

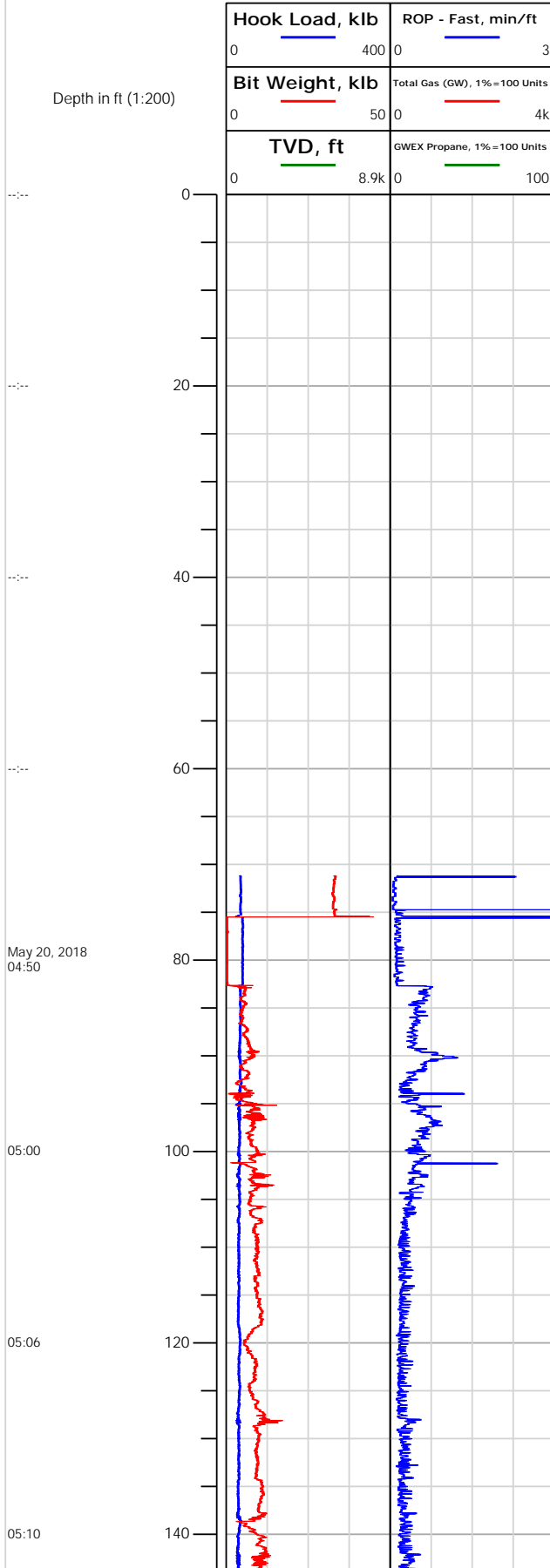


# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4





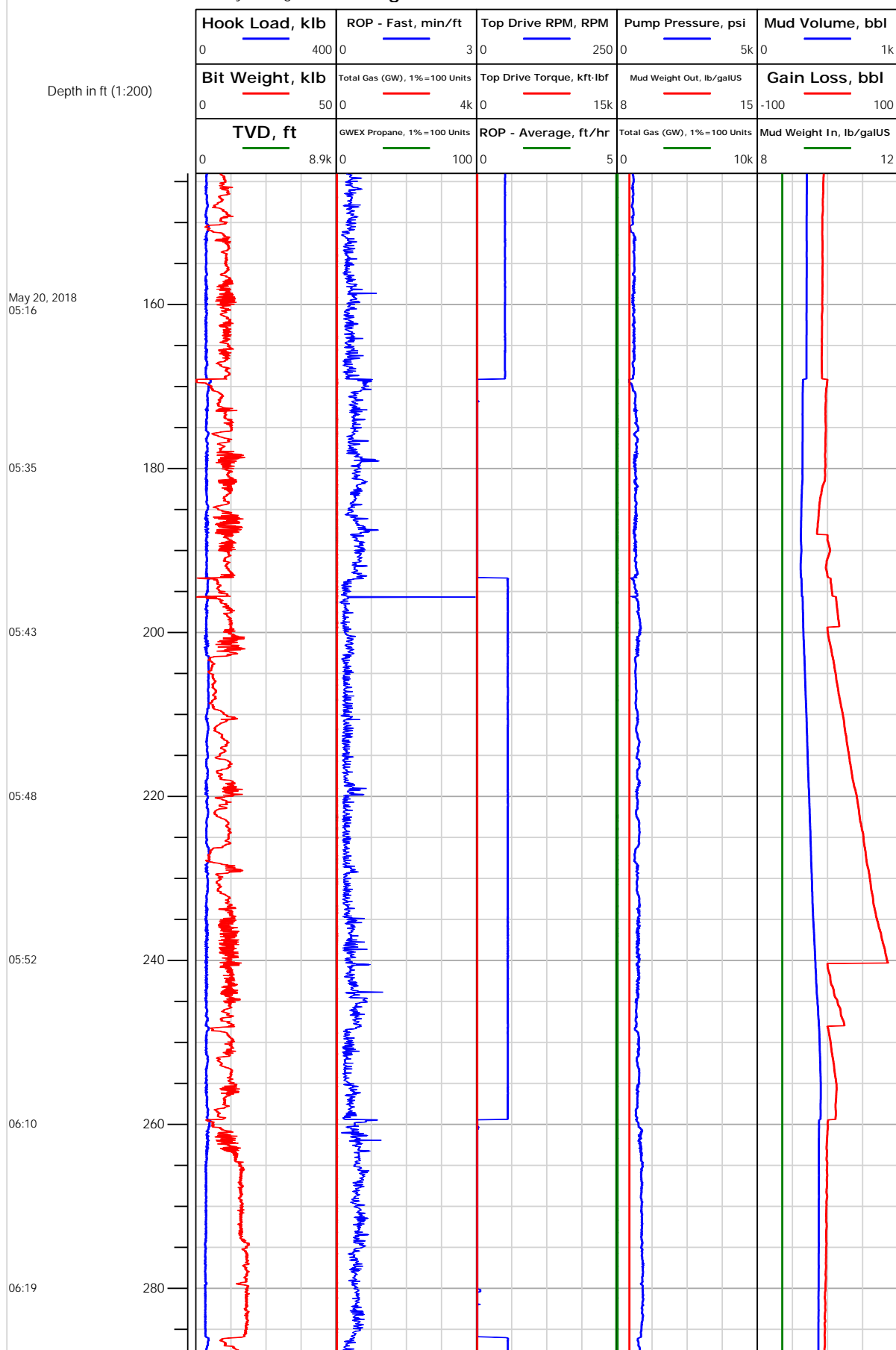
# Electronic Drilling Recorder

Operator: Laramie Energy  
Contractor: Helmerich & Payne Drlg Co

Well Name: Nichols Federal 24-21E  
Rig: 290

Location: SE/4 OF NW/4

Notes







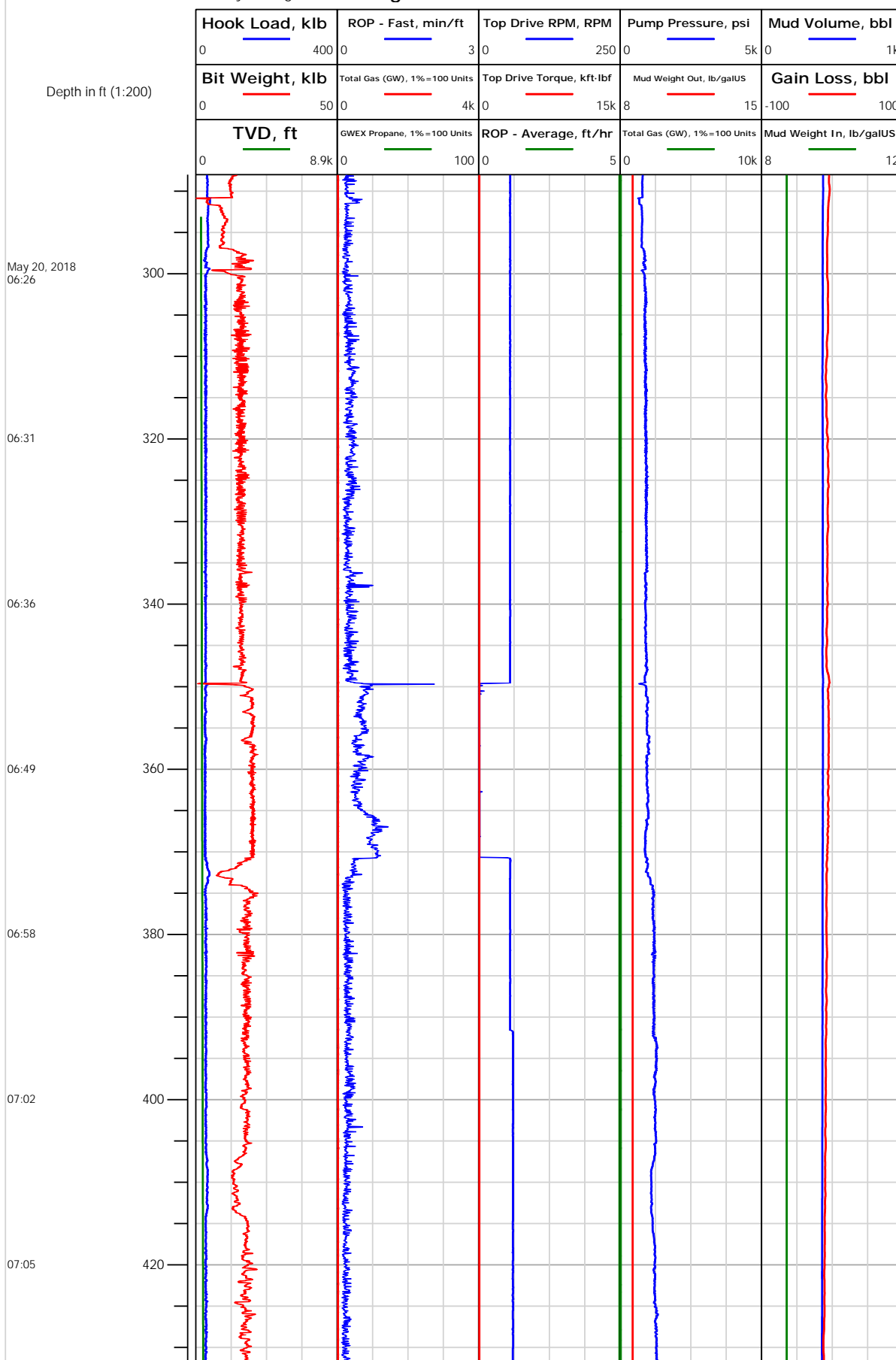
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

## Notes





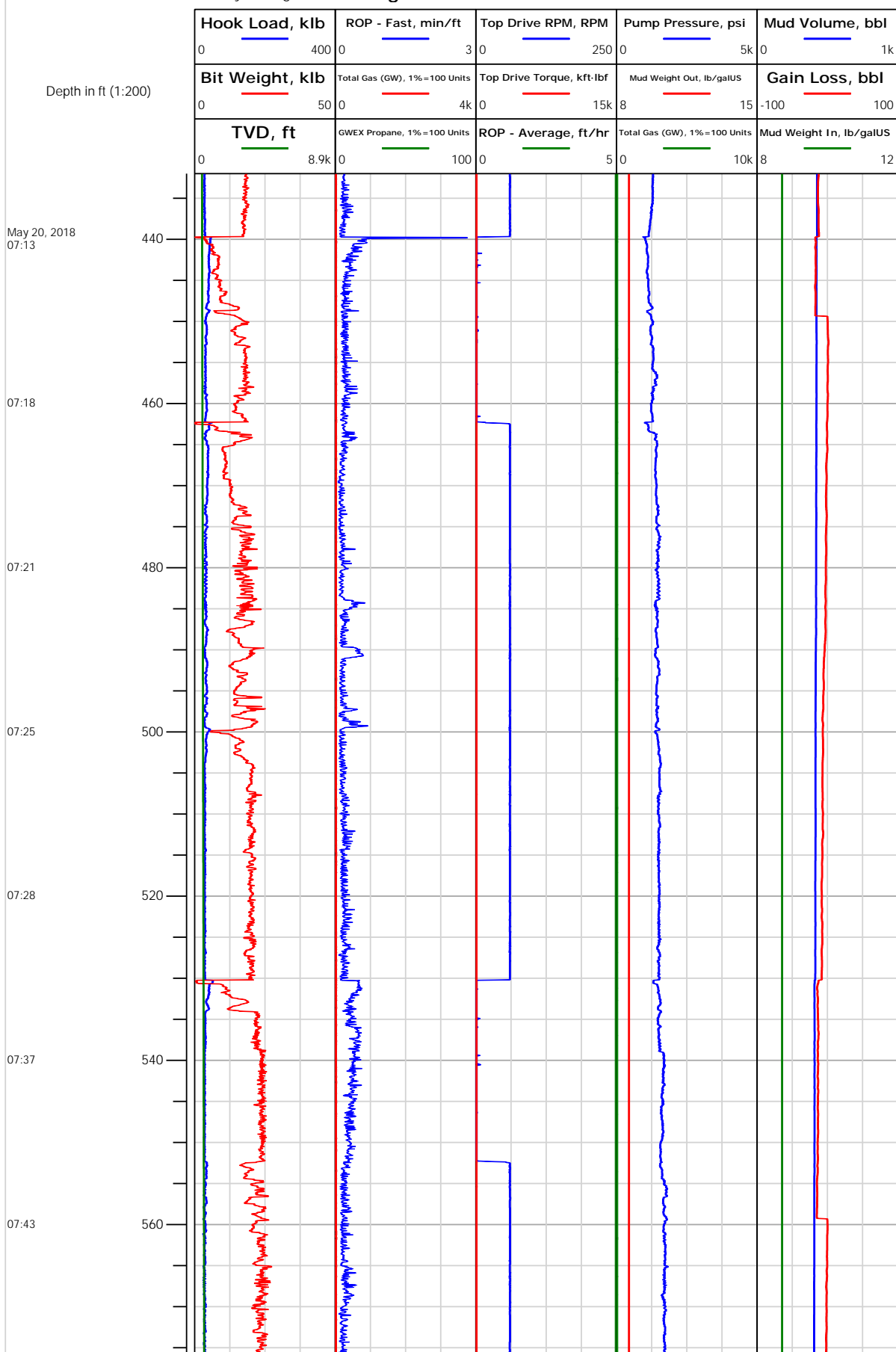
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

Notes





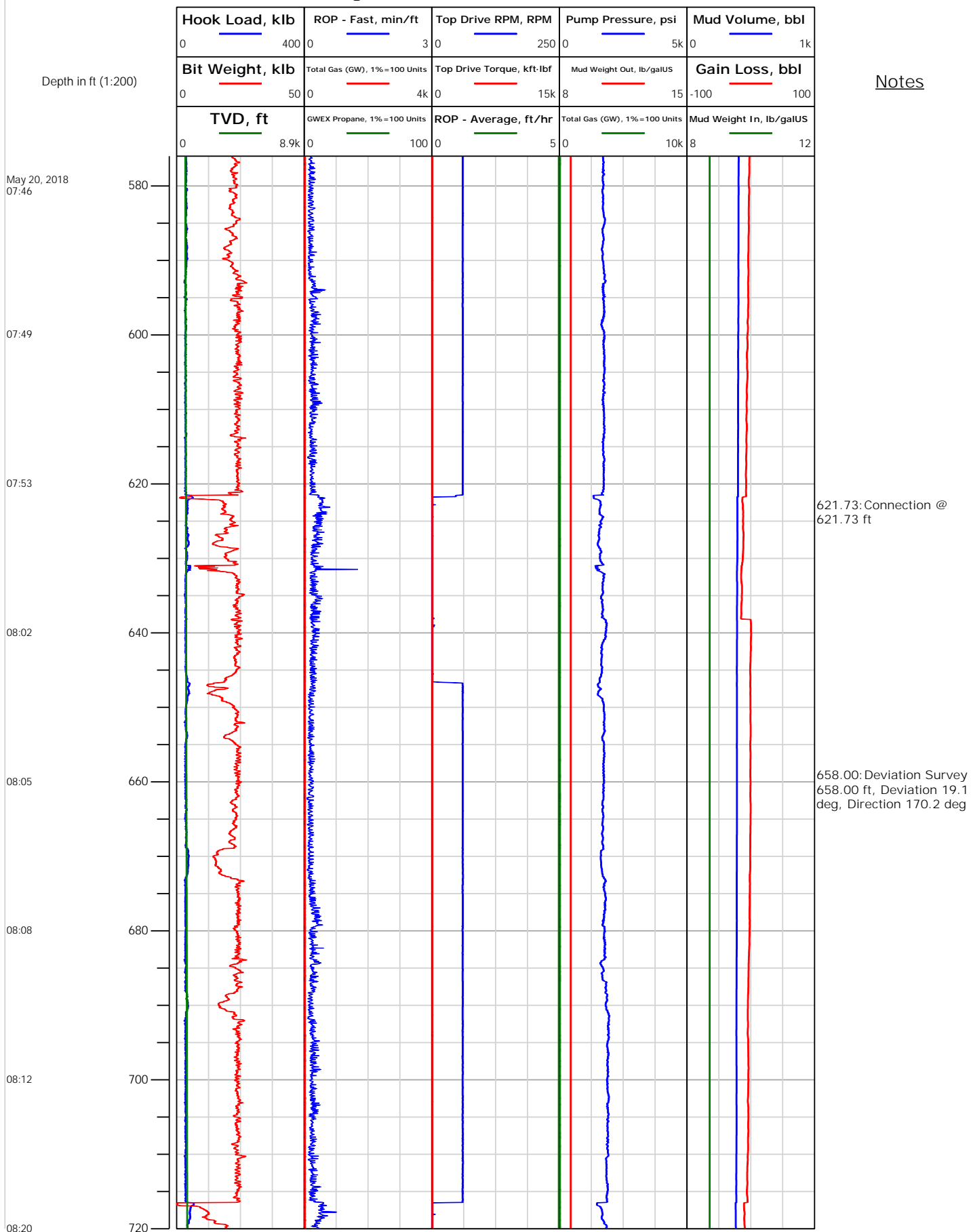
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

Notes





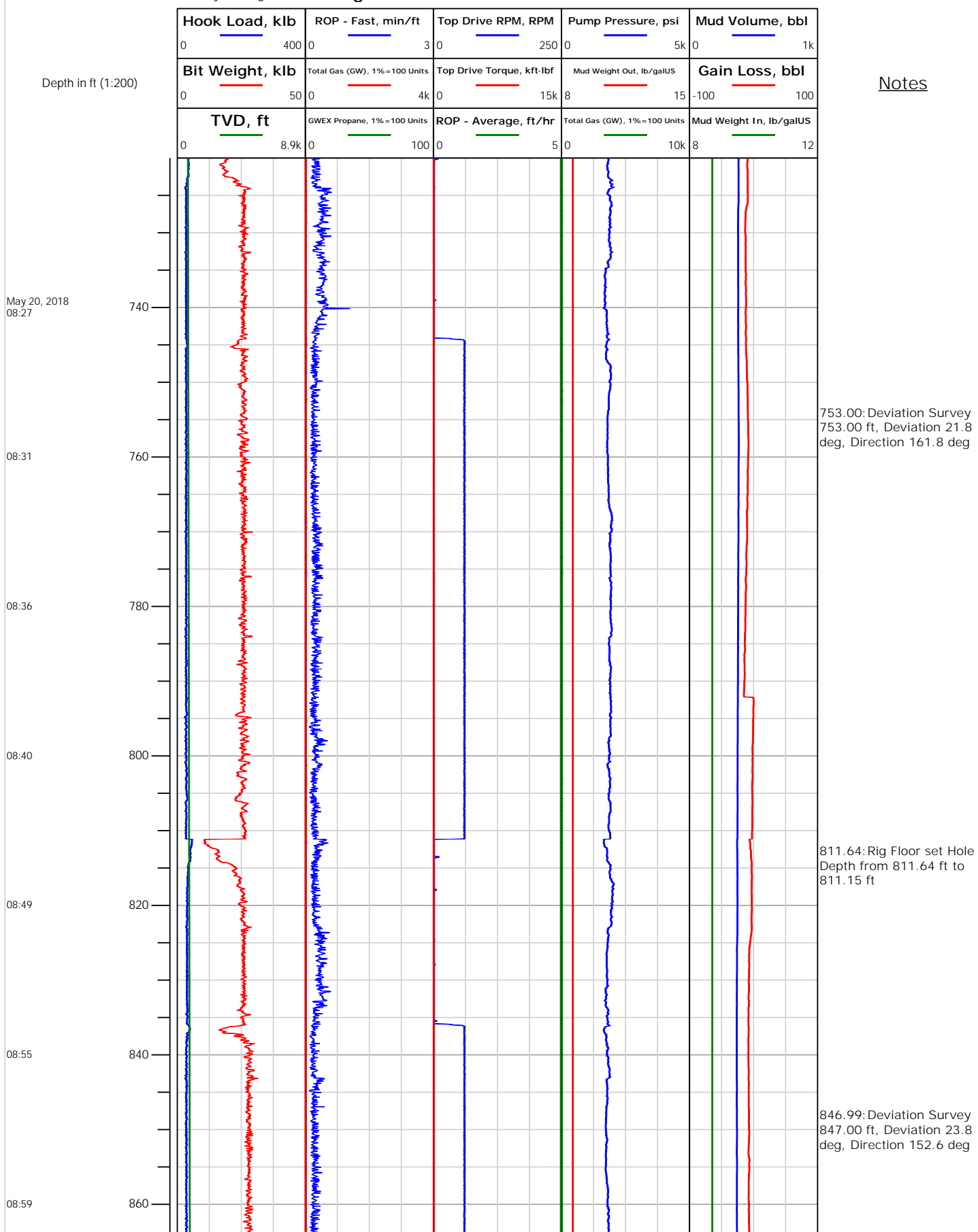
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

Notes





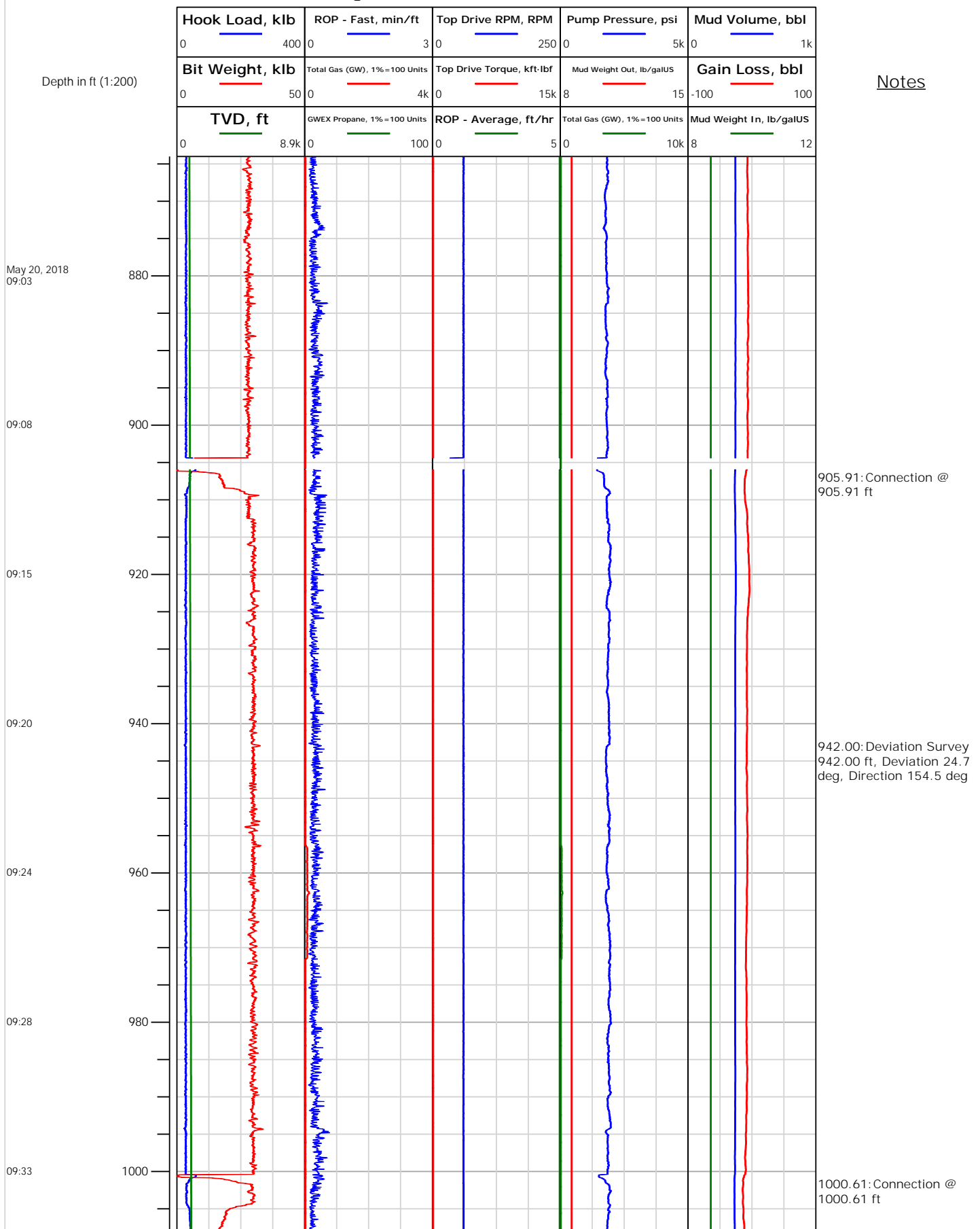
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

Notes





# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

Notes

Depth in ft (1:200)

May 20, 2018  
09:41

09:44

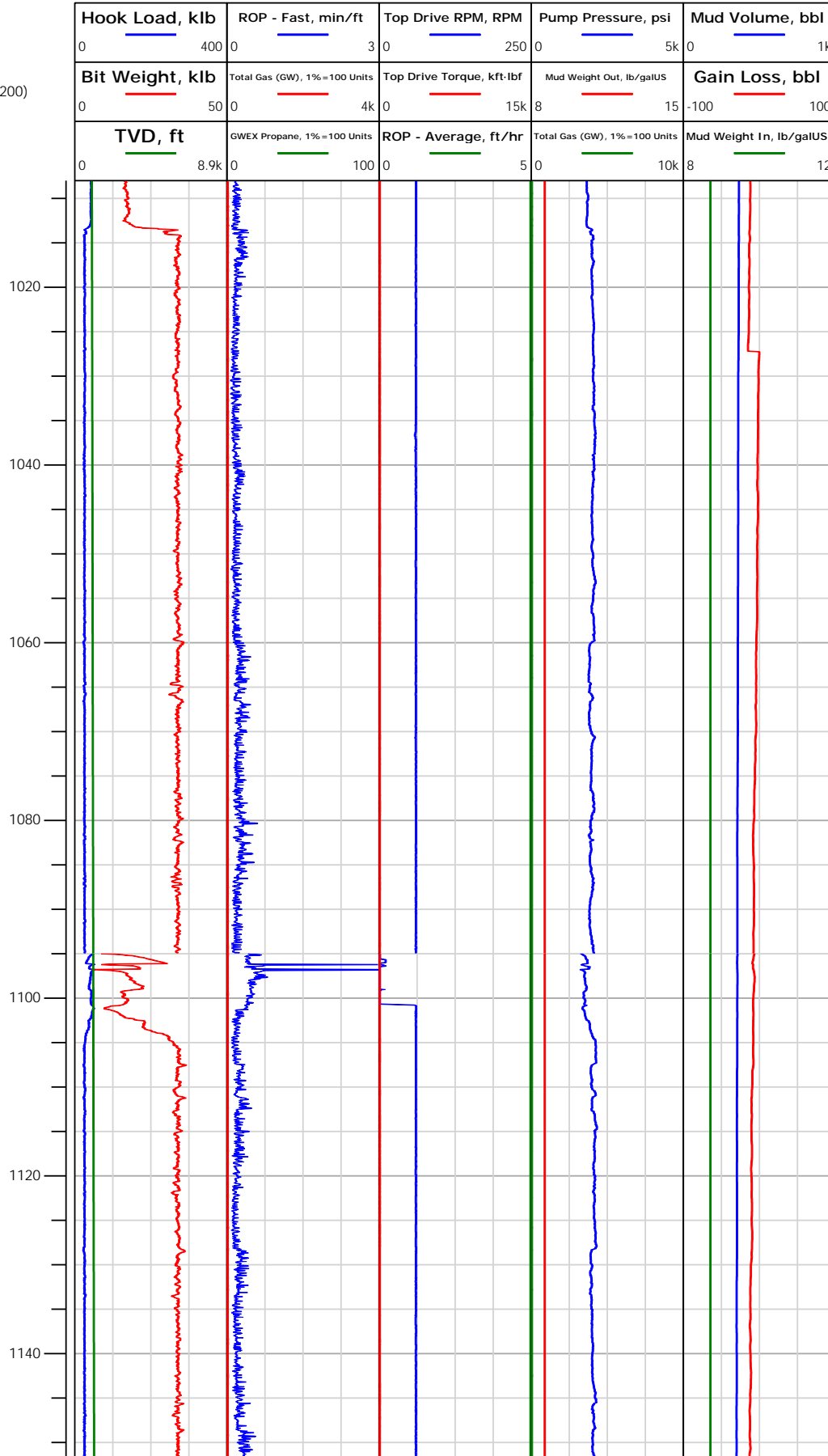
09:48

09:52

10:02

10:07

10:10



1037.00: Deviation Survey  
1037.00 ft, Deviation 25.6  
deg, Direction 151.2 deg

1095.06: Connection @  
1095.06 ft

1131.00: Deviation Survey  
1131.00 ft, Deviation 25.8  
deg, Direction 151.8 deg



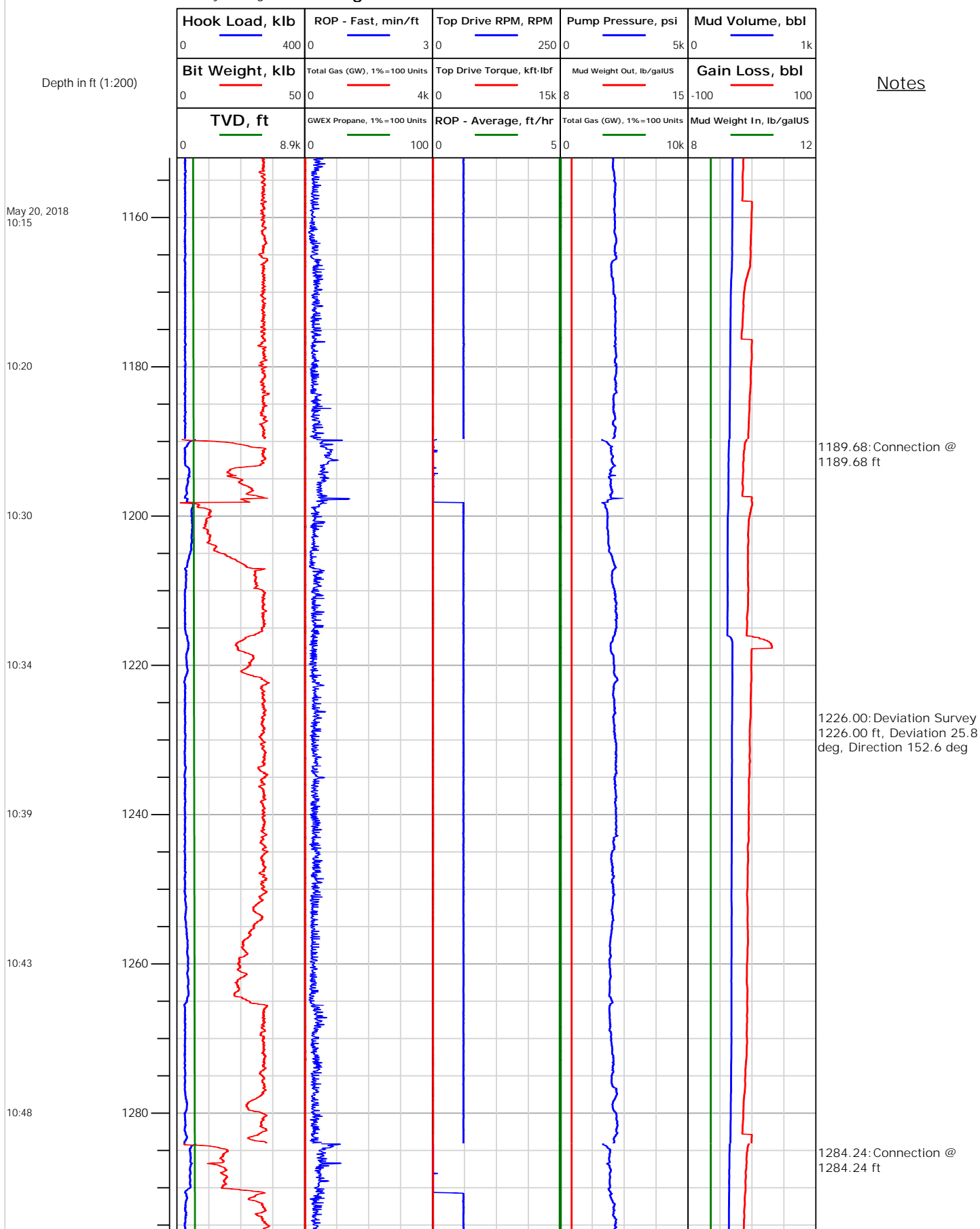
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

## Notes





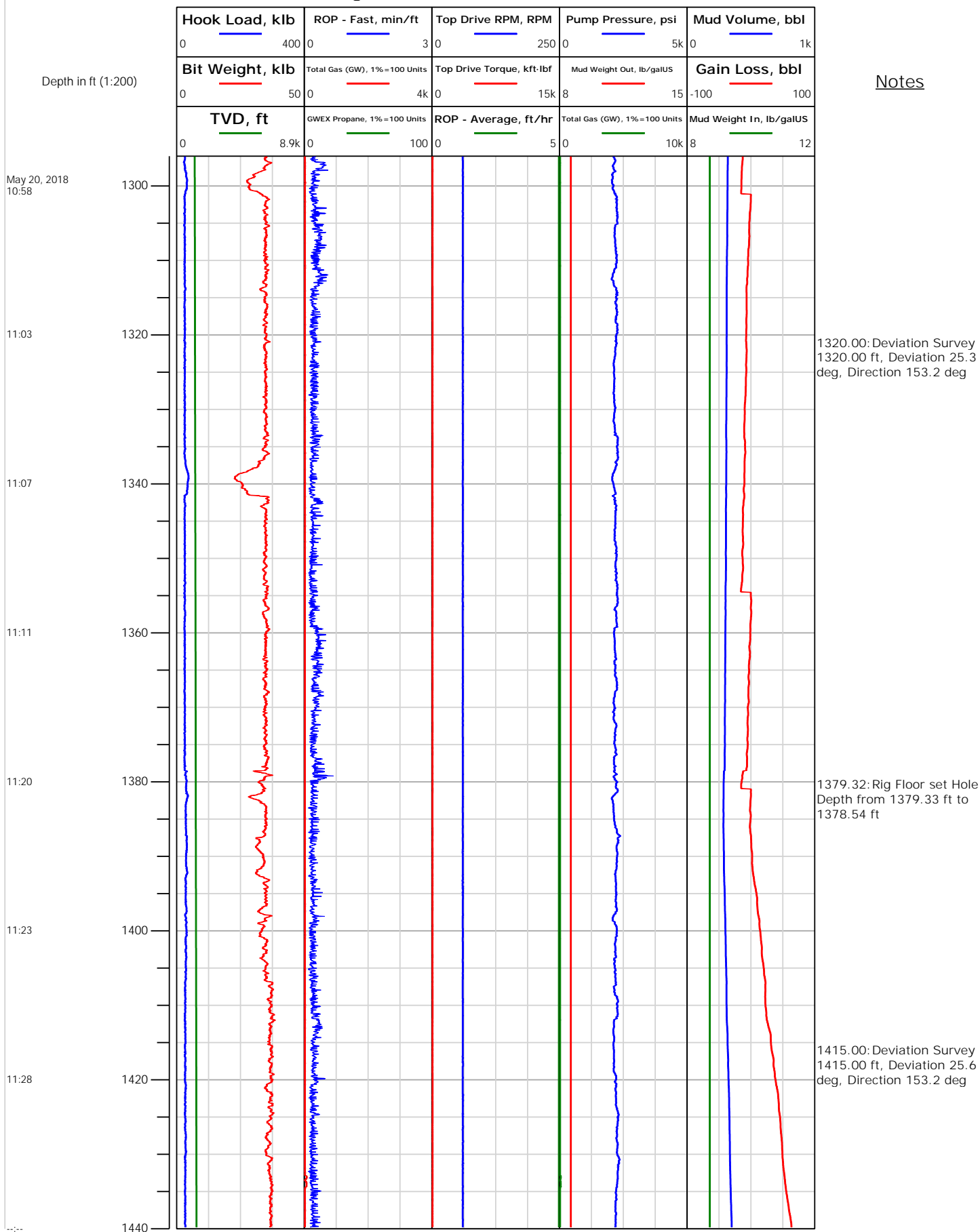
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

Notes







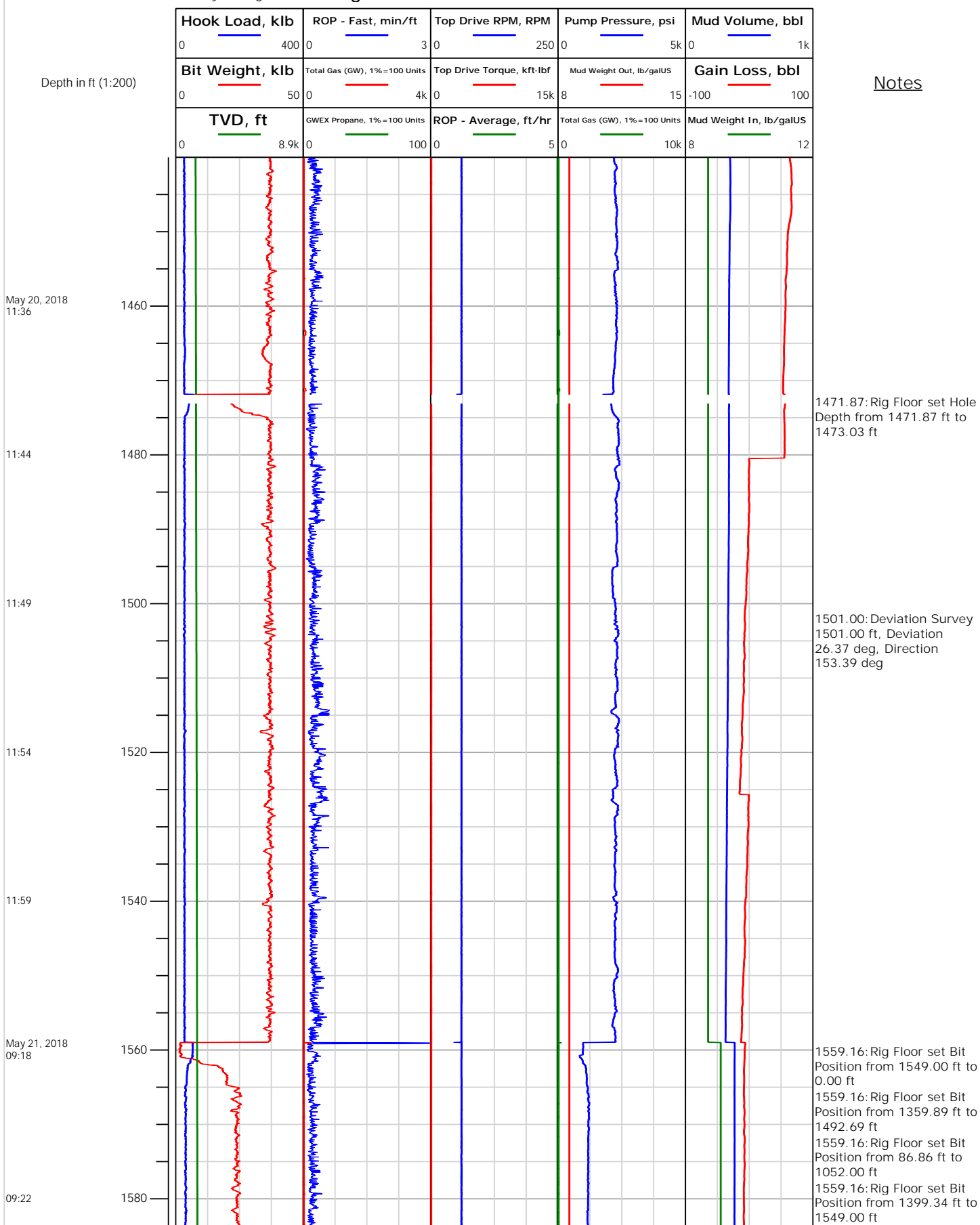
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

## Notes





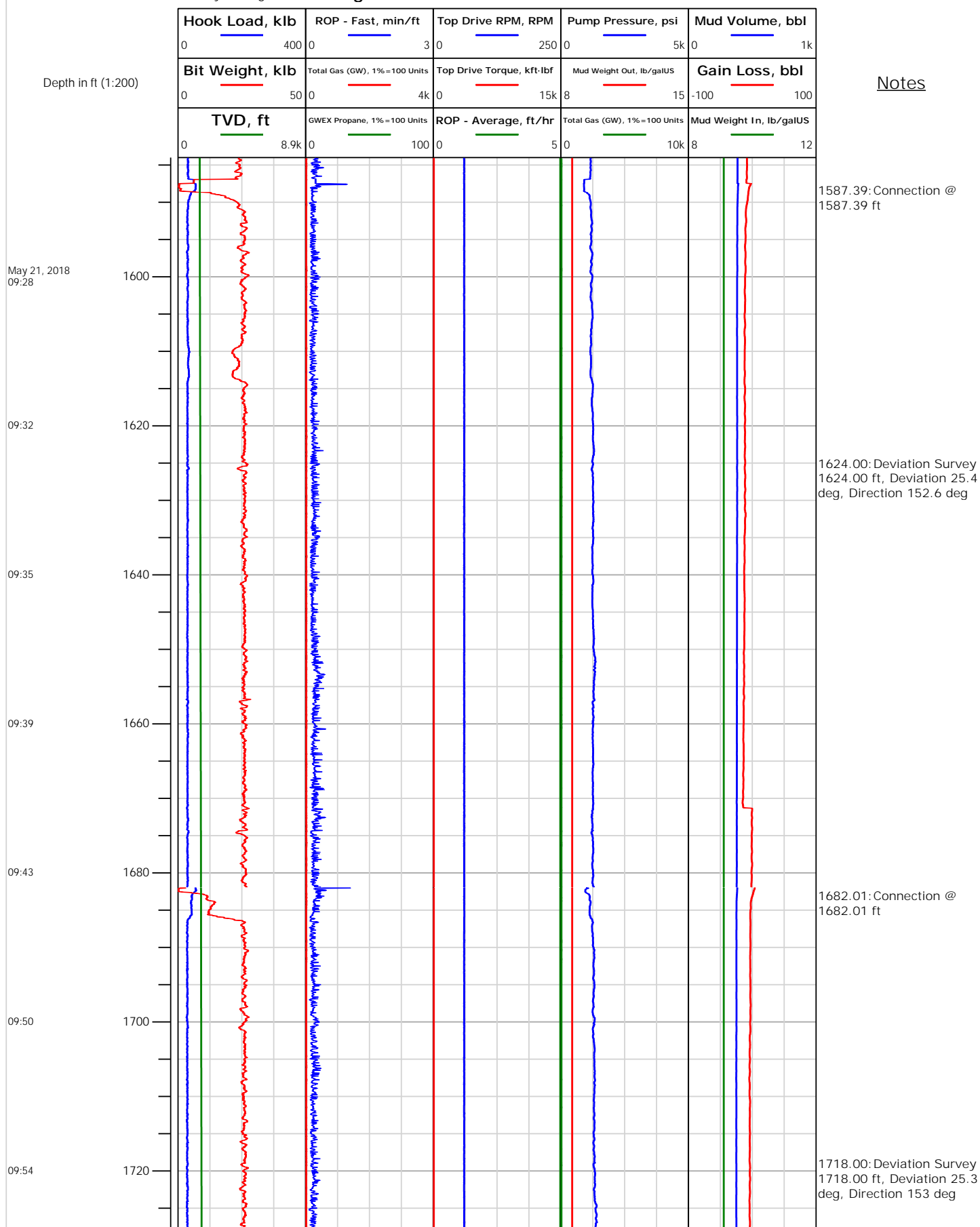
## Electronic Drilling Recorder

Operator: Laramie Energy  
Contractor: Helmerich & Payne Drlg Co

Well Name: Nichols Federal 24-21E  
Rig: 290

Location: SE/4 OF NW/4

## Notes





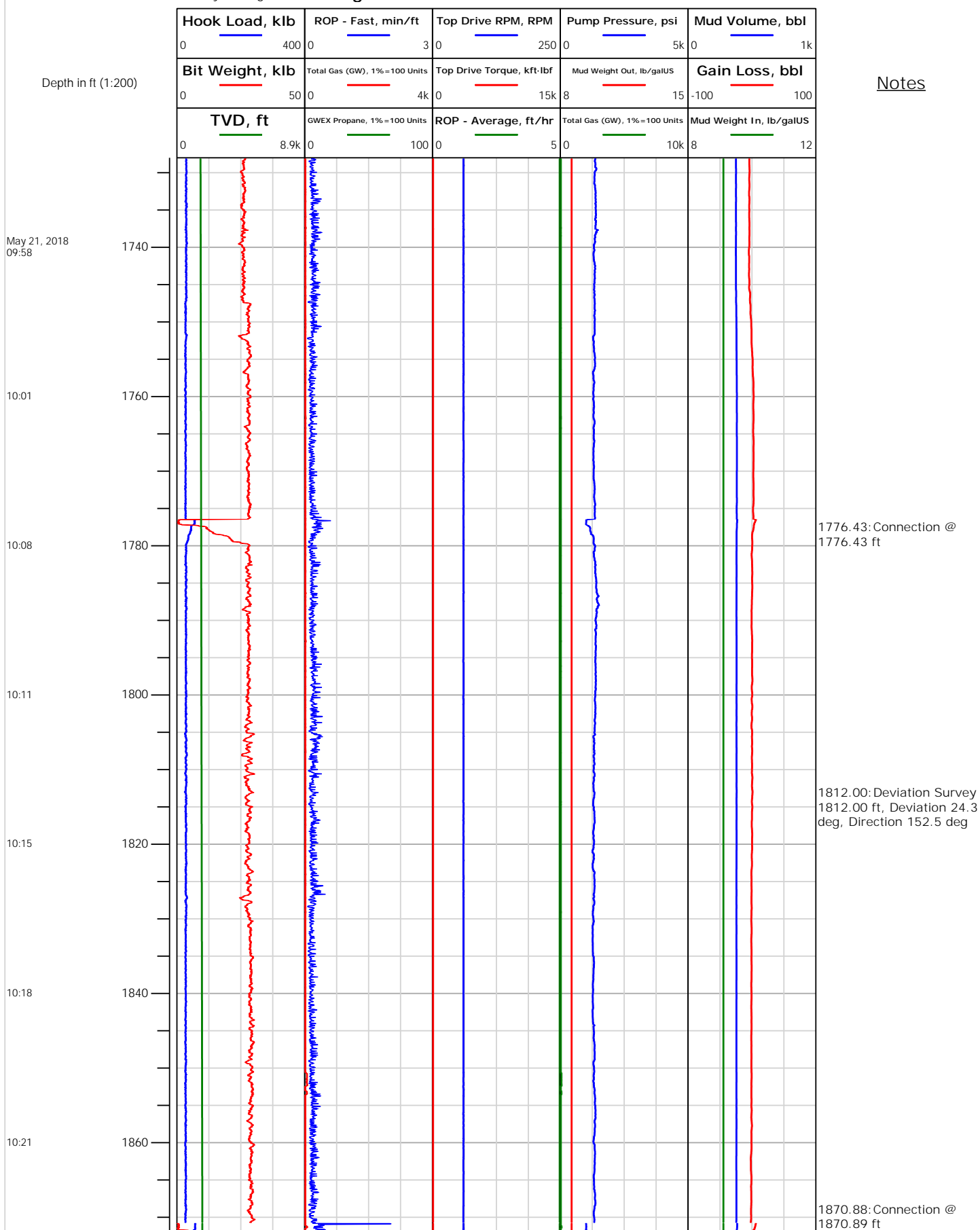
# Electronic Drilling Recorder

Operator: Laramie Energy  
Contractor: Helmerich & Payne Drlg Co

Well Name: Nichols Federal 24-21E  
Rig: 290

Location: SE/4 OF NW/4

Notes





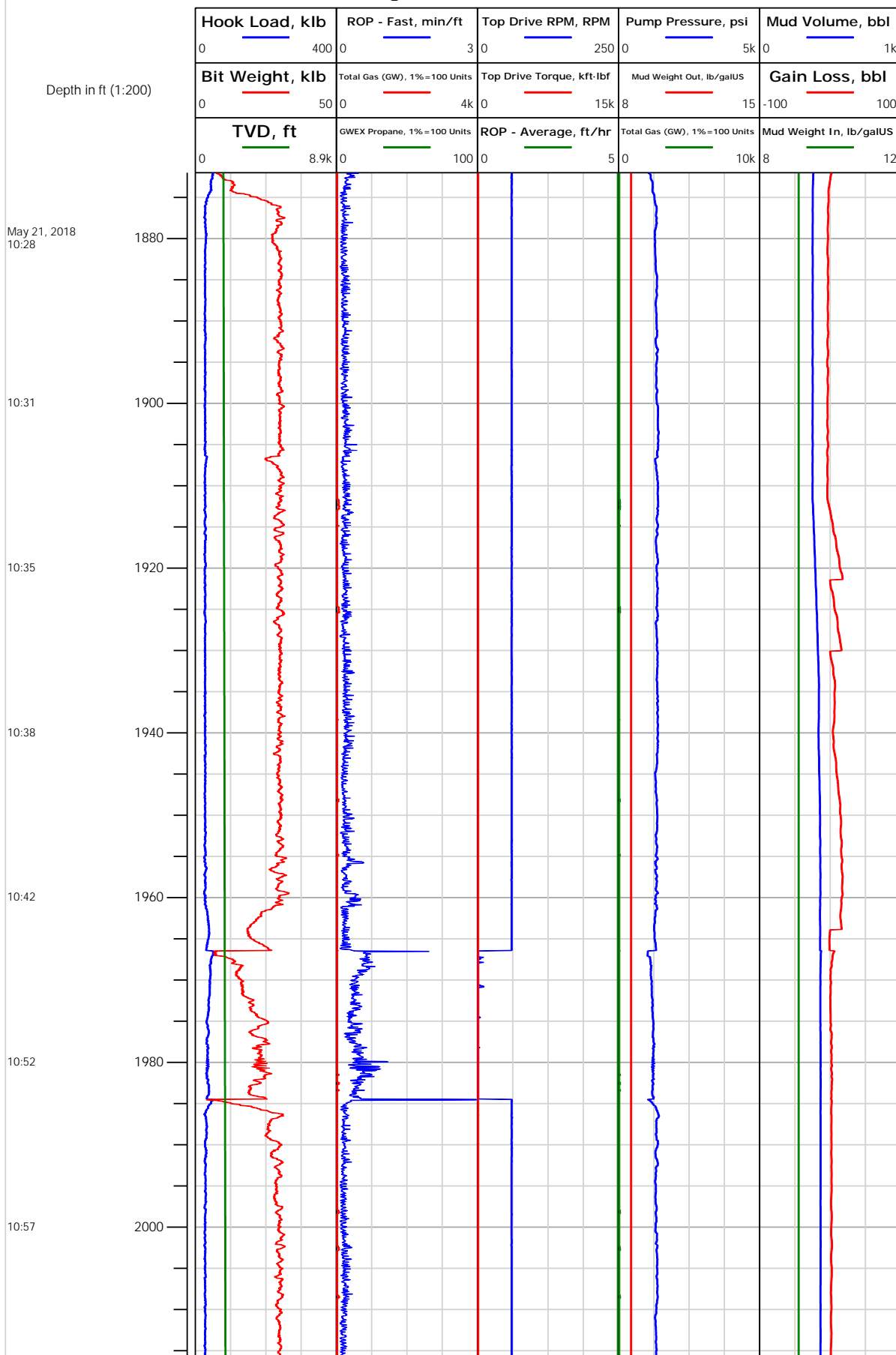
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

Notes





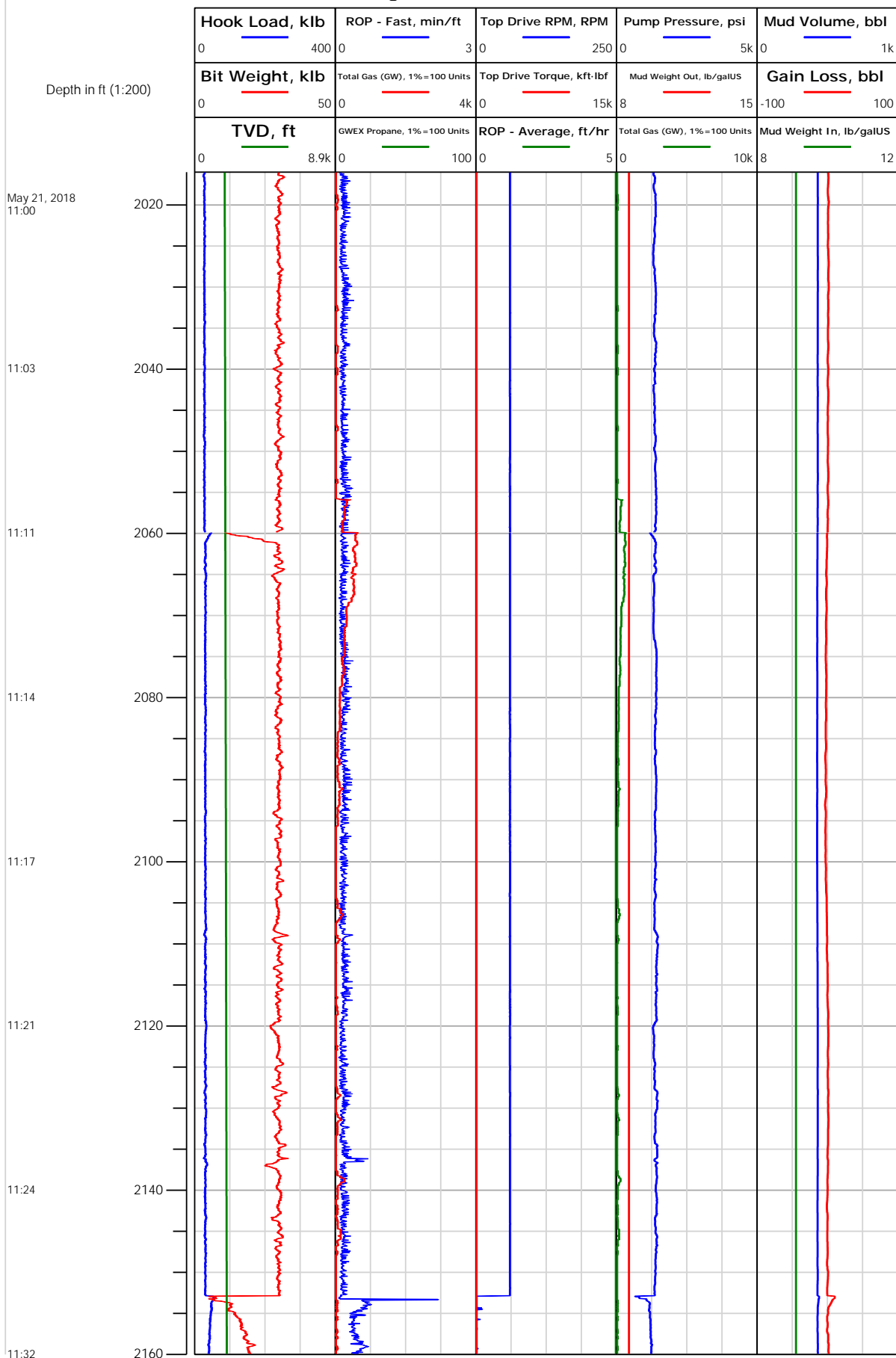
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

Notes





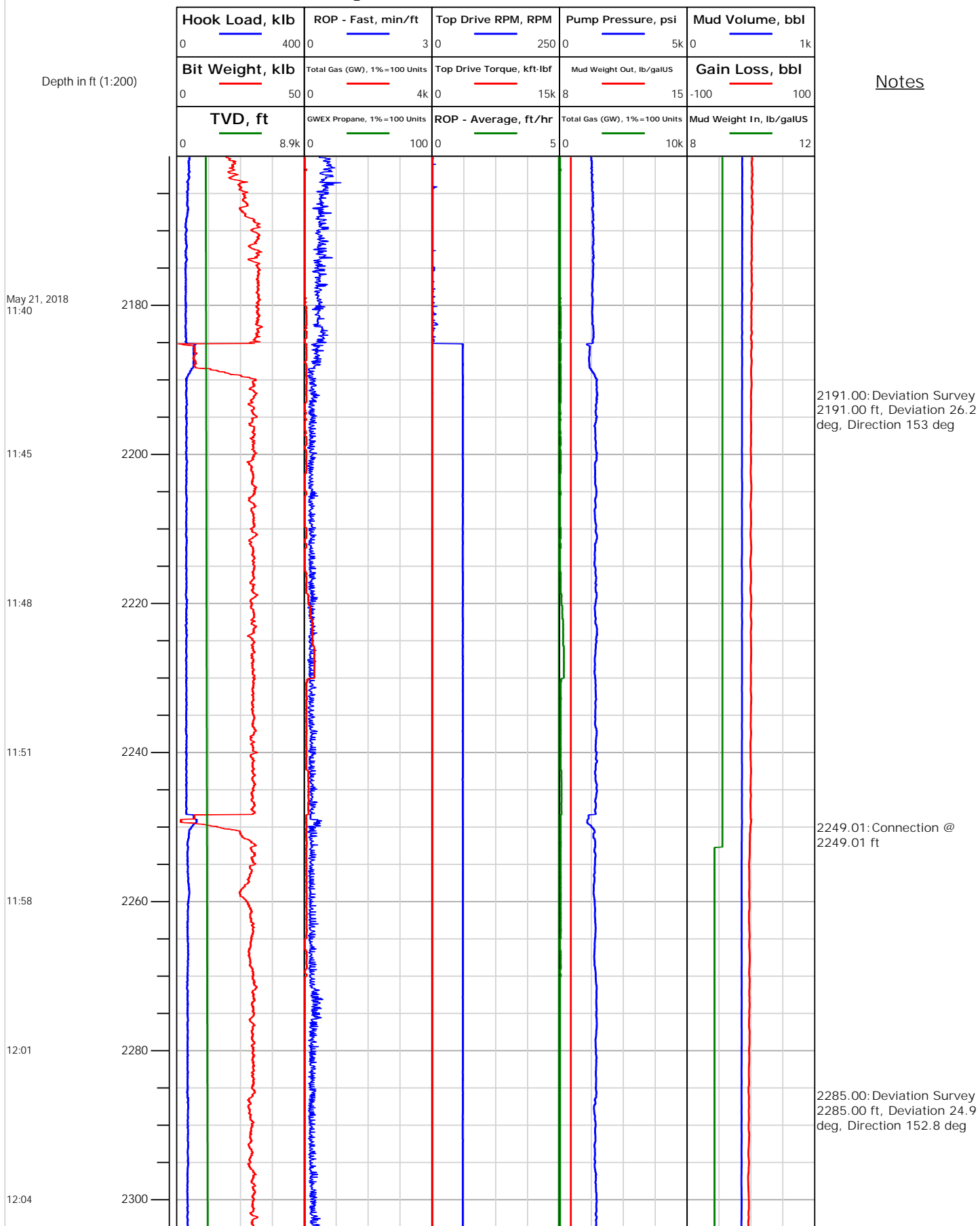
## Electronic Drilling Recorder

Operator: Laramie Energy  
Contractor: Helmerich & Payne Drlg Co

Well Name: Nichols Federal 24-21E  
Rig: 290

Location: SE/4 OF NW/4

## Notes





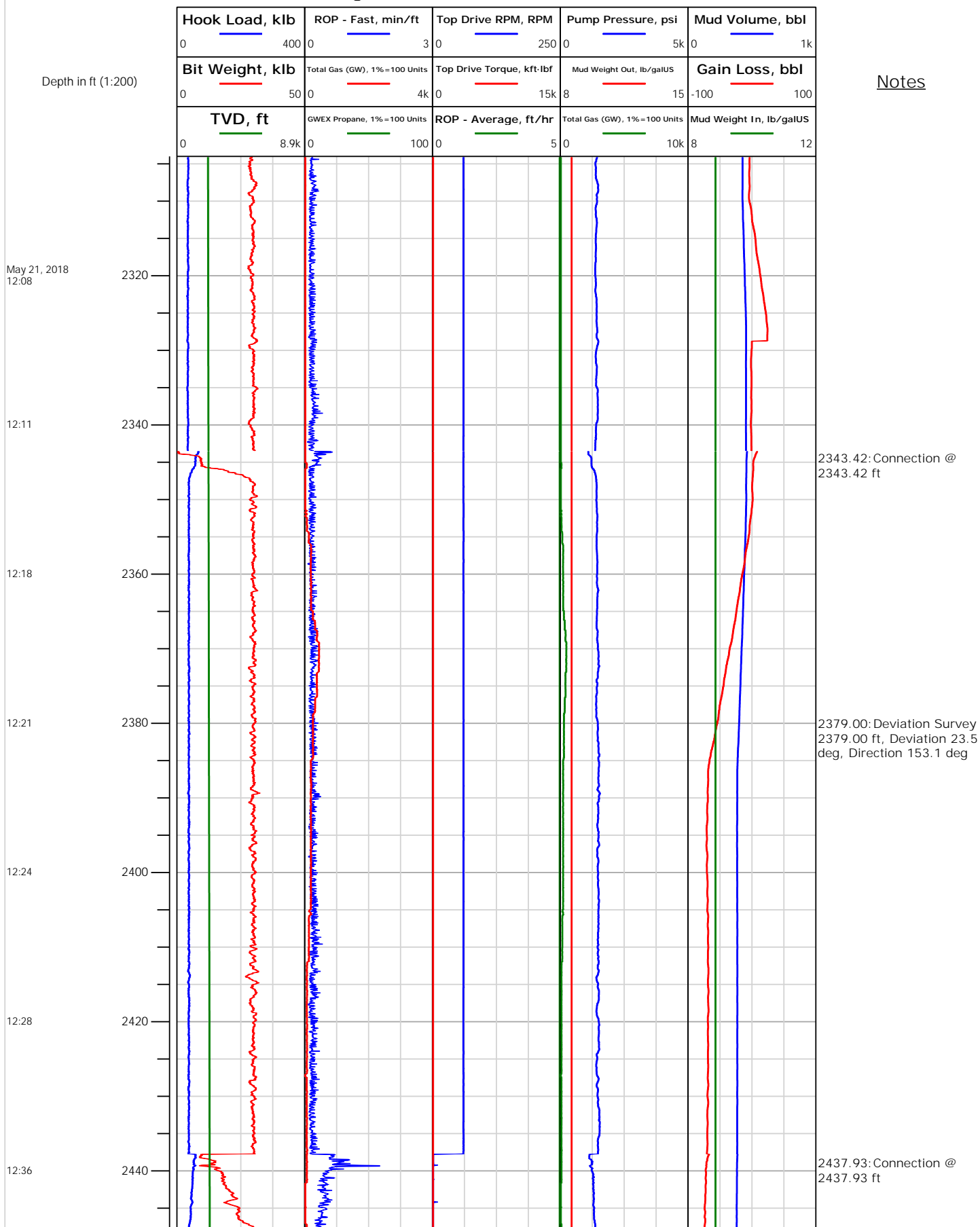
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

Notes





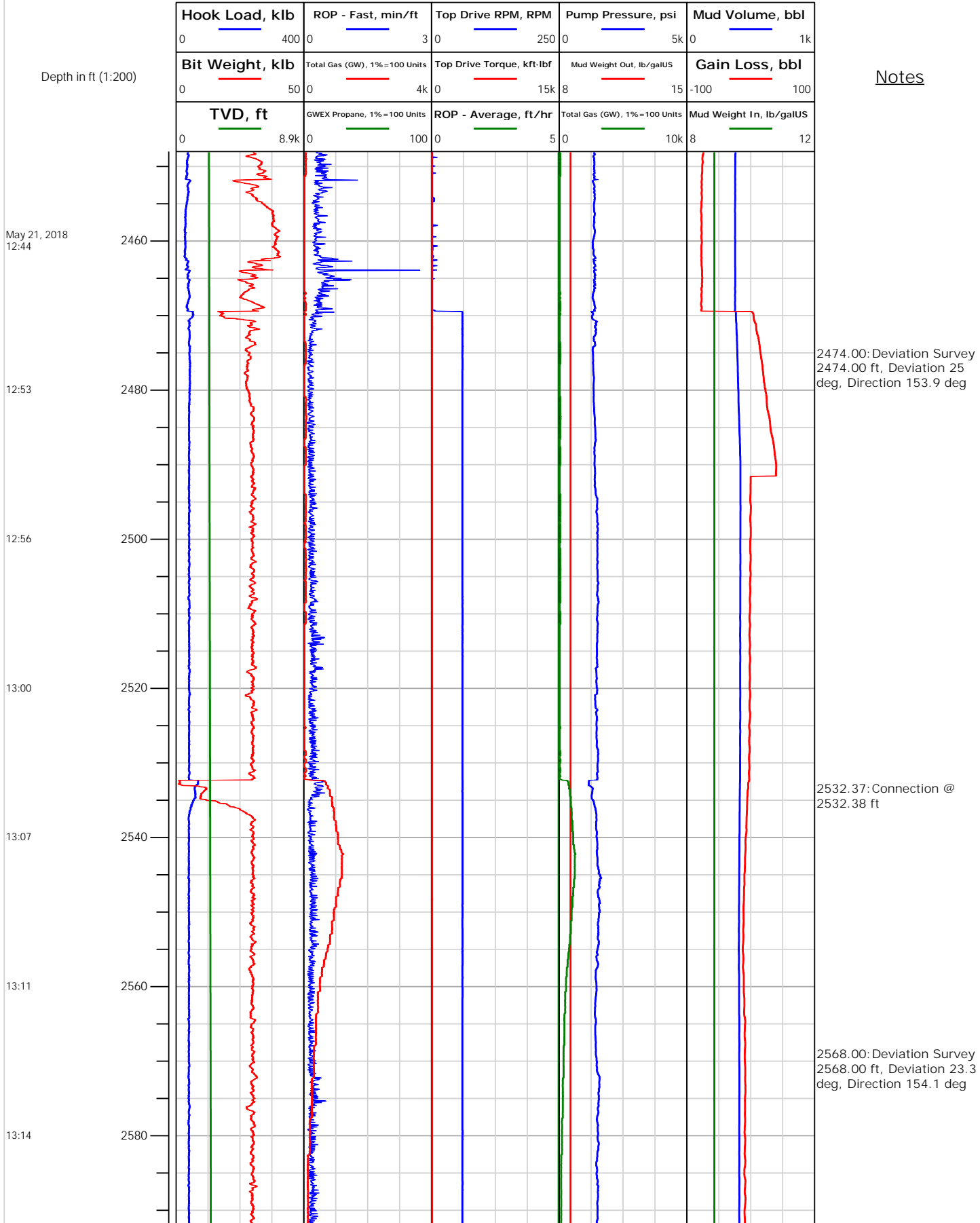
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

## Notes







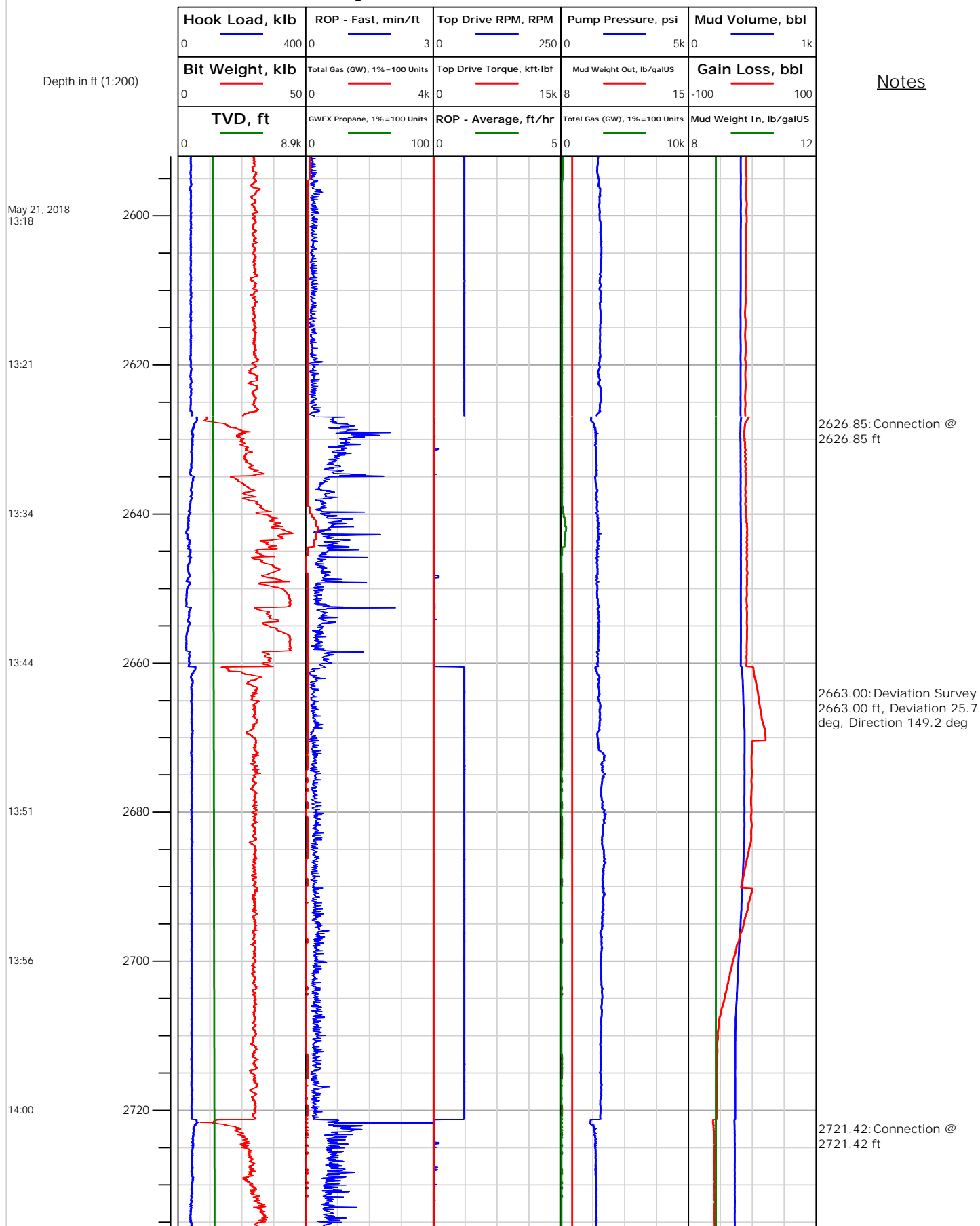
## Electronic Drilling Recorder

Operator: Laramie Energy  
Contractor: Helmerich & Payne Drlg Co

Well Name: Nichols Federal 24-21E  
Rig: 290

Location: SE/4 OF NW/4

## Notes





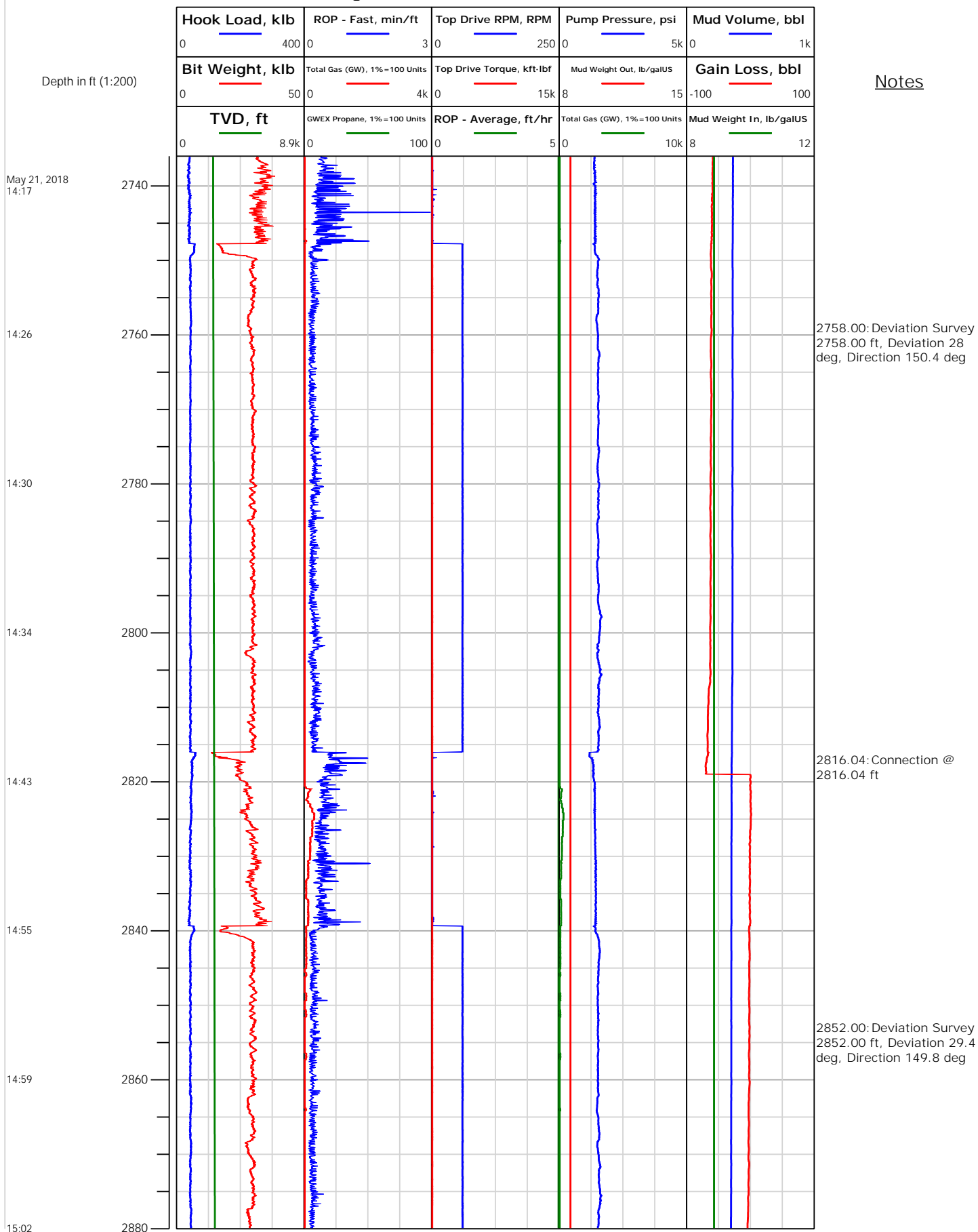
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

## Notes





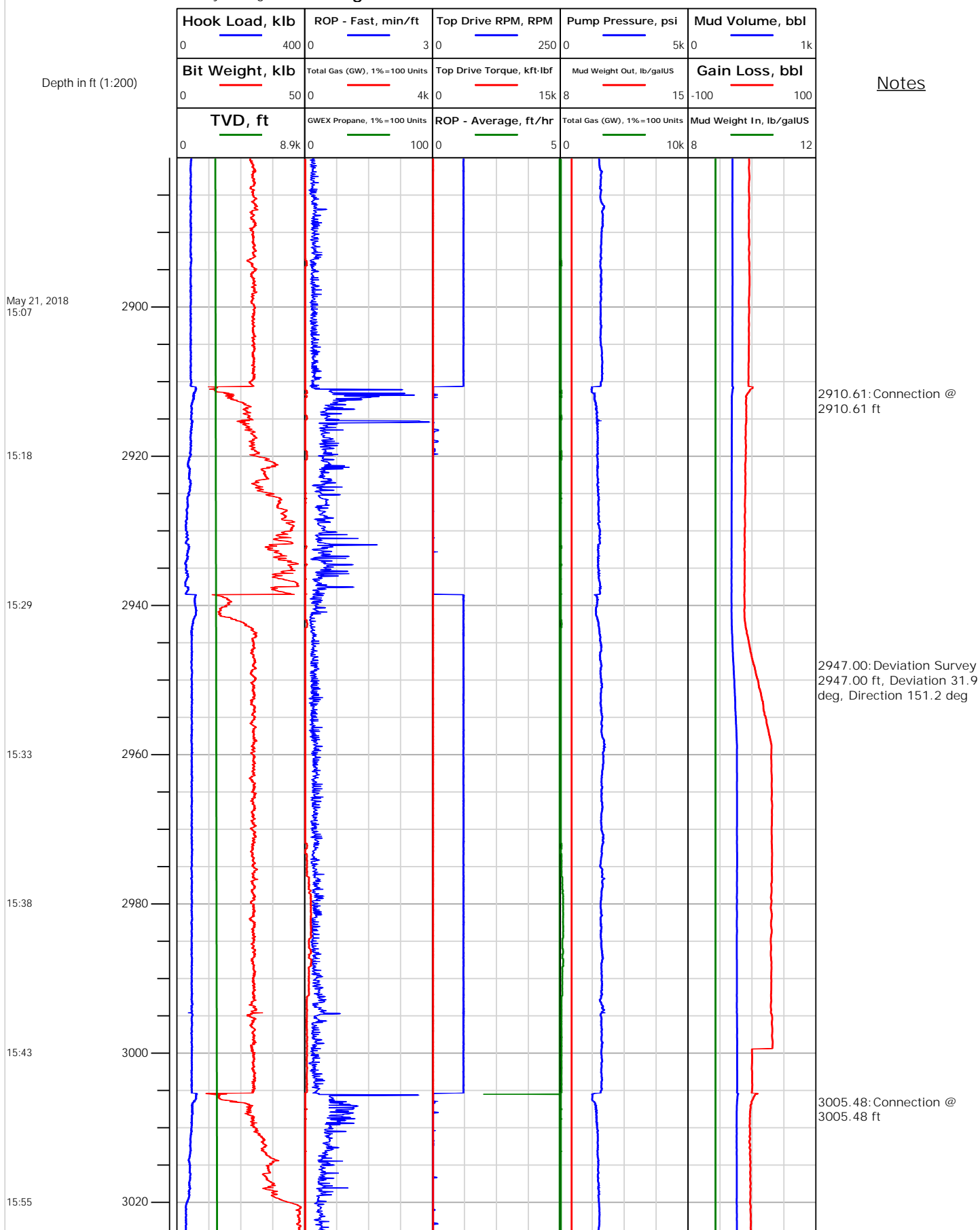
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

Notes





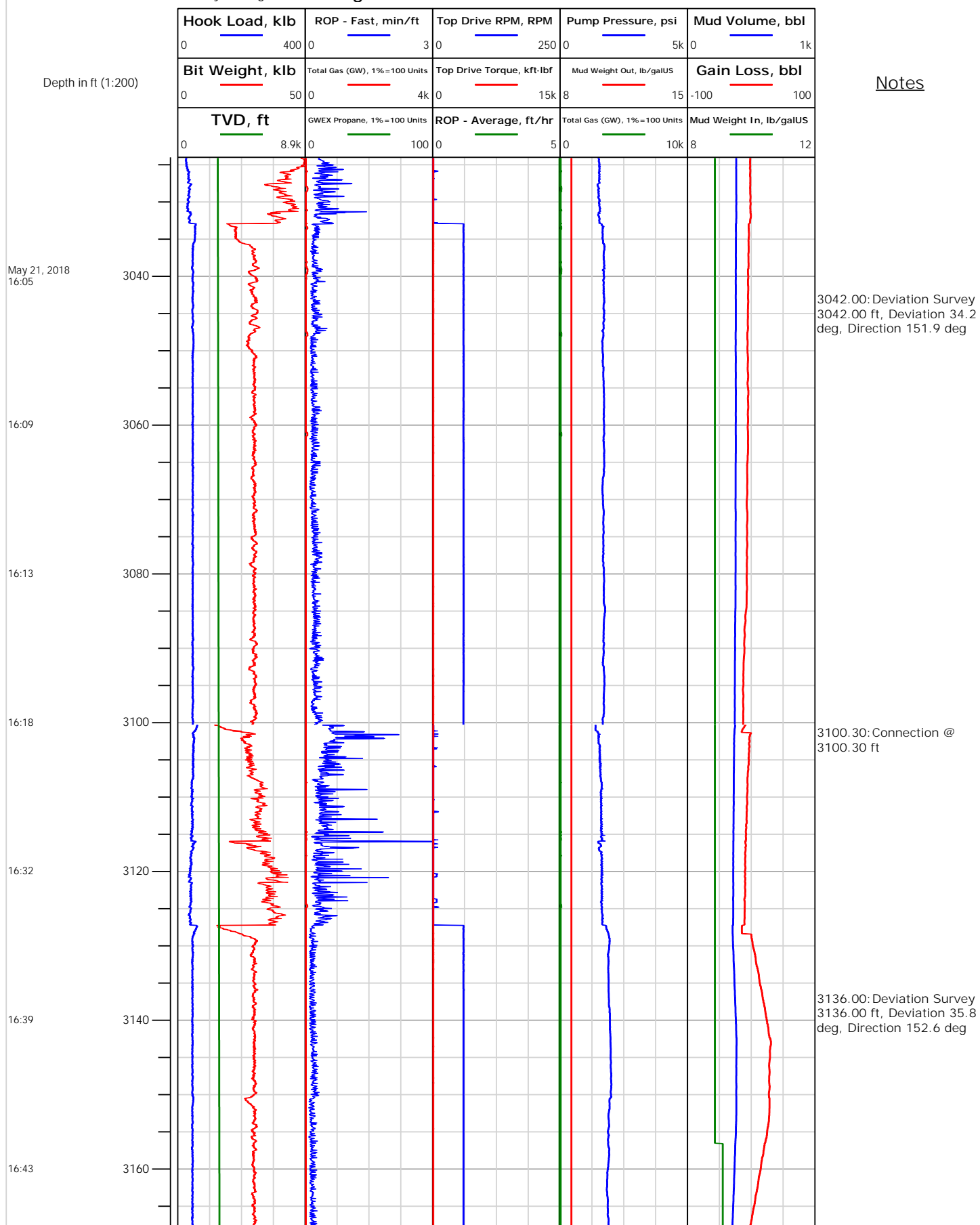
## Electronic Drilling Recorder

Operator: Laramie Energy  
Contractor: Helmerich & Payne Drlg Co

Well Name: Nichols Federal 24-21E  
Rig: 290

Location: SE/4 OF NW/4

## Notes





# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

Notes

Depth in ft (1:200)

May 21, 2018  
16:46

17:14

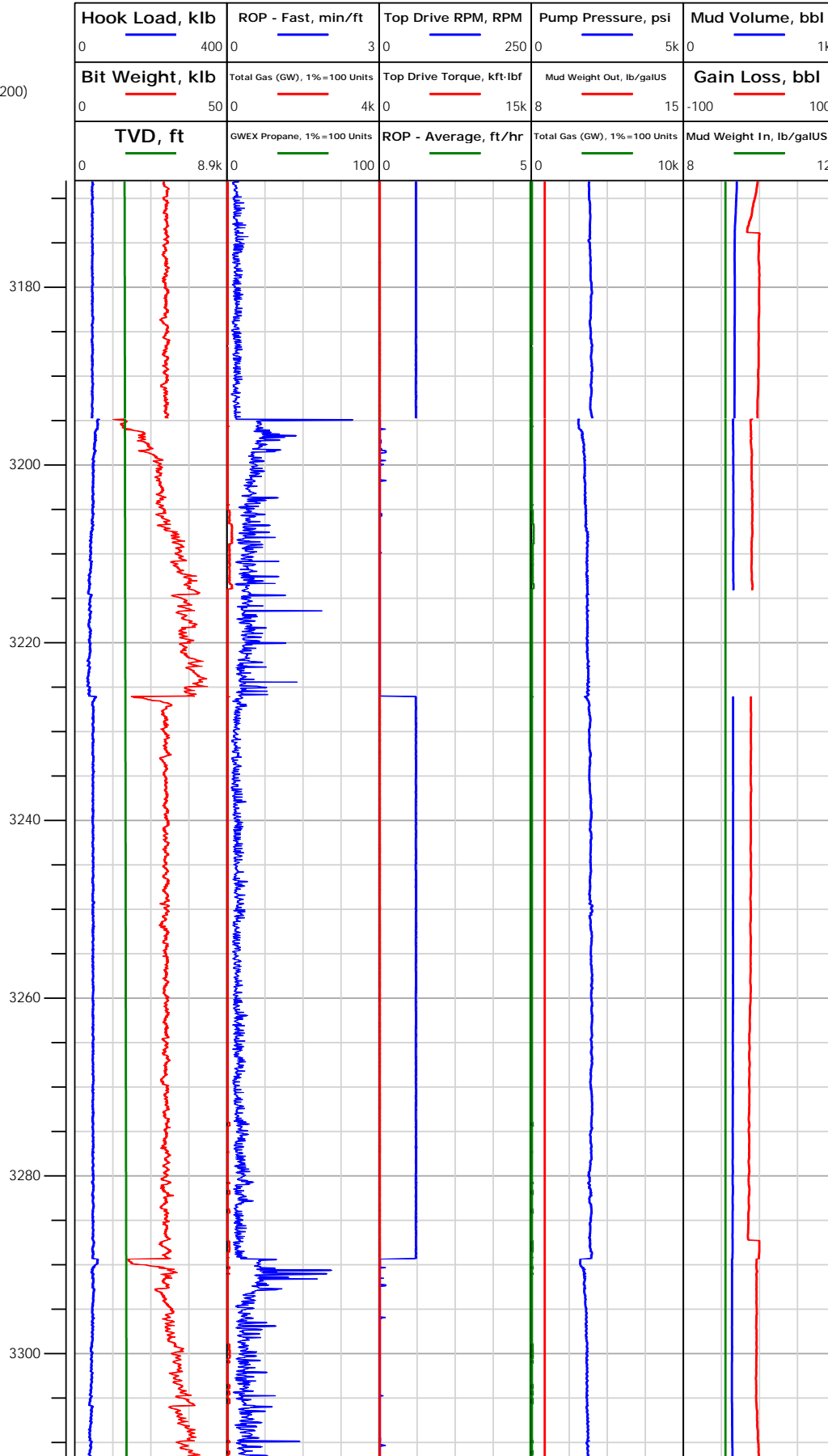
17:23

17:31

17:34

17:39

17:51





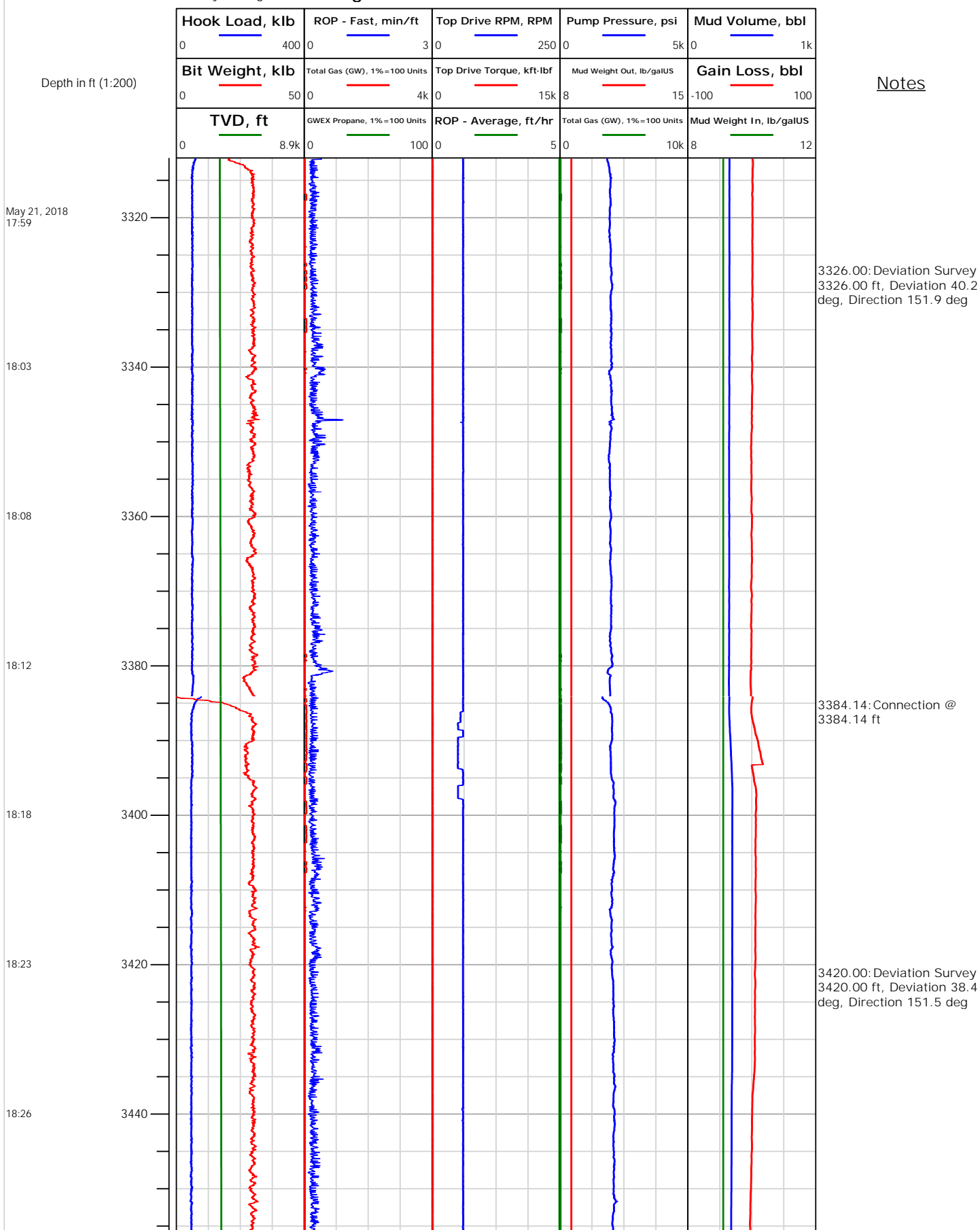
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

## Notes





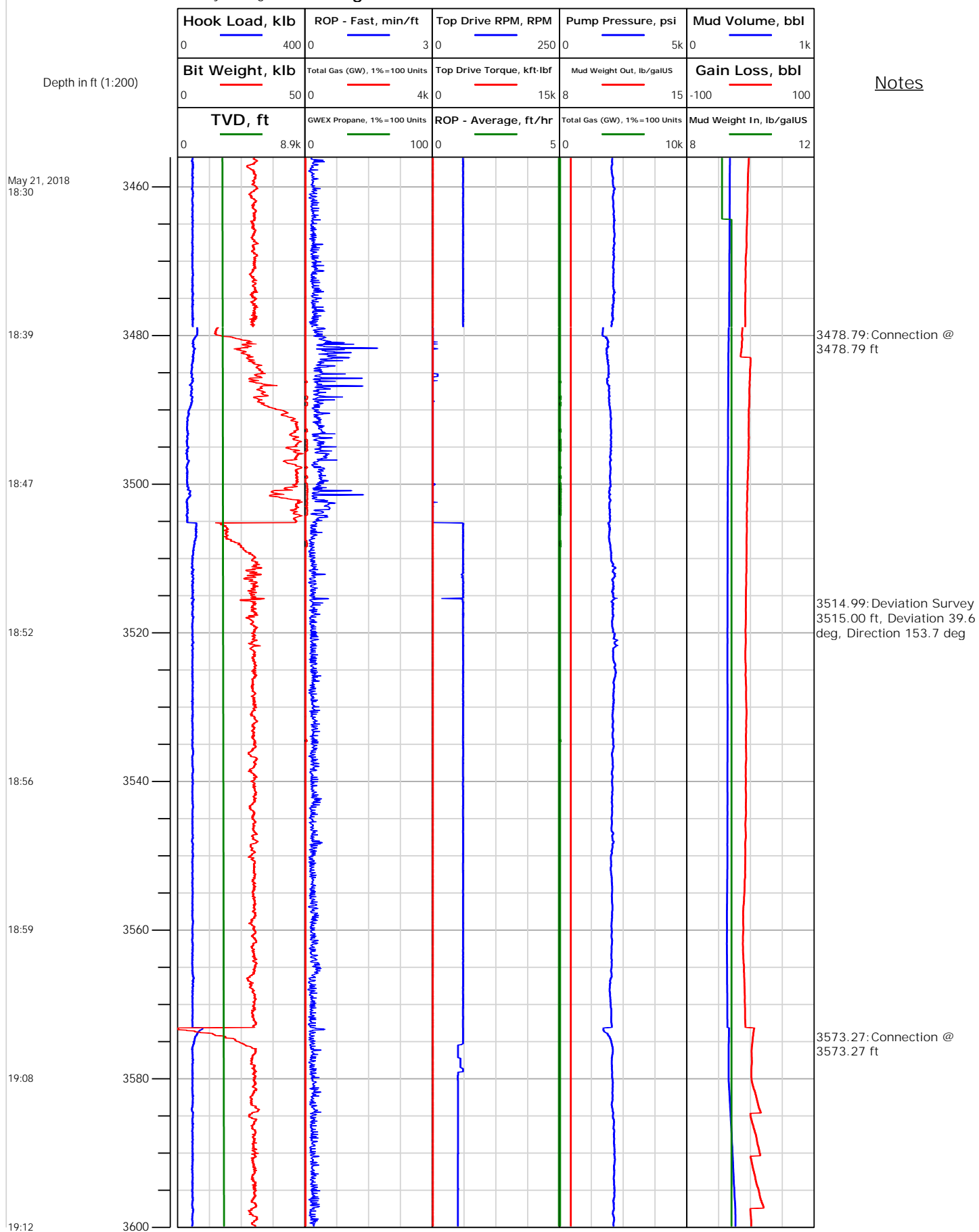
## Electronic Drilling Recorder

Operator: Laramie Energy  
Contractor: Helmerich & Payne Drlg Co

Well Name: Nichols Federal 24-21E  
Rig: 290

Location: SE/4 OF NW/4

## Notes





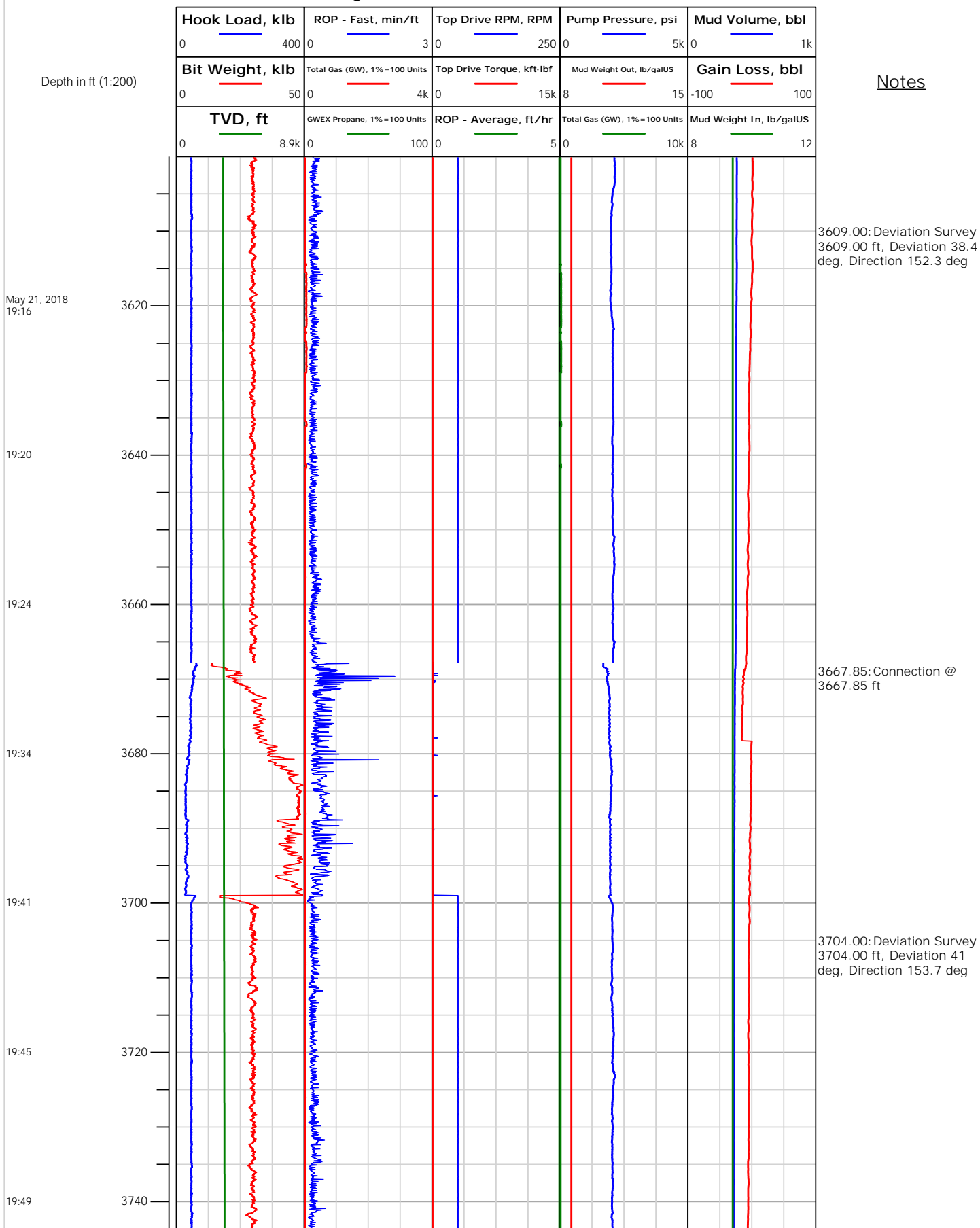
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

## Notes







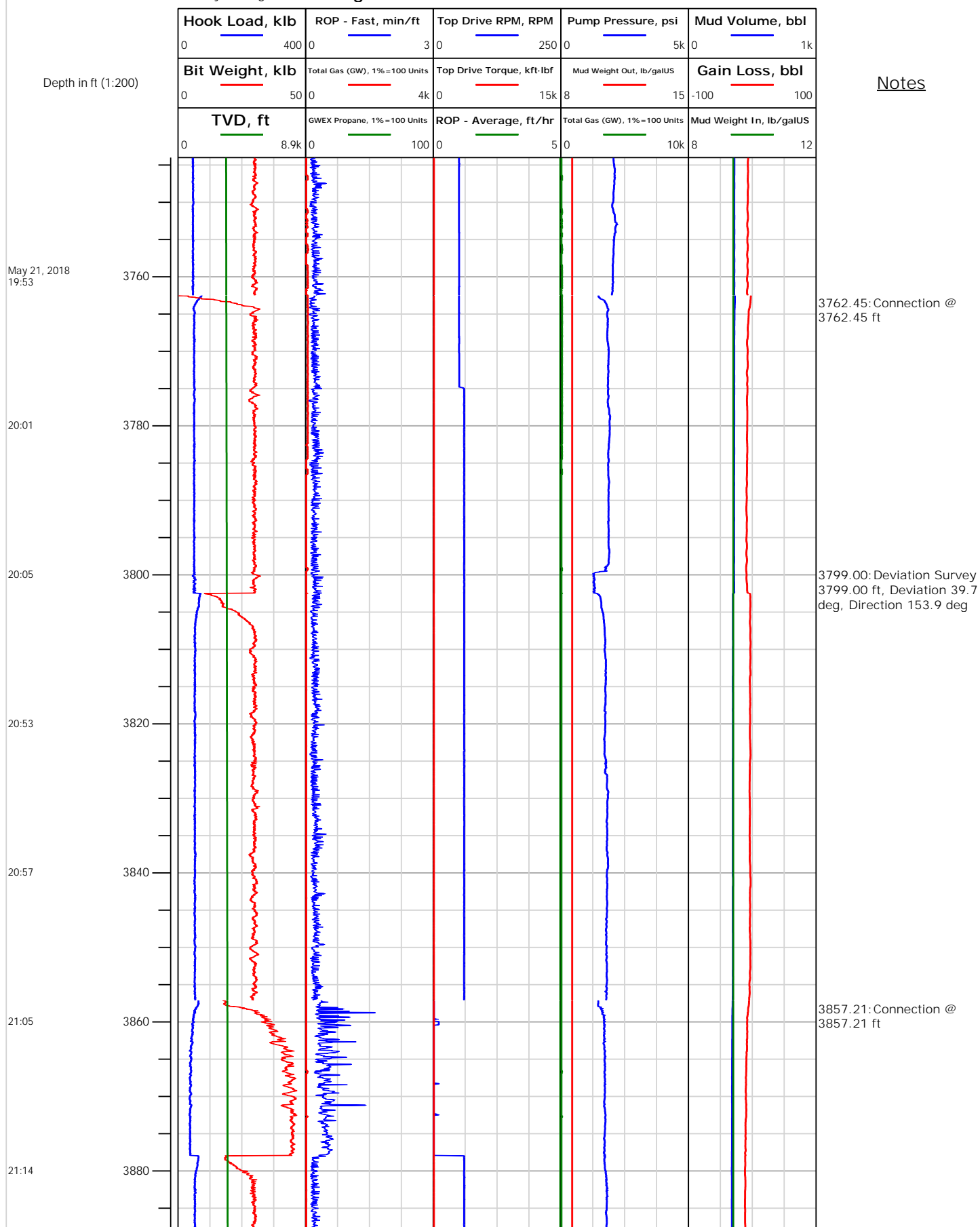
## Electronic Drilling Recorder

Operator: Laramie Energy  
Contractor: Helmerich & Payne Drlg Co

Well Name: Nichols Federal 24-21E  
Rig: 290

Location: SE/4 OF NW/4

## Notes





# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

## Notes

Depth in ft (1:200)

May 21, 2018  
21:18

21:22

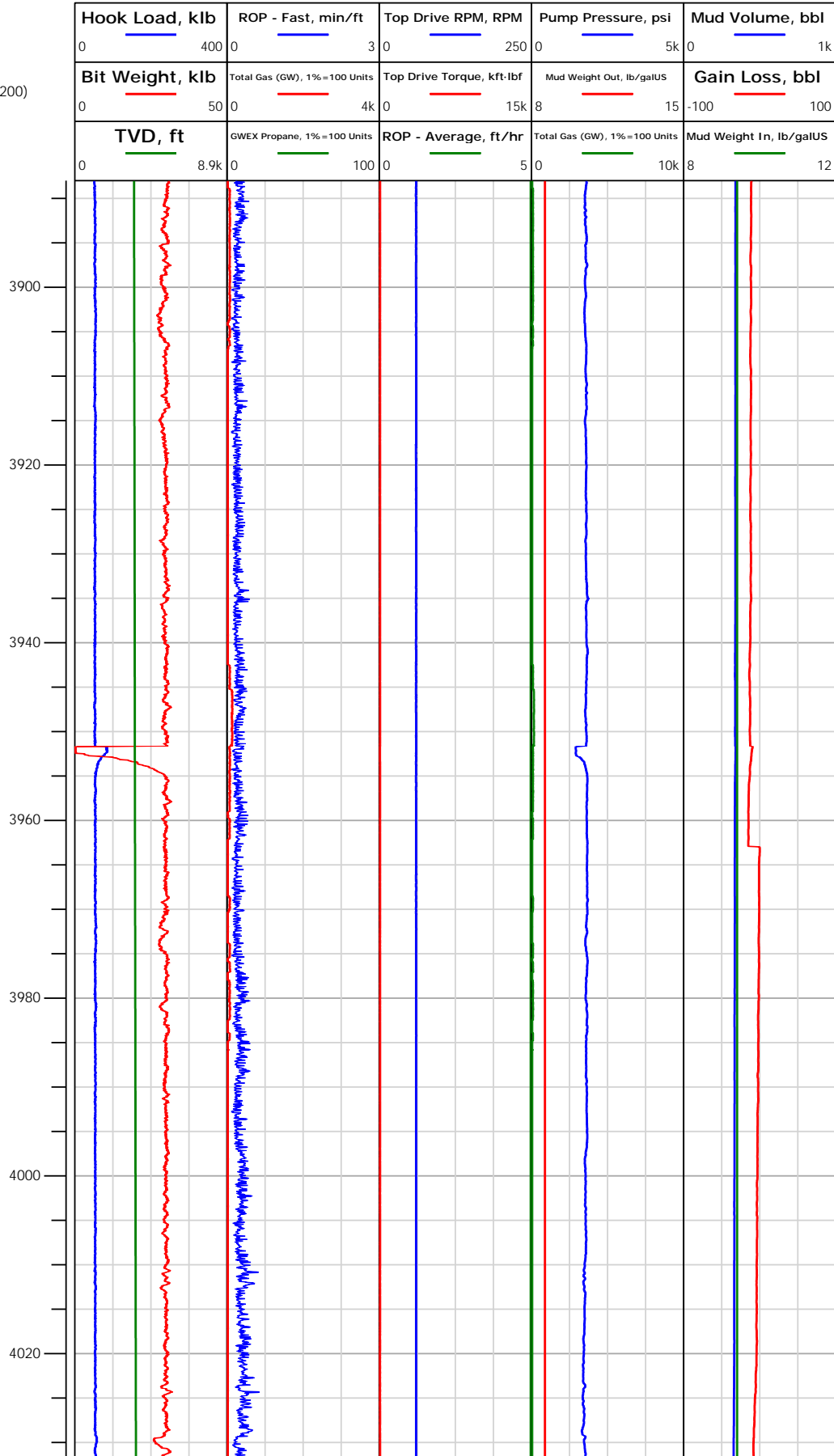
21:26

21:34

21:38

21:42

21:48





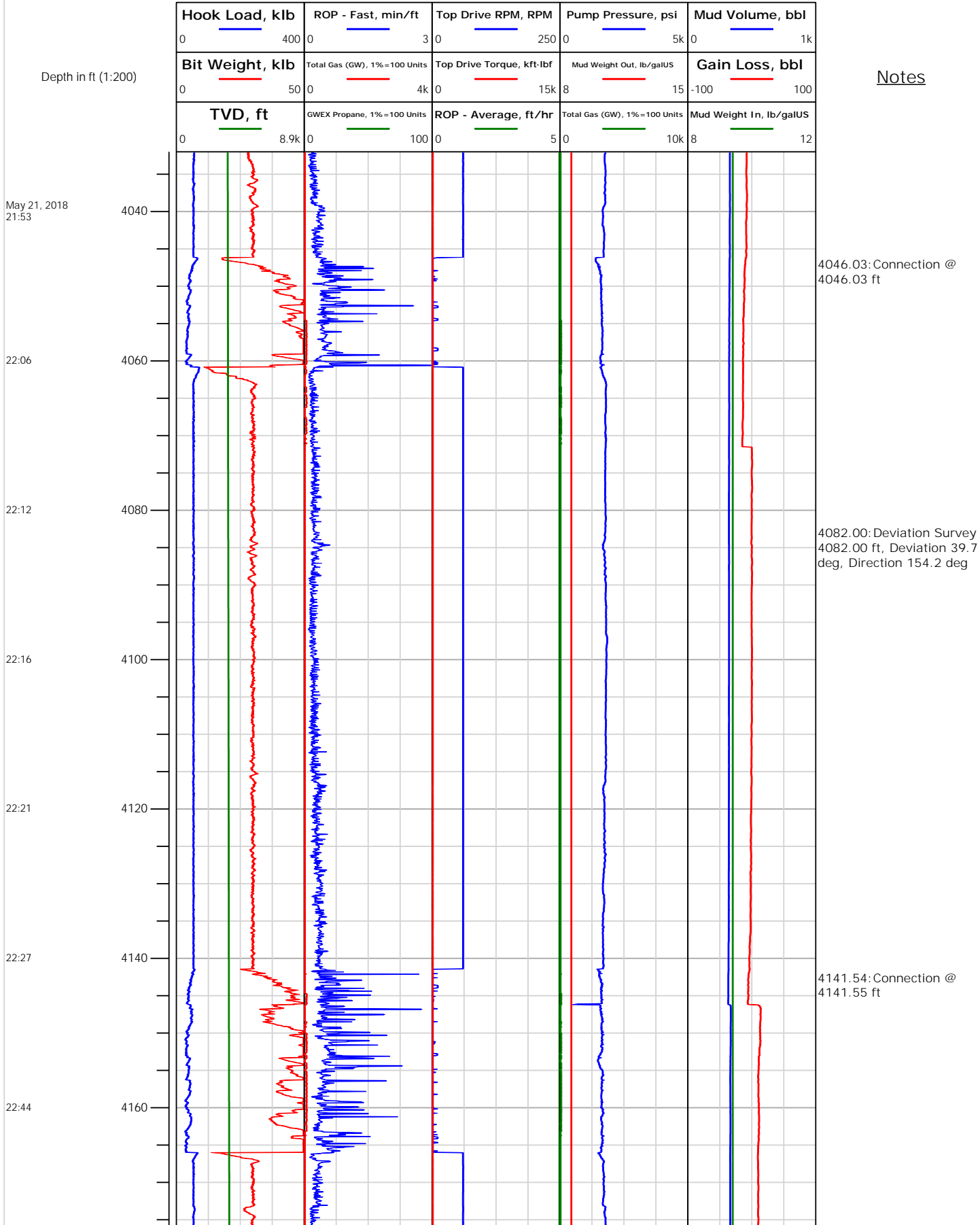
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

## Notes





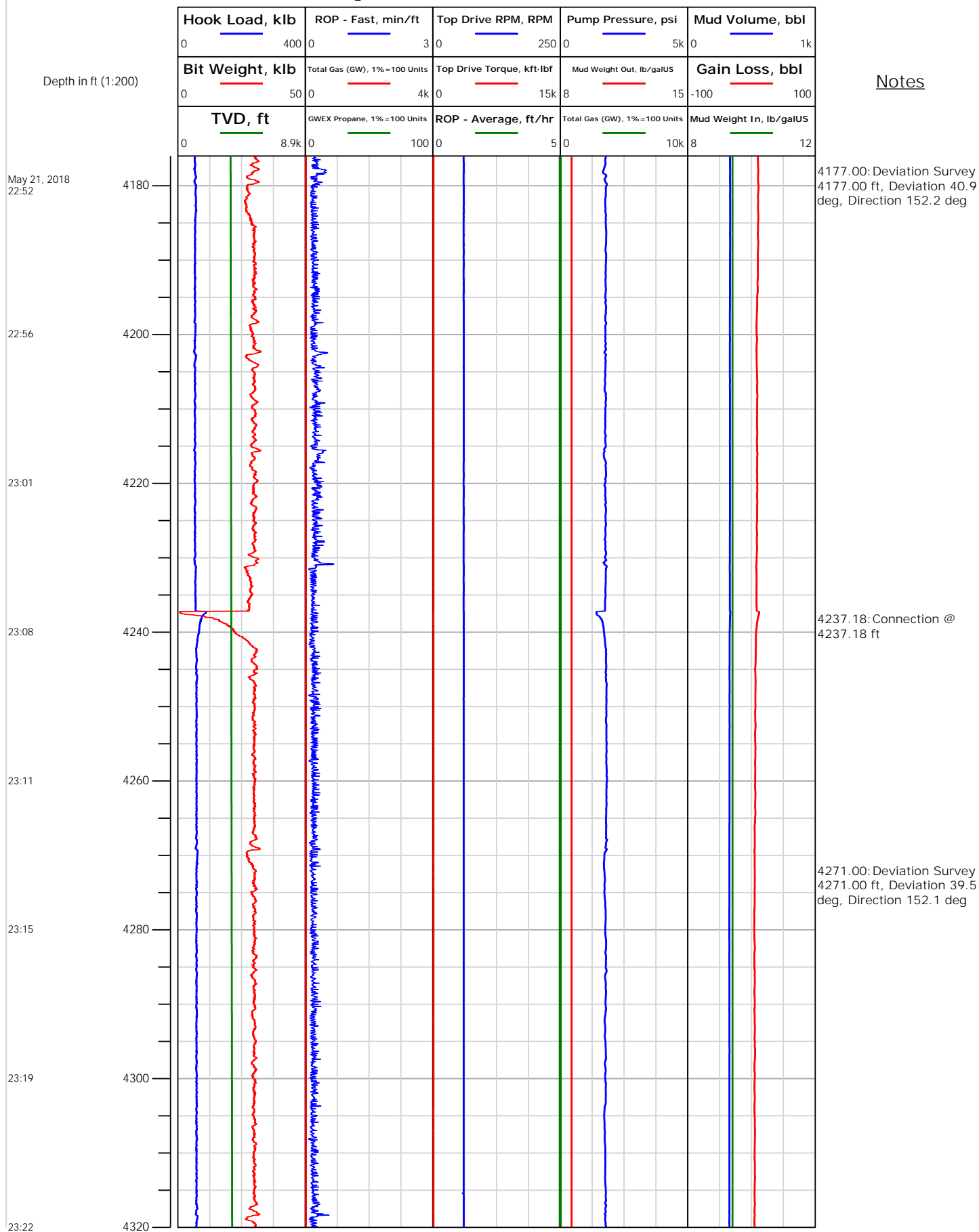
## Electronic Drilling Recorder

Operator: Laramie Energy  
Contractor: Helmerich & Payne Drlg Co

Well Name: Nichols Federal 24-21E  
Rig: 290

Location: SE/4 OF NW/4

## Notes





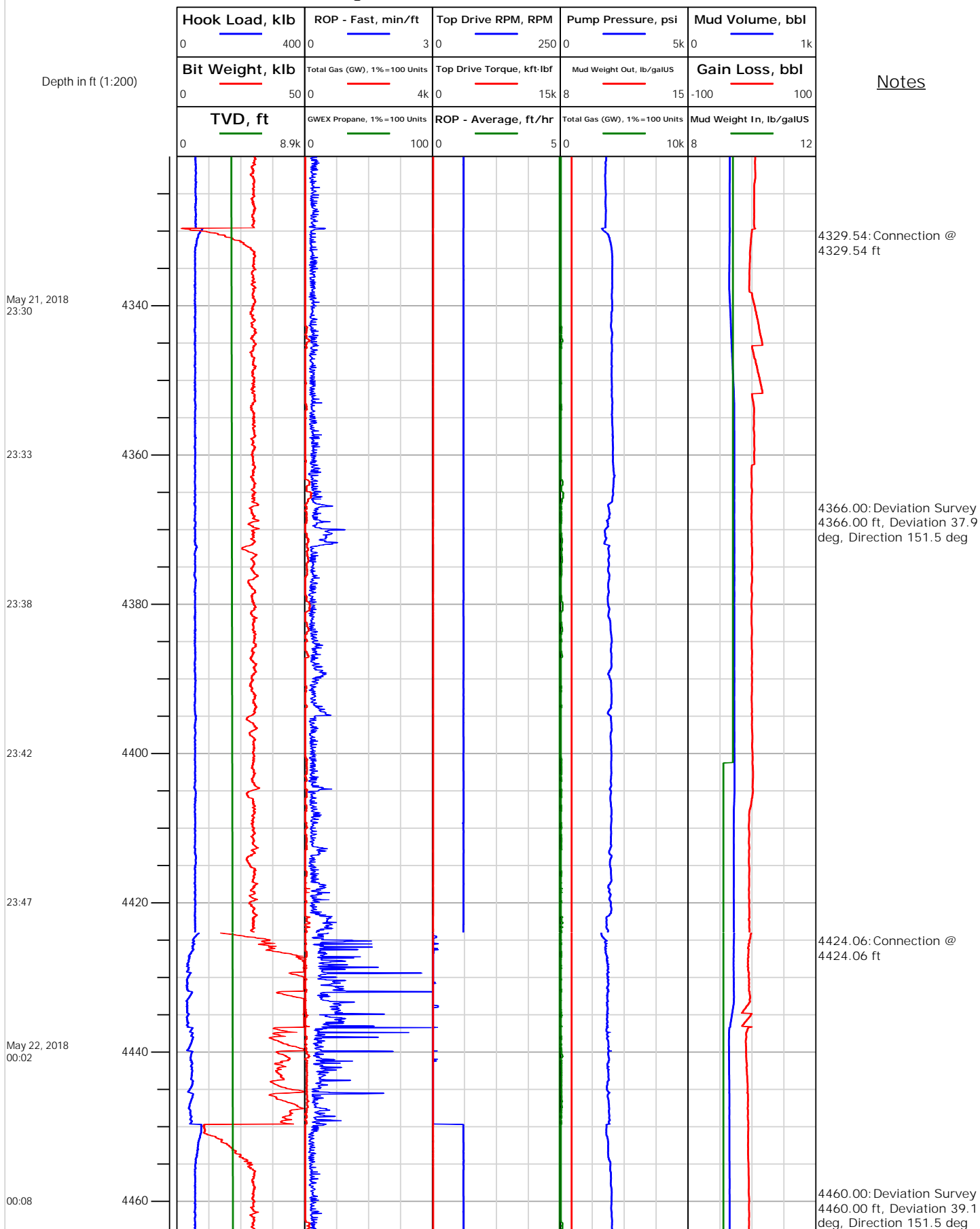
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

## Notes





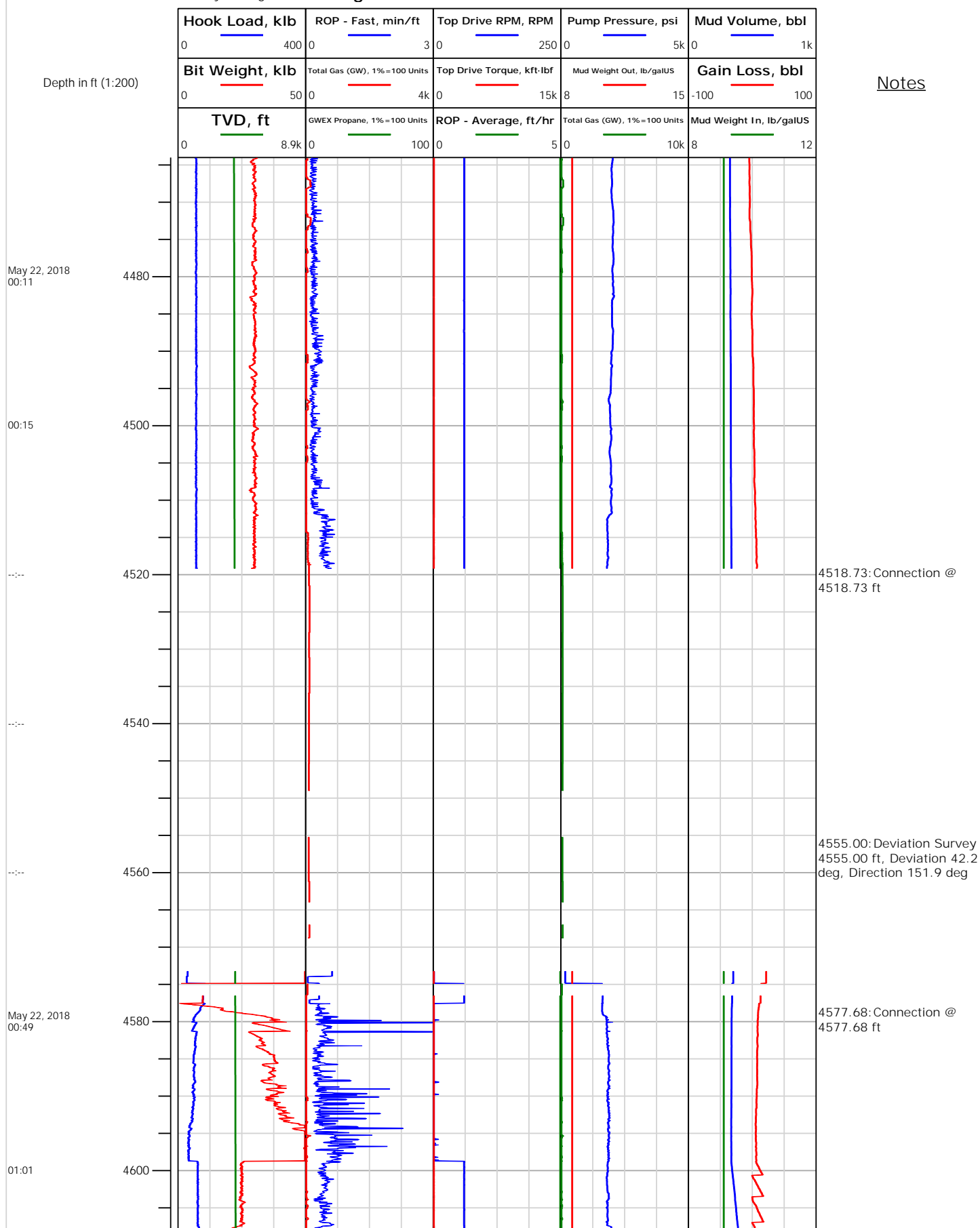
## Electronic Drilling Recorder

Operator: Laramie Energy  
Contractor: Helmerich & Payne Drlg Co

Well Name: Nichols Federal 24-21E  
Rig: 290

Location: SE/4 OF NW/4

Notes





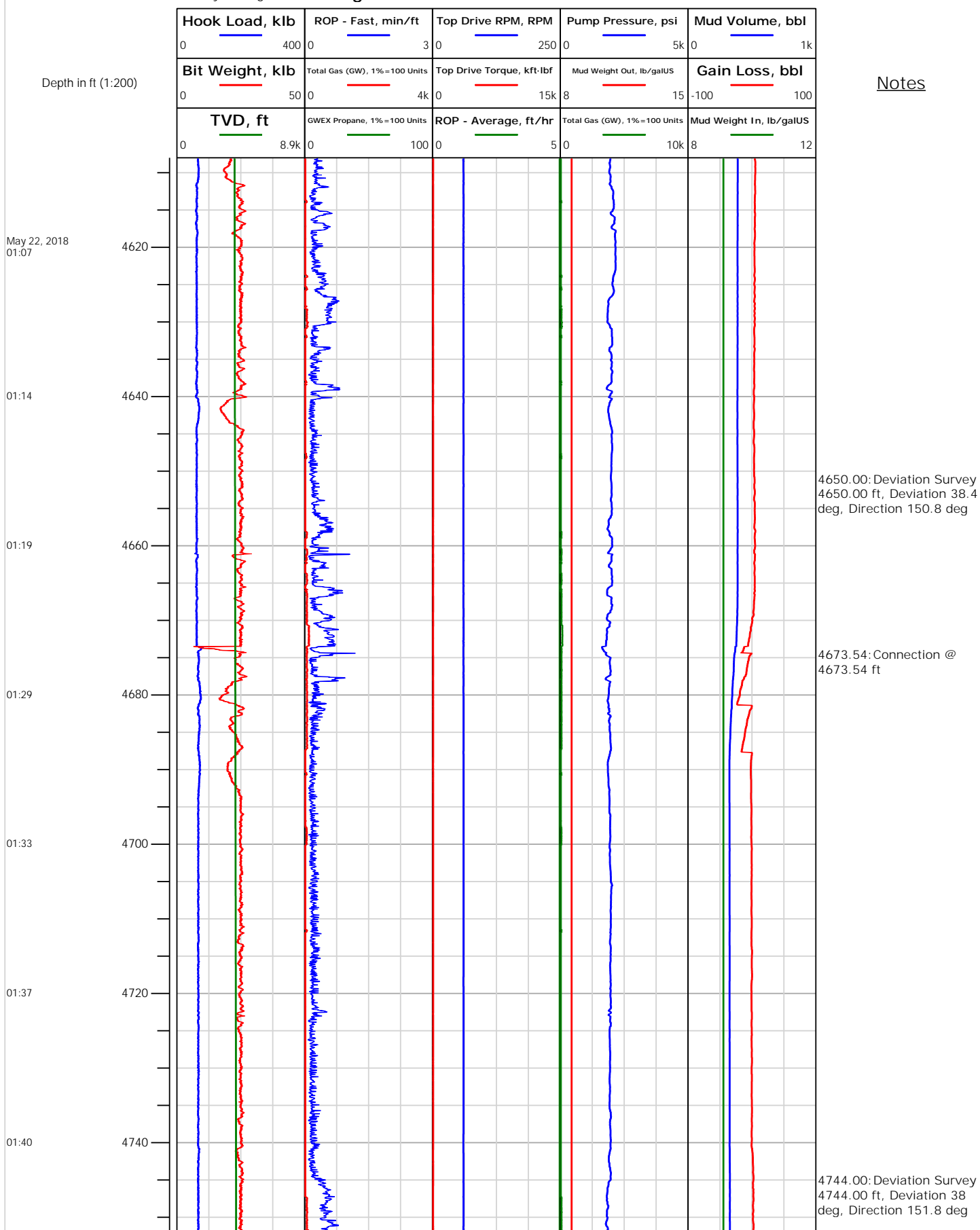
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

Notes





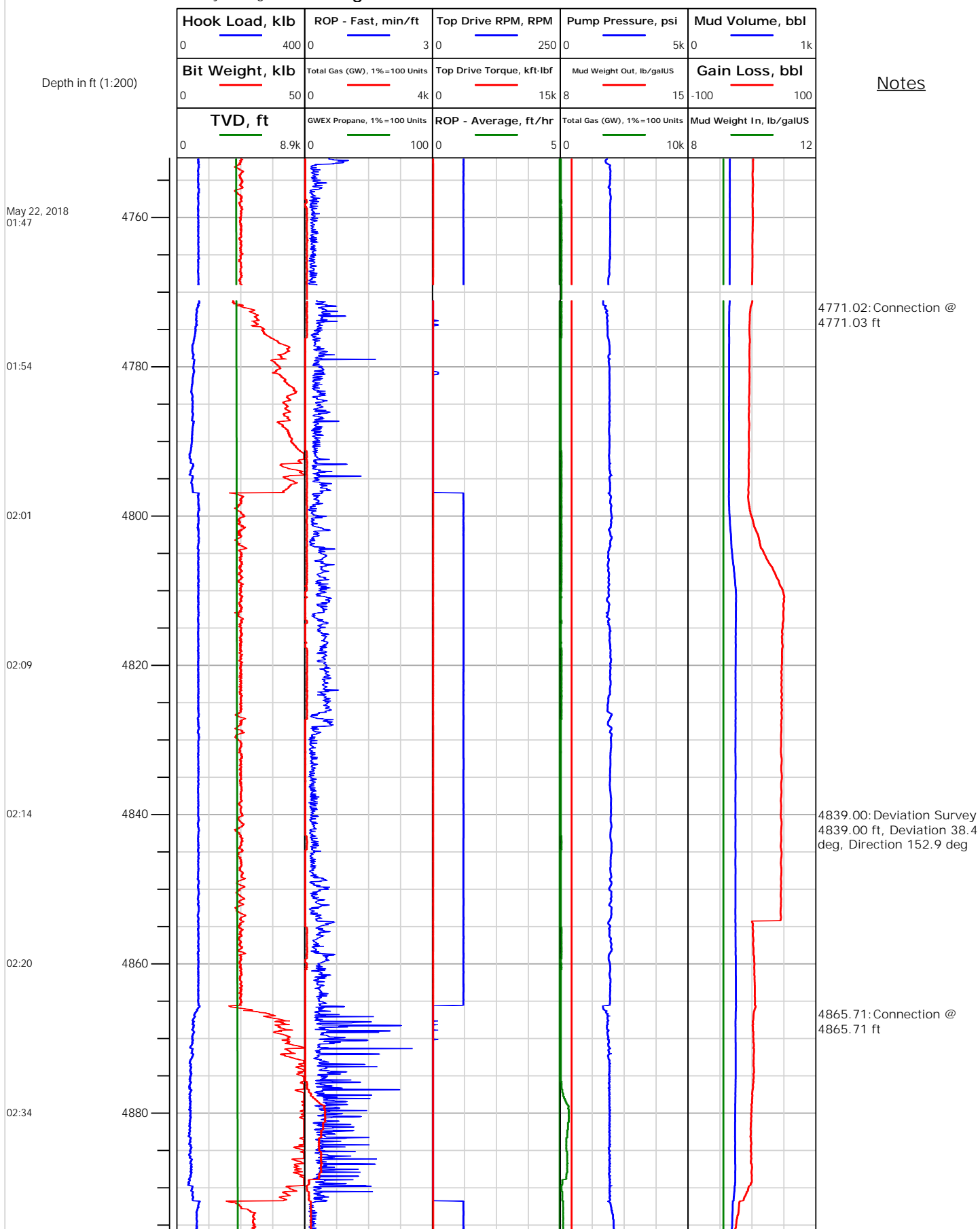
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

## Notes







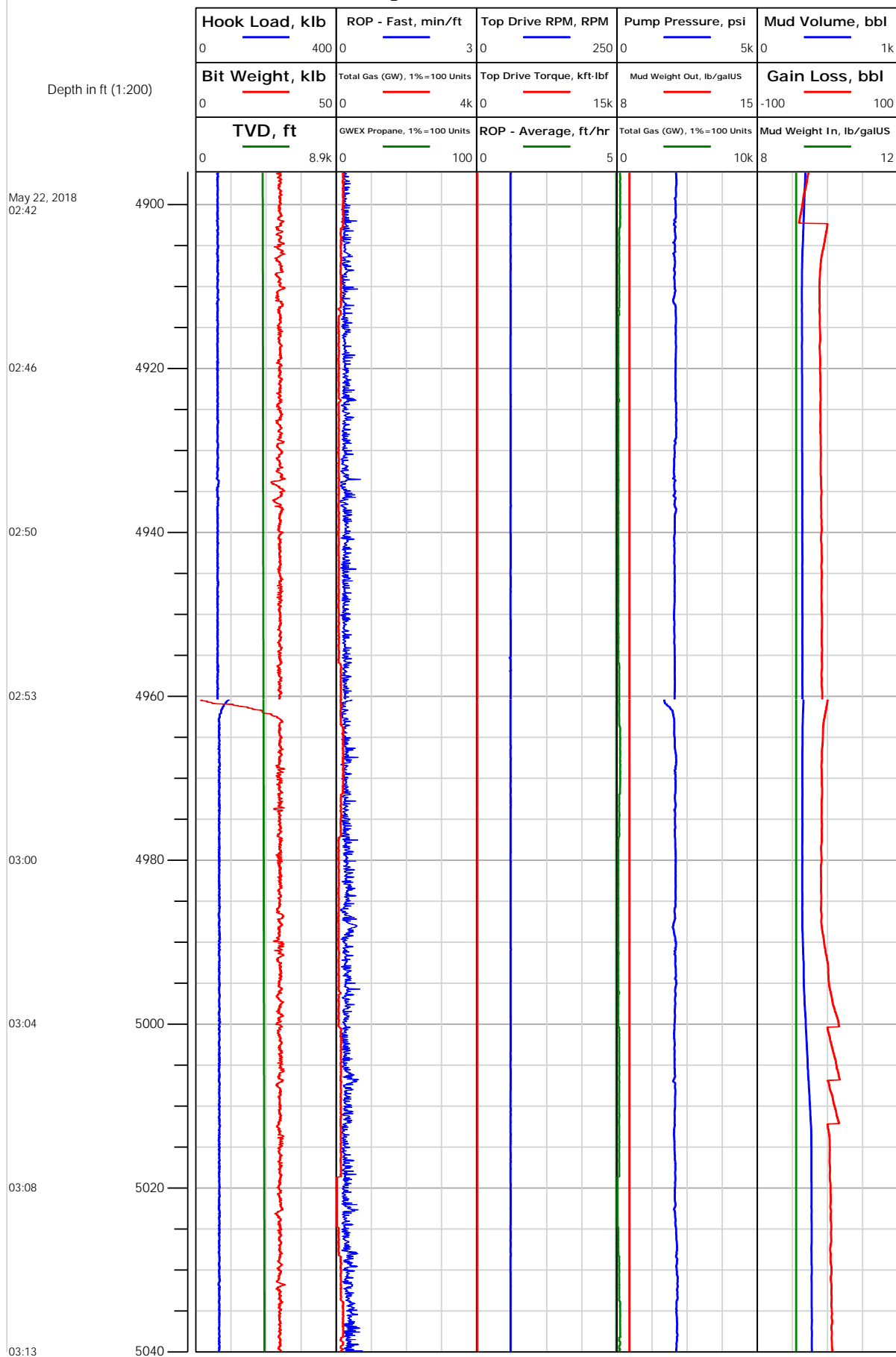
## Electronic Drilling Recorder

Operator: Laramie Energy  
Contractor: Helmerich & Payne Drlg Co

Well Name: Nichols Federal 24-21E  
Rig: 290

Location: SE/4 OF NW/4

Notes





# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

Notes

Depth in ft (1:200)

May 22, 2018  
03:24

03:30

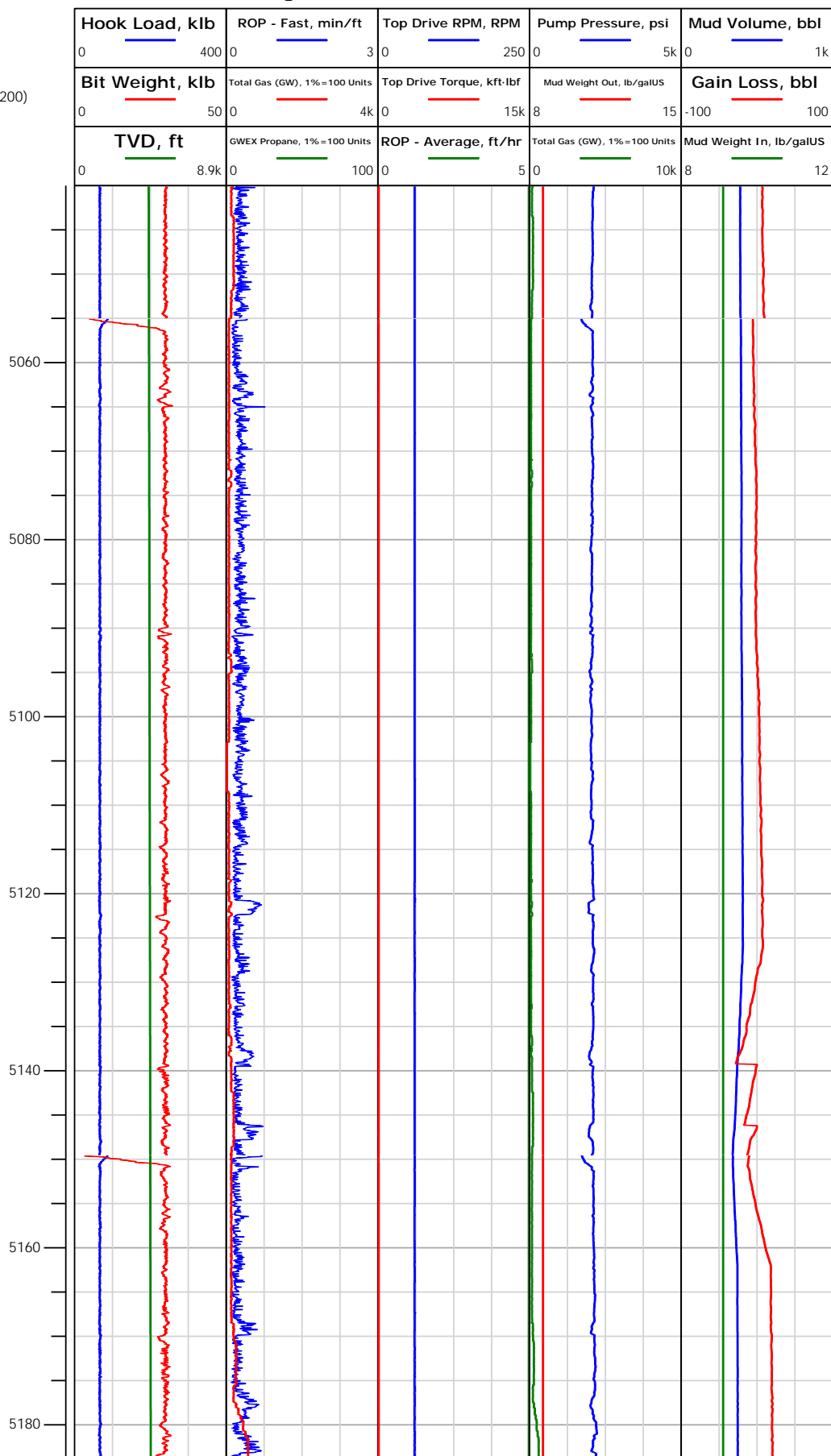
03:35

03:40

03:45

03:54

03:59





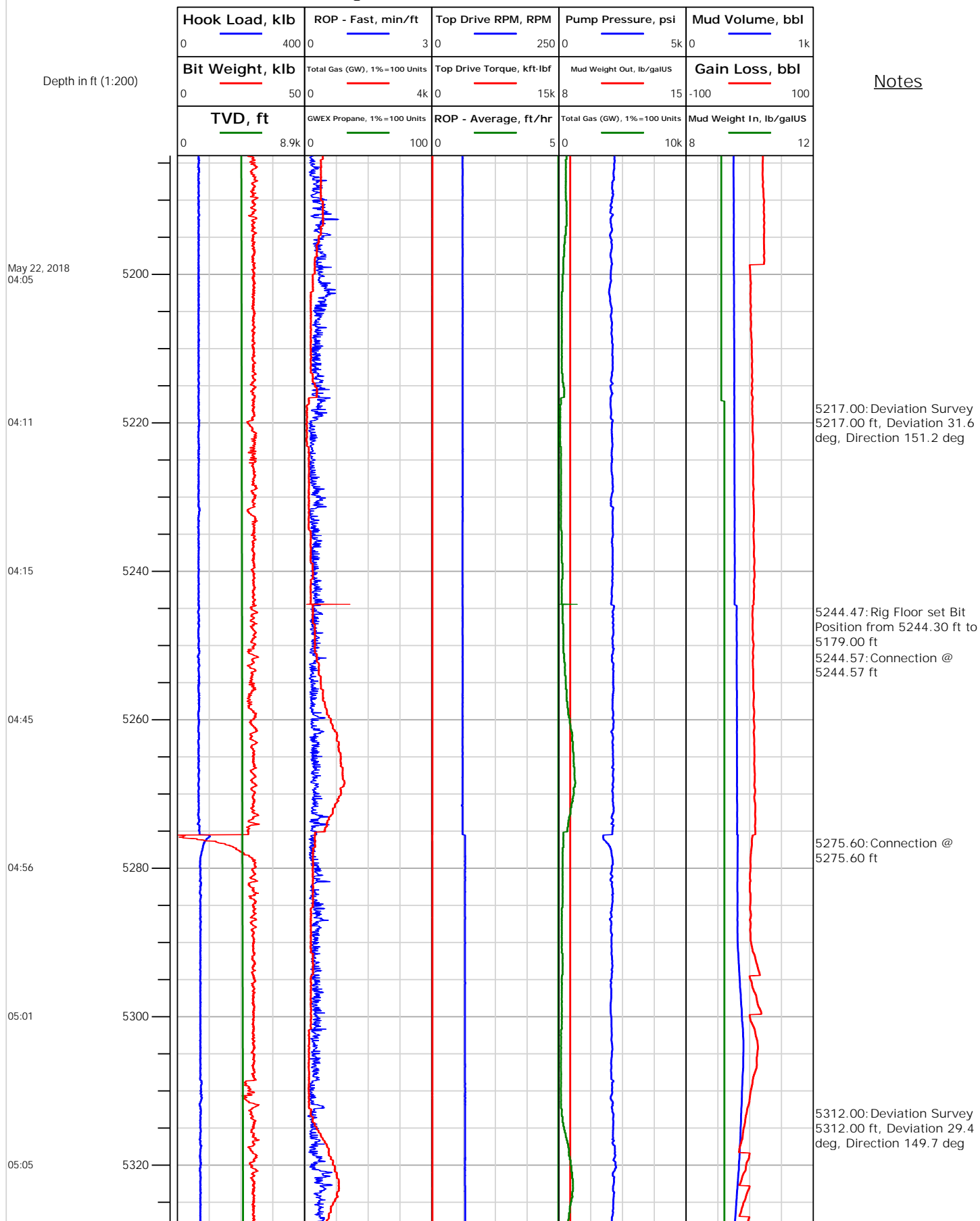
## Electronic Drilling Recorder

Operator: Laramie Energy  
Contractor: Helmerich & Payne Drlg Co

Well Name: Nichols Federal 24-21E  
Rig: 290

Location: SE/4 OF NW/4

## Notes





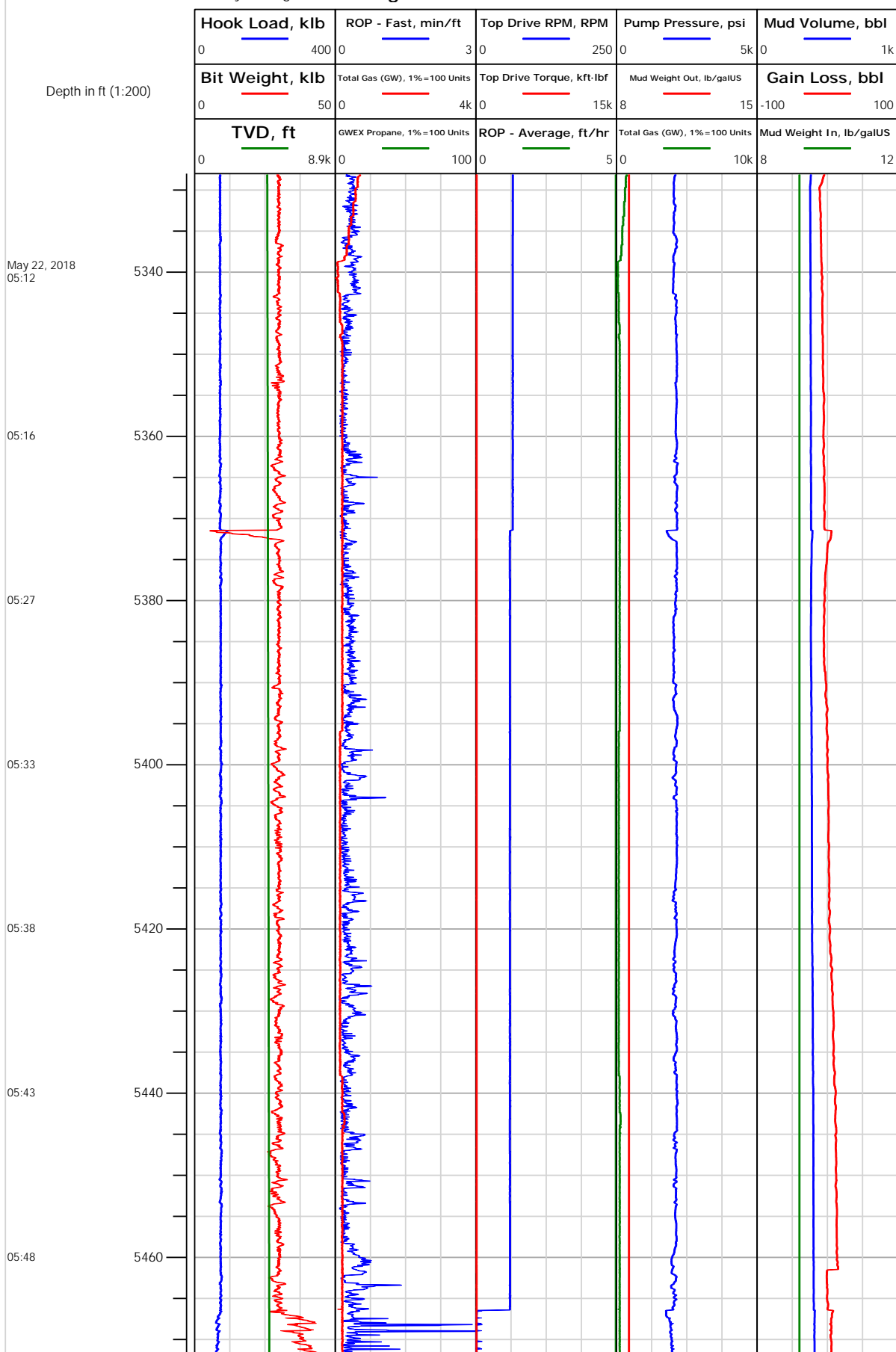
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

Notes





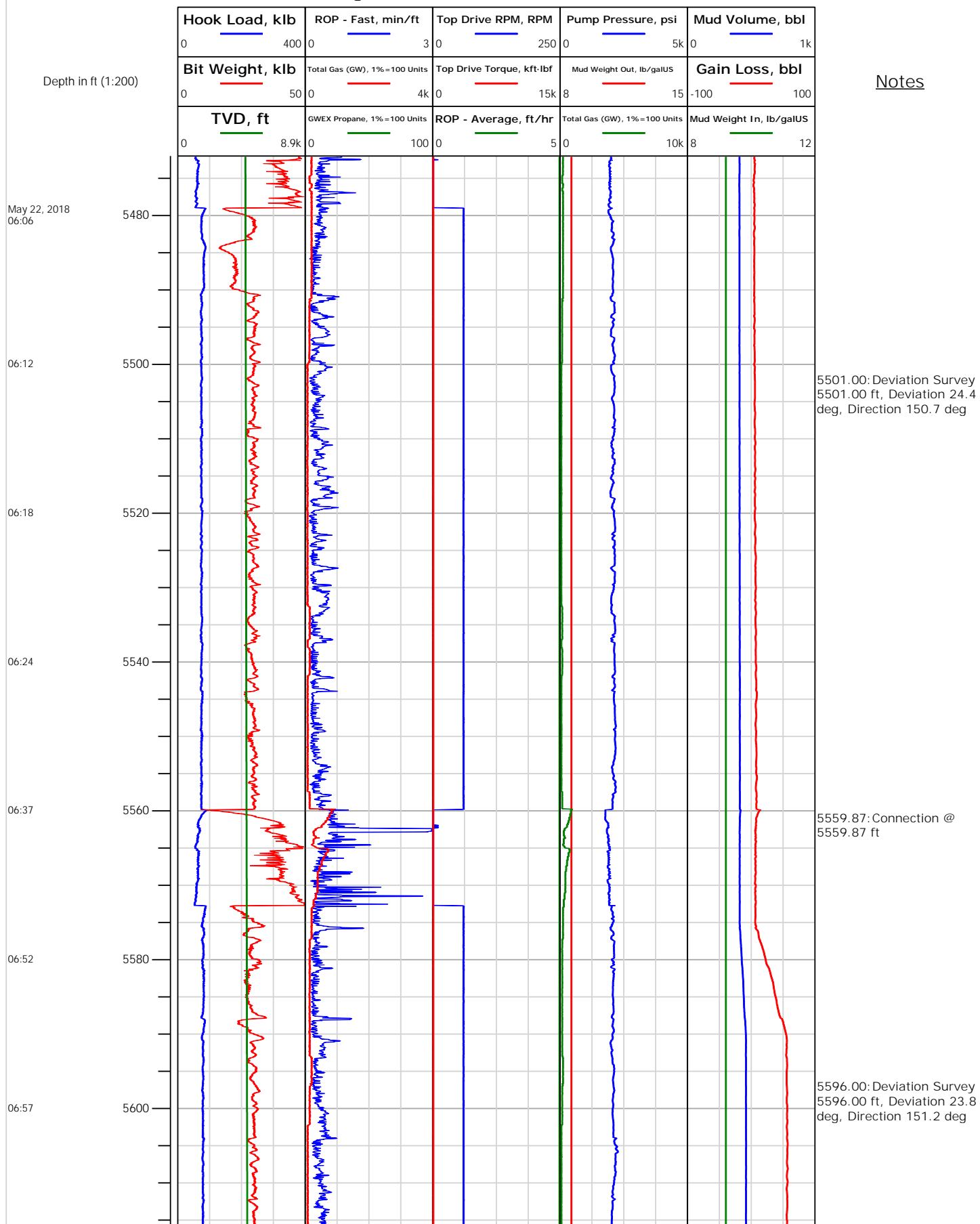
## Electronic Drilling Recorder

Operator: Laramie Energy  
Contractor: Helmerich & Payne Drlg Co

Well Name: Nichols Federal 24-21E  
Rig: 290

Location: SE/4 OF NW/4

## Notes





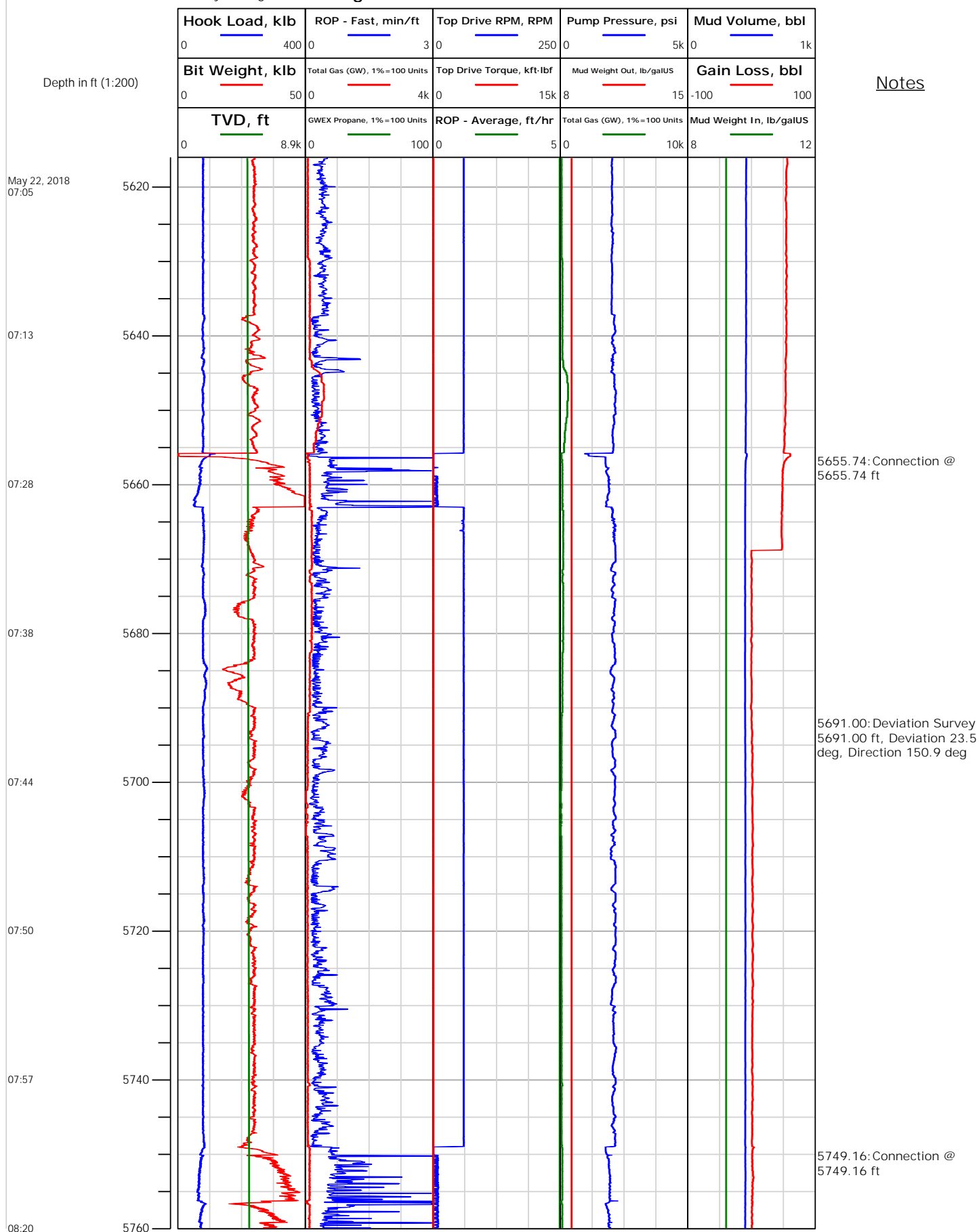
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

Notes





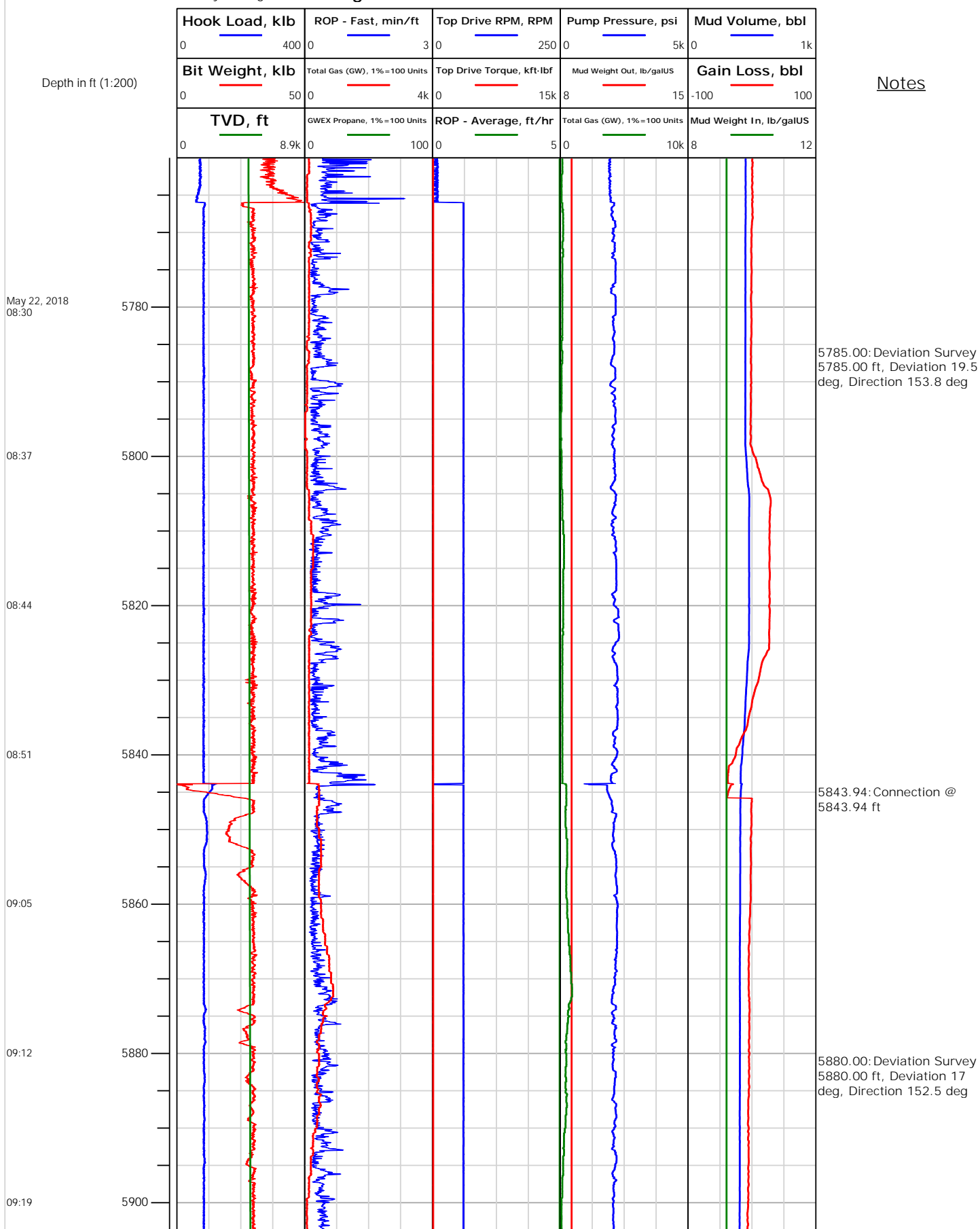
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

## Notes





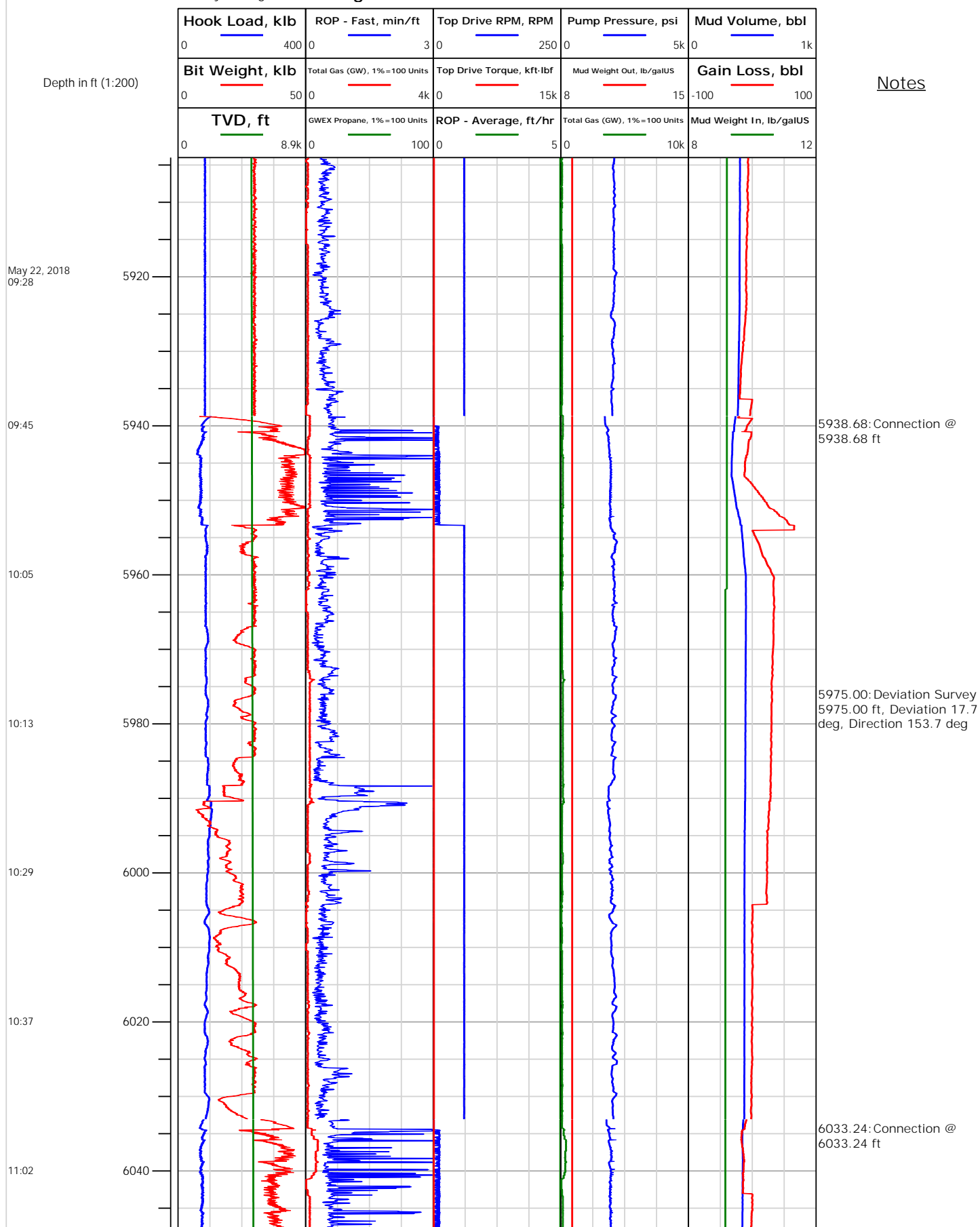
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

Notes







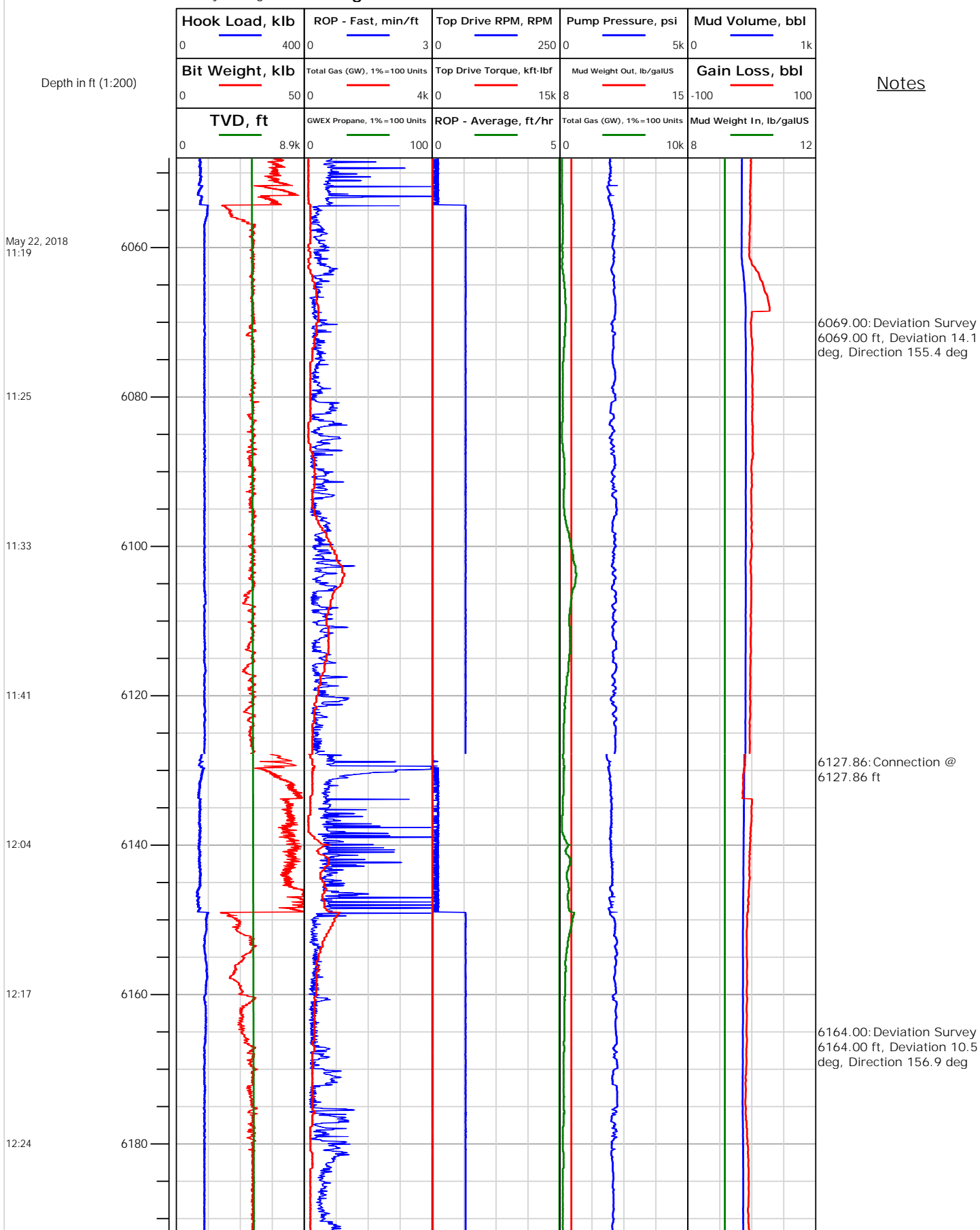
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

## Notes





## Electronic Drilling Recorder

Operator: Laramie Energy  
Contractor: Helmerich & Payne Drlg Co

Well Name: Nichols Federal 24-21E  
Rig: 290

Location: SE/4 OF NW/4

## Notes

Depth in ft (1:200)

May 22, 2018  
12:34

12:43

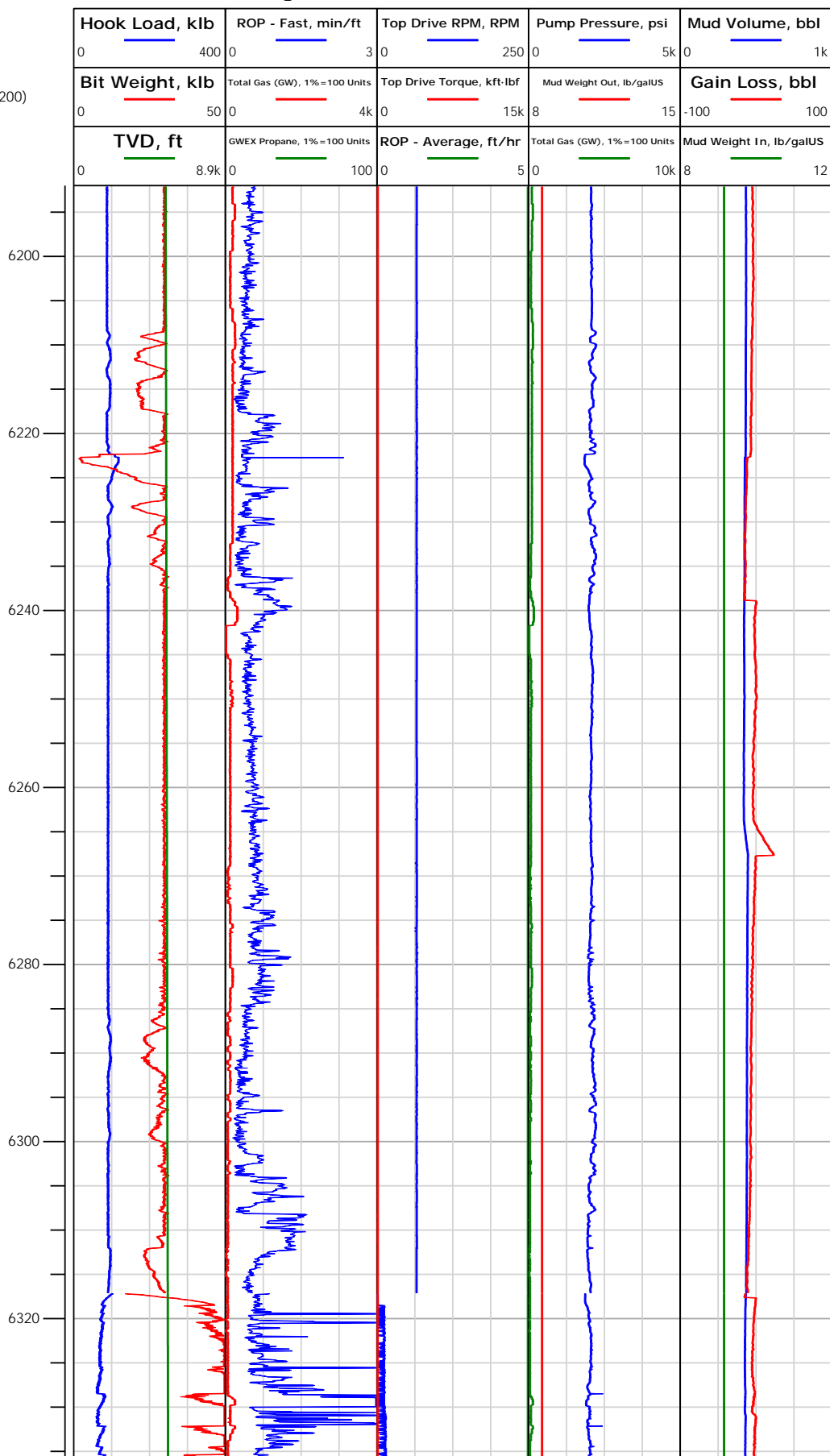
13:01

13:11

13:24

13:32

14:02





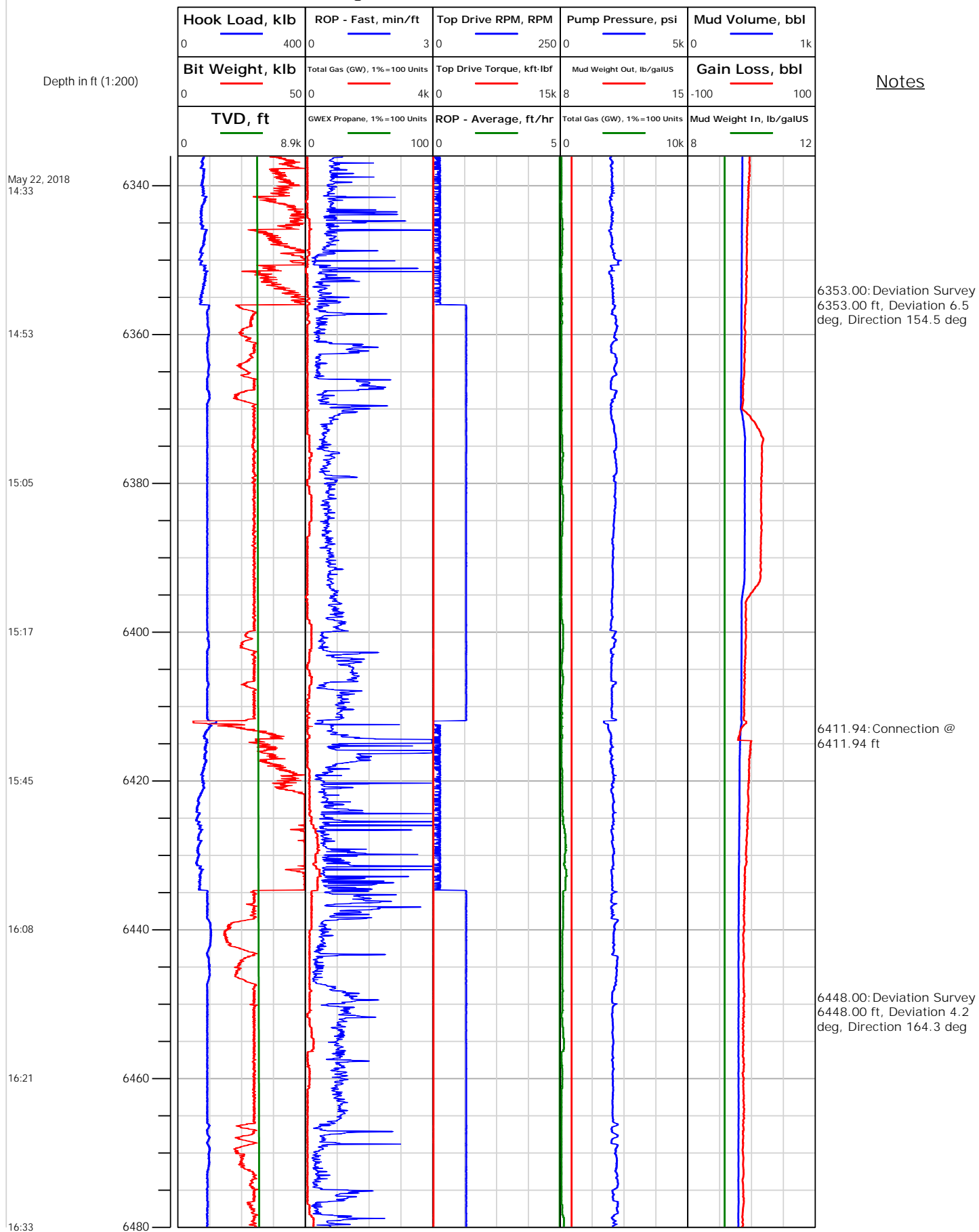
## Electronic Drilling Recorder

Operator: Laramie Energy  
Contractor: Helmerich & Payne Drlg Co

Well Name: Nichols Federal 24-21E  
Rig: 290

Location: SE/4 OF NW/4

## Notes





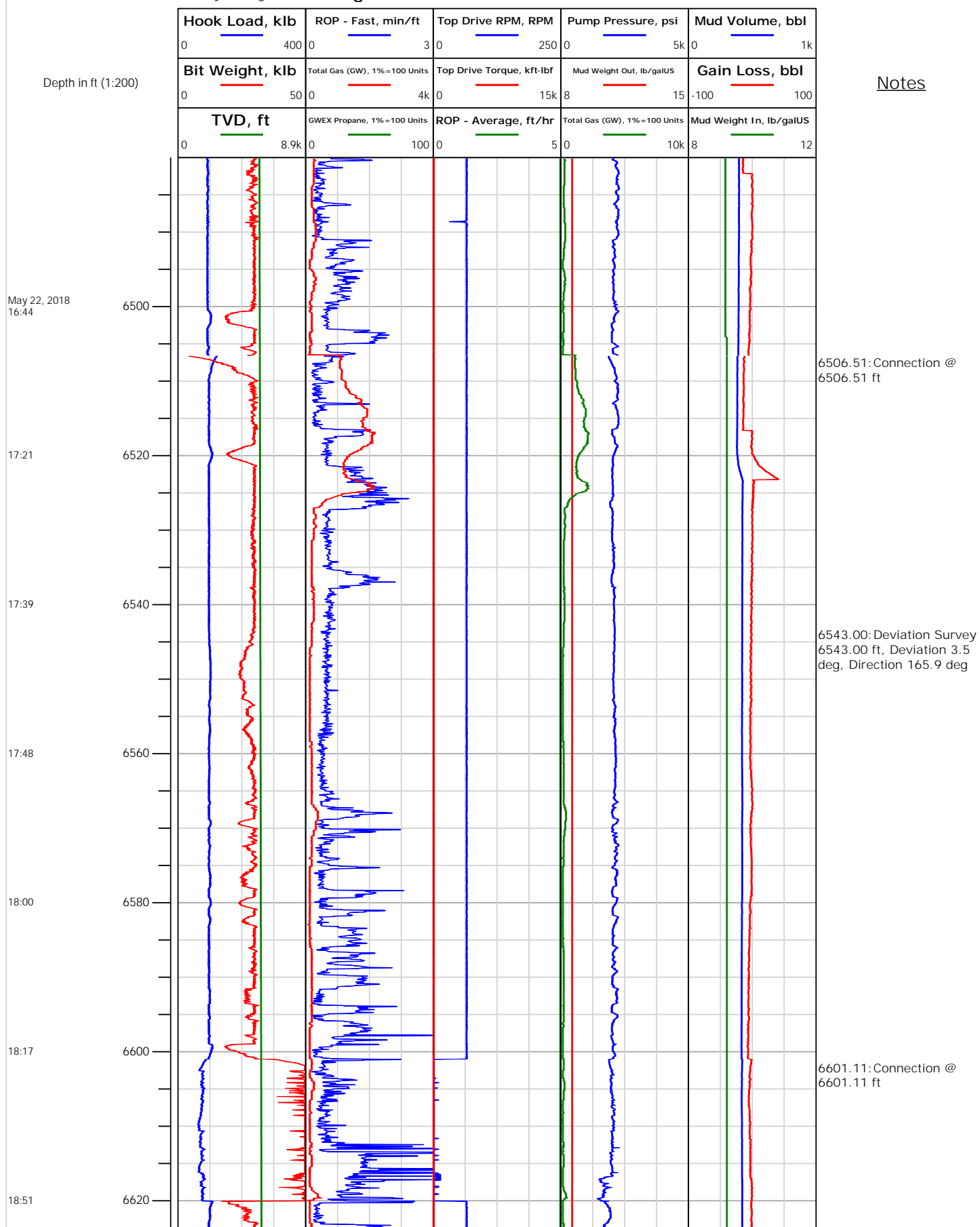
## Electronic Drilling Recorder

Operator: Laramie Energy  
Contractor: Helmerich & Payne Drlg Co

Well Name: Nichols Federal 24-21E  
Rig: 290

Location: SE/4 OF NW/4

## Notes





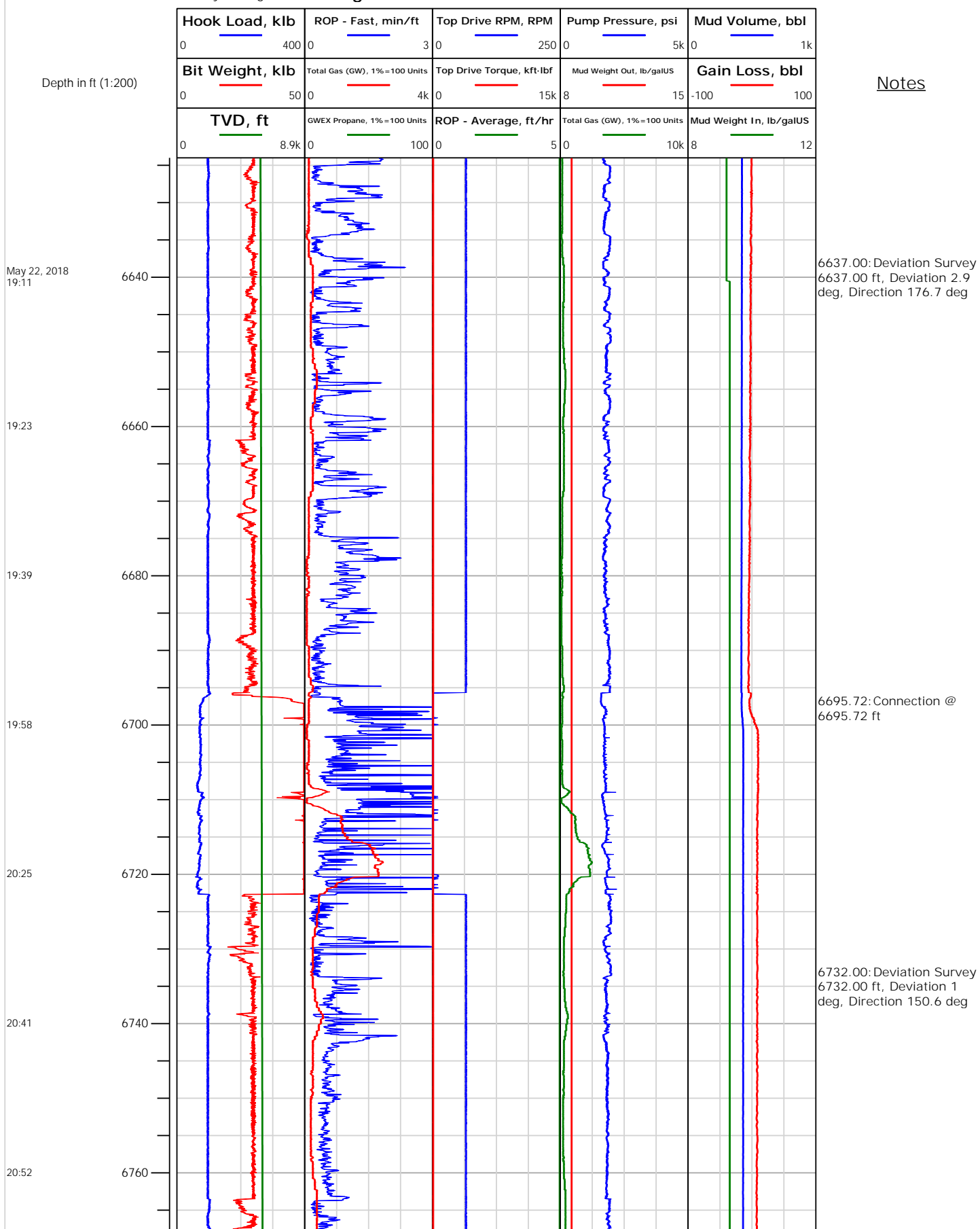
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

## Notes





# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

Notes

Depth in ft (1:200)

May 22, 2018  
 21:02

21:18

21:27

21:38

21:48

21:55

22:11

6780

6800

6820

6840

6860

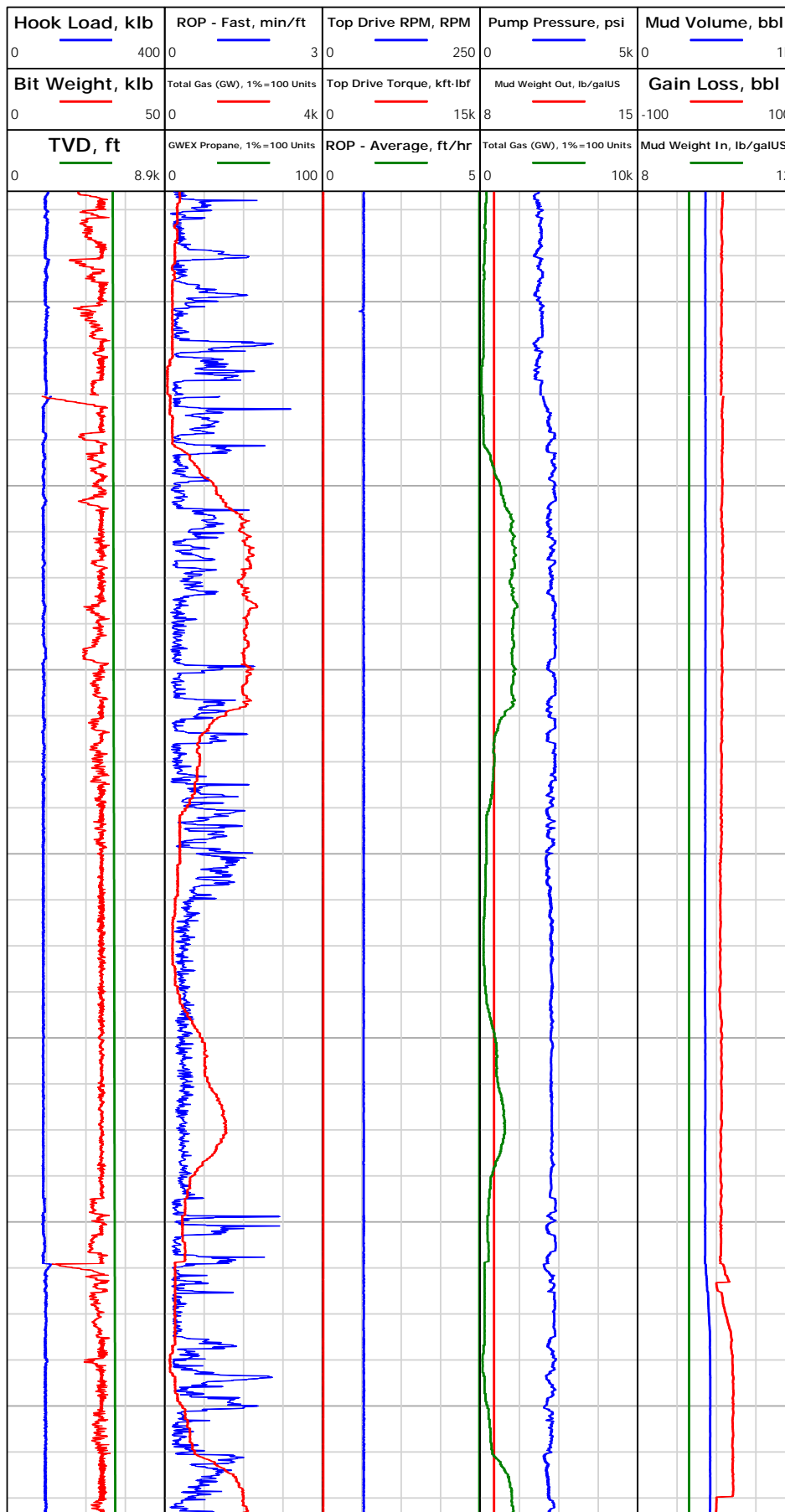
6880

6900

6790.17: Connection @  
 6790.17 ft

6825.99: Deviation Survey  
 6826.00 ft, Deviation 1.23  
 deg, Direction 169.48 deg

6884.65: Connection @  
 6884.65 ft





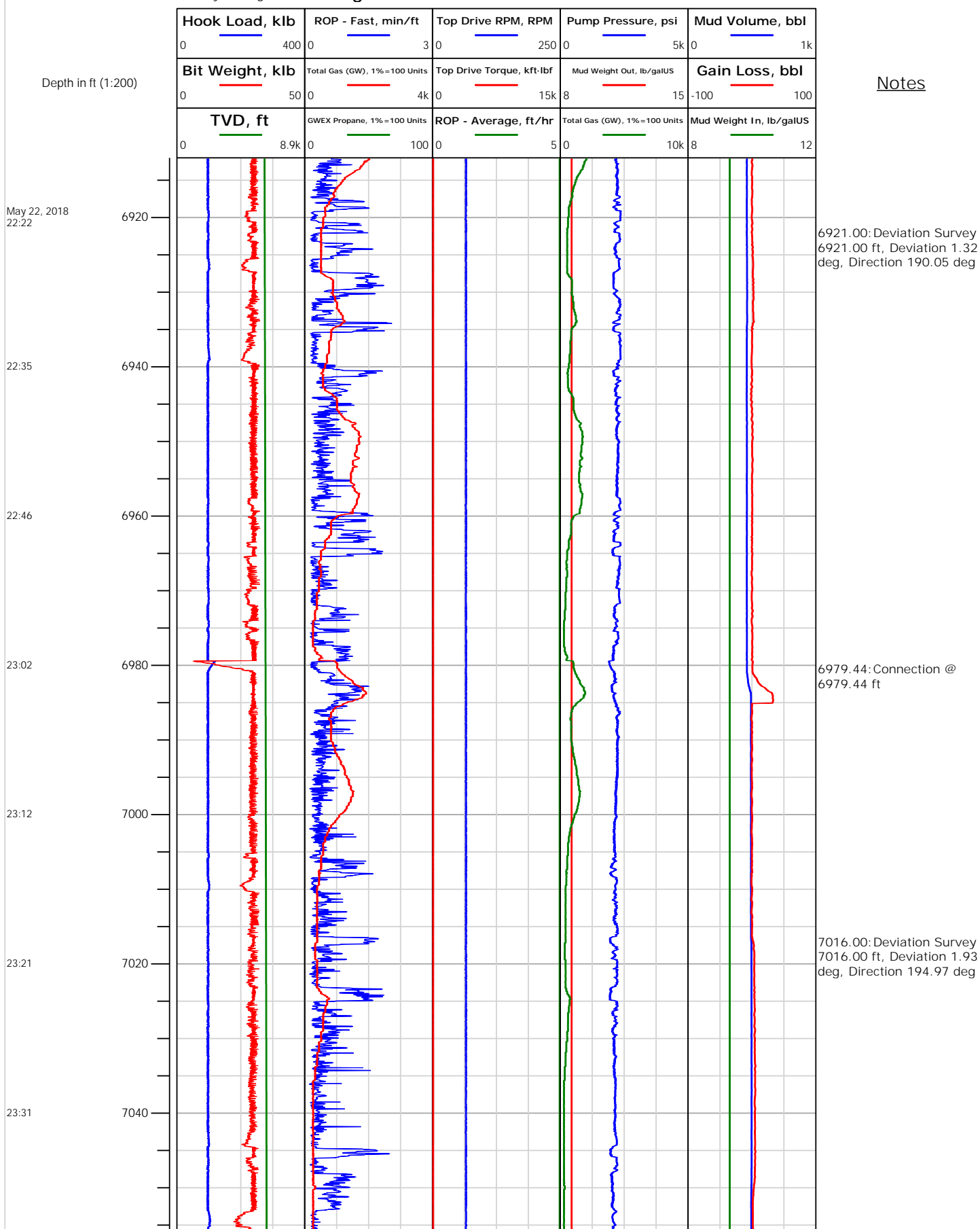
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

## Notes





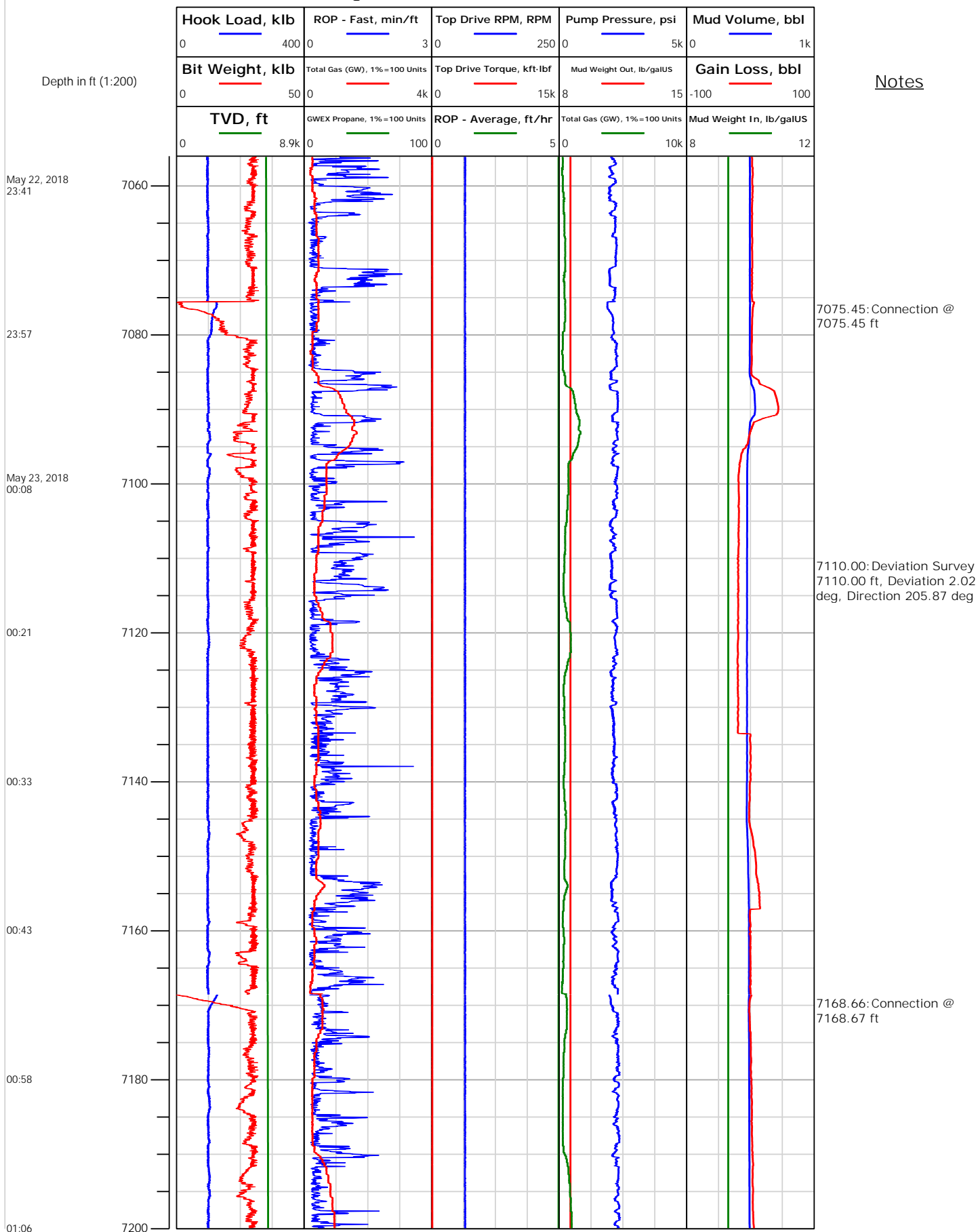
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

Notes







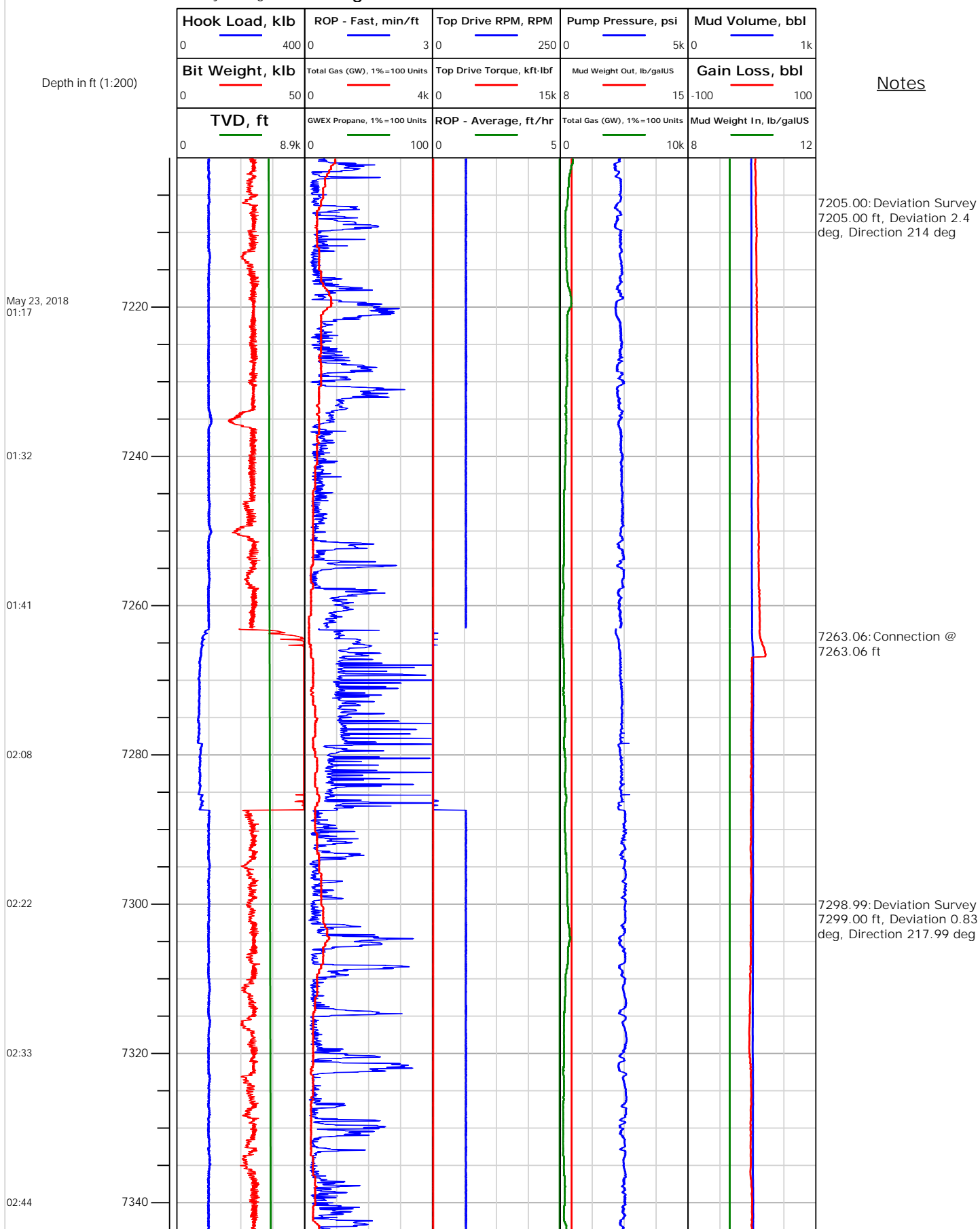
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

## Notes





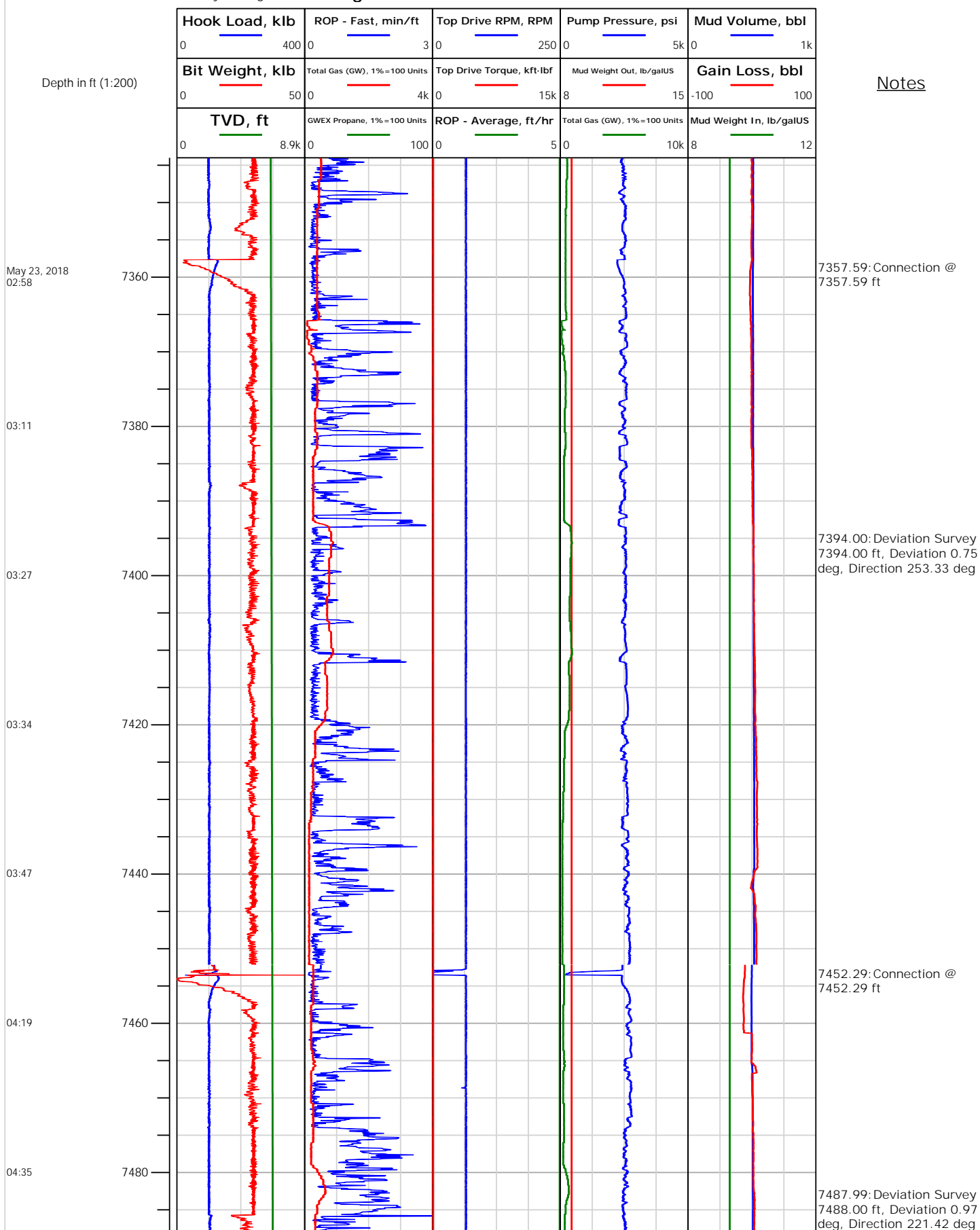
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

## Notes





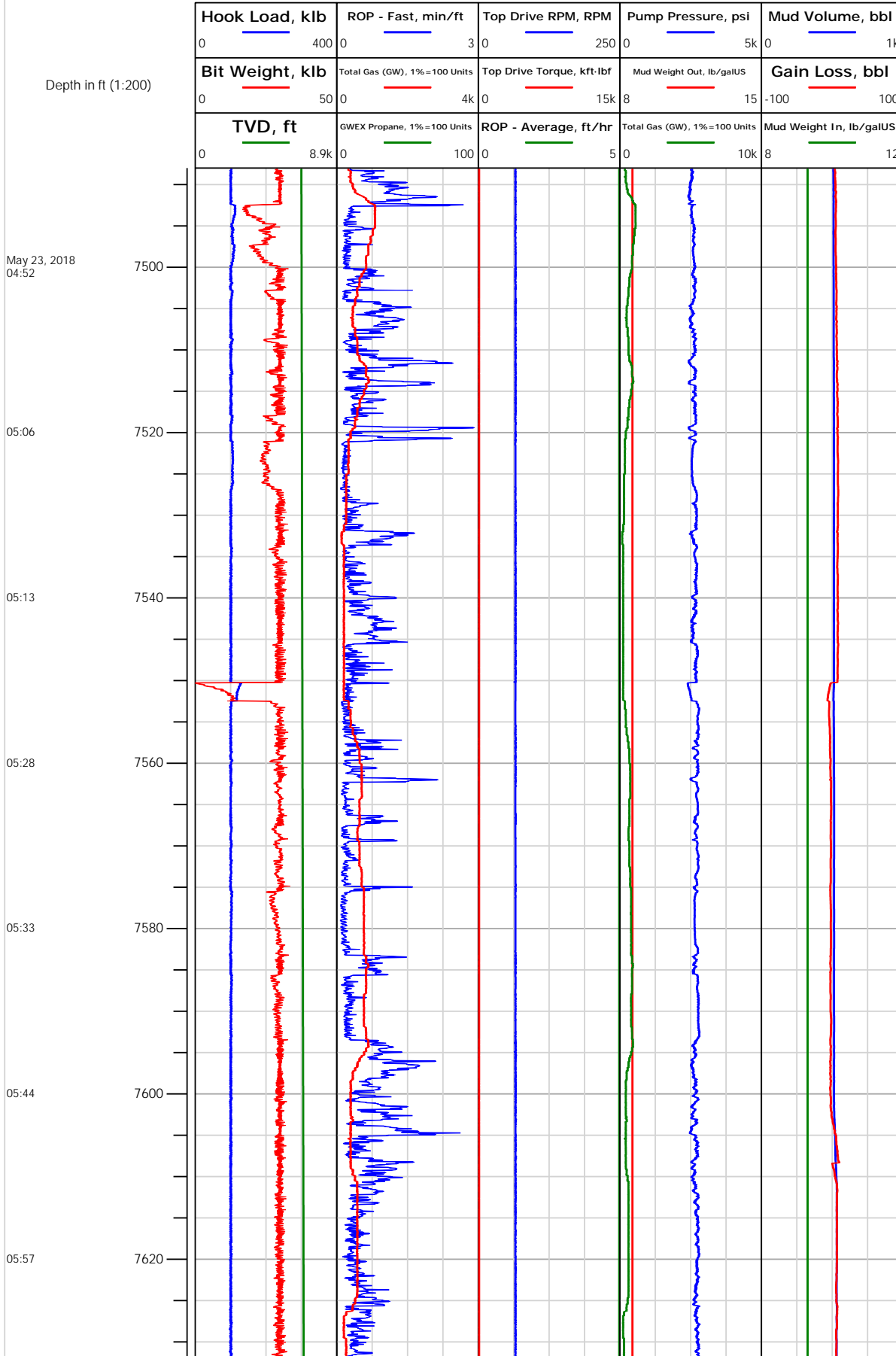
# Electronic Drilling Recorder

**Operator:** Laramie Energy  
**Contractor:** Helmerich & Payne Drlg Co

**Well Name:** Nichols Federal 24-21E  
**Rig:** 290

**Location:** SE/4 OF NW/4

Notes





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**Rig:** 290

**Location:** SE/4 OF NW/4

## Notes

Depth in ft (1:200)

May 23, 2018  
06:05

06:19

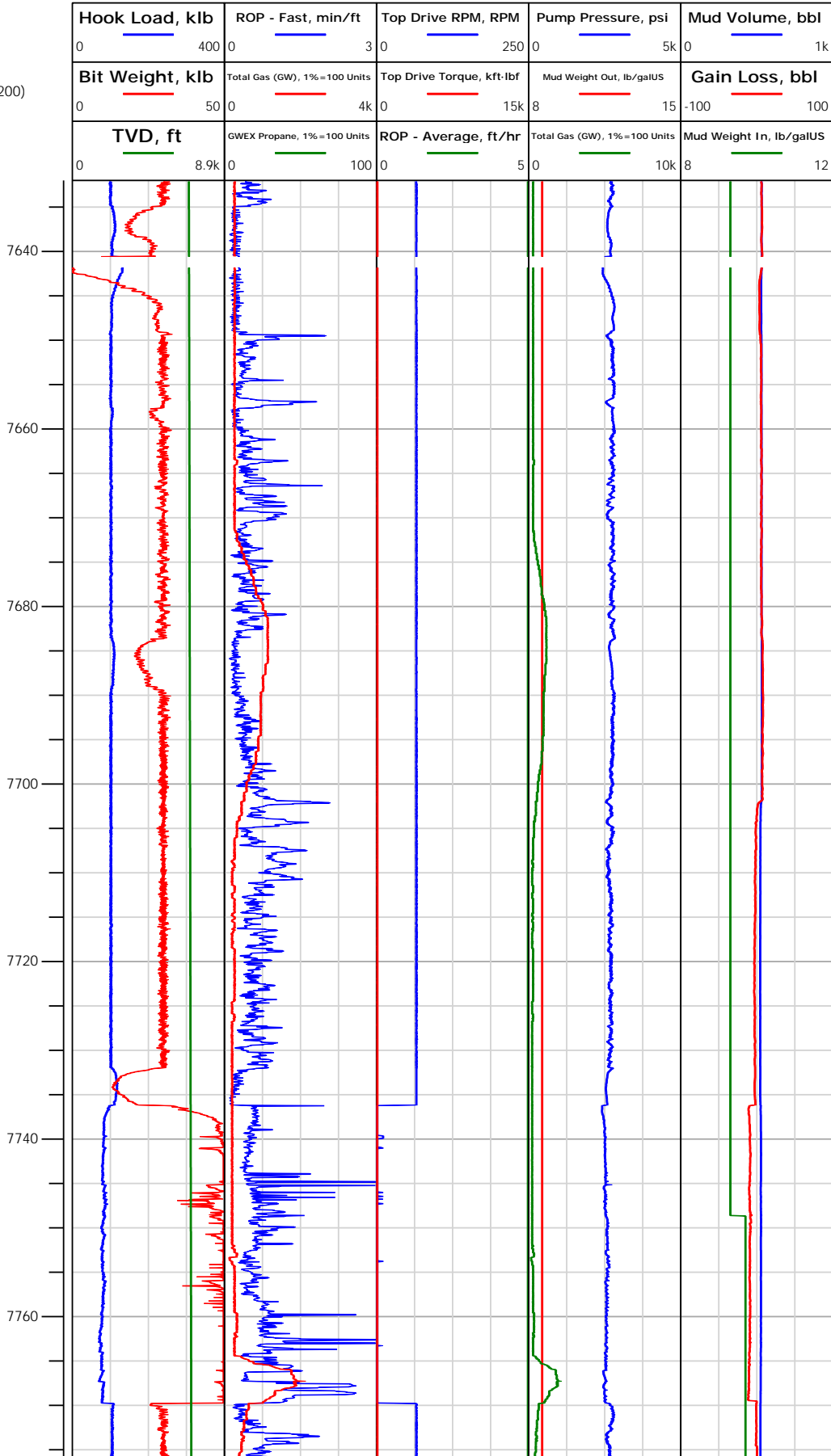
06:29

06:36

06:51

07:06

07:32





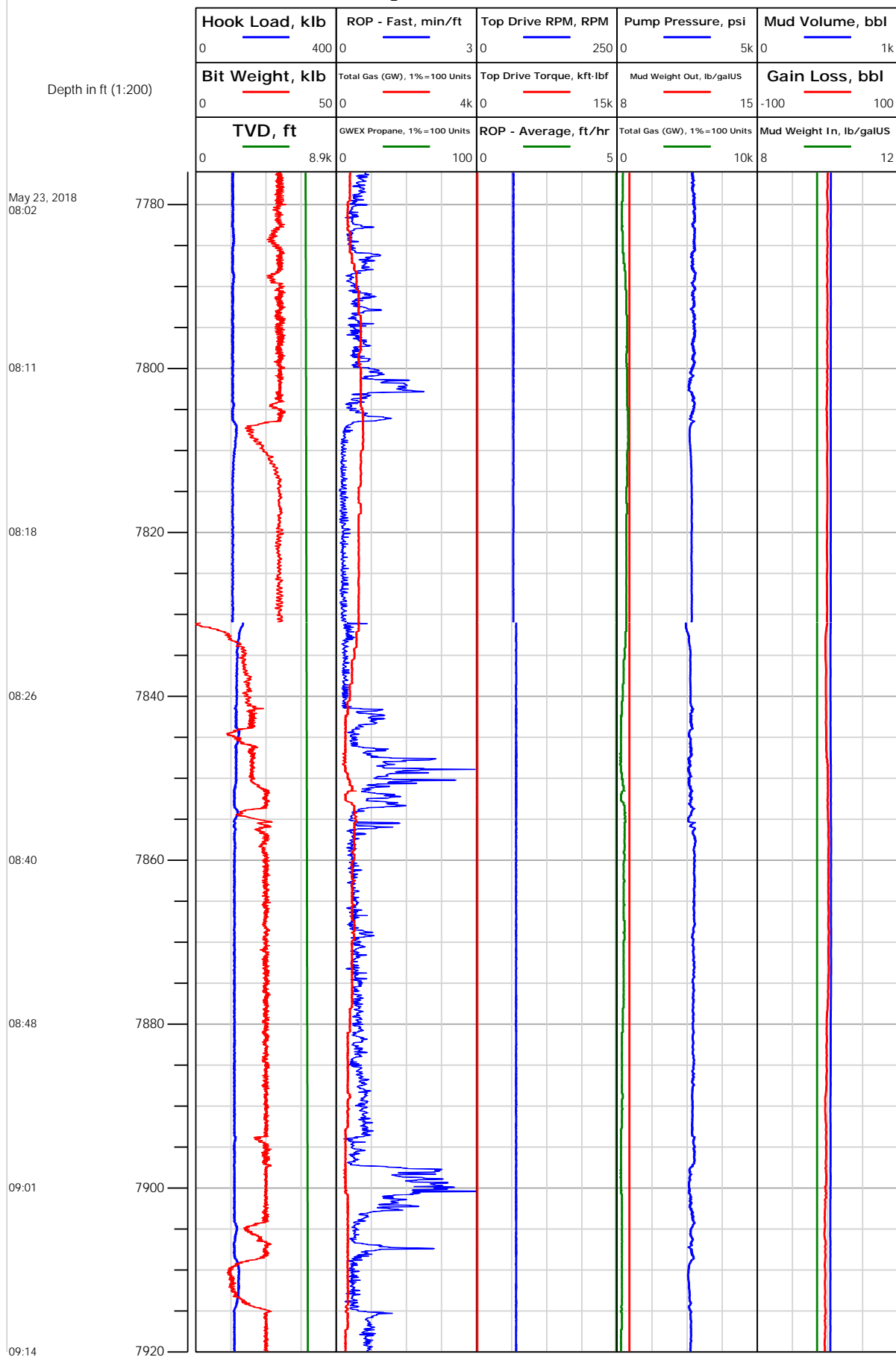
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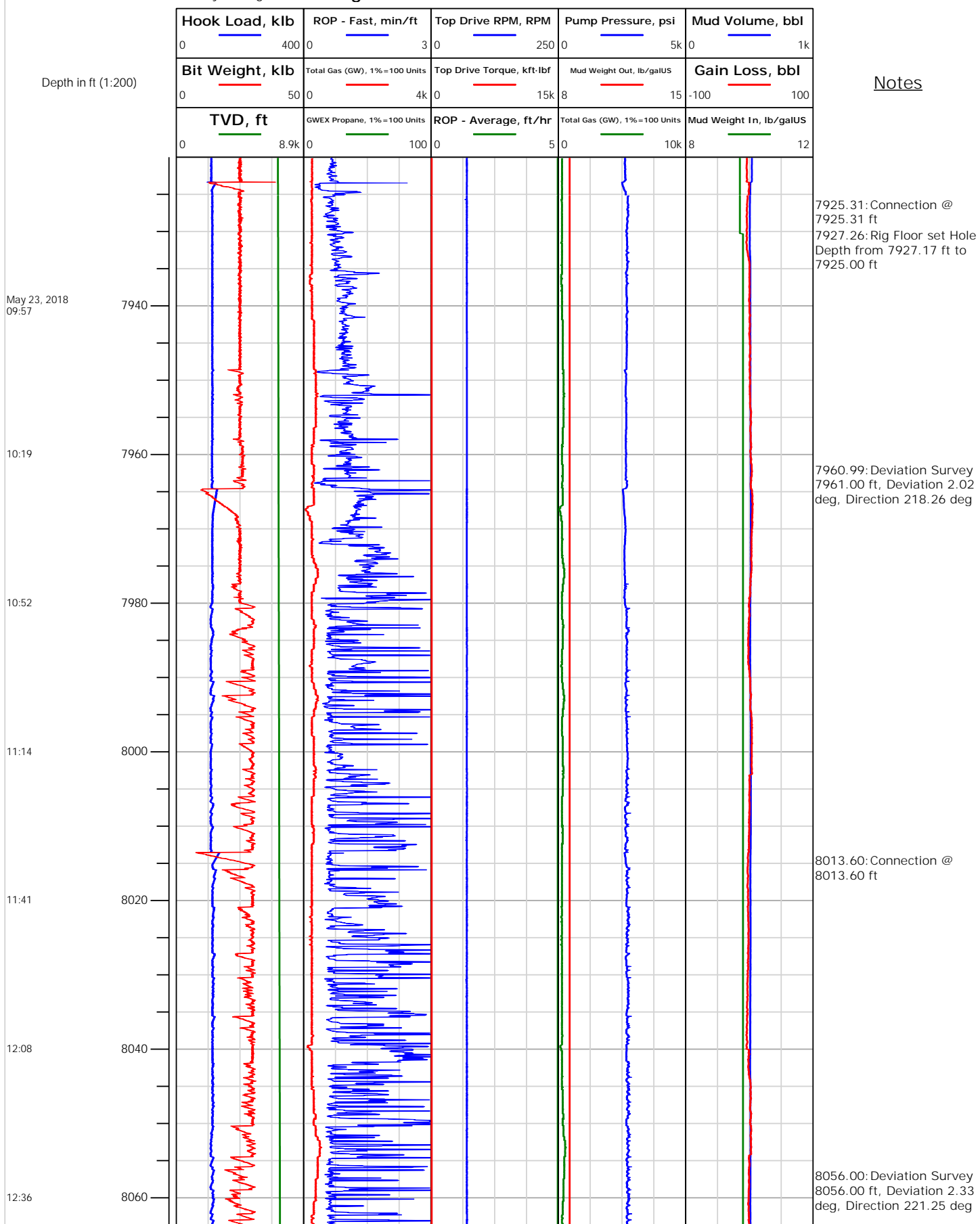
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## Notes

