

Piceance Energy, LLC
Piceance Federal 28-05M
Slot B-6
Patterson 306 (22-ft KB)

API # : 05-077-10242-00
SW/4 NW/4 S28/T9S/R93W/6th PM
Mesa County, CO
Date of diagram : 8/23/2015

Vertical datum

----- 7578' RKB Elevation

----- 7556' Pad Elevation

16" OD Conductor 82 -ft MD RKB
(in 26" hole, grouted to ground level)

8-5/8" Shoe 1563 -ft MD RKB
11" Hole 1573 -ft MD RKB

<u>Formation</u>	<u>Prognosis</u>
'G' Sand	2948 -ft MD RKB
Williams Fork	4916 -ft MD RKB
Top of Gas	6144 -ft MD RKB
Cameo	7244 -ft MD RKB
Base Cameo Coal	7902 -ft MD RKB
Rollins	7944 -ft MD RKB

Top of 20'
Marker Joint 6366 -ft MD RKB

Top of 20'
Marker Joint 7170 -ft MD RKB

4-1/2" Float Collar (PBTD) 8025 -ft MD RKB
4-1/2" Float Shoe 8115 -ft MD RKB
7-7/8" Hole TD 8125 -ft MD RKB

Cementing details

8-5/8" 24# J55 STC Surface Csg			
Density (ppg)	<u>Lead</u>	<u>Tail</u>	
Volume (sx)	12.3	12.8	
Yield (cf/sx)	192	120	
Top (ft RKB)	2.45	2.17	
Bottom (ft RKB)	Surface	1000	
Returns (full or partial)	1000	1563	
	Full	Full	

4-1/2" 11.6# I80 LTC Production Csg			
Density (ppg)	<u>Lead</u>	<u>Tail</u>	<u>Displacement</u>
Volume (sx)	12.8	13.3	8.3 ppg
Yield (cf/sx)	950	413	124 bbls
Est Top (ft RKB)	1.75	1.89	N/A
Est Bottom (ft RKB)	1022	5944	N/A
Returns (full or partial)	5944	8115	N/A
	Full	Full	Full

Other Remarks : Surface = 23 bbls of cmt to surface full returns
= 40 bbls spacer and 20 bbls cement to surface Production