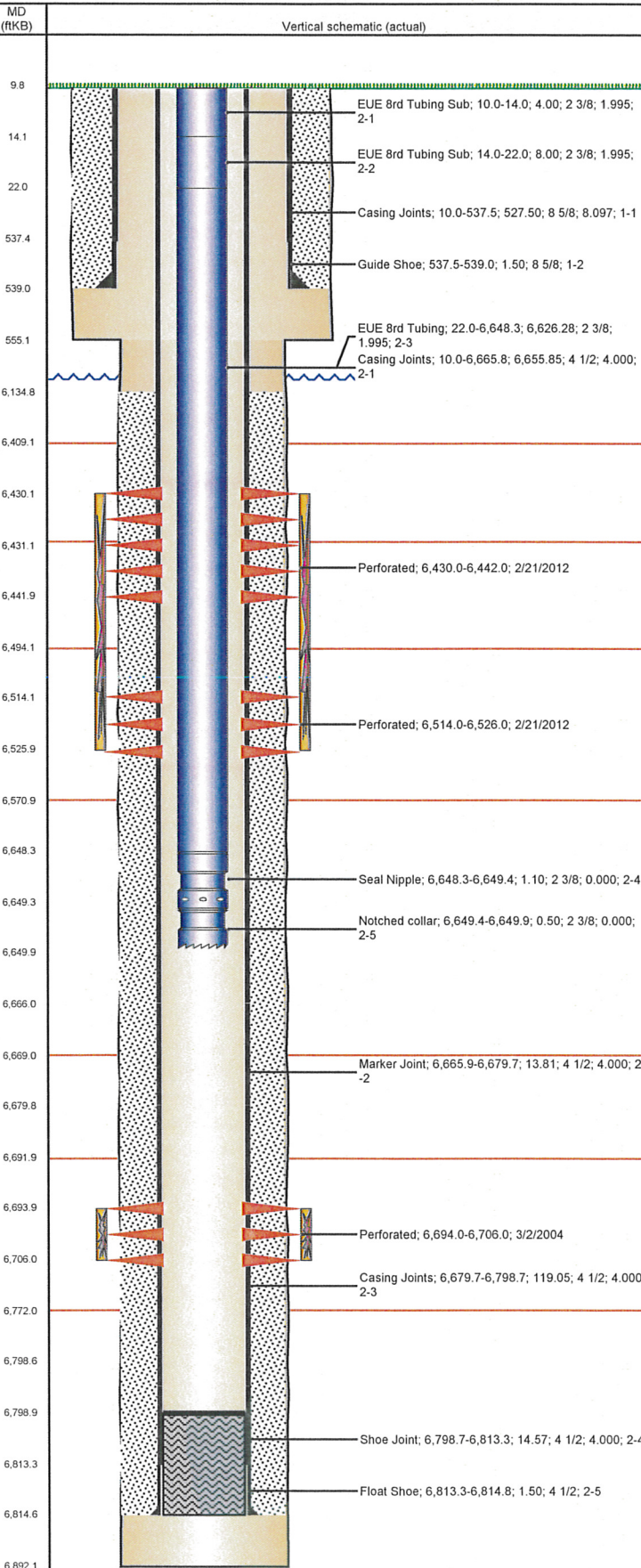


Frac Wellbore Schematic Report

Well Name: MILLAGE C12-04

VERTICAL - ORIGINAL HOLE, 8/6/2012 11:13:25 AM



Well Header

API	Business Unit	District	Well Config
05-123-21884	WATTENBERG	15	VERTICAL
Original KB Elevation (ft)	KB - GL / MSL (ftKB)	Spud Date	P & A Date
4,627.00	10.00	2/10/2004	

Comment
WELL HAS A TIGHT SPOT IN IT FROM 6526' TO 6626'.

Directions To Well
RD 59 AND RD 48, E 1/10, S 1/10 INTO

Current PBTD (ftKB)
ORIGINAL HOLE - 6,799.0

Surface Location (Congressional)							
Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section	Township	Twnshp N...	Range
		NW	NW	12	4	N	64
							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
2/13/2004	6,799.0	CASING TALLY	GUIDE SHOE
3/1/2004	6,774.0	CASED HOLE LOG	DEPTH LOGGER

Wellbore Sections			
Section Des	Size (in)	Act Top (ftKB)	Act Btm (ftKB)
SURFACE	12 1/4	10.0	555.0
PRODUCTION	7 7/8	555.0	6,892.0

Zone Statuses			
Zone Name	Status Date	Status	Job
CODELL	3/18/2004	PR	DRILLING - ORIGINAL, 2/10/2004 00:00
CODELL	2/24/2012	PR	RE-FRAC & RECOMPLETE, 2/13/2012 06:00
NIOBRARA	2/24/2012	PR	RE-FRAC & RECOMPLETE, 2/13/2012 06:00

Casing Strings						
Csg Des	Run Date	OD (in)	Wt/Len (lb/ft)	Grade	Top (ftKB)	Set Depth (ftKB)
Surface	2/11/2004	8 5/8	24.00	J-55	10.0	539.0
Production	2/14/2004	4 1/2	11.60	M-80	10.0	6,814.8

Cement		
Des	Top (ftKB)	Btm (ftKB)
SURFACE CASING CEMENT	10.0	539.0
PRODUCTION CASING CEMENT	6,135.0	6,814.8

Tubing Components					
Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)
EUE 8rd Tubing Sub	2 3/8	4.70	J-55	1	4.00
EUE 8rd Tubing Sub	2 3/8	4.70	J-55	1	8.00
EUE 8rd Tubing	2 3/8	4.70	J-55	204	6,626.28
Seal Nipple	2 3/8	0.00	x	1	1.10
Notched collar	2 3/8	0.00	x	1	0.50

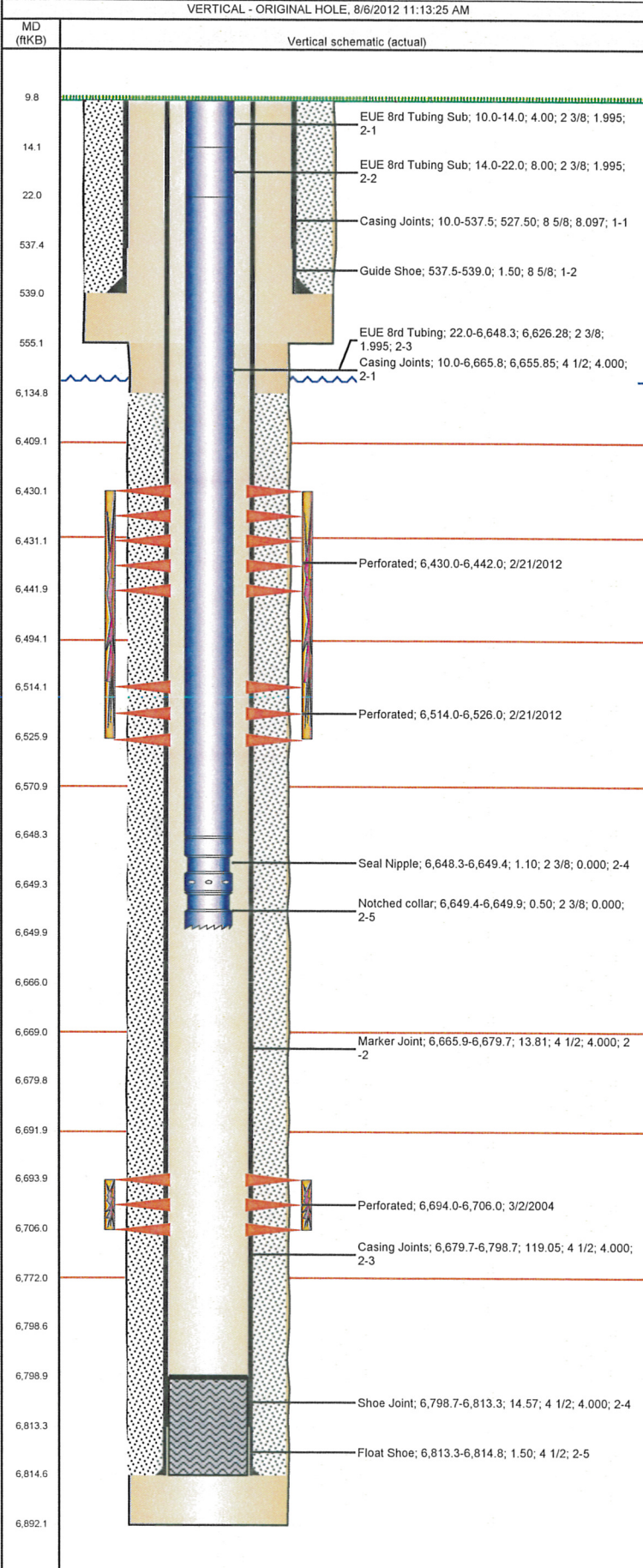
Perforation Data					
Zone	Bnch/St g	Entered Shot Total	Top (ftKB)	Btm (ftKB)	Date
NIOBRARA, ORIGINAL HOLE		24	6,430.0	6,442.0	2/21/2012
NIOBRARA, ORIGINAL HOLE		24	6,514.0	6,526.0	2/21/2012
CODELL, ORIGINAL HOLE		48	6,694.0	6,706.0	3/2/2004

Stimulations & Treatments			
Bnch/Stg	Date	Zone	Primary Job Type
	3/15/2004	CODELL, ORIGINAL HOLE	DRILLING - ORIGINAL

Comment			
Total Add Amount	Total Clean Volume...	Vol Slurry Tot (gal)	Vol Gas Tot (MCF)
Proppant Ottawa 129570 lb		273462.00	
Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
6,174.0	6,517.0	14.10	14.30

Well Name: MILLAGE C12-04

VERTICAL - ORIGINAL HOLE, 8/6/2012 11:13:25 AM



Stimulations & Treatments

Bnch/Stg	Date	Zone	Primary Job Type
	2/21/2012	CODELL, ORIGINAL HOLE	RE-FRAC & RECOMPLETE
Comment INITIAL PRESS - 0, LOAD - 74BBL, BREAK - 4060, INITIAL ISIP - 2584, 5SIP - 1169. 5SIP < 1500 - RATE RAISED TO 18BPM. PROBLEMS WITH XLINKER AT TAIL END OF PAD, EXTEND PAD TO GET GOOD SAMPLE BEFORE GOING TO SAND. WENT TO 24# GEL 400BBL EARLY. HALTED SAND RAMP AT 3.5PPG AND HELD IT THERE, START SWEEP AT 1100BBL INTO RAMP STAGE, SHUT DOWN AFTER CLEANING UP WELLBORE. FINAL ISIP 4610, FINAL 5SIP - 4152, CALLED OFFICE AND DECIDED TO CALL STAGE. PUMPED ACID FOR NIO DOWN AT 4BPM BEFORE GOING IN WITH WIRELINE. 157000 LBS OF 20/40 WHITE IN FORMATION. AVG RATE - 17.97. AVG PRESS - 4135, AVG VISC - 21.5, AVG PH - 10.26, AVG TEMP - 70.8, MAX RATE - 19.69, MAX PRESS - 4973.			
Total Add Amount		Total Clean Volume...	Vol Slurry Tot (gal)
Proppant Ottawa		115140.90	122311.98
157114.199 lb			
Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
4,135.0	4,973.0	17.97	19.69
Bnch/Stg	Date	Zone	Primary Job Type
	2/21/2012	NIOBRARA, ORIGINAL HOLE	RE-FRAC & RECOMPLETE
Comment INITIAL WHP - 1951, BREAK - 3625, INITIAL ISIP - 3574, LOST SAND WHILE SWITCHING COMPARTMENTS AND THE BEGINNING OF 3PPG. FINAL ISIP - 3672, FINAL 5SIP - 3346, AVG RATE - 45.78. AVG PRESS - 4218, AVG VISC - 17.4, AVG PH - 10.42, MAX RATE - 49.91, MAX PRESS - 4399.			
Total Add Amount		Total Clean Volume...	Vol Slurry Tot (gal)
Proppant Ottawa		158497.93	169968.13
253010.896 lb			
Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
3,802.0	4,399.0	45.78	49.91

Other In Hole

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

Logs

Date	Type	Top (ftKB)	Btm (ftKB)
2/14/2004	COMPENSATED DENSITY	539.0	6,840.0
2/14/2004	INDUCTION	539.0	6,840.0
3/1/2004	CBL/CCL/GR	6,000.0	6,771.0
3/16/2011	GYRO	10.0	6,600.0