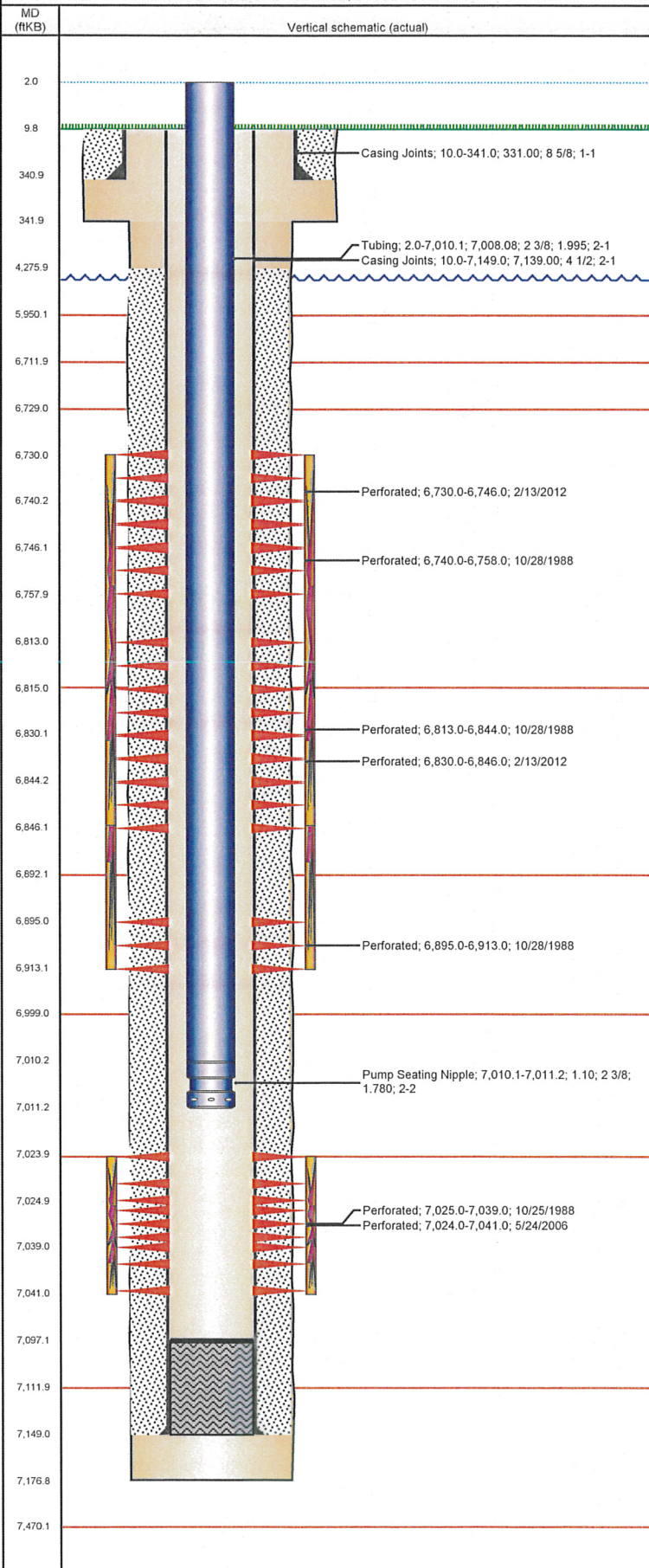


Frac Wellbore Schematic Report

Well Name: BOULTER 11-02

VERTICAL - ORIGINAL HOLE, 8/9/2012 10:17:53 AM



Well Header

API	Business Unit	District	Well Config
05-123-14073	WATTENBERG	15	VERTICAL
Original KB Elevation (ft)	KB - GL / MSL (ftKB)	Spud Date	P & A Date
4,687.00	10.00	9/30/1988	

Comment
WELL FILE MINIMAL & SKETCHY, MOST INFO NOT FROM ORIG SOURCES.
LOCATION IS VERY SOFT. (MARSH)

Directions To Well
Rd 45 & Rd 46, E 2/10, N into

Current PBTD (ftKB)
ORIGINAL HOLE - 7,097.0

Surface Location (Congressional)

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section	Township	Twnshp N...	Range	Rng E/W Dir
		SW	SW	11	4	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
10/5/1988	7,097.0	CASED HOLE LOG	DEPTH-LOGGER/CBL
6/21/2006	7,094.0	TAG	53' OF RATHOLE

Wellbore Sections

Section Des	Size (in)	Act Top (ftKB)	Act Btm (ftKB)
SURFACE	12 1/4	10.0	342.0
PRODUCTION	7 7/8	342.0	7,177.0

Zone Statuses

Zone Name	Status Date	Status	Job
NIOBRARA	11/8/1988	PR	DRILLING/COMPLETION - ORIGINAL, 9/30/1988 00:00
NIOBRARA	2/28/2012	PR	RE-FRAC, 2/9/2012 06:00
NIOBRARA	3/26/2012	PR	RE-FRAC, 2/9/2012 06:00
CODELL	11/8/1988	PR	DRILLING/COMPLETION - ORIGINAL, 9/30/1988 00:00
CODELL	6/26/2006	PR	RE-FRAC, 5/22/2006 00:00
CODELL	2/9/2012	SI	RE-FRAC, 2/9/2012 06:00
CODELL	3/26/2012	PR	RE-FRAC, 2/9/2012 06:00

Casing Strings

Csg Des	Run Date	OD (in)	Wt/Len (lb/ft)	Grade	Top (ftKB)	Set Depth (ftKB)
Surface	9/30/1988	8 5/8	24.00		10.0	341.0
Production	10/5/1988	4 1/2	15.10		10.0	7,149.0

Cement

Des	Top (ftKB)	Btm (ftKB)
SURFACE CASING CEMENT	10.0	341.0
PRODUCTION CASING CEMENT	4,276.0	7,149.0

Tubing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)
Tubing	2 3/8	4.70	J-55	229	7,008.08
Pump Seating Nipple	2 3/8	4.70	J-55	1	1.10

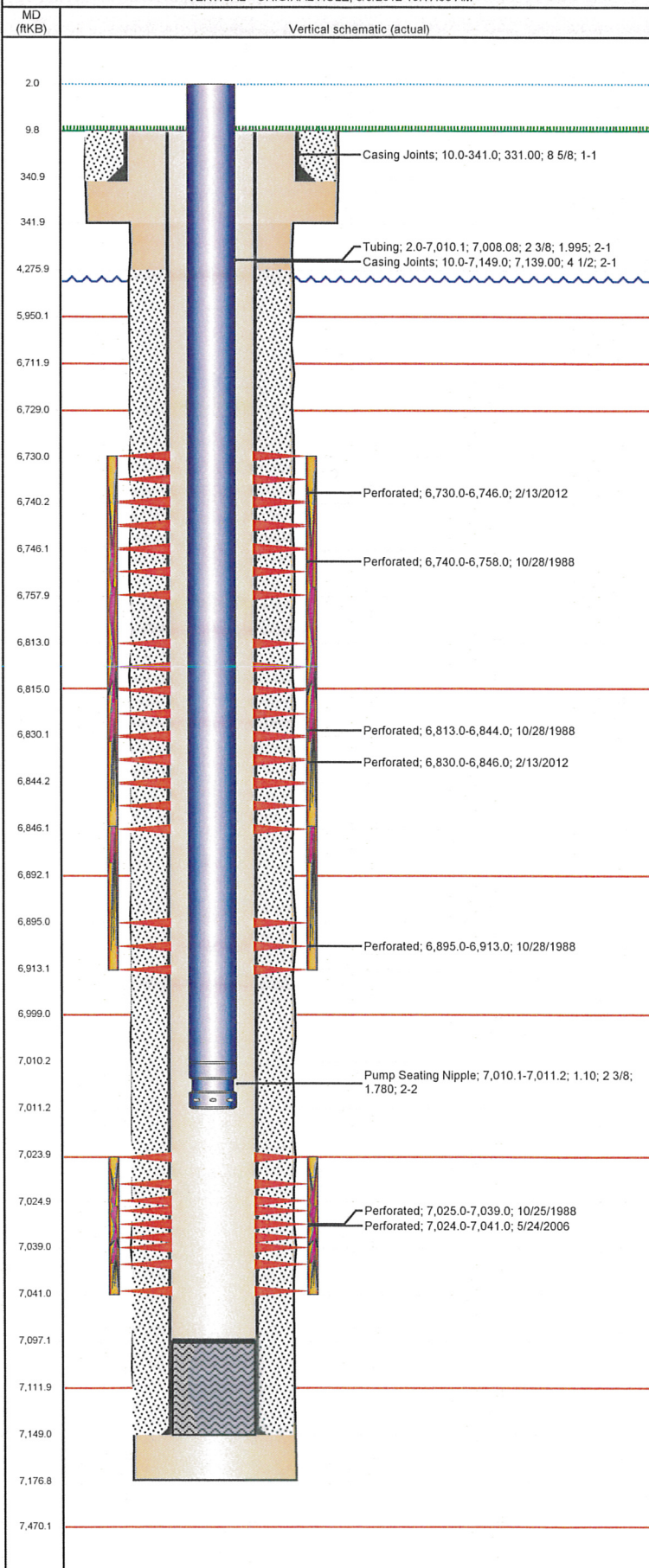
Perforation Data

Zone	Bnch/St g	Entered Shot Total	Top (ftKB)	Btm (ftKB)	Date
NIOBRARA, ORIGINAL HOLE	A	32	6,730.0	6,746.0	2/13/2012
NIOBRARA, ORIGINAL HOLE	A	4	6,740.0	6,758.0	10/28/1988
NIOBRARA, ORIGINAL HOLE	B	8	6,813.0	6,844.0	10/28/1988
NIOBRARA, ORIGINAL HOLE	B	32	6,830.0	6,846.0	2/13/2012
NIOBRARA, ORIGINAL HOLE	C	3	6,895.0	6,913.0	10/28/1988
CODELL, ORIGINAL HOLE		68	7,024.0	7,041.0	5/24/2006
CODELL, ORIGINAL HOLE		28	7,025.0	7,039.0	10/25/1988

Frac Wellbore Schematic Report

Well Name: BOULTER 11-02

VERTICAL - ORIGINAL HOLE, 8/9/2012 10:17:53 AM



Stimulations & Treatments

Bnch/Stg	Date	Zone	Primary Job Type
	10/27/1988	CODELL, ORIGINAL HOLE	DRILLING/COMPLETION - ORIGINAL

Comment

Total Add Amount	Total Clean Volume...	Vol Slurry Tot (gal)	Vol Gas Tot (MCF)
Proppant 150000 lb; Proppant 100 MESH 10000 lb		81312.00	
Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
3,750.0	4,630.0	12.00	13.00
Bnch/Stg	Date	Zone	Primary Job Type
	10/28/1988	NIOBRARA, ORIGINAL HOLE	DRILLING/COMPLETION - ORIGINAL

Comment

Total Add Amount	Total Clean Volume...	Vol Slurry Tot (gal)	Vol Gas Tot (MCF)
Proppant 270000 lb; Proppant 100 MESH 10000 lb; Proppant CARBO LITE 8000		95583.60	
Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
4,950.0	5,710.0	25.00	26.00
Bnch/Stg	Date	Zone	Primary Job Type
	6/16/2006	CODELL, ORIGINAL HOLE	RE-FRAC

Comment

Total Add Amount	Total Clean Volume...	Vol Slurry Tot (gal)	Vol Gas Tot (MCF)
Proppant Ottawa 246600 lb	5387256.02	128284.80	
Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
4,700.0	5,207.0	0.38	0.39
Bnch/Stg	Date	Zone	Primary Job Type
	2/27/2012	NIOBRARA, ORIGINAL HOLE	RE-FRAC

Comment

(NIOBRARA A,B RF) : PREJOB ISIP=3194 PSI, 5 MIN=2692 PSI. JOB AVERAGES: 4348 PSI, 32.3 BPM, 14.5 CP, 10.6 PH, 65.7F. JOB MAX: 4544 PSI, 36.2 BPM. POST JOB ISIP= 3433 PSI, 5 MIN= 2721 PSI.

Total Add Amount	Total Clean Volume...	Vol Slurry Tot (gal)	Vol Gas Tot (MCF)
Proppant Ottawa 250764.603 lb	149902.62	161346.37	
Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
4,348.0	4,544.0	32.30	36.20

Other In Hole

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

Logs

Date	Type	Top (ftKB)	Btm (ftKB)
10/5/1988	COMPENSATED DENSITY	4,293.0	7,157.0
10/5/1988	DUAL INDUCTION	336.0	7,176.0
10/13/1988	SONIC CBL	4,100.0	7,030.0