12, 07

WELL: Portive 6 6-30-92 DATE: FRAC PROCEDURE

OBJECTIVE: Frac

: Frac \_\_\_\_\_\_ as shown below at \_5\_\_\_\_ BPM. Zone will be fraced with 1600 gal. 35# linear prepad, 9000 gal. 35# XL + 24000# 20/40 resin coate

## FRAC SCHEDULE:

Stage	Fluid	Proppant	Lbs.	Clean	Dirty	Cumul.
	Volume	Conc.	Proppant	Volume	Volume	Dirty
	(gal.)	(ppg)		(bbls.)	(bbls.)	Volume
*=====	=======	========		********	=======	
Prepad	1600	0	0	38	38	38
Pad	3200	0	0	76	76	114
1	1600	2	3200	38	42	156
2	2200	4	8800	52	62	218
3	2000	6	12000	48	61	278
Flush	1850	Ð	0	44	44	322
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	12450		24000	296	322	

## ADDITIVES:

24000 lbs. 20/40 resin coated sand

- 320 bbls. clean 2% KCl water (incl. tank bottoms, flush)
- 6 lbs. Frac-Cide 20 biocide (6#/frac tank premixed)
- 471 lbs. J-4 low residue, high yield guar gel (35 #/1000 gal premixed)
- 336 lbs. Adomite Aqua FLA (25 #/1000 gal. premixed)
- 18 gal. B-31 amine x-link catalyst (2 gal./1000 gal. on the fly)
- 54 lbs. B-5 ammonium persulfate breaker (4 #/1000 gal. premixed)
- 20 lbs. CL-2 crosslinker (1.5 #/1000 gal. premixed)
- 13 gal. Clay-Master 4 (1 gal./1000 gal. premixed)
- 27 gal. Nine-40 nonemulsifier (2 gal./1000 gal. premixed)
- 34.8 gal. Acfrac activator for resin coated sand (6 gal./1000 gal. prop laden)

## COMMENTS:

- 1. Pump job at <u>5</u> BPM down 2-7/8" tubing.
- 2. Use clean frac tank. Add bactericide to water when filling tank.
- 3. Have service company engineer run breaker tests to determine actual breaker loading required at 135 t deg. F the night before job is to be pumped. Use water from actual free tank and charicals including setup.
- from actual frac tank and chemicals, including activator, that will actually be pumped. 4. When sand runs out, bypass blender tub and begin flush. DON'T WANT
- SAND CONCENTRATION DILUTED AT END OF JOB.
- 5. Displace frac 3 bbls. short of top perf with base gel. DO NOT OVERFLUSH FRAC.

kbcollins/frac2bb.wk1