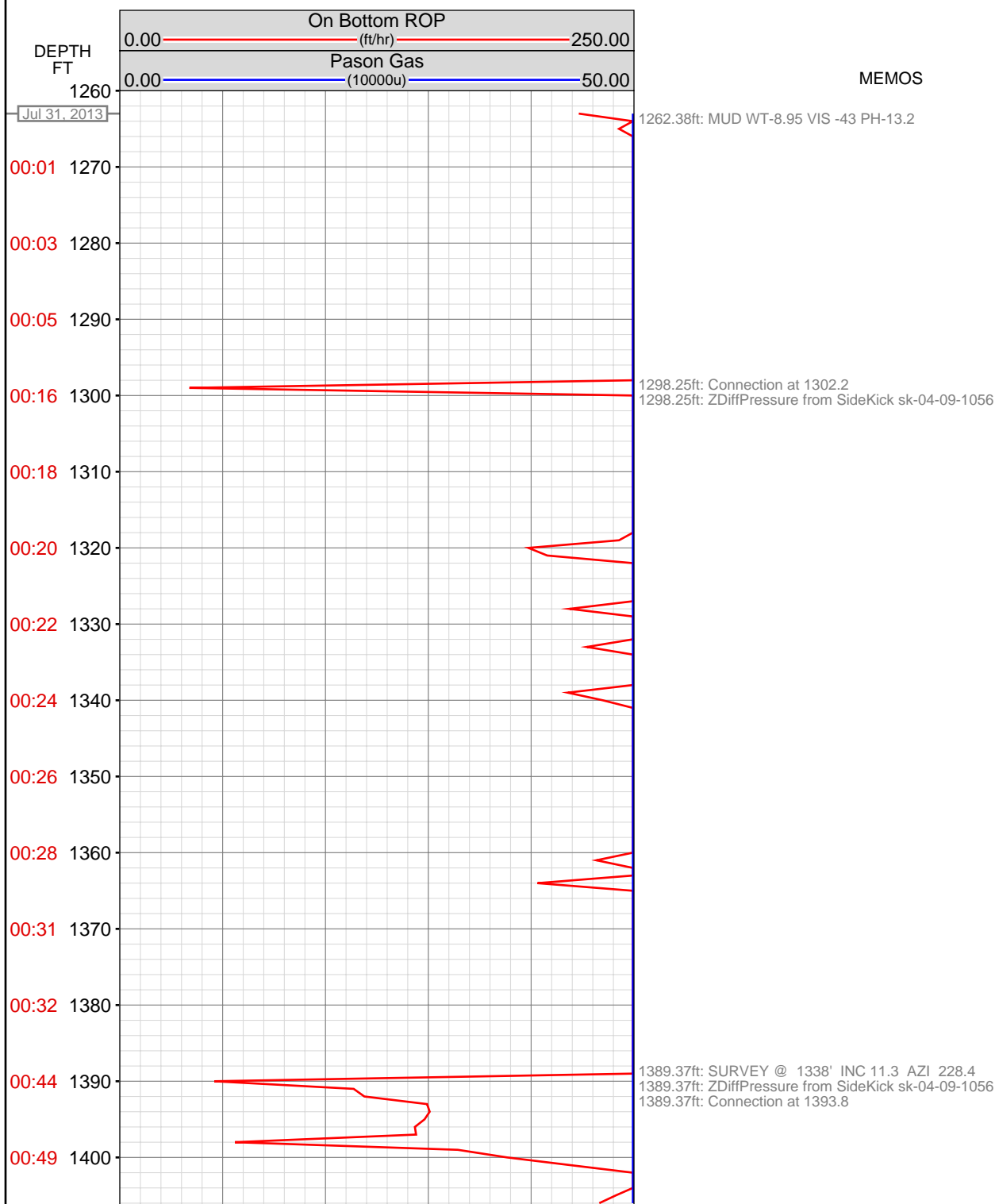
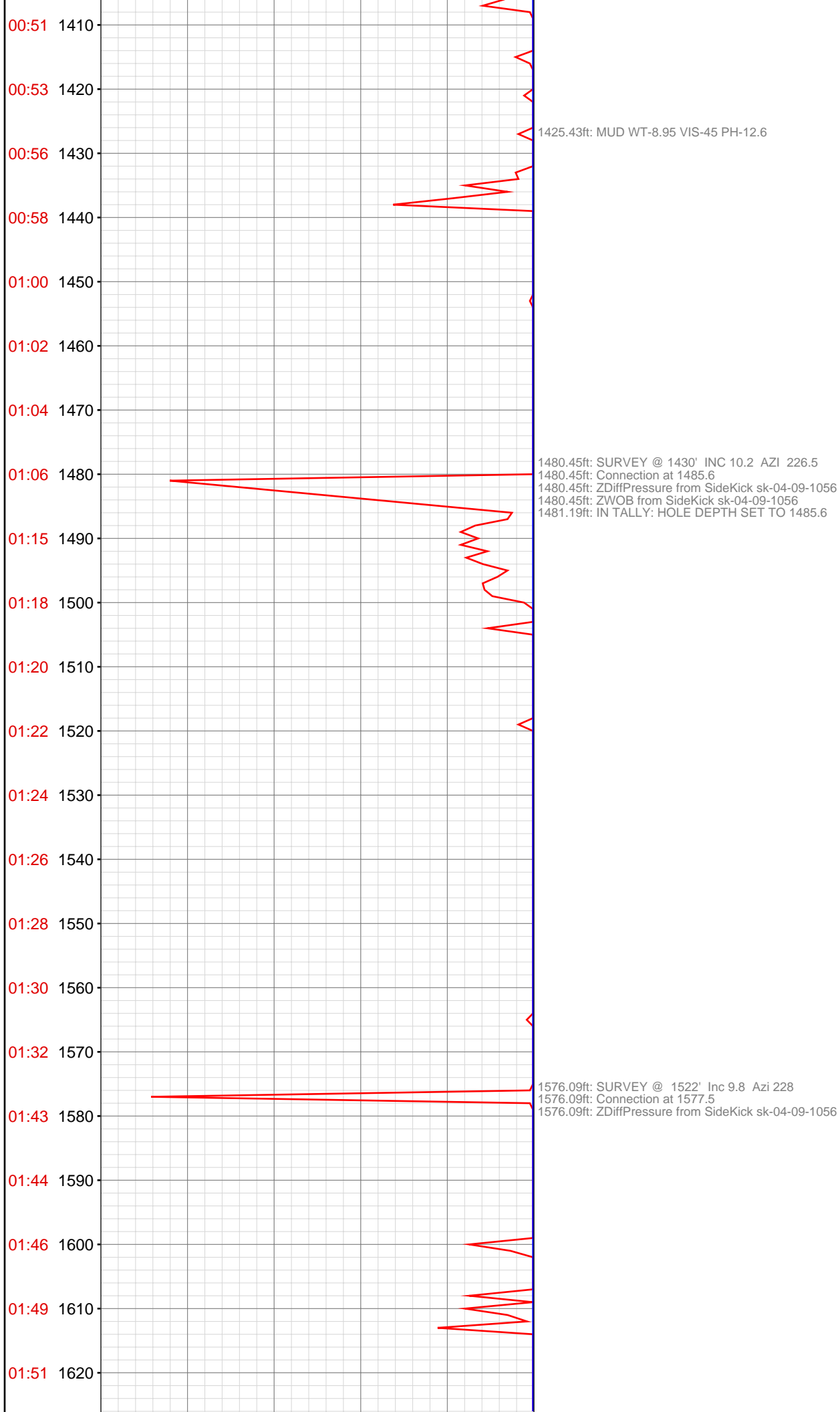
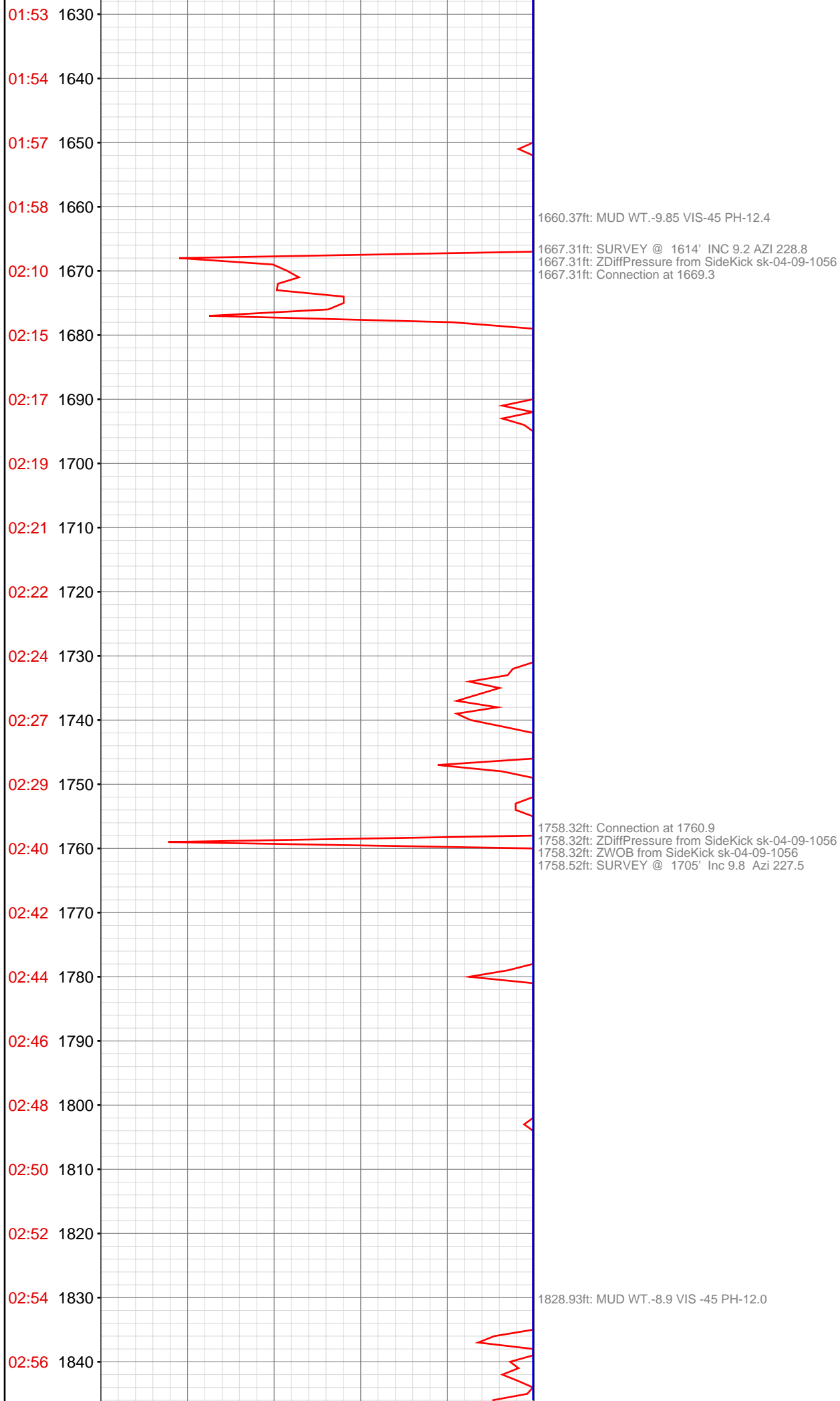


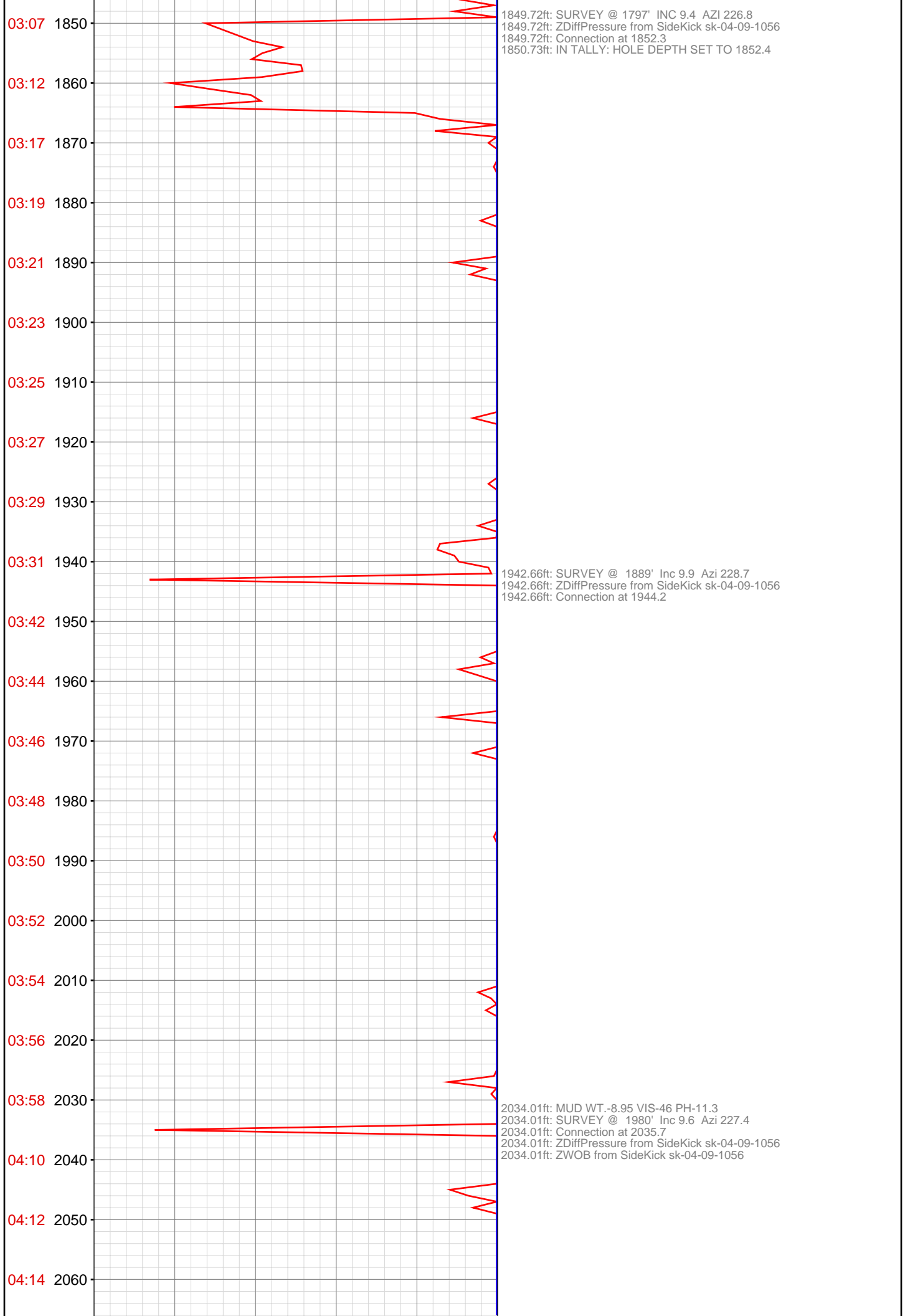
**OPERATOR:** EnCana Oil & Gas (USA), Inc.  
**WELL:** Hagen Federal 22-4D  
**FIELD:**  
**LOCATION:**  
**COUNTRY:** USA  
**RIG:** Pat-UTI 303

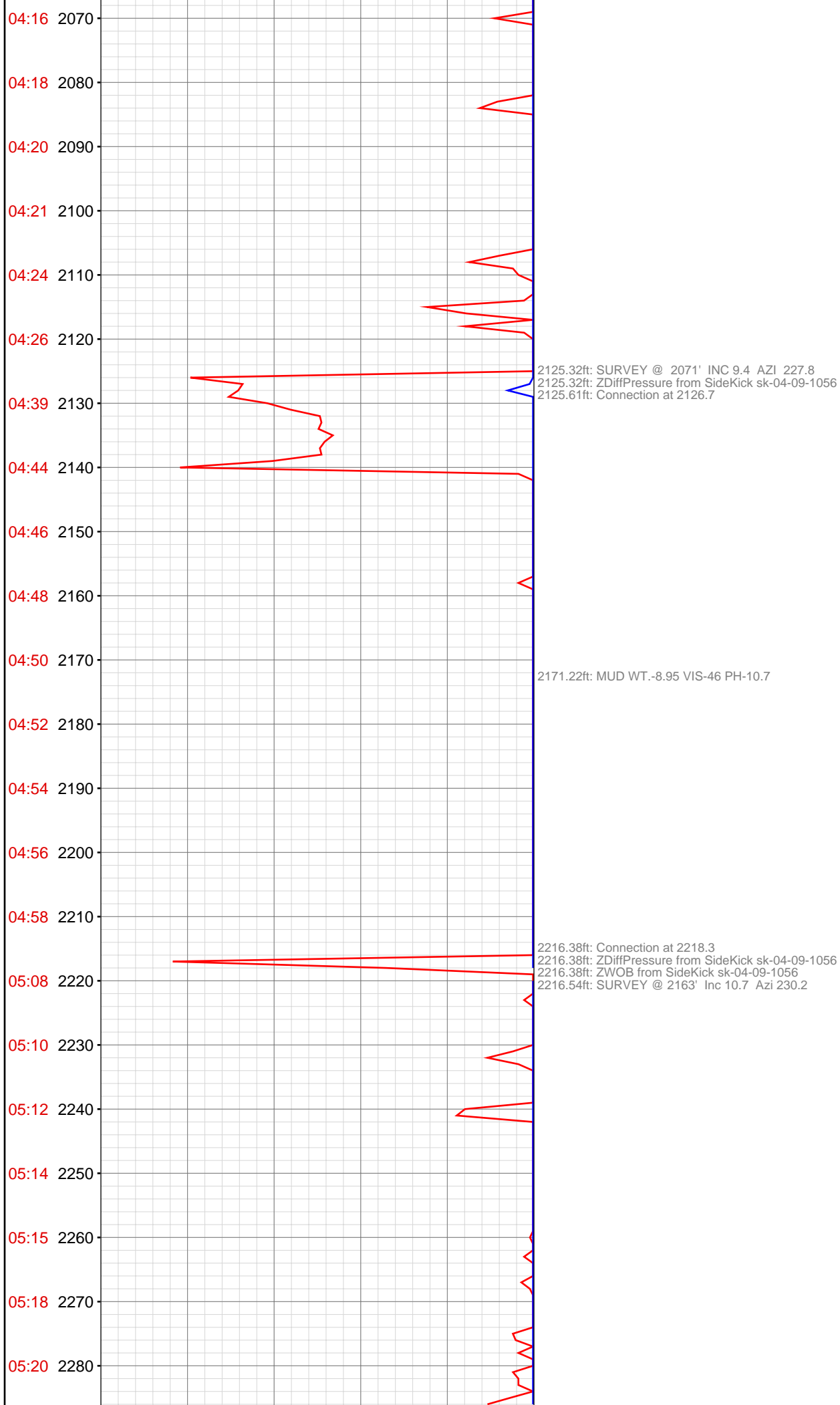
**CONTRACTOR:** Patterson-UTI Drilling Company  
**UNIQUE WELL ID:** 05-045-22013  
**SPUD DATE:** Jul 31, 2013 22:45  
**RELEASE DATE:** Aug 03, 2013 21:00

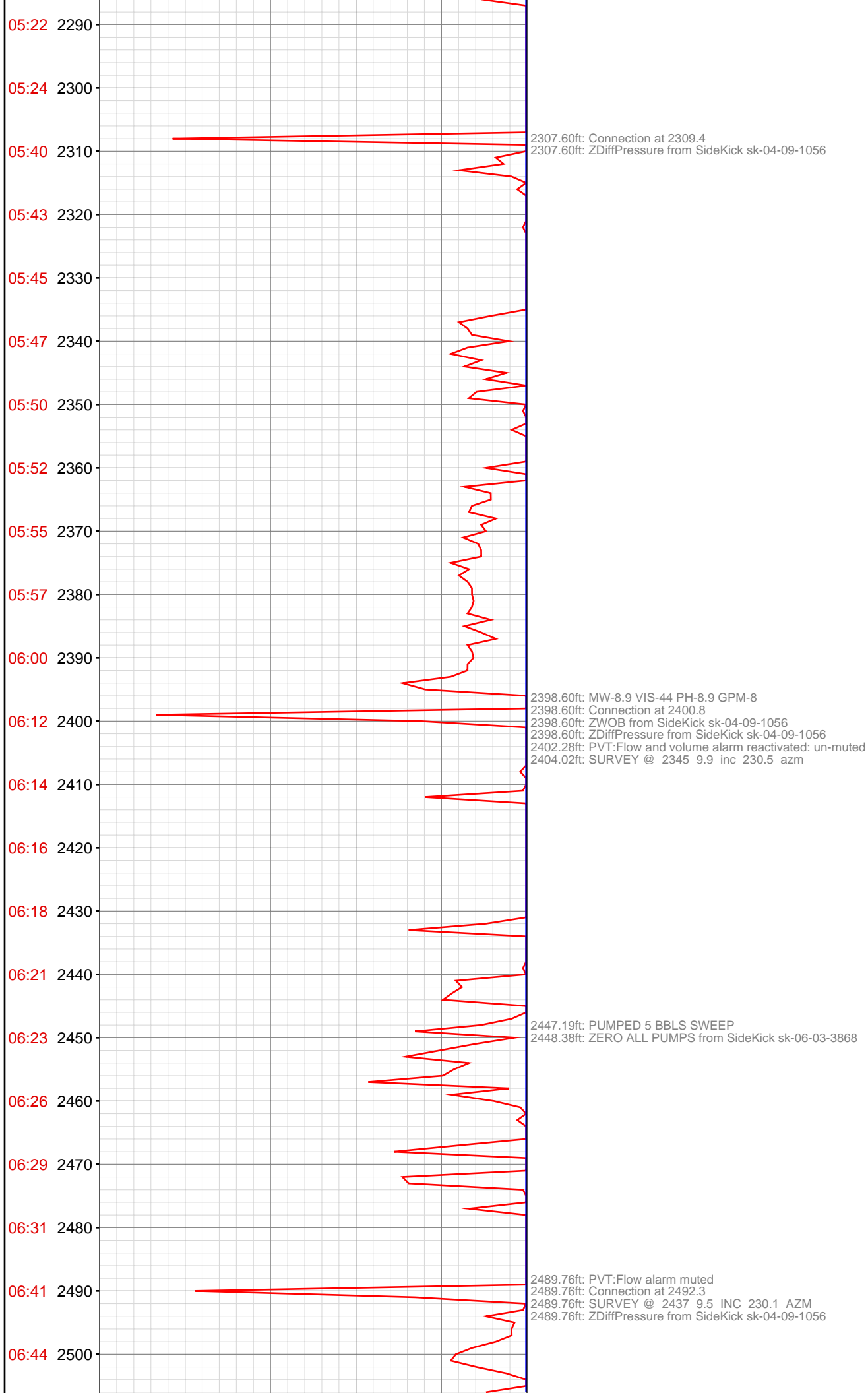


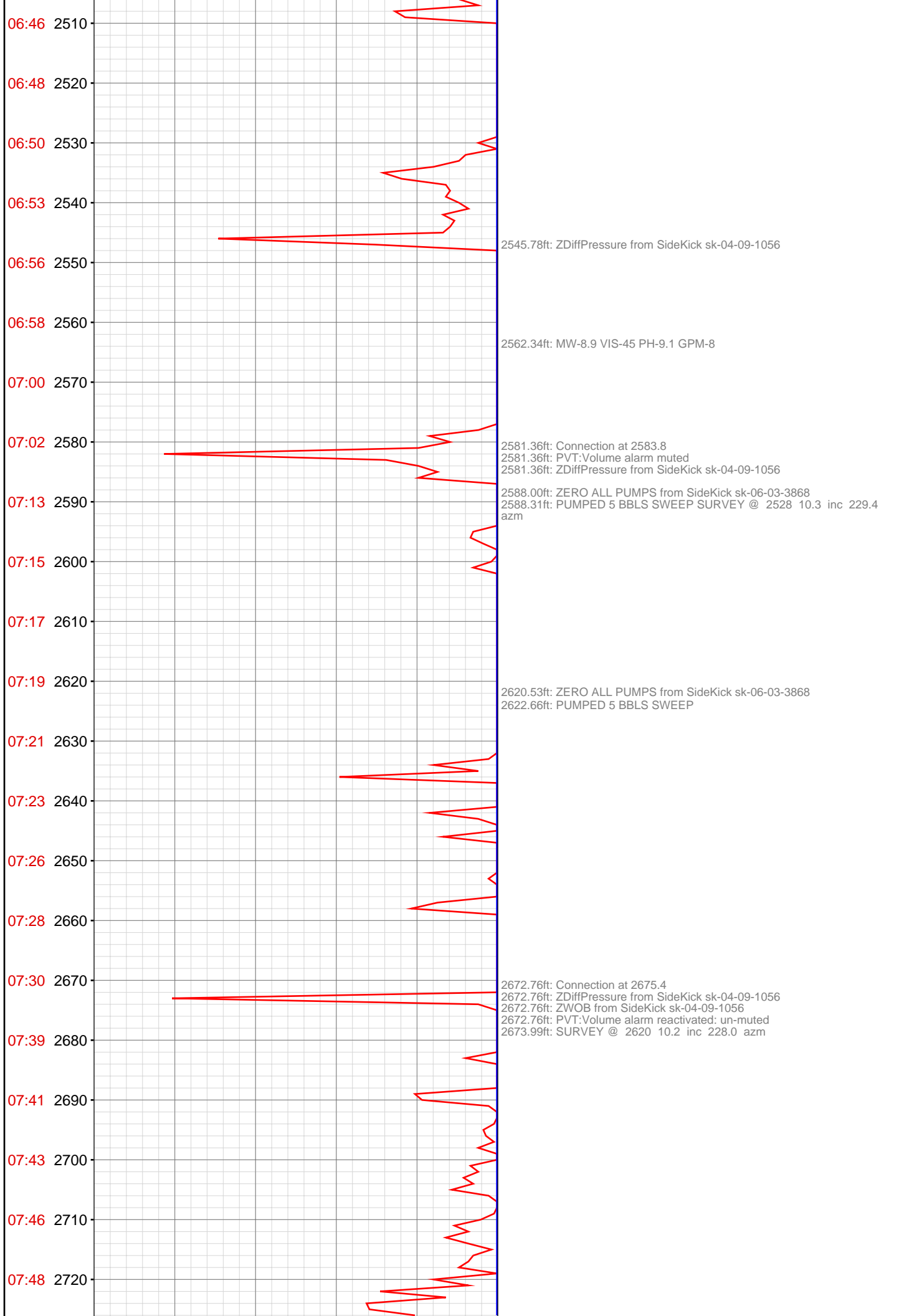


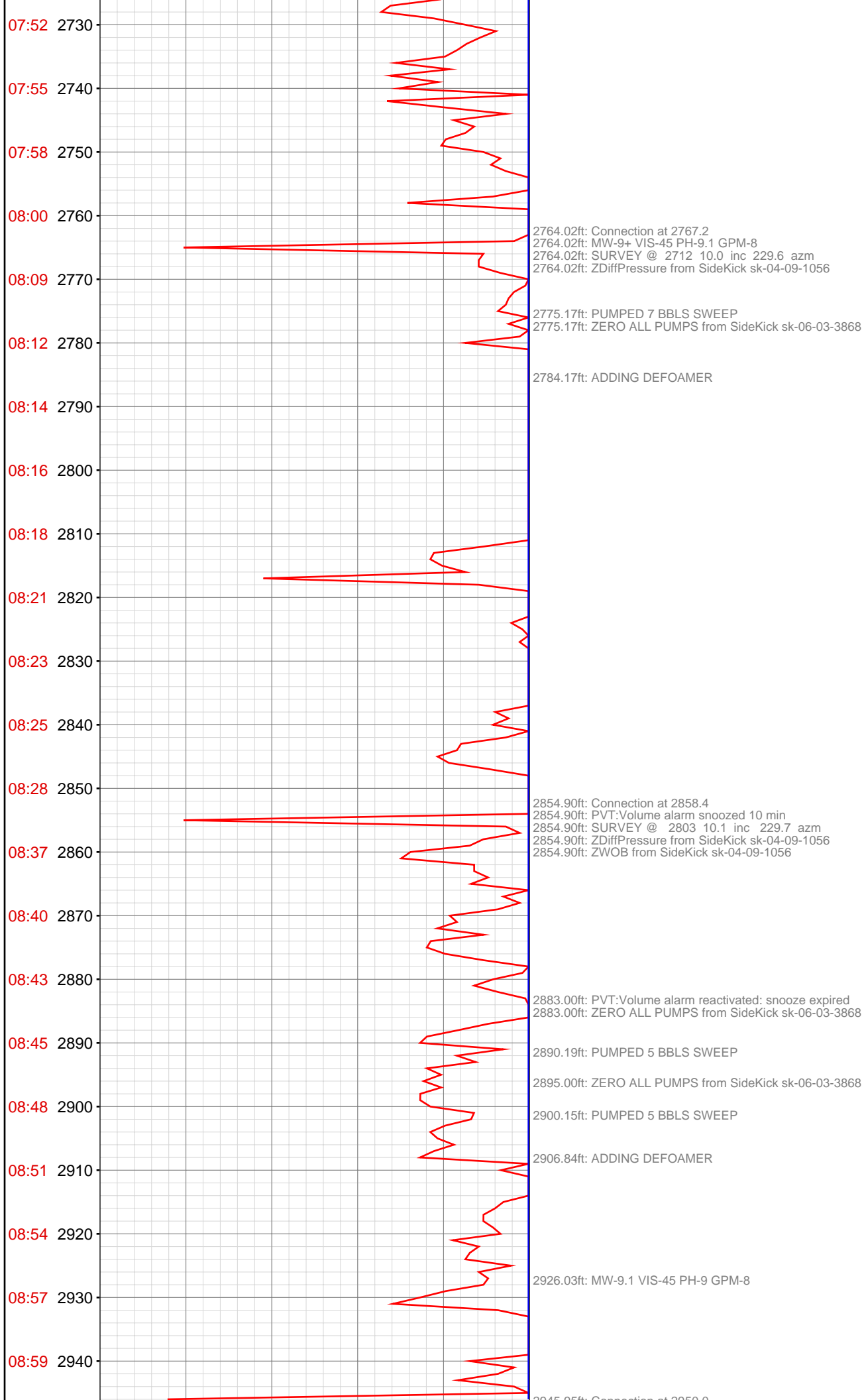




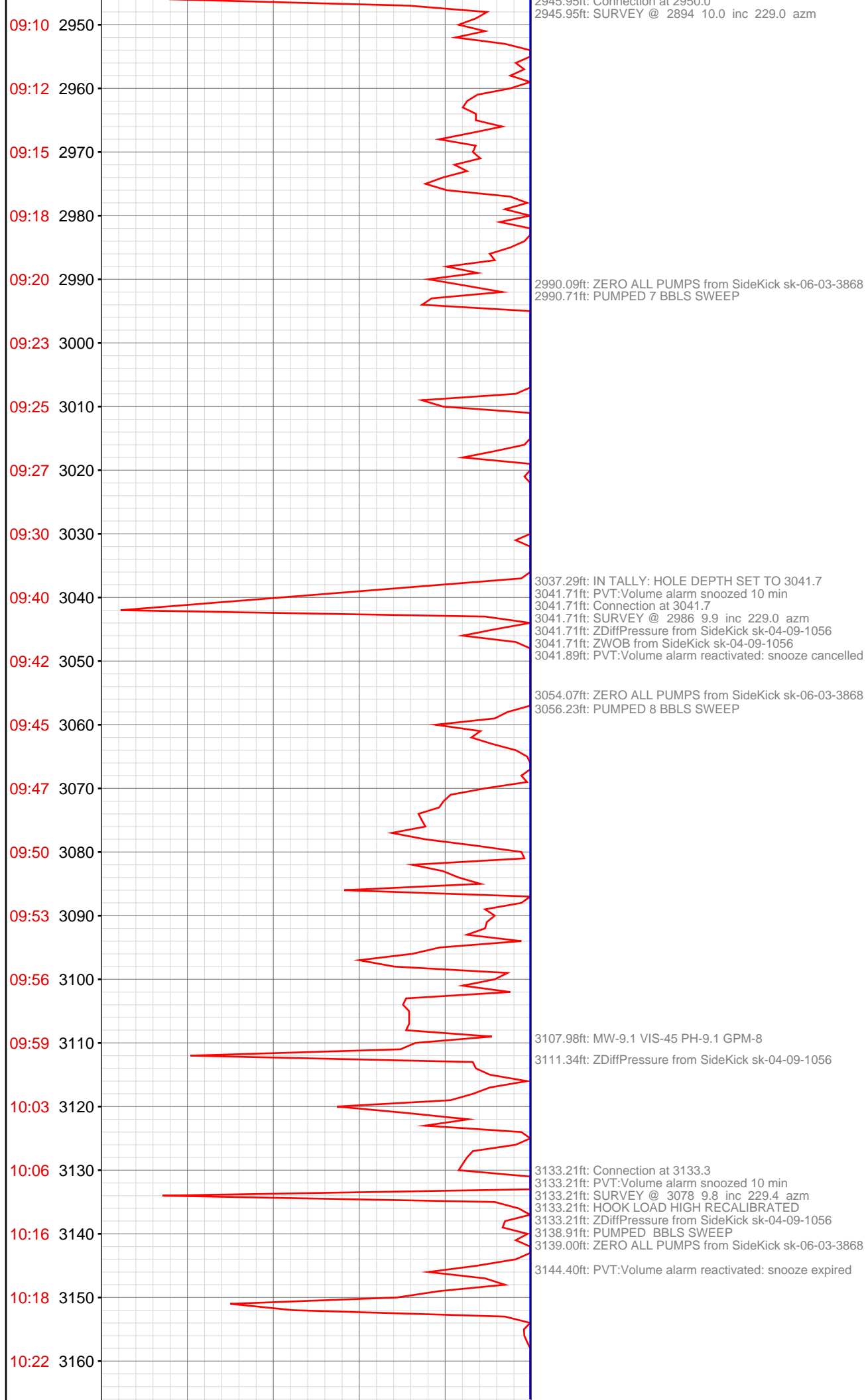


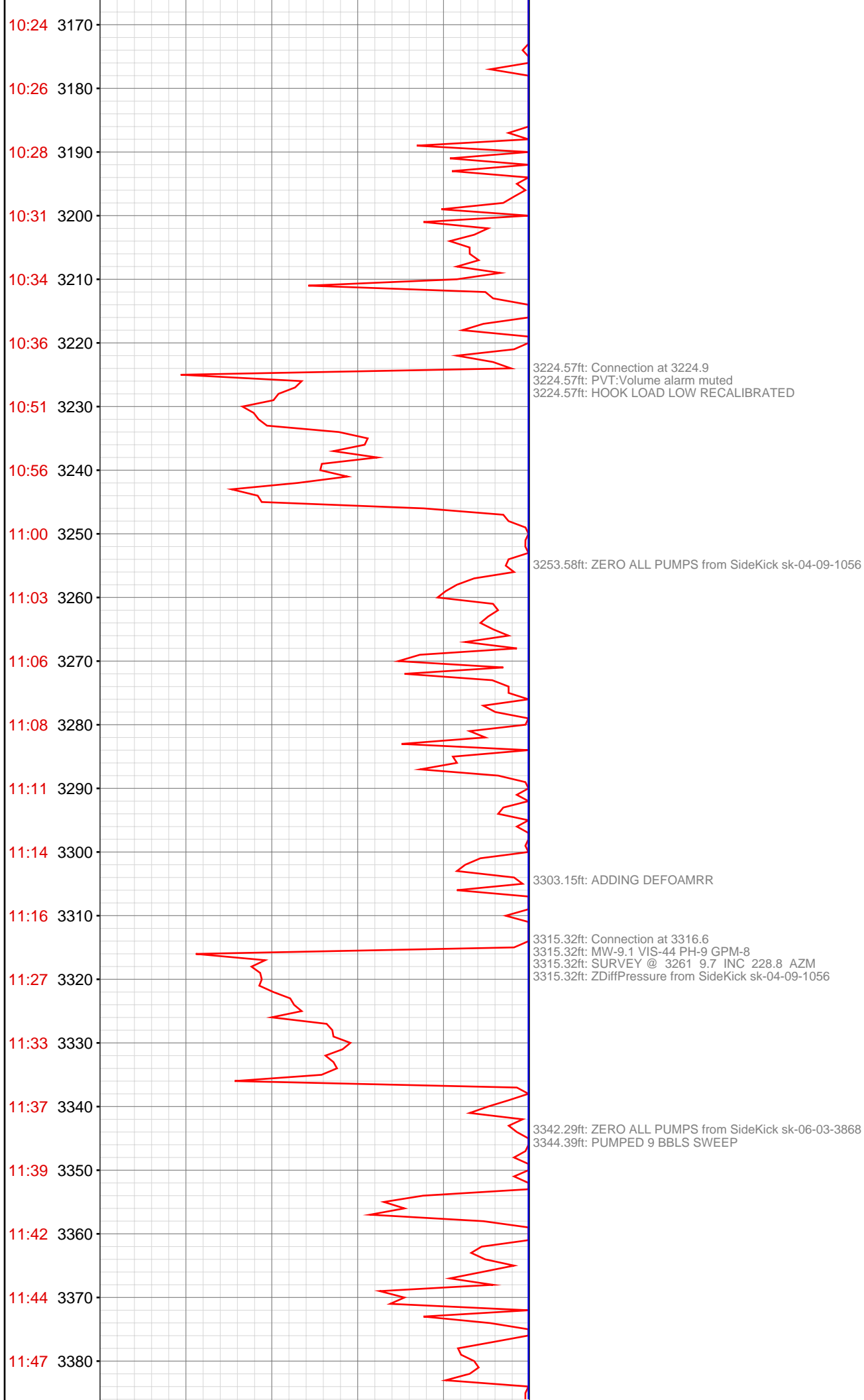


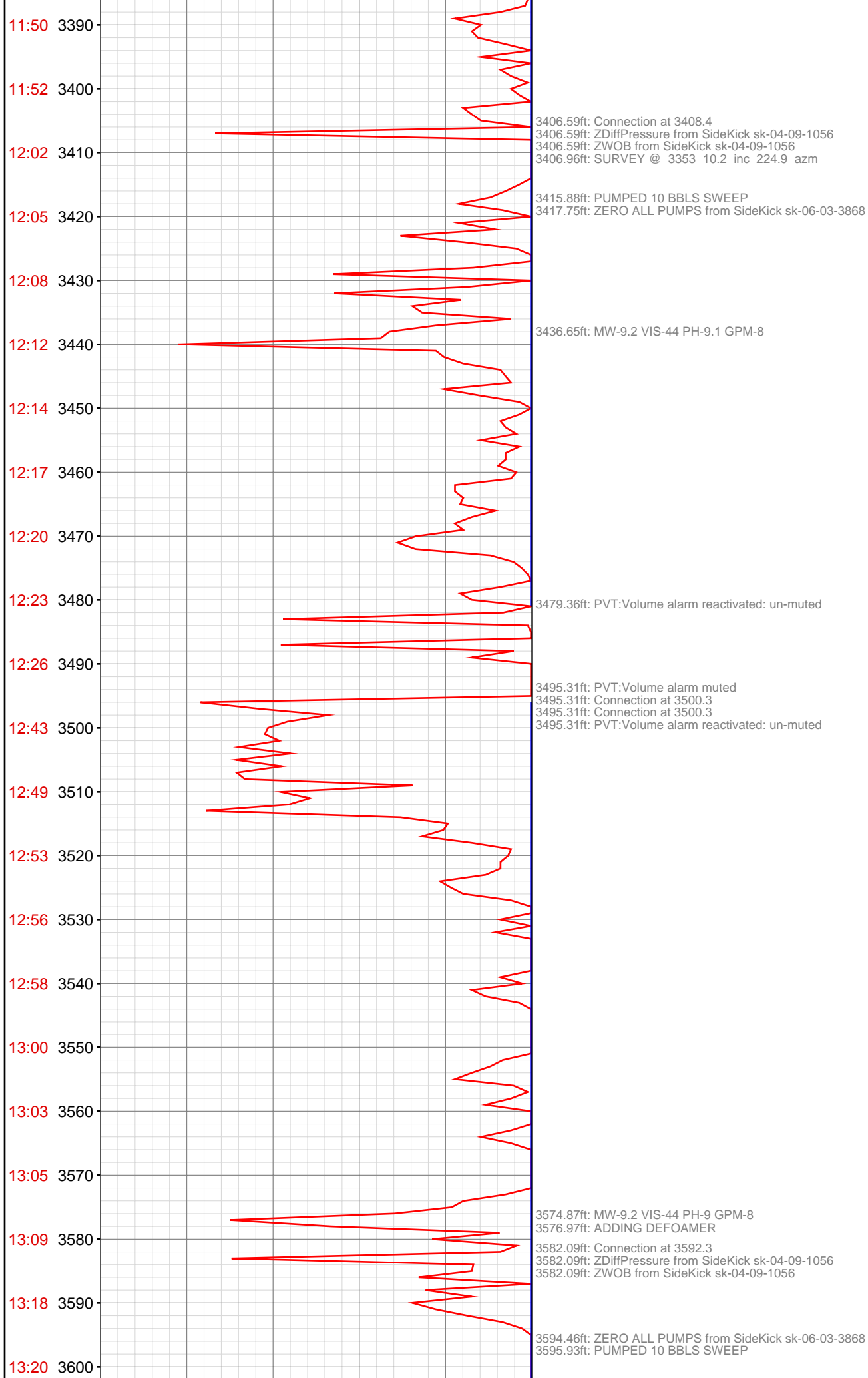


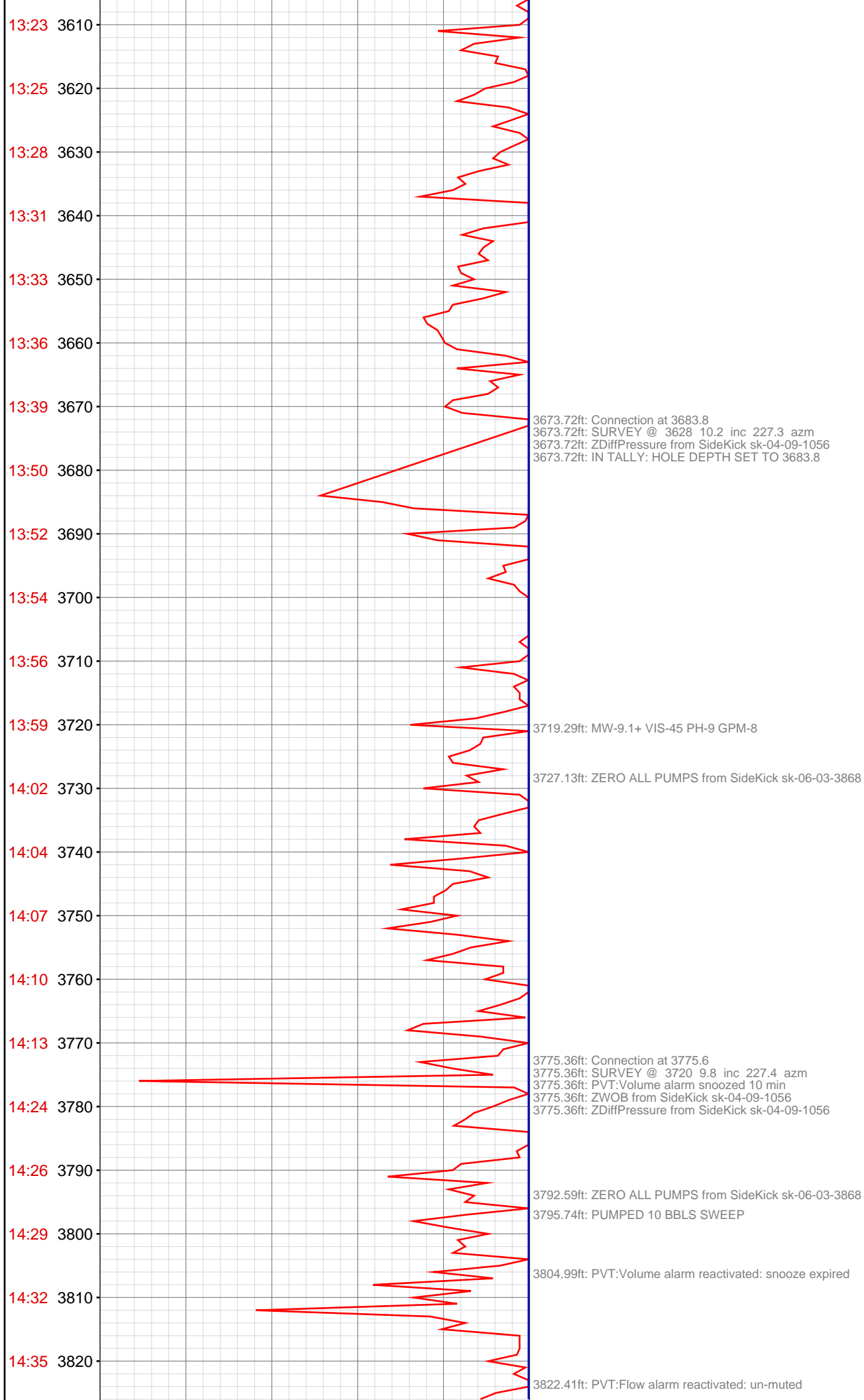


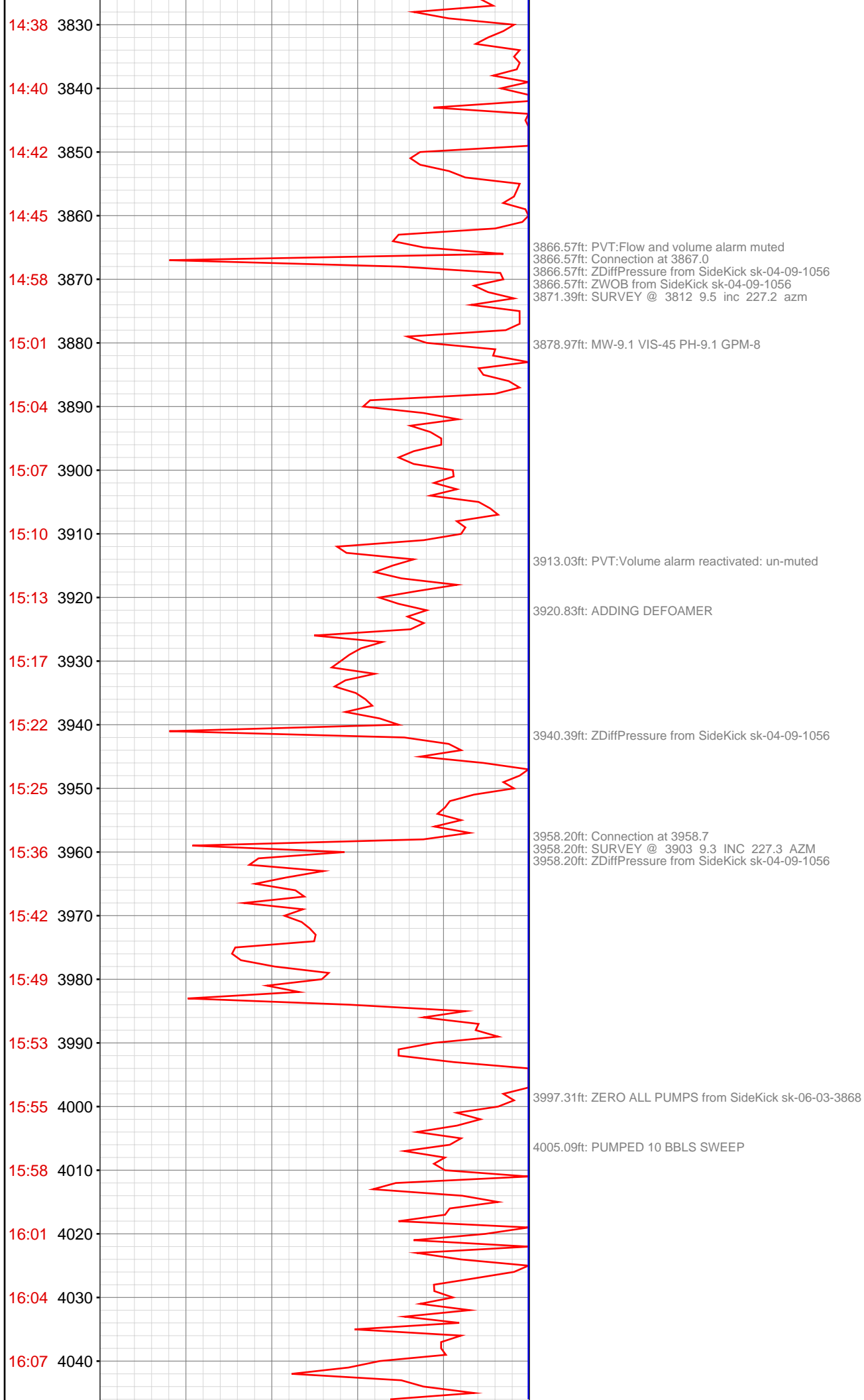


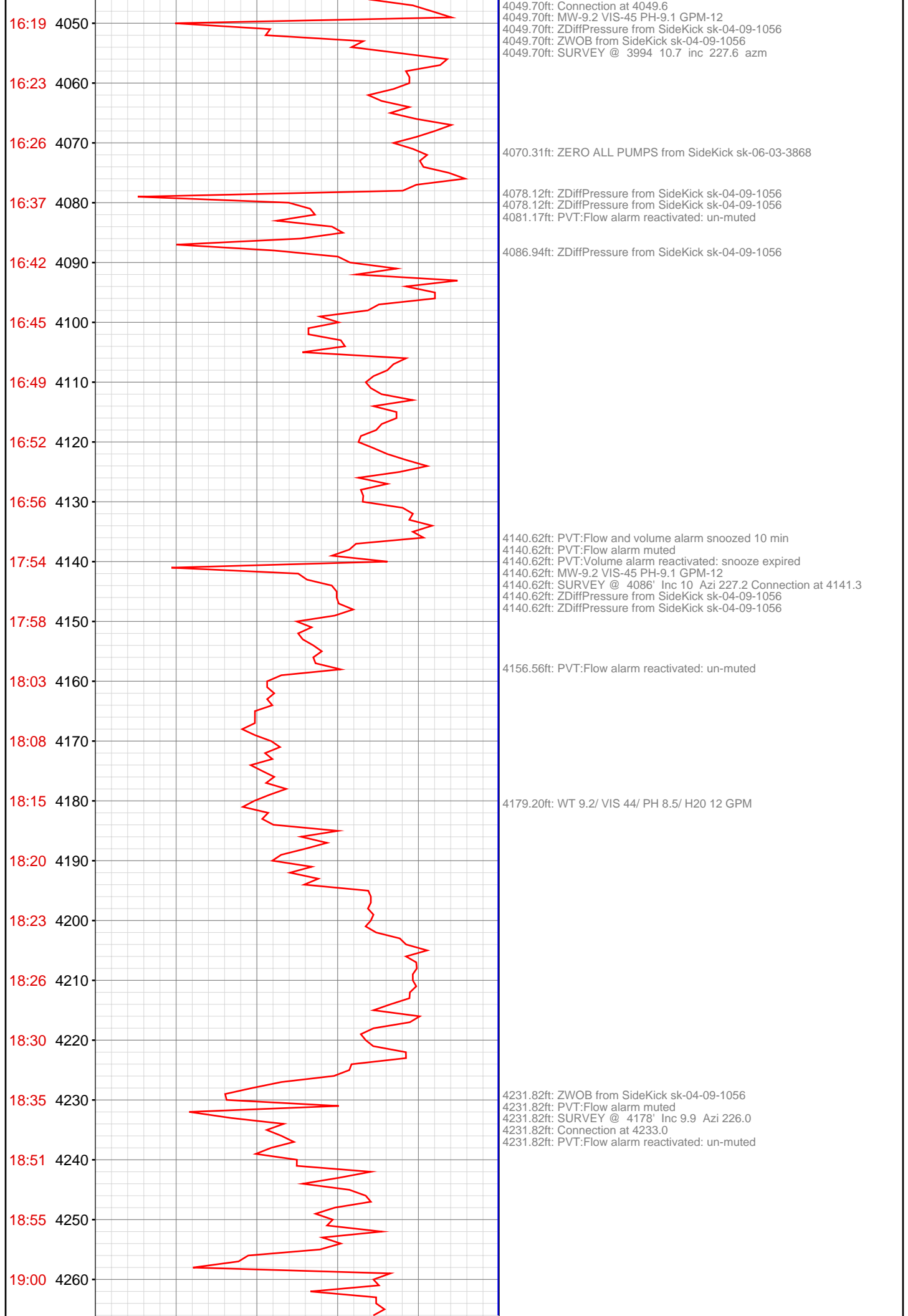


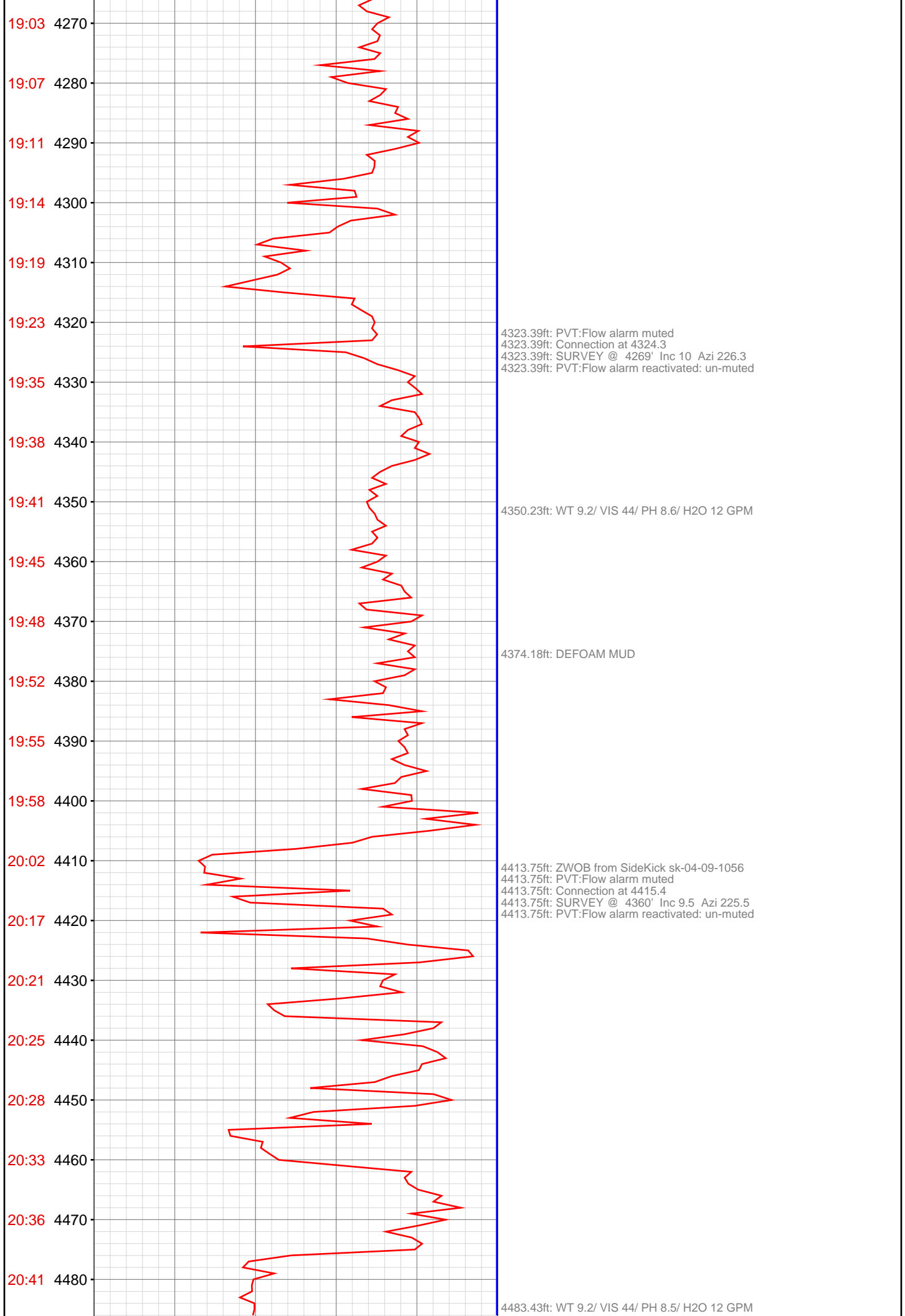


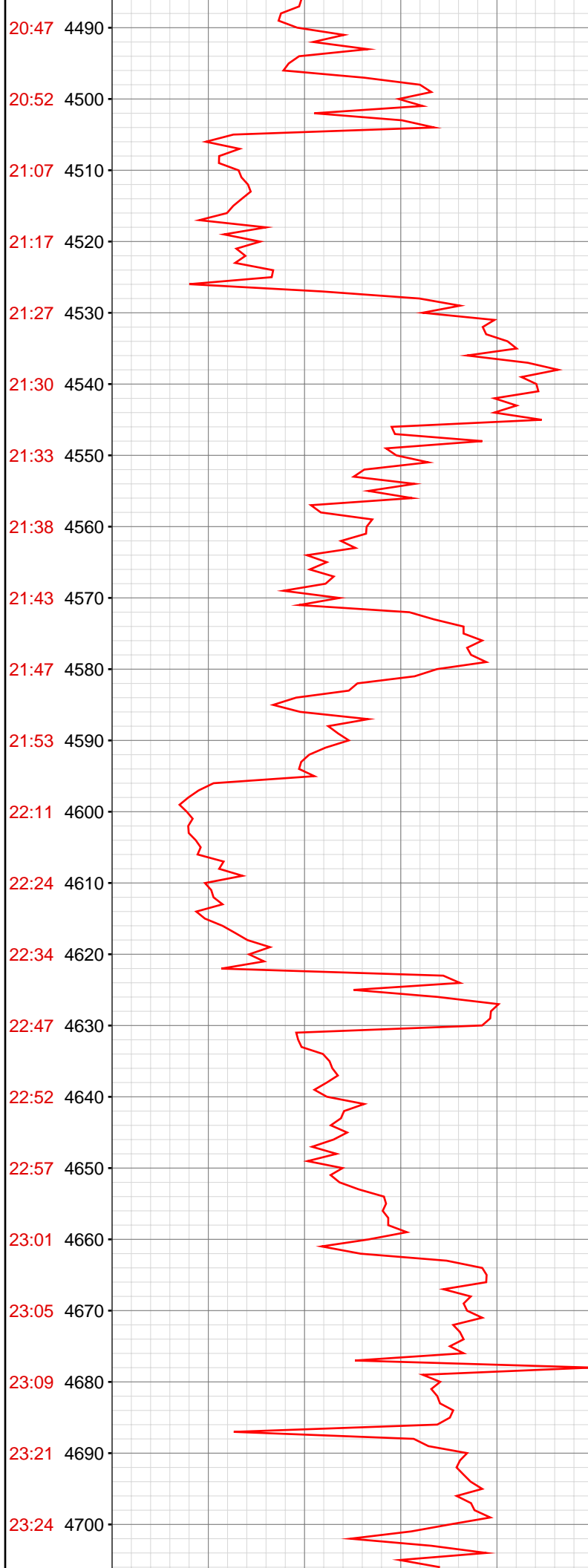












4504.43ft: PVT:Flow alarm muted  
4504.43ft: Connection at 4506.4  
4504.43ft: SURVEY @ 4451' INC 8.9 AZI 226  
4504.43ft: PVT:Flow alarm reactivated: un-muted

4591.57ft: PVT:Volume alarm muted  
4595.51ft: PVT:Flow alarm muted  
4595.51ft: ZWOB from SideKick sk-04-09-1056  
4595.51ft: Connection at 4597.9  
4595.51ft: SURVEY @ 4542' INC 9.3 AZI 226.4  
4595.51ft: PVT:Flow alarm reactivated: un-muted  
4597.18ft: WT 9.2/ VIS 44/ PH 8.8/ H2O 12 GPM

4621.52ft: PVT:Flow alarm muted  
4621.52ft: ZDiffPressure from SideKick sk-04-09-1056

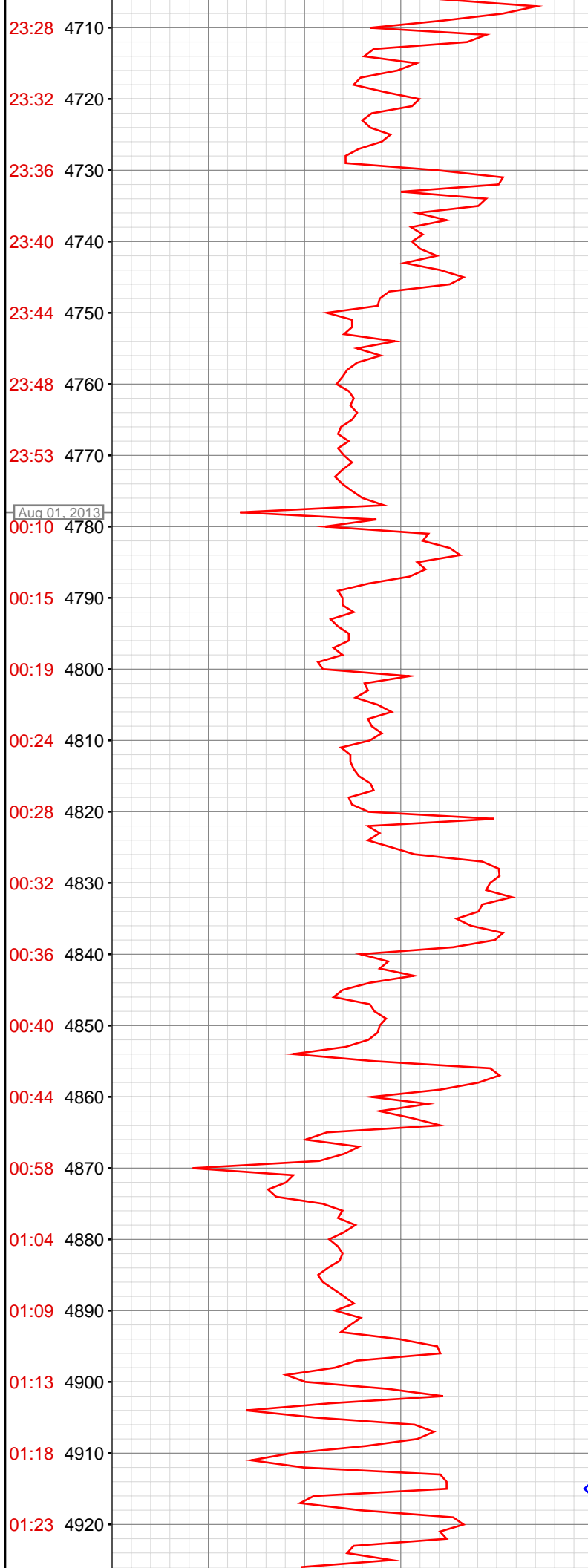
4627.40ft: PVT:Flow and volume alarm reactivated: un-muted

4655.91ft: WT 9.2/ VIS 44/ PH 8.8/ H2O 12 GPM

4686.84ft: ZWOB from SideKick sk-04-09-1056  
4686.84ft: PVT:Flow alarm muted  
4686.84ft: Connection at 4689.4  
4686.84ft: SURVEY @ 4634' Inc 10.4 Azi 227.5

4699.80ft: PVT:Flow alarm reactivated: un-muted



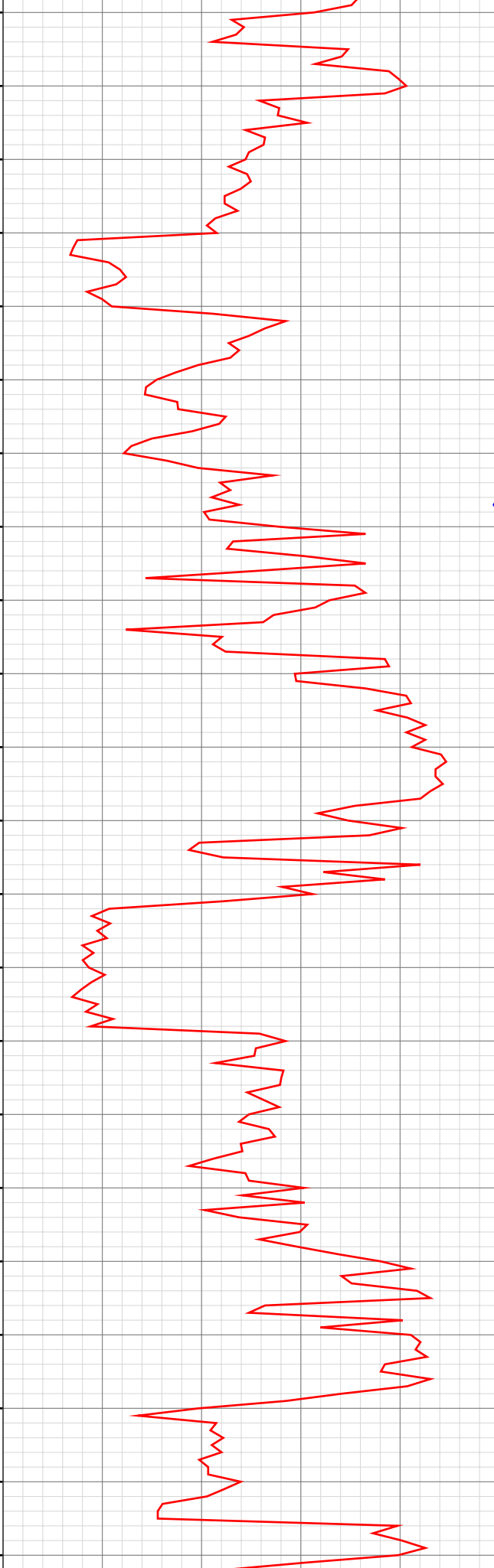


4777.95ft: WT 9.2/ VIS 44/ PH 8.8/ H2O 12 GPM  
4777.95ft: PVT:Flow alarm muted  
4777.95ft: S-P-R  
4777.95ft: ZWOB from SideKick sk-04-09-1056  
4777.95ft: Connection at 4780.9  
4777.95ft: SURVEY @ 4725' Inc 10.2 Azi 228  
4777.95ft: ZDiffPressure from SideKick sk-04-09-1056  
4778.67ft: PVT:Flow alarm reactivated: un-muted  
4779.04ft: PUMP OUT CELLAR  
4781.27ft: PUMP OUT CELLAR  
4786.75ft: PUMP OUT CELLAR

4869.09ft: PVT:Flow alarm muted  
4869.09ft: Connection at 4872.3  
4869.09ft: DEFOAM MUD  
4869.09ft: PVT:Flow alarm reactivated: un-muted

4887.96ft: WT 9.3/ VIS 44/ PH 8.8/ H2O 10 GPM

01:28 4930  
01:32 4940  
01:36 4950  
01:41 4960  
02:04 4970  
02:10 4980  
02:18 4990  
02:23 5000  
02:27 5010  
02:32 5020  
02:35 5030  
02:38 5040  
02:42 5050  
03:02 5060  
03:15 5070  
03:21 5080  
03:26 5090  
03:29 5100  
03:33 5110  
03:36 5120  
03:43 5130  
03:47 5140



4951.41ft: SURVEY @ 4817' Inc 10.1 Azi 227.2  
4960.04ft: PVT:Flow alarm muted  
4960.04ft: ZWOB from SideKick sk-04-09-1056  
4960.04ft: Connection at 4963.8  
4960.04ft: SURVEY @ 4908' INC 9.8 AZI 228  
4960.04ft: PVT:Flow alarm reactivated: un-muted  
4962.80ft: WT 9.3/ VIS 44/ PH 9.0/ H2O 8 GPM

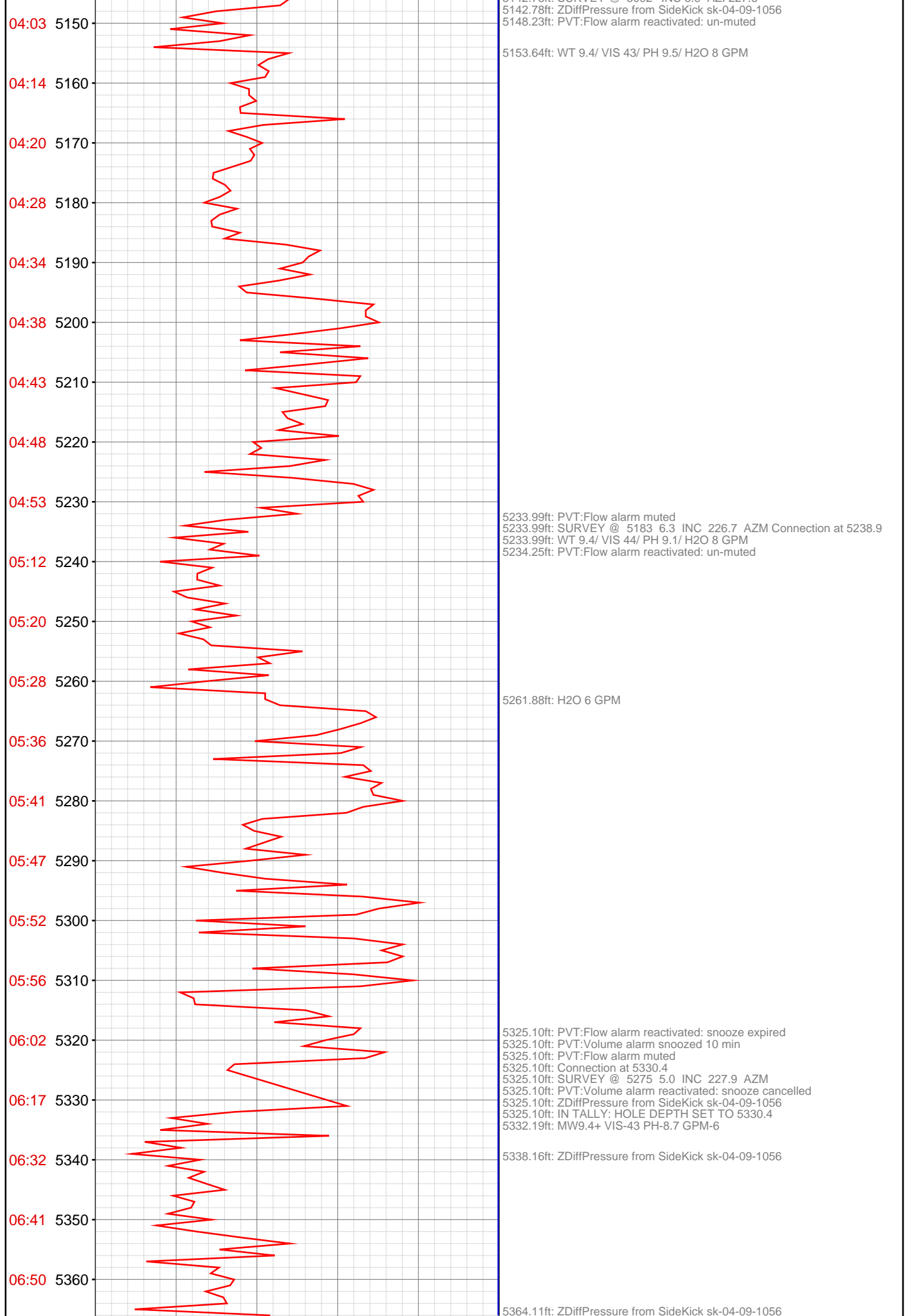
5008.63ft: CENTRIFUGES OFF ACTIVE

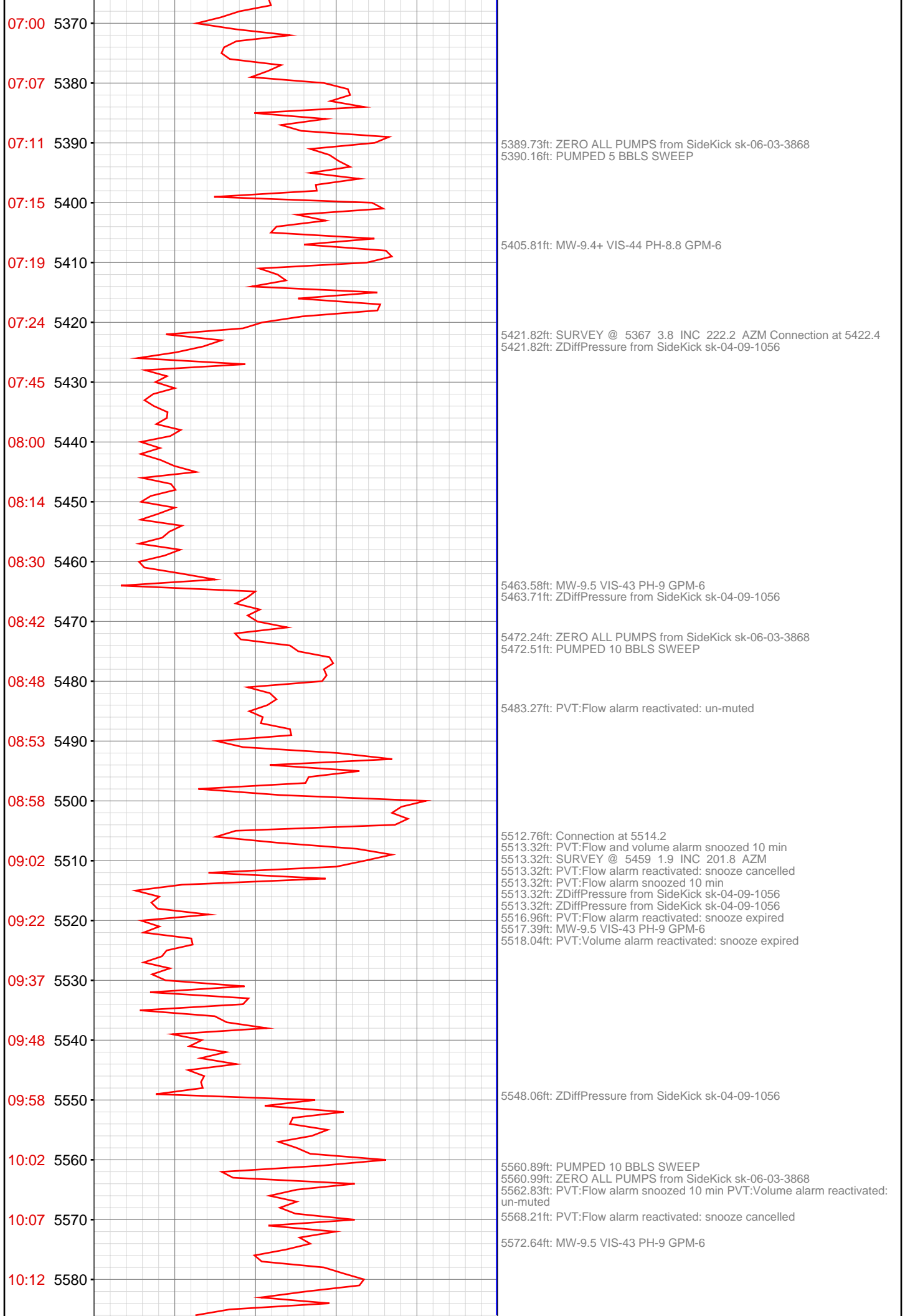
5051.44ft: Connection at 5055.3  
5051.44ft: PVT:Flow alarm muted  
5051.44ft: SURVEY @ 5000' INC 8.9 AZI 228  
5051.44ft: ZDiffPressure from SideKick sk-04-09-1056  
5051.44ft: SLIDING

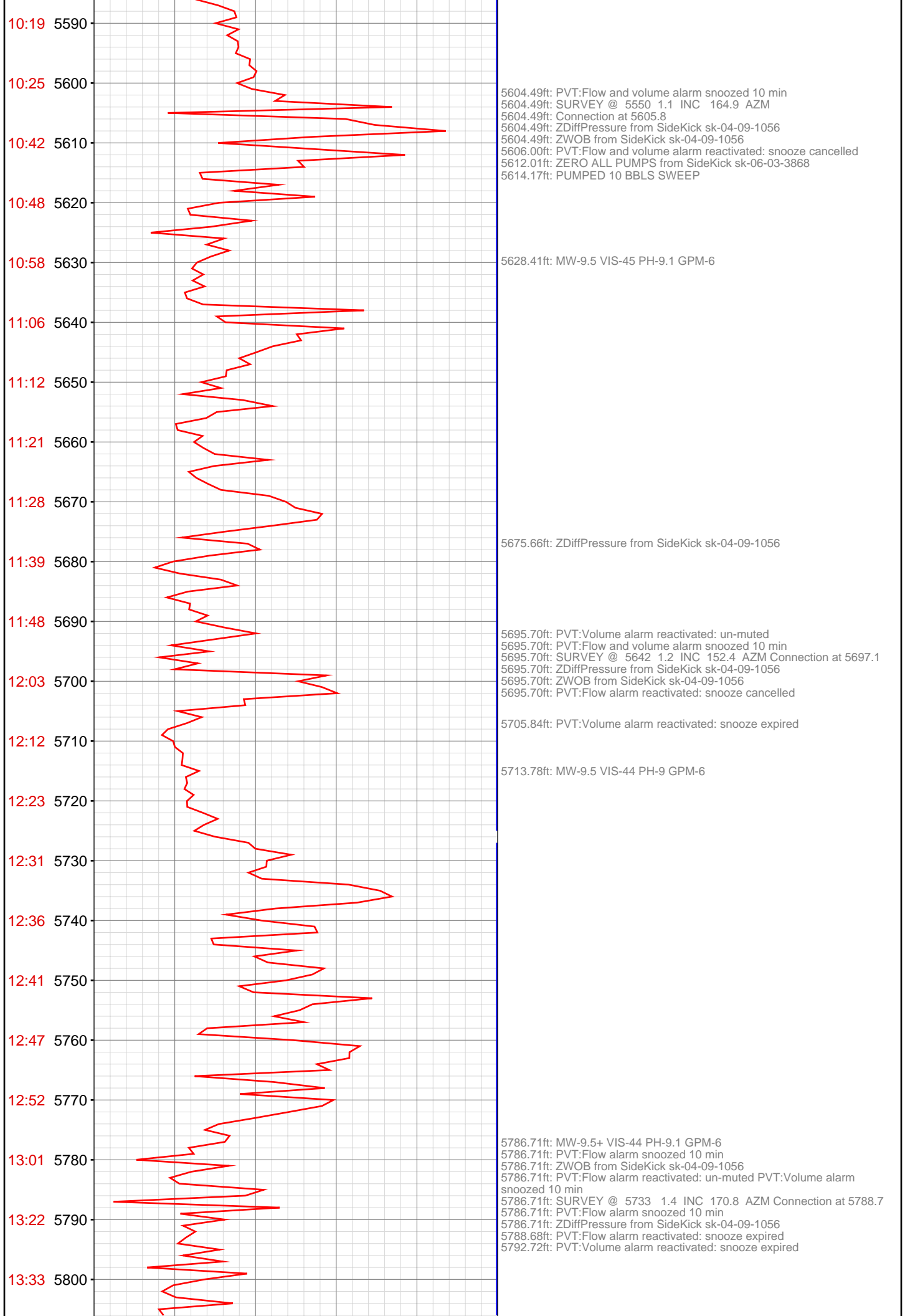
5058.33ft: WT 9.3+/ VIS 42/ PH 8.8/ H2O 10 GPM

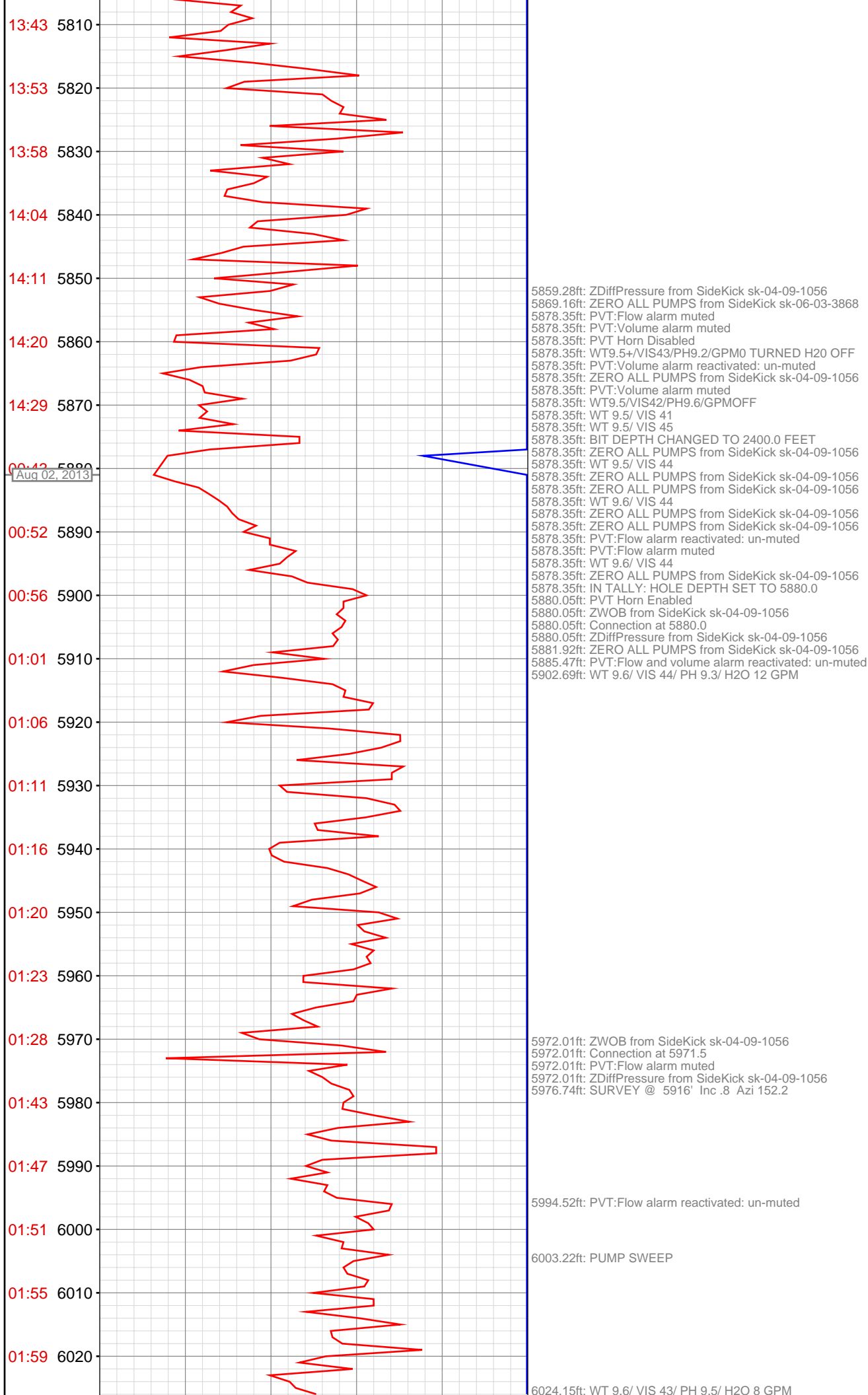
5064.21ft: PVT:Flow alarm reactivated: un-muted

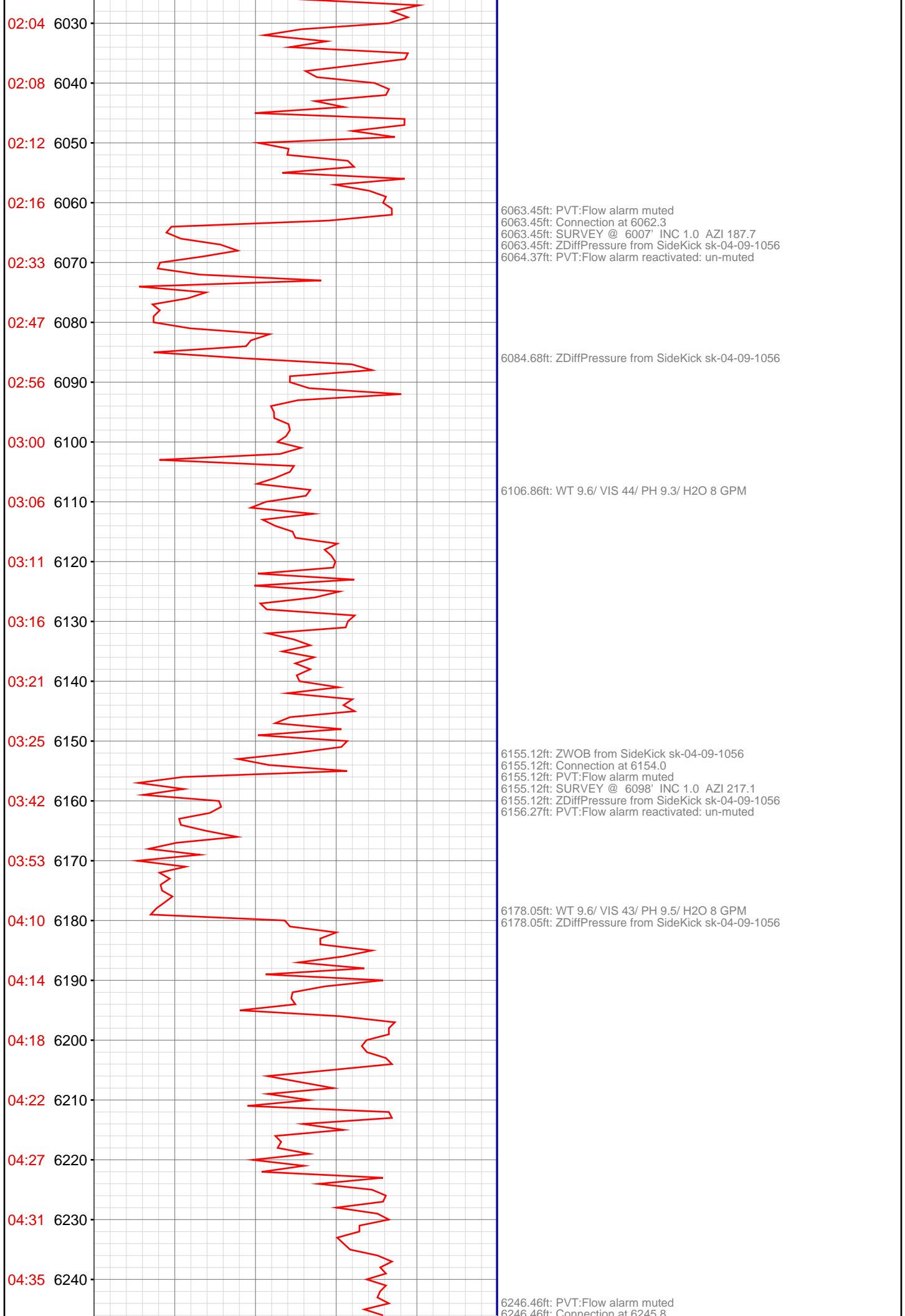
5142.78ft: PVT:Flow alarm muted  
5142.78ft: ZWOB from SideKick sk-04-09-1056  
5142.78ft: Connection at 5147.2  
5142.78ft: SURVEY @ 5092' INC 6.9 AZI 227.6











6063.45ft: PVT:Flow alarm muted  
6063.45ft: Connection at 6062.3  
6063.45ft: SURVEY @ 6007' INC 1.0 AZI 187.7  
6063.45ft: ZDiffPressure from SideKick sk-04-09-1056  
6064.37ft: PVT:Flow alarm reactivated: un-muted

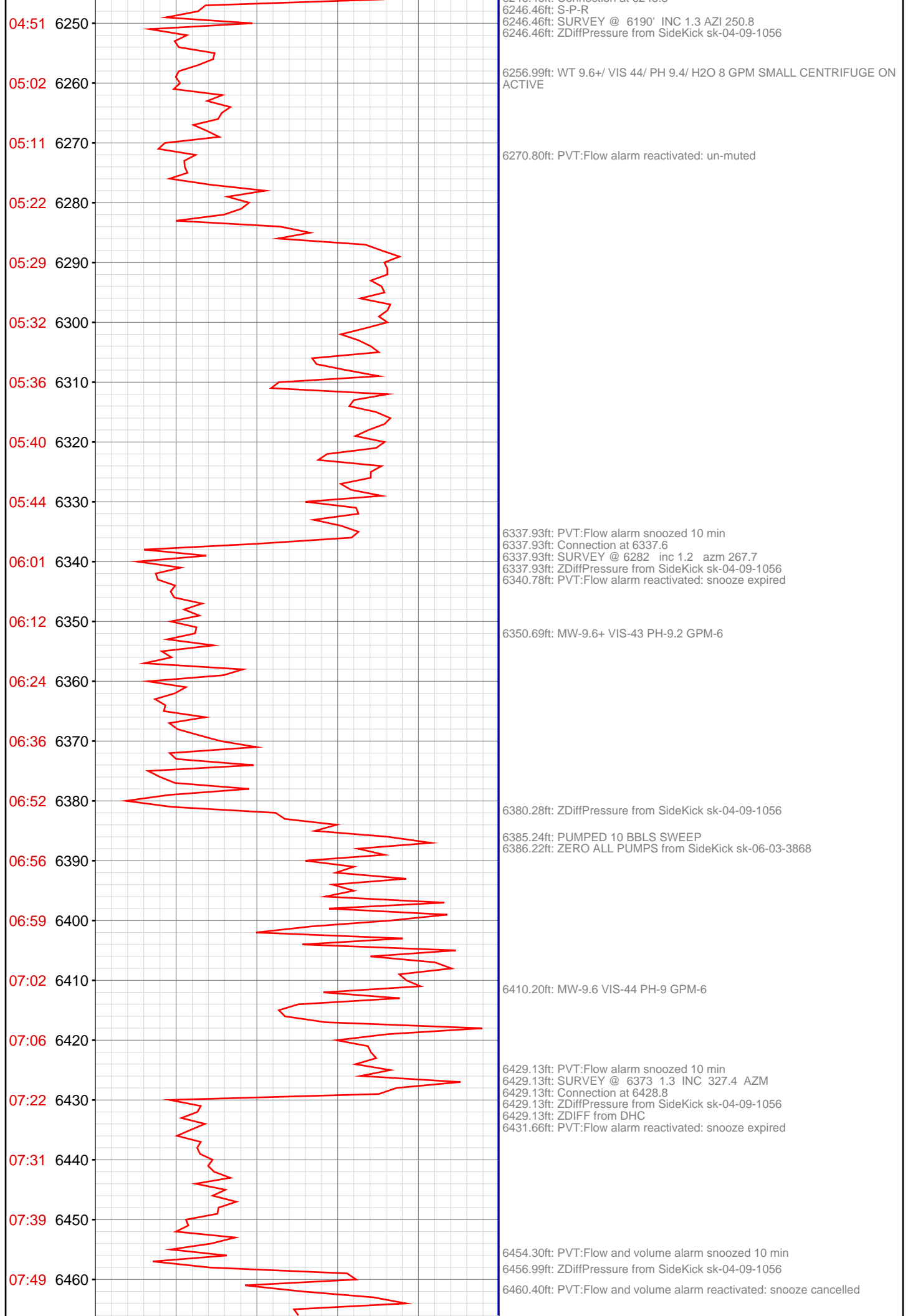
6084.68ft: ZDiffPressure from SideKick sk-04-09-1056

6106.86ft: WT 9.6/ VIS 44/ PH 9.3/ H2O 8 GPM

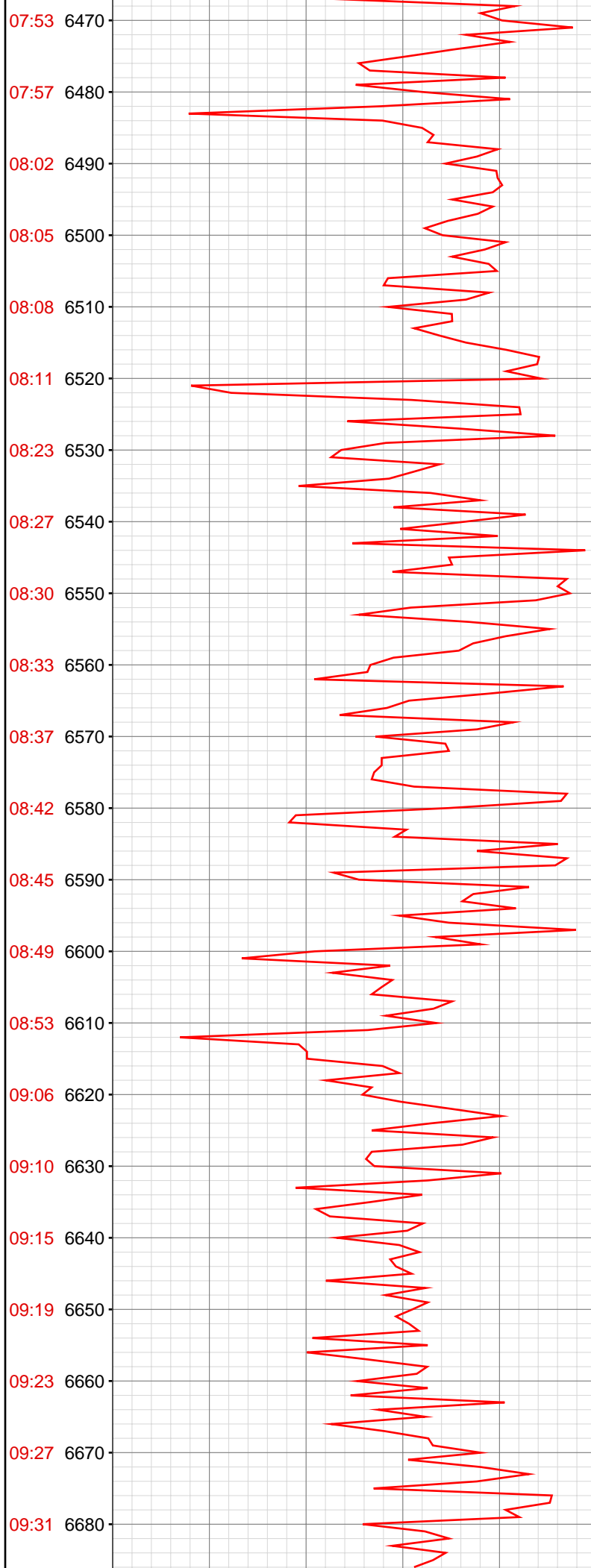
6155.12ft: ZWOB from SideKick sk-04-09-1056  
6155.12ft: Connection at 6154.0  
6155.12ft: PVT:Flow alarm muted  
6155.12ft: SURVEY @ 6098' INC 1.0 AZI 217.1  
6155.12ft: ZDiffPressure from SideKick sk-04-09-1056  
6156.27ft: PVT:Flow alarm reactivated: un-muted

6178.05ft: WT 9.6/ VIS 43/ PH 9.5/ H2O 8 GPM  
6178.05ft: ZDiffPressure from SideKick sk-04-09-1056

6246.46ft: PVT:Flow alarm muted  
6246.46ft: Connection at 6245.8







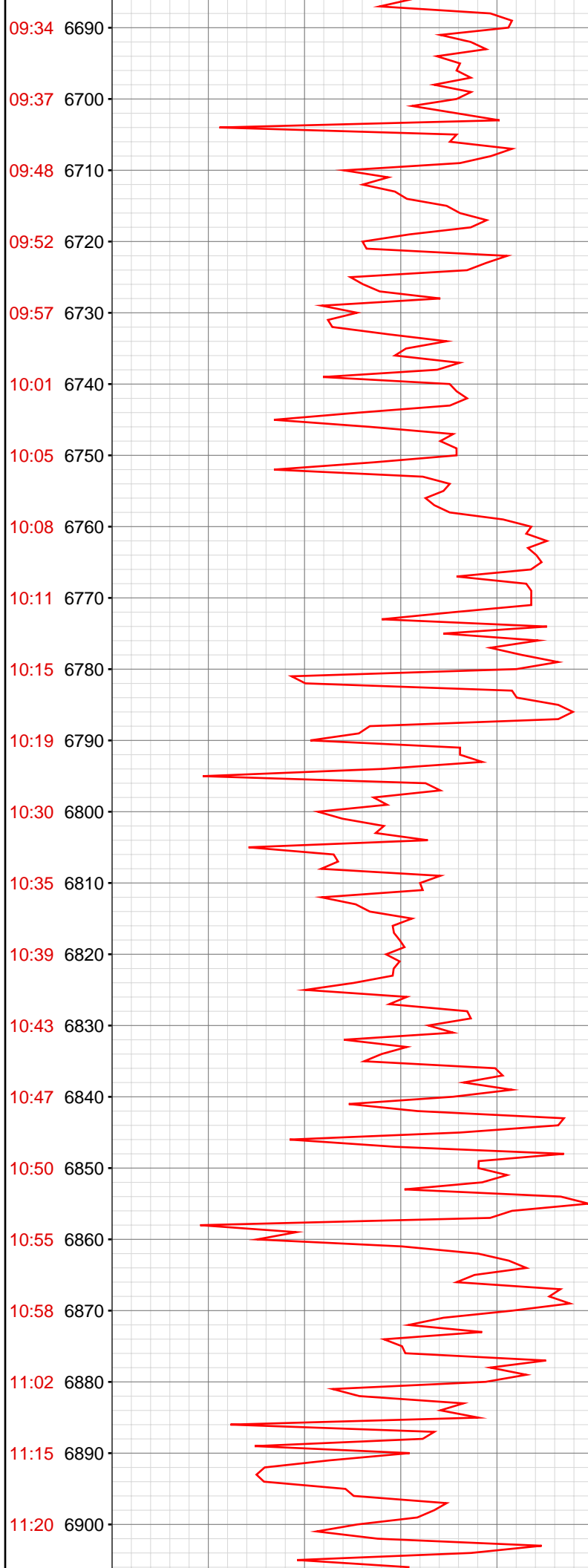
6482.68ft: ZDiffPressure from SideKick sk-04-09-1056

6520.64ft: PVT:Flow alarm snoozed 10 min  
6520.64ft: ZWOB from SideKick sk-04-09-1056  
6520.64ft: ZDiffPressure from SideKick sk-04-09-1056  
6521.13ft: SURVEY @ 6464 1.6 inc 7.1 azm  
6525.39ft: Connection at 6519.9

6529.00ft: PVT:Flow alarm reactivated: snooze cancelled

6611.78ft: PVT:Flow alarm snoozed 10 min  
6611.78ft: Connection at 6611.5  
6611.78ft: SURVEY @ 6556 1.0 inc 342.9 azm  
6611.78ft: ZDiffPressure from SideKick sk-04-09-1056  
6611.78ft: ZDiffPressure from SideKick sk-04-09-1056  
6611.78ft: ZWOB from SideKick sk-04-09-1056  
6612.73ft: MW-9.6+ VIS-45 PH-9.2 GPM-6

6632.28ft: PVT:Flow alarm reactivated: snooze expired



6703.05ft: Connection at 6703.0  
6703.05ft: PVT:Flow alarm snoozed 10 min  
6703.05ft: SURVEY @ 6647 1.1 inc 313.9 azm  
6703.05ft: ZDiffPressure from SideKick sk-04-09-1056  
6708.40ft: ZERO ALL PUMPS from SideKick sk-06-03-3868

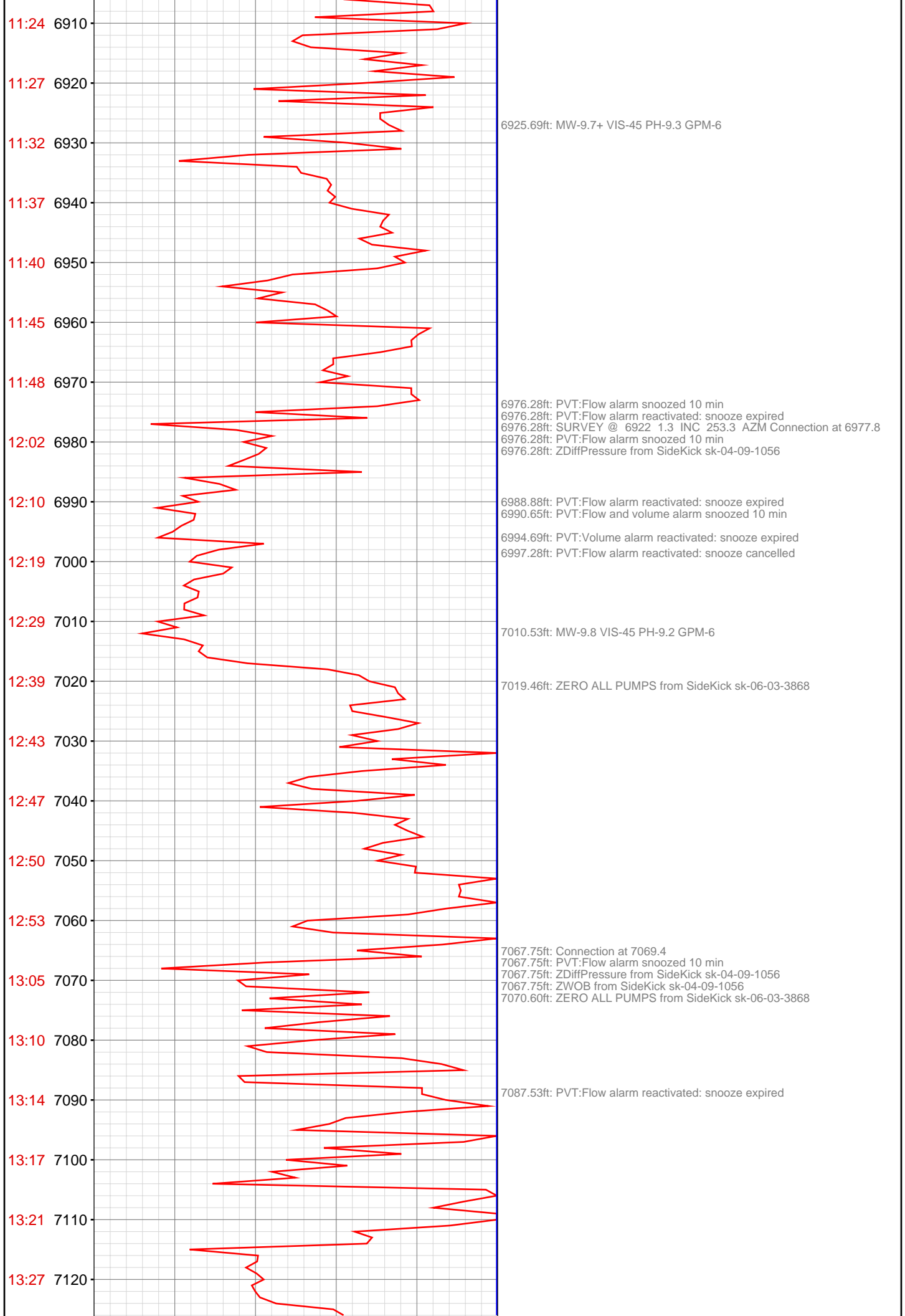
6716.31ft: PVT:Flow alarm reactivated: snooze expired

6777.23ft: Connection at 6794.5

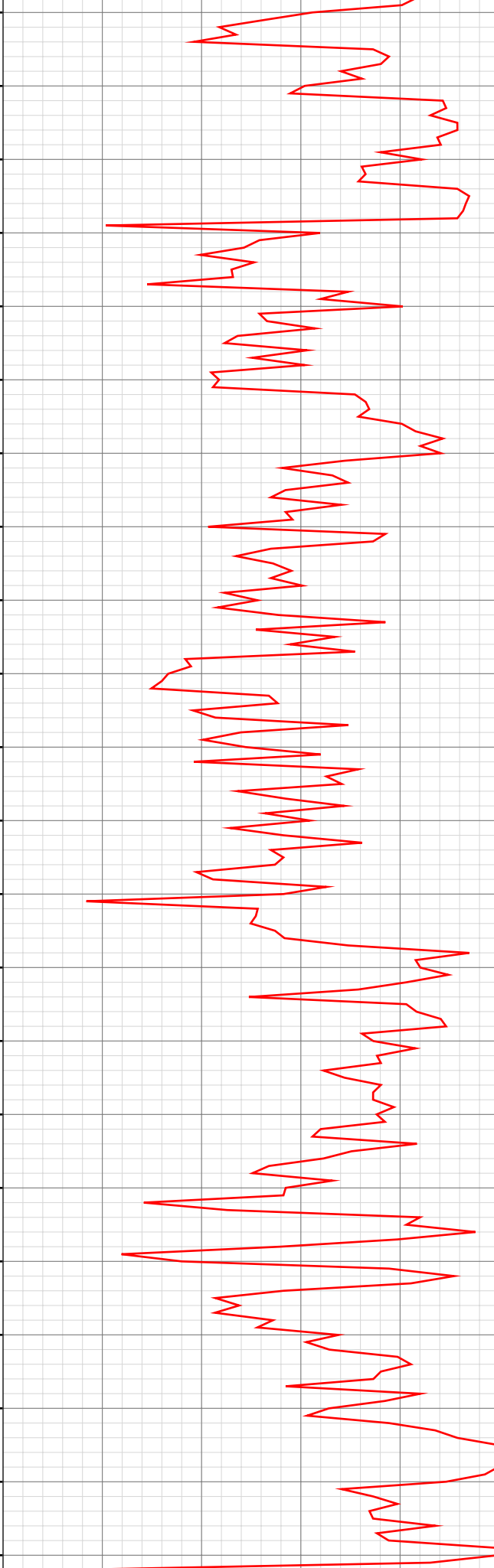
6793.41ft: MW-9.7 VIS-44 PH-9.3 GPM-6  
6794.19ft: PVT:Flow alarm snoozed 10 min  
6794.19ft: SURVEY @ 6739 1.1 inc 280.1 azm  
6794.19ft: ZWOB from SideKick sk-04-09-1056  
6794.19ft: ZDiffPressure from SideKick sk-04-09-1056

6805.09ft: PVT:Flow alarm reactivated: snooze expired

6885.33ft: PVT:Flow alarm snoozed 10 min  
6885.33ft: Connection at 6886.0  
6885.33ft: ZDiffPressure from SideKick sk-04-09-1056  
6885.33ft: ZWOB from SideKick sk-04-09-1056  
6891.99ft: PVT:Flow alarm reactivated: snooze cancelled  
6893.04ft: ZERO ALL PUMPS from SideKick sk-06-03-3868



13:31 7130  
13:36 7140  
13:38 7150  
13:47 7160  
13:52 7170  
13:58 7180  
14:01 7190  
14:05 7200  
14:09 7210  
14:14 7220  
14:20 7230  
14:24 7240  
14:28 7250  
14:43 7260  
14:46 7270  
14:49 7280  
14:53 7290  
14:58 7300  
15:02 7310  
15:05 7320  
15:08 7330  
15:11 7340



7135.24ft: MW-9.8 VIS-46 PH-9 GPM-6

7158.73ft: Connection at 7160.8  
7158.73ft: PVT:Flow alarm snoozed 10 min  
7158.73ft: ZDiffPressure from SideKick sk-04-09-1056  
7158.73ft: ZWOB from SideKick sk-04-09-1056  
7158.73ft: PVT:Flow alarm reactivated: snooze cancelled  
7162.07ft: SURVEY @ 7105 inc 0.4 azm 245.9  
7166.40ft: ZERO ALL PUMPS from SideKick sk-06-03-3868  
7167.32ft: PUMPED 10 BBLS SWEEP

7248.26ft: PVT:Flow alarm snoozed 10 min  
7250.20ft: PVT:Flow alarm reactivated: snooze expired  
7250.20ft: Connection at 7252.3  
7250.20ft: PVT:Flow and volume alarm snoozed 10 min  
7250.20ft: ZDiffPressure from SideKick sk-04-09-1056  
7250.20ft: ZWOB from SideKick sk-04-09-1056  
7250.20ft: PVT:Flow and volume alarm reactivated: snooze cancelled  
7251.58ft: SURVEY @ 7197 .2 inc 247.7 azm

7284.15ft: MW-9.9 VIS-45 PH-9 GPM-6

7291.14ft: SMALL CENTUFIGE ON ACTIVE

7341.63ft: PVT:Flow alarm snoozed 10 min  
7341.63ft: SURVEY @ 7288 inc 0.0 azm 68.3  
7341.63ft: ZDiffPressure from SideKick sk-04-09-1056  
7341.63ft: Connection at 7343.4

