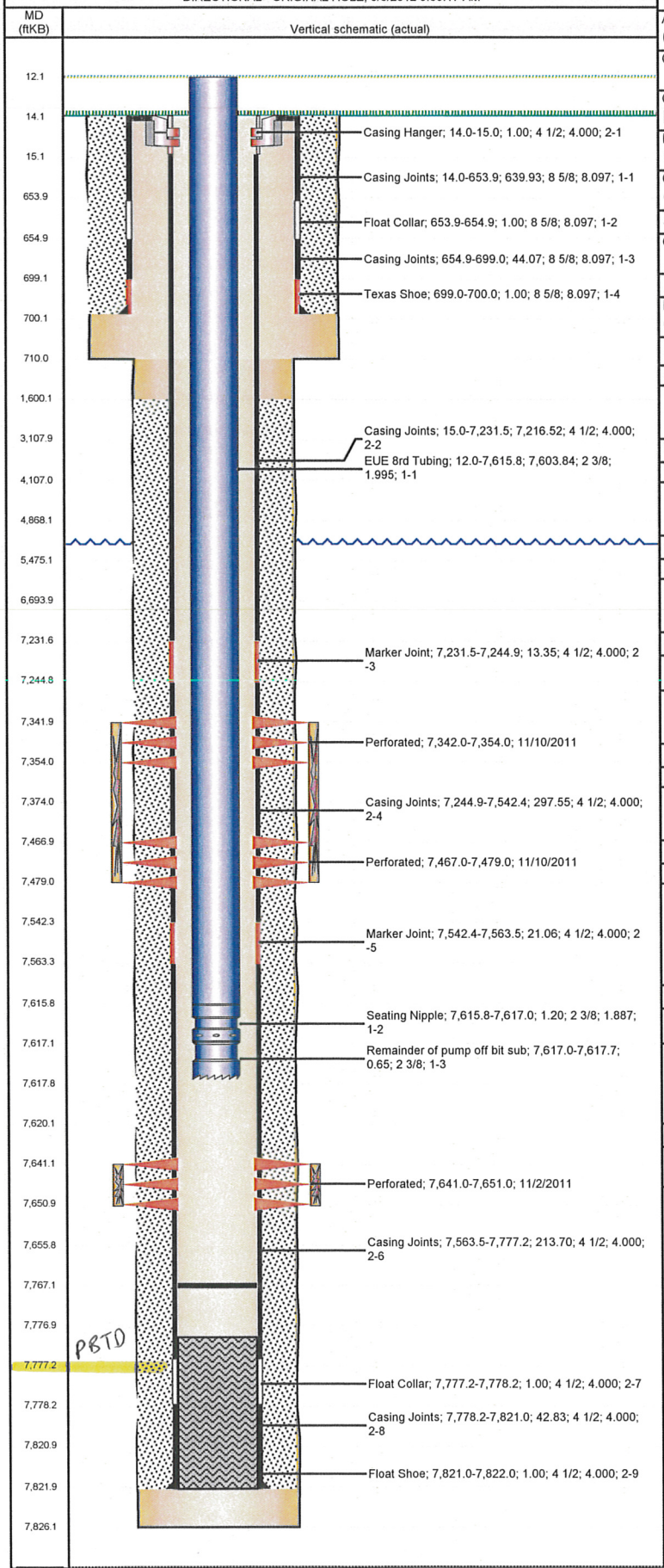
Frac Wellbore Schematic Report

noble energy

Well Name: CALVARY USX EE29-03D

DIRECTIONAL - ORIGINAL HOLE, 9/5/2012 9:59:17 AM



Well Header

API	Business Unit	District	Well Config
05-123-33671	WATTENBERG	15	DIRECTIONAL

Original KB Elevation (ft)	KB - GL / MSL (ftKB)	Spud Date	P & A Date
4,938.00	14.00	9/14/2011	

Comment
NO OPEN HOLE LOGS RUN ON THIS WELL

Directions To Well
From CR 76 on CR 39, North 8/10ths, East into location

Current PBTD (ftKB)
ORIGINAL HOLE - 7,767.0

Surface Location (Congressional)

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section	Township	Twnshp N...	Range	Rng E/W Dir
		SW	NW	29	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
660.0	FNL	2,000.0	FWL

Plug Back Total Depths

Date	Depth (ftKB)	Method	Com
9/18/2011	7,777.0	CASING TALLY	FLOAT COLLAR
10/14/2011	7,758.0	CASED HOLE LOG	DEPTH LOGGER

Wellbore Sections

Section Des	Size (in)	Act Top (ftKB)	Act Btm (ftKB)
SURFACE	12 1/4	14.0	710.0
PRODUCTION	7 7/8	710.0	7,826.0

Zone Statuses

Zone Name	Status Date	Status	Job
CODELL	11/17/2011	PR	DRILLING/COMPLETION - ORIGINAL, 9/14/2011 14:30
NIOBRARA	11/17/2011	PR	DRILLING/COMPLETION - ORIGINAL, 9/14/2011 14:30

Casing Strings

Csg Des	Run Date	OD (in)	Wt/Len (lb/ft)	Grade	Top (ftKB)	Set Depth (ftKB)
Surface	9/15/2011	8 5/8	24.00	J-55	14.0	700.0
Production	9/18/2011	4 1/2	11.60	M-80	14.0	7,822.0

Cement

Des	Top (ftKB)	Btm (ftKB)
Surface Casing Cement	14.0	700.0
Production Casing Cement	1,600.0	7,822.0

Tubing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)
EUE 8rd Tubing	2 3/8	4.70	J-55	249	7,603.84
Seating Nipple	2 3/8	5.40	J-55	1	1.20
Remainder of pump off bit sub	2 3/8		J-55	1	0.65

Perforation Data

Zone	Bnch/Stg	Entered Shot Total	Top (ftKB)	Btm (ftKB)	Date
NIOBRARA, ORIGINAL HOLE	A	24	7,342.0	7,354.0	11/10/2011
NIOBRARA, ORIGINAL HOLE	B	24	7,467.0	7,479.0	11/10/2011
CODELL, ORIGINAL HOLE	01	40	7,641.0	7,651.0	11/2/2011

Stimulations & Treatments

Bnch/Stg	Date	Zone	Primary Job Type
	11/10/2011	CODELL, ORIGINAL HOLE	DRILLING/COMPLETION - ORIGINAL

Comment
(CODELL):ISIP 3239 PSI: 5 MIN 2612 PSI:PERFS OPEN 30 NWB 624 PERF FRICTION 101 PIPE FRICTION 347, FINAL ISDP 3817 PSI, 5 MIN=3687 PSI, TREATMENT AVGS: VISC 22.6 TEMP61.3 PH 10.7.
JOB WENT WELL WITH NO ISSUES TO REPORT.

HALLIBURTON WIRELINE SET PLUG @ 7530', PERFORATED NIO A 7342' - 7354', NIO B 7467' - 7479'.

Total Add Amount	Total Clean Volume...	Vol Slurry Tot (gal)	Vol Gas Tot (MCF)
Ottawa 247311.401 lb	117226.62	128452.80	

Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
4,133.0	4,470.0	21.90	32.00

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