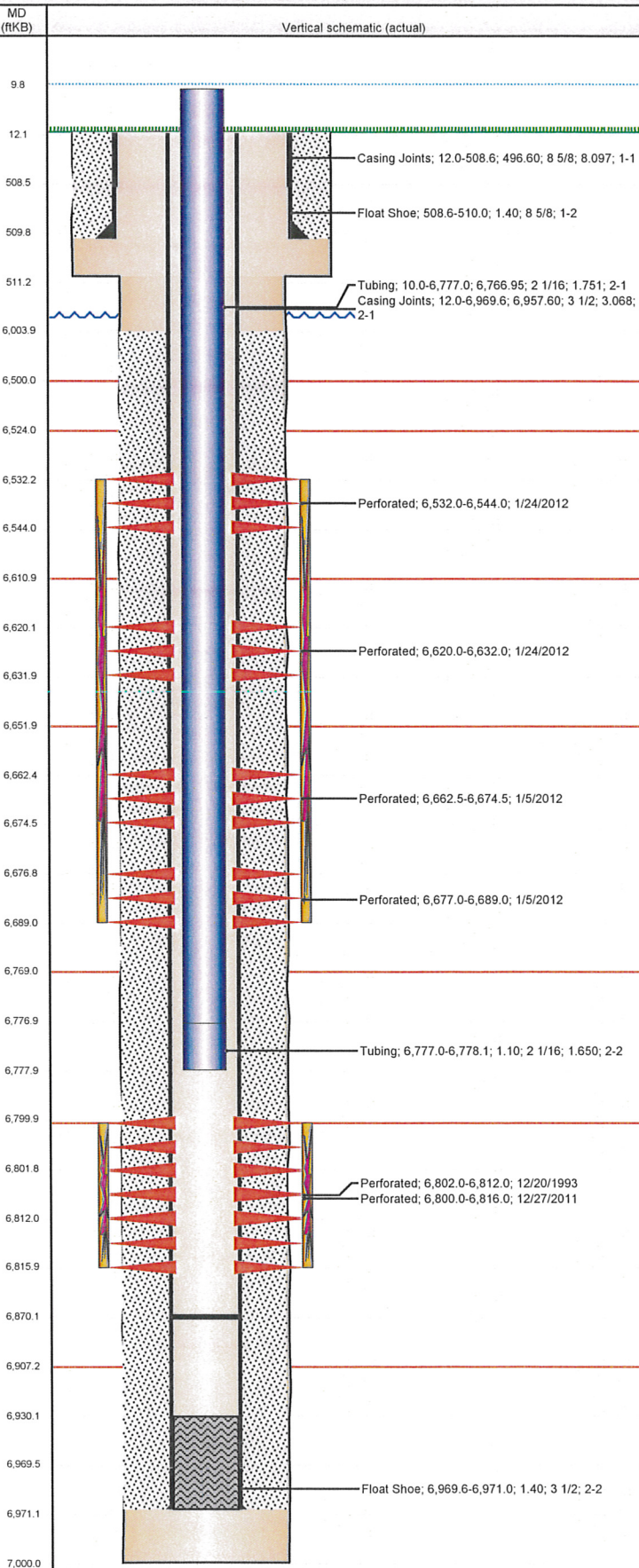


Well Name: ROTHE 02-10

VERTICAL - ORIGINAL HOLE, 8/16/2012 9:25:15 AM



Well Header

API 05-123-17623	Business Unit WATTENBERG	District 15	Well Config VERTICAL
Original KB Elevation (ft) 4,627.00	KB - GL / MSL (ftKB) 12.00	Spud Date 12/2/1993	P & A Date

Comment
DIRECTIONAL. RIG MOVED AND WELLBORE WAS RE-DRILLED IMMEDIATELY FOLLOWING INITIAL LOGS BECAUSE THE CODELL FAULTED OUT.

Directions To Well
CR 48 & CR 59 N 2/10, ON SOUTH SIDE OF DITCH GO 0.4 MILES NORTHWEST, SOUTH INTO

Current PBTD (ftKB)
ORIGINAL HOLE - 6,870.0

Surface Location (Congressional)

Quarter 1	Quarter 2	Quarter 3 NW	Quarter 4 SE	Section 2	Township 4 N	Twnshp N...	Range 64 W	Rng E/W Dir
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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
12/15/1993	6,930.0	TAG	GUIDE SHOE
12/20/1993	6,909.0	CASED HOLE LOG	DEPTH LOGGER

Wellbore Sections

Section Des	Size (in)	Act Top (ftKB)	Act Btm (ftKB)
SURFACE	12 1/4	12.0	511.0
PRODUCTION	7 7/8	511.0	7,000.0

Zone Statuses

Zone Name	Status Date	Status	Job
CODELL	1/8/1994	PR	DRILLING - ORIGINAL, 12/2/1993 00:00
CODELL	2/27/2012	PR	RE-FRAC & RECOMPLETE, 12/19/2011 06:00
NIOBRARA	2/27/2012	PR	RE-FRAC & RECOMPLETE, 12/19/2011 06:00

Casing Strings

Csg Des	Run Date	OD (in)	Wt/Len (lb/ft)	Grade	Top (ftKB)	Set Depth (ftKB)
Surface	12/2/1993	8 5/8	24.00	J-55	12.0	510.0
Production	12/15/1993	3 1/2	7.70	M-75	12.0	6,971.0

Cement

Des	Top (ftKB)	Btm (ftKB)
SURFACE CASING CEMENT	12.0	510.0
PRODUCTION CASING CEMENT	6,004.0	6,971.0

Tubing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)
Tubing	2 1/16	3.25	J-55	210	6,766.95
Tubing	2 1/16	3.25	J-55	1	1.10

Perforation Data

Zone	Bnch/St g	Entered Shot Total	Top (ftKB)	Btm (ftKB)	Date
NIOBRARA, ORIGINAL HOLE		48	6,532.0	6,544.0	1/24/2012
NIOBRARA, ORIGINAL HOLE		48	6,620.0	6,632.0	1/24/2012
CODELL, ORIGINAL HOLE		24	6,662.5	6,674.5	1/5/2012
CODELL, ORIGINAL HOLE		24	6,677.0	6,689.0	1/5/2012
CODELL, ORIGINAL HOLE		32	6,800.0	6,816.0	12/27/2011
CODELL, ORIGINAL HOLE		20	6,802.0	6,812.0	12/20/1993

Stimulations & Treatments

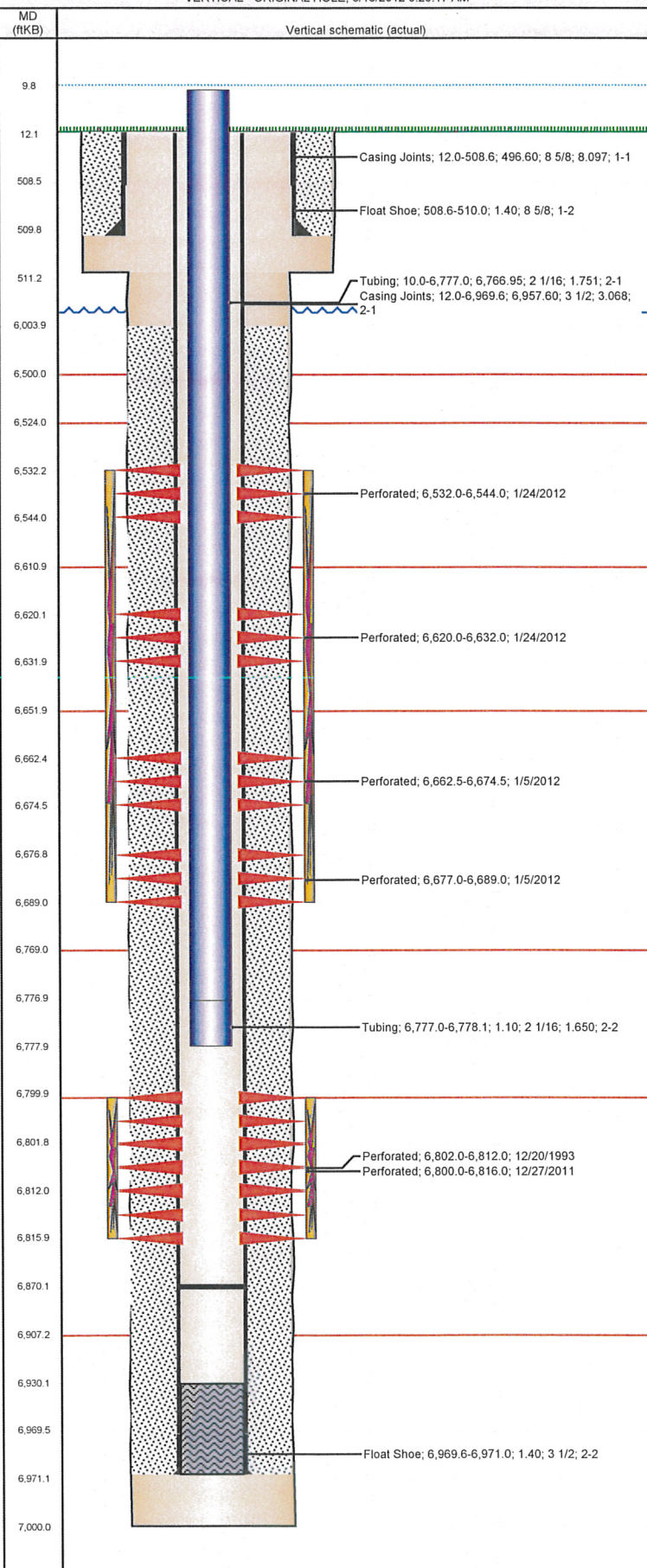
Bnch/Stg	Date	Zone	Primary Job Type
	12/21/1993	CODELL, ORIGINAL HOLE	DRILLING - ORIGINAL

Comment

Total Add Amount Proppant 192400 lb	Total Clean Volume...	Vol Slurry Tot (gal) 53424.00	Vol Gas Tot (MCF)
Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)

Well Name: ROTHE 02-10

VERTICAL - ORIGINAL HOLE, 8/16/2012 9:25:17 AM



Stimulations & Treatments

Bnch/Stg	Date	Zone	Primary Job Type
	1/5/2012	CODELL, ORIGINAL HOLE	RE-FRAC & RECOMPLETE
Comment (CODELL RF) ISIP 2246. 5 MIN 1420. INCREASED RATE FROM 14 BPM TO 18 BPM DUE TO LEAK OFF. FOLLOWED DESIGN GEL CHANGES ON SCHEDULE. JOB WENT WELL WITH NO ISSUES TO REPORT. AVERAGES: VISC 23.0, TEMP 64.6, PH 10.23, NOLTE +0.20. POST ISIP 4120, POST 5 MIN 3461.			
Total Add Amount		Total Clean Volume...	Vol Slurry Tot (gal)
Proppant Ottawa		130669.56	141865.92
246884.492 lb			
Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
4,165.0	4,490.0	18.80	19.20
Bnch/Stg	Date	Zone	Primary Job Type
	1/27/2012	NIOBRARA, ORIGINAL HOLE	RE-FRAC & RECOMPLETE
Comment (NIOBRARA):CUT 100 BBLs OUT OF SLICKWATER PAD TO MAKE FLUID STARTED JOB 12 BBLs SHORT COULD NOT GET A WATER TRANSPORT INTO LOCATON DUE TO SMALL LOCATION.DURING JOB THE XLW 22C RAN ERRADIC DUE TO CRYSTALIZATION IN THE BOTTOM OF TOT INCREASE THE XLW 14 TO 1 GPT. BHTP STAYED ABOUT THE SAME FOR THE REST OF THE TREATMENT.			
Total Add Amount		Total Clean Volume...	Vol Slurry Tot (gal)
Proppant Ottawa		148246.98	159382.03
244749.598 lb			
Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
4,104.0	4,492.0	38.26	39.79

Other In Hole

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

Logs

Date	Type	Top (ftKB)	Btm (ftKB)
12/7/1993	COMPENSATED DENSITY	4,190.0	6,942.0
12/14/1993	INDUCTION	3,400.0	6,992.0
12/20/1993	GAMMA RAY	3,400.0	6,992.0
12/8/2011	GYRO	12.0	6,992.0
12/20/2011	CBL/CCL/GR	5,642.0	6,923.0