



## Wellbore Report & Schematic

**Well Name: HORSETAIL 19N-1924M**

API Number 051233988500		WPC ID 1CO0761082		Well Permit Number		Field Name Wildcat		County Weld			State CO						
Well Configuration Type Vertical		Orig KB Elv (ft) 4,766.50		Ground Elevation (ft) 4,748.00		Total Depth (ftKB) 9,370.0		Original Spud Date 8/3/2014			Completion Date						
Asset Group Retail Asset Group		Engineer Contact Charles Ohlson		N/S Dist (ft) 660.0		N/S Ref FSL		East/West Distance (ft) 2,656.0		E/W Ref FEL		Qtr 1 SW	Qtr 2 SE	Section 19	Township 10 N	Range 57	Rng E... W

Vertical - Original Hole, 9/8/2014 2:23:35 PM

MD (ftKB)	Vertical schematic (actual)					
-228.2						
18.4						
20.0						
21.7						
22.3						
23.0						
24.3						
25.6						
67.1						
108.6						
813.2						
1,517.7						
1,518.2						
1,518.7						
1,540.7						
1,562.7						
1,562.8						
1,563.0						
1,563.3						
1,563.6						
1,574.3						
1,585.0						
3,192.4						
4,799.9						
7,042.5						
9,285.1						
9,285.9						
9,286.7						
9,306.8						
9,326.8						
9,327.6						
9,328.4						
9,349.2						
9,370.1						
9,604.5						

2-2; Well Head ; 9 5/8; 8.921; 18.5; 3.19  
3-3; Pup joint/ Hanger; 7; 6.184; 18.5; 4.50

2-3; Pup Joint; 9 5/8; 8.921; 21.7; 4.00

1-1; Casing joints; 16; 18.5; 90.00

2-6; Casing Joints; 9 5/8; 8.921; 25.7; 1,491.89

2-7; Float Collar; 9 5/8; 8.921; 1,517.6; 1.00

2-8; Casing Joints; 9 5/8; 8.921; 1,518.6; 44.12

2-9; Guide Shoe; 9 5/8; 8.921; 1,562.7; 1.00

3-4; Casing Joints; 7; 6.184; 23.0; 9,262.14

3-5; Float Collar; 7; 9,285.1; 1.50

3-6; Casing Joints; 7; 6.184; 9,286.6; 40.26

3-7; Shoe; 7; 9,326.9; 1.50

Wellbore Name	Start Date	Size (in)	Act Top (ftKB)	Act Btm (ftKB)	End Date
Original Hole	7/25/2014	24	18.5	108.5	7/26/2014
Original Hole	8/3/2014	13 1/2	108.5	1,585.0	8/3/2014
Original Hole	8/5/2014	8 3/4	1,585.0	9,370.0	8/12/2014

Conductor Pipe, 108.5ftKB

OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
16	42.09	J-55	18.5	108.5	90.00	Casing joints

Surface Csg, 1,563.7ftKB

OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
9 5/8	36.00	J-55	18.5	18.5	0.00	Landing Joint
9 5/8	36.00	J-55	18.5	21.7	3.19	Well Head
9 5/8	36.00	J-55	21.7	25.7	4.00	Pup Joint
9 5/8	36.00	J-55	25.7	25.7	0.00	Casing Joints
9 5/8	36.00	J-55	25.7	25.7	0.00	Casing Joints
9 5/8	36.00	J-55	25.7	1,517.6	1,491.89	Casing Joints
9 5/8	36.00	J-55	1,517.6	1,518.6	1.00	Float Collar
9 5/8	36.00	J-55	1,518.6	1,562.7	44.12	Casing Joints
9 5/8	36.00	J-55	1,562.7	1,563.7	1.00	Guide Shoe

Intermediate Csg, 9,328.4ftKB

OD (in)	Wt (lb/ft)	Grade	Top (ftKB)	Btm (ftKB)	Len (ft)	Item Des
7	29.00	L-80	18.5	18.5	0.00	Pup joint/ Hanger
7	29.00	L-80	18.5	18.5	0.00	Landing joint
7	29.00	L-80	18.5	23.0	4.50	Pup joint/ Hanger
7	29.00	L-80	23.0	9,285.1	9,262.14	Casing Joints
7	29.00	L-80	9,285.1	9,286.6	1.50	Float Collar
7	29.00	L-80	9,286.6	9,326.9	40.26	Casing Joints
7	29.00	L-80	9,326.9	9,328.4	1.50	Shoe

Cement Stages

Description	Pump Start...	Drill Out Date	Top (ftKB)	Btm (ftKB)	Top Meas Meth
Conductor Cement	7/25/2014		18.5	108.5	Returns to Surface
Description	Pump Start...	Drill Out Date	Top (ftKB)	Btm (ftKB)	Top Meas Meth
Surface Casing Cement	8/4/2014		18.5	1,563.7	Returns to Surface
Description	Pump Start...	Drill Out Date	Top (ftKB)	Btm (ftKB)	Top Meas Meth
Intermediate Casing Cement	8/21/2014		1,563.0	4,800.0	
Description	Pump Start...	Drill Out Date	Top (ftKB)	Btm (ftKB)	Top Meas Meth
Intermediate Casing Cement	8/21/2014		4,800.0	9,370.0	

Perforations

Type of Hole	Date	Top (ftKB)	Btm (ftKB)	Zone

Stimulations & Treatments

Date	Comment	Min Top...	Max Bt...	Frac Le...

Stim/Treat Fluids

<fluidname>, <fluidtyp>

Proppant Frm...	Total Clean V...	Avg Treat R...	Max Treat R...	Avg Treat Pre...	P Max (psi)	Frac Grad...

Stim/Treat Stages

<Stage Type?> <Stage Number?>

Stg #	Start Date	Top (ftKB)	Btm (ftKB)	Vol Clea...	Vol Slur...	Comment
Stg #	Add	Type	Amount	Units	Sand Size	

Tubing Strings

Set Depth (ft...	Comment	Run Date			
Item Des	OD (in)	ID (in)	Len (ft)	Top (ftKB)	Btm (ftKB)

Rod Strings

Rod Description	Run Date			
Item Des	OD (in)	Len (ft)	Top (ftKB)	Btm (ftKB)

Other In Hole

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

Bottom Hole Cores

Date	Core #	Top Depth (ftKB)	Btm (ftKB)	Recovered (ft)	% Recov (%)

age 1/1

Report Printed: 9/8/2014