

PETRONOMICS NATURAL GAS ENGINE OIL RECOMMENDATION APPLICATION CHART

| ENGINE MANUFACTURER | FUEL | MODEL | PETRONOMICS RECOMMENDATION |
|-------------------------------|------|---------------------------|--|
| AJAX | CG | 2-Cycle | 56924, 56925 |
| CATERPILLAR | CG | 6.25" Bore | 56912, 56913 |
| | CG | 3400, 3500, 3600 | 56902, 56903, 56922, 56923 |
| | LFG | ALL | 56902', 56903', 56922, 56923 |
| COOPER BESSEMER | CG | 2-Cycle | 56912, 56913 |
| | CG | 4-Cycle | 56908, 56909, 56902, 56903, 56922, 56923 |
| DRESSER RAND - INGERSOLL RAND | CG | Category I | 56910, 56911, 56912, 56913 |
| | CG | Category II | 56910, 56911, 56912, 56913 |
| | CG | Category III | 56906, 56907, 56908, 56909 |
| CLARK | CG | 2-Cycle | 56912, 56913 |
| ENTERPRISE | CG | ALL | 56908, 56909 |
| FAIRBANKS-MORSE (MEP) | CG | 2-Cycle | 56906, 56907, 56908, 56909, 56902, 56903, 56922, 56923 |
| NORDBERG | CG | ALL | 56908, 56909 |
| | LFG | ALL | 56920, 56921 |
| SUPERIOR WHITE | CG | G, GT, GST | 56904, 56905 |
| | CG | 1700, 2400 | 56902, 56903, 56922, 56923 |
| | LFG | G, GT, GST | 56920, 56921 |
| | LFG | 1700, 2400 | 56918, 56919 |
| WAUKESHA | CG | VHP, AT, VSG, F817, F1197 | 56902, 56903, 56922, 56923 |
| | CG | VSG Series | 56902, 56903, 56922, 56923 |
| | CG | VGF Series | 56904, 56905 |
| | CG | VHP- (3-Ring) Lean Burn | 56904, 56905 |
| | LFG | VHP, AT | 56920, 56921 |
| | BMG | VHP, AT | 56918, 56919 |
| | DG | All | 56904, 56905 |
| WORTHINGTON | CG | 2-Cycle | 56912, 56913 |
| | CG | 2-Cycle TC | 56916, 56917 |
| | CG | 4-Cycle | 56916, 56917 |

NOTES:

1. Petronomics 56918, 56919 is a preferred alternative for Caterpillar landfill gas application.

FUELS:

CG - CLEAN GAS - Natural Gas 90-95% Methane with <10ppm H2S and <5% Liquid Hydrocarbons.

LFG - LANDFILL GAS - 40-60% Methane, 20-40% CO2, 500-1500ppm H2S, 50-150ppm Chlorinated Compound and quantities of Silicon Compounds (Siloxane).

DC - DIGESTER GAS - Sewer Gas - 50-70% Methane, 20-30% CO2 can contain large amounts of corrosive compounds (H2S)

BMG - BIO-MASS GAS - See Digester Gas.