

Piceance Energy, LLC
Gunderson 29-09E
Slot A-10
Patterson 306 (22-ft KB)

API #: 05-077-09762-00
SE/4 NE/4 S29/T9S/R93W/6th PM
Mesa County, CO
Date of diagram : 4/13/2015

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 1549 -ft MD RKB
11" Hole 1559 -ft MD RKB

Formation	Prognosis
'G' Sand	2756 -ft MD RKB
Williams Fork	4612 -ft MD RKB
Top of Gas	5815 -ft MD RKB
Cameo	6915 -ft MD RKB
Base Cameo Coal	7573 -ft MD RKB
Rollins	7615 -ft MD RKB

Top of 20'
Marker Joint 5990 -ft MD RKB

Top of 20'
Marker Joint 6896 -ft MD RKB

4-1/2" Float Collar (PBTD) 7755 -ft MD RKB
4-1/2" Float Shoe 7845 -ft MD RKB
7-7/8" Hole TD 7856 -ft MD RKB

Cementing details

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

	Lead	Tail
Density (ppg)	12.3	12.8
Volume (sx)	192	114
Yield (cf/sx)	2.45	2.17
Top (ft RKB)	Surface	1000
Bottom (ft RKB)	1000	1549
Returns (full or partial)	Full	Full

4-1/2" 11.6# 180 LTC Production Csg

	Lead	Tail
Density (ppg)	12.8	13.3
Volume (sx)	890	413
Yield (cf/sx)	1.75	1.89
Est Top (ft RKB)	1022	5615
Est Bottom (ft RKB)	5593	7845
Returns (full or partial)	Full	Full