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-R"-NH_2, where R is an unbranched fatty acid alkyl selected from $C_{15}H_{31}$, $C_{17}H_{35}$, or $C_{21}H_{43}$ and R' and R" are alkyl groups; 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_2H_4, C_6H_{12} or $C_{10}H_{20}$.

3. The oil-based drilling fluid composition according to claim 1, where R" is selected from C_2H_4, C_6H_{12} or $C_{10}H_{20}$.

4. The oil-based drilling fluid composition according to claim 1, where R is $C_{17}H_{35}$, R' is C_2H_4, and R" is C_2H_4.

5. The oil-based drilling fluid composition according to any of claims 1 through 4, 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.

6. The oil-based drilling fluid composition according to any of claims 1 through 4, where the viscosity at a shear rate of 10.22 s^{-1} measured at 50°C is greater than 400 cP.

7. The oil-based drilling fluid composition according to any of claims 1 through 4, where the viscosity at a shear rate of 170 s^{-1} measured at 50°C is less than 125 cP.

8. 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-R"-NH_2, where R is an unbranched fatty acid alkyl selected from $C_{15}H_{31}$, $C_{17}H_{35}$, or $C_{21}H_{43}$ and R' and R" are alkyl groups;

optionally, mixing at least one rheology modifier, and 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.

9. The oil-based drilling fluid composition according to claim 8, where R' is selected from C_2H_4, C_6H_{12} or $C_{10}H_{20}$; and R" is selected from C_2H_4, C_6H_{12} or $C_{10}H_{20}$.

10. The oil-based drilling fluid composition according to claim 8, where R is $C_{17}H_{35}$, R' is C_2H_4, and R" is C_2H_4.

11. The method according to any of claims 8 through 10, 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.

12. 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-R"-NH_2, where R is an unbranched fatty acid alkyl selected from $C_{15}H_{31}$, $C_{17}H_{35}$, or $C_{21}H_{43}$ and R' and R" are alkyl groups; and

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

13. The method of claim 12, where the method further comprises operating a drill in the wellbore.

14. The method of claim 12, where the wellbore comprises a wellbore temperature greater than 300 °F.

15. The method of any of claims 12 through 14, where the wellbore comprises a wellbore pressure greater than 10,000 psi.