

BJ SERVICES COMPANY
CEMENTING RECOMMENDATION
SURFACE CASING

VOLUME CALCULATIONS

1293 FT X	0.4127 CU-FT/FT WITH 100 % EXCESS	= 1067 CU-FT
307 FT X	0.4127 CU-FT/FT WITH 100 % EXCESS	= 254 CU-FT
40 FT X	0.3576 CU-FT/FT WITH 0 % EXCESS	= 14 CU-FT (INSIDE PIPE)

TOTAL SLURRY VOLUME: 1335 CU-FT
238 BBLs

SLURRY NO.	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
1	1067	/ 1.74	= 615 SACKS CLASS C + 4.000 % GEL (BENTONITE) + 2.000 % CACL2 + 81.000 % WATER
2	268	/ 1.34	= 200 SACKS CLASS C + 2.000 % CACL2 + 56.000 % WATER

DISPLACEMENT FLUID: 99.3 BBL WATER @ 8.33 LB/GAL

CEMENT PROPERTIES

	SLURRY NO.1	SLURRY NO.2
SLURRY WEIGHT (LB/GAL)	13.51	14.82
SLURRY YIELD (CU-FT PER SACK)	1.74	1.34
AMOUNT OF MIX WATER (GALS PER SACK)	9.14	6.32
ESTIMATED PUMP TIME (HH:MM)	4:00	3:00

RECEIVED
1997 NOV 24 P 3 16
AGENCY OF LAND MANAGEMENT
ROSWELL OFFICE