O'BRIANT ENGINEERING

P.O. Box 10487

Midland, Texas 79702

915-683-5511 915-683-3172

Mr. Sam Snow Read & Stevens, Inc. P. O. Box 1518 Roswell, New Mexico 88201

19-Dec-87

Re: **PRODUCTION CASING REPORT (5-1/2")** North Lea Federal No. 3

Lea County, New Mexico

Dear Mr. Snow:

The well was spudded at 10:15 AM MDST, October 19, 1987. A 17-1/2" hole was drilled to 1,595' KB where 13-3/8 inch casing was set. Drilling continued with twelve and one-fourth inch and eleven inch bits to 5,195' KB where 8-5/8" intermediate casing was set and cemented. Drilling was resumed with a 7-7/8" bit; total depth of 13,730' KB was reached 12/11/87. Five and one half inch production casing was set at total depth and cemented in place; details follow.

All casing is 5-1/2", LT & C; see following for other details.

		Top of
ltem (bottom to top)	Length	Section - KB
Halliburton float shoe (thread locked)	1.70'	13,736.30'
Joint (thread locked), 23#/ft, N-80	35,35'	13,700.95
Halliburton float collar (thread locked)		13,699.65'
Joints (thread locked bottom jt.), 23#/ft, N-80		10,104.26
Halliburton DV tool (thread locked top & bottom)	•	10,100.96*
Joints, 23#/ft, N-80		9,847.84'
Joints, 20#/ft, N-80		8,469.15
Joints, 23*/ft, N-80	•	3,315.16
Joints, 23#/ft, S-95	•	2,230.33
Joints, 23*/ft, P-110	•	18.00'
Total Pipe		
K B to C H F	-	
Casing set at (casing tally):	13,738.00' KB	
	Joint (thread locked), 23*/ft, N-80 Halliburton float collar (thread locked) Joints (thread locked bottom jt.), 23*/ft, N-80 Halliburton DV tool (thread locked top & bottom) Joints, 23*/ft, N-80 Joints, 23*/ft, N-80 Joints, 23*/ft, N-80 Joints, 23*/ft, S-95 Joints, 23*/ft, P-110 Total Pipe K B to C H F	Halliburton float shoe (thread locked) 1.70' Joint (thread locked), 23*/ft, N-80 35.35' Halliburton float collar (thread locked) 1.30' Joints (thread locked bottom jt.), 23*/ft, N-80 3,595.39' Halliburton DV tool (thread locked top & bottom) 3.30' Joints, 23*/ft, N-80 253.12' Joints, 23*/ft, N-80 253.12' Joints, 20*/ft, N-80 1,378.69' Joints, 23*/ft, N-80 5,153.99' Joints, 23*/ft, N-80 5,153.99' Joints, 23*/ft, N-80 1,084.83' Joints, 23*/ft, P-110 2,212.33' Total Pipe 13,720.00' K B to C H F 18.00'

Notes: Ran 20 centralizers & 5 baskets; see tally and notes for details on sand blasted intervals, make-up torque, etc.