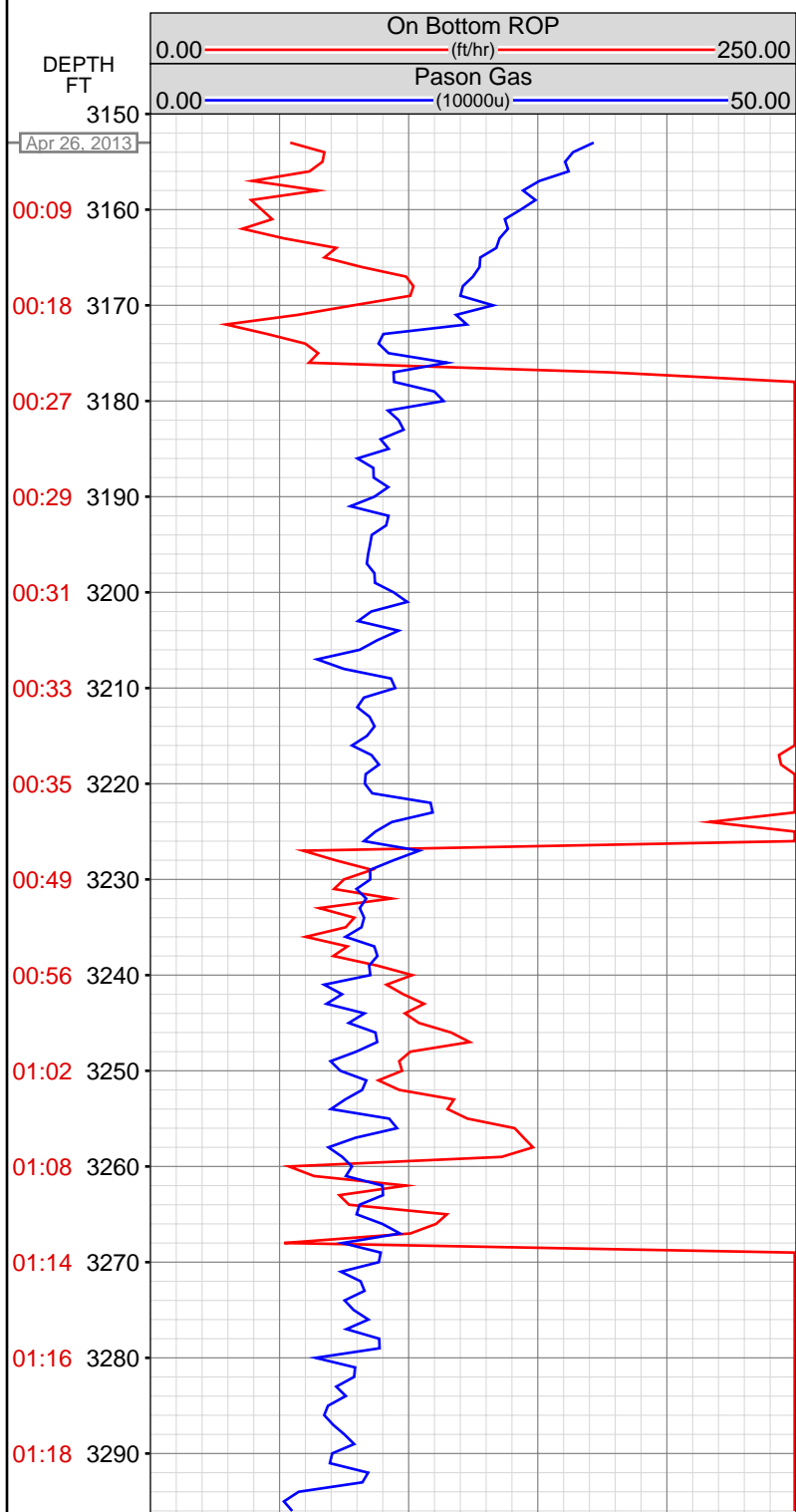
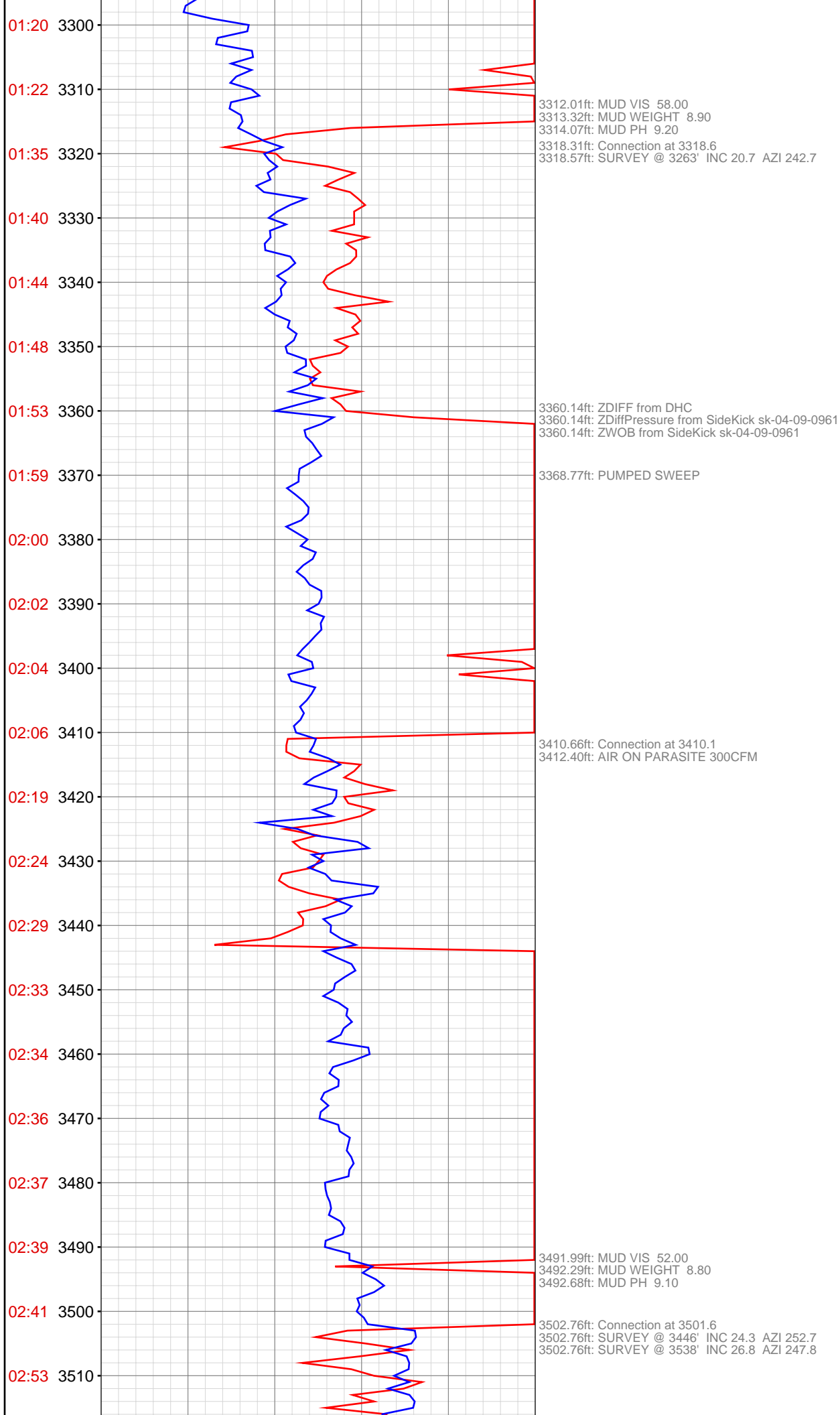


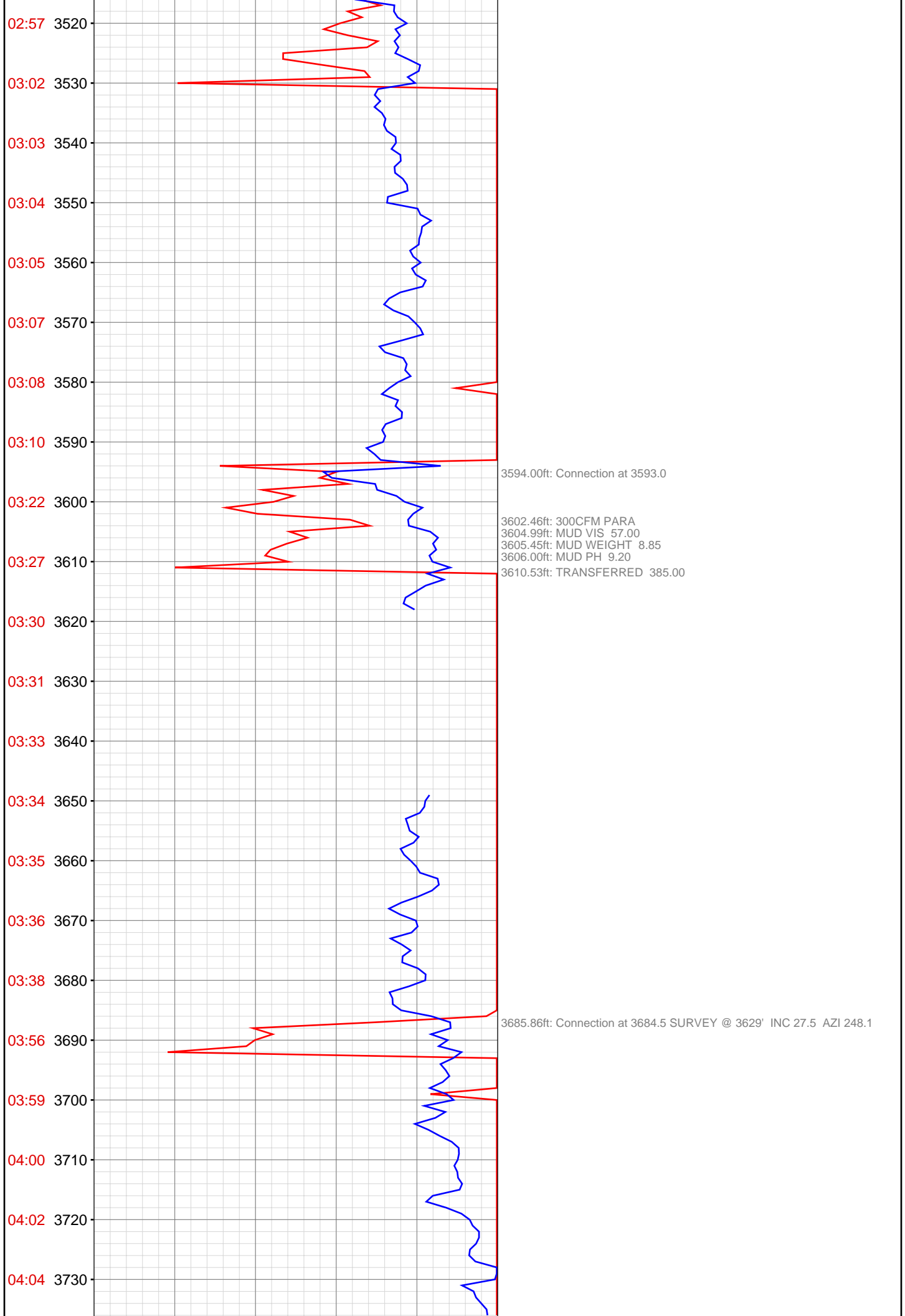
OPERATOR: EnCana Oil & Gas (USA), Inc.
WELL: SG 8507B-35 D36 496
FIELD:
LOCATION:
COUNTRY: USA
RIG: Pat-UTI 326

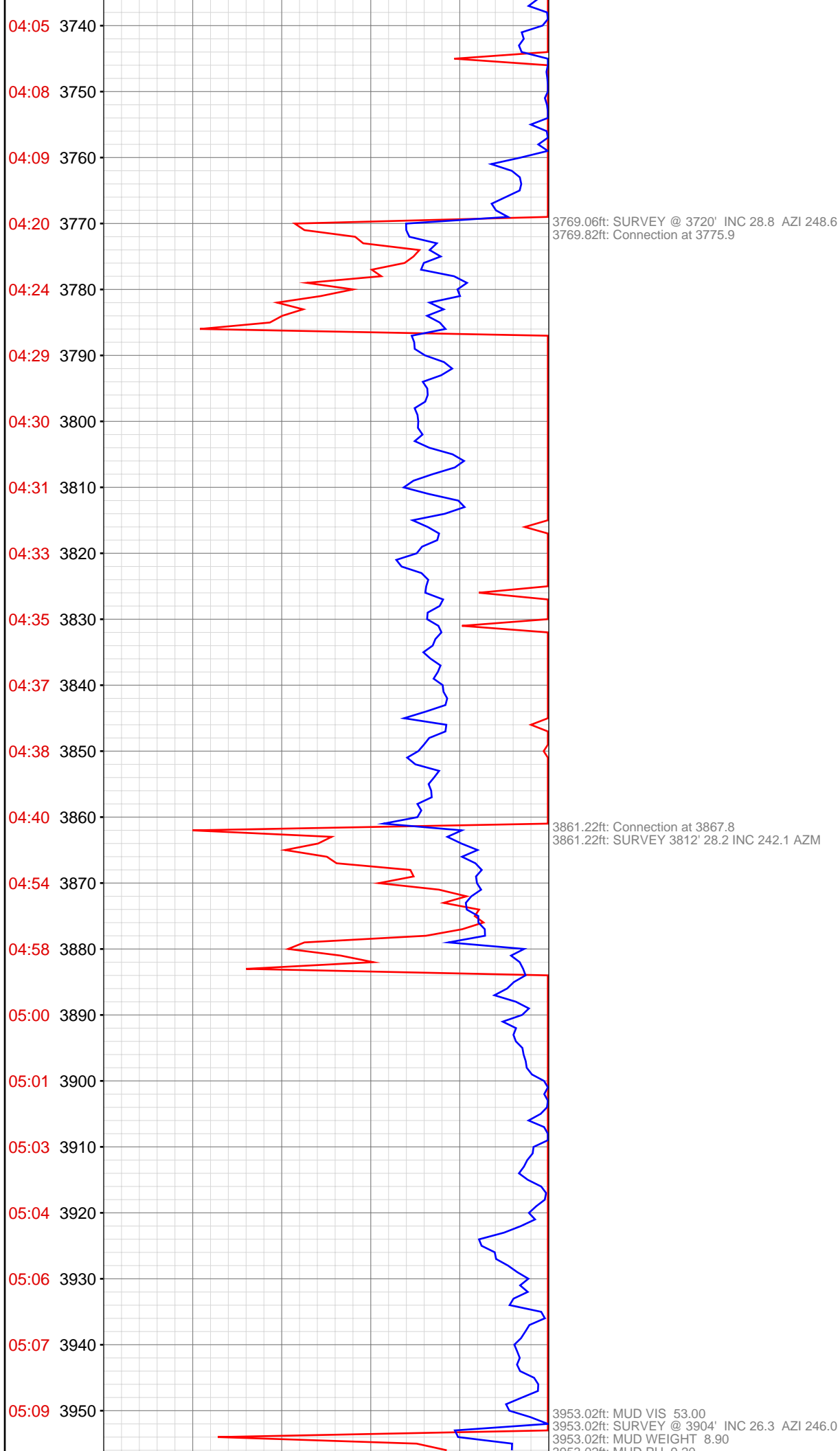
CONTRACTOR: Patterson-UTI Drilling Company
UNIQUE WELL ID:
SPUD DATE: Apr 26, 2013 00:00
RELEASE DATE:



MEMOS







3953.02ft: MUD PH 9.20
3953.02ft: Connection at 3959.3

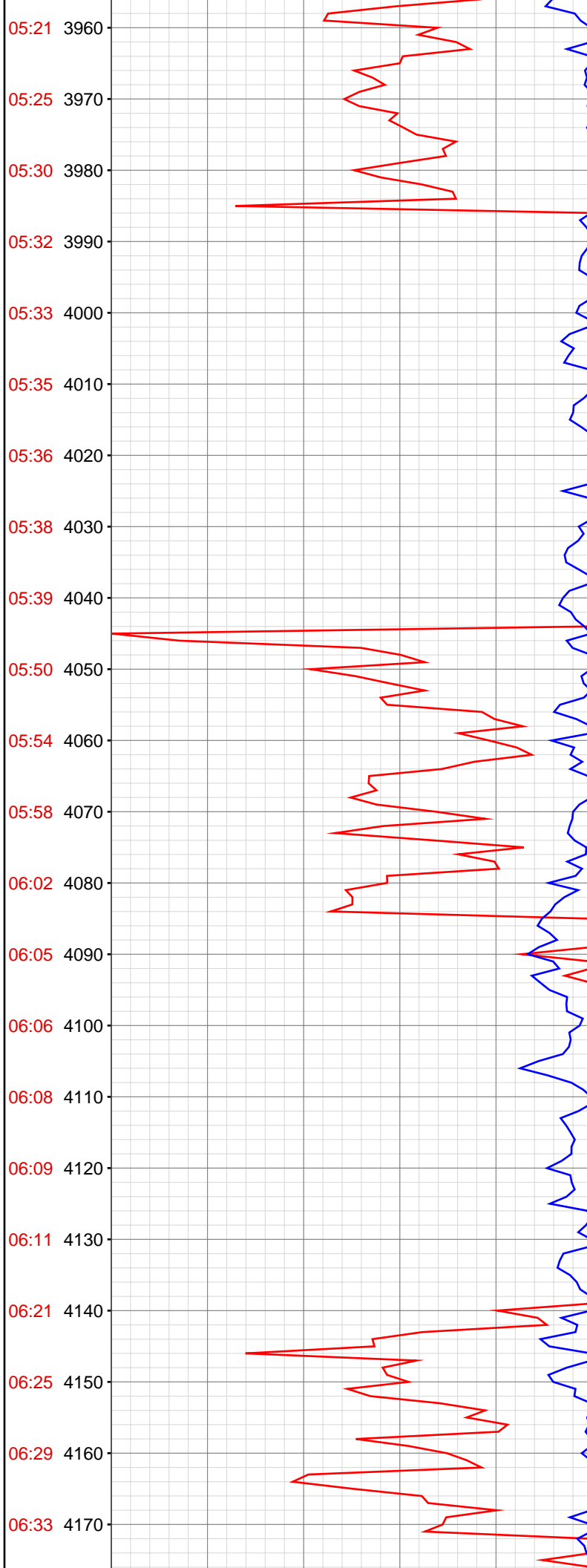
4044.98ft: Connection at 4051.6 SURVEY @ 3996 25.6 INC. 239.6 AZ.

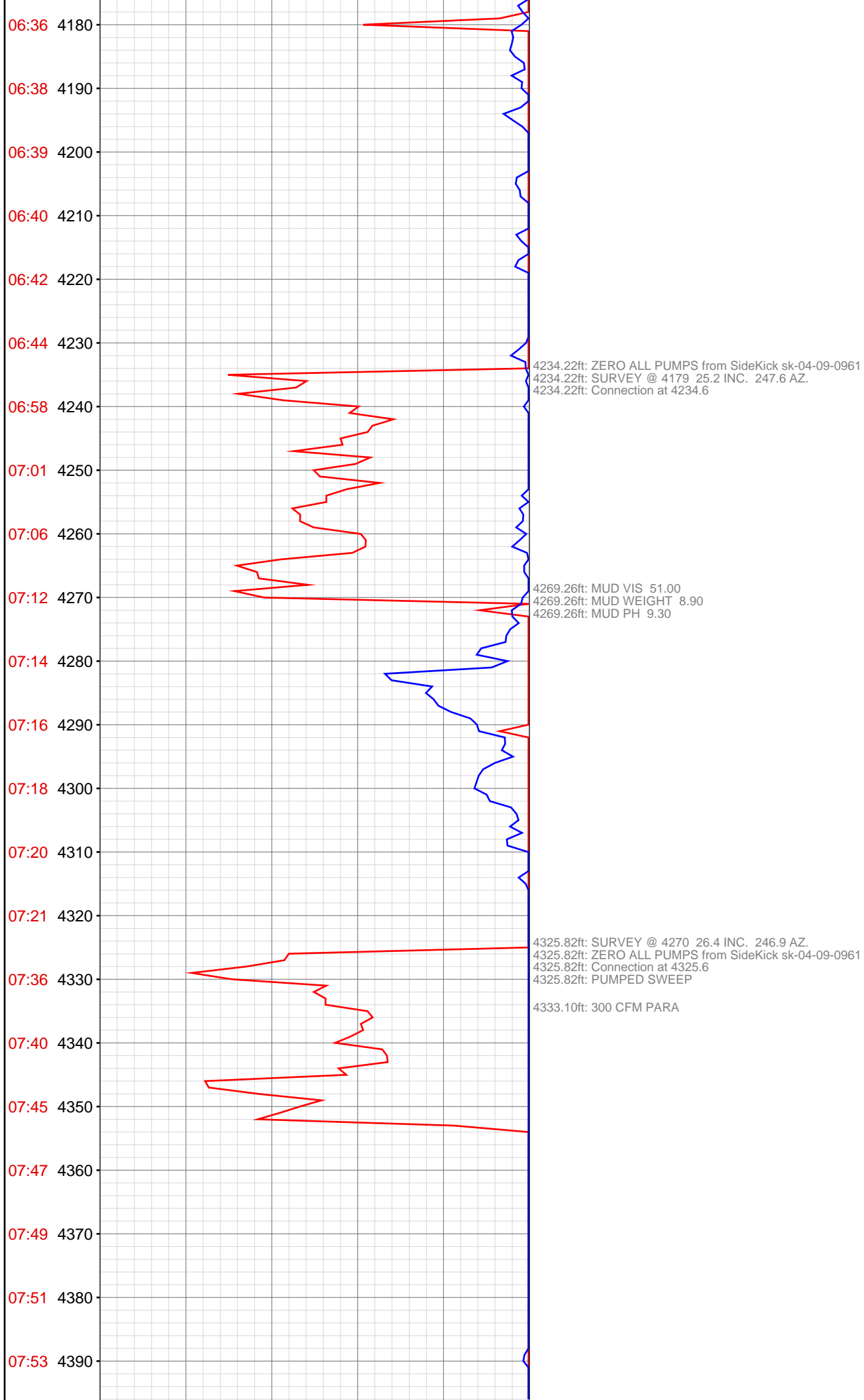
4077.72ft: MUD VIS 52.00
4077.99ft: MUD WEIGHT 8.95
4077.99ft: MUD PH 9.50

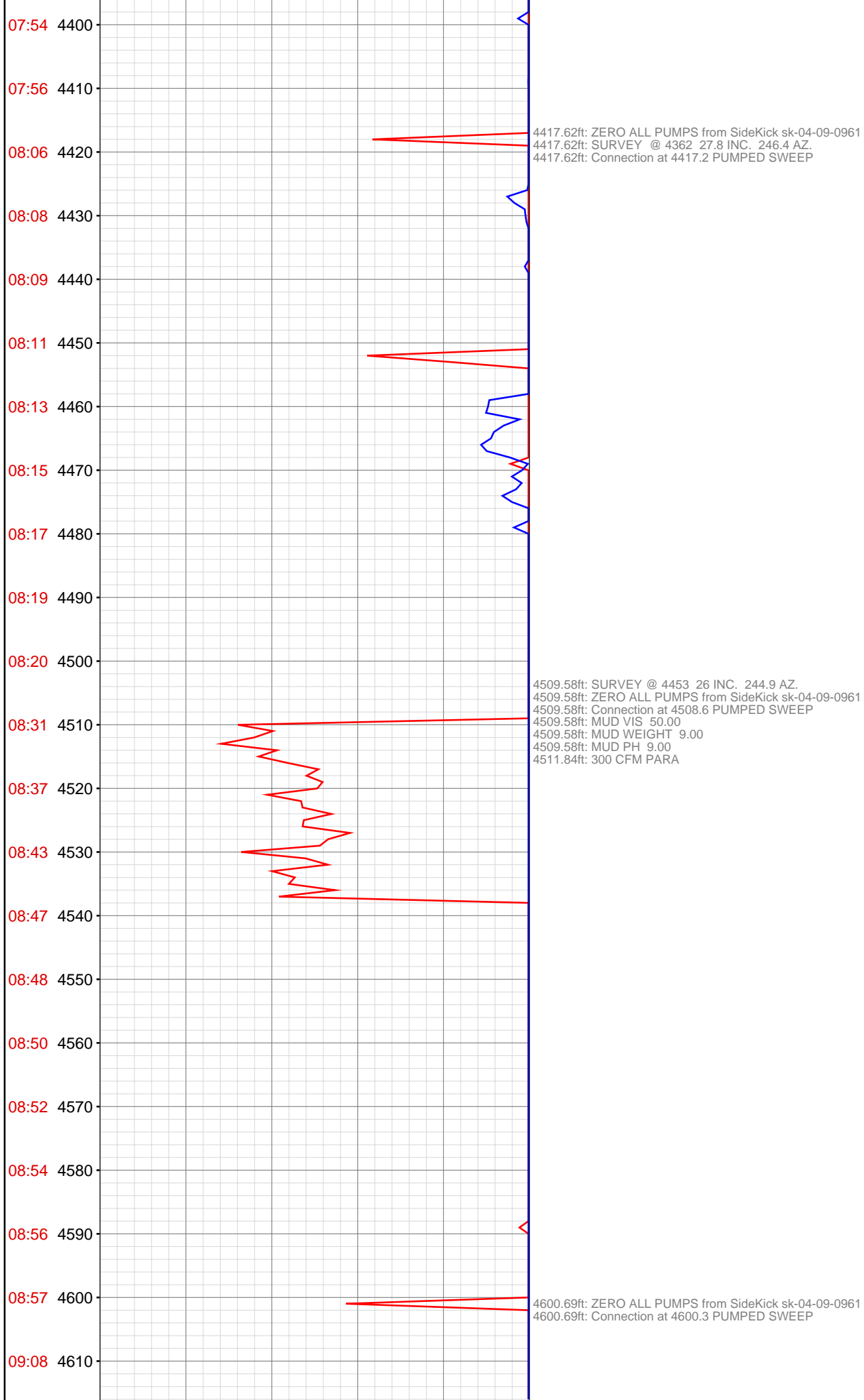
4089.30ft: 300 CFM PARA

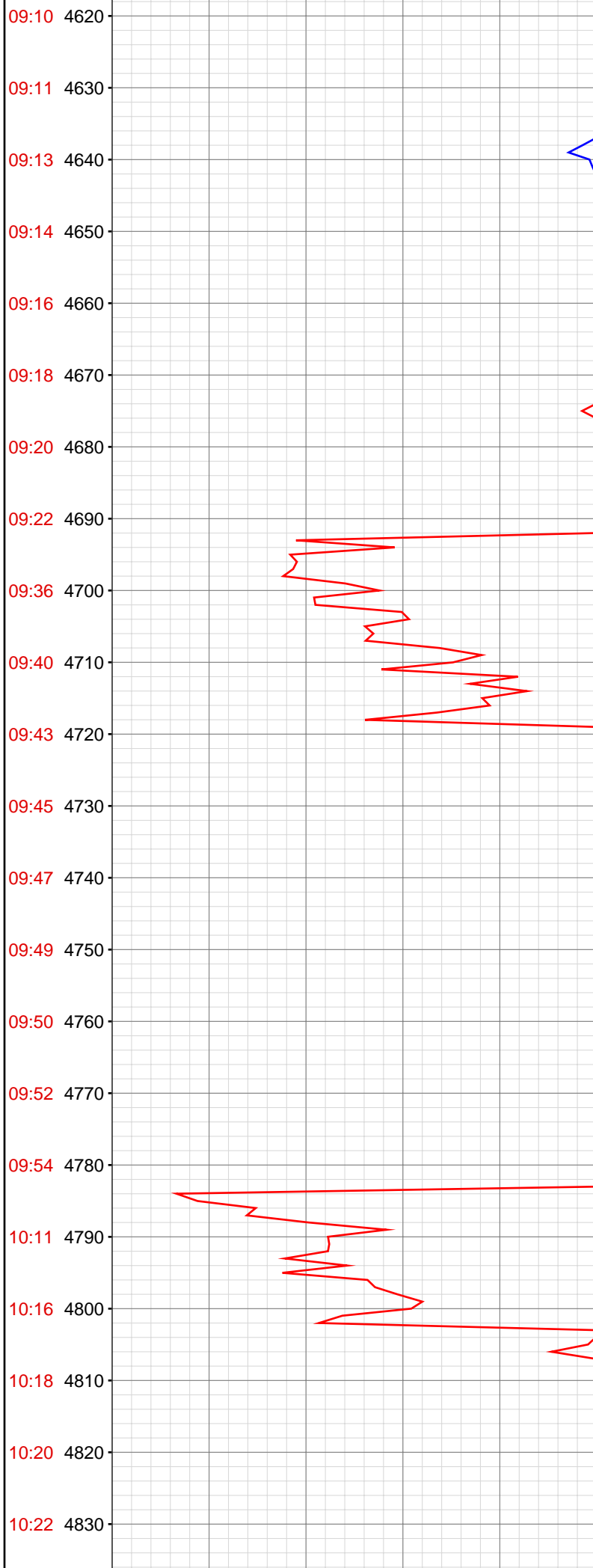
4139.34ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
4139.34ft: Connection at 4143.2

4147.64ft: SURVEY @ 4088 26.8 INC. 240.5 AZ.









4692.68ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
4692.68ft: SURVEY @ 4636 26.8 INC. 249.3 AZ.
4692.68ft: Connection at 4691.9 PUMPED SWEEP

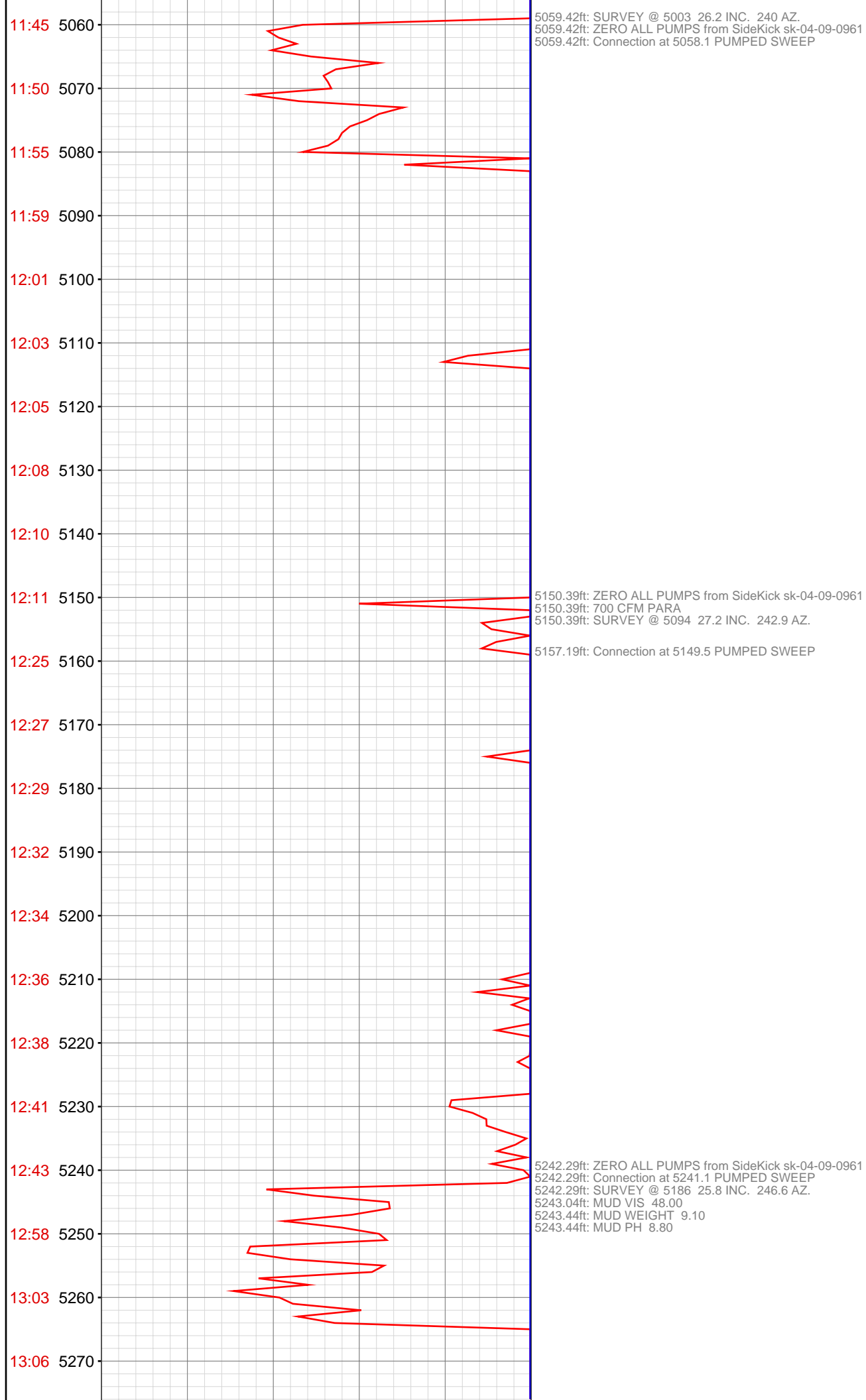
4783.89ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
4783.89ft: MUD VIS 49.00
4783.89ft: MUD WEIGHT 9.05
4783.89ft: MUD PH 9.20
4783.89ft: Connection at 4783.4 PUMPED SWEEP
4783.89ft: SURVEY @ 4728 26.5 INC. 240.8 AZ.

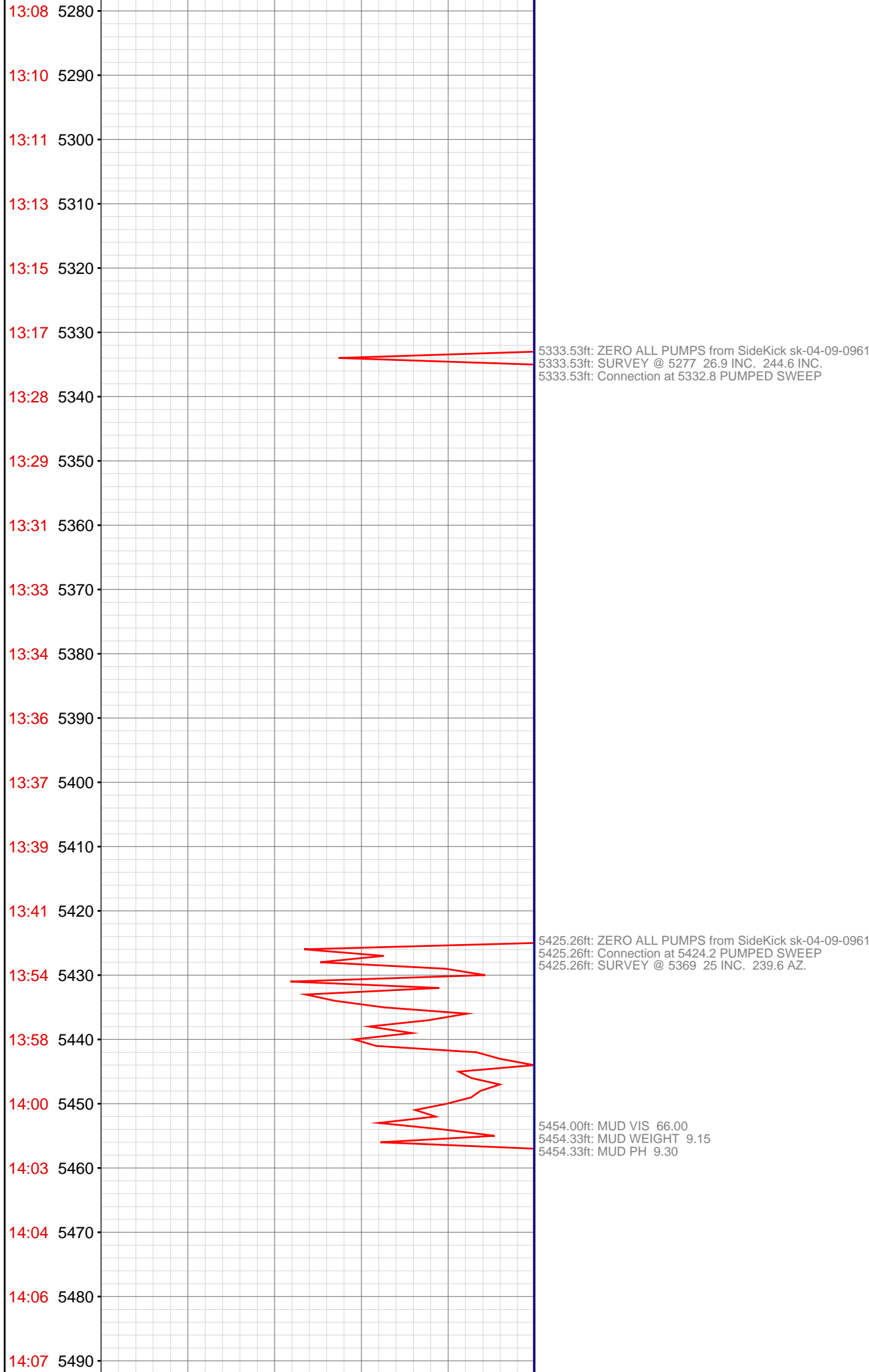
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11:23 5010
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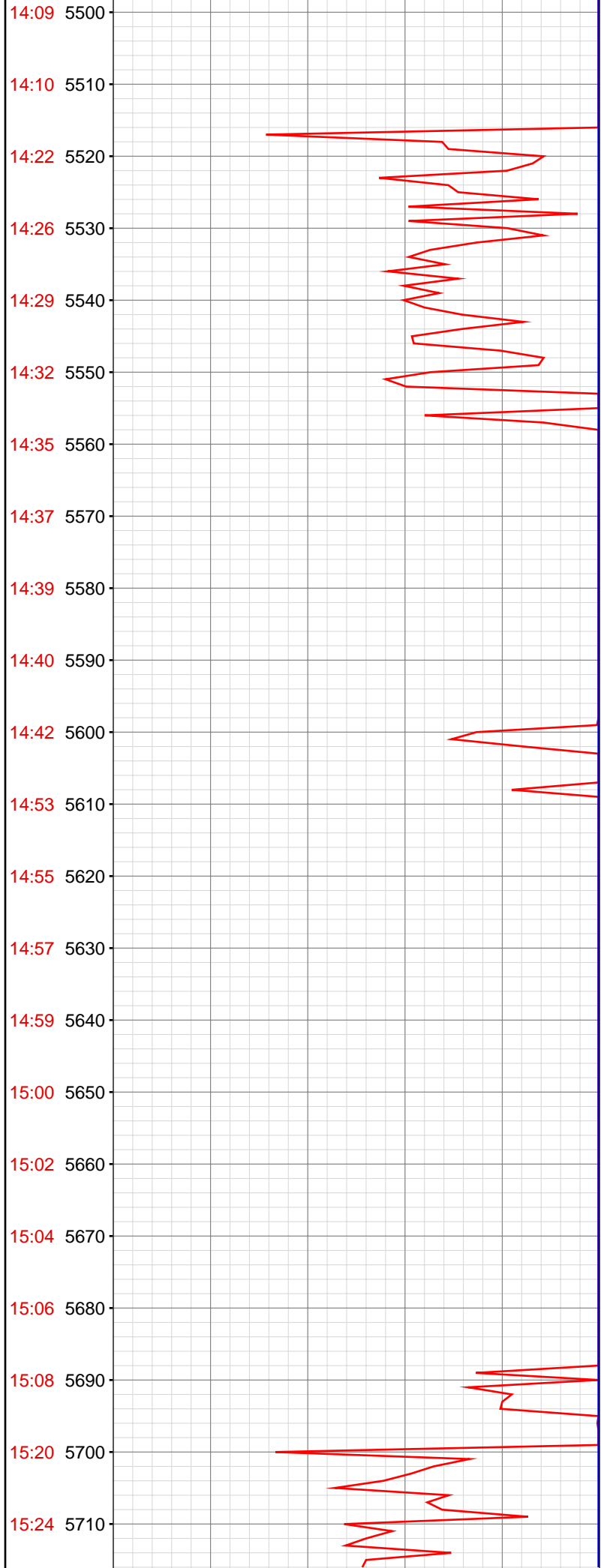
4872.47ft: SURVEY @ 4820 26.5 INC. 243.8 AZ.
4875.33ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
4875.33ft: Connection at 4875.1 PUMPED SWEEP
4875.33ft: 300 CFM PARA

4961.45ft: 700 CFM PARA
4967.42ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
4967.42ft: Connection at 4966.4 PUMPED SWEEP
4967.42ft: SURVEY @ 4911 23.8 INC. 239.8 AZ.







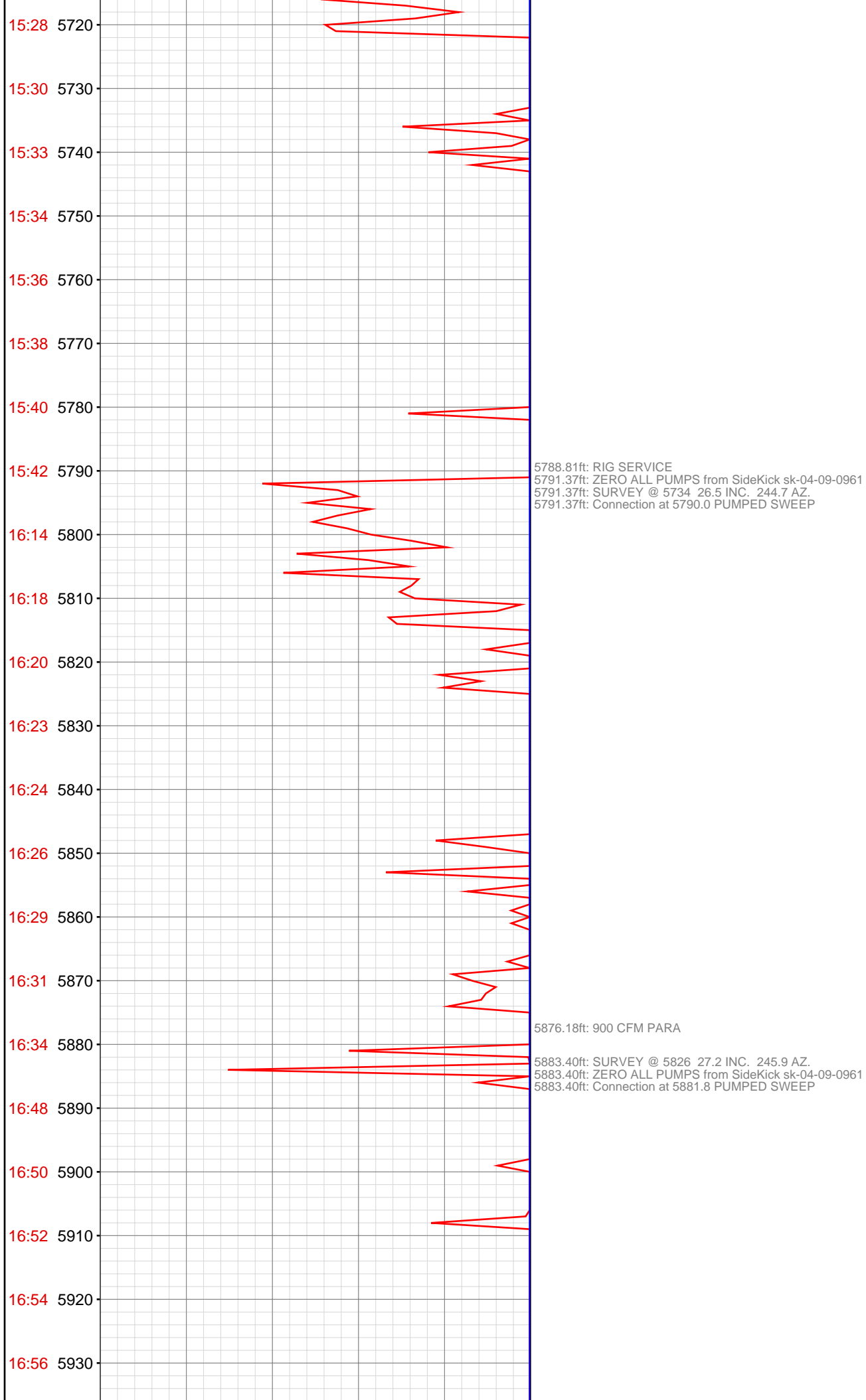


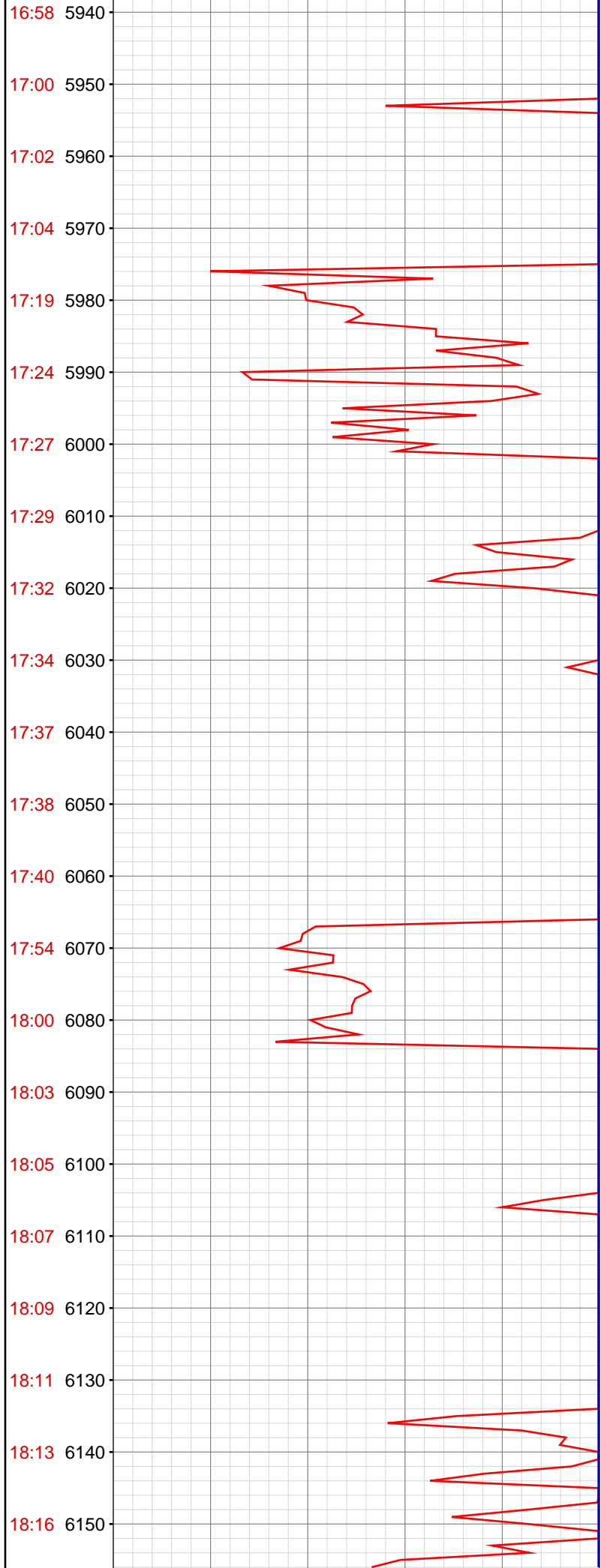
5516.99ft: SURVEY @ 5460 25.3 INC. 240.6 AZ.
5516.99ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
5516.99ft: Connection at 5515.2
5516.99ft: PUMPED SWEEP

5607.97ft: SURVEY @ 5551 27.3 INC. 243.4 AZ.
5607.97ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
5607.97ft: Connection at 5606.7 PUMPED SWEEP

5685.70ft: 900 CFM PARA

5699.97ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
5699.97ft: MUD VIS 58.00
5699.97ft: MUD WEIGHT 9.20
5699.97ft: Connection at 5698.0
5699.97ft: MUD PH 8.90

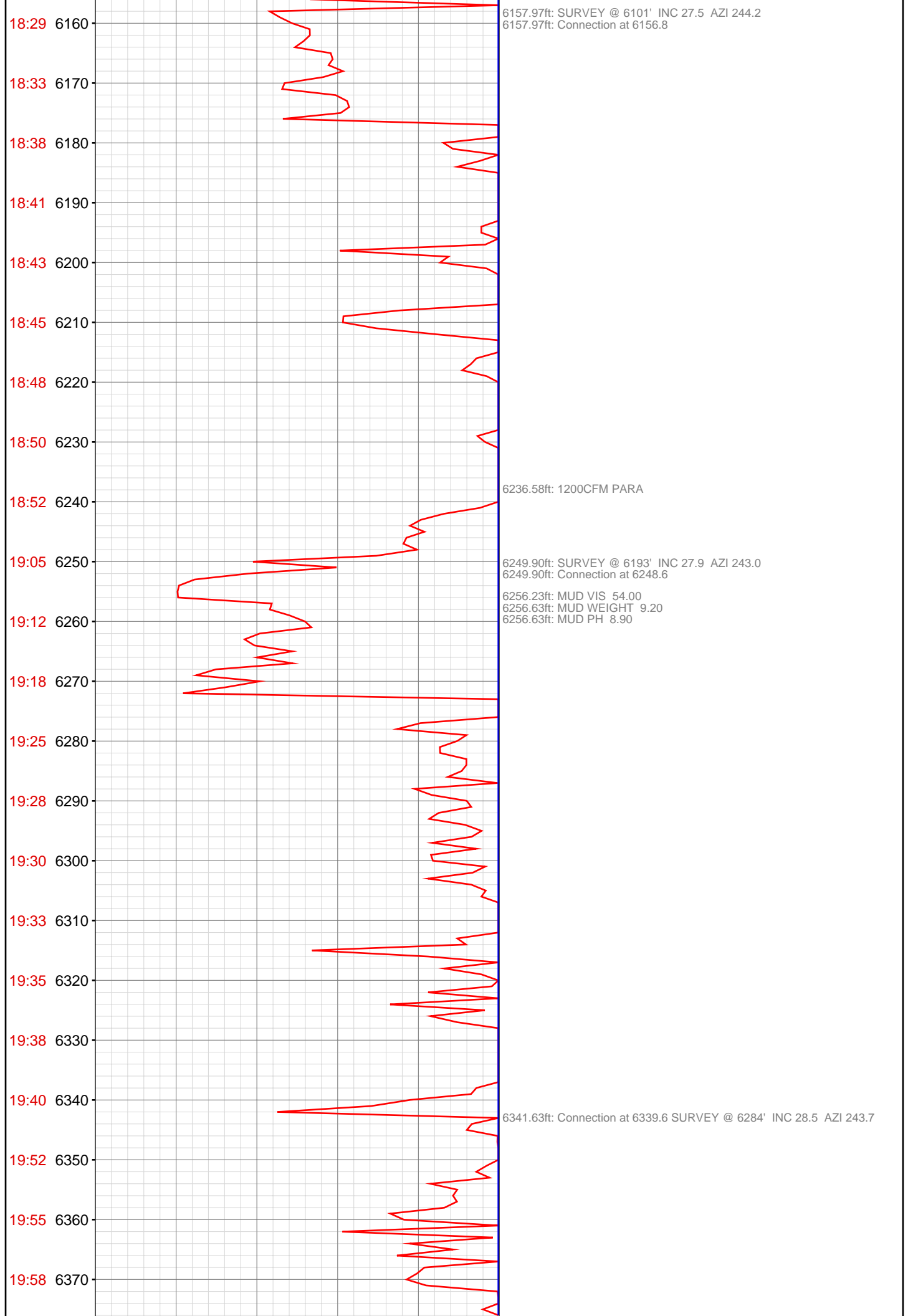


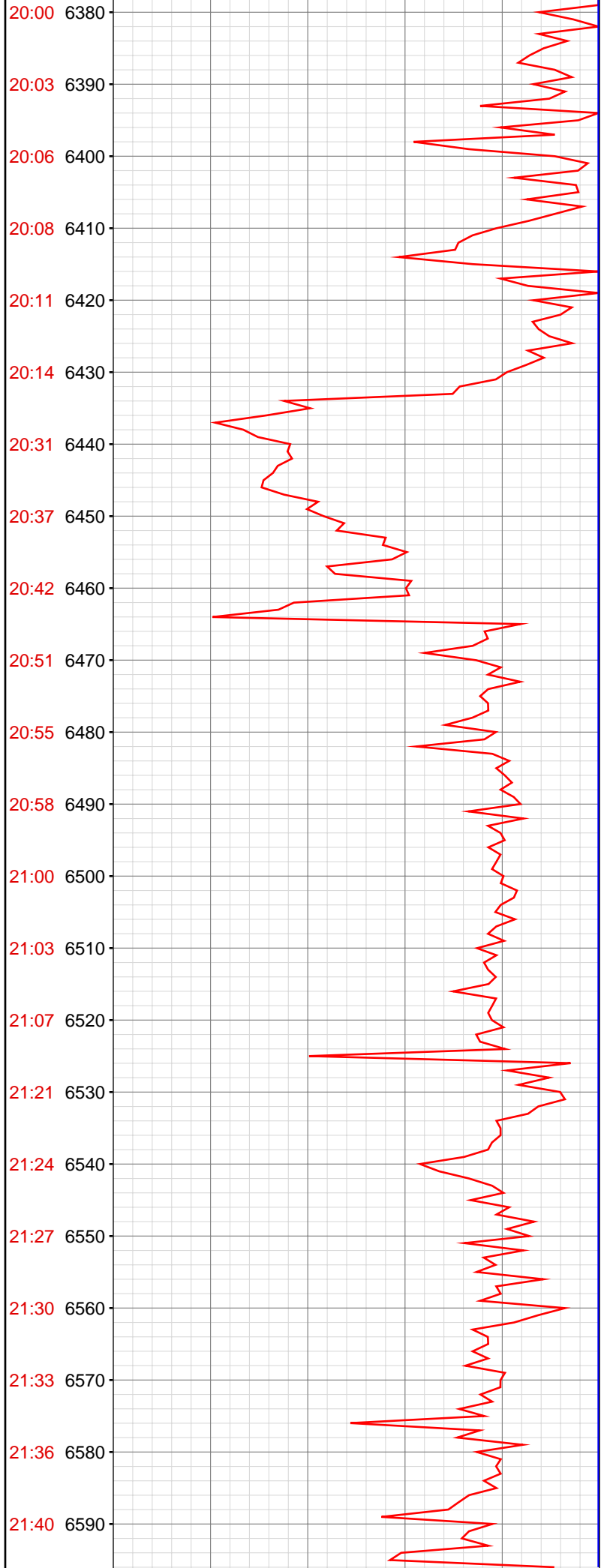


5975.03ft: SURVEY @ 5918 25.8 INC. 242.7 AZ.
5975.03ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
5975.03ft: Connection at 5973.4 PUMPED SWEEP

6066.37ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
6066.37ft: SURVEY @ 6010' INC 26.7 AZI 246.0
6066.37ft: Connection at 6065.1

6092.13ft: MUD VIS 51.00
6094.13ft: MUD WEIGHT 9.20
6096.26ft: MUD PH 8.90



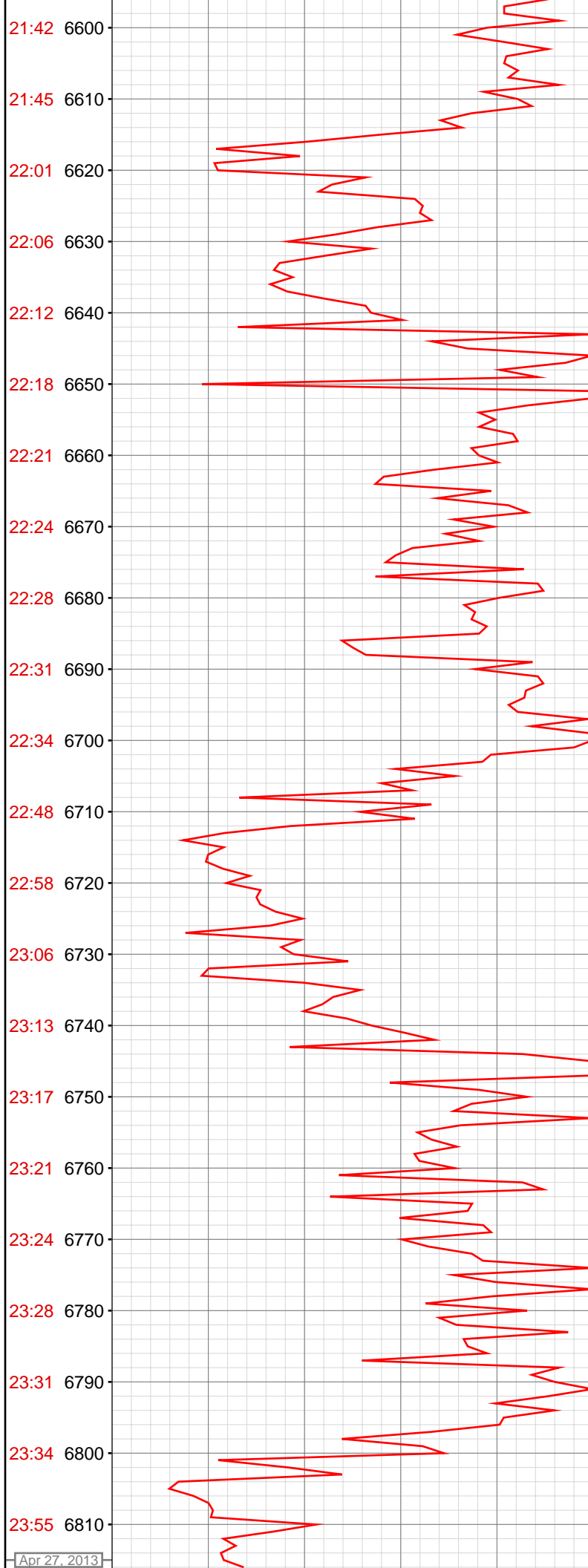


6383.99ft: MUD VIS 50.00
6383.99ft: MUD WEIGHT 9.20
6384.32ft: MUD PH 9.10

6433.37ft: SURVEY @ 6376' INC 26.3 AZI 242.7
6433.37ft: Connection at 6431.0

6496.00ft: MUD VIS 51.00
6496.82ft: MUD WEIGHT 9.25
6497.01ft: MUD PH 8.90

6524.70ft: SURVEY @ 6467' INC 28.0 AZI 246.4
6524.70ft: Connection at 6522.9



6616.21ft: SURVEY @ 6558' INC 27.4 AZI 243.1
6616.21ft: Connection at 6613.7
6618.80ft: MUD VIS 53.00
6619.06ft: MUD WEIGHT 9.25
6619.06ft: MUD PH 8.90

6635.66ft: 1800CFM PARA

6707.91ft: SURVEY @ 6650' INC 27.5 AZI 245.0
6707.91ft: Connection at 6705.4

6721.36ft: MUD VIS 50.00
6721.36ft: MUD WEIGHT 9.20
6721.62ft: MUD PH 9.10

6800.03ft: SURVEY @ 6742' INC 27.3 AZI 245.4
6800.53ft: Connection at 6797.1

6813.22ft: MUD VIS 50.00
6813.45ft: MUD WEIGHT 9.20

6813.45ft: MUD PH 9.20

6892.06ft: 1800CFM PARA 300CFM DP
6892.06ft: SURVEY @ 6833' INC 26.9 AZI 246.4
6892.06ft: Connection at 6888.2

6901.51ft: MUD VIS 50.00
6901.58ft: MUD WEIGHT 9.20
6901.58ft: MUD PH 9.10

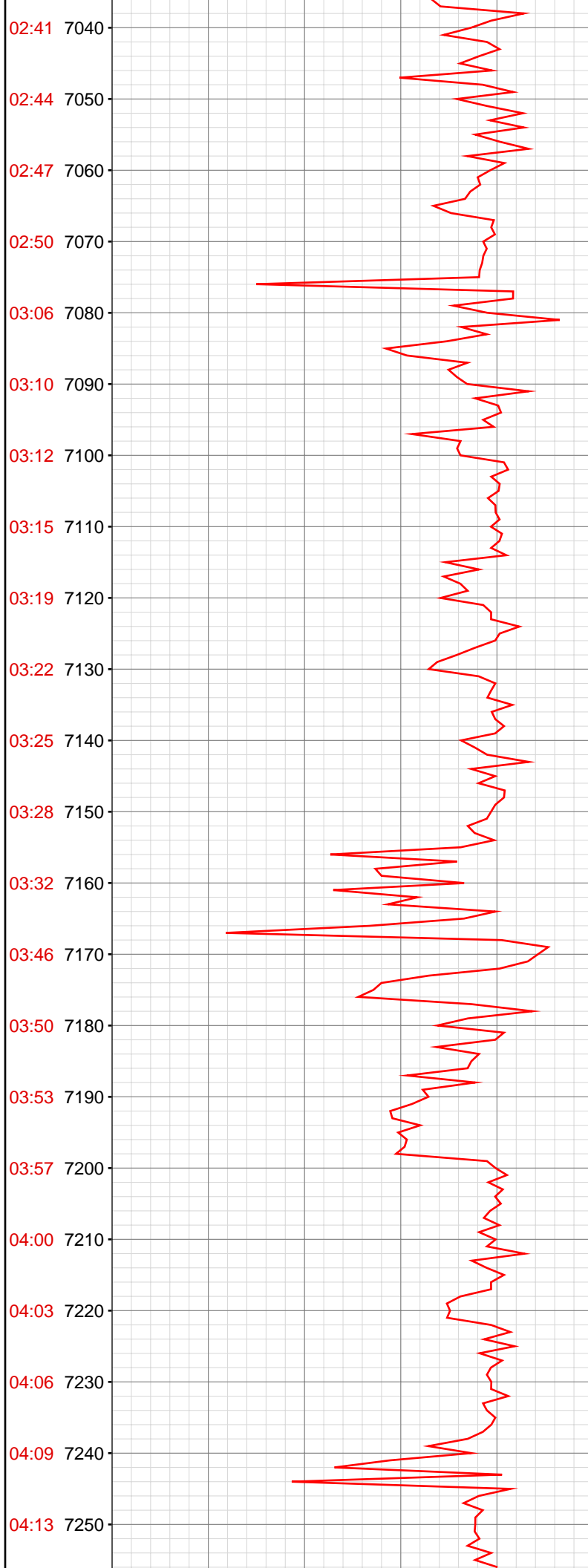
6914.76ft: 1800CFM PARA 600CFM DP

6922.74ft: 1800CFM PARA 900CFM DP

6940.68ft: 1200CFM DP 1800CFM PARA

6984.06ft: Connection at 6979.9
6984.06ft: TRANSFERRED 350.00
6984.06ft: SURVEY @ 6924' INC 26.3 AZI 243.3

7014.67ft: MUD VIS 48.00
7014.99ft: MUD WEIGHT 8.85
7015.03ft: MUD PH 9.20

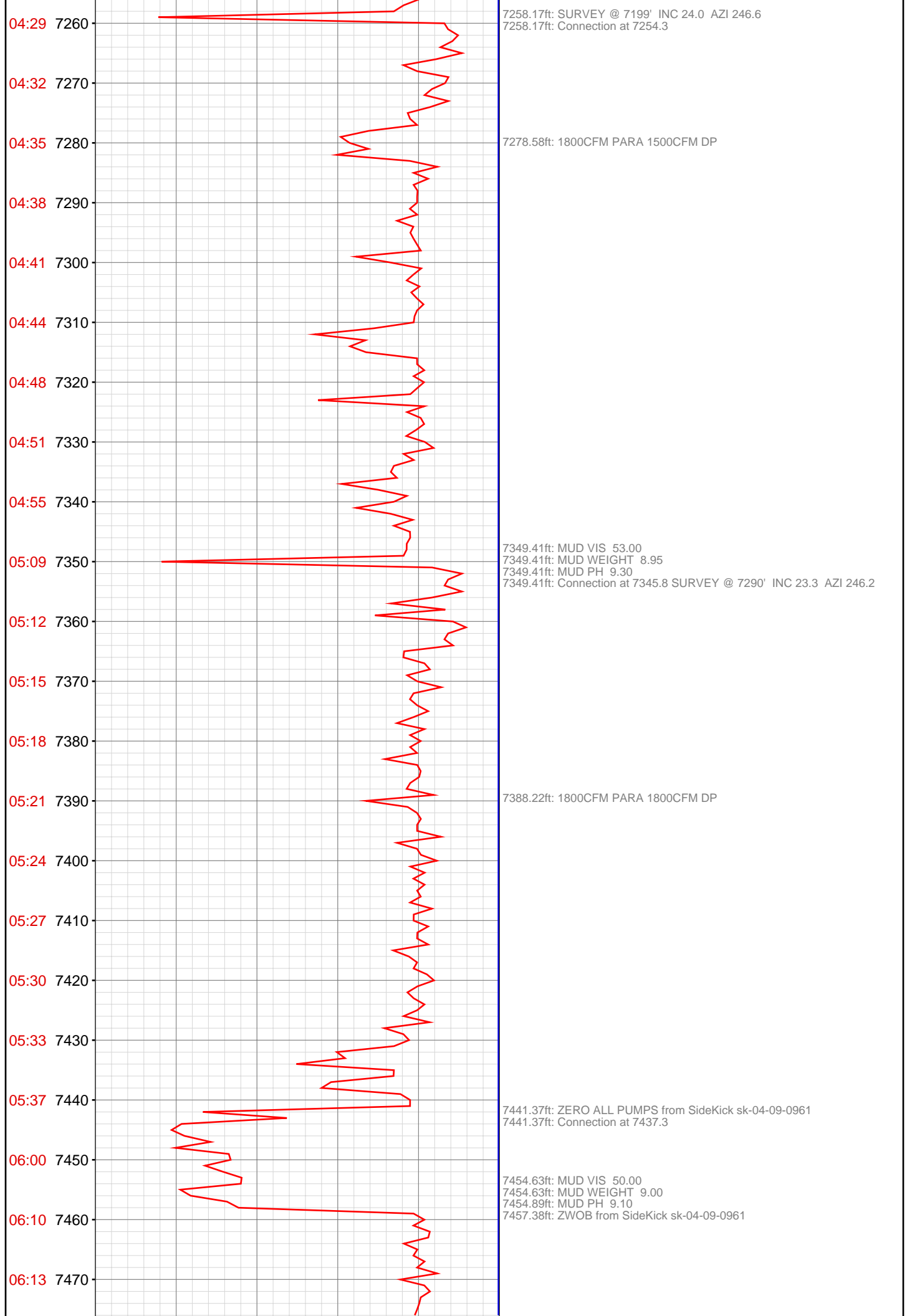


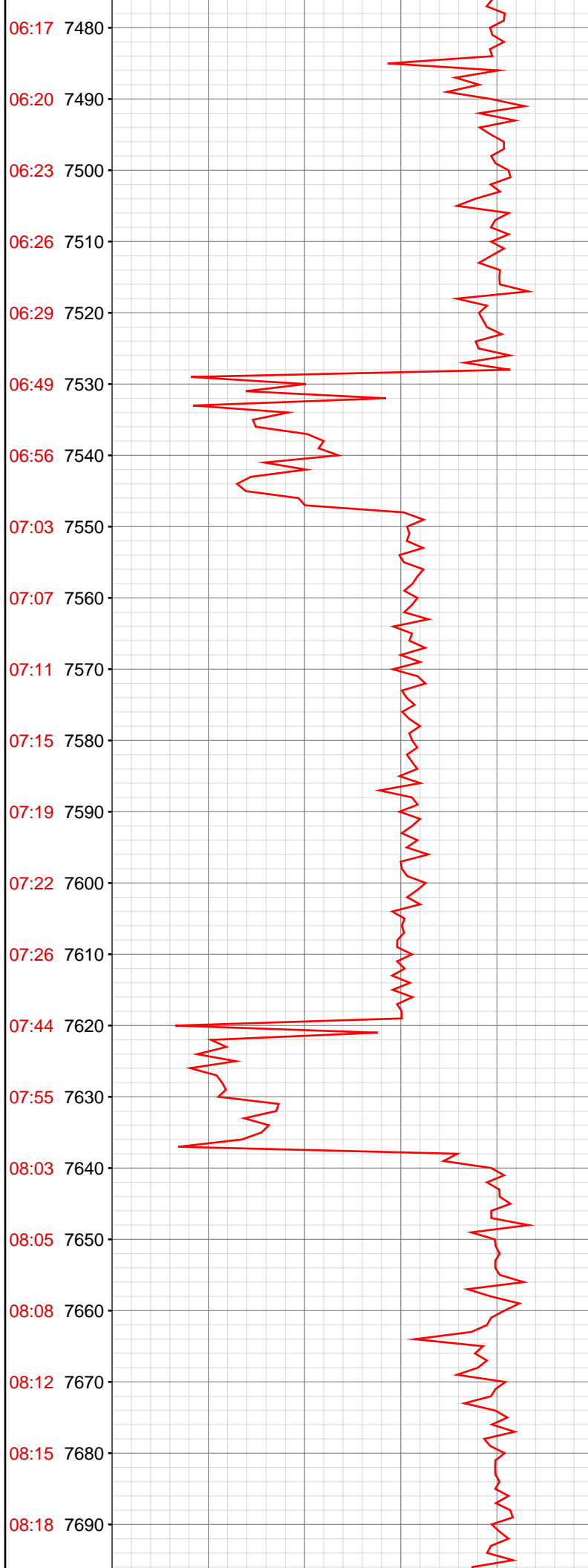
7075.79ft: SURVEY @ 7016' INC 27.7 AZI 245.1
7075.79ft: Connection at 7071.6

7142.22ft: 1800CFM PARA 1500CFM DP

7166.90ft: SURVEY @ 7108' INC 25.9 AZI 243.6
7166.90ft: Connection at 7163.3

7205.41ft: MUD VIS 50.00
7206.04ft: MUD WEIGHT 8.95
7206.04ft: MUD PH 9.00



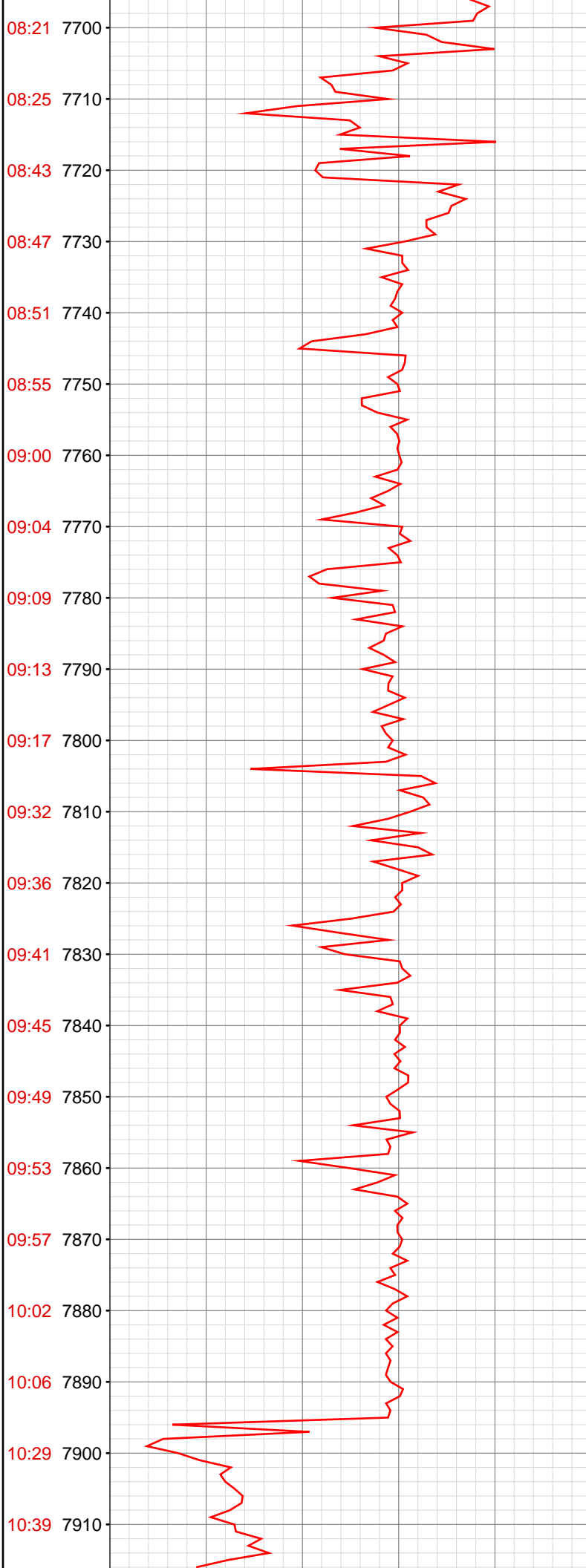


7527.99ft: SURVEY @ 7473 20.3 INC. 247.3 AZ.
7527.99ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
7527.99ft: Connection at 7528.9 1800 CFM PARA 1800 DS PUMPED SWEEP

7619.62ft: SURVEY @ 7564 18.5 INC. 243.4 AZ.
7619.62ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
7619.62ft: Connection at 7619.9 PUMPED SWEEP

7641.01ft: MUD VIS 57.00
7641.01ft: MUD WEIGHT 9.05
7641.14ft: MUD PH 9.20

7646.85ft: TRANSFER PREMIX T/ACTIVE

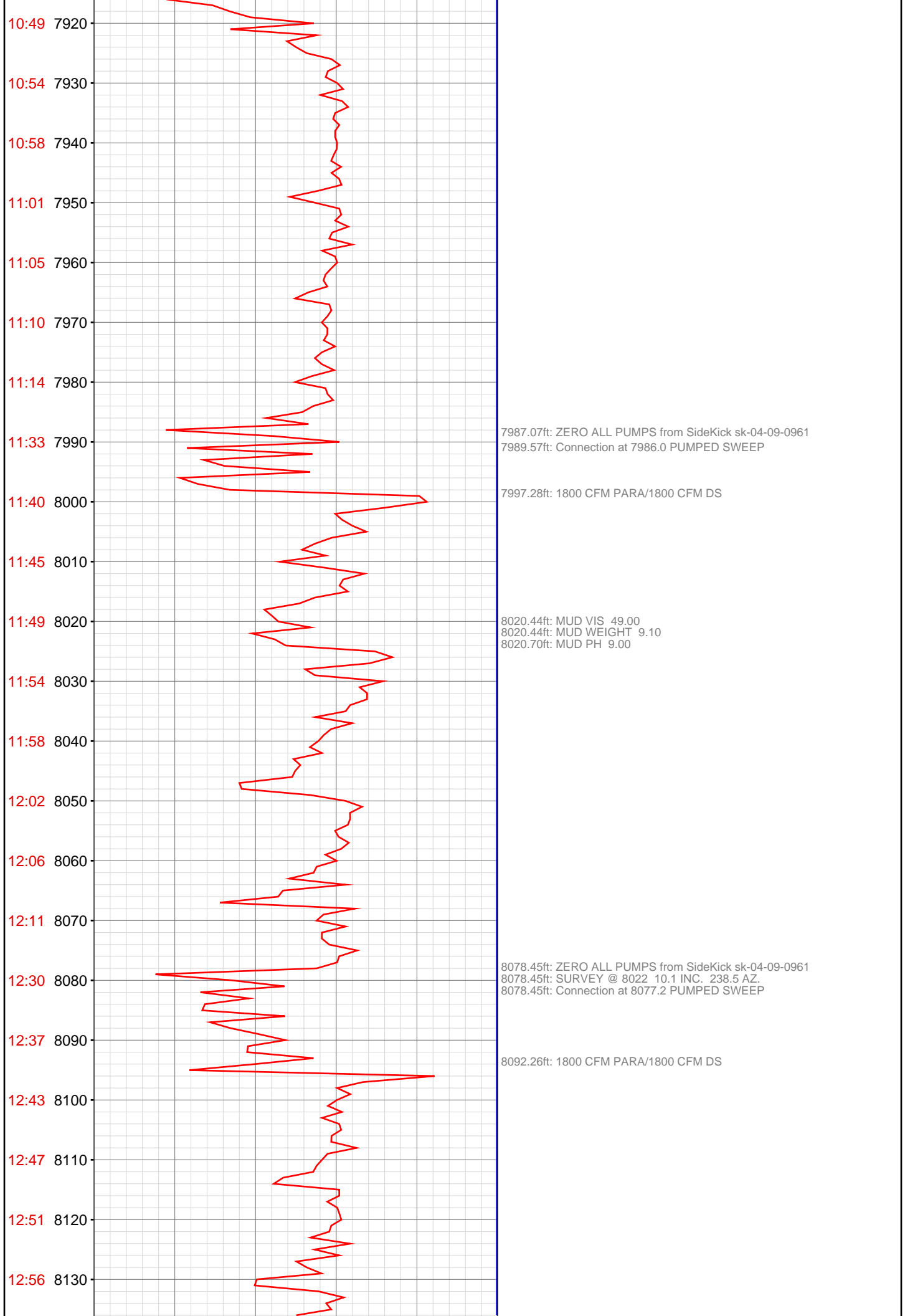


7711.45ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
7711.45ft: Connection at 7711.1 PUMPED SWEEP SURVEY @ 7658 15.7
INC. 246.2 AZ.

7729.00ft: 1800 CFM PARA/1800 DS

7803.45ft: MUD VIS 49.00
7803.45ft: MUD WEIGHT 9.00
7803.45ft: MUD PH 8.90
7803.45ft: SURVEY @ 7747 14.9 INC. 240.2 AZ.
7803.45ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
7804.07ft: Connection at 7802.8 PUMPED SWEEP

7895.41ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
7895.41ft: SURVEY @ 7839 14.3 INC. 242.3 AZ.
7895.41ft: Connection at 7894.1 PUMPED SWEEP
7898.95ft: MUD VIS 49.00
7898.95ft: MUD WEIGHT 9.05
7898.95ft: MUD PH 8.90



13:00 8140

13:04 8150

13:09 8160

13:26 8170

13:30 8180

13:35 8190

13:39 8200

13:43 8210

13:47 8220

13:52 8230

13:56 8240

14:00 8250

14:04 8260

14:25 8270

14:37 8280

14:41 8290

14:46 8300

14:51 8310

14:55 8320

15:00 8330

15:06 8340

15:11 8350

8141.40ft: 1700 CFM DS
8144.65ft: MUD VIS 55.00
8145.01ft: MUD WEIGHT 9.10
8145.14ft: MUD PH 9.00

8169.78ft: SURVEY @ 8113 7.7 INC. 242 AZ.
8169.78ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
8169.78ft: Connection at 8168.9
8169.78ft: PUMPED SWEEP

8240.35ft: 1500 CFM DS
8242.62ft: 1800 CFM PARA

8261.52ft: Connection at 8260.7 PUMPED SWEEP

8267.62ft: MUD VIS 51.00
8267.62ft: MUD WEIGHT 9.20
8267.88ft: MUD PH 8.90

8339.99ft: 1300 CFM PARA 1300 CFM DS/1800 CFM PARA

8353.12ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
8353.12ft: Connection at 8352.5 PUMPED SWEEP
8353.12ft: SURVEY @ 8342 17.7 INC. 242 AZ.

8353.12ft: SURVEY @ 8297' 6.4 INC. 240 AZ.

8377.95ft: 2700 CFM PARA/900 CFM DS

8412.57ft: MUD VIS 60.00
8412.57ft: MUD WEIGHT 9.25
8412.57ft: MUD PH 9.30

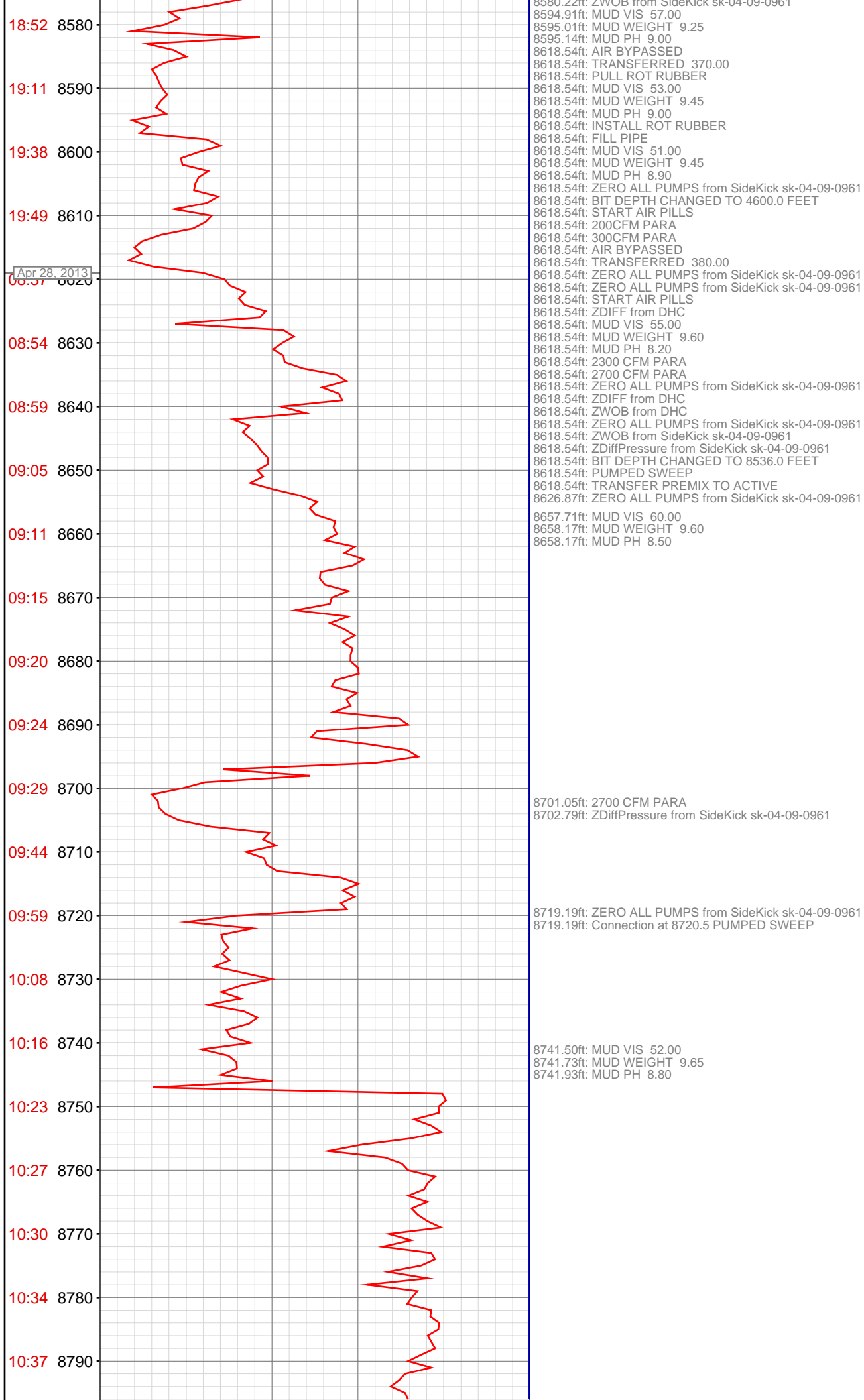
8444.36ft: RIG SERVICE
8444.36ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
8444.36ft: Connection at 8444.0 PUMPED SWEEP

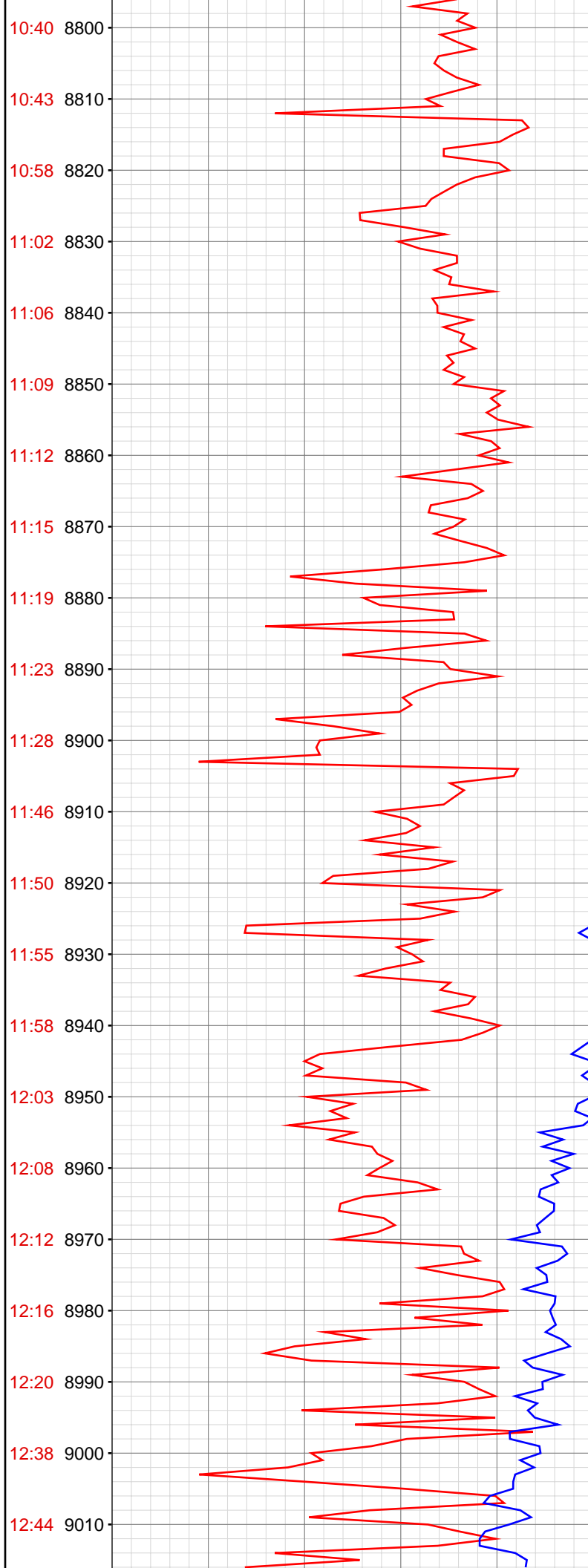
8465.09ft: 700 CFM DS
8467.82ft: 2700 CFM PARA DS AIR BYPASSED

8532.05ft: MUD VIS 53.00
8532.78ft: MUD WEIGHT 9.10
8533.30ft: MUD PH 9.10
8536.29ft: 1800CFM PARA 300CFM DP
8536.29ft: Connection at 8535.7 SURVEY @ 8480' INC 2.0 AZI 213.0

8558.07ft: TRANSFERRED 370.00

8558.07ft: TRANSFERRED 370.00





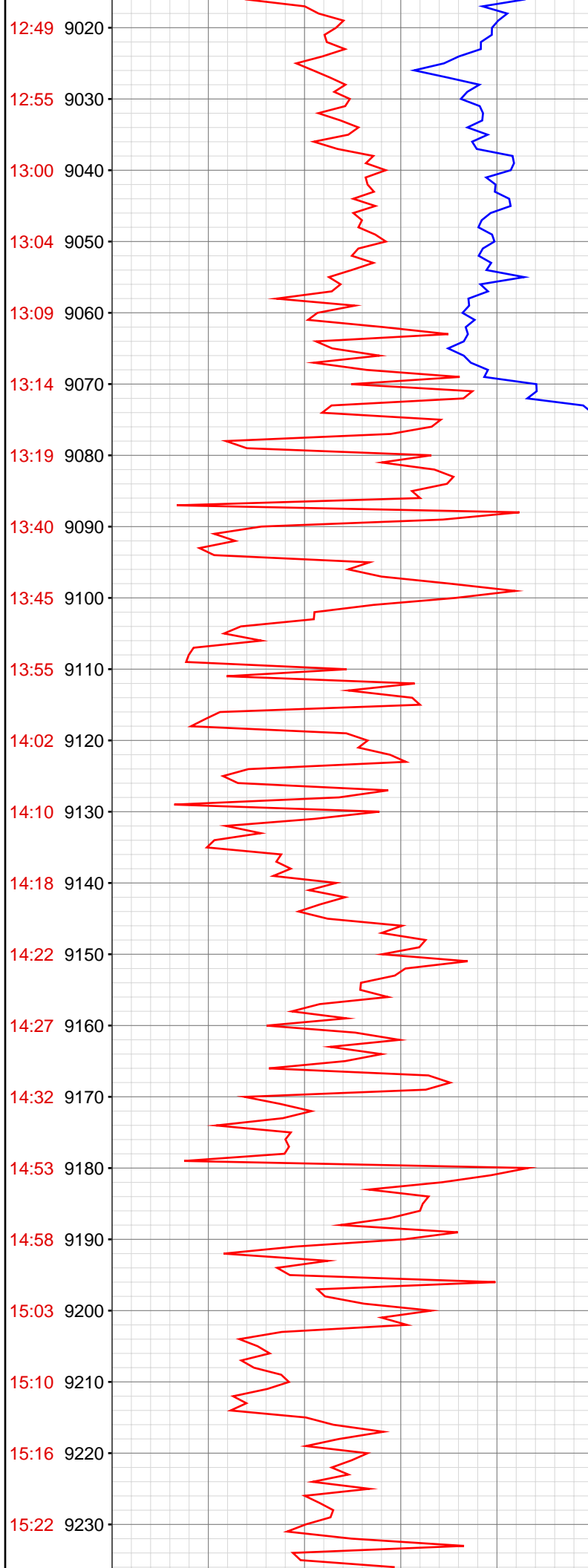
8810.99ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
8810.99ft: Connection at 8812.1 PUMPED SWEEP
8810.99ft: SURVEY @ 8752 .1 INC. 153.8 AZ.

8862.47ft: TRANSFER PREMIX TO ACTIVE

8902.92ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
8902.92ft: SURVEY @ 8843 0 INC. 190.9 AZ.
8902.92ft: Connection at 8903.8 PUMPED SWEEP

8915.12ft: MUD VIS 61.00
8915.75ft: MUD WEIGHT 9.55
8915.75ft: MUD PH 8.90
8917.22ft: 2700 CFM PARA

8995.14ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
8995.14ft: Connection at 8995.3 PUMPED SWEEP
8998.75ft: SURVEY @ 8935 .4 INC. 78.1 AZ.

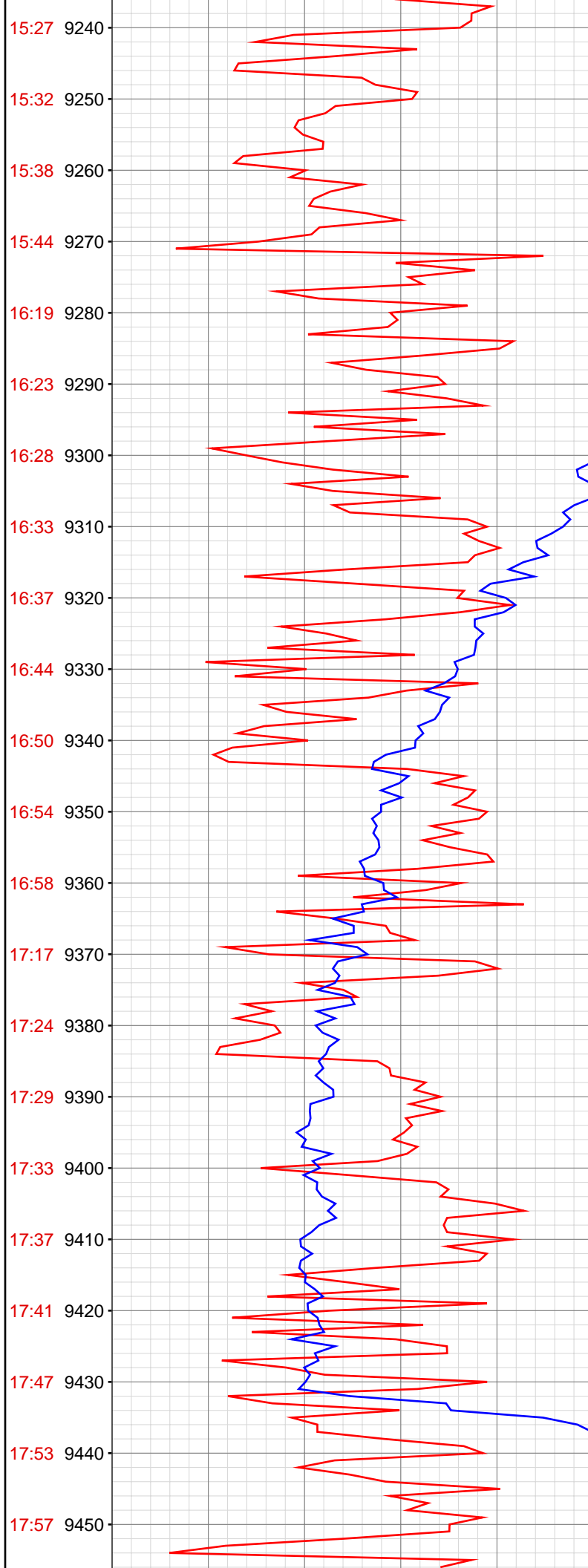


9040.58ft: MUD VIS 54.00
9040.58ft: MUD WEIGHT 9.60
9040.58ft: MUD PH 9.00

9086.75ft: Connection at 9087.0
9086.75ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
9086.75ft: PUMPED SWEEP
9086.75ft: SURVEY @ 9027 .5 INC. 143.4 AZ.

9178.48ft: Connection at 9178.7 PUMPED SWEEP
9178.48ft: ZERO ALL PUMPS from SideKick sk-04-09-0961

9210.73ft: MUD VIS 48.00
9210.73ft: MUD WEIGHT 9.65
9210.96ft: MUD PH 8.80



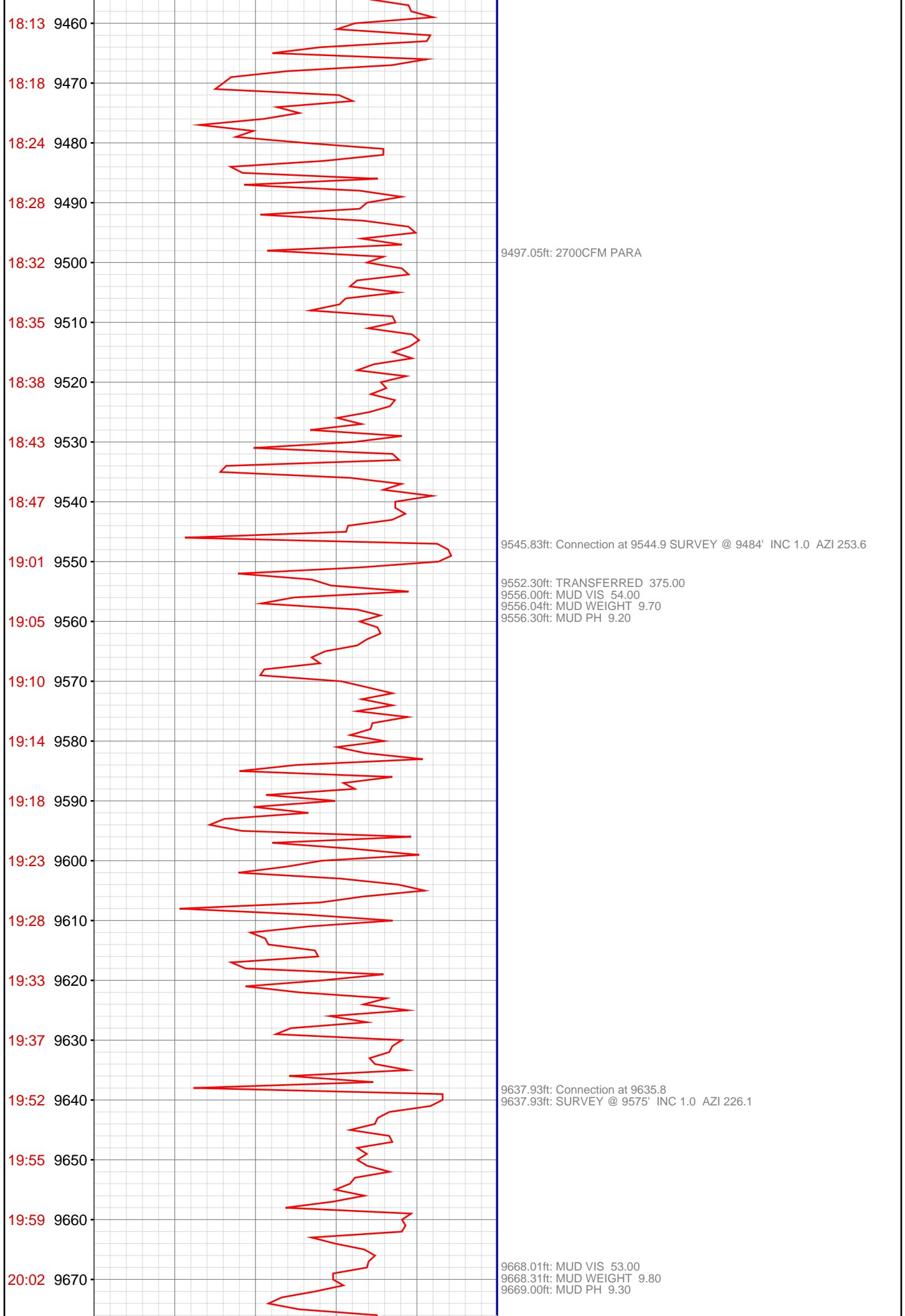
9254.33ft: 2700 CFM PARA

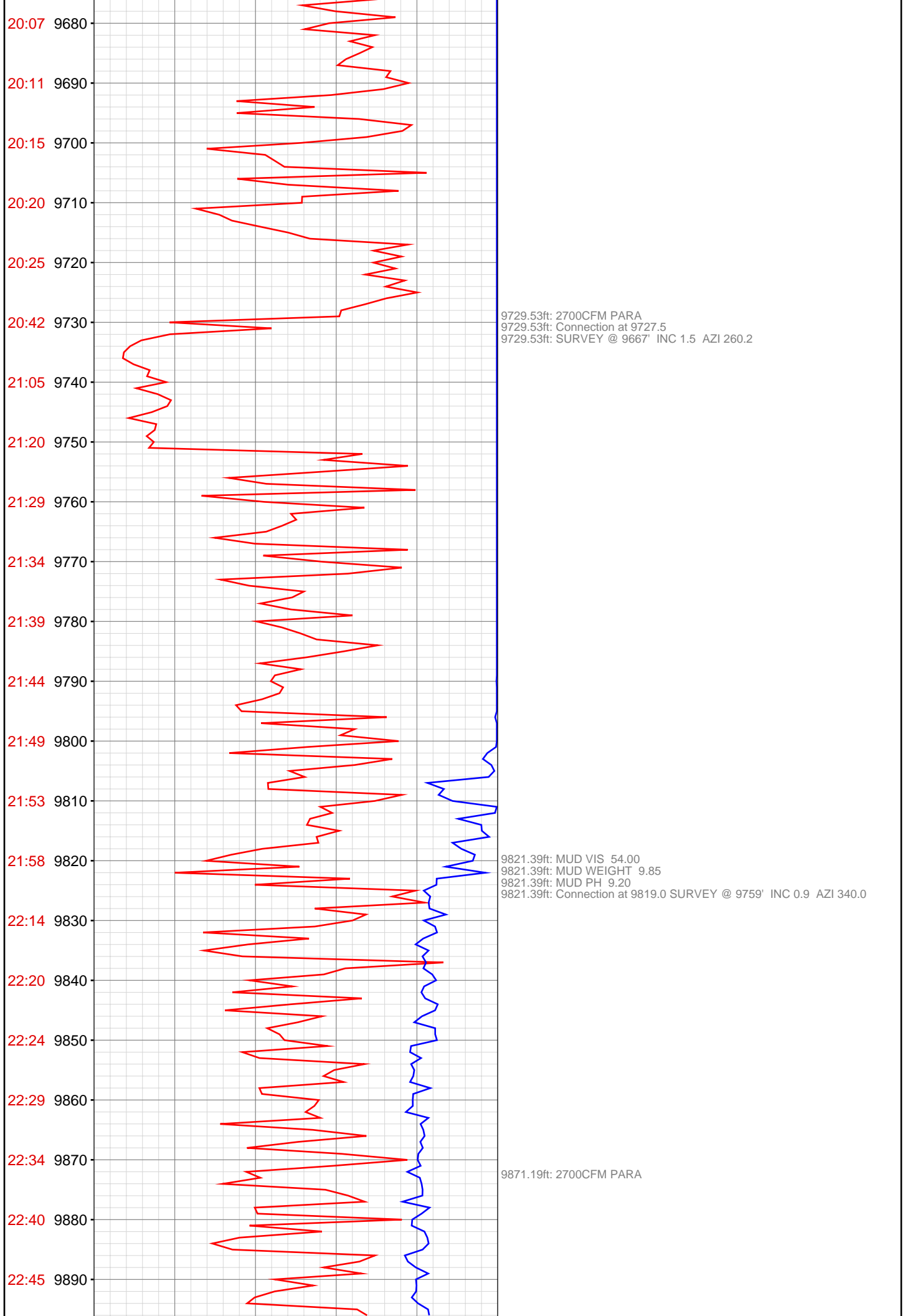
9270.47ft: Connection at 9270.1
9270.47ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
9270.47ft: PUMPED SWEEP
9270.47ft: SURVEY @ 9210 .6 INC. 254.4 AZ.
9270.47ft: MUD VIS 58.00
9270.47ft: MUD WEIGHT 9.65
9270.47ft: MUD PH 9.60

9361.81ft: SURVEY @ 9301 .3 INC. 265.7 AZ.
9361.81ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
9361.81ft: Connection at 9361.6 PUMPED SWEEP

9446.00ft: MUD VIS 51.00
9446.00ft: MUD WEIGHT 9.70
9446.52ft: MUD PH 8.70

9453.74ft: Connection at 9453.2 SURVEY @ 9393' INC 0.5 AZI 227.5





20:07 9680

20:11 9690

20:15 9700

20:20 9710

20:25 9720

20:42 9730

21:05 9740

21:20 9750

21:29 9760

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21:49 9800

21:53 9810

21:58 9820

22:14 9830

22:20 9840

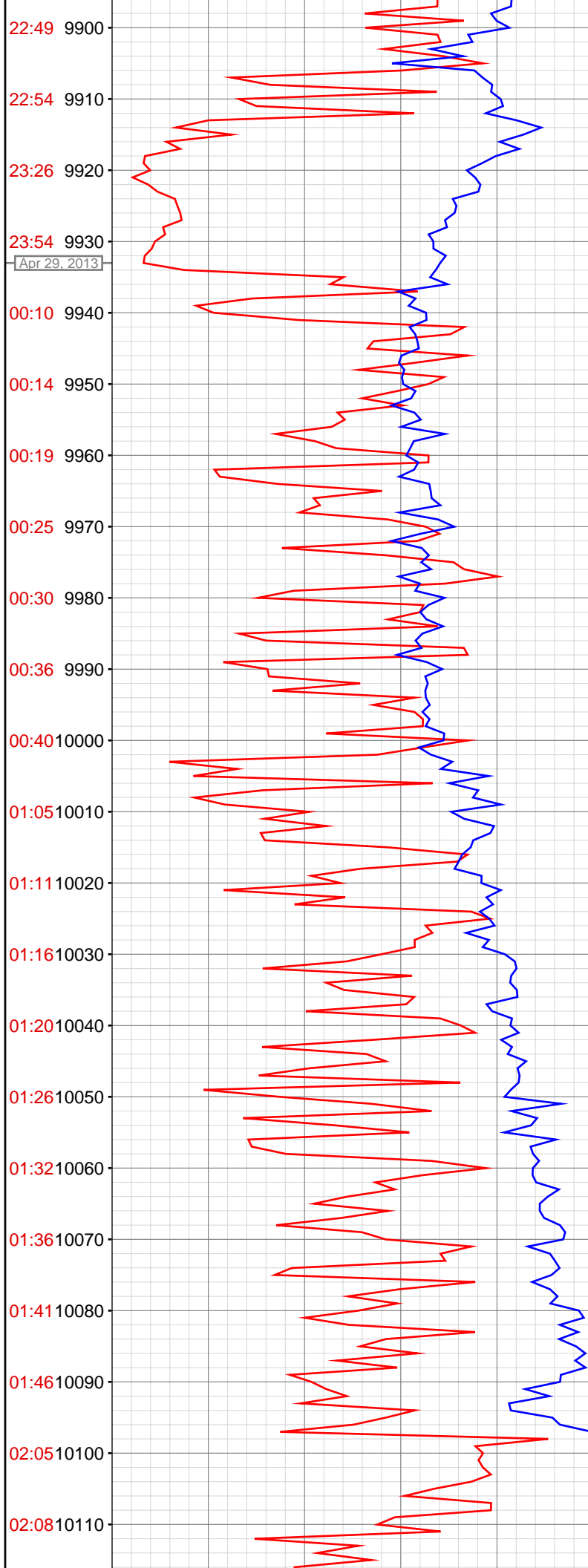
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22:34 9870

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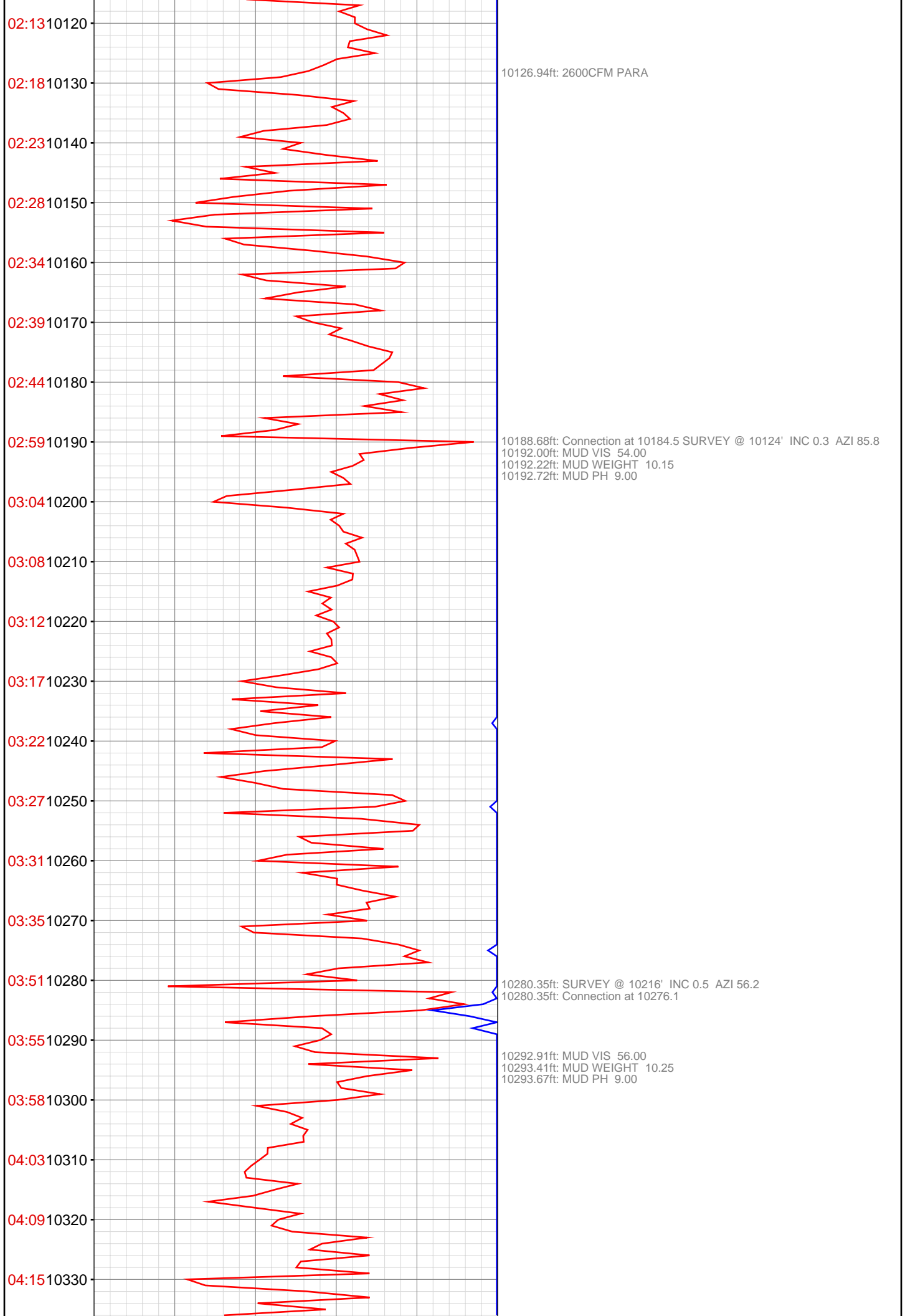


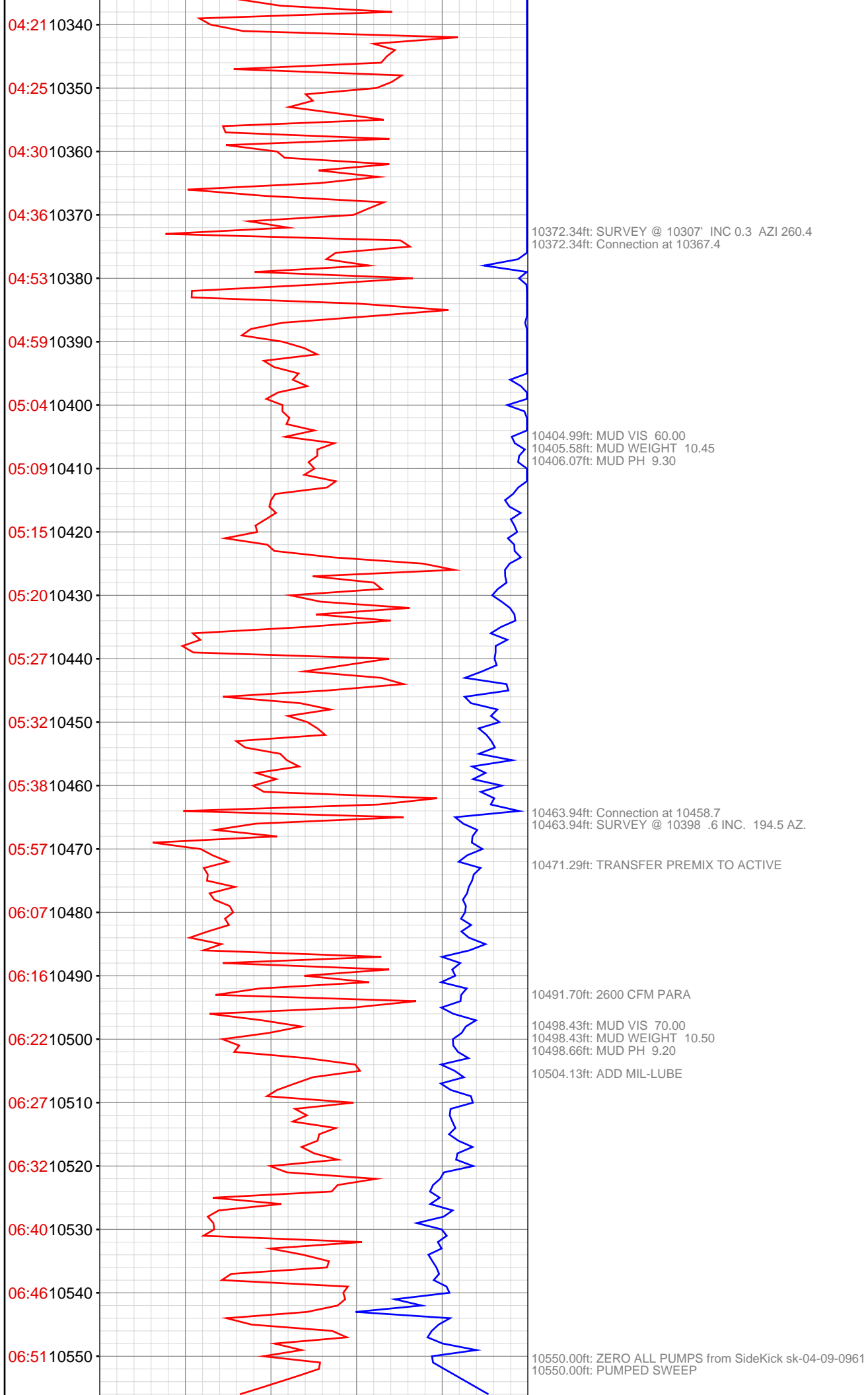
9912.76ft: MUD VIS 54.00
9913.39ft: MUD WEIGHT 9.95
9913.39ft: MUD PH 9.20
9913.48ft: Connection at 9909.9 SURVEY @ 9849' INC 1.1 AZI 309.3

9932.91ft: MUD VIS 51.00
9932.91ft: MUD WEIGHT 9.95
9932.91ft: MUD PH 9.00

10004.86ft: 2600CFM PARA
10004.86ft: Connection at 10001.4 SURVEY @ 9941' INC 0.7 AZI 26.8
10004.86ft: MUD VIS 57.00
10004.86ft: MUD WEIGHT 10.00
10004.86ft: MUD PH 9.30

10096.59ft: Connection at 10092.7
10096.59ft: MUD VIS 56.00
10096.59ft: MUD WEIGHT 10.10
10096.59ft: MUD PH 9.20
10096.59ft: SURVEY @ 10032' INC 0.6 AZI 56.9

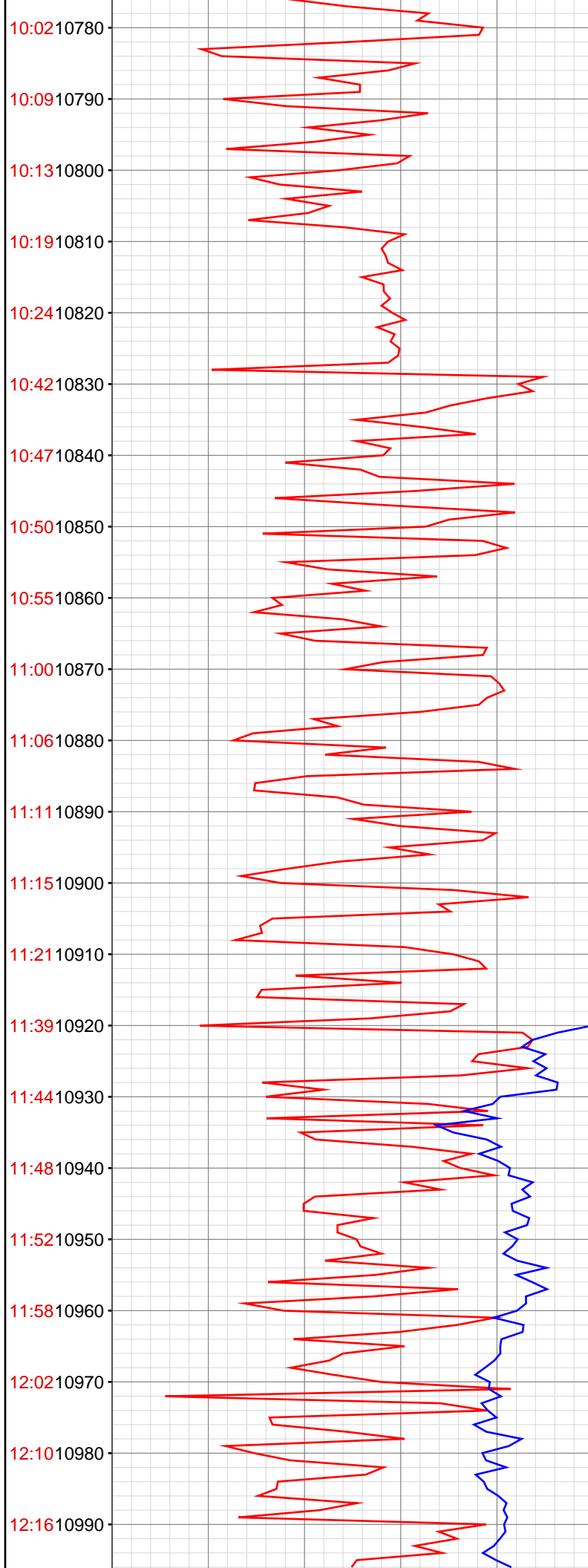




10555.68ft: Connection at 10550.5

10642.22ft: MUD VIS 62.00
10642.22ft: MUD WEIGHT 10.50
10642.59ft: MUD PH 9.30
10643.83ft: Connection at 10642.0 PUMPED SWEEP
10643.83ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
10649.57ft: 2600 CFM PARA

10735.83ft: Connection at 10733.5 PUMPED SWEEP
10735.83ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
10735.83ft: MUD VIS 53.00
10735.83ft: MUD WEIGHT 10.50
10735.83ft: MUD PH 9.00
10735.83ft: SURVEY @ 10673 .3 INC. 356.2 AZ.

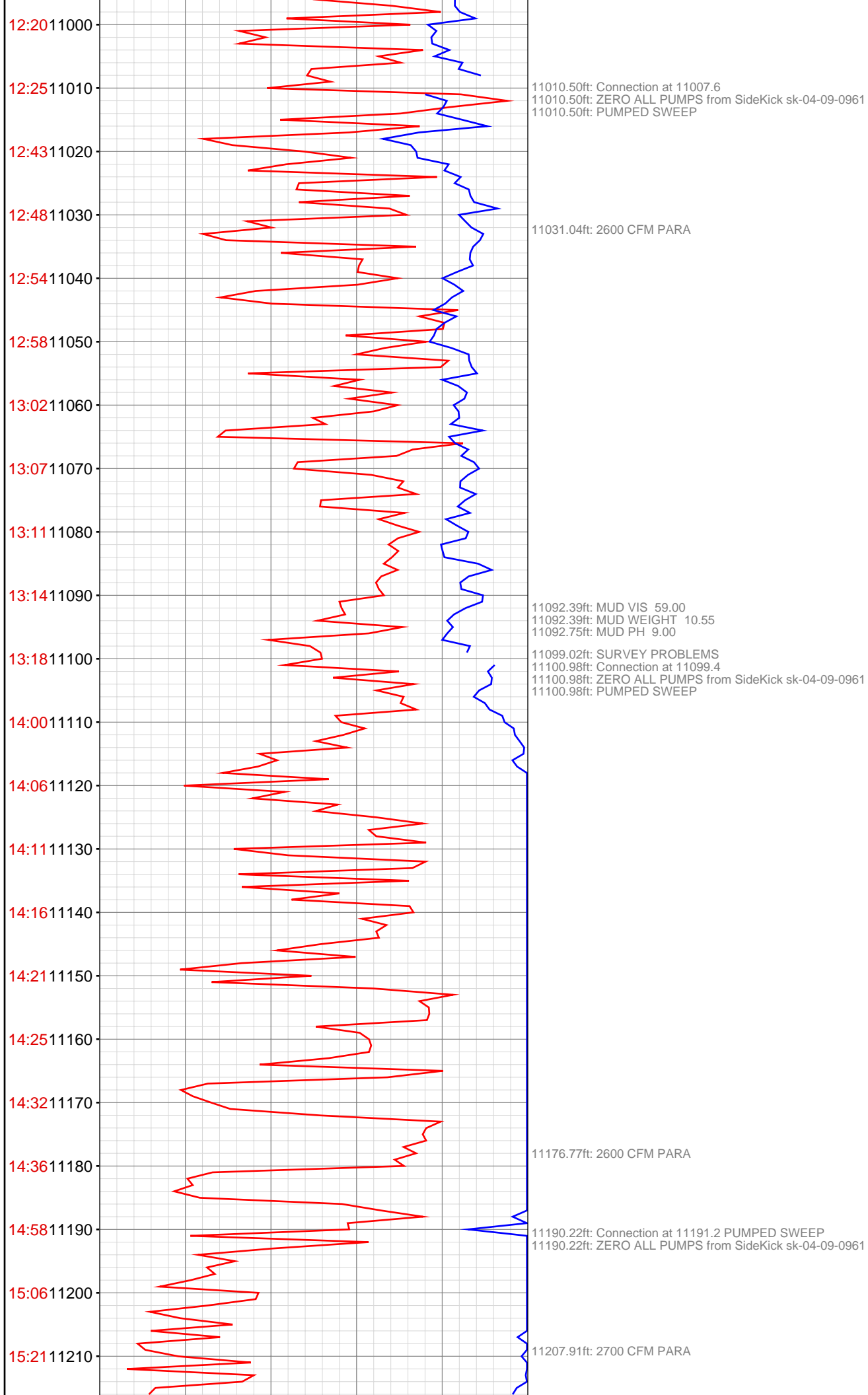


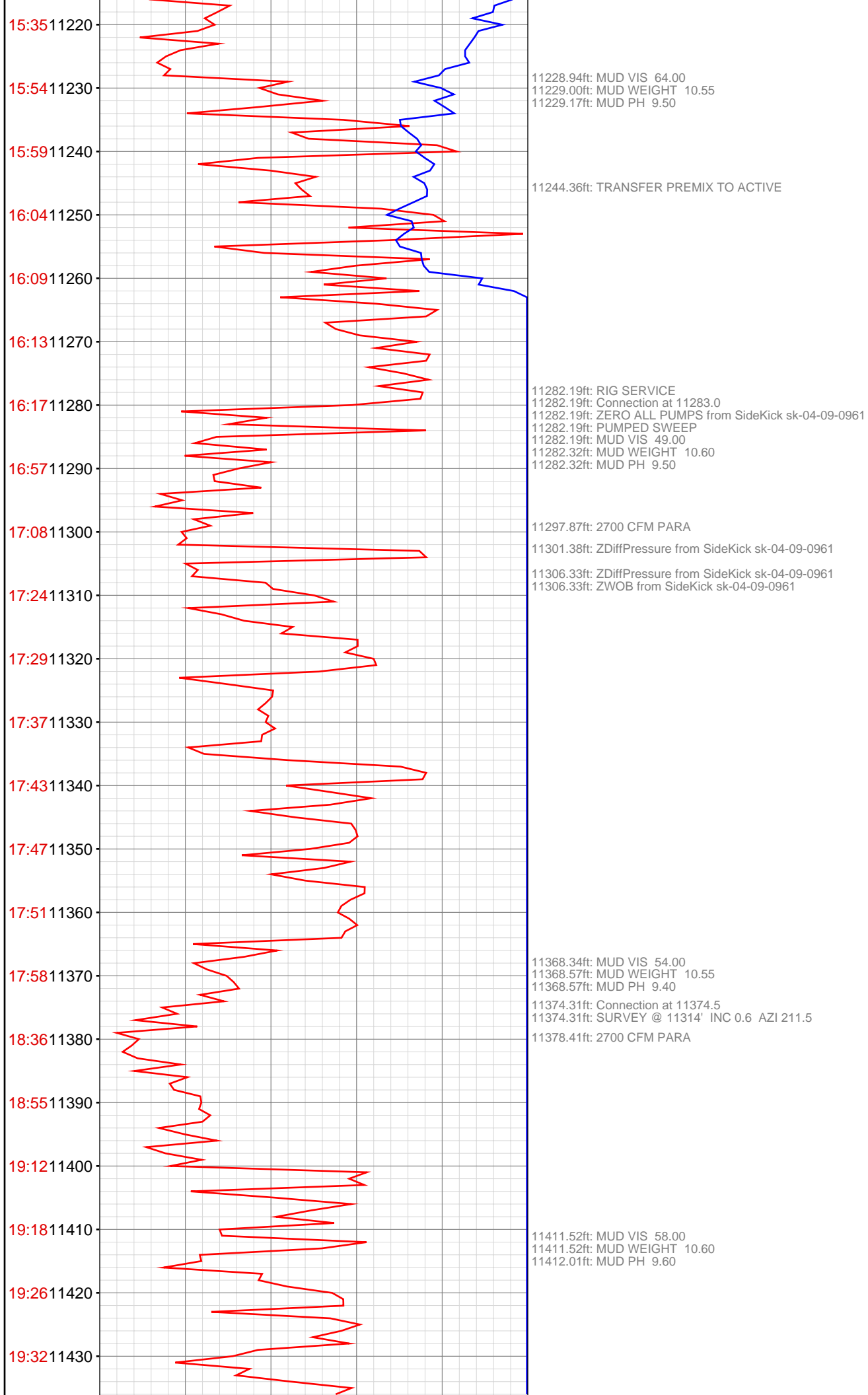
10796.33ft: 2600 CFM PARA

10827.69ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
10827.69ft: Connection at 10824.6 PUMPED SWEEP
10827.69ft: MUD VIS 52.00 SURVEY @ 10764 .6 INC. 17.7 AZ.
10827.69ft: MUD WEIGHT 10.45
10827.69ft: MUD PH 9.10

10919.29ft: SURVEY @ 10855 .4 INC. 347.2 AZ.
10919.29ft: ZERO ALL PUMPS from SideKick sk-04-09-0961
10919.29ft: Connection at 10916.0 PUMPED SWEEP

10971.82ft: MUD VIS 60.00
10971.82ft: MUD WEIGHT 10.55
10971.82ft: MUD PH 9.20





19:37 11440

19:44 11450

19:51 11460

20:14 11470

20:20 11480

20:26 11490

20:30 11500

20:35 11510

20:41 11520

20:50 11530

21:00 11540

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21:50 11610

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22:00 11630

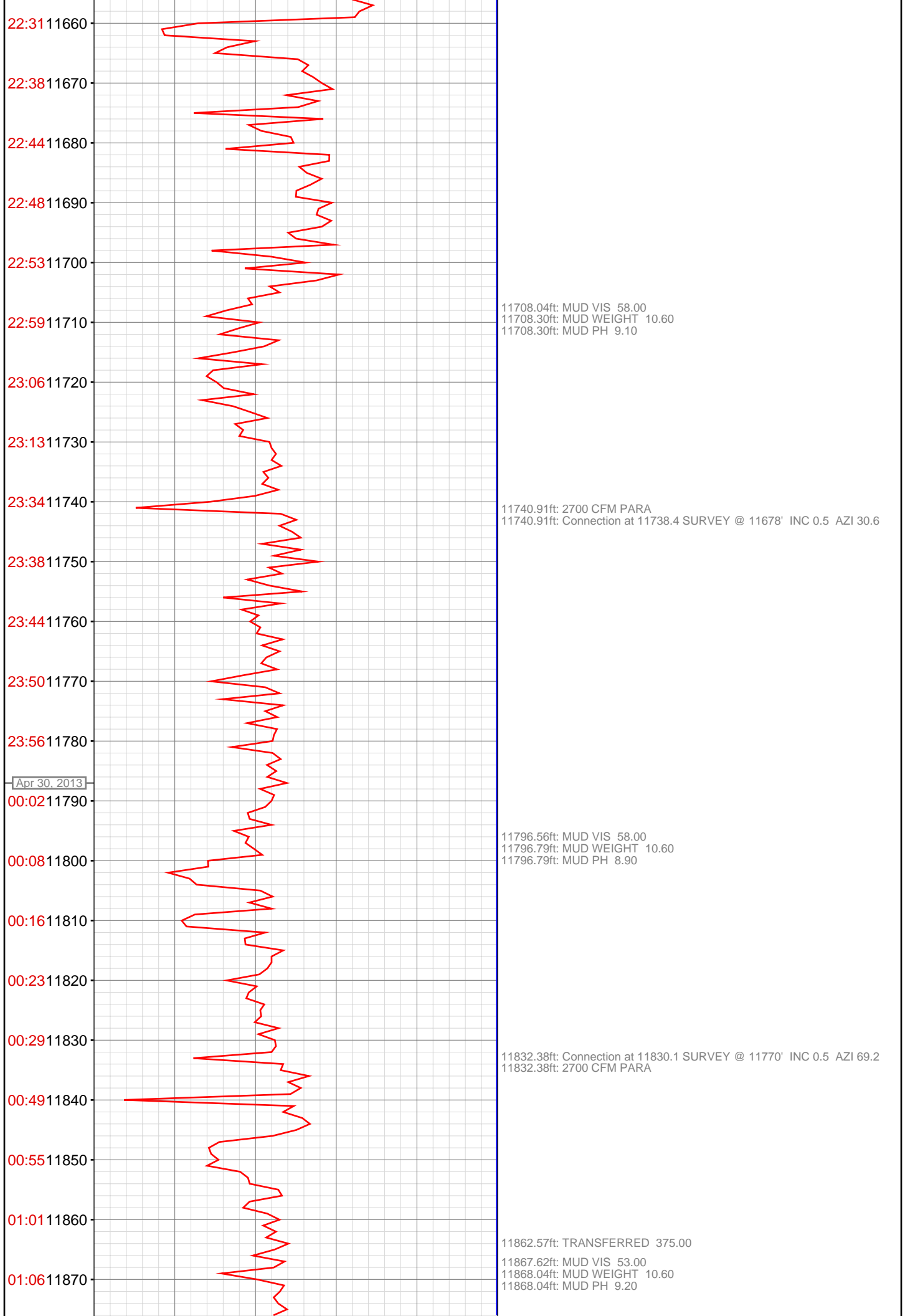
22:06 11640

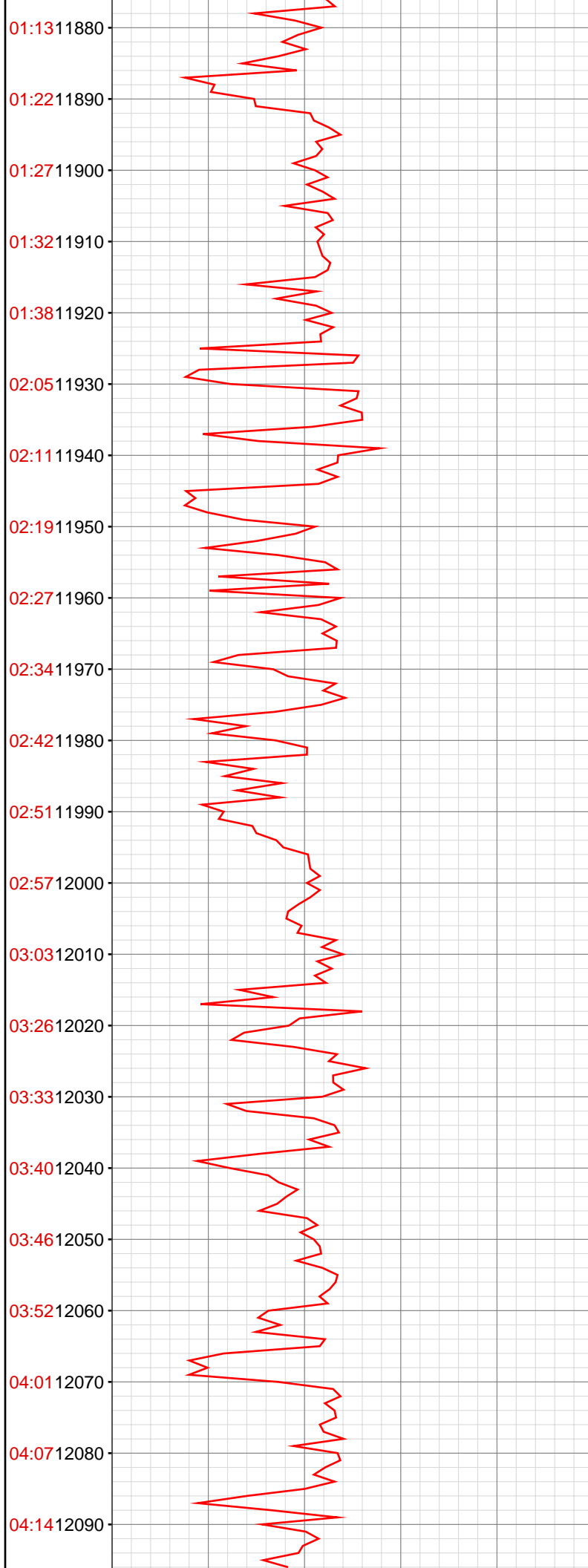
22:26 11650

11465.98ft: 2700 CFM PARA
11465.98ft: MUD VIS 54.00
11465.98ft: MUD WEIGHT 10.60
11465.98ft: MUD PH 9.30
11465.98ft: Connection at 11464.7
11465.98ft: SURVEY @ 11404' INC 0.5 AZI 99.8

11557.25ft: MUD VIS 55.00
11557.25ft: MUD WEIGHT 10.60
11557.25ft: MUD PH 9.10
11557.25ft: SURVEY @ 11495' INC 0.1 AZI 74.1
11557.25ft: Connection at 11555.7

11643.57ft: MUD VIS 56.00
11643.64ft: MUD WEIGHT 10.60
11643.64ft: MUD PH 9.00
11649.05ft: Connection at 11646.7 SURVEY @ 11586' INC 0.5 AZI 45.0





11924.31ft: SURVEY @ 11861' INC 0.4 AZI 336.7
11924.31ft: Connection at 11921.5
11928.67ft: MUD VIS 55.00
11928.77ft: MUD WEIGHT 10.60
11929.04ft: MUD PH 9.00

11952.43ft: 2700 CFM PARA

12007.19ft: MUD VIS 57.00
12007.45ft: MUD WEIGHT 10.60
12007.68ft: MUD PH 8.90

12016.27ft: Connection at 12013.1
12016.27ft: SURVEY @ 11953' INC 0.6 AZI 244.4

12068.01ft: MUD VIS 58.00
12068.18ft: MUD WEIGHT 10.60
12068.18ft: MUD PH 9.20

