Revised: January 15th, 2012

**Power Solutions International**
201 Mittel Drive
Wood Dale, IL 60191
630-350-9400
www.psiengines.com

## Zero-Hour Non-Deteriorated Emissions for Permitting Customers

**GRAMS PER KW-HR**

| | D081NA | | D081L[5 &6] | | D111L[5] | | D146L[5] | | D183L[5 & 6] | | D219L[5] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EPA Engine Family** | CPWRB8.10NGP | | CPWRB8.10TNP | | CPWRB11.1NGP | | CPWRB14.6NGP | | CPWRB18.3NGP | | CPWRB21.9NGP | |
| **Model/Fuel** | 8.1LNA LPG | 8.1LNA NG | 8.1LT LPG | 8.1LT NG | 11.1L LPG | 11.1L NG | 14.6L LPG | 14.6L NG | 18.3L LPG | 18.3L NG | 21.9L LPG | 21.9L NG |
| **Displacement (Liter)** | 8.071L | | 8.071L | | 11.051L | | 14.618L | | 18.273L | | 21.927L | |
| **Rated Power (kW) @ 1800 RPM[1,2&3]** | 105.9 | 103.6 | 136.1 | 175.7 | 154.9 | 226.0 | 237.8 | 334.8 | 316.9 | 422.0 | 351.9 | 484.6 |
| | g/KW-hr | g/KW-hr | g/KW-hr | g/KW-hr | g/KW-hr | g/KW-hr | g/KW-hr | g/KW-hr | g/KW-hr | g/KW-hr | g/KW-hr | g/KW-hr |
| **BSCO** | 0.59 | 0.16 | 0.53 | 0.18 | 0.33 | 0.35 | 0.15 | 0.08 | 0.20 | 0.28 | 0.34 | 0.13 |
| **BSCO2** | 937.8 | 650.9 | 808.40 | 662.75 | 899 | 623 | 952.04 | 647.93 | 777.32 | 591.9 | 881.30 | 590.70 |
| **BSTHC** | 0.01 | 0.31 | 0.09 | 0.85 | 0.09 | 2.98 | 0.06 | 0.20 | 0.04 | 0.75 | 0.05 | 0.43 |
| **BSNMHC[7]** | NA | 0.1 | NA | 0.02 | NA | 0.34 | NA | 0.06 | NA | 0.00 | NA | 0.01 |
| **BSNOx** | 0.09 | 0.06 | 0.01 | 0.01 | 0.02 | 0.03 | 0.04 | 0.10 | 0.06 | 0.04 | 0.03 | 0.08 |
| **BSTHC+Nox** | 0.1 | NA | 0.11 | 0.85 | 0.11 | NA | 0.10 | NA | 0.10 | NA | 0.08 | NA |
| **BSNMHC+Nox** | NA | 0.15 | NA | 0.03 | NA | 0.37 | NA | 0.16 | NA | 0.04 | NA | 0.09 |
| **BSFC (kg/kw-hr)[4]** | 0.28 | 0.275 | 0.27 | 0.25 | 0.30 | 0.26 | 0.32 | 0.24 | 0.26 | 0.22 | 0.27 | 0.22 |

**GRAMS PER HP-HR**

| | D081NA | | D081L[5 &6] | | D111L[5] | | D146L[5] | | D183L[5 & 6] | | D219L[5] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EPA Engine Family** | CPWRB8.10NGP | | CPWRB8.10TNP | | CPWRB11.1NGP | | CPWRB14.6NGP | | CPWRB18.3NGP | | CPWRB21.9NGP | |
| **Model/Fuel** | 8.1LNA LPG | 8.1LNA NG | 8.1LT LPG | 8.1LT NG | 11.1L LPG | 11.1L NG | 14.6L LPG | 14.6L NG | 18.3L LPG | 18.3L NG | 21.9L LPG | 21.9L NG |
| **Displacement (Cubic Inch)** | 492.5CID | | 492.5CID | | 674.5CID | | 892.1CID | | 1115.1CID | | 1338.0CID | |
| **Rated Power (hp) @ 1800 RPM[1,2&3]** | 142 | 139 | 183 | 236 | 208 | 303 | 319 | 449 | 425 | 566 | 472 | 650 |
| | g/hp-hr | g/hp-hr | g/hp-hr | g/hp-hr | g/hp-hr | g/hp-hr | g/hp-hr | g/hp-hr | g/hp-hr | g/hp-hr | g/hp-hr | g/hp-hr |
| **BSCO** | 0.44 | 0.12 | 0.39 | 0.13 | 0.25 | 0.26 | 0.11 | 0.06 | 0.15 | 0.21 | 0.25 | 0.10 |
| **BSCO2** | 699.22 | 485.31 | 602.74 | 494.15 | 670.06 | 464.32 | 709.84 | 483.10 | 579.57 | 441.32 | 657.10 | 440.43 |
| **BSTHC** | 0.01 | 0.23 | 0.07 | 0.63 | 0.07 | 2.22 | 0.04 | 0.15 | 0.03 | 0.56 | 0.04 | 0.32 |
| **BSNMHC[7]** | N/A | 0.07 | NA | 0.02 | NA | 0.25 | NA | 0.04 | NA | 0.00 | NA | 0.00 |
| **BSNOx** | 0.07 | 0.04 | 0.01 | 0.00 | 0.01 | 0.02 | 0.03 | 0.07 | 0.04 | 0.03 | 0.02 | 0.06 |
| **BSTHC+Nox** | 0.07 | N/A | 0.08 | NA | 0.08 | NA | 0.07 | NA | 0.07 | NA | 0.06 | NA |
| **BSNMHC+Nox** | N/A | 0.11 | NA | 0.02 | NA | 0.28 | NA | 0.12 | NA | 0.03 | NA | 0.06 |
| **BSFC (kg/hp-hr)[4]** | 0.21 | 0.21 | 0.20 | 0.19 | 0.22 | 0.19 | 0.24 | 0.18 | 0.19 | 0.16 | 0.20 | 0.16 |

**NOTES**

[1] Rated power is based on ISO3046 and/or ISO 8528.

[2] All ratings are gross flywheel horsepower corrected to 77ºF at an altitude of 328 feet with no cooling fan or alternator losses using heating value for NG of 1015 BTU/SCF.

[3] Production tolerances in engines and installed components can account for power variations of +/- 5%. Altitude, temperature and excessive exhaust and intake restrictions should be applied to power calculations.

[4] Bsfc is based on 100% gross flywheel power rating and does not include fan or generator losses.

[5] Emissions shown are certified third-party Zero-hour data points suitable for site permitting calculations and are measured in accordance with US EPA NSPS 40CFR Part 1048

[6] Emissions shown are certified third-party Zero-hour data points suitable for site permitting calculations and are measured in accordance with US EPA NSPS 40CFR Part 60

[7] For NG, NMHC is reported in place of VOC for this report

Revised: January 15th, 2012

**Power Solutions International**
201 Mittel Drive
Wood Dale, IL 60191
630-350-9400
www.psiengines.com

# NGE 8.1L-NA

## Zero-Hour Non-Deteriorated Emissions for Permitting Customers

**GRAMS PER KW-HR**

| | D081NA | |
|---|---|---|
| **EPA Engine Family** | CPWRB8.10NGP | |
| **Model/Fuel** | **8.1LNA LPG** | **8.1LNA NG** |
| **Displacement (Liter)** | 8.071L | |
| **Rated Power (kW) @ 1800 RPM**[1,2&3] | 105.9 | 103.6 |
| | **g/KW-hr** | **g/KW-hr** |
| **BSCO** | 0.59 | 0.16 |
| **BSCO2** | 938 | 651 |
| **BSTHC** | 0.01 | 0.31 |
| **BSNMHC**[7] | NA | 0.1 |
| **BSNOx** | 0.09 | 0.06 |
| **BSTHC+Nox** | 0.1 | NA |
| **BSNMHC+Nox** | NA | 0.15 |
| **BSFC (kg/kw-hr)**[4] | 0.28 | 0.275 |

**GRAMS PER HP-HR**

| | D081NA | |
|---|---|---|
| **EPA Engine Family** | CPWRB8.10NGP | |
| **Model/Fuel** | **8.1LNA LPG** | **8.1LNA NG** |
| **Displacement (Cubic Inch)** | 492.5CID | |
| **Rated Power (hp) @ 1800 RPM**[1,2&3] | 142 | 139 |
| | **g/hp-hr** | **g/hp-hr** |
| **BSCO** | 0.44 | 0.12 |
| **BSCO2** | 699 | 485 |
| **BSTHC** | 0.01 | 0.23 |
| **BSNMHC**[7] | NA | 0.07 |
| **BSNOx** | 0.07 | 0.04 |
| **BSTHC+Nox** | 0.07 | NA |
| **BSNMHC+Nox** | NA | 0.11 |
| **BSFC (kg/hp-hr)**[4] | 0.21 | 0.21 |

**NOTES**

[1] Rated power is based on ISO3046 and/or ISO 8528.

[2] All ratings are gross flywheel horsepower corrected to 77ºF at an altitude of 328 feet with no cooling fan or alternator losses using heating value for NG of 1015 BTU/SCF.

[3] Production tolerances in engines and installed components can account for power variations of +/- 5%. Altitude, temperature and excessive exhaust and intake restrictions should be applied to power calculations.

[4] Bsfc is based on 100% gross flywheel power rating and does not include fan or generator losses.

[5] Emissions shown are certified third-party Zero-hour data points suitable for site permitting calculations and are measured in accordance with US EPA NSPS 40CFR Part 1048

[6] Emissions shown are certified third-party Zero-hour data points suitable for site permitting calculations and are measured in accordance with US EPA NSPS 40CFR Part 60

[7] For NG, NMHC is reported in place of VOC for this report

Revised: January 15th, 2012

**Power Solutions Inter**
201 Mittel Drive
Wood Dale, IL 60191
630-350-9400
www.psiengines.com

# NGE 8.1L-CAC

## Zero-Hour Non-Deteriorated Emissions for Permitting Customers

| GRAMS PER KW-HR | D081L[5 &6] | |
|---|---|---|
| EPA Engine Family | CPWRB8.10TNP | |
| Model/Fuel | 8.1LT LPG | 8.1LT NG |
| Displacement (Liter) | 8.071L | |
| Rated Power (kW) @ 1800 RPM[1,2&3] | 136 | 176 |
| | g/KW-hr | g/KW-hr |
| BSCO | 0.53 | 0.18 |
| BSCO2 | 808 | 663 |
| BSTHC | 0.09 | 0.85 |
| BSNMHC[7] | NA | 0.02 |
| BSNOx | 0.01 | 0.01 |
| BSTHC+Nox | 0.11 | 0.85 |
| BSNMHC+Nox | NA | 0.03 |
| BSFC (kg/kw-hr)[4] | 0.27 | 0.25 |

| GRAMS PER HP-HR | D081L[5 &6] | |
|---|---|---|
| EPA Engine Family | CPWRB8.10TNP | |
| Model/Fuel | 8.1LT LPG | 8.1LT NG |
| Displacement (Cubic Inch) | 492.5CID | |
| Rated Power (hp) @ 2000 RPM[1,2&3] | 183 | 236 |
| | g/hp-hr | g/hp-hr |
| BSCO | 0.39 | 0.13 |
| BSCO2 | 603 | 494 |
| BSTHC | 0.07 | 0.63 |
| BSNMHC[7] | NA | 0.02 |
| BSNOx | 0.01 | 0.00 |
| BSTHC+Nox | 0.08 | NA |
| BSNMHC+Nox | NA | 0.02 |
| BSFC (kg/hp-hr)[4] | 0.20 | 0.19 |

**NOTES**

[1] Rated power is based on ISO3046 and/or ISO 8528.

[2] All ratings are gross flywheel horsepower corrected to 77ºF at an altitude of 328 feet with no cooling fan or alternator losses using heating value for NG of 1015 BTU/SCF.

[3] Production tolerances in engines and installed components can account for power variations of +/- 5%. Altitude, temperature and excessive exhaust and intake restrictions should be applied to power calculations.

[4] Bsfc is based on 100% gross flywheel power rating and does not include fan or generator losses.

[5] Emissions shown are certified third-party Zero-hour data points suitable for site permitting calculations and are measured in accordance with US EPA NSPS 40CFR Part 1048

[6] Emissions shown are certified third-party Zero-hour data points suitable for site permitting calculations and are measured in accordance with US EPA NSPS 40CFR Part 60

[7] For NG, NMHC is reported in place of VOC for this report

Revised: January 15th, 2012

**Power Solutions Interna**
201 Mittel Drive
Wood Dale, IL 60191
630-350-9400
www.psiengines.com

# NGE 11.1L-CAC

## Zero-Hour Non-Deteriorated Emissions for Permitting Customers

| GRAMS PER KW-HR | D111L[5] | |
|---|---|---|
| EPA Engine Family | CPWRB11.1NGP | |
| Model/Fuel | 11.1L LPG | 11.1L NG |
| Displacement (Liter) | 11.051L | |
| Rated Power (kW) @ 2000 RPM[1,2&3] | 155 | 226 |
| | g/KW-hr | g/KW-hr |
| BSCO | 0.33 | 0.35 |
| BSCO2 | 899 | 623 |
| BSTHC | 0.09 | 2.98 |
| BSNMHC[7] | NA | 0.34 |
| BSNOx | 0.02 | 0.03 |
| BSTHC+Nox | 0.11 | NA |
| BSNMHC+Nox | NA | 0.37 |
| BSFC (kg/kw-hr)[4] | 0.30 | 0.26 |

| GRAMS PER HP-HR | D111L[5] | |
|---|---|---|
| EPA Engine Family | CPWRB11.1NGP | |
| Model/Fuel | 11.1L LPG | 11.1L NG |
| Displacement (Cubic Inch) | 674.5CID | |
| Rated Power (hp) @ 2000 RPM[1,2&3] | 208 | 303 |
| | g/hp-hr | g/hp-hr |
| BSCO | 0.25 | 0.26 |
| BSCO2 | 670 | 464 |
| BSTHC | 0.07 | 2.22 |
| BSNMHC[7] | NA | 0.25 |
| BSNOx | 0.01 | 0.02 |
| BSTHC+Nox | 0.08 | NA |
| BSNMHC+Nox | NA | 0.28 |
| BSFC (kg/hp-hr)[4] | 0.22 | 0.19 |

**NOTES**

[1] Rated power is based on ISO3046 and/or ISO 8528.

[2] All ratings are gross flywheel horsepower corrected to 77ºF at an altitude of 328 feet with no cooling fan or alternator losses using heating value for NG of 1015 BTU/SCF.

[3] Production tolerances in engines and installed components can account for power variations of +/- 5%. Altitude, temperature and excessive exhaust and intake restrictions should be applied to power calculations.

[4] Bsfc is based on 100% gross flywheel power rating and does not include fan or generator losses.

[5] Emissions shown are certified third-party Zero-hour data points suitable for site permitting calculations and are measured in accordance with US EPA NSPS 40CFR Part 1048

[6] Emissions shown are certified third-party Zero-hour data points suitable for site permitting calculations and are measured in accordance with US EPA NSPS 40CFR Part 60

[7] For NG, NMHC is reported in place of VOC for this report

Revised: January 15th, 2012

**Power Solutions International**
201 Mittel Drive
Wood Dale, IL 60191

630-350-9400
www.psiengines.com

# NGE 14.6L-CAC

## Zero-Hour Non-Deteriorated Emissions for Permitting Customers

| GRAMS PER KW-HR | D146L[5] | |
|---|---|---|
| EPA Engine Family | CPWRB14.6NGP | |
| Model/Fuel | 14.6L LPG | 14.6L NG |
| Displacement (Liter) | 14.618L | |
| Rated Power (kW) @ 1800 RPM[1,2&3] | 238 | 335 |
| | g/KW-hr | g/KW-hr |
| BSCO | 0.15 | 0.08 |
| BSCO2 | 952 | 648 |
| BSTHC | 0.06 | 0.20 |
| BSNMHC[7] | NA | 0.06 |
| BSNOx | 0.04 | 0.10 |
| BSTHC+Nox | 0.10 | NA |
| BSNMHC+Nox | NA | 0.16 |
| BSFC (kg/kw-hr)[4] | 0.32 | 0.24 |

**GRAMS PER HP-HR**

| | D146L[5] | |
|---|---|---|
| EPA Engine Family | CPWRB14.6NGP | |
| Model/Fuel | 14.6L LPG | 14.6L NG |
| Displacement (Cubic Inch) | 892.1CID | |
| Rated Power (hp) @ 1800 RPM[1,2&3] | 319 | 449 |
| | g/hp-hr | g/hp-hr |
| BSCO | 0.11 | 0.06 |
| BSCO2 | 710 | 483 |
| BSTHC | 0.04 | 0.15 |
| BSNMHC[7] | NA | 0.05 |
| BSNOx | 0.03 | 0.08 |
| BSTHC+Nox | 0.07 | NA |
| BSNMHC+Nox | NA | 0.12 |
| BSFC (kg/hp-hr)[4] | 0.52 | 0.40 |

**NOTES**

[1] Rated power is based on ISO3046 and/or ISO 8528.

[2] All ratings are gross flywheel horsepower corrected to 77ºF at an altitude of 328 feet with no cooling fan or alternator losses using heating value for NG of 1015 BTU/SCF.

[3] Production tolerances in engines and installed components can account for power variations of +/- 5%. Altitude, temperature and excessive exhaust and intake restrictions should be applied to power calculations.

[4] Bsfc is based on 100% gross flywheel power rating and does not include fan or generator losses.

[5] Emissions shown are certified third-party Zero-hour data points suitable for site permitting calculations and are measured in accordance with US EPA NSPS 40CFR Part 1048

[6] Emissions shown are certified third-party Zero-hour data points suitable for site permitting calculations and are measured in accordance with US EPA NSPS 40CFR Part 60

[7] For NG, NMHC is reported in place of VOC for this report

Revised: January 15th, 2012

**Power Solutions International**
201 Mittel Drive
Wood Dale, IL 60191
630-350-9400
www.psiengines.com

# NGE 18.3L-CAC

## Zero-Hour Non-Deteriorated Emissions for Permitting Customers

**GRAMS PER KW-HR**

| | D183L[5 & 6] | |
|---|---|---|
| **EPA Engine Family** | **CPWRB18.3NGP** | |
| **Model/Fuel** | **18.3L LPG** | **18.3L NG** |
| **Displacement (Liter)** | 18.273L | |
| **Rated Power (kW) @ 1800 RPM[1,2&3]** | 316.9 | 422.0 |
| | **g/KW-hr** | **g/KW-hr** |
| **BSCO** | 0.20 | 0.28 |
| **BSCO2** | 777 | 592 |
| **BSTHC** | 0.04 | 0.75 |
| **BSNMHC[7]** | NA | 0.00 |
| **BSNOx** | 0.06 | 0.04 |
| **BSTHC+Nox** | 0.1 | NA |
| **BSNMHC+Nox** | NA | 0.04 |
| **BSFC (kg/kw-hr)[4]** | 0.259 | 0.217 |

**GRAMS PER HP-HR**

| | D183L[5 & 6] | |
|---|---|---|
| **EPA Engine Family** | **CPWRB18.3NGP** | |
| **Model/Fuel** | **18.3L LPG** | **18.3L NG** |
| **Displacement (Cubic Inch)** | 1115.1CID | |
| **Rated Power (hp) @ 1800 RPM[1,2&3]** | 425 | 566 |
| | **g/hp-hr** | **g/hp-hr** |
| **BSCO** | 0.15 | 0.21 |
| **BSCO2** | 580 | 441 |
| **BSTHC** | 0.03 | 0.56 |
| **BSNMHC[7]** | NA | 0.00 |
| **BSNOx** | 0.04 | 0.03 |
| **BSTHC+Nox** | 0.07 | NA |
| **BSNMHC+Nox** | NA | 0.03 |
| **BSFC (kg/hp-hr)[4]** | 0.19 | 0.16 |

**NOTES**

[1] Rated power is based on ISO3046 and/or ISO 8528.

[2] All ratings are gross flywheel horsepower corrected to 77ºF at an altitude of 328 feet with no cooling fan or alternator losses using heating value for NG of 1015 BTU/SCF.

[3] Production tolerances in engines and installed components can account for power variations of +/- 5%. Altitude, temperature and excessive exhaust and intake restrictions should be applied to power calculations.

[4] Bsfc is based on 100% gross flywheel power rating and does not include fan or generator losses.

[5] Emissions shown are certified third-party Zero-hour data points suitable for site permitting calculations and are measured in accordance with US EPA NSPS 40CFR Part 1048

[6] Emissions shown are certified third-party Zero-hour data points suitable for site permitting calculations and are measured in accordance with US EPA NSPS 40CFR Part 60

[7] For NG, NMHC is reported in place of VOC for this report

Revised: January 15th, 2012

**Power Solutions International**
201 Mittel Drive
Wood Dale, IL 60191
630-350-9400
www.psiengines.com

# NGE 21.9L-CAC

## Zero-Hour Non-Deteriorated Emissions for Permitting Customers

**GRAMS PER KW-HR**

| | D219L[5] | |
|---|---|---|
| **EPA Engine Family** | **CPWRB21.9NGP** | |
| **Model/Fuel** | **21.9L LPG** | **21.9L NG** |
| **Displacement (Liter)** | 21.927L | |
| **Rated Power (kW) @ 1800 RPM[1,2&3]** | 352 | 485 |
| | **g/KW-hr** | **g/KW-hr** |
| **BSCO** | 0.34 | 0.13 |
| **BSCO2** | 881 | 591 |
| **BSTHC** | 0.05 | 0.43 |
| **BSNMHC[7]** | NA | 0.01 |
| **BSNOx** | 0.03 | 0.08 |
| **BSTHC+Nox** | 0.08 | NA |
| **BSNMHC+Nox** | NA | 0.09 |
| **BSFC (kg/kw-hr)[4]** | 0.27 | 0.22 |

**GRAMS PER HP-HR**

| | D219L[5] | |
|---|---|---|
| **EPA Engine Family** | **CPWRB21.9NGP** | |
| **Model/Fuel** | **21.9L LPG** | **21.9L NG** |
| **Displacement (Cubic Inch)** | 1338CID | |
| **Rated Power (hp) @ 1800 RPM[1,2&3]** | 472 | 650 |
| | **g/hp-hr** | **g/hp-hr** |
| **BSCO** | 0.25 | 0.10 |
| **BSCO2** | 657 | 440 |
| **BSTHC** | 0.04 | 0.32 |
| **BSNMHC[7]** | NA | 0.00 |
| **BSNOx** | 0.02 | 0.06 |
| **BSTHC+Nox** | 0.06 | NA |
| **BSNMHC+Nox** | NA | 0.06 |
| **BSFC (kg/hp-hr)[4]** | 0.20 | 0.16 |

**NOTES**

[1] Rated power is based on ISO3046 and/or ISO 8528.

[2] All ratings are gross flywheel horsepower corrected to 77ºF at an altitude of 328 feet with no cooling fan or alternator losses using heating value for NG of 1015 BTU/SCF.

[3] Production tolerances in engines and installed components can account for power variations of +/- 5%. Altitude, temperature and excessive exhaust and intake restrictions should be applied to power calculations.

[4] Bsfc is based on 100% gross flywheel power rating and does not include fan or generator losses.

[5] Emissions shown are certified third-party Zero-hour data points suitable for site permitting calculations and are measured in accordance with US EPA NSPS 40CFR Part 1048

[6] Emissions shown are certified third-party Zero-hour data points suitable for site permitting calculations and are measured in accordance with US EPA NSPS 40CFR Part 60

[7] For NG, NMHC is reported in place of VOC for this report