

**A. P. D. (cont.)**  
**Thirteen Point Surface Unit Plan**  
**North Indian Basin Unit No. 21**

Upper and lower kelly cocks with valve handle and safety valve and subs to fit all drillstring connections in use will be available on rig floor.

**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>FROM TO</u>		<u>SECTION</u> <u>LENGTH</u>	<u>HOLE</u> <u>SIZE</u>	<u>CSG</u> <u>SIZE</u>	<u>WT.</u> <u>PPF</u>	<u>GRADE</u>	<u>THREADS</u> <u>COUPLINGS</u>	<u>NEW</u> <u>USED</u>		
0	1200'	1200'	12.25"	9.625"	36	K-55	8rd, STC	New		
0	2800'	2800'	8.75"	7"	23	K-55	8rd, LTC	New		
2800'	9500'	6700'	8.75"	7"	26	K-55	8rd, LTC	New		
<u>CASING</u> <u>STRING</u>		<u>DV</u> <u>DPTH</u>	<u>STG</u>	<u>LEAD</u> <u>TAIL</u>	<u>AMT</u> <u>SXS</u>	<u>TYPE</u> <u>CEMENT</u>	<u>YIELD</u> <u>CF/SX</u>	<u>WT.</u> <u>PPG.</u>	<u>TOC</u>	<u>ADDITIVES</u>
9.625"	None	1	L	600	"C" Lite		1.99	12.4	10#/SK. Gilsonite, 3% CACl <sub>2</sub> , 1/4# cello	
9.625"			T	200	"C" Neat		1.32	14.8	surf	2% CACl, 1/4# cello
7"	±5600'	1	L	500	"C" Lite		1.8	13.6	5600'	8 pps Silica, .6% Halad 9, 3% salt, 5 pps Gilsonite
7"		2	L	675	"C" Lite		1.91	12.8	1000'	5 pps, salt, 5 pps Gilsonite, 1/4 pps Cello
7"		2	T	100	"C" Neat		1.32	14.8	5500'	

*Each stage will be preceded by an appropriate mud flush. Actual production hole volumes will be based on the caliper volume plus 15% excess.*