

Foundation Energy Management, LLC
Drilling - Completion - Workover - Facilities
WELLBORE DIAGRAM

Well / Battery	Prospect Name	Total Depth	Estimated Start Date
Bass Box Elder invest #11-34	Paladin	8,314'	11/1/2015
Location	Sec-Twn-Rng	Producing Horiz	County & State
NESE	11-3S-65W	DSND	Adams County, CO

· WELLBORE DIAGRAM

General Info

API #: 05-001-08370

Field Name: Mandella

KB Elevation: 5.433'

GL Elevation: 5.423'

Spud Date: 24 February 1984

Completion Date: 30 March 1984

TD: 8.314"

Formation tops

Denver 671' - 103'

Upper Arapaho 898' - 713'

Lower Arapaho 1,219' - 973'

Fox Hill/Laramie aquifer 1.793' - 1.546'

Nebraska 7,425' (top)

D Sand 8 106' (top)

1 Sand 8 183' (top)

Surface Casing

8-5/8" 24# @ 290' in 12-1/4" Hole

K55 ST&C Casing

300 ax Class G - TOC @ Surface

Perforate at 700'. Circulate 200 sxs to surface

Port Collar

1.512' w/100 sxs 50/50 pozmix, TOC: 785' (Calc)

40 sxs on top to cover Fox Hills and Port Collar. (TOC: 1.448")

CICR set at 1,800'

67 are bumped under CIGR to cover Fox Hills

Reheated at 1.850°

(Confirm TOC covers Niobrara with CBL)

12 srs of cement from 7 475' - 7 372' to cover Niobrara

TOC: 8.043%

CIBP set at 8.060' w/ 2 sxs on top

Stimulation

BREAKDOWN: 50%-3% KCL, 50%-Methanol
FRAC: 70%-CO2 Foam, 20%-KCL, 10%-Methanol
52 000# 20/40 Mesh Sand

Perforations

8.110' - 8.150' (DSND)

Production Casing

5-1/2" 15 5#/17# @ 8 3/4' in 7-7/8" Hole

200 sq cm!

TOC @ 6.987' (Calculated to be confirmed via CBL)

Original PBTD: 8.219'

TD: 8.314"