

Piceance Energy, LLC
Piceance Federal 28-04M
Slot A-6
Patterson 306 (22-ft KB)

API # : 05-077-10237-00
SW/4 NW/4 S28/T9S/R93W/6th PM
Mesa County, CO
Date of diagram : 8/18/2015

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 1572 -ft MD RKB
11" Hole 1582 -ft MD RKB

Formation	Prognosis
'G' Sand	2967 -ft MD RKB
Williams Fork	4936 -ft MD RKB
Top of Gas	6164 -ft MD RKB
Cameo	7264 -ft MD RKB
Base Cameo Coal	7922 -ft MD RKB
Rollins	7964 -ft MD RKB

Top of 20'
Marker Joint 6408 -ft MD RKB

Top of 20'
Marker Joint 7217 -ft MD RKB

4-1/2" Float Collar (PBSD)
4-1/2" Float Shoe 8036 -ft MD RKB
7-7/8" Hole TD 8106 -ft MD RKB
8116 -ft MD RKB

Cementing details

8-5/8" 24# J55 STC Surface Csg	Lead	Tail
Density (ppg)	12.3	12.8
Volume (sx)	192	120
Yield (cf/sx)	2.45	2.17
Top (ft RKB)	Surface	1000
Bottom (ft RKB)	1000	1572
Returns (full or partial)	Full	Full

4-1/2" 11.6# I80 LTC Production Csg	Lead	Tail
Density (ppg)	12.8	13.3
Volume (sx)	950	413
Yield (cf/sx)	1.75	1.89
Est Top (ft RKB)	1022	5964
Est Bottom (ft RKB)	5964	8106
Returns (full or partial)	Full	Full

Displacement
8.3 ppg
124 bbls
N/A
N/A
N/A
Full

Other Remarks : Surface = 25 bbls of cmt to surface full returns Production
= 40 bbls spacer and 10 bbls cement to surface