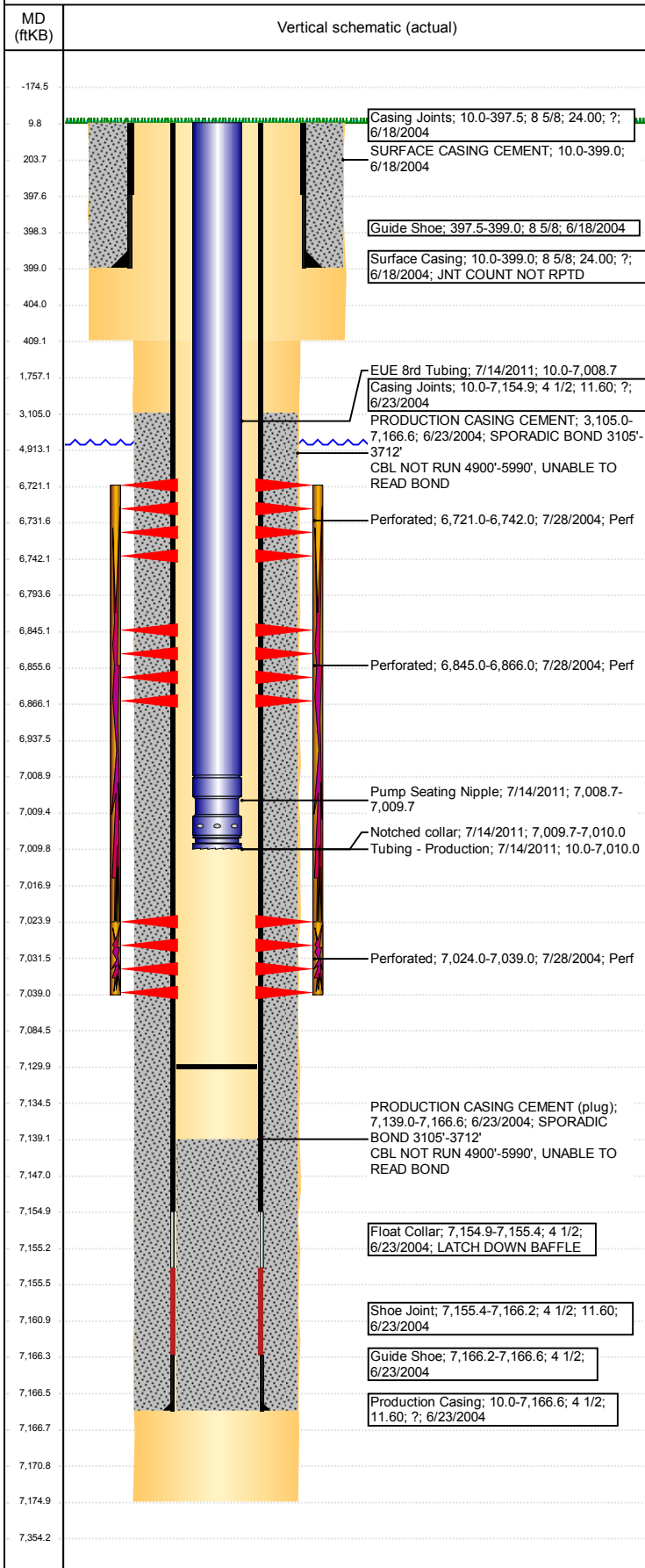


**Well Name: HALL 31-11**

VERTICAL - ORIGINAL HOLE, 4/27/2017 12:59:56 PM



## Well Header

API 05-123-22234	Business Unit DJ BASIN	District 15	Well Config VERTICAL
Original KB Elevation (ft) 4,725	KB - GL / MSL (ftKB) 10.00	Spud Date 6/17/2004	P & A Date
Comment			

## Directions To Well

GREELY CO.83 AVE./O ST.,N.1/10,W.1/10,S.2/10,SE 500' INTO.

## Congressional Location

Quarter 3 NE	Quarter 4 NE	Section 31	Township 6	Twnshp N/S Dir N	Range 66	Range E/W Dir W
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## Bottom Hole Location

North-South Distance (ft)	From N or S Line	East-West Distance (ft)	From E or W Line
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## Plug Back Total Depths

Date	Depth (ftKB)	Method	Com
6/24/2004	7,154.9	CASING TALLY	TOP OF FLOAT COLLAR
7/9/2004	7,139.0	CASED HOLE LOG	DEPTH LOGGER ON CBL
6/15/2011	7,130.0	TAG	TAG/CO

## Wellbore Sections

Section Des	Size (in)	Act Top, MD (ftKB)	Act Btm, MD (ftKB)
SURFACE	12 1/4	10	409
PRODUCTION	7 7/8	409	7,175

## Zone Statuses

Zone Name	Status Date	Status	Fluid Type	Job	Prod Method
CODELL	6/8/2004	PR	Water	DRILLING - OR...	Flowing
CODELL	11/22/2010	PR		RE-FRAC, 6/15...	
CODELL	8/22/2011	PR		DRILLING - OR...	
NIOBRARA	6/8/2004	PR	Water	DRILLING - OR...	Flowing
NIOBRARA	11/22/2010	PR			
NIOBRARA	10/22/2015	PR			

## Casing Strings

### Surface Casing, 399.0ftKB

Casing Description	Run Date	OD (in)	Wt/Len (l...)	Grade	Top, MD (ft...)	MD (ftKB)
Surface Casing	6/18/2004	8 5/8	24.00	?	10.0	399.0

### Production Casing, 7,166.6ftKB

Casing Description	Run Date	OD (in)	Wt/Len (l...)	Grade	Top, MD (ft...)	MD (ftKB)
Production Casing	6/23/2004	4 1/2	11.60	?	10.0	7,166.6

## Cement

Description	Top Depth (ftKB)	Bottom Depth (ftKB)
SURFACE CASING CEMENT	10.0	399.0
PRODUCTION CASING CEMENT	3,105.0	7,166.6

## Tubing Strings

Tubing Description	Run Date	String...	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Set De...
Tubing	5/15/2005	2 3/8	1.87		?	7,014.00	
Tubing - Frac string	6/15/2011	2 3/8	2.00	4.70	C-75	6,943.54	
Tubing - Production	7/14/2011	2 3/8	2.00	4.70	J-55	7,000.00	

## Tubing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)	Btm (ftKB)	Btm (TVD) (ftKB)
EUE 8rd Tubing	2 3/8	4.70	J-55	228	6,998.70	7,008.7	
Pump Seating Nipple	2 3/8			1	1.00	7,009.7	
Notched collar	2 3/8			1	0.30	7,010.0	

## Other In Hole

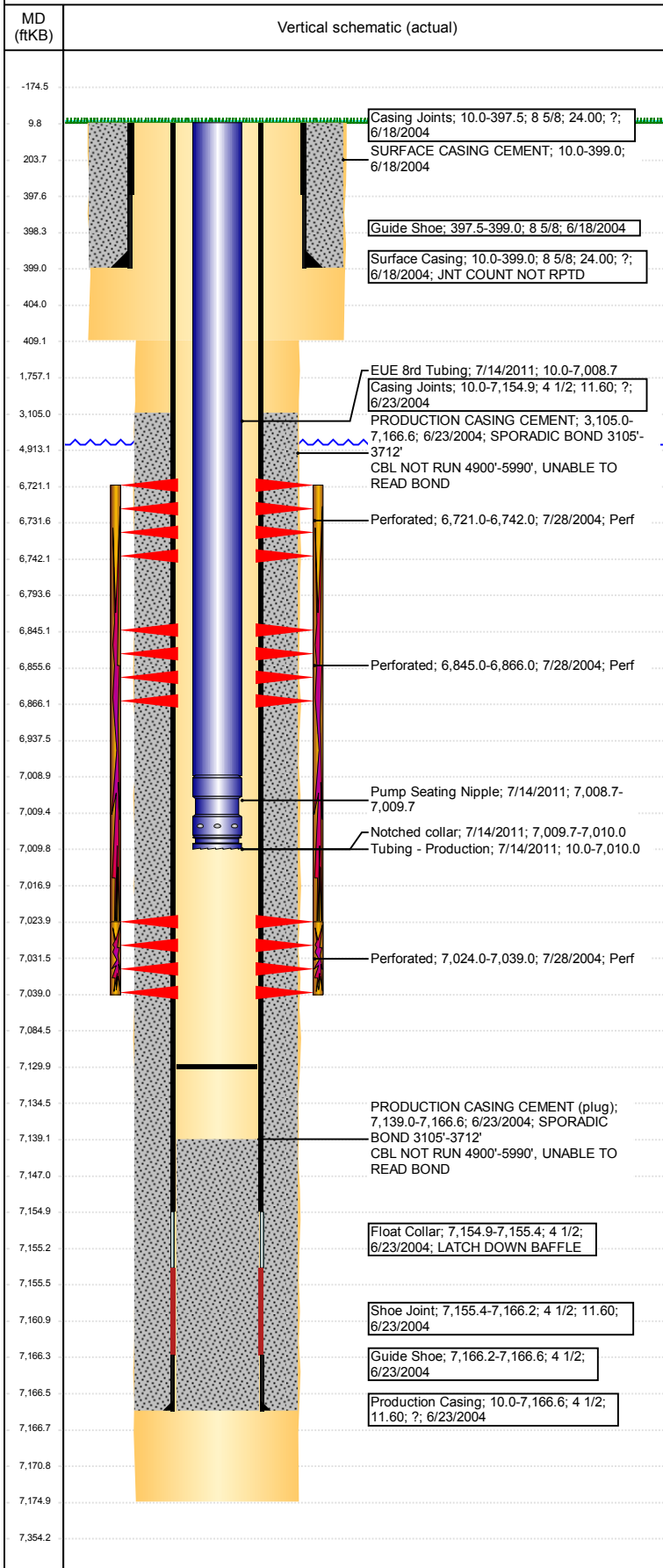
Run Date	Des	OD (in)	Top (ftKB)	Btm (ftKB)

## Logs

Date	Type	Top, MD (ftKB)	Btm, MD (ftKB)
6/23/2004	COMPENSATED DENSITY	3,000.0	7,173.0
6/23/2004	INDUCTION	399.0	7,173.0
7/9/2004	CEMENT BOND	3,100.0	7,137.0

**Well Name: HALL 31-11**

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Perforation Data					
Linked Zone	Bnch/St g	Sum of Entered Shot Total	Top (ftKB)	Btm (ftKB)	Date
NIOBRARA, ORIGINAL HOLE	A	84	6,721.00	6,742.00	7/28/2004
NIOBRARA, ORIGINAL HOLE	B	84	6,845.00	6,866.00	7/28/2004
CODELL, ORIGINAL HOLE		60	7,024.00	7,039.00	7/28/2004
Total (Sum)		228			
Stimulation Intervals					
Start Date		Primary Job Type			
7/30/2004		DRILLING - ORIGINAL			
Technical Result		Tech Result Details		Tech Result Note	
Comment					
CDL/NIO LIMITED ENTRY					
Start Date		Primary Job Type			
7/8/2011		RE-FRAC			
Technical Result		Tech Result Details		Tech Result Note	
Success		According to Plan			
Comment					
(CODELL REFRAC): ISIP - 2940 PSI. TREATMENT WENT WELL. POST ISIP - 3368 PSI. AVG NOLTE - 0.14. AVG VISC - 23.9 CP. AVG TEMP - 69.16F. AVG PH - 10.26.					