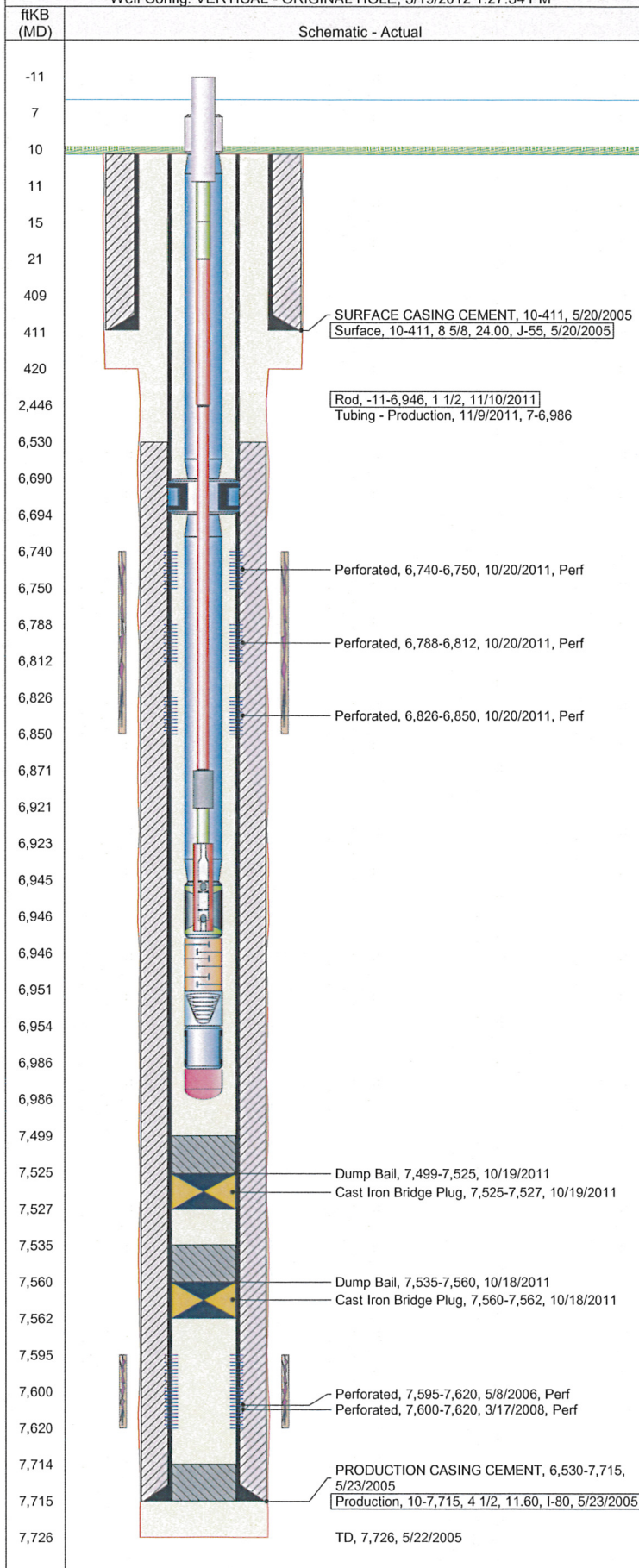


Frac Wellbore Schematic Report

Well Name: HALEY-RAY 13-21

Well Config: VERTICAL - ORIGINAL HOLE, 3/19/2012 1:27:34 PM



Well Header

API		Business Unit		Spud Date		Well Configuration Type	
05-123-22935		WATTENBERG		5/19/2005		VERTICAL	
Orig KB Elev (ft)	KB - GL / ...	Quarter Quarter	Sec/Abs	Twn/Sur...	Range	P & A Date	
5,173.00	10	NESWSW	21	11N	61W		

Comment
Found a 1pg report from Halliburton 2/12/2009 that shows JSND was frac'd. No other info or State Rpts to back this up.

Directions To Well
WCR 122 & 89, NORTH 1.9 MILES,(NORTH CATTLE GUARD), NORTHEAST 0.1 MILES AND WEST INTO.

Current PBTD (ftKB)
ORIGINAL HOLE - 7525.0

Bottom Hole Location

North-South Distance (ft)	From N or S Line	East-West Distance (ft)	From E or W Line

PBTDs

Date	Depth (ftKB)	Method	Comment
5/23/2005	7,713.0	CASING TALLY	GUIDE SHOE
6/23/2005	7,678.0	CASED HOLE LOG	DEPTH LOGGER ON CBL

Wellbore Sections

Section	Size (in)	Act Top (ftKB)	Act Btm (ftKB)
SURFACE	12 1/4	10.0	420.0
PRODUCTION	7 7/8	420.0	7,726.0

Zone Statuses

Zone	Status Date	Status	Job
J SAND	7/26/2006	PR	DRILLING/COMPLETION - ORIGI...
J SAND	10/18/2011	SI	RECOMPLETION, 10/12/2011 12:00
NIOBRARA	11/12/2011	PR	RECOMPLETION, 10/12/2011 12:00

Casing Strings

Casing Description	Run Date	String OD (in)	String Wt (lbs/ft)	String Grade	Top (ftKB)	Set Depth (ftKB)
Surface	5/20/2005	8 5/8	24.00	J-55	10.0	411.0
Production	5/23/2005	4 1/2	11.60	I-80	10.0	7,715.0

Cement

Description	Top (ftKB)	Btm (ftKB)
SURFACE CASING CEMENT	10.0	411.0
PRODUCTION CASING CEMENT	6,530.0	7,715.0
Dump Bail	7,499.0	7,525.0
Dump Bail	7,535.0	7,560.0

Tubing Components

Item Description	OD (in)	Wt (lbs/ft)	Grade	Jts	Len (ft)
Stretch Correction	2 3/8	4.70	J-55	1	3.00
Tubing	2 3/8	4.70	J-55	213	6,680.33
Anchor/catcher	4 1/2	4.70	J-55	1	3.15
Tubing	2 3/8	4.70	J-55	8	251.45
Pump Seating Nipple	2 3/8	4.70	J-55	1	1.13
Gas separator	2 3/8	4.70	J-55	1	5.20
D-SANDER	2 3/8	4.70	J-55	1	3.12
Mud Anchor	2 3/8	4.70	J-55	1	31.30
Bull Plug	2 3/8	4.70	J-55	1	0.63

Rods & Pumps

Rod Description	Run Date	Set Depth (ftKB)
Rod	11/10/2011	6,946.0

Comment

Item Description	OD Nominal (in)	Joints	Length (ft)
Polished Rod	1 1/2	1	22.00
Item Description	OD Nominal (in)	Joints	Length (ft)
Pony Rod	7/8	1	4.00
Pony Rod	7/8	1	6.00
Item Description	OD Nominal (in)	Joints	Length (ft)
Sucker Rod	7/8	97	2,425.00
Item Description	OD Nominal (in)	Joints	Length (ft)
Sucker Rod	3/4	177	4,425.00
Item Description	OD Nominal (in)	Joints	Length (ft)
Sinker Bar	1 1/4	2	50.00
Item Description	OD Nominal (in)	Joints	Length (ft)
Pony Rod	3/4	1	2.00

ne: **HALEY-RAY 13-21**

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Schematic - Actual

