

Piceance Energy, LLC
Piceance Federal 28-19E
Slot A-9
Patterson 306 (22-ft KB)

API #: 05-077-10254-00
NE/4 SW/4 S28/T9S/R93W/6th PM
Mesa County, CO
Date of diagram : 10/23/2015

Vertical datum

----- 7701' RKB Elevation

----- 7679' Pad Elevation

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

8-5/8" Shoe 1613 -ft MD RKB
11" Hole 1623 -ft MD RKB

Formation	Prognosis
'G' Sand	3169 -ft MD RKB
Williams Fork	5278 -ft MD RKB
Top of Gas	6518 -ft MD RKB
Cameo	7618 -ft MD RKB
Base Cameo Coal	8276 -ft MD RKB
Rollins	8318 -ft MD RKB

Top of 20'
Marker Joint 6477 -ft MD RKB

Top of 20'
Marker Joint 7593 -ft MD RKB

4-1/2" Float Collar (PBSD)
4-1/2" Float Shoe 8414 -ft MD RKB
7-7/8" Hole TD 8501 -ft MD RKB
8511 -ft MD RKB

Cementing details

8-5/8" 24# J55 STC Surface Csg

Lead	Tail
Density (ppg)	12.3
Volume (sx)	192
Yield (cf/sx)	2.45
Top (ft RKB)	Surface
Bottom (ft RKB)	1000
Returns (full or partial)	Full

4-1/2" 11.6# I80 LTC Production Csg

Lead	Tail	Displacement
Density (ppg)	12.7	8.3 ppg
Volume (sx)	1387	131 bbls
Yield (cf/sx)	1.64	N/A
Est Top (ft RKB)	1022	N/A
Est Bottom (ft RKB)	6318	N/A
Returns (full or partial)	Full	Full

Other Remarks : Surface- 30 bbls cement to surface.

Production- 40 Bbls of Spacer 130 Bbls Cement to surface