WHAT IS CLAIMED IS:

1. A method of preventing or inhibiting exhaust valve seat recession in a natural gas fueled engine, the method comprising lubricating a natural gas fueled engine in need of exhaust valve seat recession prevention or inhibition with a natural gas enginelubricating oil composition comprising (a) a major amount of an oil of lubricating viscosity, (b) one or more phosphorus-containing anti-wear additives comprising a primary zinc dialkylthiophosphate, (c) 1 wt.% to 8 wt.%, based on the total weight of the natural gas engine lubricating oil composition, of one or more ashless dispersants comprising a bissuccinimide, (d) 0.5 wt.% to 2.5 wt.%, based on the total weight of the natural gas engine lubricating oil composition, of one or more alkaline earth metal salts of an alkyl-substituted hydroxyaromatic carboxylic acid having a total base number of from 100 to 250, wherein the one or more alkaline earth metal salts of an alkyl-substituted hydroxyaromatic carboxylic acid are one or more calcium salts of an alkyl-substituted hydroxybenzoic acid, and (e) 0.1 wt.% to 5 wt.%, based on the total weight of the natural gas engine lubricating oil composition, of one or more antioxidants comprising a hindered phenol compound, wherein the natural gas engine lubricating oil composition contains no more than about 0.03 weight percent of phosphorus, based on the total weight of the natural gas engine lubricating oil composition, and further wherein the natural gas engine lubricating oil composition is substantially free of any alkali metal-containing detergents.

2. The method according to Claim 1, wherein the natural gas engine lubricating oil composition further comprises sulfurized isobutylene.

3. The method of claim 1, wherein the natural gas engine lubricating oil composition prevents or inhibits exhaust valve seat recession in the natural gas-fueled engine greater than or comparable to a corresponding natural gas engine lubricating oil composition in which the one or more alkaline earth metal salts of an alky-substituted hydroxybenzoic acid is replaced with an alkaline earth metal-containing phenate detergent.

4. The method of claim 1, wherein the natural gas engine lubricating oil composition has a sulfated ash content of 0.15 to 0.3 wt.% as determined by ASTM D874.

5. The method of claim 1, wherein the natural gas engine lubricating oil composition is substantially free of molybdenum-containing compounds.

6. The method of claim 1, wherein the natural gas engine lubricating oil composition contains from 0.005 to 0.03 wt.% of phosphorus, based on the total weight of the natural gas engine lubricating oil composition.

7. The method of claim 1, wherein the natural gas engine lubricating oil composition has a sulfated ash content of 0.12 to 1.0 wt.% as determined by ASTM D 874.