

A. P. D. (cont.)
Thirteen Point Surface Use Plan
Indian Hills Unit # 36

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:

---DEPTH---		SECTION	HOLE	CSG	WT.		THREADS		NEW
FROM	TO	LENGTH	SIZE	SIZE	PPF	GRADE	COUPLINGS		USED
0	1200'	1200	12.25"	9-5/8"	36.00#	K-55	8rd, STC		New
0	4800'	4800'	8.750"	7.00"	23.00#	K-55	8rd, LT&C		New
4800'	9600'	4800'	8.750"	7.00"	26.00 [#]	K-55	8rd, LT&C		New

Casing	DV		Lead	Amt	Type	Yield	Wt.		
String	Depth	Stg.	Tail	SXS	Cement	CF/SX	PPG.	TOC	Additives
9.625"	none	1	L	350	"C"	2.02	12.4	surf.	5# /Sk.Gilsonite,2% Cacl1/4# cello
9.625"	none		T	150	"C Neat	1.34	14.8	800'	2% Cacl, ¼# cello
7.0"	6300'	1	L	340	Prem.	1.44	13.0	6300'	Foamers, N2
7.0"		2	L	850	Interfill "C"	2.47	11.9	Surf.	1/4pps Cello,3pps Gilsonite,0.2% 322 Halad
7.0		2	T	100	"C" Neat	1.32	14.8	6000'	N/A

Each stage will be preceded by an appropriate mud flush. Actual production hole volumes will be based on the caliper volume plus 25% excess.