

WELL NAME & NUMBER SWEPI et al MANGAS MOUNTAINS FEDERAL #1

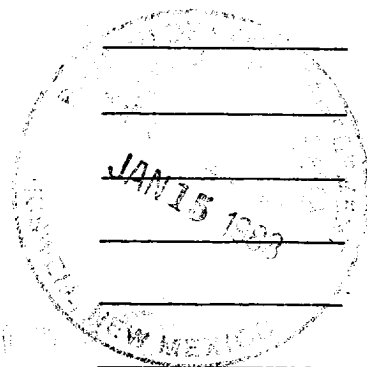
LOCATION NW/4 SW/4 SEC. 21, T3S-R15W
(Give Unit, Section, Township and Range)

OPERATOR Shell Western E & P Inc.

DRILLING CONTRACTOR Grace Drilling Company

The undersigned hereby certifies that he is an authorized representative of the drilling contractor who drilled the above-described well and that he has conducted deviation tests and obtained the following results:

DEGREES @ DEPTH	DEGREES @ DEPTH	DEGREES @ DEPTH	DEGREES @ DEPTH
1 161	1 1/4 3245	3 3/4 6989	
1 235	3/4 3360	3 1/4 7580	
1 3/4 510	3/4 3515	7 1/4 7808	
1 3/4 630	1/4 3652		
1 841	1 3890		
1 3/4 985	3/4 4237		
1 3/4 1180	1/2 4483		
1 1/2 1427	1 4639		
1 1/2 1646	1 1/4 5100		
1 1/4 1832	1 1/4 5420		
1 1/4 2012	1 5600		
1 2302	1 1/4 5800		
1 2552	2 3/4 6393		
1 1/4 2760	3 6634		
1 1/4 2946	3 1/4 6740		



Drilling Contractor Grace Drilling Company

By [Signature]

Subscribed and sworn to before me this 22 day of December, 19 87

[Signature]
Notary Public

My Commission Expires 6-30-90

ector County TX