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(54) Title: MICROBIAL PRODUCTS AND THEIR USE IN BIOREMEDIATION AND TO REMOVE PARAFFIN AND OTHER CONTAMINATING SUBSTANCES FROM OIL AND GAS PRODUCTION AND PROCESSING EQUIPMENT

California heavy crude bottom		Original	Treated	% Increase
API		-3.7	7.2	295% increase
Viscosity		2400 cPas	120 cPas	95% decrease
Canadian Syncrude		Original	Treated	% change
API		16.2	32.08	100% increase
Viscosity		455 cPas	43 cPas	91% decrease
Distressed Mexican Fuel Oil		Original	Treated	% change
API		7.57	16.7	121% increase
Viscosity		2728 cPas	887 cPas	68% decrease

FIG. 11

(57) Abstract: The subject invention provides microbe-based products, as well as their use in simultaneously enhancing oil recovery from an oil well while efficiently removing contaminating compositions such as biofilm, scale, paraffin, and/or asphaltenes from oil production equipment and oil-bearing formations. The subject invention can also be used to disperse paraffin and asphaltene precipitates, and to reduce the viscosity of heavy crude oil. The subject invention further provides materials and methods for bioremediation of hydrocarbon-contaminated sites.

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