

6288'	6376'	6406'	6433'	6456'	
6300'	6380'	6411'	6438'	6460'	(Total - 20 holes)
6305'	6384'	6416'	6443'	6464'	
6331'	6388'	6421'	6448'	6472'	

C. POOH w/3-1/2" perforating gun & CCL.

14. RIH w/7" treating packer & 2-7/8" workstring & set 7" treating packer @ +6150'.

15. Breakdown Tubb perfs @ 6-8 BPM as follows:

- A. Pump 40 bbls (1680 gals) 15% HCl-NE-FE acid (inhibited for 24 hrs @ 115°F).
- B. Drop 6 - 7/8" RCN ball sealers (S.G. - 1.3) every 8 bbls (total - 30 balls).
- C. Flush to bottom perf w/49 bbls TFW.
- D. Release 7" treating packer & run through perfs knocking balls off.
- E. Reset 7" treating packer @ +6150'.

16. Acid frac Tubb perfs in 2 equal stages @ 16 BPM as follows:

NOTE: See Maximum Surface Treating Pressure Chart for pressures.

- A. Pump 80 bbls (3360 gals) gelled fluid pad.
- B. Pump 85 bbls (3570 gals) 28% HCl-NE-FE acid inhibited for 24 hrs @ 115°F.
- C. Pump 60 bbls (2520 gals) gelled fluid flush.
- D. Drop 10 - 7/8" RCN ball sealers (S.G. - 1.1).
- E. Pump 80 bbls (3360 gals) gelled fluid pad.
- F. Pump 85 bbls (3570 gals) 28% HCl-NE-FE acid inhibited for 24 hrs @ 115°F.
- G. Pump 60 bbls (2520 gals) gelled fluid flush.
- H. Flush to bottom perf w/42 bbls (1764 gals) gelled fluid.
- I. Shut in well overnight (or minimum of 4 hrs).

NOTE: Record ISIP, 5, 10 and 15 minute shut-in pressures.

Total Volume Pad - 160 bbls

Total Volume Flush - 162 bbls

Total Volume 28% Acid - 170 bbls

#### Acid Composition

15% HCl - Breakdown  
28% HCl - Acid Frac  
Acid Inhibitor  
Iron Sequesterant  
Non-Emulsifier  
Surfactant  
Friction Reducer

#### Gelled Fluid Composition

2% KCL Base Fluid  
40 lbs/1000 gals Hydroxypropyl Guar Gum  
25 lbs/1000 gals Adomite Aqua  
Non-Emulsifier  
Surfactant  
Adocide  
Breaker - for 2 hr break