

GL Elevation: 7,249'
KB Elevation: 7,261'"I" SWNESE 15-T25N-R2W
Rio Arriba County, NM
30-039-23949

TD 12-1/4" Hole: 374'

374' 9 jts, 9-5/8", 36#, K-55, STC
M&P 250 sx "B" + 3% CaCl₂. Bumped plug. Circulated 10 bbls to pit (12/07/85).

1,210' CBL TOC

Mesaverde Short String Detail as of 04/29/02				
	11.00'		KB Elevation	
11.00'	5,373.44'	167 jts	(4) 2-3/8", 4.7#, N-80 Tubing	
5,384.44'	1.10'		(3) 2-3/8" Seat Nipple	
5,385.54'	31.70'	1 jts	(2) 2-3/8", 4.7#, N-80 Tubing	
5,417.24'	0.40'		(1) 2-3/8" Notched Collar	
5,417.64'	5,417.64'	168 jts	END OF TUBING	

3,625' CBL TOC
3,625' DVT

Dakota Long String Detail as of 04/29/02				
	9.50'		KB Elevation	
9.50'	5,657.09'	175 jts	(6) 2-3/8", 4.7#, N-80 Tubing	
5,666.59'	0.92'		(5) Baker "R-3" Packer	
5,676.51'	2,102.86'	66 jts	(4) 2-3/8", 4.7#, N-80 Tubing	
7,779.37'	1.10'		(3) 2-3/8" Seat Nipple	
7,780.47'	32.36'	1 jts	(2) 2-3/8", 4.7#, N-80 Tubing	
7,812.83'	0.40'		(1) 2-3/8" Notched Collar	
7,813.23'	7,813.23'	242 jts	END OF TUBING	

4,998' DVT

Mv Upper Menefee 0.32" Perforations				
5,245'	5,293'	16'	1 spf	16 shots
5,301'	5,387'	16'	1 spf	16 shots

Mv Point Lookout 37" Net; 0.32" Perforations				
5,497'	5,499'	3'	4-spf	3-shots
5,504'	5,568'	22'	4-spf	22-shots
		25'		25-shots

Squeezed 50 sx "B" + 2% CaCl₂ (05/19/00).Shot squeeze hole at 5,485'. Squeezed 50 sx (10.1 bbls) "B" + 2% CaCl₂ (05/17/00).

3,225 bbls BD: 2,000 psi Pavg: 2,890 psi Ravg: 63 bpm ISIP: 1,560 psi FG: 0.73 psi/ft 01/18/01 Mv Upper Menefee slickwater frac.

Squeezed Point Lookout perforations with 200 sx "H" + 2% CaCl₂ and tested to 1,000 psi (01/11/01)

2,701 bbls BD: 2,750 psi Pavg: 1,100 psi Ravg: 50 bpm ISIP: 600 psi FG: 0.55 psi/ft 06/02/00 Mv Point Lookout slickwater frac.

Original Mancos, Gallup 0.5" Perforations

6,584'	6,595'	2'	2-spf	4-shots
6,620'	6,695'	5'	2-spf	10-shots
6,740'	6,793'	9'	2-spf	18-shots
6,801'	6,862'	8'	2-spf	16-shots
6,905'	7,006'	9'	2-spf	18-shots
		33'		66-shots

Squeezed Gallup, Mancos perforations with 250 sx (53 bbls) "B": 30 bbls into formation/23 bbls below EZSV. Tested to 1,000 psi (05/15/00)

110,000# 20/40 2,500 bbls BD: 2,800 psi Pavg: 2,400 psi Ravg: 55 bpm ISIP: 900 psi FG: 0.57 psi/ft 02/07/86 Original Greenhorn/Graneros Dowell slickwater frac.

Original Greenhorn, Graneros and Dakota 0.5" Perforations

7,577'	7,595'	4'	2 spf	8 shots
7,603'	7,646'	9'	2 spf	18 shots
7,715'	7,799'	14'	2 spf	28 shots
7,821'	7,880'	11'	2 spf	22 shots
		38'		76 shots

30,500# 20/40 1,214 bbls BD: 3,000 psi Pavg: 3,200 psi Ravg: 35 bpm ISIP: 2,550 psi FG: 0.77 psi/ft 01/22/86 Original Greenhorn/Graneros Dowell slickwater frac.

100,020# 20/40 580 bbls BD: 1,228 psi Pavg: 6,000 psi Ravg: 27 bpm ISIP: 3,150 psi FG: 0.84 psi/ft 04/28/02 Greenhorn/Graneros/Dakota American Energy 80Q N2 foam re-frac

105,000# 20/40 1,429 bbls BD: 2,000 psi Pavg: 2,800 psi Ravg: 50 bpm ISIP: 1,400 psi FG: 0.62 psi/ft 01/14/86 Original Dakota Dowell slickwater frac.

7,956' 36 jts, 7", 26#, N-80 (FC: 7,917'; Top 26#: 6,850'); 158 jts, 7", 23#, N-80 and 1 jt, 7", 26#, N-80 at surface (12/24/85).

Stage 1: 800 sx 50/50 poz + 2% gel + 10% salt; Tailed 50 sx "B" Neat

Stage 2: 440 sx 65/35 poz + 3% gel + 10% Calseal; Tailed 50 sx "B" Neat. DVT: 4,998'.

Stage 3: 160 sx 65/35 poz + 3% gel + 10% Calseal; Tailed 50 sx "B" Neat. DVT: 3,625'.

PBSD: 7,908'

TD 8-3/4" Hole: 7,982'