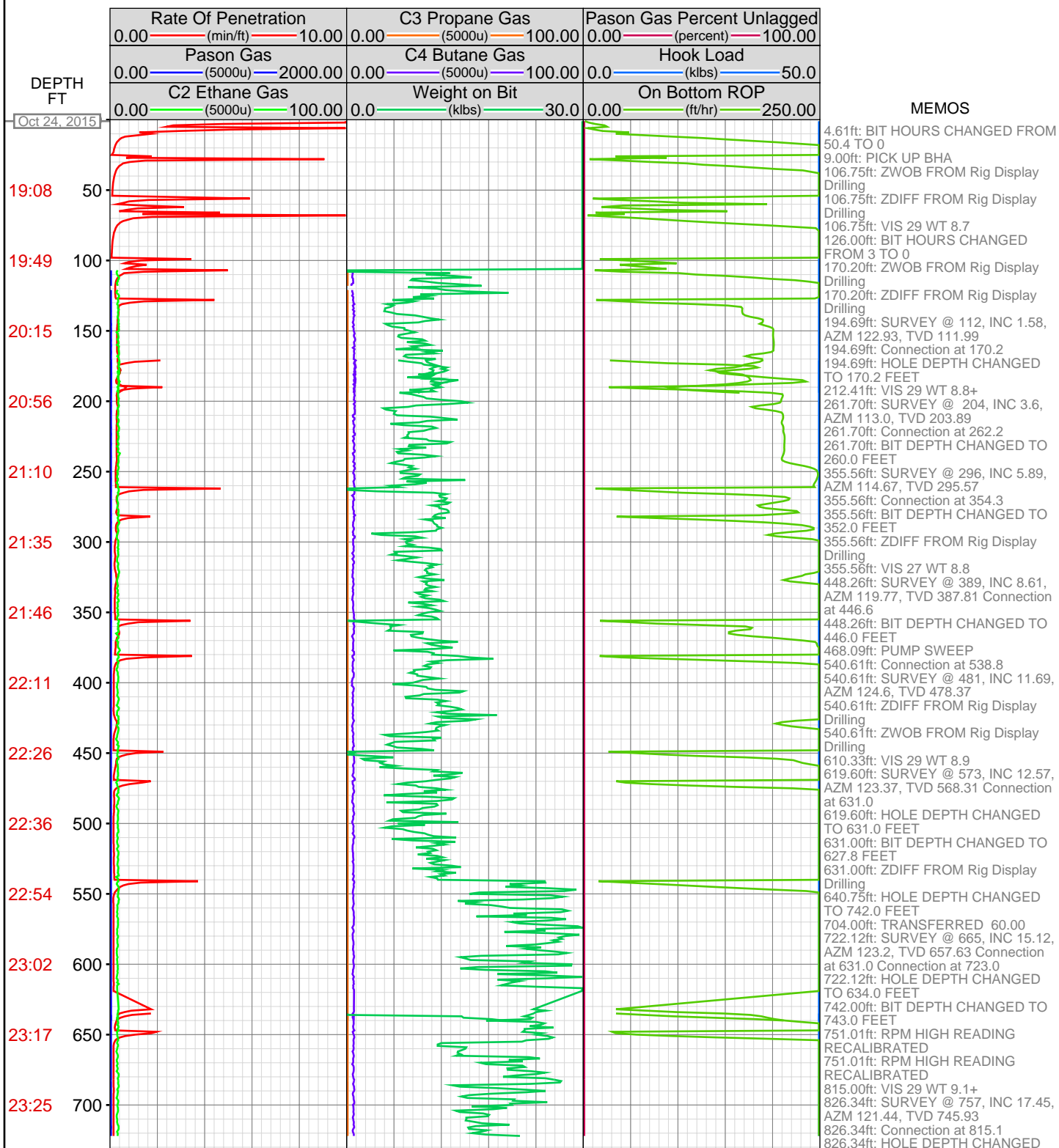
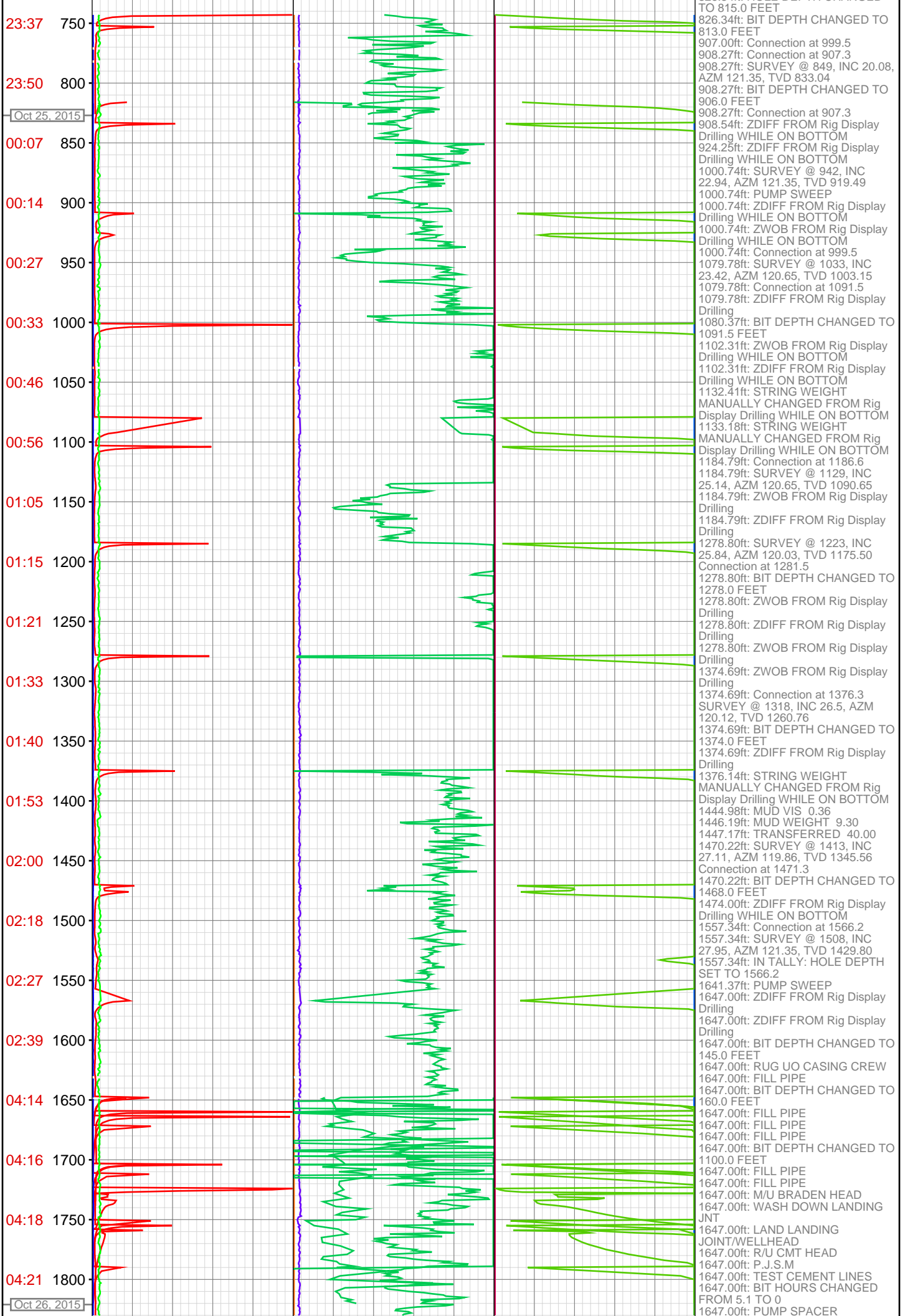
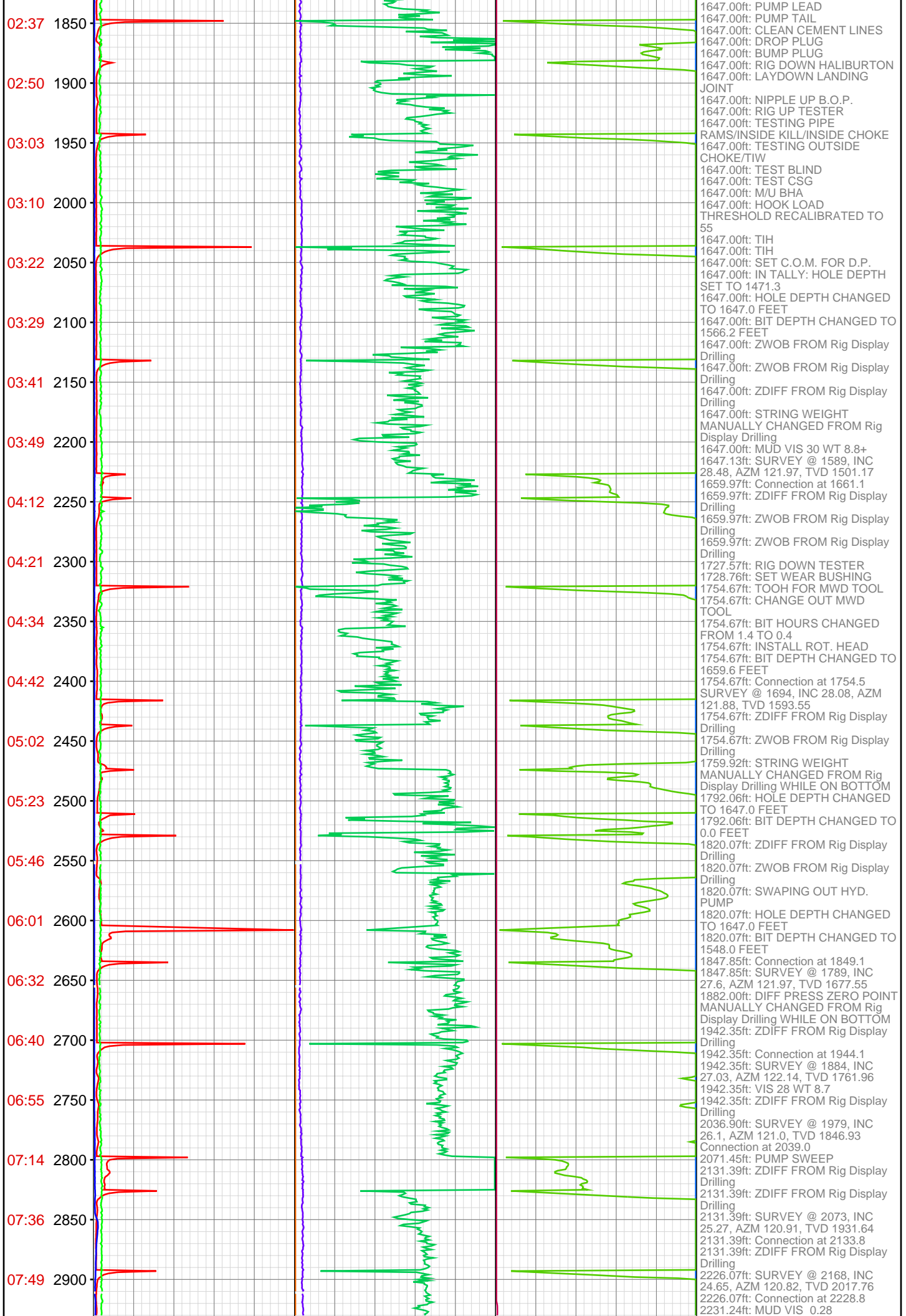


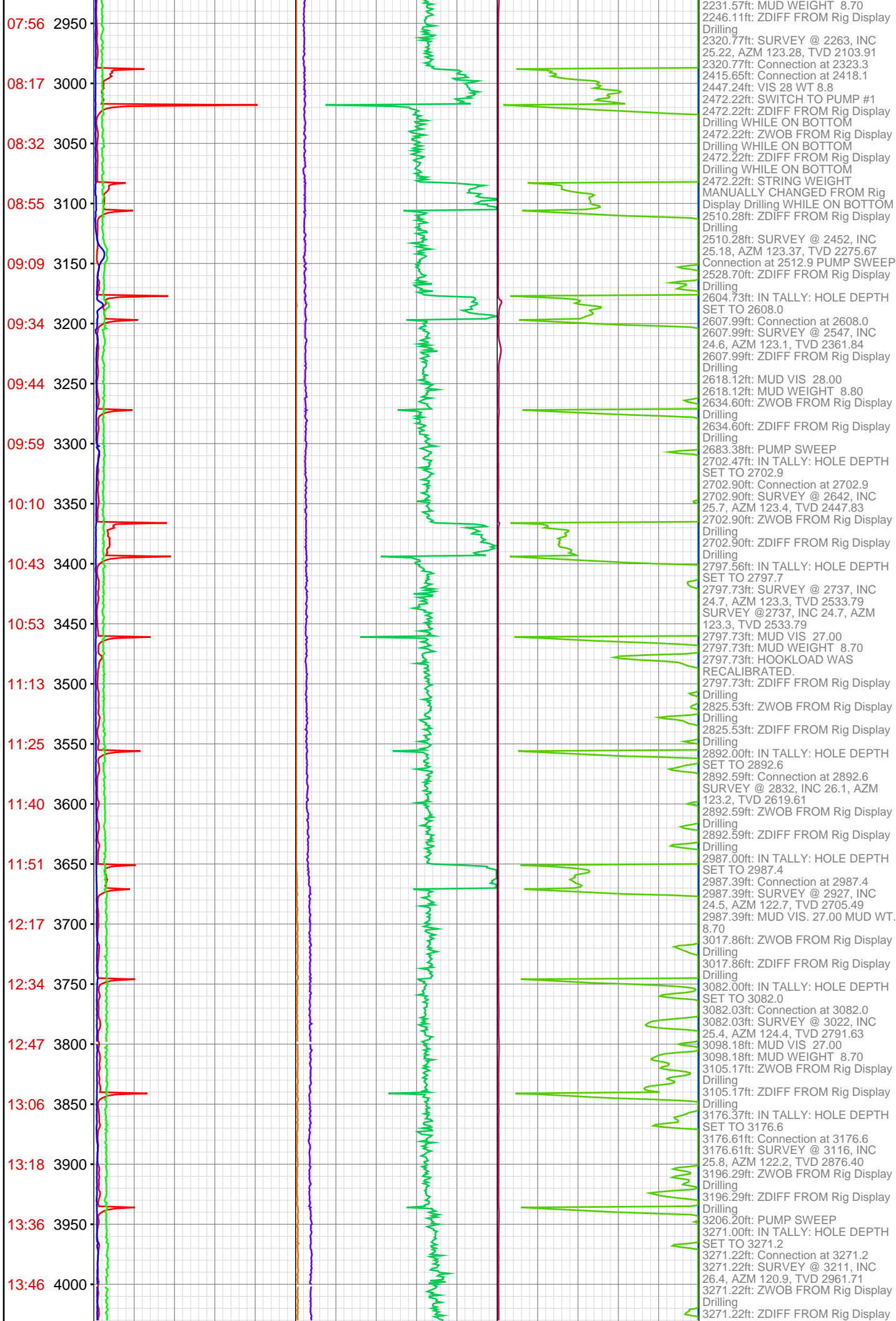
**OPERATOR:** Piceance Energy, LLC  
**WELL:** PICEANCE FEDERAL 28-18E  
**FIELD:**  
**LOCATION:** SEC 28 TWP 9S RNG 93W  
**COUNTRY:** USA  
**RIG:** Pat-UTI 306

**CONTRACTOR:** Patterson-UTI Drilling Company  
**UNIQUE WELL ID:** 05-077-10258-00  
**SPUD DATE:** Oct 24, 2015 20:00  
**RELEASE DATE:** Oct 29, 2015 09:00

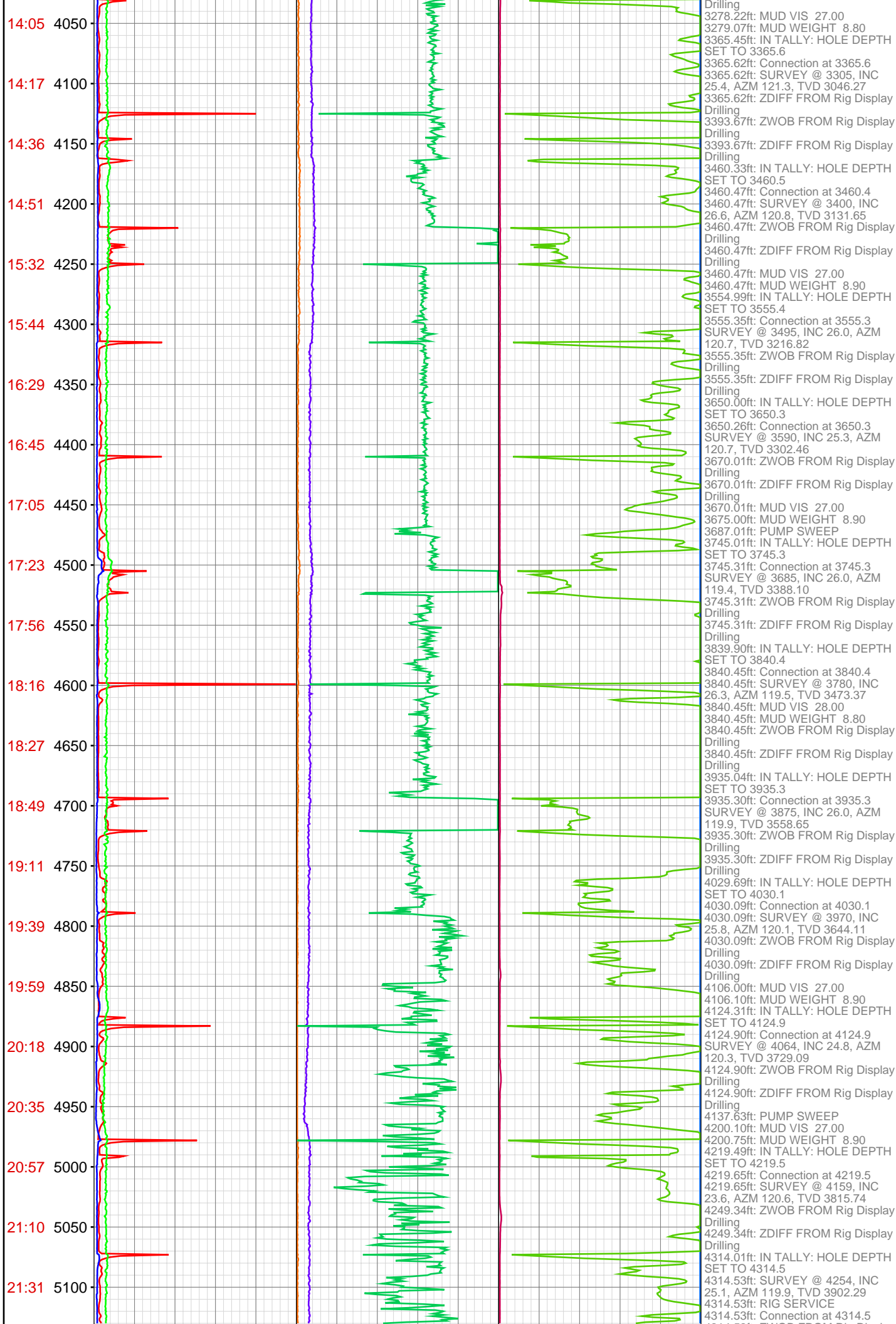


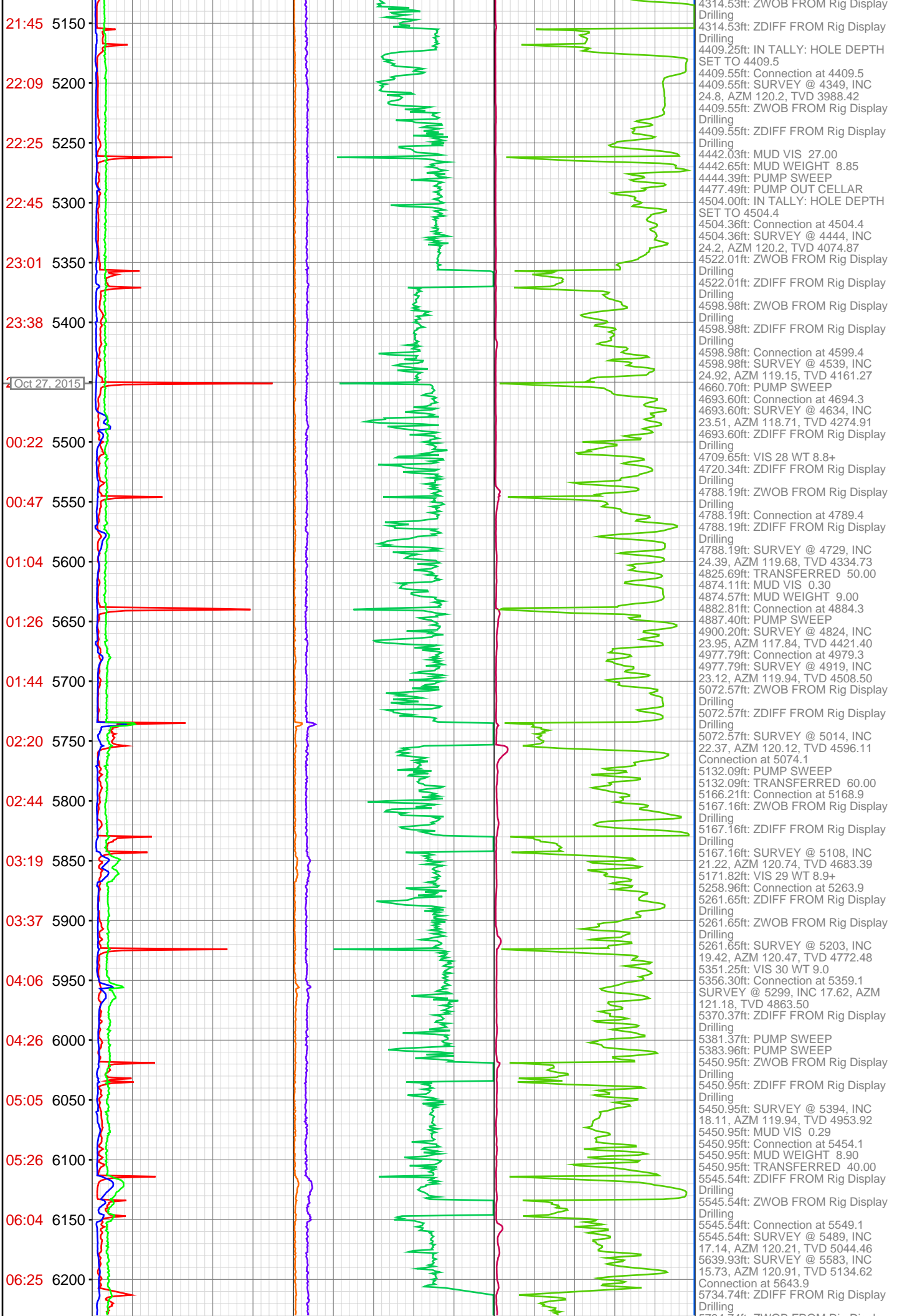


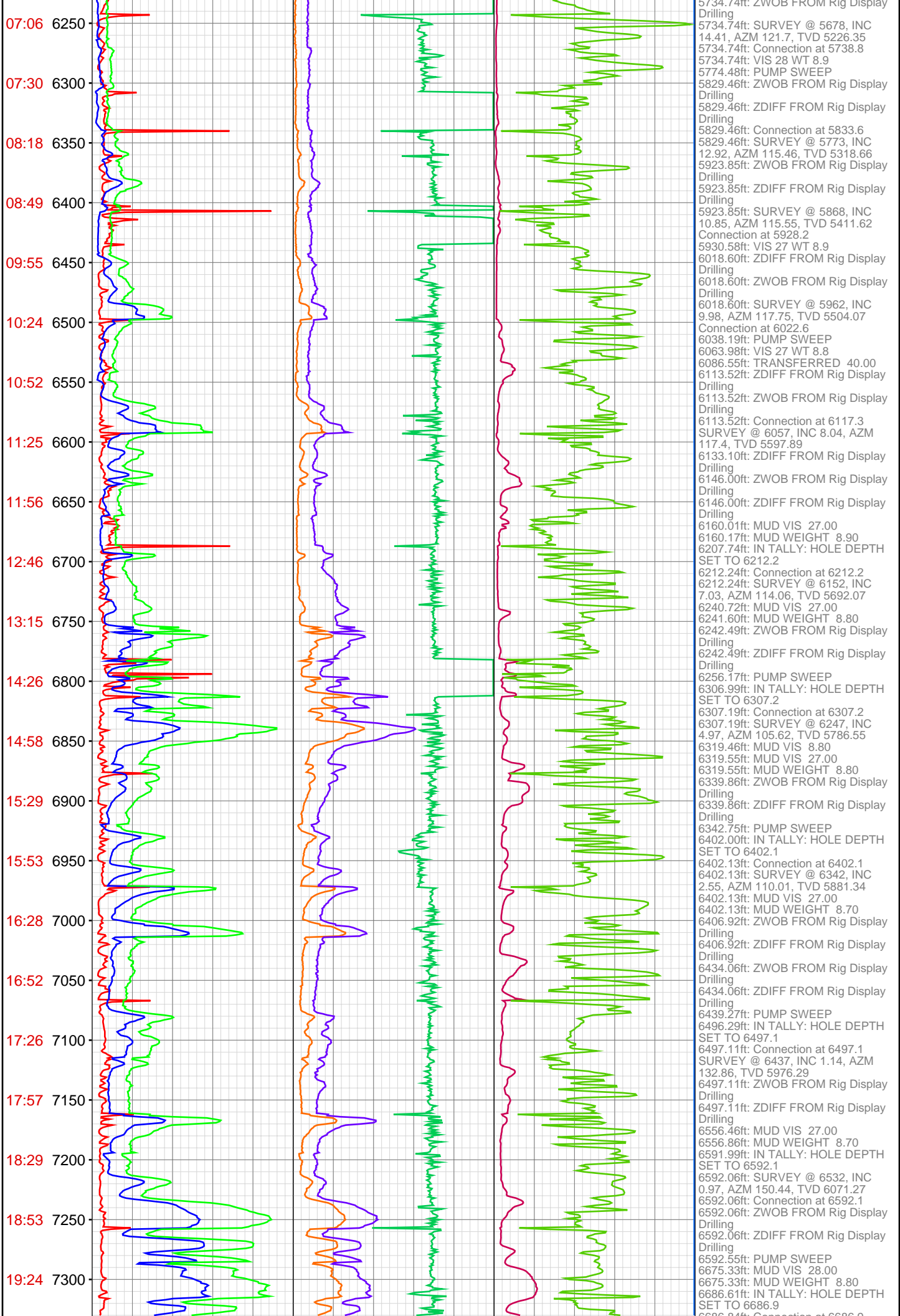




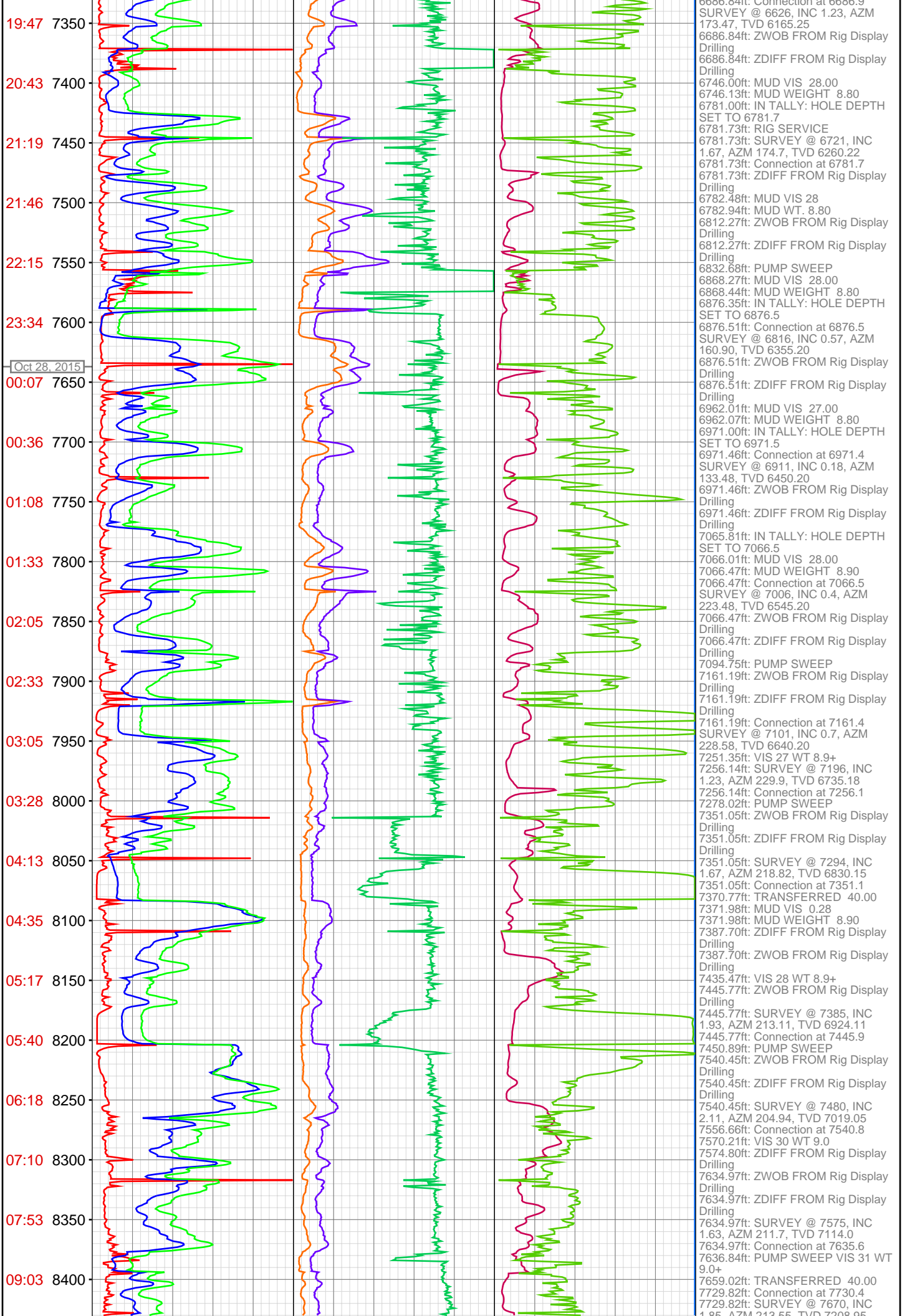














8450	7729.82ft: ZDIFF FROM Rig Display Drilling
	7732.45ft: VIS 34 WT 9.1
	7824.31ft: SURVEY @ 7765, INC 2.07, AZM 211.44, TVD 7303.90
	7824.31ft: Connection at 7825.3
	7919.09ft: ZDIFF FROM Rig Display Drilling
	7919.09ft: ZWOB FROM Rig Display Drilling
	7919.09ft: SURVEY @ 7860, INC 1.76, AZM 222.25, TVD 7398.84
	7919.09ft: Connection at 7920.1
	7934.74ft: MUD VIS 0.40
	7935.01ft: MUD WEIGHT 9.30
	7941.31ft: PUMP SWEEP
	8013.94ft: Connection at 8014.7
	8013.94ft: SURVEY @ 7954, INC 1.76, AZM 248.7, TVD 7492.8
	8013.94ft: ZDIFF FROM Rig Display Drilling
	8033.04ft: VIS 50 WT 9.4
	8084.58ft: DIFF PRESS ZERO POINT MANUALLY CHANGED FROM Rig Display Drilling WHILE ON BOTTOM
	8108.86ft: ZWOB FROM Rig Display Drilling
	8108.86ft: ZDIFF FROM Rig Display Drilling
	8108.86ft: Connection at 8109.6
	8108.86ft: SURVEY @ 8049, INC 2.33, AZM 257.67, TVD 7587.74
	8123.49ft: VIS 52 WT 9.4+
	8176.18ft: VIS 48 WT 9.4+
	8203.51ft: Connection at 8204.5
	8203.51ft: ZWOB FROM Rig Display Drilling
	8203.51ft: SURVEY @ 8144, INC 2.99, AZM 243.17, TVD 7682.64
	8257.32ft: MUD VIS 56.00
	8257.32ft: MUD WEIGHT 9.55
	8297.93ft: IN TALLY: HOLE DEPTH SET TO 8299.4
	8299.38ft: SURVEY @ 8239, INC 3.69, AZM 241.23, TVD 7777.48
	8299.38ft: Connection at 8299.4
	8299.38ft: ZWOB FROM Rig Display Drilling
	8299.38ft: ZDIFF FROM Rig Display Drilling
	8311.48ft: PUMP SWEEP
	8317.00ft: ZWOB FROM Rig Display Drilling
	8369.49ft: MUD VIS 58.00
	8369.62ft: MUD WEIGHT 9.65
	8383.30ft: ZWOB FROM Rig Display Drilling
	8383.30ft: ZDIFF FROM Rig Display Drilling
	8393.83ft: IN TALLY: HOLE DEPTH SET TO 8394.3
	8394.26ft: Connection at 8394.3
	SURVEY @ 8334, INC 3.87, AZM 237.72, TVD 7872.27
	8394.26ft: MUD VIS 60.00
	8394.26ft: MUD WEIGHT 9.65
	8394.26ft: ZWOB FROM Rig Display Drilling
	8394.26ft: ZDIFF FROM Rig Display Drilling
	8437.76ft: PUMP SWEEP
	8447.15ft: SURVEY @ 8387, INC 3.82, AZM 235.35, TVD 7925.15
	8447.15ft: T.O.O.H
	8447.15ft: PUMP PILL
	8447.15ft: T.I.T.H
	8447.15ft: FILL PIPE
	8447.15ft: FILL PIPE
	8447.15ft: BIT DEPTH CHANGED TO 4445.0 FEET
	8447.15ft: PUMP SWEEP
	CIRCULATE
	8447.15ft: BIT DEPTH CHANGED TO 8444.0 FEET
	8447.15ft: MUD VIS 60.00
	8447.15ft: MUD WEIGHT 9.70
	8447.15ft: PUMP OUT CELLAR
	8447.15ft: T.O.O.H
	8447.15ft: PUMP PILL
	8447.15ft: BLOW DOWN TOP DRIVE
	8447.15ft: PVT: Total Mud alarm was enabled
	8447.15ft: PVT: Total Mud alarm was disabled
	8447.15ft: PVT: Alarms unmuted
	8447.15ft: PULL ROT HEAD
	8447.15ft: L/D BHA
	8447.15ft: BREAK BIT & DRAIN MOTOR
	8447.15ft: PULL WEAR BUSHING
	8447.15ft: R/U CASERS
	8447.15ft: PJSM W/WEATHERFORD
	8447.15ft: M/U SHOE TRACK
	8447.15ft: FLOW CHECK FLOATS
	8447.15ft: MUD VIS 0.58
	8447.15ft: MUD WEIGHT 9.70
	8447.15ft: FILL & INSTALL MARKER A
	8447.15ft: BIT DEPTH CHANGED TO 881.0 FEET
	8447.15ft: FILL @ SHOE
	8447.15ft: BIT DEPTH CHANGED TO 1744.0 FEET

9550	8447.15ft: MARKER B 8447.15ft: BIT DEPTH CHANGED TO 1992.0 FEET 8447.15ft: BIT DEPTH CHANGED TO 2812.0 FEET 8447.15ft: HOOK LOAD THRESHOLD RECALIBRATED TO 50 8447.15ft: BIT DEPTH CHANGED TO 2897.0 FEET 8447.15ft: FILL
9600	8447.15ft: BIT DEPTH CHANGED TO 4200.0 FEET 8447.15ft: FILL 8447.15ft: FILL 8447.15ft: BIT DEPTH CHANGED TO 7991.0 FEET
9650	8447.15ft: CIRCULATE AND RECIPROCATATE 8447.15ft: LAND MANDREL 8447.15ft: CONDITION MUD & CIRC 8447.15ft: DIFF PRESS ZERO POINT
9700	MANUALLY CHANGED FROM Rig Display Drilling 8447.15ft: VIS 45 WT 9.5 8447.15ft: VIS 35 WT 9.4 8447.15ft: PJSM / HALCO 8447.15ft: R/U CMT HEAD 8447.15ft: ZDIFF FROM Rig Display Drilling
9750	8447.15ft: PSI TEST LINES 8447.15ft: DROP BTM PLUG 8447.15ft: PUMP SPACER 8447.15ft: PUMP LEAD 8447.15ft: BIT HOURS CHANGED FROM 45.7 TO 0 8447.15ft: PUMP TAIL
9800	8447.15ft: XFER TO UPRIGHT 8447.15ft: WASH UP LINES / DROP TOP PLUG AND DISPLACE 8447.15ft: BUMP PLUG 8447.15ft: RIG DOWN CEMENTERS 8447.15ft: SET PACK OFF
9850	8511.65ft: ATTEMPTED TO ZERO TOTAL STROKES 8511.65ft: ATTEMPTED TO SET HOLE DEPTH TO 0.00 FEET
9900	
9950	
10000	