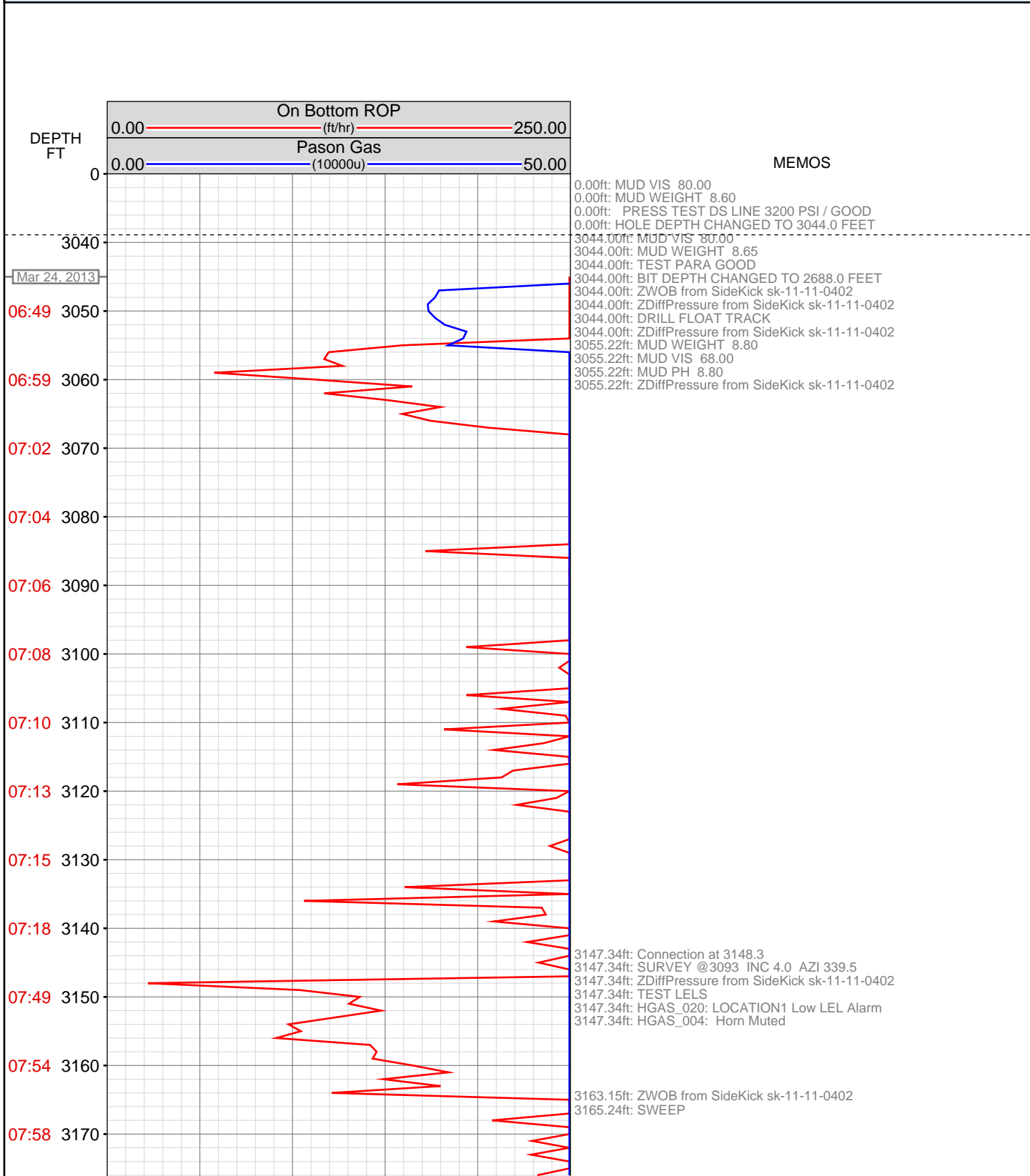


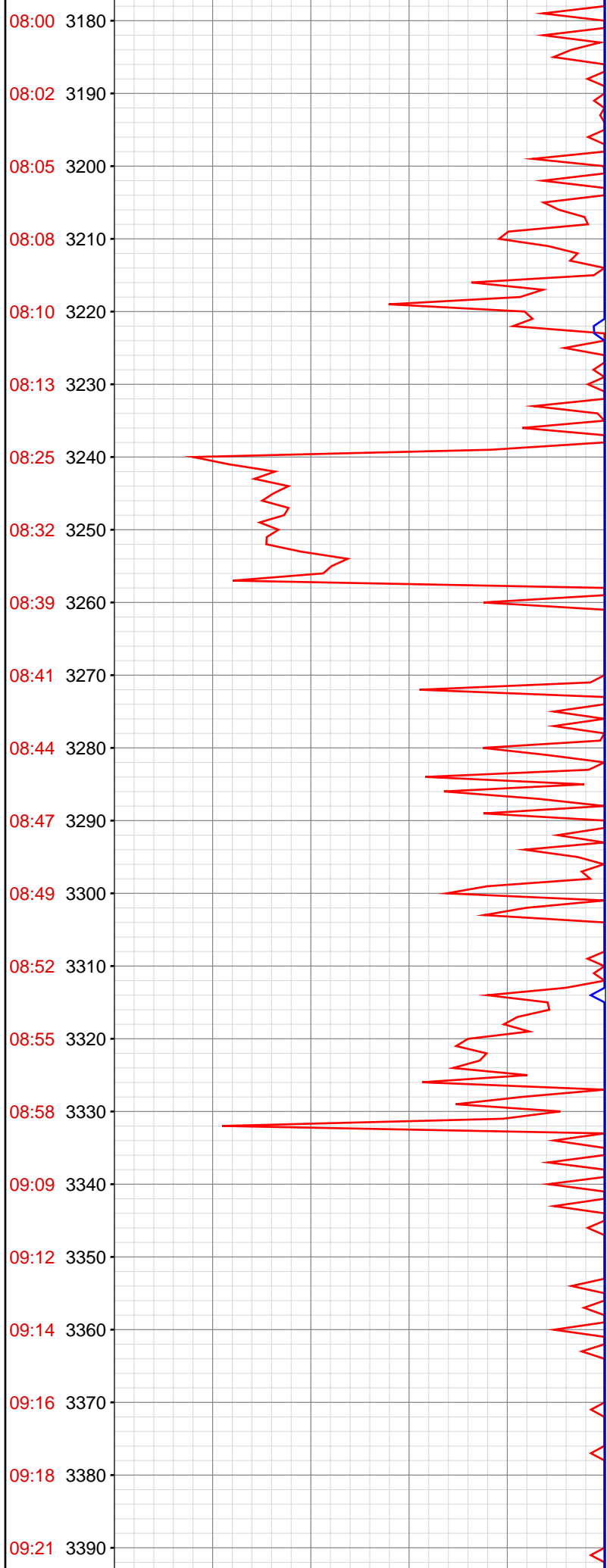
# DataHub EDR Log

Mon Apr 29, 2013 14:26:32  
Well Dossier 1364086962  
Greg Veregin

**OPERATOR:** EnCana Oil & Gas (USA), Inc.  
**WELL:** SG 8512B-24 L24 496  
**FIELD:**  
**LOCATION:** SEC 24 TWP 4S RNG 96W  
**COUNTRY:** USA  
**RIG:** Pat-UTI 330

**CONTRACTOR:** Patterson-UTI Drilling Company  
**UNIQUE WELL ID:** 0504521176  
**SPUD DATE:** Mar 24, 2013 07:00  
**RELEASE DATE:** Apr 01, 2013 00:00



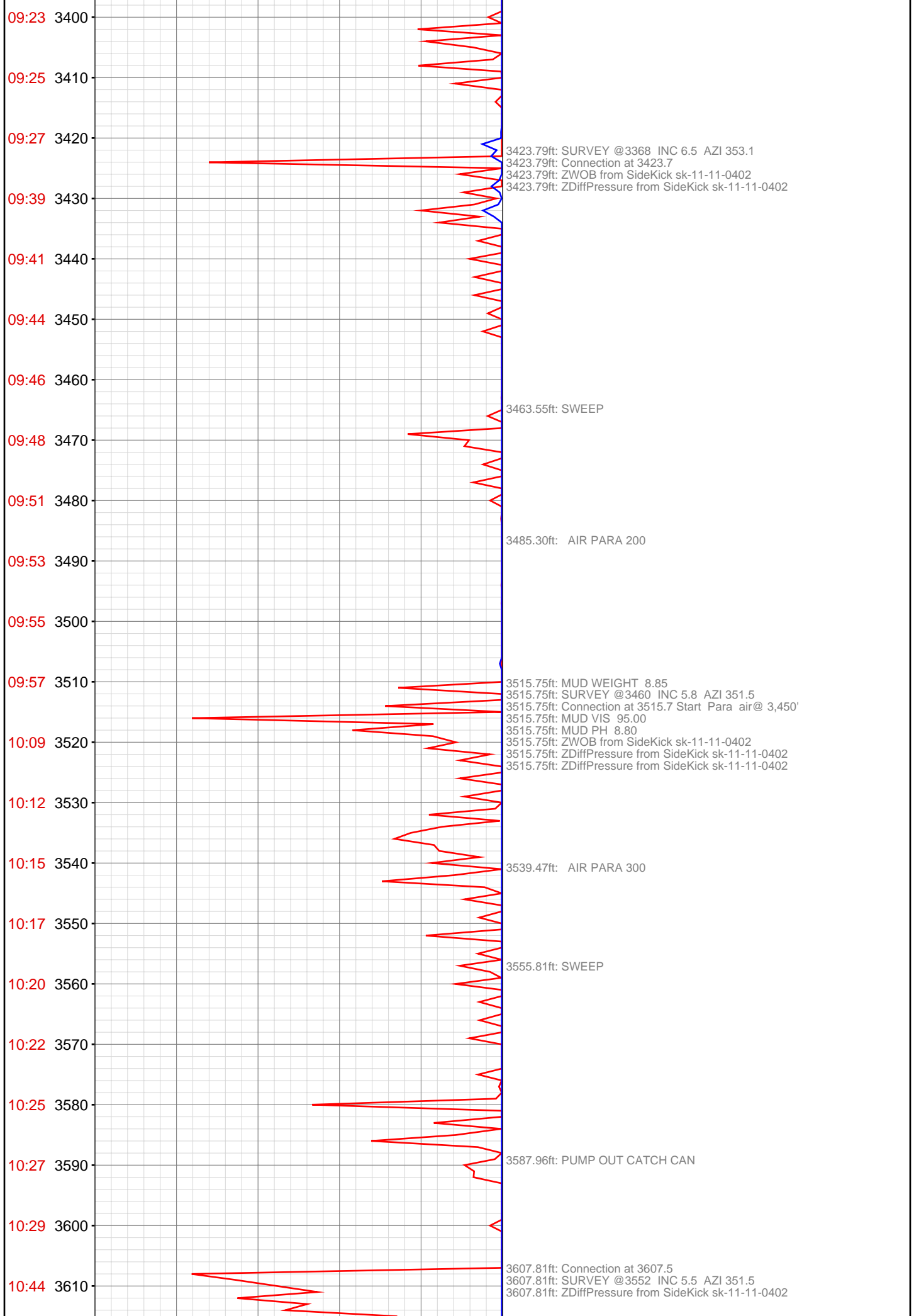


3201.00ft: MUD WEIGHT 8.75  
3202.54ft: MUD VIS 62.00  
3203.13ft: MUD PH 8.80

3239.53ft: SURVEY @3185 INC 4.6 AZI 350.2  
3239.53ft: Connection at 3240.1  
3239.53ft: ZDiffPressure from SideKick sk-11-11-0402

3256.99ft: ZWOB from SideKick sk-11-11-0402  
3257.14ft: SWEEP

3331.59ft: MUD VIS 85.00  
3331.59ft: SURVEY @3276 INC 6.5 AZI 349.7  
3331.59ft: MUD WEIGHT 8.95  
3331.59ft: Connection at 3331.9  
3331.59ft: ZWOB from SideKick sk-11-11-0402  
3331.59ft: ZDiffPressure from SideKick sk-11-11-0402  
3333.01ft: SWEEP



09:23 3400

09:25 3410

09:27 3420

09:39 3430

09:41 3440

09:44 3450

09:46 3460

09:48 3470

09:51 3480

09:53 3490

09:55 3500

09:57 3510

10:09 3520

10:12 3530

10:15 3540

10:17 3550

10:20 3560

10:22 3570

10:25 3580

10:27 3590

10:29 3600

10:44 3610

3423.79ft: SURVEY @3368 INC 6.5 AZI 353.1  
3423.79ft: Connection at 3423.7  
3423.79ft: ZWOB from SideKick sk-11-11-0402  
3423.79ft: ZDiffPressure from SideKick sk-11-11-0402

3463.55ft: SWEEP

3485.30ft: AIR PARA 200

3515.75ft: MUD WEIGHT 8.85  
3515.75ft: SURVEY @3460 INC 5.8 AZI 351.5  
3515.75ft: Connection at 3515.7 Start Para air@ 3,450'  
3515.75ft: MUD VIS 95.00  
3515.75ft: MUD PH 8.80  
3515.75ft: ZWOB from SideKick sk-11-11-0402  
3515.75ft: ZDiffPressure from SideKick sk-11-11-0402  
3515.75ft: ZDiffPressure from SideKick sk-11-11-0402

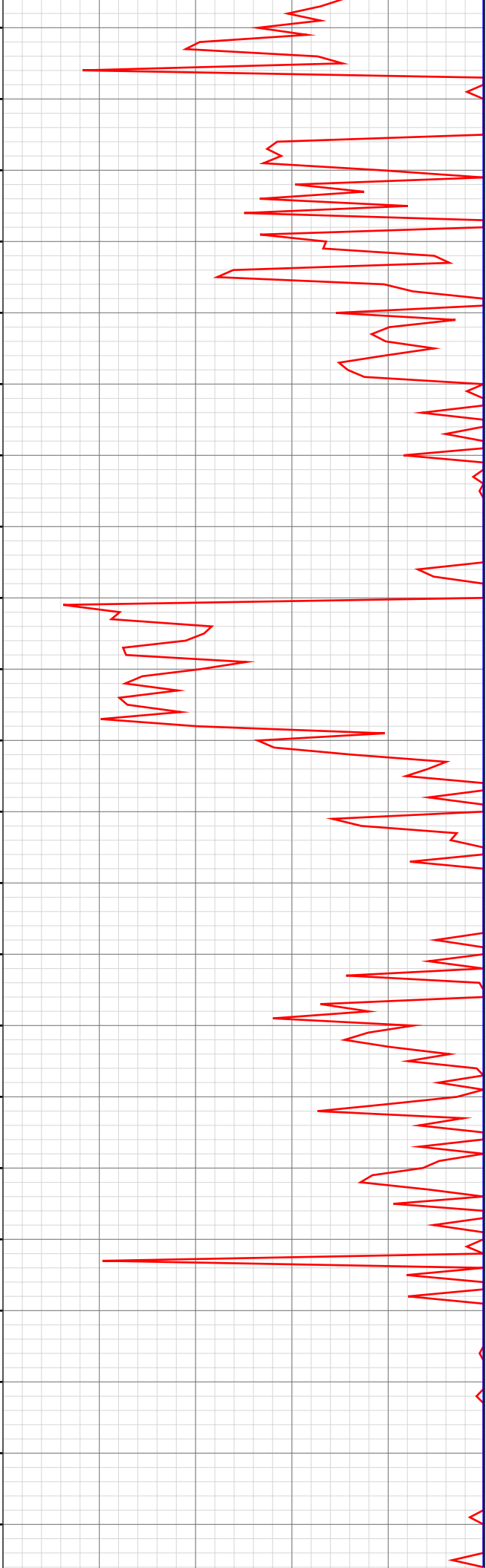
3539.47ft: AIR PARA 300

3555.81ft: SWEEP

3587.96ft: PUMP OUT CATCH CAN

3607.81ft: Connection at 3607.5  
3607.81ft: SURVEY @3552 INC 5.5 AZI 351.5  
3607.81ft: ZDiffPressure from SideKick sk-11-11-0402

10:48 3620  
10:54 3630  
10:57 3640  
11:00 3650  
11:03 3660  
11:06 3670  
11:09 3680  
11:11 3690  
11:13 3700  
11:30 3710  
11:39 3720  
11:42 3730  
11:44 3740  
11:46 3750  
11:49 3760  
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11:57 3790  
12:09 3800  
12:11 3810  
12:13 3820  
12:15 3830



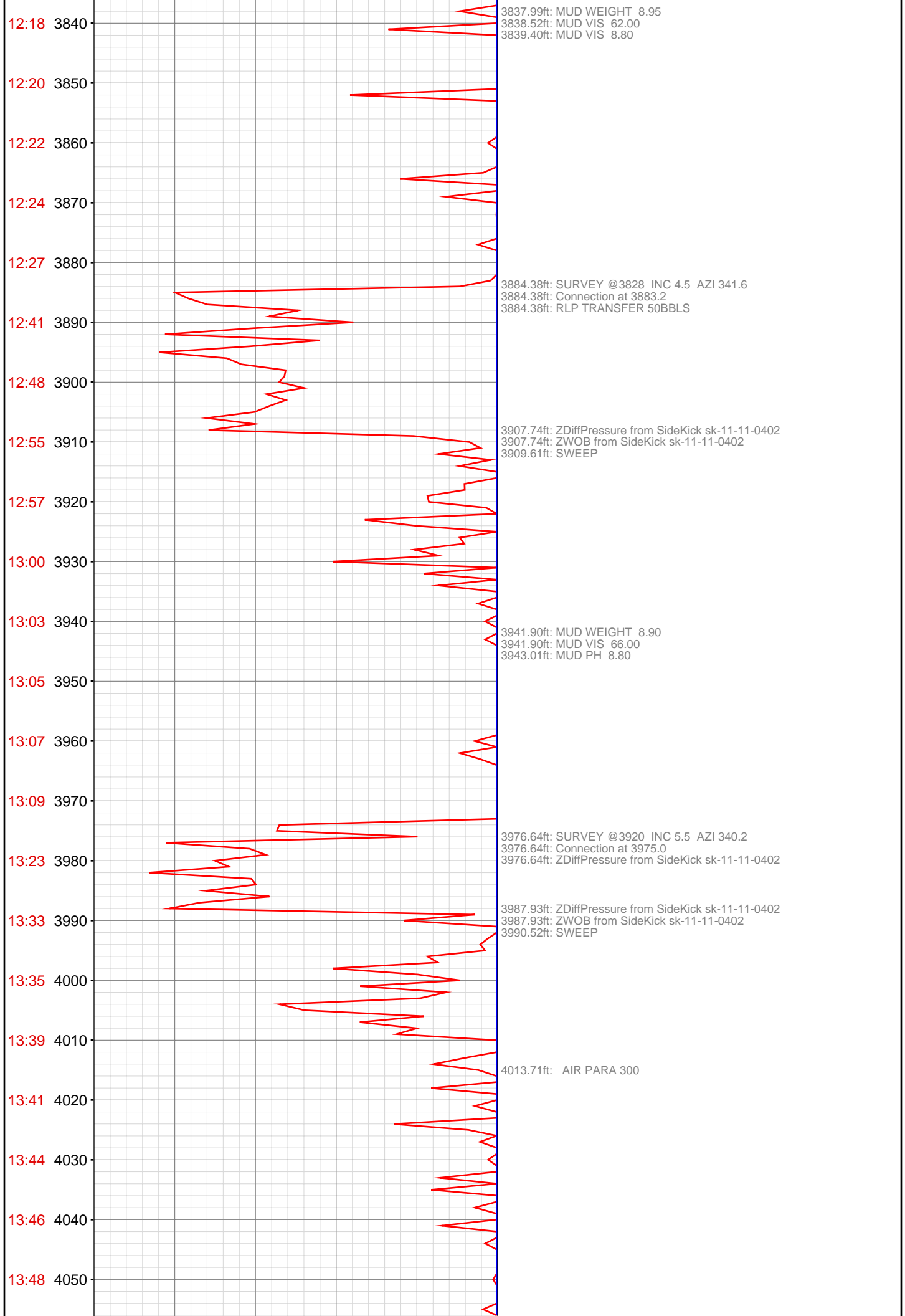
3625.26ft: ZDiffPressure from SideKick sk-11-11-0402  
3625.26ft: ZWOB from SideKick sk-11-11-0402  
3625.26ft: RLP TRANSFER 20 BBLs SWEEP

3664.50ft: MUD WEIGHT 8.95  
3665.62ft: MUD VIS 65.00  
3666.21ft: MUD PH 8.80

3700.07ft: SURVEY @3644 INC 5.1 AZI 343.6  
3700.07ft: Connection at 3699.4  
3700.07ft: ZDiffPressure from SideKick sk-11-11-0402

3716.93ft: ZWOB from SideKick sk-11-11-0402  
3716.93ft: SWEEP

3792.32ft: AIR PARA 300  
3792.32ft: SURVEY @3736 INC 5.8 AZI 341.9  
3792.32ft: Connection at 3791.3  
3792.32ft: ZWOB from SideKick sk-11-11-0402  
3792.32ft: ZDiffPressure from SideKick sk-11-11-0402



13:50 4060  
14:06 4070  
14:15 4080  
14:22 4090  
14:28 4100  
14:31 4110  
14:34 4120  
14:37 4130  
14:39 4140  
14:42 4150  
14:44 4160  
15:06 4170  
15:14 4180  
15:21 4190  
15:23 4200  
15:26 4210  
15:28 4220  
15:31 4230  
15:34 4240  
15:36 4250  
15:48 4260  
15:50 4270



4068.70ft: MUD WEIGHT 8.90  
4068.70ft: MUD VIS 62.00  
4068.70ft: MUD PH 8.80  
4068.70ft: SURVEY @4011 INC 5.1 AZI 323.0  
4068.70ft: Connection at 4066.8  
4068.70ft: ZDiffPressure from SideKick sk-11-11-0402

4096.00ft: ZDiffPressure from SideKick sk-11-11-0402  
4096.00ft: ZWOB from SideKick sk-11-11-0402  
4097.64ft: SWEEP

4160.89ft: Connection at 4158.8 SURVEY @4103 INC 7.2 AZI 333.5  
4160.89ft: ZDiffPressure from SideKick sk-11-11-0402  
4162.01ft: MUD WEIGHT 8.95  
4162.11ft: MUD VIS 66.00  
4162.30ft: MUD PH 8.90

4184.02ft: ZDiffPressure from SideKick sk-11-11-0402  
4184.02ft: ZWOB from SideKick sk-11-11-0402  
4184.02ft: SWEEP

4253.02ft: SURVEY @4195 INC 7.1 AZI 349.6  
4253.02ft: Connection at 4250.8  
4253.02ft: ZWOB from SideKick sk-11-11-0402  
4253.02ft: ZDiffPressure from SideKick sk-11-11-0402  
4254.82ft: AIR PARA 300

15:53 4280  
15:56 4290  
15:58 4300  
16:00 4310  
16:03 4320  
16:06 4330  
16:09 4340  
16:30 4350  
16:40 4360  
16:47 4370  
16:50 4380  
16:53 4390  
16:55 4400  
16:57 4410  
17:00 4420  
17:03 4430  
17:14 4440  
17:16 4450  
17:18 4460  
17:20 4470  
17:23 4480  
17:26 4490

4294.65ft: MUD WEIGHT 8.90  
4295.37ft: MUD VIS 66.00  
4296.06ft: MUD PH 8.90

4345.21ft: SURVEY @4287 INC 6.4 AZI 346.3  
4345.21ft: Connection at 4342.7  
4346.72ft: IN TALLY: HOLE DEPTH SET TO 4342.7

4362.70ft: ZWOB from SideKick sk-11-11-0402  
4362.70ft: ZDiffPressure from SideKick sk-11-11-0402  
4366.11ft: SWEEP

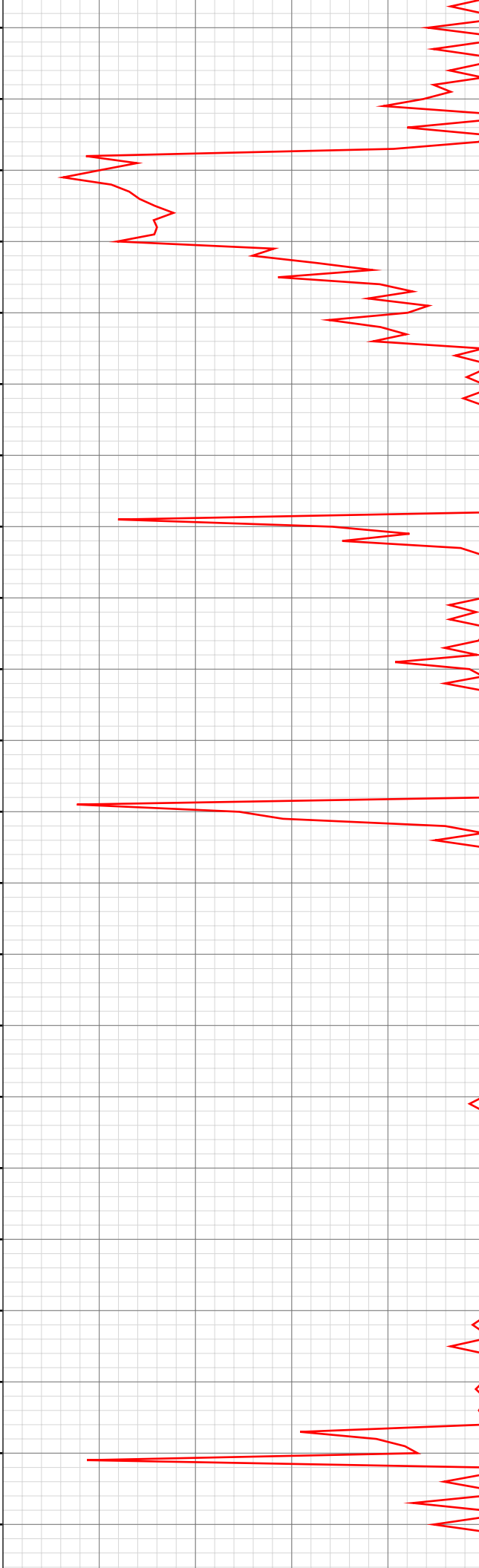
4373.43ft: AIR PARA 400

4400.00ft: MUD WEIGHT 8.90  
4400.66ft: MUD VIS 67.00  
4400.98ft: MUD PH 8.80

4433.10ft: SURVEY @4378 INC 7.1 AZI 0.8  
4433.10ft: Connection at 4425.5  
4433.10ft: ZWOB from SideKick sk-11-11-0402  
4433.10ft: ZDiffPressure from SideKick sk-11-11-0402



17:28 4500  
17:30 4510  
18:20 4520  
18:33 4530  
18:37 4540  
18:39 4550  
18:41 4560  
18:44 4570  
18:47 4580  
18:49 4590  
18:51 4600  
19:10 4610  
19:12 4620  
19:14 4630  
19:16 4640  
19:18 4650  
19:20 4660  
19:22 4670  
19:24 4680  
19:27 4690  
19:29 4700  
19:44 4710



4525.00ft: RIG SERVICE  
4525.00ft: SURVEY @4470 INC 6.6 AZI 0.2  
4525.00ft: ZDiffPressure from SideKick sk-11-11-0402  
4525.00ft: Connection at 4517.4  
4526.28ft: IN TALLY: HOLE DEPTH SET TO 4517.4  
4529.59ft: SWEEP  
4529.59ft: ZWOB from SideKick sk-11-11-0402  
4529.59ft: ZDiffPressure from SideKick sk-11-11-0402

4548.10ft: TEST LEL PARA CFM 500  
4549.51ft: HGAS\_021: LOCATION1 High LEL Alarm  
4550.16ft: HGAS\_004: Horn Muted  
4554.99ft: HGAS\_023: LOCATION2 Low LEL Alarm  
4555.54ft: HGAS\_024: LOCATION2 High LEL Alarm  
4556.00ft: HGAS\_004: Horn Muted

4595.01ft: MUD VIS 68.00  
4595.74ft: MUD WEIGHT 8.90  
4596.00ft: MUD PH 8.70

4608.04ft: SURVEY 4562 6.3 INC 351 AZI  
4608.04ft: ZWOB from SideKick sk-11-11-0402  
4608.04ft: ZDiffPressure from SideKick sk-11-11-0402  
4608.04ft: Connection at 4609.3

4617.09ft: SWEEP

4700.26ft: Connection at 4701.2  
4700.26ft: ZWOB from SideKick sk-11-11-0402  
4700.26ft: ZDiffPressure from SideKick sk-11-11-0402

19:46 4720  
19:48 4730  
19:50 4740  
19:52 4750  
19:57 4760  
20:00 4770  
20:02 4780  
20:05 4790  
20:44 4800  
20:51 4810  
21:00 4820  
21:03 4830  
21:06 4840  
21:08 4850  
21:10 4860  
21:12 4870  
21:14 4880  
21:35 4890  
21:37 4900  
21:41 4910  
21:43 4920  
21:46 4930

4736.19ft: SWEEP

4792.36ft: WAIT ON 326 SURVEY  
4792.36ft: MUD VIS 66.00  
4792.36ft: MUD WEIGHT 8.90  
4792.36ft: SURVEY 4746 4.6 INC 346.7 AZI  
4792.36ft: Connection at 4793.0  
4792.36ft: ZDiffPressure from SideKick sk-11-11-0402  
4793.41ft: TRANSFERRED 40.00

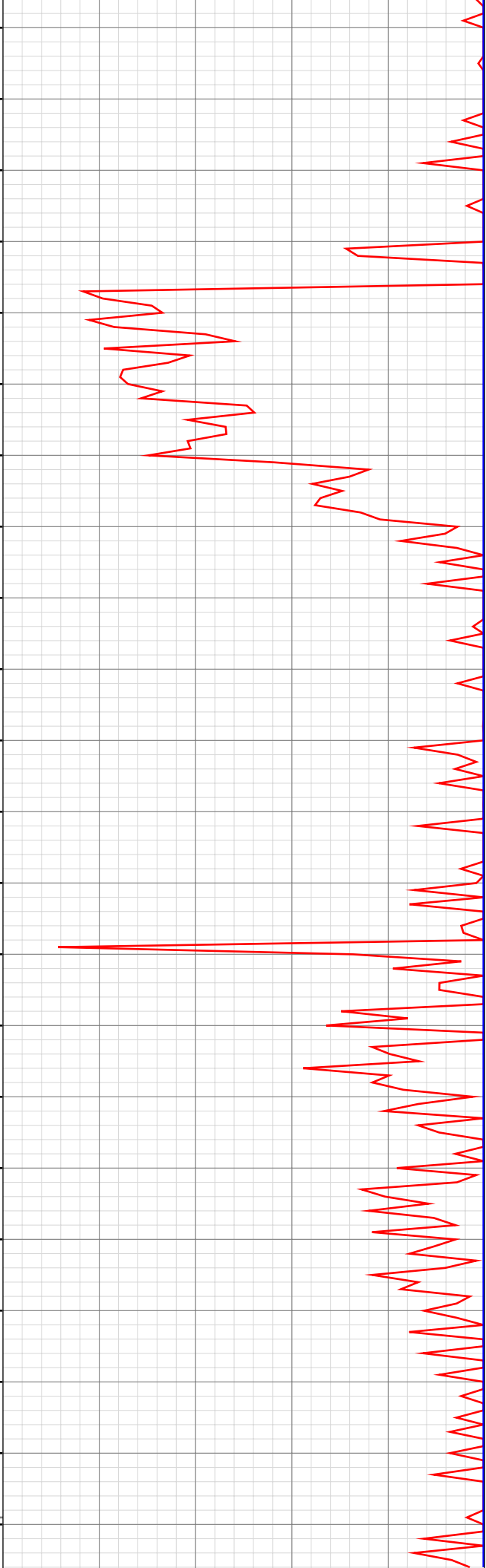
4811.48ft: ZWOB from SideKick sk-11-11-0402

4821.33ft: SWEEP

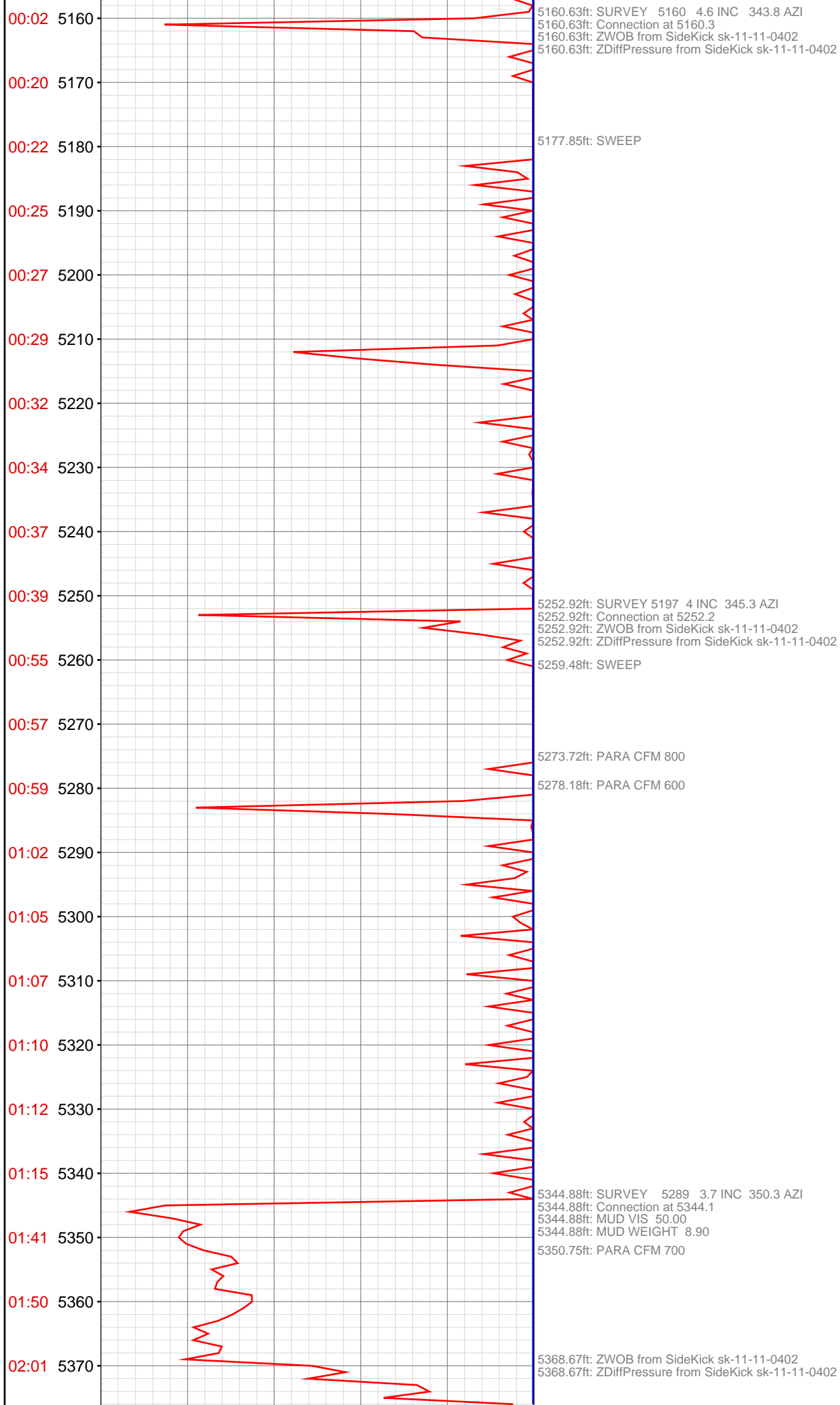
4884.35ft: WAIT ON 326 SURVEY  
4884.35ft: PARA CFM 500 SURVEY 4837 6.3 INC 349.2 AZI  
4884.35ft: MUD VIS 64.00  
4884.35ft: MUD WEIGHT 8.90  
4884.35ft: Connection at 4884.8  
4884.35ft: ZWOB from SideKick sk-11-11-0402  
4884.35ft: ZDiffPressure from SideKick sk-11-11-0402

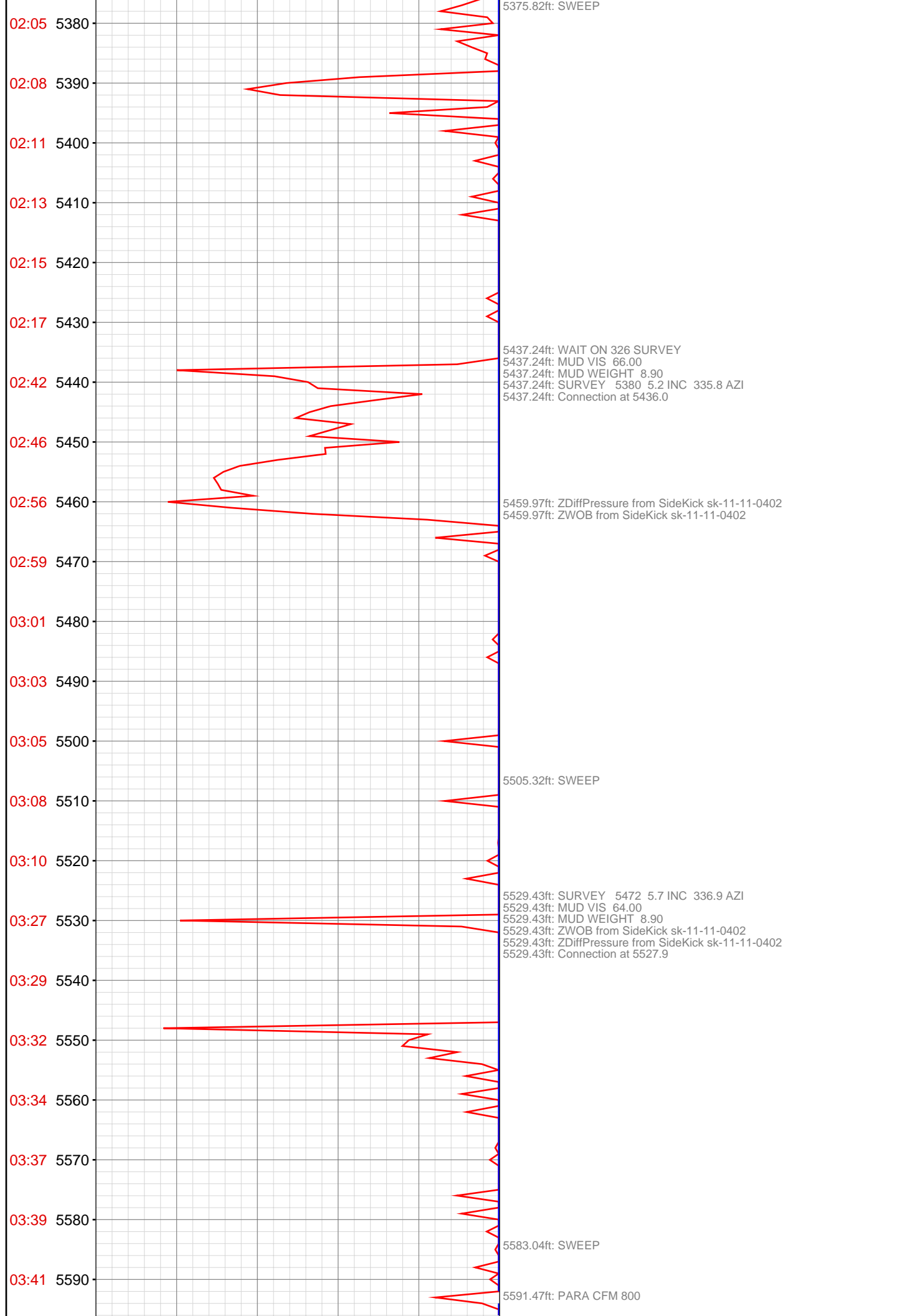


21:48 4940  
21:50 4950  
21:53 4960  
21:55 4970  
22:16 4980  
22:24 4990  
22:31 5000  
22:35 5010  
22:37 5020  
22:40 5030  
22:42 5040  
22:44 5050  
22:46 5060  
23:39 5070  
23:42 5080  
23:45 5090  
23:47 5100  
23:50 5110  
23:53 5120  
23:55 5130  
23:58 5140  
00:00 5150



4976.61ft: Connection at 4976.6  
4989.07ft: MUD VIS 62.00  
4989.30ft: MUD WEIGHT 8.90  
4993.18ft: TRANSFERRED 200.00  
4999.44ft: ZWOB from SideKick sk-11-11-0402  
4999.44ft: ZDiffPressure from SideKick sk-11-11-0402  
5043.60ft: PARA CFM 500  
5068.73ft: SURVEY 5021 5.1 INC 340.7 AZI  
5068.73ft: Connection at 5068.6  
5068.73ft: SWEEP  
5068.73ft: ZWOB from SideKick sk-11-11-0402  
5068.73ft: ZDiffPressure from SideKick sk-11-11-0402





02:05 5380

02:08 5390

02:11 5400

02:13 5410

02:15 5420

02:17 5430

02:42 5440

02:46 5450

02:56 5460

02:59 5470

03:01 5480

03:03 5490

03:05 5500

03:08 5510

03:10 5520

03:27 5530

03:29 5540

03:32 5550

03:34 5560

03:37 5570

03:39 5580

03:41 5590

5375.82ft: SWEEP

5437.24ft: WAIT ON 326 SURVEY  
5437.24ft: MUD VIS 66.00  
5437.24ft: MUD WEIGHT 8.90  
5437.24ft: SURVEY 5380 5.2 INC 335.8 AZI  
5437.24ft: Connection at 5436.0

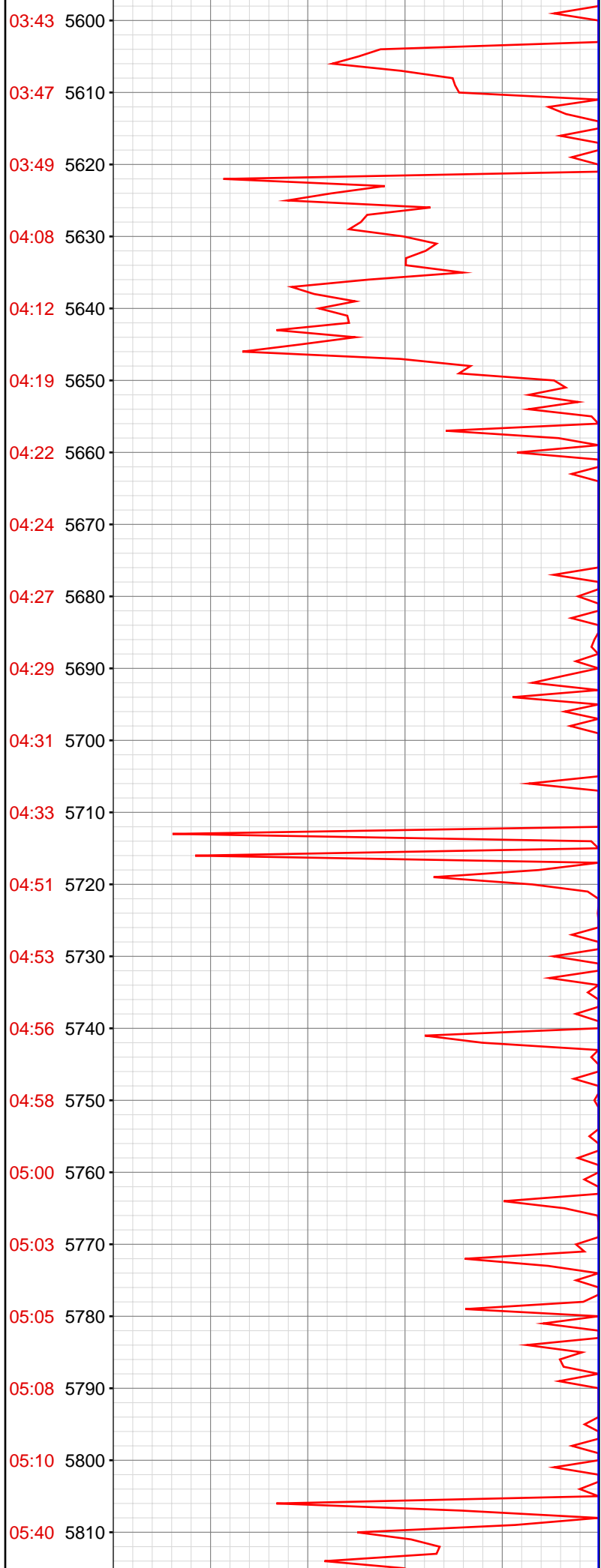
5459.97ft: ZDiffPressure from SideKick sk-11-11-0402  
5459.97ft: ZWOB from SideKick sk-11-11-0402

5505.32ft: SWEEP

5529.43ft: SURVEY 5472 5.7 INC 336.9 AZI  
5529.43ft: MUD VIS 64.00  
5529.43ft: MUD WEIGHT 8.90  
5529.43ft: ZWOB from SideKick sk-11-11-0402  
5529.43ft: ZDiffPressure from SideKick sk-11-11-0402  
5529.43ft: Connection at 5527.9

5583.04ft: SWEEP

5591.47ft: PARA CFM 800



5621.52ft: SURVEY 5564 5.1 INC 337.5 AZI  
5621.52ft: ZDiffPressure from SideKick sk-11-11-0402  
5621.52ft: Connection at 5619.7  
5621.52ft: MUD VIS 60.00  
5621.52ft: MUD WEIGHT 8.90

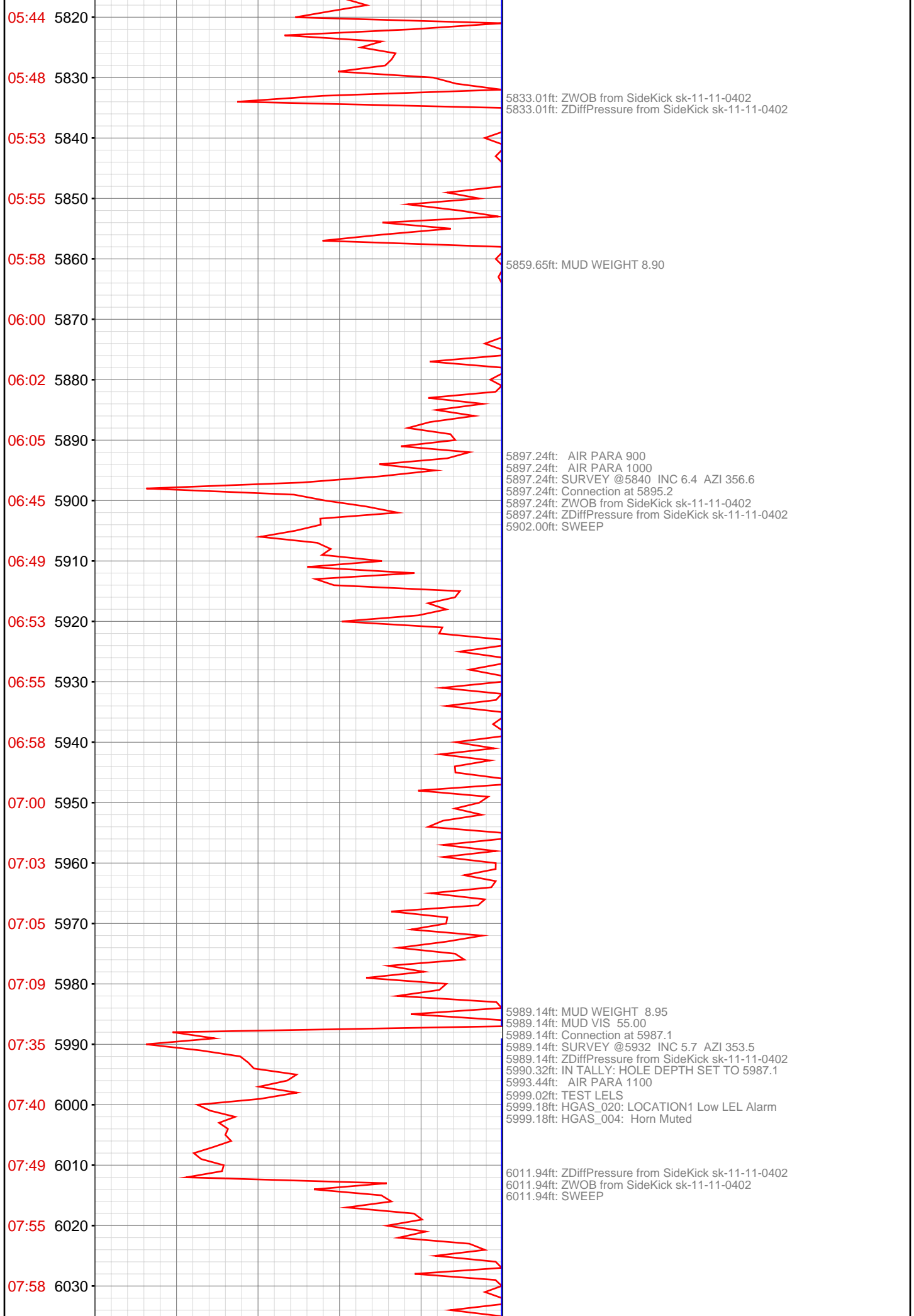
5645.93ft: ZDiffPressure from SideKick sk-11-11-0402  
5645.93ft: ZDiffPressure from SideKick sk-11-11-0402  
5645.93ft: ZWOB from SideKick sk-11-11-0402

5662.93ft: SWEEP

5712.99ft: SURVEY 5656 6.3 INC 346.5 AZI  
5712.99ft: Connection at 5711.6  
5712.99ft: ZDiffPressure from SideKick sk-11-11-0402  
5712.99ft: ZWOB from SideKick sk-11-11-0402

5777.99ft: SWEEP

5805.12ft: TRANSFERRED 40.00  
5805.12ft: WAIT ON 326 TO SURVEY  
5805.12ft: PARA CFM 800  
5805.12ft: SURVEY 5748 5.4 INC 344.5 AZI  
5805.12ft: Connection at 5803.4  
5809.51ft: MUD VIS 58.00  
5809.51ft: MUD WEIGHT 9.80  
5810.11ft: MUD WEIGHT 8.90



05:44 5820

05:48 5830

05:53 5840

05:55 5850

05:58 5860

06:00 5870

06:02 5880

06:05 5890

06:45 5900

06:49 5910

06:53 5920

06:55 5930

06:58 5940

07:00 5950

07:03 5960

07:05 5970

07:09 5980

07:35 5990

07:40 6000

07:49 6010

07:55 6020

07:58 6030

5833.01ft: ZWOB from SideKick sk-11-11-0402  
5833.01ft: ZDiffPressure from SideKick sk-11-11-0402

5859.65ft: MUD WEIGHT 8.90

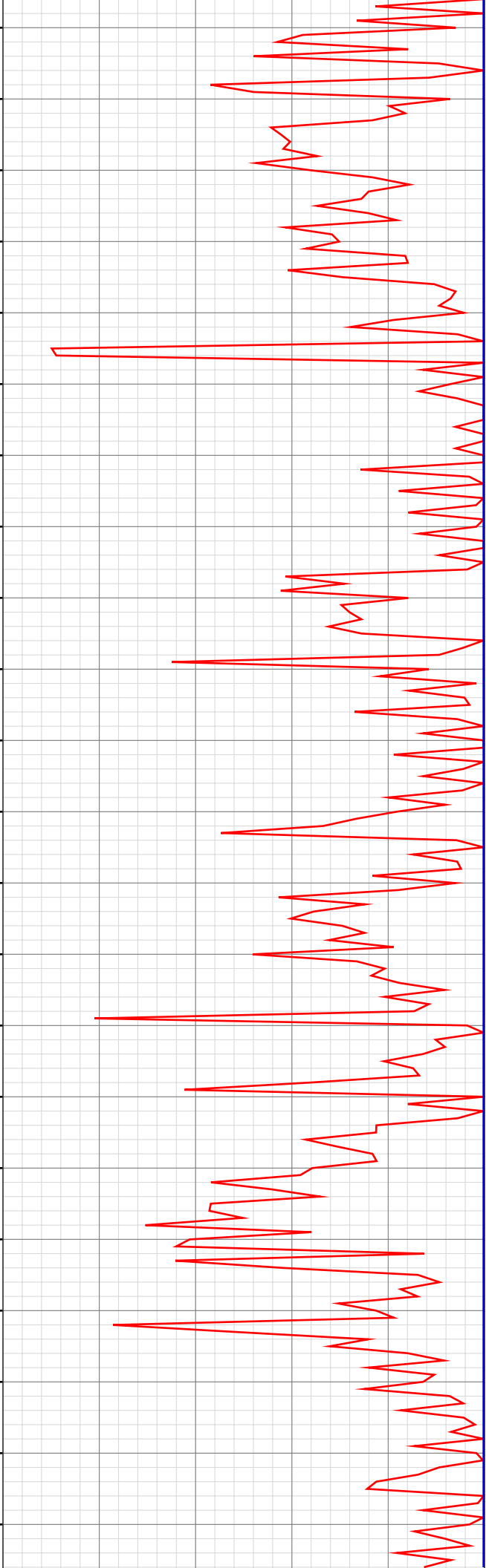
5897.24ft: AIR PARA 900  
5897.24ft: AIR PARA 1000  
5897.24ft: SURVEY @5840 INC 6.4 AZI 356.6  
5897.24ft: Connection at 5895.2  
5897.24ft: ZWOB from SideKick sk-11-11-0402  
5897.24ft: ZDiffPressure from SideKick sk-11-11-0402  
5902.00ft: SWEEP

5989.14ft: MUD WEIGHT 8.95  
5989.14ft: MUD VIS 55.00  
5989.14ft: Connection at 5987.1  
5989.14ft: SURVEY @5932 INC 5.7 AZI 353.5  
5989.14ft: ZDiffPressure from SideKick sk-11-11-0402  
5990.32ft: IN TALLY: HOLE DEPTH SET TO 5987.1  
5993.44ft: AIR PARA 1100  
5999.02ft: TEST LELS  
5999.18ft: HGAS\_020: LOCATION1 Low LEL Alarm  
5999.18ft: HGAS\_004: Horn Muted

6011.94ft: ZDiffPressure from SideKick sk-11-11-0402  
6011.94ft: ZWOB from SideKick sk-11-11-0402  
6011.94ft: SWEEP

6025.44ft: AIR PARA 1000

08:00 6040  
08:03 6050  
08:07 6060  
08:10 6070  
08:14 6080  
08:42 6090  
08:44 6100  
08:47 6110  
08:50 6120  
08:53 6130  
08:56 6140  
08:58 6150  
09:01 6160  
09:05 6170  
09:20 6180  
09:23 6190  
09:26 6200  
09:31 6210  
09:35 6220  
09:39 6230  
09:42 6240  
09:44 6250



6072.57ft: MUD WEIGHT 8.95  
6073.10ft: MUD VIS 54.00

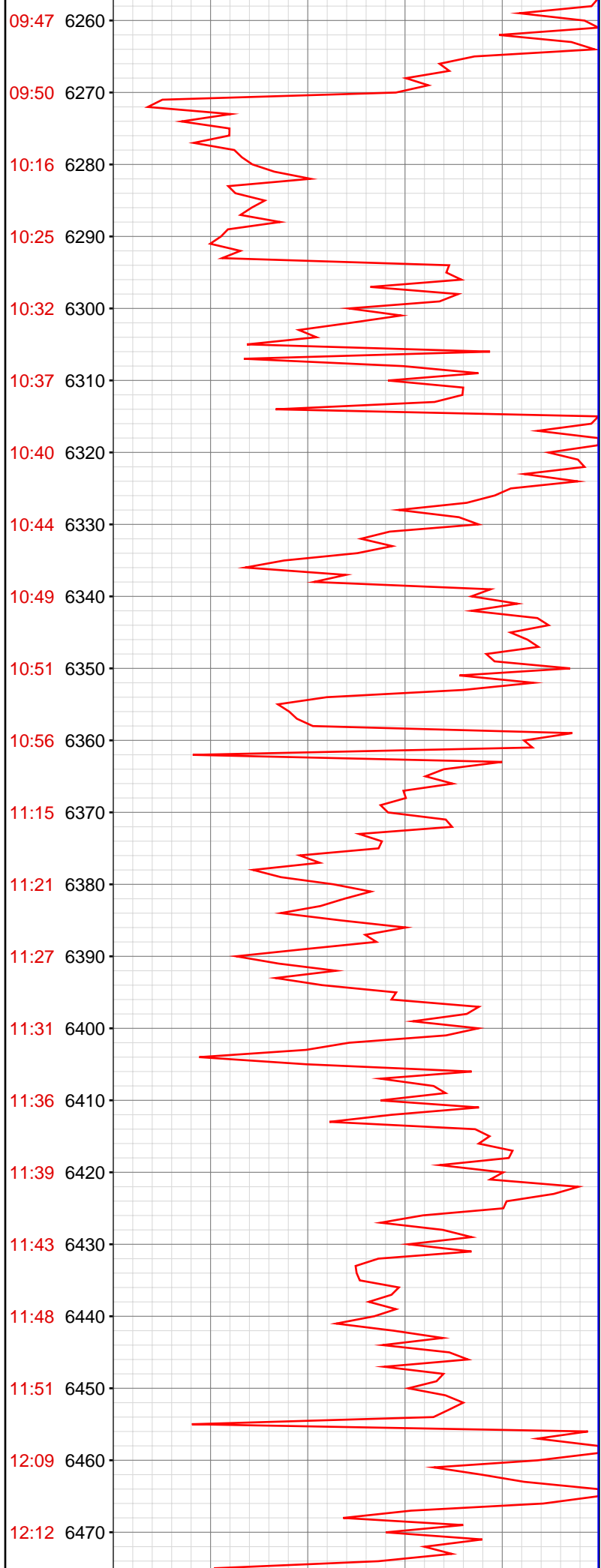
6084.88ft: AIR PARA 1300  
6085.76ft: AIR PARA 1500  
6085.76ft: AIR PARA 1800  
6085.76ft: Connection at 6087.1  
6085.76ft: SURVEY @6032 INC 7.7 AZI 347.8  
6085.76ft: ZWOB from SideKick sk-11-11-0402  
6085.76ft: ZDiffPressure from SideKick sk-11-11-0402  
6089.44ft: SWEEP

6119.65ft: TRANSFER 250BBLS

6178.05ft: MUD WEIGHT 9.00  
6178.05ft: MUD VIS 55.00  
6178.05ft: SURVEY @6123 INC 6.9 AZI 347.9  
6178.05ft: Connection at 6179.0  
6178.05ft: ZWOB from SideKick sk-11-11-0402  
6178.05ft: ZDiffPressure from SideKick sk-11-11-0402

6192.16ft: SWEEP

6212.96ft: AIR PARA 1800



09:47 6260

09:50 6270

10:16 6280

10:25 6290

10:32 6300

10:37 6310

10:40 6320

10:44 6330

10:49 6340

10:51 6350

10:56 6360

11:15 6370

11:21 6380

11:27 6390

11:31 6400

11:36 6410

11:39 6420

11:43 6430

11:48 6440

11:51 6450

12:09 6460

12:12 6470

6270.01ft: Connection at 6271.0 SURVEY @6215 INC 5.9 AZI 342.8  
6270.01ft: ZDiffPressure from SideKick sk-11-11-0402  
6271.59ft: MUD WEIGHT 9.00  
6271.82ft: MUD VIS 55.00

6291.50ft: ZDiffPressure from SideKick sk-11-11-0402  
6291.50ft: ZWOB from SideKick sk-11-11-0402  
6291.50ft: SWEEP

6340.35ft: PUMP OUT CELLAR

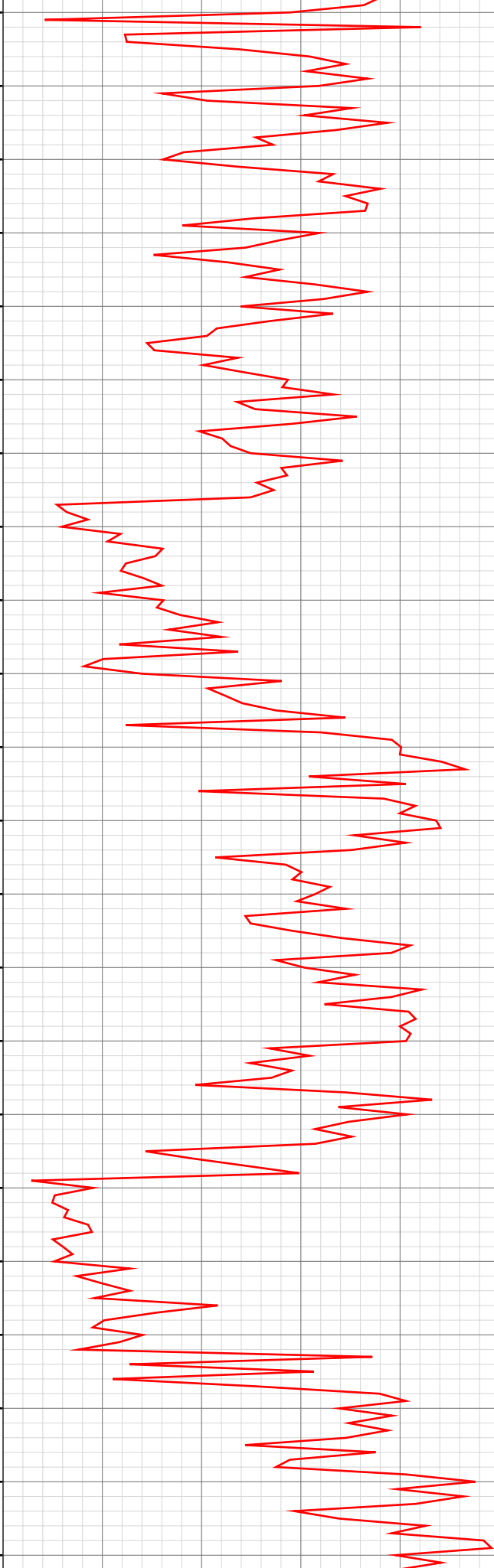
6361.98ft: MUD WEIGHT 9.20  
6361.98ft: MUD VIS 69.00  
6361.98ft: MUD PH 8.20  
6361.98ft: SURVEY @6307 INC 7.8 AZI 341.3  
6361.98ft: Connection at 6362.7  
6361.98ft: STRING AIR ON @6362'  
6361.98ft: ZWOB from SideKick sk-11-11-0402  
6361.98ft: ZDiffPressure from SideKick sk-11-11-0402  
6366.17ft: AIR PARA 1800 / DS 300

6373.56ft: SWEEP

6454.10ft: ZERO ALL PUMPS from SideKick sk-11-11-0402  
6454.10ft: SURVEY @6399 INC 7.3 AZI 342.2  
6454.10ft: Connection at 6454.6  
6454.10ft: ZWOB from SideKick sk-11-11-0402  
6454.10ft: ZDiffPressure from SideKick sk-11-11-0402

6466.11ft: SWEEP

12:19 6480  
12:25 6490  
12:29 6500  
12:33 6510  
12:38 6520  
12:44 6530  
12:49 6540  
13:30 6550  
13:40 6560  
13:49 6570  
13:54 6580  
13:58 6590  
14:01 6600  
14:05 6610  
14:08 6620  
14:13 6630  
14:39 6640  
14:56 6650  
15:07 6660  
15:16 6670  
15:20 6680  
15:23 6690



6483.50ft: MUD WEIGHT 9.10  
6483.50ft: MUD VIS 63.00  
6485.01ft: MUD PH 9.00

6500.82ft: 1800 CFM PARA 500 CFM DP

6538.71ft: PUMP OUT CATCH CAN

6546.16ft: MUD WEIGHT 9.10  
6546.16ft: MUD VIS 69.00  
6546.16ft: MUD PH 8.90  
6546.16ft: Connection at 6546.4  
6547.80ft: 1800 CFM PARA / 700 CFM DS  
6547.80ft: SURVEY @6491 INC 6.1 AZI 332.5

6568.08ft: SWEEP  
6568.37ft: ZDiffPressure from SideKick sk-11-11-0402  
6568.37ft: ZWOB from SideKick sk-11-11-0402  
6569.19ft: 1800 CFM PARA / 900 CFM DS

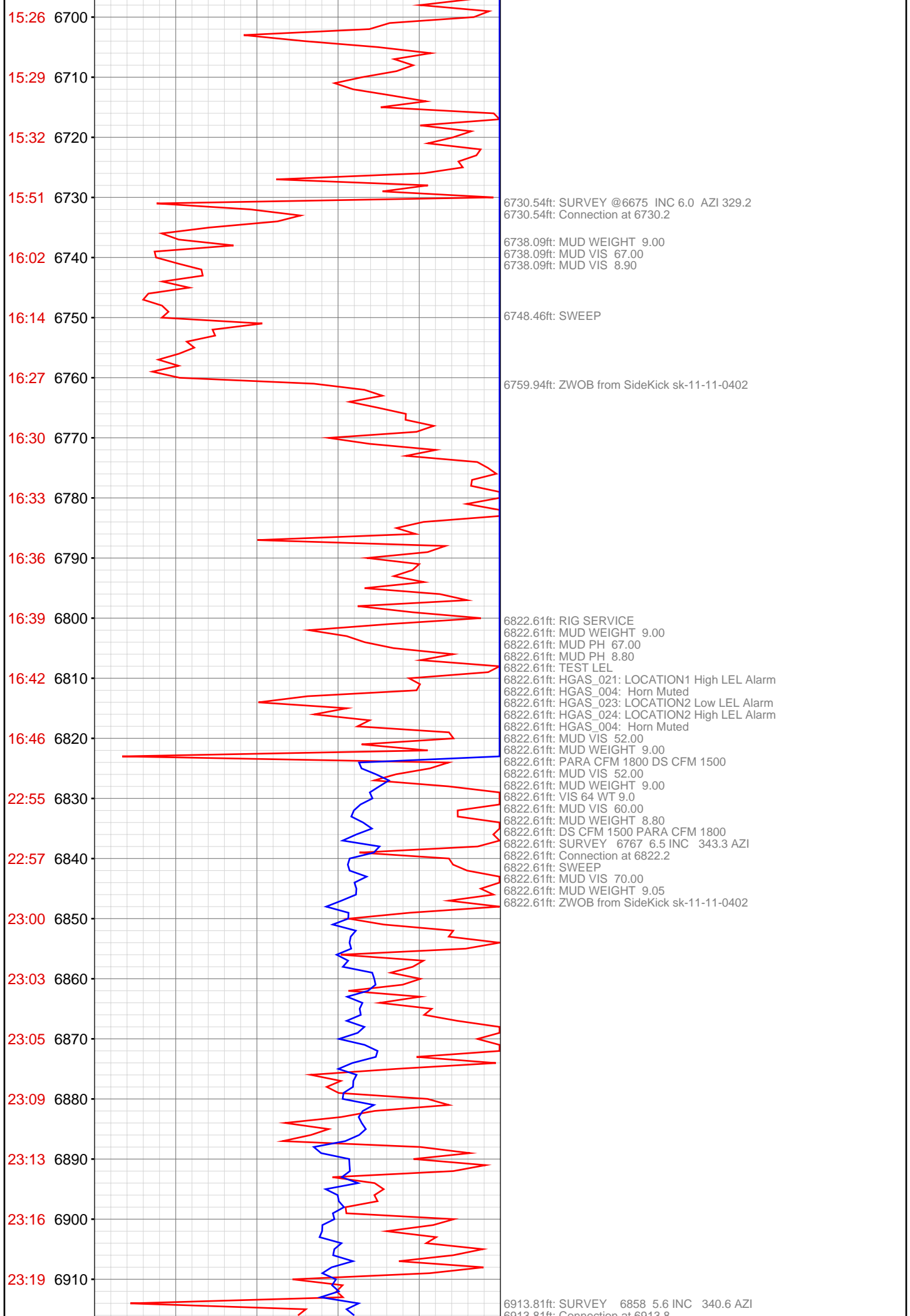
6607.19ft: MUD WEIGHT 9.10  
6607.78ft: MUD VIS 64.00  
6608.14ft: MUD PH 9.00  
6611.35ft: SWEEP  
6614.34ft: 1800 CFM PARA / 1200 CFM DS

6638.29ft: SURVEY @6583 INC 5.9 AZI 321.9  
6638.29ft: Connection at 6638.3

6649.31ft: 1800 CFM PARA / 1500 CFM DS  
6649.70ft: MUD WEIGHT 9.00  
6650.00ft: MUD VIS 62.00  
6650.23ft: MUD PH 8.90

6665.72ft: ZDiffPressure from SideKick sk-11-11-0402  
6665.72ft: ZWOB from SideKick sk-11-11-0402  
6665.72ft: SWEEP

6685.96ft: TRANSFER 150 BBLS



15:26 6700

15:29 6710

15:32 6720

15:51 6730

16:02 6740

16:14 6750

16:27 6760

16:30 6770

16:33 6780

16:36 6790

16:39 6800

16:42 6810

16:46 6820

22:55 6830

22:57 6840

23:00 6850

23:03 6860

23:05 6870

23:09 6880

23:13 6890

23:16 6900

23:19 6910

6730.54ft: SURVEY @6675 INC 6.0 AZI 329.2  
6730.54ft: Connection at 6730.2

6738.09ft: MUD WEIGHT 9.00  
6738.09ft: MUD VIS 67.00  
6738.09ft: MUD VIS 8.90

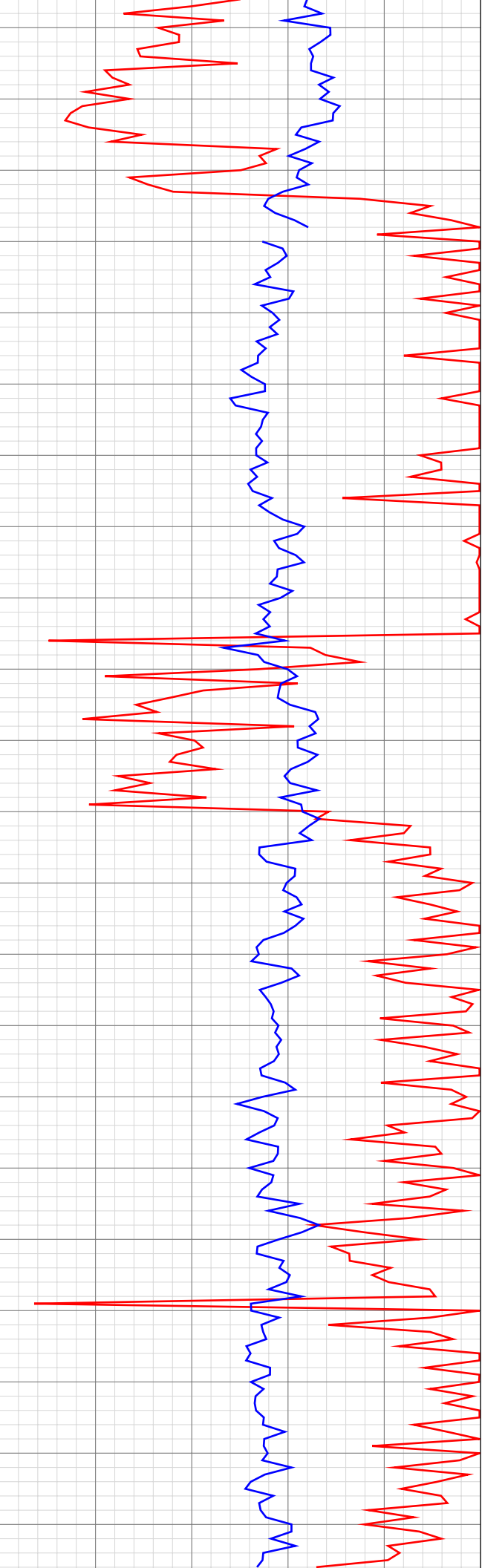
6748.46ft: SWEEP

6759.94ft: ZWOB from SideKick sk-11-11-0402

6822.61ft: RIG SERVICE  
6822.61ft: MUD WEIGHT 9.00  
6822.61ft: MUD PH 67.00  
6822.61ft: MUD PH 8.80  
6822.61ft: TEST LEL  
6822.61ft: HGAS\_021: LOCATION1 High LEL Alarm  
6822.61ft: HGAS\_004: Horn Muted  
6822.61ft: HGAS\_023: LOCATION2 Low LEL Alarm  
6822.61ft: HGAS\_024: LOCATION2 High LEL Alarm  
6822.61ft: HGAS\_004: Horn Muted  
6822.61ft: MUD VIS 52.00  
6822.61ft: MUD WEIGHT 9.00  
6822.61ft: PARA CFM 1800 DS CFM 1500  
6822.61ft: MUD VIS 52.00  
6822.61ft: MUD WEIGHT 9.00  
6822.61ft: VIS 64 WT 9.0  
6822.61ft: MUD VIS 60.00  
6822.61ft: MUD WEIGHT 8.80  
6822.61ft: DS CFM 1500 PARA CFM 1800  
6822.61ft: SURVEY 6767 6.5 INC 343.3 AZI  
6822.61ft: Connection at 6822.2  
6822.61ft: SWEEP  
6822.61ft: MUD VIS 70.00  
6822.61ft: MUD WEIGHT 9.05  
6822.61ft: ZWOB from SideKick sk-11-11-0402

6913.81ft: SURVEY 6858 5.6 INC 340.6 AZI  
6913.81ft: Connection at 6913.8

23:43 6920  
23:53 6930  
Mar 26, 2013  
00:04 6940  
00:08 6950  
00:10 6960  
00:12 6970  
00:15 6980  
00:17 6990  
00:19 7000  
00:41 7010  
00:48 7020  
00:59 7030  
01:02 7040  
01:04 7050  
01:07 7060  
01:10 7070  
01:12 7080  
01:15 7090  
01:40 7100  
01:43 7110  
01:45 7120  
01:48 7130



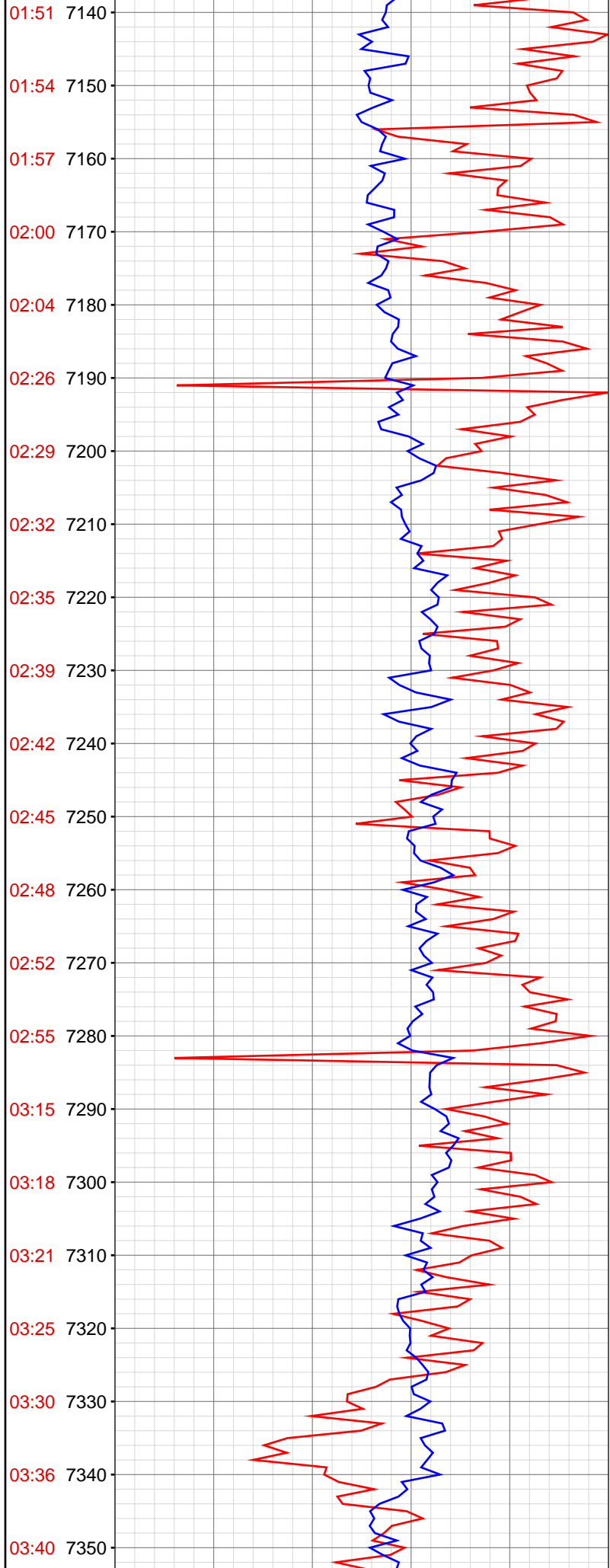
6928.97ft: MUD VIS 68.00  
6928.97ft: MUD WEIGHT 9.25  
6935.24ft: DS CFM 1600 PARA CFM 1800  
6935.24ft: SWEEP  
6935.24ft: ZDiffPressure from SideKick sk-11-11-0402  
6935.24ft: ZWOB from SideKick sk-11-11-0402

7005.94ft: SURVEY 6950 6.8 INC 342.5 AZI  
7005.94ft: Connection at 7005.6  
7005.94ft: MUD VIS 65.00  
7005.94ft: MUD WEIGHT 9.30  
7005.94ft: MUD PH 8.80

7029.00ft: ZWOB from SideKick sk-11-11-0402  
7029.00ft: ZDiffPressure from SideKick sk-11-11-0402

7039.50ft: SWEEP  
7043.18ft: DS CFM 1500 PARA CFM 1800

7098.06ft: SURVEY 7134 6.6 INC 351.6 AZI  
7098.06ft: Connection at 7097.6  
7098.06ft: MUD VIS 67.00  
7098.06ft: MUD WEIGHT 9.35  
7098.06ft: ZWOB from SideKick sk-11-11-0402



7190.26ft: SURVEY 7226 6.1 INC 349.2 AZI  
7190.26ft: Connection at 7189.4  
7190.26ft: DS CFM 1400 PARA CFM 1800  
7190.26ft: SWEEP  
7190.26ft: ZWOB from SideKick sk-11-11-0402  
7190.26ft: MUD VIS 65.00  
7190.26ft: MUD WEIGHT 9.35

7282.55ft: SURVEY 7226 5.6 INC 348.2 AZI  
7282.55ft: Connection at 7281.4  
7282.55ft: SWEEP  
7282.55ft: ZWOB from SideKick sk-11-11-0402

03:45 7360  
03:49 7370  
04:09 7380  
04:13 7390  
04:16 7400  
04:19 7410  
04:22 7420  
04:25 7430  
04:29 7440  
04:32 7450  
04:34 7460  
04:59 7470  
05:02 7480  
05:05 7490  
05:08 7500  
05:12 7510  
05:15 7520  
05:20 7530  
05:23 7540  
05:27 7550  
05:47 7560  
05:50 7570

7363.03ft: MUD VIS 68.00  
7363.32ft: MUD WEIGHT 9.40

7374.74ft: SURVEY 7318 5.5 INC 348.1 AZI  
7374.74ft: Connection at 7373.3  
7374.74ft: ZWOB from SideKick sk-11-11-0402  
7374.74ft: SWEEP

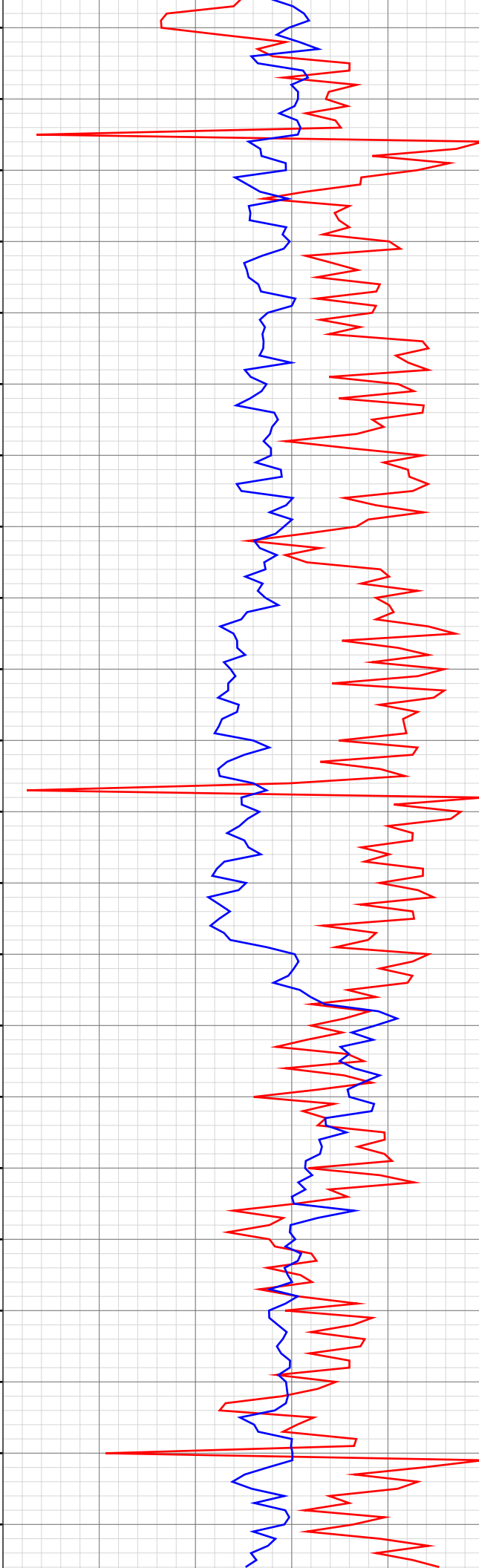
7415.22ft: DS CFM 1300 / PARA CFM 1800

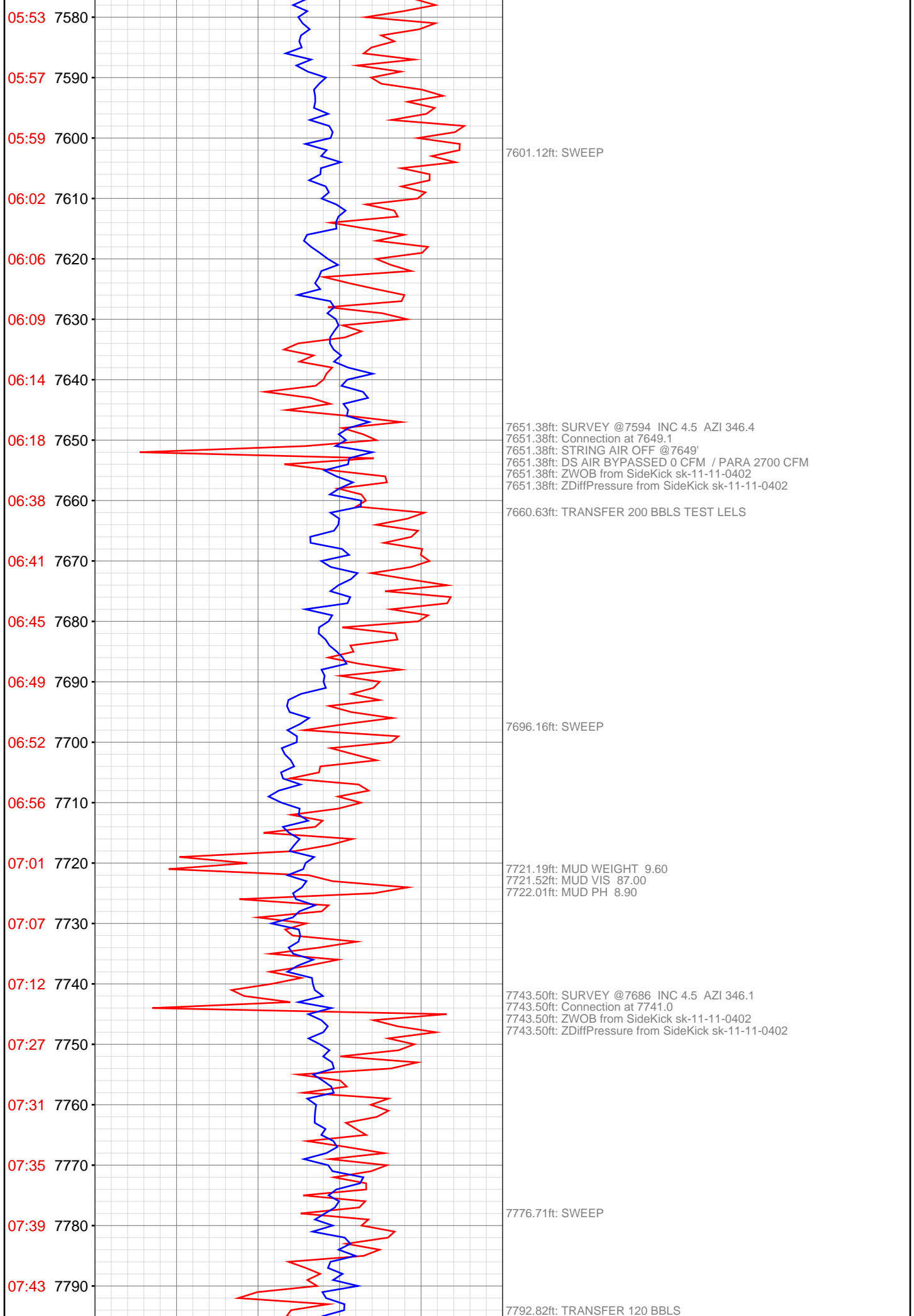
7431.04ft: MUD VIS 66.00  
7431.33ft: MUD WEIGHT 9.40

7466.93ft: SURVEY 7410 5.1 INC 348.6 AZI  
7466.93ft: Connection at 7465.2  
7466.93ft: SWEEP  
7466.93ft: ZWOB from SideKick sk-11-11-0402

7537.99ft: MUD VIS 85.00  
7538.22ft: MUD WEIGHT 9.50

7559.19ft: SURVEY 7557 5.0 INC 347.4 AZI  
7559.19ft: Connection at 7557.2  
7559.19ft: ZWOB from SideKick sk-11-11-0402





05:53 7580

05:57 7590

05:59 7600

06:02 7610

06:06 7620

06:09 7630

06:14 7640

06:18 7650

06:38 7660

06:41 7670

06:45 7680

06:49 7690

06:52 7700

06:56 7710

07:01 7720

07:07 7730

07:12 7740

07:27 7750

07:31 7760

07:35 7770

07:39 7780

07:43 7790

7601.12ft: SWEEP

7651.38ft: SURVEY @7594 INC 4.5 AZI 346.4  
7651.38ft: Connection at 7649.1  
7651.38ft: STRING AIR OFF @7649'  
7651.38ft: DS AIR BYPASSED 0 CFM / PARA 2700 CFM  
7651.38ft: ZWOB from SideKick sk-11-11-0402  
7651.38ft: ZDiffPressure from SideKick sk-11-11-0402

7660.63ft: TRANSFER 200 BBLS TEST LELS

7696.16ft: SWEEP

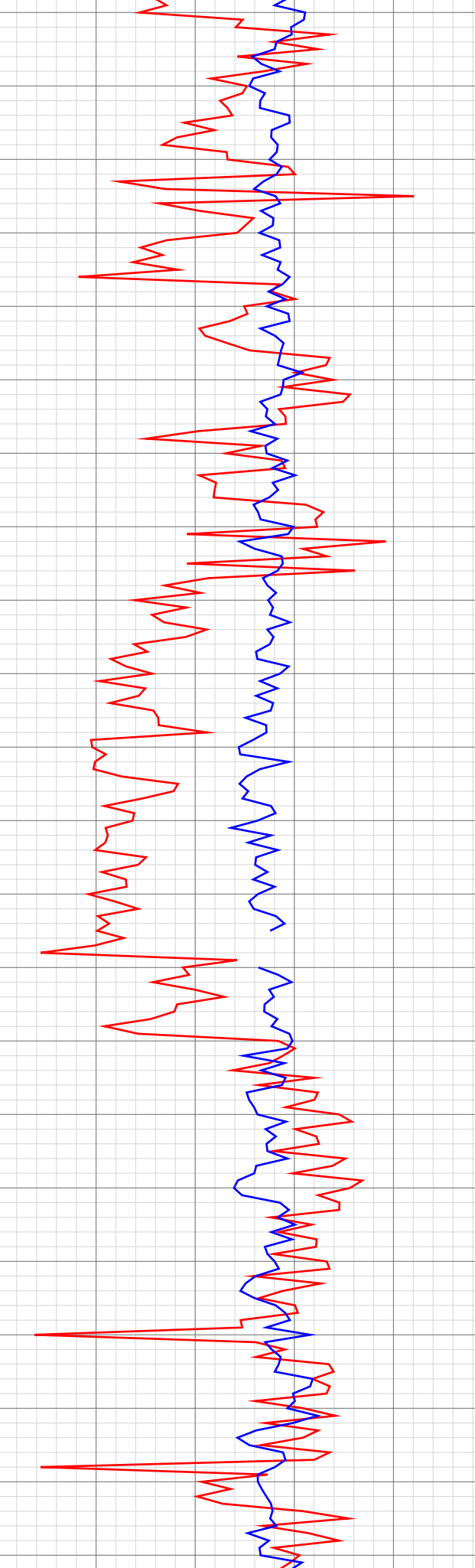
7721.19ft: MUD WEIGHT 9.60  
7721.52ft: MUD VIS 87.00  
7722.01ft: MUD PH 8.90

7743.50ft: SURVEY @7686 INC 4.5 AZI 346.1  
7743.50ft: Connection at 7741.0  
7743.50ft: ZWOB from SideKick sk-11-11-0402  
7743.50ft: ZDiffPressure from SideKick sk-11-11-0402

7776.71ft: SWEEP

7792.82ft: TRANSFER 120 BBLS

07:49 7800  
07:54 7810  
07:59 7820  
08:05 7830  
08:23 7840  
08:27 7850  
08:32 7860  
08:36 7870  
08:42 7880  
08:51 7890  
08:59 7900  
09:08 7910  
09:19 7920  
09:43 7930  
09:50 7940  
09:53 7950  
09:57 7960  
10:01 7970  
10:08 7980  
10:12 7990  
10:18 8000  
10:23 8010



7803.05ft: SWEEP

7815.65ft: MUD WEIGHT 9.60  
7816.70ft: MUD VIS 82.00  
7817.00ft: MUD PH 8.90

7835.79ft: SURVEY @7777 INC 4.0 AZI 345.9  
7835.79ft: Connection at 7832.9 2700 CFM PARA  
7835.79ft: ZWOB from SideKick sk-11-11-0402  
7835.79ft: ZDiffPressure from SideKick sk-11-11-0402

7845.47ft: SWEEP

7907.91ft: MUD WEIGHT 9.60  
7908.30ft: MUD VIS 75.00  
7908.30ft: MUD PH 8.90

7927.99ft: SURVEY @7869 INC 3.8 AZI 339.4  
7927.99ft: Connection at 7924.8  
7927.99ft: ZWOB from SideKick sk-11-11-0402  
7927.99ft: ZDiffPressure from SideKick sk-11-11-0402  
7929.04ft: IN TALLY: HOLE DEPTH SET TO 7924.8

7955.54ft: SWEEP

7979.33ft: MUD WEIGHT 9.70  
7979.33ft: MUD VIS 71.00  
7979.33ft: MUD PH 8.80

7997.90ft: 2900 CFM PARA

8012.24ft: 3000 CFM PARA  
8015.52ft: SURVEY @7961 INC 3.6 AZI 341.0  
8015.52ft: Connection at 8016.6  
8015.52ft: SWEEP  
8015.52ft: MUD WEIGHT 9.70

8015.52ft: MUD WEIGHT 9.70  
8015.52ft: MUD VIS 71.00  
8015.52ft: ZWOB from SideKick sk-11-11-0402  
8015.52ft: ZDiffPressure from SideKick sk-11-11-0402  
8019.39ft: 3200 CFM PARA

8107.87ft: Connection at 8108.5  
8107.87ft: SURVEY @8053 INC 3.7 AZI 339.4  
8107.87ft: ZWOB from SideKick sk-11-11-0402  
8107.87ft: ZDiffPressure from SideKick sk-11-11-0402

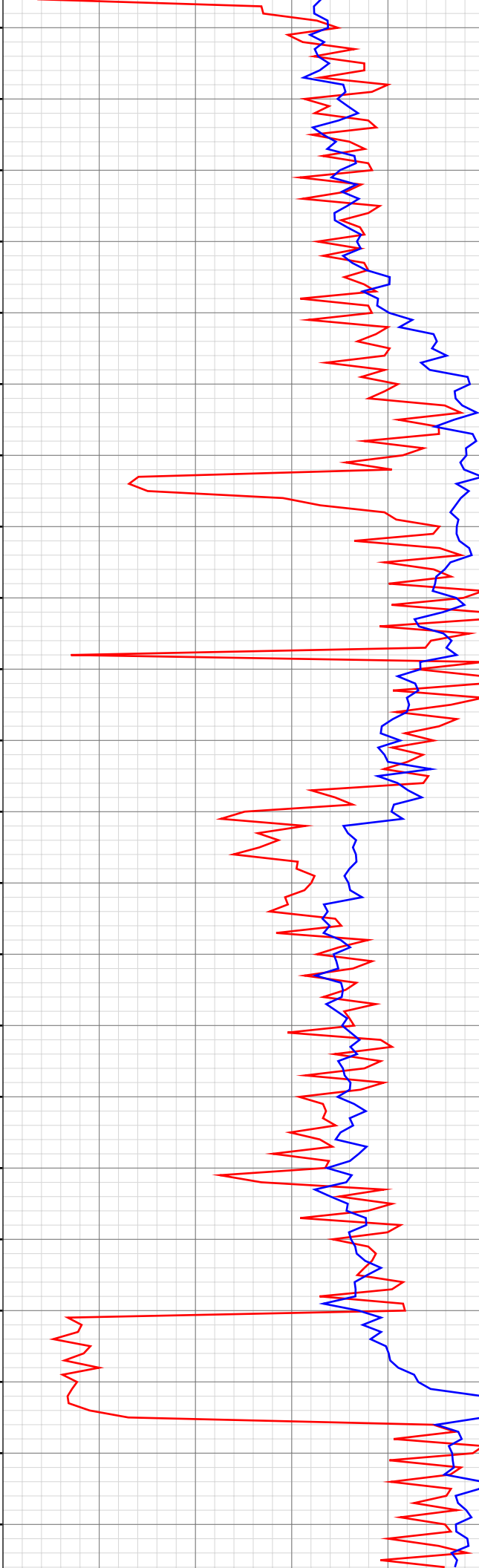
8127.85ft: SWEEP

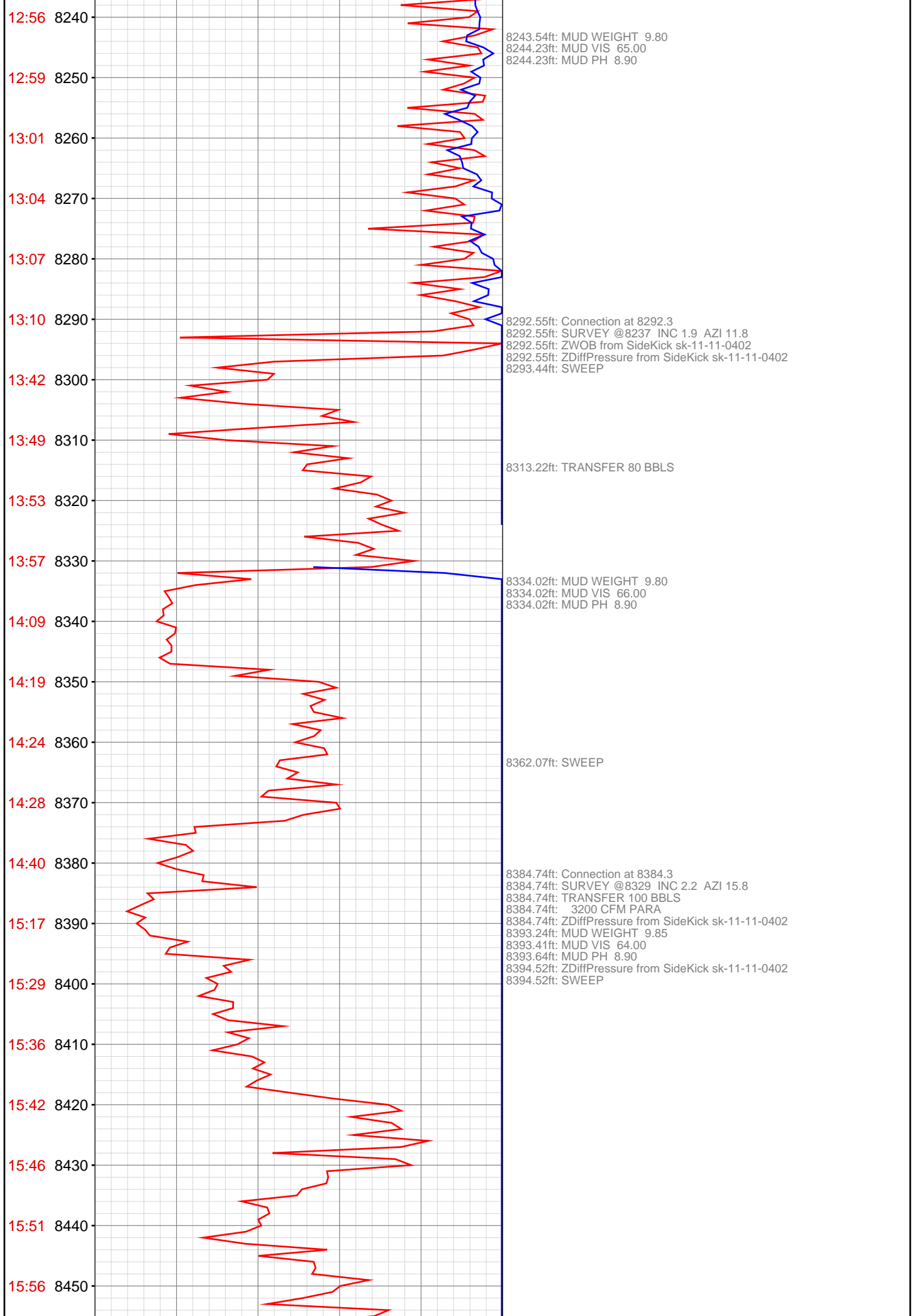
8177.00ft: MUD WEIGHT 9.75  
8177.40ft: MUD VIS 69.00  
8178.28ft: MUD PH 8.90

8200.30ft: SURVEY @8145 INC 3.2 AZI 339.2  
8200.30ft: Connection at 8200.5  
8200.30ft: ZDiffPressure from SideKick sk-11-11-0402

8214.37ft: ZWOB from SideKick sk-11-11-0402  
8214.37ft: ZDiffPressure from SideKick sk-11-11-0402  
8214.37ft: SWEEP 3200 CFM PARASITE AIR

10:58 8020  
11:02 8030  
11:05 8040  
11:08 8050  
11:11 8060  
11:15 8070  
11:18 8080  
11:22 8090  
11:25 8100  
11:41 8110  
11:43 8120  
11:47 8130  
11:51 8140  
11:54 8150  
11:58 8160  
12:01 8170  
12:05 8180  
12:09 8190  
12:12 8200  
12:40 8210  
12:50 8220  
12:53 8230





12:56 8240

12:59 8250

13:01 8260

13:04 8270

13:07 8280

13:10 8290

13:42 8300

13:49 8310

13:53 8320

13:57 8330

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14:28 8370

14:40 8380

15:17 8390

15:29 8400

15:36 8410

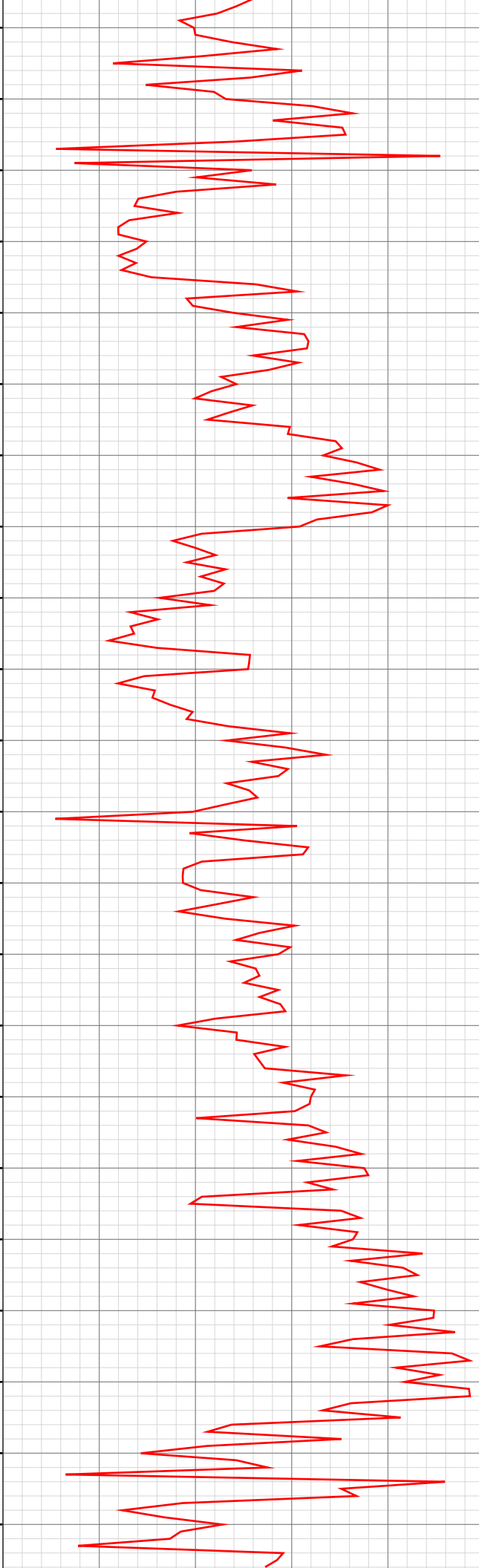
15:42 8420

15:46 8430

15:51 8440

15:56 8450

16:01 8460  
16:06 8470  
18:46 8480  
18:54 8490  
19:00 8500  
19:05 8510  
19:09 8520  
19:13 8530  
19:19 8540  
19:26 8550  
19:33 8560  
19:37 8570  
20:01 8580  
20:06 8590  
20:10 8600  
20:14 8610  
20:18 8620  
20:23 8630  
20:26 8640  
20:28 8650  
20:32 8660  
20:54 8670



8457.48ft: MUD WEIGHT 9.90  
8457.78ft: MUD VIS 66.00  
8458.01ft: MUD PH 8.90  
  
8476.87ft: MUD WEIGHT 9.90  
8476.87ft: MUD VIS 64.00  
8476.87ft: MUD PH 8.80  
8476.87ft: 3200 CFM PARASITE AIR  
8476.87ft: MUD VIS 62.00  
8476.87ft: MUD WEIGHT 9.90  
8477.62ft: SURVEY 8421 .9 INC 43.3 AZI  
8477.62ft: ZDiffPressure from SideKick sk-11-11-0402  
8478.51ft: PARA CFM 3200  
8479.99ft: Connection at 8476.2  
8487.99ft: SWEEP  
  
8497.61ft: TRANSFERRED 300.00  
  
8552.79ft: TRANSFERRED 100.00  
8553.18ft: MUD VIS 69.00  
8553.18ft: MUD WEIGHT 9.90  
  
8570.11ft: Connection at 8568.2  
8570.11ft: ZWOB from SideKick sk-11-11-0402  
8570.11ft: ZDiffPressure from SideKick sk-11-11-0402  
8570.57ft: TEST LEL  
8574.05ft: HGAS\_021: LOCATION1 High LEL Alarm  
8574.05ft: HGAS\_004: Horn Muted  
8578.61ft: SWEEP  
8580.18ft: HGAS\_023: LOCATION2 Low LEL Alarm  
8580.61ft: HGAS\_004: Horn Muted  
  
8616.27ft: MUD VIS 66.00  
8616.80ft: MUD WEIGHT 9.95  
  
8662.24ft: SURVEY 8605 .5 INC 88.3 AZI  
8662.24ft: Connection at 8660.1  
8662.24ft: ZDiffPressure from SideKick sk-11-11-0402  
8662.24ft: ZWOB from SideKick sk-11-11-0402  
  
8671.85ft: SWEEP

8676.02ft: PARA CFM 3100

21:01 8680

21:08 8690

21:13 8700

8704.00ft: MUD VIS 62.00  
8704.36ft: MUD WEIGHT 10.00

21:19 8710

21:26 8720

21:35 8730

21:44 8740

8754.20ft: Connection at 8752.0 SURVEY 8696 .7 INC 148.8 AZI  
8754.20ft: MUD WEIGHT 65.00  
8754.20ft: MUD WEIGHT 10.00  
8754.20ft: MUD PH 8.70  
8754.20ft: ZWOB from SideKick sk-11-11-0402  
8754.20ft: ZDiffPressure from SideKick sk-11-11-0402  
8758.24ft: SWEEP

21:52 8750

22:22 8760

22:30 8770

8769.26ft: PARA CFM 3300

22:40 8780

22:51 8790

22:59 8800

8805.09ft: MUD VIS 60.00  
8805.09ft: MUD WEIGHT 10.00  
8805.45ft: MUD PH 9.10

23:09 8810

23:20 8820

23:25 8830

8834.32ft: PARA CFM 3500

23:36 8840

8846.56ft: SURVEY 8788 .4 INC 229.3 AZI  
8846.56ft: ZDiffPressure from SideKick sk-11-11-0402  
8846.56ft: ZWOB from SideKick sk-11-11-0402  
8846.56ft: Connection at 8843.8  
8847.28ft: IN TALLY: HOLE DEPTH SET TO 8843.8  
8850.95ft: MUD VIS 64.00  
8850.98ft: MUD WEIGHT 10.00

Mar 27, 2013

00:05 8850

00:11 8860

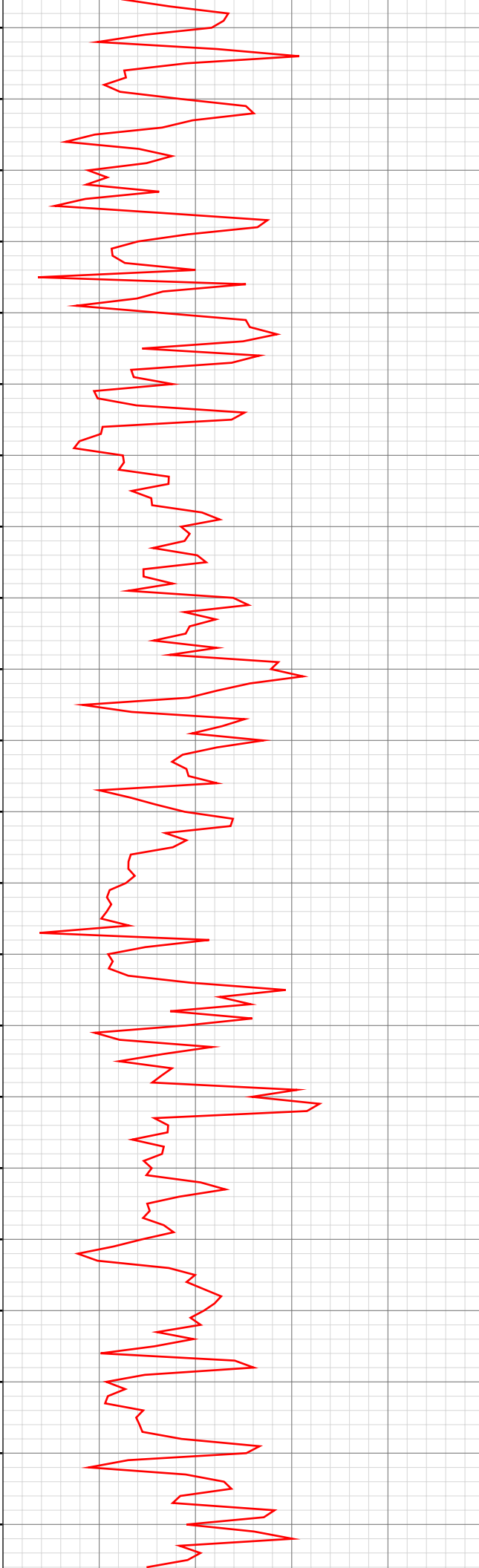
00:20 8870

00:29 8880

8882.87ft: PARA CFM 3500

00:39 8890

00:46 8900  
00:55 8910  
01:04 8920  
01:15 8930  
01:42 8940  
01:47 8950  
01:58 8960  
02:06 8970  
02:13 8980  
02:19 8990  
02:25 9000  
02:32 9010  
02:40 9020  
03:13 9030  
03:20 9040  
03:26 9050  
03:33 9060  
03:40 9070  
03:49 9080  
03:56 9090  
04:03 9100  
04:10 9110



8914.44ft: PARA CFM 3200

8934.48ft: Connection at 8935.6 SURVEY 8880 .2 INC 85.4 AZI  
8934.48ft: ZWOB from SideKick sk-11-11-0402  
8934.48ft: ZDiffPressure from SideKick sk-11-11-0402  
8938.98ft: MUD VIS 64.00  
8938.98ft: MUD WEIGHT 10.00

8946.42ft: SWEEP

9001.77ft: TRANSFERRED 200.00  
9002.82ft: PARA CFM 3200

9026.38ft: MUD VIS 62.00  
9026.38ft: MUD WEIGHT 10.05  
9026.38ft: Connection at 9027.5 SURVEY 8972 .1 INC 141.8 AZI  
9026.38ft: ZDiffPressure from SideKick sk-11-11-0402  
9026.38ft: ZWOB from SideKick sk-11-11-0402

9047.28ft: PARA CFM 3400

9062.63ft: SWEEP

9113.45ft: MUD VIS 62.00  
9113.52ft: MUD WEIGHT 10.05

9118.37ft: Connection at 9119.3  
9118.37ft: SURVEY 9064 .2 INC 169.4 AZI  
9118.37ft: ZWOB from SideKick sk-11-11-0402  
9118.37ft: ZDiffPressure from SideKick sk-11-11-0402

9159.78ft: SWEEP

9165.52ft: MUD VIS 58  
9166.63ft: MUD WEIGHT 10.05

9210.33ft: Connection at 9211.2  
9210.33ft: SURVEY @9156 INC 0.6 AZI 180.7  
9210.33ft: ZDiffPressure from SideKick sk-11-11-0402  
9210.33ft: ZWOB from SideKick sk-11-11-0402

9230.41ft: MUD VIS 57.00  
9230.41ft: MUD WEIGHT 10.10  
9231.59ft: 3400 CFM PARA

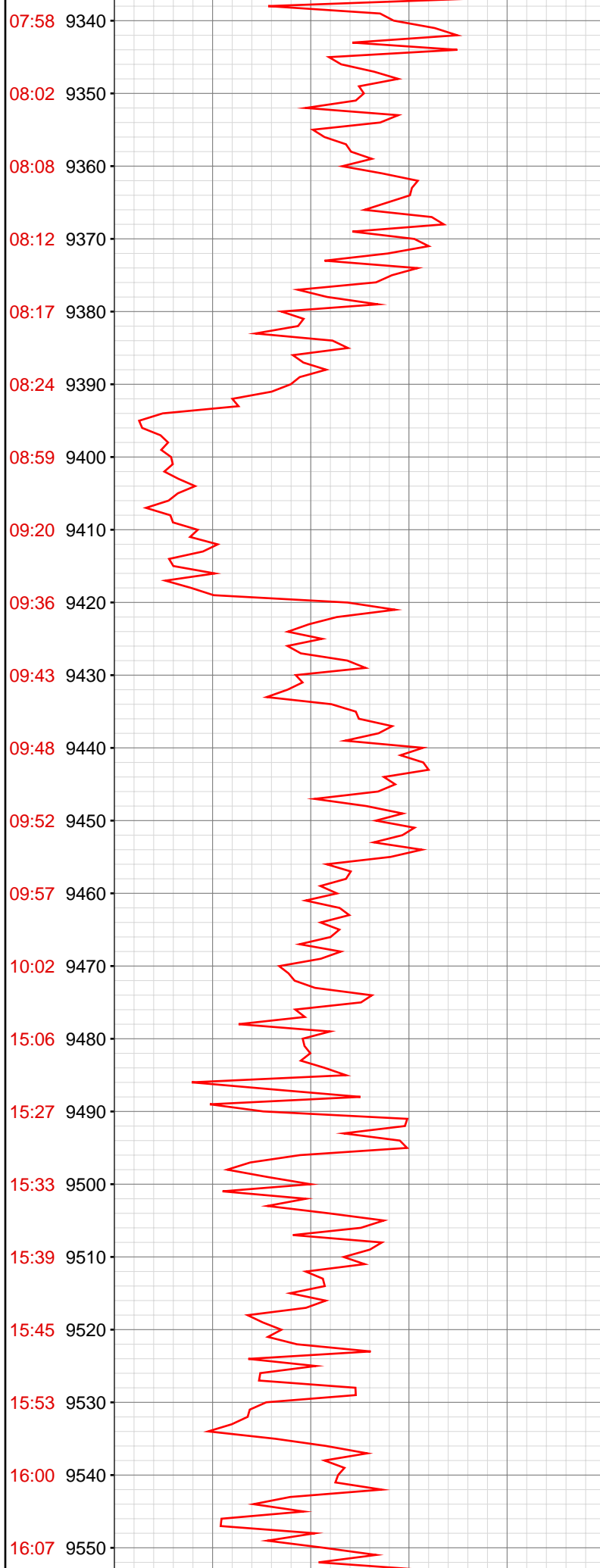
9245.18ft: SWEEP

9297.15ft: PVT:Volume alarm reactivated: un-muted  
9302.46ft: Connection at 9303.0  
9302.46ft: SURVEY @9247 INC 1.3 AZI 217.8  
9302.46ft: ZDiffPressure from SideKick sk-11-11-0402  
9303.38ft: MUD VIS 58.00  
9303.38ft: MUD WEIGHT 10.10

9315.75ft: SWEEP

04:36 9120  
04:43 9130  
04:49 9140  
04:54 9150  
05:02 9160  
05:11 9170  
05:20 9180  
05:30 9190  
05:36 9200  
05:44 9210  
06:05 9220  
06:14 9230  
06:23 9240  
06:30 9250  
06:36 9260  
06:42 9270  
06:49 9280  
06:55 9290  
07:01 9300  
07:36 9310  
07:49 9320  
07:54 9330





9354.04ft: 3400 CFM PARA

9390.72ft: MUD VIS 56.00  
 9391.70ft: MUD WEIGHT 10.10  
 9393.11ft: Connection at 9394.9  
 9393.11ft: SURVEY @9339 INC 1.8 AZI 239.3\

9406.40ft: MUD VIS 58.00  
 9406.40ft: MUD WEIGHT 10.10

9417.49ft: ZDiffPressure from SideKick sk-11-11-0402  
 9417.65ft: SWEEP

9477.46ft: AIR BYPASSED  
 9477.46ft: MUD VIS 56.00  
 9477.46ft: MUD WEIGHT 10.20  
 9477.46ft: CIRC. OUT KICK  
 9477.46ft: ZERO ALL PUMPS from SideKick sk-11-11-0402  
 9477.46ft: MUD VIS 58.00

9477.46ft: MUD WEIGHT 10.25  
 9477.46ft: PVT:Volume alarm muted  
 9477.46ft: ALL AIR EQUIPMENT SHUT DOWN  
 9477.46ft: MUD VIS 58.00

9477.46ft: MUD WEIGHT 10.25  
 9477.46ft: TRANSFER MUD 250 BBL  
 9477.46ft: TRANSFER STOPPED  
 9477.46ft: MUD VIS 59.00  
 9477.46ft: MUD WEIGHT 10.35  
 9477.46ft: TRANSFER MUD PREMIX T/ACTIVE  
 9477.46ft: ZERO ALL PUMPS from SideKick sk-11-11-0402

9477.46ft: MUD VIS 62.00  
 9477.46ft: MUD WEIGHT 10.40  
 9477.46ft: START AIR PILLS PARA  
 9477.46ft: BREAK CIRC WITH AIR  
 9477.46ft: 700 CFM PARA  
 9477.46ft: SWEEP

9477.46ft: 900 CFM PARA PILL  
 9477.46ft: TRANSFER MUD PREMIX T/ACTIVE  
 9477.46ft: 1200 CFM PILL  
 9477.46ft: 1800 CFM PARA PILL

9477.46ft: 1800 CFM PARA  
 9477.46ft: MUD VIS 56.00  
 9477.46ft: MUD WEIGHT 10.40  
 9477.46ft: TRANSFER STOPPED  
 9477.46ft: 1800 CFM PARA

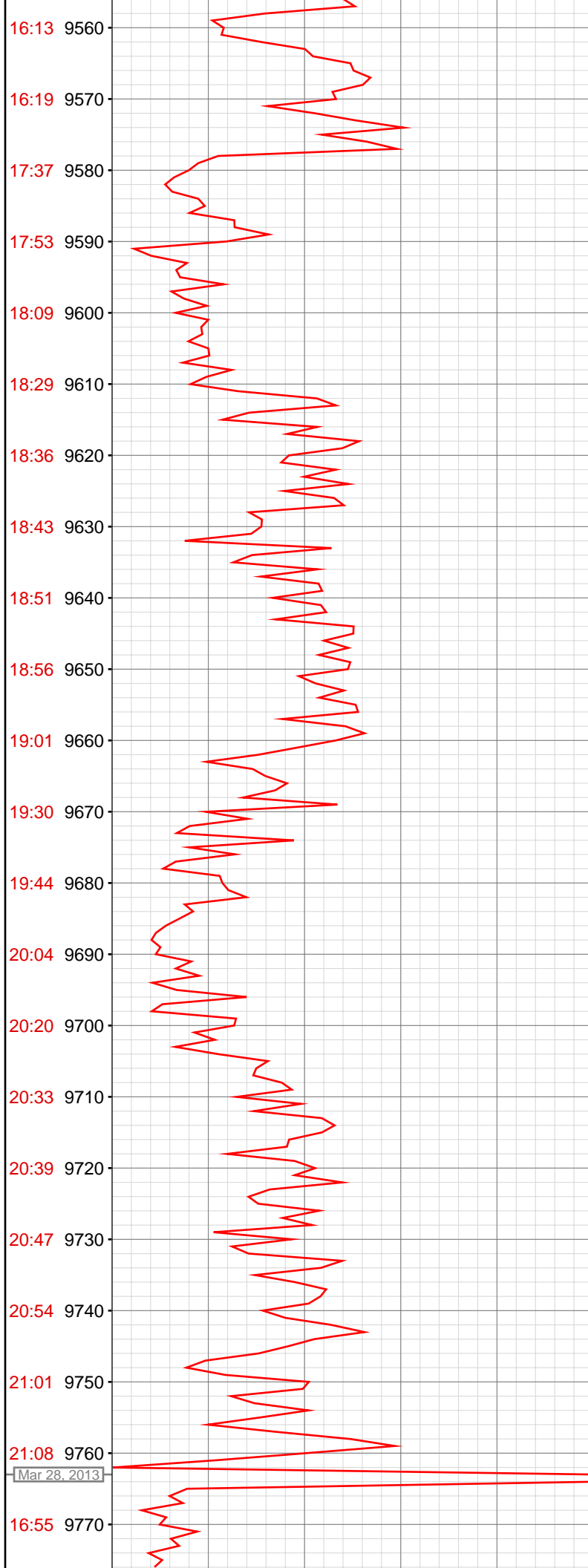
9477.46ft: PVT:Volume alarm reactivated: un-muted  
 9477.46ft: ZWOB from SideKick sk-11-11-0402  
 9477.46ft: ZDiffPressure from SideKick sk-11-11-0402  
 9477.46ft: 2000 CFM PARA

9477.46ft: RESUME DRILLING WITH 10.4 MUD WT.  
 9485.14ft: MUD VIS 60.00  
 9485.14ft: MUD WEIGHT 10.45  
 9485.14ft: Connection at 9486.8  
 9485.14ft: SURVEY @9431 INC 2.1 AZI 305.3  
 9485.14ft: ZDiffPressure from SideKick sk-11-11-0402  
 9485.14ft: PUMP OUT CELLAR

9513.19ft: 2400 CFM PARA

9516.47ft: SWEEP

9552.00ft: MUD VIS 58.00  
 9552.00ft: MUD WEIGHT 10.50  
 9554.07ft: 2700 CFM PARA



9574.97ft: AIR BYPASSED  
 9577.36ft: RIG SERVICE  
 9577.36ft: BYPASS AIR TO BLOW DOWN CHOKE LINES  
 9577.36ft: PUMP AIR PILLS  
 9577.36ft: TRANSFERRED 400.00  
 9577.36ft: PVT:Volume alarm muted  
 9577.36ft: 1800 CFM PARA  
 9577.36ft: SURVEY @ 9523' INC. 2.2 AZ. 287.7  
 9577.36ft: 2700 CFM PARA  
 9577.36ft: PVT:Volume alarm reactivated: un-muted  
 9577.36ft: MUD VIS 53.00  
 9577.36ft: MUD WEIGHT 10.50  
 9577.36ft: ZDiffPressure from SideKick sk-11-11-0402  
 9584.15ft: 3000 CFM PARA  
 9597.11ft: MUD VIS 53.00  
 9597.28ft: MUD WEIGHT 10.45  
 9597.28ft: MUD PH 8.40

9606.23ft: ZDiffPressure from SideKick sk-11-11-0402  
 9606.23ft: ZWOB from SideKick sk-11-11-0402  
 9607.78ft: SWEEP

9669.46ft: MUD VIS 52.00  
 9669.46ft: MUD WEIGHT 10.50  
 9669.46ft: Connection at 9670.7  
 9669.46ft: SURVEY @ 9615' INC. 2.4 AZ. 326.2  
 9692.88ft: MUD VIS 51.00  
 9693.01ft: MUD WEIGHT 10.55  
 9701.25ft: PARA CFM 3000  
 9702.23ft: ZWOB from SideKick sk-11-11-0402  
 9702.23ft: ZDiffPressure from SideKick sk-11-11-0402  
 9702.23ft: SWEEP  
 9742.13ft: PUMP CATCH TANK  
 9752.26ft: MUD VIS 55.00  
 9752.26ft: MUD WEIGHT 10.60  
 9752.56ft: MUD PH 8.40  
 9761.52ft: SURVEY @ 9707' INC. 2.1 AZ. 351.6  
 9761.52ft: SWEEP  
 9761.52ft: PUMP CELLAR  
 9762.60ft: SWEEP

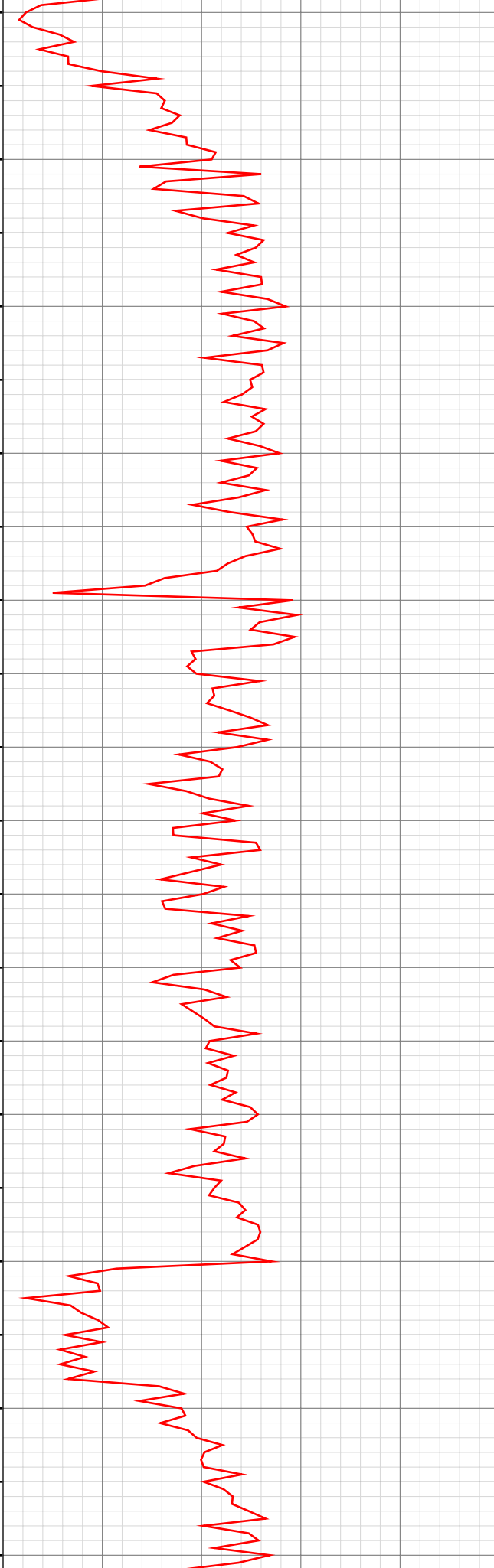
9762.60ft: CIRCULATE TO THE CLEAN HOLE  
 9762.60ft: PARA CFM 3400  
 9762.60ft: TRANSFER MUD  
 9762.60ft: AIR BYPASSED  
 9762.60ft: ZERO ALL PUMPS from SideKick sk-11-11-0402  
 9762.60ft: TRANSFERRED 75.00  
 9762.60ft: PVT:Flow alarm reactivated: un-muted  
 9762.60ft: BLOW DOWN T/D  
 9762.60ft: FLOW CHECK  
 9762.60ft: ZERO ALL PUMPS from SideKick sk-11-11-0402  
 9762.60ft: ZERO ALL PUMPS from SideKick sk-11-11-0402  
 9762.60ft: TRANSFERRED 550.00  
 9762.60ft: PVT:Volume alarm muted  
 9762.60ft: PVT:Volume alarm reactivated: un-muted  
 9762.60ft: MUD VIS 56.00

9762.60ft: MUD WEIGHT 10.70  
 9762.60ft: WORKING ON TOPDRIVE  
 9762.60ft: REMOVE ROT HEAD  
 9762.60ft: MUD VIS 58.00  
 9762.60ft: MUD WEIGHT 10.70  
 9762.60ft: PVT:Flow alarm muted  
 9762.60ft: MUD VIS 58.00  
 9762.60ft: MUD WEIGHT 10.70  
 9762.60ft: BIT DEPTH CHANGED TO 0.0 FEET  
 9762.60ft: M/UP BIT & NEW MOTOR  
 9762.60ft: CHANGE BATTERIES/ SCRIBE  
 9762.60ft: MUD VIS 59.00  
 9762.60ft: MUD WEIGHT 10.70  
 9762.60ft: INSTALL ROTATING HEAD  
 9762.60ft: MUD VIS 58.00  
 9762.60ft: MUD WEIGHT 10.70  
 9762.60ft: ZERO ALL PUMPS from SideKick sk-11-11-0402  
 9762.60ft: FILL PIPE  
 9762.60ft: BIT DEPTH CHANGED TO 3140.0 FEET  
 9762.60ft: MUD VIS 58.00  
 9762.60ft: MUD WEIGHT 10.70

9762.60ft: ZERO ALL PUMPS from SideKick sk-11-11-0402  
 9762.60ft: FILL PIPE  
 9762.60ft: PVT:Volume alarm muted  
 9762.60ft: ZERO ALL PUMPS from SideKick sk-11-11-0402  
 9762.60ft: START AIR PILLS PARA  
 9762.60ft: TRANSFERRED 180.00  
 9762.60ft: BREAK CIRC WITH AIR  
 9762.60ft: MUD VIS 60.00

9762.60ft: MUD WEIGHT 10.70  
 9762.60ft: PVT:Flow alarm reactivated: un-muted  
 9762.60ft: PVT:Flow alarm muted  
 9762.60ft: 1800 CFM PARA  
 9762.60ft: wash & ream  
 9762.60ft: ZWOB from DHC

17:27 9780  
17:53 9790  
17:59 9800  
18:10 9810  
18:15 9820  
18:20 9830  
18:25 9840  
18:29 9850  
18:54 9860  
19:00 9870  
19:05 9880  
19:11 9890  
19:17 9900  
19:22 9910  
19:29 9920  
19:34 9930  
19:40 9940  
19:44 9950  
20:24 9960  
20:40 9970  
20:47 9980  
20:52 9990



9762.60ft: CIRCULATE  
9762.60ft: MUD VIS 58.00  
9762.60ft: MUD WEIGHT 10.70  
9762.60ft: 2200 CFM PARA  
9762.60ft: AIR BYPASSED  
9762.60ft: TRIP IN HOLE  
9762.60ft: PVT:Flow and volume alarm reactivated: un-muted  
9762.60ft: BIT DEPTH CHANGED TO 8294.0 FEET  
9762.60ft: MUD VIS 57.00  
9762.60ft: MUD WEIGHT 10.70  
9762.60ft: FILL PIPE  
9762.60ft: PVT:Volume alarm muted  
9762.60ft: START AIR PILLS PARASITE  
9762.60ft: PVT:Flow alarm muted  
9762.60ft: 1800 CFM PARA  
9762.60ft: 2400 CFM PARA  
9762.60ft: Establish flow ream to bottom  
9762.60ft: 2700 CFM PARA  
9762.60ft: MUD VIS 60.00  
9764.57ft: MUD WEIGHT 10.7  
9766.44ft: Connection at 9765.2  
9766.44ft: ZDiffPressure from SideKick sk-11-11-0402  
9767.09ft: 2700 CFM PARA  
9771.42ft: PUMP OUT CELLAR  
9780.77ft: 3000 CFM PARA  
9786.06ft: ZWOB from SideKick sk-11-11-0402  
9787.83ft: PVT:Volume alarm reactivated: un-muted  
9787.83ft: 3200 CFM PARA  
9815.52ft: SWEEP  
9827.59ft: TRANSFERRED 380.00  
  
9856.46ft: MUD VIS 47.00  
9856.53ft: MUD WEIGHT 10.65  
9856.86ft: MUD PH 8.60  
9858.56ft: Connection at 9857.0  
9858.56ft: SURVEY @ 9802' INC. 0.7 AZ. 308.9  
9858.56ft: ZWOB from SideKick sk-11-11-0402  
9858.56ft: ZDiffPressure from SideKick sk-11-11-0402  
9866.54ft: SWEEP  
  
9950.10ft: MUD VIS 51.00  
9950.10ft: MUD WEIGHT 10.70  
9950.16ft: MUD PH 8.80  
9950.16ft: PARA CFM 3300  
9950.16ft: Connection at 9948.8  
9950.16ft: SURVEY @ 9893' INC. 0.8 AZ. 291.4  
9955.84ft: PARA CFM 3400  
9959.42ft: PARA CFM 3300  
  
9965.81ft: ZWOB from SideKick sk-11-11-0402  
9965.81ft: ZDiffPressure from SideKick sk-11-11-0402  
9967.75ft: SWEEP  
  
9986.25ft: TEST LEL'S  
9987.30ft: HGAS\_021: LOCATION1 High LEL Alarm  
9987.30ft: HGAS\_004: Horn Muted  
9989.01ft: HGAS\_023: LOCATION2 Low LEL Alarm  
9989.40ft: HGAS\_024: LOCATION2 High LEL Alarm  
9989.40ft: HGAS\_004: Horn Muted

20:57 10000  
21:02 10010  
21:08 10020  
21:14 10030  
21:19 10040  
21:40 10050  
21:45 10060  
21:50 10070  
21:56 10080  
22:02 10090  
22:07 10100  
22:12 10110  
22:17 10120  
22:23 10130  
22:43 10140  
22:48 10150  
22:53 10160  
22:58 10170  
23:05 10180  
23:10 10190  
23:17 10200  
23:22 10210



10042.06ft: Connection at 10040.8  
10042.06ft: SURVEY @ 9985' INC. 0.6 AZ. 222.0  
10042.06ft: ZWOB from SideKick sk-11-11-0402  
10042.06ft: ZDiffPressure from SideKick sk-11-11-0402

10051.84ft: AWEEP

10067.03ft: TRANSFERRED 200.00

10077.49ft: MUD VIS 50.00  
10077.49ft: MUD WEIGHT 10.70  
10078.02ft: MUD PH 8.80

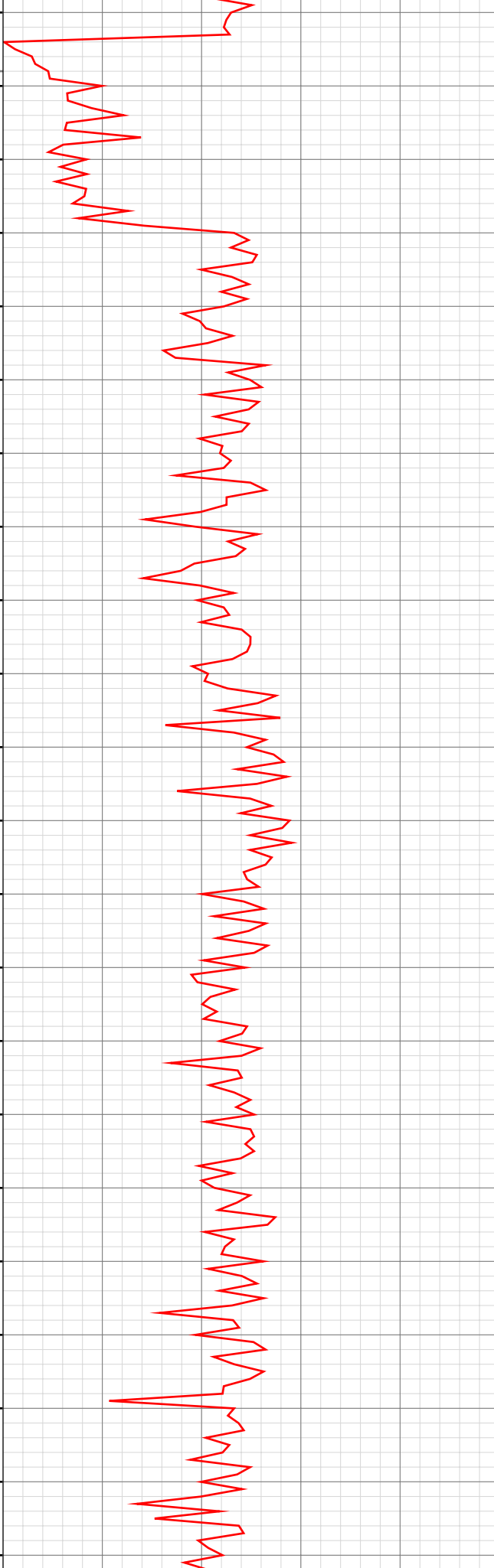
10112.93ft: PARA CFM 3300

10134.19ft: Connection at 10132.6  
10134.19ft: SURVEY @ 10077' INC. 0.9 AZ. 224.4  
10134.19ft: ZWOB from SideKick sk-11-11-0402  
10134.19ft: ZDiffPressure from SideKick sk-11-11-0402

10147.38ft: SWEEP

10187.96ft: MUD VIS 56.00  
10188.25ft: MUD WEIGHT 10.70

23:28 10220  
Mar 29, 2013  
00:06 10230  
00:23 10240  
00:39 10250  
00:44 10260  
00:50 10270  
00:56 10280  
01:02 10290  
01:07 10300  
01:12 10310  
01:37 10320  
01:42 10330  
01:47 10340  
01:51 10350  
01:57 10360  
02:02 10370  
02:08 10380  
02:13 10390  
02:18 10400  
03:06 10410  
03:11 10420  
03:18 10430



10224.02ft: IN TALLY: HOLE DEPTH SET TO 10224.4  
10224.41ft: ZDiffPressure from SideKick sk-11-11-0402  
10226.38ft: Connection at 10224.4  
10226.38ft: SURVEY @ 10169' INC. 1.3 AZ. 237.9

10247.54ft: ZDiffPressure from SideKick sk-11-11-0402  
10247.54ft: ZWOB from SideKick sk-11-11-0402  
10250.98ft: SWEEP

10272.97ft: PARA CFM 3300

10307.51ft: MUD VIS 52.00  
10307.74ft: MUD WEIGHT 10.70  
10308.01ft: MUD PH 8.80

10316.40ft: Connection at 10316.3  
10316.40ft: SURVEY @ 10261' INC. 0.8 AZ. 48.7  
10316.40ft: ZWOB from SideKick sk-11-11-0402  
10316.40ft: ZDiffPressure from SideKick sk-11-11-0402  
10322.15ft: SWEEP

10393.60ft: MUD VIS 53.00  
10393.90ft: MUD WEIGHT 10.70  
10394.00ft: MUD PH 8.80

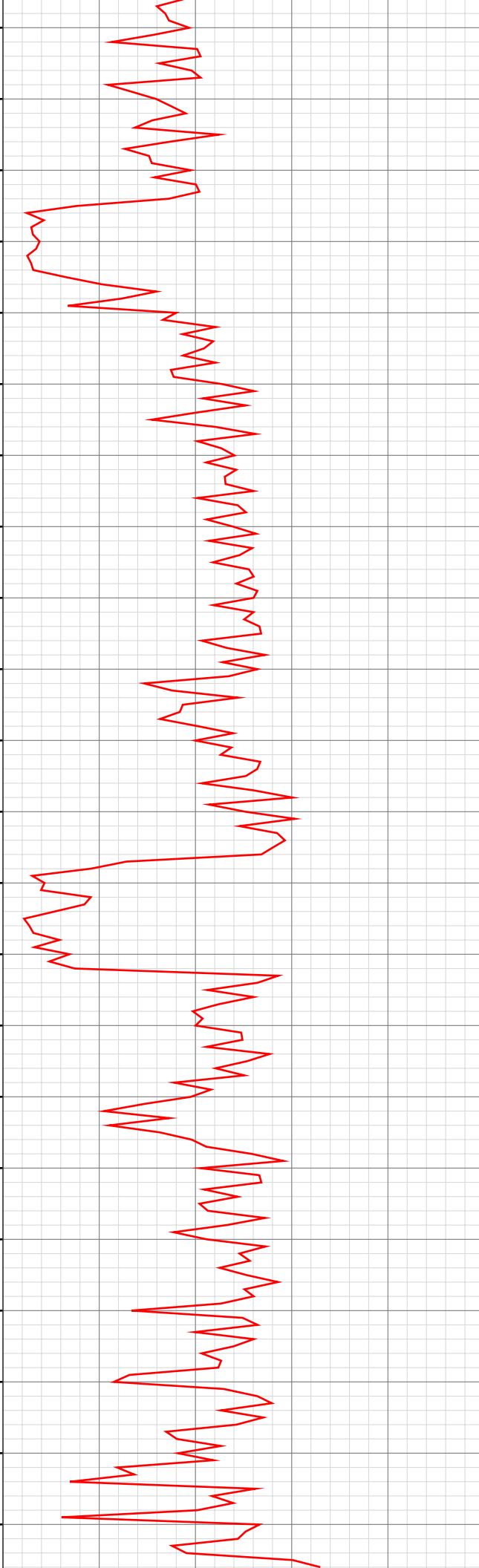
10408.60ft: CIRCULATE TO RAISE M/W  
10408.60ft: PARA CFM 3300  
10408.60ft: MUD VIS 52.00  
10408.60ft: MUD WEIGHT 10.80  
10408.60ft: Connection at 10408.2  
10408.60ft: SURVEY @ 10353' INC. 0.7 AZ. 76.0  
10408.60ft: ZWOB from SideKick sk-11-11-0402  
10408.60ft: ZDiffPressure from SideKick sk-11-11-0402  
10415.45ft: SWEEP

03:25 10440  
03:30 10450  
03:35 10460  
03:41 10470  
03:46 10480  
03:52 10490  
03:57 10500  
04:17 10510  
04:21 10520  
04:27 10530  
04:33 10540  
04:38 10550  
04:44 10560  
06:00 10570  
06:08 10580  
06:15 10590  
06:32 10600  
06:38 10610  
06:45 10620  
06:52 10630  
06:59 10640  
07:05 10650



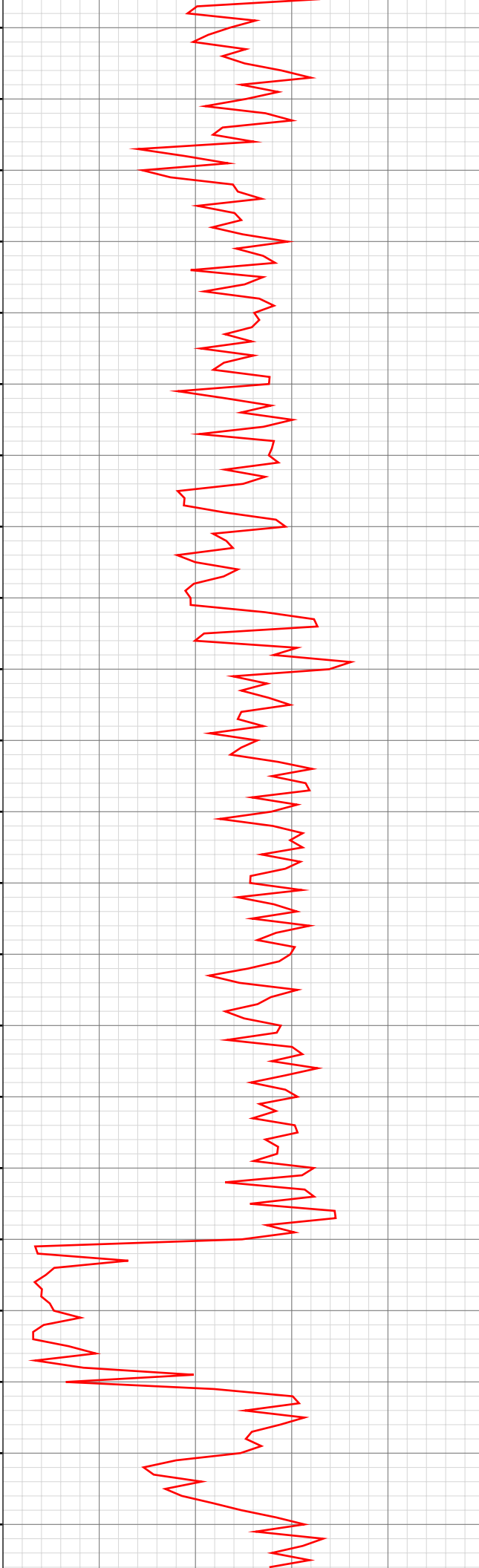
10498.00ft: MUD VIS 48.00  
10498.39ft: MUD WEIGHT 10.80  
10498.69ft: MUD PH 8.50  
10500.79ft: Connection at 10500.2  
10500.79ft: SURVEY @ 10445' INC. 0.4 AZ. 253.5  
10500.79ft: ZWOB from SideKick sk-11-11-0402  
10500.79ft: ZDiffPressure from SideKick sk-11-11-0402  
10509.22ft: SWEEP  
10561.88ft: 20 FOOT FLARE  
10561.88ft: MUD WEIGHT 10.85  
10561.88ft: CIRCULATE GAS OUT  
10561.88ft: PARA CFM 2900  
10561.88ft: PARA CFM 3100  
10561.88ft: ZWOB from SideKick sk-11-11-0402  
10561.88ft: ZDiffPressure from SideKick sk-11-11-0402  
10567.85ft: MUD VIS 57.00  
10567.85ft: MUD WEIGHT 10.95  
10567.85ft: MUD PH 8.70  
10567.85ft: PARA CFM 2900  
10567.85ft: ZDiffPressure from SideKick sk-11-11-0402  
10567.85ft: ZWOB from SideKick sk-11-11-0402  
10576.18ft: MUD VIS 58.00  
10576.51ft: MUD WEIGHT 11.00  
10592.62ft: Connection at 10592.0  
10592.62ft: SURVEY @10536 INC 1.0 AZI 237.0  
10602.59ft: PUMP SWEEP  
10606.04ft: 3100 CFM PARA  
10629.76ft: 3200 CFM PARA  
10635.73ft: WT OUT 11.0/VIS OUT 55  
10643.18ft: MUD VIS 55.00  
10643.18ft: MUD WEIGHT 11.00  
10645.57ft: PUMP SWEEP

07:13 10660  
07:21 10670  
07:29 10680  
08:06 10690  
08:29 10700  
08:35 10710  
08:41 10720  
08:46 10730  
08:51 10740  
08:56 10750  
09:02 10760  
09:07 10770  
09:36 10780  
10:05 10790  
10:13 10800  
10:18 10810  
10:25 10820  
10:31 10830  
10:36 10840  
10:42 10850  
10:47 10860  
11:14 10870



10669.88ft: 3300 CFM PARA  
10684.65ft: Connection at 10683.8  
10684.65ft: PVT Horn Disabled  
10684.65ft: SURVEY @10628 INC 1.2 AZI 222.4  
10684.65ft: PVT Horn Enabled  
10684.65ft: ZDiffPressure from SideKick sk-11-11-0402  
10686.58ft: PUMP CELLAR  
10693.77ft: MUD VIS 56.00  
10693.77ft: MUD WEIGHT 11.00  
10698.75ft: PUMP SWEEP  
10761.48ft: 3300 CFM PARA  
10776.71ft: Connection at 10775.7  
10776.71ft: MUD VIS 56.00  
10776.71ft: MUD WEIGHT 11.00  
10776.71ft: SURVEY @10720 INC 0.5 AZI 200.4  
10790.95ft: MUD VIS 60.00  
10791.01ft: MUD WEIGHT 11.00  
10793.64ft: PUMP SWEEP  
10855.18ft: 3300 CFM PARA  
10868.90ft: SURVEY @10812 INC 0.7 AZI 140.1 Connection at 10867.6

11:20 10880  
11:24 10890  
11:30 10900  
11:35 10910  
11:40 10920  
11:45 10930  
11:50 10940  
11:55 10950  
12:00 10960  
12:17 10970  
12:23 10980  
12:27 10990  
12:31 11000  
12:35 11010  
12:40 11020  
12:44 11030  
12:48 11040  
12:52 11050  
13:33 11060  
13:57 11070  
14:03 11080  
14:08 11090



10896.65ft: TRANSFERRED 400.00

10904.99ft: PVT:Volume alarm muted

10961.09ft: Connection at 10959.5  
10961.09ft: SURVEY @10904 INC 0.7 AZI 155.1  
10961.55ft: MUD VIS 62.00  
10961.84ft: MUD WEIGHT 11.00

10992.42ft: PUMP SWEEP

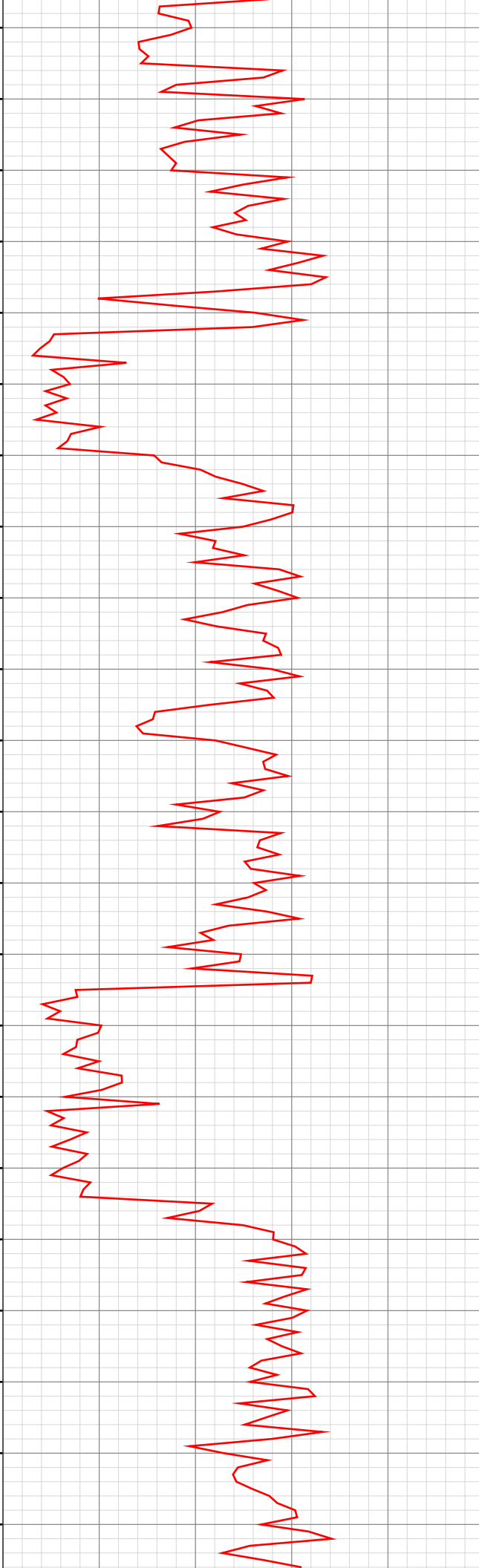
11041.63ft: PVT:Volume alarm reactivated: un-muted

11050.30ft: Connection at 11051.5  
11050.30ft: SURVEY @10996 INC 0.9 AZI 174.5  
11050.30ft: 3300 CFM PARA  
11056.63ft: MUD VIS 59.00  
11056.63ft: MUD WEIGHT 11.00

11069.85ft: ZDiffPressure from SideKick sk-11-11-0402

11080.97ft: PUMP SWEEP

14:13 11100  
14:20 11110  
14:26 11120  
14:31 11130  
14:36 11140  
15:10 11150  
15:32 11160  
15:37 11170  
15:43 11180  
15:47 11190  
15:53 11200  
15:58 11210  
16:03 11220  
16:08 11230  
16:38 11240  
16:51 11250  
17:09 11260  
17:21 11270  
17:25 11280  
17:30 11290  
17:34 11300  
17:38 11310



11104.59ft: MUD VIS 60.00  
11104.59ft: MUD WEIGHT 11.00

11142.26ft: Connection at 11143.3  
11142.26ft: SURVEY @11088 INC 0.5 AZI 221.8  
11142.26ft: ZDiffPressure from SideKick sk-11-11-0402

11158.89ft: 3300 CFM PARA  
11159.12ft: PUMP SWEEP

11234.32ft: Connection at 11235.2  
11234.32ft: SURVEY @11180 INC 1.2 AZI 214.6  
11236.25ft: MUD VIS 59.00 MUD WEIGHT 11.00

11252.53ft: 3300 CFM PARA

11263.32ft: ZDiffPressure from SideKick sk-11-11-0402

11278.71ft: PUMP SWEEP

11291.47ft: MUD VIS 60.00  
11291.90ft: MUD WEIGHT 11.05

17:43 11320  
18:25 11330  
18:59 11340  
19:16 11350  
19:22 11360  
19:27 11370  
19:32 11380  
19:38 11390  
19:41 11400  
19:46 11410  
20:07 11420  
20:12 11430  
20:16 11440  
20:20 11450  
20:25 11460  
20:29 11470  
20:33 11480  
20:38 11490  
20:42 11500  
20:47 11510  
21:10 11520  
21:14 11530

11326.38ft: Connection at 11327.0  
11326.38ft: SURVEY @ 11272' INC. 0.7 AZ. 155.6  
11327.63ft: MUD VIS 53.00  
11327.79ft: MUD WEIGHT 11.00  
11327.79ft: MUD PH 8.70  
11330.25ft: PARA CFM 3300  
11334.65ft: TEST LEL'S  
11335.24ft: HGAS\_020: LOCATION1 Low LEL Alarm  
11335.24ft: HGAS\_004: Horn Muted  
11339.11ft: HGAS\_024: LOCATION2 High LEL Alarm  
11339.11ft: HGAS\_004: Horn Muted  
11340.62ft: MUD VIS 57.00  
11341.21ft: MUD WEIGHT 11.00  
11341.21ft: MUD PH 8.70  
11348.75ft: ZWOB from SideKick sk-11-11-0402  
11348.75ft: ZDiffPressure from SideKick sk-11-11-0402  
11350.16ft: SWEEP

11418.50ft: Connection at 11418.8  
11418.50ft: SURVEY @ 11363' INC. 1.7 AZ. 45.8  
11418.50ft: MUD VIS 55.00  
11418.50ft: MUD WEIGHT 11.00  
11418.50ft: MUD PH 8.60  
11418.50ft: ZWOB from SideKick sk-11-11-0402  
11418.50ft: ZDiffPressure from SideKick sk-11-11-0402

11432.74ft: SWEEP

11510.60ft: Connection at 11510.7  
11510.60ft: SURVEY @ 11455' INC. 1.1 AZ. 51.8  
11510.60ft: ZWOB from SideKick sk-11-11-0402  
11510.60ft: ZDiffPressure from SideKick sk-11-11-0402

11519.42ft: SWEEP

11533.20ft: MUD VIS 55.00  
11534.12ft: MUD WEIGHT 11.05

11534.12ft: MUD WEIGHT 11.05

21:18 11540

21:22 11550

11548.20ft: PARA CFM 3300

21:26 11560

21:31 11570

21:35 11580

21:40 11590

21:44 11600

11602.72ft: Connection at 11602.6  
11602.72ft: SURVEY @ 11547' INC. 0.1 AZ. 91.8  
11602.72ft: ZWOB from SideKick sk-11-11-0402  
11602.72ft: ZDiffPressure from SideKick sk-11-11-0402  
11609.68ft: MUD VIS 53.00  
11610.01ft: MUD WEIGHT 11.05  
11610.20ft: MUD PH 8.70

22:02 11610

11615.55ft: SWEEP

22:06 11620

22:11 11630

22:16 11640

22:19 11650

22:24 11660

22:28 11670

22:33 11680

22:37 11690

11694.85ft: Connection at 11694.5  
11694.85ft: SURVEY @ 11639' INC. 0.4 AZ. 231.5  
11694.85ft: ZWOB from SideKick sk-11-11-0402  
11694.85ft: ZDiffPressure from SideKick sk-11-11-0402  
11699.54ft: SWEEP

22:56 11700

23:00 11710

23:04 11720

23:10 11730

23:15 11740

23:19 11750

23:23 11760  
23:28 11770  
23:32 11780  
23:51 11790  
23:54 11800  
23:59 11810  
00:04 11820  
00:09 11830  
00:13 11840  
00:17 11850  
00:22 11860  
00:27 11870  
00:45 11880  
00:49 11890  
00:53 11900  
00:58 11910  
01:03 11920  
01:08 11930  
01:12 11940  
01:17 11950  
01:22 11960  
01:29 11970

Mar 30, 2013

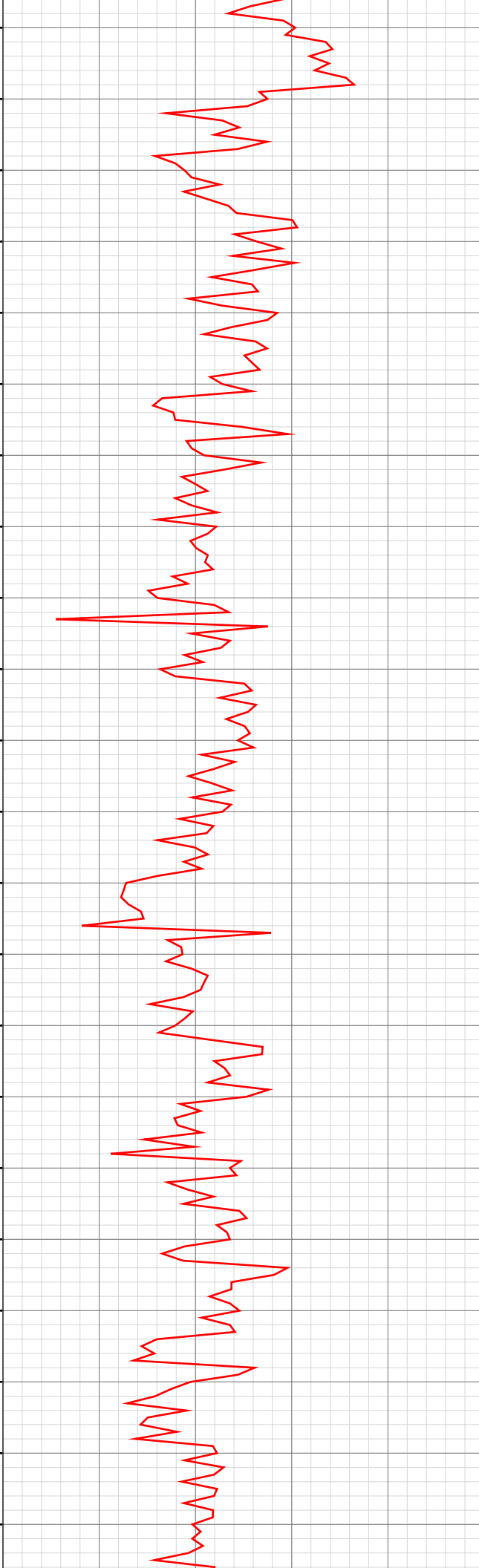
11781.59ft: PARA CFM 3300  
11786.98ft: MUD VIS 54.00  
11786.98ft: MUD WEIGHT 11.05  
11786.98ft: MUD PH 8.80  
11786.98ft: Connection at 11786.4  
11786.98ft: SURVEY @ 11731' INC. 0.9 AZ. 227.3  
11786.98ft: ZWOB from SideKick sk-11-11-0402  
11786.98ft: ZDiffPressure from SideKick sk-11-11-0402  
11795.54ft: SWEEP

11878.81ft: Connection at 11878.2  
11878.81ft: MUD VIS 53.00  
11878.81ft: MUD WEIGHT 11.05  
11878.81ft: MUD PH 8.50  
11878.81ft: SURVEY @ 11823' INC. 1.2 AZ. 231.8  
11878.81ft: ZWOB from SideKick sk-11-11-0402  
11878.81ft: ZDiffPressure from SideKick sk-11-11-0402  
11883.79ft: SWEEP

11927.59ft: TRANSFERRED 200.00

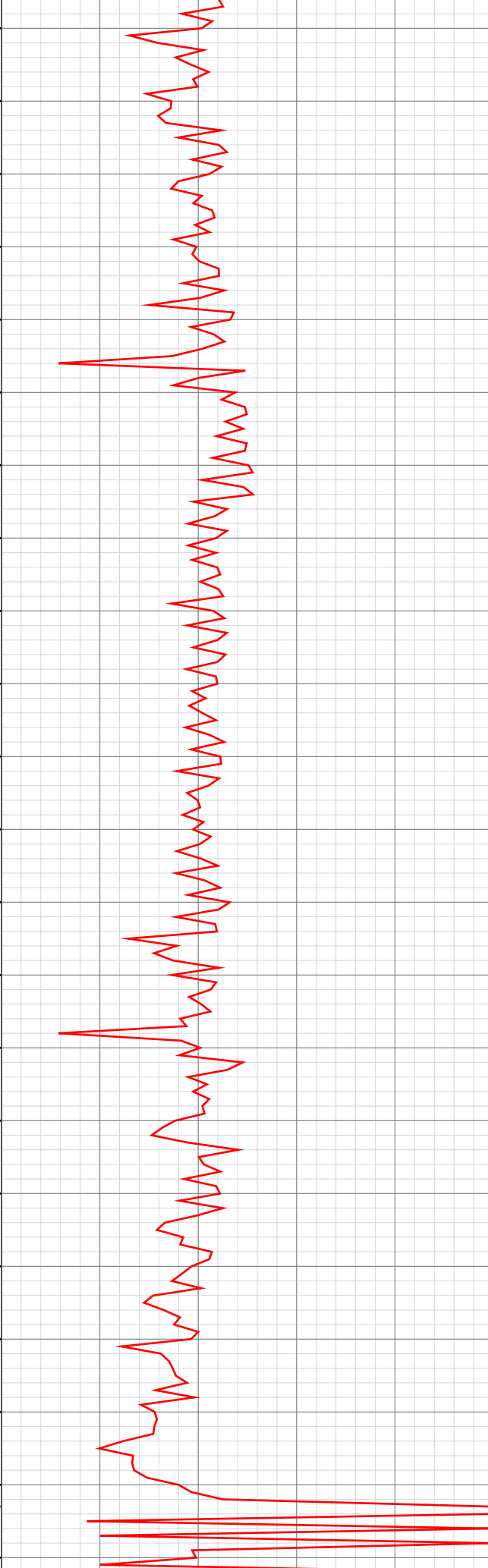
11970.93ft: MUD VIS 54.00  
11970.93ft: MUD WEIGHT 11.05  
11970.93ft: MUD PH 8.70  
11970.93ft: Connection at 11970.3  
11970.93ft: SURVEY @ 11915' INC. 1.7 AZ. 240.0  
11970.93ft: PUMP CELLAR

01:48 11980  
01:52 11990  
01:57 12000  
02:02 12010  
02:07 12020  
02:12 12030  
02:18 12040  
02:24 12050  
02:30 12060  
02:50 12070  
02:56 12080  
03:01 12090  
03:07 12100  
03:16 12110  
03:22 12120  
03:28 12130  
03:34 12140  
03:39 12150  
04:19 12160  
04:26 12170  
04:33 12180  
04:39 12190



11970.93ft: ZWOB from SideKick sk-11-11-0402  
11970.93ft: ZDiffPressure from SideKick sk-11-11-0402  
  
11985.70ft: SWEEP  
  
12048.20ft: PARA CFM 3300  
  
12062.96ft: Connection at 12062.0  
12062.96ft: SURVEY @ 12007' INC. 2.5 AZ. 237.1  
12062.96ft: ZWOB from SideKick sk-11-11-0402  
12062.96ft: ZDiffPressure from SideKick sk-11-11-0402  
  
12070.64ft: SWEEP  
  
12076.31ft: MUD VIS 56.00  
12076.61ft: MUD WEIGHT 11.05  
12076.61ft: MUD PH 8.60  
  
12153.81ft: ZWOB from SideKick sk-11-11-0402  
12153.81ft: ZDiffPressure from SideKick sk-11-11-0402  
12155.09ft: Connection at 12153.8  
12155.09ft: SURVEY @ 12098' INC. 2.2 AZ. 241.7  
12155.09ft: MUD VIS 52.00  
12155.09ft: MUD WEIGHT 11.10  
12155.09ft: MUD PH 8.70  
12165.13ft: SWEEP  
12202.36ft: PUMP CELLAR  
12212.86ft: RLP TRANSFER 120 BBL IN 12 HRS  
12221.46ft: MUD VIS 48.00  
12221.46ft: MUD WEIGHT 11.25  
12221.52ft: MUD PH 8.50  
12245.70ft: Connection at 12245.5  
12245.70ft: SURVEY @ 12190' INC. 2.0 AZ. 238.2  
12245.70ft: PARA CFM 3300  
12245.70ft: ZWOB from SideKick sk-11-11-0402  
12245.70ft: ZDiffPressure from SideKick sk-11-11-0402  
12295.37ft: PUMP SWEEP  
12337.73ft: MUD VIS 52.00  
12337.73ft: MUD WEIGHT 11.30  
12337.73ft: Connection at 12337.2  
12337.73ft: SURVEY @ 12282' INC 2.3 AZI 224.5  
12337.73ft: ZWOB from SideKick sk-11-11-0402  
12349.25ft: 3300 CFM PARASITE AIR  
12379.36ft: MUD VIS 52.00  
12379.36ft: MUD WEIGHT 11.30  
12402.00ft: LAND CASING SHOE @ 12,372'  
12402.00ft: AIR BYPASSED  
12402.00ft: START AIR PILLS  
12402.00ft: 1800 CFM  
12402.00ft: 2400 CFM  
12402.00ft: 2900 CFM PARA  
12402.00ft: PARA CFM 3000  
12402.00ft: MUD VIS 45.00  
12402.00ft: MUD WEIGHT 11.33  
12402.00ft: TEST LEL'S  
12402.00ft: HGAS\_020: LOCATION1 Low LEL Alarm  
12402.00ft: HGAS\_021: LOCATION1 High LEL Alarm  
12402.00ft: HGAS\_004: Horn Muted  
12402.00ft: HGAS\_024: LOCATION2 High LEL Alarm  
12402.00ft: HGAS\_004: Horn Muted  
12402.00ft: AIR BYPASSED  
12402.00ft: PVT:Flow alarm reactivated: un-muted  
12402.00ft: PRESURE TETING CEMENT LINES  
12402.00ft: PVT:Flow alarm muted  
12402.00ft: START AIR PILLS  
12402.00ft: PARA CFM 1800  
12402.00ft: PUMP CELLAR  
12402.00ft: PARA CFM 2700

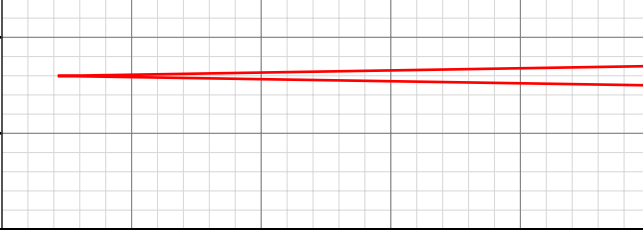
04:45 12200  
04:51 12210  
04:58 12220  
05:04 12230  
05:10 12240  
05:31 12250  
05:36 12260  
05:42 12270  
05:48 12280  
05:54 12290  
05:59 12300  
06:05 12310  
06:11 12320  
06:18 12330  
06:38 12340  
06:43 12350  
06:49 12360  
06:56 12370  
07:03 12380  
07:11 12390  
07:18 12400  
Mar 31, 2013  
17:02 12410



12402.00ft: PARA CFM 3000  
12402.00ft: PARA CFM 3200  
12402.00ft: AIR BYPASSED  
12402.00ft: DROP PLUG  
12402.00ft: START AIR PILLS  
12402.00ft: AIR BYPASSED  
12402.00ft: PLUG DOWN  
12402.00ft: PVT:Volume alarm muted  
12402.13ft: SURVEY @12347 INC 2.5 AZI 227.3  
12402.72ft: PUMP SWEEP  
12402.72ft: PUMP OUT CELLAR  
12402.72ft: PUMP SWEEP  
12402.72ft: 3300 CFM PARA  
12402.72ft: MUD VIS 56.00  
12402.72ft: MUD WEIGHT 11.35  
12402.72ft: PUMP OUT CELLAR  
12402.72ft: MUD VIS 55.00  
12402.72ft: MUD WEIGHT 11.35  
12402.72ft: AIR BYPASSED  
12402.72ft: CIRC & TRIP OUT FOR CASING  
12402.72ft: FLOW CHECK  
12402.72ft: ZERO ALL PUMPS from SideKick sk-11-11-0402  
12402.72ft: PVT:Flow alarm reactivated: un-muted  
12402.72ft: TRANSFERRED 300.00  
12402.72ft: PVT:Volume alarm muted  
12402.72ft: MUD VIS 60.00  
12402.72ft: MUD WEIGHT 11.35  
12402.72ft: MUD VIS 60.00  
12402.72ft: MUD WEIGHT 11.40  
12402.72ft: MUD VIS 54.00  
12402.72ft: MUD WEIGHT 11.40  
12402.72ft: PULL ROTATING HEAD  
12402.72ft: MUD VIS 62.00  
12402.72ft: MUD WEIGHT 11.40  
12402.72ft: ZERO ALL PUMPS from SideKick sk-11-11-0402  
12402.72ft: PVT:Flow alarm muted  
12402.72ft: PULL WEARBUSHING  
12402.72ft: C/O SAVER SUB  
12402.72ft: pull wear bushing / rig service  
12402.72ft: PVT:Volume alarm reactivated: un-muted  
12402.72ft: MUD VIS 59.00  
12402.72ft: MUD WEIGHT 11.40  
12402.72ft: MUD VIS 54.00  
12402.72ft: MUD WEIGHT 11.40  
12402.72ft: TRANSFERRED 180.00  
12402.72ft: MUD VIS 54.00  
12402.72ft: MUD WEIGHT 11.40  
12402.72ft: PVT:Flow alarm reactivated: un-muted  
12402.72ft: BIT DEPTH CHANGED TO 398.0 FEET  
12402.72ft: BIT DEPTH CHANGED TO 440.0 FEET  
12402.72ft: BIT DEPTH CHANGED TO 6.0 FEET  
12402.72ft: BIT DEPTH CHANGED TO 648.0 FEET  
12402.72ft: HOOKLOAD WAS RECALIBRATED  
12402.72ft: BIT DEPTH CHANGED TO 606.0 FEET  
12402.72ft: MUD VIS 56.00  
12402.72ft: MUD WEIGHT 11.40  
12402.72ft: INSTALL RUBER  
12402.72ft: FILL PIPE  
12402.72ft: MUD VIS 53.00  
12402.72ft: MUD WEIGHT 11.40  
12402.72ft: BIT DEPTH CHANGED TO 4914.0 FEET  
12402.72ft: MUD VIS 47.00  
12402.72ft: MUD WEIGHT 11.35  
12402.72ft: START AIR PILLS  
12402.72ft: PVT:Flow alarm muted  
12402.72ft: PARA CFM 1800  
12402.72ft: PARA CFM 2100  
12402.72ft: PARA CFM 2400  
12402.72ft: PARA CFM 2700  
12402.72ft: 3000 CFM PARA  
12402.72ft: MUD VIS 55.00  
12402.72ft: MUD WEIGHT 11.30  
12402.72ft: AIR BYPASSED  
12402.72ft: STRAT AIR PILLS  
12402.72ft: PVT:Volume alarm muted  
12402.72ft: 1800 CFM PARA  
12402.72ft: 2400 CFM PARA  
12402.72ft: 2700 CFM PARA AIR BYPASSED  
12402.72ft: MUD VIS 53.00  
12402.72ft: MUD WEIGHT 10.30  
12402.72ft: MUD WEIGHT 11.30  
12402.72ft: RUN 2-JTS CHANGE TAWG PRESS CUPS TWICE  
12402.72ft: ZERO ALL PUMPS from SideKick sk-11-11-0402  
12402.72ft: FILL PIPE  
12402.72ft: TRANSFERRED 400.00  
12402.72ft: MUD VIS 59.00  
12402.72ft: MUD WEIGHT 11.30  
12402.72ft: FILL PIPE  
12402.72ft: START AIR PILLS  
12402.72ft: PVT:Flow and volume alarm reactivated: un-muted  
12402.72ft: PVT:Flow and volume alarm muted  
12402.72ft: 1800 CFM PARA  
12402.72ft: 2400 CFM PARA  
12402.72ft: BIT DEPTH CHANGED TO 9384.0 FEET  
12402.72ft: 2700 CFM PARA  
12402.72ft: 3000 CFM PARA  
12402.72ft: MUD VIS 59.00  
12402.72ft: MUD WEIGHT 11.30  
12402.72ft: AIR BYPASSED  
12402.72ft: PVT:Flow and volume alarm reactivated: un-muted  
12402.72ft: MUD VIS 58.00  
12402.72ft: MUD WEIGHT 11.30  
12402.72ft: LAY DOWN BAD JOINT  
12402.72ft: MUD VIS 55.00  
12402.72ft: MUD WEIGHT 11.30  
12402.72ft: FILL PIPE  
12402.72ft: START AIR PILLS  
12402.72ft: PVT:Flow and volume alarm muted  
12402.72ft: 1800 CFM PARA  
12402.72ft: 2400 CFM PARA  
12402.72ft: 2700 CFM PARA  
12402.72ft: 3000 CFM PARA  
12402.72ft: AIR BYPASSFD

17:04 12420

12430



12402.72ft: START AIR PILLS  
12402.72ft: 1800 CFM PARA  
12402.72ft: 2400 CFM PARA  
12402.72ft: MUD VIS 57.00  
12402.72ft: MUD WEIGHT 11.30  
12402.72ft: 2700 CFM PARA  
12402.72ft: 2900 CFM PARA  
12402.72ft: PVT:Volume alarm reactivated: un-muted  
12429.66ft: MUD VIS 49.00  
12429.66ft: MUD WEIGHT 11.30  
12429.66ft: BIT DEPTH CHANGED TO 12372.0 FEET  
12429.66ft: HOLE DEPTH CHANGED TO 12402.0 FEET