

Expires 5/26/00

30-005-63207

Operator <u>Gates Petr. Corp.</u>		Lease <u>Thunderhead TD St.</u>		Well # <u>3</u>	
Location of Well	Unit <u>K</u>	Section <u>32</u>	Township <u>8</u>	Range <u>26</u>	County <u>Chaves</u>
Drilling Contractor <u>NA</u>			Type of Equipment <u>Rotary</u>		

APPROVED CASING PROGRAM

* Witness 8 5/8

Min. WOC Time 18 Hours

Size of Hole	Size of Casing	Weight Per Foot	New or Used	Depth	Sacks Cement
12 3/4	* 8 5/8	24 #		1000'	450 Circ
7 7/8	4 1/2	10.5 #		4750'	350 TOC 3800'

Casing Data:

Surface _____ joints of _____ inch _____ # Grade _____
 (Approved) (Rejected) _____

Inspected by _____ date _____

Cementing Program

Size of hole _____ Size of Casing _____ Sacks cement required _____
 Type of Shoe used _____ Float collar used _____ Btm 3 jts welded _____
 TD of hole _____ Set _____ Feet of _____ Inch _____ # Grade _____
 New-used csg. @ _____ with _____ sacks neat cement around shoe
 + _____ sax _____ additives _____
 Plug down @ _____ (AM) (PM) Date _____
 Cement circulated _____ No. of Sacks _____
 Cemented by _____ Witnessed by _____
 Temp. Survey ran @ _____ (AM) (PM) Date _____ top cement @ _____
 Casing test @ _____ (AM) (PM) Date _____
 Method Used _____ Witnessed by _____
 Checked for shut off @ _____ (AM) (PM) Date _____
 Method used _____ Witnessed by _____
 Remarks: _____