CLAIMS

1. An oil-based drilling fluid composition comprising:

an oil phase comprising a base oil;

an aqueous phase comprising water;

at least one emulsifier, in which the at least one emulsifier comprises an amino amide comprising the formula R-CO-NH-R'-NH_2, where R is a fatty acid alkyl and R' is an alkyl group selected from C_2H_4, C_6H_{12} or $C_{10}H_{20}$; and

one or more additives chosen from a wetting agent, a rheology modifier, a fluid-loss control additive, and a weighting additive.

2. The oil-based drilling fluid composition according to claim 1, where R is selected from $C_{15}H_{31}$, $C_{17}H_{35}$, $C_{21}H_{43}$ or $C_8H_{17}CHCHC_7H_{14}$.

3. The oil-based drilling fluid composition according to claim 1 or 2, where the oil-based drilling fluid comprises from 10% by weight to 20% by weight base oil, based on the total weight of the oil-based drilling fluids.

4. The oil-based drilling fluid composition according to claim 1 or 2, where the oil-based drilling fluid comprises from 0.05% by weight to 5.0% by weight emulsifier, based on the total weight of the oil-based drilling fluids.

5. The oil-based drilling fluid composition according to claim 1 or 2, where the oil-based drilling fluid comprises from 0.1% by weight to 2.0% by weight wetting agent, based on the total weight of the oil-based drilling fluids.

6. The oil-based drilling fluid composition according to claim 1 or 2, where the oil-based drilling fluid comprises from 0.1% by weight to 2.0% by weight rheology modifier, based on the total weight of the oil-based drilling fluids.

7. The oil-based drilling fluid composition according to claim 1 or 2, where the oil-based drilling fluid comprises from 0.5% by weight to 2.0% by weight fluid-loss control additive, based on the total weight of the oil-based drilling fluids.

8. The oil-based drilling fluid composition according to claim 1 or 2, where the oil-based drilling fluid comprises from 3.0% by weight to 5.0% by weight brine solution, based on the total weight of the oil-based drilling fluids.

9. The oil-based drilling fluid composition according to claim 1 or 2, where the oil-based drilling fluid comprises from 64% by weight to 85.3% by weight weighting additive, based on the total weight of the oil-based drilling fluids.

10. The oil-based drilling fluid composition according to claim 1 or 2, where the viscosity at a shear rate of 10.22 s^{-1} measured at 50°C is greater than 358 cP.

11. The oil-based drilling fluid composition according to claim 1 or 2, where the viscosity at a shear rate of 170 s^{-1} measured at 50°C is less than 128 cP.

12. A method for making an oil-based drilling fluid composition comprising:

mixing a base oil, at least one emulsifier, at least one emulsifier, and optionally at least one wetting agent to form a first mixture, in which the at least one emulsifier comprises an amino amide comprising the formula R-CO-NH-R'-NH_2, where R is a fatty acid alkyl and R' is an alkyl group selected from C_2H_4, C_6H_{12} or $C_{10}H_{20}$;

optionally, mixing at least one rheology modifier, and a alkalinity adjuster into the first mixture to form a second mixture;

optionally, mixing at least one fluid-loss control additive into the second mixture to form a third mixture;

mixing a brine solution into the first mixture or the third mixture to form a fourth mixture; and

mixing a weighting additive into the fourth mixture to form the oil-based drilling fluid composition.

13. The oil-based drilling fluid composition according to claim 12, where R is selected from $C_{15}H_{31}$, $C_{17}H_{35}$, $C_{21}H_{43}$ or $C_8H_{17}CHCHC_7H_{14}$.

14. The method according to claim 12 or 13, where the oil-based drilling fluid composition comprises from 0.05% by weight to 5.0% by weight emulsifier, based on the total weight of the oil-based drilling fluid composition.

15. A method for drilling a subterranean well, the method comprising:

providing an oil-based drilling fluid composition; and

introducing the oil-based drilling fluid composition into a wellbore;

wherein the oil-based drilling fluid composition comprises:

an oil phase comprising a base oil;

an aqueous phase comprising water;

at least one emulsifier, in which the at least one emulsifier comprises an amino amide comprising the formula R-CO-NH-R'-NH_2, where R is a fatty acid alkyl and R' is an alkyl group selected from C_2H_4, C_6H_{12} or $C_{10}H_{20}$; and

one or more additives chosen from a wetting agent, a rheology modifier, a fluid-loss control additive, and a weighting additive.