

# MorningStar Operating, LLC

**Tibbar Federal #4**  
**San Juan County, NM**  
 Section 25, T26N R09W

TD – 6,481 ft MD

12-1/4" hole to 311' KB  
 Surface Csg: 9 jts (290') 8-5/8" 24# J55 STC  
 Setting Depth: 303 ft

**Cement**  
 175sx Reg cement  
 Cement circulated to surface

7-7/8" hole to 6481'  
 Prod Csg: 202 jts 4-1/2" 10.5# J55  
 Setting Depth: 6,481'  
 FC @ 6,479'  
 DV tools @ 2088' & 4598'

**Cement**  
 1<sup>st</sup> stage lead: 175sx 50/50 Pozmix  
 1<sup>st</sup> stage tail: 125sx reg cement  
 2<sup>nd</sup> stage: 250sx Class C  
 3<sup>rd</sup> stage: 500sx Class C  
 Circulated 50 bbls good cmt to surface

**Perfs: (Dakota):**  
 6272'-90' at 2 spf    6296'-98' at 4 spf  
 6300'-08' at 2 spf    6318'-20' at 4 spf  
 6364'-72' at 2 spf    6382'-88' at 2 spf  
 6394'-98' at 4 spf    6404'-08' at 4 spf

**SWFrac 3/27/1967:**  
 112,000 gal treated wtr  
 90,000 lbs 10/20 sand  
 AIR=61 bpm, but ball inj failed to work...  
 decide to refrac  
**Refrac 03/28/1967:**  
 50,000 gal treated wtr  
 w/ 83 nylon core balls in 4 stages  
 40,000 lbs 10/20 sand  
 AIR=43 bpm

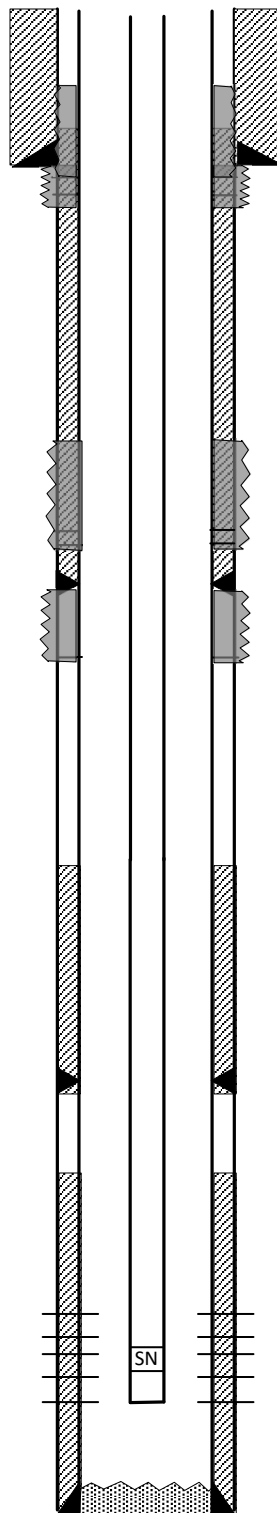
## **Casing squeeze (09/1993):**

Set RBP @ 2000'. Ran CBL and audio log.  
 Perf 2>0.34" holes at 1926'.  
 Pump 12.6bbls of 15.6ppg cement, ~ 3.2bbls cmt  
 squeezed into formation.  
 Drillout to 1745'.  
 Perf 2>0.34" holes at 1730'.  
 Pump/hesitate 15sx balanced plug.  
 Perf 2>0.34" holes at 878'.  
 Spot 25sx balanced plug, pressure up.

Drillout test to 883', 500psig passed.  
 Drillout test to 1800', 500psig passed.  
 Ran CBL/audio log, still shows gas fluid movement  
 behind csg...

Pull RBP @ 2000'. RIH ModG RBP set @ 2,996'.  
 Perf 3 sq holes at 2760'. Pump 200sx Class G  
 pressured up and WOC.  
 Perf 2>0.34" holes at 312'. Pump 200sx Class G, no  
 blow out of bradenhead, SI with sq.pressure.

Drillout test to 314', 500psig passed.  
 Drillout test to 2,763', 500psig passed. POOH RBP.  
 Cleanout to PBTD, RWTP.



## **Prod Tbg (09/28/1993):**

2-3/8" 4.7# J-55 tbg:  
 EOT=6,374' KB;

**Dakota Perfs:**  
 6,272' – 6,408' (overall)

Prepared by: B.Savage  
 Date: 02/16/2022

KB = 13 ft  
 GL = 6,254 ft  
 API# 30-045-20039

Spud Date: 03/13/1967  
 Ready to produce: 03/29/1967  
 Casing Squeeze: 09/18/1993

## **Formation Tops:**

Ojo Alamo: 1,112'  
 Kirtland: 1,208'  
 Fruitland: 1,744'  
 Pictured Cliffs: 1,827'  
 Cliffhouse: 3,460'  
 Point Lookout: 4,190'  
 Gallup: 5,340'  
 Graneros: 6,242'  
 Dakota: 6,360'

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**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS  
  
Action 82491

CONDITIONS

Operator: MorningStar Operating LLC 400 W 7th St Fort Worth, TX 76102	OGRID: 330132
	Action Number: 82491
	Action Type: [UF-WBS] Wellbore Schematic (WELLBORE SCHEMATICS)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	None	4/29/2022