

Piceance Energy, LLC
Gunderson 29-13E
Slot B-9
Patterson 306 (22-ft KB)

API #: 05-077-10231-00
SE/4 NE/4 S29/T9S/R93W/6th PM
Mesa County, CO
Date of diagram : 4/21/2015

Vertical datum

----- 7553' RKB Elevation

----- 7531' Pad Elevation

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

8-5/8" Shoe 1555 -ft MD RKB
11" Hole 1565 -ft MD RKB

Formation	Prognosis
'G' Sand	2741 -ft MD RKB
Williams Fork	4616 -ft MD RKB
Top of Gas	5828 -ft MD RKB
Cameo	6928 -ft MD RKB
Base Cameo Coal	7586 -ft MD RKB
Rollins	7628 -ft MD RKB

Top of 20'
Marker Joint 5935 -ft MD RKB

Top of 20'
Marker Joint 6829 -ft MD RKB

4-1/2" Float Collar (PBTD) 7690 -ft MD RKB
4-1/2" Float Shoe 7780 -ft MD RKB
7-7/8" Hole TD 7790 -ft MD RKB

Cementing details

8-5/8" 24# J55 STC Surface Csq			
Lead	Tail		
12.3	12.8		
Volume (sx)	114		
Yield (cf/sx)	2.17		
Top (ft RKB)	1000		
Bottom (ft RKB)	1555		
Returns (full or partial)	Full		
4-1/2" 11.6# 180 LTC Production Csq			
Lead	Tail		
12.8	13.3		
Volume (sx)	413		
Yield (cf/sx)	1.89		
Est Top (ft RKB)	5628		
Est Bottom (ft RKB)	7780		
Returns (full or partial)	Full		