

IX

**Proposed
Stimulation
Program**

VGSAU 233 WIW

API # 30-025-36355

2630' FSL & 660' FWL
SEC 1, UL "L", TWN 18-S, Range 34-E, County Lea
ELEVATION: 3997' GL, 4003' KB
Completed: 10/20/2003

Surface Casing:

12 1/4" hole
34 JTS 8 5/8" csg - 24#, J55
set @ 1535'. Cemented w/ 545 sx 35:65 POZ
class "C" cmt 12.8 ppg, followed by 200 Sx cl
"C" cmt 14.8 ppg. 80 Sx cement to surface.
(8/14/03)

Production Casing:

7-7/8" hole
106 JTS 5-1/2" csg - 15.5#, J55, LTC
set @ 4600.
Lead: 560 sx 35/65 POX cl "C", 12.8 ppg cmt
Tail: 470 sx 50:50 POX cl "C" 14.2 ppg cmt
Circulated water cement to surface. Well was
flowing (8/20/03)

TOC @ Surface Based on CBL. Good
bond cement below 4000'

Perforation Intervals:

4366'-4385' (19'):

4389- 4417' (28'):

4425'- 4448' (23')

70' - 4 spf, 280 holes. 3 1/8 in. XPS Expendable
(10/14/2003)

Acid from 4366' to 4448' w/ 7,000 gls 15% HCl &
1750# rock salt. First 1000# block had a 2636 psi
increase f/ 2300 to 4936 psi. Second block of 750# rock
salt had an increase of 500 psi f/ 2200 to 2700 psi.
(10/15/2003)

FC @ 4559'

Last Workover:

13-20 Aug-2003: Drilled 10 Acr Injector: Drilled surface hole w/ 12
1/4" bit. Ran 8 5/8" 24#- J55 casing to 1535'. Cement casing to surface
w/ 745 sx cl "C" cmt. Drilled production hole w/ 7 7/8" bit. Hit water
flow @ 4500' (14 bph). drilled to 4611' and flow increased to 35 bph.
Called well TD. Ran 5 1/2" 15.5# - J55 to 4600'. Cemented casing in
place w/ 1030 sx C/ "C" cement. watered cement on surface. Released
Rig.

13-20 Oct-2003: Initial Completion : perforate 70' - 4 spf, 280 holes,
3 1/8 in. XPS Expendable. Acid from 4366' to 4448' w/ 7,000 gls 15%
HCl & 1750# rock salt. First 1000# block had a 2636 psi increase f/
2300 to 4936 psi. Second block of 750# rock salt had an increase of
500 psi f/ 2200 to 2700 psi. Clean out salt. P/U 5 1/2" Lock set Pkr w/
136 jts 2 3/8" duolined tbq. Set Pkr @ 4311'. R/D.

INJECTION EQUIPMENT:

1- 5-1/2" Lock set Nickel Plated w/ Pump out plug PKR
136- Joints 2-3/8" Duolined Injection Tbg.

PACKER SET @ 4311'

Zones

Top	Depth	Interval
GB Marker	4,198	
GB Dol Top	4,300	40
GB Dol Bott	4,340	30
San Andres	4,370	200
LSA	4,570	140
O/W	4,710	

TOTAL 410

PBTD @ 4556' (13-Oct-2003)

COMMENTS AND RECOMMENDATIONS:

Stimulation Details.