(June 1990) DEPARTMEN	TED STATES NT OF THE INTERIOR LAND MANAGEMENT	FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993 5. Lease Designation and Serial No.			
5:17: 144	LAND MANAGEMENT	NM-99705			
SUNDRY NOTICES الله الله الله الله الله الله الله الل	AND REPORTS ON WELLS rill or to deepen or reentry to a different reservoir. OR PERMIT—" for such proposals	6. If Indian, Allottee or Tribe Name			
	T IN TRIPLICATE	7. If Unit or CA, Agreement Designation			
1. Type of Well Oil Gas Well Well Other		8. Well Name and No.			
2. Name of Operator	Eagle Springs 8 Fed. #2M				
Penwell Energy, Inc.		9. API Well No.			
3. Address and Telephone No.	N. II. N. TV. 70701 015 (02 252)	10. Field and Pool, or Exploratory Area			
600 N. Marienfeld, Ste. 1100 4. Location of Well (Footage, Sec., T., R., M., or Survey I		Wildcat 19N HUSB NAWOS			
4. Excellent of well (Poolage, Sec., 1., K., M., of Survey I	B-	11. County or Parish, State			
330' FNL & 2310' FEL S	Section 8 - T19N - R4W				
		Sandoval, New Mexico			
12. CHECK APPROPRIATE BOX	(s) TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION				
Notice of Intent	Abandonment	Change of Plans New Construction			
Subsequent Report	Recompletion Plugging Back	Non-Routine Fracturing			
Subsequent Report	Casing Repair	Water Shut-Off			
Final Abandonment Notice	Altering Casing	Conversion to Injection			
	Other	Dispose Water			
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			
Describe Proposed or Completed Operations (Clearly state give subsurface locations and measured and true ver	all pertinent details, and give pertinent dates, including estimated date of startic tical depths for all markers and zones pertinent to this work.)*	ig any proposed work. If well is directionally drilled,			
Request Change of Casing Pro	ogram from approved APD:				
As approved: Surface Casing Production Cas	g 11" hole, 8 5/8", 24#, J55 @ 350'+ sing - 7 7/8" hole, 5 1/2", 17#, J55 @	/- cmtd. w/175 sacks. 3,800'+/- Cmtd. w/450 sack			
	5/8", 36#, J55 casing @ 350'+/-, cmtd.				
Production - 8 3/4" hole, 7	'', 23#, J55 casing @ 3,800'+/-, cmtd.	w/450 sacks+/			
(See attachments for new ca	sing design.)	11. SVE 7677			
	COPY	2000 2000 27 DIET 3000 27			
14. I hereby certify that the foregoing is true and correct Signed Bill	Pierce тые Manager of Operations	Date 41, 6, 83, 2000			
(This space for Federal or State office use)	0 .	7/21/00			
Approved by Conditions of approval, if any:	Title Caro.	Date			
Title 18 U.S.C. Section 1001, makes it a crime for any persor representations as to any matter within its jurisdiction.	son knowingly and willfully to make to any department or agency of the Unit	ed States any false, fictitious or fraudulent statements			

Operator: PENWELL ENERGY, INC. Well Name: Eagle Springs 8 Fed 2M Project ID: Location: 330'FNL & 2310'FEL NM-99705

Section 8 - T19N - R4W Sandoval County, New Mexico

<u>Design Factors:</u>

<u>Design Parameters:</u> Mud weight (9.63 ppg) : 0.500 Collapse

: 1.125 Shut in surface pressure : 315 : 1.00 Burst psi Internal gradient (burst): 0.100 psi/ft 8 Round : 1.80 (J) : 0.500 Annular gradient (burst) psi/ft Buttress : 1.60 (J) Tensile load is determined using air weight Body Yield : 1.50 (B)

Service rating is "Sweet"

	Length (feet)	Size (in.)	Weight (lb/ft)	Grad	e Joi		Depth feet)	Drift (in.)	Cost
1	350	9-5/8"	36.00	J-5	5 ST&0	С	350	8.765	. <u>.</u>
	Load (psi)	Collapse Strgth (psi)		Burst Load (psi)	Min Int Strgth (psi)		Load (kips)	Tension Strgth (kips)	s.F.
1	175	2020	9.999	315	3520	11.17	12.60	394	31.27 J

, Artesia, New Mexico Prepared by:

Date 07-13-2000

Remarks Section 8-T19N-R4W

Design is for a Surface string.

350 foot well is 100 feet. Minimum segment length for the

Additional details regarding deeper string(s):

Next string will set at 3,800 ft. with 9.20 ppg mud (pore pressure of 1,816 psi.) The frac gradient of 1.000 at the casing seat results in an injection 350 psi. Effective BHP (for burst) is 350 psi, the BHP load is 175 psi (using an annular mud of 10.00 ppg) and the differential gradient is -0.400 psi/ft.

The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1993 pricing model. (Version 1.0G)

Operator: PENWELL ENERGY, INC. | Well Name: Eagle Springs 8 Fed 2M | Project ID: NM-99705 | Location: 330' FNL & 2310' FEL

Sandoval County, New Mexico

Section 8 - T19N - R4W

: 1.50

(J)

(J)

(B)

<u>Design Parameters:</u>

Mud weight (9.00 ppg): 0.468 psi/ft
Shut in surface pressure: 1397 psi
Internal gradient (burst): 0.100 psi/ft
Annular gradient (burst): 0.468 psi/ft
Tensile load is determined using air weight

Design Factors:

Collapse : 1.125
Burst : 1.00
8 Round : 1.80
Buttress : 1.60

Body Yield

Service rating is "Sweet"

	Length (feet)	Size (in.)	Weight (lb/ft)		e Joi		Depth (feet)	Drift (in.)	Cost
1	3,800	7"	23.00	J-5!	5 ST&C	2	3,800	6.241	
	Load (psi)	Collapse Strgth (psi)	S.F.	Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Load (kips)		s.F.
1	1777	3270	1.840	1397	4360	3.12	87.40	309	3.54 J

Prepared by : , Artesia, New Mexico

Date : 07-13-2000

Remarks :

Design is for a Production string.

Minimum segment length for the 3,800 foot well is 1,500 feet.

An annular mud weight of 9.000 ppg was used for burst purposes. The differential mud gradient below any lost-circulation depth is -0.368 psi/ft and the bottom hole pressure load is 0 psi.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1993 pricing model. (Version 1.0G)