

PETROLEUM ENGINEERING  
RESERVOIR STUDIES  
EVALUATIONS  
GEOLOGICAL STUDIES

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Odessa Natural Corporation

SUNDRY NOTICE con't  
Little Federal No. 3

3-22-77

Set retainer 6398'.  $3\frac{1}{2}$  BPM. Squeeze perfs 6432'-6474', with 50 sacks Class "B" neat cement. Maximum and final pressure 2500 psig. Perforate 6274'-6291', 6331'-6342' & 6346'-6350' with 1 shot per foot. Sand water frac as follows:

Pad	-9,300 Gals. water with 1% KCl, $2\frac{1}{2}\#$ FR-20 per 1000 gals and 1 gal Frac Flow per 1000 gals.
Water	-61,700 gals. with 1% KCl, $2\frac{1}{2}\#$ FR-20 per 1000 gals and 1 gal. Frac Flow per 1000 gals in first 5000 gals.
Sand	-75,000 lbs. 20-40
Flush	- 5,000 gals.
Breakdown Press.	- 2,600 psig
Ave. Treat Press.	- 2,700 psig
Max. Treat Press.	- 3,500 psig (flush)
Ave. Injection Rate	-43 BPM
Hydraulic Horsepower	- 2,846 HHP
Instantaneous SIP	- 1,550 psig
5 minute SIP	- 1,300 psig
10 minute SIP	- 1,200 psig
15 minute SIP	- 1,100 psig