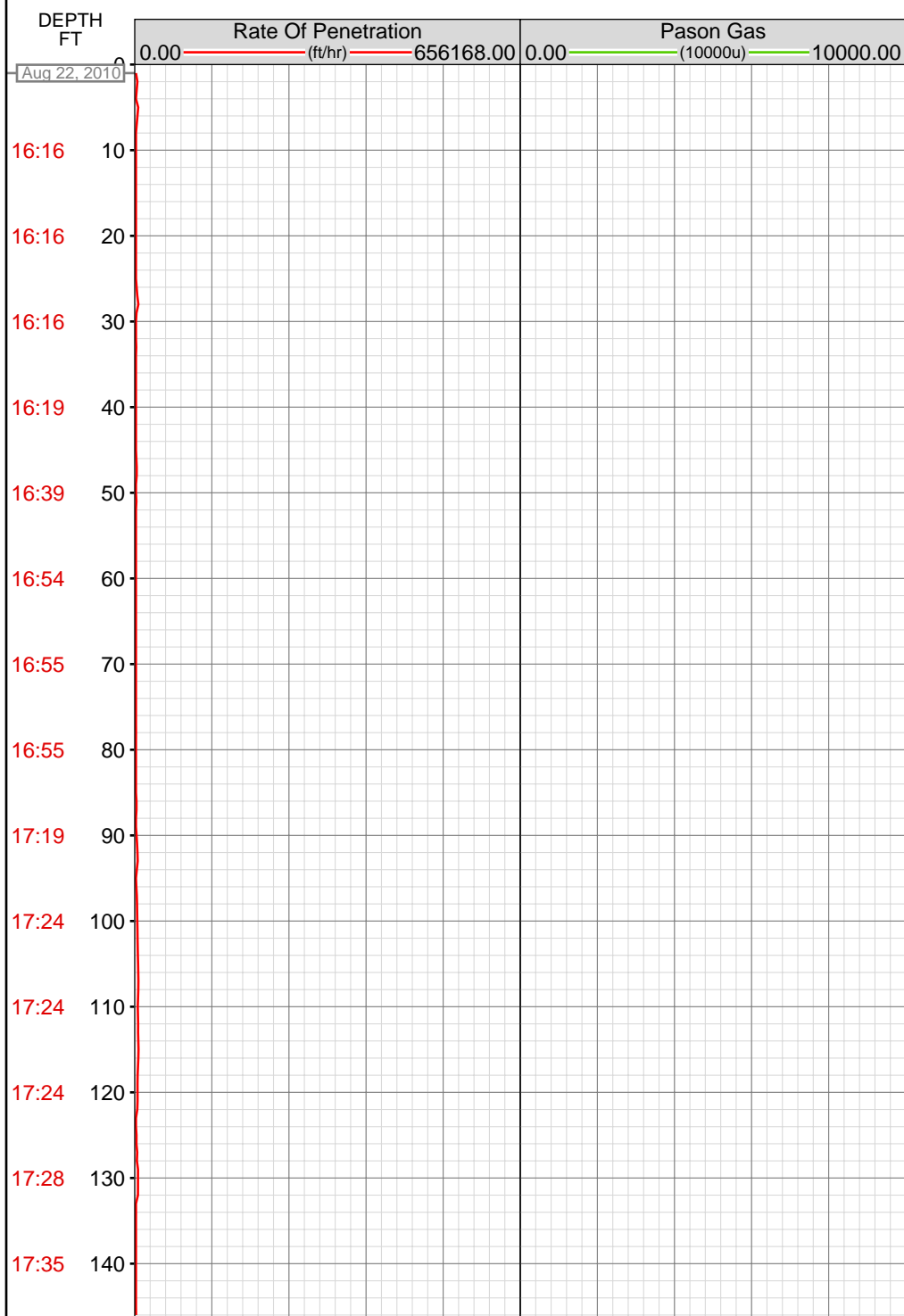


# DataHub EDR Log

Mon Aug 30, 2010 09:03:13  
Well Dossier 1282512707  
Marilyn Tucker

**OPERATOR:** EnCana Oil & Gas (USA), Inc.  
**WELL:** NPWF 04D-22 K22 596  
**FIELD:**  
**LOCATION:** NESW Sec. 22-TWP5S-RNG96W-M6TH  
**COUNTRY:** USA  
**RIG:** Pat-UTI 303

**CONTRACTOR:** Patterson-UTI Drilling Company  
**UNIQUE WELL ID:** 05 045 18895 00  
**SPUD DATE:** Aug 22, 2010 22:00  
**RELEASE DATE:** Aug 28, 2010 02:00



MEMOS

44.00ft: SYSTEM-WIDE UNIT CHANGE FOR  
HEAVY GAS TO GAS10000 SYSTEM-WIDE UNIT  
CHANGE FOR PASON GAS TO GAS10000  
52.00ft: MUD VIS 60.00  
52.00ft: MUD WEIGHT 8.60

17:35 150

17:56 160

18:01 170

18:01 180

18:01 190

18:14 200

18:14 210

18:14 220

18:14 230

18:14 240

18:14 250

18:14 260

18:14 270

18:15 280

18:16 290

18:16 300

18:16 310

18:16 320

18:16 330

18:16 340

18:16 350

18:17 360

18:17 370

18:18 380

18:18 390

18:18 400

18:18 410

18:18 420

18:18 430

18:18 440

18:18 450

18:20 460

18:20 470

18:20 480

18:20 490

18:20 500

18:20 510

18:20 520

18:20 530

18:20 540

18:23 550

18:23 560

18:23 570

18:23 580

18:23 590

18:23 600

18:23 610

18:23 620

18:23 630

18:32 640

18:32 650

18:35 660

18:35 670

18:36 680

18:36 690

18:36 700

18:36 710

18:36 720

18:37 730

18:39 740

18:39 750

18:39 760

18:39 770

18:40 780

18:40 790

18:41 800

18:41 810

18:41 820

18:42 830

18:42 840

18:43 850

18:43 860

18:44 870

18:44 880

18:44 890

18:44 900

18:44 910

18:46 920

18:46 930

18:46 940

18:46 950

18:48 960

18:48 970

18:48 980

18:48 990

18:48 1000

18:50 1010

18:50 1020

18:50 1030

18:50 1040

18:50 1050

18:52 1060

18:52 1070

18:52 1080

18:52 1090

18:53 1100

18:53 1110

18:53 1120

18:54 1130

18:54 1140

18:55 1150

18:55 1160

18:55 1170

18:55 1180

18:56 1190

18:57 1200

18:57 1210

18:57 1220

18:57 1230

18:59 1240

18:59 1250

18:59 1260

19:00 1270

19:00 1280

19:01 1290

19:01 1300

19:01 1310

19:01 1320

19:02 1330

19:03 1340

19:03 1350

19:03 1360

19:03 1370

19:04 1380

19:05 1390

19:05 1400

19:05 1410

19:05 1420

19:07 1430

19:07 1440

19:07 1450

19:07 1460

19:07 1470

19:09 1480

19:09 1490

19:09 1500

19:09 1510

19:09 1520

19:11 1530

19:11 1540

19:11 1550

19:11 1560

19:11 1570

19:13 1580

19:13 1590

19:13 1600

19:13 1610

19:15 1620

19:15 1630

19:15 1640

19:15 1650

19:15 1660

19:17 1670

19:17 1680



19:17 1690  
19:17 1700  
19:21 1710  
19:21 1720  
19:21 1730  
19:21 1740  
22:12 1750  
22:16 1760  
22:20 1770  
22:26 1780  
22:32 1790  
22:36 1800  
22:39 1810  
22:43 1820  
22:55 1830  
22:55 1840  
22:58 1850  
23:02 1860  
23:05 1870  
23:08 1880  
23:12 1890  
23:16 1900

1745.00ft: BIT DEPTH CHANGED TO 1645.0  
FEET  
1745.00ft: MUD VIS 48.00  
1745.00ft: MUD WEIGHT 8.75  
1745.00ft: BIT DEPTH CHANGED TO 1745.0  
FEET  
1745.11ft: Connection at 1746.8  
1755.00ft: HOLE DEPTH CHANGED TO 1653.0  
FEET  
1755.00ft: ZWOB from SideKick sk-06-03-3103  
1755.00ft: ZDiffPressure from SideKick  
sk-06-03-3103  
1755.00ft: BIT DEPTH CHANGED TO 1675.0  
FEET  
1755.00ft: BIT DEPTH CHANGED TO 1701.0  
FEET

1782.00ft: ZDIFF from DHC  
1782.00ft: ZWOB from DHC

1825.00ft: IN TALLY: HOLE DEPTH SET TO  
1838.3  
1825.00ft: ZDIFF from DHC  
1825.00ft: BIT DEPTH CHANGED TO 1838.0  
FEET  
1825.00ft: HOOK LOAD HIGH RECALIBRATED  
1825.00ft: ZWOB from DHC

1838.59ft: SURVEY @ 1783 in 27.7 az 320.0  
tvd 1689  
1838.59ft: Connection at 1838.3

23:19 1910-

23:22 1920-

23:25 1930-

23:37 1940-

23:43 1950-

23:47 1960-

23:49 1970-

23:52 1980-

23:55 1990-

23:57 2000-

Aug 23, 2010  
00:00 2010-

00:03 2020-

00:20 2030-

00:26 2040-

00:30 2050-

00:33 2060-

00:36 2070-

00:38 2080-

00:40 2090-

00:43 2100-

00:46 2110-

00:57 2120-

1930.00ft: BIT DEPTH CHANGED TO 1930.0  
FEET  
1930.14ft: Connection at 1929.9  
1930.14ft: SURVEY @ 1874 IN 26 AZ 319.5  
TVD 1770  
1932.00ft: HOOK LOAD THRESHOLD  
RECALIBRATED TO 36

1946.00ft: MUD VIS 46.00  
1946.00ft: MUD WEIGHT 8.75

2020.00ft: BIT DEPTH CHANGED TO 2020.0  
FEET  
2020.30ft: Connection at 2021.5 SURVEY @ 1966  
IN 26.3 AZ 324.8 TVD 1853

2114.05ft: SURVEY @ 2057 IN 27.7 AZ 329.9  
TVD 1934  
2114.05ft: Connection at 2113.0  
2114.34ft: BIT DEPTH CHANGED TO 2114.0  
FEET

01:00 2130

01:03 2140

01:06 2150

01:08 2160

01:10 2170

01:12 2180

01:14 2190

01:15 2200

01:23 2210

01:25 2220

01:27 2230

01:29 2240

01:30 2250

01:32 2260

01:34 2270

01:36 2280

01:38 2290

01:44 2300

01:47 2310

01:49 2320

01:52 2330

01:54 2340

2207.00ft: BIT DEPTH CHANGED TO 2207.0  
FEET  
2207.18ft: SURVEY @ 2149 IN 29.9 AZ 330.7  
TVD 2014  
2207.18ft: Connection at 2204.6

2215.00ft: HOOK LOAD THRESHOLD  
RECALIBRATED TO 32

2229.00ft: MUD VIS 48.00  
2229.00ft: MUD WEIGHT 8.70

2295.00ft: BIT DEPTH CHANGED TO 2295.0  
FEET  
2295.08ft: Connection at 2296.2  
2295.08ft: SURVEY @ 2241 IN 28.7 AZ 330.9  
TVD 2094

01:56 2350  
01:59 2360  
02:01 2370  
02:03 2380  
02:10 2390  
02:14 2400  
02:18 2410  
02:21 2420  
02:24 2430  
02:26 2440  
02:29 2450  
02:31 2460  
02:34 2470  
02:36 2480  
02:44 2490  
02:48 2500  
02:50 2510  
02:52 2520  
02:54 2530  
02:57 2540  
02:59 2550  
03:01 2560

2387.00ft: BIT DEPTH CHANGED TO 2387.0  
FEET  
2387.45ft: Connection at 2387.6 SURVEY @ 2332  
IN 27.1 AZ 331.4 TVD 2175

2481.00ft: HOOK LOAD LOW RECALIBRATED  
2481.00ft: HOOK LOAD HIGH RECALIBRATED  
2481.00ft: ZWOB from DHC  
2481.00ft: BIT DEPTH CHANGED TO 2481.0  
FEET  
2481.52ft: Connection at 2479.0 SURVEY @ 2424  
IN 29.3 AZ 334.3 TVD 2256  
2487.15ft: HOOK LOAD THRESHOLD  
RECALIBRATED TO 38  
2493.00ft: HOOKLOAD WAS RECALIBRATED  
2493.08ft: ZWOB from DHC

03:03 2570

03:14 2580

03:18 2590

03:22 2600

03:25 2610

03:27 2620

03:29 2630

03:31 2640

03:34 2650

03:36 2660

03:45 2670

03:48 2680

03:50 2690

03:53 2700

03:55 2710

03:58 2720

04:00 2730

04:03 2740

04:05 2750

04:15 2760

04:19 2770

04:23 2780

2572.61ft: Connection at 2570.5  
2572.61ft: SURVEY @ 2515 IN 28 AZ 333.7  
TVD 2336  
2572.61ft: ZDiffPressure from SideKick  
sk-06-03-3103

2662.85ft: Connection at 2661.9  
2662.85ft: SURVEY @ 2606 IN 28.6 AZ 331.8  
TVD 2416

2751.82ft: Connection at 2753.4

2759.49ft: SURVEY @ 2698 IN 27 AZ 331.8  
TVD 2497

04:27 2790

04:30 2800

04:32 2810

04:34 2820

04:35 2830

04:37 2840

2841.85ft: SURVEY @ 2789 IN 28.2 AZ 326.8  
TVD 2578 Connection at 2844.8

04:50 2850

04:52 2860

04:55 2870

04:57 2880

05:00 2890

05:02 2900

05:05 2910

05:07 2920

05:10 2930

2932.00ft: IN TALLY: HOLE DEPTH SET TO  
2936.3  
2936.30ft: Connection at 2936.3 SURVEY @ 2881  
IN 26.2 AZ 326.1 TVD 2660

05:18 2940

05:22 2950

05:27 2960

05:31 2970

2968.00ft: MUD VIS 49.00  
2968.00ft: MUD WEIGHT 8.70

05:34 2980

05:37 2990

05:39 3000

05:42 3010

05:44 3020

05:54 3030

05:56 3040

05:58 3050

06:01 3060

06:03 3070

06:05 3080

06:08 3090

06:11 3100

06:13 3110

06:22 3120

06:25 3130

06:29 3140

06:31 3150

06:33 3160

06:36 3170

06:39 3180

06:41 3190

06:44 3200

06:53 3210

06:57 3220

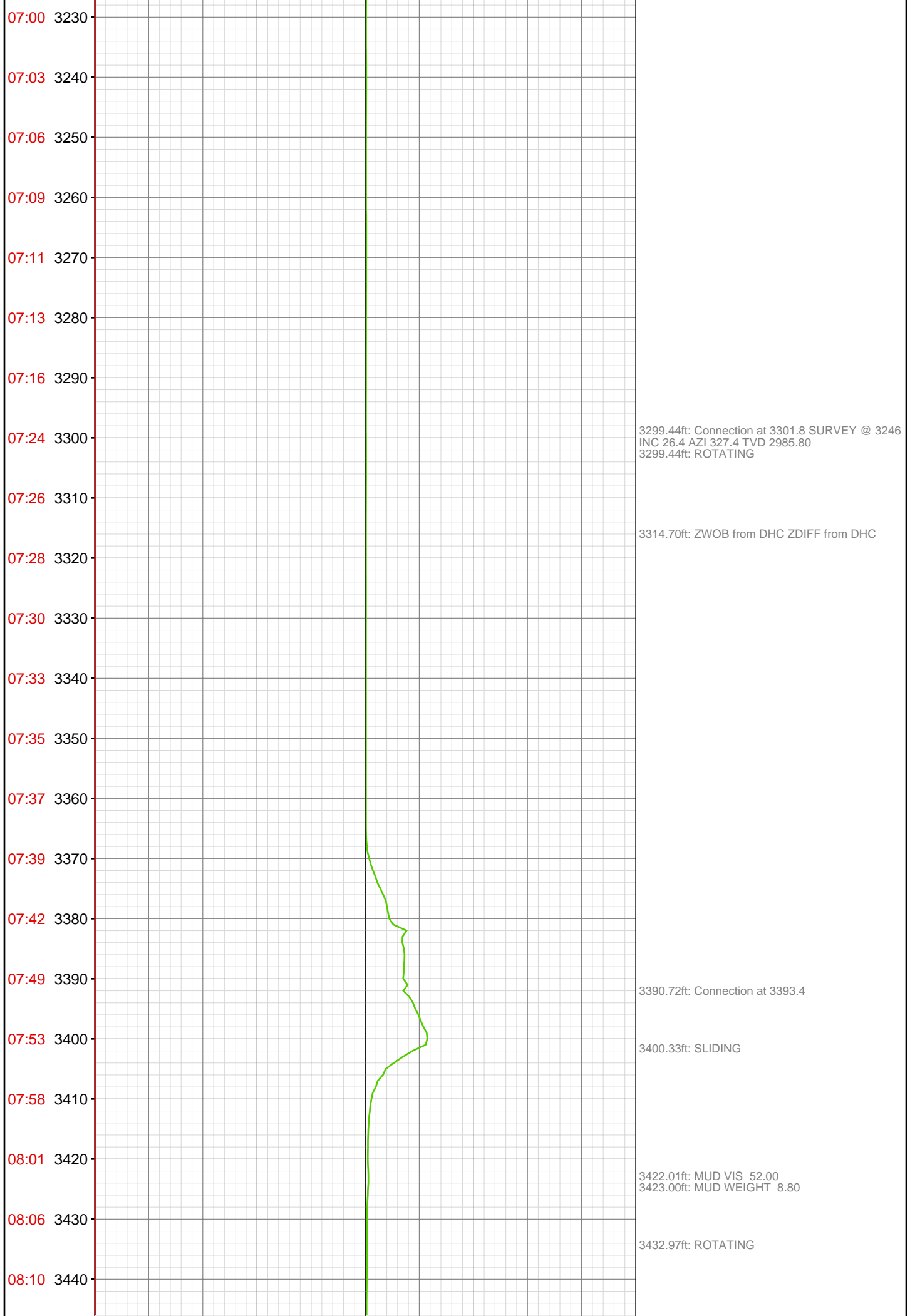
3027.53ft: Connection at 3027.6  
3027.53ft: SURVEY @ 2972 IN 28 AZ 324.4  
TVD 2741

3117.88ft: Connection at 3119.0

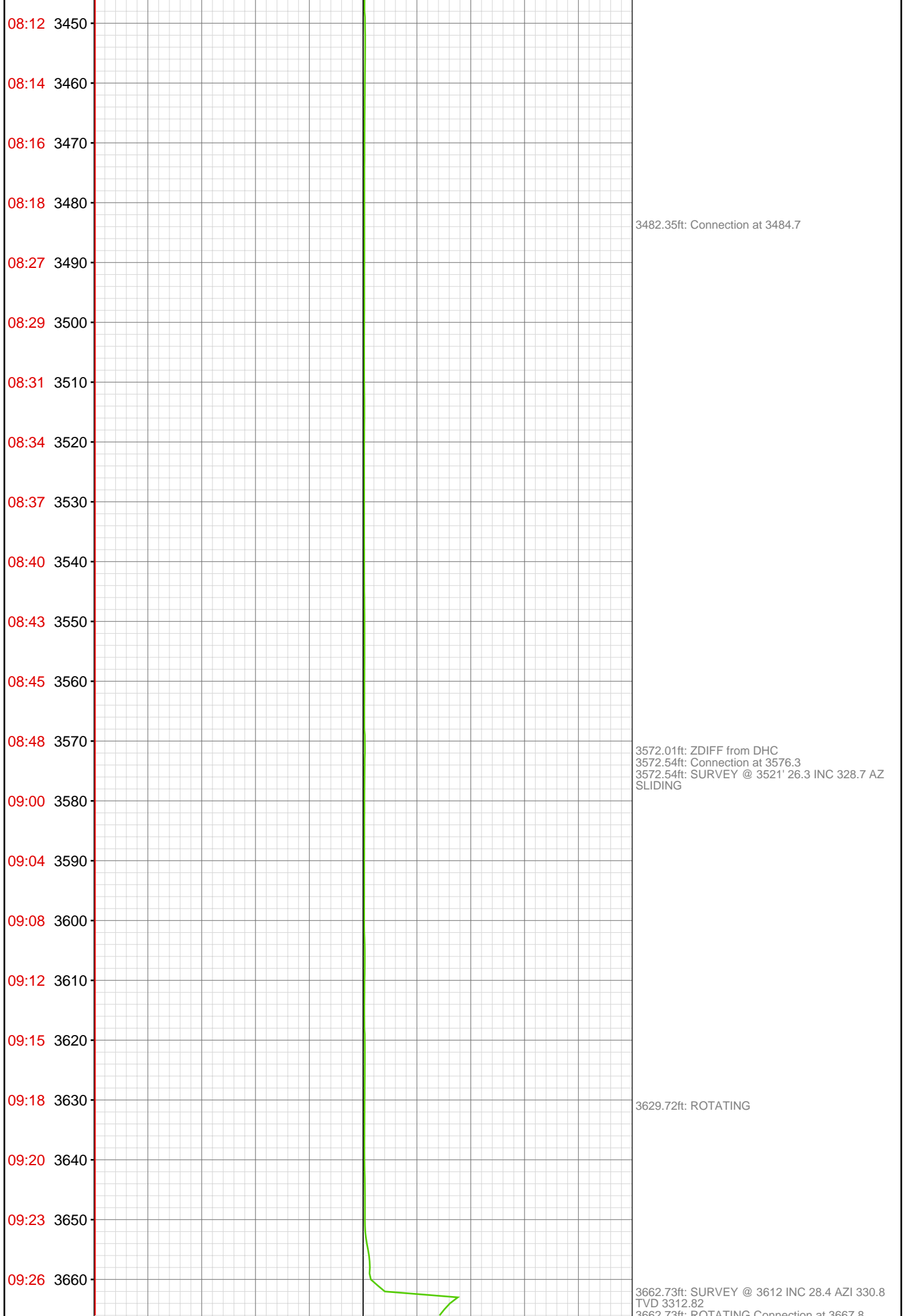
3124.00ft: MUD VIS 51.00  
3125.00ft: MUD WEIGHT 8.80

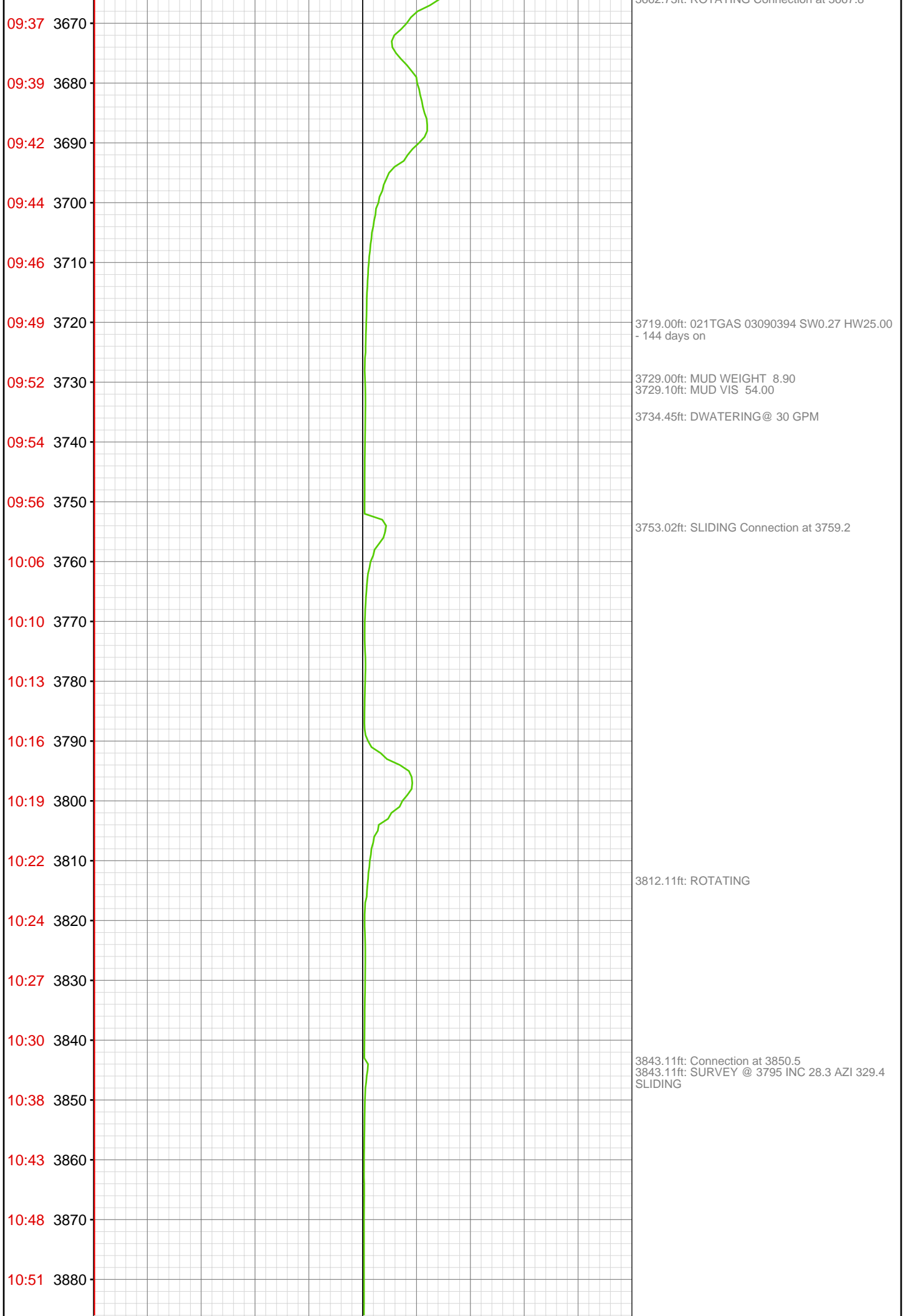
3204.56ft: Connection at 3210.3

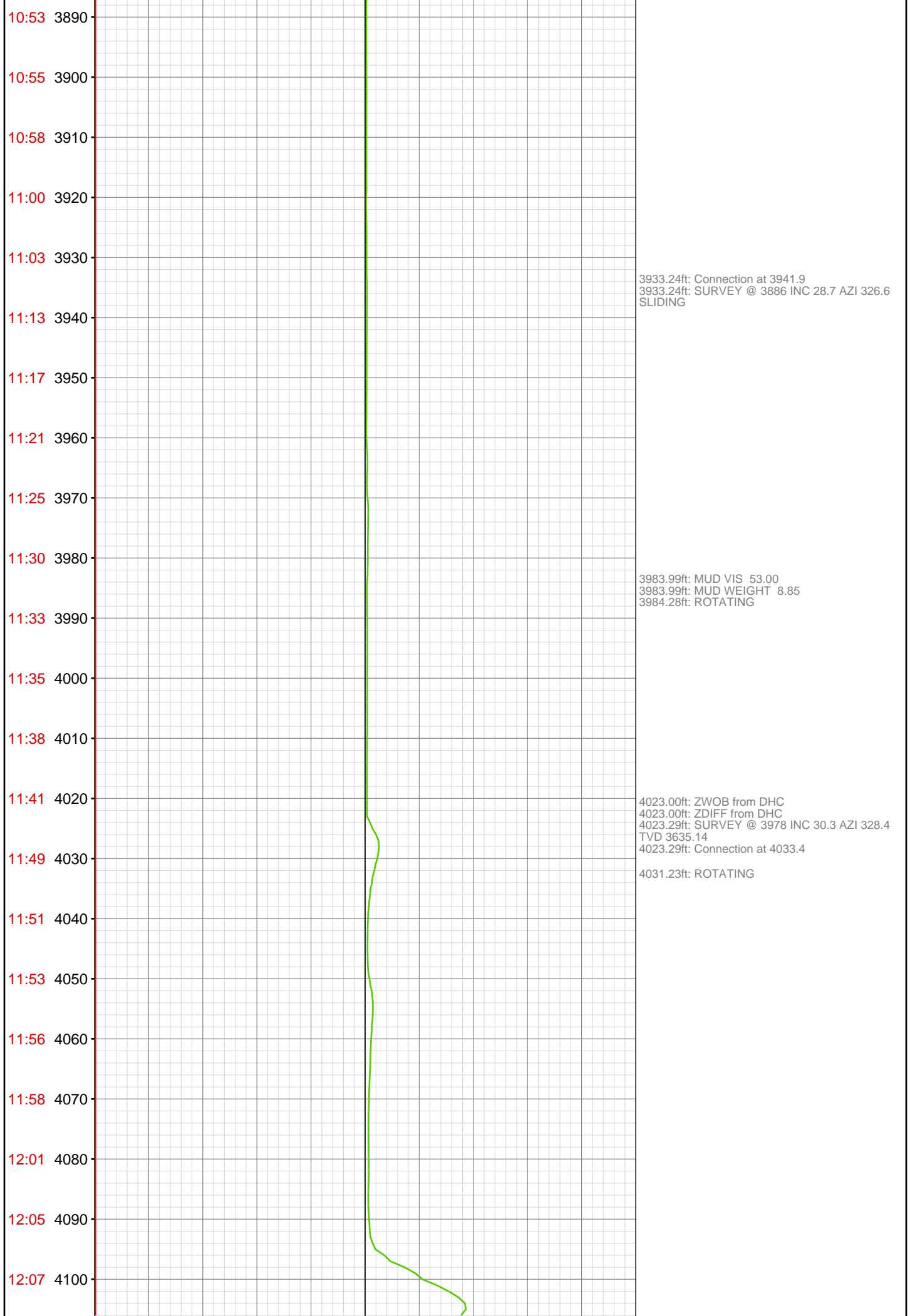
3208.12ft: SURVEY @ 3155 INC 26.3 AZI 323.4  
SLIDING

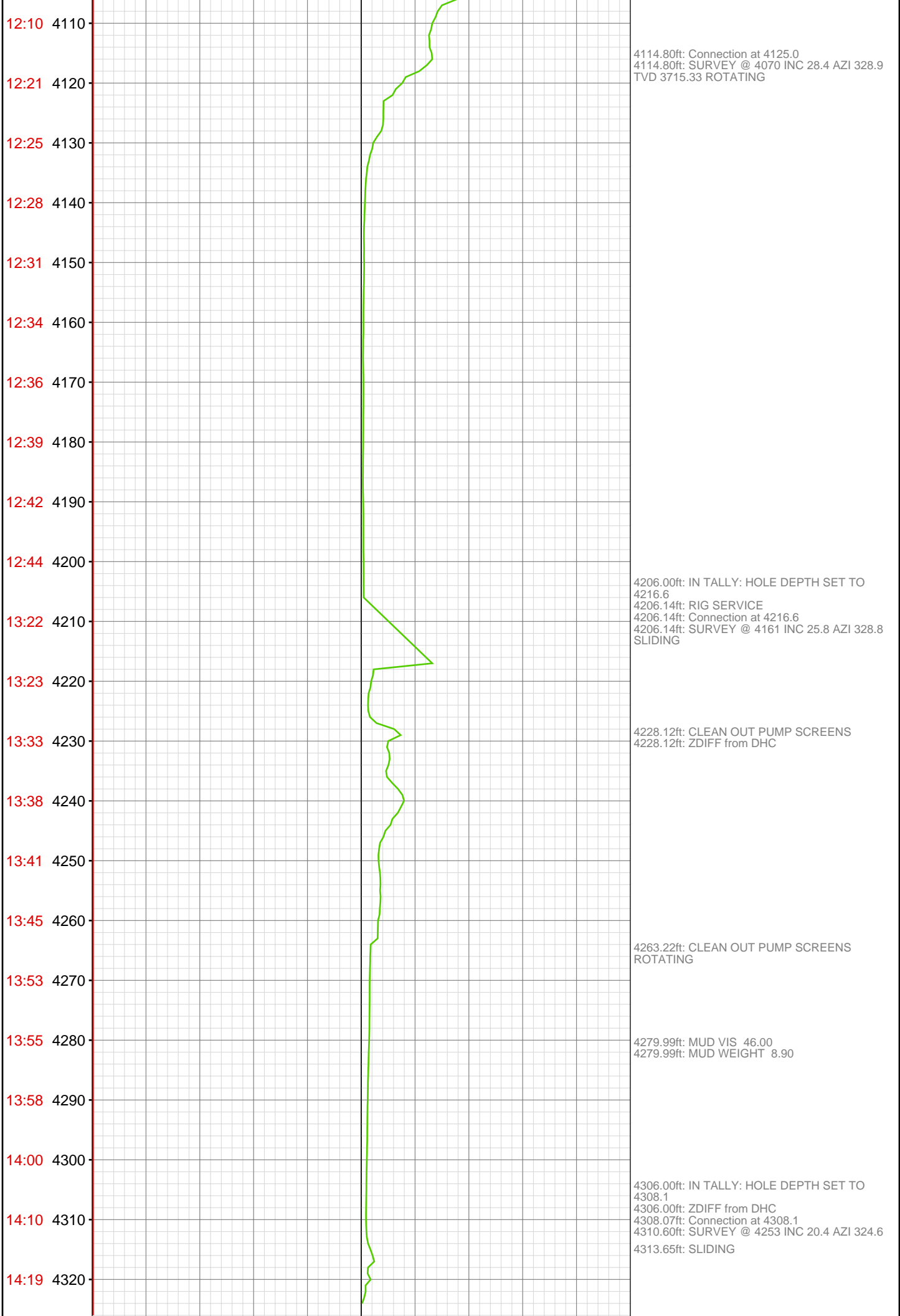












|       |      |  |
|-------|------|--|
| 14:30 | 4330 |  |
| 14:37 | 4340 | 4336.88ft: PVT Horn Enabled  |
| 14:42 | 4350 |  |
| 14:50 | 4360 | 4356.86ft: ROTATING  |
| 14:51 | 4370 |  |
| 14:54 | 4380 |  |
| 14:57 | 4390 |  |
| 15:06 | 4400 | 4398.00ft: ZDiffPressure from SideKick<br>sk-06-03-3103<br>4398.16ft: SURVEY @ 4344 INC 21.4 AZI 325.6<br>4398.16ft: Connection at 4399.5  |
| 15:11 | 4410 | 4410.30ft: SLIDING   |
| 15:15 | 4420 |  |
| 15:21 | 4430 | 4429.99ft: 003TGAS-Manual flush<br>4429.99ft: 003TGAS-Manual flush<br>4433.99ft: 002TGAS-Manual zero<br>4437.99ft: MUD VIS 46.00<br>4439.01ft: MUD WEIGHT 9.00<br>4439.99ft: 022TGAS-Trap needs service<br>4441.01ft: 046TGAS-Analyzer air pressure = zero,<br>check air supply. Standby |
| 15:25 | 4440 |  |
| 15:28 | 4450 |  |
| 15:32 | 4460 | 4458.99ft: 003TGAS-Manual flush<br>4458.99ft: 002TGAS-Manual zero  |
| 15:39 | 4470 | 4466.01ft: 036TGAS-Sample plugged. Flushing.<br>Call Pason   |
| 15:45 | 4480 |  |
| 16:04 | 4490 | 4489.01ft: 012TGAS-Analyzer air pressure low,<br>check air supply. Standby<br>4489.01ft: ZDIFF from DHC<br>4489.60ft: Connection at 4491.0   |
| 16:15 | 4500 |  |
| 16:21 | 4510 |  |
| 16:33 | 4520 |  |
| 16:45 | 4530 |  |
| 16:53 | 4540 |  |

16:59 4550-  
17:09 4560-  
17:17 4570-  
17:34 4580-  
17:41 4590-  
17:48 4600-  
17:56 4610-  
18:03 4620-  
18:11 4630-  
18:15 4640-  
18:20 4650-  
18:24 4660-  
18:27 4670-  
18:35 4680-  
18:39 4690-  
18:43 4700-  
18:48 4710-  
18:52 4720-  
18:56 4730-  
19:01 4740-  
19:05 4750-  
19:11 4760-

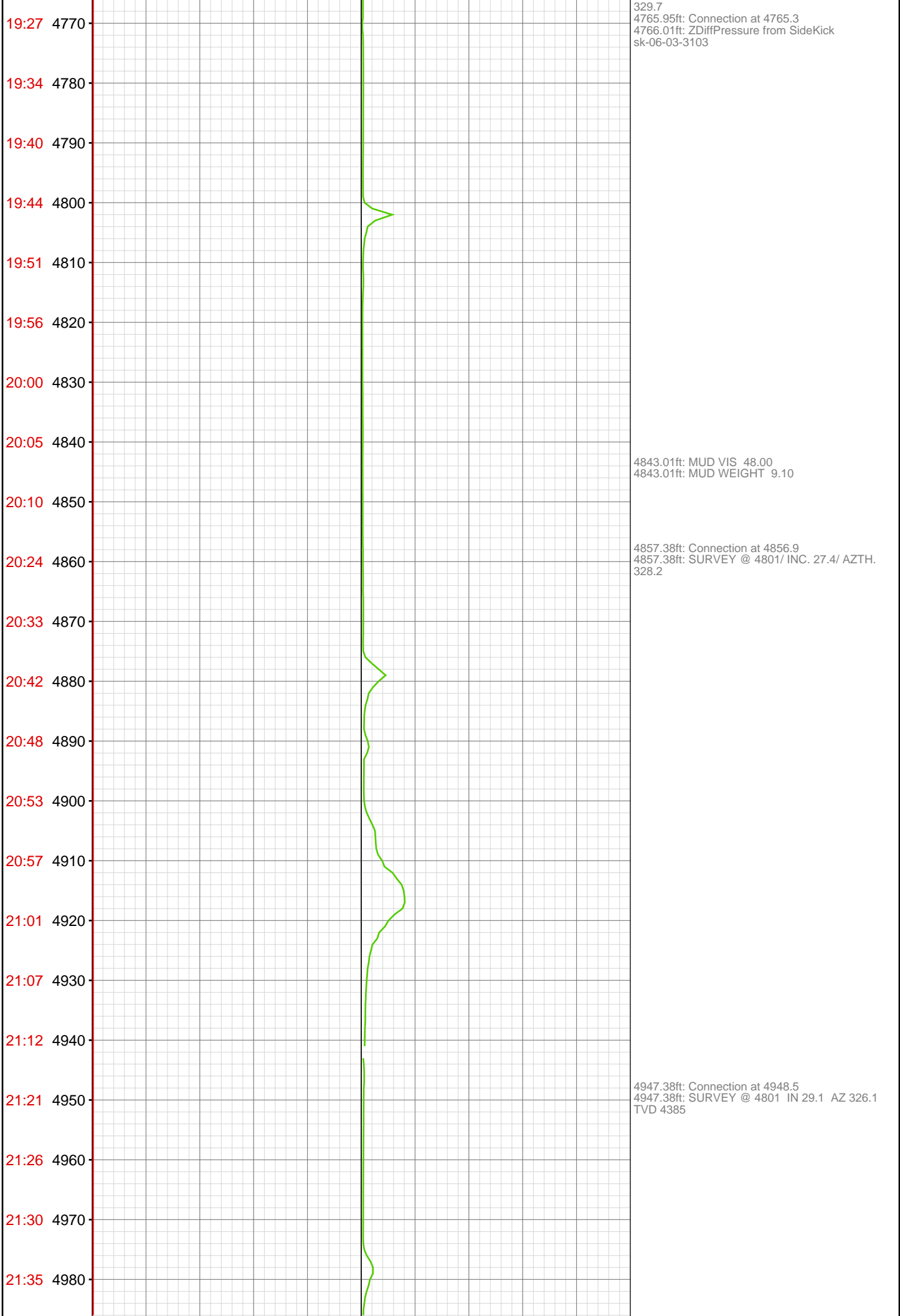
4577.00ft: 043TGAS-Check trap cable  
(unplugged?)  
4577.99ft: ZDIFF from DHC  
4577.99ft: MUD VIS 50.00  
4577.99ft: MUD WEIGHT 9.05  
4578.28ft: Connection at 4582.4

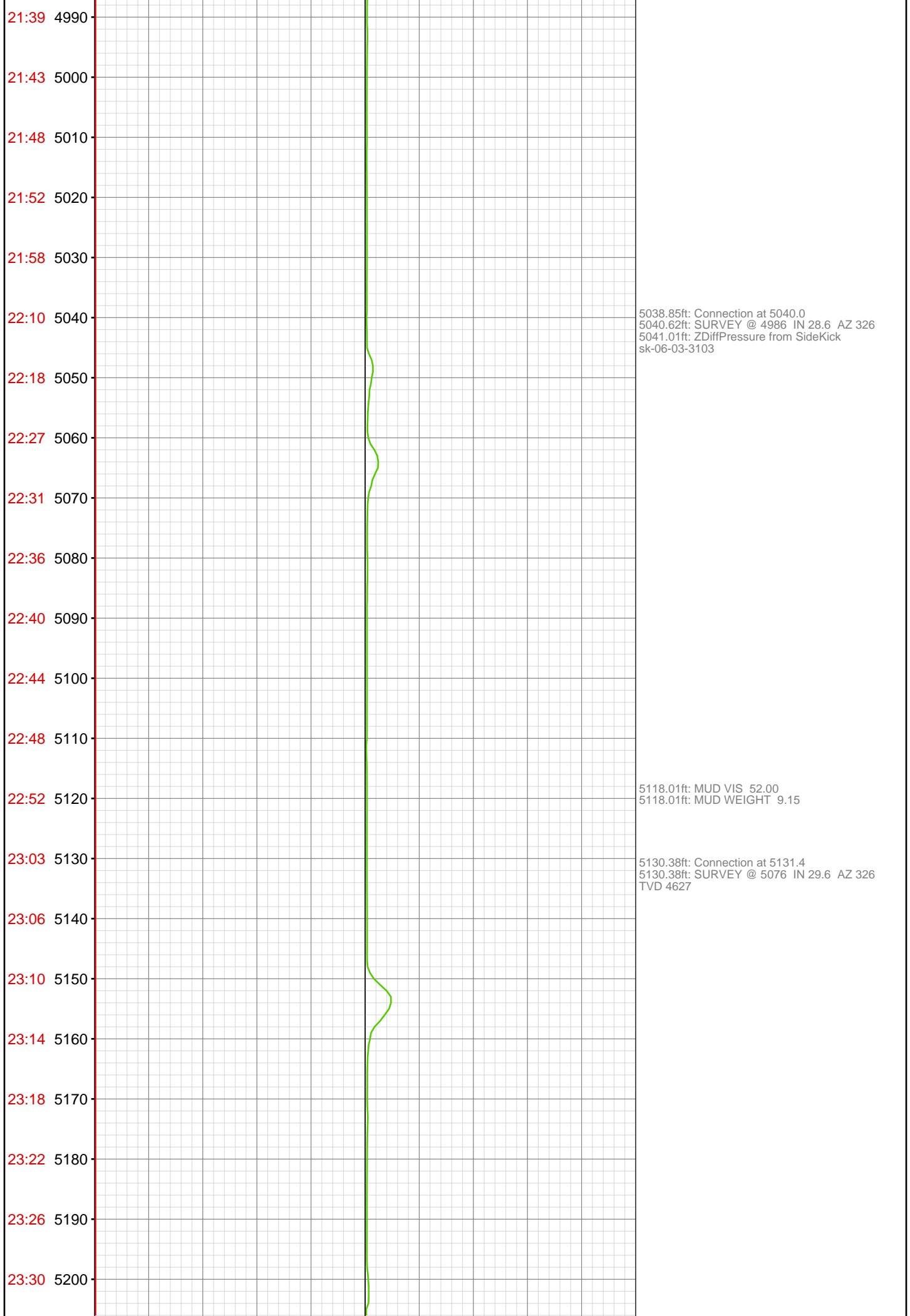
4666.99ft: IN TALLY: HOLE DEPTH SET TO  
4673.9

4674.64ft: Connection at 4673.9

4685.40ft: SURVEY @ 4618 IN 26.4 AZ 330.4  
TVD 4221

4765.95ft: BOP DRILL 2:25  
4765.95ft: SURVEY @ 4710/ INC. 25.0/ AZTH.







23:36 5210  
23:40 5220  
23:52 5230  
23:57 5240  
00:00 5250  
00:05 5260  
00:09 5270  
00:14 5280  
00:18 5290  
00:22 5300  
00:27 5310  
00:39 5320  
00:45 5330  
00:49 5340  
00:53 5350  
00:57 5360  
01:02 5370  
01:06 5380  
01:10 5390  
01:14 5400  
01:34 5410  
01:40 5420

Aug 24, 2010



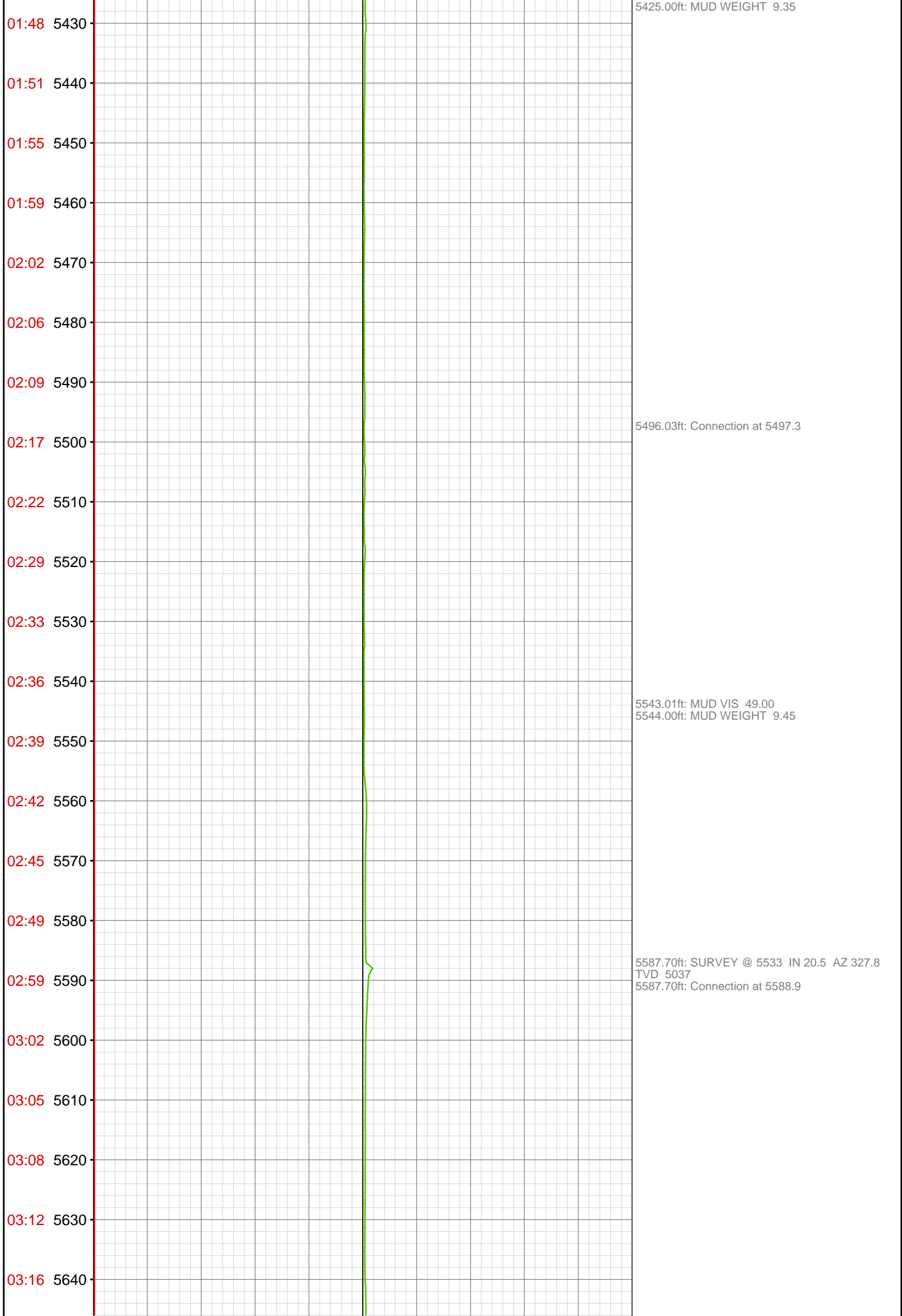
5221.75ft: SURVEY @ 5167 IN 28.1 AZ 325.7  
TVD 4707  
5221.75ft: Connection at 5222.9

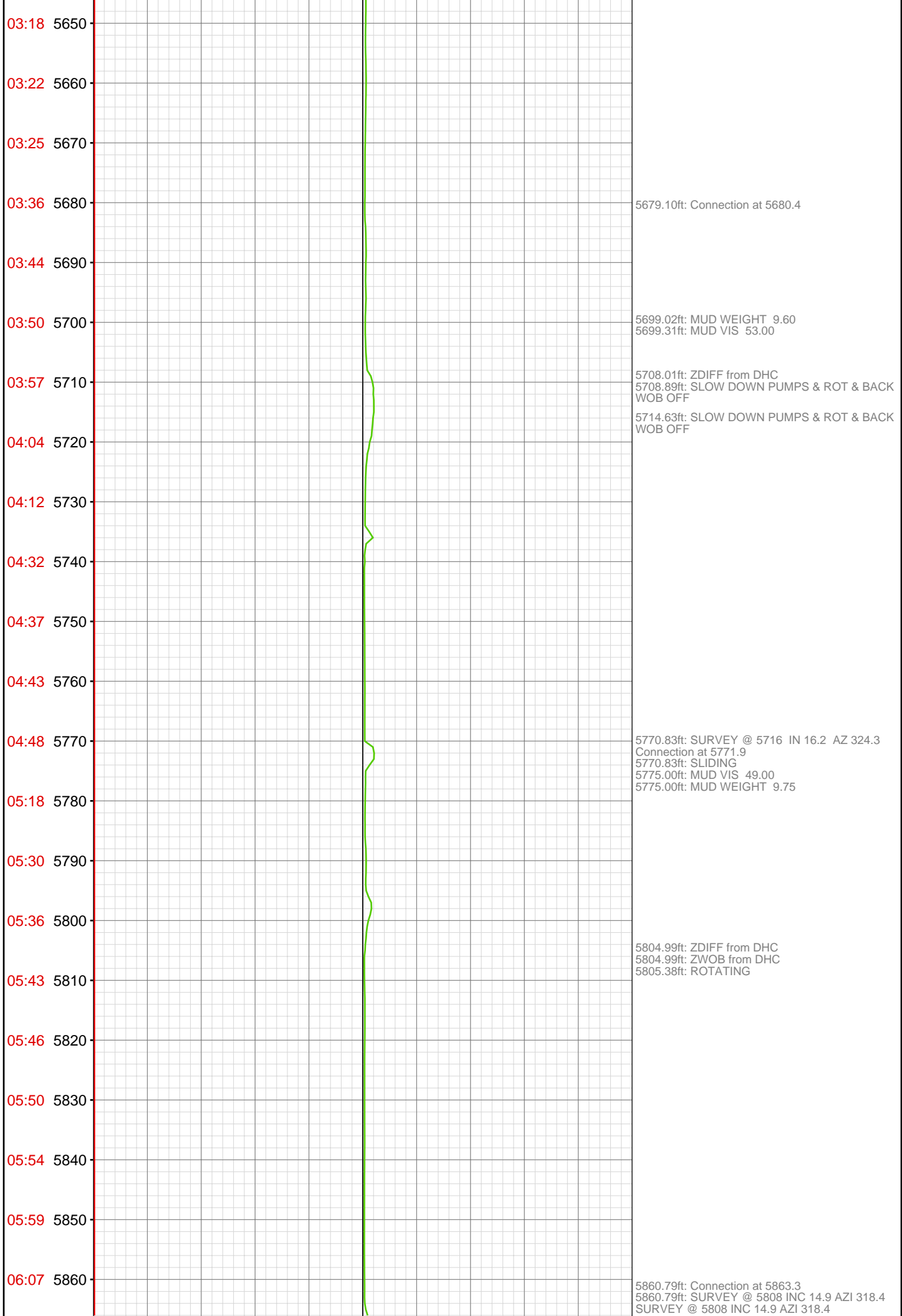
5313.25ft: SURVEY @ 5259 IN 27.2 AZ 326.1  
TVD 4788  
5313.25ft: Connection at 5314.3

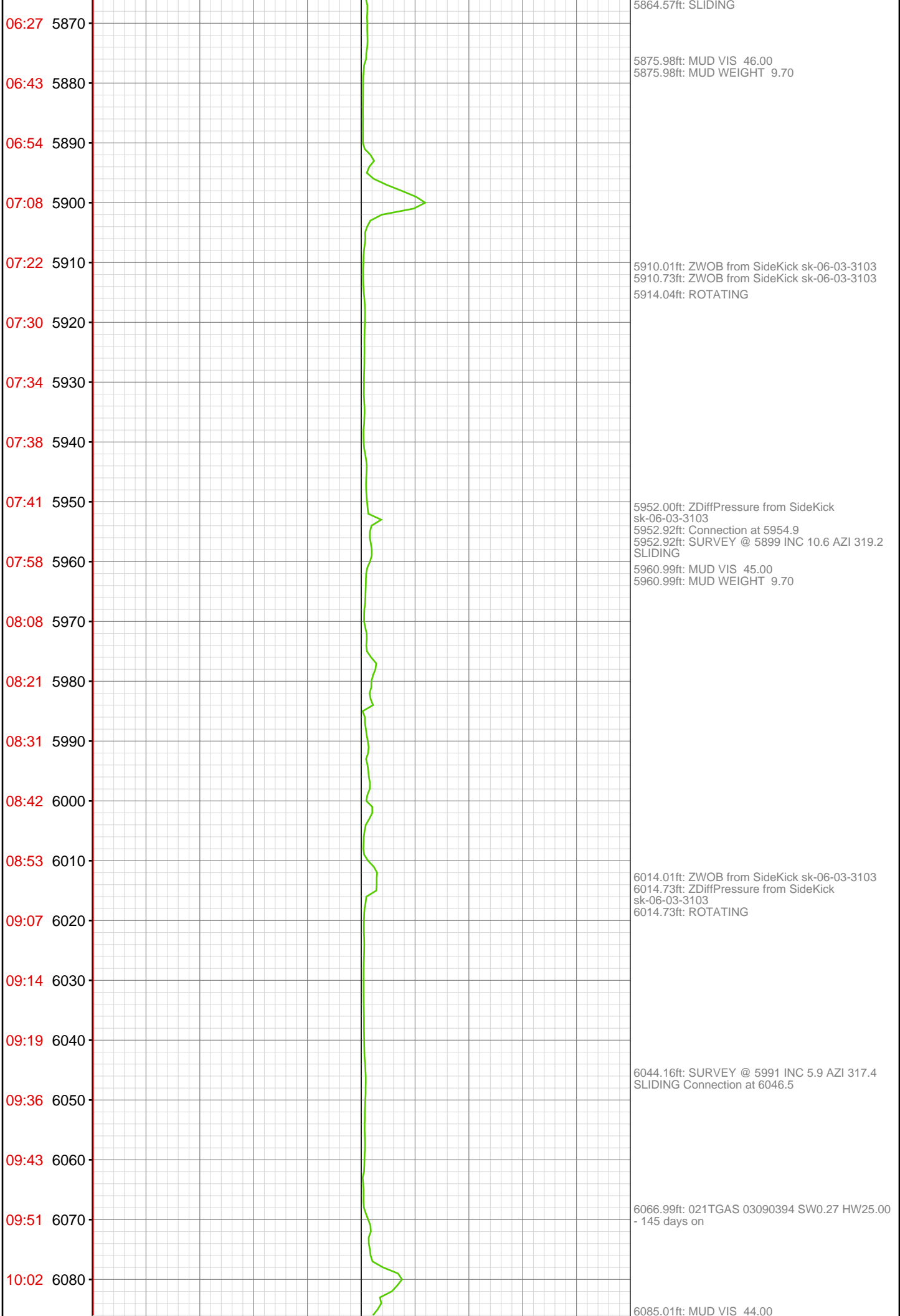
5325.00ft: MUD VIS 49.00  
5325.39ft: MUD WEIGHT 9.25

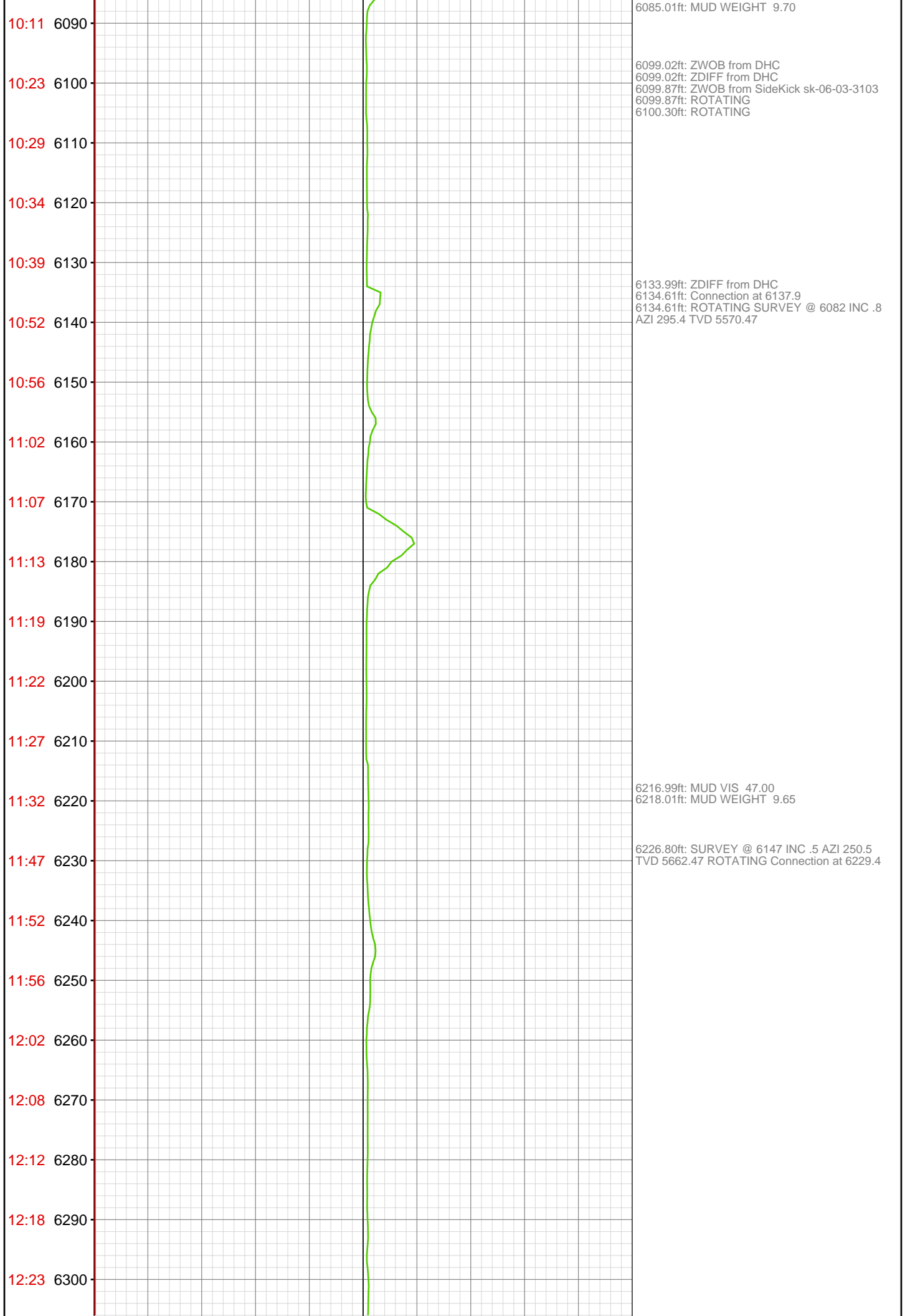
5404.69ft: SURVEY @5350 IN 26 AZ 325 TVD  
4869 Connection at 5405.8

5425.00ft: MUD VIS 47.00









12:28 6310-  
12:39 6320-  
12:46 6330-  
12:50 6340-  
12:54 6350-  
13:00 6360-  
13:06 6370-  
13:12 6380-  
13:19 6390-  
13:24 6400-  
13:28 6410-  
13:50 6420-  
14:06 6430-  
14:21 6440-  
14:31 6450-  
14:35 6460-  
14:39 6470-  
14:45 6480-  
14:49 6490-  
14:52 6500-  
15:07 6510-  
15:13 6520-

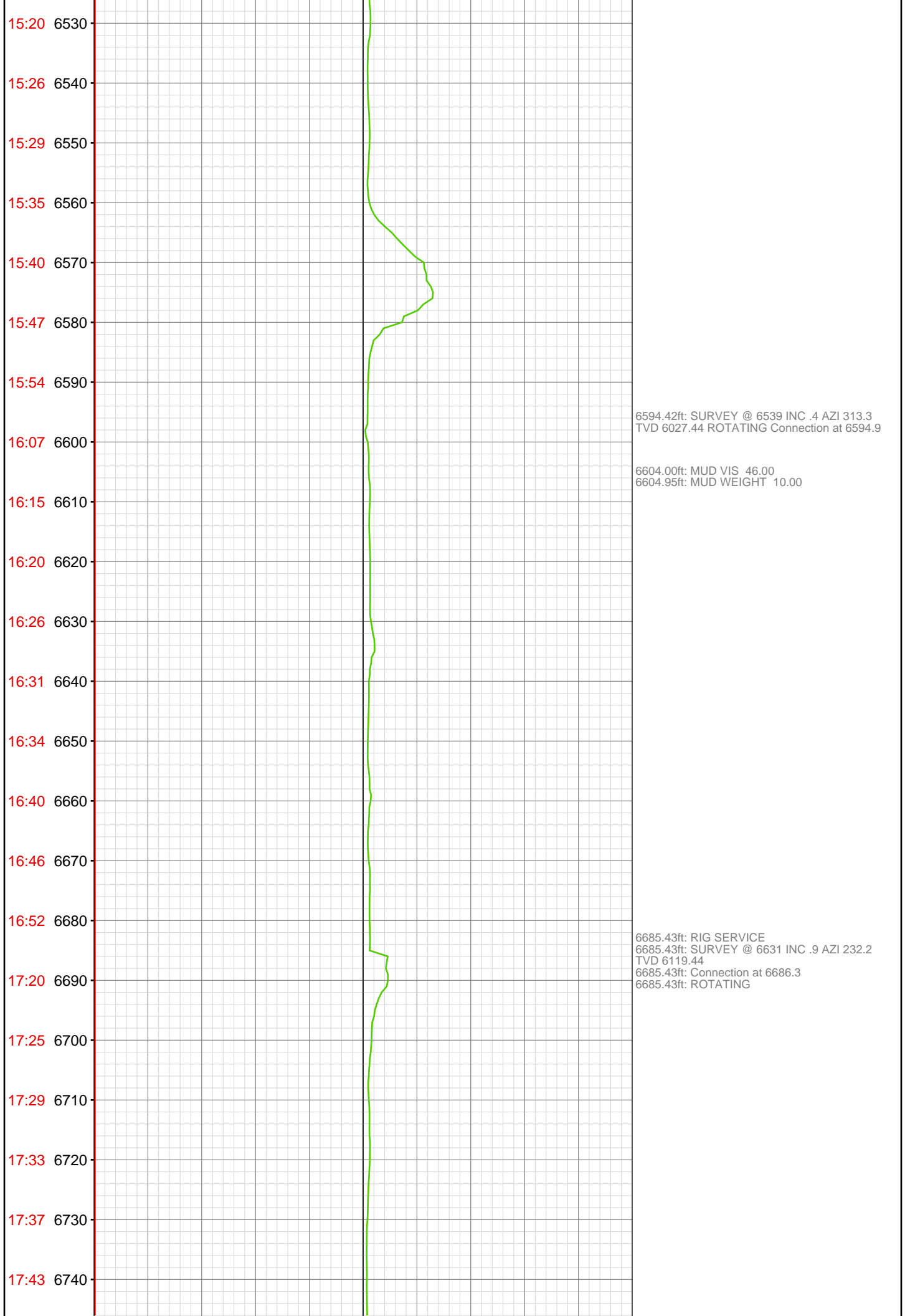
6316.99ft: ZWOB from DHC  
6316.99ft: ZDIFF from DHC  
6317.42ft: Connection at 6320.8  
6317.42ft: SURVEY 6265 INC .8 AZI 245.9 TVD  
5753.46 ROTATING  
6319.00ft: IN TALLY: HOLE DEPTH SET TO  
6320.8

6410.99ft: ZDiffPressure from SideKick  
sk-06-03-3103  
6411.25ft: Connection at 6412.3  
6411.25ft: SURVEY @ 6357 INC 1.1 AZI 260.0  
TVD 584.45  
6411.25ft: SLIDING

6442.88ft: ZWOB from SideKick sk-06-03-3103  
6442.88ft: ROTATING

6456.00ft: MUD VIS 46.00  
6456.99ft: MUD WEIGHT 9.85

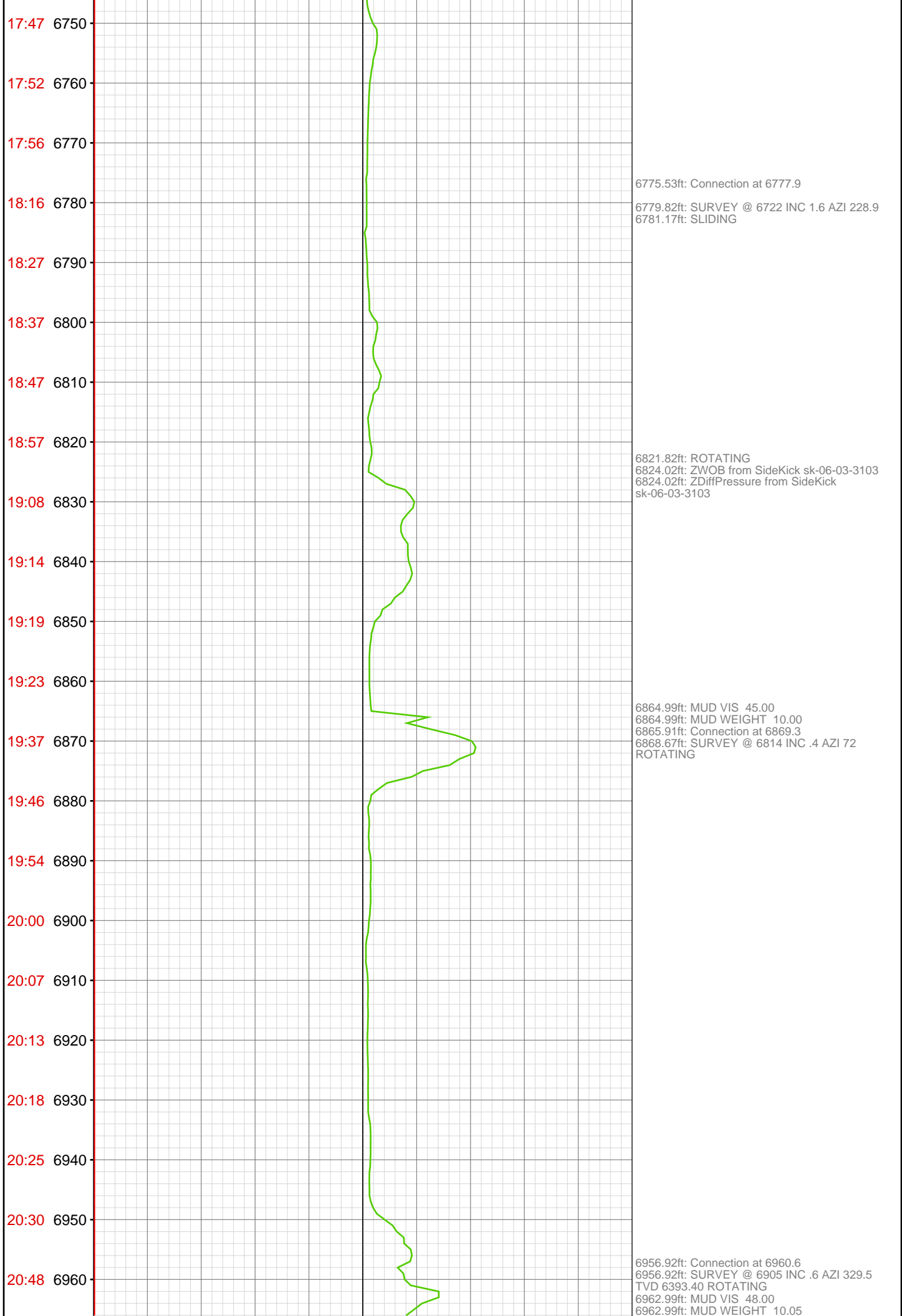
6502.89ft: SURVEY @ 6448 INC .5 AZI 55.6 TVD  
5936.44 ROTATING  
6502.89ft: Connection at 6503.5



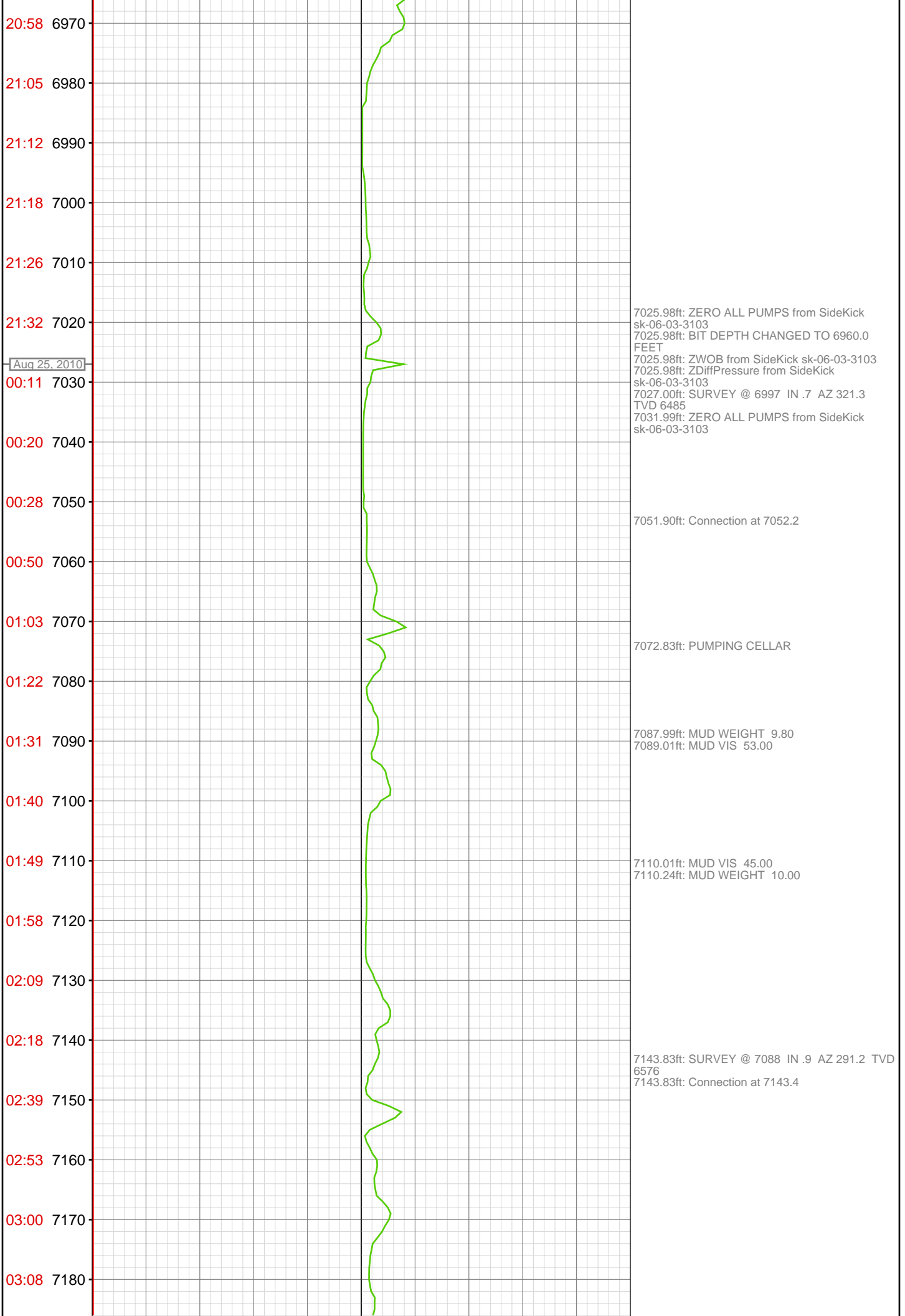
6594.42ft: SURVEY @ 6539 INC .4 AZI 313.3  
TVD 6027.44 ROTATING Connection at 6594.9

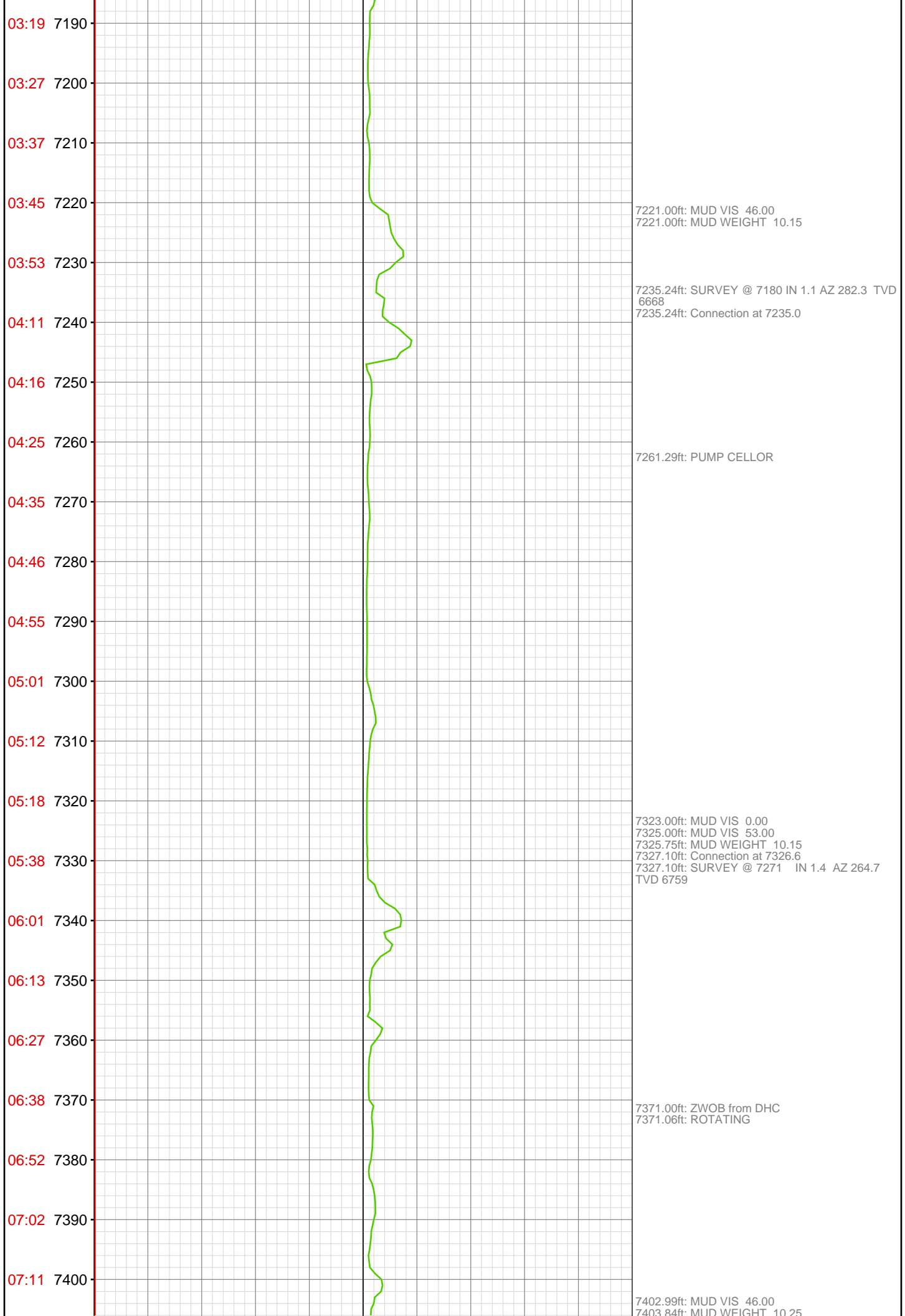
6604.00ft: MUD VIS 46.00  
6604.95ft: MUD WEIGHT 10.00

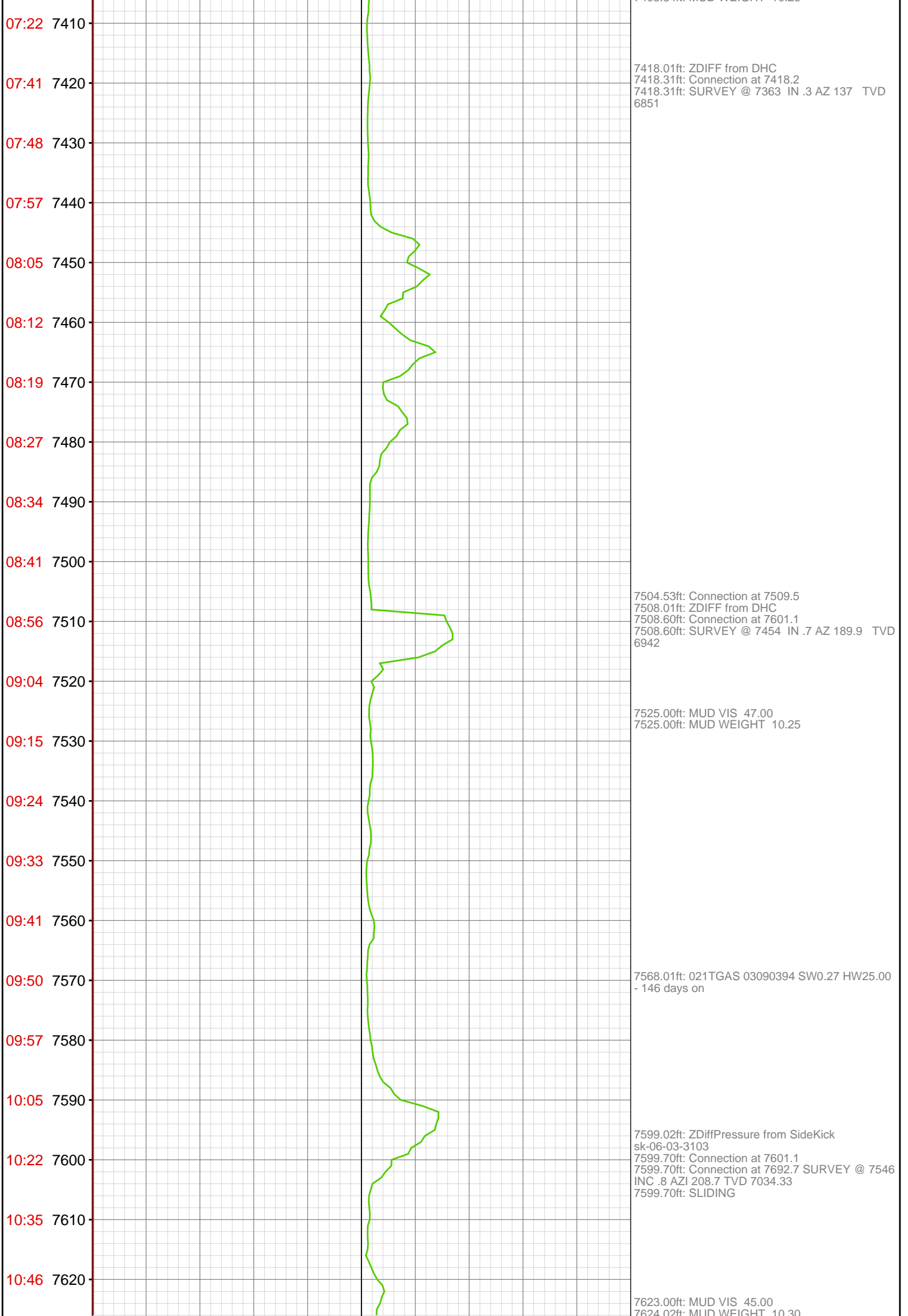
6685.43ft: RIG SERVICE  
6685.43ft: SURVEY @ 6631 INC .9 AZI 232.2  
TVD 6119.44  
6685.43ft: Connection at 6686.3  
6685.43ft: ROTATING

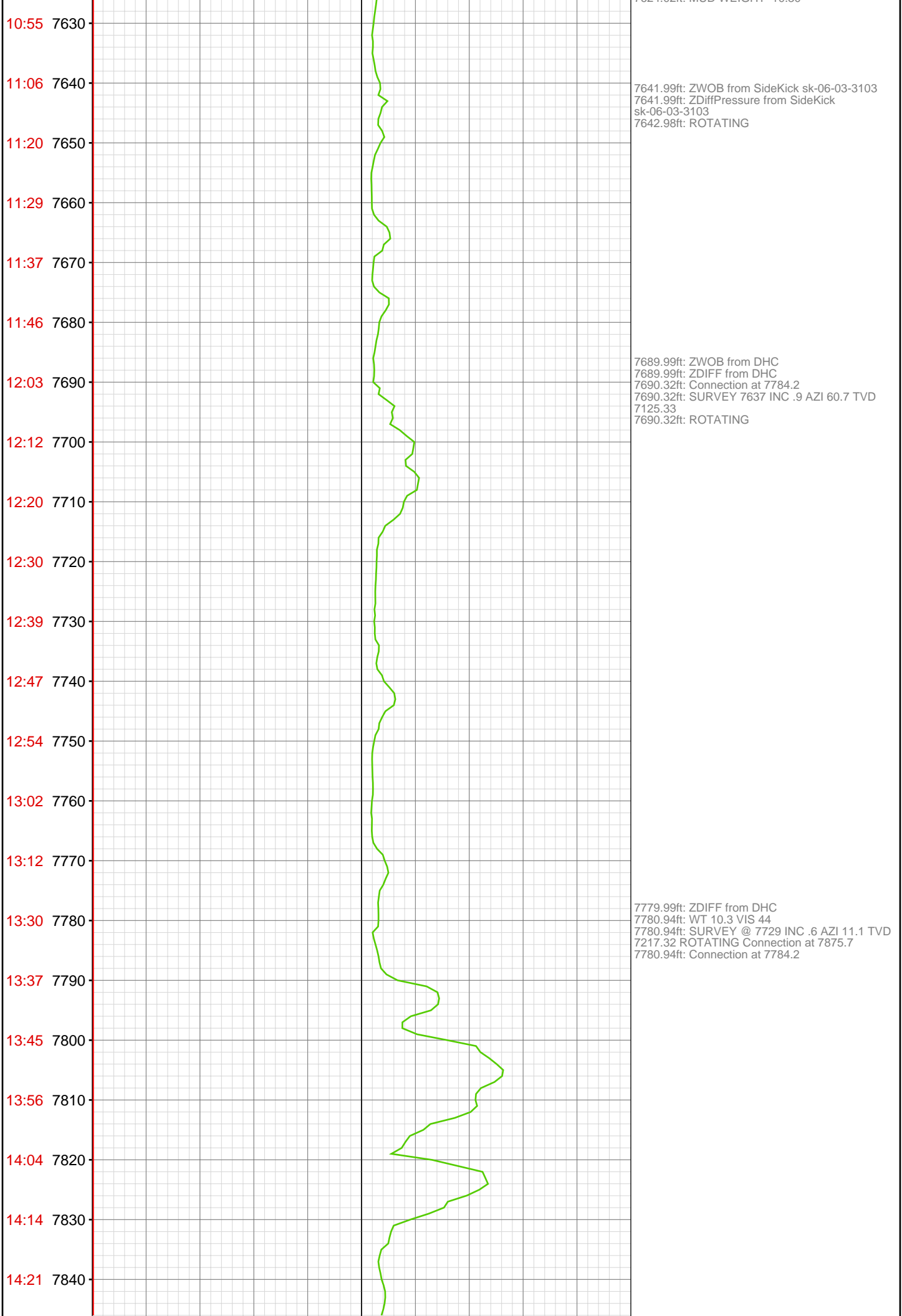


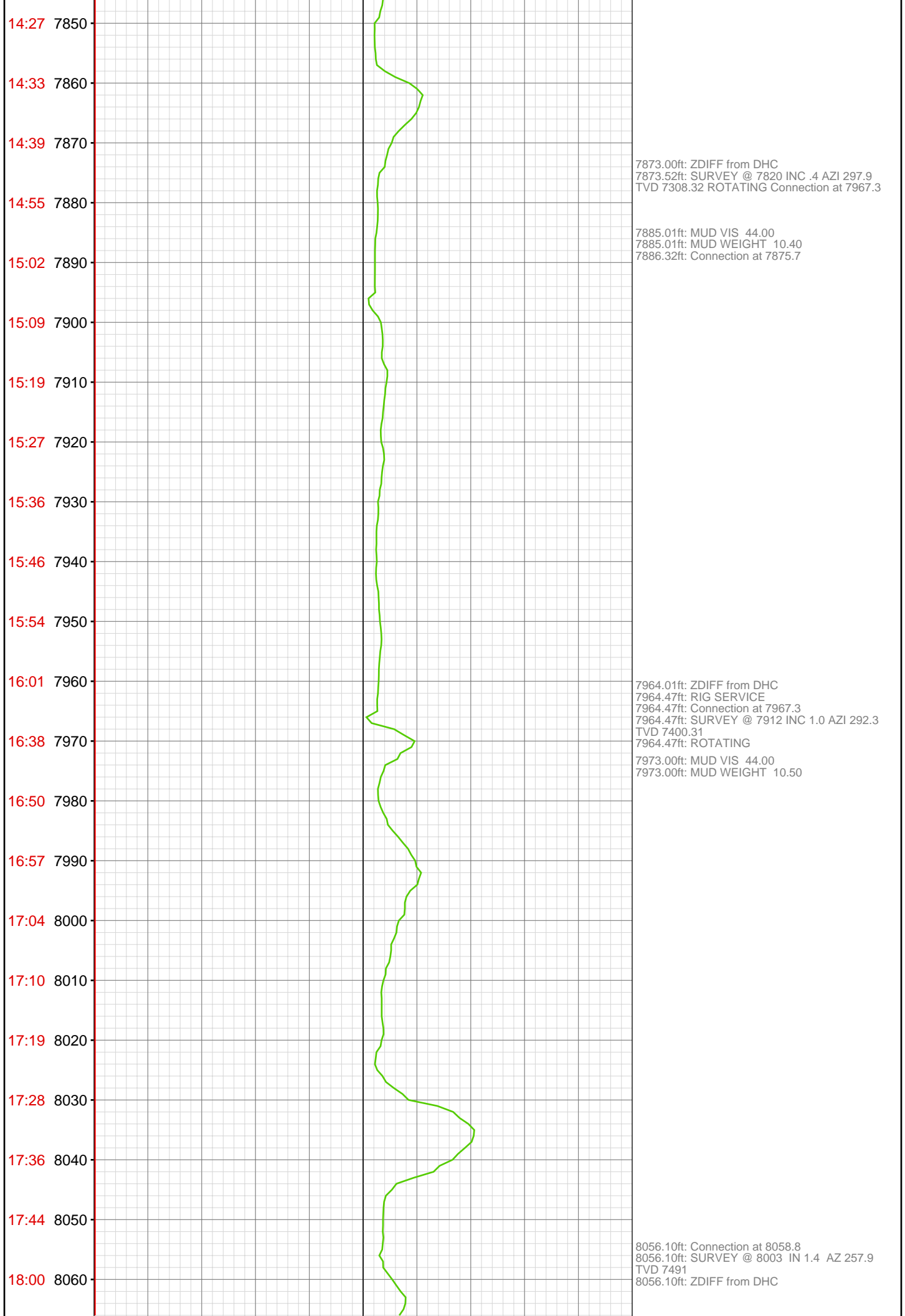


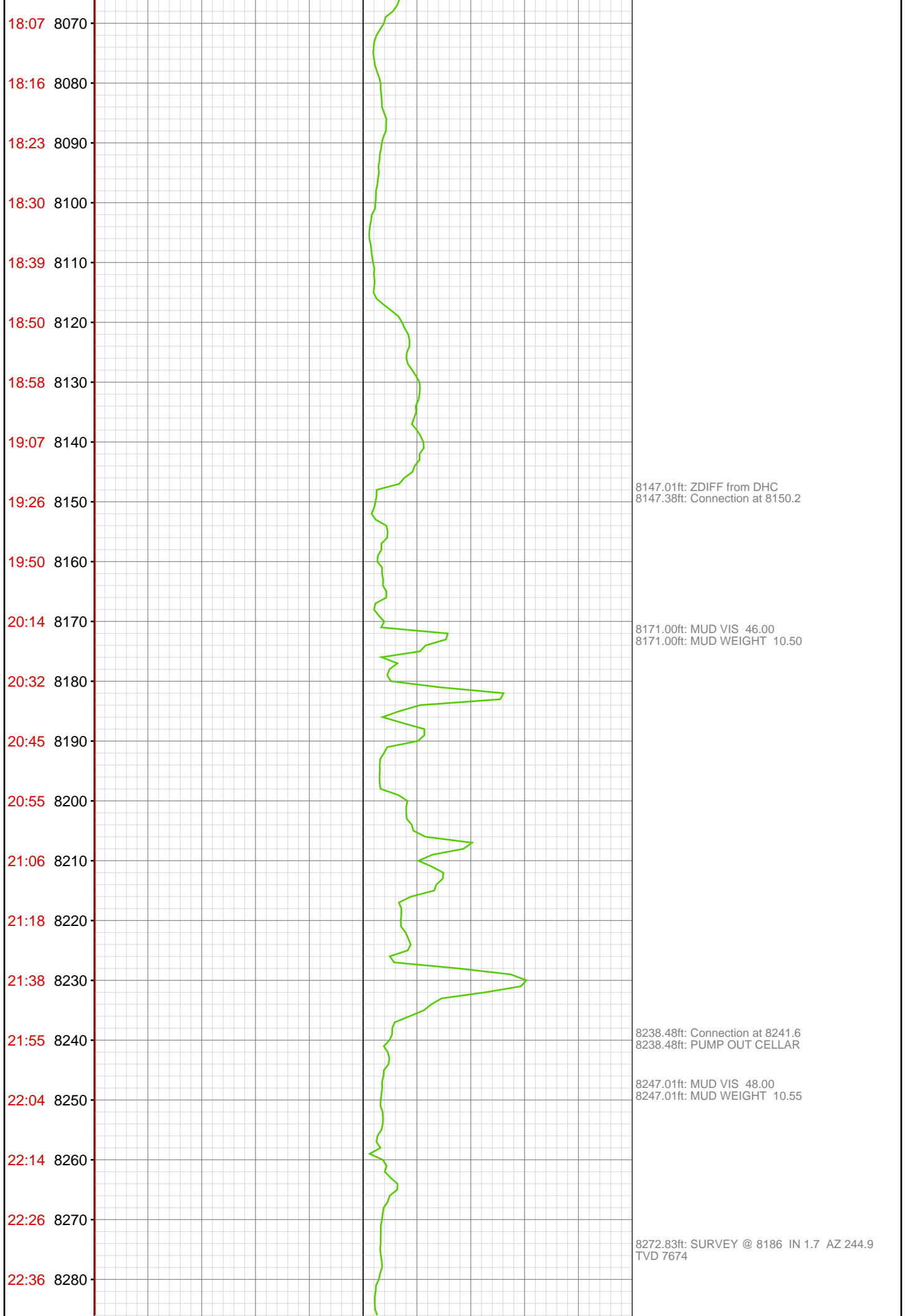


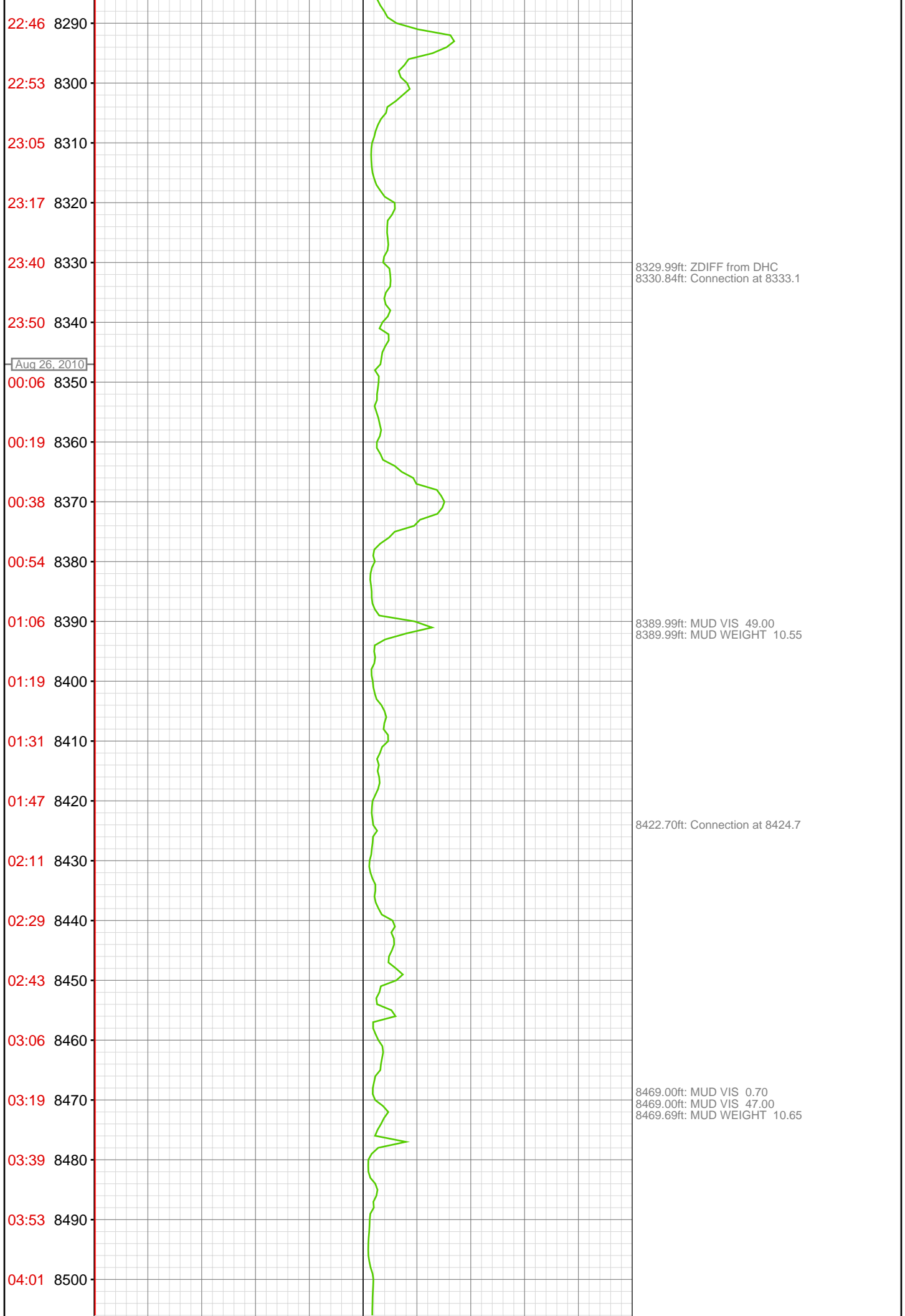


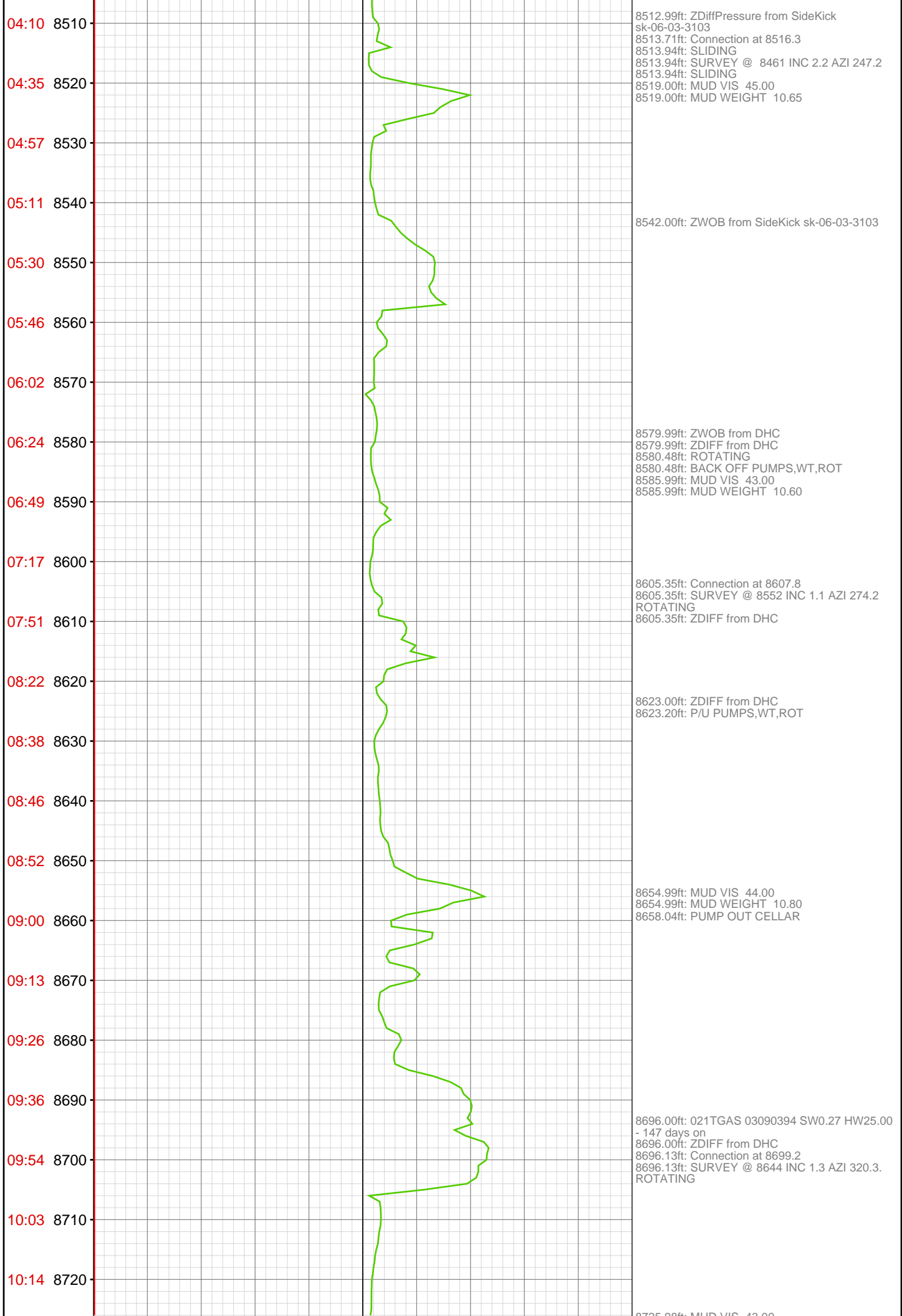




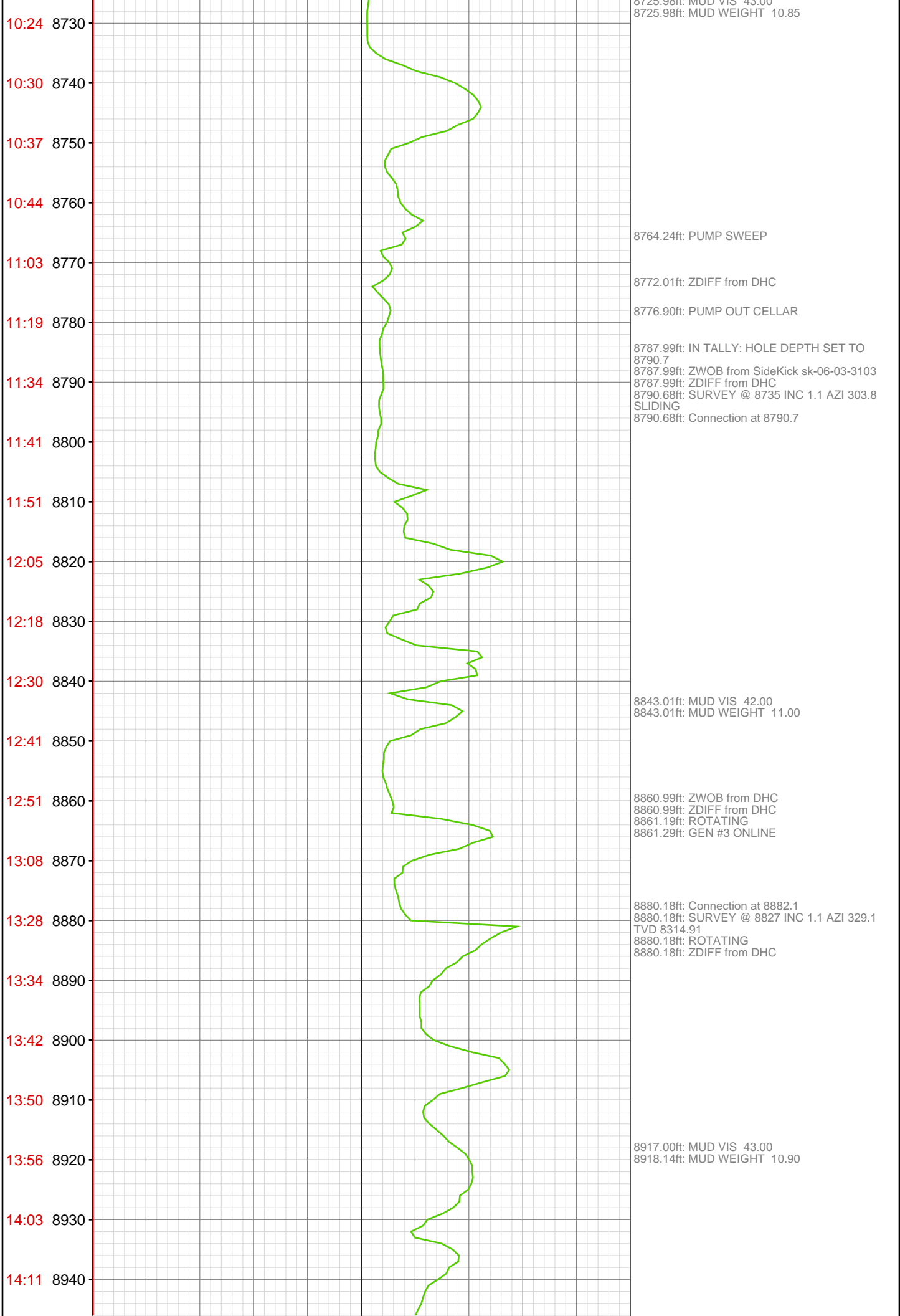


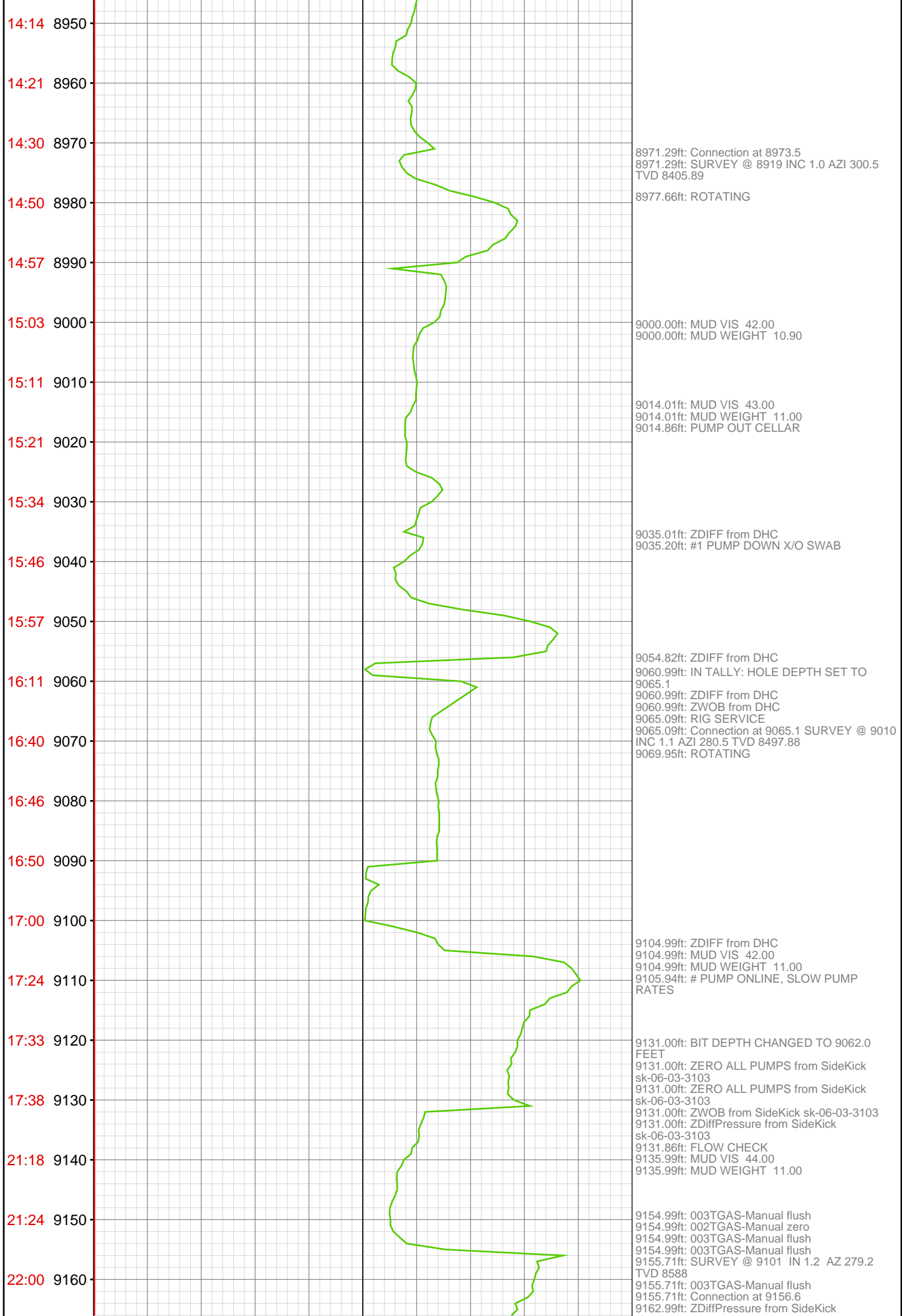












22:15 9170  
22:34 9180  
22:39 9190  
22:42 9200  
22:48 9210  
22:53 9220  
22:59 9230  
23:04 9240  
23:19 9250  
23:26 9260  
23:33 9270  
23:41 9280  
23:47 9290  
23:55 9300  
Aug 27, 2010  
00:07 9310  
00:20 9320  
00:35 9330  
00:54 9340  
01:04 9350  
9360

9223.00ft: MUD VIS 47.00  
9223.00ft: MUD WEIGHT 11.00

9247.05ft: Connection at 9248.1  
9247.05ft: SURVEY @ 9193 IN 1.9 AZ 250.1  
TVD 8680

9339.01ft: IN TALLY: HOLE DEPTH SET TO  
9339.5  
9339.53ft: SURVEY @ 9284 IN 2 AZ 259.8 TVD  
8771  
9350.00ft: ZERO ALL PUMPS from SideKick  
sk-06-03-3103  
9350.00ft: 021TGAS 03090394 SW0.27 HW25.00  
- 148 days on  
9350.00ft: BIT DEPTH CHANGED TO 1731.0  
FEET  
9350.00ft: ZERO ALL PUMPS from SideKick  
sk-06-03-3103  
9350.00ft: BIT DEPTH CHANGED TO 3710.0  
FEET  
9350.00ft: ZERO ALL PUMPS from SideKick  
sk-06-03-3103  
9350.00ft: ZERO ALL PUMPS from SideKick  
sk-06-03-3103  
9350.00ft: ZERO ALL PUMPS from SideKick  
sk-06-03-3103  
9350.07ft: SURVEY @ 9295 IN 2.0 AZ 258.3  
9350.07ft: TVD 8782  
9350.07ft: FLOW CHECK  
9350.07ft: FLOW CHECK  
9350.07ft: FLOW CHECK  
9350.07ft: PUMP CELLAR  
9350.07ft: FLOW CHECK  
9350.07ft: NO FLOW  
9350.07ft: PULL ROT HEAD RUBBER  
9350.07ft: LD DIRECTIONAL TOOLS  
9350.07ft: PULL WEAR BUSHING  
9350.07ft: PUMP OUT CELLAR  
9350.07ft: RIG UP FOR CASING  
9350.07ft: SAFTEY MEETING  
9350.07ft: INSTALL ROT HEAD RUBBER  
9350.07ft: FILL PIPE  
9350.07ft: FILL PIPE  
9350.07ft: FILL PIPE  
9350.07ft: TAGGED, SWEDGE UP  
9350.07ft: FILL PIPE  
9350.07ft: PUMP CELLAR  
9350.07ft: ZERO ALL PUMPS from SideKick  
sk-06-03-3103