BAROID BAROID® 41

Weighting Material

Description

BAROID® 41 weighting material is a specially processed barite in powder form for use as a drilling fluid weighting additive. BAROID 41 weighting material has a specific gravity of 4.1 and can be used to increase the density of drilling fluids up to 21 lb/gal (2.40 SG).

Applications/Functions

- Helps increase drilling fluid density up to 21 lb/gal
- Helps control formation pressures
- Helps stabilize the borehole

Advantages

- High quality, free from corrosive and abrasive material
- Chemically inert
- Cost-effective weighting agent

Typical Properties

Appearance	Variable-colored, free-flowing powder
Specific gravity	4.1 (minimum)
Moisture content	Less than 1%
Bulk density, lb/ft^3	155 (compacted)

Recommended Treatment

- Before adding BAROID 41 weighting material, the Marsh Funnel viscosity (sec/qt) of the circulating fluid should be increased to four times the desired final weight by the addition of AQUAGEL® or QUIK-GEL®.
- Add BAROID through a high shear mixer so the entire circulating volume is at uniform weight.
- To control an artesian flow at the surface, premix the necessary volume of weighted mud and apply in one continuous operation.

  NOTE: In near surface holes drilled in unconsolidated alluvium (overburden), weights in excess of 11 lb/gal (1.32 g/cm^3) could result in loss of circulation.

Amount of BAROID® 41 Weighting Material Required To Increase the Density of 100 Gallons of QUIK-GEL® Drilling Fluid with Initial Density of 8.5* lb/gal			
Final Weight lb/gal	**Barite to Add lb/100 gal**	**Hydrostatic Gradient psi/ft**	**Final Volume gal**
9.0	67	0.468	102.0
9.5	137	0.494	104.0
10.0	210	0.520	106.0
10.5	285	0.546	108.0
11.0	364	0.572	110.0
11.5	446	0.598	113.0
12.0	532	0.624	115.0

*Based on a QUIK-GEL slurry of 20-30 pounds per 100 gallons of water or 24-36 kilograms per cubic meter of water

Notes:

- Hole Volume (gal) = (hole diameter in inches)^2 x 0.042 x (depth in ft.)
- Hole Volume (m^3) = (hole diameter in mm)^2 x 0.0000008 x (depth in meters)
- Always mix a minimum of 2 hole volumes

Amount of BAROID 41 Weighting Material Required To Increase the Density of 1 m^3 QUIK-GEL Drilling Fluid with Initial Density of 1.02* g/cm^3			
Final weight g/cm^3	**Barite to Add kg/m^3**	**Hydrostatic gradient kPa/meter**	**Final volume m^3**
1.08	67	0.468	1.02
1.14	136	0.494	1.04
1.20	208	0.520	1.06
1.26	283	0.546	1.08
1.32	361	0.572	1.10
1.38	443	0.598	1.13
1.44	537	0.624	1.15

Packaging

BAROID 41 weighting material is packaged in 50-lb (28 kg) multiwall paper bags.

Availability

BAROID 41 weighting material can be purchased through any Baroid Industrial Drilling Products Retailer. To locate the Baroid IDP retailer nearest you contact the Customer Service Department in Houston or your area IDP Sales Representative.

Baroid Industrial Drilling Products
Product Service Line, Halliburton
3000 N. Sam Houston Pkwy E.
Houston, TX 77032

Customer Service	(800) 735-6075 Toll Free	(281) 871-4612
Technical Service	(877) 379-7412 Toll Free	(281) 871-4613