



Exhaust Emission Data Sheet

100GGHH

60 Hz Spark Ignited Generator Set

EPA Emissions

Engine Information:

Model:	WSG-1068	Bore:	3.55 in. (90.2 mm)
Type:	4 Cycle, V-10 Cylinder Spark-Ignited	Stroke:	4.17 in. (105.9 mm)
Aspiration:	Turbocharged	Displacement:	412.5 cu. in. (6.8 liters)
Compression Ratio:	9.0:1		
Emission Control Device:	Electronics Air/Fuel Ratio Control, 3-way Catalyst, and Closed-loop Breather System		

	<u>Natural Gas</u>	<u>Propane</u>
<u>PERFORMANCE DATA</u>	<u>Standby</u>	<u>Standby</u>
Genset Rating (kW) @1800 RPM (60 Hz)	100	100
BHP @ 1800 RPM (60 Hz)	153.2	153.2
Fuel Consumption (SCFH)	1352	502
Air to Fuel Ratio	17.1	15.5
Exhaust Gas Flow (CFM)	625	609
Exhaust Gas Temperature (°F)	1004	1004
<u>EXHAUST EMISSION DATA</u>		
HC (Total Unburned Hydrocarbons)*	241	115
NOx (Oxides of Nitrogen as NO ₂)	5	5
CO (Carbon Monoxide)	0	0
Values are ppmvd		
HC (Total Unburned Hydrocarbons)*	0.29	0.14
NOx (Oxides of Nitrogen as NO ₂)	0.02	0.02
CO (Carbon Monoxide)	0.00	0.00
Values are Grams per HP-Hour		
*HC includes all NMHC, VOC, POC, and ROC constituents (Non-Methane HC, Volatile Organic Compounds, Precursor Organic Compounds, and Reactive Organic Compounds)		

TEST CONDITIONS

Data was recorded during steady-state rated engine speed (± 25 RPM) with full load ($\pm 2\%$). Pressures, temperatures, and emission rates were stabilized.

Fuel Specification:

Natural Gas: Dry gas as received from Supplier (1000 BTU/SCF).

Propane: Meets the requirements for Commercial Grade Propane under the ASTM D1835 Standard Specification for Liquefied Gases

Fuel Temperature 60 ± 9 °F at Flow Transmitter

Fuel Pressure 14.73PSIA ± 0.5 PSIA at Flow Transmitter

Intake Air Temperature: 77 ± 9 °F at inlet

Barometric Pressure: 29.92 in. Hg ± 1 in. Hg

Humidity: NOx measurement corrected to 75 grains H₂O/lb dry air

The NOx, HC, and CO emission data tabulated here were from a single engine under the test conditions shown above. These data are subjected to instrumentation and engine-to-engine variability. Field emission test data are not guaranteed to these levels. Actual field test results may vary due to test site conditions, installation, fuel specification, test procedures and instrumentation. Engine operation with excessive air intake or exhaust restriction beyond published maximum limit, or with improper maintenance, may result in elevated emission levels.