**Increase Mud Density**

**Mud weight (ppg) with barite**

(average specific gravity of barite — 4.2)

Sample Case : Determine the number of sacks of barite required to increase

The density of 100 bbl of 12.0 ppg (W1) mud to 14.0 ppg (W2):

140 sk/100 bbl

Volume increase (bbl) due to mud weight increase with barite

Sample Case : Determine the volume increase when increasing the density

From 12.0 ppg (W,) to 14.0 ppg (W2):

Starting volume (bbl) of original mud weight required to give a predetermined final volume of desired mud weight with barite

Sample Case : Determine the starting volume (bbl) of 12.0 ppg (W1) mud

Required to achieve 100 bbl (VF) of 14.0 ppg (W2) mud with

barite :

Mud weight increase with calcium carbonate (SG — 2.7)

NOTE : The maximum practical mud weight attainable with calcium carbonate

is 14.0 ppg

Sample Case : Determine the number of sacks of calcium carbonate/l0O bbl

required to increase the density from 12.0 ppg (W1) to 13.0

ppg (W2):

Volume increase (bbl) due to mud weight increase with calcium carbonate

Sample Case : Determine the volume increase (bbl/100 bbl) when increasing

The density from 12.0 ppg (W1) to 13.0 ppg (W2):

**Starting volume (bbl) of original mud weight required to give a predetermined final volume of desired mud weight with calcium carbonate**

Sample Case : Determine the starting volume (bbl) of 12.0 ppg (W1) mud

Required to achieve 100 bbl (VF) of 13.0 ppg (W2) mud with

Calcium carbonate :

90.5 bbl

Mud weight increase with hematite (SG —4.8)

Sample Case : Determine the hematite (sk/lOO bbl) required to increase the

density of 100 bbl of 12.0 ppg (W1) to 14.0 ppg (W2):

**Volume increase (bbl) due to mud weight increase with hematite**

Sample Case : Detennine the volurn increase (bbl/l00 bbl) when increasing

The density from 12.0 ppg (W1) to 14.0 ppg (W2):

**Starting volume (bbl) of original mud weight required to give a predetermined final volume of desired mud weight with hematite**

Sample Case : Determine the starting volume (bbl) of 12.0 ppg (W1) mud

required to achieve 100 bbl (VF) of 14.0 ppg (W2) mud with

hematite :