Date: February 11, 1988

Subject: Intermediate Casing Point Atlantic State "30" No.2 Lea County, New Mexico

From/Location: V. L. Buryakovsky MIO-1420

Telephone: 688-5561

To/Location: Well File

The Atlantic State "30" No. 2 well, will be drilled as a Abo/Bone Springs offset to the Atlantic State "30" No.1 well located in Section 30-T17S-R36E of Lea County, New Mexico.

The typical casing design for the Bone Springs wells in the area is to set $^{+}/_{-}400'$ of 13-3/8" surface casing. Then drill 11" intermediate hole which should penetrate all the salts and evaporite sections, and set 8-5/8" casing $^{+}/_{-}100'$ into the Yates Formation to cover all the salts.

On the Atlantic No.1 well the top of the Yates was identified at $+/_{-}$ 3200' and Intermediate casing was set and cemented at 3600'. The upper portion of the production hole from 3600' to 7700' was supposed to be drilled with Fresh Water system to increase penetration rate and reduce mud cost. However, as we drilled through this section of the hole the CL- concentration has steadily increased indicating presence of the salt stringers. It was later confirmed by the open hole logs. Logs indicate that the Anhydride and Salts section continues into the Yates Formation to the depth of $+/_{-}$ 4000' (See attachments).

We recommend that intermediate casing point be extended to cover the Anhydride and Salts to $+/_$ 4100'. That should allow to drill upper portion of the production hole with lighter mud, minimize corrosion, and reduce wash-outs, thus improving protection of the production casing by improving quality of the cement job.

V. L. Buryakovsky Sr.Drilling Engineer

Approved by: D. Kimbrough

Attachments D D. McKelwey cc: K. D. Krawietz A. D. Green T. D. Verseput Well File

B. N. Brown

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MIO-1416 KDK Hulss MIO-121

MIO-121 MIO-125



	CHANGED PAR		:
NAME VALUE UNIT	DEPTH (F)	NAME VALUE	UNIT DEPTH (F)
HC BS	3577.0	BHS CASE	3579.0
<u>SP (MY)</u> -160.0 40.000	;		
GR (GAPI) 0.0 100.00	0500	45000 .45000	TENS(LB) 12000. 2000.0
CALI(IN) 6.0000 16.000		RHOBO	(G/C3)
6.0000 16.000 GR (GAPI)	2.0000	NPHI	3.0000
100.00 200.00	, 30000		1000
CP 30.22 F	ILE 12 1	1-DEC-87 17:30	
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