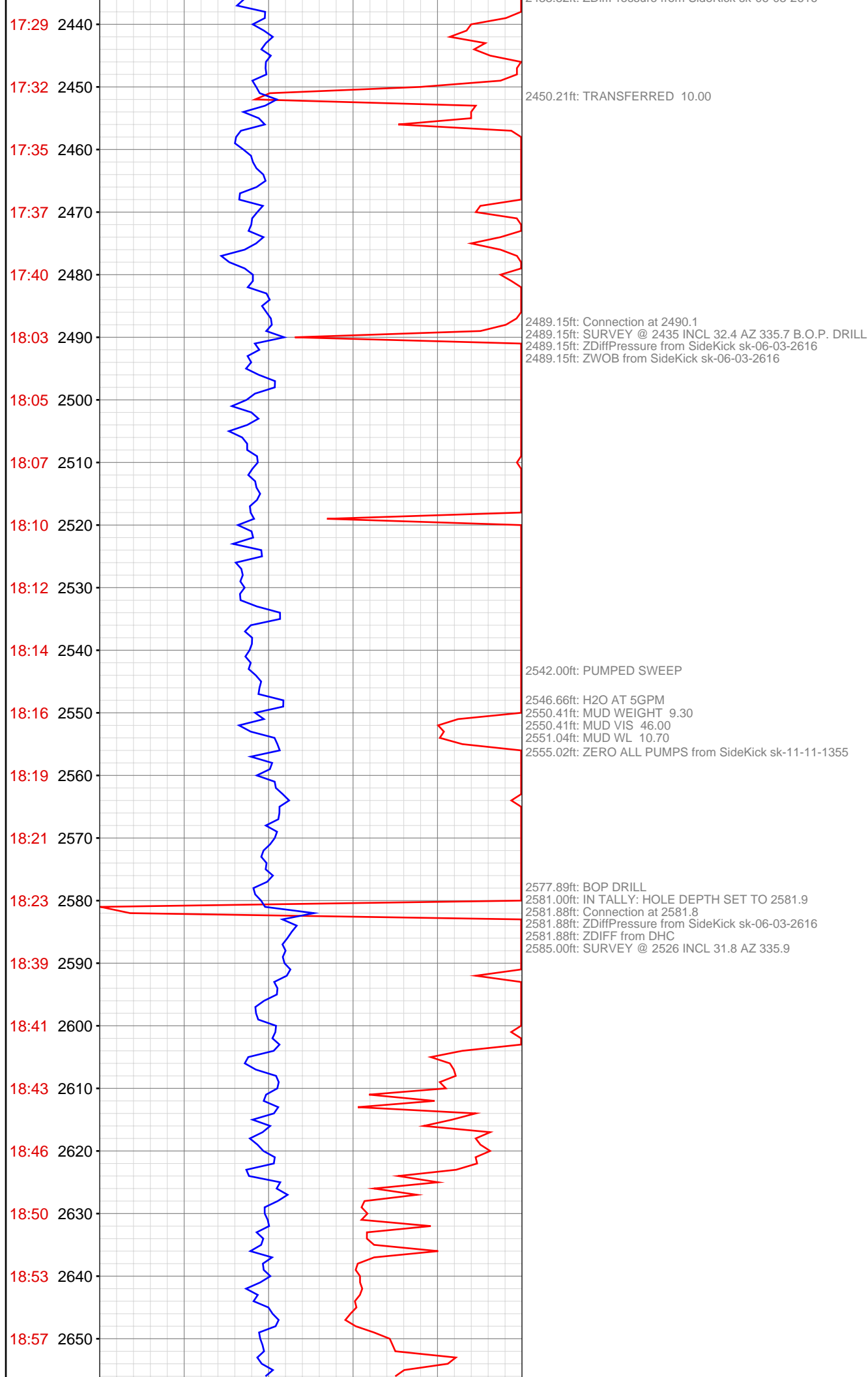
2214.92ft: ZDiffPressure from SideKick sk-06-03-2616
2214.92ft: ZWOB from SideKick sk-06-03-2616

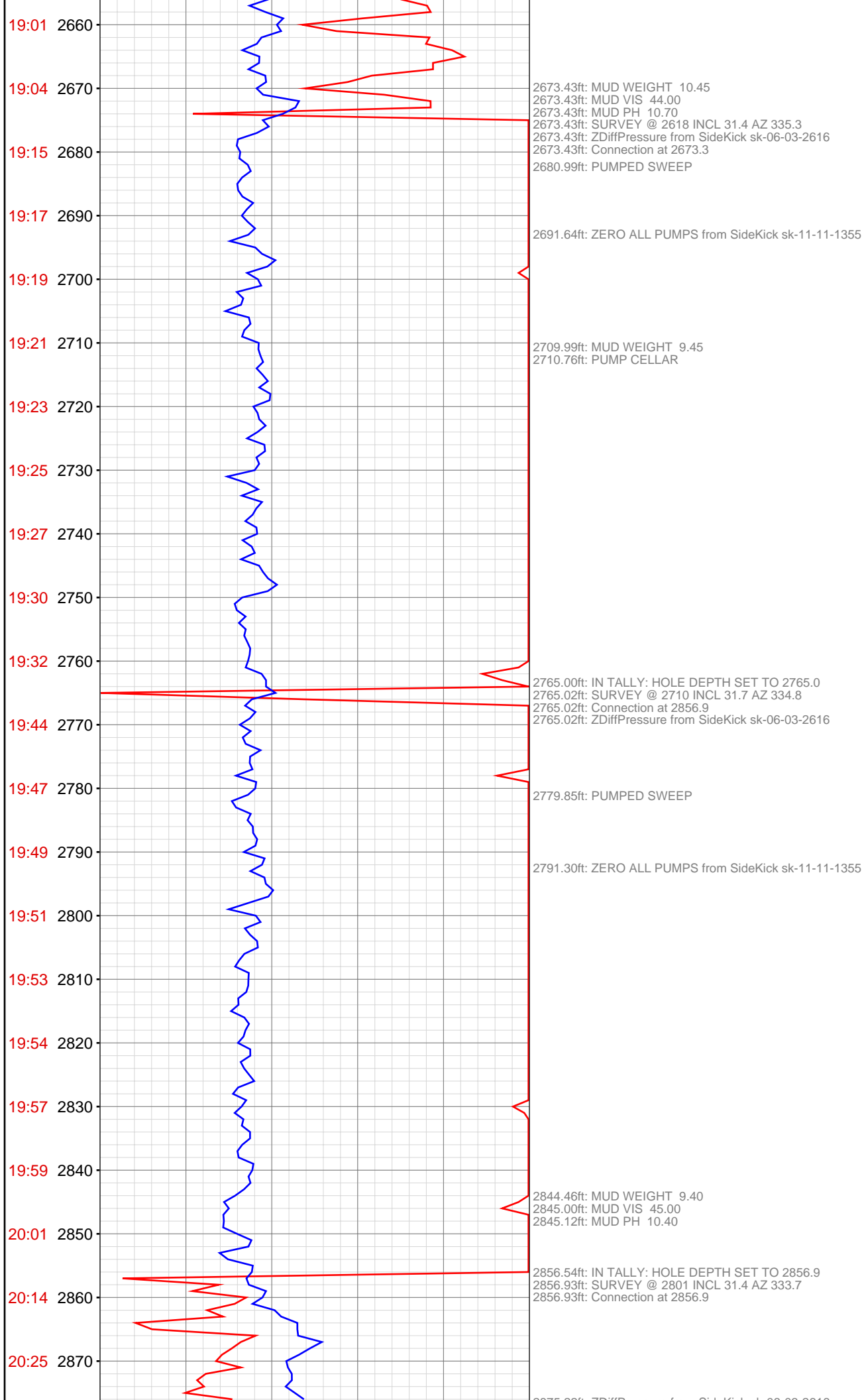
2306.67ft: Connection at 2306.9
2306.67ft: ZWOB from SideKick sk-06-03-2616
2306.67ft: ZDiffPressure from SideKick sk-06-03-2616
2312.05ft: SURVEY @ 2251 INC 33.5 AZI 334.6

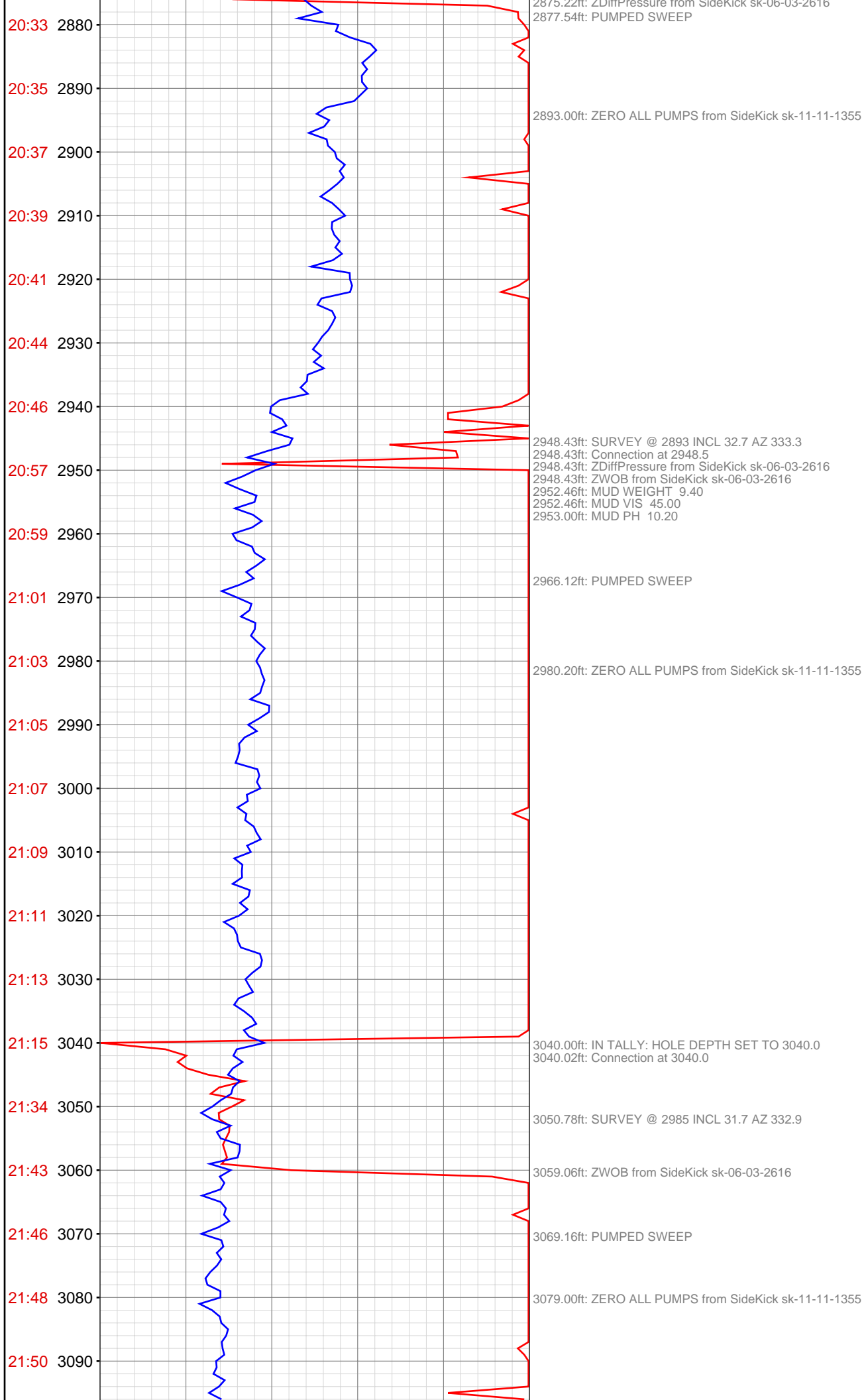
2398.03ft: MUD WEIGHT 44.00
2398.03ft: Connection at 2398.1
2398.03ft: MUD WEIGHT 9.35
2398.03ft: MUD VIS 44.00
2398.03ft: MUD PH 11.30
2398.03ft: SURVEY @ 2343 INCL 33.4 AZ 334.3
2398.03ft: SLIDING

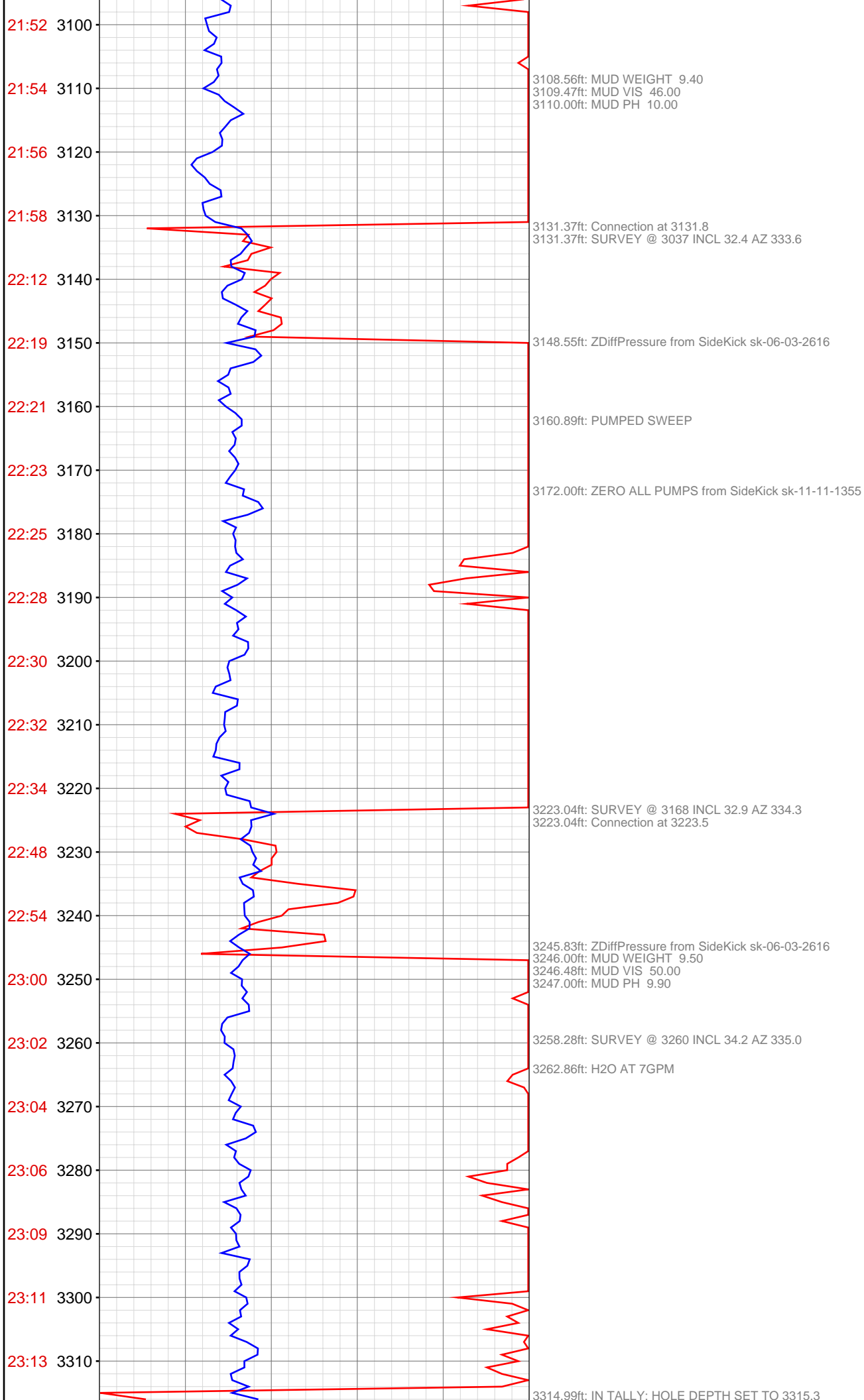
2412.05ft: ROTATING

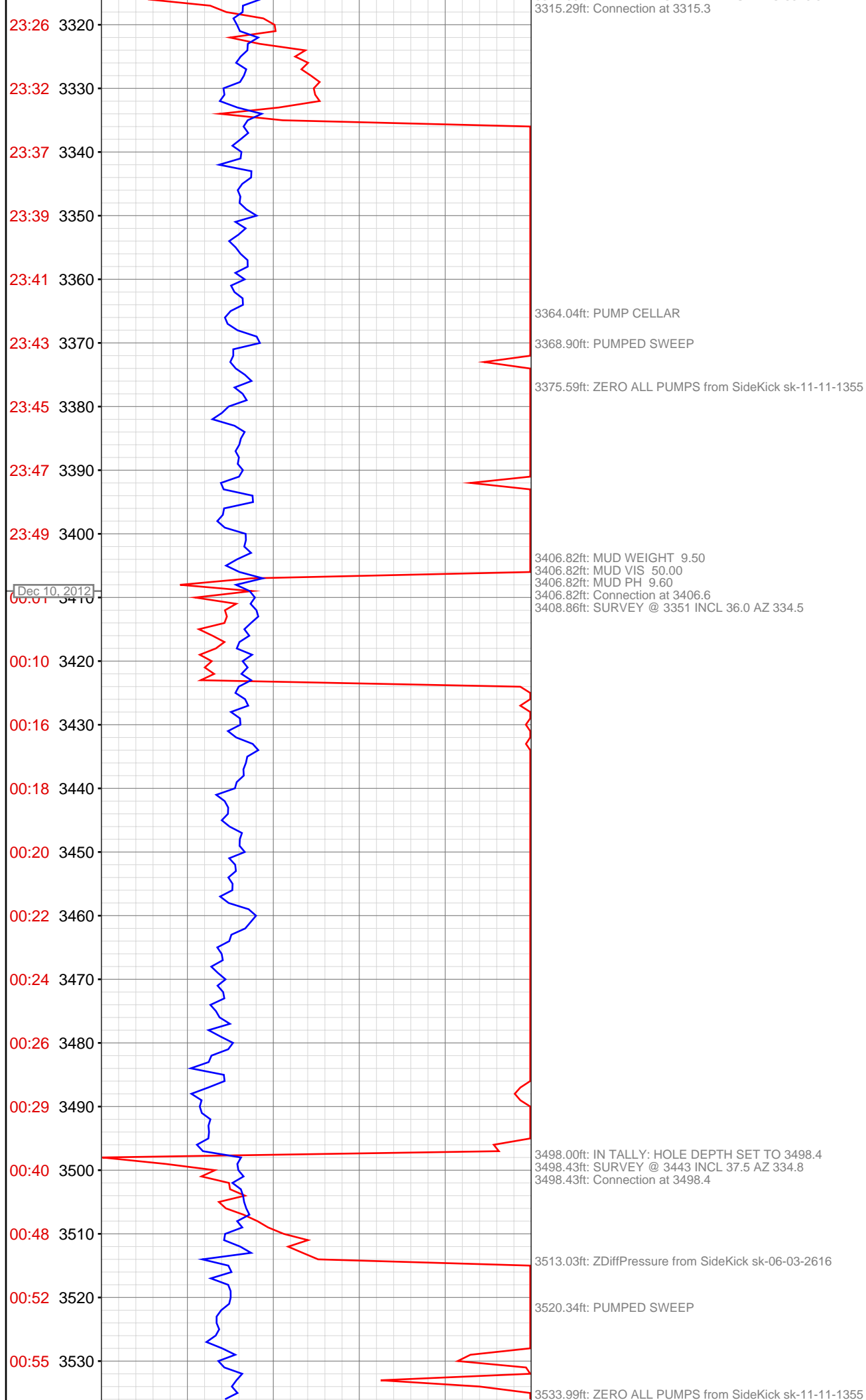
2433.52ft: ZWOB from SideKick sk-06-03-2616
2433.52ft: ZDiffPressure from SideKick sk-06-03-2616

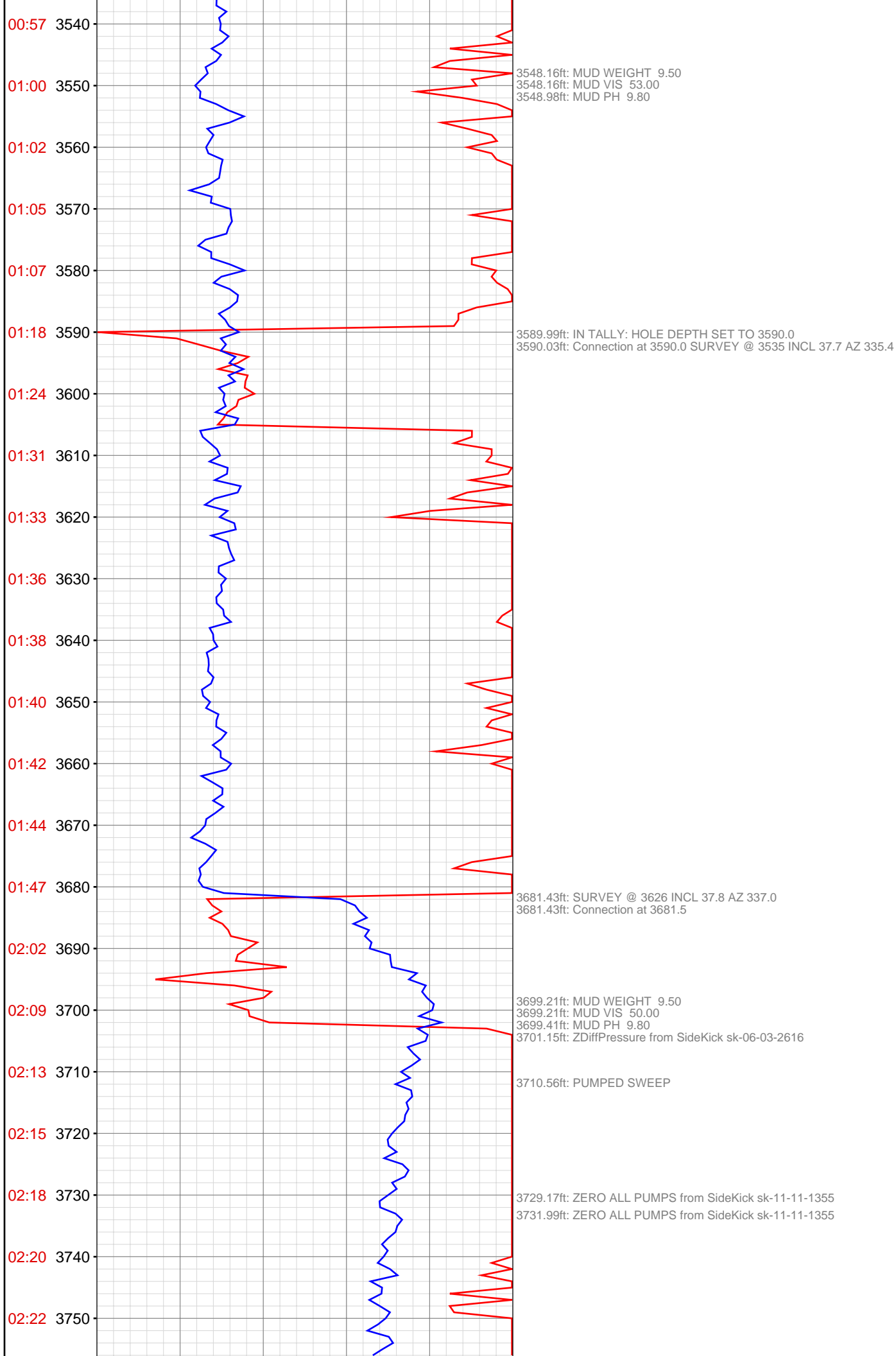


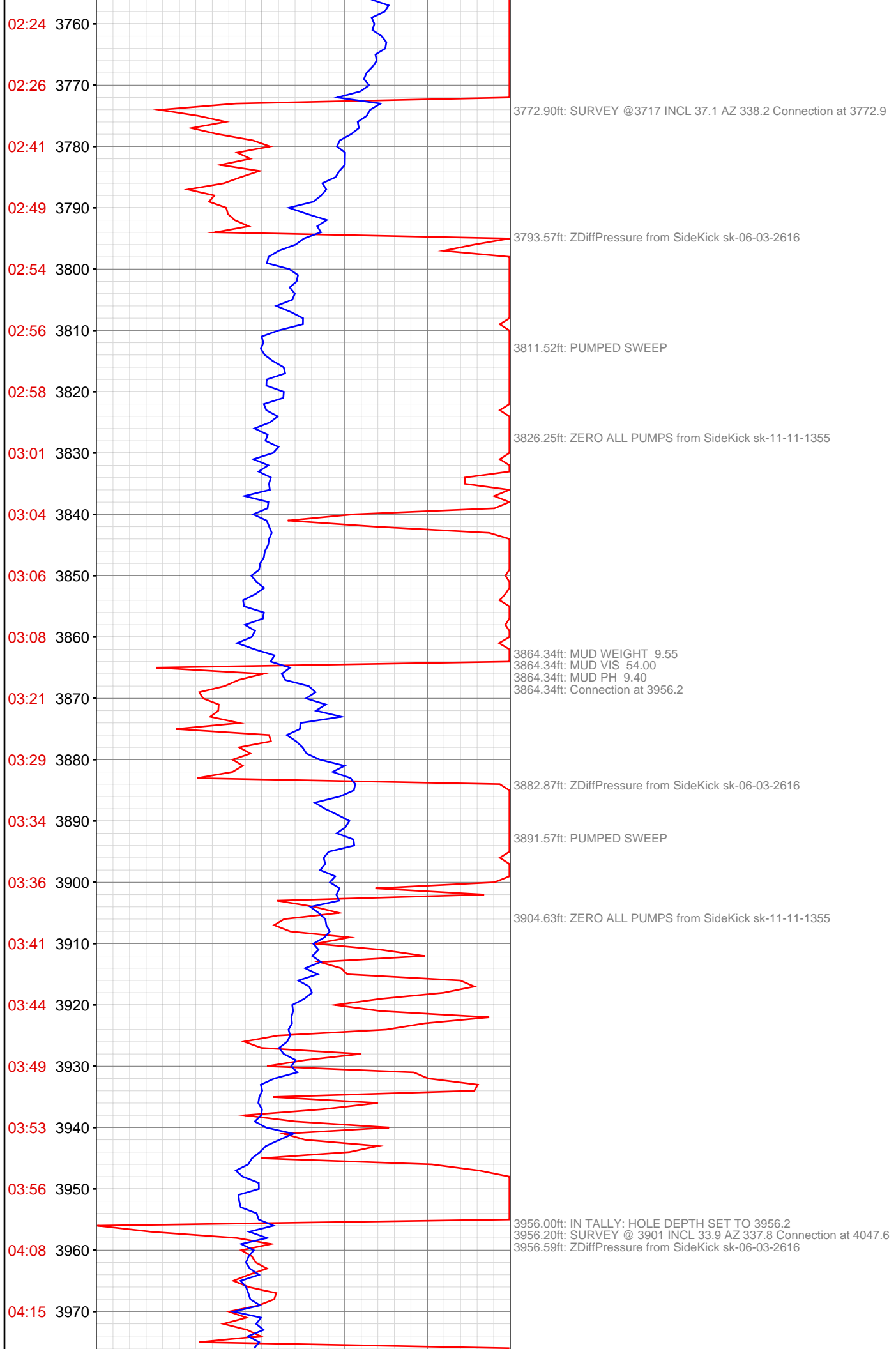


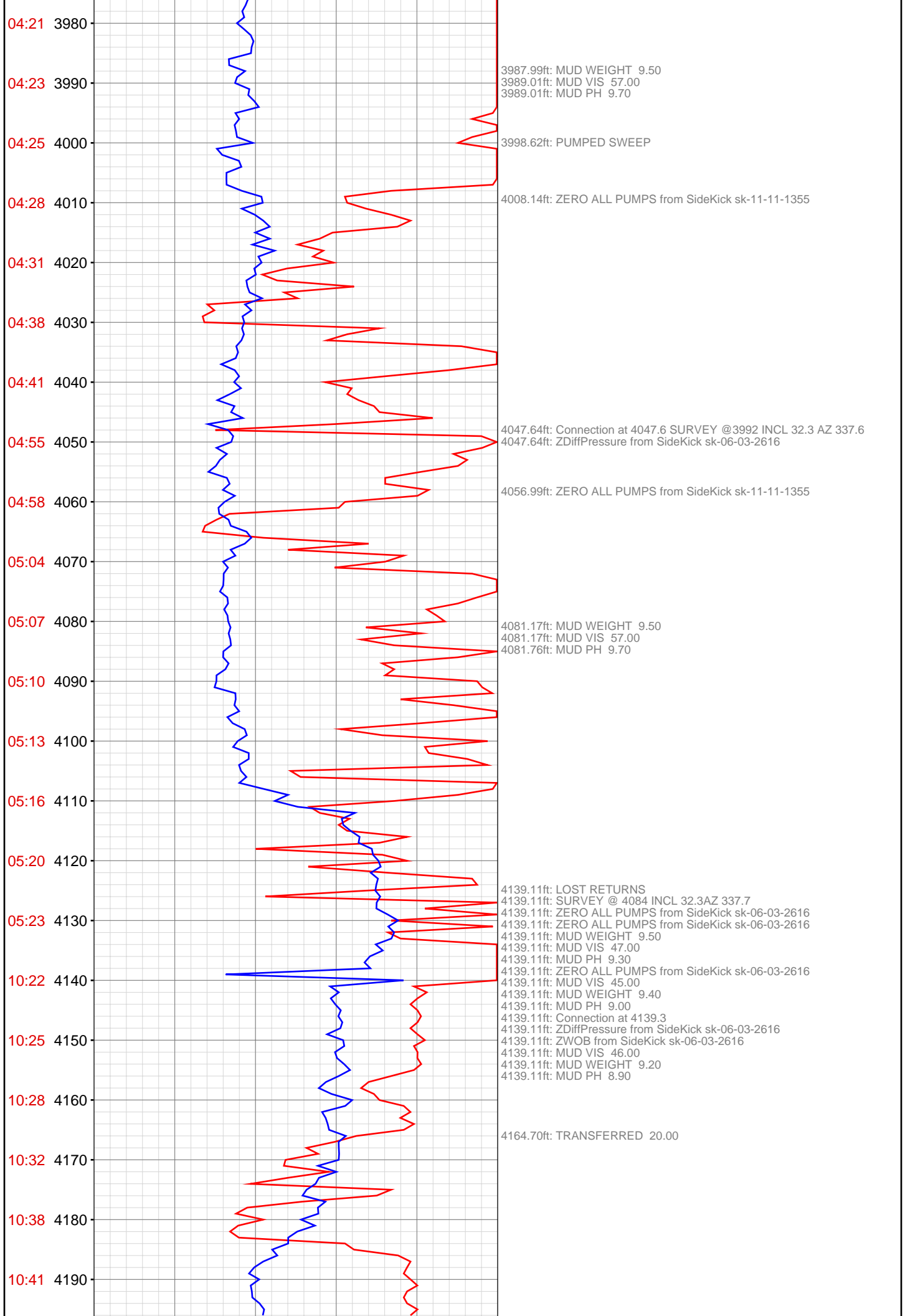


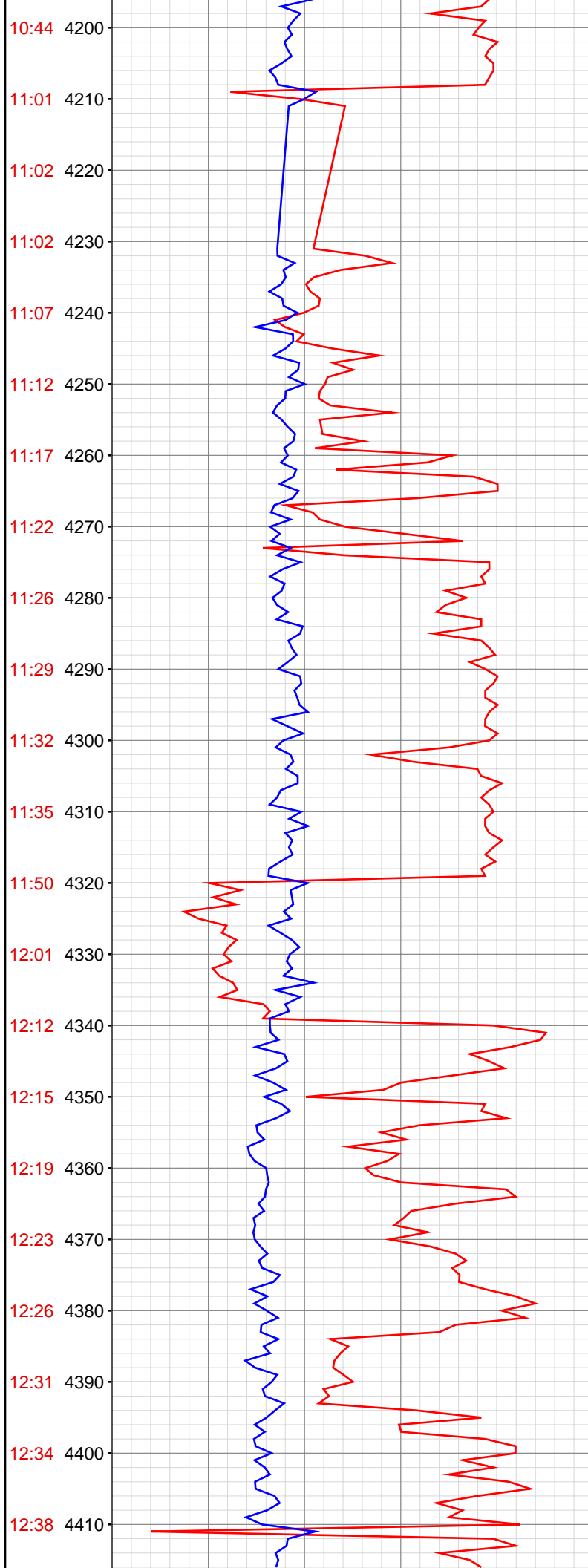












4208.79ft: SURVEY @ 4175 INC 32.7 AZI 335.0
4208.79ft: Connection at 4230.6
4208.79ft: ZWOB from SideKick sk-06-03-2616
4208.79ft: ZDiffPressure from SideKick sk-06-03-2616
4211.15ft: IN TALLY: HOLE DEPTH SET TO 4230.6

4242.52ft: MUD WEIGHT 9.35
4242.52ft: MUD VIS 45.00
4242.78ft: MUD PH 9.40

4278.74ft: ZERO ALL PUMPS from SideKick sk-06-03-2616

4319.09ft: SURVEY @ 4267 inc 32.8 azi 334.4 Connection at 4322.3
4319.09ft: SLIDING
4319.09ft: ZWOB from SideKick sk-06-03-2616
4319.09ft: ZDiffPressure from SideKick sk-06-03-2616

4333.99ft: MUD VIS 55.00
4334.09ft: MUD WEIGHT 9.45
4334.22ft: MUD PH 8.90
4338.06ft: ZDiffPressure from SideKick sk-06-03-2616
4338.06ft: ZWOB from SideKick sk-06-03-2616
4338.06ft: ROTATING
4343.50ft: PUMP SWEEP

4410.60ft: SURVEY @ 4358 INC 31.9 AZI 335.2
4410.60ft: Connection at 4413.7
4410.60ft: ROTATING
4410.60ft: ZWOB from SideKick sk-06-03-2616
4410.60ft: ZDiffPressure from SideKick sk-06-03-2616

4414.44ft: PUMPED SWEEP

4447.61ft: MUD WEIGHT 9.45
4447.70ft: MUD VIS 50.00
4447.70ft: MUD PH 9.10

4456.07ft: TRANSFERRED 20.00

4464.04ft: TRANSFERRED 40.00

4501.94ft: SURVEY @ 4450 INC 31.3 AZI 335.7
4501.94ft: ROTATING
4501.94ft: ZDiffPressure from SideKick sk-06-03-2616
4501.94ft: ZWOB from SideKick sk-06-03-2616
4501.94ft: TRANSFERRED 60.00
4501.94ft: TRANSFERRED 60.00
4501.94ft: MUD VIS 43.00
4501.94ft: MUD WEIGHT 9.25
4501.94ft: MUD PH 9.30
4501.94ft: ZERO ALL PUMPS from SideKick sk-06-03-2616
4501.94ft: ZWOB from SideKick sk-06-03-2616
4501.94ft: ZDiffPressure from SideKick sk-06-03-2616
4506.20ft: Connection at 4505.1

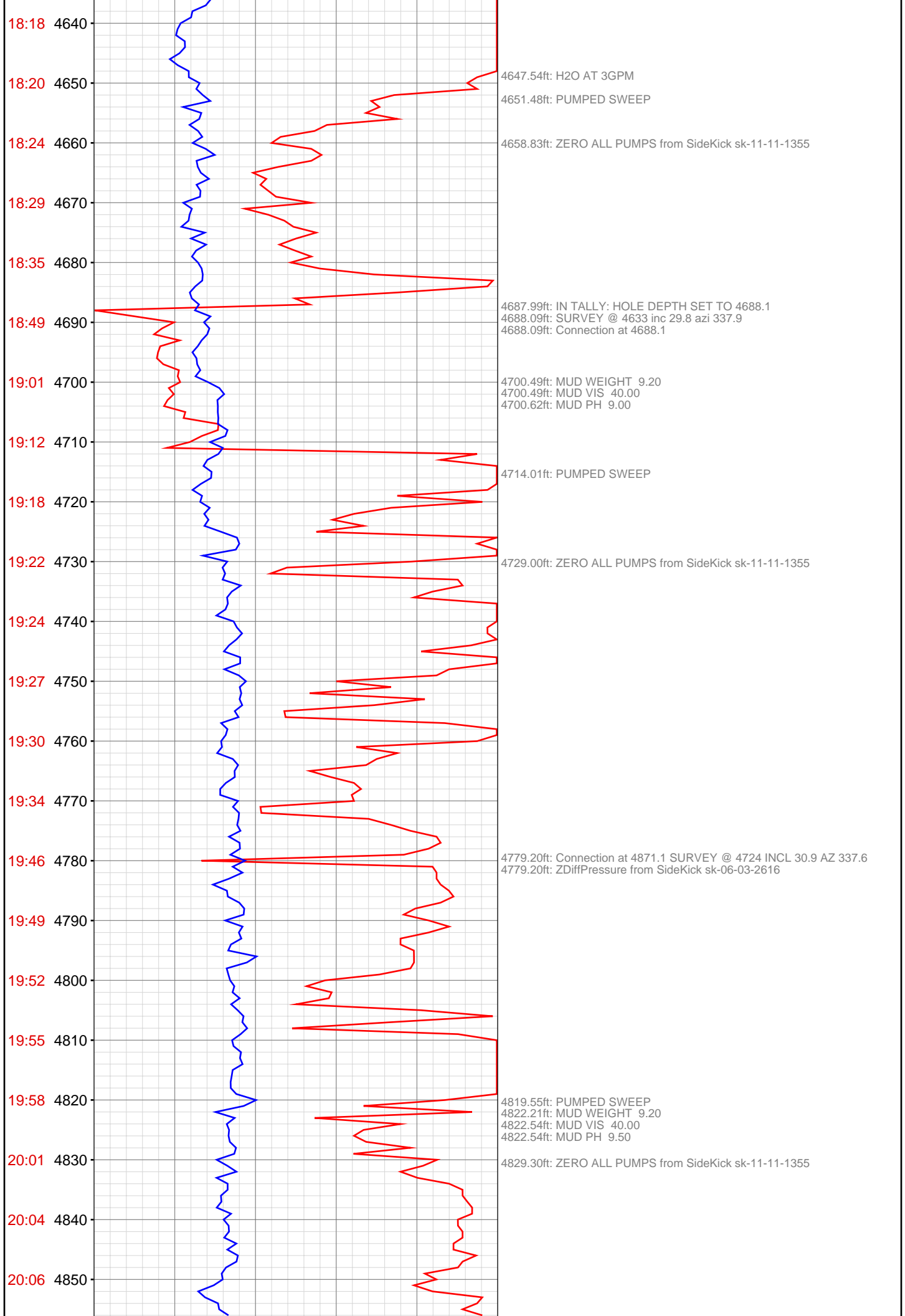
4547.01ft: IN TALLY: HOLE DEPTH SET TO 4550.9

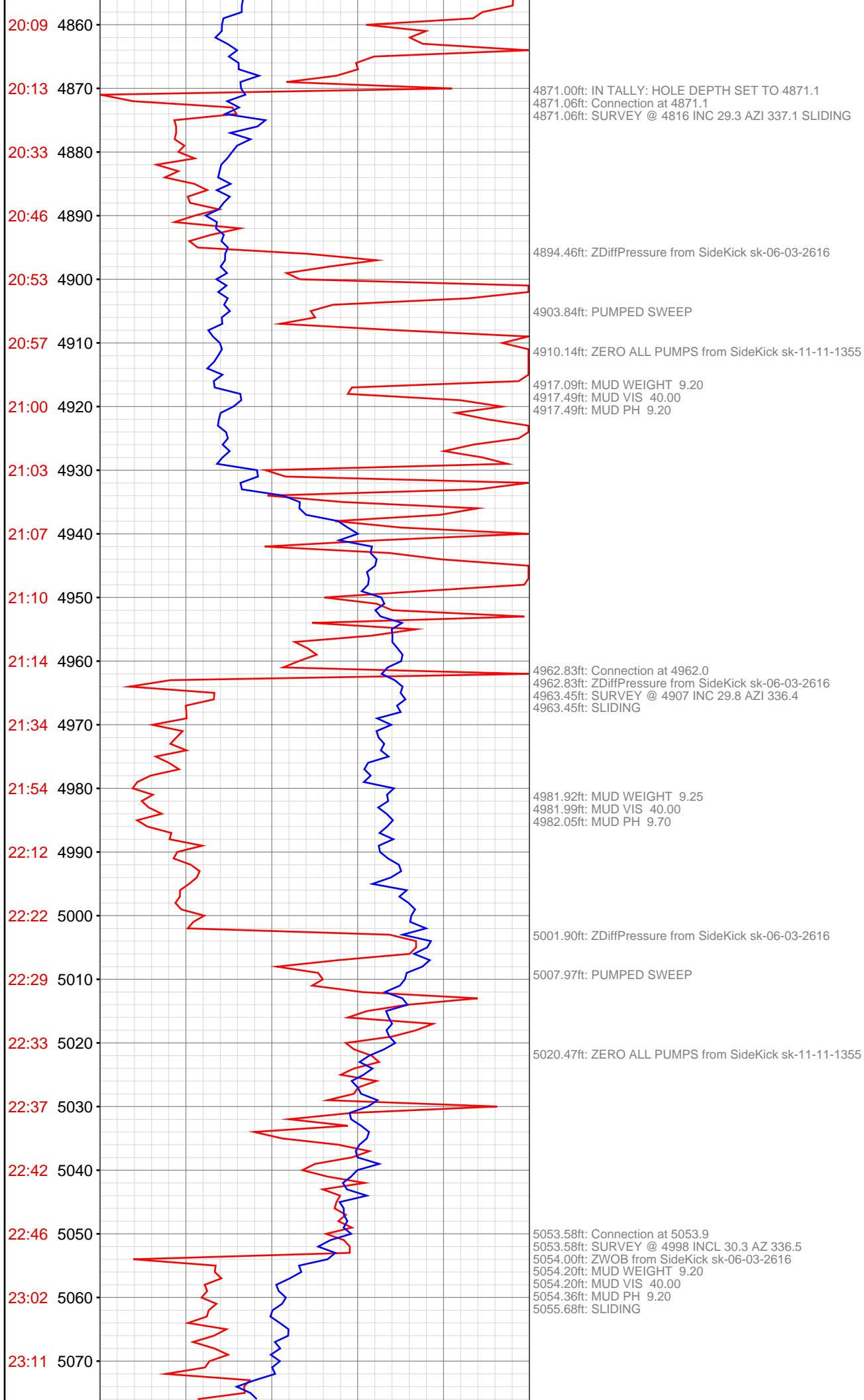
4552.53ft: IN TALLY: HOLE DEPTH SET TO 4550.9

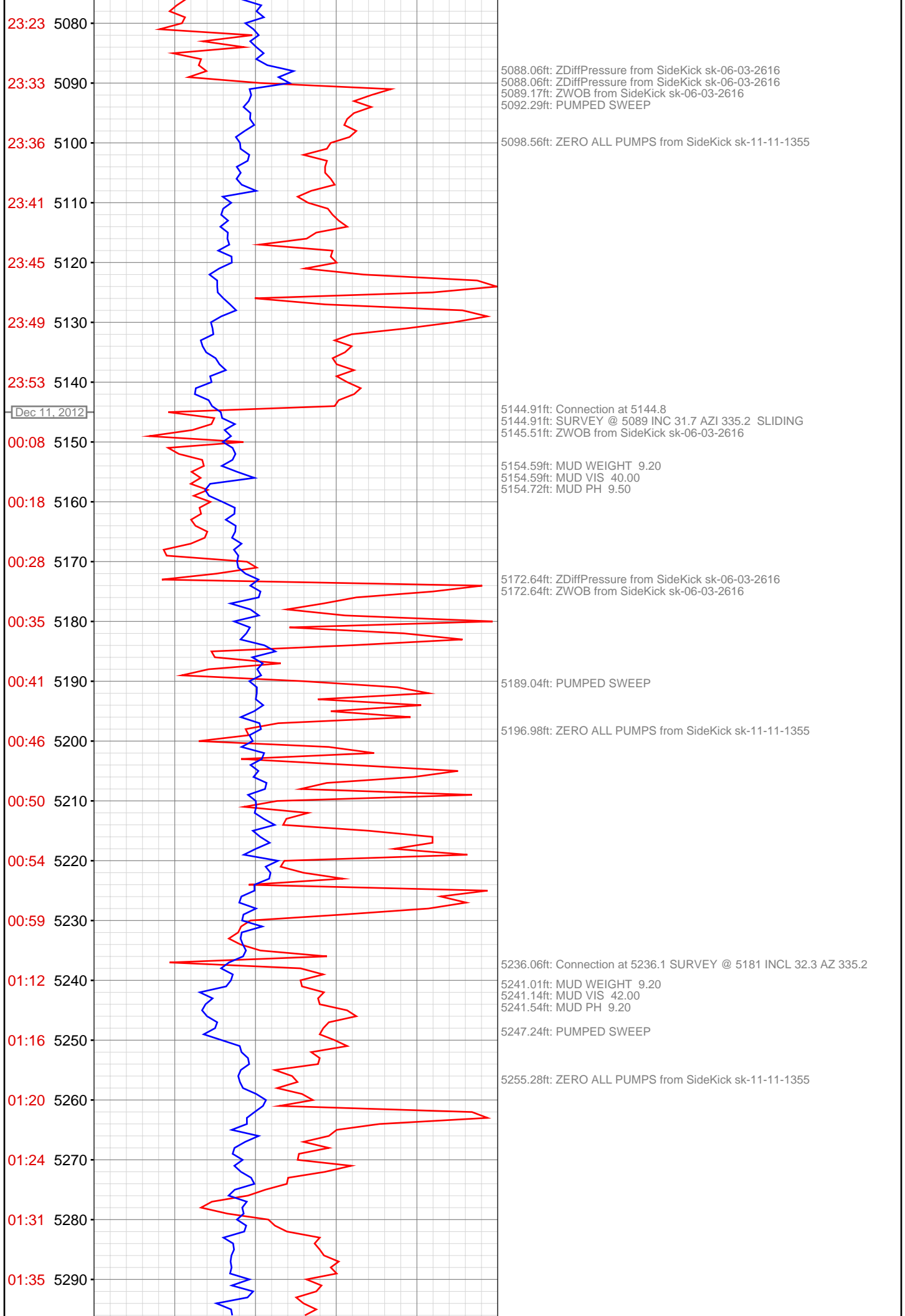
4596.00ft: IN TALLY: HOLE DEPTH SET TO 4596.7
4596.69ft: Connection at 4596.7 SURVEY @ 4541' INC. 30.7 -333.0AZM.

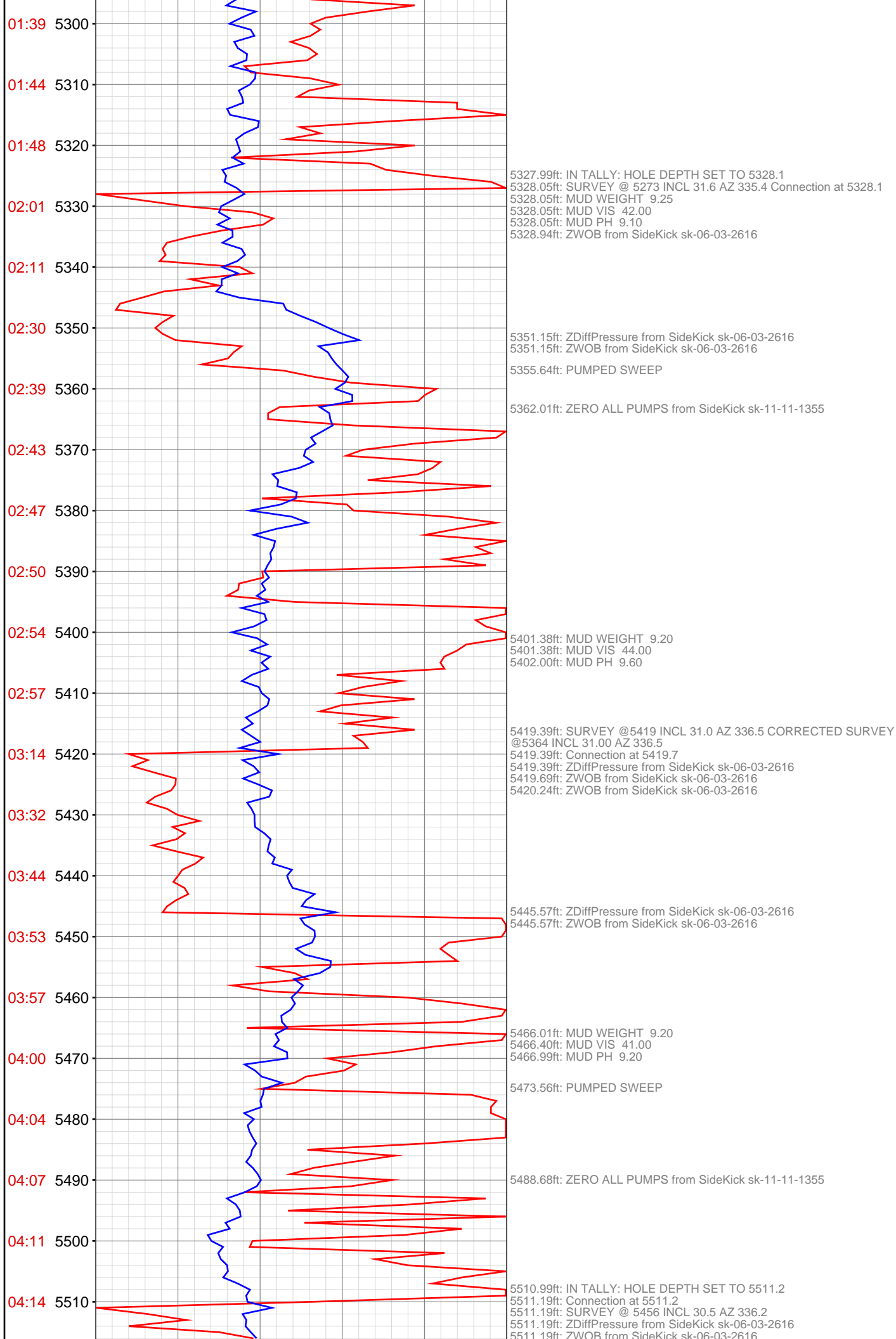
4603.35ft: MUD WEIGHT 9.20
4603.35ft: MUD VIS 42.00
4603.41ft: MUD PH 9.20

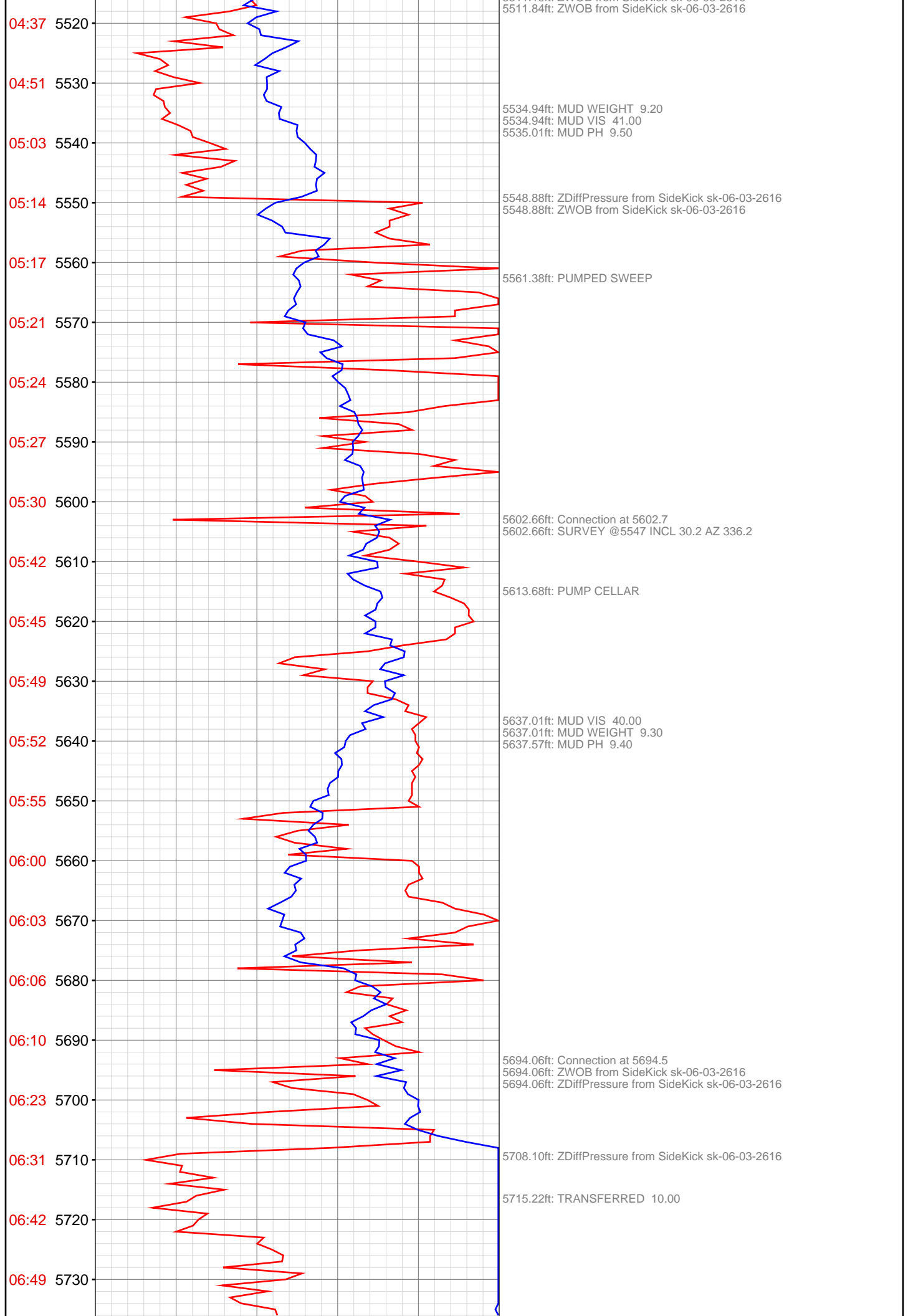
4626.21ft: ZDiffPressure from SideKick sk-06-03-2616
4626.21ft: ZWOB from SideKick sk-06-03-2616

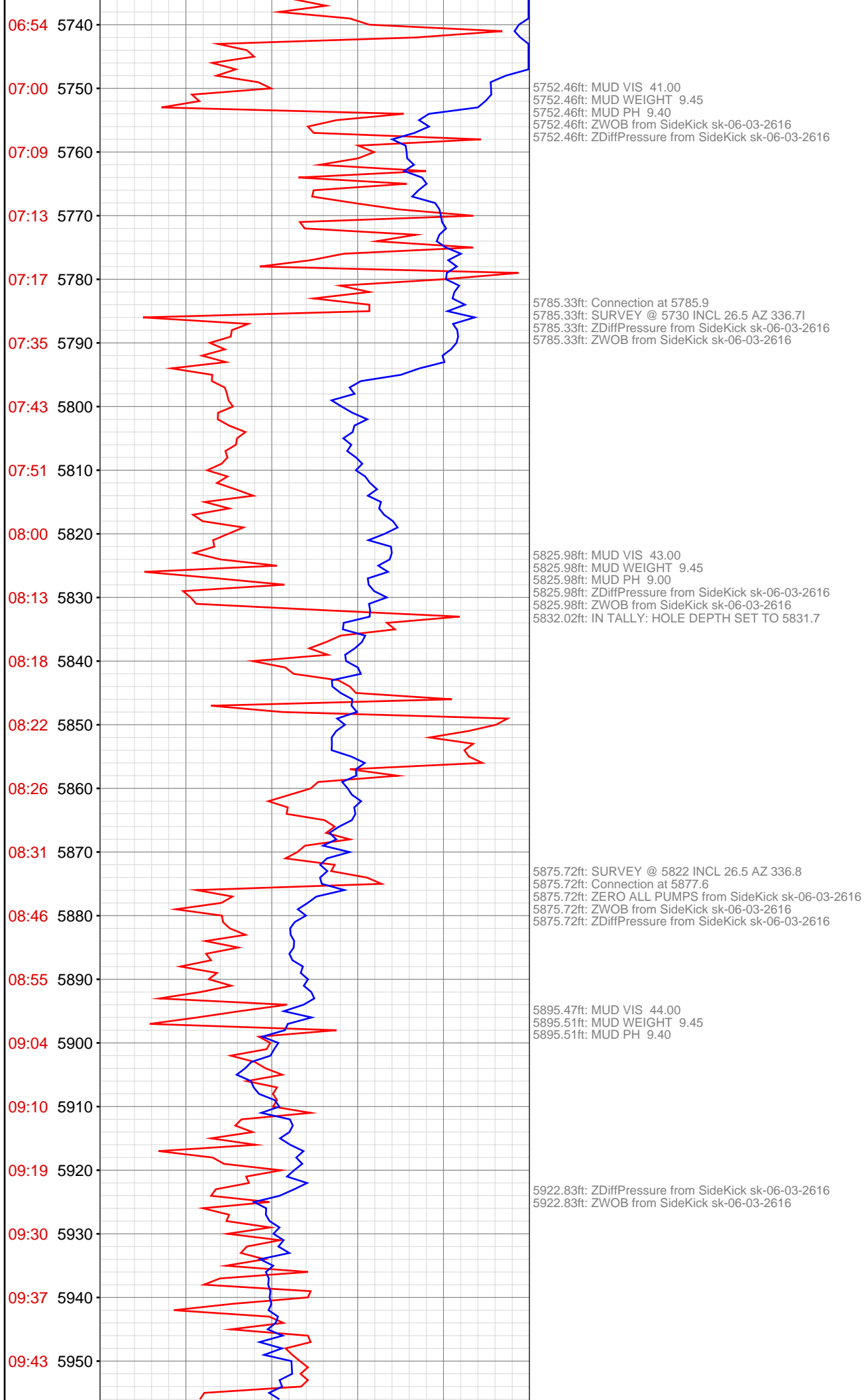


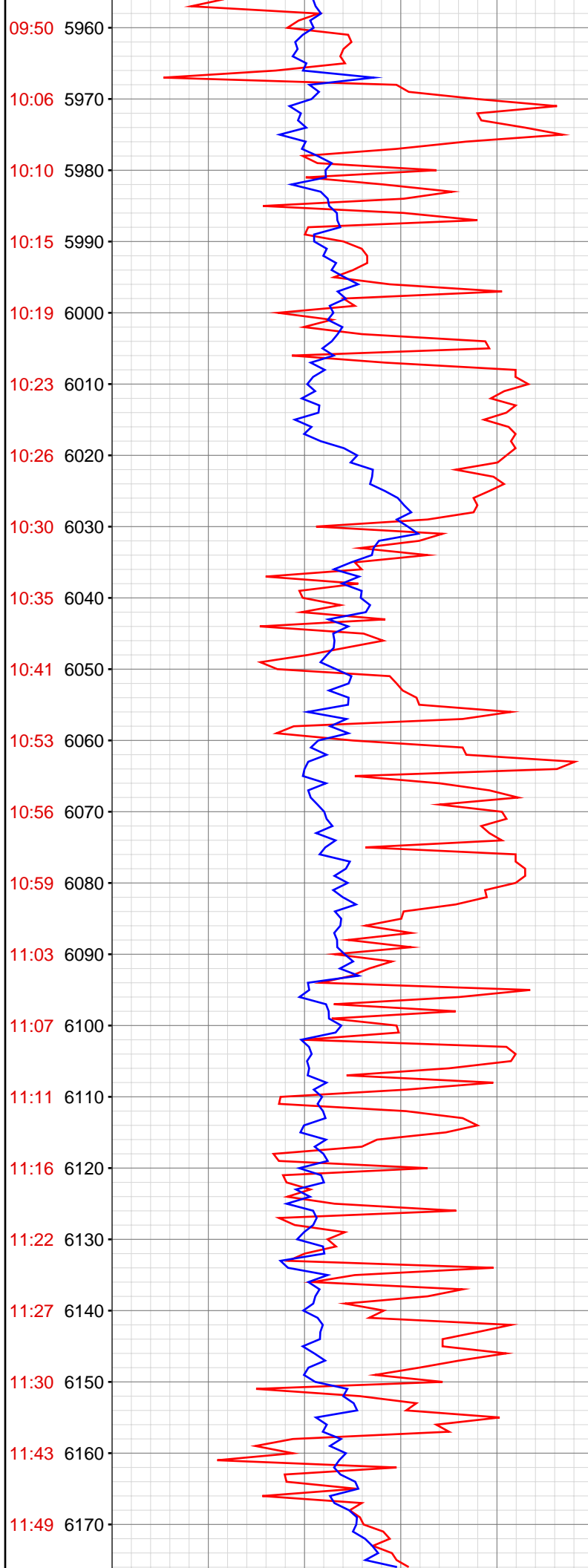










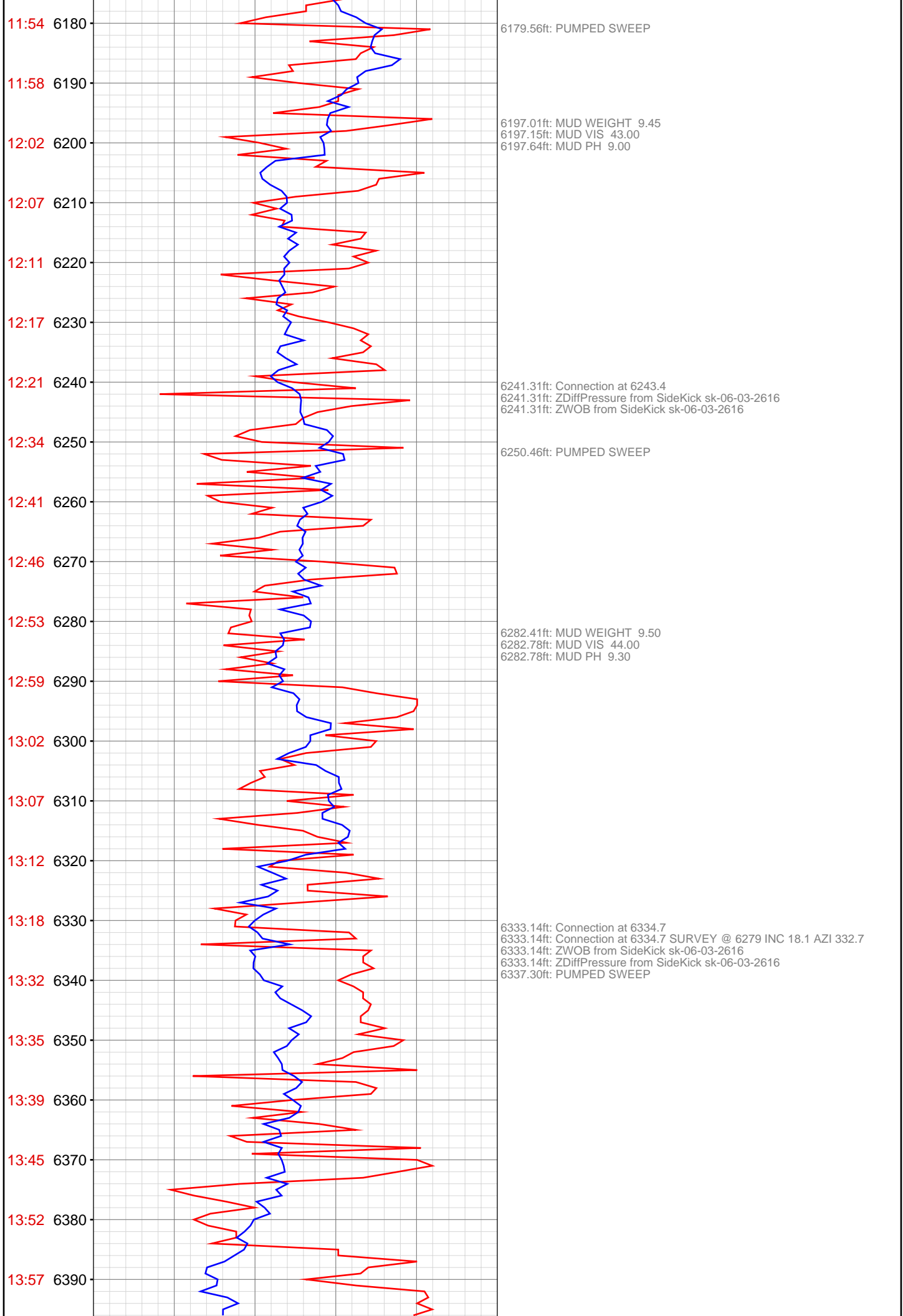


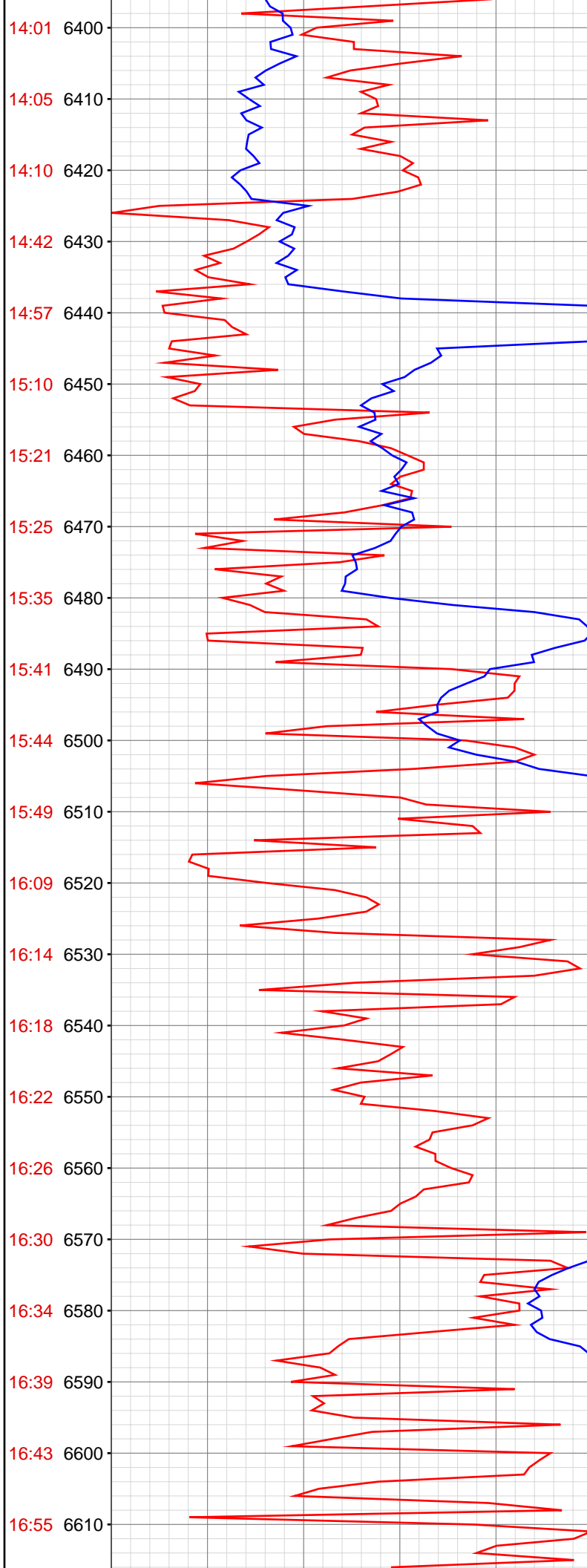
5966.90ft: MUD VIS 43.00
5966.90ft: MUD WEIGHT 9.40
5966.90ft: MUD PH 9.30
5966.90ft: Connection at 5969.0
5966.90ft: ZWOB from SideKick sk-06-03-2616
5966.90ft: ZDiffPressure from SideKick sk-06-03-2616
5966.90ft: PUMPED SWEEP

6057.58ft: SURVEY @ 6005 INC 25.3 AZI 336.8
6058.30ft: Connection at 6060.4
6058.30ft: ZDiffPressure from SideKick sk-06-03-2616
6058.30ft: ZWOB from SideKick sk-06-03-2616
6060.14ft: TRANSFERRED 10.00

6102.00ft: MUD WEIGHT 9.40
6102.49ft: MUD VIS 43.00
6102.49ft: MUD PH 9.20

6150.13ft: SURVEY @ 6096 INC 22.1 AZI 335.8
6150.13ft: Connection at 6151.8
6150.13ft: ZWOB from SideKick sk-06-03-2616
6150.13ft: ZDiffPressure from SideKick sk-06-03-2616



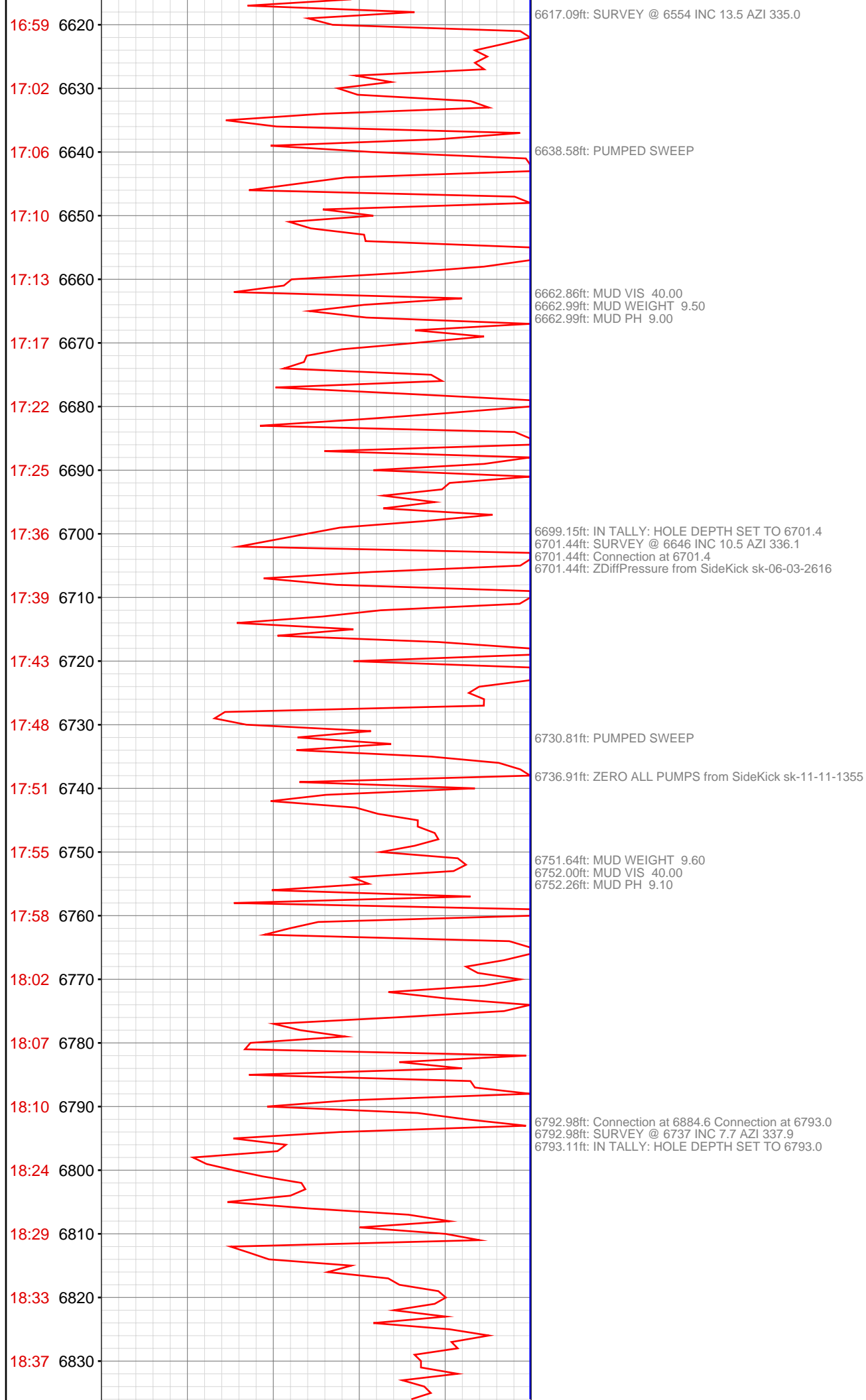


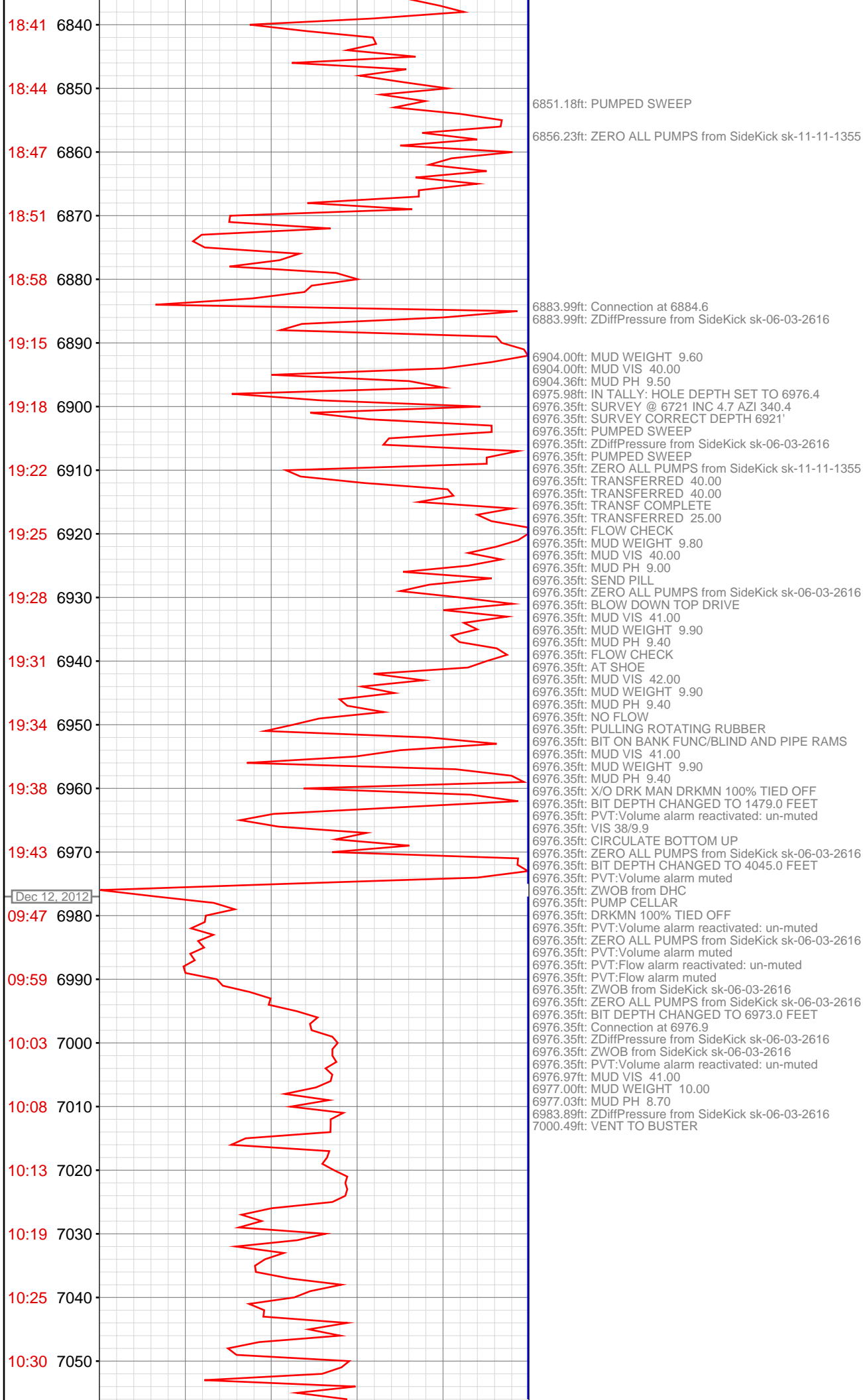
6419.65ft: MUD VIS 43.00
6419.65ft: MUD WEIGHT 9.55
6420.08ft: MUD PH 9.30
6424.61ft: TRANSFERRED 20.00
6424.61ft: SURVEY @ 6371 INC 15.9 AZI 331.5
6424.61ft: SPR
6424.61ft: SURVEY @ 6371 INC 15.9 AZI 331.5
6424.61ft: Connection at 6426.4
6424.61ft: ZDiffPressure from SideKick sk-06-03-2616
6424.61ft: ZWOB from SideKick sk-06-03-2616
6424.61ft: SLIDING
6424.61ft: ZWOB from SideKick sk-06-03-2616
6425.85ft: IN TALLY: HOLE DEPTH SET TO 6426.4

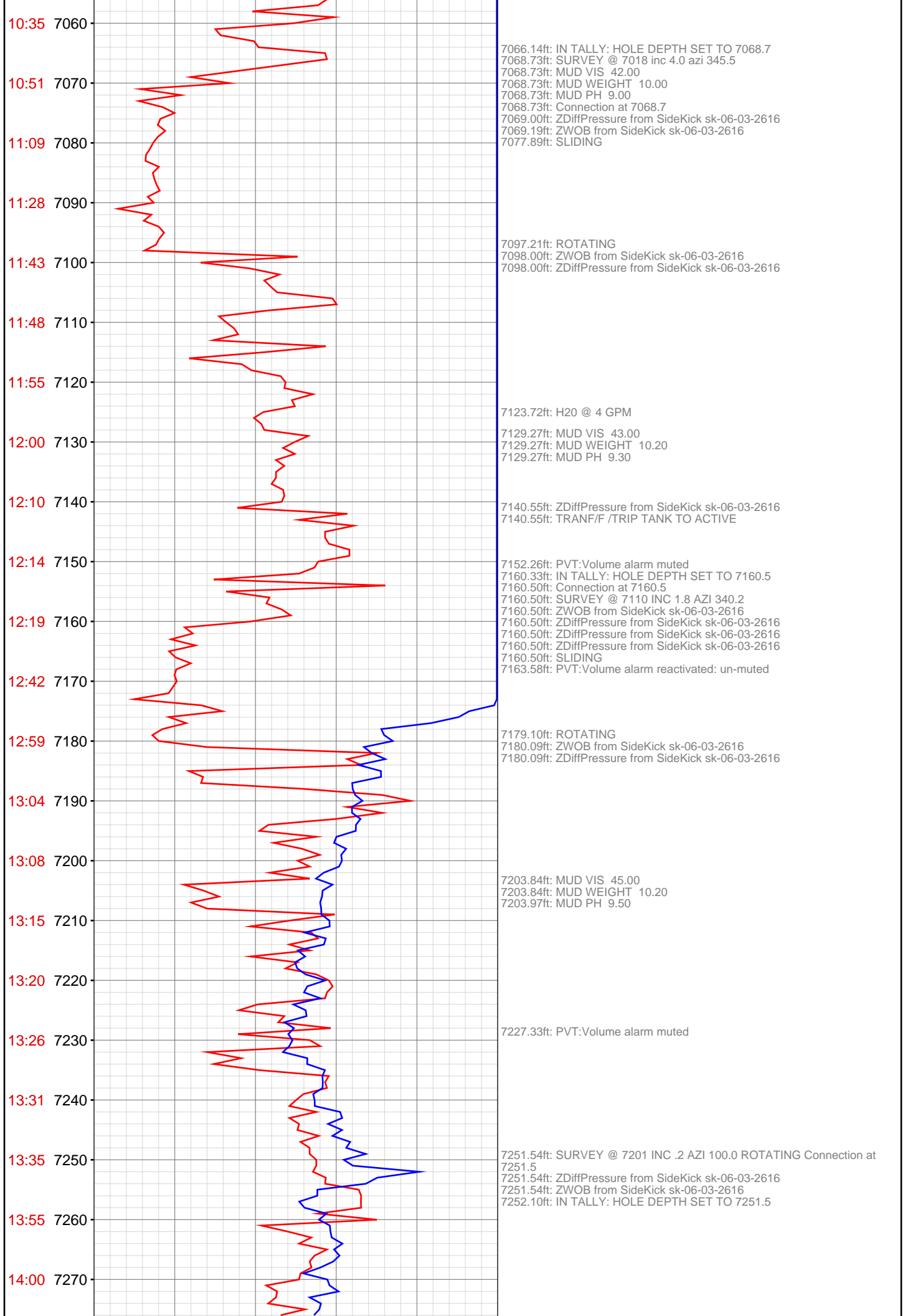
6447.97ft: MUD VIS 42.00
6448.00ft: MUD WEIGHT 9.60
6448.03ft: MUD PH 9.00
6451.44ft: ZDiffPressure from SideKick sk-06-03-2616
6451.44ft: ZWOB from SideKick sk-06-03-2616

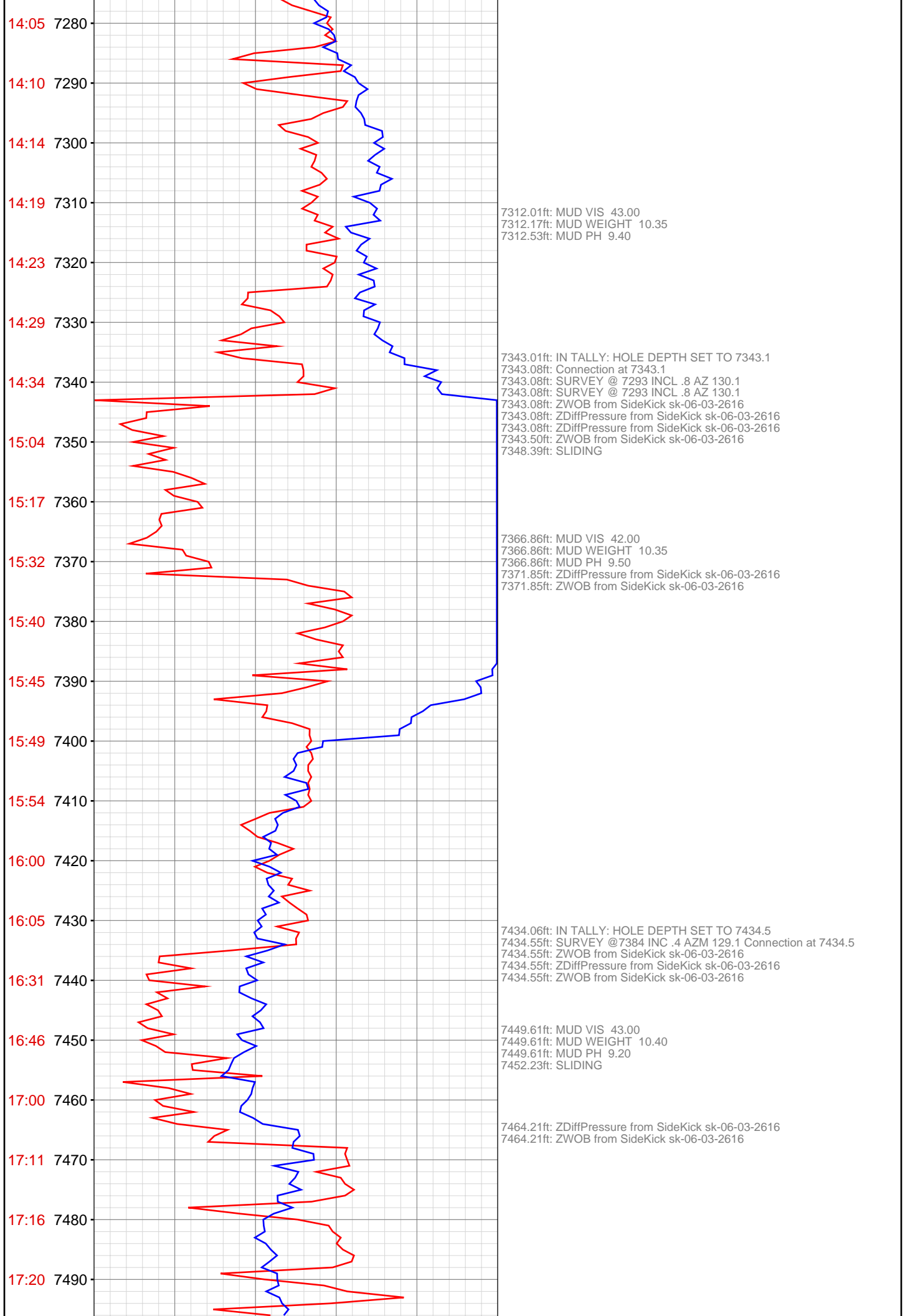
6516.57ft: MUD VIS 42.00
6516.57ft: MUD WEIGHT 9.60
6516.57ft: MUD VIS 43.00
6516.57ft: MUD WEIGHT 9.65
6516.57ft: MUD PH 9.40
6516.57ft: ZWOB from SideKick sk-06-03-2616
6516.57ft: ZDiffPressure from SideKick sk-06-03-2616
6518.64ft: SURVEY @ 6463 INC 15.1 AZI 333.7

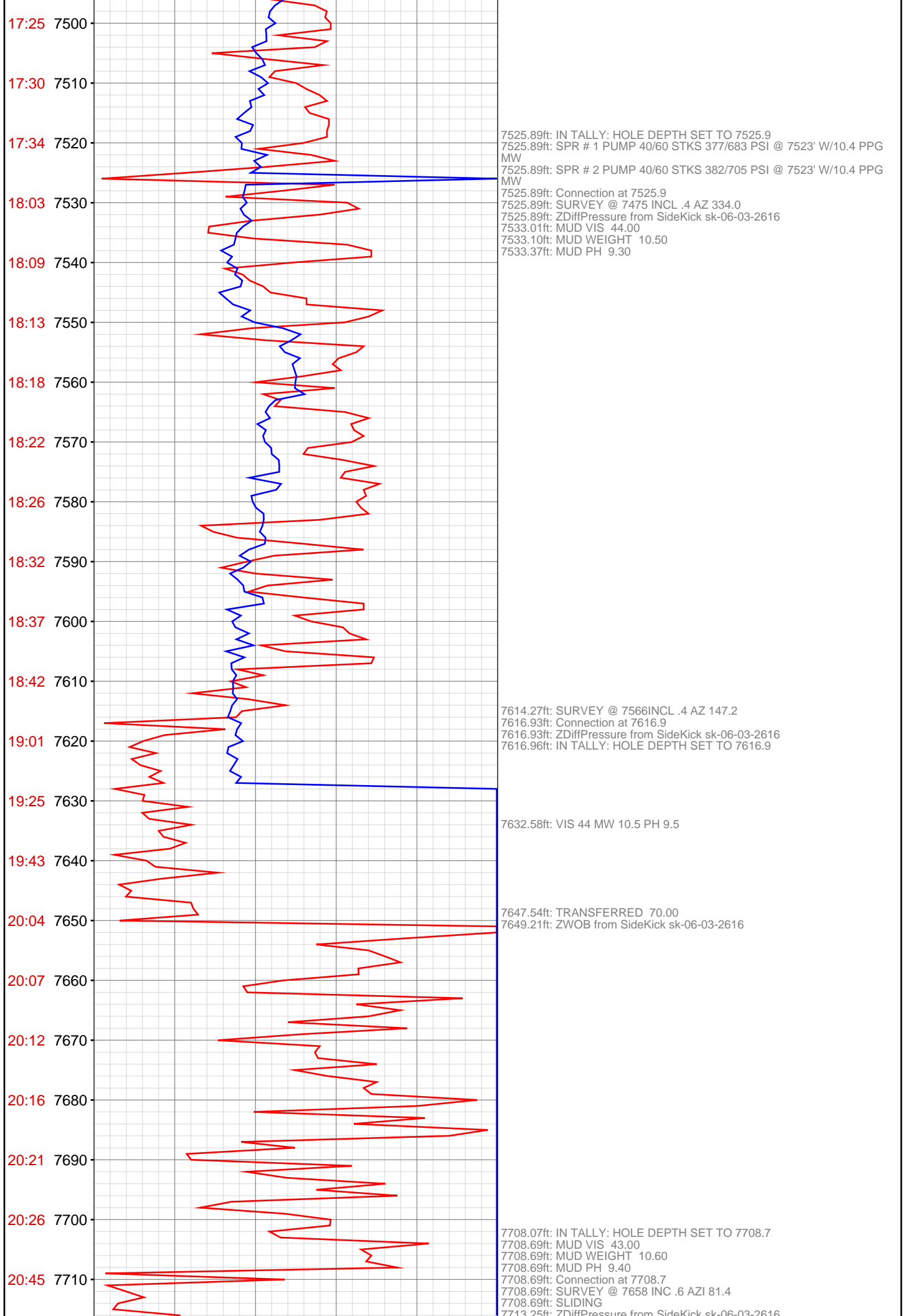
6608.17ft: Connection at 6609.9
6608.17ft: ZDiffPressure from SideKick sk-06-03-2616
6608.17ft: MUD WEIGHT 9.60
6608.60ft: MUD VIS 42.00
6608.99ft: MUD PH 9.20

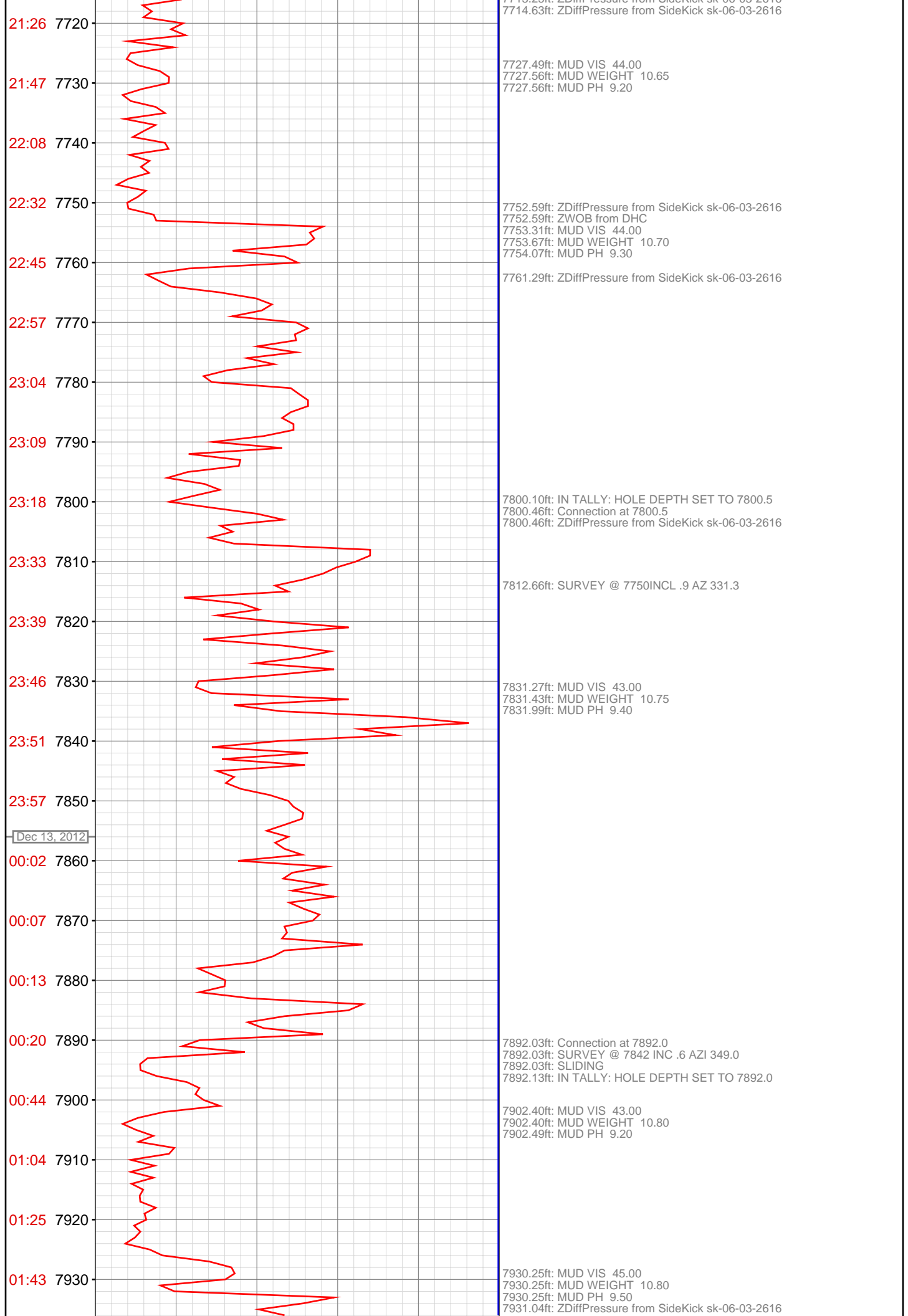


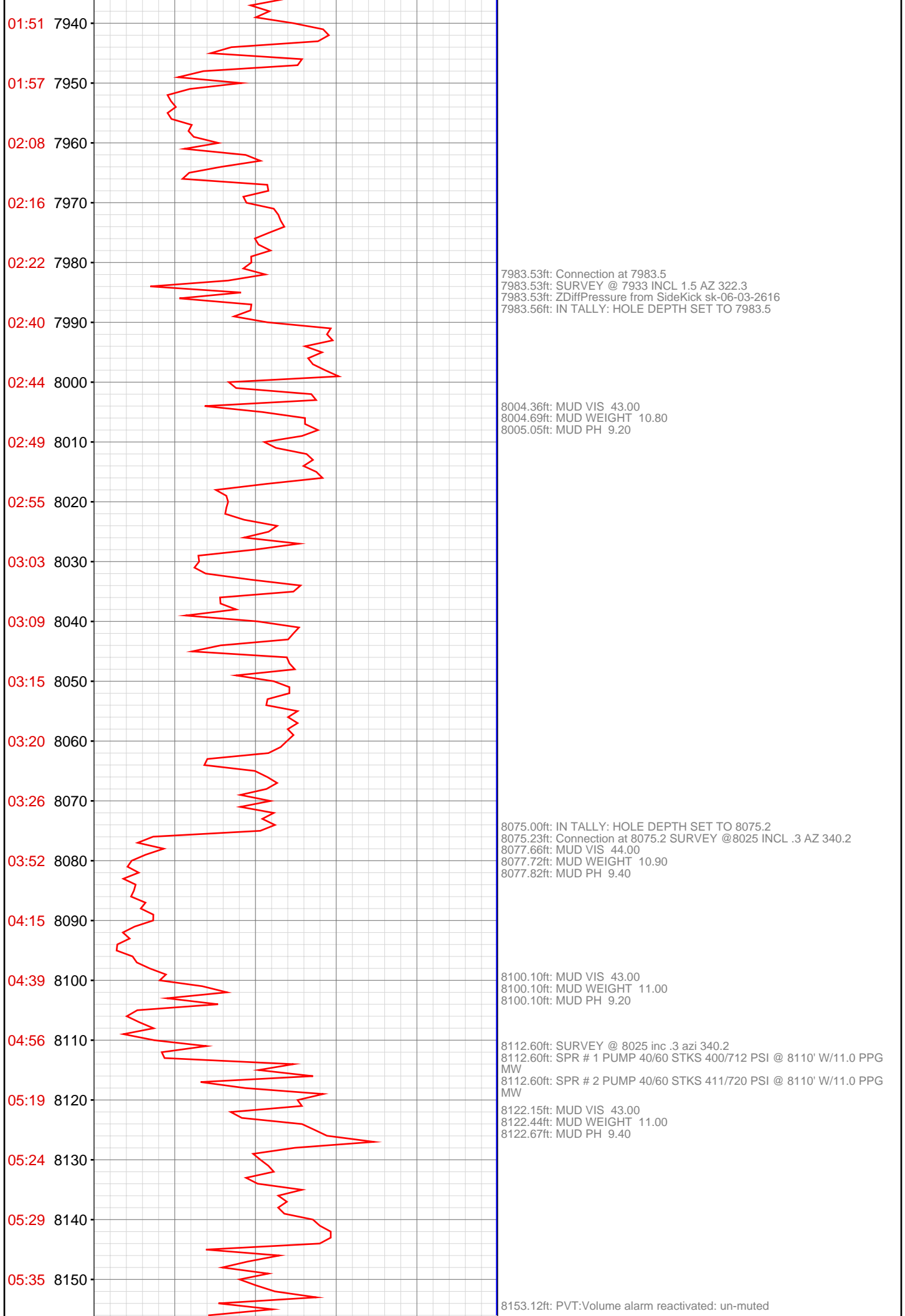


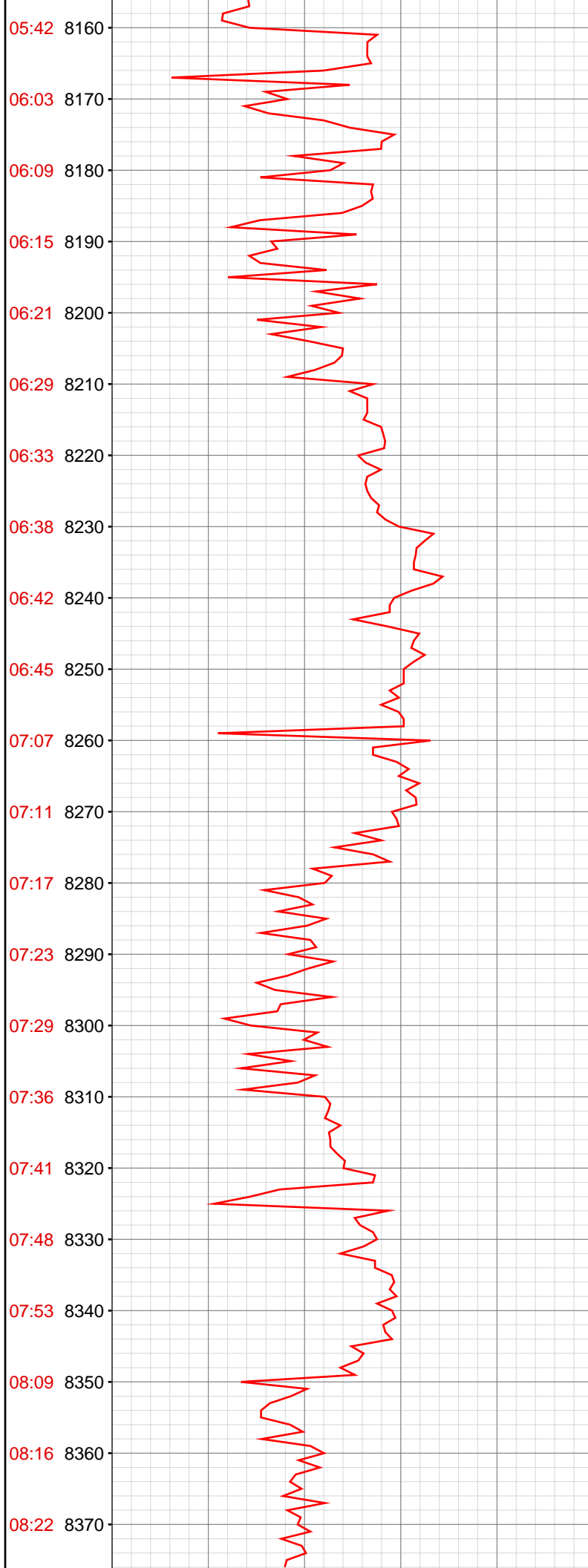












8166.63ft: IN TALLY: HOLE DEPTH SET TO 8166.8
8166.83ft: Connection at 8166.8
8166.83ft: SURVEY @ 8116 INC 1.2 AZI 176.5
8166.83ft: ZDiffPressure from SideKick sk-06-03-2616
8169.13ft: SURVEY @ 8116 INCL 1.2 AZ 176.5

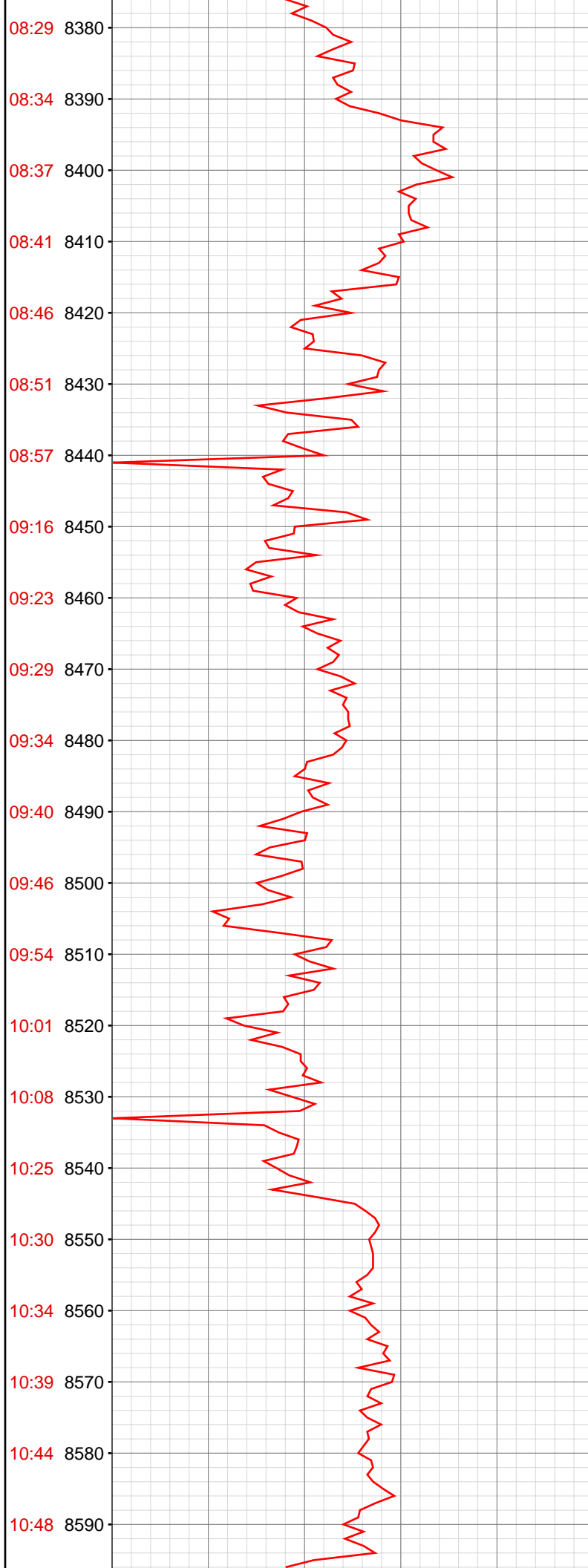
8204.00ft: TRANSFERRED 0.07
8204.00ft: TRANSFERRED 60.00
8204.00ft: ZDiffPressure from SideKick sk-06-03-2616
8205.05ft: PVT:Volume alarm muted

8258.20ft: SURVEY @ 8208 INC 1.0 AZI 29.3
8258.20ft: Connection at 8258.2
8258.20ft: ZDiffPressure from SideKick sk-06-03-2616
8258.56ft: IN TALLY: HOLE DEPTH SET TO 8258.2
8261.65ft: MUD VIS 42.00
8262.01ft: MUD WEIGHT 11.10
8262.01ft: MUD PH 9.70

8278.71ft: PVT:Volume alarm reactivated: un-muted

8324.77ft: ZDiffPressure from SideKick sk-06-03-2616
8324.77ft: ZWOB from SideKick sk-06-03-2616

8349.15ft: IN TALLY: HOLE DEPTH SET TO 8349.4
8349.51ft: Connection at 8349.4
8349.51ft: SURVEY @ 8299 INC .6 AZI 114.7
8349.51ft: ZDiffPressure from SideKick sk-06-03-2616



8437.99ft: MUD VIS 44.00
8438.12ft: MUD WEIGHT 11.20
8438.12ft: MUD PH 9.20
8441.01ft: IN TALLY: HOLE DEPTH SET TO 8441.2
8441.24ft: SURVEY @ 8391 INC 1.4 AZI 163.6
8441.24ft: ROTATING Connection at 8441.2
8441.24ft: ZWOB from SideKick sk-06-03-2616
8441.24ft: ZDiffPressure from SideKick sk-06-03-2616

8521.92ft: MUD VIS 45.00
8522.01ft: MUD WEIGHT 11.30
8522.08ft: MUD PH 9.50
8526.35ft: TRANSFERRED 60.00
8532.48ft: IN TALLY: HOLE DEPTH SET TO 8533.0
8533.01ft: PVT:Volume alarm muted
8533.01ft: SURVEY @ 8483 INC 137.3 AZI 137.3 ROTATING
8533.01ft: Connection at 8533.0
8533.01ft: ZDiffPressure from SideKick sk-06-03-2616

