# Appendix B-2

# Field Data Sheets
# Engine #2

ISOKINETIC SAMPLING DATA

| Plant Name, City, State, Project Number | Sampling Location | Method No. | Run Number | Test Date | Notes |
|---|---|---|---|---|---|
| Waste Mgmt Maine | ENGINE #2 STACK | M5 | ENGINE 2-1 | 9/3/09 | Total Moisture Catch: F 3691 I 3529 N 142 |

| Operators | Stack I.D. (In.) | Ambient T. (°F) | Barometric (In. Hg) | Static Pressure | Assumed Moist. % | O2 (%) | CO2 (%) | Probe Length and Liner Type | Filter Type | Filter Number |
|---|---|---|---|---|---|---|---|---|---|---|
| KL/EB | 16 | 72°F | 30.12 | -0.2 | 10 | | | 3'-Glass | Quartz | 634 |

| DGM No. | DGM Delta H@ | DGM CAL Y | Pitot No. | Pitot Tube Cp | Pitot Leak Check | Nozzle Number | Nozzle Diameter | Leak Check (Initial) cfm | Leak Check (Initial) (In Hg) | Leak Check (Final) cfm | Leak Check (Final) (In Hg) | K Factor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80823 | 1.671 | 0.9936 | 4-3 | 0.84 | ✓ | | 0.248 | 0.000 | 8.0 | 0001 | 10.5 | 0.85 |

y = 0.991
ΔH@ = 1.892

| Point Number | Clock Time (24-hour) | Elapsed Test Time (min) | Dry Gas Meter Reading (Cubic Feet) | ΔP Velocity (In H2O) | ΔH Orifice (In H2O) | Stack Temp. (°F) | Probe Temp. (°F) | Filter Oven Temp. (°F) | Impinger Temp. (°F) | Filter Exit or Heated Line Temp. (°F) | XAD Trap Temp. (°F) | DGM Temp. (°F) DGM In | DGM Temp. (°F) DGM Out | Sample Train Vacuum (In Hg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A1 | 1133 | 0 | 459.958 | 2.4 | 2.05 | 813 | 253 | 264 | 60 | N/A | N/A | 93 | 91 | 4 |
| 2 | | 4 | 463.0 | 2.3 | 2.00 | 814 | 254 | 261 | 61 | — | — | 95 | 91 | 4 |
| 3 | | 8 | 466.1 | 2.3 | 1.95 | 816 | 253 | 262 | 61 | — | — | 95 | 92 | 4 |
| 4 | | 12 | 469.3 | 2.3 | 1.95 | 811 | 255 | 259 | 61 | — | — | 97 | 92 | 4 |
| 5 | | 16 | 472.7 | 2.2 | 1.90 | 812 | 256 | 263 | 63 | — | — | 97 | 92 | 4 |
| 6 | | 20 | 475.6 | 2.2 | 1.90 | 811 | 259 | 264 | 63 | — | — | 97 | 92 | 4 |
| 7 | | 24 | 478.5 | 2.4 | 2.05 | 811 | 258 | 261 | 63 | — | — | 97 | 91 | 4 |
| 8 | | 28 | 481.6 | 2.4 | 2.05 | 810 | 260 | 259 | 63 | — | — | 97 | 91 | 4 |
| B1 | | 32 | 485.0 | 2.5 | 2.15 | 808 | 261 | 258 | 63 | — | — | 97 | 92 | 4 |
| 2 | | 36 | 488.2 | 2.5 | 2.15 | 809 | 262 | 256 | 62 | — | — | 97 | 92 | 4 |
| 3 | | 40 | 491.4 | 2.5 | 2.15 | 807 | 260 | 259 | 62 | — | — | 97 | 92 | 4 |
| 4 | | 44 | 494.8 | 2.5 | 2.15 | 807 | 258 | 260 | 62 | — | — | 97 | 92 | 4 |
| 5 | | 48 | 498.3 | 2.4 | 2.05 | 811 | 257 | 258 | 62 | — | — | 97 | 92 | 4 |
| 6 | | 52 | 501.0 | 2.4 | 2.05 | 800 | 256 | 261 | 64 | — | — | 97 | 92 | 4 |
| 7 | | 56 | 504.3 | 2.4 | 2.05 | 803 | 256 | 261 | 65 | — | — | 97 | 92 | 4 |
| 8 | | 60 | 507.5 | 2.3 | 1.95 | 805 | 259 | 259 | 65 | — | — | 97 | 91 | 4 |
| STOP | 1240 | 64 | 510.865 | — | — | — | — | — | — | — | — | — | — | — |

| Total Run Time | DGM Volume | Ave. SQRT ΔP | Average ΔH | Stack Temp | Ave. DGM Temp. |
|---|---|---|---|---|---|
| 64 | | | | | |

TRC

ISOKINETIC SAMPLING DATA

| Plant Name, City, State, Project Number | Sampling Location | Method No. | Run Number | Test Date | Notes |
|---|---|---|---|---|---|
| Waste Mgmt Maine | ENGINE 2 - STACK | M5 | ENGINE 2-2 | 9/3/09 | Total Moisture Catch: F 3709 I 3582 N 127 |

| Operators | Stack I.D. (in.) | Ambient T. (°F) | Barometric (in. Hg) | Static Pressure | Assumed Moist. % | O2 (%) | CO2 (%) | Probe Length and Liner Type | Filter Type | Filter Number |
|---|---|---|---|---|---|---|---|---|---|---|
| EB/KL | 16 | 72 | 30.12 | -0.25 | 12 | 9.0 | 9.8 | 3'-Glass | Quartz | 685 |

| DGM No. | DGM Delta H@ | DGM CAL Y | Pitot No. | Pitot Tube Cp | Pitot Leak Check | Nozzle Number | Nozzle Diameter | Leak Check (Initial) cfm | Leak Check (Initial) (In Hg) | Leak Check (Final) cfm | Leak Check (Final) (In Hg) | K Factor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80823 | 1.67 | ~~0.9936~~ 0.991 | 4-3 | 0.84 | ✓ | | 0.218 | 0.000 | 9.0 | 0.002 | 8.0 | 0.85 |

$y = 0.991$
$\Delta H@ = 1.892$

| Point Number | Clock Time (24-hour) | Elapsed Test Time (min) | Dry Gas Meter Reading (Cubic Feet) | ΔP Velocity (in H2O) | ΔH Orifice (in H2O) | Stack Temp. (°F) | Probe Temp. (°F) | Filter Oven Temp. (°F) | Impinger Temp. (°F) | Filter Exit or Heated Line Temp. (°F) | XAD Trap Temp. (°F) | DGM Temp. (°F) DGM In | DGM Temp. (°F) DGM Out | Sample Train Vacuum (in Hg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A1 | 1245 | 0 | 511.499 | 2.4 | 2.00 | 803 | 249 | 258 | 63 | N/A | N/A | 94 | 92 | 4 |
| 2 | | 4 | 514.6 | 2.4 | 2.00 | 801 | 249 | 257 | 62 | — | — | 95 | 92 | 4 |
| 3 | | 8 | 517.8 | 2.5 | 2.10 | 799 | 256 | 255 | 62 | — | — | 96 | 91 | 4 |
| 4 | | 12 | 521.0 | 2.5 | 2.10 | 798 | 257 | 254 | 62 | — | — | 96 | 91 | 4 |
| 5 | | 16 | 524.3 | 2.5 | 2.10 | 800 | 255 | 252 | 62 | — | — | 96 | 91 | 4 |
| 6 | | 20 | 527.7 | 2.5 | 2.10 | 801 | 254 | 253 | 63 | — | — | 96 | 91 | 4 |
| 7 | | 24 | 530.6 | 2.5 | 2.10 | 801 | 260 | 253 | 63 | — | — | 96 | 91 | 4 |
| 8 | | 28 | 533.8 | 2.3 | 1.95 | 800 | 261 | 258 | 63 | — | — | 96 | 91 | 4 |
| B1 | | 32 | 537.0 | 2.3 | 1.95 | 799 | 260 | 259 | 63 | — | — | 96 | 91 | 4 |
| 2 | | 36 | 540.3 | 2.4 | 2.00 | 795 | 259 | 257 | 63 | — | — | 96 | 91 | 4 |
| 3 | | 40 | 543.6 | 2.4 | 2.00 | 795 | 258 | 256 | 64 | — | — | 96 | 91 | 4 |
| 4 | | 44 | 546.9 | 2.5 | 2.10 | 782 | 259 | 257 | 65 | — | — | 96 | 91 | 4 |
| 5 | | 48 | 550.0 | 2.5 | 2.10 | 782 | 257 | 255 | 66 | — | — | 96 | 91 | 4 |
| 6 | | 52 | 553.2 | 2.5 | 2.10 | 774 | 255 | 254 | 62 | — | — | 96 | 91 | 4 |
| 7 | | 56 | 556.2 | 2.4 | 2.00 | 771 | 255 | 254 | 62 | — | — | 96 | 91 | 4 |
| 8 | | 60 | 559.3 | 2.5 | 2.10 | 768 | 253 | 253 | 62 | — | — | 96 | 91 | 4 |
| STOP | 1352 | 64 | 562.496 | — | — | — | — | — | — | — | — | — | — | — |

| Total Run Time | DGM Volume | Ave. SQRT ΔP | Average ΔH | Stack Temp | Ave. DGM Temp |
|---|---|---|---|---|---|
| 64 | | | | | |

TRC

ISOKINETIC SAMPLING DATA

| Plant Name, City, State, Project Number | Sampling Location | Method No. | Run Number | Test Date | Notes |
|---|---|---|---|---|---|
| Waste Mgmt Maine | ENGINE #2 STACK | M5 | ENGINE 2-3 | 9-3-09 | Total Moisture Catch: F 3613 I 3477 N 136 |

| Operators | Stack I.D. (in.) | Ambient T. (°F) | Barometric (in. Hg) | Static Pressure | Assumed Moist. % | O2 (%) | CO2 (%) | Probe Length and Liner Type | Filter Type | Filter Number |
|---|---|---|---|---|---|---|---|---|---|---|
| KL/EB | 16 | 70 | 30.12 | -0.25 | 12 | | | 3'-Glass | Quartz | 686 |

| DGM No. | DGM Delta H@ | DGM CAL Y | Pitot No. | Pitot Tube Cp | Pitot Leak Check | Nozzle Number | Nozzle Diameter | Leak Check (Initial) cfm | Leak Check (Initial) (in Hg) | Leak Check (Final) cfm | Leak Check (Final) (in Hg) | K Factor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80823 | 1.671 | 0.9936 | 4-3 | 0.84 | ✓ | | 0.218 | 0.000 | 10.5 | 0.001 | 8.0 | 0.85 |

y = 0.9911
ΔH@ = 1.892

| Point Number | Clock Time (24-hour) | Elapsed Test Time (min) | Dry Gas Meter Reading (Cubic Feet) | ΔP Velocity (in H2O) | ΔH Orifice (in H2O) | Stack Temp. (°F) | Probe Temp. (°F) | Filter Oven Temp. (°F) | Impinger Temp. (°F) | Filter Exit or Heated Line Temp. (°F) | XAD Trap Temp. (°F) | DGM Temp. (°F) DGM In | DGM Temp. (°F) DGM Out | Sample Train Vacuum (in Hg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A 1 | 1358 | 0 | 563.401 | 2.5 | 2.10 | 775 | 243 | 246 | 60 | N/A | N/A | 94 | 90 | 5 |
| 2 | | 4 | 566.6 | 2.5 | 2.10 | 804 | 250 | 249 | 61 | — | — | 95 | 90 | 5 |
| 3 | | 8 | 569.9 | 2.5 | 2.10 | 804 | 257 | 260 | 61 | — | — | 96 | 90 | 5 |
| 4 | | 12 | 573.1 | 2.5 | 2.10 | 805 | 254 | 262 | 61 | — | — | 96 | 90 | 5 |
| 5 | | 16 | 576.3 | 2.5 | 2.10 | 805 | 253 | 261 | 62 | — | — | 96 | 90 | 5 |
| 6 | | 20 | 579.2 | 2.4 | 2.00 | 804 | 255 | 262 | 62 | — | — | 96 | 91 | 5 |
| 7 | | 24 | 582.4 | 2.4 | 2.00 | 799 | 258 | 265 | 60 | — | — | 97 | 91 | 5 |
| 8 | | 28 | 585.6 | 2.4 | 2.00 | 795 | 260 | 261 | 60 | — | — | 97 | 91 | 5 |
| B 1 | | 32 | 588.5 | 2.4 | 2.00 | 796 | 259 | 260 | 61 | — | — | 97 | 91 | 5 |
| 2 | | 36 | 591.6 | 2.4 | 2.00 | 792 | 260 | 258 | 61 | — | — | 97 | 91 | 5 |
| 3 | | 40 | 594.7 | 2.3 | 1.95 | 788 | 261 | 259 | 62 | — | — | 97 | 91 | 5 |
| 4 | | 44 | 597.8 | 2.3 | 1.95 | 785 | 263 | 256 | 62 | — | — | 97 | 91 | 5 |
| 5 | | 48 | 600.9 | 2.5 | 2.10 | 783 | 259 | 258 | 62 | — | — | 97 | 91 | 5 |
| 6 | | 52 | 603.9 | 2.5 | 2.10 | 779 | 256 | 260 | 63 | — | — | 97 | 91 | 5 |
| 7 | | 56 | 607.0 | 2.5 | 2.10 | 778 | 256 | 259 | 65 | — | — | 97 | 91 | 5 |
| 8 | | 60 | 610.2 | 2.5 | 2.10 | 776 | 261 | 263 | 65 | — | — | 97 | 91 | 5 |
| STOP | 1507 | 64 | 613.391 | — | — | — | — | — | — | — | — | — | — | — |

| Total Run Time | DGM Volume | Ave. SQRT ΔP | Average ΔH | Stack Temp | Ave. DGM Temp |
|---|---|---|---|---|---|
| | | | | | |

TRC