## Con't... POINT 6: TECHNICAL STAGES OF OPERATION

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## D) CEMENT

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		FT OF												
INTERVAL	AMOUNT SXS	FILL	<u>D'PE</u>	GALS/SX	PPG	FT <sup>3</sup> /SX								
1 <sup>st</sup> Stage: (Circ 150 sx to surface)														
Lead	1300	2515	Halco Lite + 2% CaCl <sub>2</sub> + 1/4#/sx Flocele	12.09	12.59	2.24								
Tail	100	20 <b>0</b>	Class C + 2% CaCl <sub>2</sub>	6.34	14.80	1.34								
2 <sup>nd</sup> Stage: (Circ 12 sx to surface)														
Lead	150	420	Halco Lite + 2% CaCl <sub>2</sub> + 1/4#/sx Flocele	12.0 <del>9</del>	12.59	2.24								
Tail	100	280	Class C + 2% CaCl <sub>2</sub>	6.34	14.80	1.34								
					PRODUCTION (Two stage w/DV tool @ 6500' and circulate cement to surface)									
PRODUCTION (Tw	o stage w/DV tool @ 6500	and circul	late cement to surface)											
INTERVAL	o stage w/DV tool @ 6500 AMOUNT SXS		late cement to surface)	GALS/SX	<u>PPG</u>	FT <sup>3</sup> /SX								
INTERVAL 1 <sup>st</sup> Stage 6500'-12,637' (50% excess) 2 <sup>nd</sup> Stage		FT OF	,	<u>GALS/SX</u> 6.36	<u>PPG</u> 14.00	<u>FT³/SX</u> 1.36								
INTERVAL 1 <sup>st</sup> Stage 6500'-12,637' (50% excess)	AMOUNT SXS		<u>'D'PE</u> Poz H + 0.5% FL-25 + 0.5%											

\* Surface & Intermediate was cemented in place during previous drilling (6/78).

## E) DIRECTIONAL DRILLING (See attached directional plan.)

A straight hole will be re-drilled and drilled to 9100' TVD. A gyro survey or multishot survey will be taken every 100' from 9100' to surface.

Directional surveys will be provided at least every 200' from TD to 9100' detailing hole location. See attached directional plan.

## **POINT 7: ANTICIPATED RESERVOIR CONDITIONS**

Normal pressures are anticipated throughout the Delaware, Bone Spring & Wolfcamp sections. The Strawn expected BHP is 9100 (max) or an equivalent mud weight of 13.3 ppg @ TD. Due to the tight nature of the reservoir rock (high pressure, low volume), the well will be drilled under balanced utilizing a rotating head. The expected BHT at TD is  $205^{\circ}$ F. Prior to penetrating the abnormal pressures in the Strawn, mud-monitoring equipment will be installed and operative. No H<sub>2</sub>S is anticipated.