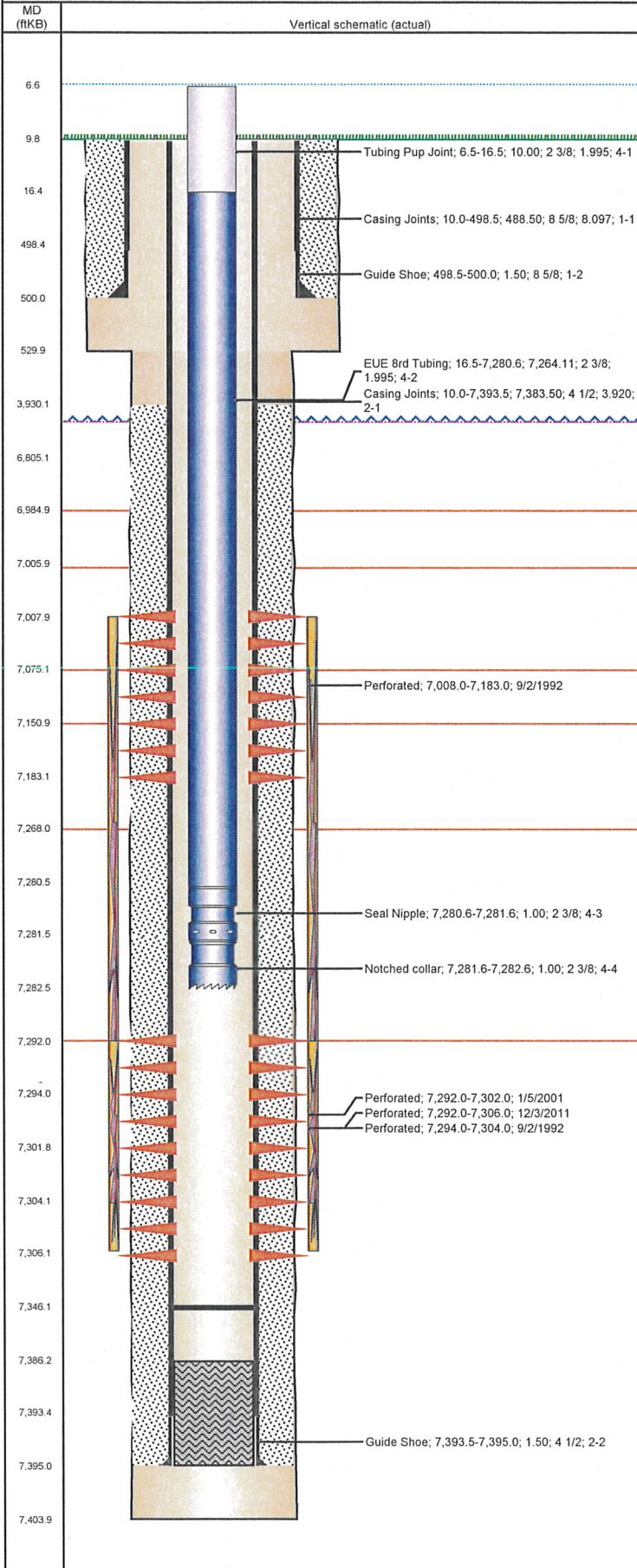


Well Name: LAND 31-13

VERTICAL - ORIGINAL HOLE, 6/21/2012 11:18:33 AM



Well Header

API 05-123-16009	Business Unit WATTENBERG	District 15	Well Config VERTICAL
Original KB Elevation (ft) 4,868.00	KB - GL / MSL (ftKB) 10.00	Spud Date 8/3/1992	P & A Date

Comment
DISCREPANCY IN FILE - TD (7375') VS. CSG SET DEPTH (7404'):

Directions To Well
WCR 39 & 40, S. 0.4, W. 0.1, NW. 0.1, SW. 0.1, W. 0.1, SW. INTO.

Current PBTD (ftKB)
ORIGINAL HOLE - 7,346.2

Surface Location (Congressional)

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section	Township	Twnshp N...	Range	Rng E/W Dir
		SW	NE	31	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
8/14/1992	7,386.0	CASED HOLE LOG	DEPTH LOGGER
1/12/2001	7,330.0	TAG	FILL

Wellbore Sections

Section Des	Size (in)	Act Top (ftKB)	Act Btm (ftKB)
SURFACE	12 1/4	10.0	530.0
PRODUCTION	7 7/8	530.0	7,404.0

Zone Statuses

Zone Name	Status Date	Status	Job
CODELL	9/10/1992	PR	DRILLING/COMPLETION - ORIGINAL, 8/3/1992 00:00
CODELL	1/12/2001	PR	RE-FRAC, 12/30/2000 00:00
CODELL	2/6/2012	PR	TRI-FRAC, 12/2/2011 06:00
NIOBRARA	9/10/1992	PR	DRILLING/COMPLETION - ORIGINAL, 8/3/1992 00:00

Casing Strings

Csg Des	Run Date	OD (in)	Wt/Len (lb/ft)	Grade	Top (ftKB)	Set Depth (ftKB)
Surface	8/4/1992	8 5/8	24.00	J-55	10.0	500.0
Production	8/10/1992	4 1/2	12.60	L-80	10.0	7,395.0

Cement

Des	Top (ftKB)	Btm (ftKB)
SURFACE CASING CEMENT	10.0	500.0
PRODUCTION CASING CEMENT	3,930.0	7,395.0

Tubing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)
Tubing Pup Joint	2 3/8	4.70	J-55	1	10.00
EUE 8rd Tubing	2 3/8	4.70	J-55	235	7,264.11
Seal Nipple	2 3/8			1	1.00
Notched collar	2 3/8			0	1.00

Perforation Data

Zone	Bnch/St g	Entered Shot Total	Top (ftKB)	Btm (ftKB)	Date
NIOBRARA, ORIGINAL HOLE		16	7,008.0	7,183.0	9/2/1992
CODELL, ORIGINAL HOLE		40	7,292.0	7,302.0	1/5/2001
CODELL, ORIGINAL HOLE		56	7,292.0	7,306.0	12/3/2011
CODELL, ORIGINAL HOLE		10	7,294.0	7,304.0	9/2/1992

Stimulations & Treatments

Bnch/Stg	Date	Zone	Primary Job Type
	9/4/1992	CODELL, ORIGINAL HOLE	DRILLING/COMPLETION - ORIGINAL

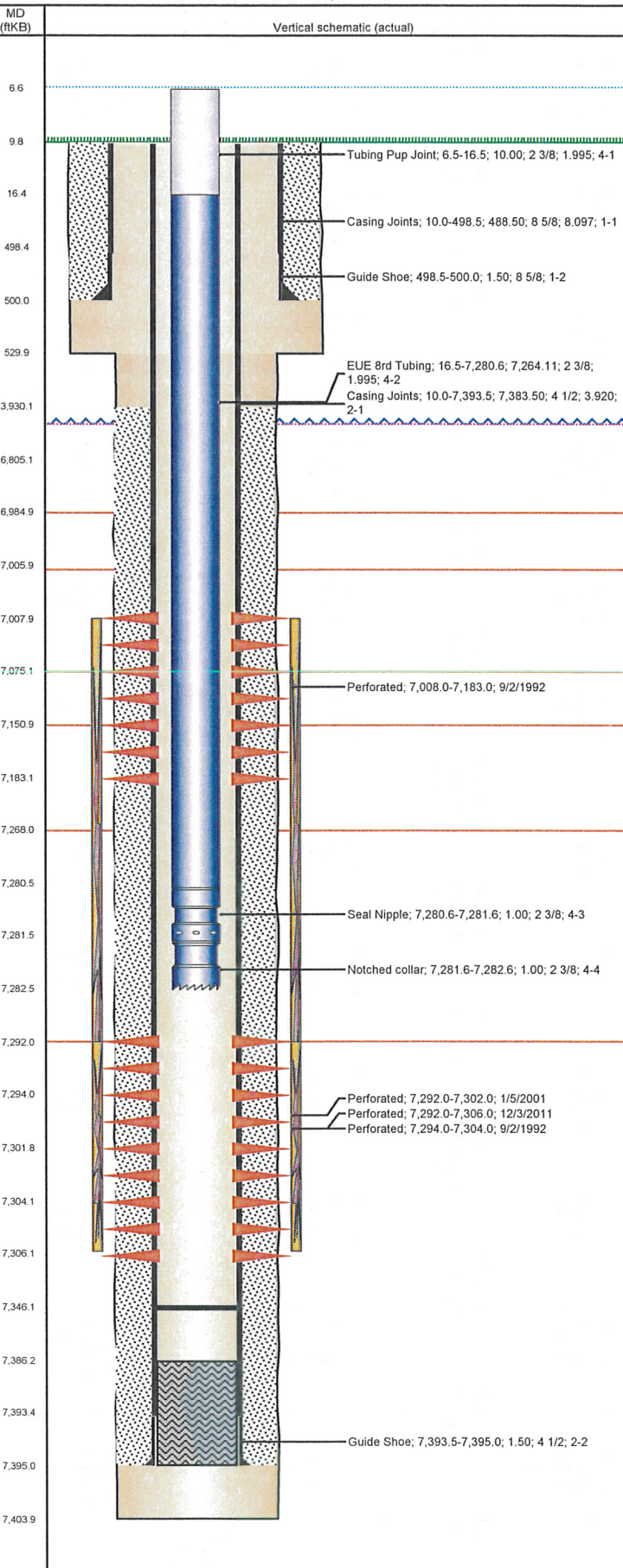
Comment
TERRA FRAC + 60 BO

Total Add Amount	Total Clean Volume...	Vol Slurry Tot (gal)	Vol Gas Tot (MCF)
Proppant 252000 lb; Proppant 100 MESH 12000 lb; Proppant AcFrac Black 5000 lb		94080.01	

Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
3,602.0		12.30	

Well Name: LAND 31-13

VERTICAL - ORIGINAL HOLE, 6/21/2012 11:18:33 AM



Stimulations & Treatments

Bnch/Stg	Date	Zone	Primary Job Type
	9/4/1992	NIOBRARA, ORIGINAL HOLE	DRILLING/COMPLETION - ORIGINAL

Comment
TERRA FRAC + 60 BO

Total Add Amount Proppant 270000 lb; Proppant 100 MESH 10000 lb; Proppant AcFrac Black 8000 lb	Total Clean Volume...	Vol Slurry Tot (gal) 92769.60	Vol Gas Tot (MCF)
Avg Treat Pressure (psi) 5,321.0	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min) 19.70	Max Treat Rate (bbl/min)

Bnch/Stg	Date	Zone	Primary Job Type
	1/10/2001	CODELL, ORIGINAL HOLE	RE-FRAC

Comment

Total Add Amount Proppant 260180 lb	Total Clean Volume...	Vol Slurry Tot (gal) 122556.00	Vol Gas Tot (MCF)
Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)

Bnch/Stg	Date	Zone	Primary Job Type
	12/22/2011	CODELL, ORIGINAL HOLE	TRI-FRAC

Comment
(CODELL TF) ISIP 3932, 5 MIN 2056. LAB VAN GENERATOR FAILED DURING 1.0 PSA STAGE, NO REAL TIME FLUID QAQC FOR REST OF JOB. CONTINUOUSLY BENCH TESTED FLUID. AT THE END OF 2-4 PSA RAMP, BLENDER OPERATOR RAN CRB AT A LOADING 3 PPT, INSTEAD OF 1 PPT FOR ABOUT 10 MIN. REDUCED CRB LOADING TO 0.5 PPT FOR REST OF 2-4 PSA RAMP. INCREASE CRB LOADING TO 1 PPT DURING 4.0 PSA STAGE. AVERAGES: VISC 29.1, TEMP 64.6, PH 10.27, NOLTE +0.09. POST ISIP 3503, POST 5 MIN 3109.

Total Add Amount Proppant Ottawa 247933.396 lb	Total Clean Volume...	Vol Slurry Tot (gal) 139704.18	Vol Gas Tot (MCF)
Avg Treat Pressure (psi) 5,792.0	Max Treat Pressure (psi) 7,145.0	Avg Treat Rate (bbl/min) 18.55	Max Treat Rate (bbl/min) 19.10

Other In Hole

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

Logs

Date	Type	Top (ftKB)	Btm (ftKB)
8/8/1992	COMPENSATED DENSITY	4,200.0	7,442.0
8/8/1992	INDUCTION	500.0	7,442.0
8/14/1992	ACOUSTIC	3,790.0	7,386.0
8/14/1992	SONIC	3,790.0	7,381.0