



# Exploration and Production

## Well P&A Procedure

COGCC Doc # 2597256

Wellname **DOE 1-W-28**  
 Location **SWNE 28-6S-95W**  
 Field **Parachute**  
 County **Garfield, CO**  
 API **05 045 06586**  
 ELEV **5557'**  
 Footages **1915' FNL, 1755' FEL**

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Revision Date:  
 12/7/2016

Casing:	13-3/8" 24# - 29'	
	8-5/8" 24# - 315'	
	4-1/2" 10.5# - 3,851'	0.0159 bbls/LnFt
	2-3/8" 4.60# - 2,201'	0.0039 bbls/LnFt
	TBG in CSG volume	0.0105 bbls/LnFt
Current Top of Cement:	1,585' CBL (3-24-2010)	
Top of Wasatch:	2,088'	

**Purpose: Plug to abandon well**

Zone:	<b>All Perforations</b>		
Existing Perforations:	<u>Depth</u>	<u>PHZ</u>	<u>Holes</u>
	Shallow		
	Deep		
	2,088	2,117	1 SPF 30
	2,118	2,129	1 SPF 12
	2,130	2,140	1 SPF 11
	2,143	2,148	1 SPF 6
		59	total
<b>Proposed Procedure</b>			
1	Notify COGCC & BLM Representative of start of activity		
2	TIH w/2-3/8" TBG working tight spots down through perforations to 2,120'		
3	Open backside to tank and establish circulation		
4	Pump water spacer ahead of 8.27 bbls (TBG capacity @ 2,120')		
5	Pump 11.68 sk 15.8 ppg cement down TBG w/backside open and displace to balance plug		
6	POOH to 500'		
7	Secure well for night and wait on cement		
8	TIH and tag cement plug, if tag below upper perforation, repeat steps and pump extra job until coverage is at least 50' over top perf @ 2,088'		
9	Shut well in and ensure no pressure builds on TBG or CSG		
10	RU WL and TIH to 365' (50' deeper than surface CSG shoe)		
11	Shoot 1' @ 4 SPF PHZ		
12	POOH and RD WL		
13	TIH w/2-3/8" TBG working tight spots down to 325'		
14	Open backside to tank and establish circulation		
15	Pump water spacer ahead of 1.42 bbls (TBG capacity @ 365')		
16	Pump 42.63 sk 15.8 ppg cement surface plug down TBG w/backside open and displace as needed filling hole full of cement		
17	POOH & secure well		
19	Weld in place dryhole marker		
20	Backfill cellar		

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**Spud 8/31/1989**

Casing	<b>29'</b>	<b>13-3/8" 24#</b>
Cement	Redimix to surface	
Casing	<b>315'</b>	<b>8-5/8" 24#</b>
Cement	100 sx	50/50 Poz
	50 sx	Class G
Casing	<b>3851'</b>	<b>4-1/2" 10.5#</b>
Cement	610 sx	50/50 Poz

Tubing **2,201**      2-3/8"

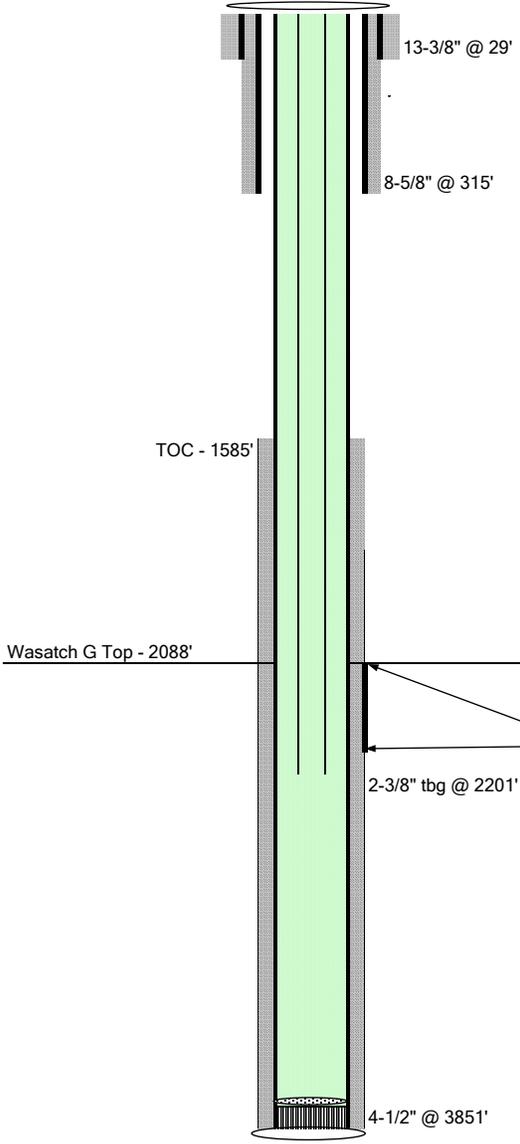
**Formation Tops**

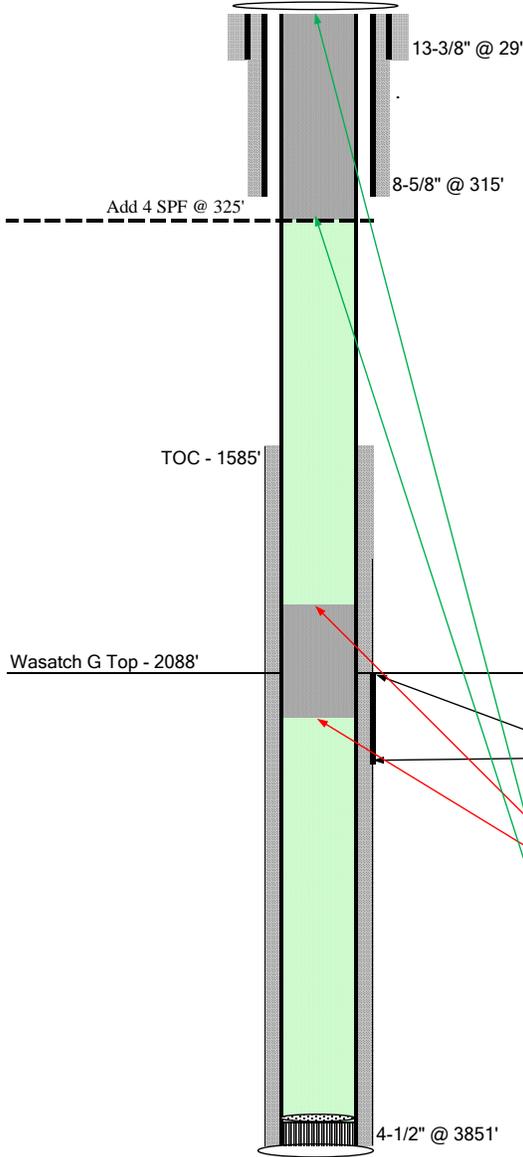
Wasatch 2088'

**TOC - Bond Log** 1585'

**Completed Intervals**

	<u>Depth</u>	<u># Holes</u>
<b>Wasatch G</b>	2088' - 2148'	59





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Cement	Redimix to surface		
Casing	315'	8-5/8" 24#	
Cement	100 sx	50/50 Poz	
	50 sx	Class G	
Casing	3851'	4-1/2" 10.5#	0.08955 ft <sup>3</sup> /Lnft
Cement	610 sx	50/50 Poz	
Tubing	0'	2-3/8"	

**Formation Tops**

Wasatch 2088'

**TOC - Bond Log** 1585'

**Completed Intervals**

	Depth	# Holes
<b>Wasatch G</b>	2088' - 2148'	59

**P&A Calculations**

	Shallow	Deep
<b>Primary cement, balanced plug from</b>	2,020'	2,120'
8.955 ft <sup>3</sup>	between desired plug depths	
1.15 ft <sup>3</sup> /sk yield	15.8 lb/gal cmt	
<b>7.79 sx for 100' plug in 4.5" 10.5# CSG</b>		
150% excess		
<b>11.68 sx Total</b>		
<b>Secondary cement, plug from</b>	0'	365'
32.68575 ft <sup>3</sup>	between desired plug depths	
1.15 ft <sup>3</sup> /sk yield	15.8 lb/gal cmt	
<b>28.42 sx for 325' plug in 4.5" 10.5# CSG</b>		
150% excess		
<b>42.63 sx Total</b>		