

FRACTURE TREATMENT

Stage No. 1

Date 7-6-78

Operator R & G Drilling Company Lease and Well Hardie # 68

Correlation Log Type GR-Collar From 1934 to 500'

Temporary Bridge Plug Type None Set At _____

Perforations 1782-1796 1 per foot, 1800-1808 2 per foot
1-2 per foot type 3 1/2" Glass Strip Jets

Pad 3580 gallons. Additives 2% KCl, 2 lbs.
FR-20 per 1000 gallons.

Water 56,120 gallons. Additives 2% KCl, 2 lbs.
FR-20 per 1000 gallons. 1 gallon Howco Suds
per 1000 gallons last 30,000 gallons.

Sand 55,000 lbs. Size 20/40

Flush 1700 gallons. Additives 2% KCl, 2 lbs.
FR-20 per 1000 gallong. 1 gallong Howco Suds
per 1000 gallons.

Breakdown 2200 psig

Ave. Treating Pressure 1600 psig

Max. Treating Pressure 2000 psig

Ave. Injecton Rate 43 BPM

Hydraulic Horsepower 1686 HHP

Instantaneous SIP 600 psig

5 Minute SIP 550 psig

10 Minute SIP 500 psig

15 Minute SIP 440 psig

Ball Drops: 10 Balls at 30,000 gallons 600 psig
 _____ Balls at _____ gallons _____ psig
 _____ Balls at _____ gallons _____ psig
 _____ Balls at _____ gallons _____ psig

Remarks: 8000 gallons water in 1 tank.