

FRACTURE TREATMENT

Stage No. 1

Date 7-12-78

Operator R & G Drilling Company Lease and Well Phillips No. 67

Correlation Log Type GR-Collar From 600 to 1613'

Temporary Bridge Plug Type None Set At _____

Perforations 1428'-1434', 1470'-1476', 1488'-1496' & 1524'-1530'
1 per foot type 3 1/2" Densi Jet - 10

Pad 4,000 gallons. Additives 2% KCl and
2 lbs. FR-20 per 1000 gallons

Water 55,800 gallons. Additives 2% KCl, 2 lbs.
FR-20 per 1000 gallons and 1 gallon Howco Suds
with last 30,000 gallons.

Sand 55,000 lbs. Size 20-40

Flush 11,000 gallons. Additives 2% KCl, 2 lbs.
FR-20 per 1000 gallons and 1 gallon Howco Suds
per 1000 gallons.

Breakdown 1200 psig

Ave. Treating Pressure 2400 psig

Max. Treating Pressure 2800 psig

Ave. Injecton Rate 33.0 BPM

Hydraulic Horsepower 1941 HHP

Instantaneous SIP 1000 psig

5 Minute SIP 910 psig

10 Minute SIP 890 psig

15 Minute SIP 870 psig

Ball Drops: 6 Balls at 25,200 gallons _____ psig
_____ Balls at _____ gallons _____ psig
_____ Balls at _____ gallons _____ psig
increas
increas
increas

Remarks: _____

Walsh ENGINEERING & PRODUCTION CORP.