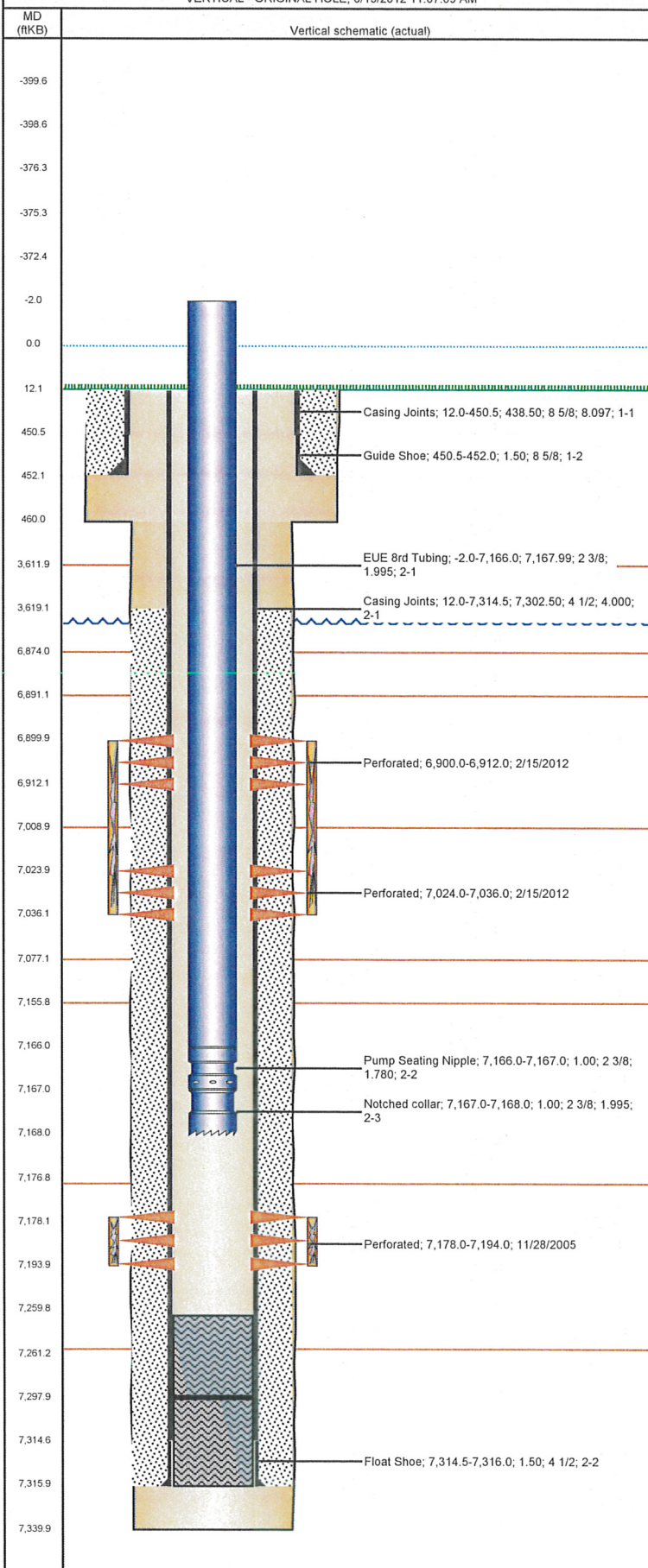


Well Name: LEFFLER I21-02

VERTICAL - ORIGINAL HOLE, 8/15/2012 11:07:09 AM



## Well Header

API 05-123-23328	Business Unit WATTENBERG	District 15	Well Config VERTICAL
Original KB Elevation (ft) 4,769.00	KB - GL / MSL (ftKB) 12.00	Spud Date 11/14/2005	P & A Date
Comment			

## Directions To Well

HWY 392 & CR 29 SOUTH 3/4 MILE EAST 4/10 N 2/10 EAST 3/10 UP DIRT HILL FOLLOW MARKERS THROUGH FIELD N/E EAST 1/10 N 1/10 WEST 2/10 INTO

## Current PBTD (ftKB)

ORIGINAL HOLE - 7,298.0

## Surface Location (Congressional)

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section	Township	Twnshp N...	Range	Rng E/W Dir
		NW	NE	21	6	N	66	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
11/18/2005	7,298.0	CASING TALLY	LATCH DOWN COLLAR
11/28/2005	7,260.0	CASED HOLE LOG	DEPTH LOGGER

## Wellbore Sections

Section Des	Size (in)	Act Top (ftKB)	Act Btm (ftKB)
SURFACE	12 1/4	12.0	460.0
PRODUCTION	7 7/8	460.0	7,340.0

## Zone Statuses

Zone Name	Status Date	Status	Job
CODELL	12/19/2005	PR	DRILLING/COMPLETION - ORIGINAL, 11/14/2005 00:00
CODELL	3/1/2012	PR	RE-FRAC, 2/2/2012 06:00
NIOBRARA	3/1/2012	PR	RE-FRAC, 2/2/2012 06:00

## Casing Strings

Csg Des	Run Date	OD (in)	Wt/Len (lb/ft)	Grade	Top (ftKB)	Set Depth (ftKB)
SURFACE	11/15/2005	8 5/8	24.00	J-55	12.0	452.0
PRODUCTION	11/19/2005	4 1/2	11.60	N-80	12.0	7,316.0

## Cement

Des	Top (ftKB)	Btm (ftKB)
SURFACE CASING CEMENT	12.0	452.0
PRODUCTION CASING CEMENT	3,619.0	7,316.0

## Tubing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)
EUE 8rd Tubing	2 3/8	4.70	J-55	217	7,167.99
Pump Seating Nipple	2 3/8	4.70	J-55	1	1.00
Notched collar	2 3/8	4.70	J-55	0	1.00

## Perforation Data

Zone	Bnch/St g	Entered Shot Total	Top (ftKB)	Btm (ftKB)	Date
NIOBRARA, ORIGINAL HOLE		24	6,900.0	6,912.0	2/15/2012
NIOBRARA, ORIGINAL HOLE		24	7,024.0	7,036.0	2/15/2012
CODELL, ORIGINAL HOLE		64	7,178.0	7,194.0	11/28/2005

## Stimulations & Treatments

Bnch/Stg	Date	Zone	Primary Job Type
	12/16/2005	CODELL, ORIGINAL HOLE	DRILLING/COMPLETION - ORIGINAL

## Comment

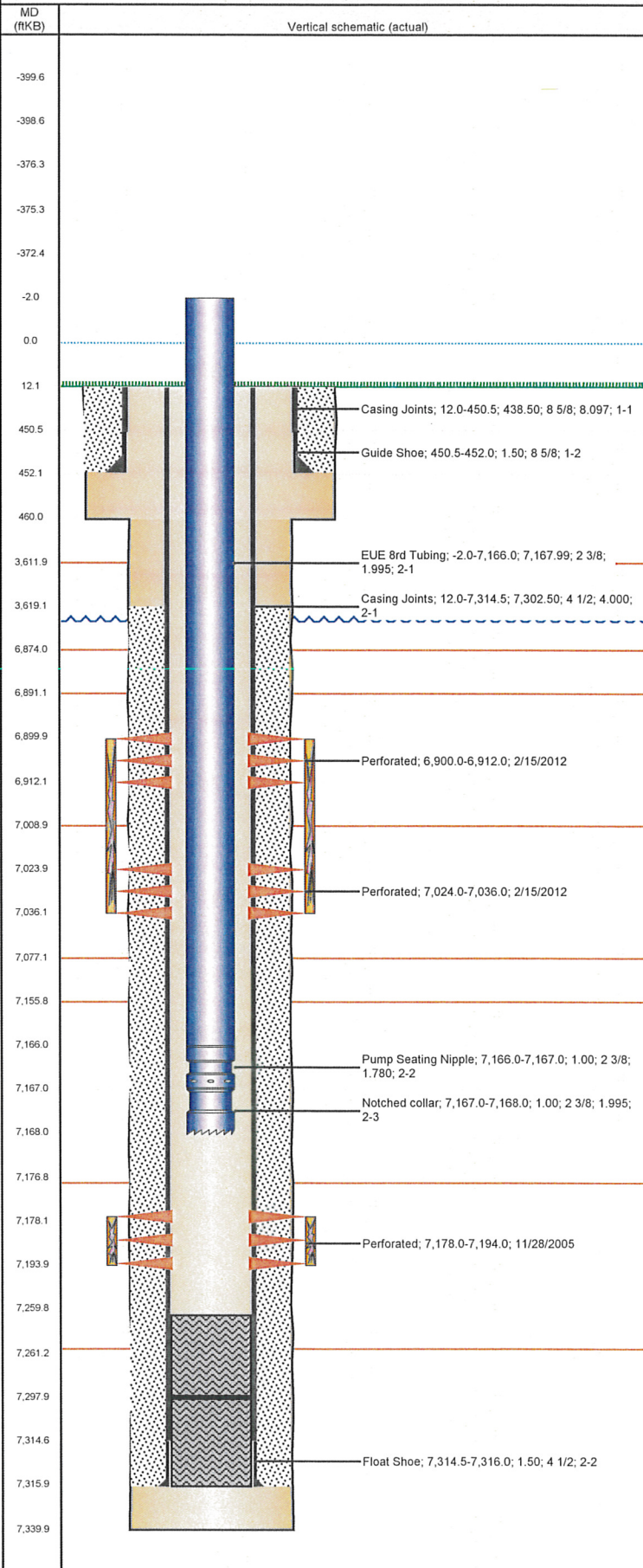
DEAD STRING FRAC

Total Add Amount	Total Clean Volume...	Vol Slurry Tot (gal)	Vol Gas Tot (MCF)
Proppant Ottawa 270220 lb		133552.02	
Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
7,105.0	7,417.0	16.60	17.70



**Well Name: LEFFLER I21-02**

VERTICAL - ORIGINAL HOLE, 8/15/2012 11:07:09 AM



**Stimulations & Treatments**

Bnch/Stg	Date	Zone	Primary Job Type
	2/15/2012	CODELL, ORIGINAL HOLE	RE-FRAC
<p>Comment</p> <p>(CODELL)- BREAK 3069, 5 MIN 1264, ISIP 2332, RATE 8.3, PERFS OPEN 16, PERF FRIC 164 NWB FRIC 670, AVG PRESS 3341, AVG RATE 13.9, AVG VISC 21.4, PH 10.25, AVG TEMP 66.75 DEG.</p> <p>SHUT DOWN DUE TO LOW VISCOSITY 16.84 @ 10:23. STARTED JOB AGAIN @10:38 VISCOSITY RUNNING 23.1</p> <p>JW WIRELINE</p> <p>SET COMPOSITE BRIDGE PLUG @ 7120'</p> <p>REPERFORATE NIO @ 6900-6912', 7024'-7036</p>			
Total Add Amount		Total Clean Volume...	Vol Slurry Tot (gal)
Proppant Ottawa		131922.00	142867.20
241744.004 lb			
Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
3,341.0	3,777.0	13.90	17.10
Bnch/Stg	Date	Zone	Primary Job Type
	2/15/2012	NIOBRARA, ORIGINAL HOLE	RE-FRAC
<p>Comment</p> <p>(NIO)- BREAK 3828 @ 1.1, ISIP 3862, AVG TREAT PRESSURE 2854, MAX 4689, AVG VISC. 18.4 AVG TEMP 65.4 DEG.,</p> <p>DURING 2 LB SAND THE 4 INCH SWEDGE BETWEEN THE STINGER VALVE AND OUR VALVE CRACKED WE WENT TO FRESH WATER AND FLUSHED THE WELL. WE GOT A NEW SWEDGE AND REPLACED IT. COUNTINUED THE FRAC. DOWN TIME30 MINUTES.</p> <p>DURING 3 LB SAND WE HAD TO SHUT DOWN. SWEDGE ON BAKER VALVE IS LEAKING TIGHTENED SWEDGE.</p> <p>DURING 4 LB SAND THE 4 INCH SWEDGE STARTED TO LEAK AGAIN. DROPPED RATE AND FLUSHED WELL WITH 80 BARRALES DUE TO SHORTAGE OF WATER. LEFT 20,000LBS OF SAND IN THE SAND MASTER. STARTED FLOW BACK WITHIN 30 MINUTES OF SHUTDOWN.</p> <p>NOTHING FURTHER TO REPORT.</p>			
Total Add Amount		Total Clean Volume...	Vol Slurry Tot (gal)
Proppant Ottawa		157995.60	168487.20
231628.807 lb			
Avg Treat Pressure (psi)	Max Treat Pressure (psi)	Avg Treat Rate (bbl/min)	Max Treat Rate (bbl/min)
2,854.0	4,689.0	15.50	44.00

**Other In Hole**

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

**Logs**

Date	Type	Top (ftKB)	Btm (ftKB)
11/18/2005	COMPENSATED DENSITY	2,800.0	7,320.0
11/18/2005	INDUCTION	452.0	7,340.0
11/18/2005	PERFORATION	7,090.0	7,200.0
11/28/2005	CBL/CCL/GR	3,400.0	7,257.0