

A. P. D. (cont.)
Thirteen Point Surface Use Plan
Indian Hills Unit #25

Test Frequency

1. When installed.
2. Anytime a pressure seal is broken (test confined only to affected equipment).
3. At least every 20 days.
4. Blind and pipe rams shall be activated each trip but not more than once/day.

4. Casing and Cement Program:

<u>---DEPTH---</u>		<u>SECTION</u>	<u>HOLE</u>	<u>CSG</u>	<u>WT.</u>	<u>THREADS</u>		<u>NEW</u>
<u>FROM</u>	<u>TO</u>	<u>LENGTH</u>	<u>SIZE</u>	<u>SIZE</u>	<u>PPF</u>	<u>GRADE</u>	<u>COUPLINGS</u>	<u>USED</u>
0	1800'	1800'	17.50"	13-3/8"	54.50#	K-55	8rd, STC	New
0	4800'	4800'	12.25"	9-5/8"	40#	L-80	8rd, LT&C	New
4800'	8800'	4000'	12.25"	9-5/8"	53.5	C-75	8rd, LT&C	New

<u>Casing</u>	<u>DV</u>		<u>Lead</u>	<u>Amt</u>	<u>Type</u>	<u>Yield</u>	<u>Wt.</u>		
<u>String</u>	<u>Depth</u>	<u>Stg.</u>	<u>Tail</u>	<u>SXS</u>	<u>Cement</u>	<u>CF/SX</u>	<u>PPG.</u>	<u>TOC</u>	<u>Additives</u>
13-3/8"			L	100	"C"	7.15	9.5		Dia Seal
13-3/8"			L	100	Thixset	1.52	14.0		Thixset
13-3/8"			L	746	Lite	2.02	12.4	surface	2% cacI2
13-3/8"			T	300	PremPlus	1.34	14.8		
9-5/8"	6400'	1	L	350	" "	2.18	9.2		N2
9-5/8"		1	T	700	" "	1.44	13.0		N2
9-5/8"		2	L	1360	Interfill "C"	2.47	11.9		Flocele
9-5/8"		2	T	200	PremPlus	1.32	14.8		Neat

Each stage will be preceded by an appropriate mud flush. Actual production hole volumes will be based on the caliper volume plus 20% excess.

Centralizer Program:

9 5/8" Conventional centralizers. Bottom 3 joints and every fourth joint to surface.