

Piceance Energy, LLC  
Piceance Federal 28-09E  
Slot B-3  
Patterson 306 (22-ft KB)

API #: 05-077-10255-00  
NE/4 SW/4 S28/T9S/R93W/6th PM  
Mesa County, CO  
Date of diagram: 12/13/2015

Vertical datum ----- 7701' RKB Elevation



8-5/8" Shoe 1593 -ft MD RKB  
11" Hole 1603 -ft MD RKB

Formation	Prognosis
'G' Sand	3271 -ft MD RKB
Williams Fork	5259 -ft MD RKB
Top of Gas	6509 -ft MD RKB
Cameo	7609 -ft MD RKB
Base Cameo Coal	8267 -ft MD RKB
Rollins	8309 -ft MD RKB

Top of 20'  
Marker Joint 6735 -ft MD RKB

Top of 20'  
Marker Joint 7594 -ft MD RKB

4-1/2" Float Collar (PBTD) 8419 -ft MD RKB  
4-1/2" Float Shoe 8503 -ft MD RKB  
7-7/8" Hole TD 8513 -ft MD RKB

**Cementing details**

8-5/8" 24# J55 STC Surface Csg		Lead	Tail
Density (ppg)	12.3	12.3	12.8
Volume (sx)	192	192	122
Yield (cf/sx)	2.45	2.45	2.17
Top (ft RKB)	Surface	Surface	1000
Bottom (ft RKB)	1000	1000	1593
Returns (full or partial)	Full	Full	Full

4-1/2" 11.6# 180 LTC Production Csg		Lead	Tail	Displacement
Density (ppg)	12.7	12.7	13.5	8.3 ppg
Volume (sx)	1090	1090	446	130 bbls
Yield (cf/sx)	1.64	1.64	1.75	N/A
Est Top (ft RKB)	1022	1022	6309	N/A
Est Bottom (ft RKB)	6309	6309	8503	N/A
Returns (full or partial)	Full	Full	Full	Full

Other Remarks : Surface= 35 bbls cmt to surface  
Production = 20 bbls cement to surface