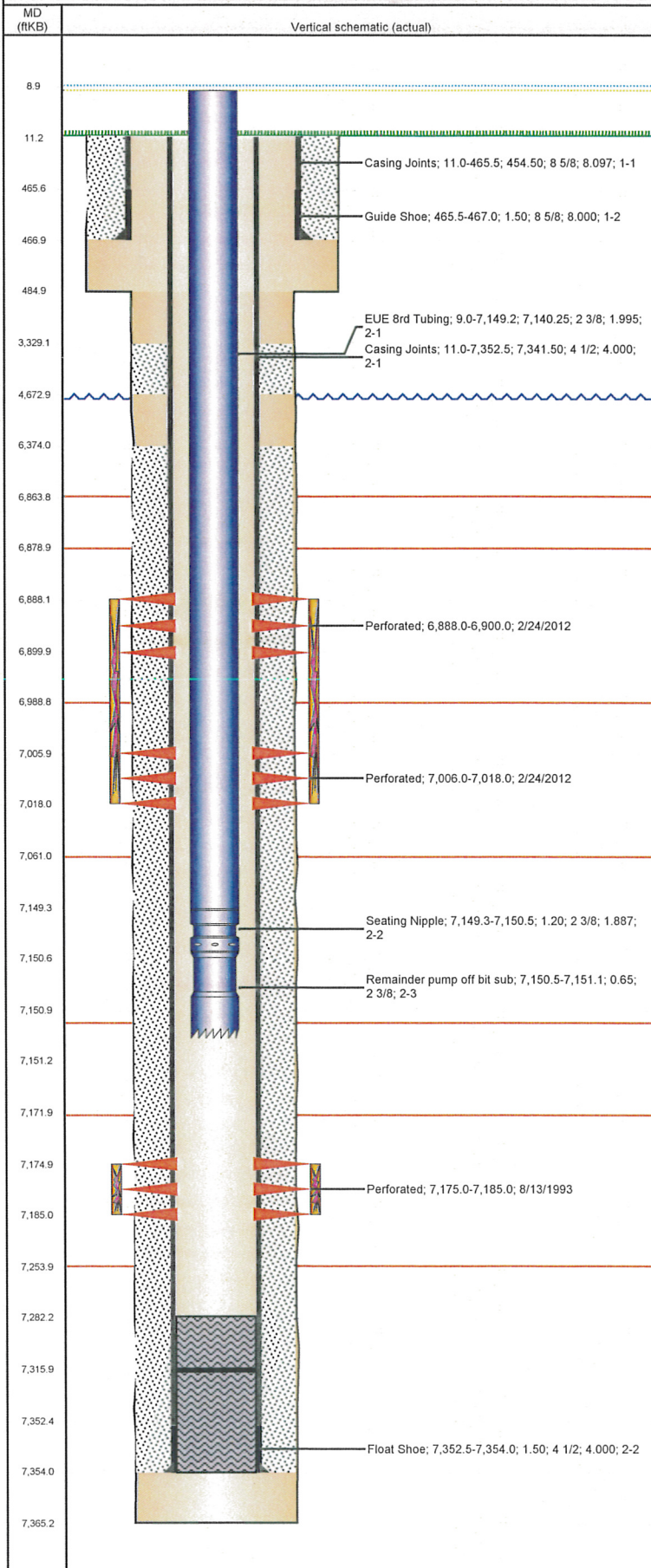


Well Name: OTTOSON 32-16

VERTICAL - ORIGINAL HOLE, 8/9/2012 9:35:49 AM



## Well Header

API 05-123-17119	Business Unit WATTENBERG	District 15	Well Config VERTICAL
Original KB Elevation (ft) 4,812.00	KB - GL / MSL (ftKB) 11.00	Spud Date 8/5/1993	P & A Date
Comment			

## Directions To Well

RDS 74 & 41, NORTHERN 3/8, WEST 3/8, SOUTH INTO.

Current PBTD (ftKB)

ORIGINAL HOLE - 7,316.0

## Surface Location (Congressional)

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section	Township	Twnshp N...	Range	Rng E/W Dir
		SE	SE	32	7	N	65	W

## Bottom Hole Location

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

## Plug Back Total Depths

Date	Depth (ftKB)	Method	Com
8/10/1993	7,282.0	TAG	GUIDE SHOE
8/13/1993	7,282.0	CASED HOLE LOG	DEPTH LOGGER

## Wellbore Sections

Section Des	Size (in)	Act Top (ftKB)	Act Btm (ftKB)
SURFACE	12 1/4	11.0	485.0
PRODUCTION	7 7/8	485.0	7,365.0

## Zone Statuses

Zone Name	Status Date	Status	Job
CODELL	9/5/1993	PR	DRILLING/COMPLETION - ORIGINAL, 8/5/1993 00:00
CODELL	2/28/2012	PR	RE-FRAC & RECOMPLETE, 2/14/2012 06:00
NIOBRARA	2/28/2012	PR	RE-FRAC & RECOMPLETE, 2/14/2012 06:00

## Casing Strings

Csg Des	Run Date	OD (in)	Wt/Len (lb/ft)	Grade	Top (ftKB)	Set Depth (ftKB)
Surface	8/5/1993	8 5/8	24.00	M-50	11.0	467.0
Production	8/10/1993	4 1/2	11.60	M-75	11.0	7,354.0

## Cement

Des	Top (ftKB)	Btm (ftKB)
SURFACE CASING CEMENT	11.0	467.0
PRODUCTION CASING CEMENT	3,329.0	4,673.0
PRODUCTION CASING CEMENT	6,374.0	7,354.0

## Tubing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)
EUE 8rd Tubing	2 3/8	4.70	J-55	241	7,140.25
Seating Nipple	2 3/8	5.40	J-55	1	1.20
Remainder pump off bit sub	2 3/8		J-55	1	0.65

## Perforation Data

Zone	Bnch/St g	Entered Shot Total	Top (ftKB)	Btm (ftKB)	Date
NIOBRARA, ORIGINAL HOLE	A	24	6,888.0	6,900.0	2/24/2012
NIOBRARA, ORIGINAL HOLE	B	24	7,006.0	7,018.0	2/24/2012
CODELL, ORIGINAL HOLE		20	7,175.0	7,185.0	8/13/1993

## Stimulations & Treatments

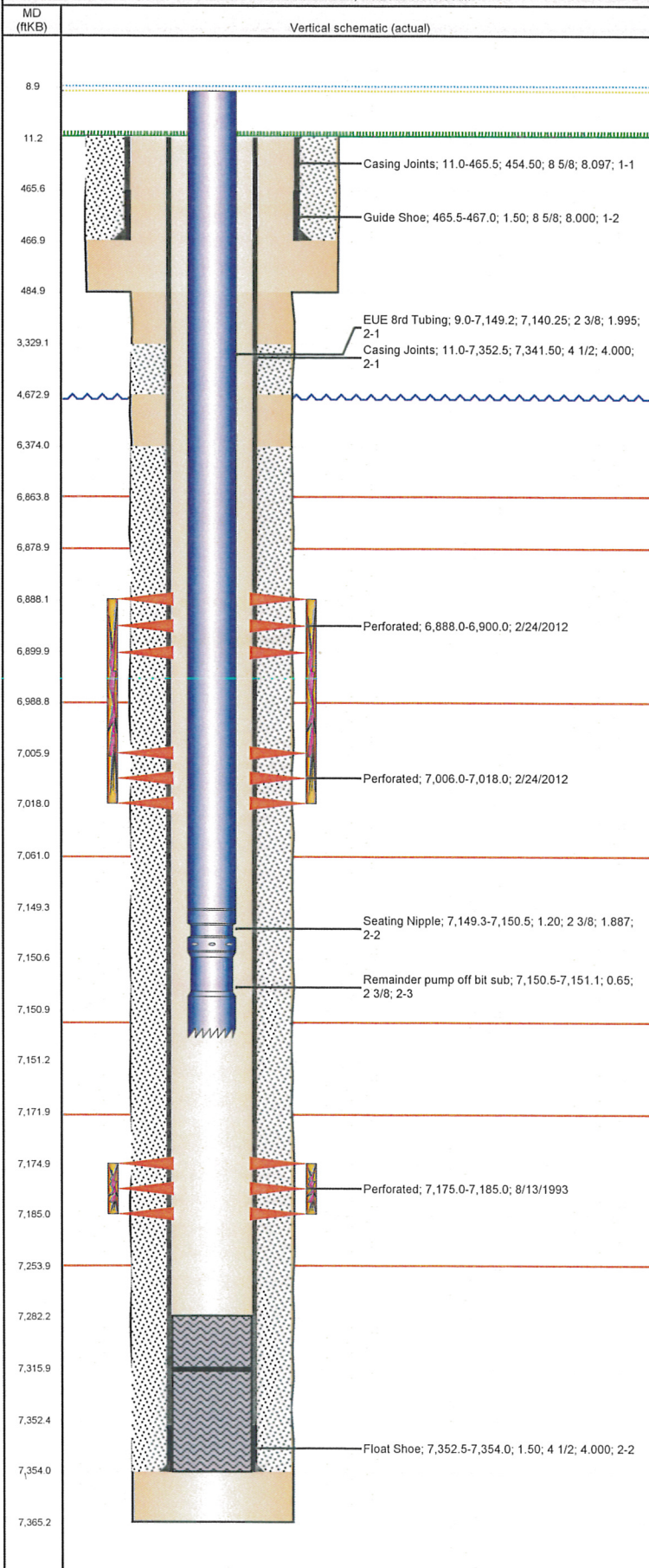
Bnch/Stg	Date	Zone	Primary Job Type
	8/17/1993	CODELL, ORIGINAL HOLE	DRILLING/COMPLETION - ORIGINAL
Comment			

Total Add Amount	Total Clean Volume...	Vol Slurry Tot (gal)	Vol Gas Tot (MCF)
Proppant 191100 lb		59892.00	
Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
4,200.0	4,600.0	15.00	15.00



Well Name: OTTOSON 32-16

VERTICAL - ORIGINAL HOLE, 8/9/2012 9:35:49 AM



## Stimulations & Treatments

Bnch/Stg	Date	Zone	Primary Job Type
	2/24/2012	NIOBRARA, ORIGINAL HOLE	RE-FRAC & RECOMPLETE
Comment (NIOBRARA) OPEN 2296 PSI, BREAK 4080 @ 2.4, ISIP 3479, FINAL ISIP 3592, 5 MIN 3331, AVG VIS 16.9, AVG PH 10.38, AVG TEMP 67.9			
Total Add Amount	Total Clean Volume...		Vol Slurry Tot (gal)
Proppant Ottawa 246847.398 lb	153976.63		165220.02
Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
4,238.0	4,526.0	44.18	47.56
Bnch/Stg	Date	Zone	Primary Job Type
	2/24/2012	CODELL, ORIGINAL HOLE	RE-FRAC & RECOMPLETE
Comment (CODELL): OPEN 0 PSI, 50 BBL TO LOAD, BREAK 3052 @ 4BPM, ISIP 2296, 5 MIN 1711, INCREASED RATE UP TO 18 BPM, PERFS OPEN 19, PERF FRICTION 86, NWB 758, PIPE FRICTION 520, TOTAL 1364, FINAL ISIP 3628, FINAL SHUT IN 3101 AVG VIS 21.3, AVG PH 10.25, AVG TEMP 67.9			
Total Add Amount	Total Clean Volume...		Vol Slurry Tot (gal)
Proppant Ottawa 246661.703 lb	134793.54		145984.87
Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
3,926.0	4,216.0	18.44	19.32

## Other In Hole

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

## Logs

Date	Type	Top (ftKB)	Btm (ftKB)
8/8/1993	COMPENSATED DENSITY	3,740.0	7,363.0
8/8/1993	INDUCTION	467.0	7,363.0
8/13/1993	CEMENT BOND	3,100.0	7,277.0