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# TABLE 2-1. SENTINEL AND POINT OF COMPLIANCE GROUNDWATER ANALYTICAL RESULTS SUMMARY
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Location ID | Date Sampled | Benzene (mg/L) | Ethylbenzene (mg/L) | Toluene (mg/L) | Xylenes, Total (mg/L) | Chlorobenzene (mg/L) | Arsenic, Dissolved (mg/L) | Lead, Dissolved (mg/L) |
|---|---|---|---|---|---|---|---|---|
| MW-35 | 11/19/08 | 0.13 | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-35 Dup | 11/19/08 | 0.13 | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-37 | 11/18/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-120 | 11/18/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-131 | 7/08/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.0102) | ND(0.0069) |
| | 11/21/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | 0.0155 J | 0.0225 |
| MW-132 | 7/09/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.0102) | ND(0.0069) |
| | 11/17/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-133 | 7/08/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.0102) | ND(0.0069) |
| | 11/18/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-133 Dup | 7/08/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.0102) | ND(0.0069) |
| MW-134 | 7/09/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.0102) | ND(0.0069) |
| | 11/17/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.01) | ND(0.0069) |
| Groundwater Remedial Objectives | | 0.005 | 0.7 | 1 | 10 | 0.1 | 0.01 | 0.015 |

NOTES:
J – estimated concentration
mg/L - milligrams per liter
ND - not detected
-- not analyzed

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# TABLE 2-2. PERIMETER, INTERIOR, AND SUPPLEMENTAL WELL GROUNDWATER ANALYTICAL RESULTS SUMMARY
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Location ID | Date Sampled | Benzene (mg/L) | Ethylbenzene (mg/L) | Toluene (mg/L) | Xylenes, Total (mg/L) | Chlorobenzene (mg/L) | Arsenic, Dissolved (mg/L) | Lead, Dissolved (mg/L) |
|---|---|---|---|---|---|---|---|---|
| L-1RR | 11/24/08 | 1.6 | 1.9 | 0.25 | 7.9 | ND(0.008) | 0.0455 | 0.0261 |
| L-3R | 12/01/08 | 13 | 1.6 | 0.17 | 0.41 | ND(0.016) | 0.0458 | ND(0.0069) |
| MW-10 | 12/01/08 | 0.017 | 0.009 | 0.002 J | 0.004 J | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-17 | 12/04/08 | 9.4 | 0.28 | 0.14 | 0.23 | ND(0.016) | 0.0624 | ND(0.0069) |
| MW-18R | 12/30/08 | 2.4 | 1.2 | 0.13 | 2.8 | ND(0.002) | 0.0285 | 0.0085 J |
| MW-21 | 12/29/08 | 0.26 | 1.9 | 0.1 | 1.5 | ND(0.0008) | 0.0133 J | ND(0.0345) |
| MW-22 | 11/25/08 | 0.04 | 0.88 | 0.055 | 0.72 | ND(0.0008) | 0.0284 | ND(0.0069) |
| MW-22 Dup | 11/25/08 | 0.04 | 0.85 | 0.055 | 0.69 | ND(0.0008) | 0.0292 | ND(0.0069) |
| MW-26R | 11/25/08 | 0.003 J | ND(0.0008) | ND(0.0007) | 0.0008 J | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-33 | 11/20/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-48S | 12/11/08 | 0.001 J | 0.29 | 0.001 J | 1.1 | ND(0.0008) | 0.0341 JB | ND(0.0069) |
| MW-48S Dup | 12/11/08 | 0.001 J | 0.29 | 0.001 J | 1.1 | ND(0.0008) | 0.0344 JB | ND(0.0069) |
| MW-51 | 11/20/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-64 | 12/02/08 | 0.002 J | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-80 | 12/08/08 | 0.029 | ND(0.0008) | 0.004 J | 0.01 | ND(0.0008) | 0.0359 | ND(0.0069) |
| MW-81S | 12/17/08 | 0.52 | 0.002 J | 0.015 | 0.053 | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-85D | 12/11/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | 0.0009 J | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-85S | 12/11/08 | 0.23 | 0.46 | 0.044 | 0.37 | ND(0.004) | 0.0208 JB | ND(0.0069) |
| MW-88 | 12/12/08 | 0.019 | 0.0009 J | 0.001 J | 0.007 | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-93S | 12/23/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-93S Dup | 12/23/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-94S | 12/08/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-94S Dup | 12/08/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-95S | 12/15/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.01) | 0.0097 J |
| MW-99S | 12/17/08 | 0.026 | 0.26 | 0.008 | 0.29 | ND(0.0008) | 0.023 | ND(0.0069) |
| MW-100S | 12/16/08 | ND(0.0005) | ND(0.0008) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-104S | 11/25/08 | ND(0.0005) | 0.002 J | ND(0.0007) | 0.007 | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-115S | 12/09/08 | ND(0.0005) | 0.0008 J | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.01) | ND(0.0069) |

NOTES:
J – estimated concentration
B - constituent reported in method blank
mg/L - milligrams per liter
ND - not detected
-- not analyzed

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# TABLE 2-3. DISSOLVED PHASE NATURAL ATTENUATION ANALYTICAL RESULTS SUMMARY
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Location ID | Date Sampled | Alkalinity to pH 4.5 (mg/L) | Alkalinity to pH 8.3 (mg/L) | Calcium, Total (mg/L) | Chemical Oxygen Demand (mg/L) | Chloride (mg/L) | Iron, Ferric (mg/L) | Iron, Ferrous (mg/L) |
|---|---|---|---|---|---|---|---|---|
| L-1RR | 11/24/08 | 446 | ND(0.46) | -- | 120 | 37.8 | ND(0.25) J | 15.1 |
| MW-18R | 12/30/08 | 312 | ND(0.46) | 112 | 107 | 24.3 | ND(0.5) | 22.1 |
| MW-33 | 11/20/08 | 388 | ND(0.46) | -- | ND(12.8) | 30.1 | ND(0.25) J | 6.1 |
| MW-35 | 11/19/08 | 474 | ND(0.46) | -- | 18.4 J | 73.6 | ND(0.052) J | 0.085 J |
| MW-38 | 12/02/08 | 439 | ND(0.46) | -- | 90.3 | 1020 | ND(0.2) J | 5.7 |
| MW-51 | 11/20/08 | 221 | ND(0.46) | -- | 13.7 J | 89.6 | ND(0.052) J | 0.012 J |
| MW-81S | 12/17/08 | 463 | ND(0.46) | 132 | 25.3 J | 50.7 | ND(0.25) | 11.6 |
| MW-85S | 12/11/08 | 479 | ND(0.46) | 162 | 71.7 | 18.8 | ND(0.5) | 20 |
| MW-100S | 12/16/08 | 377 | ND(0.46) | 139 | 13.7 J | 208 | ND(0.052) | 0.023 J |
| MW-112 | 12/04/08 | 483 | ND(0.46) | -- | 32.3 J | 51.7 | ND(0.5) J | 16.9 |
| MW-114 | 11/19/08 | 468 | ND(0.46) | -- | 13.7 | 169 | ND(0.052) J | 0.01 |
| MW-115S | 12/09/08 | 528 | ND(0.46) | 144 | 23 J | 115 | ND(0.2) | 4.6 |

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# TABLE 2-3. DISSOLVED PHASE NATURAL ATTENUATION ANALYTICAL RESULTS SUMMARY
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Location ID | Date Sampled | Nitrogen Ammonia (mg/L) | Methane (mg/L) | Manganese, Total (mg/L) | Manganese, Dissolved (mg/L) | Iron, Total (mg/L) | Nitrogen, Nitrate (mg/L) | Nitrogen, Nitrite (mg/L) |
|---|---|---|---|---|---|---|---|---|
| L-1RR | 11/24/08 | 0.43 J | 15 | -- | 0.229 | -- | ND(0.04) | ND(0.015) |
| MW-18R | 12/30/08 | 0.94 | 5.4 | 0.305 | 0.293 | 21.8 | ND(0.04) | 0.022 J |
| MW-33 | 11/20/08 | ND(0.2) | 0.32 | -- | 0.767 | -- | ND(0.04) | ND(0.015) |
| MW-35 | 11/19/08 | ND(0.2) | 13 | -- | 1.66 | -- | ND(0.04) | ND(0.015) |
| MW-38 | 12/02/08 | 2.6 | 15 | -- | 0.435 | -- | ND(0.04) | ND(0.015) |
| MW-51 | 11/20/08 | ND(0.2) | ND(0.005) | -- | 0.536 | -- | 0.93 | ND(0.015) |
| MW-81S | 12/17/08 | ND(0.2) | 17 | 0.192 | 0.191 | 11.7 | ND(0.04) | ND(0.015) |
| MW-85S | 12/11/08 | 1.5 | 14 | 1.01 | 0.958 | 19.4 | ND(0.04) | ND(0.015) J |
| MW-100S | 12/16/08 | ND(0.2) | 0.011 J | 0.007 | 0.0018 J | ND(0.0522) | 5.5 | ND(0.015) |
| MW-112 | 12/04/08 | 0.45 J | 18 | -- | 0.282 | -- | ND(0.04) | 0.026 J |
| MW-114 | 11/19/08 | ND(0.2) | ND(0.005) | -- | ND(0.00084) | -- | 9.8 | ND(0.015) |
| MW-115S | 12/09/08 | ND(0.2) | 9.5 | 2.52 | 2.51 | 4.48 | ND(0.04) | ND(0.015) |

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# TABLE 2-3. DISSOLVED PHASE NATURAL ATTENUATION ANALYTICAL RESULTS SUMMARY
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Location ID | Date Sampled | Potassium, Total (mg/L) | Sodium, Total (mg/L) | Sulfate (mg/L) | Total Organic Carbon (mg/L) |
|---|---|---|---|---|---|
| L-1RR | 11/24/08 | -- | -- | ND(1.5) | 6.3 J |
| MW-18R | 12/30/08 | 1.37 | 11.9 | 39.2 | 11.5 |
| MW-33 | 11/20/08 | -- | -- | 43.5 | 1.3 |
| MW-35 | 11/19/08 | -- | -- | ND(1.5) | 2.4 |
| MW-38 | 12/02/08 | -- | -- | ND(1.5) | 3 |
| MW-51 | 11/20/08 | -- | -- | 62.8 | 1.7 |
| MW-81S | 12/17/08 | 4.18 | 28.1 | ND(1.5) | 4 |
| MW-85S | 12/11/08 | 3.27 | 14.1 | ND(1.5) | 11.9 |
| MW-100S | 12/16/08 | 7.17 | 106 | 54.1 | 1.2 |
| MW-112 | 12/04/08 | -- | -- | 1.5 J | 5.1 |
| MW-114 | 11/19/08 | -- | -- | 94.6 | 1.8 |
| MW-115S | 12/09/08 | 2.64 | 59.4 J | ND(1.5) | 2.9 |

NOTES:
J – estimated concentration
mg/L - milligrams per liter
ND - not detected
-- not analyzed

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# TABLE 2-4a. VERTICAL PROFILE GROUNDWATER ANALYTICAL RESULTS SUMMARY
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Location ID | Date Sampled | Benzene (mg/L) | Ethylbenzene (mg/L) | Toluene (mg/L) | Xylenes, Total (mg/L) | Chlorobenzene (mg/L) | Arsenic, Dissolved (mg/L) | Lead, Dissolved (mg/L) |
|---|---|---|---|---|---|---|---|---|
| MW-18R | 12/30/08 | 2.4 | 0.13 | 1.2 | 2.8 | ND(0.002) | 0.0285 | 0.0085 J |
| NW-18IS | 12/30/08 | 1.8 | 0.27 | 2.2 | 8 | ND(0.004) | 0.0275 | ND(0.0069) |
| NW-18ID | 1/08/09 | 2.1 | 0.33 | 2.7 | 8.8 | ND(0.004) | 0.0276 | ND(0.0069) |
| NW-18D | 1/08/09 | 0.32 | 0.29 | 0.26 | 4.8 | ND(0.002) | 0.0274 | ND(0.0069) |
| NW-18D Dup | 1/08/09 | 0.29 | 0.27 | 0.25 | 5.4 | ND(0.004) | 0.0319 | ND(0.0069) |
| NW-20ID | 1/09/09 | 1.9 | 0.11 | 1.6 | 1.9 | ND(0.003) | -- | -- |
| MW-21 | 12/29/08 | 0.26 | 0.1 | 1.9 | 1.5 | ND(0.0008) | 0.0133 J | ND(0.0345) |
| NW-21IS | 12/29/08 | 3.2 | 0.13 | 1.8 | 3.2 | ND(0.002) | 0.0206 | ND(0.0345) |
| NW-21ID | 12/23/08 | 1.4 | 0.055 | 0.32 | 0.58 | ND(0.0008) | 0.0279 | ND(0.0069) |
| NW-21D | 12/18/08 | 0.004 J | 0.001 J | 0.12 | 0.16 | ND(0.0008) | 0.0189 J | 0.0121 J |
| MW-93S | 12/23/08 | ND(0.0005) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.0008) | ND(0.01) | ND(0.0069) |
| MW-93S Dup | 12/23/08 | ND(0.0005) | ND(0.0007) | ND(0.0008) | ND(0.0008) | ND(0.0008) | ND(0.01) | ND(0.0069) |
| NW-93D | 1/07/09 | 0.006 | 0.002 J | 0.067 | 0.041 | ND(0.0008) | 0.0199 J | ND(0.0069) |

NOTES:
J – estimated concentration
mg/L - milligrams per liter
ND - not detected
-- not analyzed

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# TABLE 2-4b. VERTICAL PROFILE GROUNDWATER ANALYTICAL RESULTS SUMMARY
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Location ID | Date Sampled | Alkalinity to pH 4.5 (mg/L) | Alkalinity to pH 8.3 (mg/L) | Calcium, Total (mg/L) | Chemical Oxygen Demand (mg/L) | Chloride (mg/L) | Iron, Ferric (mg/L) | Iron, Ferrous (mg/L) |
|---|---|---|---|---|---|---|---|---|
| MW-18R | 12/30/08 | 312 | ND(0.46) | 112 | 107 | 24.3 | ND(0.5) | 22.1 |
| NW-18IS | 12/30/08 | 486 | ND(0.46) | 136 | 114 | 37.6 | ND(0.25) | 17.7 |
| NW-18ID | 1/08/09 | 487 | ND(0.46) | 134 | 111 | 41.9 | 17.1 | 0.63 |
| NW-18D | 1/08/09 | 488 | ND(0.46) | 152 | 74.1 | 45.5 | ND(0.25) | 16.2 |
| NW-18D Dup | 1/08/09 | -- | -- | -- | -- | -- | -- | -- |
| NW-20ID | 1/09/09 | 513 | ND(0.46) | 160 | 104 | 64.7 | ND(0.5) | 21.1 |
| MW-21 | 12/29/08 | 483 | ND(0.46) | 151 | 88 | 40.5 | ND(0.5) | 19.2 |
| NW-21IS | 12/29/08 | 476 | ND(0.46) | 146 | 92.6 | 47.8 | ND(0.5) | 18.2 |
| NW-21ID | 12/23/08 | 292 | ND(0.46) | 99.9 | 57.8 | 79.3 | ND(0.5) | 12.2 |
| NW-21D | 12/18/08 | 377 | ND(0.46) | 103 | 32.3 J | 58.5 | ND(0.5) | 12.4 |
| MW-93S | 12/23/08 | 336 | ND(0.46) | 118 | 13.7 J | 72.3 | 0.055 J | 0.77 |
| MW-93S Dup | 12/23/08 | -- | -- | -- | -- | -- | -- | -- |
| NW-93D | 1/07/09 | 531 | ND(0.46) | 147 | 53.2 | 72.4 | 0.41 J | 15.2 |

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# TABLE 2-4b. VERTICAL PROFILE GROUNDWATER ANALYTICAL RESULTS SUMMARY
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Location ID | Date Sampled | Iron, Total (mg/L) | Manganese, Dissolved (mg/L) | Manganese, Total (mg/L) | Methane (mg/L) | Nitrogen, Ammonia (mg/L) | Nitrogen, Kjeldahl (mg/L) | Nitrogen, Nitrate (mg/L) |
|---|---|---|---|---|---|---|---|---|
| MW-18R | 12/30/08 | 21.8 | 0.293 | 0.305 | 5.4 | 0.94 | 1.7 | ND(0.04) |
| NW-18IS | 12/30/08 | 17.2 | 0.132 | 0.133 | 18 | 0.99 | 1.3 | ND(0.04) |
| NW-18ID | 1/08/09 | 17.8 | 0.13 | 0.134 | 21 | ND(0.2) | 0.67 J | ND(0.04) |
| NW-18D | 1/08/09 | 15.8 | 0.144 | 0.147 | 15 | 0.77 | 0.7 J | ND(0.04) |
| NW-18D Dup | 1/08/09 | -- | -- | -- | -- | -- | -- | -- |
| NW-20ID | 1/09/09 | 20.6 | -- | 0.207 | 18 | 0.6 J | 0.9 J | ND(0.04) |
| MW-21 | 12/29/08 | 18.7 | 0.0705 | 0.074 | 21 | ND(0.2) | 0.91 J | ND(0.04) |
| NW-21IS | 12/29/08 | 18.5 | 0.0715 | 0.0741 | 23 | ND(0.2) | ND(0.5) | ND(0.04) |
| NW-21ID | 12/23/08 | 12.4 | 0.0348 | 0.0371 | 8.6 | ND(0.2) | ND(0.5) | ND(0.04) |
| NW-21D | 12/18/08 | 11.4 | 0.0367 | 0.0471 | 17 | ND(0.2) | ND(0.5) | ND(0.04) |
| MW-93S | 12/23/08 | 0.82 | 0.351 | 0.345 | 0.0054 J | ND(0.2) | ND(0.5) | 0.81 |
| MW-93S Dup | 12/23/08 | -- | -- | -- | -- | -- | -- | -- |
| NW-93D | 1/07/09 | 15.6 | 0.334 | 0.357 | 17 | ND(0.2) | 0.52 J | ND(0.04) |

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# TABLE 2-4b. VERTICAL PROFILE GROUNDWATER ANALYTICAL RESULTS SUMMARY
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Location ID | Date Sampled | Nitrogen, Nitrite (mg/L) | Potassium, Total (mg/L) | Sodium, Total (mg/L) | Sulfate (mg/L) | Total Organic Carbon (mg/L) | Diesel Range Organics (mg/L) | Gasoline Range Organics (mg/L) |
|---|---|---|---|---|---|---|---|---|
| MW-18R | 12/30/08 | 0.022 J | 1.37 | 11.9 | 39.2 | 11.5 | 5.9 J | 21 |
| NW-18IS | 12/30/08 | 0.017 J | 2.5 | 50.3 | ND(1.5) | 8.5 | 5.4 | 30 |
| NW-18ID | 1/08/09 | 0.035 J | 2.75 | 58.6 | ND(1.5) | 8.9 | 3.9 J | 31 |
| NW-18D | 1/08/09 | 0.039 J | 2.74 | 31.6 | ND(1.5) | 7.1 | 3.2 J | 18 |
| NW-18D Dup | 1/08/09 | -- | -- | -- | -- | -- | 3.4 J | 19 |
| NW-20ID | 1/09/09 | 0.016 J | 3.33 | 56.5 | ND(1.5) | 12.7 J | 5.5 J | 19 |
| MW-21 | 12/29/08 | 0.023 J | 2.79 | 19.9 | ND(1.5) | 6.4 | 5.3 | 14 |
| NW-21IS | 12/29/08 | 0.04 J | 3.3 | 33.2 | ND(1.5) | 6 JB | 6 | 23 |
| NW-21ID | 12/23/08 | ND(0.015) R | 3.97 | 36.2 | ND(1.5) | 3.5 | 3.9 | 10 |
| NW-21D | 12/18/08 | ND(0.015) | 3.38 | 28.2 | 3.3 J | 3.1 JB | 3.1 | 5 |
| MW-93S | 12/23/08 | ND(0.015) R | 4.67 | 48.4 | 48.1 | 1.8 | 0.44 | 0.16 |
| MW-93S Dup | 12/23/08 | -- | -- | -- | -- | -- | 0.4 | 0.15 |
| NW-93D | 1/07/09 | ND(0.015) | 3.91 | 65.5 | 2.2 J | 5.1 | 3.4 | 5.3 J |

NOTES:
J – estimated concentration
R - value rejected, constituent was analyzed outside of the acceptable holding time
B - constituent reported in method blank
mg/L - milligrams per liter
ND - not detected
-- not analyzed

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**TABLE 2-5. SHEEN OBSERVATIONS ALONG WEST BANK OF GREAT MIAMI RIVER**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Date | 1 | Comment | 2 | Comment | 3 | Comment | 4 | Comment | 5 | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| 7/3/2008 | NO | none | NO | none | NO | none | NO | none | NO | none |
| 7/10/2008 | NO | none | NO | none | NO | none | NO | none | NO | none |
| 7/17/2008 | NO | none | NO | none | NO | none | NO | none | NO | none |
| 7/24/2008 | NO | none | NO | none | NO | none | NO | none | NO | none |
| 7/31/2008 | NO | none | NO | none | NO | none | NO | none | NO | none |
| 8/7/2008 | NO | none | NO | none | NO | none | NO | none | NO | none |
| 8/11/2008 | NO | none | NO | none | NO | none | NO | none | NO | none |
| 8/14/2008 | NO | none | NO | none | YES | Slight seepage from bank | NO | none | NO | none |
| 8/18/2008 | NO | none | NO | none | NO | none | NO | none | NO | none |
| 8/22/2008 | NO | none | NO | none | YES | Slight sheen at water edge | YES | Slight sheen at water edge | NO | none |
| 8/25/2008 | NO | River up slightly | NO | none | NO | none | NO | none | NO | none |
| 8/28/2008 | NO | none | NO | none | YES | Slight sheen at water edge | YES | Slight sheen at water edge | NO | none |
| 9/2/2008 | NO | none | NO | none | NO | none | NO | none | NO | none |
| 9/4/2008 | NO | none | NO | none | NO | none | NO | none | NO | none |
| 9/8/2008 | NO | none | NO | none | NO | none | NO | none | NO | none |
| 9/11/2008 | NO | none | NO | none | NO | none | NO | none | NO | none |
| 9/16/2008 | NO | none | NO | none | NO | none | NO | none | NO | none |
| 9/18/2008 | NR | tree clearing in area | NR | tree clearing in area | NR | tree clearing in area | NR | tree clearing in area | NR | tree clearing in area |
| 9/22/2008 | NR | tree clearing in area | NR | tree clearing in area | NR | tree clearing in area | NR | tree clearing in area | NR | tree clearing in area |
| 9/29/2008 | NR | tree clearing in area | NR | tree clearing in area | NR | tree clearing in area | NR | tree clearing in area | NR | tree clearing in area |
| 10/2/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 10/6/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 10/9/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 10/13/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 10/16/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 10/24/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 10/27/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 10/29/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 11/3/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 11/6/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 11/10/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 11/13/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |

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**TABLE 2-5. SHEEN OBSERVATIONS ALONG WEST BANK OF GREAT MIAMI RIVER**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Date | 6 | Comment | 7 | Comment | 8 | Comment | 9 | Comment | 10 | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| 7/3/2008 | NO | none | NO | none | NO | none | NO | none | NO | slight bank seeping-no sheen |
| 7/10/2008 | NO | none | NO | none | NO | none | NO | none | NO | none |
| 7/17/2008 | NO | none | NO | none | NO | none | NO | none | NO | none |
| 7/24/2008 | NO | none | NO | none | NO | none | NO | none | NO | slight bank seeping-slight sheen |
| 7/31/2008 | NO | none | NO | none | NO | none | NO | none | NO | slight bank seeping-no sheen |
| 8/7/2008 | NO | none | NO | none | NO | none | NO | none | NO | slight bank seepage-no sheen/odor |
| 8/11/2008 | NO | none | NO | none | NO | none | NO | none | NO | slight bank seepage-no sheen/odor |
| 8/14/2008 | NO | none | NO | none | NO | none | NO | none | NO | slight bank seepage-no sheen/odor |
| 8/18/2008 | NO | none | NO | none | NO | none | NO | none | NO | slight bank seepage-no sheen/odor |
| 8/22/2008 | NO | none | NO | none | NO | none | NO | none | NO | slight bank seepage-no sheen/odor |
| 8/25/2008 | NO | none | NO | none | NO | none | NO | none | NO | slight bank seepage-no sheen/odor |
| 8/28/2008 | NO | none | NO | none | NO | none | NO | none | NO | slight bank seepage-no sheen/odor |
| 9/2/2008 | NO | none | NO | none | NO | none | NO | none | NO | slight bank seepage-no sheen/odor |
| 9/4/2008 | NO | none | NO | none | NO | none | NO | none | NO | slight bank seepage-no sheen/odor |
| 9/8/2008 | NO | none | NO | none | NO | none | NO | none | NO | slight bank seepage-no sheen/odor |
| 9/11/2008 | NO | none | NO | none | NO | none | NO | none | NO | slight bank seepage-no sheen/odor |
| 9/16/2008 | NO | none | NO | none | NO | none | NO | none | NO | none |
| 9/18/2008 | NR | tree clearing in area | NR | tree clearing in area | NR | tree clearing in area | NR | tree clearing in area | NR | tree clearing in area |
| 9/22/2008 | NR | tree clearing in area | NR | tree clearing in area | NR | tree clearing in area | NR | tree clearing in area | NR | tree clearing in area |
| 9/29/2008 | NO | none | NO | none | NO | none | NO | none | NO | none |
| 10/2/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 10/6/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 10/9/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 10/13/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 10/16/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 10/24/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 10/27/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 10/29/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 11/3/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 11/6/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 11/10/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |
| 11/13/2008 | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall | NR | construction of barrier wall |

NOTES:
Daily observations conducted on normal work days
NO - no sheening was observed on the river
NR - observation was not recorded for reasons stated in the comments
YES - sheen was observed on the river

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**TABLE 2-6. SUMMARY OF SOIL VAPOR SAMPLES COLLECTED FROM NESTED WELLS**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Vapor Well | Depth | Sep-05 | Oct-05 | Nov-05 | Jun/Jul-06 | Nov/Dec-06 | Jun/Jul-07 | Apr/May-08 | Sep-08 | Dec-08 |
|---|---|---|---|---|---|---|---|---|---|---|
| VW-18 | 5 | | | | | | | X | X | |
| | 10 | | | | | | | X | X | |
| | 15 | | | | | | | X | X | |
| | 20 | | | | | | | submerged | submerged | |
| | 25 | | | | | | | submerged | submerged | |
| VW-20 | 5 | | | | | | | X | X | |
| | 10 | | | | | | | X | X | |
| | 15 | | | | | | | X | X | |
| | 20 | | | | | | | cancelled[1] | X | |
| | 25 | | | | | | | X | X | |
| | 30 | | | | | | | submerged | X | |
| | 35 | | | | | | | submerged | X | |
| | 40 | | | | | | | submerged | submerged | |
| VW-21 | 5 | | | | | | | X | X | |
| | 10 | | | | | | | X | X | |
| | 15 | | | | | | | X | X | |
| | 20 | | | | | | | X | X | |
| VW-93 | 5 | X | | | | X | X | X | X | X |
| | 10 | X | | | | X | X | X | X | X |
| | 15 | X | | | | X | X | X | X | X |
| | 20 | X | | | | X | X | X | X | X |
| | 25 | X | | | | X | X | X | X | X |
| | 30 | X | X | | | X | X | X | X | X |
| | 35 | X | X | | | X | X | X | X | X |
| | 40 | X | X | | | X | X | X | X | X |
| | 45 | X | X | | | X | X | X | X | X |
| | 50 | X | X | | | X | X | X | X | X |
| | 55 | X | | | | X | X | X | X | X |
| | 60 | X | X | | | X | X | submerged | X | submerged |

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**TABLE 2-6. SUMMARY OF SOIL VAPOR SAMPLES COLLECTED FROM NESTED WELLS**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Vapor Well | Depth | Sep-05 | Oct-05 | Nov-05 | Jun/Jul-06 | Nov/Dec-06 | Jun/Jul-07 | Apr/May-08 | Sep-08 | Dec-08 |
|---|---|---|---|---|---|---|---|---|---|---|
| VW-96 | 5 | X | | X | X | X | | X | X | X |
| | 10 | X | | X | X | X | X | X | X | X |
| | 15 | X | | | | tubing severed[2] | tubing severed[2] | tubing severed[2] | X | X |
| | 20 | X | X | | X | X | X | X | X | X |
| | 25 | X | X | | | X | X | X | X | X |
| | 30 | X | X | | X | X | X | X | X | X |
| | 35 | X | X | | | X | X | X | X | X |
| | 40 | X | X | | X | X | X | X | X | X |
| | 45 | X | | | | X | X | X | X | X |
| | 50 | X | X | | X | X | X | X | X | X |
| | 55 | X | | | X | X | X | X | X | X |
| | 60 | X | X | | submerged | submerged | submerged | submerged | X | X |
| VW-99 | 5A | | | | | | | X | X | X |
| | 10A | | | | | | | | X | |
| | 10 | X | | | X | X | X | X | X | X |
| | 15 | X | | | | X | X | X | X | X |
| | 20 | X | X | | X | X | X | X | X | X |
| | 25 | X | X | | | X | X | X | X | X |
| | 30 | X | X | | X | X | X | X | X | X |
| | 35 | X | X | | | X | X | X | X | X |
| | 40 | X | X | | X | X | X | X | X | X |
| | 45 | X | | | | X | X | X | X | X |
| | 50 | X | X | | X | X | X | X | X | X |
| | 55 | X | | | | X | X | X | X | X |
| | 60 | X | X | | X | submerged | submerged | submerged | submerged | X |
| VW-94 | 30 | | | X | | | | | | |
| | 35 | | | X | | | | | | |
| | 40 | | | X | | | | | | |
| | 45 | | | X | | | | | | |
| | 50 | | | X | | | | | | |
| | 55 | | | X | | | | | | |

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**TABLE 2-6. SUMMARY OF SOIL VAPOR SAMPLES COLLECTED FROM NESTED WELLS**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Vapor Well | Depth | Sep-05 | Oct-05 | Nov-05 | Jun/Jul-06 | Nov/Dec-06 | Jun/Jul-07 | Apr/May-08 | Sep-08 | Dec-08 |
|---|---|---|---|---|---|---|---|---|---|---|
| VW-127 | 5 | X | | | | X | | X | X | X |
| | 10 | X | | | | X | | X | X | X |
| | 15 | X | | | | X | | X | X | X |
| | 20 | X | X | | | X | | X | X | X |
| | 30 | X | X | | | X | | X | X | X |
| | 40 | X | X | | | X | | X | X | X |
| | 50 | X | X | | | X | | X | X | X |
| VW-128 | 5 | X | | | X | X | X | X | X | X |
| | 10 | X | | | X | X | X | X | X | X |
| | 15 | X | | | X | X | X | X | X | X |
| | 20 | X | X | | X | X | X | X | X | X |
| | 30 | X | X | | X | X | X | X | X | X |
| | 40 | X | X | | X | X | X | X | X | X |
| | 50 | X | X | | X | X | X | X | X | X |
| VW-129 | 5 | | | | X | | X | X | X | X |
| | 10 | | | | X | | X | X | X | X |
| | 15 | | | | X | | X | X | X | X |
| | 20 | | | | X | | X | X | X | X |
| | 30 | | | | X | | X | X | X | X |
| | 40 | | | | X | | X | X | X | X |
| | 50 | | | | X | | X | X | X | X |
| VW-130 | 5 | | | | | | | X | X | X |
| | 10 | | | | | | | X | X | X |
| | 15 | | | | | | | X | X | X |
| | 20 | | | | | | | X | X | X |
| | 30 | | | | | | | X | X | X |
| | 40 | | | | | | | X | X | X |
| | 50 | | | | | | | low permeability | low permeability | low permeability |

X - soil vapor sample collected from monitoring interval

[1] - The sample collected from 20 ft-bgs in nested well VW-20 was cancelled due to contamination of the sample in the laboratory.

[2] - The tubing connecting the probe installed at 15 ft-bgs in nested well VW-96 to the ground surface was severed at depth and subsequently repaired.

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**TABLE 2-7. NESTED WELL FIELD SCREENING RESULTS**
**FIRST 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Sample ID | Date | Static Pressure/ Vacuum (in-$H_2O$) | Estimated Soil Gas Permeability ($cm^2$) | Probe Specific Capacity ($cm^3$/s·in $H_2O$) | Helium Effective Vapor Diffusion Coefficient ($cm^2$/s) | Millington-Quirk Effective Vapor Diffusion Coefficient ($cm^2$/s) | Total Organic Vapors (ppm) | Oxygen Concentration (%) | Carbon Dioxide Concentration (%) | Methane Concentration (%) |
|---|---|---|---|---|---|---|---|---|---|---|
| VW-18 (5) | 9/24/2008 | -0.60 | 5.27E-08 | -1.8 | 4.98E-04 | 6.99E-03 | 310 | 0.0 | 12.9 | >100 |
| VW-18 (10) | 9/24/2008 | -0.05 | 1.71E-07 | -5.9 | 3.26E-04 | 3.04E-03 | 300 | 0.0 | 12.7 | >100 |
| VW-18 (15) | 9/24/2008 | -0.10 | 1.61E-06 | -56 | 1.33E-03 | 1.36E-02 | 319 | 0.0 | 12.4 | >100 |
| VW-20 (5) | 9/25/2008 | -0.10 | 4.82E-07 | -17 | 7.06E-03 | 1.63E-03 | 2.1 | 18.7 | 2.8 | 0.0 |
| VW-20 (10) | 9/25/2008 | -0.10 | 6.02E-07 | -21 | 4.00E-03 | 1.21E-03 | 17.8 | 12.6 | 6.6 | 0.0 |
| VW-20 (15) | 9/25/2008 | 0.00 | 1.56E-06 | -54 | 2.88E-03 | 3.45E-03 | 64 | 0.7 | 13.1 | 0.3 |
| VW-20 (20) | 9/25/2008 | 0.00 | 4.82E-07 | -17 | 1.45E-03 | 2.94E-03 | 422 | 0.0 | 13.2 | 19.0 |
| VW-20 (25) | 9/25/2008 | 0.00 | 1.10E-06 | -38 | 4.72E-03 | 1.05E-02 | 450 | 0.0 | 13.3 | 98.9 |
| VW-20 (30) | 9/25/2008 | -0.10 | 4.01E-07 | -14 | -- | 1.03E-02 | 962 | 0.0 | 13.2 | >100 |
| VW-20 (35) | 9/25/2008 | 0.10 | 2.93E-08 | -1.0 | -- | -- | 1118 | 0.0 | 13.2 | >100 |
| VW-21 (5) | 9/24/2008 | -0.40 | 2.66E-09 | -0.10 | 7.25E-04 | 9.16E-03 | 970 | 0.0 | 17.5 | 15.7 |
| VW-21 (10) | 9/24/2008 | 0.20 | 7.16E-09 | -0.26 | 3.06E-03 | 5.85E-02 | 780 | 0.0 | 17.3 | 41.4 |
| VW-21 (15) | 9/24/2008 | -0.05 | 1.21E-06 | -42 | 1.95E-03 | 5.08E-04 | 760 | 0.0 | 13.8 | >100 |
| VW-21 (20) | 9/24/2008 | -0.20 | 6.02E-07 | -21 | 5.65E-03 | 1.93E-02 | 713 | 0.0 | 14.2 | >100 |
| VW-93(5) | 9/7/2008 | 0.00 | 1.02E-08 | -1.3 | 6.11E-03 | 3.89E-03 | 0.0 | 19.2 | 2.0 | 0.0 |
| | 12/9/2008 | 0.00 | 2.12E-07 | -28 | -- | -- | 0.0 | 18.2 | 1.2 | 0.0 |
| VW-93(10) | 9/7/2008 | 0.00 | 2.65E-07 | -35 | 1.38E-03 | 1.76E-02 | 2.2 | 21.2 | 1.4 | 0.0 |
| | 12/9/2008 | 0.20 | 2.20E-07 | -29 | -- | -- | 0.0 | 11.8 | 3.7 | 0.0 |
| VW-93(15) | 9/7/2008 | -0.20 | 1.82E-07 | -24 | 3.04E-03 | 6.56E-03 | 5.1 | 20.1 | 3.1 | 0.0 |
| | 12/9/2008 | -0.10 | 1.68E-07 | -22 | -- | -- | 0.0 | 11.4 | 4.5 | 0.0 |
| VW-93(20) | 9/7/2008 | 0.00 | 1.27E-07 | -17 | 3.48E-03 | 1.81E-03 | 3.3 | 19.4 | 3.4 | 0.0 |
| | 12/9/2008 | 0.00 | 1.74E-07 | -23 | -- | -- | 0.0 | 11.4 | 4.6 | 0.1 |
| VW-93(25) | 9/7/2008 | NA | 1.27E-07 | -17 | 1.69E-02 | 2.66E-02 | 3.7 | 19.2 | 2.8 | 0.0 |
| | 12/9/2008 | 0.00 | 1.68E-07 | -22 | -- | -- | 0.0 | 12.0 | 4.4 | 0.1 |
| VW-93(30) | 9/7/2008 | 0.00 | 1.27E-07 | -17 | 9.39E-03 | 3.29E-04 | 4.7 | 18.9 | 2.9 | 0.0 |
| | 12/9/2008 | 0.40 | 1.14E-07 | -15 | -- | -- | 0.1 | 11.7 | 3.8 | 0.0 |
| VW-93(35) | 9/7/2008 | 0.00 | 4.87E-08 | -6.4 | 8.56E-03 | 9.00E-03 | 4.1 | 17.8 | 3.1 | 0.0 |
| | 12/9/2008 | -0.50 | 5.47E-08 | -7.2 | -- | -- | 0.2 | 6.8 | 4.7 | 0.0 |
| VW-93(40) | 9/7/2008 | 0.00 | 9.07E-08 | -12 | 8.32E-03 | 1.70E-02 | 15.0 | 16.3 | 3.3 | 0.0 |
| | 12/9/2008 | 0.00 | 1.00E-07 | -13 | -- | -- | 0.1 | 5.1 | 4.9 | 0.0 |

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**TABLE 2-7. NESTED WELL FIELD SCREENING RESULTS**
**FIRST 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Sample ID | Date | Static Pressure/ Vacuum (in-$H_2O$) | Estimated Soil Gas Permeability ($cm^2$) | Probe Specific Capacity ($cm^3$/s·in $H_2O$) | Helium Effective Vapor Diffusion Coefficient ($cm^2$/s) | Millington-Quirk Effective Vapor Diffusion Coefficient ($cm^2$/s) | Total Organic Vapors (ppm) | Oxygen Concentration (%) | Carbon Dioxide Concentration (%) | Methane Concentration (%) |
|---|---|---|---|---|---|---|---|---|---|---|
| VW-93(45) | 9/7/2008 | 0.00 | 9.07E-08 | -12 | 1.63E-02 | 4.99E-03 | 29.3 | 10.3 | 4.2 | 0.0 |
| | 12/9/2008 | 0.40 | 4.90E-08 | -6.5 | -- | -- | 0.2 | 2.2 | 5.5 | 0.0 |
| VW-93(50) | 9/7/2008 | -0.10 | 6.34E-08 | -8.3 | 2.66E-02 | 4.66E-02 | 15.0 | 9.8 | 4.2 | 0.0 |
| | 12/9/2008 | 0.50 | 4.90E-08 | -6.5 | -- | -- | 0.3 | 2.2 | 5.6 | 0.0 |
| VW-93(55) | 9/7/2008 | 0.00 | 6.34E-08 | -8.3 | 1.80E-02 | 5.78E-03 | 15.4 | 8.1 | 4.7 | 0.0 |
| | 12/9/2008 | 2.80 | 4.44E-08 | -5.9 | -- | -- | 0.2 | 1.6 | 5.5 | 0.0 |
| VW-93(60) | 9/7/2008 | 0.00 | 8.47E-08 | -11 | 2.75E-02 | 4.56E-03 | 12.6 | 5.7 | 5.8 | 0.0 |
| | 12/8/2008 | 0.60 | 4.44E-08 | -5.9 | -- | -- | 0.4 | 0.0 | 6.2 | 0.0 |
| VW-96A(5) | 9/9/2008 | 0.00 | 1.82E-07 | -24 | -- | -- | 0.0 | 17.0 | 2.9 | 0.0 |
| | 12/12/2008 | 0.00 | 9.79E-07 | -128 | -- | -- | 11.3 | 3.8 | 4.5 | 2.9 |
| VW-96(10) | 9/8/2008 | -0.60 | 5.28E-08 | -6.9 | -- | -- | 0.0 | 16.1 | 3.0 | 0.0 |
| | 12/11/2008 | 0.10 | 4.71E-07 | -62 | -- | -- | 10.8 | 0.0 | 8.3 | 4.0 |
| VW-96(15) | 9/6/2008 | 0.00 | 1.23E-08 | -1.6 | -- | -- | 12.1 | 16.1 | 2.9 | 0.0 |
| | 12/11/2008 | 0.10 | 3.45E-08 | -4.6 | -- | -- | 15.1 | 0.0 | 8.8 | 5.1 |
| VW-96(20) | 9/6/2008 | -0.80 | 3.96E-08 | -5.2 | -- | -- | 10.7 | 14.4 | 2.0 | 0.0 |
| | 12/11/2008 | 0.10 | 8.54E-08 | -11 | -- | -- | 10.8 | 0.0 | 7.5 | 4.8 |
| VW-96(25) | 9/6/2008 | -0.70 | 1.74E-08 | -2.3 | -- | -- | 21.5 | 5.0 | 1.6 | 0.0 |
| | 12/11/2008 | 0.30 | 4.05E-08 | -5.4 | -- | -- | 11.5 | 0.0 | 7.4 | 9.0 |
| VW-96(30) | 9/6/2008 | -1.10 | 7.05E-08 | -9.2 | -- | -- | 0.0 | 3.7 | 3.6 | 0.0 |
| | 12/11/2008 | 0.30 | 1.40E-07 | -18 | -- | -- | 15.8 | 0.0 | 8.8 | 13.0 |
| VW-96(35) | 9/6/2008 | -1.00 | 7.93E-08 | -10 | -- | -- | 36.3 | 3.5 | 4.6 | 0.0 |
| | 12/11/2008 | 0.00 | 1.14E-07 | -15 | -- | -- | 18.2 | 0.0 | 8.8 | 13.3 |
| VW-96(40) | 9/6/2008 | -0.40 | 1.27E-07 | -17 | -- | -- | 66.0 | 2.9 | 5.5 | 0.0 |
| | 12/11/2008 | 0.10 | 1.02E-07 | -13 | -- | -- | 37.5 | 0.0 | 9.1 | 15.9 |
| VW-96(45) | 9/6/2008 | -0.40 | 7.05E-08 | -9.2 | -- | -- | 52.9 | 2.5 | 5.7 | 0.0 |
| | 12/11/2008 | 0.20 | 1.00E-07 | -13 | -- | -- | 69.6 | 0.0 | 9.2 | 21.2 |
| VW-96(50) | 9/6/2008 | -0.40 | 1.06E-07 | -14 | -- | -- | 108 | 0.5 | 7.6 | 0.3 |
| | 12/12/2008 | 0.10 | 8.30E-08 | -11 | -- | -- | 90.1 | 0.0 | 9.8 | 44.9 |
| VW-96(55) | 9/6/2008 | -0.20 | 1.06E-07 | -14 | -- | -- | 97.6 | 1.3 | 8.8 | 23.3 |
| | 12/12/2008 | 0.10 | 8.30E-08 | -11 | -- | -- | 114 | 0.0 | 9.7 | 61.2 |
| VW-96(60) | 9/6/2008 | -0.50 | 5.76E-08 | -7.6 | -- | -- | 161 | 0.9 | 9.2 | >100 |
| | 12/11/2008 | 0.00 | 6.18E-08 | -8.2 | -- | -- | 349 | 0.0 | 10.2 | >100 |

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**TABLE 2-7. NESTED WELL FIELD SCREENING RESULTS**
**FIRST 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Sample ID | Date | Static Pressure/ Vacuum (in-$H_2O$) | Estimated Soil Gas Permeability ($cm^2$) | Probe Specific Capacity ($cm^3/s \cdot in\ H_2O$) | Helium Effective Vapor Diffusion Coefficient ($cm^2/s$) | Millington-Quirk Effective Vapor Diffusion Coefficient ($cm^2/s$) | Total Organic Vapors (ppm) | Oxygen Concentration (%) | Carbon Dioxide Concentration (%) | Methane Concentration (%) |
|---|---|---|---|---|---|---|---|---|---|---|
| VW-99A(5) | 9/8/2008 | 0.00 | 9.09E-07 | -119 | -- | -- | 1.5 | 20.1 | 1.7 | 0.0 |
| | 12/12/2008 | 0.00 | 5.79E-07 | -76 | -- | -- | 1.9 | 19.2 | 1.1 | 0.0 |
| VW-99A(10) | 9/8/2008 | 0.00 | 5.30E-07 | -69 | -- | -- | 0.0 | 19.3 | 2.2 | 0.0 |
| VW-99(10) | 9/9/2008 | 0.00 | 5.53E-07 | -72 | -- | -- | 1.9 | 18.7 | 3.2 | 0.0 |
| | 12/12/2008 | 0.00 | 2.65E-07 | -35 | -- | -- | 6.1 | 14.7 | 3.7 | 0.0 |
| VW-99(15) | 9/9/2008 | -0.20 | 2.54E-07 | -33 | -- | -- | 5.3 | 18.8 | 2.6 | 0.0 |
| | 12/12/2008 | 0.20 | 2.12E-07 | -28 | -- | -- | 0.7 | 9.7 | 6.4 | 0.0 |
| VW-99(20) | 9/9/2008 | 0.00 | 4.90E-07 | -64 | -- | -- | 4.3 | 18.8 | 2.4 | 0.0 |
| | 12/11/2008 | 0.00 | 2.12E-07 | -28 | -- | -- | 1.9 | 0.1 | 11.8 | 0.0 |
| VW-99(25) | 9/9/2008 | 0.00 | 3.74E-07 | -49 | -- | -- | 6.6 | 18.7 | 2.4 | 0.0 |
| | 12/11/2008 | 0.00 | 2.12E-07 | -28 | -- | -- | 12.6 | 2.9 | 12.1 | 2.3 |
| VW-99(30) | 9/9/2008 | 0.00 | 3.03E-07 | -40 | -- | -- | 5.9 | 14.2 | 3.7 | 0.0 |
| | 12/11/2008 | 0.00 | 2.12E-07 | -28 | -- | -- | 62.0 | 1.4 | 10.9 | 13.4 |
| VW-99(35) | 9/9/2008 | 0.00 | 2.54E-07 | -33 | -- | -- | 4.0 | 1.6 | 8.2 | 0.0 |
| | 12/11/2008 | 0.00 | 1.59E-07 | -21 | -- | -- | 50.0 | 0.0 | 11.0 | 14.0 |
| VW-99(40) | 9/9/2008 | -0.05 | 1.59E-07 | -21 | -- | -- | 5.2 | 0.0 | 10.5 | 0.0 |
| | 12/11/2008 | 0.00 | 1.59E-07 | -21 | -- | -- | 115 | 0.0 | 11.8 | 22.2 |
| VW-99(45) | 9/9/2008 | 0.00 | 1.59E-07 | -21 | -- | -- | 23.2 | 0.0 | 10.0 | 3.9 |
| | 12/11/2008 | 0.00 | 1.27E-07 | -17 | -- | -- | 163 | 0.0 | 11.7 | 32.1 |
| VW-99(50) | 9/8/2008 | 0.30 | 1.41E-07 | -19 | -- | -- | 68.3 | 0.0 | 10.1 | 11.3 |
| | 12/11/2008 | 0.40 | 1.27E-07 | -17 | -- | -- | 233 | 0.0 | 11.7 | 50.2 |
| VW-99(55) | 9/8/2008 | 0.00 | 1.41E-07 | -18 | -- | -- | 181 | 0.0 | 10.1 | 38.2 |
| | 12/11/2008 | 0.00 | 9.07E-08 | -12 | -- | -- | 279 | 0.0 | 11.8 | 82.7 |
| VW-99(60) | 9/8/2008 | -0.10 | 1.41E-07 | -18 | -- | -- | 1.5 | 17.5 | 2.6 | 0.0 |
| | 12/11/2008 | 0.50 | 2.12E-07 | -28 | -- | -- | 473 | 6.4 | 8.6 | 84.9 |
| VW-127(5) | 9/8/2008 | 0.08 | 5.16E-08 | -12 | -- | -- | 0.0 | 0.3 | 5.5 | 18.6[1] |
| | 12/11/2008 | 0.30 | 2.77E-08 | -6.4 | -- | -- | 0.3 | 12.5 | 4.2 | 0.0 |
| VW-127(10) | 9/8/2008 | 0.10 | 2.40E-08 | -5.5 | -- | -- | 0.0 | 0.0 | 9.0 | 5.1[1] |
| | 12/11/2008 | -0.50 | 7.23E-08 | -17 | -- | -- | 1.2 | 9.8 | 5.4 | 0.0 |
| VW-127(15) | 9/8/2008 | -0.34 | 6.02E-08 | -14 | -- | -- | 0.0 | 4.0 | 9.0 | 0.0 |
| | 12/11/2008 | -0.70 | 1.45E-07 | -33 | -- | -- | 0.1 | 15.8 | 6.2 | 0.0 |
| VW-127(20) | 9/8/2008 | -0.05 | 1.45E-07 | -33 | -- | -- | 0.0 | 11.5 | 3.8 | 0.2 |
| | 12/12/2008 | -0.50 | 1.45E-07 | -33 | -- | -- | 0.0 | 10.5 | 4.5 | 0.0 |

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**TABLE 2-7. NESTED WELL FIELD SCREENING RESULTS**
**FIRST 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Sample ID | Date | Static Pressure/ Vacuum (in-$H_2O$) | Estimated Soil Gas Permeability ($cm^2$) | Probe Specific Capacity ($cm^3$/s·in $H_2O$) | Helium Effective Vapor Diffusion Coefficient ($cm^2$/s) | Millington-Quirk Effective Vapor Diffusion Coefficient ($cm^2$/s) | Total Organic Vapors (ppm) | Oxygen Concentration (%) | Carbon Dioxide Concentration (%) | Methane Concentration (%) |
|---|---|---|---|---|---|---|---|---|---|---|
| VW-127(30) | 9/9/2008 | -0.31 | 3.48E-09 | -0.81 | -- | -- | 0.0 | 12.4 | 2.3 | 0.0 |
| | 12/12/2008 | -0.40 | 7.41E-09 | -1.7 | -- | -- | 0.0 | 10.0 | 3.0 | 0.0 |
| VW-127(40) | 9/9/2008 | -0.05 | 7.23E-08 | -17 | -- | -- | 0.0 | 12.3 | 3.7 | 0.0 |
| | 12/12/2008 | -0.50 | 9.04E-08 | -21 | -- | -- | 0.0 | 8.4 | 7.5 | 0.0 |
| VW-127(50) | 9/9/2008 | -0.19 | 8.03E-08 | -19 | -- | -- | 0.0 | 9.4 | 5.8 | 0.0 |
| | 12/12/2008 | -0.40 | 5.16E-08 | -12 | -- | -- | 0.0 | 8.9 | 7.6 | 0.0 |
| VW-128(5) | 9/7/2008 | 0.00 | 7.23E-08 | -17 | -- | -- | 0.0 | 20.1 | 3.3 | 0.0 |
| | 12/12/2008 | 0.00 | 6.02E-08 | -14 | -- | -- | 0.3 | 16.9 | 1.3 | 0.0 |
| VW-128(10) | 9/7/2008 | 0.05 | 1.89E-08 | -4.4 | -- | -- | 0.0 | 20.5 | 1.2 | 0.0 |
| | 12/12/2008 | 0.00 | 1.23E-08 | -2.9 | -- | -- | 0.1 | 15.8 | 1.1 | 0.1 |
| VW-128(15) | 9/6/2008 | 0.00 | 8.48E-09 | -2.0 | -- | -- | 0.0 | 20.0 | 1.3 | 0.0 |
| | 12/13/2008 | 0.00 | 7.73E-09 | -1.8 | -- | -- | 0.0 | 16.8 | 1.8 | 0.0 |
| VW-128(20) | 9/6/2008 | 0.00 | 2.40E-08 | -5.5 | -- | -- | 0.0 | 19.0 | 1.0 | 0.0 |
| | 12/13/2008 | 0.20 | 1.80E-08 | -4.2 | -- | -- | 0.0 | 14.0 | 1.5 | 0.1 |
| VW-128(30) | 9/6/2008 | 0.00 | 9.04E-08 | -21 | -- | -- | 0.0 | 18.4 | 1.9 | 0.0 |
| | 12/13/2008 | 0.00 | 6.57E-08 | -15 | -- | -- | 0.1 | 11.8 | 3.2 | 0.1 |
| VW-128(40) | 9/6/2008 | 0.00 | 9.04E-08 | -21 | -- | -- | 0.0 | 16.0 | 3.5 | 0.0 |
| | 12/13/2008 | 0.00 | 5.22E-08 | -12 | -- | -- | 0.2 | 6.8 | 5.8 | 0.1 |
| VW-128(50) | 9/6/2008 | 0.00 | 7.23E-08 | -17 | -- | -- | 0.0 | 13.1 | 5.5 | 0.0 |
| | 12/13/2008 | 0.00 | 3.94E-08 | -9.1 | -- | -- | 0.3 | 4.8 | 6.8 | 0.1 |
| VW-129(5) | 9/8/2008 | 0.00 | 1.03E-06 | -238 | -- | -- | 0.0 | 16.8 | 3.6 | 0.0 |
| | 12/10/2008 | -0.10 | 4.82E-07 | -111 | -- | -- | 0.5 | 15.7 | 2.1 | 0.1 |
| VW-129(10) | 9/8/2008 | 0.00 | 4.82E-07 | -111 | -- | -- | 0.0 | 16.2 | 3.0 | 0.0 |
| | 12/10/2008 | 0.10 | 3.33E-07 | -77 | -- | -- | 0.5 | 14.5 | 3.3 | 0.1 |
| VW-129(15) | 9/8/2008 | 0.00 | 2.41E-07 | -56 | -- | -- | 0.0 | 16.3 | 2.8 | 0.0 |
| | 12/10/2008 | 0.10 | 1.97E-07 | -45 | -- | -- | 0.7 | 14.3 | 3.5 | 0.1 |
| VW-129(20) | 9/8/2008 | 0.00 | 2.58E-07 | -60 | -- | -- | 29.7 | 16.9 | 2.9 | 0.0 |
| | 12/10/2008 | 0.10 | 1.54E-07 | -36 | -- | -- | 0.6 | 13.8 | 3.7 | 0.0 |
| VW-129(30) | 9/8/2008 | 0.00 | 1.64E-07 | -38 | -- | -- | 0.0 | 16.3 | 3.3 | 0.0 |
| | 12/10/2008 | 0.00 | 1.08E-07 | -25 | -- | -- | 0.8 | 16.0 | 3.5 | 0.0 |
| VW-129(40) | 9/8/2008 | 0.10 | 9.04E-08 | -21 | -- | -- | 6.9 | 16.2 | 3.4 | 0.6 |
| | 12/10/2008 | -0.10 | 7.16E-08 | -17 | -- | -- | 9.2 | 16.1 | 3.7 | 0.0 |
| VW-129(50) | 9/7/2008 | 0.10 | 9.04E-08 | -21 | -- | -- | 0.0 | 17.2 | 3.4 | 0.0 |
| | 12/10/2008 | 0.00 | 6.12E-08 | -14 | -- | -- | 0.3 | 15.6 | 3.9 | 0.0 |

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**TABLE 2-7. NESTED WELL FIELD SCREENING RESULTS**
**FIRST 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Sample ID | Date | Static Pressure/ Vacuum (in-$H_2O$) | Estimated Soil Gas Permeability ($cm^2$) | Probe Specific Capacity ($cm^3$/s·in $H_2O$) | Helium Effective Vapor Diffusion Coefficient ($cm^2$/s) | Millington-Quirk Effective Vapor Diffusion Coefficient ($cm^2$/s) | Total Organic Vapors (ppm) | Oxygen Concentration (%) | Carbon Dioxide Concentration (%) | Methane Concentration (%) |
|---|---|---|---|---|---|---|---|---|---|---|
| VW-130(5) | 9/9/2008 | 0.01 | 1.81E-07 | -42 | -- | -- | 0.0 | 16.3 | 5.3 | 0.0 |
| | 12/9/2008 | -0.10 | 2.40E-07 | -55 | -- | -- | 5.4 | 17.2 | 3.2 | 0.0 |
| VW-130(10) | 9/9/2008 | 0.00 | 1.90E-07 | -44 | -- | -- | 0.0 | 15.5 | 5.6 | 0.0 |
| | 12/10/2008 | 0.00 | 1.08E-07 | -25 | -- | -- | 0.2 | 16.8 | 3.2 | 0.0 |
| VW-130(15) | 9/5/2008 | -0.01 | 2.26E-07 | -52 | -- | -- | 6.2 | 16.7 | 5.1 | 0.0 |
| | 12/10/2008 | 0.10 | 2.41E-07 | -56 | -- | -- | 0.2 | 16.7 | 3.7 | 0.0 |
| VW-130(20) | 9/5/2008 | 0.00 | 1.85E-07 | -43 | -- | -- | 4.0 | 16.4 | 5.0 | 0.0 |
| | 12/10/2008 | -0.10 | 8.02E-08 | -19 | -- | -- | 0.8 | 16.4 | 3.8 | 0.0 |
| VW-130(30) | 9/5/2008 | 0.01 | 7.23E-08 | -17 | -- | -- | 3.6 | 15.5 | 1.5 | 0.0 |
| | 12/10/2008 | 0.10 | 7.21E-08 | -17 | -- | -- | 0.3 | 14.7 | 1.9 | 0.0 |
| VW-130(40) | 9/5/2008 | 0.01 | 9.04E-08 | -21 | -- | -- | 2.6 | 15.2 | 2.5 | 0.0 |
| | 12/10/2008 | 0.10 | 9.04E-08 | -21 | -- | -- | 0.4 | 14.8 | 2.8 | 0.0 |

NOTES:

[1] - Natural gas odor detected near nested vapor monitoring well during monitoring in April 2008, newly installed sewer hook up and meters identified to the west of the nested well, utility company repaired leak during Summer 2008

$cm^2$ - square centimeters

$cm^2$/s - square centimeters per second

$cm^3$/s·in H2O - cubic centimeters per second per inch of water

in-$H_2O$ - inches of water

ppm - parts per million

# TABLE 2-8a. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, PETROLEUM RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | TO Method | TO Dilution Factor | n-Butylbenzene mg/m$^3$ | sec-Butylbenzene mg/m$^3$ | Isopropylbenzene mg/m$^3$ | n-Propylbenzene mg/m$^3$ | 1,2-Dichloroethane mg/m$^3$ | 1,2-Dibromoethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethylbenzene mg/m$^3$ | Total Xylenes mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclohexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 2,2,4-Trimethylpentane mg/m$^3$ | 1,3,5-Trimethylbenzene mg/m$^3$ | 1,2,4-Trimethylbenzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyltoluene mg/m$^3$ | TVPH as gasoline mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-18 | Apr 2008 | 5 | TO-15 | 880 | ND(9.7) R | ND(9.7) R | ND(2.2) R | ND(2.2) R | ND(1.8) R | ND(3.4) R | ND(1.6) R | ND(9.2) R | ND(1.4) R | ND(1.6) R | ND(1.9) R | | ND(1.9) R | ND(1.9) R | 17 R | 7 R | ND(1.8) R | ND(1.9) R | 310 R | ND(2.2) R | ND(2.2) R | ND(0.97) R | ND(2.2) R | |
| | | 10 | TO-15 | 11300 | ND(120) R | ND(120) R | ND(28) R | ND(28) R | ND(23) R | ND(43) R | ND(20) R | ND(120) R | ND(18) R | ND(21) R | ND(24) R | | ND(24) R | ND(24) R | 28 R | ND(20) R | ND(23) R | ND(24) R | 5000 R | ND(28) R | ND(28) R | ND(12) R | ND(28) R | |
| | | 15 | TO-15 | 16500 | ND(180) | ND(180) | ND(40) | ND(40) | ND(33) | ND(63) | ND(30) | ND(170) UJ | 44 | ND(31) | ND(36) | | ND(36) | ND(36) | 520 J | ND(29) | ND(34) | ND(35) | 5100 J | ND(40) | ND(40) | ND(18) | ND(40) | 6,176 |
| | | 15 Dup | TO-15 | 16900 | ND(180) | ND(180) | ND(42) | ND(42) | ND(34) | ND(65) | ND(30) | ND(180) UJ | 47 | ND(32) | ND(37) | | ND(37) | ND(37) | 560 J | ND(30) | ND(35) | ND(36) | 5400 J | ND(42) | ND(42) | ND(19) | ND(42) | 6,531 |
| | May 2008 | 5 | TO-15 | 69 | ND(7.6) R | ND(7.6) R | ND(1.7) R | ND(1.7) R | ND(1.4) R | ND(2.6) R | ND(1.2) R | ND(7.2) R | ND(1.1) R | 0.5 R | ND(1.5) R | | 0.98 R | ND(1.5) R | 20 | ND(1.2) R | ND(1.4) R | ND(1.5) R | 1300 R | ND(1.7) R | ND(1.7) R | ND(0.76) R | ND(1.7) R | |
| | | 10 | TO-15 | 466 | ND(51) R | ND(51) R | ND(11) R | ND(11) R | ND(9.4) R | ND(18) R | ND(8.4) R | ND(49) R | ND(7.4) R | 2.9 R | ND(10) R | | 4.4 R | ND(10) R | 12 | ND(8.2) R | ND(9.5) R | ND(9.9) R | 5700 R | ND(11) R | ND(11) R | ND(5.2) R | ND(11) R | |
| | Sep 2008 | 5 | TO-15 | 2290 | ND(250) | ND(250) | ND(56) | ND(56) | ND(46) | ND(88) | ND(41) UJ | ND(240) | 13 J | ND(43) | ND(50) | | ND(50) UJ | ND(50) | 96 | ND(40) | ND(47) | ND(49) | 5400 | ND(56) | ND(56) | ND(25) | ND(56) | 6283.5 |
| | | 10 | TO-15 | 2200 | ND(240) | ND(240) | ND(54) | ND(54) | ND(44) | ND(84) | ND(40) | ND(230) | 19 J | ND(41) | ND(48) | | ND(48) UJ | ND(48) | 140 | ND(39) | ND(45) | ND(47) | 6100 | ND(54) | ND(54) | ND(24) | ND(54) | 7003 |
| | | 15 | TO-15 | 2800 | ND(310) | ND(310) | ND(69) | ND(69) | ND(57) | ND(110) | ND(50) UJ | ND(290) | 66 | ND(53) | ND(61) | | ND(61) | ND(61) | 1300 | 150 | ND(57) | ND(60) | 6200 | ND(69) | ND(69) | ND(31) | ND(69) | 8644 |
| VW-20 | Apr 2008 | 5 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) UJ | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) UJ | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) UJ | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.0857) |
| | | 10 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) UJ | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) UJ | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) UJ | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.0857) |
| | | 15 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) UJ | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) UJ | ND(0.0041) | ND(0.0048) | ND(0.005) | 0.007 J | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | 0.09 |
| | | 25 | TO-15 | 7.93 | ND(0.087) | ND(0.087) | ND(0.019) | ND(0.019) | ND(0.016) | ND(0.03) | ND(0.014) | ND(0.083) UJ | 0.016 | ND(0.015) | ND(0.017) | | 0.24 | ND(0.017) | 0.2 J | 0.057 J | ND(0.016) | ND(0.017) | 4.6 J | 0.63 J | 0.63 J | ND(0.0088) | 0.12 | 6.3 |
| | | 25 Dup | TO-15 | 12.3 | ND(0.14) | ND(0.14) | ND(0.03) | ND(0.03) | ND(0.025) | ND(0.047) | ND(0.022) | ND(0.13) UJ | ND(0.02) | ND(0.023) | ND(0.027) | | 0.31 | ND(0.027) | 0.28 J | 0.084 J | ND(0.025) | ND(0.026) | 6.4 J | 0.83 J | 0.83 J | ND(0.014) | 0.15 | 8.8 |
| | Sep 2008 | 5 | TO-15 | 2.13 | ND(0.023) | ND(0.023) | ND(0.0052) | ND(0.0052) | ND(0.0043) | ND(0.0082) | ND(0.0038) | ND(0.022) | 0.00054 J | 0.0064 | 0.004 J | | 0.013 J | 0.0058 | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0045) | ND(0.005) | ND(0.0052) | 0.0096 | ND(0.0024) | ND(0.0052) | 0.10 |
| | | 10 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | 0.00052 J | 0.002 J | ND(0.005) | | 0.0043 J | 0.0018 J | ND(0.004) | ND(0.0041) | 0.0059 | ND(0.005) | 0.014 | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | 0.10 |
| | | 15 | TO-15 | 2.2 | ND(0.24) | ND(0.24) | ND(0.054) | ND(0.054) | ND(0.044) | ND(0.084) | ND(0.04) | ND(0.23) | 0.017 J | ND(0.041) | ND(0.048) | | ND(0.048) | ND(0.048) | ND(0.038) | ND(0.039) | ND(0.045) | ND(0.047) | 31 | ND(0.054) | ND(0.054) | ND(0.024) | ND(0.054) | 31.78 |
| | | 20 | TO-15 | 46.6 | ND(5.1) | ND(5.1) | ND(1.1) | ND(1.1) | ND(0.94) | ND(1.8) | ND(0.84) | ND(4.9) | 3.6 | ND(0.88) | ND(1) | | 0.54 J | ND(1) | 84 | 38 | 4.2 | ND(0.99) | 810 | ND(1.1) | ND(1.1) | ND(0.52) | ND(1.1) | 954.72 |
| | | 25 | TO-15 | 116 | ND(13) | ND(13) | ND(2.8) | ND(2.8) | ND(2.3) | ND(4.4) | ND(2.1) | ND(12) | 16 | ND(2.2) | 2.3 J | | 4.5 J | ND(2.5) | 290 | 200 | 49 | ND(2.5) | 1400 | ND(2.8) | ND(2.8) | ND(1.3) | ND(2.8) | 1996.45 |
| | | 30 | TO-15 | 432 | ND(47) | ND(47) | 16 | 36 J | ND(8.7) | ND(16) | ND(7.8) UJ | ND(45) | 89 | 17 | 290 J | | 620 J | 6.9 J | 2000 | 2000 | 1900 | ND(9.2) | 5500 | 36 J | 76 J | ND(4.8) | 53 J | 12716.65 |
| | | 30 Dup | TO-15 | 432 | ND(47) | ND(47) | 10 J | 20 J | ND(8.7) | ND(16) | ND(7.8) | ND(45) | 86 | 16 | 220 J | | 440 J | 4.8 J | 1900 | 2000 | 1800 | ND(9.2) | 5200 | 18 J | 35 J | ND(4.8) | 28 J | 11968.05 |
| | | 35 | TO-15 | 404 | ND(44) | ND(44) | 16 | 35 | ND(8.2) | ND(16) | ND(7.3) UJ | ND(42) | 90 | 17 | 270 | | 670 J | 7.8 J | 1600 | 1700 | 930 | ND(8.6) | 5100 | 43 | 99 | ND(4.5) | 60 | 10725.1 |
| VW-21 | Apr 2008 | 5 | TO-15 | 484 | ND(5.3) | ND(5.3) | ND(1.2) | ND(1.2) | ND(0.98) | ND(1.8) | ND(0.87) | ND(5.1) UJ | 0.57 J | 0.8 J | ND(1) | | 0.41 J | 0.17 J | 23 J | 1.5 | ND(0.99) | ND(1) | 270 J | ND(1.2) | ND(1.2) | ND(0.54) | ND(1.2) | 309 |
| | | 10 | TO-15 | 528 | ND(5.8) R | ND(5.8) R | ND(1.3) R | ND(1.3) R | ND(1.1) R | ND(2) R | ND(0.95) R | ND(5.5) R | ND(0.84) R | ND(0.99) R | ND(1.1) R | | ND(1.1) R | ND(1.1) R | 25 R | 3.1 R | ND(1.1) R | ND(1.1) R | 400 R | ND(1.3) R | ND(1.3) R | ND(0.58) R | ND(1.3) R | |
| | | 15 | TO-15 | 9520 | ND(100) | ND(100) | ND(23) | ND(23) | ND(19) | ND(36) | ND(17) | ND(100) UJ | 12 J | ND(18) | ND(21) | | ND(21) | ND(21) | 280 J | 160 | ND(20) | ND(20) | 3600 J | ND(23) | ND(23) | ND(10) | ND(23) | 4,201 |
| | | 20 | TO-15 | 8960 | ND(98) | ND(98) | ND(22) | ND(22) | ND(18) | ND(34) | ND(16) | ND(94) UJ | 13 J | 3 J | ND(19) | | ND(19) | 2 J | 340 J | 140 | ND(18) | ND(19) | 3900 J | ND(22) | ND(22) | ND(9.9) | ND(22) | 4,674 |
| | May 2008 | 10 | TO-15 | 2.24 | ND(0.24) R | ND(0.24) R | ND(0.055) R | ND(0.055) R | ND(0.045) R | ND(0.086) R | ND(0.04) R | ND(0.23) R | 0.019 R | 0.0058 R | ND(0.049) R | | ND(0.049) R | ND(0.049) R | 0.5 R | 0.043 R | ND(0.046) R | ND(0.048) R | 6.5 R | ND(0.055) R | ND(0.055) R | ND(0.025) R | ND(0.055) R | |
| | Sep 2008 | 5 | TO-15 | 58.2 | ND(6.4) | ND(6.4) | ND(1.4) | 1.9 | ND(1.2) | ND(2.2) | ND(1) | ND(6.1) | 1.8 | ND(1.1) | ND(1.3) | | ND(1.3) UJ | ND(1.3) | 70 | ND(1) | ND(1.2) | ND(1.2) | 1100 | ND(1.4) | ND(1.4) | ND(0.64) | ND(1.4) | 1192.67 |
| | | 10 | TO-15 | 124 | ND(14) | ND(14) | ND(3) | ND(3) | ND(2.5) | ND(4.8) | ND(2.2) | ND(13) | 3.3 | ND(2.3) | ND(2.7) | | ND(2.7) UJ | ND(2.7) | 160 | 12 | ND(2.5) | ND(2.6) | 1600 | ND(3) | ND(3) | ND(1.4) | ND(3) | 1816.5 |
| | | 15 | TO-15 | 786 | ND(86) | ND(86) | ND(19) | ND(19) | ND(16) | ND(30) | ND(14) | ND(82) | 9.5 J | ND(15) | ND(17) | | ND(17) UJ | ND(17) | 230 | 180 | 19 | ND(17) | 4200 | ND(19) | ND(19) | ND(8.7) | ND(19) | 4888.85 |
| | | 15 Dup | TO-15 | 786 | ND(86) | ND(86) | ND(19) | ND(19) | ND(16) | ND(30) | ND(14) | ND(82) | 10 J | ND(15) | ND(17) | | 4.1 J | ND(17) | 270 | 190 | 17 | ND(17) | 4300 | ND(19) | ND(19) | ND(8.7) | ND(19) | 5032.95 |
| | | 20 | TO-15 | 710 | ND(78) | ND(78) | ND(17) | 21 | ND(14) | ND(27) | ND(13) | ND(74) | 12 | ND(13) | ND(15) | | 4.6 J | ND(15) | 340 | 220 | 34 | ND(15) | 4200 | ND(17) | ND(17) | ND(7.8) | ND(17) | 5040.5 |
| VW-93A | Mar 2005 | 5 | TO-15 | 2.33 | | | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.060) |
| | Sep 2005 | 5 | TO-15 | 2.82 | | | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.011) | ND(0.0051) | ND(0.03) | ND(0.0045) | ND(0.0053) | ND(0.0061) | | ND(0.0061) | ND(0.0061) | ND(0.0048) | ND(0.005) | ND(0.0058) | ND(0.006) | ND(0.0066) | ND(0.0069) | ND(0.0069) | ND(0.0031) | ND(0.0069) | ND (0.073) |
| | Nov/Dec 2006 | 5 | TO-15 | 2.13 | | | ND(0.0052) R | ND(0.0052) R | | | | ND(0.022) R | ND(0.0034) R | ND(0.004) R | ND(0.0046) R | | ND(0.0046) R | ND(0.0046) R | | 0.0077 R | | | ND(0.005) R | ND(0.0052) R | ND(0.0052) R | | | |
| | Jun/Jul 2007 | 5 | TO-15 | 2.64 | | | ND(0.0065) | ND(0.0065) | | | | ND(0.028) | ND(0.0042) | ND(0.005) | ND(0.0057) | | ND(0.0057) | ND(0.0057) | | ND(0.0046) | | | ND(0.0062) | ND(0.0065) | ND(0.0065) | | | ND (0.046) |
| | Apr 2008 | 5 | TO-15 | 2.42 | ND(0.026) | ND(0.026) | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) J | ND(0.0039) | ND(0.0046) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0042) | ND(0.0043) | ND(0.005) J | ND(0.0052) | ND(0.0056) | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) | ND (0.0881) |
| | Sep 2008 | 5 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.0857) |
| | | 5 Dup | TO-15 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) | ND(0.0051) | ND(0.0056) | ND(0.0058) | 0.0088 | ND(0.0026) | ND(0.0058) | 0.0279 |
| | Dec 2008 | 5 | TO-15 | 2.02 | ND(0.022) | ND(0.022) | ND(0.005) | ND(0.005) | ND(0.0041) | ND(0.0078) | ND(0.0036) | ND(0.021) | ND(0.0032) | 0.036 | 0.0068 | | 0.031 | 0.013 | ND(0.0035) | ND(0.0036) | ND(0.0041) | ND(0.0043) | ND(0.0047) | ND(0.005) | 0.029 | ND(0.0022) | 0.014 | 0.014 |

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## TABLE 2-8a. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, PETROLEUM RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | TO Method | TO Dilution Factor | n-Butyl-benzene mg/m$^3$ | sec-Butyl-benzene mg/m$^3$ | Isopropyl-benzene mg/m$^3$ | n-Propyl-benzene mg/m$^3$ | 1,2-Dichloro-ethane mg/m$^3$ | 1,2-Dibromo-ethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethyl-benzene mg/m$^3$ | Total Xylenes mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclo-hexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 2,2,4-Trimethyl-pentane mg/m$^3$ | 1,3,5-Trimethyl-benzene mg/m$^3$ | 1,2,4-Trimethyl-benzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyl-toluene mg/m$^3$ | TVPH as gasoline mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-93 | Aug 1997 | 10 | TO-3 | | | | | | | | | | ND(0.20) | ND(0.20) | ND(0.20) | ND(0.20) | | | | | | | | | | | | ND(30) |
| | | 15 | TO-3 | | | | | | | | | | ND(0.20) | ND(0.20) | ND(0.20) | ND(0.20) | | | | | | | | | | | | ND(30) |
| | | 20 | TO-3 | | | | | | | | | | ND(0.20) | ND(0.20) | ND(0.20) | ND(0.20) | | | | | | | | | | | | ND(30) |
| | | 25 | TO-3 | | | | | | | | | | ND(0.20) | ND(0.20) | ND(0.20) | ND(0.20) | | | | | | | | | | | | ND(30) |
| | | 30 | TO-3 | | | | | | | | | | ND(0.20) | ND(0.20) | ND(0.20) | ND(0.20) | | | | | | | | | | | | ND(30) |
| | | 35 | TO-3 | | | | | | | | | | ND(0.20) | ND(0.20) | ND(0.20) | ND(0.20) | | | | | | | | | | | | ND(30) |
| | | 40 | TO-3 | | | | | | | | | | ND(0.20) | ND(0.20) | ND(0.20) | ND(0.20) | | | | | | | | | | | | ND(30) |
| | | 45 | TO-3 | | | | | | | | | | 20 | 15 | 6.4 | 12 | | | | | | | | | | | | 14000 |
| | | 50 | TO-3 | | | | | | | | | | ND(0.20) | 30 | 11 | 17 | | | | | | | | | | | | 28000 |
| | | 55 | TO-3 | | | | | | | | | | 59 | 34 | 13 | 23 | | | | | | | | | | | | 43000 |
| | | 60 | TO-3 | | | | | | | | | | 104 | 35 | 23 | 41 | | | | | | | | | | | | 67000 |
| | | 60 | TO-14 | | | | | | | | | | 30 | ND(10) | ND(10) | 3 U | | | | | | | | | | | | |
| | Dec 1997 | 10 | TO-3 | | | | | | | | | | ND(0.035) | ND(0.035) | ND(0.047) | ND(0.047) | | | | | | | | | | | | 3 |
| | | 15 | TO-3 | | | | | | | | | | ND(0.035) | ND(0.035) | ND(0.047) | ND(0.047) | | | | | | | | | | | | 3.5 |
| | | 20 | TO-3 | | | | | | | | | | ND(0.035) | ND(0.035) | ND(0.047) | ND(0.047) | | | | | | | | | | | | ND(2.4) |
| | | 25 | TO-3 | | | | | | | | | | ND(0.035) | ND(0.035) | ND(0.047) | ND(0.047) | | | | | | | | | | | | 3.4 |
| | | 30 | TO-3 | | | | | | | | | | ND(0.035) | ND(0.035) | ND(0.047) | ND(0.047) | | | | | | | | | | | | ND(2.4) |
| | | 35 | TO-3 | | | | | | | | | | ND(0.035) | ND(0.035) | ND(0.047) | ND(0.047) | | | | | | | | | | | | ND(2.4) |
| | | 40 | TO-3 | | | | | | | | | | ND(0.035) | ND(0.035) | ND(0.047) | ND(0.047) | | | | | | | | | | | | 8.5 C |
| | | 45 | TO-3 | | | | | | | | | | ND(7.1) | 8.9 J | ND(9.4) | ND(9.4) | | | | | | | | | | | | 16000 C |
| | | 50 | TO-3 | | | | | | | | | | ND(8.8) | 40 | ND(12) | 14 J | | | | | | | | | | | | 30000 C |
| | | 55 | TO-14 | | | | | | | | | | 4.9 | ND(0.20) | ND(0.24) | 1.8 | | | | | | | | 0.64J | 0.96J | | 1.0J | |
| | | 60 | TO-3 | | | | | | | | | | ND(18) | 110 | ND(24) | 33 J | | | | | | | | | | | | 97000 C |
| | Mar 1998 | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 |
| | | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | 23000 |
| | | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | 75000 |
| | Jul 1998 | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |
| | | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | 19 |
| | | 20 | | | | | | | | | | | | | | | | | | | | | | | | | | 7 |
| | | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| | | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| | | 35 | | | | | | | | | | | | | | | | | | | | | | | | | | 20 |
| | | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | 10 |
| | | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | 23940 |
| | | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | 41730 |
| | | 55 | | | | | | | | | | | | | | | | | | | | | | | | | | 46640 |
| | | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | 78440 |
| | Dec 1998 | 10 | TO-3 | | | | | | | | | | ND(0.0032) | 0.0079 J | ND(0.004) | ND(0.004) | | | | | | | | | | | | 0.606 B |
| | | 35 | TO-3 | | | | | | | | | | ND(0.0032) | 0.0071 J | ND(0.004) | ND(0.004) | | | | | | | | | | | | 0.0461 B |
| | | 35 Dup | TO-3 | | | | | | | | | | ND(0.0032) | 0.0124 J | 0.0265 | ND(0.004) | | | | | | | | | | | | 0.396 B |
| | | 45 | TO-3 | | | | | | | | | | 27.4 M | 3.46 M | 1.6926 | 2.17 MJ | | | | | | | | | | | | 605.8 B |
| | | 60 | TO-3 | | | | | | | | | | 105 | 67.7 M | 20.8J | 26.5MJ | | | | | | | | | | | | 19572 B |
| | Feb 1999 | 10 | TO-3 | | | | | | | | | | ND | 0.0083 J | ND | ND | | | | | | | | | | | | 0.1770 |
| | | 35 | TO-3 | | | | | | | | | | ND | 0.0199 J | ND | ND | | | | | | | | | | | | 0.3310 |
| | | 35 Dup | TO-3 | | | | | | | | | | ND | 0.0135 J | ND | ND | | | | | | | | | | | | 0.405 B |
| | | 45 | TO-3 | | | | | | | | | | 6.38 | 7.89 M | 3.6460 | 4.77 MJ | | | | | | | | | | | | 1957 B |
| | | 60 | TO-3 | | | | | | | | | | 89 | 75.2 M | 36.46 M | 47.74 J | | | | | | | | | | | | 34484 B |

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# TABLE 2-8a. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, PETROLEUM RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | TO Method | TO Dilution Factor | n-Butylbenzene mg/m$^3$ | sec-Butylbenzene mg/m$^3$ | Isopropylbenzene mg/m$^3$ | n-Propylbenzene mg/m$^3$ | 1,2-Dichloroethane mg/m$^3$ | 1,2-Dibromoethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethylbenzene mg/m$^3$ | Total Xylenes mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclohexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 2,2,4-Trimethylpentane mg/m$^3$ | 1,3,5-Trimethylbenzene mg/m$^3$ | 1,2,4-Trimethylbenzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyltoluene mg/m$^3$ | TVPH as gasoline mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-93 | Mar 2005 | 10 | TO-15 | 2.96 | | | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.011) | ND(0.0053) | ND(0.031) | ND(0.0047) | ND(0.0056) | ND(0.0064) | | ND(0.0064) | ND(0.0064) | ND(0.0051) | ND(0.0052) | ND(0.0061) | ND(0.0063) | ND(0.0069) | ND(0.0073) | ND(0.0073) | ND(0.0033) | ND(0.0073) | ND (0.076) |
| | | 15 | TO-15 | 2.76 | | | ND(0.0068) | ND(0.0068) | ND(0.0056) | ND(0.011) | ND(0.005) | ND(0.029) | ND(0.0044) | ND(0.0052) | ND(0.006) | | ND(0.006) | ND(0.006) | ND(0.0048) | ND(0.0049) | ND(0.0056) | ND(0.0059) | ND(0.0064) | ND(0.0068) | ND(0.0068) | ND(0.003) | ND(0.0068) | ND (0.071) |
| | | 20 | TO-15 | 2.33 | | | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.060) |
| | | 20 Dup | TO-15 | 2.42 | | | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) | ND(0.0039) | ND(0.0046) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0042) | ND(0.0043) | ND(0.005) | ND(0.0052) | ND(0.0056) | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) | ND (0.062) |
| | | 25 | TO-15 | 2.69 | | | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.01) | ND(0.0048) | ND(0.028) | ND(0.0043) | ND(0.0051) | ND(0.0058) | | ND(0.0058) | ND(0.0058) | ND(0.0046) | ND(0.0047) | ND(0.0055) | ND(0.0057) | ND(0.0063) | ND(0.0066) | ND(0.0066) | ND(0.003) | ND(0.0066) | ND (0.069) |
| | | 30 | TO-15 | 2.53 | | | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) | ND (0.065) |
| | | 35 | TO-15 | 2.29 | | | ND(0.0056) | ND(0.0056) | ND(0.0046) | ND(0.0088) | ND(0.0041) | ND(0.024) | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) | ND (0.059) |
| | | 40 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.057) |
| | | 45 | TO-15 | 2.42 | | | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) | ND(0.0039) | ND(0.0046) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0042) | ND(0.0043) | ND(0.005) | ND(0.0052) | ND(0.0056) | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) | ND (0.062) |
| | | 50 | TO-15 | 2.64 | | | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.01) | ND(0.0048) | ND(0.028) | ND(0.0042) | ND(0.005) | ND(0.0057) | | ND(0.0057) | ND(0.0057) | ND(0.0045) | ND(0.0046) | ND(0.0054) | ND(0.0056) | ND(0.0062) | ND(0.0065) | ND(0.0065) | ND(0.0029) | ND(0.0065) | ND (0.068) |
| | | 55 | TO-15 | 2.58 | | | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0099) | ND(0.0046) | ND(0.027) | 0.0044 | 0.0076 | ND(0.0056) | | ND(0.0056) | ND(0.0056) | ND(0.0044) | 0.015 | 0.015 | ND(0.0055) | ND(0.006) | ND(0.0063) | ND(0.0063) | ND(0.0028) | ND(0.0063) | 0.099 |
| | | 60 | TO-15 | 440 | | | ND(1.1) | ND(1.1) | ND(0.89) | ND(1.7) | ND(0.79) | ND(4.6) | ND(0.7) | ND(0.83) | ND(0.96) | | ND(0.96) | ND(0.96) | ND(0.76) | 3.2 | ND(0.9) | ND(0.94) | 190 | ND(1.1) | ND(1.1) | ND(0.49) | ND(1.1) | 203.69 |
| | Sep 2005 | 10 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | 0.0060 | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | 0.0042 | ND(0.0055) | 0.064 |
| | | 15 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | 0.0073 | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | 0.0036 | ND(0.0054) | 0.064 |
| | | 20 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.057) |
| | | 25 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.057) |
| | | 30 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | 0.0055 | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | 0.061 |
| | | 35 | TO-15 | 2.29 | | | ND(0.0056) | ND(0.0056) | ND(0.0046) | ND(0.0088) | ND(0.0041) | ND(0.024) | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) | ND (0.059) |
| | | 40 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | 0.071 | ND(0.0035) | ND(0.0041) | ND(0.0048) | | 0.0053 | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | 0.0089 | 0.03 | ND(0.0024) | 0.012 | 0.162 |
| | | 45 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.057) |
| | | 50 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.057) |
| | | 55 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.057) |
| | | 60 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.057) |
| | Oct 2005 | 30 | TO-15 | 2.2 | | | ND(0.0054) | 0.0061 | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | 0.015 | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | 0.072 |
| | | 35 | TO-15 | 2.13 | | | ND(0.0052) | ND(0.0052) | ND(0.0043) | ND(0.0082) | ND(0.0038) | ND(0.022) | ND(0.0034) | ND(0.004) | ND(0.0046) | | ND(0.0046) | ND(0.0046) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0045) | ND(0.005) | ND(0.0052) | ND(0.0052) | ND(0.0024) | ND(0.0052) | ND (0.055) |
| | | 40 | TO-15 | 2.09 | | | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) | ND(0.0033) | ND(0.0039) | ND(0.0045) | | ND(0.0045) | ND(0.0045) | ND(0.0036) | ND(0.0037) | ND(0.0043) | ND(0.0044) | 0.011 | ND(0.0051) | ND(0.0051) | ND(0.0023) | ND(0.0051) | 0.062 |
| | | 45 | TO-15 | 2.16 | | | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) | ND (0.056) |
| | | 50 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.057) |
| | | 60 | TO-15 | 2.13 | | | ND(0.0052) | ND(0.0052) | ND(0.0043) | ND(0.0082) | ND(0.0038) | ND(0.022) | ND(0.0034) | ND(0.004) | ND(0.0046) | | ND(0.0046) | ND(0.0046) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0045) | ND(0.005) | ND(0.0052) | ND(0.0052) | ND(0.0024) | ND(0.0052) | ND (0.055) |
| | Nov/Dec 2006 | 10 | TO-15 | 2.16 | | | ND(0.0053) | ND(0.0053) | | | | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | | ND(0.0038) | | | ND(0.005) | ND(0.0053) | ND(0.0053) | | | ND (0.037) |
| | | 15 | TO-15 | 2.09 | | | ND(0.0051) | ND(0.0051) | | | | ND(0.022) | ND(0.0033) | ND(0.0039) | ND(0.0045) | | ND(0.0045) | ND(0.0045) | | ND(0.0037) | | | ND(0.0049) | ND(0.0051) | ND(0.0051) | | | ND (0.036) |
| | | 20 | TO-15 | 2.16 | | | ND(0.0053) | ND(0.0053) | | | | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | | ND(0.0038) | | | ND(0.005) | ND(0.0053) | ND(0.0053) | | | ND (0.037) |
| | | 25 | TO-15 | 2.16 | | | ND(0.0053) | ND(0.0053) | | | | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | | ND(0.0038) | | | ND(0.005) | ND(0.0053) | ND(0.0053) | | | ND (0.037) |
| | | 30 | TO-15 | 21.3 | | | ND(0.052) | ND(0.052) | | | | ND(0.22) | ND(0.034) | ND(0.04) | ND(0.046) | | ND(0.046) | ND(0.046) | | ND(0.038) | | | ND(0.05) | ND(0.052) | ND(0.052) | | | ND (0.364) |
| | | 35 | TO-15 | 2.05 | | | ND(0.005) | ND(0.005) | | | | ND(0.021) | ND(0.0033) | ND(0.0039) | ND(0.0044) | | ND(0.0044) | ND(0.0044) | | ND(0.0036) | | | ND(0.0048) | ND(0.005) | ND(0.005) | | | ND (0.035) |
| | | 40 | TO-15 | 2.05 | | | ND(0.005) | ND(0.005) | | | | ND(0.021) | ND(0.0033) | ND(0.0039) | ND(0.0044) | | ND(0.0044) | ND(0.0044) | | ND(0.0036) | | | ND(0.0048) | ND(0.005) | ND(0.005) | | | ND (0.035) |
| | | 45 | TO-15 | 2.02 | | | ND(0.005) | ND(0.005) | | | | ND(0.021) | ND(0.0032) | ND(0.0038) | ND(0.0044) | | ND(0.0044) | ND(0.0044) | | ND(0.0036) | | | ND(0.0047) | ND(0.005) | ND(0.005) | | | ND (0.035) |
| | | 50 | TO-15 | 2.38 | | | ND(0.0058) | ND(0.0058) | | | | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | | ND(0.0042) | | | ND(0.0056) | ND(0.0058) | ND(0.0058) | | | ND (0.041) |
| | | 55 | TO-15 | 2.38 | | | ND(0.0058) | ND(0.0058) | | | | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | | ND(0.0042) | | | ND(0.0056) | ND(0.0058) | ND(0.0058) | | | ND (0.041) |
| | | 60 | TO-15 | 2.13 | | | ND(0.0052) | ND(0.0052) | | | | ND(0.022) | ND(0.0034) | ND(0.004) | ND(0.0046) | | ND(0.0046) | ND(0.0046) | | ND(0.0038) | | | ND(0.005) | ND(0.0052) | ND(0.0052) | | | ND (0.036) |
| | Jun/Jul 2007 | 10 | TO-15 | 2.58 | | | ND(0.0063) | ND(0.0063) | | | | ND(0.027) | ND(0.0041) | ND(0.0049) | ND(0.0056) | | ND(0.0056) | ND(0.0056) | | ND(0.0045) | | | ND(0.006) | ND(0.0063) | ND(0.0063) | | | ND (0.044) |
| | | 15 | TO-15 | 2.76 | | | ND(0.0068) | ND(0.0068) | | | | 0.0320 | 0.0072 | 0.0091 | ND(0.006) | | 0.042 | 0.02 | | 0.0057 | | | 0.0086 | ND(0.0068) | 0.033 | | | 0.171 |
| | | 20 | TO-15 | 2.47 | | | ND(0.0061) | ND(0.0061) | | | | ND(0.026) | ND(0.0039) | 0.0120 | ND(0.0054) | | 0.008 | ND(0.0054) | | ND(0.0044) | | | ND(0.0058) | ND(0.0061) | 0.0073 | | | 0.062 |
| | | 25 | TO-15 | 2.76 | | | ND(0.0068) | ND(0.0068) | | | | ND(0.029) | ND(0.0044) | ND(0.0052) | ND(0.006) | | ND(0.006) | ND(0.006) | | ND(0.0049) | | | ND(0.0064) | ND(0.0068) | ND(0.0068) | | | ND (0.048) |
| | | 30 | TO-15 | 2.38 | | | ND(0.0058) | ND(0.0058) | | | | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | | 0.0051 | | | ND(0.0056) | ND(0.0058) | ND(0.0058) | | | 0.044 |
| | | 35 | TO-15 | 2.33 | | | ND(0.0057) | ND(0.0057) | | | | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | | ND(0.0041) | | | ND(0.0054) | ND(0.0057) | ND(0.0057) | | | ND (0.040) |
| | | 40 | TO-15 | 2.38 | | | ND(0.0058) | ND(0.0058) | | | | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | | ND(0.0042) | | | ND(0.0056) | ND(0.0058) | ND(0.0058) | | | ND (0.041) |
| | | 45 | TO-15 | 2.29 | | | ND(0.0056) | ND(0.0056) | | | | ND(0.024) | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | | ND(0.004) | | | ND(0.0053) | ND(0.0056) | ND(0.0056) | | | ND (0.039) |
| | | 50 | TO-15 | 2.38 | | | ND(0.0058) | ND(0.0058) | | | | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | | ND(0.0042) | | | ND(0.0056) | ND(0.0058) | ND(0.0058) | | | ND (0.041) |
| | | 55 | TO-15 | 2.38 | | | ND(0.0058) | ND(0.0058) | | | | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | | ND(0.0042) | | | ND(0.0056) | ND(0.0058) | ND(0.0058) | | | ND (0.041) |
| | | 60 | TO-15 | 2.47 | | | ND(0.0061) | ND(0.0061) | | | | ND(0.026) | 0.0050 | 0.0320 | ND(0.0054) | | 0.049 | 0.026 | | ND(0.0044) | | | 0.051 | 0.0096 | 0.026 | | | 0.223 |

US EPA ARCHIVE DOCUMENT

# TABLE 2-8a. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, PETROLEUM RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | TO Method | TO Dilution Factor | n-Butylbenzene mg/m$^3$ | sec-Butylbenzene mg/m$^3$ | Isopropylbenzene mg/m$^3$ | n-Propylbenzene mg/m$^3$ | 1,2-Dichloroethane mg/m$^3$ | 1,2-Dibromoethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethylbenzene mg/m$^3$ | Total Xylenes mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclohexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 2,2,4-Trimethylpentane mg/m$^3$ | 1,3,5-Trimethylbenzene mg/m$^3$ | 1,2,4-Trimethylbenzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyltoluene mg/m$^3$ | TVPH as gasoline mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-93 | Apr 2008 | 10 | TO-15 | 25.3 | ND(0.28) | ND(0.28) | ND(0.062) J | ND(0.062) | ND(0.051) | ND(0.097) | ND(0.046) | ND(0.26) J | ND(0.04) | ND(0.048) | ND(0.055) J | | ND(0.055) | ND(0.055) | ND(0.044) | ND(0.044) | ND(0.052) J | ND(0.054) | ND(0.059) | ND(0.062) | ND(0.062) | ND(0.028) | ND(0.062) | ND (0.929) |
| | | 10 Dup | TO-15 | 33.7 | ND(0.37) | ND(0.37) | ND(0.083) J | ND(0.083) | ND(0.068) | ND(0.13) | ND(0.061) | ND(0.35) J | ND(0.054) | ND(0.063) | ND(0.073) J | | ND(0.073) | ND(0.073) | ND(0.058) | ND(0.059) | ND(0.069) J | ND(0.072) | ND(0.079) | ND(0.083) | ND(0.083) | ND(0.037) | ND(0.083) | ND (1.237) |
| | | 15 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) J | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) J | ND(0.0037) | ND(0.0044) | ND(0.005) J | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) J | ND(0.005) | ND(0.0054) | 0.0064 | 0.0074 | ND(0.0026) | ND(0.0057) | 0.094 |
| | | 20 | TO-15 | 2.58 | ND(0.028) | ND(0.028) | ND(0.0063) | ND(0.0063) | ND(0.0052) J | ND(0.0099) | ND(0.0046) | ND(0.027) J | ND(0.0041) | 0.011 J | ND(0.0056) | | 0.012 J | ND(0.0056) | ND(0.0044) | ND(0.0045) J | ND(0.0053) J | ND(0.0055) | ND(0.006) | ND(0.0063) | ND(0.0063) | ND(0.0028) | ND(0.0063) | 0.112 |
| | | 20 Dup | TO-15 | 2.58 | ND(0.028) | ND(0.028) | ND(0.0063) | ND(0.0063) | ND(0.0052) J | ND(0.0099) | ND(0.0046) | ND(0.027) J | ND(0.0041) | ND(0.0049) J | ND(0.0056) | | ND(0.0056) J | ND(0.0056) | ND(0.0044) | ND(0.0045) J | ND(0.0053) J | ND(0.0055) | ND(0.006) | ND(0.0063) | ND(0.0063) | ND(0.0028) | ND(0.0063) | ND (0.094) |
| | | 25 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) J | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) J | ND(0.0037) | ND(0.0044) | ND(0.005) J | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) J | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.086) |
| | | 30 | TO-15 | 2.42 | ND(0.026) | ND(0.026) | ND(0.0059) J | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) J | ND(0.0039) | ND(0.0046) | ND(0.0052) J | | ND(0.0052) | ND(0.0052) | ND(0.0042) | ND(0.0043) | ND(0.005) J | ND(0.0052) | ND(0.0056) | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) | ND (0.088) |
| | | 35 | TO-15 | 2.29 | ND(0.025) | ND(0.025) | ND(0.0056) | ND(0.0056) | ND(0.0046) | ND(0.0088) | ND(0.0041) | ND(0.024) J | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) J | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) | ND (0.084) |
| | | 40 | TO-15 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) J | ND(0.004) | ND(0.0048) | ND(0.0055) | | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) J | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) | ND (0.093) |
| | | 45 | TO-15 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) J | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) J | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) | ND (0.087) |
| | | 50 | TO-15 | 2.47 | ND(0.027) | ND(0.027) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) J | ND(0.0039) | ND(0.0046) | ND(0.0054) | | ND(0.0054) | ND(0.0054) | ND(0.0042) | 0.02 | ND(0.0051) J | ND(0.0053) | ND(0.0058) | ND(0.0061) | ND(0.0061) | ND(0.0027) | ND(0.0061) | ND (0.109) |
| | | 55 | TO-15 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) J | ND(0.004) | ND(0.0048) | ND(0.0055) | | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) J | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) | ND (0.093) |
| | Sep 2008 | 10 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.0857) |
| | | 15 | TO-15 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.08145) |
| | | 20 | TO-15 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) | ND (0.0929) |
| | | 20 Dup | TO-15 | 2.47 | ND(0.027) | ND(0.027) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) | ND(0.0039) | ND(0.0046) | ND(0.0054) | | ND(0.0054) | ND(0.0054) | ND(0.0042) | ND(0.0044) | ND(0.0051) | ND(0.0053) | ND(0.0058) | ND(0.0061) | ND(0.0061) | ND(0.0027) | ND(0.0061) | ND (0.0908) |
| | | 25 | TO-15 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | 0.0047 JB | 0.011 | ND(0.0048) | 0.0062 | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | 0.0965 |
| | | 30 | TO-15 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) | ND (0.0873) |
| | | 35 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | 0.006 JB | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.0895) |
| | | 40 | TO-15 | 2.29 | ND(0.025) | ND(0.025) | 0.0061 | ND(0.0056) | ND(0.0046) | ND(0.0088) | ND(0.0041) | 0.046 | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) | ND (0.12115) |
| | | 45 | TO-15 | 2.47 | ND(0.027) | ND(0.027) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) | ND(0.0039) | ND(0.0046) | ND(0.0054) | | ND(0.0054) | ND(0.0054) | ND(0.0042) | ND(0.0044) | ND(0.0051) | ND(0.0053) | ND(0.0058) | ND(0.0061) | ND(0.0061) | ND(0.0027) | ND(0.0061) | ND (0.0908) |
| | | 50 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.0857) |
| | | 55 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.0857) |
| | | 60 | TO-15 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) | ND (0.0873) |
| | Dec 2008 | 10 | TO-15 | 2.16 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | 0.0051 | ND(0.0083) | ND(0.0039) | ND(0.023) | 0.0036 | 0.0053 | ND(0.0047) | | 0.0091 | ND(0.0047) | 0.004 | 0.029 | 0.023 | ND(0.0046) | 0.086 | ND(0.0053) | 0.0059 | ND(0.0024) | ND(0.0053) | 0.2314 |
| | | 15 | TO-15 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.08145) |
| | | 20 | TO-15 | 2.02 | ND(0.022) | ND(0.022) | ND(0.005) | 0.0059 J | ND(0.0041) | ND(0.0078) | ND(0.0036) | ND(0.021) | ND(0.0032) | 0.16 | 0.035 | | 0.15 | 0.059 | ND(0.0035) | ND(0.0036) | 0.0074 | ND(0.0043) | ND(0.0047) | 0.0067 | 0.014 | ND(0.0022) | 0.021 | 0.5125 |
| | | 25 | TO-15 | 2.09 | ND(0.023) | ND(0.023) | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) | 0.0056 | 0.043 | 0.012 | | 0.052 | 0.022 | ND(0.0036) | ND(0.0037) | ND(0.0043) | ND(0.0044) | ND(0.0049) | 0.0067 | 0.021 | ND(0.0023) | 0.02 | 0.241 |
| | | 30 | TO-15 | 2.13 | ND(0.023) | ND(0.023) | ND(0.0052) | ND(0.0052) | ND(0.0043) | ND(0.0082) | ND(0.0038) | ND(0.022) | ND(0.0034) | ND(0.004) | ND(0.0046) | | ND(0.0046) | ND(0.0046) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0045) | ND(0.005) | ND(0.0052) | ND(0.0052) | ND(0.0024) | ND(0.0052) | ND (0.07765) |
| | | 35 | TO-15 | 2.16 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) | ND (0.0798) |
| | | 40 | TO-15 | 2.09 | ND(0.023) | ND(0.023) | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | 0.11 | 0.0057 | 0.031 | 0.0076 | | 0.029 | 0.035 | ND(0.0036) | ND(0.0037) | ND(0.0043) | 0.013 | ND(0.0049) | ND(0.0051) | 0.018 | ND(0.0023) | 0.014 | 0.31135 |
| | | 45 | TO-15 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.08145) |
| | | 50 | TO-15 | 2.13 | ND(0.023) | ND(0.023) | ND(0.0052) | ND(0.0052) | ND(0.0043) | ND(0.0082) | ND(0.0038) | ND(0.022) | 0.0043 | ND(0.004) | ND(0.0046) | | ND(0.0046) | ND(0.0046) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0045) | ND(0.005) | ND(0.0052) | ND(0.0052) | ND(0.0024) | ND(0.0052) | 0.08025 |
| | | 55 | TO-15 | 2.02 | ND(0.022) | ND(0.022) | ND(0.005) | ND(0.005) | ND(0.0041) | ND(0.0078) | ND(0.0036) | ND(0.021) | ND(0.0032) | ND(0.0038) | ND(0.0044) | | ND(0.0044) | ND(0.0044) | ND(0.0035) | ND(0.0036) | 0.0042 | ND(0.0043) | ND(0.0047) | ND(0.005) | ND(0.005) | ND(0.0022) | ND(0.005) | 0.0762 |
| | | 55 Dup | TO-15 | 2.16 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) | ND (0.0798) |
| | | 60 | TO-15 | 2.09 | ND(0.023) | ND(0.023) | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) | ND(0.0033) | ND(0.0039) | ND(0.0045) | | ND(0.0045) | ND(0.0045) | ND(0.0036) | ND(0.0037) | ND(0.0043) | ND(0.0044) | ND(0.0049) | ND(0.0051) | ND(0.0051) | ND(0.0023) | ND(0.0051) | ND (0.0767) |
| VW-96A | Mar 2005 | 5 | TO-15 | 2.05 | | | ND(0.005) | ND(0.005) | 0.0290 | ND(0.0079) | ND(0.0037) | ND(0.021) | ND(0.0033) | 0.0087 | 0.0063 | | 0.013 | ND(0.0044) | ND(0.0035) | ND(0.0036) | ND(0.0042) | ND(0.0044) | ND(0.0048) | ND(0.005) | 0.0055 | 0.0045 | ND(0.005) | 0.107 |
| | Sep 2005 | 5 | TO-15 | 2.96 | | | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.011) | ND(0.0053) | ND(0.031) | ND(0.0047) | ND(0.0056) | ND(0.0064) | | ND(0.0064) | ND(0.0064) | ND(0.0051) | ND(0.0052) | ND(0.0061) | ND(0.0063) | ND(0.0069) | ND(0.0073) | ND(0.0073) | ND(0.0033) | ND(0.0073) | ND (0.076) |
| | Jun/Jul 2006 | 5 | TO-15 | 2.33 | | | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.060) |
| | Nov/Dec 2006 | 5 | TO-15 | 2.69 | | | ND(0.0066) | ND(0.0066) | | | | ND(0.028) | ND(0.0043) | ND(0.0051) | ND(0.0058) | | ND(0.0058) | ND(0.0058) | | ND(0.0047) | | | ND(0.0063) | ND(0.0066) | ND(0.0066) | | | ND (0.046) |
| | | 5 Dup | TO-15 | 2.42 | | | ND(0.0059) R | ND(0.0059) R | | | | ND(0.025) R | 0.005 R | 0.009 R | ND(0.0052) R | | 0.0056 R | ND(0.0052) R | | 0.0082 R | | | ND(0.0056) R | ND(0.0059) R | ND(0.0059) R | | | |
| | Apr 2008 | 5 | TO-15 | 2.05 | ND(0.022) | ND(0.022) | ND(0.005) | ND(0.005) | ND(0.0041) | ND(0.0079) | ND(0.0037) | ND(0.021) J | ND(0.0033) | 0.0043 | ND(0.0044) | | ND(0.0044) | ND(0.0044) | ND(0.0035) | 0.0074 | ND(0.0042) J | ND(0.0044) | ND(0.0048) | ND(0.005) | ND(0.005) | ND(0.0023) | ND(0.005) | 0.082 |
| | Sep 2008 | 5 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | 0.0069 | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | 0.090 |
| | Dec 2008 | 5 | TO-15 | 7.63 | ND(0.84) | ND(0.84) | ND(0.19) | ND(0.19) | ND(0.15) | ND(0.29) | ND(0.14) | ND(0.8) | ND(0.12) | ND(0.14) | ND(0.16) | | ND(0.16) | ND(0.16) | ND(0.13) | ND(0.13) | ND(0.16) | ND(0.16) | 79 | ND(0.19) | ND(0.19) | ND(0.084) | ND(0.19) | 81.707 |

US EPA ARCHIVE DOCUMENT

# TABLE 2-8a. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, PETROLEUM RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | TO Method | TO Dilution Factor | n-Butyl-benzene mg/m$^3$ | sec-Butyl-benzene mg/m$^3$ | Isopropyl-benzene mg/m$^3$ | n-Propyl-benzene mg/m$^3$ | 1,2-Dichloro-ethane mg/m$^3$ | 1,2-Dibromo-ethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethyl-benzene mg/m$^3$ | Total Xylenes mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclo-hexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 2,2,4-Trimethyl-pentane mg/m$^3$ | 1,3,5-Trimethyl-benzene mg/m$^3$ | 1,2,4-Trimethyl-benzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyl-toluene mg/m$^3$ | TVPH as gasoline mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-96 | Sep 1997 | 10 | TO-3 | | | | | | | | | | ND(0.10) | 0.62 | 1.7 | 5.1 | | | | | | | | | | | | 320 |
| | | 15 | TO-3 | | | | | | | | | | ND(0.10) | 0.29 | 0.9 | 3.1 | | | | | | | | | | | | 330 |
| | | 20 | TO-3 | | | | | | | | | | ND(0.40) | 25 | 36 | 140 | | | | | | | | | | | | 9600 |
| | | 20 | TO-14 | | | | | | | | | | ND(20) | ND(20) | 3.5 | 22.5 | | | | | | | | | | | | |
| | | 25 | TO-3 | | | | | | | | | | ND(0.10) | 0.5 | 1.7 | 2.6 | | | | | | | | | | | | 210 |
| | | 30 | TO-3 | | | | | | | | | | ND(0.10) | 0.20 | 0.21 | 1.4 | | | | | | | | | | | | 78 |
| | | 35 | TO-3 | | | | | | | | | | ND(0.40) | 12 | 3 | 2.9 | | | | | | | | | | | | 8600 |
| | | 40 | TO-3 | | | | | | | | | | 44 | 33 | 12 | 25 | | | | | | | | | | | | 40000 |
| | | 45 | TO-3 | | | | | | | | | | 59 | 33 | 25 | 86 | | | | | | | | | | | | 49000 |
| | | 50 | TO-3 | | | | | | | | | | 260 | 160 | 84 | 240 | | | | | | | | | | | | 120000 |
| | | 55 | TO-3 | | | | | | | | | | 800 | 270 | 170 | 460 | | | | | | | | | | | | 180000 |
| | | 60 | TO-3 | | | | | | | | | | 1100 | 300 | 180 | 350 | | | | | | | | | | | | 200000 |
| | Dec 1997 | 10 | TO-3 | | | | | | | | | | ND(0.035) | 0.073 J | ND(0.047) | 0.078 J | | | | | | | | | | | | 84 C |
| | | 15 | TO-3 | | | | | | | | | | ND(0.035) | ND(0.035) | ND(0.047) | ND(0.047) | | | | | | | | | | | | 8.4 C |
| | | 20[1] | TO-3 | | | | | | | | | | ND(0.24) | 1.6 | 19 | 35 | | | | | | | | | | | | 1700 C |
| | | 20 Dup[1] | TO-3 | | | | | | | | | | ND(0.18) | 0.68 | 12 | 19 | | | | | | | | | | | | 1300 C |
| | | 25 | TO-3 | | | | | | | | | | ND(0.035) | 0.039 J | ND(0.047) | 0.090 J | | | | | | | | | | | | 16 C |
| | | 30 | TO-3 | | | | | | | | | | ND(0.035) | ND(0.035) | ND(0.047) | ND(0.047) | | | | | | | | | | | | 5.7 |
| | | 35 | TO-3 | | | | | | | | | | ND(0.12) | 0.26JB | ND(0.16) | ND(0.16) | | | | | | | | | | | | 410 C |
| | | 40 | TO-3 | | | | | | | | | | ND(7.1) | 14 J | 14 J | ND(9.4) | | | | | | | | | | | | 28000 C |
| | | 45 | TO-3 | | | | | | | | | | ND(7.1) | 12 J | 10 J | 17 J | | | | | | | | | | | | 26000 C |
| | | 50 | TO-3 | | | | | | | | | | 49 | 15 JB | ND(9.4) | 39 | | | | | | | | | | | | 28000 C |
| | | 55 | TO-3 | | | | | | | | | | 830 | 190 | 350 | 870 | | | | | | | | | | | | 260000 C |
| | | 60 | TO-14 | | | | | | | | | | 1000 | 78 | 340 | 980 | | | | | | | | 40 | 77 | | 87 | |
| | | 60 Dup | TO-14 | | | | | | | | | | 1000 | 77 | 330 | 990 | | | | | | | | 34 | 69 | | 78 | |
| | Mar 1998 | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 |
| | | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | 52000 |
| | | 55 | | | | | | | | | | | | | | | | | | | | | | | | | | 154000 |
| | Jul 1998 | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | 33 |
| | | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | 8 |
| | | 20 | | | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| | | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| | | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | 918 |
| | | 35 | | | | | | | | | | | | | | | | | | | | | | | | | | 13990 |
| | | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | 74730 |
| | | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | 90300 |
| | | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | 127990 |
| | | 55 | | | | | | | | | | | | | | | | | | | | | | | | | | 179040 |
| | Dec 1998 | 15 | TO-3 | | | | | | | | | | 0.48 M | 0.056 M | ND(0.013) | ND(0.013) | | | | | | | | | | | | 163.1 B |
| | | 30 | TO-3 | | | | | | | | | | ND(0.0032) | 0.0056 J | ND(0.004) | ND(0.004) | | | | | | | | | | | | 0.350 B |
| | | 30 Dup | TO-3 | | | | | | | | | | ND(0.0032) | ND(0.004) | ND(0.004) | ND(0.004) | | | | | | | | | | | | 0.559 B |
| | | 45 | TO-3 | | | | | | | | | | 35.1 | 14.7 M | 3.86 J | 5.21 J | | | | | | | | | | | | 12116 B |
| | | 55 | TO-3 | | | | | | | | | | 315.8 | 48.9 MJ | 60.8 J | 147.6 J | | | | | | | | | | | | 36814 B |
| | Feb 1999 | 15 | TO-3 | | | | | | | | | | ND | 0.06 | 0.0412 | ND | | | | | | | | | | | | 0.396 B |
| | | 30 | TO-3 | | | | | | | | | | ND | ND | ND | ND | | | | | | | | | | | | 15378 B |
| | | 30 Dup | TO-3 | | | | | | | | | | 124 | 4.512 J | ND | ND | | | | | | | | | | | | 9786 B |
| | | 45 | TO-3 | | | | | | | | | | 191 | 86 M | 24.3 J | 32.98 J | | | | | | | | | | | | 74560 B |
| | | 55 | TO-3 | | | | | | | | | | 1212 M | 191.8 M | 295 | 694 | | | | | | | | | | | | 125820 B |

US EPA ARCHIVE DOCUMENT

# TABLE 2-8a. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, PETROLEUM RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | TO Method | TO Dilution Factor | n-Butylbenzene mg/m$^3$ | sec-Butylbenzene mg/m$^3$ | Isopropylbenzene mg/m$^3$ | n-Propylbenzene mg/m$^3$ | 1,2-Dichloroethane mg/m$^3$ | 1,2-Dibromoethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethylbenzene mg/m$^3$ | Total Xylenes mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclohexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 2,2,4-Trimethylpentane mg/m$^3$ | 1,3,5-Trimethylbenzene mg/m$^3$ | 1,2,4-Trimethylbenzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyltoluene mg/m$^3$ | TVPH as gasoline mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-96 | Mar 2005 | 10 | TO-15 | 2.13 | | | ND(0.0052) | ND(0.0052) | ND(0.0043) | ND(0.0082) | ND(0.0038) | ND(0.022) | ND(0.0034) | ND(0.004) | ND(0.0046) | | ND(0.0046) | ND(0.0046) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0045) | ND(0.005) | ND(0.0052) | ND(0.0052) | ND(0.0024) | ND(0.0052) | ND (0.055) |
| | | 15 | TO-15 | 2.16 | | | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) | ND (0.056) |
| | | 20 | TO-15 | 2.38 | | | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) | ND (0.061) |
| | | 25 | TO-15 | 2.13 | | | ND(0.0052) | ND(0.0052) | ND(0.0043) | ND(0.0082) | ND(0.0038) | ND(0.022) | ND(0.0034) | ND(0.004) | ND(0.0046) | | ND(0.0046) | ND(0.0046) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0045) | ND(0.005) | ND(0.0052) | ND(0.0052) | ND(0.0024) | ND(0.0052) | ND (0.055) |
| | | 30 | TO-15 | 1.75 | | | ND(0.0043) | ND(0.0043) | ND(0.0035) | ND(0.0067) | ND(0.0032) | ND(0.018) | ND(0.0028) | ND(0.0033) | ND(0.0038) | | ND(0.0038) | ND(0.0038) | ND(0.003) | ND(0.0031) | ND(0.0036) | ND(0.0037) | ND(0.0041) | 0.0073 | ND(0.0043) | ND(0.0019) | ND(0.0043) | ND (0.050) |
| | | 35 | TO-15 | 1.79 | | | ND(0.0044) R | ND(0.0044) R | ND(0.0036) R | ND(0.0069) R | ND(0.0032) R | ND(0.019) R | ND(0.0028) R | 0.004 R | ND(0.0039) R | | ND(0.0039) R | ND(0.0039) R | ND(0.0031) R | 0.0047 R | ND(0.0037) R | ND(0.0038) R | ND(0.0042) R | 0.0046 R | ND(0.0044) R | ND(0.002) R | ND(0.0044) R | |
| | | 40 | TO-15 | 1.58 | | | ND(0.0039) | ND(0.0039) | ND(0.0032) | ND(0.0061) | ND(0.0028) | ND(0.016) | ND(0.0025) | ND(0.003) | ND(0.0034) | | 0.0047 | ND(0.0034) | ND(0.0027) | ND(0.0028) | ND(0.0032) | ND(0.0034) | ND(0.0037) | 0.015 | 0.018 | ND(0.0017) | 0.01 | 0.081 |
| | | 45 | TO-15 | 1.55 | | | ND(0.0038) | ND(0.0038) | ND(0.0031) | ND(0.006) | ND(0.0028) | ND(0.016) | ND(0.0025) | ND(0.0029) | ND(0.0034) | | ND(0.0034) | ND(0.0034) | ND(0.0027) | ND(0.0027) | ND(0.0032) | ND(0.0033) | ND(0.0036) | 0.0058 | 0.022 | ND(0.0017) | 0.0043 | 0.066 |
| | | 50 | TO-15 | 336 | | | ND(0.82) | ND(0.82) | ND(0.68) | ND(1.3) | ND(0.6) | ND(3.5) | ND(0.54) | ND(0.63) | ND(0.73) | | ND(0.73) | ND(0.73) | ND(0.58) | ND(0.59) | ND(0.69) | ND(0.72) | 140 | ND(0.82) | ND(0.82) | ND(0.37) | ND(0.82) | 148.25 |
| | | 50 Dup | TO-15 | 164 | | | ND(0.4) | ND(0.4) | ND(0.33) | ND(0.63) | ND(0.3) | ND(1.7) | ND(0.26) | ND(0.31) | ND(0.36) | | ND(0.36) | ND(0.36) | ND(0.28) | ND(0.29) | ND(0.34) | ND(0.35) | 110 | ND(0.4) | ND(0.4) | ND(0.18) | ND(0.4) | 114.03 |
| | | 55 | TO-15 | 328 | | | ND(0.81) | ND(0.81) | ND(0.66) | ND(1.3) | ND(0.59) | ND(3.4) | 4 | ND(0.62) | ND(0.71) | | ND(0.71) | ND(0.71) | 26 | 24 | ND(0.67) | ND(0.7) | 500 E | ND(0.81) | ND(0.81) | ND(0.36) | ND(0.81) | 561.24 |
| | May 2005 | 30 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | 7.9 DX | 0.0078 | ND(0.0054) | ND(0.0024) | ND(0.0054) | 7.96 |
| | | 35 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | 0.0057 | ND(0.0045) | ND(0.0047) | 15 DX | 0.0075 | ND(0.0054) | ND(0.0024) | ND(0.0054) | 15.06 |
| | | 35 Dup | TO-15 | 22.9 | | | ND(0.056) | ND(0.056) | ND(0.046) | ND(0.088) | ND(0.041) | ND(0.24) | ND(0.036) | ND(0.043) | ND(0.05) | | ND(0.05) | ND(0.05) | ND(0.039) | ND(0.04) | ND(0.047) | ND(0.049) | 16 | ND(0.056) | ND(0.056) | ND(0.025) | ND(0.056) | 16.56 |
| | | 55 | TO-15 | 44.8 | | | 0.2100 | 0.1600 | ND(0.091) | ND(0.17) | ND(0.081) | ND(0.47) | 3.3 DX | ND(0.084) | 0.28 | | ND(0.097) | ND(0.097) | 60 DX | 31 DX | ND(0.092) | ND(0.095) | 820 DX | ND(0.11) | 0.2 | ND(0.05) | ND(0.11) | 915.92 |
| | Sep 2005 | 10 | TO-15 | 2.09 | | | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) | ND(0.0033) | 0.0046 | ND(0.0045) | | ND(0.0045) | ND(0.0045) | 0.0038 | 0.0076 | ND(0.0043) | ND(0.0044) | 0.028 | ND(0.0051) | ND(0.0051) | ND(0.0023) | ND(0.0051) | 0.090 |
| | | 15 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | 0.0079 | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | 0.006 | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | 0.067 |
| | | 20 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | 0.0091 | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | 0.008 | 0.0074 | ND(0.0025) | ND(0.0055) | 0.074 |
| | | 25 | TO-15 | 2.29 | | | ND(0.0056) | ND(0.0056) | ND(0.0046) | ND(0.0088) | ND(0.0041) | ND(0.024) | ND(0.0036) | 0.0047 | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) | 0.061 |
| | | 30 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | 0.0091 | ND(0.0055) | ND(0.0025) | ND(0.0055) | 0.064 |
| | | 35 | TO-15 | 2.42 | | | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) | ND(0.0039) | ND(0.0046) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0042) | 0.0052 | ND(0.005) | ND(0.0052) | 0.012 | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) | 0.074 |
| | | 40 | TO-15 | 45.8 | | | ND(0.11) | ND(0.11) | ND(0.093) | ND(0.18) | ND(0.082) | ND(0.48) | ND(0.073) | ND(0.086) | ND(0.099) | | ND(0.099) | ND(0.099) | ND(0.079) | ND(0.081) | ND(0.094) | ND(0.098) | 28 | ND(0.11) | ND(0.11) | ND(0.051) | ND(0.11) | 29.12 |
| | | 45 | TO-15 | 93.2 | | | ND(0.23) | ND(0.23) | ND(0.19) | ND(0.36) | ND(0.17) | ND(0.98) | ND(0.15) | ND(0.18) | ND(0.2) | | ND(0.2) | ND(0.2) | ND(0.16) | ND(0.16) | ND(0.19) | ND(0.2) | 69 | ND(0.23) | ND(0.23) | ND(0.1) | ND(0.23) | 71.30 |
| | | 50 | TO-15 | 572 | | | ND(1.4) | ND(1.4) | ND(1.2) | ND(2.2) | ND(1) | ND(6) | ND(0.91) | ND(1.1) | ND(1.2) | | ND(1.2) | ND(1.2) | 3.6 | 2.7 | ND(1.2) | ND(1.2) | 500 | ND(1.4) | ND(1.4) | ND(0.63) | ND(1.4) | 519.32 |
| | | 55 | TO-15 | 1120 | | | ND(2.8) | ND(2.8) | ND(2.3) | ND(4.3) | ND(2) | ND(12) | 7 | ND(2.1) | ND(2.4) | | ND(2.4) | ND(2.4) | 180 | 160 | 31 | ND(2.4) | 1500 E | ND(2.8) | ND(2.8) | ND(1.2) | ND(2.8) | 1901.75 |
| | | 55 Dup | TO-15 | 1470 | | | ND(3.6) | ND(3.6) | ND(3) | ND(5.6) | ND(2.6) | ND(15) | 4.5 | ND(2.8) | ND(3.2) | | ND(3.2) | ND(3.2) | 120 | 100 | 19 | ND(3.1) | 1000 | ND(3.6) | ND(3.6) | ND(1.6) | ND(3.6) | 1274.15 |
| | | 60 | TO-15 | 3730 | | | 9.2000 | 18.0000 | ND(7.5) | ND(14) | ND(6.7) | ND(39) | 33 | 10 | 120 | | 270 | ND(8.1) | 400 | 770 | 560 | ND(7.9) | 1700 | 25 | 51 | ND(4.1) | 33 | 4042.85 |
| | Oct 2005 | 20 | TO-15 | 2.05 | | | ND(0.005) | ND(0.005) | ND(0.0041) | ND(0.0079) | ND(0.0037) | ND(0.021) | ND(0.0033) | ND(0.0039) | ND(0.0044) | | ND(0.0044) | ND(0.0044) | ND(0.0035) | ND(0.0036) | ND(0.0042) | ND(0.0044) | ND(0.0048) | ND(0.005) | 0.0065 | ND(0.0023) | ND(0.005) | 0.056 |
| | | 25 | TO-15 | 2.38 | | | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) | ND (0.061) |
| | | 30 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | 0.0047 | ND(0.0049) | | 0.0062 | 0.006 | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | 0.0069 | 0.0071 | ND(0.0025) | ND(0.0055) | 0.076 |
| | | 35 | TO-15 | 2.16 | | | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) | ND (0.056) |
| | | 40 | TO-15 | 2.16 | | | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | 0.0084 | 0.0057 | ND(0.0024) | ND(0.0053) | 0.065 |
| | | 50 | TO-15 | 2.33 | | | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | 0.011 | 0.018 | 0.014 J | ND(0.0026) | ND(0.0057) | 0.094 |
| | | 50 Dup | TO-15 | 2.33 | | | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | 0.011 | 0.019 | 0.02 J | ND(0.0026) | ND(0.0057) | 0.101 |
| | | 60 | TO-15 | 2330 | | | 7.7000 | 12.0000 | ND(4.7) | ND(9) | ND(4.2) | ND(24) | 31.0000 | 14.0000 | 110.0000 | | 280 | ND(5) | 380 | 620 | 520 | ND(5) | 1700 | 31 | 63 | ND(2.6) | 35 | 3830.95 |
| | Jun/Jul 2006 | 10 | TO-15 | 2.53 | | | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) | ND (0.065) |
| | | 20 | TO-15 | 52.8 | | | ND(0.13) | ND(0.13) | ND(0.11) | ND(0.2) | ND(0.095) | ND(0.55) | ND(0.084) | ND(0.099) | ND(0.11) | | ND(0.11) | ND(0.11) | ND(0.091) | ND(0.093) | ND(0.11) | ND(0.11) | 30 | ND(0.13) | ND(0.13) | ND(0.058) | ND(0.13) | 31.29 |
| | | 30 | TO-15 | 672 | | | ND(1.6) | ND(1.6) | ND(1.4) | ND(2.6) | ND(1.2) | ND(7) | ND(1.1) | ND(1.3) | ND(1.4) | | ND(1.4) | ND(1.4) | ND(1.2) | ND(1.2) | ND(1.4) | ND(1.4) | 510 | ND(1.6) | ND(1.6) | ND(0.74) | ND(1.6) | 526.37 |
| | | 40 | TO-15 | 826 | | | ND(2) | ND(2) | ND(1.7) | ND(3.2) | ND(1.5) | ND(8.6) | ND(1.3) | ND(1.6) | ND(1.8) | | ND(1.8) | ND(1.8) | ND(1.4) | ND(1.4) | ND(1.7) | ND(1.8) | 580 | ND(2) | ND(2) | ND(0.91) | ND(2) | 600.26 |
| | | 50 | TO-15 | 2640 | | | ND(6.5) | ND(6.5) | ND(5.3) | ND(10) | ND(4.8) | ND(28) | 4.5 | 5.3 | ND(5.7) | | ND(5.7) | ND(5.7) | 59 | 22 | 5.4 | ND(5.6) | 2100 | ND(6.5) | ND(6.5) | ND(2.9) | ND(6.5) | 2249.30 |
| | | 55 | TO-15 | 3030 | | | ND(7.4) | ND(7.4) | ND(6.1) | ND(12) | ND(5.5) | ND(32) | 5.1 | ND(5.7) | ND(6.6) | | ND(6.6) | ND(6.6) | 160 | 83 | 34 | ND(6.4) | 2300 | ND(7.4) | ND(7.4) | ND(3.4) | ND(7.4) | 2646.05 |
| | Nov/Dec 2006 | 10 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | | | | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | | ND(0.0039) | | | ND(0.0051) | ND(0.0054) | ND(0.0054) | | | ND (0.038) |
| | | 20 | TO-15 | 2.33 | | | ND(0.0057) | ND(0.0057) | | | | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | | ND(0.0041) | | | ND(0.0054) | 0.0094 | 0.007 | | | 0.050 |
| | | 25 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | | | | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | | ND(0.0039) | | | ND(0.0052) | ND(0.0055) | ND(0.0055) | | | ND (0.038) |
| | | 30 | TO-15 | 2.16 | | | ND(0.0053) | ND(0.0053) | | | | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | | ND(0.0038) | | | 0.013 | 0.015 | ND(0.0053) | | | 0.060 |
| | | 35 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | | | | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | | ND(0.0039) | | | 0.01 | 0.02 | ND(0.0055) | | | 0.063 |
| | | 40 | TO-15 | 2.53 | | | ND(0.0062) | ND(0.0062) | | | | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | | ND(0.0055) | ND(0.0055) | | ND(0.0044) | | | 0.013 | 0.022 | 0.0071 | | | 0.076 |
| | | 45 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | | | | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | 0.006 | ND(0.0049) | | ND(0.0039) | | | 0.043 | 0.02 | 0.028 | | | 0.125 |
| | | 50 | TO-15 | 229 | | | ND(0.56) | ND(0.56) | | | | ND(2.4) | ND(0.36) | ND(0.43) | ND(0.5) | | ND(0.5) | ND(0.5) | | ND(0.4) | | | 98 | ND(0.56) | ND(0.56) | | | 101.665 |
| | | 55 | TO-15 | 1470 | | | ND(3.6) | ND(3.6) | | | | ND(15) | 5.7 | ND(2.8) | ND(3.2) | | ND(3.2) | ND(3.2) | | 48 | | | 1300 | ND(3.6) | ND(3.6) | | | 1374.60 |

US EPA ARCHIVE DOCUMENT

# TABLE 2-8a. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, PETROLEUM RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | TO Method | TO Dilution Factor | n-Butylbenzene mg/m$^3$ | sec-Butylbenzene mg/m$^3$ | Isopropylbenzene mg/m$^3$ | n-Propylbenzene mg/m$^3$ | 1,2-Dichloroethane mg/m$^3$ | 1,2-Dibromoethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethylbenzene mg/m$^3$ | Total Xylenes mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclohexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 2,2,4-Trimethylpentane mg/m$^3$ | 1,3,5-Trimethylbenzene mg/m$^3$ | 1,2,4-Trimethylbenzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyltoluene mg/m$^3$ | TVPH as gasoline mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-96 | Jun/Jul 2007 | 10 | TO-15 | 2.33 | | | ND(0.0057) | ND(0.0057) | | | | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | | ND(0.0041) | | | ND(0.0054) | ND(0.0057) | ND(0.0057) | | | ND (0.040) |
| | | 20 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | | | | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | | ND(0.0039) | | | ND(0.0052) | ND(0.0055) | ND(0.0055) | | | ND (0.038) |
| | | 25 | TO-15 | 458 | | | ND(1.1) | ND(1.1) | | | | ND(4.8) | ND(0.73) | ND(0.86) | ND(0.99) | | ND(0.99) | ND(0.99) | | ND(0.81) | | | 410 | ND(1.1) | ND(1.1) | | | 417.29 |
| | | 25 Dup | TO-15 | 864 | | | ND(2.1) | ND(2.1) | | | | ND(9) | ND(1.4) | ND(1.6) | ND(1.9) | | ND(1.9) | ND(1.9) | | 1.5 | | | 330 | ND(2.1) | ND(2.1) | | | 344.55 |
| | | 30 | TO-15 | 476 | | | ND(1.2) | ND(1.2) | | | | ND(5) | ND(0.76) | ND(0.9) | ND(1) | | ND(1) | ND(1) | | ND(0.84) | | | 440 | ND(1.2) | ND(1.2) | | | 447.65 |
| | | 35 | TO-15 | 476 | | | ND(1.2) | ND(1.2) | | | | ND(5) | ND(0.76) | ND(0.9) | ND(1) | | ND(1) | ND(1) | | ND(0.84) | | | 270 | ND(1.2) | ND(1.2) | | | 277.65 |
| | | 40 | TO-15 | 466 | | | ND(1.1) | ND(1.1) | | | | ND(4.9) | ND(0.74) | ND(0.88) | ND(1) | | ND(1) | ND(1) | | ND(0.82) | | | 220 | ND(1.1) | ND(1.1) | | | 227.37 |
| | | 45 | TO-15 | 238 | | | ND(0.58) | ND(0.58) | | | | ND(2.5) | ND(0.38) | ND(0.45) | ND(0.52) | | ND(0.52) | ND(0.52) | | ND(0.42) | | | 190 | ND(0.58) | ND(0.58) | | | 193.82 |
| | | 45 Dup | TO-15 | 293 | | | ND(0.72) | ND(0.72) | | | | ND(3.1) | ND(0.47) | ND(0.55) | ND(0.64) | | ND(0.64) | ND(0.64) | | ND(0.52) | | | 180 | ND(0.72) | ND(0.72) | | | 184.72 |
| | | 50 | TO-15 | 484 | | | ND(1.2) | ND(1.2) | | | | ND(5.1) | 0.77 | ND(0.91) | ND(1) | | ND(1) | ND(1) | | 8.1 | | | 620 E | ND(1.2) | ND(1.2) | | | 635.78 |
| | | 55 | TO-15 | 988 | | | ND(2.4) | ND(2.4) | | | | ND(10) | ND(1.6) | ND(1.9) | ND(2.1) | | ND(2.1) | ND(2.1) | | 80 | | | 1100 E | ND(2.4) | ND(2.4) | | | 1194.70 |
| | Apr 2008 | 10 | TO-15 | 2.64 | ND(0.029) | ND(0.029) | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.01) | ND(0.0048) | ND(0.028) J | ND(0.0042) | ND(0.005) | ND(0.0057) | | ND(0.0057) | ND(0.0057) | ND(0.0045) | ND(0.0046) | ND(0.0054) J | ND(0.0056) | ND(0.0062) | ND(0.0065) | ND(0.0065) | ND(0.0029) | ND(0.0065) | ND (0.097) |
| | | 20 | TO-15 | 2.42 | ND(0.026) | ND(0.026) | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) J | 0.047 | 0.13 | 0.028 | | 0.039 | 0.019 | ND(0.0042) | 0.0063 | 0.0078 J | ND(0.0052) | 0.0094 | ND(0.0059) | 0.0067 | ND(0.0027) | ND(0.0059) | 0.359 |
| | | 25 | TO-15 | 2.09 | ND(0.023) | ND(0.023) | ND(0.0051) J | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) J | ND(0.0033) | ND(0.0039) | ND(0.0045) J | | 0.0074 | ND(0.0045) | ND(0.0036) | ND(0.0037) | ND(0.0043) J | ND(0.0044) | ND(0.0049) | ND(0.0051) | 0.0087 | ND(0.0023) | 0.0061 | 0.092 |
| | | 30 | TO-15 | 2.02 | ND(0.022) | ND(0.022) | ND(0.005) J | ND(0.005) | ND(0.0041) | ND(0.0078) | ND(0.0036) | ND(0.021) J | ND(0.0032) | ND(0.0038) | ND(0.0044) J | | ND(0.0044) | ND(0.0044) | ND(0.0035) | ND(0.0036) | ND(0.0041) J | ND(0.0043) | 0.014 | ND(0.005) | ND(0.005) | ND(0.0022) | ND(0.005) | 0.086 |
| | | 35 | TO-15 | 2.47 | ND(0.027) | ND(0.027) | ND(0.0061) | ND(0.0061) | ND(0.005) J | ND(0.0095) | ND(0.0044) | ND(0.026) J | ND(0.0039) | ND(0.0046) | ND(0.0054) | | 0.011 | ND(0.0054) | ND(0.0042) | ND(0.0044) | ND(0.0051) J | ND(0.0053) | ND(0.0058) | 0.016 | 0.0076 | ND(0.0027) | 0.0069 | 0.120 |
| | | 40 | TO-15 | 2.16 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) J | ND(0.0034) | 0.012 | ND(0.0047) | | ND(0.0047) | ND(0.0047) | 0.005 | 0.055 | ND(0.0044) J | ND(0.0046) | ND(0.005) | 0.014 | ND(0.0053) | ND(0.0024) | ND(0.0053) | 0.157 |
| | | 45 | TO-15 | 2.29 | ND(0.025) | ND(0.025) | ND(0.0056) | 0.028 | ND(0.0046) J | ND(0.0088) | ND(0.0041) | ND(0.024) J | 0.004 | 0.028 | 0.053 | | 0.078 | 0.061 | ND(0.0039) | ND(0.004) | ND(0.0047) J | ND(0.0049) | 0.012 | 0.089 | 0.17 | ND(0.0025) | 0.11 | 0.692 |
| | | 50 | TO-15 | 2.64 | ND(0.029) | ND(0.029) | ND(0.0065) | ND(0.0065) | ND(0.0053) J | ND(0.01) | ND(0.0048) | ND(0.028) J | ND(0.0042) | ND(0.005) | ND(0.0057) | | 0.0076 | ND(0.0057) | ND(0.0045) | ND(0.0046) | ND(0.0054) J | ND(0.0056) | 0.033 | 0.054 | 0.068 | ND(0.0029) | 0.012 | 0.256 |
| | | 55 | TO-15 | 129 | ND(1.4) | ND(1.4) | ND(0.32) | ND(0.32) | ND(0.26) | ND(0.5) | ND(0.23) | ND(1.4) J | 1.1 | ND(0.24) | ND(0.28) | | ND(0.28) | ND(0.28) | 1.9 J | 1.1 J | 0.62 J | ND(0.27) | 160 J | ND(0.32) | 0.44 J | ND(0.14) | ND(0.32) | 169.140 |
| | Sep 2008 | 10 | TO-15 | 2.29 | ND(0.025) | ND(0.025) | ND(0.0056) | ND(0.0056) | ND(0.0046) | ND(0.0088) | ND(0.0041) | ND(0.024) | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) | ND (0.08385) |
| | | 15 | TO-15 | 2.58 | ND(0.028) | ND(0.028) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0099) | ND(0.0046) | ND(0.027) | ND(0.0041) | ND(0.0049) | ND(0.0056) | | ND(0.0056) | ND(0.0056) | ND(0.0044) | ND(0.0045) | ND(0.0053) | ND(0.0055) | ND(0.006) | ND(0.0063) | ND(0.0063) | ND(0.0028) | ND(0.0063) | ND (0.09425) |
| | | 20 | TO-15 | 2.47 | ND(0.027) | ND(0.027) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) | ND(0.0039) | ND(0.0046) | 0.042 | | 0.16 | 0.045 | ND(0.0042) | ND(0.0044) | ND(0.0051) | ND(0.0053) | ND(0.0058) | 0.0092 | 0.01 | ND(0.0027) | ND(0.0061) | 0.3428 |
| | | 25 | TO-15 | 2.42 | ND(0.026) | ND(0.026) | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | 0.028 | ND(0.0039) | 0.028 | 0.0063 | | 0.05 | 0.022 | ND(0.0042) | ND(0.0043) | ND(0.005) | ND(0.0052) | 0.0068 | 0.017 | 0.052 | ND(0.0027) | 0.029 | 0.29295 |
| | | 30 | TO-15 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) | ND(0.0054) | 0.0075 | 0.016 | ND(0.0062) | ND(0.0028) | ND(0.0062) | 0.11035 |
| | | 35 | TO-15 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) | ND(0.0051) | ND(0.0056) | 0.015 | ND(0.0058) | ND(0.0026) | ND(0.0058) | 0.0994 |
| | | 40 | TO-15 | 2.47 | ND(0.027) | ND(0.027) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) | ND(0.0039) | ND(0.0046) | ND(0.0054) | | ND(0.0054) | ND(0.0054) | ND(0.0042) | ND(0.0044) | ND(0.0051) | ND(0.0053) | ND(0.0058) | 0.019 | ND(0.0061) | ND(0.0027) | ND(0.0061) | 0.10675 |
| | | 45 | TO-15 | 2.58 | ND(0.028) | ND(0.028) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0099) | ND(0.0046) | ND(0.027) | ND(0.0041) | ND(0.0049) | ND(0.0056) | | ND(0.0056) | ND(0.0056) | ND(0.0044) | ND(0.0045) | ND(0.0053) | ND(0.0055) | ND(0.006) | 0.0099 | 0.0088 | ND(0.0028) | ND(0.0063) | 0.10665 |
| | | 50 | TO-15 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | ND(0.0038) | 0.0083 JB | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0041) | 0.034 | ND(0.0049) | ND(0.0051) | 0.13 | 0.037 | 0.02 | ND(0.0026) | ND(0.0058) | 0.30365 |
| | | 55 | TO-15 | 84.3 | ND(9.2) | ND(9.2) | ND(2.1) | ND(2.1) | ND(1.7) | ND(3.2) | ND(1.5) | ND(8.8) | ND(1.3) | ND(1.6) | ND(1.8) | | ND(1.8) | ND(1.8) | 90 | 120 | 39 | ND(1.8) | 640 | ND(2.1) | ND(2.1) | ND(0.93) | ND(2.1) | 916.565 |
| | | 60 | TO-15 | 2.42 | ND(26) | ND(26) | 16 | 32 | ND(4.9) | ND(9.3) | ND(4.4) | ND(25) | 23 | ND(4.6) | 62 | | 88 | ND(5.2) | 740 | 1700 | 780 | ND(5.2) | 2500 | 12 | 75 | ND(2.7) | 25 | 6109.65 |
| | Dec 2008 | 10 | TO-15 | 5.6 | ND(0.61) | ND(0.61) | ND(0.14) | ND(0.14) | ND(0.11) | ND(0.22) | ND(0.1) | ND(0.59) | ND(0.089) | ND(0.1) | ND(0.12) | | ND(0.12) | ND(0.12) | ND(0.096) | 0.11 | ND(0.11) | ND(0.12) | 84 | ND(0.14) | ND(0.14) | ND(0.062) | ND(0.14) | 86.0485 |
| | | 15 | TO-15 | 7.77 | ND(0.85) | ND(0.85) | ND(0.19) | ND(0.19) | ND(0.16) | ND(0.3) | ND(0.14) | ND(0.81) | ND(0.12) | ND(0.15) | ND(0.17) | | ND(0.17) | ND(0.17) | ND(0.13) | 0.18 | ND(0.16) | ND(0.16) | 120 | ND(0.19) | ND(0.19) | ND(0.086) | ND(0.19) | 122.868 |
| | | 20 | TO-15 | 7.47 | ND(0.82) | ND(0.82) | ND(0.18) | ND(0.18) | ND(0.15) | ND(0.29) | ND(0.13) | ND(0.78) | ND(0.12) | ND(0.14) | ND(0.16) | | ND(0.16) | ND(0.16) | ND(0.13) | ND(0.13) | ND(0.15) | ND(0.16) | 110 | ND(0.18) | ND(0.18) | ND(0.083) | ND(0.18) | 112.6415 |
| | | 25 | TO-15 | 8.2 | ND(0.9) | ND(0.9) | ND(0.2) | ND(0.2) | ND(0.16) | ND(0.32) | ND(0.15) | ND(0.86) | ND(0.13) | ND(0.15) | ND(0.18) | | ND(0.18) | ND(0.18) | ND(0.14) | ND(0.14) | ND(0.17) | ND(0.17) | 170 | ND(0.2) | ND(0.2) | ND(0.091) | ND(0.2) | 172.9105 |
| | | 30 | TO-15 | 17.4 | ND(1.9) | ND(1.9) | ND(0.43) | ND(0.43) | ND(0.35) | ND(0.67) | ND(0.31) | ND(1.8) | ND(0.28) | ND(0.33) | ND(0.38) | | ND(0.38) | ND(0.38) | ND(0.3) | 0.31 | ND(0.36) | ND(0.37) | 220 | ND(0.43) | ND(0.43) | ND(0.19) | ND(0.43) | 226.335 |
| | | 35 | TO-15 | 18.3 | ND(2) | ND(2) | ND(0.45) | ND(0.45) | ND(0.37) | ND(0.7) | ND(0.33) | ND(1.9) | ND(0.29) | ND(0.34) | ND(0.4) | | ND(0.4) | ND(0.4) | ND(0.31) | ND(0.32) | ND(0.37) | ND(0.39) | 230 | ND(0.45) | ND(0.45) | ND(0.2) | ND(0.45) | 236.485 |
| | | 40 | TO-15 | 23.3 | ND(2.6) | ND(2.6) | ND(0.57) | ND(0.57) | ND(0.47) | ND(0.9) | ND(0.42) | ND(2.4) | ND(0.37) | ND(0.44) | ND(0.5) | | ND(0.5) | ND(0.5) | ND(0.4) | 0.7 | ND(0.48) | ND(0.5) | 420 | ND(0.57) | ND(0.57) | ND(0.26) | ND(0.57) | 428.795 |
| | | 45 | TO-15 | 34.6 | ND(3.8) | ND(3.8) | ND(0.85) | ND(0.85) | ND(0.7) | ND(1.3) | ND(0.62) | ND(3.6) | ND(0.55) | ND(0.65) | ND(0.75) | | ND(0.75) | ND(0.75) | 5.9 | 9.3 | ND(0.71) | ND(0.74) | 580 | ND(0.85) | ND(0.85) | ND(0.38) | ND(0.85) | 606.875 |
| | | 50 | TO-15 | 106 | ND(12) | ND(12) | ND(2.6) | ND(2.6) | ND(2.1) | ND(4.1) | ND(1.9) | ND(11) | ND(1.7) | ND(2) | ND(2.3) | | ND(2.3) | ND(2.3) | 72 | 82 | 21 | ND(2.2) | 1200 | ND(2.6) | ND(2.6) | ND(1.2) | ND(2.6) | 1410.05 |
| | | 50 Dup | TO-15 | 108 | ND(12) | ND(12) | ND(2.6) | ND(2.6) | ND(2.2) | ND(4.1) | ND(1.9) | ND(11) | ND(1.7) | ND(2) | ND(2.3) | | ND(2.3) | ND(2.3) | 73 | 84 | 20 | ND(2.3) | 1200 | ND(2.6) | ND(2.6) | ND(1.2) | ND(2.6) | 1412.15 |
| | | 55 | TO-15 | 104 | ND(11) | ND(11) | ND(2.6) | ND(2.6) | ND(2.1) | ND(4) | ND(1.9) | ND(11) | ND(1.7) | ND(2) | ND(2.2) | | ND(2.2) | ND(2.2) | 150 | 180 | 75 | ND(2.2) | 1200 | ND(2.6) | ND(2.6) | ND(1.2) | ND(2.6) | 1638.85 |
| | | 60 | TO-15 | 220 | ND(24) | ND(24) | 15 | 29 | ND(4.4) | ND(8.4) | ND(4) | ND(23) | 22 | ND(4.1) | 13 | | 51 | ND(4.8) | 560 | 1100 | 890 | ND(4.7) | 2600 | 6.7 | 50 | ND(2.4) | 18 | 5406.6 |
| VW-99A | Mar 2005 | 5 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.057) |
| | | 10 | TO-15 | 2.29 | | | ND(0.0056) | ND(0.0056) | ND(0.0046) | ND(0.0088) | ND(0.0041) | ND(0.024) | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) | ND (0.059) |
| | Apr 2008 | 5 | TO-15 | 2.42 | ND(0.026) | ND(0.026) | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) J | 0.01 | 0.021 J | ND(0.0052) | | ND(0.0052) J | ND(0.0052) J | ND(0.0042) | ND(0.0043) J | ND(0.005) J | ND(0.0052) | ND(0.0056) J | ND(0.0059) J | ND(0.0059) J | ND(0.0027) | ND(0.0059) J | 0.115 |
| | | 5 Dup | TO-15 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | 0.0071 | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) J | ND(0.0038) | 0.013 | 0.01 | | 0.045 J | 0.02 J | 0.0046 | 0.012 J | 0.026 J | ND(0.0051) | 0.025 J | 0.016 J | 0.051 J | ND(0.0026) | 0.034 J | 0.320 |
| | | 10 | TO-15 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) J | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) J | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) | ND (0.087) |
| | Sep 2008 | 5 | TO-15 | 2.2 | ND(0.024) | ND(0.024) | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | 0.0089 | 0.0087 | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) UJ | ND(0.0054) | 0.094 |
| | | 10 | TO-15 | 2.2 | ND(0.024) | ND(0.024) | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) UJ | ND(0.0054) | ND (0.0806) |
| | Dec 2008 | 5 | TO-15 | 2.2 | ND(0.024) | ND(0.024) | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.0806) |

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## TABLE 2-8a. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, PETROLEUM RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | TO Method | TO Dilution Factor | n-Butyl-benzene mg/m$^3$ | sec-Butyl-benzene mg/m$^3$ | Isopropyl-benzene mg/m$^3$ | n-Propyl-benzene mg/m$^3$ | 1,2-Dichloro-ethane mg/m$^3$ | 1,2-Dibromo-ethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethyl-benzene mg/m$^3$ | Total Xylenes mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclo-hexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 2,2,4-Trimethyl-pentane mg/m$^3$ | 1,3,5-Trimethyl-benzene mg/m$^3$ | 1,2,4-Trimethyl-benzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyl-toluene mg/m$^3$ | TVPH as gasoline mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-99 | Dec 1997 | 10 | TO-3 | | | | | | | | | | 0.55 | 0.18 | 0.33 | 0.94 | | | | | | | | | | | | 180 C |
| | | 15 | TO-3 | | | | | | | | | | ND(0.035) | ND(0.035) | 0.060 J | 0.26 | | | | | | | | | | | | 40 C |
| | | 20 | TO-3 | | | | | | | | | | ND(0.035) | ND(0.035) | ND(0.047) | 0.060 J | | | | | | | | | | | | 15 C |
| | | 25 | TO-3 | | | | | | | | | | ND(0.035) | ND(0.035) | ND(0.047) | ND(0.047) | | | | | | | | | | | | 14 C |
| | | 30 | TO-3 | | | | | | | | | | ND(0.035) | 0.18 | 0.074 J | 0.28 | | | | | | | | | | | | 100 C |
| | | 35 | TO-3 | | | | | | | | | | ND(7.1) | 12 JB | ND(9.4) | 15 J | | | | | | | | | | | | 24000 C |
| | | 40 | TO-14 | | | | | | | | | | 44 | 0.77J | 9.1000 | 38 | | | | | | | | 6.4 | 15 | | 9.7 | |
| | | 45 | TO-3 | | | | | | | | | | 150 | 58 JB | ND(47) | 120 J | | | | | | | | | | | | 97000 C |
| | | 45 Dup | TO-3 | | | | | | | | | | 160 | 49 JB | ND(47) | 130 J | | | | | | | | | | | | 100000 C |
| | | 50 | TO-3 | | | | | | | | | | 460 | 150 JB | 270 J | 650 | | | | | | | | | | | | 190000 C |
| | | 50 SS | TO-3 | | | | | | | | | | 480 | 160 JB | ND(94) | 670 | | | | | | | | | | | | 200000 C |
| | | 55 | TO-3 | | | | | | | | | | 680 | 160 JB | 400 | 810 | | | | | | | | | | | | 230000 C |
| | | 55 Dup | TO-3 | | | | | | | | | | 720 | 190 JB | 410 | 1000 | | | | | | | | | | | | 220000 C |
| | | 60 | TO-3 | | | | | | | | | | 880 | 180 JB | 560 | 1100 | | | | | | | | | | | | 280000 C |
| | | 60 SS | TO-3 | | | | | | | | | | 970 | 250 JB | 630 | 1100 | | | | | | | | | | | | 290000 C |
| | Mar 1998 | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 |
| | | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | 52000 |
| | | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | 154000 |
| | Jul 1998 | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | 40 |
| | | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | 7 |
| | | 20 | | | | | | | | | | | | | | | | | | | | | | | | | | 7 |
| | | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | 6 |
| | | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | 20 |
| | | 35 | | | | | | | | | | | | | | | | | | | | | | | | | | 23860 |
| | | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | 53620 |
| | | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | 106880 |
| | | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | 144110 |
| | | 55 | | | | | | | | | | | | | | | | | | | | | | | | | | 172090 |
| | Dec 1998 | 15 | TO-3 | | | | | | | | | | ND(0.003) | 0.0068 J | ND(0.004) | ND(0.004) | | | | | | | | | | | | 0.443 B |
| | | 35 | TO-3 | | | | | | | | | | 41.5 | 9.02 J | ND | 6.51 J | | | | | | | | | | | | 11184 B |
| | | 50 | TO-3 | | | | | | | | | | 1021 | 161.7 | 191 | 403.6 | | | | | | | | | | | | 125820 B |
| | | 60 | TO-3 | | | | | | | | | | 1978 | 308M | 447 | 781 | | | | | | | | | | | | 195720 B |
| | Feb 1999 | 15 | TO-3 | | | | | | | | | | ND | 0.0064 J | ND | 0.0074 J | | | | | | | | | | | | 0.979 B |
| | | 35 | TO-3 | | | | | | | | | | 131 | 45.12 M | 14.76 J | 26.47 J | | | | | | | | | | | | 55920 B |
| | | 50 | TO-3 | | | | | | | | | | 1180 M | 169 | 217 | 434 | | | | | | | | | | | | 153780 B |
| | | 55 | TO-3 | | | | | | | | | | 1946 M | 361 M | 651 | 1345 J | | | | | | | | | | | | 200380 B |
| | Mar 2005 | 10 | TO-15 | 1.55 | | | ND(0.0038) | ND(0.0038) | ND(0.0031) | ND(0.006) | ND(0.0028) | ND(0.016) | ND(0.0025) | ND(0.0029) | ND(0.0034) | | ND(0.0034) | ND(0.0034) | ND(0.0027) | ND(0.0027) | ND(0.0032) | ND(0.0033) | 0.011 | ND(0.0038) | ND(0.0038) | ND(0.0017) | ND(0.0038) | 0.049 |
| | | 15 | TO-15 | 1.46 | | | ND(0.0036) | ND(0.0036) | ND(0.003) | ND(0.0056) | ND(0.0026) | ND(0.015) | ND(0.0023) | ND(0.0028) | ND(0.0032) | | ND(0.0032) | ND(0.0032) | ND(0.0025) | ND(0.0026) | ND(0.003) | ND(0.0031) | ND(0.0034) | ND(0.0036) | ND(0.0036) | ND(0.0016) | ND(0.0036) | ND (0.038) |
| | | 20 | TO-15 | 1.55 | | | ND(0.0038) | ND(0.0038) | ND(0.0031) | ND(0.006) | ND(0.0028) | ND(0.016) | ND(0.0025) | ND(0.0029) | ND(0.0034) | | ND(0.0034) | ND(0.0034) | ND(0.0027) | ND(0.0027) | ND(0.0032) | ND(0.0033) | ND(0.0036) | ND(0.0038) | ND(0.0038) | ND(0.0017) | ND(0.0038) | ND (0.040) |
| | | 25 | TO-15 | 1.52 | | | ND(0.0037) | ND(0.0037) | ND(0.0031) | ND(0.0058) | ND(0.0027) | ND(0.016) | ND(0.0024) | ND(0.0029) | ND(0.0033) | | ND(0.0033) | ND(0.0033) | ND(0.0026) | ND(0.0027) | ND(0.0031) | ND(0.0032) | ND(0.0036) | ND(0.0037) | ND(0.0037) | ND(0.0017) | ND(0.0037) | ND (0.039) |
| | | 30 | TO-15 | 1.55 | | | ND(0.0038) | ND(0.0038) | ND(0.0031) | ND(0.006) | ND(0.0028) | ND(0.016) | 0.039 | 0.026 | 0.0045 | | 0.019 | 0.0055 | 0.015 | 0.058 | 0.025 | ND(0.0033) | 0.12 | ND(0.0038) | 0.0054 | ND(0.0017) | 0.0078 | 0.347 |
| | | 35 | TO-15 | 1.61 | | | ND(0.004) | ND(0.004) | ND(0.0032) | ND(0.0062) | ND(0.0029) | ND(0.017) | ND(0.0026) | ND(0.003) | ND(0.0035) | | ND(0.0035) | ND(0.0035) | ND(0.0028) | ND(0.0028) | ND(0.0033) | ND(0.0034) | 0.18 | ND(0.004) | ND(0.004) | ND(0.0018) | ND(0.004) | 0.220 |
| | | 40 | TO-15 | 52.8 | | | ND(0.13) | ND(0.13) | ND(0.11) | ND(0.2) | ND(0.095) | ND(0.55) | ND(0.084) | ND(0.099) | ND(0.11) | | ND(0.11) | ND(0.11) | ND(0.091) | ND(0.093) | ND(0.11) | ND(0.11) | 47 | ND(0.13) | ND(0.13) | ND(0.058) | ND(0.13) | 48.29 |
| | | 45 | TO-15 | 242 | | | ND(0.59) | ND(0.59) | ND(0.49) | ND(0.93) | ND(0.44) | ND(2.5) | ND(0.39) | ND(0.46) | ND(0.52) | | ND(0.52) | ND(0.52) | ND(0.42) | ND(0.43) | ND(0.5) | ND(0.52) | 92 | ND(0.59) | ND(0.59) | ND(0.27) | ND(0.59) | 97.93 |
| | | 45 Dup | TO-15 | 229 | | | ND(0.56) | ND(0.56) | ND(0.46) | ND(0.88) | ND(0.41) | ND(2.4) | ND(0.36) | ND(0.43) | ND(0.5) | | ND(0.5) | ND(0.5) | ND(0.39) | ND(0.4) | ND(0.47) | ND(0.49) | 92 | ND(0.56) | ND(0.56) | ND(0.25) | ND(0.56) | 97.62 |
| | | 50 | TO-15 | 1010 | | | ND(2.5) | ND(2.5) | ND(2) | ND(3.9) | ND(1.8) | ND(11) | ND(1.6) | ND(1.9) | ND(2.2) | | ND(2.2) | ND(2.2) | ND(1.7) | 2.7 | ND(2.1) | ND(2.2) | 460 | ND(2.5) | ND(2.5) | ND(1.1) | ND(2.5) | 486.90 |
| | | 55 | TO-15 | 1550 | | | ND(3.8) | ND(3.8) | ND(3.1) | ND(6) | ND(2.8) | ND(16) | ND(2.5) | ND(2.9) | ND(3.4) | | ND(3.4) | ND(3.4) | 130 | 180 | 31 | ND(3.3) | 1000 | ND(3.8) | ND(3.8) | ND(1.7) | ND(3.8) | 1374.75 |

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# TABLE 2-8a. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, PETROLEUM RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | TO Method | TO Dilution Factor | n-Butylbenzene mg/m$^3$ | sec-Butylbenzene mg/m$^3$ | Isopropylbenzene mg/m$^3$ | n-Propylbenzene mg/m$^3$ | 1,2-Dichloroethane mg/m$^3$ | 1,2-Dibromoethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethylbenzene mg/m$^3$ | Total Xylenes mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclohexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 2,2,4-Trimethylpentane mg/m$^3$ | 1,3,5-Trimethylbenzene mg/m$^3$ | 1,2,4-Trimethylbenzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyltoluene mg/m$^3$ | TVPH as gasoline mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-99 | Sep 2005 | 10 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | 0.0081 | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | 0.062 |
| | | 15 | TO-15 | 2.16 | | | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) | ND (0.056) |
| | | 20 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.057) |
| | | 25 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | 0.0063 | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | 0.0055 | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | 0.064 |
| | | 30 | TO-15 | 2.29 | | | ND(0.0056) | ND(0.0056) | ND(0.0046) | ND(0.0088) | ND(0.0041) | ND(0.024) | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) | ND (0.059) |
| | | 35 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.057) |
| | | 40 | TO-15 | 22.4 | | | ND(0.055) | ND(0.055) | ND(0.045) | ND(0.086) | ND(0.04) | ND(0.23) | ND(0.036) | ND(0.042) | ND(0.049) | | ND(0.049) | ND(0.049) | ND(0.038) | ND(0.039) | ND(0.046) | ND(0.048) | 12 | ND(0.055) | ND(0.055) | ND(0.025) | ND(0.055) | 12.55 |
| | | 45 | TO-15 | 440 | | | ND(1.1) | ND(1.1) | ND(0.89) | ND(1.7) | ND(0.79) | ND(4.6) | ND(0.7) | ND(0.83) | ND(0.96) | | ND(0.96) | ND(0.96) | ND(0.76) | ND(0.78) | ND(0.9) | ND(0.94) | 330 | ND(1.1) | ND(1.1) | ND(0.49) | ND(1.1) | 340.88 |
| | | 50 | TO-15 | 2160 | | | ND(5.3) | ND(5.3) | ND(4.4) | ND(8.3) | ND(3.9) | ND(23) | ND(3.4) | ND(4.1) | ND(4.7) | | ND(4.7) | ND(4.7) | 68 | 46 | ND(4.4) | ND(4.6) | 970 | ND(5.3) | ND(5.3) | ND(2.4) | ND(5.3) | 1133.55 |
| | | 50 Dup | TO-15 | 2330 | | | ND(5.7) | ND(5.7) | ND(4.7) | ND(9) | ND(4.2) | ND(24) | ND(3.7) | ND(4.4) | ND(5) | | ND(5) | ND(5) | 71 | 51 | ND(4.8) | ND(5) | 1000 | ND(5.7) | ND(5.7) | ND(2.6) | ND(5.7) | 1174.95 |
| | | 55 | TO-15 | 4400 | | | ND(11) | ND(11) | ND(8.9) | ND(17) | ND(7.9) | ND(46) | ND(7) | ND(8.3) | ND(9.6) | | ND(9.6) | ND(9.6) | 350 | 370 | 190 | ND(9.4) | 2100 | ND(11) | ND(11) | ND(4.9) | ND(11) | 3106.60 |
| | | 60 | TO-15 | 2240 | | | 5.5 | 11 | ND(4.5) | ND(8.6) | ND(4) | ND(23) | ND(3.6) | ND(4.2) | 56 | | 140 | ND(4.9) | 260 | 330 | 250 | ND(4.8) | 1200 | 31 | 68 | ND(2.5) | 26 | 2407.55 |
| | Oct 2005 | 20 | TO-15 | 2.09 | | | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) | ND(0.0033) | ND(0.0039) | ND(0.0045) | | 0.016 | ND(0.0045) | ND(0.0036) | ND(0.0037) | ND(0.0043) | ND(0.0044) | ND(0.0049) | 0.0063 | 0.01 | ND(0.0023) | 0.01 | 0.086 |
| | | 25 | TO-15 | 2.05 | | | ND(0.005) | ND(0.005) | ND(0.0041) | ND(0.0079) | ND(0.0037) | ND(0.021) | ND(0.0033) | ND(0.0039) | ND(0.0044) | | ND(0.0044) | ND(0.0044) | ND(0.0035) | ND(0.0036) | ND(0.0042) | ND(0.0044) | ND(0.0048) | ND(0.005) | ND(0.005) | ND(0.0023) | ND(0.005) | ND (0.052) |
| | | 30 | TO-15 | 2.13 | | | ND(0.0052) | ND(0.0052) | ND(0.0043) | ND(0.0082) | ND(0.0038) | ND(0.022) | ND(0.0034) | ND(0.004) | ND(0.0046) | | ND(0.0046) | ND(0.0046) | ND(0.0037) | 0.0038 | ND(0.0044) | ND(0.0045) | ND(0.005) | ND(0.0052) | ND(0.0052) | ND(0.0024) | ND(0.0052) | 0.057 |
| | | 35 | TO-15 | 2.16 | | | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) | ND (0.056) |
| | | 40 | TO-15 | 3.46 | | | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) | ND(0.0033) | ND(0.0039) | ND(0.0045) | | ND(0.0045) | ND(0.0045) | ND(0.0036) | ND(0.0037) | ND(0.0043) | ND(0.0044) | 0.023 | ND(0.0051) | ND(0.0051) | ND(0.0023) | ND(0.0051) | 0.074 |
| | | 50 | TO-15 | 2.09 | | | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) | ND(0.0033) | ND(0.0039) | ND(0.0045) | | ND(0.0045) | ND(0.0045) | 0.0056 | ND(0.0037) | ND(0.0043) | ND(0.0044) | 0.022 | 0.0084 | 0.0062 | ND(0.0023) | ND(0.0051) | 0.087 |
| | | 60 | TO-15 | 1080 | | | ND(2.6) | ND(2.6) | ND(2.1) | ND(4.1) | ND(1.9) | ND(11) | ND(1.7) | 6.1 | 11 | | 57 | 2.7 | 200 | 190 | 170 | ND(2.2) | 950 | 18 | 16 | ND(1.2) | 7.8 | 1643.3 |
| | Jun/Jul 2006 | 10 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.057) |
| | | 20 | TO-15 | 2.29 | | | ND(0.0056) | ND(0.0056) | ND(0.0046) | ND(0.0088) | ND(0.0041) | ND(0.024) | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) | ND (0.059) |
| | | 30 | TO-15 | 2.42 | | | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) | ND(0.0039) | ND(0.0046) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0042) | ND(0.0043) | ND(0.005) | ND(0.0052) | ND(0.0056) | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) | ND (0.062) |
| | | 40 | TO-15 | 2.76 | | | ND(0.0068) | ND(0.0068) | ND(0.0056) | ND(0.011) | ND(0.005) | ND(0.029) | ND(0.0044) | ND(0.0052) | ND(0.006) | | ND(0.006) | ND(0.006) | ND(0.0048) | ND(0.0049) | ND(0.0056) | ND(0.0059) | 0.0086 | ND(0.0068) | ND(0.0068) | ND(0.003) | ND(0.0068) | 0.077 |
| | | 50 | TO-15 | 1080 | | | ND(2.6) | ND(2.6) | ND(2.2) | ND(4.1) | ND(1.9) | ND(11) | ND(1.7) | ND(2) | ND(2.3) | | ND(2.3) | ND(2.3) | 39 | 28 | 13 | ND(2.3) | 560 | ND(2.6) | ND(2.6) | ND(1.2) | ND(2.6) | 663.15 |
| | | 50 Dup | TO-15 | 952 | | | ND(2.3) | ND(2.3) | ND(1.9) | ND(3.6) | ND(1.7) | ND(10) | ND(1.5) | ND(1.8) | ND(2.1) | | ND(2.1) | ND(2.1) | 44 | 30 | 13 | ND(2) | 610 | ND(2.3) | ND(2.3) | ND(1) | ND(2.3) | 717.65 |
| | | 60 | TO-15 | 2.38 | | | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | 0.0086 | ND(0.0042) | ND(0.0049) | ND(0.0051) | 0.042 | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) | 0.107 |
| | Nov/Dec 2006 | 10 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | | | | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | | ND(0.0039) | | | ND(0.0051) | ND(0.0054) | ND(0.0054) | | | ND (0.038) |
| | | 15 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | | | | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | | ND(0.0039) | | | ND(0.0051) | ND(0.0054) | ND(0.0054) | | | ND (0.038) |
| | | 20 | TO-15 | 2.38 | | | ND(0.0058) | ND(0.0058) | | | | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | | ND(0.0042) | | | ND(0.0056) | ND(0.0058) | ND(0.0058) | | | ND (0.041) |
| | | 20 Dup | TO-15 | 2.16 | | | ND(0.0053) | ND(0.0053) | | | | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | | ND(0.0038) | | | ND(0.005) | ND(0.0053) | ND(0.0053) | | | ND (0.037) |
| | | 25 | TO-15 | 2.13 | | | ND(0.0052) | ND(0.0052) | | | | ND(0.022) | ND(0.0034) | ND(0.004) | ND(0.0046) | | ND(0.0046) | ND(0.0046) | | ND(0.0038) | | | ND(0.005) | ND(0.0052) | ND(0.0052) | | | ND (0.036) |
| | | 30 | TO-15 | 2.42 | | | ND(0.0059) | ND(0.0059) | | | | ND(0.025) | ND(0.0039) | ND(0.0046) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | | ND(0.0043) | | | ND(0.0056) | ND(0.0059) | ND(0.0059) | | | ND (0.041) |
| | | 35 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | | | | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | | ND(0.0039) | | | ND(0.0051) | ND(0.0054) | ND(0.0054) | | | ND (0.038) |
| | | 40 | TO-15 | 2.53 | | | ND(0.0062) | ND(0.0062) | | | | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | | ND(0.0055) | ND(0.0055) | | ND(0.0044) | | | ND(0.0059) | ND(0.0062) | ND(0.0062) | | | ND (0.043) |
| | | 45 | TO-15 | 2.29 | | | ND(0.0056) | ND(0.0056) | | | | ND(0.024) | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | | ND(0.004) | | | ND(0.0053) | ND(0.0056) | ND(0.0056) | | | ND (0.039) |
| | | 50 | TO-15 | 418 | | | ND(1) | ND(1) | | | | ND(4.4) | ND(0.67) | ND(0.79) | ND(0.91) | | ND(0.91) | ND(0.91) | | ND(0.74) | | | 190 | ND(1) | ND(1) | | | 196.67 |
| | | 55 | TO-15 | 852 | | | ND(2.1) | ND(2.1) | | | | ND(8.9) | ND(1.4) | ND(1.6) | ND(1.8) | | ND(1.8) | ND(1.8) | | 78 | | | 800 | ND(2.1) | ND(2.1) | | | 890.85 |
| | Jun/Jul 2007 | 10 | TO-15 | 2.42 | | | ND(0.0059) | ND(0.0059) | | | | ND(0.025) | ND(0.0039) | ND(0.0046) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | | ND(0.0043) | | | ND(0.0056) | ND(0.0059) | ND(0.0059) | | | ND (0.041) |
| | | 15 | TO-15 | 2.33 | | | ND(0.0057) | ND(0.0057) | | | | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | | ND(0.0041) | | | ND(0.0054) | ND(0.0057) | ND(0.0057) | | | ND (0.040) |
| | | 20 | TO-15 | 2.53 | | | ND(0.0062) | ND(0.0062) | | | | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | | ND(0.0055) | ND(0.0055) | | ND(0.0044) | | | ND(0.0059) | ND(0.0062) | ND(0.0062) | | | ND (0.043) |
| | | 25 | TO-15 | 2.38 | | | ND(0.0058) | ND(0.0058) | | | | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | | ND(0.0042) | | | ND(0.0056) | ND(0.0058) | ND(0.0058) | | | ND (0.041) |
| | | 30 | TO-15 | 2.29 | | | ND(0.0056) | ND(0.0056) | | | | ND(0.024) | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | | ND(0.004) | | | ND(0.0053) | ND(0.0056) | ND(0.0056) | | | ND (0.039) |
| | | 35 | TO-15 | 233 | | | ND(0.57) | ND(0.57) | | | | ND(2.4) | ND(0.37) | ND(0.44) | ND(0.5) | | ND(0.5) | ND(0.5) | | ND(0.41) | | | 250 E | ND(0.57) | ND(0.57) | | | 253.70 |
| | | 35 Dup | TO-15 | 466 | | | ND(1.1) | ND(1.1) | | | | ND(4.9) | ND(0.74) | ND(0.88) | ND(1) | | ND(1) | ND(1) | | ND(0.82) | | | 220 | ND(1.1) | ND(1.1) | | | 227.37 |
| | | 40 | TO-15 | 484 | | | ND(1.2) | ND(1.2) | | | | ND(5.1) | ND(0.77) | ND(0.91) | ND(1) | | ND(1) | ND(1) | | ND(0.85) | | | 510 E | ND(1.2) | ND(1.2) | | | 517.72 |
| | | 45 | TO-15 | 432 | | | ND(1.1) | ND(1.1) | | | | ND(4.5) | ND(0.69) | ND(0.81) | ND(0.94) | | ND(0.94) | ND(0.94) | | 3.3 J | | | 670 E | ND(1.1) | ND(1.1) | | | 679.91 |
| | | 45 Dup | TO-15 | 968 | | | ND(2.4) | ND(2.4) | | | | ND(10) | ND(1.5) | ND(1.8) | ND(2.1) | | ND(2.1) | ND(2.1) | | 7.2 J | | | 670 | ND(2.4) | ND(2.4) | | | 691.80 |
| | | 50 | TO-15 | 1830 | | | ND(4.5) | ND(4.5) | | | | ND(19) | ND(2.9) | ND(3.4) | ND(4) | | ND(4) | ND(4) | | 60 | | | 810 | ND(4.5) | ND(4.5) | | | 897.65 |
| | | 55 | TO-15 | 440 | | | 1.2 | 1.7 | | | | ND(4.6) | 1.4 | ND(0.83) | 3.4 | | 17 | ND(0.96) | | 310 | | | 1600 E | 1.6 | 3.6 | | | 1943.10 |

US EPA ARCHIVE DOCUMENT

# TABLE 2-8a. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, PETROLEUM RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | TO Method | TO Dilution Factor | n-Butylbenzene mg/m$^3$ | sec-Butylbenzene mg/m$^3$ | Isopropylbenzene mg/m$^3$ | n-Propylbenzene mg/m$^3$ | 1,2-Dichloroethane mg/m$^3$ | 1,2-Dibromoethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethylbenzene mg/m$^3$ | Total Xylenes mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclohexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 2,2,4-Trimethylpentane mg/m$^3$ | 1,3,5-Trimethylbenzene mg/m$^3$ | 1,2,4-Trimethylbenzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyltoluene mg/m$^3$ | TVPH as gasoline mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-99 | Apr 2008 | 10 | TO-15 | 2.47 | ND(0.027) | ND(0.027) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) J | ND(0.0039) | 0.019 | 0.013 | | 0.038 | 0.013 | ND(0.0042) | ND(0.0044) | 0.01 J | ND(0.0053) | ND(0.0058) | ND(0.0061) | ND(0.0061) | ND(0.0027) | 0.008 | 0.176 |
| | | 15 | TO-15 | 2.02 | ND(0.022) | ND(0.022) | ND(0.005) | ND(0.005) | ND(0.0041) | ND(0.0078) | ND(0.0036) | ND(0.021) J | ND(0.0032) | ND(0.0038) | ND(0.0044) | | ND(0.0044) | ND(0.0044) | ND(0.0035) | ND(0.0036) | ND(0.0041) J | ND(0.0043) | ND(0.0047) | ND(0.005) | ND(0.005) | ND(0.0022) | ND(0.005) | ND (0.074) |
| | | 20 | TO-15 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) J | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) J | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | Ned (0.081) |
| | | 25 | TO-15 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) J | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) J | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) | ND (0.087) |
| | | 30 | TO-15 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) J | ND(0.004) | 0.0049 | ND(0.0055) | | 0.006 | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) J | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) | 0.099 |
| | | 35 | TO-15 | 22.9 | ND(0.25) | ND(0.25) | ND(0.056) | ND(0.056) | ND(0.046) | ND(0.088) | ND(0.041) | ND(0.24) J | ND(0.036) | ND(0.043) | ND(0.05) | | ND(0.05) | ND(0.05) | ND(0.039) | ND(0.04) | ND(0.047) J | ND(0.049) | 8.7 | ND(0.056) | ND(0.056) | ND(0.025) | ND(0.056) | 9.512 |
| | | 40 | TO-15 | 22.4 | ND(0.24) | ND(0.24) | ND(0.055) | ND(0.055) | ND(0.045) | ND(0.086) | ND(0.04) | ND(0.23) J | ND(0.036) | ND(0.042) | ND(0.049) | | ND(0.049) | ND(0.049) | ND(0.038) | ND(0.039) | ND(0.046) J | ND(0.048) | 16 | ND(0.055) | ND(0.055) | ND(0.025) | ND(0.055) | 16.789 |
| | | 45 | TO-15 | 46.6 | ND(0.51) | ND(0.51) | ND(0.11) | ND(0.11) | ND(0.094) | ND(0.18) | ND(0.084) | ND(0.49) J | ND(0.074) | ND(0.088) | ND(0.1) | | ND(0.1) | ND(0.1) | ND(0.08) | ND(0.082) | ND(0.095) J | ND(0.099) | 36 | ND(0.11) | ND(0.11) | ND(0.052) | ND(0.11) | 37.644 |
| | | 50 | TO-15 | 110 | ND(1.2) | ND(1.2) | ND(0.27) | ND(0.27) | ND(0.22) J | ND(0.42) | ND(0.2) | ND(1.2) J | ND(0.18) | ND(0.21) | ND(0.24) | | ND(0.24) | ND(0.24) | ND(0.19) | ND(0.19) | ND(0.22) J | ND(0.23) | 56 J | ND(0.27) | ND(0.27) | ND(0.12) | ND(0.27) | 59.925 |
| | | 50 Dup | TO-15 | 110 | ND(1.2) | ND(1.2) | ND(0.27) | ND(0.27) | ND(0.22) | ND(0.42) | ND(0.2) | ND(1.2) J | ND(0.18) | ND(0.21) | ND(0.24) | | ND(0.24) | ND(0.24) | ND(0.19) | 0.23 | ND(0.22) J | ND(0.23) | 96 | ND(0.27) | ND(0.27) | ND(0.12) | ND(0.27) | 100.060 |
| | Sep 2008 | 10 | TO-15 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.08145) |
| | | 15 | TO-15 | 2.29 | ND(0.025) | ND(0.025) | ND(0.0056) | ND(0.0056) | ND(0.0046) | ND(0.0088) | ND(0.0041) | ND(0.024) | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) | ND (0.08385) |
| | | 20 | TO-15 | 2.58 | ND(0.028) | ND(0.028) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0099) | ND(0.0046) | ND(0.027) | ND(0.0041) | ND(0.0049) | ND(0.0056) | | ND(0.0056) | ND(0.0056) | ND(0.0044) | ND(0.0045) | ND(0.0053) | ND(0.0055) | ND(0.006) | ND(0.0063) | ND(0.0063) | ND(0.0028) | ND(0.0063) | ND (0.09425) |
| | | 25 | TO-15 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.08145) |
| | | 30 | TO-15 | 2.13 | ND(0.023) | ND(0.023) | ND(0.0052) | ND(0.0052) | ND(0.0043) | ND(0.0082) | ND(0.0038) | ND(0.022) | 0.023 | ND(0.004) | ND(0.0046) | | ND(0.0046) | ND(0.0046) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0045) | ND(0.005) | ND(0.0052) | ND(0.0052) | ND(0.0024) | ND(0.0052) | ND (0.09895) |
| | | 35 | TO-15 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | ND(0.0038) | ND(0.0045) UJ | ND(0.0052) | | ND(0.0052) UJ | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) | ND(0.0051) | ND(0.0056) | ND(0.0058) UJ | 0.0076 J | ND(0.0026) | ND(0.0058) UJ | 0.092 |
| | | 35 Dup | TO-15 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | ND(0.0038) | 0.013 J | ND(0.0052) | | 0.021 J | 0.0085 | ND(0.0041) | ND(0.0042) | ND(0.0049) | ND(0.0051) | ND(0.0056) | 0.0059 J | 0.02 J | ND(0.0026) | 0.015 J | 0.15455 |
| | | 40 | TO-15 | 2.29 | ND(0.025) | ND(0.025) | ND(0.0056) | ND(0.0056) | 0.058 | ND(0.0088) | ND(0.0041) | ND(0.024) | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) | ND(0.0049) | 0.026 | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) | 0.1629 |
| | | 45 | TO-15 | 3.73 | ND(0.41) | ND(0.41) | ND(0.092) | ND(0.092) | ND(0.075) | ND(0.14) | ND(0.067) | ND(0.39) | ND(0.06) | ND(0.07) | ND(0.081) | | ND(0.081) | ND(0.081) | ND(0.064) | ND(0.066) | ND(0.076) | ND(0.079) | 49 | ND(0.092) | ND(0.092) | ND(0.041) | ND(0.092) | 50.3255 |
| | | 50 | TO-15 | 16 | ND(1.8) | ND(1.8) | ND(0.39) | ND(0.39) | ND(0.32) | ND(0.61) | ND(0.29) | ND(1.7) | ND(0.26) | ND(0.3) | ND(0.35) | | ND(0.35) | ND(0.35) | 13 | 8.8 | ND(0.33) | ND(0.34) | 200 | ND(0.39) | ND(0.39) | ND(0.18) | ND(0.39) | 227.265 |
| | | 55 | TO-15 | 74.7 | ND(8.2) | ND(8.2) | ND(1.8) | ND(1.8) | ND(1.5) | ND(2.9) | ND(1.3) | ND(7.8) | ND(1.2) | ND(1.4) | ND(1.6) | | ND(1.6) | ND(1.6) | 130 | 210 | 44 | ND(1.6) | 560 | ND(1.8) | ND(1.8) | ND(0.83) | ND(1.8) | 968.365 |
| | | 55 Dup | TO-15 | 74.4 | ND(8.2) | ND(8.2) | ND(1.8) | ND(1.8) | ND(1.5) | ND(2.9) | ND(1.3) | ND(7.8) | ND(1.2) | ND(1.4) | ND(1.6) | | ND(1.6) | ND(1.6) | 130 | 200 | 44 | ND(1.6) | 550 | ND(1.8) | ND(1.8) | ND(0.83) | ND(1.8) | 948.365 |
| | | 60 | TO-15 | 2.29 | ND(0.025) | ND(0.025) | 0.027 | 0.06 | ND(0.0046) | ND(0.0088) | ND(0.0041) | ND(0.024) | ND(0.0036) | 0.006 JB | 0.007 | | 0.021 | 0.03 | ND(0.0039) | ND(0.004) | ND(0.0047) | ND(0.0049) | ND(0.0053) | 0.056 | 0.15 | ND(0.0025) | 0.18 | 0.5972 |
| | Dec 2008 | 10 | TO-15 | 2.13 | 0.24 | ND(0.023) | 0.041 | 0.072 | ND(0.0043) | ND(0.0082) | ND(0.0038) | ND(0.022) | 0.018 | 0.011 | 0.3 | | 0.62 | 0.03 | 0.066 | 0.2 | 0.3 | ND(0.0045) | 0.14 | 0.42 | 0.36 | ND(0.0024) | 0.42 | 3.2721 |
| | | 15 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.0857) |
| | | 20 | TO-15 | 2.09 | ND(0.023) | ND(0.023) | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) | ND(0.0033) | ND(0.0039) | ND(0.0045) | | ND(0.0045) | ND(0.0045) | ND(0.0036) | ND(0.0037) | ND(0.0043) | ND(0.0044) | ND(0.0049) | ND(0.0051) | ND(0.0051) | ND(0.0023) | ND(0.0051) | ND (0.0767) |
| | | 25 | TO-15 | 3.44 | ND(0.38) | ND(0.38) | ND(0.084) | ND(0.084) | ND(0.07) | ND(0.13) | ND(0.062) | ND(0.36) | ND(0.055) | ND(0.065) | ND(0.075) | | ND(0.075) | ND(0.075) | ND(0.059) | 0.066 J | ND(0.07) | ND(0.073) | 49 J | ND(0.084) | ND(0.084) | ND(0.038) | ND(0.084) | 50.2595 |
| | | 30 | TO-15 | 42.6 | ND(4.7) | ND(4.7) | ND(1) | ND(1) | ND(0.86) | ND(1.6) | ND(0.77) | ND(4.5) | ND(0.68) | ND(0.8) | ND(0.92) | | ND(0.92) | ND(0.92) | ND(0.73) | 2.2 | ND(0.87) | ND(0.91) | 430 | ND(1) | ND(1) | ND(0.47) | ND(1) | 446.875 |
| | | 35 | TO-15 | 30.8 | ND(3.4) | ND(3.4) | ND(0.76) | ND(0.76) | ND(0.62) | ND(1.2) | ND(0.56) | ND(3.2) | ND(0.49) | ND(0.58) | ND(0.67) | | ND(0.67) | ND(0.67) | ND(0.53) | 1.3 J | ND(0.63) | ND(0.66) | 380 J | ND(0.76) | ND(0.76) | ND(0.34) | ND(0.76) | 392.01 |
| | | 40 | TO-15 | 27.7 | ND(3) | ND(3) | ND(0.68) | ND(0.68) | ND(0.56) | ND(1.1) | ND(0.5) | ND(2.9) | ND(0.44) | ND(0.52) | ND(0.6) | | ND(0.6) | ND(0.6) | 9.9 | 10 | ND(0.57) | ND(0.59) | 490 | ND(0.68) | ND(0.68) | ND(0.31) | ND(0.68) | 519.245 |
| | | 45 | TO-15 | 34.2 | ND(3.8) | ND(3.8) | ND(0.84) | ND(0.84) | ND(0.69) | ND(1.3) | ND(0.62) | ND(3.6) | 0.67 | ND(0.64) | ND(0.74) | | 0.99 | ND(0.74) | 40 | 56 | 5.8 | ND(0.73) | 660 | ND(0.84) | ND(0.84) | ND(0.38) | ND(0.84) | 775.08 |
| | | 50 | TO-15 | 52.2 | ND(5.7) | ND(5.7) | ND(1.3) | ND(1.3) | ND(1) | ND(2) | ND(0.94) | ND(5.5) | 1.0 | ND(0.98) | ND(1.1) | | ND(1.1) | ND(1.1) | 120 | 160 | 38 | ND(1.1) | 870 | ND(1.3) | ND(1.3) | ND(0.58) | ND(1.3) | 1205.65 |
| | | 55 | TO-15 | 109 | ND(12) | ND(12) | ND(2.7) | ND(2.7) | ND(2.2) | ND(4.2) | ND(2) | ND(11) | 1.8 J | ND(2) | 3.7 J | | 4.6 J | ND(2.4) | 220 J | 420 J | 140 J | ND(2.3) | 1000 J | ND(2.7) | ND(2.7) | ND(1.2) | ND(2.7) | 1822.5 |
| | | 55 Dup | TO-15 | 205 | ND(22) | ND(22) | ND(5) | ND(5) | ND(4.1) | ND(7.9) | ND(3.7) | ND(21) | ND(3.3) | ND(3.9) | 7.1 J | | 5.8 | ND(4.4) | 270 | 490 | 180 J | ND(4.4) | 1300 J | ND(5) | ND(5) | ND(2.3) | ND(5) | 2314.9 |
| | | 60 | TO-15 | 51.2 | 49 | 5.5 | 5.4 | 2.8 | ND(1) | ND(2) | ND(0.92) | ND(5.4) | 1.3 | 1.4 | 23 | | 93 | 3.4 | 180 | 320 | 170 | ND(1.1) | 870 | 77 | 74 | ND(0.57) | 41 | 1922.295 |
| VW-127 | May 2005 | 5 | TO-15 | 2.09 | | | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) | ND(0.0033) | ND(0.0039) | ND(0.0045) | | ND(0.0045) | ND(0.0045) | ND(0.0036) | 0.015 | ND(0.0043) | ND(0.0044) | ND(0.0049) | ND(0.0051) | ND(0.0051) | ND(0.0023) | ND(0.0051) | 0.067 |
| | | 10 | TO-15 | 2.33 | | | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | 0.02 | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | 0.078 |
| | | 15 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | 0.011 | 0.034 | 0.0072 | | 0.014 | 0.0068 | 0.04 | 0.044 | 0.0053 | ND(0.0048) | 0.032 | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | 0.232 |
| | | 20 | TO-15 | 2.16 | | | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | 0.0086 | ND(0.0047) | | 0.0079 | 0.005 | 0.011 | 0.024 | ND(0.0044) | ND(0.0046) | 0.024 | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) | 0.123 |
| | | 30 | TO-15 | 4.6 | | | ND(0.011) | ND(0.011) | ND(0.0093) | ND(0.018) | ND(0.0083) | ND(0.048) | 0.034 | 0.061 | 0.018 | | 0.038 | 0.012 | 0.071 | 0.27 | 0.042 | ND(0.0098) | 0.16 | ND(0.011) | ND(0.011) | ND(0.0051) | ND(0.011) | 0.783 |
| | | 40 | TO-15 | 2.16 | | | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | 0.0044 | ND(0.0047) | | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | 0.075 | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) | 0.131 |
| | | 50 | TO-15 | 4.4 | | | ND(0.011) | ND(0.011) | ND(0.0089) | ND(0.017) | ND(0.0079) | ND(0.046) | ND(0.007) | 0.02 | ND(0.0096) | | 0.026 | ND(0.0096) | 0.013 | ND(0.0078) | ND(0.009) | ND(0.0094) | ND(0.01) | ND(0.011) | ND(0.011) | ND(0.0049) | ND(0.011) | 0.160 |
| | Sep 2005 | 5 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.057) |
| | | 10 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.057) |
| | | 15 | TO-15 | 2.29 | | | ND(0.0056) | ND(0.0056) | ND(0.0046) | ND(0.0088) | ND(0.0041) | ND(0.024) | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) | ND (0.059) |
| | | 20 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.057) |
| | | 30 | TO-15 | 2.38 | | | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) | ND (0.061) |
| | | 40 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.057) |
| | | 40 Dup | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | 0.0036 | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | 0.058 |
| | | 50 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.057) |

US EPA ARCHIVE DOCUMENT

# TABLE 2-8a. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, PETROLEUM RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | TO Method | TO Dilution Factor | n-Butylbenzene mg/m$^3$ | sec-Butylbenzene mg/m$^3$ | Isopropylbenzene mg/m$^3$ | n-Propylbenzene mg/m$^3$ | 1,2-Dichloroethane mg/m$^3$ | 1,2-Dibromoethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethylbenzene mg/m$^3$ | Total Xylenes mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclohexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 2,2,4-Trimethylpentane mg/m$^3$ | 1,3,5-Trimethylbenzene mg/m$^3$ | 1,2,4-Trimethylbenzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyltoluene mg/m$^3$ | TVPH as gasoline mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Oct 2005 | 20 | TO-15 | 2.16 | | | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) | ND (0.056) |
| | | 30 | TO-15 | 2.14 | | | ND(0.0052) | ND(0.0053) | ND(0.0043) | ND(0.0082) | ND(0.0038) | ND(0.022) | 0.013 | 0.036 | 0.008 | | 0.02 | 0.0088 | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | 0.01 | ND(0.0053) | 0.007 | ND(0.0024) | 0.0072 | 0.147 |
| | | 40 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.057) |
| | | 50 | TO-15 | 2.05 | | | ND(0.005) | ND(0.005) | ND(0.0041) | ND(0.0079) | ND(0.0037) | ND(0.021) | ND(0.0033) | 0.0077 | ND(0.0044) | | 0.0055 | ND(0.0044) | ND(0.0035) | ND(0.0036) | ND(0.0042) | ND(0.0044) | ND(0.0048) | ND(0.005) | ND(0.005) | ND(0.0023) | ND(0.005) | 0.062 |
| | Nov/Dec 2006 | 5 | TO-15 | 2.16 | | | ND(0.0053) | ND(0.0053) | | | | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | | ND(0.0038) | | | ND(0.005) | ND(0.0053) | ND(0.0053) | | | ND (0.037) |
| | | 10 | TO-15 | 4.45 | | | ND(0.011) R | ND(0.011) R | | | | ND(0.047) R | ND(0.0071) R | ND(0.0084) R | ND(0.0097) R | | ND(0.0097) R | ND(0.0097) R | | ND(0.0078) R | | | ND(0.01) R | ND(0.011) R | ND(0.011) R | | | |
| | | 15 | TO-15 | 2.09 | | | ND(0.0051) | ND(0.0051) | | | | ND(0.022) | ND(0.0033) | ND(0.0039) | ND(0.0045) | | ND(0.0045) | ND(0.0045) | | ND(0.0037) | | | ND(0.0049) | ND(0.0051) | ND(0.0051) | | | ND (0.036) |
| | | 20 | TO-15 | 2.13 | | | ND(0.0052) | ND(0.0052) | | | | ND(0.022) | ND(0.0034) | 0.0043 | 0.0072 | | 0.0075 | ND(0.0046) | | ND(0.0038) | | | ND(0.005) | ND(0.0052) | 0.0055 J | | | 0.052 |
| | | 30 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | | | | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | | ND(0.0039) | | | ND(0.0051) | ND(0.0054) | ND(0.0054) | | | ND (0.038) |
| | | 40 | TO-15 | 2.13 | | | ND(0.0052) | ND(0.0052) | | | | ND(0.022) | ND(0.0034) | ND(0.004) | ND(0.0046) | | ND(0.0046) | ND(0.0046) | | ND(0.0038) | | | ND(0.005) | ND(0.0052) | ND(0.0052) | | | ND (0.036) |
| | | 50 | TO-15 | 2.16 | | | ND(0.0053) | ND(0.0053) | | | | ND(0.023) | 0.0034 | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | | 0.0047 | | | ND(0.005) | ND(0.0053) | ND(0.0053) | | | 0.042 |
| | Apr 2008 | 5 | TO-15 | 476 | ND(5.2) | ND(5.2) | ND(1.2) | ND(1.2) | ND(0.96) J | ND(1.8) | ND(0.86) | ND(5) J | 18 | ND(0.9) | ND(1) | | ND(1) | ND(1) | 34 | 110 | 46 J | ND(1) | ND(1.1) | ND(1.2) | ND(1.2) | ND(0.53) | ND(1.2) | 223.775 |
| | | 10 | TO-15 | 8.43 | ND(0.092) | ND(0.092) | ND(0.021) | ND(0.021) | ND(0.017) J | ND(0.032) | ND(0.015) | ND(0.088) J | ND(0.013) | ND(0.016) | ND(0.018) | | ND(0.018) | ND(0.018) | ND(0.014) | ND(0.015) | ND(0.017) J | ND(0.018) | ND(0.02) | ND(0.021) | ND(0.021) | ND(0.0093) | ND(0.021) | ND (0.309) |
| | | 15 | TO-15 | 2.58 | ND(0.028) | ND(0.028) | ND(0.0063) | ND(0.0063) | ND(0.0052) J | ND(0.0099) | ND(0.0046) | ND(0.027) J | ND(0.0041) | ND(0.0049) | ND(0.0056) | | ND(0.0056) | ND(0.0056) | ND(0.0044) | 0.0045 | 0.0094 J | ND(0.0055) | ND(0.006) | ND(0.0063) | ND(0.0063) | ND(0.0028) | ND(0.0063) | 0.103 |
| | | 20 | TO-15 | 2.64 | ND(0.029) | ND(0.029) | ND(0.0065) | ND(0.0065) | ND(0.0053) J | ND(0.01) | ND(0.0048) | ND(0.028) J | ND(0.0042) | ND(0.005) | ND(0.0057) | | ND(0.0057) | ND(0.0057) | ND(0.0045) | ND(0.0046) | ND(0.0054) J | ND(0.0056) | ND(0.0062) | ND(0.0065) | ND(0.0065) | ND(0.0029) | ND(0.0065) | ND (0.097) |
| | | 30 | TO-15 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) J | ND(0.0091) | ND(0.0043) | ND(0.025) J | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | 0.0087 J | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) | 0.094 |
| | | 40 | TO-15 | 2.42 | ND(0.026) | ND(0.026) | ND(0.0059) | ND(0.0059) | ND(0.0049) J | ND(0.0093) | ND(0.0044) | ND(0.025) J | ND(0.0039) | ND(0.0046) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0042) | ND(0.0043) | ND(0.005) J | ND(0.0052) | ND(0.0056) | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) | ND (0.088) |
| | | 50 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) J | ND(0.009) | ND(0.0042) | ND(0.024) J | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | 0.0053 | ND(0.0041) | ND(0.0048) J | ND(0.005) | 0.0085 | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | 0.095 |
| | Sep 2008 | 5 | TO-15 | 843 | ND(9.2) | ND(9.2) | ND(2.1) | ND(2.1) | ND(1.7) | ND(3.2) | ND(1.5) | ND(8.8) | 40 | ND(1.6) | ND(1.8) | | ND(1.8) | ND(1.8) | 13 | 32 | 19 | ND(1.8) | ND(2) | ND(2.1) | ND(2.1) | ND(0.93) UJ | ND(2.1) | 159.83 |
| | | 10 | TO-15 | 96.8 | ND(1.1) | ND(1.1) | ND(0.24) | ND(0.24) | ND(0.2) | ND(0.37) | ND(0.17) | ND(1) | 2.8 | ND(0.18) | ND(0.21) | | ND(0.21) | ND(0.21) | 0.43 | 2.1 | 0.63 | ND(0.21) | ND(0.23) | ND(0.24) | ND(0.24) | ND(0.11) | ND(0.24) | 12.46 |
| | | 15 | TO-15 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | 0.016 | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) | 0.1868 |
| | | 20 | TO-15 | 2.47 | ND(0.027) | ND(0.027) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) | ND(0.0039) | ND(0.0046) | ND(0.0054) | | ND(0.0054) | ND(0.0054) | ND(0.0042) | ND(0.0044) | ND(0.0051) | ND(0.0053) | ND(0.0058) | ND(0.0061) | ND(0.0061) | ND(0.0027) | ND(0.0061) | ND (0.1816) |
| | | 30 | TO-15 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.1629) |
| | | 40 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.1714) |
| | | 50 | TO-15 | 2.2 | ND(0.024) | ND(0.024) | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | 0.0038 | ND(0.0041) | 0.0049 | | 0.037 | 0.011 | 0.0064 | 0.0046 JB | 0.0072 | ND(0.0047) | 0.0085 | 0.0097 | 0.024 | ND(0.0024) UJ | 0.016 | 0.2429 |
| | Dec 2008 | 5 | TO-15 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.08145) |
| | | 10 | TO-15 | 2.16 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) | ND (0.0798) |
| | | 15 | TO-15 | 2.13 | ND(0.023) | ND(0.023) | ND(0.0052) | ND(0.0052) | ND(0.0043) | ND(0.0082) | ND(0.0038) | ND(0.022) | ND(0.0034) | ND(0.004) | ND(0.0046) | | ND(0.0046) | ND(0.0046) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0045) | ND(0.005) | ND(0.0052) | ND(0.0052) | ND(0.0024) | ND(0.0052) | ND (0.07765) |
| | | 20 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.0857) |
| | | 30 | TO-15 | 2.16 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | 0.026 | 0.036 | 0.012 | ND(0.0047) | | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) | 0.13855 |
| | | 40 | TO-15 | 2.09 | ND(0.023) | ND(0.023) | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) | ND(0.0033) | ND(0.0039) | ND(0.0045) | | 0.031 U | 0.013 U | ND(0.0036) | ND(0.0037) | ND(0.0043) | ND(0.0044) | ND(0.0049) | 0.0081 U | 0.029 U | ND(0.0023) | 0.02 U | 0.16565 |
| | | 40 Dup | TO-15 | 2.05 | ND(0.022) | ND(0.022) | ND(0.005) | ND(0.005) | ND(0.0041) | ND(0.0079) | ND(0.0037) | ND(0.021) | ND(0.0033) | ND(0.0039) | ND(0.0044) | | ND(0.0044) | ND(0.0044) | ND(0.0035) | ND(0.0036) | ND(0.0042) | ND(0.0044) | ND(0.0048) | ND(0.005) | ND(0.005) | ND(0.0023) | ND(0.005) | ND (0.07445) |
| | | 50 | TO-15 | 2.05 | ND(0.022) | ND(0.022) | ND(0.005) | ND(0.005) | ND(0.0041) | ND(0.0079) | ND(0.0037) | ND(0.021) | ND(0.0033) | ND(0.0039) | ND(0.0044) | | ND(0.0044) | ND(0.0044) | ND(0.0035) | ND(0.0036) | ND(0.0042) | ND(0.0044) | ND(0.0048) | ND(0.005) | ND(0.005) | ND(0.0023) | ND(0.005) | ND (0.07445) |
| VW-128 | Apr 2005 | 5 | TO-15 | 2.33 | | | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | 0.036 | 0.056 | 0.019 | | 0.019 | 0.01 | 0.065 | 0.025 | ND(0.0048) | ND(0.005) | 0.064 | ND(0.0057) | 0.01 | ND(0.0026) | 0.007 | 0.347 |
| | | 10 | TO-15 | 2.47 | | | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) | 0.023 | 0.039 | 0.017 | | 0.013 | 0.011 | 0.045 | 0.014 | ND(0.0051) | ND(0.0053) | 0.032 | ND(0.0061) | 0.008 | ND(0.0027) | ND(0.0061) | 0.243 |
| | | 15 | TO-15 | 2.53 | | | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | 0.025 | 0.036 | 0.013 | | 0.0086 | 0.01 | 0.028 | 0.037 | 0.0094 | ND(0.0054) | 0.021 | ND(0.0062) | 0.013 | ND(0.0028) | 0.0062 | 0.243 |
| | | 20 | TO-15 | 2.42 | | | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) | 0.0057 | 0.0062 | ND(0.0052) | | ND(0.0052) | ND(0.0052) | 0.0066 | 0.0078 | ND(0.005) | ND(0.0052) | 0.0099 | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) | 0.087 |
| | | 30 | TO-15 | 2.42 | | | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) | ND(0.0039) | ND(0.0046) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0042) | ND(0.0043) | ND(0.005) | ND(0.0052) | ND(0.0056) | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) | ND (0.062) |
| | | 40 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.057) |
| | | 50 | TO-15 | 2.64 | | | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.01) | ND(0.0048) | ND(0.028) | ND(0.0042) | ND(0.005) | ND(0.0057) | | ND(0.0057) | ND(0.0057) | ND(0.0045) | ND(0.0046) | ND(0.0054) | ND(0.0056) | ND(0.0062) | ND(0.0065) | ND(0.0065) | ND(0.0029) | ND(0.0065) | ND (0.068) |
| | | 50 Dup | TO-15 | 2.42 | | | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) | ND(0.0039) | ND(0.0046) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0042) | ND(0.0043) | ND(0.005) | ND(0.0052) | ND(0.0056) | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) | ND (0.062) |
| | Sep 2005 | 5 | TO-15 | 2.29 | | | ND(0.0056) | ND(0.0056) | ND(0.0046) | ND(0.0088) | ND(0.0041) | ND(0.024) | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) | ND (0.059) |
| | | 10 | TO-15 | 2.42 | | | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) | ND(0.0039) | ND(0.0046) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0042) | ND(0.0043) | ND(0.005) | ND(0.0052) | ND(0.0056) | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) | ND (0.062) |
| | | 15 | TO-15 | 2.33 | | | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.060) |
| | | 20 | TO-15 | 2.29 | | | ND(0.0056) | ND(0.0056) | ND(0.0046) | ND(0.0088) | ND(0.0041) | ND(0.024) | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) | ND (0.059) |
| | | 30 | TO-15 | 2.84 | | | ND(0.007) | ND(0.007) | ND(0.0057) | ND(0.011) | ND(0.0051) | ND(0.03) | ND(0.0045) | 0.0056 | ND(0.0062) | | 0.0074 | ND(0.0062) | ND(0.0049) | ND(0.005) | ND(0.0058) | ND(0.006) | ND(0.0066) | ND(0.007) | ND(0.007) | ND(0.0031) | ND(0.007) | 0.081 |
| | | 40 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.057) |
| | | 40 Dup | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | 0.0064 | 0.015 | ND(0.0049) | | 0.015 | 0.0055 | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | 0.007 | ND(0.0025) | ND(0.0055) | 0.095 |
| | | 50 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | 0.0093 U | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | 0.065 |
| | Oct 2005 | 20 | TO-15 | 2.16 | | | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) | ND (0.056) |
| | | 30 | TO-15 | 2.05 | | | ND(0.005) | ND(0.005) | ND(0.0041) | ND(0.0079) | ND(0.0037) | ND(0.021) | ND(0.0033) | ND(0.0039) | ND(0.0044) | | ND(0.0044) | ND(0.0044) | ND(0.0035) | ND(0.0036) | ND(0.0042) | ND(0.0044) | ND(0.0048) | ND(0.005) | ND(0.005) | ND(0.0023) | ND(0.005) | ND (0.052) |
| | | 40 | TO-15 | 2.02 | | | ND(0.005) | ND(0.005) | ND(0.0041) | ND(0.0078) | ND(0.0036) | ND(0.021) | ND(0.0032) | ND(0.0038) | ND(0.0044) | | ND(0.0044) | ND(0.0044) | ND(0.0035) | ND(0.0036) | ND(0.0041) | ND(0.0043) | ND(0.0047) | ND(0.005) | ND(0.005) | ND(0.0022) | ND(0.005) | ND (0.052) |
| | | 50 | TO-15 | 2.09 | | | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) | ND(0.0033) | ND(0.0039) | ND(0.0045) | | ND(0.0045) | ND(0.0045) | ND(0.0036) | ND(0.0037) | ND(0.0043) | ND(0.0044) | ND(0.0049) | ND(0.0051) | ND(0.0051) | ND(0.0023) | ND(0.0051) | ND (0.054) |
| | | 50 Dup | TO-15 | 2.01 | | | ND(0.0049) | ND(0.0049) | ND(0.0041) | ND(0.0077) | ND(0.0036) | ND(0.021) | ND(0.0032) | ND(0.0038) | ND(0.0044) | | ND(0.0044) | ND(0.0044) | ND(0.0034) | ND(0.0035) | ND(0.0041) | ND(0.0043) | 0.0064 | ND(0.0049) | ND(0.0049) | ND(0.0022) | ND(0.0049) | 0.056 |

US EPA ARCHIVE DOCUMENT

# TABLE 2-8a. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, PETROLEUM RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | TO Method | TO Dilution Factor | n-Butyl-benzene mg/m$^3$ | sec-Butyl-benzene mg/m$^3$ | Isopropyl-benzene mg/m$^3$ | n-Propyl-benzene mg/m$^3$ | 1,2-Dichloro-ethane mg/m$^3$ | 1,2-Dibromo-ethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethyl-benzene mg/m$^3$ | Total Xylenes mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclo-hexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 2,2,4-Trimethyl-pentane mg/m$^3$ | 1,3,5-Trimethyl-benzene mg/m$^3$ | 1,2,4-Trimethyl-benzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyl-toluene mg/m$^3$ | TVPH as gasoline mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-128 | Jun/Jul 2006 | 5 | TO-15 | 2.58 | | | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0099) | ND(0.0046) | ND(0.027) | ND(0.0041) | ND(0.0049) | ND(0.0056) | | ND(0.0056) | ND(0.0056) | ND(0.0044) | ND(0.0045) | ND(0.0053) | ND(0.0055) | ND(0.006) | ND(0.0063) | ND(0.0063) | ND(0.0028) | ND(0.0063) | ND (0.066) |
| | | 10 | TO-15 | 2.47 | | | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) | ND(0.0039) | ND(0.0046) | ND(0.0054) | | ND(0.0054) | ND(0.0054) | ND(0.0042) | ND(0.0044) | ND(0.0051) | ND(0.0053) | ND(0.0058) | ND(0.0061) | ND(0.0061) | ND(0.0027) | ND(0.0061) | ND (0.064) |
| | | 15 | TO-15 | 2.64 | | | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.01) | ND(0.0048) | ND(0.028) | ND(0.0042) | ND(0.005) | ND(0.0057) | | ND(0.0057) | ND(0.0057) | ND(0.0045) | ND(0.0046) | ND(0.0054) | ND(0.0056) | ND(0.0062) | ND(0.0065) | ND(0.0065) | ND(0.0029) | ND(0.0065) | ND (0.068) |
| | | 20 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.057) |
| | | 30 | TO-15 | 2.29 | | | ND(0.0056) | ND(0.0056) | ND(0.0046) | ND(0.0088) | ND(0.0041) | ND(0.024) | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) | ND (0.059) |
| | | 40 | TO-15 | 2.38 | | | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) | ND (0.061) |
| | | 50 | TO-15 | 2.58 | | | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0099) | ND(0.0046) | ND(0.027) | ND(0.0041) | ND(0.0049) | ND(0.0056) | | ND(0.0056) | ND(0.0056) | ND(0.0044) | ND(0.0045) | 0.0073 J | ND(0.0055) | ND(0.006) | ND(0.0063) | ND(0.0063) | ND(0.0028) | ND(0.0063) | 0.071 |
| | | 50 Dup | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | 0.0042 | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | 0.059 |
| | Nov/Dec 2006 | 5 | TO-15 | 2.13 | | | ND(0.0052) | ND(0.0052) | | | | ND(0.022) | ND(0.0034) | ND(0.004) | ND(0.0046) | | ND(0.0046) | ND(0.0046) | | ND(0.0038) | | | ND(0.005) | ND(0.0052) | ND(0.0052) | | | ND (0.036) |
| | | 10 | TO-15 | 2.09 | | | ND(0.0051) | ND(0.0051) | | | | ND(0.022) | ND(0.0033) | ND(0.0039) | ND(0.0045) | | ND(0.0045) | ND(0.0045) | | ND(0.0037) | | | ND(0.0049) | ND(0.0051) | ND(0.0051) | | | ND (0.036) |
| | | 15 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | | | | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | | ND(0.0039) | | | ND(0.0051) | ND(0.0054) | ND(0.0054) | | | ND (0.038) |
| | | 20 | TO-15 | 2.09 | | | ND(0.0051) | ND(0.0051) | | | | ND(0.022) | ND(0.0033) | ND(0.0039) | ND(0.0045) | | ND(0.0045) | ND(0.0045) | | ND(0.0037) | | | ND(0.0049) | ND(0.0051) | ND(0.0051) | | | ND (0.036) |
| | | 20 Dup | TO-15 | 2.33 | | | ND(0.0057) | ND(0.0057) | | | | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | | ND(0.0041) | | | ND(0.0054) | ND(0.0057) | ND(0.0057) | | | ND (0.040) |
| | | 30 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | | | | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | | ND(0.0039) | | | ND(0.0051) | ND(0.0054) | ND(0.0054) | | | ND (0.038) |
| | | 40 | TO-15 | 2.29 | | | ND(0.0056) | ND(0.0056) | | | | ND(0.024) | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | | ND(0.004) | | | ND(0.0053) | ND(0.0056) | ND(0.0056) | | | ND (0.039) |
| | | 50 | TO-15 | 2.58 | | | ND(0.0063) | ND(0.0063) | | | | ND(0.027) | ND(0.0041) | ND(0.0049) | ND(0.0056) | | ND(0.0056) | ND(0.0056) | | ND(0.0045) | | | ND(0.006) | ND(0.0063) | ND(0.0063) | | | ND (0.044) |
| | | 50 Dup | TO-15 | 2.09 | | | ND(0.0051) | ND(0.0051) | | | | ND(0.022) | ND(0.0033) | ND(0.0039) | ND(0.0045) | | ND(0.0045) | ND(0.0045) | | ND(0.0037) | | | ND(0.0049) | ND(0.0051) | ND(0.0051) | | | ND (0.036) |
| | Jun/Jul 2007 | 5 | TO-15 | 2.33 | | | ND(0.0057) | ND(0.0057) | | | | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | | ND(0.0041) | | | ND(0.0054) | ND(0.0057) | ND(0.0057) | | | ND (0.040) |
| | | 10 | TO-15 | 2.38 | | | ND(0.0058) | ND(0.0058) | | | | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | | ND(0.0042) | | | ND(0.0056) | ND(0.0058) | ND(0.0058) | | | ND (0.041) |
| | | 15 | TO-15 | 2.42 | | | ND(0.0059) | ND(0.0059) | | | | ND(0.025) | ND(0.0039) | ND(0.0046) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | | ND(0.0043) | | | ND(0.0056) | ND(0.0059) | ND(0.0059) | | | ND (0.041) |
| | | 20 | TO-15 | 2.29 | | | ND(0.0056) | ND(0.0056) | | | | ND(0.024) | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | | ND(0.004) | | | ND(0.0053) | ND(0.0056) | ND(0.0056) | | | ND (0.039) |
| | | 30 | TO-15 | 2.42 | | | ND(0.0059) | ND(0.0059) | | | | ND(0.025) | ND(0.0039) | ND(0.0046) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | | ND(0.0043) | | | ND(0.0056) | ND(0.0059) | ND(0.0059) | | | ND (0.041) |
| | | 40 | TO-15 | 2.58 | | | ND(0.0063) | ND(0.0063) | | | | ND(0.027) | ND(0.0041) | ND(0.0049) | ND(0.0056) | | ND(0.0056) | ND(0.0056) | | ND(0.0045) | | | ND(0.006) | ND(0.0063) | ND(0.0063) | | | ND (0.044) |
| | | 50 | TO-15 | 2.47 | | | ND(0.0061) | ND(0.0061) | | | | ND(0.026) | ND(0.0039) | ND(0.0046) | ND(0.0054) | | ND(0.0054) | ND(0.0054) | | ND(0.0044) | | | ND(0.0058) | ND(0.0061) | ND(0.0061) | | | ND (0.043) |
| | Apr 2008 | 5 | TO-15 | 2.29 | ND(0.025) | ND(0.025) | ND(0.0056) | ND(0.0056) | ND(0.0046) J | ND(0.0088) | ND(0.0041) | ND(0.024) J | 0.022 | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) J | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) | 0.104 |
| | | 10 | TO-15 | 2.09 | ND(0.023) J | ND(0.023) J | ND(0.0051) J | ND(0.0051) J | ND(0.0042) J | ND(0.008) J | ND(0.0038) J | ND(0.022) J | 0.0065 J | 0.024 J | ND(0.0045) J | | ND(0.0045) J | ND(0.0045) J | ND(0.0036) J | ND(0.0037) J | ND(0.0043) J | ND(0.0044) J | ND(0.0049) J | ND(0.0051) J | ND(0.0051) J | ND(0.0023) J | ND(0.0051) J | 0.1036 J |
| | | 15 | TO-15 | 2.64 | ND(0.029) | ND(0.029) | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.01) | ND(0.0048) | ND(0.028) J | ND(0.0042) | ND(0.005) | ND(0.0057) | | ND(0.0057) | ND(0.0057) | ND(0.0045) | ND(0.0046) | ND(0.0054) J | ND(0.0056) | ND(0.0062) | ND(0.0065) | ND(0.0065) | ND(0.0029) | ND(0.0065) | ND (0.097) |
| | | 20 | TO-15 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) J | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) J | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) | ND (0.087) |
| | | 30 | TO-15 | 2.02 | ND(0.022) | ND(0.022) | ND(0.005) | ND(0.005) | ND(0.0041) | ND(0.0078) | ND(0.0036) | ND(0.021) J | ND(0.0032) | 0.013 | ND(0.0044) | | ND(0.0044) | ND(0.0044) | ND(0.0035) | 0.0089 | ND(0.0041) J | ND(0.0043) | ND(0.0047) | ND(0.005) | ND(0.005) | ND(0.0022) | ND(0.005) | 0.092 |
| | | 40 | TO-15 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | 0.029 J | ND(0.0038) | 0.02 | 0.0089 | | 0.044 | 0.018 | ND(0.0041) | ND(0.0042) | ND(0.0049) J | ND(0.0051) | ND(0.0056) | 0.0088 | 0.034 | ND(0.0026) | 0.02 | 0.239 |
| | | 50 | TO-15 | 2.09 | ND(0.023) | ND(0.023) | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) J | ND(0.0033) | ND(0.0039) | ND(0.0045) | | ND(0.0045) | ND(0.0045) | ND(0.0036) | ND(0.0037) | ND(0.0043) J | ND(0.0044) | ND(0.0049) | ND(0.0051) | ND(0.0051) | ND(0.0023) | ND(0.0051) | ND (0.077) |
| | | 50 Dup | TO-15 | 2.09 | ND(0.023) | ND(0.023) | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) J | ND(0.0033) | ND(0.0039) | ND(0.0045) | | ND(0.0045) | ND(0.0045) | ND(0.0036) | ND(0.0037) | ND(0.0043) J | ND(0.0044) | ND(0.0049) | ND(0.0051) | ND(0.0051) | ND(0.0023) | ND(0.0051) | ND (0.077) |
| | Sep 2008 | 5 | TO-15 | 2.2 | ND(0.024) | ND(0.024) | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.1612) |
| | | 10 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | 0.0045 | 0.046 | 0.01 | | 0.042 | 0.02 | ND(0.004) | ND(0.0041) | 0.0078 | ND(0.005) | ND(0.0054) | 0.006 | 0.024 | ND(0.0026) | 0.017 | 0.2789 |
| | | 15 | TO-15 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | 0.0045 JB | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.1632) |
| | | 20 | TO-15 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.1629) |
| | | 30 | TO-15 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.1629) |
| | | 40 | TO-15 | 2.29 | ND(0.025) | ND(0.025) | ND(0.0056) | ND(0.0056) | ND(0.0046) | ND(0.0088) | ND(0.0041) | ND(0.024) | ND(0.0036) | 0.0095 JB | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.0039) | 0.005 JB | ND(0.0047) | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) | ND (0.1689) |
| | | 50 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | 0.032 | 0.16 | ND(0.0047) | ND(0.009) | ND(0.0042) | 0.058 | 0.05 | 0.7 | 0.18 | | 0.74 | 0.34 | 0.02 | 0.014 | 0.067 | ND(0.005) | ND(0.0054) | 0.22 | 1 .0 | ND(0.0026) | 0.7 | 4.3639 |
| | Dec 2008 | 5 | TO-15 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.08145) |
| | | 10 | TO-15 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | 0.017 | 0.0054 | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | 0.09895 |
| | | 15 | TO-15 | 2.13 | ND(0.023) | ND(0.023) | ND(0.0052) | ND(0.0052) | ND(0.0043) | ND(0.0082) | ND(0.0038) | ND(0.022) | ND(0.0034) | ND(0.004) | ND(0.0046) | | ND(0.0046) | ND(0.0046) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0045) | ND(0.005) | ND(0.0052) | ND(0.0052) | ND(0.0024) | ND(0.0052) | ND (0.07765) |
| | | 20 | TO-15 | 2.2 | ND(0.024) | ND(0.024) | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.0806) |
| | | 30 | TO-15 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.08145) |
| | | 40 | TO-15 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | ND (0.115) |
| | | 50 | TO-15 | 2.2 | ND(0.024) | ND(0.024) | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.0806) |
| VW-129 | Apr 2005 | 5 | TO-15 | 2.53 | | | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | 0.005 | 0.016 | 0.0099 | | 0.022 | 0.008 | 0.0064 | 0.016 | 0.012 | ND(0.0054) | ND(0.0059) | ND(0.0062) | 0.0084 | ND(0.0028) | ND(0.0062) | 0.146 |
| | | 10 | TO-15 | 2.42 | | | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) | 0.0039 | 0.011 | 0.008 | | 0.06 | 0.041 | 0.0089 | 0.022 | 0.01 | ND(0.0052) | ND(0.0056) | 0.027 | 0.066 | ND(0.0027) | 0.054 | 0.346 |
| | | 15 | TO-15 | 2.82 | | | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.011) | ND(0.0051) | ND(0.03) | ND(0.0045) | 0.0056 | ND(0.0061) | | ND(0.0061) | ND(0.0061) | ND(0.0048) | ND(0.005) | ND(0.0058) | ND(0.006) | ND(0.0066) | ND(0.0069) | ND(0.0069) | ND(0.0031) | ND(0.0069) | 0.076 |
| | | 20 | TO-15 | 2.33 | | | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | 0.0038 | 0.0085 | ND(0.005) | | 0.0055 | ND(0.005) | 0.006 | 0.011 | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | 0.084 |
| | | 30 | TO-15 | 2.16 | | | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | 0.0044 | 0.018 | 0.0097 | | 0.014 | 0.006 | 0.0051 | 0.0091 | 0.008 | ND(0.0046) | ND(0.005) | ND(0.0053) | 0.008 | ND(0.0024) | 0.0062 | 0.122 |
| | | 40 | TO-15 | 2.38 | | | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | 0.0049 | 0.013 | 0.0061 | | 0.0077 | ND(0.0052) | 0.0067 | 0.014 | 0.0078 | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) | 0.106 |
| | | 50 | TO-15 | 2.89 | | | ND(0.0071) | ND(0.0071) | ND(0.0058) | ND(0.011) | ND(0.0052) | ND(0.03) | ND(0.0046) | 0.012 | ND(0.0063) | | 0.031 | 0.013 | ND(0.005) | ND(0.0051) | ND(0.0059) | ND(0.0062) | ND(0.0068) | ND(0.0071) | ND(0.0071) | ND(0.0032) | ND(0.0071) | 0.121 |
| | | 50 Dup | TO-15 | 2.53 | | | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | ND(0.004) | 0.0058 | ND(0.0055) | | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) | 0.068 |

US EPA ARCHIVE DOCUMENT

# TABLE 2-8a. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, PETROLEUM RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | TO Method | TO Dilution Factor | n-Butylbenzene mg/m$^3$ | sec-Butylbenzene mg/m$^3$ | Isopropylbenzene mg/m$^3$ | n-Propylbenzene mg/m$^3$ | 1,2-Dichloroethane mg/m$^3$ | 1,2-Dibromoethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethylbenzene mg/m$^3$ | Total Xylenes mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclohexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 2,2,4-Trimethylpentane mg/m$^3$ | 1,3,5-Trimethylbenzene mg/m$^3$ | 1,2,4-Trimethylbenzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyltoluene mg/m$^3$ | TVPH as gasoline mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-129 | Jun/Jul 2006 | 5 | TO-15 | 2.33 | | | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.060) |
| | | 10 | TO-15 | 2.29 | | | ND(0.0056) | ND(0.0056) | ND(0.0046) | ND(0.0088) | ND(0.0041) | ND(0.024) | ND(0.0036) | ND(0.0043) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) | ND (0.059) |
| | | 15 | TO-15 | 2.64 | | | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.01) | ND(0.0048) | ND(0.028) | ND(0.0042) | ND(0.005) | ND(0.0057) | | ND(0.0057) | ND(0.0057) | ND(0.0045) | ND(0.0046) | ND(0.0054) | ND(0.0056) | ND(0.0062) | ND(0.0065) | ND(0.0065) | ND(0.0029) | ND(0.0065) | ND (0.068) |
| | | 20 | TO-15 | 3.46 | | | ND(0.0085) | ND(0.0085) | ND(0.007) | ND(0.013) | ND(0.0062) | ND(0.036) | ND(0.0055) | ND(0.0065) | ND(0.0075) | | ND(0.0075) | ND(0.0075) | ND(0.006) | ND(0.0061) | ND(0.0071) | ND(0.0074) | ND(0.0081) | ND(0.0085) | ND(0.0085) | ND(0.0038) | ND(0.0085) | ND (0.089) |
| | | 30 | TO-15 | 2.47 | | | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) | ND(0.0039) | ND(0.0046) | ND(0.0054) | | ND(0.0054) | ND(0.0054) | ND(0.0042) | ND(0.0044) | ND(0.0051) | ND(0.0053) | ND(0.0058) | ND(0.0061) | ND(0.0061) | ND(0.0027) | ND(0.0061) | ND (0.064) |
| | | 40 | TO-15 | 2.69 | | | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.01) | ND(0.0048) | ND(0.028) | ND(0.0043) | ND(0.0051) | ND(0.0058) | | ND(0.0058) | ND(0.0058) | ND(0.0046) | ND(0.0047) | ND(0.0055) | ND(0.0057) | ND(0.0063) | ND(0.0066) | ND(0.0066) | ND(0.003) | ND(0.0066) | ND (0.069) |
| | | 50 | TO-15 | 2.13 | | | ND(0.0052) | ND(0.0052) | ND(0.0043) | ND(0.0082) | ND(0.0038) | ND(0.022) | ND(0.0034) | ND(0.004) | ND(0.0046) | | ND(0.0046) | ND(0.0046) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0045) | ND(0.005) | ND(0.0052) | ND(0.0052) | ND(0.0024) | ND(0.0052) | ND (0.055) |
| | Jun/Jul 2007 | 5 | TO-15 | 2.64 | | | ND(0.0065) | ND(0.0065) | | | | ND(0.028) | ND(0.0042) | ND(0.005) | ND(0.0057) | | ND(0.0057) | ND(0.0057) | | ND(0.0046) | | | ND(0.0062) | ND(0.0065) | ND(0.0065) | | | ND (0.046) |
| | | 10 | TO-15 | 2.24 | | | ND(0.0055) | ND(0.0055) | | | | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | | ND(0.0049) | ND(0.0049) | | 0.0044 | | | ND(0.0052) | ND(0.0055) | ND(0.0055) | | | 0.036 |
| | | 15 | TO-15 | 2.58 | | | ND(0.0063) | ND(0.0063) | | | | ND(0.027) | ND(0.0041) | ND(0.0049) | ND(0.0056) | | ND(0.0056) | ND(0.0056) | | ND(0.0045) | | | ND(0.006) | ND(0.0063) | ND(0.0063) | | | ND (0.044) |
| | | 20 | TO-15 | 2.38 | | | ND(0.0058) | ND(0.0058) | | | | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | | ND(0.0042) | | | ND(0.0056) | ND(0.0058) | ND(0.0058) | | | ND (0.041) |
| | | 30 | TO-15 | 2.53 | | | ND(0.0062) | ND(0.0062) | | | | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | | ND(0.0055) | ND(0.0055) | | ND(0.0044) | | | ND(0.0059) | ND(0.0062) | ND(0.0062) | | | ND (0.043) |
| | | 40 | TO-15 | 2.47 | | | ND(0.0061) | ND(0.0061) | | | | ND(0.026) | ND(0.0039) | ND(0.0046) | ND(0.0054) | | ND(0.0054) | ND(0.0054) | | ND(0.0044) | | | ND(0.0058) | ND(0.0061) | ND(0.0061) | | | ND (0.043) |
| | | 40 Dup | TO-15 | 2.53 | | | ND(0.0062) | ND(0.0062) | | | | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | | ND(0.0055) | ND(0.0055) | | ND(0.0044) | | | ND(0.0059) | ND(0.0062) | ND(0.0062) | | | ND (0.043) |
| | | 50 | TO-15 | 2.38 | | | ND(0.0058) | ND(0.0058) | | | | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | | ND(0.0042) | | | ND(0.0056) | ND(0.0058) | ND(0.0058) | | | ND (0.041) |
| | Apr 2008 | 5 | TO-15 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | 0.0075 | ND(0.0051) | ND(0.0097) | ND(0.0046) | 0.13 J | 0.0069 | 0.022 | 0.014 | | 0.029 | 0.02 | ND(0.0044) | 0.0079 | 0.01 J | ND(0.0054) | ND(0.0059) | 0.027 | 0.061 | ND(0.0028) | 0.034 | 0.419 |
| | | 10 | TO-15 | 2.58 | ND(0.028) | ND(0.028) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0099) | ND(0.0046) | ND(0.027) J | ND(0.0041) | ND(0.0049) | ND(0.0056) | | ND(0.0056) | ND(0.0056) | ND(0.0044) | ND(0.0045) | ND(0.0053) J | ND(0.0055) | ND(0.006) | ND(0.0063) | ND(0.0063) | ND(0.0028) | ND(0.0063) | ND (0.094) |
| | | 15 | TO-15 | 2.47 | ND(0.027) | ND(0.027) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) J | ND(0.0039) | ND(0.0046) | ND(0.0054) | | ND(0.0054) | ND(0.0054) | ND(0.0042) | ND(0.0044) | ND(0.0051) J | ND(0.0053) | ND(0.0058) | ND(0.0061) | ND(0.0061) | ND(0.0027) | ND(0.0061) | ND (0.091) |
| | | 20 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) J | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) J | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.086) |
| | | 30 | TO-15 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) J | ND(0.0036) | 0.0051 | ND(0.0049) | | 0.0052 | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) J | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) | 0.087 |
| | | 40 | TO-15 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) J | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) J | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) | ND (0.087) |
| | | 50 | TO-15 | 2.47 | ND(0.027) | ND(0.027) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) J | ND(0.0039) | ND(0.0046) | ND(0.0054) | | ND(0.0054) | ND(0.0054) | ND(0.0042) | ND(0.0044) | ND(0.0051) J | ND(0.0053) | ND(0.0058) | ND(0.0061) | ND(0.0061) | ND(0.0027) | ND(0.0061) | ND (0.091) |
| | Sep 2008 | 5 | TO-15 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) | ND (0.1858) |
| | | 10 | TO-15 | 2.58 | ND(0.028) | ND(0.028) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0099) | ND(0.0046) | ND(0.027) | ND(0.0041) | ND(0.0049) | ND(0.0056) | | ND(0.0056) | ND(0.0056) | ND(0.0044) | ND(0.0045) | ND(0.0053) | ND(0.0055) | ND(0.006) | ND(0.0063) | ND(0.0063) | ND(0.0028) | ND(0.0063) | ND (0.1885) |
| | | 15 | TO-15 | 2.38 | ND(0.026) | ND(0.026) UJ | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) UJ | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) | ND (0.1746) |
| | | 20 | TO-15 | 2.47 | ND(0.027) | ND(0.027) UJ | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) UJ | ND(0.0039) | ND(0.0046) | ND(0.0054) | | ND(0.0054) | ND(0.0054) | ND(0.0042) | ND(0.0044) | ND(0.0051) | ND(0.0053) | 0.014 J | ND(0.0061) | ND(0.0061) | ND(0.0027) | ND(0.0061) | 0.1898 |
| | | 20 Dup | TO-15 | 2.42 | ND(0.026) | ND(0.026) UJ | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) UJ | ND(0.0039) | ND(0.0046) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0042) | ND(0.0043) | ND(0.005) | ND(0.0052) | ND(0.0056) UJ | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) | ND (0.0881) |
| | | 30 | TO-15 | 2.38 | ND(0.026) | ND(0.026) UJ | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) UJ | ND(0.0038) | 0.007 JB | 0.0078 | | 0.0085 | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) | ND(0.0051) | ND(0.0056) | ND(0.0058) | 0.0087 | ND(0.0026) | 0.0087 | 0.1888 |
| | | 40 | TO-15 | 2.2 | ND(0.024) | ND(0.024) | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.1612) |
| | | 50 | TO-15 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) | ND (0.1858) |
| | | 50 Dup | TO-15 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) | ND (0.0929) |
| | Dec 2008 | 5 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.1077) |
| | | 10 | TO-15 | 2.16 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) | ND (0.0998) |
| | | 15 | TO-15 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) | ND (0.10245) |
| | | 20 | TO-15 | 2.13 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) | ND (0.09715) |
| | | 30 | TO-15 | 2.2 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) | ND (0.1011) |
| | | 40 | TO-15 | 2.29 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) | ND (0.1909) |
| | | 50 | TO-15 | 2.09 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) | ND (0.09615) |
| VW130 | Apr 2005 | 5 | TO-15 | 2.76 | | | ND(0.0068) | ND(0.0068) | ND(0.0056) | ND(0.011) | ND(0.005) | ND(0.029) | ND(0.0044) | ND(0.0052) | ND(0.006) | | ND(0.006) | ND(0.006) | 0.036 | 0.05 | ND(0.0056) | ND(0.0059) | ND(0.0064) | ND(0.0068) | ND(0.0068) | ND(0.003) | ND(0.0068) | 0.153 |
| | | 10 | TO-15 | 2.42 | | | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) | 0.004 | 0.0094 | 0.013 | | ND(0.0052) | 0.0089 | 0.068 | 0.13 | 0.022 | ND(0.0052) | ND(0.0056) | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) | 0.301 |
| | | 15 | TO-15 | 2.42 | | | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) | ND(0.0039) | 0.0072 | 0.0083 | | ND(0.0052) | 0.0073 | 0.02 | 0.007 | ND(0.005) | ND(0.0052) | ND(0.0056) | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) | 0.100 |
| | | 20 | TO-15 | 2.58 | | | ND(0.0063) R | ND(0.0063) R | ND(0.0052) R | ND(0.0099) R | ND(0.0046) R | ND(0.027) R | ND(0.0041) R | ND(0.0049) R | ND(0.0056) R | | ND(0.0056) R | ND(0.0056) R | ND(0.0044) R | 0.01 R | ND(0.0053) R | ND(0.0055) R | ND(0.006) R | ND(0.0063) R | ND(0.0063) R | ND(0.0028) R | ND(0.0063) R | |
| | | 30 | TO-15 | 2.53 | | | ND(0.0062) J | ND(0.0062) J | ND(0.0051) J | ND(0.0097) J | ND(0.0046) J | ND(0.026) J | 0.01 J | 0.058 J | 0.0076 J | | 0.011J | 0.0059 J | 0.013 J | ND(0.0044) J | ND(0.0052) J | ND(0.0054) J | ND(0.0059) J | ND(0.0062) J | ND(0.0062) J | ND(0.0028) J | ND(0.0062) J | 0.15555 J |
| | | 30 Dup | TO-15 | 2.58 | | | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0099) | ND(0.0046) | ND(0.027) | 0.0092 | 0.055 | 0.0075 J | | 0.0086 J | ND(0.0056) | 0.012 | ND(0.0045) | ND(0.0053) | ND(0.0055) | ND(0.006) | ND(0.0063) | ND(0.0063) | ND(0.0028) | ND(0.0063) | 0.146 |
| | | 40 | TO-15 | 2.76 | | | ND(0.0068) | ND(0.0068) | ND(0.0056) | ND(0.011) | ND(0.005) | ND(0.029) | ND(0.0044) | ND(0.0052) | ND(0.006) | | ND(0.006) | ND(0.006) | ND(0.0048) | 0.005 | ND(0.0056) | ND(0.0059) | ND(0.0064) | ND(0.0068) | ND(0.0068) | ND(0.003) | ND(0.0068) | 0.074 |
| | | 50 | TO-15 | 2.53 | | | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | ND(0.004) | 0.006 | ND(0.0055) | | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) | 0.069 |
| | May 2005 | 20 | TO-15 | 2.2 | | | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.057) |
| | | 40 | TO-15 | 2.58 | | | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0099) | ND(0.0046) | ND(0.027) | ND(0.0041) | ND(0.0049) | ND(0.0056) | | ND(0.0056) | ND(0.0056) | ND(0.0044) | ND(0.0045) | ND(0.0053) | ND(0.0055) | ND(0.006) | ND(0.0063) | ND(0.0063) | ND(0.0028) | ND(0.0063) | ND (0.066) |

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# TABLE 2-8a. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, PETROLEUM RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | TO Method | TO Dilution Factor | n-Butylbenzene mg/m$^3$ | sec-Butylbenzene mg/m$^3$ | Isopropylbenzene mg/m$^3$ | n-Propylbenzene mg/m$^3$ | 1,2-Dichloroethane mg/m$^3$ | 1,2-Dibromoethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethylbenzene mg/m$^3$ | Total Xylenes mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclohexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 2,2,4-Trimethylpentane mg/m$^3$ | 1,3,5-Trimethylbenzene mg/m$^3$ | 1,2,4-Trimethylbenzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyltoluene mg/m$^3$ | TVPH as gasoline mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-130 | Apr 2008 | 5 | TO-15 | 2.42 | ND(0.026) | ND(0.026) | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) J | ND(0.0039) | 0.007 | 0.0052 | | 0.0087 | ND(0.0052) | ND(0.0042) | ND(0.0043) | ND(0.005) J | ND(0.0052) | ND(0.0056) J | ND(0.0059) | 0.0061 | ND(0.0027) | ND(0.0059) | 0.105 |
| | | 10 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) J | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) J | ND(0.005) | ND(0.0054) J | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.086) |
| | | 15 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) J | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) J | ND(0.0037) | 0.0086 | 0.0054 J | | 0.016 | 0.0053 | ND(0.004) | ND(0.0041) | ND(0.0048) J | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | 0.111 |
| | | 20 | TO-15 | 2.33 | ND(0.026) J | ND(0.026) J | ND(0.0057) J | ND(0.0057) J | ND(0.0047) J | ND(0.009) J | ND(0.0042) J | ND(0.024) J | ND(0.0037) J | ND(0.0044) J | ND(0.005) J | | ND(0.005) J | ND(0.005) J | ND(0.004) J | 0.039 J | ND(0.0048) J | ND(0.005) J | ND(0.0054) J | ND(0.0057) J | ND(0.0057) J | ND(0.0026) | ND(0.0057) J | 0.123 |
| | | 30 | TO-15 | 77.7 | ND(0.85) J | ND(0.85) J | ND(0.19) J | ND(0.19) J | ND(0.16) J | ND(0.3) J | ND(0.14) J | ND(0.81) J | ND(0.12) J | ND(0.15) J | ND(0.17) J | | ND(0.17) J | ND(0.17) J | ND(0.13) J | ND(0.14) J | ND(0.16) J | ND(0.16) J | ND(0.18) J | ND(0.19) J | ND(0.19) J | ND(0.086) | ND(0.19) J | ND (2.848) |
| | | 40 | TO-15 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) J | ND(0.0038) | ND(0.0045) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0041) | 0.01 J | 0.0088 J | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) | 0.102 |
| | | 40 Dup | TO-15 | 2.42 | ND(0.026) | ND(0.026) | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) J | ND(0.0039) | ND(0.0046) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0042) | ND(0.0043) J | ND(0.005) J | ND(0.0052) | ND(0.0056) | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) | ND (0.088) |
| | Sep 2008 | 5 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) UJ | ND(0.0057) | ND (0.1714) |
| | | 10 | TO-15 | 2.2 | ND(0.024) | ND(0.024) | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.1612) |
| | | 15 | TO-15 | 2.2 | ND(0.024) | ND(0.024) | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | 0.0043 JB | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.1571) |
| | | 20 | TO-15 | 2.2 | ND(0.024) | ND(0.024) | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.01612) |
| | | 30 | TO-15 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) | ND (0.1714) |
| | | 40 | TO-15 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) | ND (0.1858) |
| | | 40 Dup | TO-15 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) | ND (0.1858) |
| | Dec 2008 | 5 | TO-15 | 2.2 | ND(0.024) | ND(0.024) | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) | ND (0.0806) |
| | | 10 | TO-15 | 2.05 | ND(0.022) | ND(0.022) | ND(0.005) | ND(0.005) | ND(0.0041) | ND(0.0079) | ND(0.0037) | ND(0.021) | ND(0.0033) | ND(0.0039) | ND(0.0044) | | ND(0.0044) | ND(0.0044) | ND(0.0035) | ND(0.0036) | ND(0.0042) | ND(0.0044) | ND(0.0048) | ND(0.005) | ND(0.005) | ND(0.0023) | ND(0.005) | ND (0.07445) |
| | | 15 | TO-15 | 2.13 | ND(0.023) | ND(0.023) | ND(0.0052) | ND(0.0052) | ND(0.0043) | ND(0.0082) | ND(0.0038) | ND(0.022) | ND(0.0034) | ND(0.004) | ND(0.0046) | | ND(0.0046) | ND(0.0046) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0045) | ND(0.005) | ND(0.0052) | ND(0.0052) | ND(0.0024) | ND(0.0052) | ND (0.07765) |
| | | 20 | TO-15 | 2.16 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | 0.01 | ND(0.0047) | | 0.017 | 0.0084 | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | 0.0069 | 0.029 | ND(0.0024) | 0.014 | 0.1504 |
| | | 30 | TO-15 | 2.05 | ND(0.022) | ND(0.022) | ND(0.005) | ND(0.005) | ND(0.0041) | ND(0.0079) | ND(0.0037) | ND(0.021) | ND(0.0033) | ND(0.0039) | ND(0.0044) | | ND(0.0044) | ND(0.0044) | ND(0.0035) | ND(0.0036) | ND(0.0042) | ND(0.0044) | ND(0.0048) | ND(0.005) | ND(0.005) | ND(0.0023) | ND(0.005) | ND (0.07445) |
| | | 40 | TO-15 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) | ND (0.0929) |
| | | 40 Dup | TO-15 | 2.42 | ND(0.026) | ND(0.026) | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) | ND(0.0039) | ND(0.0046) | ND(0.0052) | | ND(0.0052) | ND(0.0052) | ND(0.0042) | ND(0.0043) | ND(0.005) | ND(0.0052) | ND(0.0056) | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) | ND (0.0881) |

**NOTES:**

1 - The detection limits reported in units of mg/m$^3$ in Table C-10-B of ESE 1999 for VW-96 at 20 ft-bgs for the December 1997 event were incorrect based on Table C-10-A of ESE 1999. Therefore, the corrected detection limits are provided on this table.

2 - TVPH data reported for Mar 1998 and Jul 1998 was analyzed by Arizona State University using Gas Chromatography. All other TVPH data from 1997-1999 was analyzed using TO-3. For data collected during 2005-2007, TVPH data is estimated by summing constituents commonly found in gasoline (constituents shown on this table). For constituents reported as "ND", 1/2 of the detection limit was used as a surrogate in estimating the TVPH concentration.

3 - For data collected during 2005-2007 reported as "ND" additional data qualifier flags are not shown on this table. See Trihydro and GeoSyntec 2005 and Appendix A of this report for data qualifier information.

**B** - Constituent detected in blank sample

**C** - Sample chromatographic pattern is not indicative of the standard patterns used to calibrate the gas chromatograph

**DX** – Analyte concentration in the initial dilution exceeded instrument calibration range. The reported value for the qualified analyte is from an analysis run at higher dilution.

**Dup** - Blind Duplicate Sample

**E** – Concentration of analyte exceeded instrument calibration range

**J** – estimated concentration

**M** - Reported value may be biased due to apparent matrix interferences

**mg/m$^3$** - milligram per cubic meter

**ND** - Not detected

**SS** - Sample collected from stainless steel probe

**TVPH** - Total volatile petroleum hydrocarbons as gasoline

**R** – Value has been rejected and should not be used for qualitative or quantitative purposes

**U** – Detected in blank sample, 1997-1999 results changed to non detect; subsequent results reported

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# TABLE 2-8b. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, SOLVENT RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | Dilution Factor | Acetone mg/m$^3$ | 2-Butanone mg/m$^3$ | Carbon tetrachloride mg/m$^3$ | Chloro-benzene mg/m$^3$ | 1,1-Dichloro-ethane mg/m$^3$ | 1,1-Dichloro-ethene mg/m$^3$ | cis-1,2-Dichloroethene mg/m$^3$ | trans-1,2-Dichloroethene mg/m$^3$ | 1,4-Dioxane mg/m$^3$ | Hexachloro-butadiene mg/m$^3$ | 2-Hexanone mg/m$^3$ | Isopropanol mg/m$^3$ | 4-Methyl-2-Pentanone mg/m$^3$ | Methylene Chloride mg/m$^3$ | 1,1,2,2-Tetrachloro-ethane mg/m$^3$ | Tetrachloro-ethene mg/m$^3$ | Tetrahydro-furan mg/m$^3$ | 1,1,1-Trichloro-ethane mg/m$^3$ | 1,1,2-Trichloro-ethane mg/m$^3$ | Trichloro-ethene mg/m$^3$ | Vinyl Chloride mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-18 | Apr 2008 | 5 | 880 | ND(4.2) R | ND(1.3) R | ND(2.8) R | ND(2) R | ND(1.8) R | ND(1.7) R | ND(1.7) R | ND(1.7) R | ND(6.3) R | ND(19) R | ND(7.2) R | 9.7 R | ND(1.8) R | ND(1.5) R | ND(3) R | ND(3) R | ND(1.3) R | ND(2.4) R | ND(2.4) R | ND(2.4) R | ND(1.1) R |
| | | 10 | 11300 | ND(54) R | ND(17) R | ND(36) R | ND(26) R | ND(23) R | ND(22) R | ND(22) R | ND(22) R | ND(81) R | ND(240) R | ND(92) R | ND(56) R | ND(23) R | ND(20) R | ND(39) R | ND(38) R | ND(17) R | ND(31) R | ND(31) R | ND(30) R | ND(14) R |
| | | 15 | 16500 | ND(78) | ND(24) | ND(52) | ND(38) | ND(33) | ND(33) | ND(33) | ND(33) | ND(120) | ND(350) UJ | ND(140) | ND(81) | ND(34) | ND(29) | ND(57) | ND(56) | ND(24) | ND(45) | ND(45) | ND(44) | ND(21) |
| | | 15 Dup | 16900 | 2200 J | ND(25) | ND(53) | ND(39) | ND(34) | ND(34) | ND(34) | ND(34) | ND(120) | ND(360) UJ | ND(140) | ND(83) | ND(35) | ND(29) | ND(58) | ND(57) | ND(25) | ND(46) | ND(46) | ND(45) | ND(22) |
| | May 2008 | 5 | 69 | ND(3.3) R | ND(1) R | ND(2.2) R | ND(1.6) R | ND(1.4) R | ND(1.4) R | ND(1.4) R | ND(1.4) R | ND(5) R | ND(15) R | ND(5.6) R | ND(3.4) R | ND(1.4) R | ND(1.2) R | ND(2.4) R | ND(2.3) R | ND(1) R | ND(1.9) R | ND(1.9) R | ND(1.8) R | ND(0.88) R |
| | | 10 | 466 | ND(22) R | ND(6.9) R | ND(15) R | ND(11) R | ND(9.4) R | ND(9.2) R | ND(9.2) R | ND(9.2) R | ND(34) R | ND(99) R | ND(38) R | ND(23) R | ND(9.5) R | ND(8.1) R | ND(16) R | ND(16) R | ND(6.9) R | ND(13) R | ND(13) R | ND(12) R | ND(6) R |
| | Sep 2008 | 5 | 2290 | ND(110) | ND(34) | ND(72) | ND(53) | ND(46) | ND(45) | ND(45) | ND(45) | ND(160) | ND(490) | ND(190) | ND(110) | ND(47) | ND(40) | ND(79) | ND(78) | ND(34) | ND(62) | ND(62) | ND(62) | ND(29) |
| | | 10 | 2200 | ND(100) | ND(32) | ND(69) | ND(51) | ND(44) | ND(44) | ND(44) | ND(44) | ND(160) | ND(470) | ND(180) | ND(110) | ND(45) | ND(38) | ND(76) | ND(75) | ND(32) | ND(60) | ND(60) | ND(59) | ND(28) |
| | | 15 | 2800 | ND(130) | ND(41) | ND(88) | ND(64) | ND(57) | ND(56) | ND(56) | ND(56) | ND(200) | ND(600) | ND(230) | ND(140) | ND(57) | ND(49) | ND(96) | ND(95) | ND(41) | ND(76) | ND(76) | ND(75) | ND(36) |
| VW-20 | Apr 2008 | 5 | 2.33 | 0.016 | 0.0083 | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) UJ | ND(0.019) | 0.069 | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 10 | 2.33 | 0.03 | 0.0075 | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) UJ | ND(0.019) | 0.64 | ND(0.0048) | 0.011 | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 15 | 2.33 | ND(0.011) | 0.0098 | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) UJ | ND(0.019) | 0.052 | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 25 | 7.93 | ND(0.038) | 0.014 | ND(0.025) | ND(0.018) | ND(0.016) | ND(0.016) | ND(0.016) | ND(0.016) | ND(0.057) | ND(0.17) UJ | ND(0.065) | 0.1 | ND(0.016) | ND(0.014) | ND(0.027) | ND(0.027) | ND(0.012) | ND(0.022) | ND(0.022) | ND(0.021) | ND(0.01) |
| | | 25 Dup | 12.3 | ND(0.058) | ND(0.018) | ND(0.039) | ND(0.028) | ND(0.025) | ND(0.024) | ND(0.024) | ND(0.024) | ND(0.089) | ND(0.26) UJ | ND(0.1) | ND(0.06) | ND(0.025) | ND(0.021) | ND(0.042) | ND(0.042) | ND(0.018) | ND(0.034) | ND(0.034) | ND(0.033) | ND(0.016) |
| | Sep 2008 | 5 | 2.13 | 0.016 | 0.0034 | ND(0.0067) | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.045) | ND(0.017) | 0.012 | ND(0.0044) | ND(0.0037) | ND(0.0073) | ND(0.0072) | ND(0.0031) | ND(0.0058) | ND(0.0058) | ND(0.0057) | ND(0.0027) |
| | | 10 | 2.33 | 0.014 | ND(0.0034) | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | 0.03 | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 15 | 2.2 | ND(0.1) | ND(0.032) | ND(0.069) | ND(0.051) | ND(0.044) | ND(0.044) | ND(0.044) | ND(0.044) | ND(0.16) | ND(0.47) | ND(0.18) | ND(0.11) | ND(0.045) | ND(0.038) | ND(0.076) | ND(0.075) | ND(0.032) | ND(0.06) | ND(0.06) | ND(0.059) | ND(0.028) |
| | | 20 | 46.6 | ND(2.2) | ND(0.69) | ND(1.5) | ND(1.1) | ND(0.94) | ND(0.92) | ND(0.92) | ND(0.92) | ND(3.4) | ND(9.9) | ND(3.8) | ND(2.3) | ND(0.95) | ND(0.81) | ND(1.6) | ND(1.6) | ND(0.69) | ND(1.3) | ND(1.3) | ND(1.2) | ND(0.6) |
| | | 25 | 116 | ND(5.5) | ND(1.7) | ND(3.6) | ND(2.7) | ND(2.3) | ND(2.3) | ND(2.3) | ND(2.3) | ND(8.4) | ND(25) | ND(9.5) | ND(5.7) | ND(2.4) | ND(2) | ND(4) | ND(3.9) | ND(1.7) | ND(3.2) | ND(3.2) | ND(3.1) | ND(1.5) |
| | | 30 | 432 | ND(20) | ND(6.4) | ND(14) | ND(9.9) | ND(8.7) | ND(8.6) | ND(8.6) | ND(8.6) | ND(31) | ND(92) | ND(35) | ND(21) | ND(8.8) | ND(7.5) | ND(15) | ND(15) | ND(6.4) | ND(12) | ND(12) | ND(12) | ND(5.5) |
| | | 30 Dup | 432 | ND(20) | ND(6.4) | ND(14) | ND(9.9) | ND(8.7) | ND(8.6) | ND(8.6) | ND(8.6) | ND(31) | ND(92) | ND(35) | ND(21) | ND(8.8) | ND(7.5) | ND(15) | ND(15) | ND(6.4) | ND(12) | ND(12) | ND(12) | ND(5.5) |
| | | 35 | 404 | ND(19) | ND(6) | ND(13) | ND(9.3) | ND(8.2) | ND(8) | ND(8) | ND(8) | ND(29) | ND(86) | ND(33) | ND(20) | ND(8.3) | ND(7) | ND(14) | ND(14) | ND(6) | ND(11) | ND(11) | ND(11) | ND(5.2) |
| VW-21 | Apr 2008 | 5 | 484 | 3.8 | ND(0.71) | ND(1.5) | ND(1.1) | ND(0.98) | ND(0.96) | ND(0.96) | ND(0.96) | ND(3.5) | ND(10) UJ | ND(4) | 47 | ND(0.99) | ND(0.84) | ND(1.7) | ND(1.6) | ND(0.71) | ND(1.3) | ND(1.3) | ND(1.3) | ND(0.62) |
| | | 10 | 528 | ND(2.5) R | ND(0.78) R | ND(1.7) R | ND(1.2) R | ND(1.1) R | ND(1) R | ND(1) R | ND(1) R | ND(3.8) R | ND(11) R | ND(4.3) R | ND(2.6) R | ND(1.1) R | ND(0.92) R | ND(1.8) R | ND(1.8) R | ND(0.78) R | ND(1.4) R | ND(1.4) R | ND(1.4) R | ND(0.67) R |
| | | 15 | 9520 | ND(45) | ND(14) | ND(30) | ND(22) | ND(19) | ND(19) | ND(19) | ND(19) | ND(69) | ND(200) UJ | ND(78) | ND(47) | ND(19) | ND(16) | ND(33) | ND(32) | ND(14) | ND(26) | ND(26) | ND(26) | ND(12) |
| | | 20 | 8960 | ND(42) | ND(13) | ND(28) | ND(21) | ND(18) | ND(18) | ND(18) | ND(18) | ND(64) | ND(190) UJ | ND(73) | ND(44) | ND(18) | ND(16) | ND(31) | ND(30) | ND(13) | ND(24) | ND(24) | ND(24) | ND(11) |
| | May 2008 | 10 | 2.24 | 0.2 R | 0.098 R | ND(0.07) R | ND(0.052) R | ND(0.045) R | ND(0.044) R | ND(0.044) R | ND(0.044) R | ND(0.16) R | ND(0.48) R | ND(0.18) R | 0.11 R | ND(0.046) R | ND(0.039) R | ND(0.077) R | ND(0.076) R | ND(0.033) R | ND(0.061) R | ND(0.061) R | ND(0.06) R | ND(0.029) R |
| | Sep 2008 | 5 | 58.2 | ND(2.8) | ND(0.86) | ND(1.8) | ND(1.3) | ND(1.2) | ND(1.2) | ND(1.2) | ND(1.2) | ND(4.2) | ND(12) | ND(4.8) | ND(2.9) | ND(1.2) | ND(1) | ND(2) | ND(2) | ND(0.86) | ND(1.6) | ND(1.6) | ND(1.6) | ND(0.74) |
| | | 10 | 124 | ND(5.9) | ND(1.8) | ND(3.9) | ND(2.8) | ND(2.5) | ND(2.4) | ND(2.4) | ND(2.4) | ND(8.9) | ND(26) | ND(10) | ND(6.1) | ND(2.5) | ND(2.2) | ND(4.2) | ND(4.2) | ND(1.8) | ND(3.4) | ND(3.4) | ND(3.3) | ND(1.6) |
| | | 15 | 786 | ND(37) | ND(12) | ND(25) | ND(18) | ND(16) | ND(16) | ND(16) | ND(16) | ND(57) | ND(170) | ND(64) | ND(39) | ND(16) | ND(14) | ND(27) | ND(27) | ND(12) | ND(21) | ND(21) | ND(21) | ND(10) |
| | | 15 Dup | 786 | ND(37) | ND(12) | ND(25) | ND(18) | ND(16) | ND(16) | ND(16) | ND(16) | ND(57) | ND(170) | ND(64) | ND(39) | ND(16) | ND(14) | ND(27) | ND(27) | ND(12) | ND(21) | ND(21) | ND(21) | ND(10) |
| | | 20 | 710 | ND(34) | ND(10) | ND(22) | ND(16) | ND(14) | ND(14) | ND(14) | ND(14) | ND(51) | ND(150) | ND(58) | ND(35) | ND(14) | ND(12) | ND(24) | ND(24) | ND(10) | ND(19) | ND(19) | ND(19) | ND(9.1) |
| VW-93A | Mar 2005 | 5 | 2.33 | ND(0.011) | ND(0.0034) | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | Sep 2005 | 5 | 2.82 | 0.047 | 0.0062 | ND(0.0089) | ND(0.0065) | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0056) | ND(0.02) | ND(0.06) | ND(0.023) | ND(0.014) | ND(0.0058) | ND(0.0049) | ND(0.0097) | ND(0.0096) | ND(0.017) | ND(0.0077) | ND(0.0077) | ND(0.0076) | ND(0.0036) |
| | Apr 2008 | 5 | 2.42 | 0.021 | 0.0048 | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | 0.12 | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | ND(0.0036) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | Sep 2008 | 5 | 2.33 | 0.037 JB | 0.01 JB | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 5 Dup | 2.38 | 0.022 U | 0.0039 U | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | Dec 2008 | 5 | 2.02 | ND(0.0096) UJ | ND(0.003) | ND(0.0064) | ND(0.0046) | ND(0.0041) | ND(0.004) | ND(0.004) | ND(0.004) | ND(0.014) | ND(0.043) | ND(0.016) | ND(0.0099) | ND(0.0041) | ND(0.0035) | ND(0.0069) | ND(0.0068) | ND(0.003) | ND(0.0055) | ND(0.0055) | ND(0.0054) | ND(0.0026) |
| VW-93 | Mar 2005 | 10 | 2.96 | 0.015 | ND(0.0044) | ND(0.0093) | ND(0.0068) | ND(0.006) | ND(0.0059) | ND(0.0059) | ND(0.0059) | ND(0.021) | ND(0.063) | ND(0.024) | ND(0.014) | ND(0.0061) | ND(0.0051) | ND(0.01) | ND(0.01) | 0.0044 | ND(0.0081) | ND(0.0081) | ND(0.008) | ND(0.0038) |
| | | 15 | 2.76 | ND(0.013) | ND(0.0041) | ND(0.0087) | ND(0.0064) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0055) | ND(0.02) | ND(0.059) | ND(0.023) | ND(0.014) | ND(0.0056) | ND(0.0048) | ND(0.0095) | ND(0.0094) | ND(0.0041) | ND(0.0075) | ND(0.0075) | ND(0.0074) | ND(0.0035) |
| | | 20 | 2.33 | 0.017 | ND(0.0034) | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 20 Dup | 2.42 | 0.012 | ND(0.0036) | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | ND(0.012) | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | ND(0.0036) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 25 | 2.69 | 0.031 | 0.0077 | ND(0.0085) | ND(0.0062) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0053) | ND(0.019) | ND(0.057) | ND(0.022) | ND(0.013) | ND(0.0055) | ND(0.0047) | ND(0.0092) | ND(0.0091) | 0.004 | ND(0.0073) | ND(0.0073) | ND(0.0072) | ND(0.0034) |
| | | 30 | 2.53 | 0.02 | 0.0075 | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | ND(0.012) | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | 0.0044 | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 35 | 2.29 | 0.016 | 0.0043 | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | ND(0.011) | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.0034) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 40 | 2.24 | 0.016 | 0.0034 | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | 0.0035 | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 45 | 2.42 | 0.013 | ND(0.0036) | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | ND(0.012) | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | ND(0.0036) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 50 | 2.64 | 0.014 | 0.012 | ND(0.0083) | ND(0.0061) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.019) | ND(0.056) | ND(0.022) | ND(0.013) | ND(0.0054) | ND(0.0046) | ND(0.0091) | ND(0.009) | 0.023 | ND(0.0072) | ND(0.0072) | ND(0.0071) | ND(0.0034) |
| | | 55 | 2.58 | 0.32 | 0.06 | ND(0.0081) | ND(0.0059) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0051) | ND(0.018) | ND(0.055) | ND(0.021) | 0.032 | ND(0.0053) | ND(0.0045) | ND(0.0088) | ND(0.0088) | 0.0063 | ND(0.007) | ND(0.007) | ND(0.0069) | ND(0.0033) |
| | | 60 | 440 | ND(2.1) | ND(0.65) | ND(1.4) | ND(1) | ND(0.89) | ND(0.87) | ND(0.87) | ND(0.87) | ND(3.2) | ND(9.4) | ND(3.6) | ND(2.2) | ND(0.9) | ND(0.76) | ND(1.5) | ND(1.5) | ND(0.65) | ND(1.2) | ND(1.2) | ND(1.2) | ND(0.56) |

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# TABLE 2-8b. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, SOLVENT RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | Dilution Factor | Acetone mg/m$^3$ | 2-Butanone mg/m$^3$ | Carbon tetrachloride mg/m$^3$ | Chloro-benzene mg/m$^3$ | 1,1-Dichloro-ethane mg/m$^3$ | 1,1-Dichloro-ethene mg/m$^3$ | cis-1,2-Dichloroethene mg/m$^3$ | trans-1,2-Dichloroethene mg/m$^3$ | 1,4-Dioxane mg/m$^3$ | Hexachloro-butadiene mg/m$^3$ | 2-Hexanone mg/m$^3$ | Isopropanol mg/m$^3$ | 4-Methyl-2-Pentanone mg/m$^3$ | Methylene Chloride mg/m$^3$ | 1,1,2,2-Tetrachloro-ethane mg/m$^3$ | Tetrachloro-ethene mg/m$^3$ | Tetrahydro-furan mg/m$^3$ | 1,1,1-Trichloro-ethane mg/m$^3$ | 1,1,2-Trichloro-ethane mg/m$^3$ | Trichloro-ethene mg/m$^3$ | Vinyl Chloride mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-93 | Sep 2005 | 10 | 2.24 | 0.058 | 0.0049 | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | 0.048 | ND(0.0046) | 0.14 | ND(0.0077) | ND(0.0076) | ND(0.013) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 15 | 2.2 | 0.048 | 0.0034 | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | 0.046 | ND(0.0045) | 0.17 | ND(0.0076) | ND(0.0075) | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 20 | 2.2 | 0.04 | 0.0052 | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 25 | 2.24 | 0.039 | 0.0058 | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.013) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 30 | 2.24 | 0.055 | 0.0099 | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.013) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 35 | 2.29 | 0.035 | 0.0042 | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | ND(0.011) | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.014) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 40 | 2.2 | 0.027 | 0.0044 | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 45 | 2.2 | 0.013 U | ND(0.0032) | ND(0.0069) | 0.049 | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 50 | 2.24 | 0.018 | ND(0.0033) | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.013) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 55 | 2.24 | 0.012 U | ND(0.0033) | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.013) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 60 | 2.2 | 0.026 U | 0.0041 U | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | Oct 2005 | 30 | 2.2 | ND(0.01) | ND(0.0032) | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 35 | 2.13 | ND(0.01) | ND(0.0031) | ND(0.0067) | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.045) | ND(0.017) | ND(0.01) | ND(0.0044) | ND(0.0037) | ND(0.0073) | ND(0.0072) | ND(0.012) | ND(0.0058) | ND(0.0058) | ND(0.0057) | ND(0.0027) |
| | | 40 | 2.09 | ND(0.0099) | ND(0.0031) | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | ND(0.0071) | ND(0.012) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | | 45 | 2.16 | 0.012 | 0.0036 | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | ND(0.011) | ND(0.0044) | ND(0.0038) | ND(0.0074) | ND(0.0073) | ND(0.013) | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 50 | 2.2 | 0.017 | 0.0037 | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 60 | 2.13 | 0.023 | 0.0048 | ND(0.0067) | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.045) | ND(0.017) | ND(0.01) | ND(0.0044) | ND(0.0037) | ND(0.0073) | ND(0.0072) | ND(0.012) | ND(0.0058) | ND(0.0058) | ND(0.0057) | ND(0.0027) |
| | Apr 2008 | 10 | 25.3 | ND(0.12) J | ND(0.037) | ND(0.08) | ND(0.058) | ND(0.051) | ND(0.05) | ND(0.05) | ND(0.05) | ND(0.18) | ND(0.54) | ND(0.21) | 8.6 J | ND(0.052) | ND(0.044) | ND(0.087) | ND(0.086) | ND(0.037) | ND(0.069) | ND(0.069) | ND(0.068) | ND(0.032) |
| | | 10 Dup | 33.7 | ND(0.16) J | ND(0.05) | ND(0.11) | ND(0.078) | ND(0.068) | ND(0.067) | ND(0.067) | ND(0.067) | ND(0.24) | ND(0.72) | ND(0.28) | 14 J | ND(0.069) | ND(0.058) | ND(0.12) | ND(0.11) | ND(0.05) | ND(0.092) | ND(0.092) | ND(0.09) | ND(0.043) |
| | | 15 | 2.33 | 0.012 J | 0.02 | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | 0.011 JB | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 20 | 2.58 | ND(0.012) J | ND(0.0038) | ND(0.0081) | ND(0.0059) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0051) | ND(0.018) | ND(0.055) | ND(0.021) | ND(0.013) J | ND(0.0053) | ND(0.0045) | ND(0.0088) | ND(0.0088) | ND(0.0038) | ND(0.007) | ND(0.007) | ND(0.0069) | ND(0.0033) |
| | | 20 Dup | 2.58 | 0.029 J | 0.0048 | ND(0.0081) | ND(0.0059) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0051) | ND(0.018) | ND(0.055) | ND(0.021) | 0.052 J | ND(0.0053) | ND(0.0045) | ND(0.0088) | ND(0.0088) | ND(0.0038) | ND(0.007) | ND(0.007) | ND(0.0069) | ND(0.0033) |
| | | 25 | 2.33 | ND(0.011) J | 0.0037 | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 30 | 2.42 | ND(0.011) J | 0.0074 | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | ND(0.012) | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | 0.021 | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 35 | 2.29 | ND(0.011) | ND(0.0034) | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | ND(0.011) | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.0034) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 40 | 2.53 | 0.17 | 0.033 | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | 0.029 | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.0037) | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 45 | 2.38 | 0.048 | 0.0097 | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 50 | 2.47 | 0.028 | ND(0.0036) | ND(0.0078) | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) | ND(0.02) | ND(0.012) | ND(0.005) | 0.18 | ND(0.0085) | ND(0.0084) | ND(0.0036) | ND(0.0067) | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | | 55 | 2.53 | 0.084 | 0.031 | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | 0.082 | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | 0.0038 | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | Sep 2008 | 10 | 2.33 | 0.014 U | 0.007 JB | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | 0.012 U | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 15 | 2.24 | 0.011 U | 0.03 U | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | 0.011 U | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 20 | 2.53 | 0.016 U | 0.0039 U | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | 0.042 JB | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.0037) | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 20 Dup | 2.47 | 0.084 JB | 0.024 JB | ND(0.0078) | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) | ND(0.02) | 0.029 U | ND(0.005) | ND(0.0043) | ND(0.0085) | ND(0.0084) | ND(0.0036) | ND(0.0067) | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | | 25 | 2.24 | 0.017 U | 0.015 JB | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | 0.013 U | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 30 | 2.38 | 0.024 JB | 0.012 JB | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | 0.0059 | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 35 | 2.33 | 0.016 U | ND(0.0034) | ND(0.0073) | ND(0.0054) | 0.0052 | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | 0.01 | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 40 | 2.29 | 0.042 JB | 0.0098 JB | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | ND(0.011) | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | 0.0042 | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 45 | 2.47 | 0.014 U | 0.03 U | ND(0.0078) | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) | ND(0.02) | 0.088 JB | ND(0.005) | ND(0.0043) | ND(0.0085) | ND(0.0084) | 0.0041 | ND(0.0067) | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | | 50 | 2.33 | 0.014 U | 0.018 JB | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 55 | 2.33 | 0.021 U | 0.0077 JB | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | 0.012 U | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 60 | 2.38 | ND(0.011) | 0.013 JB | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | Dec 2008 | 10 | 2.16 | 0.3 J | 0.069 | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | ND(0.011) | ND(0.0044) | 0.0067 | ND(0.0074) | ND(0.0073) | ND(0.0032) | ND(0.0059) | ND(0.0059) | 0.019 | ND(0.0028) |
| | | 15 | 2.24 | 0.029 JB | 0.03 JB | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 20 | 2.02 | ND(0.0096) UJ | ND(0.003) | ND(0.0064) | ND(0.0046) | ND(0.0041) | ND(0.004) | ND(0.004) | ND(0.004) | ND(0.014) | ND(0.043) | ND(0.016) | ND(0.0099) | ND(0.0041) | ND(0.0035) | ND(0.0069) | ND(0.0068) | ND(0.003) | ND(0.0055) | ND(0.0055) | ND(0.0054) | ND(0.0026) |
| | | 25 | 2.09 | ND(0.0099) UJ | ND(0.0031) | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | ND(0.0071) | ND(0.0031) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | | 30 | 2.13 | 0.055 JB | 0.086 | ND(0.0067) | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.045) | ND(0.017) | ND(0.01) | ND(0.0044) | ND(0.0037) | ND(0.0073) | ND(0.0072) | 0.16 | ND(0.0058) | ND(0.0058) | ND(0.0057) | ND(0.0027) |
| | | 35 | 2.16 | 0.06 JB | 0.0088 JB | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | ND(0.011) | ND(0.0044) | ND(0.0038) | ND(0.0074) | ND(0.0073) | ND(0.0032) | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 40 | 2.09 | 0.34 J | 0.097 | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | ND(0.0071) | ND(0.0031) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | | 45 | 2.24 | ND(0.011) UJ | ND(0.0033) | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 50 | 2.13 | 0.091 JB | 0.018 JB | ND(0.0067) | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.045) | ND(0.017) | ND(0.01) | ND(0.0044) | ND(0.0037) | ND(0.0073) | ND(0.0072) | ND(0.0031) | ND(0.0058) | ND(0.0058) | ND(0.0057) | ND(0.0027) |
| | | 55 | 2.02 | ND(0.0096) UJ | ND(0.003) | ND(0.0064) | ND(0.0046) | ND(0.0041) | ND(0.004) | ND(0.004) | ND(0.004) | ND(0.014) | ND(0.043) | ND(0.016) | 0.038 J | ND(0.0041) | ND(0.0035) | ND(0.0069) | 0.024 J | ND(0.003) | ND(0.0055) | ND(0.0055) | ND(0.0054) | ND(0.0026) |
| | | 55 Dup | 2.16 | ND(0.01) UJ | ND(0.0032) | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | 0.029 J | ND(0.0044) | ND(0.0038) | ND(0.0074) | ND(0.0073) UJ | ND(0.0032) | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 60 | 2.09 | ND(0.0099) | ND(0.0031) | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | ND(0.0071) | ND(0.0031) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |

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# TABLE 2-8b. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, SOLVENT RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | Dilution Factor | Acetone mg/m$^3$ | 2-Butanone mg/m$^3$ | Carbon tetrachloride mg/m$^3$ | Chloro-benzene mg/m$^3$ | 1,1-Dichloro-ethane mg/m$^3$ | 1,1-Dichloro-ethene mg/m$^3$ | cis-1,2-Dichloroethene mg/m$^3$ | trans-1,2-Dichloroethene mg/m$^3$ | 1,4-Dioxane mg/m$^3$ | Hexachloro-butadiene mg/m$^3$ | 2-Hexanone mg/m$^3$ | Isopropanol mg/m$^3$ | 4-Methyl-2-Pentanone mg/m$^3$ | Methylene Chloride mg/m$^3$ | 1,1,2,2-Tetrachloro-ethane mg/m$^3$ | Tetrachloro-ethene mg/m$^3$ | Tetrahydro-furan mg/m$^3$ | 1,1,1-Trichloro-ethane mg/m$^3$ | 1,1,2-Trichloro-ethane mg/m$^3$ | Trichloro-ethene mg/m$^3$ | Vinyl Chloride mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-96A | Mar 2005 | 5 | 2.05 | 0.37 | 0.19 | ND(0.0064) | ND(0.0047) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | 0.11 | 0.024 | 0.0088 | ND(0.007) | ND(0.007) | 0.029 | ND(0.0056) | ND(0.0056) | ND(0.0055) | ND(0.0026) |
| | Sep 2005 | 5 | 2.96 | 0.035 | ND(0.0044) | ND(0.0093) | ND(0.0068) | ND(0.006) | ND(0.0059) | ND(0.0059) | ND(0.0059) | ND(0.021) | ND(0.063) | ND(0.024) | ND(0.014) | ND(0.0061) | 0.0057 | ND(0.01) | ND(0.01) | ND(0.017) | ND(0.0081) | ND(0.0081) | ND(0.008) | ND(0.0038) |
| | Jun/Jul 2006 | 5 | 2.33 | 0.011 | 0.0035 | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.014) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | Apr 2008 | 5 | 2.05 | 0.018 | ND(0.003) | ND(0.0064) | ND(0.0047) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | 0.28 | ND(0.0042) | ND(0.0036) | ND(0.007) | ND(0.007) | ND(0.003) | ND(0.0056) | ND(0.0056) | ND(0.0055) | ND(0.0026) |
| | Sep 2008 | 5 | 2.33 | 0.18 JB | 0.092 | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | 0.056 | 0.035 JB | 0.0071 | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | Dec 2008 | 5 | 7.63 | ND(0.36) | ND(0.11) | ND(0.24) | ND(0.18) | ND(0.15) | ND(0.15) | ND(0.15) | ND(0.15) | ND(0.55) | ND(1.6) | ND(0.62) | ND(0.38) | ND(0.16) | ND(0.13) | ND(0.26) | ND(0.26) | ND(0.11) | ND(0.21) | ND(0.21) | ND(0.2) | ND(0.098) |
| VW-96 | Mar 2005 | 10 | 2.13 | ND(0.01) | ND(0.0031) | ND(0.0067) | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.045) | ND(0.017) | ND(0.01) | ND(0.0044) | ND(0.0037) | ND(0.0073) | ND(0.0072) | ND(0.0031) | ND(0.0058) | ND(0.0058) | ND(0.0057) | ND(0.0027) |
| | | 15 | 2.16 | ND(0.01) | ND(0.0032) | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | ND(0.011) | ND(0.0044) | ND(0.0038) | 0.0086 | ND(0.0073) | ND(0.0032) | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 20 | 2.38 | ND(0.011) | ND(0.0035) | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 25 | 2.13 | ND(0.01) | ND(0.0031) | ND(0.0067) | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.045) | ND(0.017) | ND(0.01) | ND(0.0044) | ND(0.0037) | ND(0.0073) | 0.011 | ND(0.0031) | ND(0.0058) | ND(0.0058) | ND(0.0057) | ND(0.0027) |
| | | 30 | 1.75 | ND(0.0083) | ND(0.0026) | ND(0.0055) | ND(0.004) | ND(0.0035) | ND(0.0035) | ND(0.0035) | ND(0.0035) | ND(0.013) | ND(0.037) | ND(0.014) | ND(0.0086) | ND(0.0036) | ND(0.003) | ND(0.006) | 0.006 | ND(0.0026) | ND(0.0048) | ND(0.0048) | ND(0.0047) | ND(0.0022) |
| | | 35 | 1.79 | 0.011 R | ND(0.0026) R | ND(0.0056) R | ND(0.0041) R | ND(0.0036) R | ND(0.0035) R | ND(0.0035) R | ND(0.0035) R | ND(0.013) R | ND(0.038) R | ND(0.015) R | ND(0.0088) R | ND(0.0037) R | 0.1 R | ND(0.0061) R | ND(0.0061) R | ND(0.0026) R | ND(0.0049) R | ND(0.0049) R | ND(0.0048) R | ND(0.0023) R |
| | | 40 | 1.58 | ND(0.0075) | ND(0.0023) | ND(0.005) | ND(0.0036) | ND(0.0032) | ND(0.0031) | ND(0.0031) | ND(0.0031) | ND(0.011) | ND(0.034) | ND(0.013) | ND(0.0078) | ND(0.0032) | ND(0.0027) | ND(0.0054) | 0.0061 | ND(0.0023) | ND(0.0043) | ND(0.0043) | ND(0.0042) | ND(0.002) |
| | | 45 | 1.55 | ND(0.0074) | ND(0.0023) | ND(0.0049) | ND(0.0036) | ND(0.0031) | ND(0.0031) | ND(0.0031) | ND(0.0031) | ND(0.011) | ND(0.033) | ND(0.013) | ND(0.0076) | ND(0.0032) | ND(0.0027) | ND(0.0053) | 0.018 | ND(0.0023) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.002) |
| | | 50 | 336 | ND(1.6) | ND(0.5) | ND(1) | ND(0.77) | ND(0.68) | ND(0.67) | ND(0.67) | ND(0.67) | ND(2.4) | ND(7.2) | ND(2.8) | ND(1.6) | ND(0.69) | ND(0.58) | ND(1.2) | ND(1.1) | ND(0.5) | ND(0.92) | ND(0.92) | ND(0.9) | ND(0.43) |
| | | 50 Dup | 164 | ND(0.78) | ND(0.24) | ND(0.52) | ND(0.38) | ND(0.33) | ND(0.32) | ND(0.32) | ND(0.32) | ND(1.2) | ND(3.5) | ND(1.3) | ND(0.81) | ND(0.34) | ND(0.28) | ND(0.56) | ND(0.56) | ND(0.24) | ND(0.45) | ND(0.45) | ND(0.44) | ND(0.21) |
| | | 55 | 328 | ND(1.6) | ND(0.48) | ND(1) | ND(0.76) | ND(0.66) | ND(0.65) | ND(0.65) | ND(0.65) | ND(2.4) | ND(7) | ND(2.7) | ND(1.6) | ND(0.67) | ND(0.57) | ND(1.1) | ND(1.1) | ND(0.48) | ND(0.89) | ND(0.89) | ND(0.88) | ND(0.42) |
| | May 2005 | 30 | 2.2 | ND(0.01) | ND(0.0032) | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 35 | 2.2 | ND(0.01) | ND(0.0032) | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | 0.008 | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 35 Dup | 22.9 | ND(0.11) | ND(0.034) | ND(0.072) | ND(0.053) | ND(0.046) | ND(0.045) | ND(0.045) | ND(0.045) | ND(0.16) | ND(0.49) | ND(0.19) | ND(0.11) | ND(0.047) | ND(0.04) | ND(0.079) | 0.46 | ND(0.14) | ND(0.062) | ND(0.062) | ND(0.062) | ND(0.029) |
| | | 55 | 44.8 | ND(0.21) | ND(0.066) | ND(0.14) | ND(0.1) | ND(0.091) | ND(0.089) | ND(0.089) | ND(0.089) | ND(0.32) | ND(0.96) | ND(0.37) | ND(0.22) | ND(0.092) | ND(0.078) | ND(0.15) | ND(0.15) | ND(0.26) | ND(0.12) | ND(0.12) | ND(0.12) | ND(0.057) |
| | Sep 2005 | 10 | 2.09 | 0.041 | 0.0048 | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | ND(0.0071) | ND(0.012) | ND(0.0057) | ND(0.0057) | 0.007 | ND(0.0027) |
| | | 15 | 2.24 | 0.015 | ND(0.0033) | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.013) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 20 | 2.24 | 0.029 | 0.0051 | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.013) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 25 | 2.29 | 0.066 | 0.0076 | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | ND(0.011) | ND(0.0047) | ND(0.004) | ND(0.0079) | 0.0088 | ND(0.014) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 30 | 2.24 | 0.026 | 0.0046 | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.013) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 35 | 2.42 | 0.015 | ND(0.0036) | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | ND(0.012) | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | ND(0.014) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 40 | 45.8 | ND(0.22) | ND(0.068) | ND(0.14) | ND(0.1) | ND(0.093) | ND(0.091) | ND(0.091) | ND(0.091) | ND(0.33) | ND(0.98) | ND(0.38) | ND(0.22) | ND(0.094) | ND(0.08) | ND(0.16) | ND(0.16) | ND(0.27) | ND(0.12) | ND(0.12) | ND(0.12) | ND(0.058) |
| | | 45 | 93.2 | ND(0.44) | ND(0.14) | ND(0.29) | ND(0.21) | ND(0.19) | ND(0.18) | ND(0.18) | ND(0.18) | ND(0.67) | ND(2) | ND(0.76) | ND(0.46) | ND(0.19) | ND(0.16) | ND(0.32) | ND(0.32) | ND(0.55) | ND(0.25) | ND(0.25) | ND(0.25) | ND(0.12) |
| | | 50 | 572 | ND(2.7) | ND(0.84) | ND(1.8) | ND(1.3) | ND(1.2) | ND(1.1) | ND(1.1) | ND(1.1) | ND(4.1) | ND(12) | ND(4.7) | ND(2.8) | ND(1.2) | ND(0.99) | ND(2) | ND(1.9) | ND(3.4) | ND(1.6) | ND(1.6) | ND(1.5) | ND(0.73) |
| | | 55 | 1120 | ND(5.3) | ND(1.6) | ND(3.5) | ND(2.6) | ND(2.3) | ND(2.2) | ND(2.2) | ND(2.2) | ND(8.1) | ND(24) J | ND(9.2) | ND(5.5) | ND(2.3) | ND(1.9) | ND(3.8) | ND(3.8) | ND(6.6) | ND(3) | ND(3) | ND(3) | ND(1.4) |
| | | 55 Dup | 1470 | ND(7) | ND(2.2) | ND(4.6) | ND(3.4) | ND(3) | ND(2.9) | ND(2.9) | ND(2.9) | ND(10) | ND(31) J | ND(12) | ND(7.2) | ND(3) | ND(2.6) | ND(5) | ND(5) | ND(8.7) | ND(4) | ND(4) | ND(4) | ND(1.9) |
| | | 60 | 3730 | 29 | ND(5.5) | ND(12) | ND(8.6) | ND(7.5) | ND(7.4) | ND(7.4) | ND(7.4) | ND(27) | ND(80) J | ND(30) | 56 | ND(7.6) | 190 | ND(13) | ND(13) | ND(22) | ND(10) | ND(10) | ND(10) | ND(4.8) |
| | Oct 2005 | 20 | 2.05 | 0.012 | ND(0.003) | ND(0.0064) | ND(0.0047) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) J | ND(0.017) | ND(0.01) | ND(0.0042) | ND(0.0036) | ND(0.007) | ND(0.007) | ND(0.012) | ND(0.0056) | ND(0.0056) | ND(0.0055) | ND(0.0026) |
| | | 25 | 2.38 | ND(0.011) | ND(0.0035) | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) J | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.014) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 30 | 2.24 | ND(0.011) | ND(0.0033) | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) J | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.013) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 35 | 2.16 | ND(0.01) | ND(0.0032) | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) J | ND(0.018) | ND(0.011) | ND(0.0044) | ND(0.0038) | ND(0.0074) | ND(0.0073) | ND(0.013) | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 40 | 2.16 | ND(0.01) | ND(0.0032) | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) J | ND(0.018) | ND(0.011) | ND(0.0044) | ND(0.0038) | ND(0.0074) | ND(0.0073) | ND(0.013) | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 50 | 2.33 | ND(0.011) | ND(0.0034) | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) J | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | 0.014 | ND(0.014) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 50 Dup | 2.33 | ND(0.011) | ND(0.0034) | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) J | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | 0.014 | ND(0.014) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 60 | 2330 | 13 | ND(3.4) J | ND(7.3) J | ND(5.4) J | ND(4.7) J | ND(4.6) J | ND(4.6) J | ND(4.6) J | ND(17) J | ND(50) J | ND(19) J | 67 | ND(4.8) J | ND(4) J | ND(8) J | ND(7.9) J | ND(14) J | ND(6.4) J | ND(6.4) J | ND(6.3) J | ND(3) J |
| | Jun/Jul 2006 | 10 | 2.53 | 0.012 | 0.0046 | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | ND(0.012) | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.015) | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 20 | 52.8 | ND(0.25) J | ND(0.078) J | ND(0.17) J | ND(0.12) J | ND(0.11) J | ND(0.1) J | ND(0.1) J | ND(0.1) J | ND(0.38) J | ND(1.1) J | ND(0.43) J | ND(0.26) J | ND(0.11) J | ND(0.092) J | ND(0.18) J | ND(0.18) J | ND(0.31) J | ND(0.14) J | ND(0.14) J | ND(0.14) J | ND(0.067) J |
| | | 30 | 672 | ND(3.2) J | ND(0.99) J | ND(2.1) J | ND(1.5) J | ND(1.4) J | ND(1.3) J | ND(1.3) J | ND(1.3) J | ND(4.8) J | ND(14) J | ND(5.5) J | ND(3.3) J | ND(1.4) J | ND(1.2) J | ND(2.3) J | ND(2.3) J | ND(4) J | ND(1.8) J | ND(1.8) J | ND(1.8) J | ND(0.86) J |
| | | 40 | 826 | ND(3.9) J | ND(1.2) J | ND(2.6) J | ND(1.9) J | ND(1.7) J | ND(1.6) J | ND(1.6) J | ND(1.6) J | ND(6) J | ND(18) J | ND(6.8) J | ND(4.1) J | ND(1.7) J | ND(1.4) J | ND(2.8) J | ND(2.8) J | ND(4.9) J | ND(2.2) J | ND(2.2) J | ND(2.2) J | ND(1) J |
| | | 50 | 2640 | ND(12) J | ND(3.9) J | ND(8.3) J | ND(6.1) J | ND(5.3) J | ND(5.2) J | ND(5.2) J | ND(5.2) J | ND(19) J | ND(56) J | ND(22) J | ND(13) J | ND(5.4) J | 5.4 | ND(9.1) J | ND(9) J | ND(16) J | ND(7.2) J | ND(7.2) J | ND(7.1) J | ND(3.4) J |
| | | 55 | 3030 | ND(14) J | ND(4.5) J | ND(9.5) J | ND(7) J | ND(6.1) J | ND(6) J | ND(6) J | ND(6) J | ND(22) J | ND(65) J | ND(25) J | ND(15) J | 50 | 7.2 | ND(10) J | ND(10) J | ND(18) J | ND(8.3) J | ND(8.3) J | ND(8.1) J | ND(3.9) J |

US EPA ARCHIVE DOCUMENT

# TABLE 2-8b. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, SOLVENT RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | Dilution Factor | Acetone mg/m$^3$ | 2-Butanone mg/m$^3$ | Carbon tetrachloride mg/m$^3$ | Chloro-benzene mg/m$^3$ | 1,1-Dichloro-ethane mg/m$^3$ | 1,1-Dichloro-ethene mg/m$^3$ | cis-1,2-Dichloroethene mg/m$^3$ | trans-1,2-Dichloroethene mg/m$^3$ | 1,4-Dioxane mg/m$^3$ | Hexachloro-butadiene mg/m$^3$ | 2-Hexanone mg/m$^3$ | Isopropanol mg/m$^3$ | 4-Methyl-2-Pentanone mg/m$^3$ | Methylene Chloride mg/m$^3$ | 1,1,2,2-Tetrachloro-ethane mg/m$^3$ | Tetrachloro-ethene mg/m$^3$ | Tetrahydro-furan mg/m$^3$ | 1,1,1-Trichloro-ethane mg/m$^3$ | 1,1,2-Trichloro-ethane mg/m$^3$ | Trichloro-ethene mg/m$^3$ | Vinyl Chloride mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-96 | Apr 2008 | 10 | 2.64 | 0.015 | 0.0053 | ND(0.0083) | ND(0.0061) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.019) | ND(0.056) | ND(0.022) | ND(0.013) | ND(0.0054) | ND(0.0046) | ND(0.0091) | ND(0.009) | ND(0.0039) | ND(0.0072) | ND(0.0072) | ND(0.0071) | ND(0.0034) |
| | | 20 | 2.42 | ND(0.011) | ND(0.0036) | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | 0.012 | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | ND(0.0036) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 25 | 2.09 | 0.018 J | 0.0051 | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | 0.15 | ND(0.0043) | ND(0.0036) | ND(0.0072) | ND(0.0071) | ND(0.0031) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | | 30 | 2.02 | 0.02 J | ND(0.003) | ND(0.0064) | ND(0.0046) | ND(0.0041) | ND(0.004) | ND(0.004) | ND(0.004) | ND(0.014) | ND(0.043) | ND(0.016) | 0.27 | ND(0.0041) | 0.0051 | ND(0.0069) | ND(0.0068) | ND(0.003) | ND(0.0055) | ND(0.0055) | ND(0.0054) | ND(0.0026) |
| | | 35 | 2.47 | ND(0.012) | ND(0.0036) | ND(0.0078) | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) | ND(0.02) | 0.054 | ND(0.005) | ND(0.0043) | ND(0.0085) | ND(0.0084) | ND(0.0036) | ND(0.0067) | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | | 40 | 2.16 | 0.027 | 0.0053 | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | 0.34 | ND(0.0044) | ND(0.0038) | ND(0.0074) | 0.01 | ND(0.0032) | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 45 | 2.29 | 0.023 | ND(0.0034) | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | 0.018 | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.0034) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 50 | 2.64 | ND(0.012) | ND(0.0039) | ND(0.0083) | ND(0.0061) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.019) | ND(0.056) | ND(0.022) | ND(0.013) | ND(0.0054) | ND(0.0046) | ND(0.0091) | 0.0092 | ND(0.0039) | ND(0.0072) | ND(0.0072) | ND(0.0071) | ND(0.0034) |
| | | 55 | 129 | ND(0.61) | ND(0.19) | ND(0.4) | ND(0.3) | ND(0.26) | ND(0.26) | ND(0.26) | ND(0.26) | ND(0.93) | ND(2.8) | ND(1) | ND(0.63) | ND(0.26) | ND(0.22) | ND(0.44) | ND(0.44) | ND(0.19) | ND(0.35) | ND(0.35) | ND(0.35) | ND(0.16) |
| | Sep 2008 | 10 | 2.29 | 0.02 U | 0.0073 JB | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | ND(0.011) | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.0034) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 15 | 2.58 | ND(0.012) | ND(0.0038) | ND(0.0081) | ND(0.0059) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0051) | ND(0.018) | ND(0.055) | ND(0.021) | ND(0.013) | ND(0.0053) | ND(0.0045) | ND(0.0088) | ND(0.0088) | ND(0.0038) | ND(0.007) | ND(0.007) | ND(0.0069) | ND(0.0033) |
| | | 20 | 2.47 | ND(0.012) | ND(0.0036) | ND(0.0078) | ND(0.0057) | ND(0.005) | 0.0049 | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) | ND(0.02) | 0.012 U | ND(0.005) | ND(0.0043) | ND(0.0085) | 0.015 | ND(0.0036) | ND(0.0067) | ND(0.0067) | 0.05 | ND(0.0032) |
| | | 25 | 2.42 | 0.012 U | ND(0.0036) | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | 0.016 U | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | ND(0.0036) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 30 | 2.53 | 0.026 JB | 0.0059 U | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | ND(0.012) | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.0037) | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 35 | 2.38 | 0.032 JB | 0.0039 U | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | 0.012 U | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 40 | 2.47 | 0.012 U | ND(0.0036) | ND(0.0078) | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) | ND(0.02) | 0.013 U | ND(0.005) | ND(0.0043) | ND(0.0085) | ND(0.0084) | ND(0.0036) | ND(0.0067) | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | | 45 | 2.58 | ND(0.012) | ND(0.0038) | ND(0.0081) | ND(0.0059) | ND(0.0052) | ND(0.0051) | 0.011 | ND(0.0051) | ND(0.018) | ND(0.055) | ND(0.021) | ND(0.013) | ND(0.0053) | ND(0.0045) | ND(0.0088) | ND(0.0088) | ND(0.0038) | ND(0.007) | ND(0.007) | 0.24 | ND(0.0033) |
| | | 50 | 2.38 | 0.089 JB | ND(0.0035) | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | 0.025 U | ND(0.0049) | ND(0.0041) | ND(0.0082) | 0.015 | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 55 | 84.3 | ND(4) | ND(1.2) | ND(2.6) | ND(1.9) | ND(1.7) | ND(1.7) | ND(1.7) | ND(1.7) | ND(6.1) | ND(18) | ND(6.9) | ND(4.1) | ND(1.7) | ND(1.5) | ND(2.9) | ND(2.8) | ND(1.2) | ND(2.3) | ND(2.3) | ND(2.3) | ND(1.1) |
| | | 60 | 2.42 | ND(11) | ND(3.6) | ND(7.6) | ND(5.6) | ND(4.9) | ND(4.8) | ND(4.8) | ND(4.8) | ND(17) | ND(52) | ND(20) | ND(12) | ND(5) | ND(4.2) | ND(8.3) | ND(8.2) | ND(3.6) | ND(6.6) | ND(6.6) | ND(6.5) | ND(3.1) |
| | Dec 2008 | 10 | 5.6 | ND(0.27) | ND(0.082) | ND(0.18) | ND(0.13) | ND(0.11) | ND(0.11) | ND(0.11) | ND(0.11) | ND(0.4) | ND(1.2) | ND(0.46) | ND(0.28) | ND(0.11) | ND(0.097) | ND(0.19) | ND(0.19) | ND(0.082) | ND(0.15) | ND(0.15) | ND(0.15) | ND(0.072) |
| | | 15 | 7.77 | ND(0.27) | ND(0.082) | ND(0.18) | ND(0.13) | ND(0.11) | ND(0.11) | ND(0.11) | ND(0.11) | ND(0.4) | ND(1.2) | ND(0.46) | ND(0.28) | ND(0.11) | ND(0.097) | ND(0.19) | ND(0.19) | ND(0.082) | ND(0.15) | ND(0.15) | ND(0.15) | ND(0.072) |
| | | 20 | 7.47 | ND(0.35) | ND(0.11) | ND(0.24) | ND(0.17) | ND(0.15) | ND(0.15) | ND(0.15) | ND(0.15) | ND(0.54) | ND(1.6) | ND(0.61) | ND(0.37) | ND(0.15) | ND(0.13) | ND(0.26) | ND(0.25) | ND(0.11) | ND(0.2) | ND(0.2) | ND(0.2) | ND(0.095) |
| | | 25 | 8.2 | ND(0.39) | ND(0.12) | ND(0.26) | ND(0.19) | ND(0.16) | ND(0.16) | ND(0.16) | ND(0.16) | ND(0.59) | ND(1.7) | ND(0.67) | ND(0.4) | ND(0.17) | ND(0.14) | ND(0.28) | ND(0.28) | ND(0.12) | ND(0.22) | ND(0.22) | ND(0.22) | ND(0.1) |
| | | 30 | 17.4 | ND(0.83) | ND(0.26) | ND(0.55) | ND(0.4) | ND(0.35) | ND(0.34) | ND(0.34) | ND(0.34) | ND(1.2) | ND(3.7) | ND(1.4) | ND(0.86) | ND(0.36) | ND(0.3) | ND(0.6) | ND(0.59) | ND(0.26) | ND(0.47) | ND(0.47) | ND(0.47) | ND(0.22) |
| | | 35 | 18.3 | ND(0.87) | ND(0.27) | ND(0.58) | ND(0.42) | ND(0.37) | ND(0.36) | ND(0.36) | ND(0.36) | ND(1.3) | ND(3.9) | ND(1.5) | ND(0.9) | ND(0.37) | ND(0.32) | ND(0.63) | ND(0.62) | ND(0.27) | ND(0.5) | ND(0.5) | ND(0.49) | ND(0.23) |
| | | 40 | 23.3 | ND(1.1) | ND(0.34) | ND(0.73) | ND(0.54) | ND(0.47) | ND(0.46) | ND(0.46) | ND(0.46) | ND(1.7) | ND(5) | ND(1.9) | ND(1.1) | ND(0.48) | ND(0.4) | ND(0.8) | ND(0.79) | ND(0.34) | ND(0.64) | ND(0.64) | ND(0.63) | ND(0.3) |
| | | 45 | 34.6 | ND(1.6) | ND(0.51) | ND(1.1) | ND(0.8) | ND(0.7) | ND(0.68) | ND(0.68) | ND(0.68) | ND(2.5) | ND(7.4) | ND(2.8) | ND(1.7) | ND(0.71) | ND(0.6) | ND(1.2) | ND(1.2) | ND(0.51) | ND(0.94) | ND(0.94) | ND(0.93) | ND(0.44) |
| | | 50 | 106 | ND(5) | ND(1.6) | ND(3.3) | ND(2.4) | ND(2.1) | ND(2.1) | ND(2.1) | ND(2.1) | ND(7.6) | ND(23) | ND(8.7) | ND(5.2) | ND(2.2) | ND(1.8) | ND(3.6) | ND(3.6) | ND(1.6) | ND(2.9) | ND(2.9) | ND(2.8) | ND(1.4) |
| | | 50 Dup | 108 | ND(5.1) | ND(1.6) | ND(3.4) | ND(2.5) | ND(2.2) | ND(2.1) | ND(2.1) | ND(2.1) | ND(7.8) | ND(23) | ND(8.8) | ND(5.3) | ND(2.2) | ND(1.9) | ND(3.7) | ND(3.7) | ND(1.6) | ND(2.9) | ND(2.9) | ND(2.9) | ND(1.4) |
| | | 55 | 104 | ND(4.9) | ND(1.5) | ND(3.3) | ND(2.4) | ND(2.1) | ND(2.1) | ND(2.1) | ND(2.1) | ND(7.5) | ND(22) | ND(8.5) | ND(5.1) | ND(2.1) | ND(1.8) | ND(3.6) | ND(3.5) | ND(1.5) | ND(2.8) | ND(2.8) | ND(2.8) | ND(1.3) |
| | | 60 | 220 | ND(10) | ND(3.2) | ND(6.9) | ND(5.1) | ND(4.4) | ND(4.4) | ND(4.4) | ND(4.4) | ND(16) | ND(47) | ND(18) | ND(11) | ND(4.5) | ND(3.8) | ND(7.6) | ND(7.5) | ND(3.2) | ND(6) | ND(6) | ND(5.9) | ND(2.8) |
| VW-99A | Mar 2005 | 5 | 2.2 | 0.022 | 0.0047 | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | 0.014 | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 10 | 2.29 | ND(0.011) | ND(0.0034) | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | ND(0.011) | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.0034) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | Apr 2008 | 5 | 2.42 | 0.022 | 0.0057 | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | ND(0.012) | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | ND(0.0036) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 5 Dup | 2.38 | 0.023 | ND(0.0035) | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 10 | 2.38 | ND(0.011) | ND(0.0035) | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.0035) | ND(0.0065) | ND(0.0065) | 0.0071 | ND(0.003) |
| | Sep 2008 | 5 | 2.2 | 0.042 JB | 0.011 JB | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | 0.012 U | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.0032) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 10 | 2.2 | 0.035 JB | 0.015 JB | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | 0.024 U | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.0032) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | Dec 2008 | 5 | 2.2 | ND(0.01) | ND(0.0032) | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.0032) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| VW-99 | Mar 2005 | 10 | 1.55 | 0.0094 | 0.0023 | ND(0.0049) | ND(0.0036) | ND(0.0031) | ND(0.0031) | ND(0.0031) | ND(0.0031) | ND(0.011) | ND(0.033) | ND(0.013) | ND(0.0076) | ND(0.0032) | ND(0.0027) | ND(0.0053) | ND(0.0052) | ND(0.0023) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.002) |
| | | 15 | 1.46 | 0.0073 | ND(0.0022) | ND(0.0046) | ND(0.0034) | ND(0.003) | ND(0.0029) | ND(0.0029) | ND(0.0029) | ND(0.01) | ND(0.031) | ND(0.012) | ND(0.0072) | ND(0.003) | ND(0.0025) | ND(0.005) | ND(0.005) | ND(0.0022) | ND(0.004) | ND(0.004) | ND(0.0039) | ND(0.0019) |
| | | 20 | 1.55 | ND(0.0074) | ND(0.0023) | ND(0.0049) | ND(0.0036) | ND(0.0031) | ND(0.0031) | ND(0.0031) | ND(0.0031) | ND(0.011) | ND(0.033) | ND(0.013) | ND(0.0076) | ND(0.0032) | ND(0.0027) | ND(0.0053) | 0.0066 | ND(0.0023) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.002) |
| | | 25 | 1.52 | ND(0.0072) | ND(0.0022) | ND(0.0048) | ND(0.0035) | ND(0.0031) | ND(0.003) | ND(0.003) | ND(0.003) | ND(0.011) | ND(0.032) | ND(0.012) | ND(0.0075) | ND(0.0031) | ND(0.0026) | ND(0.0052) | 0.011 | ND(0.0022) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.0019) |
| | | **30** | **1.55** | **ND(0.0074)** | **ND(0.0023)** | **ND(0.0049)** | **ND(0.0036)** | **ND(0.0031)** | **ND(0.0031)** | **ND(0.0031)** | **ND(0.0031)** | **ND(0.011)** | **ND(0.033)** | **ND(0.013)** | **ND(0.0076)** | **ND(0.0032)** | **ND(0.0027)** | **ND(0.0053)** | **0.031** | **ND(0.0023)** | **ND(0.0042)** | **ND(0.0042)** | **ND(0.0042)** | **ND(0.002)** |
| | | 35 | 1.61 | ND(0.0076) | ND(0.0024) | ND(0.0051) | ND(0.0037) | ND(0.0032) | ND(0.0032) | ND(0.0032) | ND(0.0032) | ND(0.012) | ND(0.034) | ND(0.013) | ND(0.0079) | ND(0.0033) | ND(0.0028) | ND(0.0055) | 0.05 | ND(0.0024) | ND(0.0044) | ND(0.0044) | ND(0.0043) | ND(0.002) |
| | | 40 | 52.8 | ND(0.25) | ND(0.078) | ND(0.17) | ND(0.12) | ND(0.11) | ND(0.1) | ND(0.1) | ND(0.1) | ND(0.38) | ND(1.1) | ND(0.43) | ND(0.26) | ND(0.11) | ND(0.092) | ND(0.18) | ND(0.18) | ND(0.078) | ND(0.14) | ND(0.14) | ND(0.14) | ND(0.067) |
| | | 45 | 242 | ND(1.1) | ND(0.36) | ND(0.76) | ND(0.56) | ND(0.49) | ND(0.48) | ND(0.48) | ND(0.48) | ND(1.7) | ND(5.2) | ND(2) | ND(1.2) | ND(0.5) | ND(0.42) | ND(0.83) | ND(0.82) | ND(0.36) | ND(0.66) | ND(0.66) | ND(0.65) | ND(0.31) |
| | | 45 Dup | 229 | ND(1.1) | ND(0.34) | ND(0.72) | ND(0.53) | ND(0.46) | ND(0.45) | ND(0.45) | ND(0.45) | ND(1.6) | ND(4.9) | ND(1.9) | ND(1.1) | ND(0.47) | ND(0.4) | ND(0.79) | ND(0.78) | ND(0.34) | ND(0.62) | ND(0.62) | ND(0.62) | ND(0.29) |
| | | 50 | 1010 | ND(4.8) | ND(1.5) | ND(3.2) | ND(2.3) | ND(2) | ND(2) | ND(2) | ND(2) | ND(7.3) | ND(22) | ND(8.3) | ND(5) | ND(2.1) | ND(1.8) | ND(3.5) | ND(3.4) | ND(1.5) | ND(2.8) | ND(2.8) | ND(2.7) | ND(1.3) |
| | | 55 | 1550 | ND(7.4) | ND(2.3) | ND(4.9) | ND(3.6) | ND(3.1) | ND(3.1) | ND(3.1) | ND(3.1) | ND(11) | ND(33) | ND(13) | ND(7.6) | ND(3.2) | ND(2.7) | ND(5.3) | ND(5.3) | ND(2.3) | ND(4.2) | ND(4.2) | ND(4.2) | ND(2) |

US EPA ARCHIVE DOCUMENT

# TABLE 2-8b. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, SOLVENT RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | Dilution Factor | Acetone mg/m$^3$ | 2-Butanone mg/m$^3$ | Carbon tetrachloride mg/m$^3$ | Chloro-benzene mg/m$^3$ | 1,1-Dichloro-ethane mg/m$^3$ | 1,1-Dichloro-ethene mg/m$^3$ | cis-1,2-Dichloroethene mg/m$^3$ | trans-1,2-Dichloroethene mg/m$^3$ | 1,4-Dioxane mg/m$^3$ | Hexachloro-butadiene mg/m$^3$ | 2-Hexanone mg/m$^3$ | Isopropanol mg/m$^3$ | 4-Methyl-2-Pentanone mg/m$^3$ | Methylene Chloride mg/m$^3$ | 1,1,2,2-Tetrachloro-ethane mg/m$^3$ | Tetrachloro-ethene mg/m$^3$ | Tetrahydro-furan mg/m$^3$ | 1,1,1-Trichloro-ethane mg/m$^3$ | 1,1,2-Trichloro-ethane mg/m$^3$ | Trichloro-ethene mg/m$^3$ | Vinyl Chloride mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-99 | Sep 2005 | 10 | 2.2 | 0.035 | 0.0076 | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) J | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 15 | 2.16 | 0.021 | ND(0.0032) | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) J | ND(0.018) | ND(0.011) | ND(0.0044) | ND(0.0038) | ND(0.0074) | 0.0088 | ND(0.013) | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 20 | 2.24 | 0.012 | ND(0.0033) | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) J | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | 0.014 | ND(0.013) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 25 | 2.24 | 0.016 | 0.0039 | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) J | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | 0.02 | ND(0.013) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 30 | 2.29 | 0.022 | 0.0051 | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) J | ND(0.019) | ND(0.011) | ND(0.0047) | ND(0.004) | ND(0.0079) | 0.02 | ND(0.014) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 35 | 2.2 | 0.021 | 0.004 | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) J | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | 0.035 | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 40 | 22.4 | ND(0.11) | ND(0.033) | ND(0.07) | ND(0.052) | ND(0.045) | ND(0.044) | ND(0.044) | ND(0.044) | ND(0.16) | ND(0.48) J | ND(0.18) | ND(0.11) | ND(0.046) | ND(0.039) | ND(0.077) | ND(0.076) | ND(0.13) | ND(0.061) | ND(0.061) | ND(0.06) | ND(0.029) |
| | | 45 | 440 | ND(2.1) | ND(0.65) | ND(1.4) | ND(1) | ND(0.89) | ND(0.87) | ND(0.87) | ND(0.87) | ND(3.2) | ND(9.4) J | ND(3.6) | ND(2.2) | ND(0.9) | ND(0.76) | ND(1.5) | ND(1.5) | ND(2.6) | ND(1.2) | ND(1.2) | ND(1.2) | ND(0.56) |
| | | 50 | 2160 | ND(10) | ND(3.2) | ND(6.8) | ND(5) | ND(4.4) | ND(4.3) | ND(4.3) | ND(4.3) | ND(16) | ND(46) J | ND(18) | ND(11) | ND(4.4) | ND(3.8) | ND(7.4) | ND(7.3) | ND(13) | ND(5.9) | ND(5.9) | ND(5.8) | ND(2.8) |
| | | 50 Dup | 2330 | ND(11) | ND(3.4) | ND(7.3) | ND(5.4) | ND(4.7) | ND(4.6) | ND(4.6) | ND(4.6) | ND(17) | ND(50) J | ND(19) | ND(11) | ND(4.8) | ND(4) | ND(8) | ND(7.9) | ND(14) | ND(6.4) | ND(6.4) | ND(6.3) | ND(3) |
| | | 55 | 4400 | ND(21) | ND(6.5) | ND(14) | ND(10) | ND(8.9) | ND(8.7) | ND(8.7) | ND(8.7) | ND(32) | ND(94) J | ND(36) | ND(22) | ND(9) | ND(7.6) | ND(15) | ND(15) | ND(26) | ND(12) | ND(12) | ND(12) | ND(5.6) |
| | | 60 | 2240 | ND(11) | ND(3.3) | ND(7) | ND(5.2) | ND(4.5) | ND(4.4) | ND(4.4) | ND(4.4) | ND(16) | ND(48) J | ND(18) | ND(11) | ND(4.6) | ND(3.9) | ND(7.7) | ND(7.6) | ND(13) | ND(6.1) | ND(6.1) | ND(6) | ND(2.9) |
| | Oct 2005 | 20 | 2.09 | ND(0.0099) | ND(0.0031) | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | 0.01 | ND(0.012) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | | 25 | 2.05 | ND(0.0097) | ND(0.003) | ND(0.0064) | ND(0.0047) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0042) | ND(0.0036) | ND(0.007) | 0.022 | ND(0.012) | ND(0.0056) | ND(0.0056) | ND(0.0055) | ND(0.0026) |
| | | 30 | 2.13 | 0.01 | 0.0034 | ND(0.0067) | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.045) | ND(0.017) | ND(0.01) | ND(0.0044) | ND(0.0037) | ND(0.0073) | 0.032 | ND(0.012) | ND(0.0058) | ND(0.0058) | ND(0.0057) | ND(0.0027) |
| | | 35 | 2.16 | ND(0.01) | ND(0.0032) | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | ND(0.011) | ND(0.0044) | ND(0.0038) | ND(0.0074) | 0.032 | ND(0.013) | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 40 | 2.09 | 0.011 | ND(0.0031) | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) J | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | 0.046 J | ND(0.012) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | | 40 Dup | 3.46 | ND(0.016) | ND(0.0051) | ND(0.011) | ND(0.008) | ND(0.007) | ND(0.0068) | ND(0.0068) | ND(0.0068) | ND(0.025) | ND(0.074) J | ND(0.028) | ND(0.017) | ND(0.0071) | ND(0.006) | ND(0.012) | 0.029 J | ND(0.02) | ND(0.0094) | ND(0.0094) | ND(0.0093) | ND(0.0044) |
| | | 50 | 2.09 | ND(0.0099) | ND(0.0031) | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) J | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | 0.048 | ND(0.012) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | | 60 | 1060 | 6.7 | ND(1.6) J | ND(3.3) J | ND(2.4) J | ND(2.1) J | ND(2.1) J | ND(2.1) J | ND(2.1) J | ND(7.6) J | ND(23) J | ND(8.7) J | 30 | ND(2.2) J | ND(1.8) J | ND(3.6) J | ND(3.6) J | ND(6.2) J | ND(2.9) J | ND(2.9) J | ND(2.8) J | ND(1.4) J |
| | | 60 Dup | 1080 | 7.1 | ND(1.6) J | ND(3.4) J | ND(2.5) J | ND(2.2) J | ND(2.1) J | ND(2.1) J | ND(2.1) J | ND(7.8) J | ND(23) J | ND(8.8) J | 33 | ND(2.2) J | ND(1.9) J | ND(3.7) J | ND(3.7) J | ND(6.4) J | ND(2.9) J | ND(2.9) J | ND(2.9) J | ND(1.4) J |
| | Jun/Jul 2006 | 10 | 2.24 | 0.024 J | 0.0068 | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) J | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.013) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 20 | 2.29 | 0.024 J | 0.0057 | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) J | ND(0.019) | ND(0.011) | ND(0.0047) | ND(0.004) | ND(0.0079) | 0.016 | ND(0.014) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 30 | 2.42 | 0.024 J | 0.0073 | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) J | ND(0.02) | ND(0.012) | ND(0.005) | ND(0.0042) | ND(0.0083) | 0.034 | ND(0.014) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 40 | 2.76 | 0.11 J | 0.047 | ND(0.0087) | ND(0.0064) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0055) | ND(0.02) | ND(0.059) J | 0.031 | ND(0.014) | ND(0.0056) | ND(0.0048) | ND(0.0095) | 0.06 | ND(0.016) | ND(0.0075) | ND(0.0075) | ND(0.0074) | ND(0.0035) |
| | | 50 | 1080 | 6.9 J | ND(1.6) J | ND(3.4) J | ND(2.5) J | ND(2.2) J | ND(2.1) J | ND(2.1) J | ND(2.1) J | ND(7.8) J | ND(23) J | ND(8.8) J | ND(5.3) J | ND(2.2) J | 7.5 | ND(3.7) J | ND(3.7) J | ND(6.4) J | ND(2.9) J | ND(2.9) J | ND(2.9) J | ND(1.4) J |
| | | 50 Dup | 952 | 6.6 J | ND(1.4) J | ND(3) J | ND(2.2) J | ND(1.9) J | ND(1.9) J | ND(1.9) J | ND(1.9) J | ND(6.9) J | ND(20) J | ND(7.8) J | ND(4.7) J | ND(1.9) J | 5.9 | ND(3.3) J | ND(3.2) J | ND(5.6) J | ND(2.6) J | ND(2.6) J | ND(2.6) J | ND(1.2) J |
| | | 60 | 2.38 | 0.061 J | 0.0092 | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) J | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.014) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | Apr 2008 | 10 | 2.47 | ND(0.012) | ND(0.0036) | ND(0.0078) | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) | ND(0.02) | 0.016 | ND(0.005) | ND(0.0043) | ND(0.0085) | ND(0.0084) | ND(0.0036) | ND(0.0067) | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | | 15 | 2.02 | 0.0096 | ND(0.003) | ND(0.0064) | ND(0.0046) | ND(0.0041) | ND(0.004) | ND(0.004) | ND(0.004) | ND(0.014) | ND(0.043) | ND(0.016) | 0.31 | ND(0.0041) | 0.0074 | ND(0.0069) | ND(0.0068) | ND(0.003) | ND(0.0055) | ND(0.0055) | ND(0.0054) | ND(0.0026) |
| | | 20 | 2.24 | 0.014 | 0.0049 | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | 0.0042 | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 25 | 2.38 | 0.04 | 0.0058 | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | 0.0087 | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 30 | 2.53 | 0.045 | 0.0084 | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | 0.024 | ND(0.0052) | ND(0.0044) | ND(0.0087) | 0.016 | ND(0.0037) | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 35 | 22.9 | ND(0.11) | ND(0.034) | ND(0.072) | ND(0.053) | ND(0.046) | ND(0.045) | ND(0.045) | ND(0.045) | ND(0.16) | ND(0.49) | ND(0.19) | ND(0.11) | ND(0.047) | ND(0.04) | ND(0.079) | ND(0.078) | ND(0.034) | ND(0.062) | ND(0.062) | ND(0.062) | ND(0.029) |
| | | 40 | 22.4 | ND(0.11) | ND(0.033) | ND(0.07) | ND(0.052) | ND(0.045) | ND(0.044) | ND(0.044) | ND(0.044) | ND(0.16) | ND(0.48) | ND(0.18) | ND(0.11) | ND(0.046) | ND(0.039) | ND(0.077) | ND(0.076) | ND(0.033) | ND(0.061) | ND(0.061) | ND(0.06) | ND(0.029) |
| | | 45 | 46.6 | ND(0.22) | ND(0.069) | ND(0.15) | ND(0.11) | ND(0.094) | ND(0.092) | ND(0.092) | ND(0.092) | ND(0.34) | ND(0.99) | ND(0.38) | ND(0.23) | ND(0.095) | ND(0.081) | ND(0.16) | ND(0.16) | ND(0.069) | ND(0.13) | ND(0.13) | ND(0.12) | ND(0.06) |
| | | 50 | 110 | ND(0.52) | ND(0.16) | ND(0.35) | ND(0.25) | ND(0.22) | ND(0.22) | ND(0.22) | ND(0.22) | ND(0.79) | ND(2.3) | ND(0.9) | ND(0.54) | ND(0.22) | ND(0.19) | ND(0.38) | ND(0.37) | ND(0.16) | ND(0.3) | ND(0.3) | ND(0.3) | ND(0.14) |
| | | 50 Dup | 110 | ND(0.52) | ND(0.16) | ND(0.35) | ND(0.25) | ND(0.22) | ND(0.22) | ND(0.22) | ND(0.22) | ND(0.79) | ND(2.3) | ND(0.9) | ND(0.54) | ND(0.22) | ND(0.19) | ND(0.38) | ND(0.37) | ND(0.16) | ND(0.3) | ND(0.3) | ND(0.3) | ND(0.14) |
| | Sep 2008 | 10 | 2.24 | 0.02 U | 0.0066 JB | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 15 | 2.29 | ND(0.011) | ND(0.0034) | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | 0.013 U | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.0034) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 20 | 2.58 | 0.058 JB | 0.03 JB | ND(0.0081) | ND(0.0059) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0051) | ND(0.018) | ND(0.055) | ND(0.021) | ND(0.013) | ND(0.0053) | ND(0.0045) | ND(0.0088) | 0.012 | ND(0.0038) | ND(0.007) | ND(0.007) | ND(0.0069) | ND(0.0033) |
| | | 25 | 2.24 | 0.05 JB | 0.018 JB | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | 0.013 U | ND(0.0046) | ND(0.0039) | ND(0.0077) | 0.016 | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 30 | 2.13 | ND(0.01) | ND(0.0031) | ND(0.0067) | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.045) | ND(0.017) | ND(0.01) | ND(0.0044) | ND(0.0037) | ND(0.0073) | 0.019 | ND(0.0031) | ND(0.0058) | ND(0.0058) | ND(0.0057) | ND(0.0027) |
| | | 35 | 2.38 | ND(0.011) UJ | ND(0.0035) | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | 0.029 | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 35 Dup | 2.38 | 0.012 U | ND(0.0035) | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | 0.014 U | ND(0.0049) | ND(0.0041) | ND(0.0082) | 0.028 | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 40 | 2.29 | 0.016 U | 0.0034 U | 0.0078 | ND(0.0053) | 0.011 | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | ND(0.011) | ND(0.0047) | 0.0048 | ND(0.0079) | 0.039 | ND(0.0034) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 45 | 3.73 | ND(0.18) | ND(0.055) | ND(0.12) | ND(0.086) | ND(0.075) | ND(0.074) | ND(0.074) | ND(0.074) | ND(0.27) | ND(0.8) | ND(0.3) | ND(0.18) | ND(0.076) | ND(0.065) | ND(0.13) | ND(0.13) | ND(0.055) | ND(0.1) | ND(0.1) | ND(0.1) | ND(0.048) |
| | | 50 | 16 | ND(0.76) | ND(0.24) | ND(0.5) | ND(0.37) | ND(0.32) | ND(0.32) | ND(0.32) | ND(0.32) | ND(1.2) | ND(3.4) | ND(1.3) | ND(0.79) | ND(0.33) | ND(0.28) | ND(0.55) | ND(0.54) | ND(0.24) | ND(0.44) | ND(0.44) | ND(0.43) | ND(0.2) |
| | | 55 | 74.7 | ND(3.5) | ND(1.1) | ND(2.4) | ND(1.7) | ND(1.5) | ND(1.5) | ND(1.5) | ND(1.5) | ND(5.4) | ND(16) | ND(6.1) | ND(3.7) | ND(1.5) | ND(1.3) | ND(2.6) | ND(2.5) | ND(1.1) | ND(2) | ND(2) | ND(2) | ND(0.95) |
| | | 55 Dup | 74.4 | ND(3.5) | ND(1.1) | ND(2.4) | ND(1.7) | ND(1.5) | ND(1.5) | ND(1.5) | ND(1.5) | ND(5.4) | ND(16) | ND(6.1) | ND(3.7) | ND(1.5) | ND(1.3) | ND(2.6) | ND(2.5) | ND(1.1) | ND(2) | ND(2) | ND(2) | ND(0.95) |
| | | 60 | 2.29 | 0.032 JB | 0.0058 U | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | ND(0.011) UJ | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.0034) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |

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# TABLE 2-8b. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, SOLVENT RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | Dilution Factor | Acetone mg/m$^3$ | 2-Butanone mg/m$^3$ | Carbon tetrachloride mg/m$^3$ | Chloro-benzene mg/m$^3$ | 1,1-Dichloro-ethane mg/m$^3$ | 1,1-Dichloro-ethene mg/m$^3$ | cis-1,2-Dichloroethene mg/m$^3$ | trans-1,2-Dichloroethene mg/m$^3$ | 1,4-Dioxane mg/m$^3$ | Hexachloro-butadiene mg/m$^3$ | 2-Hexanone mg/m$^3$ | Isopropanol mg/m$^3$ | 4-Methyl-2-Pentanone mg/m$^3$ | Methylene Chloride mg/m$^3$ | 1,1,2,2-Tetrachloro-ethane mg/m$^3$ | Tetrachloro-ethene mg/m$^3$ | Tetrahydro-furan mg/m$^3$ | 1,1,1-Trichloro-ethane mg/m$^3$ | 1,1,2-Trichloro-ethane mg/m$^3$ | Trichloro-ethene mg/m$^3$ | Vinyl Chloride mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-99 | Dec 2008 | 10 | 2.13 | 0.02 | 0.0049 | ND(0.0067) | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.045) | ND(0.017) | ND(0.01) | ND(0.0044) | ND(0.0037) | ND(0.0073) | ND(0.0072) | ND(0.0031) | ND(0.0058) | ND(0.0058) | ND(0.0057) | ND(0.0027) |
| | | 15 | 2.33 | 0.063 | 0.015 | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | 0.01 | ND(0.0034) | ND(0.0064) | ND(0.0064) | 0.0082 | ND(0.003) |
| | | 20 | 2.09 | 0.038 | ND(0.0031) | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | ND(0.0071) | ND(0.0031) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | | 25 | 3.44 | ND(0.16) | ND(0.051) | ND(0.11) | ND(0.079) | ND(0.07) | ND(0.068) | ND(0.068) | ND(0.068) | ND(0.25) | ND(0.73) | ND(0.28) | ND(0.17) | ND(0.07) | ND(0.06) | ND(0.12) | ND(0.12) | ND(0.051) | ND(0.094) | ND(0.094) | ND(0.092) | ND(0.044) |
| | | 30 | 42.6 | ND(2) | ND(0.63) | ND(1.3) | ND(0.98) | ND(0.86) | ND(0.84) | ND(0.84) | ND(0.84) | ND(3.1) | ND(9.1) | ND(3.5) | ND(2.1) | ND(0.87) | ND(0.74) | ND(1.5) | ND(1.4) | ND(0.63) | ND(1.2) | ND(1.2) | ND(1.1) | ND(0.54) |
| | | 35 | 30.8 | ND(1.5) | ND(0.45) | ND(0.97) | ND(0.71) | ND(0.62) | ND(0.61) | ND(0.61) | ND(0.61) | ND(2.2) | ND(6.6) | ND(2.5) | ND(1.5) | ND(0.63) | ND(0.54) | ND(1) | ND(1) | ND(0.45) | ND(0.84) | ND(0.84) | ND(0.83) | ND(0.39) |
| | | 40 | 27.7 | ND(1.3) | ND(0.41) | ND(0.87) | ND(0.64) | ND(0.56) | ND(0.55) | ND(0.55) | ND(0.55) | ND(2) | ND(5.9) | ND(2.3) | ND(1.4) | ND(0.57) | ND(0.48) | ND(0.95) | ND(0.94) | ND(0.41) | ND(0.76) | ND(0.76) | ND(0.74) | ND(0.35) |
| | | 45 | 34.2 | ND(1.6) | ND(0.5) | ND(1.1) | ND(0.79) | ND(0.69) | ND(0.68) | ND(0.68) | ND(0.68) | ND(2.5) | ND(7.3) | ND(2.8) | ND(1.7) | ND(0.7) | ND(0.59) | ND(1.2) | ND(1.2) | ND(0.5) | ND(0.93) | ND(0.93) | ND(0.92) | ND(0.44) |
| | | 50 | 52.2 | ND(2.5) | ND(0.77) | ND(1.6) | ND(1.2) | ND(1) | ND(1) | ND(1) | ND(1) | ND(3.8) | ND(11) | ND(4.3) | ND(2.6) | ND(1.1) | ND(0.91) | ND(1.8) | ND(1.8) | ND(0.77) | ND(1.4) | ND(1.4) | ND(1.4) | ND(0.67) |
| | | 55 | 109 | ND(5.2) | ND(1.6) | ND(3.4) | ND(2.5) | ND(2.2) | ND(2.2) | ND(2.2) | ND(2.2) | ND(7.8) | ND(23) | ND(8.9) | ND(5.4) | ND(2.2) | ND(1.9) | ND(3.7) | ND(3.7) | ND(1.6) | ND(3) | ND(3) | ND(2.9) | ND(1.4) |
| | | 55 Dup | 205 | ND(9.7) | ND(3) | ND(6.4) | ND(4.7) | ND(4.1) | ND(4.1) | ND(4.1) | ND(4.1) | ND(15) | ND(44) | ND(17) | ND(10) | ND(4.2) | ND(3.6) | ND(7) | ND(7) | ND(3) | ND(5.6) | ND(5.6) | ND(5.5) | ND(2.6) |
| | | 60 | 51.2 | ND(2.4) | ND(0.75) | ND(1.6) | ND(1.2) | ND(1) | ND(1) | ND(1) | ND(1) | ND(3.7) | ND(11) | ND(4.2) | ND(2.5) | ND(1) | ND(0.89) | ND(1.8) | ND(1.7) | ND(0.75) | ND(1.4) | ND(1.4) | ND(1.4) | ND(0.65) |
| VW-127 | May 2005 | 5 | 2.09 | 0.013 | ND(0.0031) | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | 0.0073 | ND(0.0072) | ND(0.0071) | ND(0.012) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | | 10 | 2.33 | 0.018 | ND(0.0034) | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | 0.012 | ND(0.008) | ND(0.0079) | ND(0.014) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 15 | 2.24 | 0.012 | 0.0045 | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | 0.021 | ND(0.0077) | ND(0.0076) | ND(0.013) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 20 | 2.16 | ND(0.01) | ND(0.0032) | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | ND(0.011) | ND(0.0044) | 0.0091 | ND(0.0074) | 0.096 | ND(0.013) | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 30 | 4.6 | ND(0.022) | ND(0.0068) | ND(0.014) | ND(0.01) | ND(0.0093) | ND(0.0091) | ND(0.0091) | ND(0.0091) | ND(0.033) | ND(0.098) | ND(0.038) | ND(0.023) | ND(0.0094) | 0.028 | ND(0.016) | ND(0.016) | ND(0.027) | ND(0.012) | ND(0.012) | ND(0.012) | ND(0.0059) |
| | | 40 | 2.16 | 0.028 | 0.0057 | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | ND(0.011) | ND(0.0044) | 0.008 | ND(0.0074) | 0.12 | ND(0.013) | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 50 | 4.4 | ND(0.021) | ND(0.0065) | ND(0.014) | ND(0.01) | ND(0.0089) | ND(0.0087) | ND(0.0087) | ND(0.0087) | ND(0.032) | ND(0.094) | ND(0.036) | ND(0.022) | ND(0.009) | ND(0.0076) | ND(0.015) | 0.14 | ND(0.026) | ND(0.012) | ND(0.012) | ND(0.012) | ND(0.0056) |
| | Sep 2005 | 5 | 2.24 | 0.017 | 0.0043 | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) J | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.013) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 10 | 2.2 | 0.024 | 0.0045 | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) J | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | 0.0076 | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 15 | 2.29 | 0.03 | 0.0055 | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) J | ND(0.019) | ND(0.011) | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.014) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 20 | 2.2 | 0.02 | 0.0043 | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) J | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 30 | 2.38 | 0.011 | ND(0.0035) | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) J | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | 0.064 | ND(0.014) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 40 | 2.2 | 0.022 U | 0.0051 U | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | 0.25 | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 40 Dup | 2.2 | 0.016 | 0.0032 | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | 0.25 | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 50 | 2.2 | 0.012 U | ND(0.0032) | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | 0.13 | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | Oct 2005 | 20 | 2.16 | 0.01 | ND(0.0032) | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | ND(0.011) | ND(0.0044) | ND(0.0038) | ND(0.0074) | ND(0.0073) | ND(0.013) | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 30 | 2.14 | ND(0.01) | ND(0.0032) | ND(0.0067) | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.046) | ND(0.018) | ND(0.01) | ND(0.0044) | ND(0.0037) | ND(0.0073) | 0.032 | ND(0.013) | ND(0.0058) | ND(0.0058) | ND(0.0058) | ND(0.0027) |
| | | 40 | 2.2 | 0.014 | ND(0.0032) | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | 0.0071 | ND(0.0076) | 0.19 | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 50 | 2.05 | 0.026 | 0.0066 | ND(0.0064) | ND(0.0047) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0042) | ND(0.0036) | ND(0.007) | 0.074 | ND(0.012) | ND(0.0056) | ND(0.0056) | ND(0.0055) | ND(0.0026) |
| | Apr 2008 | 5 | 476 | ND(2.3) | ND(0.7) | ND(1.5) | ND(1.1) | ND(0.96) | ND(0.94) | ND(0.94) | ND(0.94) | ND(3.4) | ND(10) | ND(3.9) | ND(2.3) | ND(0.97) | ND(0.83) | ND(1.6) | ND(1.6) | ND(0.7) | ND(1.3) | ND(1.3) | ND(1.3) | ND(0.61) |
| | | 10 | 8.43 | 0.16 | 0.015 | ND(0.026) | ND(0.019) | ND(0.017) | ND(0.017) | ND(0.017) | ND(0.017) | ND(0.061) | ND(0.18) | ND(0.069) | ND(0.041) | ND(0.017) | ND(0.015) | ND(0.029) | ND(0.028) | ND(0.012) | ND(0.023) | ND(0.023) | ND(0.023) | ND(0.011) |
| | | 15 | 2.58 | 0.081 | 0.017 | ND(0.0081) | ND(0.0059) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0051) | ND(0.018) | ND(0.055) | ND(0.021) | ND(0.013) | ND(0.0053) | ND(0.0045) | ND(0.0088) | ND(0.0088) | 0.0042 | ND(0.007) | ND(0.007) | ND(0.0069) | ND(0.0033) |
| | | 20 | 2.64 | 0.015 | 0.004 | ND(0.0083) | ND(0.0061) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.019) | ND(0.056) | ND(0.022) | ND(0.013) | ND(0.0054) | ND(0.0046) | ND(0.0091) | ND(0.009) | ND(0.0039) | ND(0.0072) | ND(0.0072) | ND(0.0071) | ND(0.0034) |
| | | 30 | 2.38 | 0.028 | 0.0084 | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | 0.036 | ND(0.0035) | ND(0.0065) | ND(0.0065) | 0.0077 | ND(0.003) |
| | | 40 | 2.42 | 0.048 | 0.013 | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | 0.024 | ND(0.005) | 0.12 | ND(0.0083) | 0.17 | ND(0.0036) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 50 | 2.33 | 0.074 | 0.013 | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | 0.059 | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | Sep 2008 | 5 | 843 | ND(4) | ND(1.2) | ND(2.6) | ND(1.9) | ND(1.7) | ND(1.7) | ND(1.7) | ND(1.7) | ND(6.1) | ND(18) | ND(6.9) | ND(4.1) UJ | ND(1.7) | ND(1.5) | ND(2.9) | ND(2.8) | ND(1.2) | ND(2.3) | ND(2.3) | ND(2.3) | ND(1.1) |
| | | 10 | 96.8 | ND(0.46) | ND(0.14) | ND(0.3) | ND(0.22) | ND(0.2) | ND(0.19) | ND(0.19) | ND(0.19) | ND(0.7) | ND(2.1) | ND(0.79) | ND(0.48) UJ | ND(0.2) | ND(0.17) | ND(0.33) | ND(0.33) | ND(0.14) | ND(0.26) | ND(0.26) | ND(0.26) | ND(0.12) |
| | | 15 | 2.38 | 0.023 U | ND(0.0035) | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 20 | 2.47 | 0.044 JB | 0.016 JB | ND(0.0078) | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) | ND(0.02) | 0.012 U | ND(0.005) | ND(0.0043) | ND(0.0085) | ND(0.0084) | ND(0.0036) | ND(0.0067) | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | | 30 | 2.24 | 0.011 U | 0.0059 JB | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | 0.043 | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 40 | 2.33 | 0.15 JB | 0.052 JB | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | 0.035 | 0.016 U | ND(0.0048) | 0.005 | ND(0.008) | 0.17 | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 50 | 2.2 | 0.075 JB | 0.012 JB | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | 0.069 | ND(0.0032) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | Dec 2008 | 5 | 2.24 | ND(0.011) | ND(0.0033) | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 10 | 2.16 | 0.03 U | ND(0.0032) | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | ND(0.011) | ND(0.0044) | ND(0.0038) | ND(0.0074) | ND(0.0073) | ND(0.0032) | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 15 | 2.13 | 0.013 U | ND(0.0031) | ND(0.0067) | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.045) | ND(0.017) | ND(0.01) | ND(0.0044) | ND(0.0037) | ND(0.0073) | ND(0.0072) | ND(0.0031) | ND(0.0058) | ND(0.0058) | ND(0.0057) | ND(0.0027) |
| | | 20 | 2.33 | 0.027 | 0.013 | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 30 | 2.16 | 0.013 | 0.035 | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | ND(0.011) | ND(0.0044) | ND(0.0038) | ND(0.0074) | 0.046 | 0.058 | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 40 | 2.09 | 0.029 J | 0.01 J | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | 0.2 | ND(0.0031) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | | 40 Dup | 2.05 | 0.017 J | ND(0.003) UJ | ND(0.0064) | ND(0.0047) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0042) | ND(0.0036) | ND(0.007) | 0.2 | ND(0.003) | ND(0.0056) | ND(0.0056) | ND(0.0055) | ND(0.0026) |
| | | 50 | 2.05 | ND(0.0097) | ND(0.003) | ND(0.0064) | ND(0.0047) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0042) | ND(0.0036) | ND(0.007) | 0.083 | ND(0.003) | ND(0.0056) | ND(0.0056) | ND(0.0055) | ND(0.0026) |

US EPA ARCHIVE DOCUMENT

# TABLE 2-8b. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, SOLVENT RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | Dilution Factor | Acetone mg/m$^3$ | 2-Butanone mg/m$^3$ | Carbon tetrachloride mg/m$^3$ | Chloro-benzene mg/m$^3$ | 1,1-Dichloro-ethane mg/m$^3$ | 1,1-Dichloro-ethene mg/m$^3$ | cis-1,2-Dichloroethene mg/m$^3$ | trans-1,2-Dichloroethene mg/m$^3$ | 1,4-Dioxane mg/m$^3$ | Hexachloro-butadiene mg/m$^3$ | 2-Hexanone mg/m$^3$ | Isopropanol mg/m$^3$ | 4-Methyl-2-Pentanone mg/m$^3$ | Methylene Chloride mg/m$^3$ | 1,1,2,2-Tetrachloro-ethane mg/m$^3$ | Tetrachloro-ethene mg/m$^3$ | Tetrahydro-furan mg/m$^3$ | 1,1,1-Trichloro-ethane mg/m$^3$ | 1,1,2-Trichloro-ethane mg/m$^3$ | Trichloro-ethene mg/m$^3$ | Vinyl Chloride mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-128 | Apr 2005 | 5 | 2.33 | ND(0.011) | ND(0.0034) | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | 0.038 | ND(0.008) | ND(0.0079) | ND(0.014) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 10 | 2.47 | ND(0.012) | ND(0.0036) | ND(0.0078) | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) | ND(0.02) | ND(0.012) | ND(0.005) | 0.042 | ND(0.0085) | ND(0.0084) | ND(0.014) | ND(0.0067) | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | | 15 | 2.53 | 0.014 | 0.0048 | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | ND(0.012) | ND(0.0052) | 0.028 | ND(0.0087) | ND(0.0086) | ND(0.015) | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 20 | 2.42 | ND(0.011) | ND(0.0036) | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | ND(0.012) | ND(0.005) | 0.036 | ND(0.0083) | ND(0.0082) | ND(0.014) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 30 | 2.42 | ND(0.011) | ND(0.0036) | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | ND(0.012) | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | ND(0.014) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 40 | 2.2 | 0.012 | ND(0.0032) | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 50 | 2.64 | 0.02 | ND(0.0039) | ND(0.0083) | ND(0.0061) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.019) | ND(0.056) | ND(0.022) | ND(0.013) | ND(0.0054) | ND(0.0046) | ND(0.0091) | ND(0.009) | ND(0.016) | ND(0.0072) | ND(0.0072) | ND(0.0071) | ND(0.0034) |
| | | 50 Dup | 2.42 | 0.012 | ND(0.0036) | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) J | ND(0.02) | ND(0.012) | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | ND(0.014) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | Sep 2005 | 5 | 2.29 | 0.023 U | 0.0064 U | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | ND(0.011) | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.014) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 10 | 2.42 | 0.04 U | 0.0079 U | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | ND(0.012) | ND(0.005) | ND(0.0042) | ND(0.0083) | 0.025 | ND(0.014) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 15 | 2.33 | ND(0.011) | ND(0.0034) | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.014) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 20 | 2.29 | 0.022 U | 0.0066 U | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | ND(0.011) | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.014) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 30 | 2.84 | 0.066 | 0.028 | ND(0.0089) | ND(0.0065) | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0056) | ND(0.02) | ND(0.06) | ND(0.023) | ND(0.014) | ND(0.0058) | ND(0.0049) | ND(0.0097) | ND(0.0096) | ND(0.017) | ND(0.0077) | ND(0.0077) | ND(0.0076) | ND(0.0036) |
| | | 40 | 2.2 | 0.012 U | 0.0065 U | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 40 Dup | 2.24 | 0.022 | 0.01 | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.013) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 50 | 2.24 | 0.038 U | 0.0067 U | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.013) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | Oct 2005 | 20 | 2.16 | ND(0.01) | ND(0.0032) | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | ND(0.011) | ND(0.0044) | ND(0.0038) | ND(0.0074) | ND(0.0073) | ND(0.013) | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 30 | 2.05 | ND(0.0097) | ND(0.003) | ND(0.0064) | ND(0.0047) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0042) | ND(0.0036) | ND(0.007) | ND(0.007) | ND(0.012) | ND(0.0056) | ND(0.0056) | ND(0.0055) | ND(0.0026) |
| | | 40 | 2.02 | ND(0.0096) | ND(0.003) | ND(0.0064) | ND(0.0046) | ND(0.0041) | ND(0.004) | ND(0.004) | ND(0.004) | ND(0.014) | ND(0.043) | ND(0.016) | ND(0.0099) | ND(0.0041) | ND(0.0035) | ND(0.0069) | ND(0.0068) | ND(0.012) | ND(0.0055) | ND(0.0055) | ND(0.0054) | ND(0.0026) |
| | | 50 | 2.09 | ND(0.0099) | ND(0.0031) | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | ND(0.0071) | ND(0.012) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | | 50 Dup | 2.01 | ND(0.0095) | ND(0.003) | ND(0.0063) | ND(0.0046) | ND(0.0041) | ND(0.004) | ND(0.004) | ND(0.004) | ND(0.014) | ND(0.043) | ND(0.016) | ND(0.0099) | ND(0.0041) | ND(0.0035) | ND(0.0069) | ND(0.0068) | ND(0.012) | ND(0.0055) | ND(0.0055) | ND(0.0054) | ND(0.0026) |
| | Jun/Jul 2006 | 5 | 2.58 | 0.013 J | 0.0062 J | ND(0.0081) | ND(0.0059) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0051) | ND(0.018) | ND(0.055) J | ND(0.021) | ND(0.013) | ND(0.0053) | ND(0.0045) | ND(0.0088) | ND(0.0088) | ND(0.015) | ND(0.007) | ND(0.007) | ND(0.0069) | ND(0.0033) |
| | | 10 | 2.47 | 0.023 J | 0.017 J | ND(0.0078) | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) J | ND(0.02) | ND(0.012) | ND(0.005) | ND(0.0043) | ND(0.0085) | ND(0.0084) | ND(0.014) | ND(0.0067) | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | | 15 | 2.64 | ND(0.012) J | ND(0.0039) J | ND(0.0083) | ND(0.0061) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.019) | ND(0.056) J | ND(0.022) | ND(0.013) | ND(0.0054) | ND(0.0046) | ND(0.0091) | ND(0.009) | ND(0.016) | ND(0.0072) | ND(0.0072) | ND(0.0071) | ND(0.0034) |
| | | 20 | 2.24 | 0.011 J | 0.0035 J | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) J | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.013) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 30 | 2.29 | 0.017 J | 0.0038 | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) J | ND(0.019) | ND(0.011) | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.014) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 40 | 2.38 | 0.014 J | ND(0.0035) J | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) J | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.014) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 50 | 2.58 | 0.19 J | 0.085 J | ND(0.0081) | ND(0.0059) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0051) | ND(0.018) | ND(0.055) J | 0.041 J | 0.014 | ND(0.0053) | ND(0.0045) | ND(0.0088) | ND(0.0088) | ND(0.015) | ND(0.007) | ND(0.007) | ND(0.0069) | ND(0.0033) |
| | | 50 Dup | 2.2 | 0.14 J | 0.06 J | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) J | 0.025 | 0.017 | 0.0062 J | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | Apr 2008 | 5 | 2.29 | 0.084 | 0.018 | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | ND(0.011) | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.0034) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 10 | 2.09 | 0.042 J | 0.01 J | ND(0.0066) J | ND(0.0048) J | ND(0.0042) J | ND(0.0041) J | ND(0.0041) J | ND(0.0041) J | ND(0.015) J | ND(0.044) J | ND(0.017) J | 0.028 J | ND(0.0043) J | ND(0.0036) J | ND(0.0072) J | ND(0.0071) J | ND(0.0031) J | ND(0.0057) J | ND(0.0057) J | ND(0.0056) J | ND(0.0027) J |
| | | 15 | 2.64 | 0.027 | 0.0065 J | ND(0.0083) | ND(0.0061) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.019) | ND(0.056) | ND(0.022) | 0.017 | ND(0.0054) | ND(0.0046) | ND(0.0091) | ND(0.009) | ND(0.0039) | ND(0.0072) | ND(0.0072) | ND(0.0071) | ND(0.0034) |
| | | 20 | 2.38 | 0.011 | ND(0.0035) | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | 0.028 | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 30 | 2.02 | 0.022 | 0.0066 | ND(0.0064) | ND(0.0046) | ND(0.0041) | ND(0.004) | ND(0.004) | ND(0.004) | ND(0.014) | ND(0.043) | ND(0.016) | 0.06 | ND(0.0041) | 0.0039 | ND(0.0069) | ND(0.0068) | ND(0.003) | ND(0.0055) | ND(0.0055) | ND(0.0054) | ND(0.0026) |
| | | 40 | 2.38 | 0.023 | 0.0067 | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | 0.11 | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 50 | 2.09 | 0.014 | ND(0.0031) | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | ND(0.0071) | ND(0.0031) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | | 50 Dup | 2.09 | 0.011 | ND(0.0031) | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | ND(0.0071) | ND(0.0031) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | Sep 2008 | 5 | 2.2 | ND(0.01) | ND(0.0032) | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.0032) | ND(0.006) | ND(0.006) | 0.026 | ND(0.0028) |
| | | 10 | 2.33 | 0.015 U | 0.0035 U | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | 0.014 U | ND(0.0048) | ND(0.004) | ND(0.008) | 0.018 | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 15 | 2.24 | 0.032 JB | 0.0049 U | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | 0.061 | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 20 | 2.24 | 0.031 JB | ND(0.0033) UJ | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | 0.057 | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 30 | 2.24 | 0.031 JB | 0.0075 JB | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | 0.027 U | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 40 | 2.29 | 0.013 U | 0.0034 U | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | 0.017 U | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.0034) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 50 | 2.33 | 0.32 J | 0.42 J | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | 1.4 | 0.04 JB | 0.45 | ND(0.004) | ND(0.008) | ND(0.0079) | 0.015 | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | Dec 2008 | 5 | 2.24 | 0.016 | 0.0064 | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 10 | 2.24 | ND(0.011) | ND(0.0033) | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 15 | 2.13 | ND(0.01) | ND(0.0031) | ND(0.0067) | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.045) | ND(0.017) | ND(0.01) | ND(0.0044) | ND(0.0037) | ND(0.0073) | ND(0.0072) | ND(0.0031) | ND(0.0058) | ND(0.0058) | ND(0.0057) | ND(0.0027) |
| | | 20 | 2.2 | 0.011 | ND(0.0032) | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.0032) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 30 | 2.24 | 0.014 | ND(0.0033) | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 40 | 2.24 | 0.014 | ND(0.0033) | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 50 | 2.2 | ND(0.01) | ND(0.0032) | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.0032) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |

US EPA ARCHIVE DOCUMENT

# TABLE 2-8b. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, SOLVENT RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | Dilution Factor | Acetone mg/m$^3$ | 2-Butanone mg/m$^3$ | Carbon tetrachloride mg/m$^3$ | Chloro-benzene mg/m$^3$ | 1,1-Dichloro-ethane mg/m$^3$ | 1,1-Dichloro-ethene mg/m$^3$ | cis-1,2-Dichloroethene mg/m$^3$ | trans-1,2-Dichloroethene mg/m$^3$ | 1,4-Dioxane mg/m$^3$ | Hexachloro-butadiene mg/m$^3$ | 2-Hexanone mg/m$^3$ | Isopropanol mg/m$^3$ | 4-Methyl-2-Pentanone mg/m$^3$ | Methylene Chloride mg/m$^3$ | 1,1,2,2-Tetrachloro-ethane mg/m$^3$ | Tetrachloro-ethene mg/m$^3$ | Tetrahydro-furan mg/m$^3$ | 1,1,1-Trichloro-ethane mg/m$^3$ | 1,1,2-Trichloro-ethane mg/m$^3$ | Trichloro-ethene mg/m$^3$ | Vinyl Chloride mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-129 | Apr 2005 | 5 | 2.53 | ND(0.012) | ND(0.0037) | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | ND(0.012) | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.015) | 0.0079 | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 10 | 2.42 | 0.015 | ND(0.0036) | 0.0077 | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | ND(0.012) | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | ND(0.014) | 0.0086 | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 15 | 2.82 | 0.029 | 0.0056 | 0.012 | ND(0.0065) | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0056) | ND(0.02) | ND(0.06) | ND(0.023) | ND(0.014) | ND(0.0058) | ND(0.0049) | ND(0.0097) | ND(0.0096) | ND(0.017) | 0.021 | ND(0.0077) | ND(0.0076) | ND(0.0036) |
| | | 20 | 2.33 | 0.015 | ND(0.0034) | 0.0099 | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.014) | 0.01 | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 30 | 2.16 | ND(0.01) | ND(0.0032) | 0.013 | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | ND(0.011) | ND(0.0044) | ND(0.0038) | ND(0.0074) | ND(0.0073) | ND(0.013) | 0.014 | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 40 | 2.38 | 0.021 | ND(0.0035) | 0.014 | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.014) | 0.018 | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 50 | 2.89 | 0.022 | 0.0046 | ND(0.0091) | ND(0.0066) | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0057) | ND(0.021) | ND(0.062) | ND(0.024) | ND(0.014) | ND(0.0059) | 0.026 | ND(0.0099) | ND(0.0098) | ND(0.017) | ND(0.0079) | ND(0.0079) | ND(0.0078) | ND(0.0037) |
| | | 50 Dup | 2.53 | 0.032 | 0.011 | 0.012 | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | ND(0.012) | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.015) | 0.021 | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | Jun/Jul 2006 | 5 | 2.33 | 0.1 J | 0.042 | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) J | 0.019 | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.014) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 10 | 2.29 | 0.027 J | 0.0085 | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) J | ND(0.019) | ND(0.011) | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.014) | 0.0064 | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 15 | 2.64 | 0.03 J | 0.0087 | ND(0.0083) | ND(0.0061) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.019) | ND(0.056) J | ND(0.022) | ND(0.013) | ND(0.0054) | ND(0.0046) | ND(0.0091) | ND(0.009) | ND(0.016) | 0.0072 | ND(0.0072) | ND(0.0071) | ND(0.0034) |
| | | 20 | 3.46 | 0.04 J | 0.0087 | ND(0.011) | ND(0.008) | ND(0.007) | ND(0.0068) | ND(0.0068) | ND(0.0068) | ND(0.025) | ND(0.074) J | ND(0.028) | ND(0.017) | ND(0.0071) | ND(0.006) | ND(0.012) | ND(0.012) | ND(0.02) | ND(0.0094) | ND(0.0094) | ND(0.0093) | ND(0.0044) |
| | | 30 | 2.47 | 0.035 J | 0.0079 | 0.0099 | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) J | ND(0.02) | ND(0.012) | ND(0.005) | ND(0.0043) | ND(0.0085) | ND(0.0084) | ND(0.014) | 0.0093 | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | | 40 | 2.69 | 0.02 J | 0.005 | 0.011 | ND(0.0062) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0053) | ND(0.019) | ND(0.057) J | ND(0.022) | ND(0.013) | ND(0.0055) | ND(0.0047) | ND(0.0092) | ND(0.0091) | ND(0.016) | 0.011 | ND(0.0073) | ND(0.0072) | ND(0.0034) |
| | | 50 | 2.13 | 0.056 J | 0.012 | 0.012 | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.045) J | ND(0.017) | ND(0.01) | ND(0.0044) | ND(0.0037) | ND(0.0073) | ND(0.0072) | ND(0.012) | 0.016 | ND(0.0058) | ND(0.0057) | ND(0.0027) |
| | Apr 2008 | 5 | 2.53 | 0.063 | 0.019 | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | ND(0.012) | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.0037) | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 10 | 2.58 | 0.033 | 0.01 | ND(0.0081) | ND(0.0059) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0051) | ND(0.018) | ND(0.055) | ND(0.021) | ND(0.013) | ND(0.0053) | ND(0.0045) | ND(0.0088) | ND(0.0088) | ND(0.0038) | 0.0074 | ND(0.007) | ND(0.0069) | ND(0.0033) |
| | | 15 | 2.47 | 0.018 | 0.0069 | ND(0.0078) | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) | ND(0.02) | ND(0.012) | ND(0.005) | ND(0.0043) | ND(0.0085) | ND(0.0084) | ND(0.0036) | ND(0.0067) | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | | 20 | 2.33 | 0.018 | 0.0072 | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | 0.012 | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 30 | 2.24 | 0.057 | 0.0091 | 0.0089 | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | 0.22 | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.0033) | 0.0087 | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 40 | 2.38 | 0.047 | 0.0086 | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | 0.014 | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.0035) | 0.0067 | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 50 | 2.47 | 0.032 | 0.0095 | 0.01 | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) | ND(0.02) | 0.031 | ND(0.005) | ND(0.0043) | ND(0.0085) | ND(0.0084) | 0.0042 | 0.014 | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | Sep 2008 | 5 | 2.53 | ND(0.012) | ND(0.0037) | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | 0.012 U | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.0037) | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 10 | 2.58 | 0.014 U | ND(0.0038) | ND(0.0081) | ND(0.0059) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0051) | ND(0.018) | ND(0.055) | ND(0.021) | 0.012 U | ND(0.0053) | ND(0.0045) | ND(0.0088) | ND(0.0088) | ND(0.0038) | ND(0.007) | ND(0.007) | ND(0.0069) | ND(0.0033) |
| | | 15 | 2.38 | 0.048 JB | 0.011 JB | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) UJ | ND(0.019) | ND(0.012) UJ | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.0035) | 0.0091 J | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 20 | 2.47 | 0.039 JB | ND(0.0036) | ND(0.0078) | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) UJ | ND(0.02) | 0.013 U | ND(0.005) | ND(0.0043) | ND(0.0085) | ND(0.0084) | ND(0.0036) | 0.0086 J | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | | 20 Dup | 2.42 | 0.042 JB | ND(0.0036) | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) UJ | ND(0.02) | 0.014 U | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | ND(0.0036) | 0.0085 J | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 30 | 2.38 | 0.052 JB | 0.0062 JB | 0.0096 | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) UJ | ND(0.019) | 0.014 U | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.0035) | 0.0097 J | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 40 | 2.2 | 0.03 JB | 0.004 U | 0.0078 | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | 0.024 U | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.0032) | 0.0083 | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 50 | 2.53 | 0.062 JB | 0.021 JB | 0.0099 | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | 0.02 U | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.0037) | 0.012 | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 50 Dup | 2.53 | 0.036 JB | 0.015 JB | 0.011 | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | 0.014 U | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.0037) | 0.013 | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | Dec 2008 | 5 | 2.33 | 0.069 U | 0.02 | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) UJ | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 10 | 2.16 | ND(0.01) | ND(0.0032) | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | ND(0.011) | ND(0.0044) | ND(0.0038) | ND(0.0074) | ND(0.0073) | ND(0.0032) | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 15 | 2.24 | 0.011 U | ND(0.0033) UJ | ND(0.007) UJ | ND(0.0052) UJ | ND(0.0045) UJ | ND(0.0044) UJ | ND(0.0044) UJ | ND(0.0044) UJ | ND(0.016) UJ | ND(0.048) UJ | ND(0.018) UJ | ND(0.011) UJ | ND(0.0046) UJ | ND(0.0039) UJ | ND(0.0077) UJ | ND(0.0076) UJ | ND(0.0033) UJ | ND(0.0061) UJ | ND(0.0061) UJ | ND(0.006) UJ | ND(0.0029) UJ |
| | | 20 | 2.13 | 0.058 U | 0.016 | ND(0.0067) | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.045) | ND(0.017) | ND(0.01) | ND(0.0044) | ND(0.0037) | ND(0.0073) | ND(0.0072) | ND(0.0031) | ND(0.0058) | ND(0.0058) | ND(0.0057) | ND(0.0027) |
| | | 30 | 2.2 | 0.036 U | ND(0.0032) | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | 0.025 | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.0032) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 40 | 2.29 | 0.12 JB | 0.02 | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | ND(0.011) | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.0034) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 50 | 2.09 | 0.043 U | ND(0.0031) | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | ND(0.0071) | ND(0.0031) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| VW-130 | Apr 2005 | 5 | 2.76 | ND(0.013) | ND(0.0041) | ND(0.0087) | ND(0.0064) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0055) | ND(0.02) | ND(0.059) | ND(0.023) | ND(0.014) | ND(0.0056) | 0.024 | ND(0.0095) | ND(0.0094) | ND(0.0041) | ND(0.0075) | ND(0.0075) | ND(0.0074) | ND(0.0035) |
| | | 10 | 2.42 | ND(0.011) | ND(0.0036) | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | ND(0.012) | ND(0.005) | 0.023 | ND(0.0083) | ND(0.0082) | ND(0.0036) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 15 | 2.42 | 0.031 | 0.0051 | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | ND(0.012) | ND(0.005) | 0.008 | ND(0.0083) | 0.014 | 0.0093 | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 20 | 2.58 | ND(0.012) R | ND(0.0038) R | ND(0.0081) R | ND(0.0059) R | ND(0.0052) R | ND(0.0051) R | ND(0.0051) R | ND(0.0051) R | ND(0.018) R | ND(0.055) R | ND(0.021) R | ND(0.013) R | ND(0.0053) R | 0.062 R | ND(0.0088) R | ND(0.0088) R | ND(0.0038) R | ND(0.007) R | ND(0.007) R | ND(0.0069) R | ND(0.0033) R |
| | | 30 | 2.53 | 0.035 J | 0.0094 J | ND(0.008) J | ND(0.0058) J | ND(0.0051) J | ND(0.005) J | ND(0.005) J | ND(0.005) J | ND(0.018) J | ND(0.054) J | ND(0.021) J | ND(0.012) J | ND(0.0052) J | 0.018 J | ND(0.0087) J | ND(0.0086) J | 0.031 J | ND(0.0069) J | ND(0.0069) J | ND(0.0068) J | ND(0.0032) J |
| | | 30 Dup | 2.58 | 0.013 J | 0.013 | ND(0.0081) | ND(0.0059) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0051) | 0.022 J | ND(0.055) | ND(0.021) | ND(0.013) | ND(0.0053) | 0.018 | ND(0.0088) | 0.44 | 0.0086 J | ND(0.007) | ND(0.007) | ND(0.0069) | ND(0.0033) |
| | | 40 | 2.76 | 0.016 | ND(0.0041) | ND(0.0087) | ND(0.0064) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0055) | ND(0.02) | ND(0.059) | ND(0.023) | ND(0.014) | ND(0.0056) | 0.05 | ND(0.0095) | ND(0.0094) | 0.0042 | ND(0.0075) | ND(0.0075) | ND(0.0074) | ND(0.0035) |
| | | 50 | 2.53 | 0.054 | 0.0074 | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | ND(0.012) | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | 0.0058 | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | May 2005 | 20 | 2.2 | 0.013 | 0.0094 | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.013) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 40 | 2.58 | 0.02 | 0.022 | ND(0.0081) | ND(0.0059) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0051) | ND(0.018) | ND(0.055) | ND(0.021) | ND(0.013) | ND(0.0053) | ND(0.0045) | ND(0.0088) | ND(0.0088) | ND(0.015) | ND(0.007) | ND(0.007) | ND(0.0069) | ND(0.0033) |

US EPA ARCHIVE DOCUMENT

# TABLE 2-8b. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, SOLVENT RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | Dilution Factor | Acetone mg/m$^3$ | 2-Butanone mg/m$^3$ | Carbon tetrachloride mg/m$^3$ | Chloro-benzene mg/m$^3$ | 1,1-Dichloro-ethane mg/m$^3$ | 1,1-Dichloro-ethene mg/m$^3$ | cis-1,2-Dichloroethene mg/m$^3$ | trans-1,2-Dichloroethene mg/m$^3$ | 1,4-Dioxane mg/m$^3$ | Hexachloro-butadiene mg/m$^3$ | 2-Hexanone mg/m$^3$ | Isopropanol mg/m$^3$ | 4-Methyl-2-Pentanone mg/m$^3$ | Methylene Chloride mg/m$^3$ | 1,1,2,2-Tetrachloro-ethane mg/m$^3$ | Tetrachloro-ethene mg/m$^3$ | Tetrahydro-furan mg/m$^3$ | 1,1,1-Trichloro-ethane mg/m$^3$ | 1,1,2-Trichloro-ethane mg/m$^3$ | Trichloro-ethene mg/m$^3$ | Vinyl Chloride mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-130 | Apr 2008 | 5 | 2.42 | 0.059 | 0.016 | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | 0.014 | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | ND(0.0036) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 10 | 2.33 | 0.1 | 0.03 | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | 0.042 | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 15 | 2.33 | 0.05 J | 0.013 | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 20 | 2.33 | 0.034 J | ND(0.0034) J | ND(0.0073) J | ND(0.0054) J | ND(0.0047) J | ND(0.0046) J | ND(0.0046) J | ND(0.0046) J | ND(0.017) J | ND(0.05) J | ND(0.019) J | ND(0.011) J | ND(0.0048) J | 0.14 J | ND(0.008) J | ND(0.0079) J | ND(0.0034) J | ND(0.0064) J | ND(0.0064) J | ND(0.0063) J | ND(0.003) J |
| | | 30 | 77.7 | ND(0.37) J | ND(0.11) J | ND(0.24) J | ND(0.18) J | ND(0.16) J | ND(0.15) J | ND(0.15) J | ND(0.15) J | ND(0.56) J | ND(1.6) J | ND(0.64) J | 52 J | ND(0.16) J | ND(0.13) J | ND(0.27) J | ND(0.26) J | ND(0.11) J | ND(0.21) J | ND(0.21) J | ND(0.21) J | ND(0.099) J |
| | | 40 | 2.38 | 0.021 | ND(0.0035) | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) J | ND(0.0049) | 0.037 J | ND(0.0082) | ND(0.0081) | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 40 Dup | 2.42 | ND(0.011) | 0.0052 | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | 0.037 J | ND(0.005) | ND(0.0042) J | ND(0.0083) | ND(0.0082) | ND(0.0036) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | Sep 2008 | 5 | 2.33 | 0.036 JB | 0.014 JB | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 10 | 2.2 | 0.093 JB | 0.049 JB | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | 0.032 | 0.014 U | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.0032) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 15 | 2.2 | 0.026 JB | 0.0086 JB | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | 0.015 U | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.0032) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 20 | 2.2 | ND(0.01) UJ | ND(0.0032) UJ | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | 0.011 U | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.0032) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 30 | 2.33 | 0.058 JB | 0.011 JB | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | 0.012 U | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 40 | 2.53 | ND(0.012) UJ | 0.0046 U | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | ND(0.012) | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.0037) | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 40 Dup | 2.53 | 0.081 JB | 0.036 JB | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | ND(0.012) | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.0037) | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | Dec 2008 | 5 | 2.2 | ND(0.01) UJ | ND(0.0032) | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.0032) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 10 | 2.05 | 0.14 JB | 0.04 | ND(0.0064) | ND(0.0047) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0042) | ND(0.0036) | ND(0.007) | ND(0.007) UJ | ND(0.003) | ND(0.0056) | ND(0.0056) | 0.03 | ND(0.0026) |
| | | 15 | 2.13 | 0.019 U | ND(0.0031) | ND(0.0067) | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.045) | ND(0.017) | ND(0.01) | ND(0.0044) | ND(0.0037) | ND(0.0073) | ND(0.0072) UJ | ND(0.0031) | ND(0.0058) | ND(0.0058) | ND(0.0057) | ND(0.0027) |
| | | 20 | 2.16 | 0.04 JB | 0.0047 U | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | ND(0.011) | ND(0.0044) | ND(0.0038) | ND(0.0074) | 0.0077 | 0.0041 | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 30 | 2.05 | 0.06 JB | 0.0086 JB | ND(0.0064) | ND(0.0047) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0042) | ND(0.0036) | ND(0.007) | ND(0.007) | ND(0.003) | ND(0.0056) | ND(0.0056) | ND(0.0055) | ND(0.0026) |
| | | 40 | 2.53 | 0.02 JB | 0.0082 JB | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | ND(0.012) | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.0037) | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 40 Dup | 2.42 | 0.023 JB | 0.0097 JB | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | ND(0.012) | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | ND(0.0036) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |

**NOTES:**

1 - For data collected during 2005-2007 reported as "ND" additional data qualifier flags are not shown on this table. See Trihydro and GeoSyntec 2005 and Appendix A of this report for data qualifier information.

**B** - Constituent detected in blank sample

**Dup** - Blind Duplicate Sample

**J** – estimated concentration

**mg/m$^3$** - milligram per cubic meter

**ND** - Not detected

**R** – Value has been rejected and should not be used for qualitative or quantitative purposes

**U** – Detected in blank sample, 1997-1999 results changed to non detect; subsequent results reported

US EPA ARCHIVE DOCUMENT

# TABLE 2-8c. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, WATER TREATMENT RELATED AND OTHER CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | Dilution Factor | Allyl Chloride mg/m$^3$ | Benzyl chloride mg/m$^3$ | Bromo-methane mg/m$^3$ | Carbon Disulfide mg/m$^3$ | Chloro-ethane mg/m$^3$ | Chloro-methane mg/m$^3$ | 1,2-Dichloro-benzene mg/m$^3$ | 1,3-Dichloro-benzene mg/m$^3$ | 1,4-Dichloro-benzene mg/m$^3$ | Dichloro-difluoro-methane mg/m$^3$ | 1,2-Dichloro-propane mg/m$^3$ | cis-1,3-dichloro-propene mg/m$^3$ | trans-1,3-Dichloro-propene mg/m$^3$ | 1,2-Dichloro-1,1,2,2-tetrafluoroethane mg/m$^3$ | Ethanol mg/m$^3$ | 1,2,4-Trichloro-benzene mg/m$^3$ | Trichloro-fluoromethane mg/m$^3$ | 1,1,2-Trichloro-trifluoroethane mg/m$^3$ | Bromo-dichloro-methane mg/m$^3$ | Bromoform mg/m$^3$ | Chloroform mg/m$^3$ | Dibromo-chloro-methane mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-18 | Apr 2008 | 5 | 880 | ND(5.5) R | ND(2.3) R | ND(1.7) R | 1.6 R | ND(1.2) R | ND(3.6) R | ND(2.6) R | ND(2.6) R | ND(2.6) R | ND(2.2) R | ND(2) R | ND(2) R | ND(2) R | ND(3.1) R | ND(3.3) R | ND(13) R | ND(2.5) R | ND(3.4) R | ND(2.9) R | ND(4.5) R | ND(2.1) R | ND(3.7) R |
| | | 10 | 11300 | ND(71) R | ND(29) R | ND(22) R | ND(18) R | ND(15) R | ND(47) R | ND(34) R | ND(34) R | ND(34) R | ND(28) R | ND(26) R | ND(26) R | ND(26) R | ND(39) R | ND(42) R | ND(170) R | ND(32) R | ND(43) R | ND(38) R | ND(58) R | ND(28) R | ND(48) R |
| | | 15 | 16500 | ND(100) | ND(43) UJ | ND(32) | ND(26) | ND(22) | ND(68) | ND(50) | ND(50) | ND(50) | ND(41) | ND(38) | ND(37) | ND(37) | ND(58) | ND(62) | ND(240) UJ | ND(46) | ND(63) | ND(55) | ND(85) UJ | ND(40) | ND(70) |
| | | 15 Dup | 16900 | ND(100) | ND(44) UJ | ND(33) | ND(26) | ND(22) | ND(70) | ND(51) | ND(51) | ND(51) | ND(42) | ND(39) | ND(38) | ND(38) | ND(59) | ND(64) | ND(250) UJ | ND(47) | ND(65) | ND(57) | ND(87) UJ | ND(41) | ND(72) |
| | May 2008 | 5 | 69 | ND(4.3) R | ND(1.8) R | ND(1.3) R | ND(1.1) R | 2.8 R | ND(2.8) R | ND(2.1) R | ND(2.1) R | ND(2.1) R | ND(1.7) R | ND(1.6) R | ND(1.6) R | ND(1.6) R | ND(2.4) R | 5.3 R | ND(10) R | ND(1.9) R | ND(2.6) R | ND(2.3) R | ND(3.6) R | ND(1.7) R | ND(2.9) R |
| | | 10 | 466 | ND(29) R | ND(12) R | ND(9) R | ND(7.2) R | ND(6.1) R | ND(19) R | ND(14) R | ND(14) R | ND(14) R | ND(12) R | ND(11) R | ND(10) R | ND(10) R | ND(16) R | 42 R | ND(69) R | ND(13) R | ND(18) R | ND(16) R | ND(24) R | ND(11) R | ND(20) R |
| | Sep 2008 | 5 | 2290 | ND(140) | ND(59) | ND(44) | ND(36) | ND(30) | ND(94) | ND(69) | ND(69) | ND(69) | ND(57) | ND(53) | ND(52) | ND(52) | ND(80) | ND(86) | ND(340) | ND(64) | ND(88) | ND(77) | ND(120) | ND(56) | ND(98) |
| | | 10 | 2200 | ND(140) | ND(57) | ND(43) | ND(34) | ND(29) | ND(91) | ND(66) | ND(66) | ND(66) | ND(54) | ND(51) | ND(50) | ND(50) | ND(77) | ND(83) | ND(330) | ND(62) | ND(84) | ND(74) | ND(110) | ND(54) | ND(94) |
| | | 15 | 2800 | ND(180) | ND(72) | ND(54) | ND(44) | ND(37) | ND(120) | ND(84) | ND(84) | ND(84) | ND(69) | ND(65) | ND(64) | ND(64) | ND(98) | ND(100) | ND(420) | ND(79) | ND(110) | ND(94) | ND(140) | ND(68) | ND(120) |
| VW-20 | Apr 2008 | 5 | 2.33 | ND(0.014) | ND(0.006) UJ | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) UJ | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) UJ | ND(0.0057) | ND(0.0099) |
| | | 10 | 2.33 | ND(0.014) | ND(0.006) UJ | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) UJ | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) UJ | ND(0.0057) | ND(0.0099) |
| | | 15 | 2.33 | ND(0.014) | ND(0.006) UJ | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) UJ | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) UJ | ND(0.0057) | ND(0.0099) |
| | | 25 | 7.93 | ND(0.05) | ND(0.02) UJ | ND(0.015) | ND(0.012) | ND(0.01) | ND(0.033) | ND(0.024) | ND(0.024) | ND(0.024) | ND(0.02) | ND(0.018) | ND(0.018) | ND(0.018) | ND(0.028) | ND(0.03) | ND(0.12) UJ | ND(0.022) | ND(0.03) | ND(0.026) | ND(0.041) UJ | ND(0.019) | ND(0.034) |
| | | 25 Dup | 12.3 | ND(0.077) | ND(0.032) UJ | ND(0.024) | ND(0.019) | ND(0.016) | ND(0.051) | ND(0.037) | ND(0.037) | ND(0.037) | ND(0.03) | ND(0.028) | ND(0.028) | ND(0.028) | ND(0.043) | ND(0.046) | ND(0.18) UJ | ND(0.034) | ND(0.047) | ND(0.041) | ND(0.064) UJ | ND(0.03) | ND(0.052) |
| | Sep 2008 | 5 | 2.13 | ND(0.013) | ND(0.0055) | ND(0.0041) | 0.0086 | ND(0.0028) | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | ND(0.0053) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0074) | ND(0.008) | ND(0.032) | ND(0.006) | ND(0.0082) | ND(0.0071) | ND(0.011) | ND(0.0052) | ND(0.0091) |
| | | 10 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 15 | 2.2 | ND(0.14) | ND(0.057) | ND(0.043) | ND(0.034) | ND(0.029) | ND(0.091) | ND(0.066) | ND(0.066) | ND(0.066) | ND(0.054) | ND(0.051) | ND(0.05) | ND(0.05) | ND(0.077) | ND(0.083) | ND(0.33) | ND(0.062) | ND(0.084) | ND(0.074) | ND(0.11) | ND(0.054) | ND(0.094) |
| | | 20 | 46.6 | ND(2.9) | ND(1.2) | ND(0.9) | ND(0.72) | ND(0.61) | ND(1.9) | ND(1.4) | ND(1.4) | ND(1.4) | ND(1.2) | ND(1.1) | ND(1) | ND(1) | ND(1.6) | ND(1.8) | ND(6.9) | ND(1.3) | ND(1.8) | ND(1.6) | ND(2.4) | ND(1.1) | ND(2) |
| | | 25 | 116 | ND(7.3) | ND(3) | ND(2.2) | ND(1.8) | ND(1.5) | ND(4.8) | ND(3.5) | ND(3.5) | ND(3.5) | ND(2.9) | ND(2.7) | ND(2.6) | ND(2.6) | ND(4) | ND(4.4) | ND(17) | ND(3.2) | ND(4.4) | ND(3.9) | ND(6) | ND(2.8) | ND(4.9) |
| | | 30 | 432 | ND(27) | ND(11) | ND(8.4) | ND(6.7) | ND(5.7) | ND(18) | ND(13) | ND(13) | ND(13) | ND(11) | ND(10) | ND(9.8) | ND(9.8) | ND(15) | ND(16) | ND(64) | ND(12) | ND(16) | ND(14) | ND(22) | ND(10) | ND(18) |
| | | 30 Dup | 432 | ND(27) | ND(11) | ND(8.4) | ND(6.7) | ND(5.7) | ND(18) | ND(13) | ND(13) | ND(13) | ND(11) | ND(10) | ND(9.8) | ND(9.8) | ND(15) | ND(16) | ND(64) | ND(12) | ND(16) | ND(14) | ND(22) | ND(10) | ND(18) |
| | | 35 | 404 | ND(25) | ND(10) | ND(7.8) | ND(6.3) | ND(5.3) | ND(17) | ND(12) | ND(12) | ND(12) | ND(10) | ND(9.3) | ND(9.2) | ND(9.2) | ND(14) | ND(15) | ND(60) | ND(11) | ND(15) | ND(14) | ND(21) | ND(9.9) | ND(17) |
| VW-21 | Apr 2008 | 5 | 484 | ND(3) | ND(1.2) UJ | ND(0.94) | 1.6 | ND(0.64) | ND(2) | ND(1.4) | ND(1.4) | ND(1.4) | ND(1.2) | ND(1.1) | ND(1.1) | ND(1.1) | ND(1.7) | ND(1.8) | ND(7.2) UJ | ND(1.4) | ND(1.8) | ND(1.6) | ND(2.5) UJ | ND(1.2) | ND(2.1) |
| | | 10 | 528 | ND(3.3) R | ND(1.4) R | ND(1) R | ND(0.82) R | ND(0.7) R | ND(2.2) R | ND(1.6) R | ND(1.6) R | ND(1.6) R | ND(1.3) R | ND(1.2) R | ND(1.2) R | ND(1.2) R | ND(1.8) R | ND(2) R | ND(7.8) R | ND(1.5) R | ND(2) R | ND(1.8) R | ND(2.7) R | ND(1.3) R | ND(2.2) R |
| | | 15 | 9520 | ND(60) | ND(25) UJ | ND(18) | ND(15) | ND(12) | ND(39) | ND(29) | ND(29) | ND(29) | ND(24) | ND(22) | ND(22) | ND(22) | ND(33) | ND(36) | ND(140) UJ | ND(27) | ND(36) | ND(32) | ND(49) UJ | ND(23) | ND(40) |
| | | 20 | 8960 | ND(56) | ND(23) UJ | ND(17) | ND(14) | ND(12) | ND(37) | ND(27) | ND(27) | ND(27) | ND(22) | ND(21) | ND(20) | ND(20) | ND(31) | ND(34) | ND(130) UJ | ND(25) | ND(34) | ND(30) | ND(46) UJ | ND(22) | ND(38) |
| | May 2008 | 10 | 2.24 | ND(0.14) R | ND(0.058) R | ND(0.043) R | ND(0.035) R | ND(0.03) R | ND(0.092) R | ND(0.067) R | ND(0.067) R | ND(0.067) R | ND(0.055) R | ND(0.052) R | ND(0.051) R | ND(0.051) R | ND(0.078) R | ND(0.084) R | ND(0.33) R | ND(0.063) R | ND(0.086) R | ND(0.075) R | ND(0.12) R | ND(0.055) R | ND(0.095) R |
| | Sep 2008 | 5 | 58.2 | ND(3.6) | ND(1.5) | ND(1.1) | ND(0.91) | ND(0.77) | ND(2.4) | ND(1.7) | ND(1.7) | ND(1.7) | ND(1.4) | ND(1.3) | ND(1.3) | ND(1.3) | ND(2) | ND(2.2) | ND(8.6) | ND(1.6) | ND(2.2) | ND(1.9) | ND(3) | ND(1.4) | ND(2.5) |
| | | 10 | 124 | ND(7.8) | ND(3.2) | ND(2.4) | ND(1.9) | ND(1.6) | ND(5.1) | ND(3.7) | ND(3.7) | ND(3.7) | ND(3.1) | ND(2.9) | ND(2.8) | ND(2.8) | ND(4.3) | ND(4.7) | ND(18) | ND(3.5) | ND(4.8) | ND(4.2) | ND(6.4) | ND(3) | ND(5.3) |
| | | 15 | 786 | ND(49) | ND(20) | ND(15) | ND(12) | ND(10) | ND(32) | ND(24) | ND(24) | ND(24) | ND(19) | ND(18) | ND(18) | ND(18) | ND(27) | ND(30) | ND(120) | ND(22) | ND(30) | ND(26) | ND(41) | ND(19) | ND(33) |
| | | 15 Dup | 786 | ND(49) | ND(20) | ND(15) | ND(12) | ND(10) | ND(32) | ND(24) | ND(24) | ND(24) | ND(19) | ND(18) | ND(18) | ND(18) | ND(27) | ND(30) | ND(120) | ND(22) | ND(30) | ND(26) | ND(41) | ND(19) | ND(33) |
| | | 20 | 710 | ND(44) | ND(18) | ND(14) | ND(11) | ND(9.4) | ND(29) | ND(21) | ND(21) | ND(21) | ND(18) | ND(16) | ND(16) | ND(16) | ND(25) | ND(27) | ND(100) | ND(20) | ND(27) | ND(24) | ND(37) | ND(17) | ND(30) |
| VW-93A | Mar 2005 | 5 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | Sep 2005 | 5 | 2.82 | ND(0.018) J | ND(0.0073) | ND(0.0055) | 0.0081 | ND(0.0037) | ND(0.012) | ND(0.0085) | ND(0.0085) | ND(0.0085) | ND(0.007) | ND(0.0065) | ND(0.0064) | ND(0.0064) | ND(0.0098) | 0.015 | ND(0.042) | ND(0.0079) | ND(0.011) | ND(0.0094) | ND(0.014) | ND(0.0069) | ND(0.012) |
| | Apr 2008 | 5 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | Sep 2008 | 5 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) UJ | ND(0.007) | ND(0.007) UJ | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 5 Dup | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) UJ | ND(0.0072) | ND(0.0072) UJ | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | Dec 2008 | 5 | 2.02 | ND(0.013) | ND(0.0052) | ND(0.0039) | ND(0.0031) | ND(0.0027) | ND(0.0083) | ND(0.0061) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0071) | ND(0.0076) | ND(0.03) | ND(0.0057) | ND(0.0077) | ND(0.0068) | ND(0.01) | ND(0.0049) | ND(0.0086) |
| VW-93 | Mar 2005 | 10 | 2.96 | ND(0.018) | ND(0.0077) | ND(0.0057) | ND(0.0046) | ND(0.0039) | ND(0.012) | ND(0.0089) | ND(0.0089) | ND(0.0089) | ND(0.0073) | ND(0.0068) | ND(0.0067) | ND(0.0067) | ND(0.01) | ND(0.011) | ND(0.044) | ND(0.0083) | ND(0.011) | ND(0.0099) | ND(0.015) | ND(0.0072) | ND(0.013) |
| | | 15 | 2.76 | ND(0.017) | ND(0.0071) | ND(0.0054) | ND(0.0043) | ND(0.0036) | ND(0.011) | ND(0.0083) | ND(0.0083) | ND(0.0083) | ND(0.0068) | ND(0.0064) | ND(0.0063) | ND(0.0063) | ND(0.0096) | ND(0.01) | ND(0.041) | ND(0.0078) | ND(0.01) | ND(0.0092) | ND(0.014) | ND(0.0067) | ND(0.012) |
| | | 20 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 20 Dup | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | | 25 | 2.69 | ND(0.017) | ND(0.007) | ND(0.0052) | ND(0.0042) | ND(0.0035) | ND(0.011) | ND(0.0081) | ND(0.0081) | ND(0.0081) | ND(0.0066) | ND(0.0062) | ND(0.0061) | ND(0.0061) | ND(0.0094) | ND(0.01) | ND(0.04) | ND(0.0076) | ND(0.01) | ND(0.009) | ND(0.014) | ND(0.0066) | ND(0.011) |
| | | 30 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | ND(0.0062) | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | | 35 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | ND(0.0036) | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | ND(0.0056) | ND(0.0098) |
| | | 40 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 45 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | | 50 | 2.64 | ND(0.016) | ND(0.0068) | ND(0.0051) | ND(0.0041) | ND(0.0035) | ND(0.011) | ND(0.0079) | ND(0.0079) | ND(0.0079) | ND(0.0065) | ND(0.0061) | ND(0.006) | ND(0.006) | ND(0.0092) | ND(0.0099) | ND(0.039) | ND(0.0074) | ND(0.01) | ND(0.0088) | ND(0.014) | ND(0.0064) | ND(0.011) |
| | | 55 | 2.58 | ND(0.016) | ND(0.0067) | ND(0.005) | ND(0.004) | ND(0.0034) | ND(0.011) | ND(0.0078) | ND(0.0078) | ND(0.0078) | ND(0.0064) | ND(0.006) | ND(0.0058) | ND(0.0058) | ND(0.009) | 0.067 | ND(0.038) | ND(0.0072) | ND(0.0099) | ND(0.0086) | ND(0.013) | ND(0.0063) | ND(0.011) |
| | | 60 | 440 | ND(2.8) | ND(1.1) | ND(0.85) | ND(0.68) | ND(0.58) | ND(1.8) | ND(1.3) | ND(1.3) | ND(1.3) | ND(1.1) | ND(1) | ND(1) | ND(1) | ND(1.5) | ND(1.6) | ND(6.5) | ND(1.2) | ND(1.7) | ND(1.5) | ND(2.3) | ND(1.1) | ND(1.9) |

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## TABLE 2-8c. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, WATER TREATMENT RELATED AND OTHER CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | Dilution Factor | Allyl Chloride mg/m$^3$ | Benzyl chloride mg/m$^3$ | Bromo-methane mg/m$^3$ | Carbon Disulfide mg/m$^3$ | Chloro-ethane mg/m$^3$ | Chloro-methane mg/m$^3$ | 1,2-Dichloro-benzene mg/m$^3$ | 1,3-Dichloro-benzene mg/m$^3$ | 1,4-Dichloro-benzene mg/m$^3$ | Dichloro-difluoro-methane mg/m$^3$ | 1,2-Dichloro-propane mg/m$^3$ | cis-1,3-dichloro-propene mg/m$^3$ | trans-1,3-Dichloro-propene mg/m$^3$ | 1,2-Dichloro-1,1,2,2-tetrafluoroethane mg/m$^3$ | Ethanol mg/m$^3$ | 1,2,4-Trichloro-benzene mg/m$^3$ | Trichloro-fluoromethane mg/m$^3$ | 1,1,2-Trichloro-trifluoroethane mg/m$^3$ | Bromo-dichloro-methane mg/m$^3$ | Bromoform mg/m$^3$ | Chloroform mg/m$^3$ | Dibromo-chloro-methane mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-93 | Sep 2005 | 10 | 2.24 | ND(0.014) J | ND(0.0058) | ND(0.0043) | 0.026 | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | 0.016 | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 15 | 2.2 | ND(0.014) J | ND(0.0057) | ND(0.0043) | 0.024 | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | 0.0097 | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 20 | 2.2 | ND(0.014) J | ND(0.0057) | ND(0.0043) | 0.009 | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | 0.0095 | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 25 | 2.24 | ND(0.014) J | ND(0.0058) | ND(0.0043) | 0.0041 | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 30 | 2.24 | ND(0.014) J | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | 0.014 | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 35 | 2.29 | ND(0.014) J | ND(0.0059) | ND(0.0044) | 0.0036 | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | ND(0.0056) | ND(0.0098) |
| | | 40 | 2.2 | ND(0.014) J | ND(0.0057) | ND(0.0043) | 0.0067 | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | 0.0062 | ND(0.0094) |
| | | 45 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) J | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 50 | 2.24 | ND(0.014) J | ND(0.0058) | ND(0.0043) | 0.005 | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | 0.014 | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 55 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) J | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 60 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) J | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | Oct 2005 | 30 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) J | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) J | ND(0.0083) | ND(0.033) J | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 35 | 2.13 | ND(0.013) | ND(0.0055) | ND(0.0041) | ND(0.0033) | ND(0.0028) J | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | ND(0.0053) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0074) J | ND(0.008) | ND(0.032) J | 0.0066 | ND(0.0082) | ND(0.0071) | ND(0.011) | ND(0.0052) | ND(0.0091) |
| | | 40 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | ND(0.0032) | ND(0.0028) J | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) J | ND(0.0079) | ND(0.031) J | 0.0094 | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| | | 45 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | ND(0.0034) | ND(0.0028) J | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) J | ND(0.0081) | ND(0.032) J | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | ND(0.0053) | ND(0.0092) |
| | | 50 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) J | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) J | ND(0.0083) | ND(0.033) J | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 60 | 2.13 | ND(0.013) | ND(0.0055) | ND(0.0041) | ND(0.0033) | ND(0.0028) J | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | ND(0.0053) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0074) J | ND(0.008) | ND(0.032) J | ND(0.006) | ND(0.0082) | ND(0.0071) | ND(0.011) | 0.0071 | ND(0.0091) |
| | Apr 2008 | 10 | 25.3 | ND(0.16) | ND(0.065) | ND(0.049) | ND(0.039) | ND(0.033) | ND(0.1) | ND(0.076) | ND(0.076) | ND(0.076) | ND(0.062) | ND(0.058) | ND(0.057) | ND(0.057) | ND(0.088) | ND(0.095) | ND(0.38) | ND(0.071) | ND(0.097) | ND(0.085) | ND(0.13) | ND(0.062) | ND(0.11) |
| | | 10 Dup | 33.7 | ND(0.21) | ND(0.087) | ND(0.065) | ND(0.052) | ND(0.044) | ND(0.14) | ND(0.1) | ND(0.1) | ND(0.1) | ND(0.083) | ND(0.078) | ND(0.076) | ND(0.076) | ND(0.12) | ND(0.13) | ND(0.5) | ND(0.095) | ND(0.13) | ND(0.11) | ND(0.17) | ND(0.082) | ND(0.14) |
| | | 15 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | 0.014 | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 20 | 2.58 | ND(0.016) | ND(0.0067) | ND(0.005) | ND(0.004) | ND(0.0034) | ND(0.011) | ND(0.0078) | ND(0.0078) | ND(0.0078) | ND(0.0064) | ND(0.006) | ND(0.0058) | ND(0.0058) | ND(0.009) | ND(0.0097) | ND(0.038) | ND(0.0072) | ND(0.0099) | ND(0.0086) | ND(0.013) J | ND(0.0063) | ND(0.011) |
| | | 20 Dup | 2.58 | ND(0.016) | ND(0.0067) | ND(0.005) | ND(0.004) | ND(0.0034) | ND(0.011) | ND(0.0078) | ND(0.0078) | ND(0.0078) | ND(0.0064) | ND(0.006) | ND(0.0058) | ND(0.0058) | ND(0.009) | ND(0.0097) | ND(0.038) | ND(0.0072) | ND(0.0099) | ND(0.0086) | ND(0.013) J | ND(0.0063) | ND(0.011) |
| | | 25 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | 0.0082 | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 30 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | | 35 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | ND(0.0036) | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) J | ND(0.0056) | ND(0.0098) |
| | | 40 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | ND(0.0062) | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | | 45 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | 0.01 | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) J | ND(0.0058) | ND(0.01) |
| | | 50 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | ND(0.0038) | ND(0.0032) | ND(0.01) | 0.014 | ND(0.0074) | ND(0.0074) | 0.0069 | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | 0.058 | ND(0.037) | ND(0.0069) | ND(0.0095) | ND(0.0083) | ND(0.013) J | ND(0.006) | ND(0.01) |
| | | 55 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | ND(0.0062) | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | Sep 2008 | 10 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | 0.0059 | ND(0.0099) |
| | | 15 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | 0.02 | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 20 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | ND(0.0062) | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | | 20 Dup | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0074) | ND(0.0074) | ND(0.0074) | ND(0.0061) | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | 0.0098 JB | ND(0.037) | ND(0.0069) | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) | ND(0.01) |
| | | 25 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) UJ | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 30 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 35 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | 0.0094 | 0.034 | 0.056 J | ND(0.007) | ND(0.007) | ND(0.007) | 0.0058 J | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 40 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | ND(0.0036) | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | ND(0.0056) | ND(0.0098) |
| | | 45 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0074) | ND(0.0074) | ND(0.0074) | ND(0.0061) | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | ND(0.0093) | ND(0.037) | ND(0.0069) | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) | ND(0.01) |
| | | 50 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 55 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) UJ | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 60 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) UJ | ND(0.0072) | ND(0.0072) | ND(0.0072) | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | Dec 2008 | 10 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | 0.0059 JB | 0.0083 | 0.045 | ND(0.0065) | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) | 0.013 JB | ND(0.032) | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | 0.0091 | ND(0.0092) |
| | | 15 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 20 | 2.02 | ND(0.013) | ND(0.0052) | ND(0.0039) | ND(0.0031) | ND(0.0027) | ND(0.0083) | ND(0.0061) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0071) | ND(0.0076) | ND(0.03) | ND(0.0057) | ND(0.0077) | ND(0.0068) | ND(0.01) | ND(0.0049) | ND(0.0086) |
| | | 25 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | ND(0.0032) | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | ND(0.0079) | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| | | 30 | 2.13 | ND(0.013) | ND(0.0055) | ND(0.0041) | ND(0.0033) | ND(0.0028) | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | ND(0.0053) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0074) | ND(0.008) | ND(0.032) | ND(0.006) | ND(0.0082) | ND(0.0071) | ND(0.011) | ND(0.0052) | ND(0.0091) |
| | | 35 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | ND(0.0034) | ND(0.0028) | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | 0.0055 | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) | 0.01 JB | ND(0.032) | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | ND(0.0053) | ND(0.0092) |
| | | 40 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | 0.01 JB | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | 0.024 JB | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| | | 45 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 50 | 2.13 | ND(0.013) | ND(0.0055) | ND(0.0041) | ND(0.0033) | ND(0.0028) | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | ND(0.0053) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0074) | ND(0.008) | ND(0.032) | ND(0.006) | ND(0.0082) | ND(0.0071) | ND(0.011) | ND(0.0052) | ND(0.0091) |
| | | 55 | 2.02 | ND(0.013) | ND(0.0052) | ND(0.0039) | ND(0.0031) | ND(0.0027) | ND(0.0083) | ND(0.0061) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0071) | ND(0.0076) | ND(0.03) | ND(0.0057) | ND(0.0077) | ND(0.0068) | ND(0.01) | ND(0.0049) | ND(0.0086) |
| | | 55 Dup | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | ND(0.0034) | ND(0.0028) | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) | ND(0.0081) | ND(0.032) | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | ND(0.0053) | ND(0.0092) |
| | | 60 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | ND(0.0032) | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | ND(0.0079) | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |

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## TABLE 2-8c. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, WATER TREATMENT RELATED AND OTHER CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | Dilution Factor | Allyl Chloride mg/m$^3$ | Benzyl chloride mg/m$^3$ | Bromo-methane mg/m$^3$ | Carbon Disulfide mg/m$^3$ | Chloro-ethane mg/m$^3$ | Chloro-methane mg/m$^3$ | 1,2-Dichloro-benzene mg/m$^3$ | 1,3-Dichloro-benzene mg/m$^3$ | 1,4-Dichloro-benzene mg/m$^3$ | Dichloro-difluoro-methane mg/m$^3$ | 1,2-Dichloro-propane mg/m$^3$ | cis-1,3-dichloro-propene mg/m$^3$ | trans-1,3-Dichloro-propene mg/m$^3$ | 1,2-Dichloro-1,1,2,2-tetrafluoroethane mg/m$^3$ | Ethanol mg/m$^3$ | 1,2,4-Trichloro-benzene mg/m$^3$ | Trichloro-fluoromethane mg/m$^3$ | 1,1,2-Trichloro-trifluoroethane mg/m$^3$ | Bromo-dichloro-methane mg/m$^3$ | Bromoform mg/m$^3$ | Chloroform mg/m$^3$ | Dibromo-chloro-methane mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-96A | Mar 2005 | 5 | 2.05 | ND(0.013) | ND(0.0053) | ND(0.004) | 0.072 | ND(0.0027) | 0.015 J | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0072) | 0.35 | ND(0.03) | ND(0.0058) | ND(0.0078) | ND(0.0069) | ND(0.01) | 0.006 | ND(0.0087) |
| | Sep 2005 | 5 | 2.96 | ND(0.018) J | ND(0.0077) | ND(0.0057) | 0.0081 | ND(0.0039) | ND(0.012) | ND(0.0089) | ND(0.0089) | ND(0.0089) | ND(0.0073) | ND(0.0068) | ND(0.0067) | ND(0.0067) | ND(0.01) | ND(0.011) | ND(0.044) | ND(0.0083) | ND(0.011) | ND(0.0099) | ND(0.015) | ND(0.0072) | ND(0.013) |
| | Jun/Jul 2006 | 5 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | Apr 2008 | 5 | 2.05 | ND(0.013) | ND(0.0053) | ND(0.004) J | 0.0077 | ND(0.0027) | ND(0.0085) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0072) | ND(0.0077) | ND(0.03) | ND(0.0058) | ND(0.0078) | ND(0.0069) | ND(0.01) | ND(0.005) | ND(0.0087) |
| | Sep 2008 | 5 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | 0.012 JB | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | Dec 2008 | 5 | 7.63 | ND(0.48) | ND(0.2) | ND(0.15) UJ | ND(0.12) | ND(0.1) | ND(0.32) | ND(0.23) | ND(0.23) | ND(0.23) | ND(0.19) | ND(0.18) | ND(0.17) | ND(0.17) | ND(0.27) | ND(0.29) | ND(1.1) | ND(0.21) | ND(0.29) | ND(0.26) | ND(0.39) | ND(0.19) | ND(0.32) |
| VW-96 | Mar 2005 | 10 | 2.13 | ND(0.013) | ND(0.0055) | ND(0.0041) | ND(0.0033) | ND(0.0028) | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | ND(0.0053) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0074) | ND(0.008) | ND(0.032) | ND(0.006) | ND(0.0082) | ND(0.0071) | ND(0.011) | ND(0.0052) | ND(0.0091) |
| | | 15 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | ND(0.0034) | ND(0.0028) | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) | ND(0.0081) | ND(0.032) | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | ND(0.0053) | ND(0.0092) |
| | | 20 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 25 | 2.13 | ND(0.013) | ND(0.0055) | ND(0.0041) | ND(0.0033) | ND(0.0028) | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | ND(0.0053) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0074) | ND(0.008) | ND(0.032) | ND(0.006) | ND(0.0082) | ND(0.0071) | ND(0.011) | ND(0.0052) | ND(0.0091) |
| | | 30 | 1.75 | ND(0.011) | ND(0.0045) | ND(0.0034) | ND(0.0027) | ND(0.0023) | ND(0.0072) | ND(0.0053) | ND(0.0053) | ND(0.0053) | ND(0.0043) | ND(0.004) | ND(0.004) | ND(0.004) | ND(0.0061) | ND(0.0066) J | ND(0.026) | ND(0.0049) | ND(0.0067) | ND(0.0059) | ND(0.009) | ND(0.0043) | ND(0.0074) |
| | | 35 | 1.79 | ND(0.011) R | ND(0.0046) R | ND(0.0035) R | 0.031 R | ND(0.0024) R | ND(0.0074) R | ND(0.0054) R | ND(0.0054) R | ND(0.0054) R | 0.0051 R | ND(0.0041) R | ND(0.0041) R | ND(0.0041) R | ND(0.0062) R | 0.013 R | ND(0.026) R | ND(0.005) R | ND(0.0068) R | ND(0.006) R | ND(0.0092) R | ND(0.0044) R | ND(0.0076) R |
| | | 40 | 1.58 | ND(0.0099) | ND(0.0041) | ND(0.0031) | ND(0.0025) | ND(0.0021) | ND(0.0065) | ND(0.0047) | ND(0.0048) | ND(0.0048) | ND(0.0039) | ND(0.0036) | ND(0.0036) | ND(0.0036) | ND(0.0055) | ND(0.006) J | ND(0.023) | ND(0.0044) | ND(0.006) | ND(0.0053) | ND(0.0082) | ND(0.0038) | ND(0.0067) |
| | | 45 | 1.55 | ND(0.0097) | ND(0.004) | ND(0.003) | ND(0.0024) | ND(0.002) | ND(0.0064) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.0038) | ND(0.0036) | ND(0.0035) | ND(0.0035) | ND(0.0054) | ND(0.0058) J | ND(0.023) | ND(0.0044) | ND(0.0059) | ND(0.0052) | ND(0.008) | ND(0.0038) | ND(0.0066) |
| | | 50 | 336 | ND(2.1) | ND(0.87) | ND(0.65) | ND(0.52) | ND(0.44) | ND(1.4) | ND(1) | ND(1) | ND(1) | ND(0.83) | ND(0.78) | ND(0.76) | ND(0.76) | ND(1.2) | ND(1.3) J | ND(5) | ND(0.94) | ND(1.3) | ND(1.1) | ND(1.7) | ND(0.82) | ND(1.4) |
| | | 50 Dup | 164 | ND(1) | ND(0.42) | ND(0.32) | ND(0.26) | ND(0.22) | ND(0.68) | ND(0.49) | ND(0.49) | ND(0.49) | ND(0.4) | ND(0.38) | ND(0.37) | ND(0.37) | ND(0.57) | ND(0.62) J | ND(2.4) | ND(0.46) | ND(0.63) | ND(0.55) | ND(0.85) | ND(0.4) | ND(0.7) |
| | | 55 | 328 | ND(2) | ND(0.85) | ND(0.64) | ND(0.51) | ND(0.43) | ND(1.4) | ND(0.99) | ND(0.99) | ND(0.99) | ND(0.81) | ND(0.76) | ND(0.74) | ND(0.74) | ND(1.1) | ND(1.2) | ND(4.9) | ND(0.92) | ND(1.2) | ND(1.1) | ND(1.7) | ND(0.8) | ND(1.4) |
| | May 2005 | 30 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 35 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | 0.0064 | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | 0.23 DX | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 35 Dup | 22.9 | ND(0.14) | ND(0.059) | ND(0.044) | ND(0.036) | ND(0.03) | ND(0.094) | ND(0.069) | ND(0.069) | ND(0.069) | ND(0.057) | ND(0.053) | ND(0.052) | ND(0.052) | ND(0.08) | ND(0.086) | ND(0.34) | ND(0.064) | ND(0.088) | ND(0.077) | ND(0.12) | ND(0.056) | ND(0.098) |
| | | 55 | 44.8 | ND(0.28) | ND(0.12) | ND(0.087) | ND(0.07) | ND(0.059) | ND(0.18) | ND(0.13) | ND(0.13) | ND(0.13) | ND(0.11) | ND(0.1) | ND(0.1) | ND(0.1) | ND(0.16) | ND(0.17) | ND(0.66) | ND(0.12) | ND(0.17) | ND(0.15) | ND(0.23) | ND(0.11) | ND(0.19) |
| | Sep 2005 | 10 | 2.09 | ND(0.013) J | ND(0.0054) | ND(0.004) | 0.02 | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | ND(0.0079) | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| | | 15 | 2.24 | ND(0.014) J | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 20 | 2.24 | ND(0.014) J | ND(0.0058) | ND(0.0043) | 0.0038 | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | 0.0061 | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 25 | 2.29 | ND(0.014) J | ND(0.0059) | ND(0.0044) | 0.0078 | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | ND(0.0056) | ND(0.0098) |
| | | 30 | 2.24 | ND(0.014) J | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | 0.014 | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 35 | 2.42 | ND(0.015) J | ND(0.0063) | ND(0.0047) | 0.0083 | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | | 40 | 45.8 | ND(0.29) J | ND(0.12) | ND(0.089) | ND(0.071) | ND(0.06) | ND(0.19) | ND(0.14) | ND(0.14) | ND(0.14) | ND(0.11) | ND(0.1) | ND(0.1) | ND(0.1) | ND(0.16) | ND(0.17) | ND(0.68) | ND(0.13) | ND(0.18) | ND(0.15) | ND(0.24) | ND(0.11) | ND(0.2) |
| | | 45 | 93.2 | ND(0.58) J | ND(0.24) | ND(0.18) | ND(0.14) | ND(0.12) | ND(0.38) | ND(0.28) | ND(0.28) | ND(0.28) | ND(0.23) | ND(0.22) | ND(0.21) | ND(0.21) | ND(0.32) | ND(0.35) | ND(1.4) | ND(0.26) | ND(0.36) | ND(0.31) | ND(0.48) | ND(0.23) | ND(0.4) |
| | | 50 | 572 | ND(3.6) J | ND(1.5) | ND(1.1) | ND(0.89) | ND(0.75) | ND(2.4) | ND(1.7) | ND(1.7) | ND(1.7) | ND(1.4) | ND(1.3) | ND(1.3) | ND(1.3) | ND(2) | ND(2.2) | ND(8.5) | ND(1.6) | ND(2.2) | ND(1.9) | ND(3) | ND(1.4) | ND(2.4) |
| | | 55 | 1120 | ND(7) | ND(2.9) | ND(2.2) | ND(1.7) | ND(1.5) | ND(4.6) | ND(3.4) | ND(3.4) | ND(3.4) | ND(2.8) | ND(2.6) | ND(2.5) | ND(2.5) | ND(3.9) | ND(4.2) | ND(17) | ND(3.1) | ND(4.3) | ND(3.8) | ND(5.8) | ND(2.7) | ND(4.8) |
| | | 55 Dup | 1470 | ND(9.2) | ND(3.8) | ND(2.8) | ND(2.3) | ND(1.9) | ND(6.1) | ND(4.4) | ND(4.4) | ND(4.4) | ND(3.6) | ND(3.4) | ND(3.3) | ND(3.3) | ND(5.1) | ND(5.5) | ND(22) | ND(4.1) | ND(5.6) | ND(4.9) | ND(7.6) | ND(3.6) | ND(6.3) |
| | | 60 | 3730 | ND(23) | ND(9.6) | ND(7.2) | 24 | ND(4.9) | ND(15) | ND(11) | ND(11) | ND(11) | ND(9.2) | ND(8.6) | ND(8.5) | ND(8.5) | ND(13) | ND(14) | ND(55) | ND(10) | ND(14) | ND(12) | ND(19) | ND(9.1) | ND(16) |
| | Oct 2005 | 20 | 2.05 | ND(0.013) | ND(0.0053) | ND(0.004) | 0.0047 | ND(0.0027) J | ND(0.0085) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0072) J | ND(0.0077) | ND(0.03) | ND(0.0058) | ND(0.0078) | ND(0.0069) | ND(0.01) | ND(0.005) | ND(0.0087) |
| | | 25 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) J | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) J | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 30 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) J | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) J | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 35 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | ND(0.0034) | ND(0.0028) J | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) J | ND(0.0081) | ND(0.032) | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | ND(0.0053) | ND(0.0092) |
| | | 40 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | ND(0.0034) | ND(0.0028) J | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) J | ND(0.0081) | ND(0.032) | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | 0.0089 | ND(0.0092) |
| | | 50 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) J | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) J | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | 0.02 | ND(0.0099) |
| | | 50 Dup | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) J | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) J | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | 0.02 | ND(0.0099) |
| | | 60 | 2330 | ND(14) J | ND(6) J | ND(4.5) J | 16 | ND(3.1) J | ND(9.6) J | ND(7) J | ND(7) J | ND(7) J | ND(5.8) J | ND(5.4) J | ND(5.3) J | ND(5.3) J | ND(8.1) J | ND(8.8) J | ND(34) J | ND(6.5) J | ND(8.9) J | ND(7.8) J | ND(12) J | ND(5.7) J | ND(9.9) J |
| | Jun/Jul 2006 | 10 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | ND(0.0062) | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | | 20 | 52.8 | ND(0.33) J | ND(0.14) J | ND(0.1) J | ND(0.082) J | ND(0.07) J | ND(0.22) J | ND(0.16) J | ND(0.16) J | ND(0.16) J | ND(0.13) J | ND(0.12) J | ND(0.12) J | ND(0.12) J | ND(0.18) J | ND(0.2) J | ND(0.78) J | ND(0.15) J | ND(0.2) J | ND(0.18) J | ND(0.27) J | ND(0.13) J | ND(0.22) J |
| | | 30 | 672 | ND(4.2) J | ND(1.7) J | ND(1.3) J | ND(1) J | ND(0.89) J | ND(2.8) J | ND(2) J | ND(2) J | ND(2) J | ND(1.7) J | ND(1.6) J | ND(1.5) J | ND(1.5) J | ND(2.3) J | ND(2.5) J | ND(10) J | ND(1.9) J | ND(2.6) J | ND(2.2) J | ND(3.5) J | ND(1.6) J | ND(2.9) J |
| | | 40 | 826 | ND(5.2) J | ND(2.1) J | ND(1.6) J | ND(1.3) J | ND(1.1) J | ND(3.4) J | ND(2.5) J | ND(2.5) J | ND(2.5) J | ND(2) J | ND(1.9) J | ND(1.9) J | ND(1.9) J | ND(2.9) J | ND(3.1) J | ND(12) J | ND(2.3) J | ND(3.2) J | ND(2.8) J | ND(4.3) J | ND(2) J | ND(3.5) J |
| | | 50 | 2640 | ND(16) J | ND(6.8) J | ND(5.1) J | ND(4.1) J | ND(3.5) J | ND(11) J | ND(7.9) J | ND(7.9) J | ND(7.9) J | ND(6.5) J | ND(6.1) J | ND(6) J | ND(6) J | ND(9.2) J | ND(9.9) J | ND(39) J | ND(7.4) J | ND(10) J | ND(8.8) J | ND(14) J | ND(6.4) J | ND(11) J |
| | | 55 | 3030 | ND(19) J | ND(7.8) J | ND(5.9) J | ND(4.7) J | ND(4) J | ND(12) J | ND(9.1) J | ND(9.1) J | ND(9.1) J | ND(7.5) J | ND(7) J | ND(6.9) J | ND(6.9) J | ND(10) J | ND(11) J | ND(45) J | ND(8.5) J | ND(12) J | ND(10) J | ND(16) J | ND(7.4) J | ND(13) J |

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# TABLE 2-8c. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, WATER TREATMENT RELATED AND OTHER CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | Dilution Factor | Allyl Chloride mg/m$^3$ | Benzyl chloride mg/m$^3$ | Bromo-methane mg/m$^3$ | Carbon Disulfide mg/m$^3$ | Chloro-ethane mg/m$^3$ | Chloro-methane mg/m$^3$ | 1,2-Dichloro-benzene mg/m$^3$ | 1,3-Dichloro-benzene mg/m$^3$ | 1,4-Dichloro-benzene mg/m$^3$ | Dichloro-difluoro-methane mg/m$^3$ | 1,2-Dichloro-propane mg/m$^3$ | cis-1,3-dichloro-propene mg/m$^3$ | trans-1,3-Dichloro-propene mg/m$^3$ | 1,2-Dichloro-1,1,2,2-tetrafluoroethane mg/m$^3$ | Ethanol mg/m$^3$ | 1,2,4-Trichloro-benzene mg/m$^3$ | Trichloro-fluoromethane mg/m$^3$ | 1,1,2-Trichloro-trifluoroethane mg/m$^3$ | Bromo-dichloro-methane mg/m$^3$ | Bromoform mg/m$^3$ | Chloroform mg/m$^3$ | Dibromo-chloro-methane mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-96 | Apr 2008 | 10 | 2.64 | ND(0.016) | ND(0.0068) | ND(0.0051) J | 0.025 | ND(0.0035) | ND(0.011) | ND(0.0079) | ND(0.0079) | ND(0.0079) | ND(0.0065) | ND(0.0061) | ND(0.006) | ND(0.006) | ND(0.0092) | ND(0.0099) | ND(0.039) | ND(0.0074) | ND(0.01) | ND(0.0088) | ND(0.014) | ND(0.0064) | ND(0.011) |
| | | 20 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | 0.0056 | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | | 25 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | ND(0.0032) | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | ND(0.0079) | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| | | 30 | 2.02 | ND(0.013) | ND(0.0052) | ND(0.0039) | ND(0.0031) | ND(0.0027) | ND(0.0083) | ND(0.0061) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0071) | ND(0.0076) | ND(0.03) | ND(0.0057) | ND(0.0077) | ND(0.0068) | ND(0.01) | ND(0.0049) | ND(0.0086) |
| | | 35 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0074) | ND(0.0074) | ND(0.0074) | ND(0.0061) | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | ND(0.0093) | ND(0.037) | ND(0.0069) | ND(0.0095) | ND(0.0083) | ND(0.013) J | ND(0.006) | ND(0.01) |
| | | 40 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) J | ND(0.0034) | ND(0.0028) | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) | ND(0.0081) | ND(0.032) | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | ND(0.0053) | ND(0.0092) |
| | | 45 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | ND(0.0036) | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) J | ND(0.0056) | ND(0.0098) |
| | | 50 | 2.64 | ND(0.016) | ND(0.0068) | ND(0.0051) | ND(0.0041) | ND(0.0035) | ND(0.011) | ND(0.0079) | ND(0.0079) | ND(0.0079) | ND(0.0065) | ND(0.0061) | ND(0.006) | ND(0.006) | ND(0.0092) | ND(0.0099) | ND(0.039) | ND(0.0074) | ND(0.01) | ND(0.0088) | ND(0.014) J | 0.072 | ND(0.011) |
| | | 55 | 129 | ND(0.81) | ND(0.33) | ND(0.25) | ND(0.2) | ND(0.17) | ND(0.53) | ND(0.39) | ND(0.39) | ND(0.39) | ND(0.32) | ND(0.3) | ND(0.29) | ND(0.29) | ND(0.45) | ND(0.49) | ND(1.9) | ND(0.36) | ND(0.49) | ND(0.43) | ND(0.67) | ND(0.31) | ND(0.55) |
| | Sep 2008 | 10 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | ND(0.0036) | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | ND(0.0056) | ND(0.0098) |
| | | 15 | 2.58 | ND(0.016) | ND(0.0067) | ND(0.005) | ND(0.004) | ND(0.0034) | ND(0.011) | ND(0.0078) | ND(0.0078) | ND(0.0078) | ND(0.0064) | ND(0.006) | ND(0.0058) | ND(0.0058) | ND(0.009) | ND(0.0097) | ND(0.038) | ND(0.0072) | ND(0.0099) | ND(0.0086) | ND(0.013) | ND(0.0063) | ND(0.011) |
| | | 20 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | ND(0.0038) | ND(0.0032) | ND(0.01) | 0.24 | ND(0.0074) | ND(0.0074) | ND(0.0061) | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | ND(0.0093) | 0.097 | ND(0.0069) | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) | ND(0.01) |
| | | 25 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0073) UJ | ND(0.0073) | ND(0.0073) UJ | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | | 30 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) UJ | ND(0.0076) | ND(0.0076) UJ | ND(0.0062) | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | | 35 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) UJ | ND(0.0072) | ND(0.0072) UJ | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 40 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0074) UJ | ND(0.0074) | ND(0.0074) UJ | ND(0.0061) | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | ND(0.0093) | ND(0.037) | ND(0.0069) | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) | ND(0.01) |
| | | 45 | 2.58 | ND(0.016) | ND(0.0067) | ND(0.005) | ND(0.004) | ND(0.0034) | ND(0.011) | ND(0.0078) UJ | ND(0.0078) | ND(0.0078) UJ | ND(0.0064) | ND(0.006) | ND(0.0058) | ND(0.0058) | ND(0.009) | ND(0.0097) | ND(0.038) | ND(0.0072) | ND(0.0099) | ND(0.0086) | ND(0.013) | ND(0.0063) | ND(0.011) |
| | | 50 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) UJ | ND(0.0072) | ND(0.0072) UJ | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | 0.071 | ND(0.01) |
| | | 55 | 84.3 | ND(5.3) | ND(2.2) | ND(1.6) | ND(1.3) | ND(1.1) | ND(3.5) | ND(2.5) | ND(2.5) | ND(2.5) | ND(2.1) | ND(1.9) | ND(1.9) | ND(1.9) | ND(2.9) | ND(3.2) | ND(12) | ND(2.4) | ND(3.2) | ND(2.8) | ND(4.4) | ND(2) | ND(3.6) |
| | | 60 | 2.42 | ND(15) | ND(6.3) | ND(4.7) | ND(3.8) | ND(3.2) | ND(10) | ND(7.3) | ND(7.3) | ND(7.3) | ND(6) | ND(5.6) | ND(5.5) | ND(5.5) | ND(8.4) | ND(9.1) | ND(36) | ND(6.8) | ND(9.3) | ND(8.1) | ND(12) | ND(5.9) | ND(10) |
| | Dec 2008 | 10 | 5.6 | ND(0.35) | ND(0.14) | ND(0.11) UJ | ND(0.087) | ND(0.074) | ND(0.23) | ND(0.17) | ND(0.17) | ND(0.17) | ND(0.14) | ND(0.13) | ND(0.13) | ND(0.13) | ND(0.2) | ND(0.21) | ND(0.83) | ND(0.16) | ND(0.21) | ND(0.19) | ND(0.29) | ND(0.14) | ND(0.24) |
| | | 15 | 7.77 | ND(0.49) | ND(0.2) | ND(0.15) UJ | ND(0.12) | ND(0.1) | ND(0.32) | ND(0.23) | ND(0.23) | ND(0.23) | ND(0.19) | ND(0.18) | ND(0.18) | ND(0.18) | ND(0.27) | ND(0.29) | ND(1.2) | ND(0.22) | ND(0.3) | ND(0.26) | ND(0.4) | ND(0.19) | ND(0.33) |
| | | 20 | 7.47 | ND(0.47) | ND(0.19) | ND(0.14) UJ | ND(0.12) | ND(0.098) | ND(0.31) | ND(0.22) | ND(0.22) | ND(0.22) | ND(0.18) | ND(0.17) | ND(0.17) | ND(0.17) | ND(0.26) | ND(0.28) | ND(1.1) | ND(0.21) | ND(0.29) | ND(0.25) | ND(0.39) | ND(0.18) | ND(0.32) |
| | | 25 | 8.2 | ND(0.51) | ND(0.21) | ND(0.16) | ND(0.13) | ND(0.11) | ND(0.34) | ND(0.25) | ND(0.25) | ND(0.25) | ND(0.2) | ND(0.19) | ND(0.19) | ND(0.19) | ND(0.29) | ND(0.31) | ND(1.2) | ND(0.23) | ND(0.31) | ND(0.27) | ND(0.42) | ND(0.2) | ND(0.35) |
| | | 30 | 17.4 | ND(1.1) | ND(0.45) | ND(0.34) UJ | ND(0.27) | ND(0.23) | ND(0.72) | ND(0.52) | ND(0.52) | ND(0.52) | ND(0.43) | ND(0.4) | ND(0.39) | ND(0.39) | ND(0.61) | ND(0.66) | ND(2.6) | ND(0.49) | ND(0.67) | ND(0.58) | ND(0.9) | ND(0.42) | ND(0.74) |
| | | 35 | 18.3 | ND(1.1) | ND(0.47) | ND(0.36) | ND(0.28) | ND(0.24) | ND(0.76) | ND(0.55) | ND(0.55) | ND(0.55) | ND(0.45) | ND(0.42) | ND(0.42) | ND(0.42) | ND(0.64) | ND(0.69) | ND(2.7) | ND(0.51) | ND(0.7) | ND(0.61) | ND(0.94) | ND(0.45) | ND(0.78) |
| | | 40 | 23.3 | ND(1.4) | ND(0.6) | ND(0.45) UJ | ND(0.36) | ND(0.31) | ND(0.96) | ND(0.7) | ND(0.7) | ND(0.7) | ND(0.58) | ND(0.54) | ND(0.53) | ND(0.53) | ND(0.81) | ND(0.88) | ND(3.4) | ND(0.65) | ND(0.89) | ND(0.78) | ND(1.2) | ND(0.57) | ND(0.99) |
| | | 45 | 34.6 | ND(2.2) | ND(0.9) | ND(0.67) | ND(0.54) | ND(0.46) | ND(1.4) | ND(1) | ND(1) | ND(1) | ND(0.86) | ND(0.8) | ND(0.78) | ND(0.78) | ND(1.2) | ND(1.3) | ND(5.1) | ND(0.97) | ND(1.3) | ND(1.2) | ND(1.8) | ND(0.84) | ND(1.5) |
| | | 50 | 106 | ND(6.6) | ND(2.7) | ND(2) UJ | ND(1.6) | ND(1.4) | ND(4.4) | ND(3.2) | ND(3.2) | ND(3.2) | ND(2.6) | ND(2.4) | ND(2.4) | ND(2.4) | ND(3.7) | ND(4) | ND(16) | ND(3) | ND(4.1) | ND(3.6) | ND(5.5) | ND(2.6) | ND(4.5) |
| | | 50 Dup | 108 | ND(6.8) | ND(2.8) | ND(2.1) UJ | ND(1.7) | ND(1.4) | ND(4.5) | ND(3.2) | ND(3.2) | ND(3.2) | ND(2.7) | ND(2.5) | ND(2.4) | ND(2.4) | ND(3.8) | ND(4.1) | ND(16) | ND(3) | ND(4.1) | ND(3.6) | ND(5.6) | ND(2.6) | ND(4.6) |
| | | 55 | 104 | ND(6.5) | ND(2.7) | ND(2) | ND(1.6) | ND(1.4) | ND(4.3) | ND(3.1) | ND(3.1) | ND(3.1) | ND(2.6) | ND(2.4) | ND(2.4) | ND(2.4) | ND(3.6) | ND(3.9) | ND(15) | ND(2.9) | ND(4) | ND(3.5) | ND(5.4) | ND(2.5) | ND(4.4) |
| | | 60 | 220 | ND(14) | ND(5.7) | ND(4.3) | ND(3.4) | ND(2.9) | ND(9.1) | ND(6.6) | ND(6.6) | ND(6.6) | ND(5.4) | ND(5.1) | ND(5) | ND(5) | ND(7.7) | ND(8.3) | ND(33) | ND(6.2) | ND(8.4) | ND(7.4) | ND(11) | ND(5.4) | ND(9.4) |
| VW-99A | Mar 2005 | 5 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 10 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | ND(0.0036) | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | ND(0.0056) | ND(0.0098) |
| | Apr 2008 | 5 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) J | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | | 5 Dup | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | 0.0058 | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | 0.022 J | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 10 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | 0.0043 | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | Sep 2008 | 5 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) UJ | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) UJ | ND(0.0054) | ND(0.0094) UJ |
| | | 10 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) UJ | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) UJ | ND(0.0054) | ND(0.0094) UJ |
| | Dec 2008 | 5 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| VW-99 | Mar 2005 | 10 | 1.55 | ND(0.0097) | ND(0.004) | ND(0.003) | ND(0.0024) | ND(0.002) | ND(0.0064) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.0038) | ND(0.0036) | ND(0.0035) | ND(0.0035) | ND(0.0054) | ND(0.0058) | ND(0.023) | ND(0.0044) | ND(0.0059) | ND(0.0052) | ND(0.008) | ND(0.0038) | ND(0.0066) |
| | | 15 | 1.46 | ND(0.0091) | ND(0.0038) | ND(0.0028) | ND(0.0023) | ND(0.0019) | ND(0.006) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0036) | ND(0.0034) | ND(0.0033) | ND(0.0033) | ND(0.0051) | ND(0.0055) | ND(0.022) | ND(0.0041) | ND(0.0056) | ND(0.0049) | ND(0.0075) | ND(0.0036) | ND(0.0062) |
| | | 20 | 1.55 | ND(0.0097) | ND(0.004) | ND(0.003) | ND(0.0024) | ND(0.002) | ND(0.0064) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.0038) | ND(0.0036) | ND(0.0035) | ND(0.0035) | ND(0.0054) | ND(0.0058) | ND(0.023) | ND(0.0044) | ND(0.0059) | ND(0.0052) | ND(0.008) | ND(0.0038) | ND(0.0066) |
| | | 25 | 1.52 | ND(0.0095) | ND(0.0039) | ND(0.003) | 0.0031 | ND(0.002) | ND(0.0063) | ND(0.0046) | ND(0.0046) | ND(0.0046) | 0.004 | ND(0.0035) | ND(0.0034) | ND(0.0034) | ND(0.0053) | ND(0.0057) | ND(0.022) | ND(0.0043) | ND(0.0058) | ND(0.0051) | ND(0.0078) | ND(0.0037) | ND(0.0065) |
| | | 30 | 1.55 | ND(0.0097) | ND(0.004) | ND(0.003) | ND(0.0024) | ND(0.002) | ND(0.0064) | ND(0.0046) | ND(0.0046) | ND(0.0046) | 0.007 | ND(0.0036) | ND(0.0035) | ND(0.0035) | ND(0.0054) | ND(0.0058) | ND(0.023) | ND(0.0044) | ND(0.0059) | ND(0.0052) | ND(0.008) | ND(0.0038) | ND(0.0066) |
| | | 35 | 1.61 | ND(0.01) | ND(0.0042) | ND(0.0031) | ND(0.0025) | ND(0.0021) | ND(0.0066) | ND(0.0048) | ND(0.0048) | ND(0.0048) | 0.0068 | ND(0.0037) | ND(0.0036) | ND(0.0036) | ND(0.0056) | ND(0.0061) | ND(0.024) | ND(0.0045) | ND(0.0062) | ND(0.0054) | ND(0.0083) | 0.0092 | ND(0.0068) |
| | | 40 | 52.8 | ND(0.33) | ND(0.14) | ND(0.1) | ND(0.082) | ND(0.07) | ND(0.22) | ND(0.16) | ND(0.16) | ND(0.16) | ND(0.13) | ND(0.12) | ND(0.12) | ND(0.12) | ND(0.18) | ND(0.2) | ND(0.78) | ND(0.15) | ND(0.2) | ND(0.18) | ND(0.27) | ND(0.13) | ND(0.22) |
| | | 45 | 242 | ND(1.5) | ND(0.63) | ND(0.47) | ND(0.38) | ND(0.32) | ND(1) | ND(0.73) | ND(0.73) | ND(0.73) | ND(0.6) | ND(0.56) | ND(0.55) | ND(0.55) | ND(0.84) | ND(0.91) | ND(3.6) | ND(0.68) | ND(0.93) | ND(0.81) | ND(1.2) | ND(0.59) | ND(1) |
| | | 45 Dup | 229 | ND(1.4) | ND(0.59) | ND(0.44) | ND(0.36) | ND(0.3) | ND(0.94) | ND(0.69) | ND(0.69) | ND(0.69) | ND(0.57) | ND(0.53) | ND(0.52) | ND(0.52) | ND(0.8) | ND(0.86) | ND(3.4) | ND(0.64) | ND(0.88) | ND(0.77) | ND(1.2) | ND(0.56) | ND(0.98) |
| | | 50 | 1010 | ND(6.3) | ND(2.6) | ND(2) | ND(1.6) | ND(1.3) | ND(4.2) | ND(3) | ND(3) | ND(3) | ND(2.5) | ND(2.3) | ND(2.3) | ND(2.3) | ND(3.5) | ND(3.8) | ND(15) | ND(2.8) | ND(3.9) | ND(3.4) | ND(5.2) | ND(2.5) | ND(4.3) |
| | | 55 | 1550 | ND(9.7) | ND(4) | ND(3) | ND(2.4) | ND(2) | ND(6.4) | ND(4.7) | ND(4.7) | ND(4.7) | ND(3.8) | ND(3.6) | ND(3.5) | ND(3.5) | ND(5.4) | ND(5.8) | ND(23) | ND(4.4) | ND(6) | ND(5.2) | ND(8) | ND(3.8) | ND(6.6) |

## TABLE 2-8c. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, WATER TREATMENT RELATED AND OTHER CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | Dilution Factor | Allyl Chloride mg/m$^3$ | Benzyl chloride mg/m$^3$ | Bromo-methane mg/m$^3$ | Carbon Disulfide mg/m$^3$ | Chloro-ethane mg/m$^3$ | Chloro-methane mg/m$^3$ | 1,2-Dichloro-benzene mg/m$^3$ | 1,3-Dichloro-benzene mg/m$^3$ | 1,4-Dichloro-benzene mg/m$^3$ | Dichloro-difluoro-methane mg/m$^3$ | 1,2-Dichloro-propane mg/m$^3$ | cis-1,3-dichloro-propene mg/m$^3$ | trans-1,3-Dichloro-propene mg/m$^3$ | 1,2-Dichloro-1,1,2,2-tetrafluoroethane mg/m$^3$ | Ethanol mg/m$^3$ | 1,2,4-Trichloro-benzene mg/m$^3$ | Trichloro-fluoromethane mg/m$^3$ | 1,1,2-Trichloro-trifluoroethane mg/m$^3$ | Bromo-dichloro-methane mg/m$^3$ | Bromoform mg/m$^3$ | Chloroform mg/m$^3$ | Dibromo-chloro-methane mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-99 | Sep 2005 | 10 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 15 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | ND(0.0034) | ND(0.0028) | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) | ND(0.0081) | ND(0.032) | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | ND(0.0053) | ND(0.0092) |
| | | 20 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | 0.032 | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 25 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | 0.022 | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 30 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | ND(0.0036) | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | 0.0056 | ND(0.0098) |
| | | 35 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | 0.0083 | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | 0.021 | ND(0.0094) |
| | | 40 | 22.4 | ND(0.14) | ND(0.058) | ND(0.043) | ND(0.035) | ND(0.03) | ND(0.092) | ND(0.067) | ND(0.067) | ND(0.067) | ND(0.055) | ND(0.052) | ND(0.051) | ND(0.051) | ND(0.078) | ND(0.084) | ND(0.33) | ND(0.063) | ND(0.086) | ND(0.075) | ND(0.12) | ND(0.055) | ND(0.095) |
| | | 45 | 440 | ND(2.8) | ND(1.1) | ND(0.85) | ND(0.68) | ND(0.58) | ND(1.8) | ND(1.3) | ND(1.3) | ND(1.3) | ND(1.1) | ND(1) | ND(1) | ND(1) | ND(1.5) | ND(1.6) | ND(6.5) | ND(1.2) | ND(1.7) | ND(1.5) | ND(2.3) | ND(1.1) | ND(1.9) |
| | | 50 | 2160 | ND(14) | ND(5.6) | ND(4.2) | ND(3.4) | ND(2.8) | ND(8.9) | ND(6.5) | ND(6.5) | ND(6.5) | ND(5.3) | ND(5) | ND(4.9) | ND(4.9) | ND(7.6) | ND(8.1) | ND(32) | ND(6.1) | ND(8.3) | ND(7.2) | ND(11) | ND(5.3) | ND(9.2) |
| | | 50 Dup | 2330 | ND(14) | ND(6) | ND(4.5) | ND(3.6) | ND(3.1) | ND(9.6) | ND(7) | ND(7) | ND(7) | ND(5.8) | ND(5.4) | ND(5.3) | ND(5.3) | ND(8.1) | ND(8.8) | ND(34) | ND(6.5) | ND(8.9) | ND(7.8) | ND(12) | ND(5.7) | ND(9.9) |
| | | 55 | 4400 | ND(28) | ND(11) | ND(8.5) | ND(6.8) | ND(5.8) | ND(18) | ND(13) | ND(13) | ND(13) | ND(11) | ND(10) | ND(10) | ND(10) | ND(15) | ND(16) | ND(65) | ND(12) | ND(17) | ND(15) | ND(23) | ND(11) | ND(19) |
| | | 60 | 2240 | ND(14) | ND(5.8) | ND(4.3) | ND(3.5) | ND(3) | ND(9.2) | ND(6.7) | ND(6.7) | ND(6.7) | ND(5.5) | ND(5.2) | ND(5.1) | ND(5.1) | ND(7.8) | ND(8.4) | ND(33) | ND(6.3) | ND(8.6) | ND(7.5) | ND(12) | ND(5.5) | ND(9.5) |
| | Oct 2005 | 20 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | ND(0.0032) | ND(0.0028) J | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) J | ND(0.0079) | ND(0.031) J | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| | | 25 | 2.05 | ND(0.013) | ND(0.0053) | ND(0.004) | ND(0.0032) | ND(0.0027) J | ND(0.0085) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0072) J | ND(0.0077) | ND(0.03) J | ND(0.0058) | ND(0.0078) | ND(0.0069) | ND(0.01) | ND(0.005) | ND(0.0087) |
| | | 30 | 2.13 | ND(0.013) | ND(0.0055) | ND(0.0041) | ND(0.0033) | ND(0.0028) J | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | ND(0.0053) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0074) J | ND(0.008) | ND(0.032) J | ND(0.006) | ND(0.0082) | ND(0.0071) | ND(0.011) | ND(0.0052) | ND(0.0091) |
| | | 35 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | 0.0036 | ND(0.0028) J | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) J | ND(0.0081) | ND(0.032) J | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | 0.014 | ND(0.0092) |
| | | 40 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | ND(0.0032) | ND(0.0028) J | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) J | ND(0.0079) | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | 0.012 | ND(0.0089) |
| | | 40 Dup | 3.46 | ND(0.022) | ND(0.009) | ND(0.0067) | ND(0.0054) | ND(0.0046) J | ND(0.014) | ND(0.01) | ND(0.01) | ND(0.01) | ND(0.0086) | ND(0.008) | ND(0.0078) | ND(0.0078) | ND(0.012) J | ND(0.013) | ND(0.051) | ND(0.0097) | ND(0.013) | ND(0.012) | ND(0.018) | ND(0.0084) | ND(0.015) |
| | | 50 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | ND(0.0032) | ND(0.0028) J | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) J | ND(0.0079) | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | 0.01 | ND(0.0089) |
| | | 60 | 1060 | ND(6.6) J | ND(2.7) J | ND(2) J | 8 | ND(1.4) J | ND(4.4) J | ND(3.2) J | ND(3.2) J | ND(3.2) J | ND(2.6) J | ND(2.4) J | ND(2.4) J | ND(2.4) J | ND(3.7) J | ND(4) J | ND(16) J | ND(3) J | ND(4.1) J | ND(3.6) J | ND(5.5) J | ND(2.6) J | ND(4.5) J |
| | | 60 Dup | 1080 | ND(6.8) J | ND(2.8) J | ND(2.1) J | 9 | ND(1.4) J | ND(4.5) J | ND(3.2) J | ND(3.2) J | ND(3.2) J | ND(2.7) J | ND(2.5) J | ND(2.4) J | ND(2.4) J | ND(3.8) J | ND(4.1) J | ND(16) J | ND(3) J | ND(4.1) J | ND(3.6) J | ND(5.6) J | ND(2.6) J | ND(4.6) J |
| | Jun/Jul 2006 | 10 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | 0.0039 J | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) J | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 20 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | ND(0.0036) J | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) J | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | ND(0.0056) | ND(0.0098) |
| | | 30 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | 0.012 J | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) J | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | 0.034 | ND(0.01) |
| | | 40 | 2.76 | ND(0.017) | ND(0.0071) | ND(0.0054) | ND(0.0043) J | ND(0.0036) | ND(0.011) | ND(0.0083) | ND(0.0083) | ND(0.0083) | ND(0.0068) | ND(0.0064) | ND(0.0063) | ND(0.0063) | ND(0.0096) | 0.014 | ND(0.041) J | ND(0.0078) | ND(0.01) | ND(0.0092) | ND(0.014) | ND(0.0067) | ND(0.012) |
| | | 50 | 1080 | ND(6.8) J | ND(2.8) J | ND(2.1) J | 4 J | ND(1.4) J | ND(4.5) J | ND(3.2) J | ND(3.2) J | ND(3.2) J | ND(2.7) J | ND(2.5) J | ND(2.4) J | ND(2.4) J | ND(3.8) J | ND(4.1) J | ND(16) J | ND(3) J | ND(4.1) J | ND(3.6) J | ND(5.6) J | ND(2.6) J | ND(4.6) J |
| | | 50 Dup | 952 | ND(6) J | ND(2.5) J | ND(1.8) J | 3 J | ND(1.2) J | ND(3.9) J | ND(2.9) J | ND(2.9) J | ND(2.9) J | ND(2.4) J | ND(2.2) J | ND(2.2) J | ND(2.2) J | ND(3.3) J | ND(3.6) J | ND(14) J | ND(2.7) J | ND(3.6) J | ND(3.2) J | ND(4.9) J | ND(2.3) J | ND(4) J |
| | | 60 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | 0.012 J | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) J | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | Apr 2008 | 10 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0074) | ND(0.0074) | ND(0.0074) | ND(0.0061) | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | ND(0.0093) | ND(0.037) | ND(0.0069) | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) | ND(0.01) |
| | | 15 | 2.02 | ND(0.013) | ND(0.0052) | ND(0.0039) | ND(0.0031) | ND(0.0027) | ND(0.0083) | ND(0.0061) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0071) | ND(0.0076) | ND(0.03) | ND(0.0057) | ND(0.0077) | ND(0.0068) | ND(0.01) | ND(0.0049) | ND(0.0086) |
| | | 20 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 25 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | 0.0064 | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | 0.012 | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 30 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | 0.011 | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | | 35 | 22.9 | ND(0.14) | ND(0.059) | ND(0.044) | ND(0.036) | ND(0.03) | ND(0.094) | ND(0.069) | ND(0.069) | ND(0.069) | ND(0.057) | ND(0.053) | ND(0.052) | ND(0.052) | ND(0.08) | ND(0.086) | ND(0.34) | ND(0.064) | ND(0.088) | ND(0.077) | ND(0.12) | ND(0.056) | ND(0.098) |
| | | 40 | 22.4 | ND(0.14) | ND(0.058) | ND(0.043) | ND(0.035) | ND(0.03) | ND(0.092) | ND(0.067) | ND(0.067) | ND(0.067) | ND(0.055) | ND(0.052) | ND(0.051) | ND(0.051) | ND(0.078) | ND(0.084) | ND(0.33) | ND(0.063) | ND(0.086) | ND(0.075) | ND(0.12) | ND(0.055) | ND(0.095) |
| | | 45 | 46.6 | ND(0.29) | ND(0.12) | ND(0.09) | ND(0.072) | ND(0.061) | ND(0.19) | ND(0.14) | ND(0.14) | ND(0.14) | ND(0.12) | ND(0.11) | ND(0.1) | ND(0.1) | ND(0.16) | ND(0.18) | ND(0.69) | ND(0.13) | ND(0.18) | ND(0.16) | ND(0.24) | ND(0.11) | ND(0.2) |
| | | 50 | 110 | ND(0.69) | ND(0.28) | ND(0.21) | ND(0.17) | ND(0.14) | ND(0.45) | ND(0.33) | ND(0.33) | ND(0.33) | ND(0.27) | ND(0.25) | ND(0.25) | ND(0.25) | ND(0.38) | ND(0.41) | ND(1.6) | ND(0.31) | ND(0.42) | ND(0.37) | ND(0.57) J | ND(0.27) | ND(0.47) |
| | | 50 Dup | 110 | ND(0.69) | ND(0.28) | ND(0.21) | ND(0.17) | ND(0.14) | ND(0.45) | ND(0.33) | ND(0.33) | ND(0.33) | ND(0.27) | ND(0.25) | ND(0.25) | ND(0.25) | ND(0.38) | ND(0.41) | ND(1.6) | ND(0.31) | ND(0.42) | ND(0.37) | ND(0.57) | ND(0.27) | ND(0.47) |
| | Sep 2008 | 10 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 15 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | ND(0.0036) | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | ND(0.0056) | ND(0.0098) |
| | | 20 | 2.58 | ND(0.016) | ND(0.0067) | ND(0.005) | ND(0.004) | ND(0.0034) | ND(0.011) | ND(0.0078) | ND(0.0078) | ND(0.0078) | ND(0.0064) | ND(0.006) | ND(0.0058) | ND(0.0058) | ND(0.009) | ND(0.0097) | ND(0.038) | ND(0.0072) | ND(0.0099) | ND(0.0086) | ND(0.013) | ND(0.0063) | ND(0.011) |
| | | 25 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | 0.0048 | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | 0.0091 JB | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 30 | 2.13 | ND(0.013) | ND(0.0055) | ND(0.0041) | ND(0.0033) | ND(0.0028) | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | ND(0.0053) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0074) | ND(0.008) | ND(0.032) | ND(0.006) | ND(0.0082) | ND(0.0071) | ND(0.011) | 0.0052 | ND(0.0091) |
| | | 35 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | 0.01 | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | 0.01 | ND(0.01) |
| | | 35 Dup | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | 0.0095 | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | 0.0099 | ND(0.01) |
| | | 40 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | ND(0.0036) | ND(0.003) | 0.016 | ND(0.0069) | ND(0.0069) | ND(0.0069) | 0.014 | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | 0.023 | ND(0.0098) |
| | | 45 | 3.73 | ND(0.23) | ND(0.096) | ND(0.072) | ND(0.058) | ND(0.049) | ND(0.15) | ND(0.11) | ND(0.11) | ND(0.11) | ND(0.092) | ND(0.086) | ND(0.085) | ND(0.085) | ND(0.13) | ND(0.14) | ND(0.55) | ND(0.1) | ND(0.14) | ND(0.12) | ND(0.19) | ND(0.091) | ND(0.16) |
| | | 50 | 16 | ND(1) | ND(0.41) | ND(0.31) | ND(0.25) | ND(0.21) | ND(0.66) | ND(0.48) | ND(0.48) | ND(0.48) | ND(0.4) | ND(0.37) | ND(0.36) | ND(0.36) | ND(0.56) | ND(0.6) | ND(2.4) | ND(0.45) | ND(0.61) | ND(0.54) | ND(0.83) | ND(0.39) | ND(0.68) |
| | | 55 | 74.7 | ND(4.7) | ND(1.9) | ND(1.4) | ND(1.2) | ND(0.98) | ND(3.1) | ND(2.2) | ND(2.2) | ND(2.2) | ND(1.8) | ND(1.7) | ND(1.7) | ND(1.7) | ND(2.6) | ND(2.8) | ND(11) | ND(2.1) | ND(2.9) | ND(2.5) | ND(3.9) | ND(1.8) | ND(3.2) |
| | | 55 Dup | 74.4 | ND(4.7) | ND(1.9) | ND(1.4) | ND(1.2) | ND(0.98) | ND(3.1) | ND(2.2) | ND(2.2) | ND(2.2) | ND(1.8) | ND(1.7) | ND(1.7) | ND(1.7) | ND(2.6) | ND(2.8) | ND(11) | ND(2.1) | ND(2.9) | ND(2.5) | ND(3.9) | ND(1.8) | ND(3.2) |
| | | 60 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | ND(0.0036) | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) UJ | ND(0.0056) | ND(0.0098) UJ |

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## TABLE 2-8c. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, WATER TREATMENT RELATED AND OTHER CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | Dilution Factor | Allyl Chloride mg/m$^3$ | Benzyl chloride mg/m$^3$ | Bromo-methane mg/m$^3$ | Carbon Disulfide mg/m$^3$ | Chloro-ethane mg/m$^3$ | Chloro-methane mg/m$^3$ | 1,2-Dichloro-benzene mg/m$^3$ | 1,3-Dichloro-benzene mg/m$^3$ | 1,4-Dichloro-benzene mg/m$^3$ | Dichloro-difluoro-methane mg/m$^3$ | 1,2-Dichloro-propane mg/m$^3$ | cis-1,3-dichloro-propene mg/m$^3$ | trans-1,3-Dichloro-propene mg/m$^3$ | 1,2-Dichloro-1,1,2,2-tetrafluoroethane mg/m$^3$ | Ethanol mg/m$^3$ | 1,2,4-Trichloro-benzene mg/m$^3$ | Trichloro-fluoromethane mg/m$^3$ | 1,1,2-Trichloro-trifluoroethane mg/m$^3$ | Bromo-dichloro-methane mg/m$^3$ | Bromoform mg/m$^3$ | Chloroform mg/m$^3$ | Dibromo-chloro-methane mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-99 | Dec 2008 | 10 | 2.13 | ND(0.013) | ND(0.0055) | ND(0.0041) | ND(0.0033) | ND(0.0028) | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | ND(0.0053) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0074) | ND(0.008) | ND(0.032) | ND(0.006) | ND(0.0082) | ND(0.0071) | ND(0.011) | ND(0.0052) | ND(0.0091) |
| | | 15 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 20 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | ND(0.0032) | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | ND(0.0079) | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| | | 25 | 3.44 | ND(0.22) | ND(0.089) | ND(0.067) UJ | ND(0.054) | ND(0.045) | ND(0.14) | ND(0.1) | ND(0.1) | ND(0.1) | ND(0.085) | ND(0.079) | ND(0.078) | ND(0.078) | ND(0.12) | ND(0.13) | ND(0.51) | ND(0.097) | ND(0.13) | ND(0.12) | ND(0.18) | ND(0.084) | ND(0.15) |
| | | 30 | 42.6 | ND(2.7) | ND(1.1) | ND(0.83) UJ | ND(0.66) | ND(0.56) | ND(1.8) | ND(1.3) | ND(1.3) | ND(1.3) | ND(1) | ND(0.98) | ND(0.97) | ND(0.97) | ND(1.5) | ND(1.6) | ND(6.3) | ND(1.2) | ND(1.6) | ND(1.4) | ND(2.2) | ND(1) | ND(1.8) |
| | | 35 | 30.8 | ND(1.9) | ND(0.8) | ND(0.6) UJ | ND(0.48) | ND(0.41) | ND(1.3) | ND(0.92) | ND(0.92) | ND(0.92) | ND(0.76) | ND(0.71) | ND(0.7) | ND(0.7) | ND(1.1) | ND(1.2) | ND(4.6) | ND(0.86) | ND(1.2) | ND(1) | ND(1.6) | ND(0.75) | ND(1.3) |
| | | 40 | 27.7 | ND(1.7) | ND(0.72) | ND(0.54) | ND(0.43) | ND(0.36) | ND(1.1) | ND(0.83) | ND(0.83) | ND(0.83) | ND(0.68) | ND(0.64) | ND(0.63) | ND(0.63) | ND(0.97) | ND(1) | ND(4.1) | ND(0.78) | ND(1.1) | ND(0.93) | ND(1.4) | ND(0.68) | ND(1.2) |
| | | 45 | 34.2 | ND(2.1) | ND(0.88) | ND(0.66) | ND(0.53) | ND(0.45) | ND(1.4) | ND(1) | ND(1) | ND(1) | ND(0.84) | ND(0.79) | ND(0.78) | ND(0.78) | ND(1.2) | ND(1.3) | ND(5.1) | ND(0.96) | ND(1.3) | ND(1.1) | ND(1.8) | ND(0.83) | ND(1.4) |
| | | 50 | 52.2 | ND(3.3) | ND(1.4) | ND(1) | ND(0.81) | ND(0.69) | ND(2.2) | ND(1.6) | ND(1.6) | ND(1.6) | ND(1.3) | ND(1.2) | ND(1.2) | ND(1.2) | ND(1.8) | ND(2) | ND(7.7) | ND(1.5) | ND(2) | ND(1.7) | ND(2.7) | ND(1.3) | ND(2.2) |
| | | 55 | 109 | ND(6.8) | ND(2.8) | ND(2.1) UJ | ND(1.7) | ND(1.4) | ND(4.5) | ND(3.3) | ND(3.3) | ND(3.3) | ND(2.7) | ND(2.5) | ND(2.5) | ND(2.5) | ND(3.8) | ND(4.1) | ND(16) | ND(3.1) UJ | ND(4.2) | ND(3.6) | ND(5.6) | ND(2.7) | ND(4.6) |
| | | 55 Dup | 205 | ND(13) | ND(5.3) | ND(4) UJ | ND(3.2) | ND(2.7) | ND(8.5) | ND(6.2) | ND(6.2) | ND(6.2) | ND(5.1) | ND(4.7) | ND(4.6) | ND(4.6) | ND(7.2) | ND(7.7) | ND(30) | ND(5.8) | ND(7.8) | ND(6.9) | ND(10) | ND(5) | ND(8.7) |
| | | 60 | 51.2 | ND(3.2) | ND(1.3) | ND(0.99) | ND(0.8) | ND(0.68) | ND(2.1) | ND(1.5) | ND(1.5) | ND(1.5) | ND(1.3) | ND(1.2) | ND(1.2) | ND(1.2) | ND(1.8) | ND(1.9) | ND(7.6) | ND(1.4) | ND(2) | ND(1.7) | ND(2.6) | ND(1.2) | ND(2.2) |
| VW-127 | May 2005 | 5 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | 0.0075 | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | 0.0056 | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | 0.047 | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| | | 10 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | 0.011 | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | 0.036 | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 15 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | 0.18 | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | 0.0057 | ND(0.0095) |
| | | 20 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | 0.068 | ND(0.0028) | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | 0.0054 | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) | ND(0.0081) | ND(0.032) | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | ND(0.0053) | ND(0.0092) |
| | | 30 | 4.6 | ND(0.029) | ND(0.012) | ND(0.0089) | 0.28 | ND(0.0061) | ND(0.019) | ND(0.014) | ND(0.014) | ND(0.014) | ND(0.011) | ND(0.011) | ND(0.01) | ND(0.01) | ND(0.016) | ND(0.017) | ND(0.068) | ND(0.013) | ND(0.018) | ND(0.015) | ND(0.024) | ND(0.011) | ND(0.02) |
| | | 40 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | 0.14 | ND(0.0028) | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) | ND(0.0081) | ND(0.032) | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | ND(0.0053) | ND(0.0092) |
| | | 50 | 4.4 | ND(0.028) | ND(0.011) | ND(0.0085) | ND(0.0068) | ND(0.0058) | ND(0.018) | ND(0.013) | ND(0.013) | ND(0.013) | ND(0.011) | ND(0.01) | ND(0.01) | ND(0.01) | ND(0.015) | ND(0.016) | ND(0.065) | ND(0.012) | ND(0.017) | ND(0.015) | ND(0.023) | ND(0.011) | ND(0.019) |
| | Sep 2005 | 5 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | 0.0035 | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | 0.011 | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 10 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 15 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | 0.009 | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | ND(0.0056) | ND(0.0098) |
| | | 20 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | 0.0045 | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 30 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 40 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | 0.075 | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | 0.0059 | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) J | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 40 Dup | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | 0.0038 | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | 0.0059 | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) J | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 50 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | 0.0036 | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | 0.0062 | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) J | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | Oct 2005 | 20 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | ND(0.0034) | ND(0.0028) J | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) J | ND(0.0081) | ND(0.032) J | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | ND(0.0053) | ND(0.0092) |
| | | 30 | 2.14 | ND(0.013) | ND(0.0055) | ND(0.0042) | ND(0.0033) | ND(0.0028) J | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | ND(0.0053) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0075) J | ND(0.0081) | ND(0.032) J | ND(0.006) | ND(0.0082) | ND(0.0072) | ND(0.011) | ND(0.0052) | ND(0.0091) |
| | | 40 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) J | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) J | 0.013 | ND(0.033) J | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 50 | 2.05 | ND(0.013) | ND(0.0053) | ND(0.004) | 0.012 | ND(0.0027) J | ND(0.0085) | ND(0.0062) | ND(0.0062) | ND(0.0062) | 0.0061 | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0072) J | ND(0.0077) | ND(0.03) J | ND(0.0058) | ND(0.0078) | ND(0.0069) | ND(0.01) | ND(0.005) | ND(0.0087) |
| | Apr 2008 | 5 | 476 | ND(3) | ND(1.2) | ND(0.92) J | ND(0.74) | ND(0.63) | ND(2) | ND(1.4) | ND(1.4) | ND(1.4) | ND(1.2) | ND(1.1) | ND(1.1) | ND(1.1) | ND(1.7) | ND(1.8) | ND(7.1) | ND(1.3) | ND(1.8) | ND(1.6) | ND(2.5) J | ND(1.2) | ND(2) |
| | | 10 | 8.43 | ND(0.053) | ND(0.022) | ND(0.016) J | ND(0.013) | ND(0.011) | ND(0.035) | ND(0.025) | ND(0.025) | ND(0.025) | ND(0.021) | ND(0.019) | ND(0.019) | ND(0.019) | ND(0.029) | 0.039 | ND(0.12) | ND(0.024) | ND(0.032) | ND(0.028) | ND(0.044) J | ND(0.02) | ND(0.036) |
| | | 15 | 2.58 | ND(0.016) | ND(0.0067) | ND(0.005) J | 0.0059 | ND(0.0034) | ND(0.011) | ND(0.0078) | ND(0.0078) | ND(0.0078) | ND(0.0064) | ND(0.006) | ND(0.0058) | ND(0.0058) | ND(0.009) | ND(0.0097) | ND(0.038) | ND(0.0072) | ND(0.0099) | ND(0.0086) | ND(0.013) J | ND(0.0063) | ND(0.011) |
| | | 20 | 2.64 | ND(0.016) | ND(0.0068) | ND(0.0051) J | ND(0.0041) | ND(0.0035) | ND(0.011) | ND(0.0079) | ND(0.0079) | ND(0.0079) | ND(0.0065) | ND(0.0061) | ND(0.006) | ND(0.006) | ND(0.0092) | ND(0.0099) | ND(0.039) | ND(0.0074) | ND(0.01) | ND(0.0088) | ND(0.014) J | ND(0.0064) | ND(0.011) |
| | | 30 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) J | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | 0.014 | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) J | ND(0.0058) | ND(0.01) |
| | | 40 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) J | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | 0.023 | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) J | ND(0.0059) | ND(0.01) |
| | | 50 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) J | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | 0.024 | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) J | ND(0.0057) | ND(0.0099) |
| | Sep 2008 | 5 | 843 | ND(5.3) | ND(2.2) | ND(1.6) | ND(1.3) | ND(1.1) | ND(3.5) | ND(2.5) | ND(2.5) | ND(2.5) | ND(2.1) | ND(1.9) | ND(1.9) | ND(1.9) | ND(2.9) | ND(3.2) | ND(12) | ND(2.4) | ND(3.2) | ND(2.8) | ND(4.4) UJ | ND(2) | ND(3.6) UJ |
| | | 10 | 96.8 | ND(0.6) | ND(0.25) | ND(0.19) | ND(0.15) | ND(0.13) | ND(0.4) | ND(0.29) | ND(0.29) | ND(0.29) | ND(0.24) | ND(0.22) | ND(0.22) | ND(0.22) | ND(0.34) | ND(0.36) | ND(1.4) | ND(0.27) | ND(0.37) | ND(0.32) | ND(0.5) UJ | ND(0.24) | ND(0.41) UJ |
| | | 15 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) UJ | ND(0.0072) | ND(0.0072) | ND(0.0072) | 0.006 J | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 20 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | ND(0.0038) | ND(0.0032) | ND(0.01) UJ | ND(0.0074) | ND(0.0074) | ND(0.0074) | 0.0075 J | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | 0.012 JB | ND(0.037) | ND(0.0069) | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) | ND(0.01) |
| | | 30 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 40 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | 0.014 JB | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 50 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | 0.0056 | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) UJ | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) UJ | ND(0.0054) | ND(0.0094) UJ |
| | Dec 2008 | 5 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 10 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | ND(0.0034) | ND(0.0028) | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) | ND(0.0081) | ND(0.032) | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | ND(0.0053) | ND(0.0092) |
| | | 15 | 2.13 | ND(0.013) | ND(0.0055) | ND(0.0041) | ND(0.0033) | ND(0.0028) | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | ND(0.0053) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0074) | ND(0.008) | ND(0.032) | ND(0.006) | ND(0.0082) | ND(0.0071) | ND(0.011) | ND(0.0052) | ND(0.0091) |
| | | 20 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 30 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | ND(0.0034) | ND(0.0028) | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | 0.0057 | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) | ND(0.0081) | ND(0.032) | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | ND(0.0053) | ND(0.0092) |
| | | 40 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | ND(0.0032) | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | 0.012 J | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | ND(0.0079) | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| | | 40 Dup | 2.05 | ND(0.013) | ND(0.0053) | ND(0.004) | ND(0.0032) | ND(0.0027) | ND(0.0085) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0051) UJ | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0072) | ND(0.0077) | ND(0.03) | ND(0.0058) | ND(0.0078) | ND(0.0069) | ND(0.01) | ND(0.005) | ND(0.0087) |
| | | 50 | 2.05 | ND(0.013) | ND(0.0053) | ND(0.004) | ND(0.0032) | ND(0.0027) | ND(0.0085) | ND(0.0062) | ND(0.0062) | ND(0.0062) | 0.0095 | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0072) | ND(0.0077) | ND(0.03) | ND(0.0058) | ND(0.0078) | ND(0.0069) | ND(0.01) | ND(0.005) | ND(0.0087) |

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## TABLE 2-8c. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, WATER TREATMENT RELATED AND OTHER CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | Dilution Factor | Allyl Chloride mg/m$^3$ | Benzyl chloride mg/m$^3$ | Bromo-methane mg/m$^3$ | Carbon Disulfide mg/m$^3$ | Chloro-ethane mg/m$^3$ | Chloro-methane mg/m$^3$ | 1,2-Dichloro-benzene mg/m$^3$ | 1,3-Dichloro-benzene mg/m$^3$ | 1,4-Dichloro-benzene mg/m$^3$ | Dichloro-difluoro-methane mg/m$^3$ | 1,2-Dichloro-propane mg/m$^3$ | cis-1,3-dichloro-propene mg/m$^3$ | trans-1,3-Dichloro-propene mg/m$^3$ | 1,2-Dichloro-1,1,2,2-tetrafluoroethane mg/m$^3$ | Ethanol mg/m$^3$ | 1,2,4-Trichloro-benzene mg/m$^3$ | Trichloro-fluoromethane mg/m$^3$ | 1,1,2-Trichloro-trifluoroethane mg/m$^3$ | Bromo-dichloro-methane mg/m$^3$ | Bromoform mg/m$^3$ | Chloroform mg/m$^3$ | Dibromo-chloro-methane mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-128 | Apr 2005 | 5 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | 0.26 | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 10 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | 0.24 | ND(0.0032) | ND(0.01) | ND(0.0074) | ND(0.0074) | ND(0.0074) | ND(0.0061) | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | ND(0.0093) | ND(0.037) | ND(0.0069) | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) | ND(0.01) |
| | | 15 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | 0.18 | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | ND(0.0062) | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | | 20 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | 0.099 | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | | 30 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | 0.015 | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | | 40 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | 0.016 | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 50 | 2.64 | ND(0.016) | ND(0.0068) | ND(0.0051) | 0.012 | ND(0.0035) | ND(0.011) | ND(0.0079) | ND(0.0079) | ND(0.0079) | ND(0.0065) | ND(0.0061) | ND(0.006) | ND(0.006) | ND(0.0092) | ND(0.0099) | ND(0.039) | ND(0.0074) | ND(0.01) | ND(0.0088) | ND(0.014) | 0.028 | ND(0.011) |
| | | 50 Dup | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | Sep 2005 | 5 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | 0.027 | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) J | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | 0.016 | ND(0.0098) |
| | | 10 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | 0.053 | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) J | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | | 15 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | 0.0068 | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) J | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | 0.049 | ND(0.0099) |
| | | 20 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | 0.051 | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) J | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | ND(0.0056) | ND(0.0098) |
| | | 30 | 2.84 | ND(0.018) J | ND(0.0074) | ND(0.0055) | 0.17 | ND(0.0037) | ND(0.012) | ND(0.0085) | ND(0.0085) | ND(0.0085) | ND(0.007) | ND(0.0066) | ND(0.0064) | ND(0.0064) | ND(0.0099) | ND(0.011) | ND(0.042) | ND(0.008) | ND(0.011) | ND(0.0095) | ND(0.015) | ND(0.0069) | ND(0.012) |
| | | 40 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) J | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 40 Dup | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | 0.0037 | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) J | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 50 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | 0.013 | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) J | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | Oct 2005 | 20 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | ND(0.0034) | ND(0.0028) J | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) J | ND(0.0081) | ND(0.032) J | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | 0.023 | ND(0.0092) |
| | | 30 | 2.05 | ND(0.013) | ND(0.0053) | ND(0.004) | ND(0.0032) | ND(0.0027) J | ND(0.0085) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0072) J | ND(0.0077) | ND(0.03) J | ND(0.0058) | ND(0.0078) | ND(0.0069) | ND(0.01) | ND(0.005) | ND(0.0087) |
| | | 40 | 2.02 | ND(0.013) | ND(0.0052) | ND(0.0039) | ND(0.0031) | ND(0.0027) J | ND(0.0083) | ND(0.0061) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0071) J | ND(0.0076) | ND(0.03) J | ND(0.0057) | ND(0.0077) | ND(0.0068) | ND(0.01) | ND(0.0049) | ND(0.0086) |
| | | 50 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | ND(0.0032) | ND(0.0028) J | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) J | 0.0084 | ND(0.031) J | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| | | 50 Dup | 2.01 | ND(0.012) | ND(0.0052) | ND(0.0039) | ND(0.0031) | ND(0.0026) J | ND(0.0083) | ND(0.006) | ND(0.006) | ND(0.006) | ND(0.005) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.007) J | ND(0.0076) | ND(0.03) J | ND(0.0056) | ND(0.0077) | ND(0.0067) | ND(0.01) | ND(0.0049) | ND(0.0086) |
| | Jun/Jul 2006 | 5 | 2.58 | ND(0.016) | ND(0.0067) | ND(0.005) | ND(0.004) | ND(0.0034) | ND(0.011) | ND(0.0078) | ND(0.0078) | ND(0.0078) | ND(0.0064) | ND(0.006) | ND(0.0058) J | ND(0.0058) | ND(0.009) | ND(0.0097) | ND(0.038) J | ND(0.0072) | ND(0.0099) | ND(0.0086) | ND(0.013) | 0.01 J | ND(0.011) |
| | | 10 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0074) | ND(0.0074) | ND(0.0074) | ND(0.0061) | ND(0.0057) | ND(0.0056) J | ND(0.0056) | ND(0.0086) | ND(0.0093) | ND(0.037) J | ND(0.0069) | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) J | ND(0.01) |
| | | 15 | 2.64 | ND(0.016) | ND(0.0068) | ND(0.0051) | ND(0.0041) | ND(0.0035) | ND(0.011) | ND(0.0079) | ND(0.0079) | ND(0.0079) | ND(0.0065) | ND(0.0061) | ND(0.006) J | ND(0.006) | ND(0.0092) | ND(0.0099) | ND(0.039) J | ND(0.0074) | ND(0.01) | ND(0.0088) | ND(0.014) | 0.022 J | ND(0.011) |
| | | 20 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | 0.0039 | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) J | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) J | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | 0.0092 J | ND(0.0095) |
| | | 30 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | ND(0.0036) J | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) J | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | ND(0.0056) | ND(0.0098) |
| | | 40 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | ND(0.0059) | ND(0.0055) | ND(0.0054) J | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) J | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) J | ND(0.01) |
| | | 50 | 2.58 | ND(0.016) | ND(0.0067) | ND(0.005) | ND(0.004) J | ND(0.0034) | ND(0.011) | ND(0.0078) | ND(0.0078) | ND(0.0078) | ND(0.0064) | ND(0.006) | ND(0.0058) | ND(0.0058) | ND(0.009) | 0.033 | ND(0.038) J | ND(0.0072) | ND(0.0099) | ND(0.0086) | ND(0.013) | ND(0.0063) | ND(0.011) |
| | | 50 Dup | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) J | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | 0.026 | ND(0.033) J | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | Apr 2008 | 5 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | 0.008 | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) J | ND(0.0056) | ND(0.0098) |
| | | 10 | 2.09 | ND(0.013) J | ND(0.0054) J | ND(0.004) J | ND(0.0032) J | ND(0.0028) J | ND(0.0086) J | ND(0.0063) J | ND(0.0063) J | ND(0.0063) J | ND(0.0052) J | ND(0.0048) J | ND(0.0047) J | ND(0.0047) J | ND(0.0073) J | 0.0099 J | ND(0.031) J | ND(0.0059) J | ND(0.008) J | ND(0.007) J | ND(0.011) J | ND(0.0051) J | ND(0.0089) J |
| | | 15 | 2.64 | ND(0.016) | ND(0.0068) | ND(0.0051) J | ND(0.0041) | ND(0.0035) | ND(0.011) | ND(0.0079) | ND(0.0079) | ND(0.0079) | ND(0.0065) | ND(0.0061) | ND(0.006) | ND(0.006) | ND(0.0092) | ND(0.0099) | ND(0.039) | ND(0.0074) | ND(0.01) | ND(0.0088) | ND(0.014) | 0.011 | ND(0.011) |
| | | 20 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) J | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 30 | 2.02 | ND(0.013) | ND(0.0052) | ND(0.0039) J | ND(0.0031) | ND(0.0027) | ND(0.0083) | ND(0.0061) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0071) | 0.0084 | ND(0.03) | ND(0.0057) | ND(0.0077) | ND(0.0068) | ND(0.01) | ND(0.0049) | ND(0.0086) |
| | | 40 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) J | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 50 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) J | ND(0.0032) | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | ND(0.0079) | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| | | 50 Dup | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) J | ND(0.0032) | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | ND(0.0079) | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| | Sep 2008 | 5 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) UJ | ND(0.0066) | ND(0.0066) | ND(0.0066) | 0.0068 J | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 10 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) UJ | ND(0.007) | ND(0.007) | ND(0.007) | 0.0091 J | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 15 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | 0.014 JB | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 20 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | 0.012 JB | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 30 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 40 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | 0.021 | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | ND(0.0056) | ND(0.0098) |
| | | 50 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | 0.0041 | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | 0.027 JB | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | Dec 2008 | 5 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 10 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 15 | 2.13 | ND(0.013) | ND(0.0055) | ND(0.0041) | ND(0.0033) | ND(0.0028) | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | ND(0.0053) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0074) | ND(0.008) | ND(0.032) | ND(0.006) | ND(0.0082) | ND(0.0071) | ND(0.011) | ND(0.0052) | ND(0.0091) |
| | | 20 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 30 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 40 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | 0.049 | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | 0.048 | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 50 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |

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# TABLE 2-8c. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, WATER TREATMENT RELATED AND OTHER CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | Dilution Factor | Allyl Chloride mg/m$^3$ | Benzyl chloride mg/m$^3$ | Bromo-methane mg/m$^3$ | Carbon Disulfide mg/m$^3$ | Chloro-ethane mg/m$^3$ | Chloro-methane mg/m$^3$ | 1,2-Dichloro-benzene mg/m$^3$ | 1,3-Dichloro-benzene mg/m$^3$ | 1,4-Dichloro-benzene mg/m$^3$ | Dichloro-difluoro-methane mg/m$^3$ | 1,2-Dichloro-propane mg/m$^3$ | cis-1,3-dichloro-propene mg/m$^3$ | trans-1,3-Dichloro-propene mg/m$^3$ | 1,2-Dichloro-1,1,2,2-tetrafluoroethane mg/m$^3$ | Ethanol mg/m$^3$ | 1,2,4-Trichloro-benzene mg/m$^3$ | Trichloro-fluoromethane mg/m$^3$ | 1,1,2-Trichloro-trifluoroethane mg/m$^3$ | Bromo-dichloro-methane mg/m$^3$ | Bromoform mg/m$^3$ | Chloroform mg/m$^3$ | Dibromo-chloro-methane mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-129 | Apr 2005 | 5 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | 0.023 | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | 0.01 | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | 0.013 | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | | 10 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | 0.022 | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | 0.011 | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | 0.013 | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | | 15 | 2.82 | ND(0.018) | ND(0.0073) | ND(0.0055) | 0.0064 | ND(0.0037) | ND(0.012) | ND(0.0085) | ND(0.0085) | ND(0.0085) | 0.014 | ND(0.0065) | ND(0.0064) | ND(0.0064) | ND(0.0098) | ND(0.011) | ND(0.042) | 0.02 | ND(0.011) | ND(0.0094) | ND(0.014) | 0.0091 | ND(0.012) |
| | | 20 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | 0.014 | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | 0.012 | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | 0.014 | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 30 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | 0.027 | ND(0.0028) | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | 0.012 | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) | ND(0.0081) | ND(0.032) | 0.015 | ND(0.0083) | ND(0.0072) | ND(0.011) | 0.0056 | ND(0.0092) |
| | | 40 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | 0.013 | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | 0.014 | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | 0.018 | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 50 | 2.89 | ND(0.018) | ND(0.0075) | ND(0.0056) | 0.078 | ND(0.0038) | ND(0.012) | ND(0.0087) | ND(0.0087) | ND(0.0087) | 0.012 | ND(0.0067) | ND(0.0066) | ND(0.0066) | ND(0.01) | ND(0.011) | ND(0.043) | 0.013 | ND(0.011) | ND(0.0097) | ND(0.015) | ND(0.007) | ND(0.012) |
| | | 50 Dup | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | 0.028 | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | 0.014 | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | 0.019 | ND(0.0097) | ND(0.0085) | ND(0.013) | 0.0095 | ND(0.011) |
| | Jun/Jul 2006 | 5 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) J | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | 0.0091 | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | 0.013 | ND(0.034) J | 0.012 | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 10 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | 0.018 J | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | 0.012 | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) J | 0.014 | ND(0.0088) | ND(0.0077) | ND(0.012) | ND(0.0056) | ND(0.0098) |
| | | 15 | 2.64 | ND(0.016) | ND(0.0068) | ND(0.0051) | ND(0.0041) J | ND(0.0035) | ND(0.011) | ND(0.0079) | ND(0.0079) | ND(0.0079) | 0.012 | ND(0.0061) | ND(0.006) | ND(0.006) | ND(0.0092) | 0.028 | ND(0.039) J | 0.014 | ND(0.01) | ND(0.0088) | ND(0.014) | ND(0.0064) | ND(0.011) |
| | | 20 | 3.46 | ND(0.022) | ND(0.009) | ND(0.0067) | ND(0.0054) J | ND(0.0046) | ND(0.014) | ND(0.01) | ND(0.01) | ND(0.01) | 0.012 | ND(0.008) | ND(0.0078) | ND(0.0078) | ND(0.012) | ND(0.013) | ND(0.051) J | 0.014 | ND(0.013) | ND(0.012) | ND(0.018) | ND(0.0084) | ND(0.015) |
| | | 30 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | 0.0081 J | ND(0.0032) | ND(0.01) | ND(0.0074) | ND(0.0074) | ND(0.0074) | 0.015 | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | 0.014 | ND(0.037) J | 0.014 | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) | ND(0.01) |
| | | 40 | 2.69 | ND(0.017) | ND(0.007) | ND(0.0052) | 0.0044 J | ND(0.0035) | ND(0.011) | ND(0.0081) | ND(0.0081) | ND(0.0081) | 0.014 | ND(0.0062) | ND(0.0061) | ND(0.0061) | ND(0.0094) | ND(0.01) | ND(0.04) J | 0.016 | ND(0.01) | ND(0.009) | ND(0.014) | ND(0.0066) | ND(0.011) |
| | | 50 | 2.13 | ND(0.013) | ND(0.0055) | ND(0.0041) | 0.005 J | ND(0.0028) | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | 0.017 | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0074) | ND(0.008) | ND(0.032) J | 0.02 | ND(0.0082) | ND(0.0071) | ND(0.011) | ND(0.0052) | ND(0.0091) |
| | Apr 2008 | 5 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) J | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | ND(0.0062) | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | 0.011 | ND(0.038) | 0.009 | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | | 10 | 2.58 | ND(0.016) | ND(0.0067) | ND(0.005) J | ND(0.004) | ND(0.0034) | ND(0.011) | ND(0.0078) | ND(0.0078) | ND(0.0078) | ND(0.0064) | ND(0.006) | ND(0.0058) | ND(0.0058) | ND(0.009) | ND(0.0097) | ND(0.038) | 0.009 | ND(0.0099) | ND(0.0086) | ND(0.013) | ND(0.0063) | ND(0.011) |
| | | 15 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) J | 0.004 | ND(0.0032) | ND(0.01) | ND(0.0074) | ND(0.0074) | ND(0.0074) | 0.0074 | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | ND(0.0093) | ND(0.037) | 0.013 | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) | ND(0.01) |
| | | 20 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) J | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | 0.009 | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | 0.013 | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 30 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) J | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | 0.011 | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | 0.011 | ND(0.0086) | ND(0.0075) | ND(0.012) | 0.012 | ND(0.0095) |
| | | 40 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) J | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | 0.009 | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | 0.01 | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 50 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0074) | ND(0.0074) | ND(0.0074) | 0.014 | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | ND(0.0093) | ND(0.037) | 0.019 | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) | ND(0.01) |
| | Sep 2008 | 5 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | ND(0.0062) | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | 0.01 | ND(0.0097) | ND(0.0085) | ND(0.013) UJ | ND(0.0062) | ND(0.011) UJ |
| | | 10 | 2.58 | ND(0.016) | ND(0.0067) | ND(0.005) | ND(0.004) | ND(0.0034) | ND(0.011) | ND(0.0078) | ND(0.0078) | ND(0.0078) | 0.0067 | ND(0.006) | ND(0.0058) | ND(0.0058) | ND(0.009) | ND(0.0097) | ND(0.038) | 0.011 | ND(0.0099) | ND(0.0086) | ND(0.013) UJ | ND(0.0063) | ND(0.011) UJ |
| | | 15 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | 0.0076 | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | 0.015 | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 20 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | 0.0041 | ND(0.0032) | ND(0.01) | ND(0.0074) | ND(0.0074) | ND(0.0074) | 0.0081 | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | ND(0.0093) | ND(0.037) | 0.015 | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) | ND(0.01) |
| | | 20 Dup | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | 0.0078 | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | 0.015 | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | | 30 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | 0.0096 | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | 0.018 | ND(0.0091) | ND(0.008) | ND(0.012) | 0.015 | ND(0.01) |
| | | 40 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | 0.0085 | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | 0.014 | ND(0.0084) | ND(0.0074) | ND(0.011) UJ | 0.0059 | ND(0.0094) UJ |
| | | 50 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) UJ | ND(0.0076) | ND(0.0076) | ND(0.0076) | 0.012 J | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | 0.019 J | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | | 50 Dup | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) UJ | ND(0.0076) | ND(0.0076) | ND(0.0076) | 0.013 J | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | 0.022 J | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | Dec 2008 | 5 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) UJ | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 10 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | ND(0.0034) | ND(0.0028) | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) | ND(0.0081) | ND(0.032) | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | ND(0.0053) | ND(0.0092) |
| | | 15 | 2.24 | ND(0.014) UJ | ND(0.0058) UJ | ND(0.0043) UJ | ND(0.0035) UJ | ND(0.003) UJ | ND(0.0092) UJ | ND(0.0067) UJ | ND(0.0067) UJ | ND(0.0067) UJ | ND(0.0055) UJ | ND(0.0052) UJ | ND(0.0051) UJ | ND(0.0051) UJ | ND(0.0078) UJ | ND(0.0084) UJ | ND(0.033) UJ | ND(0.0063) UJ | ND(0.0086) UJ | ND(0.0075) UJ | ND(0.012) UJ | ND(0.0055) UJ | ND(0.0095) UJ |
| | | 20 | 2.13 | ND(0.013) | ND(0.0055) | ND(0.0041) | ND(0.0033) | ND(0.0028) | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | ND(0.0053) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0074) | ND(0.008) | ND(0.032) | ND(0.006) | ND(0.0082) | ND(0.0071) | ND(0.011) | ND(0.0052) | ND(0.0091) |
| | | 30 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | 0.025 | ND(0.0094) |
| | | 40 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | ND(0.0036) | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | ND(0.0056) | ND(0.0098) |
| | | 50 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | ND(0.0032) | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | ND(0.0079) | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| VW-130 | Apr 2005 | 5 | 2.76 | ND(0.017) | ND(0.0071) | ND(0.0054) | 0.032 | ND(0.0036) | ND(0.011) | ND(0.0083) | ND(0.0083) | ND(0.0083) | ND(0.0068) | ND(0.0064) | ND(0.0063) | ND(0.0063) | ND(0.0096) | ND(0.01) | ND(0.041) | ND(0.0078) | ND(0.01) | ND(0.0092) | ND(0.014) | ND(0.0067) | ND(0.012) |
| | | 10 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | 0.11 | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | | 15 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | 0.042 | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | 0.21 | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | 0.042 | ND(0.01) |
| | | 20 | 2.58 | ND(0.016) R | ND(0.0067) R | ND(0.005) R | 0.0046 R | ND(0.0034) R | ND(0.011) R | ND(0.0078) R | ND(0.0078) R | ND(0.0078) R | ND(0.0064) R | ND(0.006) R | ND(0.0058) R | ND(0.0058) R | ND(0.009) R | 0.011 R | ND(0.038) R | ND(0.0072) R | ND(0.0099) R | ND(0.0086) R | ND(0.013) R | ND(0.0063) R | ND(0.011) R |
| | | 30 | 2.53 | ND(0.016) J | ND(0.0065) J | ND(0.0049) J | 0.067 J | ND(0.0033) J | ND(0.01) J | ND(0.0076) J | ND(0.0076) J | ND(0.0076) J | 0.012 J | ND(0.0058) J | ND(0.0057) J | ND(0.0057) J | ND(0.0088) J | 0.037 J | ND(0.038) J | ND(0.0071) J | ND(0.0097) J | ND(0.0085) J | ND(0.013) J | ND(0.0062) J | ND(0.011) J |
| | | 30 Dup | 2.58 | ND(0.016) | ND(0.0067) | ND(0.005) | 0.067 | ND(0.0034) | ND(0.011) | ND(0.0078) | ND(0.0078) | ND(0.0078) | 0.01 J | ND(0.006) | ND(0.0058) | ND(0.0058) | ND(0.009) | ND(0.0097) | ND(0.038) | ND(0.0072) | ND(0.0099) | ND(0.0086) | ND(0.013) | 0.0072 J | ND(0.011) |
| | | 40 | 2.76 | ND(0.017) | ND(0.0071) | ND(0.0054) | 0.0053 | ND(0.0036) | ND(0.011) | ND(0.0083) | ND(0.0083) | ND(0.0083) | ND(0.0068) | ND(0.0064) | ND(0.0063) | ND(0.0063) | ND(0.0096) | 0.011 | ND(0.041) | ND(0.0078) | ND(0.01) | ND(0.0092) | ND(0.014) | ND(0.0067) | ND(0.012) |
| | | 50 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | 0.021 | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | 0.0084 | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | 0.0094 | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) | 0.046 | ND(0.011) |
| | May 2005 | 20 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | 0.0078 | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 40 | 2.58 | ND(0.016) | ND(0.0067) | ND(0.005) | 0.035 | ND(0.0034) | ND(0.011) | ND(0.0078) | ND(0.0078) | ND(0.0078) | 0.011 | ND(0.006) | ND(0.0058) | ND(0.0058) | ND(0.009) | ND(0.0097) | ND(0.038) | ND(0.0072) | ND(0.0099) | ND(0.0086) | ND(0.013) | ND(0.0063) | ND(0.011) |
| | Apr 2008 | 5 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | 0.012 | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | | 10 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | 0.011 | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 15 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 20 | 2.33 | ND(0.014) J | ND(0.006) J | ND(0.0045) J | ND(0.0036) J | ND(0.0031) J | ND(0.0096) J | ND(0.007) J | ND(0.007) J | ND(0.007) J | 0.0063 J | ND(0.0054) J | ND(0.0053) J | ND(0.0053) J | ND(0.0081) J | 0.027 J | ND(0.034) J | ND(0.0065) J | ND(0.0089) J | ND(0.0078) J | ND(0.012) J | ND(0.0057) J | ND(0.0099) J |
| | | 30 | 77.7 | ND(0.49) J | ND(0.2) J | ND(0.15) J | ND(0.12) J | ND(0.1) J | ND(0.32) J | ND(0.23) J | ND(0.23) J | ND(0.23) J | ND(0.19) J | ND(0.18) J | ND(0.18) J | ND(0.18) J | ND(0.27) J | ND(0.29) J | ND(1.2) J | ND(0.22) J | ND(0.3) J | ND(0.26) J | ND(0.4) J | ND(0.19) J | ND(0.33) J |
| | | 40 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | 0.006 | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | 0.016 | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 40 Dup | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | 0.0075 | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |

## TABLE 2-8c. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, WATER TREATMENT RELATED AND OTHER CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth (ft-bgs) | Dilution Factor | Allyl Chloride mg/m$^3$ | Benzyl chloride mg/m$^3$ | Bromo-methane mg/m$^3$ | Carbon Disulfide mg/m$^3$ | Chloro-ethane mg/m$^3$ | Chloro-methane mg/m$^3$ | 1,2-Dichloro-benzene mg/m$^3$ | 1,3-Dichloro-benzene mg/m$^3$ | 1,4-Dichloro-benzene mg/m$^3$ | Dichloro-difluoro-methane mg/m$^3$ | 1,2-Dichloro-propane mg/m$^3$ | cis-1,3-dichloro-propene mg/m$^3$ | trans-1,3-Dichloro-propene mg/m$^3$ | 1,2-Dichloro-1,1,2,2-tetrafluoroethane mg/m$^3$ | Ethanol mg/m$^3$ | 1,2,4-Trichloro-benzene mg/m$^3$ | Trichloro-fluoromethane mg/m$^3$ | 1,1,2-Trichloro-trifluoroethane mg/m$^3$ | Bromo-dichloro-methane mg/m$^3$ | Bromoform mg/m$^3$ | Chloroform mg/m$^3$ | Dibromo-chloro-methane mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-130 | Sep 2008 | 5 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) UJ | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) UJ | ND(0.0057) | ND(0.0099) UJ |
| | | 10 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | 0.0097 JB | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 15 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 20 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 30 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | 0.0041 | 0.0035 | 0.013 | ND(0.007) | ND(0.007) | ND(0.007) | 0.01 | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 40 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) UJ | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | 0.0072 | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | | 40 Dup | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | 0.0073 | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | Dec 2008 | 5 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | 0.0079 | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 10 | 2.05 | ND(0.013) | ND(0.0053) | ND(0.004) | ND(0.0032) | ND(0.0027) | ND(0.0085) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0072) | 0.046 J | ND(0.03) | ND(0.0058) | ND(0.0078) | ND(0.0069) | ND(0.01) | ND(0.005) | ND(0.0087) |
| | | 15 | 2.13 | ND(0.013) | ND(0.0055) | ND(0.0041) | ND(0.0033) | ND(0.0028) | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | ND(0.0053) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0074) | ND(0.008) UJ | ND(0.032) | ND(0.006) | ND(0.0082) | ND(0.0071) | ND(0.011) | ND(0.0052) | ND(0.0091) |
| | | 20 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | ND(0.0034) | ND(0.0028) | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | 0.01 | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) | ND(0.0081) | ND(0.032) | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | ND(0.0053) | ND(0.0092) |
| | | 30 | 2.05 | ND(0.013) | ND(0.0053) | ND(0.004) | ND(0.0032) | ND(0.0027) | ND(0.0085) | ND(0.0062) | ND(0.0062) | ND(0.0062) | 0.0089 | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0072) | 0.0091 JB | ND(0.03) | 0.0059 | ND(0.0078) | ND(0.0069) | ND(0.01) | ND(0.005) | ND(0.0087) |
| | | 40 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | 0.0084 | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | | 40 Dup | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | 0.0085 | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |

**NOTES:**

1 – For data collected during 2005-2007 reported as "ND" additional data qualifier flags are not shown on this table. See Trihydro and GeoSyntec 2005 and Appendix A of this report for data qualifier information.

**B** - Constituent detected in blank sample

**DX** – Analyte concentration in the initial dilution exceeded instrument calibration range. The reported value for the qualified analyte is from an analysis run at higher dilution.

**Dup** – Blind Duplicate Sample

**J** – estimated concentration

**mg/m$^3$** - milligram per cubic meter

**ND** - Not detected

**R** – Value has been rejected and should not be used for qualitative or quantitative purposes

**U** – Detected in blank sample, 1997-1999 results changed to non detect; subsequent results reported

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**TABLE 2-8d. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, FIXED GASES**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Nested Well Location | Date | Depth | Method | ASTM Dilution Factor | Oxygen % | Carbon Dioxide % |
|---|---|---|---|---|---|---|
| VW-18 | April 2008 | 5 | ASTM-D-1946 | 2.20 | 18.0 R | 0.35 R |
| | | 10 | ASTM-D 1946 | 2.82 | 16.0 R | 1.0 R |
| | | 15 | ASTM-D 1946 | 2.47 | 1.6 J | 10.0 J |
| | | 15 Dup | ASTM-D 1946 | 2.53 | 1.6 J | 9.8 J |
| | May 2008 | 5 | ASTM-D 1946 | 2.76 | 2.0 R | 5.5 R |
| | | 10 | ASTM-D 1946 | 2.33 | 2.4 R | 7.7 R |
| | September 2008 | 5 | ASTM-D 1946 | 2290 | 1.1 | 13.0 |
| | | 10 | ASTM-D 1946 | 2200 | 1.1 | 13.0 |
| | | 15 | ASTM-D 1946 | 2800 | 1.2 | 13.0 |
| VW-20 | April 2008 | 5 | ASTM-D 1946 | 2.33 | 18.0 J | 0.38 J |
| | | 10 | ASTM-D 1946 | 2.33 | 19.0 J | 0.61 J |
| | | 15 | ASTM-D 1946 | 2.33 | 16.0 J | 2.7 J |
| | | 25 | ASTM-D 1946 | 2.38 | 5.8 J | 9.6 J |
| | | 25 Dup | ASTM-D 1946 | 2.16 | 1.7 J | 12.0 J |
| | September 2008 | 5 | ASTM-D 1946 | 2.13 | 19.0 | 2.9 |
| | | 10 | ASTM-D 1946 | 2.33 | 14.0 | 6.4 |
| | | 15 | ASTM-D 1946 | 2.20 | 3.5 | 14.0 |
| | | 20 | ASTM-D 1946 | 47 | 1.8 | 13.0 |
| | | 25 | ASTM-D 1946 | 116 | 1.6 | 13.0 |
| | | 30 | ASTM-D 1946 | 432 | 1.7 | 13.0 |
| | | 30 Dup | ASTM-D 1946 | 432 | 1.5 | 13.0 |
| | | 35 | ASTM-D 1946 | 404 | 1.5 | 13.0 |
| VW-21 | April 2008 | 5 | ASTM-D 1946 | 2.42 | 9.5 J | 0.98 J |
| | | 10 | ASTM-D 1946 | 2.64 | 17 R | 0.034 R |
| | | 15 | ASTM-D 1946 | 2.38 | 1.5 J | 10 J |
| | | 20 | ASTM-D 1946 | 2.24 | 2.0 J | 10 J |
| | May 2008 | 10 | ASTM-D 1946 | 2.24 | 20 R | 0.044 R |
| | September 2008 | 5 | ASTM-D 1946 | 58 | 1.6 | 17.0 |
| | | 10 | ASTM-D 1946 | 124 | 1.9 | 17.0 |
| | | 15 | ASTM-D 1946 | 786 | 1.4 | 14.0 |
| | | 15 Dup | ASTM-D 1946 | 786 | 1.6 | 14.0 |
| | | 20 | ASTM-D 1946 | 710 | 1.4 | 14.0 |
| VW-93A | March 2005 | 5 | ASTM-D 1945 | 2.33 | 19.0 | 0.8 |
| | September 2005 | 5 | ASTM-D 1945 | 2.82 | 19.0 | 1.8 |
| | Nov/Dec 2006 | 5 | ASTM-D 1945 | 2.13 | 25 R | 1.1 R |
| | June/July 2007 | 5 | ASTM-D 1945 | 2.64 | 20.0 | 1.6 |
| | April 2008 | 5 | ASTM-D 1945 | 2.42 | 19.0 | 1.0 |
| | September 2008 | 5 | ASTM-D 1946 | 2.33 | 20.0 | 2.1 |
| | | 10 | ASTM-D 1946 | 2.33 | 19.0 | 2.7 |
| | December 2008 | 5 | ASTM-D 1946 | 2.02 | 18.2 | 1.2 |

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**TABLE 2-8d. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, FIXED GASES**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Nested Well Location | Date | Depth | Method | ASTM Dilution Factor | Oxygen % | Carbon Dioxide % |
|---|---|---|---|---|---|---|
| VW-93 | December 1997 | 10 | Field Reading | | 10.0 | 6.4 |
| | | 15 | Field Reading | | 13.9 | 3.9 |
| | | 20 | Field Reading | | 13.5 | 4.1 |
| | | 25 | Field Reading | | 6.4 | 8.4 |
| | | 30 | Field Reading | | 11.0 | 6.0 |
| | | 35 | Field Reading | | 2.3 | 11.7 |
| | | 40 | Field Reading | | 1.3 | 12.4 |
| | | 45 | Field Reading | | 6.8 | 8.1 |
| | | 50 | Field Reading | | 3.0 | 10.2 |
| | | 55 | Field Reading | | 7.1 | 7.7 |
| | | 60 | Field Reading | | 2.6 | 9.9 |
| | March 1998 | 10 | ASU - GC | | 15.2 | 4.5 |
| | | 45 | ASU - GC | | 1.4 | 15.2 |
| | | 60 | ASU - GC | | 1.5 | 12.6 |
| | July 1998 | 10 | ASU - GC | | 15.8 | 5.7 |
| | | 15 | ASU - GC | | 15.5 | 6.8 |
| | | 20 | ASU - GC | | 15.0 | 6.3 |
| | | 25 | ASU - GC | | 15.7 | 3.2 |
| | | 30 | ASU - GC | | 14.9 | 6.4 |
| | | 35 | ASU - GC | | 12.5 | 8.2 |
| | | 40 | ASU - GC | | 10.2 | 9.5 |
| | | 45 | ASU - GC | | 1.2 | 14.7 |
| | | 50 | ASU - GC | | 1.1 | 13.4 |
| | | 55 | ASU - GC | | 1.1 | 13.2 |
| | | 60 | ASU - GC | | 1.2 | 12.4 |
| | March 2005 | 10 | ASTM-D 1945 | 2.96 | 17.0 | 1.4 |
| | | 15 | ASTM-D 1945 | 2.76 | 16.0 | 3.0 |
| | | 20 | ASTM-D 1945 | 2.33 | 15.0 | 3.8 |
| | | 20 Dup | ASTM-D 1945 | 2.42 | 15.0 | 3.8 |
| | | 25 | ASTM-D 1945 | 2.69 | 15.0 | 3.9 |
| | | 30 | ASTM-D 1945 | 2.53 | 14.0 | 4.9 |
| | | 35 | ASTM-D 1945 | 2.29 | 11.0 | 6.6 |
| | | 40 | ASTM-D 1945 | 2.24 | 9.2 | 7.3 |
| | | 45 | ASTM-D 1945 | 2.42 | 3.2 | 8.7 |
| | | 50 | ASTM-D 1945 | 2.64 | 2.7 | 9.0 |
| | | 55 | ASTM-D 1945 | 2.58 | 2.2 | 9.1 |
| | | 60 | ASTM-D 1945 | 2.20 | 1.4 | 9.8 |
| | September 2005 | 10 | ASTM-D 1945 | 2.24 | 18.0 | 2.0 |
| | | 15 | ASTM-D 1945 | 2.20 | 17.0 | 2.3 |
| | | 20 | ASTM-D 1945 | 2.20 | 17.0 | 2.4 |
| | | 25 | ASTM-D 1945 | 2.24 | 16.0 | 2.6 |
| | | 30 | ASTM-D 1945 | 2.24 | 13.0 | 3.4 |
| | | 35 | ASTM-D 1945 | 2.29 | 12.0 | 4.3 |
| | | 40 | ASTM-D 1945 | 2.20 | 11.0 | 4.8 |
| | | 45 | ASTM-D 1945 | 2.20 | 5.6 | 8.4 |
| | | 50 | ASTM-D 1945 | 2.24 | 4.9 | 8.6 |
| | | 55 | ASTM-D 1945 | 2.24 | 5.6 | 8.5 |
| | | 60 | ASTM-D 1945 | 2.20 | 2.3 | 10.0 |

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**TABLE 2-8d. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, FIXED GASES**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Nested Well Location | Date | Depth | Method | ASTM Dilution Factor | Oxygen % | Carbon Dioxide % |
|---|---|---|---|---|---|---|
| VW-93 | October 2005 | 30 | ASTM-D 1945 | 2.20 | 21.0 | 1.0 |
| | | 35 | ASTM-D 1945 | 2.13 | 21.0 | 1.2 |
| | | 40 | ASTM-D 1945 | 2.09 | 20.0 | 1.2 |
| | | 45 | ASTM-D 1945 | 2.16 | 20.0 | 1.3 |
| | | 50 | ASTM-D 1945 | 2.20 | 20.0 | 1.8 |
| | | 60 | ASTM-D 1945 | 2.13 | 19.0 | 4.1 |
| | Nov/Dec 2006 | 10 | ASTM-D 1945 | 2.16 | 19.0 | 1.9 |
| | | 15 | ASTM-D 1945 | 2.09 | 18.0 | 2.5 |
| | | 20 | ASTM-D 1945 | 2.16 | 17.0 | 2.6 |
| | | 25 | ASTM-D 1945 | 2.16 | 17.0 | 2.8 |
| | | 30 | ASTM-D 1945 | 2.13 | 16.0 | 3.6 |
| | | 35 | ASTM-D 1945 | 2.05 | 15.0 | 3.7 |
| | | 40 | ASTM-D 1945 | 2.05 | 13.0 | 4.5 |
| | | 45 | ASTM-D 1945 | 2.02 | 8.5 | 7.6 |
| | | 50 | ASTM-D 1945 | 2.38 | 8.2 | 7.8 |
| | | 55 | ASTM-D 1945 | 2.38 | 6.9 | 8.4 |
| | | 60 | ASTM-D 1945 | 2.13 | 3.3 | 12.0 |
| | June/July 2007 | 10 | ASTM-D 1945 | 2.58 | 19.0 | 2.1 |
| | | 15 | ASTM-D 1945 | 2.76 | 19.0 | 2.0 |
| | | 20 | ASTM-D 1945 | 2.47 | 19.0 | 2.1 |
| | | 25 | ASTM-D 1945 | 2.76 | 18.0 | 2.1 |
| | | 30 | ASTM-D 1945 | 2.38 | 17.0 | 2.8 |
| | | 35 | ASTM-D 1945 | 2.33 | 16.0 | 3.6 |
| | | 40 | ASTM-D 1945 | 2.38 | 14.0 | 4.4 |
| | | 45 | ASTM-D 1945 | 2.29 | 8.5 | 8.0 |
| | | 50 | ASTM-D 1945 | 2.38 | 7.4 | 8.5 |
| | | 55 | ASTM-D 1945 | 2.38 | 7.1 | 8.7 |
| | | 60 | ASTM-D 1945 | 2.47 | 4.1 | 9.2 |
| | April 2008 | 10 | ASTM-D 1945 | 2.53 | 17.0 | 1.7 |
| | | 10 Dup | ASTM-D 1945 | 2.53 | 17.0 | 1.7 |
| | | 15 | ASTM-D 1945 | 2.33 | 16.0 | 1.9 |
| | | 20 | ASTM-D 1945 | 2.58 | 17.0 | 1.7 |
| | | 20 Dup | ASTM-D 1945 | 2.58 | 17.0 | 1.6 |
| | | 25 | ASTM-D 1945 | 2.33 | 17.0 | 1.7 |
| | | 30 | ASTM-D 1945 | 2.42 | 17.0 | 1.6 |
| | | 35 | ASTM-D 1945 | 2.29 | 17.0 | 1.7 |
| | | 40 | ASTM-D 1945 | 2.53 | 15.0 | 2.0 |
| | | 45 | ASTM-D 1945 | 2.38 | 16.0 | 2.1 |
| | | 50 | ASTM-D 1945 | 2.47 | 12.0 | 4.0 |
| | | 55 | ASTM-D 1945 | 2.53 | 12.0 | 3.8 |

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**TABLE 2-8d. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, FIXED GASES**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Nested Well Location | Date | Depth | Method | ASTM Dilution Factor | Oxygen % | Carbon Dioxide % |
|---|---|---|---|---|---|---|
| VW-93 | September 2008 | 10 | ASTM-D 1945 | 2.33 | 19.0 | 78.0 |
| | | 15 | ASTM-D 1946 | 2.24 | 19.0 | 3.0 |
| | | 20 | ASTM-D 1946 | 2.53 | 19.0 | 3.1 |
| | | 20 Dup | ASTM-D 1946 | 2.47 | 18.0 | 2.9 |
| | | 25 | ASTM-D 1946 | 2.24 | 18.0 | 3.0 |
| | | 30 | ASTM-D 1946 | 2.38 | 18.0 | 2.7 |
| | | 35 | ASTM-D 1946 | 3.40 | 19.0 | 2.7 |
| | | 40 | ASTM-D 1946 | 2.29 | 17.0 | 3.1 |
| | | 45 | ASTM-D 1946 | 2.47 | 12.0 | 3.5 |
| | | 50 | ASTM-D 1946 | 2.33 | 10.0 | 4.2 |
| | | 55 | ASTM-D 1946 | 4.71 | 10.0 | 4.3 |
| | | 60 | ASTM-D 1946 | 4.50 | 6.0 | 5.4 |
| | December 2008 | 10 | ASTM-D 1946 | 2.16 | 11.8 | 3.7 |
| | | 15 | ASTM-D 1946 | 2.24 | 11.4 | 4.5 |
| | | 20 | ASTM-D 1946 | 2.02 | 11.4 | 4.6 |
| | | 25 | ASTM-D 1946 | 2.09 | 12.0 | 4.4 |
| | | 30 | ASTM-D 1946 | 2.13 | 11.7 | 3.8 |
| | | 35 | ASTM-D 1946 | 2.16 | 6.8 | 4.7 |
| | | 40 | ASTM-D 1946 | 2.09 | 5.1 | 4.9 |
| | | 45 | ASTM-D 1946 | 2.24 | 2.2 | 5.5 |
| | | 50 | ASTM-D 1946 | 2.13 | 2.2 | 5.6 |
| | | 55 | ASTM-D 1946 | 2.02 | 1.6 | 5.5 |
| | | 55 Dup | ASTM-D 1946 | 2.02 | 1.6 | 5.5 |
| | | 60 | ASTM-D 1946 | 2.09 | 0.0 | 6.2 |
| VW-96A | March 2005 | 5 | ASTM-D 1945 | 2.05 | 19.0 | 0.3 |
| | September 2005 | 5 | ASTM-D 1945 | 2.96 | 16.0 | 3.4 |
| | June/July 2006 | 5 | ASTM-D 1945 | 2.33 | 16.0 | 3.5 |
| | Nov/Dec 2006 | 5 | ASTM-D 1945 | 2.69 | 20.0 | 0.8 |
| | | 5 Dup | ASTM-D 1945 | 2.42 | 23.0 R | 0.8 R |
| | September 2008 | 5 | ASTM-D 1946 | 2.33 | 17.0 | 2.9 |
| | December 2008 | 5 | ASTM-D 1946 | 2.29 | 3.8 | 4.5 |
| VW-96 | December 1997 | 10 | Field Reading | | 15.7 | 2.0 |
| | | 15 | Field Reading | | 11.1 | 3.7 |
| | | 20 | Field Reading | | 5.3 | 6.0 |
| | | 25 | Field Reading | | 0.5 | 9.3 |
| | | 30 | Field Reading | | 4.2 | 8.3 |
| | | 35 | Field Reading | | 0.0 | 12.3 |
| | | 40 | Field Reading | | 0.0 | 11.5 |
| | | 45 | Field Reading | | 6.8 | 7.2 |
| | | 50 | Field Reading | | 14.2 | 3.0 |
| | | 55 | Field Reading | | 0.0 | 8.3 |
| | | 60 | Field Reading | | 0.0 | 8.1 |
| | March 1998 | 10 | ASU - GC | | 17.0 | 4.0 |
| | | 40 | ASU - GC | | 1.5 | 9.8 |
| | | 55 | ASU - GC | | 1.5 | 9.0 |

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**TABLE 2-8d. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, FIXED GASES**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Nested Well Location | Date | Depth | Method | ASTM Dilution Factor | Oxygen % | Carbon Dioxide % |
|---|---|---|---|---|---|---|
| VW-96 | July 1998 | 10 | ASU - GC | | 16.7 | 4.0 |
| | | 15 | ASU - GC | | 13.9 | 4.8 |
| | | 20 | ASU - GC | | 10.5 | 5.2 |
| | | 25 | ASU - GC | | 3.2 | 7.3 |
| | | 30 | ASU - GC | | 1.2 | 9.3 |
| | | 35 | ASU - GC | | 1.2 | 9.6 |
| | | 40 | ASU - GC | | 1.2 | 9.5 |
| | | 45 | ASU - GC | | 1.1 | 9.5 |
| | | 50 | ASU - GC | | 1.2 | 9.4 |
| | | 55 | ASU - GC | | 1.0 | 9.2 |
| | March 2005 | 10 | ASTM-D 1945 | 2.13 | 17.0 | 0.4 |
| | | 15 | ASTM-D 1945 | 2.16 | 20.0 | 0.1 |
| | | 20 | ASTM-D 1945 | 2.38 | 9.4 | 0.6 |
| | | 25 | ASTM-D 1945 | 2.13 | 6.6 | 0.6 |
| | | 30 | ASTM-D 1945 | 1.75 | 6.7 | 1.0 |
| | | 35 | ASTM-D 1945 | 1.79 | 10.0 R | 1.4 R |
| | | 40 | ASTM-D 1945 | 1.55 | 3.6 | 3.2 |
| | | 45 | ASTM-D 1945 | 1.55 | 3.7 | 3.8 |
| | | 50 | ASTM-D 1945 | 1.68 | 1.4 | 7.6 |
| | | 50 Dup | ASTM-D 1945 | 1.64 | 7.5 | 5.8 |
| | | 55 | ASTM-D 1945 | 1.64 | 4.6 | 8.6 |
| | May 2005 | 30 | ASTM-D 1945 | 2.20 | 1.5 | 3.4 |
| | | 35 | ASTM-D 1945 | 2.20 | 1.6 | 4.1 |
| | | 35 Dup | ASTM-D 1945 | 2.29 | 1.6 | 4.1 |
| | | 55 | ASTM-D 1945 | 2.24 | 2.2 | 8.9 |
| | September 2005 | 10 | ASTM-D 1945 | 2.09 | 20.0 | 0.6 |
| | | 15 | ASTM-D 1945 | 2.24 | 21.0 | 0.3 |
| | | 20 | ASTM-D 1945 | 2.24 | 11.0 | 2.5 |
| | | 25 | ASTM-D 1945 | 2.29 | 5.0 | 4.7 |
| | | 30 | ASTM-D 1945 | 2.24 | 4.9 | 5.8 |
| | | 35 | ASTM-D 1945 | 2.42 | 4.3 | 6.4 |
| | | 40 | ASTM-D 1945 | 2.29 | 2.2 | 7.5 |
| | | 45 | ASTM-D 1945 | 2.33 | 1.6 | 7.8 |
| | | 50 | ASTM-D 1945 | 2.29 | 1.4 | 8.1 |
| | | 55 | ASTM-D 1945 | 2.24 | 2.2 | 8.5 |
| | | 55 Dup | ASTM-D 1945 | 2.20 | 2.3 | 8.5 |
| | | 60 | ASTM-D 1945 | 2.33 | 1.4 | 9.1 |
| | October 2005 | 20 | ASTM-D 1945 | 2.05 | 21.0 | 0.9 |
| | | 25 | ASTM-D 1945 | 2.38 | 20.0 | 1.2 |
| | | 30 | ASTM-D 1945 | 2.24 | 21.0 | ND(0.022) |
| | | 35 | ASTM-D 1945 | 2.16 | 20.0 | 1.0 |
| | | 40 | ASTM-D 1945 | 2.16 | 20.0 | 1.0 |
| | | 50 | ASTM-D 1945 | 2.33 | 19.0 | 2.0 J |
| | | 50 Dup | ASTM-D 1945 | 2.33 | 18.0 | 1.9 J |
| | | 60 | ASTM-D 1945 | 2.33 | 1.4 | 15.0 |

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**TABLE 2-8d. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, FIXED GASES**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Nested Well Location | Date | Depth | Method | ASTM Dilution Factor | Oxygen % | Carbon Dioxide % |
|---|---|---|---|---|---|---|
| VW-96 | June/July 2006 | 30 | ASTM-D 1945 | 2.69 | 1.4 | 8.1 |
| | | 40 | ASTM-D 1945 | 2.89 | 1.4 | 8.5 |
| | | 50 | ASTM-D 1945 | 2.64 | 1.4 | 9.8 |
| | | 55 | ASTM-D 1945 | 3.03 | 1.3 | 9.6 |
| | | 10 | ASTM-D 1945 | 2.53 | 12.0 | 3.8 |
| | | 20 | ASTM-D 1945 | 2.64 | 2.8 | 6.7 |
| | Nov/Dec 2006 | 10 | ASTM-D 1945 | 2.20 | 19.0 | 1.7 |
| | | 20 | ASTM-D 1945 | 2.33 | 17.0 | 2.1 |
| | | 25 | ASTM-D 1945 | 2.24 | 15.0 | 2.5 |
| | | 30 | ASTM-D 1945 | 2.16 | 14.0 | 2.7 |
| | | 35 | ASTM-D 1945 | 2.24 | 13.0 | 3.3 |
| | | 40 | ASTM-D 1945 | 2.53 | 9.8 | 4.8 |
| | | 45 | ASTM-D 1945 | 2.24 | 8.0 | 5.9 |
| | | 50 | ASTM-D 1945 | 2.29 | 1.4 | 12.0 |
| | | 55 | ASTM-D 1945 | 2.20 | 1.3 | 14.0 |
| | June/July 2007 | 10 | ASTM-D 1945 | 2.33 | 16.0 | 2.7 |
| | | 20 | ASTM-D 1945 | 2.24 | 12.0 | 4.0 |
| | | 25 | ASTM-D 1945 | 2.29 | 1.5 | 7.8 |
| | | 25 Dup | ASTM-D 1945 | 2.16 | 1.4 | 7.2 |
| | | 30 | ASTM-D 1945 | 2.38 | 1.6 | 8.6 |
| | | 35 | ASTM-D 1945 | 2.38 | 1.5 | 8.9 |
| | | 40 | ASTM-D 1945 | 2.33 | 1.4 | 8.8 |
| | | 45 | ASTM-D 1945 | 2.38 | 1.3 | 8.9 |
| | | 45 Dup | ASTM-D 1945 | 2.20 | 1.4 | 8.9 |
| | | 50 | ASTM-D 1945 | 2.42 | 1.4 | 9.3 |
| | | 55 | ASTM-D 1945 | 2.47 | 1.6 | 9.6 |
| | April 2008 | 10 | ASTM-D 1945 | 2.64 | 19.0 | 0.4 |
| | | 20 | ASTM-D 1945 | 2.42 | 15.0 | 0.5 |
| | | 25 | ASTM-D 1945 | 2.09 | 15.0 | 0.5 |
| | | 30 | ASTM-D 1945 | 2.02 | 11.0 | 1.0 |
| | | 35 | ASTM-D 1945 | 2.47 | 7.8 | 1.9 |
| | | 40 | ASTM-D 1945 | 2.16 | 8.3 | 3.3 |
| | | 45 | ASTM-D 1945 | 2.29 | 5.8 | 4.6 |
| | | 50 | ASTM-D 1945 | 2.64 | 4.4 | 5.1 |
| | | 55 | ASTM-D 1945 | 2.58 | 1.8 | 8.8 |
| | September 2008 | 10 | ASTM-D 1946 | 2.29 | 17.0 | 2.9 |
| | | 15 | ASTM-D 1946 | 2.58 | 16.0 | 2.8 |
| | | 20 | ASTM-D 1946 | 2.47 | 15.0 | 1.9 |
| | | 25 | ASTM-D 1946 | 2.42 | 6.4 | 1.7 |
| | | 30 | ASTM-D 1946 | 2.53 | 5.2 | 3.5 |
| | | 35 | ASTM-D 1946 | 2.38 | 5.0 | 4.5 |
| | | 35 RS | ASTM-D 1946 | 2.38 | 6.2 | 7.5 |
| | | 40 | ASTM-D 1946 | 2.47 | 4.7 | 5.2 |
| | | 45 | ASTM-D 1946 | 2.58 | 4.3 | 5.5 |
| | | 50 | ASTM-D 1946 | 2.38 | 2.8 | 6.7 |
| | | 55 | ASTM-D 1946 | 2.53 | 1.6 | 8.5 |
| | | 60 | ASTM-D 1946 | 2.42 | 2.0 | 8.7 |

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**TABLE 2-8d. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, FIXED GASES**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Nested Well Location | Date | Depth | Method | ASTM Dilution Factor | Oxygen % | Carbon Dioxide % |
|---|---|---|---|---|---|---|
| VW-96 | December 2008 | 10 | ASTM-D 1946 | 2.24 | 0.0 | 8.3 |
| | | 15 | ASTM-D 1946 | 2.33 | 0.0 | 8.8 |
| | | 20 | ASTM-D 1946 | 2.24 | 0.0 | 7.5 |
| | | 25 | ASTM-D 1946 | 2.05 | 0.0 | 7.4 |
| | | 30 | ASTM-D 1946 | 2.09 | 0.0 | 8.8 |
| | | 35 | ASTM-D 1946 | 2.20 | 0.0 | 8.8 |
| | | 40 | ASTM-D 1946 | 2.33 | 0.0 | 9.1 |
| | | 45 | ASTM-D 1946 | 2.42 | 0.0 | 9.2 |
| | | 50 | ASTM-D 1946 | 2.13 | 0.0 | 9.8 |
| | | 50 Dup | ASTM-D 1946 | 2.16 | 0.0 | 9.8 |
| | | 55 | ASTM-D 1946 | 2.09 | 0.0 | 9.7 |
| | | 60 | ASTM-D 1946 | 2.20 | 0.0 | 10.2 |
| VW-99A | March 2005 | 5 | ASTM-D 1945 | 4.38 | 18.0 | 0.5 |
| | | 10 | ASTM-D 1945 | 2.29 | 18.0 | 0.2 |
| | April 2008 | 5 | ASTM-D 1945 | 2.42 | 19.0 | 0.4 |
| | | 5 Dup | ASTM-D 1945 | 2.38 | 19.0 | 0.4 |
| | | 10 | ASTM-D 1945 | 2.38 | 16.0 | 0.2 |
| | September 2008 | 5 | ASTM-D 1946 | 2.20 | 20.0 | 1.6 |
| | | 10 | ASTM-D 1946 | 2.20 | 19.0 | 2.1 |
| | December 2008 | 5 | ASTM-D 1946 | 2.20 | 19.2 | 1.1 |
| VW-99 | December 1997 | 10 | Field Reading | | 17.4 | 1.9 |
| | | 15 | Field Reading | | 11.9 | 4.8 |
| | | 20 | Field Reading | | 8.7 | 7.1 |
| | | 25 | Field Reading | | 7.5 | 8.1 |
| | | 30 | Field Reading | | 1.2 | 10.2 |
| | | 35 | Field Reading | | 0.0 | 12.1 |
| | | 40 | Field Reading | | 0.0 | 12.1 |
| | | 45 | Field Reading | | 0.0 | 11.8 |
| | | 50 | Field Reading | | 0.0 | 11.6 |
| | | 55 | Field Reading | | 0.0 | 11.3 |
| | | 60 | Field Reading | | 0.0 | 11.2 |
| | March 1998 | 10 | ASU - GC | | 17.5 | 2.5 |
| | | 40 | ASU - GC | | 1.4 | 11.5 |
| | | 50 | ASU - GC | | 1.0 | 11.5 |
| | July 1998 | 10 | ASU - GC | | 17.2 | 3.2 |
| | | 15 | ASU - GC | | 16.2 | 2.8 |
| | | 20 | ASU - GC | | 15.4 | 5.5 |
| | | 25 | ASU - GC | | 15.7 | 2.8 |
| | | 30 | ASU - GC | | 12.5 | 5.4 |
| | | 35 | ASU - GC | | 1.5 | 11.9 |
| | | 40 | ASU - GC | | 1.2 | 12.0 |
| | | 45 | ASU - GC | | 1.2 | 11.3 |
| | | 50 | ASU - GC | | 1.9 | 10.3 |
| | | 55 | ASU - GC | | 1.0 | 11.0 |

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**TABLE 2-8d. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, FIXED GASES**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Nested Well Location | Date | Depth | Method | ASTM Dilution Factor | Oxygen % | Carbon Dioxide % |
|---|---|---|---|---|---|---|
| VW-99 | March 2005 | 10 | ASTM-D 1945 | 1.55 | 16.0 | 0.1 |
| | | 15 | ASTM-D 1945 | 1.46 | 12.0 | 1.3 |
| | | 20 | ASTM-D 1945 | 1.55 | 10.0 | 2.2 |
| | | 25 | ASTM-D 1945 | 2.04 | 9.7 | 2.1 |
| | | 30 | ASTM-D 1945 | 1.55 | 2.7 | 1.8 |
| | | 35 | ASTM-D 1945 | 1.61 | 1.4 | 4.8 |
| | | 40 | ASTM-D 1945 | 2.64 | 1.7 | 6.2 |
| | | 45 | ASTM-D 1945 | 2.42 | 1.6 | 7.5 |
| | | 45 Dup | ASTM-D 1945 | 2.29 | 1.5 | 7.5 |
| | | 50 | ASTM-D 1945 | 2.53 | 1.6 | 8.4 |
| | | 55 | ASTM-D 1945 | 2.33 | 1.5 | 9.4 |
| | September 2005 | 10 | ASTM-D 1945 | 2.20 | 18.0 | 2.3 |
| | | 15 | ASTM-D 1945 | 2.16 | 17.0 | 2.1 |
| | | 20 | ASTM-D 1945 | 2.24 | 18.0 | 2.0 |
| | | 25 | ASTM-D 1945 | 2.24 | 18.0 | 2.3 |
| | | 30 | ASTM-D 1945 | 2.29 | 11.0 | 4.2 |
| | | 35 | ASTM-D 1945 | 2.20 | 2.8 | 7.8 |
| | | 40 | ASTM-D 1945 | 2.24 | 1.7 | 8.3 |
| | | 45 | ASTM-D 1945 | 2.20 | 1.5 | 8.4 |
| | | 50 | ASTM-D 1945 | 2.16 | 2.4 | 7.9 |
| | | 50 Dup | ASTM-D 1945 | 2.33 | 2.1 | 8.1 |
| | | 55 | ASTM-D 1945 | 2.20 | 1.4 | 8.3 |
| | | 60 | ASTM-D 1945 | 2.24 | 6.8 | 6.2 |
| | October 2005 | 20 | ASTM-D 1945 | 2.09 | 20.0 | 1.6 |
| | | 25 | ASTM-D 1945 | 2.05 | 20.0 | 1.8 |
| | | 30 | ASTM-D 1945 | 2.13 | 20.0 | 2.3 |
| | | 35 | ASTM-D 1945 | 2.16 | 19.0 | 2.8 |
| | | 40 | ASTM-D 1945 | 3.46 | 19.0 | 3.0 J |
| | | 50 | ASTM-D 1945 | 2.09 | 8.7 | 8.8 |
| | | 60 | ASTM-D 1945 | 2.16 | 9.2 | 8.1 |
| | June/July 2006 | 10 | ASTM-D 1945 | 2.24 | 17.0 | 2.8 |
| | | 20 | ASTM-D 1945 | 2.29 | 17.0 | 2.9 |
| | | 30 | ASTM-D 1945 | 2.42 | 15.0 | 5.0 |
| | | 40 | ASTM-D 1945 | 2.76 | 3.7 | 9.8 |
| | | 50 | ASTM-D 1945 | 2.69 | 2.0 J | 8.7 |
| | | 50 Dup | ASTM-D 1945 | 2.38 | 1.4 J | 9.4 |
| | | 60 | ASTM-D 1945 | 2.38 | 17.0 | 3.1 |
| | Nov/Dec 2006 | 10 | ASTM-D 1945 | 2.20 | 12.0 | 0.6 |
| | | 15 | ASTM-D 1945 | 2.20 | 8.1 | 1.4 |
| | | 20 | ASTM-D 1945 | 2.38 | 7.6 | 1.7 |
| | | 20 Dup | ASTM-D 1945 | 2.16 | 7.9 | 1.8 |
| | | 25 | ASTM-D 1945 | 2.13 | 7.7 | 1.9 |
| | | 30 | ASTM-D 1945 | 2.42 | 8.6 | 1.8 |
| | | 35 | ASTM-D 1945 | 2.20 | 5.8 | 3.9 |
| | | 40 | ASTM-D 1945 | 2.53 | 4.9 | 5.5 |
| | | 45 | ASTM-D 1945 | 2.29 | 2.3 | 9.8 |
| | | 50 | ASTM-D 1945 | 2.09 | 1.4 | 12.0 |
| | | 55 | ASTM-D 1945 | 2.13 | 1.3 | 13.0 |

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**TABLE 2-8d. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, FIXED GASES**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Nested Well Location | Date | Depth | Method | ASTM Dilution Factor | Oxygen % | Carbon Dioxide % |
|---|---|---|---|---|---|---|
| VW-99 | June/July 2007 | 10 | ASTM-D 1945 | 2.42 | 17.0 | 2.8 |
| | | 15 | ASTM-D 1945 | 2.33 | 17.0 | 3.0 |
| | | 20 | ASTM-D 1945 | 2.53 | 16.0 | 2.8 |
| | | 25 | ASTM-D 1945 | 2.38 | 17.0 | 2.9 |
| | | 30 | ASTM-D 1945 | 2.29 | 11.0 | 6.5 |
| | | 35 | ASTM-D 1945 | 2.33 | 1.4 | 10.0 |
| | | 35 Dup | ASTM-D 1945 | 2.33 | 1.4 | 10.0 |
| | | 40 | ASTM-D 1945 | 2.42 | 1.3 | 9.8 |
| | | 45 | ASTM-D 1945 | 2.16 | 1.7 | 8.9 |
| | | 45 Dup | ASTM-D 1945 | 2.42 | 1.4 | 9.3 |
| | | 50 | ASTM-D 1945 | 2.29 | 1.4 | 9.1 |
| | | 55 | ASTM-D 1945 | 2.20 | 1.4 | 8.9 |
| | April 2008 | 10 | ASTM-D 1945 | 2.47 | 16.0 | 0.4 |
| | | 15 | ASTM-D 1945 | 2.02 | 14.0 | 1.5 |
| | | 20 | ASTM-D 1945 | 2.24 | 12.0 | 2.9 |
| | | 25 | ASTM-D 1945 | 2.38 | 12.0 | 3.2 |
| | | 30 | ASTM-D 1945 | 2.53 | 5.8 | 4.7 |
| | | 35 | ASTM-D 1945 | 2.29 | 1.7 | 7.4 |
| | | 40 | ASTM-D 1945 | 2.24 | 1.4 | 8.3 |
| | | 45 | ASTM-D 1945 | 2.33 | 1.3 | 9.2 |
| | | 50 | ASTM-D 1945 | 2.20 | 1.5 | 9.2 |
| | | 50 Dup | ASTM-D 1945 | 2.20 | 1.2 | 9.4 |
| | September 2008 | 10 | ASTM-D 1946 | 2.24 | 18.0 | 3.2 |
| | | 15 | ASTM-D 1946 | 2.29 | 19.0 | 2.4 |
| | | 20 | ASTM-D 1946 | 2.58 | 19.0 | 2.3 |
| | | 25 | ASTM-D 1946 | 2.24 | 19.0 | 2.3 |
| | | 30 | ASTM-D 1946 | 2.13 | 15.0 | 3.4 |
| | | 35 | ASTM-D 1946 | 2.38 | 6.2 | 7.5 |
| | | 35 Dup | ASTM-D 1946 | 2.38 | 6.1 | 7.4 |
| | | 40 | ASTM-D 1946 | 2.29 | 2.2 | 9.5 |
| | | 45 | ASTM-D 1946 | 2.24 | 2.6 | 9.2 |
| | | 50 | ASTM-D 1946 | 2.24 | 1.7 | 9.4 |
| | | 55 | ASTM-D 1946 | 2.24 | 1.6 | 9.2 |
| | | 55 Dup | ASTM-D 1946 | 2.24 | 2.4 | 8.9 |
| | | 60 | ASTM-D 1946 | 2.29 | 18.0 | 2.7 |
| | December 2008 | 10 | ASTM-D 1946 | 2.13 | 14.7 | 3.7 |
| | | 15 | ASTM-D 1946 | 2.33 | 9.7 | 6.4 |
| | | 20 | ASTM-D 1946 | 2.09 | 0.1 | 11.8 |
| | | 25 | ASTM-D 1946 | 2.20 | 2.9 | 12.1 |
| | | 30 | ASTM-D 1946 | 2.13 | 1.4 | 10.9 |
| | | 35 | ASTM-D 1946 | 2.16 | 0.0 | 11.0 |
| | | 40 | ASTM-D 1946 | 1.94 | 0.0 | 11.8 |
| | | 45 | ASTM-D 1946 | 2.05 | 0.0 | 11.7 |
| | | 50 | ASTM-D 1946 | 2.09 | 0.0 | 11.7 |
| | | 55 | ASTM-D 1946 | 4.37 | 0.0 | 11.8 |
| | | 55 Dup | ASTM-D 1946 | 2.05 | 0.0 | 11.8 |
| | | 60 | ASTM-D 1946 | 2.05 | 6.4 | 8.6 |

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**TABLE 2-8d. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, FIXED GASES**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Nested Well Location | Date | Depth | Method | ASTM Dilution Factor | Oxygen % | Carbon Dioxide % |
|---|---|---|---|---|---|---|
| VW-127 | May 2005 | 10 | ASTM-D 1945 | 2.33 | 15.0 | 0.6 |
| | | 15 | ASTM-D 1945 | 2.24 | 13.0 | 0.5 |
| | | 20 | ASTM-D 1945 | 2.16 | 9.7 | 1.4 |
| | | 30 | ASTM-D 1945 | 2.13 | 6.6 | 0.0 |
| | | 40 | ASTM-D 1945 | 2.16 | 4.4 | 5.3 |
| | | 50 | ASTM-D 1945 | 2.29 | 3.5 | 9.3 |
| | | 5 | ASTM-D 1945 | 2.09 | 15.0 | 1.4 |
| | September 2005 | 10 | ASTM-D 1945 | 2.20 | 14.0 | 2.4 |
| | | 15 | ASTM-D 1945 | 2.29 | 14.0 | 2.3 |
| | | 20 | ASTM-D 1945 | 2.20 | 14.0 | 3.1 |
| | | 30 | ASTM-D 1945 | 2.38 | 10.0 | 2.7 |
| | | 40 | ASTM-D 1945 | 2.20 | 7.8 | 6.6 |
| | | 40 Dup | ASTM-D 1945 | 2.20 | 7.9 | 6.6 |
| | | 5 | ASTM-D 1945 | 2.24 | 13.0 | 4.0 |
| | | 50 | ASTM-D 1945 | 2.20 | 5.3 | 8.1 |
| | October 2005 | 20 | ASTM-D 1945 | 2.16 | 21.0 | 1.0 |
| | | 30 | ASTM-D 1945 | 2.14 | 19.0 | 1.0 |
| | | 40 | ASTM-D 1945 | 2.20 | 19.0 | 1.6 |
| | | 50 | ASTM-D 1945 | 2.05 | 15.0 | 5.6 |
| | Nov/Dec 2006 | 5 | ASTM-D 1946 | 2.16 | 18.0 | 2.3 |
| | | 10 | ASTM-D 1946 | 2.09 | 27.0 R | 1.2 R |
| | | 15 | ASTM-D 1946 | 2.09 | 20.0 | 1.8 |
| | | 20 | ASTM-D 1946 | 2.13 | 15.0 | 2.7 |
| | | 30 | ASTM-D 1946 | 2.20 | 13.0 | 3.1 |
| | | 40 | ASTM-D 1946 | 2.13 | 6.9 | 7.0 |
| | | 50 | ASTM-D 1946 | 2.16 | 5.3 | 8.7 |
| | April 2008 | 5 | ASTM-D 1946 | 2.38 | 2.1 | 4.1 |
| | | 10 | ASTM-D 1946 | 2.53 | 1.9 | 4.9 |
| | | 15 | ASTM-D 1946 | 2.58 | 9.4 | 2.3 |
| | | 20 | ASTM-D 1946 | 2.64 | 11.0 | 2.4 |
| | | 30 | ASTM-D 1946 | 2.38 | 11.0 | 2.4 |
| | | 40 | ASTM-D 1946 | 2.42 | 9.2 | 5.4 |
| | | 50 | ASTM-D 1946 | 2.33 | 6.3 | 7.8 |
| | September 2008 | 5 | ASTM-D 1946 | 2.53 | 2.0 | 5.3 |
| | | 10 | ASTM-D 1946 | 2.42 | 5.2 | 7.1 |
| | | 15 | ASTM-D 1946 | 3.86 | 5.8 | 8.0 |
| | | 20 | ASTM-D 1946 | 2.47 | 13.0 | 3.4 |
| | | 30 | ASTM-D 1946 | 2.24 | 14.0 | 2.3 |
| | | 40 | ASTM-D 1946 | 2.33 | 13.0 | 3.9 |
| | | 50 | ASTM-D 1946 | 2.20 | 11.0 | 5.6 |
| | December 2008 | 5 | ASTM-D 1946 | 2.24 | 12.5 | 4.2 |
| | | 10 | ASTM-D 1946 | 2.16 | 9.8 | 5.4 |
| | | 15 | ASTM-D 1946 | 2.13 | 15.8 | 6.2 |
| | | 20 | ASTM-D 1946 | 2.33 | 10.5 | 4.5 |
| | | 30 | ASTM-D 1946 | 2.16 | 10.0 | 3.0 |
| | | 40 | ASTM-D 1946 | 2.09 | 8.4 | 7.5 |
| | | 40 Dup | ASTM-D 1946 | 2.05 | 8.4 | 7.5 |
| | | 50 | ASTM-D 1946 | 2.05 | 8.9 | 7.6 |

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**TABLE 2-8d. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, FIXED GASES**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Nested Well Location | Date | Depth | Method | ASTM Dilution Factor | Oxygen % | Carbon Dioxide % |
|---|---|---|---|---|---|---|
| VW-128 | April 2005 | 5 | ASTM-D 1945 | 2.33 | 18.0 | 0.0 |
| | | 10 | ASTM-D 1945 | 2.47 | 19.0 | 0.0 |
| | | 15 | ASTM-D 1945 | 2.53 | 18.0 | 0.0 |
| | | 20 | ASTM-D 1945 | 2.42 | 12.0 | 0.3 |
| | | 30 | ASTM-D 1945 | 2.42 | 10.0 | 3.2 |
| | | 40 | ASTM-D 1945 | 2.20 | 7.6 | 5.1 |
| | | 50 | ASTM-D 1945 | 2.64 | 5.8 | 7.5 |
| | | 50 Dup | ASTM-D 1945 | 2.42 | 5.8 | 7.5 |
| | September 2005 | 5 | ASTM-D 1945 | 2.29 | 15.0 | 2.6 |
| | | 10 | ASTM-D 1945 | 2.42 | 18.0 | 1.8 |
| | | 15 | ASTM-D 1945 | 2.33 | 18.0 | 2.2 |
| | | 20 | ASTM-D 1945 | 2.29 | 16.0 | 1.8 |
| | | 30 | ASTM-D 1945 | 2.84 | 19.0 | 3.6 |
| | | 40 | ASTM-D 1945 | 2.20 | 10.0 | 5.6 |
| | | 40 Dup | ASTM-D 1945 | 2.24 | 10.0 | 5.7 |
| | | 50 | ASTM-D 1945 | 2.24 | 8.2 | 6.9 |
| | October 2005 | 20 | ASTM-D 1945 | 2.16 | 19.0 | 1.9 |
| | | 30 | ASTM-D 1945 | 2.05 | 16.0 | 3.8 |
| | | 40 | ASTM-D 1945 | 2.02 | 16.0 | 3.6 |
| | | 50 | ASTM-D 1945 | 2.09 | 12.0 | 6.6 |
| | | 50 Dup | ASTM-D 1945 | 2.01 | 14.0 | 5.5 |
| | June/July 2006 | 5 | ASTM-D 1945 | 2.58 | 17.0 | 3.9 |
| | | 10 | ASTM-D 1945 | 2.47 | 19.0 | 2.4 |
| | | 15 | ASTM-D 1945 | 2.64 | 19.0 | 1.9 |
| | | 20 | ASTM-D 1945 | 2.24 | 18.0 | 0.7 |
| | | 30 | ASTM-D 1945 | 2.29 | 18.0 | 1.6 |
| | | 40 | ASTM-D 1945 | 2.38 | 16.0 | 3.5 |
| | | 50 | ASTM-D 1945 | 2.58 | 14.0 | 5.2 |
| | | 50 Dup | ASTM-D 1945 | 2.20 | 14.0 | 5.3 |
| | Nov/Dec 2006 | 5 | ASTM-D 1945 | 2.13 | 19.0 | 0.9 |
| | | 10 | ASTM-D 1945 | 2.09 | 20.0 | 0.9 |
| | | 15 | ASTM-D 1945 | 2.20 | 16.0 | 1.4 |
| | | 20 | ASTM-D 1945 | 2.09 | 12.0 | 1.6 |
| | | 20 Dup | ASTM-D 1945 | 2.33 | 12.0 | 1.5 |
| | | 30 | ASTM-D 1945 | 2.20 | 10.0 | 2.7 |
| | | 40 | ASTM-D 1945 | 2.29 | 7.0 | 5.5 |
| | | 50 | ASTM-D 1945 | 2.58 | 6.2 | 6.9 |
| | | 50 Dup | ASTM-D 1945 | 2.09 | 6.2 | 6.9 |
| | June/July 2007 | 5 | ASTM-D 1945 | 2.33 | 17.0 | 3.3 |
| | | 10 | ASTM-D 1945 | 2.38 | 18.0 | 2.0 |
| | | 15 | ASTM-D 1945 | 2.42 | 19.0 | 1.7 |
| | | 20 | ASTM-D 1945 | 2.29 | 16.0 | 2.2 |
| | | 30 | ASTM-D 1945 | 2.42 | 13.0 | 3.9 |
| | | 40 | ASTM-D 1945 | 2.58 | 8.7 | 5.8 |
| | | 50 | ASTM-D 1945 | 2.47 | 6.8 | 6.7 |

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**TABLE 2-8d. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, FIXED GASES**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Nested Well Location | Date | Depth | Method | ASTM Dilution Factor | Oxygen % | Carbon Dioxide % |
|---|---|---|---|---|---|---|
| VW-128 | April 2008 | 5 | ASTM-D 1945 | 2.29 | 19.0 | 0.7 |
| | | 10 | ASTM-D 1945 | 2.09 | 21.0 J | 0.052 J |
| | | 15 | ASTM-D 1945 | 2.64 | 19.0 | 0.4 |
| | | 20 | ASTM-D 1945 | 2.38 | 16.0 | 1.3 |
| | | 30 | ASTM-D 1945 | 2.02 | 17.0 | 1.8 |
| | | 40 | ASTM-D 1945 | 2.38 | 9.4 | 4.8 |
| | | 50 | ASTM-D 1945 | 2.09 | 10.0 | 4.7 |
| | | 50 Dup | ASTM-D 1945 | 2.09 | 11.0 | 4.7 |
| | September 2008 | 5 | ASTM-D 1946 | CANCELLED | | |
| | | 10 | ASTM-D 1946 | CANCELLED | | |
| | | 15 | ASTM-D 1946 | 2.24 | 18.0 | 1.4 |
| | | 20 | ASTM-D 1946 | 2.24 | 17.0 | 1.0 |
| | | 30 | ASTM-D 1946 | 2.24 | 17.0 | 1.9 |
| | | 40 | ASTM-D 1946 | 2.29 | 15.0 | 3.3 |
| | | 50 | ASTM-D 1946 | 2.33 | 13.0 | 5.3 |
| | December 2008 | 5 | ASTM-D 1946 | 2.24 | 16.9 | 1.3 |
| | | 10 | ASTM-D 1946 | 2.24 | 15.8 | 1.1 |
| | | 15 | ASTM-D 1946 | 2.13 | 16.8 | 1.8 |
| | | 20 | ASTM-D 1946 | 2.20 | 14.0 | 1.5 |
| | | 30 | ASTM-D 1946 | 2.24 | 11.8 | 3.2 |
| | | 40 | ASTM-D 1946 | 2.24 | 6.8 | 5.8 |
| | | 50 | ASTM-D 1946 | 2.20 | 4.8 | 6.8 |
| VW-129 | April 2005 | 5 | ASTM-D 1945 | 2.53 | 15.0 | 2.2 |
| | | 10 | ASTM-D 1945 | 2.42 | 16.0 | 1.7 |
| | | 15 | ASTM-D 1945 | 2.82 | 14.0 | 3.2 |
| | | 20 | ASTM-D 1945 | 2.33 | 15.0 | 2.6 |
| | | 30 | ASTM-D 1945 | 2.16 | 15.0 | 3.2 |
| | | 40 | ASTM-D 1945 | 2.38 | 15.0 | 3.1 |
| | | 50 | ASTM-D 1945 | 2.47 | 16.0 | 0.2 |
| | | 50 Dup | ASTM-D 1945 | 2.53 | 15.0 | 3.3 |
| | June/July 2006 | 5 | ASTM-D 1945 | 2.33 | 16.0 | 3.1 |
| | | 10 | ASTM-D 1945 | 2.29 | 16.0 | 2.6 |
| | | 15 | ASTM-D 1945 | 2.64 | 16.0 | 2.5 |
| | | 20 | ASTM-D 1945 | 3.46 | 15.0 | 2.6 |
| | | 30 | ASTM-D 1945 | 2.47 | 16.0 | 3.3 |
| | | 40 | ASTM-D 1945 | 2.69 | 16.0 | 3.6 |
| | | 50 | ASTM-D 1945 | 2.13 | 16.0 | 3.8 |
| | June/July 2007 | 5 | ASTM-D 1945 | 2.64 | 16.0 | 3.3 |
| | | 10 | ASTM-D 1945 | 2.24 | 16.0 | 2.8 |
| | | 15 | ASTM-D 1945 | 2.58 | 17.0 | 2.9 |
| | | 20 | ASTM-D 1945 | 2.38 | 16.0 | 3.0 |
| | | 30 | ASTM-D 1945 | 2.53 | 16.0 | 3.2 |
| | | 40 | ASTM-D 1945 | 2.47 | 16.0 | 3.4 |
| | | 40 Dup | ASTM-D 1945 | 2.53 | 16.0 | 3.3 |
| | | 50 | ASTM-D 1945 | 2.38 | 16.0 | 3.6 |

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**TABLE 2-8d. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, FIXED GASES**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Nested Well Location | Date | Depth | Method | ASTM Dilution Factor | Oxygen % | Carbon Dioxide % |
|---|---|---|---|---|---|---|
| VW-129 | April 2008 | 5 | ASTM-D 1945 | 2.53 | 19.0 | 1.6 |
| | | 10 | ASTM-D 1945 | 2.58 | 18.0 | 1.9 |
| | | 15 | ASTM-D 1945 | 2.47 | 18.0 | 2.2 |
| | | 20 | ASTM-D 1945 | 2.33 | 18.0 | 2.5 |
| | | 30 | ASTM-D 1945 | 2.24 | 17.0 | 3.0 |
| | | 40 | ASTM-D 1945 | 2.38 | 16.0 | 3.2 |
| | | 50 | ASTM-D 1945 | 2.47 | 16.0 | 3.1 |
| | September 2008 | 5 | ASTM-D 1946 | 2.53 | 17.0 | 3.5 |
| | | 10 | ASTM-D 1946 | 2.58 | 17.0 | 3.0 |
| | | 15 | ASTM-D 1946 | 2.38 | 17.0 | 2.9 |
| | | 20 | ASTM-D 1946 | 2.47 | 16.0 | 2.8 |
| | | 20 Dup | ASTM-D 1946 | 2.42 | 17.0 | 2.7 |
| | | 30 | ASTM-D 1946 | 2.38 | 17.0 | 3.1 |
| | | 40 | ASTM-D 1946 | 4.22 | 17.0 | 3.1 |
| | | 50 | ASTM-D 1946 | 5.11 | 17.0 | 3.2 |
| | | 50 Dup | ASTM-D 1946 | 2.53 | 16.0 | 3.4 |
| | December 2008 | 5 | ASTM-D 1946 | 2.33 | 15.7 | 2.1 |
| | | 10 | ASTM-D 1946 | 2.16 | 14.5 | 3.3 |
| | | 15 | ASTM-D 1946 | 2.24 | 14.3 | 3.5 |
| | | 20 | ASTM-D 1946 | 2.13 | 13.8 | 3.7 |
| | | 30 | ASTM-D 1946 | 2.20 | 16.0 | 3.5 |
| | | 40 | ASTM-D 1946 | 2.29 | 16.1 | 3.7 |
| | | 50 | ASTM-D 1946 | 2.09 | 15.6 | 3.9 |
| VW-130 | April 2005 | 5 | ASTM-D 1945 | 2.76 | 18.0 | 0.4 |
| | | 10 | ASTM-D 1945 | 2.42 | 18.0 | 0.3 |
| | | 15 | ASTM-D 1945 | 2.42 | 18.0 | 0.9 |
| | | 20 | ASTM-D 1945 | 2.58 | 24.0 R | 0.85 R |
| | | 20 | ASTM-D 1945 | 2.20 | 19.0 | 1.4 |
| | | 30 | ASTM-D 1945 | 2.53 | 15.0 | 1.6 |
| | | 30 Dup | ASTM-D 1945 | 2.58 | 15.0 | 1.6 |
| | | 40 | ASTM-D 1945 | 2.76 | 21.0 | 1.9 |
| | | 40 | ASTM-D 1945 | 2.58 | 14.0 | 3.5 |
| | | 50 | ASTM-D 1945 | 2.53 | 14.0 | 3.7 |
| | April 2008 | 5 | ASTM-D 1945 | 2.42 | 18.0 | 1.7 |
| | | 10 | ASTM-D 1945 | 2.33 | 19.0 | 1.4 |
| | | 15 | ASTM-D 1945 | 2.33 | 19.0 | 1.4 |
| | | 20 | ASTM-D 1945 | 1.00 | 19.0 | 1.6 |
| | | 30 | ASTM-D 1945 | 1.00 | 16.0 | 1.4 |
| | | 40 | ASTM-D 1945 | 2.38 | 15.0 | 2.2 |
| | | 40 Dup | ASTM-D 1945 | 2.42 | 16.0 | 2.2 |
| | September 2008 | 5 | ASTM-D 1946 | 2.33 | 17.0 | 5.0 |
| | | 10 | ASTM-D 1946 | 2.20 | 16.0 | 5.4 |
| | | 15 | ASTM-D 1946 | 2.20 | 16.0 | 4.8 |
| | | 20 | ASTM-D 1946 | 2.20 | 16.0 | 4.5 |
| | | 25 | ASTM-D 1946 | 3.38 | 18.0 | 3.0 |
| | | 30 | ASTM-D 1946 | 2.33 | 16.0 | 1.4 |
| | | 40 | ASTM-D 1946 | 2.53 | 15.0 | 2.4 |
| | | 40 Dup | ASTM-D 1946 | 2.53 | 15.0 | 2.4 |

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**TABLE 2-8d. NESTED WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY, FIXED GASES**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Nested Well Location | Date | Depth | Method | ASTM Dilution Factor | Oxygen % | Carbon Dioxide % |
|---|---|---|---|---|---|---|
| VW-130 | December 2008 | 5 | ASTM-D 1946 | 2.20 | 17.2 | 3.2 |
| | | 10 | ASTM-D 1946 | 2.05 | 16.8 | 3.2 |
| | | 15 | ASTM-D 1946 | 2.13 | 16.7 | 3.7 |
| | | 20 | ASTM-D 1946 | 2.16 | 16.4 | 3.8 |
| | | 30 | ASTM-D 1946 | 2.05 | 14.7 | 1.9 |
| | | 40 | ASTM-D 1946 | 2.53 | 14.8 | 2.8 |
| | | 40 Dup | ASTM-D 1946 | 2.42 | 14.8 | 2.8 |

**NOTES:**
**J** – estimated concentration
**R** – Value has been rejected and should not be used for qualitative or quantitative purposes
**ASU-GC** - Analyzed by Arizona State University using Gas Chromatography

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# TABLE 2-9a. OUTDOOR AIR ANALYTICAL RESULTS SUMMARY, PETROLEUM RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Sample ID | Date | n-Butyl-benzene mg/m$^3$ | sec-Butyl-benzene mg/m$^3$ | Isopropyl-benzene mg/m$^3$ | n-Propyl-benzene mg/m$^3$ | 1,2-Dichloro-ethane mg/m$^3$ | 1,2-Dibromo-ethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethyl-benzene mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclo-hexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 1,3,5-Trimethyl-benzene mg/m$^3$ | 1,2,4-Trimethyl-benzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyl-toluene mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OA-VW-18 | 4/10/08 | ND(0.004) | ND(0.004) | ND(0.00072) | ND(0.00072) | ND(0.00059) | ND(0.0011) | ND(0.00053) | ND(0.0038) | 0.002 | 0.0034 | ND(0.00063) | 0.00064 | ND(0.00063) | ND(0.0005) | ND(0.00051) | ND(0.0006) | ND(0.00062) | ND(0.00072) | ND(0.00072) | ND(0.00032) | ND(0.00072) |
| | 4/10/08 Dup | ND(0.0042) | ND(0.0042) | ND(0.00076) | ND(0.00076) | ND(0.00063) | ND(0.0012) | ND(0.00056) | ND(0.0041) | 0.00078 | 0.0009 | ND(0.00067) | ND(0.00067) | ND(0.00067) | ND(0.00053) | ND(0.00055) | ND(0.00064) | ND(0.00066) | ND(0.00076) | ND(0.00076) | ND(0.00034) | ND(0.00076) |
| | 09/25/08 | ND(0.00083) UJ | ND(0.00062) | ND(0.0025) | ND(0.00042) | 0.00066 J | ND(0.00097) | ND(0.00097) | ND(0.00097) | 0.0027 | ND(0.00074) | ND(0.00073) | ND(0.00073) | ND(0.0011) | 0.0047 | ND(0.006) | 0.0013 | ND(0.0012) | ND(0.0011) | ND(0.0017) | ND(0.00079) | ND(0.0014) |
| OA-VW-20 | 4/9/08 | ND(0.004) | ND(0.004) | ND(0.00071) | ND(0.00071) | ND(0.00058) | ND(0.0011) | ND(0.00052) | ND(0.0038) | 0.00072 | 0.00078 | ND(0.00062) | ND(0.00062) | ND(0.00062) | ND(0.0005) | ND(0.00051) | ND(0.00059) | 0.0026 | ND(0.00071) | ND(0.00071) | ND(0.00032) | ND(0.00071) |
| | 09/25/08 | ND(0.0009) UJ | ND(0.00068) | ND(0.0027) | ND(0.00046) | 0.00052 J | ND(0.001) | ND(0.001) | ND(0.001) | 0.0024 J | ND(0.00081) | ND(0.00079) | ND(0.00079) | ND(0.0012) | 0.003 J | ND(0.0065) | 0.0012 | ND(0.0013) | ND(0.0012) | ND(0.0018) | ND(0.00085) | ND(0.0015) |
| | 9/25/08 Dup | ND(0.0009) UJ | ND(0.00068) | ND(0.0027) | ND(0.00046) | 0.001 J | ND(0.001) | ND(0.001) | ND(0.001) | 0.0038 J | ND(0.00081) | ND(0.00079) | ND(0.00079) | ND(0.0012) | 0.0056 J | ND(0.0065) | 0.0013 | ND(0.0013) | ND(0.0012) | ND(0.0018) | ND(0.00085) | ND(0.0015) |
| OA-VW-21 | 4/11/08 | ND(0.0039) | ND(0.0039) | ND(0.00069) | ND(0.00069) | ND(0.00057) | ND(0.0011) | ND(0.00051) | ND(0.0037) | 0.00048 | 0.0019 | ND(0.00061) | ND(0.00061) | ND(0.00061) | 0.00053 | ND(0.0005) | ND(0.00058) | ND(0.0006) | ND(0.00069) | ND(0.00069) | ND(0.00031) | ND(0.00069) |
| | 09/24/08 | ND(0.00087) UJ | ND(0.00065) | ND(0.0026) | ND(0.00044) | 0.001 J | ND(0.001) | ND(0.001) | ND(0.001) | 0.0032 | ND(0.00078) | ND(0.00076) | ND(0.00076) | ND(0.0012) | 0.0049 | ND(0.0062) | 0.0015 | ND(0.0013) | ND(0.0011) | ND(0.0017) | ND(0.00082) | ND(0.0014) |
| CHI2-OA2 | 3/22/05 | | | ND(0.004) | ND(0.004) | ND(0.00065) | ND(0.0012) | ND(0.0029) | ND(0.017) | 0.0011 | 0.0019 | ND(0.0007) | 0.0014 | ND(0.0007) | ND(0.0028) | ND(0.0028) | ND(0.0033) | ND(0.00068) | ND(0.00079) | ND(0.00079) | ND(0.0018) | ND(0.004) |
| | 3/23/05 | | | ND(0.0039) | ND(0.0039) | ND(0.00064) | ND(0.0012) | ND(0.0028) | ND(0.016) | 0.0011 | 0.0024 | ND(0.00069) | 0.0013 | ND(0.00069) | ND(0.0027) | ND(0.0028) | ND(0.0032) | ND(0.00067) | ND(0.00078) | ND(0.00078) | ND(0.0017) | ND(0.0039) |
| | 3/24/05 | | | ND(0.0039) | ND(0.0039) | ND(0.00064) | ND(0.0012) | ND(0.0028) | ND(0.016) | 0.0009 | 0.0014 | ND(0.00069) | ND(0.00069) | ND(0.00069) | ND(0.0027) | ND(0.0028) | ND(0.0032) | ND(0.00067) | ND(0.00078) | ND(0.00078) | ND(0.0017) | ND(0.0039) |
| | 3/25/05 | | | ND(0.0047) | ND(0.0047) | ND(0.00077) | ND(0.0015) | ND(0.0034) | ND(0.02) | 0.0015 | 0.0026 | ND(0.00083) | 0.0018 | ND(0.00083) | ND(0.0033) | ND(0.0034) | ND(0.0039) | ND(0.00081) | ND(0.00094) | ND(0.00094) | ND(0.0021) | ND(0.0047) |
| | 3/26/05 | | | ND(0.0041) | ND(0.0041) | ND(0.00068) | ND(0.0013) | ND(0.003) | ND(0.018) | 0.0024 | 0.0044 | 0.0012 | 0.0028 | 0.0011 | ND(0.0029) | ND(0.003) | ND(0.0034) | ND(0.00072) | ND(0.00082) | 0.0008 J | ND(0.0018) | ND(0.0041) |
| | 3/28/05 | | | ND(0.0046) | ND(0.0046) | ND(0.00076) | ND(0.0014) | ND(0.0034) | ND(0.02) | 0.0012 | 0.003 | ND(0.00081) | 0.0011 | ND(0.00081) | ND(0.0032) | ND(0.0033) | ND(0.0038) | ND(0.0008) | ND(0.00092) | ND(0.00092) | ND(0.0021) | ND(0.0046) |
| | 3/29/05 | | | ND(0.0041) | ND(0.0041) | ND(0.00068) | ND(0.0013) | ND(0.003) | ND(0.018) | 0.0024 | 0.0022 | ND(0.00073) | 0.0014 | ND(0.00073) | ND(0.0029) | ND(0.003) | ND(0.0034) | ND(0.00072) | ND(0.00082) | ND(0.00082) | ND(0.0018) | ND(0.0041) |
| | 3/30/05 | | | ND(0.0044) | ND(0.0044) | ND(0.00072) | ND(0.0014) | ND(0.0032) | ND(0.019) | 0.00061 | 0.0011 | ND(0.00078) | ND(0.00078) | ND(0.00078) | ND(0.0031) | ND(0.0032) | ND(0.0037) | ND(0.00076) | ND(0.00088) | ND(0.00088) | ND(0.002) | ND(0.0044) |
| | 4/1/05 | | | ND(0.0041) | ND(0.0041) | ND(0.00068) | ND(0.0013) | ND(0.003) | ND(0.018) | 0.0013 | 0.022 | ND(0.00073) | 0.0017 | ND(0.00073) | ND(0.0029) | ND(0.003) | ND(0.0034) | ND(0.00072) | ND(0.00082) | ND(0.00082) | ND(0.0018) | ND(0.0041) |
| | 4/2/05 | | | ND(0.0058) | ND(0.0058) | ND(0.00096) | ND(0.0018) | ND(0.0042) | ND(0.025) | ND(0.00075) | ND(0.00089) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.0041) | ND(0.0042) | ND(0.0048) | ND(0.001) | ND(0.0012) | ND(0.0012) | ND(0.0026) | ND(0.0058) |
| | 4/4/05 | | | ND(0.0044) | ND(0.0044) | ND(0.00072) | ND(0.0014) | ND(0.0032) | ND(0.019) | 0.001 | 0.0015 | ND(0.00078) | 0.0013 | ND(0.00078) | ND(0.0031) | ND(0.0032) | ND(0.0037) | 0.0009 J | ND(0.00088) | ND(0.00088) | 0.0043 | ND(0.0044) |
| | 4/4/05 Dup | | | ND(0.0044) | ND(0.0044) | ND(0.00072) | ND(0.0014) | ND(0.0032) | ND(0.019) | 0.001 | 0.0014 | ND(0.00078) | 0.00095 | ND(0.00078) | ND(0.0031) | ND(0.0032) | ND(0.0037) | 0.00081 J | ND(0.00088) | ND(0.00088) | 0.0042 | ND(0.0044) |
| | 4/5/05 | | | ND(0.0044) | ND(0.0044) | ND(0.00072) | ND(0.0014) | ND(0.0032) | ND(0.019) | 0.00085 | 0.0014 | ND(0.00078) | 0.0009 | ND(0.00078) | ND(0.0031) | ND(0.0032) | ND(0.0037) | 0.0013 J | ND(0.00088) | ND(0.00088) | ND(0.002) | ND(0.0044) |
| | 4/6/05 | | | ND(0.0039) | ND(0.0039) | ND(0.00064) | ND(0.0012) | ND(0.0028) | ND(0.016) | 0.0015 | 0.0026 | 0.00082 | 0.0023 | 0.00074 | 0.0032 | 0.0039 | 0.0047 | 0.002 J | ND(0.00078) | ND(0.00078) | 0.0064 | ND(0.0039) |
| | 4/7/05 | | | ND(0.0042) | ND(0.0042) | ND(0.00069) | ND(0.0013) | ND(0.0031) | ND(0.018) | 0.00094 | 0.0018 | ND(0.00074) | 0.0013 | ND(0.00074) | ND(0.0029) | ND(0.003) | ND(0.0035) | 0.00081 J | ND(0.00084) | ND(0.00084) | ND(0.0019) | ND(0.0042) |
| | 4/8/05 | | | ND(0.0043) | ND(0.0043) | ND(0.00071) | ND(0.0013) | ND(0.0032) | ND(0.018) | 0.00099 | 0.0018 | ND(0.00076) | 0.001 | ND(0.00076) | ND(0.003) | ND(0.0031) | ND(0.0036) | ND(0.00074) | ND(0.00086) | ND(0.00086) | ND(0.0019) | ND(0.0043) |
| | 4/9/05 | | | ND(0.0049) | ND(0.0049) | ND(0.00081) | ND(0.0015) | ND(0.0036) | ND(0.021) | 0.0012 | 0.0018 | ND(0.00087) | 0.0011 | ND(0.00087) | ND(0.0034) | ND(0.0035) | ND(0.0041) | ND(0.00086) | ND(0.00099) | ND(0.00099) | ND(0.0022) | ND(0.0049) |
| | 4/11/05 | | | ND(0.0044) | ND(0.0044) | ND(0.00072) | ND(0.0014) | ND(0.0032) | ND(0.019) | 0.0014 | 0.0023 | ND(0.00078) | 0.0011 | ND(0.00078) | ND(0.0031) | ND(0.0032) | ND(0.0037) | ND(0.00076) | ND(0.00088) | ND(0.00088) | ND(0.002) | ND(0.0044) |
| | 4/12/05 | | | ND(0.0041) | ND(0.0041) | ND(0.00068) | ND(0.0013) | ND(0.003) | ND(0.018) | 0.0016 | 0.0033 | ND(0.00073) | 0.002 | 0.00069 J | ND(0.0029) | ND(0.003) | ND(0.0034) | ND(0.00072) | ND(0.00082) | ND(0.00082) | ND(0.0018) | ND(0.0041) |
| | 4/13/05 | | | ND(0.0043) | ND(0.0043) | ND(0.00071) | ND(0.0013) | 0.018 | ND(0.018) | 0.0032 | 0.013 | 0.002 | 0.0059 | 0.0032 | ND(0.003) | ND(0.0031) | ND(0.0036) | ND(0.00074) | 0.00096 | 0.0032 | ND(0.0019) | ND(0.0043) |
| | 4/14/05 | | | ND(0.0052) | ND(0.0052) | ND(0.00086) | ND(0.0016) | ND(0.0038) | ND(0.022) | 0.00094 | 0.0016 | ND(0.00092) | ND(0.00092) | ND(0.00092) | ND(0.0036) | ND(0.0037) | ND(0.0043) | ND(0.0009) | ND(0.001) | ND(0.001) | ND(0.0023) | ND(0.0052) |
| | 4/14/05 Dup | | | ND(0.0043) | ND(0.0043) | ND(0.00071) | ND(0.0013) | ND(0.0032) | ND(0.018) | 0.00094 | 0.0014 | ND(0.00076) | 0.0008 | ND(0.00076) | ND(0.003) | ND(0.0031) | ND(0.0036) | ND(0.00074) | ND(0.00086) | ND(0.00086) | ND(0.0019) | ND(0.0043) |
| | 4/15/05 | | | ND(0.0055) | ND(0.0055) | ND(0.0009) | ND(0.0017) | ND(0.004) | ND(0.023) | 0.0009 | 0.0019 | ND(0.00097) | ND(0.00097) | ND(0.00097) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.00095) | ND(0.0011) | ND(0.0011) | ND(0.0025) | ND(0.0055) |
| | 5/3/05 | | | ND(0.0055) | ND(0.0055) | ND(0.0009) | ND(0.0017) | ND(0.004) | ND(0.023) | ND(0.00071) | ND(0.00084) | ND(0.00097) | ND(0.00097) | ND(0.00097) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.00095) | ND(0.0011) | ND(0.0011) | ND(0.0025) | ND(0.0055) |
| | 5/4/05 Dup | | | ND(0.011) | ND(0.011) | ND(0.0018) | ND(0.0034) | ND(0.008) | ND(0.046) | ND(0.0014) | 0.0021 | ND(0.0019) | ND(0.0019) | ND(0.0019) | ND(0.0076) | ND(0.0078) | ND(0.0091) | ND(0.0019) | ND(0.0022) | ND(0.0022) | ND(0.0049) | ND(0.011) |
| | 5/11/05 | | | ND(0.0052) | ND(0.0052) | ND(0.00086) | ND(0.0016) | ND(0.0038) | ND(0.022) | ND(0.00068) | 0.028 | ND(0.00092) | ND(0.00092) | ND(0.00092) | ND(0.0036) | ND(0.0037) | ND(0.0043) | ND(0.0009) | ND(0.001) | ND(0.001) | ND(0.0023) | ND(0.0052) |
| HOO8-OA1 | 3/22/05 | | | ND(0.0041) | ND(0.0041) | ND(0.00068) | ND(0.0013) | ND(0.003) | ND(0.018) | 0.00087 | 0.0028 | ND(0.00073) | 0.0013 | ND(0.00073) | ND(0.0029) | ND(0.003) | ND(0.0034) | ND(0.00072) | ND(0.00082) | ND(0.00082) | ND(0.0018) | ND(0.0041) |
| | 3/23/05 | | | ND(0.004) | ND(0.004) | ND(0.00065) | ND(0.0012) | ND(0.0029) | ND(0.017) | 0.0009 | 0.0015 | ND(0.0007) | 0.0008 | ND(0.0007) | ND(0.0028) | ND(0.0028) | ND(0.0033) | ND(0.00068) | ND(0.00079) | ND(0.00079) | ND(0.0018) | ND(0.004) |
| | 3/24/05 | | | ND(0.0041) | ND(0.0041) | ND(0.00068) | ND(0.0013) | ND(0.003) | ND(0.018) | 0.00066 | 0.0015 | ND(0.00073) | ND(0.00073) | ND(0.00073) | ND(0.0029) | ND(0.003) | ND(0.0034) | ND(0.00072) | ND(0.00082) | ND(0.00082) | ND(0.0018) | ND(0.0041) |
| | 3/25/05 | | | ND(0.0038) | ND(0.0038) | ND(0.00063) | ND(0.0012) | ND(0.0028) | ND(0.016) | 0.0017 | 0.0026 | ND(0.00067) | 0.0017 | ND(0.00067) | ND(0.0027) | ND(0.0027) | ND(0.0032) | ND(0.00066) | ND(0.00076) | 0.002 | ND(0.0017) | ND(0.0038) |
| | 3/26/05 | | | ND(0.0041) | ND(0.0041) | ND(0.00068) | ND(0.0013) | ND(0.003) | ND(0.018) | 0.0012 | 0.002 | ND(0.00073) | 0.0011 | ND(0.00073) | ND(0.0029) | ND(0.003) | ND(0.0034) | ND(0.00072) | ND(0.00082) | ND(0.00082) | ND(0.0018) | ND(0.0041) |
| | 3/28/05 | | | ND(0.0044) | ND(0.0044) | ND(0.00072) | ND(0.0014) | ND(0.0032) | ND(0.019) | 0.0011 | 0.0022 | ND(0.00078) | 0.0012 | ND(0.00078) | ND(0.0031) | ND(0.0032) | ND(0.0037) | ND(0.00076) | ND(0.00088) | ND(0.00088) | ND(0.002) | ND(0.0044) |
| | 3/29/05 | | | ND(0.0043) | ND(0.0043) | ND(0.00071) | ND(0.0013) | ND(0.0032) | ND(0.018) | 0.0011 | 0.0018 | ND(0.00076) | 0.00092 | ND(0.00076) | ND(0.003) | ND(0.0031) | ND(0.0036) | ND(0.00074) | ND(0.00086) | ND(0.00086) | 0.0029 | ND(0.0043) |
| | 3/30/05 | | | ND(0.0044) | ND(0.0044) | ND(0.00072) | ND(0.0014) | ND(0.0032) | ND(0.019) | 0.00077 | 0.00098 | ND(0.00078) | ND(0.00078) | ND(0.00078) | ND(0.0031) | ND(0.0032) | ND(0.0037) | ND(0.00076) | ND(0.00088) | ND(0.00088) | ND(0.002) | ND(0.0044) |

US EPA ARCHIVE DOCUMENT

# TABLE 2-9a. OUTDOOR AIR ANALYTICAL RESULTS SUMMARY, PETROLEUM RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Sample ID | Date | n-Butyl-benzene mg/m$^3$ | sec-Butyl-benzene mg/m$^3$ | Isopropyl-benzene mg/m$^3$ | n-Propyl-benzene mg/m$^3$ | 1,2-Dichloro-ethane mg/m$^3$ | 1,2-Dibromo-ethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethyl-benzene mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclo-hexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 1,3,5-Trimethyl-benzene mg/m$^3$ | 1,2,4-Trimethyl-benzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyl-toluene mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HOO8-OA1 | 3/30/05 Dup | | | ND(0.0035) | ND(0.0035) | ND(0.00057) | ND(0.0011) | ND(0.0025) | ND(0.015) | 0.00087 | 0.0013 | ND(0.00061) | 0.00078 | ND(0.00061) | ND(0.0024) | ND(0.0025) | ND(0.0029) | ND(0.0006) | ND(0.00069) | ND(0.00069) | ND(0.0016) | ND(0.0035) |
| | 3/31/05 | | | ND(0.0041) | ND(0.0041) | ND(0.00068) | ND(0.0013) | ND(0.003) | ND(0.018) | ND(0.00054) | ND(0.00063) | ND(0.00073) | ND(0.00073) | ND(0.00073) | ND(0.0029) | ND(0.003) | ND(0.0034) | ND(0.00072) | ND(0.00082) | ND(0.00082) | ND(0.0018) | ND(0.0041) |
| | 4/1/05 | | | ND(0.0045) | ND(0.0045) | ND(0.00074) | ND(0.0014) | ND(0.0033) | ND(0.019) | 0.00089 | 0.018 | ND(0.00079) | 0.00093 | ND(0.00079) | ND(0.0031) | ND(0.0032) | ND(0.0037) | ND(0.00078) | ND(0.0009) | ND(0.0009) | ND(0.002) | ND(0.0045) |
| | 4/2/05 | | | ND(0.0051) | ND(0.0051) | ND(0.00083) | ND(0.0016) | ND(0.0037) | ND(0.022) | ND(0.00066) | ND(0.00078) | ND(0.00089) | ND(0.00089) | ND(0.00089) | ND(0.0035) | ND(0.0036) | ND(0.0042) | ND(0.00088) | ND(0.001) | ND(0.001) | ND(0.0023) | ND(0.0051) |
| | 4/4/05 | | | ND(0.0049) | ND(0.0049) | ND(0.00081) | ND(0.0015) | ND(0.0036) | ND(0.021) | 0.00098 | 0.0013 | ND(0.00087) | ND(0.00087) | ND(0.00087) | ND(0.0034) | ND(0.0035) | ND(0.0041) | ND(0.00086) | ND(0.00099) | ND(0.00099) | 0.0041 | ND(0.0049) |
| | 4/5/05 | | | ND(0.0045) | ND(0.0045) | ND(0.00074) | ND(0.0014) | ND(0.0033) | ND(0.019) | 0.0009 | 0.0014 | ND(0.00079) | ND(0.00079) | ND(0.00079) | ND(0.0031) | ND(0.0032) | ND(0.0037) | 0.0018 J | ND(0.0009) | ND(0.0009) | ND(0.002) | ND(0.0045) |
| | 4/6/05 | | | ND(0.004) | ND(0.004) | ND(0.00066) | ND(0.0013) | ND(0.003) | ND(0.017) | 0.0013 | 0.0026 | 0.00076 | 0.0021 | 0.00083 | ND(0.0028) | ND(0.0029) | ND(0.0034) | 0.0038 J | ND(0.00081) | 0.00095 | 0.034 | ND(0.004) |
| | 4/7/05 | | | ND(0.0051) | ND(0.0051) | ND(0.00083) | ND(0.0016) | ND(0.0037) | ND(0.022) | 0.00099 | 0.0016 | ND(0.00089) | 0.0012 | ND(0.00089) | ND(0.0035) | ND(0.0036) | ND(0.0042) | ND(0.00088) | ND(0.001) | ND(0.001) | ND(0.0023) | ND(0.0051) |
| | 4/8/05 | | | ND(0.0043) | ND(0.0043) | ND(0.00071) | ND(0.0013) | ND(0.0032) | ND(0.018) | 0.00066 | 0.0011 | ND(0.00076) | ND(0.00076) | ND(0.00076) | ND(0.003) | ND(0.0031) | ND(0.0036) | ND(0.00074) | ND(0.00086) | ND(0.00086) | ND(0.0019) | ND(0.0043) |
| | 4/9/05 | | | ND(0.0051) | ND(0.0051) | ND(0.00083) | ND(0.0016) | ND(0.0037) | ND(0.022) | 0.00091 | 0.0014 | ND(0.00089) | ND(0.00089) | ND(0.00089) | ND(0.0035) | ND(0.0036) | ND(0.0042) | ND(0.00088) | ND(0.001) | ND(0.001) | ND(0.0023) | ND(0.0051) |
| | 4/11/05 | | | ND(0.0051) | ND(0.0051) | ND(0.00083) | ND(0.0016) | ND(0.0037) | ND(0.022) | 0.0012 | 0.0026 | ND(0.00089) | 0.0011 | ND(0.00089) | ND(0.0035) | ND(0.0036) | ND(0.0042) | ND(0.00088) | ND(0.001) | ND(0.001) | ND(0.0023) | ND(0.0051) |
| | 4/13/05 | | | ND(0.0041) | ND(0.0041) | ND(0.00068) | ND(0.0013) | ND(0.003) | ND(0.018) | 0.0014 | 0.0032 | ND(0.00073) | 0.0013 | ND(0.00073) | ND(0.0029) | ND(0.003) | ND(0.0034) | ND(0.00072) | ND(0.00082) | ND(0.00082) | ND(0.0018) | ND(0.0041) |
| | 4/13/05 Dup | | | ND(0.0045) | ND(0.0045) | ND(0.00074) | ND(0.0014) | ND(0.0033) | ND(0.019) | 0.0012 | 0.001 | ND(0.00079) | ND(0.00079) | ND(0.00079) | ND(0.0031) | ND(0.0032) | ND(0.0037) | ND(0.00078) | ND(0.0009) | ND(0.0009) | ND(0.002) | ND(0.0045) |
| | 4/14/05 | | | ND(0.0042) | ND(0.0042) | ND(0.00069) | ND(0.0013) | ND(0.0031) | ND(0.018) | 0.00082 | 0.0014 | ND(0.00074) | 0.00079 | ND(0.00074) | ND(0.0029) | ND(0.003) | ND(0.0035) | ND(0.00073) | ND(0.00084) | ND(0.00084) | ND(0.0019) | ND(0.0042) |
| | 4/15/05 | | | ND(0.0056) | ND(0.0056) | ND(0.00093) | ND(0.0018) | ND(0.0041) | ND(0.024) | 0.0024 | 0.0044 | 0.00097 J | 0.0027 | 0.0012 | ND(0.004) | ND(0.004) | ND(0.0047) | ND(0.00098) | ND(0.0011) | 0.0013 | ND(0.0025) | ND(0.0056) |
| | 5/3/05 | | | ND(0.0056) | ND(0.0056) | ND(0.00093) | ND(0.0018) | ND(0.0041) | ND(0.024) | ND(0.00073) | ND(0.00087) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.004) | ND(0.004) | ND(0.0047) | ND(0.00098) | ND(0.0011) | ND(0.0011) | ND(0.0025) | ND(0.0056) |
| | 5/11/05 | | | ND(0.0053) | ND(0.0053) | ND(0.00088) | ND(0.0017) | ND(0.0039) | ND(0.023) | ND(0.00069) | 0.044 | ND(0.00094) | 0.0013 | ND(0.00094) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.00092) | ND(0.0011) | 0.0011 | ND(0.0024) | ND(0.0053) |
| FIXED | 4/18/08 | ND(0.0056) | ND(0.0056) | ND(0.001) | ND(0.001) | ND(0.00083) | ND(0.0016) | ND(0.00074) | ND(0.0054) | ND(0.00066) | ND(0.00078) | ND(0.00089) | ND(0.00089) | ND(0.00089) | ND(0.00071) | ND(0.00073) | ND(0.00084) | ND(0.00088) | ND(0.001) | ND(0.001) | ND(0.00046) | ND(0.001) |
| | 4/19/08 | ND(0.006) | ND(0.006) | ND(0.0011) | ND(0.0011) | ND(0.00088) | ND(0.0017) | ND(0.00078) | ND(0.0057) | 0.0019 | 0.0043 | ND(0.00094) | 0.0025 | ND(0.00094) | ND(0.00075) | 0.00095 | 0.001 | ND(0.00092) | ND(0.0011) | ND(0.0011) | ND(0.00048) | 0.0011 |
| | 4/20/08 | ND(0.0058) | ND(0.0058) | ND(0.001) | ND(0.001) | ND(0.00086) | ND(0.0016) | ND(0.00076) | ND(0.0056) | 0.0034 | 0.002 | ND(0.00092) | ND(0.00092) | ND(0.00092) | ND(0.00073) | ND(0.00075) | ND(0.00087) | ND(0.0009) | ND(0.001) | ND(0.001) | ND(0.00047) | ND(0.001) |
| | 4/22/08 | ND(0.0048) | ND(0.0048) | ND(0.00086) | ND(0.00086) | ND(0.00071) | ND(0.0013) | ND(0.00063) | ND(0.0046) | 0.00094 | 0.0018 | ND(0.00076) | ND(0.00076) | ND(0.00076) | ND(0.0006) | ND(0.00062) | ND(0.00072) | ND(0.00074) | ND(0.00086) | ND(0.00086) | ND(0.00039) | ND(0.00086) |
| | 4/23/08 | ND(0.0042) | ND(0.0042) | ND(0.00076) | ND(0.00076) | ND(0.00063) | ND(0.0012) | ND(0.00056) | ND(0.0041) | 0.0017 | 0.0053 | ND(0.00067) | 0.0018 | 0.00074 | ND(0.00053) | 0.00063 | ND(0.00064) | ND(0.00066) | ND(0.00076) | ND(0.00076) | ND(0.00034) | ND(0.00076) |
| | 4/24/08 | ND(0.0054) | ND(0.0054) | ND(0.00096) | ND(0.00096) | ND(0.00079) | ND(0.0015) | ND(0.00071) | ND(0.0051) | 0.00068 | 0.0014 | ND(0.00085) | ND(0.00085) | ND(0.00085) | ND(0.00067) | ND(0.00069) | ND(0.0008) | ND(0.00083) | ND(0.00096) | ND(0.00096) | ND(0.00043) | ND(0.00096) |
| | 4/25/08 | ND(0.0049) | ND(0.0049) | ND(0.00088) | ND(0.00088) | ND(0.00072) | ND(0.0014) | ND(0.00064) | ND(0.0047) | 0.0014 J | 0.0033 J | 0.00079 | 0.0016 | ND(0.00078) | ND(0.00062) | ND(0.00063) J | ND(0.00073) | ND(0.00076) | ND(0.00088) | ND(0.00088) | ND(0.0004) | ND(0.00088) |
| | 4/25/08 Dup | ND(0.0042) | ND(0.0042) | ND(0.00075) | ND(0.00075) | ND(0.00062) | ND(0.0012) | ND(0.00055) | ND(0.004) | 0.00069 J | 0.0016 J | ND(0.00066) | ND(0.00066) | ND(0.00066) | ND(0.00052) | 0.0019 J | ND(0.00062) | ND(0.00065) | ND(0.00075) | ND(0.00075) | ND(0.00034) | ND(0.00075) |
| | 4/28/08 | ND(0.0092) | ND(0.0092) | ND(0.0016) | ND(0.0016) | ND(0.0014) | ND(0.0026) | ND(0.0012) | ND(0.0088) | ND(0.0011) | ND(0.0013) | ND(0.0014) | 0.0015 | ND(0.0014) | ND(0.0012) | ND(0.0012) | ND(0.0014) | ND(0.0014) | ND(0.0016) | ND(0.0016) | ND(0.00074) | ND(0.0016) |
| | 12/6/08 | ND(0.0043) | ND(0.0043) | ND(0.00078) | ND(0.00078) | ND(0.00064) | ND(0.0012) | ND(0.00057) | ND(0.0041) | 0.00074 | 0.0011 | ND(0.00069) | ND(0.00069) | ND(0.00069) | ND(0.00054) | 0.0006 | ND(0.00065) | ND(0.00067) | ND(0.00078) | ND(0.00078) | ND(0.00035) | ND(0.00078) |
| | 12/6/08 Dup | ND(0.0044) | ND(0.0044) | ND(0.00079) | ND(0.00079) | ND(0.00065) | ND(0.0012) | ND(0.00058) | ND(0.0042) | 0.00067 | 0.001 | ND(0.0007) | ND(0.0007) | ND(0.0007) | ND(0.00055) | ND(0.00057) | ND(0.00066) | ND(0.00068) | ND(0.00079) | ND(0.00079) | ND(0.00036) | ND(0.00079) |
| | 12/7/08 | ND(0.0044) | ND(0.0044) | ND(0.00079) | ND(0.00079) | ND(0.00065) | ND(0.0012) | ND(0.00058) | ND(0.0042) | 0.0017 | 0.0027 | ND(0.0007) | 0.0023 | ND(0.0007) | ND(0.00055) | ND(0.00057) | ND(0.00066) | ND(0.00068) | ND(0.00079) | ND(0.00079) | ND(0.00036) | ND(0.00079) |
| | 12/8/08 | ND(0.0035) | ND(0.0035) | ND(0.00063) | ND(0.00063) | ND(0.00052) | ND(0.00099) | ND(0.00046) | ND(0.0034) | 0.00091 | 0.0018 | ND(0.00056) | 0.00072 | ND(0.00056) | ND(0.00044) | 0.00054 | ND(0.00053) | ND(0.00055) | ND(0.00063) | ND(0.00063) | ND(0.00028) | ND(0.00063) |
| | 12/9/08 | ND(0.012) | ND(0.012) | ND(0.0022) | ND(0.0022) | ND(0.0018) | ND(0.0034) | ND(0.0016) | ND(0.012) | ND(0.0014) | 0.0035 | ND(0.0019) | ND(0.0019) | ND(0.0019) | ND(0.0015) | ND(0.0016) | ND(0.0018) | ND(0.0019) | ND(0.0022) | ND(0.0022) | ND(0.00099) | ND(0.0022) |
| | 12/10/08 | ND(0.0045) | ND(0.0045) | ND(0.00081) | ND(0.00081) | ND(0.00066) | ND(0.0013) | ND(0.00059) | ND(0.0043) | 0.00097 | 0.0015 | ND(0.00071) | ND(0.00071) | ND(0.00071) | ND(0.00056) | 0.0006 | ND(0.00067) | ND(0.0007) | ND(0.00081) | ND(0.00081) | ND(0.00036) | ND(0.00081) |
| | 12/11/08 | ND(0.0045) | ND(0.0045) | ND(0.00081) | ND(0.00081) | ND(0.00066) | ND(0.0013) | ND(0.00059) | ND(0.0043) | 0.0023 | 0.0021 | ND(0.00071) | ND(0.00071) | ND(0.00071) | ND(0.00056) | ND(0.00058) | ND(0.00067) | ND(0.0007) | ND(0.00081) | ND(0.00081) | ND(0.00036) | ND(0.00081) |
| | 12/12/08 | ND(0.0065) | ND(0.0065) | ND(0.0012) | ND(0.0012) | ND(0.00096) | ND(0.0018) | ND(0.00085) | ND(0.0062) | 0.00086 | 0.0017 J | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.00081) | ND(0.00083) | ND(0.00097) | ND(0.001) | ND(0.0012) | ND(0.0012) | ND(0.00052) | ND(0.0012) |
| | 12/12/08 Dup | ND(0.0065) | ND(0.0065) | ND(0.0012) | ND(0.0012) | ND(0.00096) | ND(0.0018) | ND(0.00085) | ND(0.0062) | 0.00083 | 0.001 J | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.00081) | ND(0.00083) | ND(0.00097) | ND(0.001) | ND(0.0012) | ND(0.0012) | ND(0.00052) | ND(0.0012) |
| | 12/13/08 | ND(0.0054) | ND(0.0054) | ND(0.00096) | ND(0.00096) | ND(0.00079) | ND(0.0015) | ND(0.00071) | ND(0.0051) | 0.00099 | 0.0018 | ND(0.00085) | ND(0.00085) | ND(0.00085) | ND(0.00067) | 0.00077 | ND(0.0008) | ND(0.00083) | ND(0.00096) | ND(0.00096) | ND(0.00043) | ND(0.00096) |
| Float-OA3 | 3/22/05 | | | ND(0.0041) | ND(0.0041) | ND(0.00068) | ND(0.0013) | ND(0.003) | ND(0.018) | 0.00096 | 0.0032 | 0.00083 | 0.0012 | 0.00072 J | ND(0.0029) | ND(0.003) | ND(0.0034) | ND(0.00072) | ND(0.00082) | 0.00083 | ND(0.0018) | ND(0.0041) |
| | 3/23/05 | | | ND(0.0045) | ND(0.0045) | ND(0.00074) | ND(0.0014) | ND(0.0033) | ND(0.019) | 0.0014 | 0.0031 | ND(0.00079) | 0.0014 | ND(0.00079) | ND(0.0031) | ND(0.0032) | ND(0.0037) | ND(0.00078) | ND(0.0009) | ND(0.0009) | ND(0.002) | ND(0.0045) |
| | 3/24/05 | | | ND(0.0053) | ND(0.0053) | ND(0.00088) | ND(0.0017) | ND(0.0039) | ND(0.023) | 0.00099 | 0.002 | ND(0.00094) | 0.00092 J | ND(0.00094) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.00092) | ND(0.0011) | ND(0.0011) | ND(0.0024) | ND(0.0053) |
| | 3/25/05 | | | ND(0.0047) | ND(0.0047) | ND(0.00077) | ND(0.0015) | ND(0.0034) | ND(0.02) | 0.0013 | 0.0031 | ND(0.00083) | 0.0021 | ND(0.00083) | ND(0.0033) | ND(0.0034) | ND(0.0039) | ND(0.00081) | ND(0.00094) | 0.0012 | ND(0.0021) | ND(0.0047) |
| | 3/26/05 | | | ND(0.0042) | ND(0.0042) | ND(0.00069) | ND(0.0013) | ND(0.0031) | ND(0.018) | 0.0036 | 0.006 | 0.0014 | 0.0038 | 0.0019 J | ND(0.0029) | ND(0.003) | ND(0.0035) | ND(0.00073) | 0.00087 J | 0.0032 | ND(0.0019) | ND(0.0042) |
| | 3/28/05 | | | ND(0.0049) | ND(0.0049) | ND(0.00081) | ND(0.0015) | ND(0.0036) | ND(0.021) | 0.0014 | 0.0032 | ND(0.00087) | 0.0012 | ND(0.00087) | ND(0.0034) | ND(0.0035) | ND(0.0041) | ND(0.00086) | ND(0.00099) | ND(0.00099) | ND(0.0022) | ND(0.0049) |
| | 3/29/05 | | | ND(0.0056) | ND(0.0056) | ND(0.00093) | ND(0.0018) | ND(0.0041) | ND(0.024) | 0.0022 | 0.0031 | ND(0.001) | 0.0022 | ND(0.001) | ND(0.004) | ND(0.004) | ND(0.0047) | ND(0.00098) | ND(0.0011) | 0.0012 | 0.0039 | ND(0.0056) |
| | 3/30/05 | | | ND(0.0044) | ND(0.0044) | ND(0.00072) | ND(0.0014) | ND(0.0032) | ND(0.019) | 0.0008 | 0.0017 | ND(0.00078) | 0.0012 | ND(0.00078) | ND(0.0031) | ND(0.0032) | ND(0.0037) | ND(0.00076) | ND(0.00088) | ND(0.00088) | ND(0.002) | ND(0.0044) |
| | 4/2/05 | | | ND(0.0062) | ND(0.0062) | ND(0.001) | ND(0.0019) | ND(0.0045) | ND(0.026) | 0.00081 | 0.00092 J | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0043) | ND(0.0044) | ND(0.0051) | ND(0.0011) | ND(0.0012) | ND(0.0012) | ND(0.0028) | ND(0.0062) |

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## TABLE 2-9a. OUTDOOR AIR ANALYTICAL RESULTS SUMMARY, PETROLEUM RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Sample ID | Date | n-Butyl-benzene mg/m$^3$ | sec-Butyl-benzene mg/m$^3$ | Isopropyl-benzene mg/m$^3$ | n-Propyl-benzene mg/m$^3$ | 1,2-Dichloro-ethane mg/m$^3$ | 1,2-Dibromo-ethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethyl-benzene mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclo-hexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 1,3,5-Trimethyl-benzene mg/m$^3$ | 1,2,4-Trimethyl-benzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyl-toluene mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Float-OA3 | 4/4/05 | | | ND(0.006) | ND(0.006) | ND(0.00099) | ND(0.0019) | ND(0.0044) | ND(0.026) | 0.0019 | 0.0033 | ND(0.001) | 0.0022 | ND(0.001) | ND(0.0042) | ND(0.0043) | ND(0.005) | 0.0011 J | ND(0.0012) | ND(0.0012) | 0.0062 | ND(0.006) |
| | 4/5/05 | | | ND(0.012) | ND(0.012) | ND(0.002) | ND(0.0039) | ND(0.0091) | ND(0.053) | 0.0022 | 0.0033 | ND(0.0022) | 0.0026 | ND(0.0022) | ND(0.0086) | ND(0.0089) | ND(0.01) | ND(0.0021) | ND(0.0025) | ND(0.0025) | ND(0.0056) | ND(0.012) |
| | 4/6/05 | | | ND(0.0047) | ND(0.0047) | ND(0.00077) | ND(0.0015) | ND(0.0034) | ND(0.02) | 0.0019 | 0.0044 | 0.0012 | 0.0031 | 0.0013 | ND(0.0033) | ND(0.0034) | ND(0.0039) | 0.0043 J | ND(0.00094) | 0.0015 | 0.046 | ND(0.0047) |
| | 4/7/05 | | | ND(0.0044) | ND(0.0044) | ND(0.00072) | ND(0.0014) | ND(0.0032) | ND(0.019) | 0.002 | 0.0049 | 0.0012 | 0.0038 | 0.0016 | ND(0.0031) | ND(0.0032) | ND(0.0037) | 0.00085 J | ND(0.00088) | 0.002 | ND(0.002) | ND(0.0044) |
| | 4/8/05 | | | ND(0.0052) | ND(0.0052) | ND(0.00086) | ND(0.0016) | ND(0.0038) | ND(0.022) | 0.0025 | 0.005 | ND(0.00092) | 0.0031 | 0.0012 | ND(0.0036) | ND(0.0037) | ND(0.0043) | ND(0.0009) | ND(0.001) | 0.0017 | ND(0.0023) | ND(0.0052) |
| | 4/9/05 | | | ND(0.0051) | ND(0.0051) | ND(0.00083) | ND(0.0016) | ND(0.0037) | ND(0.022) | 0.001 | 0.0022 | ND(0.00089) | ND(0.00089) | ND(0.00089) | ND(0.0035) | ND(0.0036) | ND(0.0042) | ND(0.00088) | ND(0.001) | ND(0.001) | ND(0.0023) | ND(0.0051) |
| | 4/9/05 Dup | | | ND(0.0048) | ND(0.0048) | ND(0.00079) | ND(0.0015) | ND(0.0035) | ND(0.02) | 0.00096 | 0.0016 | ND(0.00085) | ND(0.00085) | ND(0.00085) | ND(0.0034) | ND(0.0034) | ND(0.004) | ND(0.00083) | ND(0.00096) | ND(0.00096) | ND(0.0022) | ND(0.0048) |
| | 4/11/05 | | | ND(0.0058) | ND(0.0058) | ND(0.00096) | ND(0.0018) | ND(0.0042) | ND(0.025) | 0.0029 | 0.0054 | ND(0.001) | 0.0028 | 0.0012 | ND(0.0041) | ND(0.0042) | ND(0.0048) | ND(0.001) | ND(0.0012) | 0.0013 | ND(0.0026) | ND(0.0058) |
| | 4/12/05 | | | ND(0.0055) | ND(0.0055) | ND(0.0009) | ND(0.0017) | ND(0.004) | ND(0.023) | 0.0064 | 0.0092 | ND(0.00097) | 0.0031 | 0.00093 J | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.00095) | ND(0.0011) | 0.0011 | ND(0.0025) | ND(0.0055) |
| | 4/13/05 | | | ND(0.0049) | ND(0.0049) | ND(0.00081) | ND(0.0015) | ND(0.0036) | ND(0.021) | 0.0026 | 0.011 | 0.001 | 0.0031 | 0.0013 | ND(0.0034) | ND(0.0035) | ND(0.0041) | ND(0.00086) | ND(0.00099) | 0.0013 | ND(0.0022) | ND(0.0049) |
| | 4/14/05 | | | ND(0.0094) | ND(0.0094) | ND(0.0016) | ND(0.0029) | ND(0.0069) | ND(0.04) | 0.0016 | 0.006 | ND(0.0017) | 0.0018 | ND(0.0017) | ND(0.0066) | ND(0.0067) | ND(0.0078) | ND(0.0016) | ND(0.0019) | ND(0.0019) | ND(0.0042) | ND(0.0094) |
| | 4/15/05 | | | ND(0.0052) | ND(0.0052) | ND(0.00086) | ND(0.0016) | ND(0.0038) | ND(0.022) | 0.0011 | 0.0021 | ND(0.00092) | 0.001 | ND(0.00092) | ND(0.0036) | ND(0.0037) | ND(0.0043) | ND(0.0009) | ND(0.001) | ND(0.001) | ND(0.0023) | ND(0.0052) |
| | 5/2/05 | | | ND(0.0053) | ND(0.0053) | ND(0.00088) | ND(0.0017) | ND(0.0039) | ND(0.023) | 0.0074 | 0.03 | 0.0072 | 0.024 | 0.01 | ND(0.0037) | 0.0081 | 0.0061 | ND(0.00092) | 0.0027 | 0.011 | ND(0.0024) | 0.011 |
| | 5/3/05 | | | ND(0.0055) | ND(0.0055) | ND(0.0009) | ND(0.0017) | ND(0.004) | ND(0.023) | ND(0.00071) | ND(0.00084) | ND(0.00097) | ND(0.00097) | ND(0.00097) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.00095) | ND(0.0011) | ND(0.0011) | ND(0.0025) | ND(0.0055) |
| | 5/4/05 | | | ND(0.0086) | ND(0.0086) | ND(0.0014) | ND(0.0027) | ND(0.0063) | ND(0.037) | ND(0.0011) | 0.0018 | ND(0.0015) | ND(0.0015) | ND(0.0015) | ND(0.006) | ND(0.0062) | ND(0.0072) | ND(0.0015) | ND(0.0017) | ND(0.0017) | ND(0.0039) | ND(0.0086) |
| | 5/11/05 | | | ND(0.0053) | ND(0.0053) | ND(0.00088) | ND(0.0017) | ND(0.0039) | ND(0.023) | 0.00069 J | 0.12 | ND(0.00094) | ND(0.00094) | ND(0.00094) | ND(0.0037) | ND(0.0038) | 0.0058 | ND(0.00092) | ND(0.0011) | ND(0.0011) | ND(0.0024) | ND(0.0053) |
| | 9/6/05 | | | ND(0.0047) | ND(0.0047) | ND(0.00077) | ND(0.0015) | ND(0.0034) | ND(0.02) | 0.0022 | 0.0043 | ND(0.00083) | 0.0027 | 0.00092 | ND(0.0033) | ND(0.0034) | ND(0.0039) | ND(0.00081) | ND(0.00094) | 0.00095 | ND(0.0021) | ND(0.0047) |
| | 9/7/05 | | | ND(0.0049) | ND(0.0049) | ND(0.00081) | ND(0.0015) | ND(0.0036) | ND(0.021) | 0.0021 | 0.005 | ND(0.00087) | 0.0027 | 0.00098 | ND(0.0034) | ND(0.0035) | ND(0.0041) | ND(0.00086) | ND(0.00099) | 0.0012 | ND(0.0022) | ND(0.0049) |
| | 9/8/05 | | | ND(0.0048) | ND(0.0048) | ND(0.00079) | ND(0.0015) | ND(0.0035) | ND(0.02) | 0.0014 | 0.0023 | ND(0.00085) | 0.001 | ND(0.00085) | ND(0.0034) | ND(0.0034) | ND(0.004) | 0.0016 J | ND(0.00096) | ND(0.00096) | 0.0029 | ND(0.0048) |
| | 9/9/05 | | | ND(0.01) | ND(0.01) | ND(0.0017) | ND(0.0032) | ND(0.0076) | ND(0.044) | 0.003 | 0.0062 | ND(0.0018) | 0.0034 | ND(0.0018) | ND(0.0073) | ND(0.0074) | ND(0.0087) | ND(0.0018) | ND(0.0021) | ND(0.0021) | ND(0.0047) | ND(0.01) |
| | 6/27/06 | | | ND(0.0042) | ND(0.0042) | ND(0.00069) | ND(0.0013) | ND(0.0031) | ND(0.018) | 0.00064 | 0.0015 | ND(0.00074) | 0.00085 | ND(0.00074) | ND(0.0029) | ND(0.003) | ND(0.0035) | ND(0.00073) | ND(0.00084) | 0.0012 | ND(0.0019) | ND(0.0042) |
| | 6/28/06 | | | ND(0.0064) | ND(0.0064) | ND(0.001) | ND(0.002) | ND(0.0047) | ND(0.027) | 0.001 | 0.0017 | ND(0.0011) | 0.0012 | ND(0.0011) | ND(0.0044) | ND(0.0046) | ND(0.0053) | ND(0.0011) | ND(0.0013) | ND(0.0013) | ND(0.0029) | ND(0.0064) |
| | 7/5/06 | | | ND(0.0055) | ND(0.0055) | ND(0.0009) | ND(0.0017) | ND(0.004) | ND(0.023) | 0.0011 | 0.0016 | ND(0.00097) | 0.001 | ND(0.00097) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.00095) | ND(0.0011) | ND(0.0011) | ND(0.0025) | ND(0.0055) |
| | 7/6/06 | | | ND(0.0047) | ND(0.0047) | ND(0.00077) | ND(0.0015) | ND(0.0034) | ND(0.02) | 0.0041 | 0.008 | 0.0017 | 0.0085 | 0.0041 | ND(0.0033) | ND(0.0034) | ND(0.0039) | ND(0.00081) | 0.0017 | 0.0017 | ND(0.0021) | ND(0.0047) |
| | 7/7/06 | | | ND(0.0053) | ND(0.0053) | ND(0.00088) | ND(0.0017) | ND(0.0039) | ND(0.023) | 0.0011 | 0.0025 | ND(0.00094) | 0.0011 | ND(0.00094) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.00092) | ND(0.0011) | ND(0.0011) | ND(0.0024) | ND(0.0053) |
| | 11/27/06 | | | ND(0.001) | ND(0.001) | ND(0.00086) | ND(0.0016) | ND(0.00076) | ND(0.0056) | 0.0022 | 0.0043 | ND(0.00092) | 0.0027 | 0.0012 | ND(0.00073) | ND(0.00075) | ND(0.00087) | ND(0.0009) | ND(0.001) | 0.0017 | ND(0.00047) | ND(0.001) |
| | 11/30/06 | | | ND(0.00096) | ND(0.00096) | ND(0.00079) | ND(0.0015) | ND(0.00071) | ND(0.0051) | 0.0014 | 0.0024 | ND(0.00085) | 0.0016 | ND(0.00085) | ND(0.00067) | ND(0.00069) | ND(0.0008) | ND(0.00083) | ND(0.00096) | 0.0012 | ND(0.00043) | ND(0.00096) |
| | 12/14/06 | | | ND(0.00078) | ND(0.00078) | ND(0.00064) | ND(0.0012) | ND(0.00057) | ND(0.0041) | 0.0011 | 0.0016 | ND(0.00069) | 0.00091 | ND(0.00069) | ND(0.00054) | ND(0.00056) | ND(0.00065) | ND(0.00067) | ND(0.00078) | ND(0.00078) | ND(0.00035) | ND(0.00078) |
| | 12/15/06 | | | ND(0.00075) | ND(0.00075) | ND(0.00062) | ND(0.0012) | ND(0.00055) | ND(0.004) | 0.0013 | 0.0017 | ND(0.00066) | 0.00085 | ND(0.00066) | ND(0.00052) | ND(0.00054) | ND(0.00062) | ND(0.00065) | ND(0.00075) | ND(0.00075) | ND(0.00034) | ND(0.00075) |
| | 12/16/06 | | | ND(0.00096) | ND(0.00096) | ND(0.00079) | ND(0.0015) | ND(0.00071) | ND(0.0051) | 0.0017 | 0.0029 | ND(0.00085) | 0.0024 J | ND(0.00085) | ND(0.00067) | 0.00068 J | ND(0.0008) | 0.0011 | ND(0.00096) | 0.0011 J | 0.004 | ND(0.00096) |
| | 12/16/06 Dup | | | ND(0.0009) | ND(0.0009) | ND(0.00074) | ND(0.0014) | ND(0.00066) | ND(0.0048) | 0.0019 | 0.0033 | 0.0011 | 0.0018 J | ND(0.00079) | ND(0.00063) | 0.00078 | ND(0.00075) | 0.0012 | ND(0.0009) | 0.001 J | 0.0044 | ND(0.0009) |
| | 6/26/07 | | | ND(0.0012) | ND(0.0012) | ND(0.001) | ND(0.0019) | ND(0.0009) | ND(0.0066) | 0.0013 | 0.002 | ND(0.0011) | 0.0011 | ND(0.0011) | ND(0.00086) | ND(0.00088) | ND(0.001) | ND(0.0011) | ND(0.0012) | ND(0.0012) | ND(0.00056) | ND(0.0012) |
| | 6/27/07 | | | ND(0.0011) | ND(0.0011) | ND(0.0009) | ND(0.0017) | ND(0.0008) | ND(0.0058) | ND(0.00071) | ND(0.00084) | ND(0.00097) | ND(0.00097) | ND(0.00097) | ND(0.00077) | ND(0.00078) | ND(0.00091) | ND(0.00095) | ND(0.0011) | 0.0019 | ND(0.00049) | ND(0.0011) |
| | 6/28/07 | | | ND(0.0011) | ND(0.0011) | ND(0.0009) | ND(0.0017) | ND(0.0008) | ND(0.0058) | 0.00089 | 0.0058 | 0.0071 | 0.085 | 0.031 | ND(0.00077) | ND(0.00078) | ND(0.00091) | ND(0.00095) | ND(0.0011) | 0.002 | ND(0.00049) | 0.0018 |
| | 7/2/07 | | | ND(0.00099) | ND(0.00099) | ND(0.00081) | ND(0.0015) | ND(0.00072) | ND(0.0053) | ND(0.00064) | 0.00087 | ND(0.00087) | ND(0.00087) | ND(0.00087) | ND(0.00069) | ND(0.00071) | ND(0.00082) | ND(0.00086) | ND(0.00099) | ND(0.00099) | ND(0.00044) | ND(0.00099) |
| | 7/3/07 | | | ND(0.00094) | ND(0.00094) | ND(0.00077) | ND(0.0015) | ND(0.00069) | ND(0.005) | 0.0013 | 0.0026 | ND(0.00083) | 0.0013 | ND(0.00083) | ND(0.00066) | ND(0.00067) | ND(0.00078) | ND(0.00081) | ND(0.00094) | ND(0.00094) | ND(0.00042) | ND(0.00094) |
| FLOAT | 4/18/08 | ND(0.0085) | ND(0.0085) | ND(0.0015) | ND(0.0015) | ND(0.0012) | ND(0.0024) | ND(0.0011) | ND(0.0081) | ND(0.00099) | 0.0014 | ND(0.0013) | ND(0.0013) | ND(0.0013) | ND(0.0011) | ND(0.0011) | ND(0.0013) | ND(0.0013) | ND(0.0015) | ND(0.0015) | ND(0.00068) | ND(0.0015) |
| | 4/19/08 | ND(0.0074) | ND(0.0074) | ND(0.0013) | ND(0.0013) | ND(0.0011) | ND(0.002) | ND(0.00097) | ND(0.007) | 0.001 | 0.0019 | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.00092) | ND(0.00094) | ND(0.0011) | ND(0.0011) | ND(0.0013) | ND(0.0013) | ND(0.00059) | ND(0.0013) |
| | 4/20/08 | ND(0.011) | ND(0.011) | ND(0.002) | ND(0.002) | ND(0.0016) | ND(0.0031) | ND(0.0014) | ND(0.01) | ND(0.0013) | ND(0.0015) | ND(0.0017) | ND(0.0017) | ND(0.0017) | ND(0.0014) | ND(0.0014) | ND(0.0016) | ND(0.0017) | ND(0.002) | ND(0.002) | ND(0.00089) | ND(0.002) |
| | 4/21/08 | ND(0.0044) | ND(0.0044) | ND(0.00079) | ND(0.00079) | ND(0.00065) | ND(0.0012) | ND(0.00058) | ND(0.0042) | 0.00076 | 0.0012 | ND(0.0007) | ND(0.0007) | ND(0.0007) | ND(0.00055) | ND(0.00057) | ND(0.00066) | ND(0.00068) | ND(0.00079) | ND(0.00079) | ND(0.00036) | ND(0.00079) |
| | 4/22/08 | ND(0.0049) | ND(0.0049) | ND(0.00088) | ND(0.00088) | ND(0.00072) | ND(0.0014) | ND(0.00064) | ND(0.0047) | 0.00084 | 0.0014 | ND(0.00078) | ND(0.00078) | ND(0.00078) | ND(0.00062) | ND(0.00063) | ND(0.00073) | ND(0.00076) | ND(0.00088) | ND(0.00088) | ND(0.0004) | ND(0.00088) |
| | 4/23/08 | ND(0.0051) | ND(0.0051) | ND(0.00092) | ND(0.00092) | ND(0.00076) | ND(0.0014) | ND(0.00067) | ND(0.0049) | 0.0008 | 0.0015 | ND(0.00081) | ND(0.00081) | ND(0.00081) | ND(0.00064) | ND(0.00066) | ND(0.00077) | ND(0.0008) | ND(0.00092) | ND(0.00092) | ND(0.00041) | ND(0.00092) |
| | 4/24/08 | ND(0.006) | ND(0.006) | ND(0.0011) | ND(0.0011) | ND(0.00088) | ND(0.0017) | ND(0.00078) | ND(0.0057) | 0.00071 | 0.00098 | ND(0.00094) | ND(0.00094) | ND(0.00094) | ND(0.00075) | ND(0.00076) | ND(0.00089) | ND(0.00092) | ND(0.0011) | ND(0.0011) | ND(0.00048) | ND(0.0011) |
| | 4/25/08 | ND(0.005) | ND(0.005) | ND(0.0009) | ND(0.0009) | ND(0.00074) | ND(0.0014) | ND(0.00066) | ND(0.0048) | ND(0.00058) | ND(0.00069) | ND(0.00079) | ND(0.00079) | ND(0.00079) | ND(0.00063) | ND(0.00064) | ND(0.00075) | ND(0.00078) | ND(0.0009) | ND(0.0009) | ND(0.0004) | ND(0.0009) |
| | 4/25/08 Dup | ND(0.005) | ND(0.005) | ND(0.0009) | ND(0.0009) | ND(0.00074) | ND(0.0014) | ND(0.00066) | ND(0.0048) | ND(0.00058) | ND(0.00069) | ND(0.00079) | ND(0.00079) | ND(0.00079) | ND(0.00063) | ND(0.00064) | ND(0.00075) | ND(0.00078) | ND(0.0009) | ND(0.0009) | ND(0.0004) | ND(0.0009) |
| | 4/28/08 | ND(0.0069) | ND(0.0069) | ND(0.0012) | ND(0.0012) | ND(0.001) | ND(0.0019) | ND(0.0009) | ND(0.0066) | ND(0.0008) | 0.0053 | 0.0025 | 0.0059 | 0.0015 | ND(0.00086) | ND(0.00088) | ND(0.001) | ND(0.0011) | ND(0.0012) | 0.0016 | ND(0.00056) | ND(0.0012) |

US EPA ARCHIVE DOCUMENT

# TABLE 2-9a. OUTDOOR AIR ANALYTICAL RESULTS SUMMARY, PETROLEUM RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Sample ID | Date | n-Butyl-benzene mg/m$^3$ | sec-Butyl-benzene mg/m$^3$ | Isopropyl-benzene mg/m$^3$ | n-Propyl-benzene mg/m$^3$ | 1,2-Dichloro-ethane mg/m$^3$ | 1,2-Dibromo-ethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethyl-benzene mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclo-hexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 1,3,5-Trimethyl-benzene mg/m$^3$ | 1,2,4-Trimethyl-benzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyl-toluene mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FLOAT | 9/5/08 | ND(0.004) | ND(0.004) | ND(0.00072) | ND(0.00072) | 0.0029 | ND(0.0011) | ND(0.00053) | ND(0.0038) | 0.0012 | 0.048 | 0.0048 | 0.0048 | 0.0021 | 0.0038 | 0.022 | 0.0013 | 0.0025 | ND(0.00072) | 0.00082 | ND(0.00032) | 0.00073 |
| | 9/6/08 | ND(0.0048) | ND(0.0048) | ND(0.00086) | ND(0.00086) | ND(0.00071) | ND(0.0013) | ND(0.00063) | ND(0.0046) | ND(0.00056) | 0.00094 U | ND(0.00076) | ND(0.00076) | ND(0.00076) | ND(0.0006) | ND(0.00062) | ND(0.00072) | ND(0.00074) | ND(0.00086) | ND(0.00086) | ND(0.00039) | ND(0.00086) |
| | 9/7/08 | ND(0.0069) | ND(0.0069) | ND(0.0012) | ND(0.0012) | ND(0.001) | ND(0.0019) | ND(0.0009) | ND(0.0066) | 0.00087 | 0.0016 U | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.00086) | ND(0.00088) | ND(0.001) | ND(0.0011) | ND(0.0012) | ND(0.0012) | ND(0.00056) | ND(0.0012) |
| | 9/8/08 | ND(0.005) | ND(0.005) | ND(0.0009) | ND(0.0009) | ND(0.00074) | ND(0.0014) | ND(0.00066) | ND(0.0048) | 0.0011 | 0.0032 JB | ND(0.00079) | 0.0013 | ND(0.00079) | ND(0.00063) | ND(0.00064) | ND(0.00075) | ND(0.00078) | ND(0.0009) | ND(0.0009) | ND(0.0004) | ND(0.0009) |
| | 9/9/08 | ND(0.0055) | ND(0.0055) | ND(0.00099) | ND(0.00099) | ND(0.00081) | ND(0.0015) | ND(0.00072) | ND(0.0053) | 0.00076 | 0.0023 JB | ND(0.00087) | ND(0.00087) | ND(0.00087) | ND(0.00069) | ND(0.00071) | ND(0.00082) | ND(0.00086) | ND(0.00099) | ND(0.00099) | ND(0.00044) | ND(0.00099) |
| | 9/9/08 Dup | ND(0.0055) | ND(0.0055) | ND(0.00099) | ND(0.00099) | ND(0.00081) | ND(0.0015) | ND(0.00072) | ND(0.0053) | 0.00078 | 0.0024 JB | ND(0.00087) | ND(0.00087) | ND(0.00087) | ND(0.00069) | 0.00099 JB | ND(0.00082) | ND(0.00086) | ND(0.00099) | ND(0.00099) | ND(0.00044) | ND(0.00099) |
| | 12/6/08 | ND(0.0044) | ND(0.0044) | ND(0.00079) | ND(0.00079) | ND(0.00065) | ND(0.0012) | ND(0.00058) | ND(0.0042) | 0.00094 | 0.0018 | ND(0.0007) | 0.00092 | ND(0.0007) | 0.0015 | 0.00072 | ND(0.00066) | ND(0.00068) | ND(0.00079) | ND(0.00079) | ND(0.00036) | ND(0.00079) |
| | 12/7/08 | ND(0.0046) | ND(0.0046) | ND(0.00082) | ND(0.00082) | ND(0.00068) | ND(0.0013) | ND(0.0006) | ND(0.0044) | 0.0009 | 0.00076 | ND(0.00073) | ND(0.00073) | ND(0.00073) | ND(0.00058) | ND(0.00059) | ND(0.00069) | ND(0.00072) | ND(0.00082) | ND(0.00082) | ND(0.00037) | ND(0.00082) |
| | 12/8/08 | ND(0.0049) | ND(0.0049) | ND(0.00088) | ND(0.00088) | ND(0.00072) | ND(0.0014) | ND(0.00064) | ND(0.0047) | 0.0012 | 0.0013 | ND(0.00078) | ND(0.00078) | ND(0.00078) | ND(0.00062) | ND(0.00063) | ND(0.00073) | ND(0.00076) | ND(0.00088) | ND(0.00088) | ND(0.0004) | ND(0.00088) |
| | 12/9/08 | ND(0.0071) | ND(0.0071) | ND(0.0013) | ND(0.0013) | ND(0.001) | ND(0.002) | ND(0.00093) | ND(0.0068) | 0.001 | 0.0016 | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.00089) | ND(0.00091) | ND(0.0011) | ND(0.0011) | ND(0.0013) | ND(0.0013) | ND(0.00057) | ND(0.0013) |
| | 12/10/08 | ND(0.0047) | ND(0.0047) | ND(0.00084) | ND(0.00084) | ND(0.00069) | ND(0.0013) | ND(0.00062) | ND(0.0045) | 0.0011 | 0.0017 | ND(0.00074) | 0.00076 | ND(0.00074) | ND(0.00059) | ND(0.0006) | ND(0.0007) | ND(0.00073) | ND(0.00084) | ND(0.00084) | ND(0.00038) | ND(0.00084) |
| | 12/11/08 | ND(0.0065) | ND(0.0065) | ND(0.0012) | ND(0.0012) | ND(0.00096) | ND(0.0018) | ND(0.00085) | ND(0.0062) | 0.0018 | 0.0032 | ND(0.001) | 0.0013 | ND(0.001) | ND(0.00081) | ND(0.00083) | ND(0.00097) | ND(0.001) | ND(0.0012) | ND(0.0012) | ND(0.00052) | ND(0.0012) |
| | 12/12/08 | ND(0.0047) | ND(0.0047) | ND(0.00084) | ND(0.00084) | ND(0.00069) | ND(0.0013) | ND(0.00062) | ND(0.0045) | 0.00086 | 0.0013 | ND(0.00074) | ND(0.00074) | ND(0.00074) | ND(0.00059) | 0.00078 | ND(0.0007) | ND(0.00073) | ND(0.00084) | ND(0.00084) | ND(0.00038) | ND(0.00084) |
| | 12/13/08 | ND(0.0044) | ND(0.0044) | ND(0.00079) | ND(0.00079) | ND(0.00065) | ND(0.0012) | ND(0.00058) | ND(0.0042) | 0.0012 | 0.0018 | ND(0.0007) | 0.00092 | ND(0.0007) | ND(0.00055) | 0.00066 | ND(0.00066) | ND(0.00068) | ND(0.00079) | ND(0.00079) | ND(0.00036) | ND(0.00079) |
| **Average Outdoor Air Concentration** | | ND(0.00025) | ND(0.00025) | ND(0.00025) | ND(0.00025) | ND(0.00025) | ND(0.00025) | 0.00027 | -- | 0.0013 | 0.0013 | ND(0.00025) | ND(0.00025) | ND(0.00025) | ND(0.00025) | 0.00042 | 0.00049 | ND(0.00025) | ND(0.00025) | ND(0.00025) | -- | -- |

**NOTES:**

Average outdoor air concentrations are reported as the 50th percentile values from the *New York State Department of Health Summary of Indoor and Outdoor Levels of Volatile Organic Compounds from Fuel Oil Heated Homes in New York State (1997-2003)*, updated November 14, 2005

**D** – Analyte concentration in the initial dilution exceeded instrument calibration range. The reported value for the qualified analyte is from an analysis run at higher dilution.

**E** – Concentration of analyte exceeded instrument calibration range

**J** – Value is estimated and should be used with consideration or qualitative purposes

**R** – Value has been rejected and should not be used for qualitative or quantitative purposes

US EPA ARCHIVE DOCUMENT

# TABLE 2-9b. OUTDOOR AIR ANALYTICAL RESULTS SUMMARY, SOLVENT RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Sample ID | Date | Acetone mg/m$^3$ | 2-Butanone mg/m$^3$ | Carbon tetrachloride mg/m$^3$ | Chloro-benzene mg/m$^3$ | 1,1-Dichloro-ethane mg/m$^3$ | 1,1-Dichloro-ethene mg/m$^3$ | cis-1,2-Dichloroethene mg/m$^3$ | trans-1,2-Dichloroethene mg/m$^3$ | 1,4-Dioxane mg/m$^3$ | Hexachloro-butadiene mg/m$^3$ | 2-Hexanone mg/m$^3$ | Isopropanol mg/m$^3$ | 4-Methyl-2-Pentanone mg/m$^3$ | Methylene Chloride mg/m$^3$ | 1,1,2,2-Tetrachloro-ethane mg/m$^3$ | Tetrachloro-ethene mg/m$^3$ | Tetrahydro-furan mg/m$^3$ | 1,1,1-Trichloro-ethane mg/m$^3$ | 1,1,2-Trichloro-ethane mg/m$^3$ | Trichloro-ethene mg/m$^3$ | Vinyl Chloride mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OA-VW-18 | 4/10/08 | 0.015 J | 0.0018 | ND(0.00092) | ND(0.00067) | ND(0.00059) | ND(0.00058) | ND(0.00058) | ND(0.00058) | ND(0.00053) | ND(0.0078) | ND(0.003) | ND(0.0018) | ND(0.0006) | ND(0.001) | ND(0.001) | ND(0.00099) | ND(0.0022) | ND(0.0008) | ND(0.0008) | ND(0.00078) | ND(0.00037) |
| | 4/10/08 Dup | 0.0069 J | 0.0009 | ND(0.00098) | ND(0.00071) | ND(0.00063) | ND(0.00061) | ND(0.00061) | ND(0.00061) | ND(0.00056) | ND(0.0083) | ND(0.0032) | 0.0031 | ND(0.00063) | ND(0.0011) | ND(0.0011) | ND(0.001) | ND(0.0023) | ND(0.00084) | ND(0.00084) | ND(0.00083) | ND(0.0004) |
| | 09/25/08 | 0.023 | 0.0021 | ND(0.001) | ND(0.00074) | ND(0.00065) | ND(0.00064) | ND(0.00064) | ND(0.00064) | ND(0.00058) | ND(0.0086) | ND(0.0033) | 0.0027 | ND(0.00066) | 0.0012 | ND(0.0011) | ND(0.0011) | ND(0.0024) | ND(0.00088) | ND(0.00088) | ND(0.00086) | ND(0.00041) |
| OA-VW-20 | 4/9/08 | 0.0046 | 0.0011 | ND(0.00091) | ND(0.00066) | ND(0.00058) | ND(0.00057) | ND(0.00057) | ND(0.00057) | ND(0.00052) | ND(0.0077) | ND(0.0029) | 0.0027 | ND(0.00059) | ND(0.001) | ND(0.00099) | ND(0.00098) | ND(0.0021) | ND(0.00078) | ND(0.00078) | ND(0.00077) | ND(0.00037) |
| | 09/25/08 | 0.025 | 0.003 J | ND(0.0011) | ND(0.0008) | ND(0.00071) | ND(0.00069) | ND(0.00069) | ND(0.00069) | ND(0.00063) | ND(0.0093) | ND(0.0036) | 0.0036 | ND(0.00072) | 0.0014 | ND(0.0012) | ND(0.0012) | ND(0.0026) | ND(0.00095) | ND(0.00095) | ND(0.00094) | ND(0.00045) |
| | 9/25/08 Dup | 0.028 | 0.0053 J | ND(0.0011) | ND(0.0008) | ND(0.00071) | ND(0.00069) | ND(0.00069) | ND(0.00069) | ND(0.00063) | ND(0.0093) | ND(0.0036) | 0.0053 | ND(0.00072) | 0.0019 | ND(0.0012) | ND(0.0012) | ND(0.0026) | ND(0.00095) | ND(0.00095) | ND(0.00094) | ND(0.00045) |
| OA-VW-21 | 4/11/08 | 0.011 | 0.0018 | ND(0.00089) | ND(0.00065) | ND(0.00057) | ND(0.00056) | ND(0.00056) | ND(0.00056) | ND(0.00051) | ND(0.0075) | ND(0.0029) | 0.0072 | ND(0.00058) | ND(0.00098) | ND(0.00097) | ND(0.00096) | ND(0.0021) | ND(0.00077) | ND(0.00077) | ND(0.00076) | ND(0.00036) |
| | 09/24/08 | 0.014 | 0.0014 | ND(0.001) | ND(0.00077) | ND(0.00068) | ND(0.00067) | ND(0.00067) | ND(0.00067) | ND(0.0006) | ND(0.009) | ND(0.0034) | 0.0037 | ND(0.00069) | ND(0.0012) | ND(0.0012) | ND(0.0011) | ND(0.0025) | ND(0.00092) | ND(0.00092) | ND(0.0009) | ND(0.00043) |
| CHI2-OA2 | 3/22/05 | 0.0061 | ND(0.0024) | ND(0.001) | ND(0.00074) | ND(0.00065) | ND(0.00064) | ND(0.00064) | ND(0.0032) | ND(0.0029) | ND(0.0086) | ND(0.0033) | ND(0.002) | ND(0.0033) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0024) | ND(0.00088) | ND(0.00088) | ND(0.00086) | ND(0.00041) |
| | 3/23/05 | 0.013 | 0.0025 | ND(0.00099) | ND(0.00073) | ND(0.00064) | ND(0.00063) | ND(0.00063) | ND(0.0031) | ND(0.0028) | ND(0.0084) | ND(0.0032) | ND(0.0019) | ND(0.0032) | 0.0012 | ND(0.0011) | ND(0.0011) | ND(0.0023) | ND(0.00086) | ND(0.00086) | ND(0.00085) | ND(0.0004) |
| | 3/24/05 | 0.022 | 0.0057 | ND(0.00099) | ND(0.00073) | ND(0.00064) | ND(0.00063) | ND(0.00063) | ND(0.0031) | ND(0.0028) | ND(0.0084) | ND(0.0032) | ND(0.0019) | ND(0.0032) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0023) | ND(0.00086) | ND(0.00086) | ND(0.00085) | ND(0.0004) |
| | 3/25/05 | 0.011 | ND(0.0028) | ND(0.0012) | ND(0.00088) | ND(0.00077) | ND(0.00076) | ND(0.00076) | ND(0.0038) | ND(0.0034) | ND(0.01) | ND(0.0039) | ND(0.0023) | ND(0.0039) | ND(0.0013) | ND(0.0013) | ND(0.0013) | ND(0.011) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.00049) |
| | 3/26/05 | 0.033 | 0.0088 | ND(0.001) | ND(0.00077) | ND(0.00068) | ND(0.00067) | ND(0.00067) | ND(0.0033) | ND(0.003) | ND(0.009) | ND(0.0034) | ND(0.0021) | ND(0.0034) | ND(0.0012) | ND(0.0012) | 0.0014 | ND(0.0099) | ND(0.00092) | ND(0.00092) | ND(0.0009) | ND(0.00043) |
| | 3/28/05 | 0.014 | 0.003 | ND(0.0012) | ND(0.00086) | ND(0.00076) | ND(0.00074) | ND(0.00074) | ND(0.0037) | ND(0.0034) | ND(0.01) | ND(0.0038) | ND(0.0023) | ND(0.0038) | ND(0.0013) | ND(0.0013) | ND(0.0013) | ND(0.011) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.00048) |
| | 3/29/05 | 0.0088 | ND(0.0025) | 0.001 J | ND(0.00077) | ND(0.00068) | ND(0.00067) | ND(0.00067) | ND(0.0033) | ND(0.003) | ND(0.009) | ND(0.0034) | ND(0.0021) | ND(0.0034) | ND(0.0012) | ND(0.0012) | ND(0.0011) | ND(0.0099) | ND(0.00092) | ND(0.00092) | ND(0.0009) | ND(0.00043) |
| | 3/30/05 | 0.0082 | ND(0.0026) | ND(0.0011) | ND(0.00082) | ND(0.00072) | ND(0.00071) | ND(0.00071) | ND(0.0035) | ND(0.0032) | ND(0.0095) | ND(0.0037) | ND(0.0022) | ND(0.0037) | ND(0.0012) | ND(0.0012) | 0.0032 | ND(0.01) | ND(0.00098) | ND(0.00098) | ND(0.00096) | ND(0.00046) |
| | 4/1/05 | 0.0047 | ND(0.0025) | 0.001 J | ND(0.00077) | ND(0.00068) | ND(0.00067) | ND(0.00067) | ND(0.0033) | ND(0.003) | ND(0.009) | ND(0.0034) | ND(0.0021) | ND(0.0034) | ND(0.0012) | ND(0.0012) | 0.0012 | ND(0.0099) | ND(0.00092) | ND(0.00092) | ND(0.0009) | ND(0.00043) |
| | 4/2/05 | 0.0065 | 0.0037 | ND(0.0015) | ND(0.0011) | ND(0.00096) | ND(0.00094) | ND(0.00094) | ND(0.0047) | ND(0.0042) | ND(0.012) | ND(0.0048) | ND(0.0029) | ND(0.0048) | ND(0.0016) | ND(0.0016) | ND(0.0016) | ND(0.014) | ND(0.0013) | ND(0.0013) | ND(0.0013) | ND(0.0006) |
| | 4/4/05 | 0.011 | ND(0.0026) | ND(0.0011) | ND(0.00082) | ND(0.00072) | ND(0.00071) | ND(0.00071) | ND(0.0035) | ND(0.0032) | ND(0.0095) | ND(0.0037) | ND(0.0022) | ND(0.0037) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.01) | ND(0.00098) | ND(0.00098) | ND(0.00096) | ND(0.00046) |
| | 4/4/05 Dup | 0.0093 | ND(0.0026) | ND(0.0011) | ND(0.00082) | ND(0.00072) | ND(0.00071) | ND(0.00071) | ND(0.0035) | ND(0.0032) | ND(0.0095) | ND(0.0037) | ND(0.0022) | ND(0.0037) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.01) | ND(0.00098) | ND(0.00098) | ND(0.00096) | ND(0.00046) |
| | 4/5/05 | 0.0071 | ND(0.0026) | ND(0.0011) | ND(0.00082) | ND(0.00072) | ND(0.00071) | ND(0.00071) | ND(0.0035) | ND(0.0032) | ND(0.0095) | ND(0.0037) | ND(0.0022) | ND(0.0037) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.01) | ND(0.00098) | ND(0.00098) | ND(0.00096) | ND(0.00046) |
| | 4/6/05 | 0.012 | 0.0045 | ND(0.00099) | ND(0.00073) | ND(0.00064) | ND(0.00063) | ND(0.00063) | ND(0.0031) | ND(0.0028) | ND(0.0084) | ND(0.0032) | ND(0.0019) | ND(0.0032) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0093) | ND(0.00086) | ND(0.00086) | ND(0.00085) | ND(0.0004) |
| | 4/7/05 | 0.0092 | 0.0031 | ND(0.0011) | ND(0.00079) | ND(0.00069) | ND(0.00068) | ND(0.00068) | ND(0.0034) | ND(0.0031) | ND(0.0091) | ND(0.0035) | ND(0.0021) | ND(0.0035) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.01) | ND(0.00093) | ND(0.00093) | ND(0.00092) | ND(0.00044) |
| | 4/8/05 | 0.026 | 0.0064 | ND(0.0011) | ND(0.0008) | ND(0.00071) | ND(0.00069) | ND(0.00069) | ND(0.0035) | ND(0.0032) | ND(0.0093) | ND(0.0036) | ND(0.0022) | ND(0.0036) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.01) | ND(0.00095) | ND(0.00095) | ND(0.00094) | ND(0.00045) |
| | 4/9/05 | 0.0086 | ND(0.003) | ND(0.0013) | ND(0.00092) | ND(0.00081) | ND(0.0008) | ND(0.0008) | ND(0.004) | ND(0.0036) | ND(0.011) | ND(0.0041) | ND(0.0025) | ND(0.0041) | ND(0.0014) | ND(0.0014) | ND(0.0014) | ND(0.012) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.00051) |
| | 4/11/05 | 0.0085 | ND(0.0026) | ND(0.0011) | ND(0.00082) | ND(0.00072) | ND(0.00071) | ND(0.00071) | ND(0.0035) | ND(0.0032) | ND(0.0095) | ND(0.0037) | ND(0.0022) | ND(0.0037) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.01) | ND(0.00098) | ND(0.00098) | ND(0.00096) | ND(0.00046) |
| | 4/12/05 | 0.014 | 0.0041 | ND(0.001) | ND(0.00077) | ND(0.00068) | ND(0.00067) | ND(0.00067) | ND(0.0033) | ND(0.003) | ND(0.009) | ND(0.0034) | ND(0.0021) | ND(0.0034) | ND(0.0012) | ND(0.0012) | 0.0011 J | ND(0.0099) | ND(0.00092) | ND(0.00092) | ND(0.0009) | ND(0.00043) |
| | 4/13/05 | 0.0084 | 0.0029 | ND(0.0011) | ND(0.0008) | ND(0.00071) | ND(0.00069) | ND(0.00069) | ND(0.0035) | ND(0.0032) | ND(0.0093) | ND(0.0036) | ND(0.0022) | ND(0.0036) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.01) | ND(0.00095) | ND(0.00095) | ND(0.00094) | ND(0.00045) |
| | 4/14/05 | 0.0063 | ND(0.0031) | ND(0.0013) | ND(0.00098) | ND(0.00086) | ND(0.00084) | ND(0.00084) | ND(0.0042) | ND(0.0038) | ND(0.011) | ND(0.0043) | ND(0.0026) | ND(0.0043) | ND(0.0015) | ND(0.0014) | ND(0.0014) | ND(0.012) | ND(0.0012) | ND(0.0012) | ND(0.0011) | ND(0.00054) |
| | 4/14/05 Dup | 0.011 | ND(0.0026) | ND(0.0011) | ND(0.0008) | ND(0.00071) | ND(0.00069) | ND(0.00069) | ND(0.0035) | ND(0.0032) | ND(0.0093) | ND(0.0036) | ND(0.0022) | ND(0.0036) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.01) | ND(0.00095) | ND(0.00095) | ND(0.00094) | ND(0.00045) |
| | 4/15/05 | 0.026 | 0.0049 | ND(0.0014) | ND(0.001) | ND(0.0009) | ND(0.00088) | ND(0.00088) | ND(0.0044) | ND(0.004) | ND(0.012) | ND(0.0046) | ND(0.0027) | ND(0.0046) | ND(0.0015) | ND(0.0015) | ND(0.0015) | ND(0.013) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.00057) |
| | 5/3/05 | 0.0058 | ND(0.0033) | ND(0.0014) | ND(0.001) | ND(0.0009) | ND(0.00088) | ND(0.00088) | ND(0.0044) | ND(0.004) | ND(0.012) | ND(0.0046) | ND(0.0027) | ND(0.0046) | ND(0.0015) | ND(0.0015) | ND(0.0015) | ND(0.013) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.00057) |
| | 5/4/05 Dup | 0.006 | ND(0.0065) | ND(0.0028) | ND(0.002) | ND(0.0018) | ND(0.0018) | ND(0.0018) | ND(0.0088) | ND(0.008) | ND(0.024) | ND(0.0091) | ND(0.0054) | ND(0.0091) | ND(0.0031) | ND(0.003) | ND(0.003) | ND(0.026) | ND(0.0024) | ND(0.0024) | ND(0.0024) | ND(0.0011) |
| | 5/11/05 | 0.015 | ND(0.0031) | ND(0.0013) | ND(0.00098) | ND(0.00086) | ND(0.00084) | ND(0.00084) | ND(0.0042) | ND(0.0038) | ND(0.011) | ND(0.0043) | ND(0.0026) | ND(0.0043) | ND(0.0015) | ND(0.0014) | ND(0.0014) | ND(0.012) | ND(0.0012) | ND(0.0012) | ND(0.0011) | ND(0.00054) |
| HOO8-OA1 | 3/22/05 | 0.0086 | ND(0.0025) | ND(0.001) | ND(0.00077) | ND(0.00068) | ND(0.00067) | ND(0.00067) | ND(0.0033) | ND(0.003) | ND(0.009) | ND(0.0034) | ND(0.0021) | ND(0.0034) | ND(0.0012) | ND(0.0012) | ND(0.0011) | ND(0.0025) | ND(0.00092) | ND(0.00092) | ND(0.0009) | ND(0.00043) |
| | 3/23/05 | 0.0081 | 0.0024 | ND(0.001) | ND(0.00074) | ND(0.00065) | ND(0.00064) | ND(0.00064) | ND(0.0032) | ND(0.0029) | ND(0.0086) | ND(0.0033) | ND(0.002) | ND(0.0033) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0024) | ND(0.00088) | ND(0.00088) | ND(0.00086) | ND(0.00041) |
| | 3/24/05 | 0.02 | 0.0053 | ND(0.001) | ND(0.00077) | ND(0.00068) | ND(0.00067) | ND(0.00067) | ND(0.0033) | ND(0.003) | ND(0.009) | ND(0.0034) | ND(0.0021) | ND(0.0034) | ND(0.0012) | ND(0.0012) | ND(0.0011) | ND(0.0025) | ND(0.00092) | ND(0.00092) | ND(0.0009) | ND(0.00043) |
| | 3/25/05 | 0.0066 | ND(0.0023) | ND(0.00098) | ND(0.00071) | ND(0.00063) | ND(0.00061) | ND(0.00061) | ND(0.0031) | ND(0.0028) | ND(0.0083) | ND(0.0032) | ND(0.0019) | ND(0.0032) | ND(0.0011) | ND(0.0011) | ND(0.001) | ND(0.0091) | ND(0.00084) | ND(0.00084) | ND(0.00083) | ND(0.0004) |
| | 3/26/05 | 0.0048 | ND(0.0025) | ND(0.001) | ND(0.00077) | ND(0.00068) | ND(0.00067) | ND(0.00067) | ND(0.0033) | ND(0.003) | ND(0.009) | ND(0.0034) | ND(0.0021) | ND(0.0034) | ND(0.0012) | ND(0.0012) | ND(0.0011) | ND(0.0099) | ND(0.00092) | ND(0.00092) | ND(0.0009) | ND(0.00043) |
| | 3/28/05 | 0.0048 | ND(0.0026) | ND(0.0011) | ND(0.00082) | ND(0.00072) | ND(0.00071) | ND(0.00071) | ND(0.0035) | ND(0.0032) | ND(0.0095) | ND(0.0037) | ND(0.0022) | ND(0.0037) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.01) | ND(0.00098) | ND(0.00098) | ND(0.00096) | ND(0.00046) |
| | 3/29/05 | 0.024 | 0.0034 | 0.0011 J | ND(0.0008) | ND(0.00071) | ND(0.00069) | ND(0.00069) | ND(0.0035) | ND(0.0032) | ND(0.0093) | ND(0.0036) | ND(0.0022) | ND(0.0036) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.01) | ND(0.00095) | ND(0.00095) | ND(0.00094) | ND(0.00045) |
| | 3/30/05 | 0.03 | 0.0067 | 0.0011 J | ND(0.00082) | ND(0.00072) | ND(0.00071) | ND(0.00071) | ND(0.0035) | ND(0.0032) | ND(0.0095) | ND(0.0037) | ND(0.0022) | ND(0.0037) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.01) | ND(0.00098) | ND(0.00098) | ND(0.00096) | ND(0.00046) |

US EPA ARCHIVE DOCUMENT

# TABLE 2-9b. OUTDOOR AIR ANALYTICAL RESULTS SUMMARY, SOLVENT RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Sample ID | Date | Acetone mg/m$^3$ | 2-Butanone mg/m$^3$ | Carbon tetrachloride mg/m$^3$ | Chloro-benzene mg/m$^3$ | 1,1-Dichloro-ethane mg/m$^3$ | 1,1-Dichloro-ethene mg/m$^3$ | cis-1,2-Dichloroethene mg/m$^3$ | trans-1,2-Dichloroethene mg/m$^3$ | 1,4-Dioxane mg/m$^3$ | Hexachloro-butadiene mg/m$^3$ | 2-Hexanone mg/m$^3$ | Isopropanol mg/m$^3$ | 4-Methyl-2-Pentanone mg/m$^3$ | Methylene Chloride mg/m$^3$ | 1,1,2,2-Tetrachloro-ethane mg/m$^3$ | Tetrachloro-ethene mg/m$^3$ | Tetrahydro-furan mg/m$^3$ | 1,1,1-Trichloro-ethane mg/m$^3$ | 1,1,2-Trichloro-ethane mg/m$^3$ | Trichloro-ethene mg/m$^3$ | Vinyl Chloride mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HOO8-OA1 | 3/30/05 Dup | 0.008 | ND(0.0021) | 0.00089 J | ND(0.00065) | ND(0.00057) | ND(0.00056) | ND(0.00056) | ND(0.0028) | ND(0.0025) | ND(0.0075) | ND(0.0029) | ND(0.0017) | ND(0.0029) | ND(0.00098) | ND(0.00097) | ND(0.00096) | ND(0.0083) | ND(0.00077) | ND(0.00077) | ND(0.00076) | ND(0.00036) |
| | 3/31/05 | 0.0079 | ND(0.0025) | 0.001 J | ND(0.00077) | ND(0.00068) | ND(0.00067) | ND(0.00067) | ND(0.0033) | ND(0.003) | ND(0.009) | ND(0.0034) | ND(0.0021) | ND(0.0034) | ND(0.0012) | ND(0.0012) | ND(0.0011) | ND(0.0099) | ND(0.00092) | ND(0.00092) | ND(0.0009) | ND(0.00043) |
| | 4/1/05 | 0.012 | 0.0034 | 0.0012 J | ND(0.00084) | ND(0.00074) | ND(0.00072) | ND(0.00072) | ND(0.0036) | ND(0.0033) | ND(0.0098) | ND(0.0037) | ND(0.0022) | ND(0.0037) | ND(0.0013) | ND(0.0012) | ND(0.0012) | ND(0.011) | ND(0.001) | ND(0.001) | ND(0.00098) | ND(0.00047) |
| | 4/2/05 | 0.0048 | ND(0.003) | ND(0.0013) | ND(0.00095) | ND(0.00083) | ND(0.00082) | ND(0.00082) | ND(0.0041) | ND(0.0037) | ND(0.011) | ND(0.0042) | ND(0.0025) | ND(0.0042) | ND(0.0014) | ND(0.0014) | ND(0.0014) | ND(0.012) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.00053) |
| | 4/4/05 | 0.01 | ND(0.003) | ND(0.0013) | ND(0.00092) | ND(0.00081) | ND(0.0008) | ND(0.0008) | ND(0.004) | ND(0.0036) | ND(0.011) | ND(0.0041) | ND(0.0025) | ND(0.0041) | ND(0.0014) | ND(0.0014) | ND(0.0014) | ND(0.012) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.00051) |
| | 4/5/05 | 0.0077 | ND(0.0027) | ND(0.0012) | ND(0.00084) | ND(0.00074) | ND(0.00072) | ND(0.00072) | ND(0.0036) | ND(0.0033) | ND(0.0098) | ND(0.0037) | ND(0.0022) | ND(0.0037) | ND(0.0013) | ND(0.0012) | ND(0.0012) | ND(0.011) | ND(0.001) | ND(0.001) | ND(0.00098) | ND(0.00047) |
| | 4/6/05 | 0.014 | 0.0025 | ND(0.001) | ND(0.00076) | ND(0.00066) | ND(0.00065) | ND(0.00065) | ND(0.0032) | ND(0.003) | ND(0.0087) | ND(0.0034) | ND(0.002) | ND(0.0034) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0097) | ND(0.00089) | ND(0.00089) | ND(0.00088) | ND(0.00042) |
| | 4/7/05 | 0.0087 | 0.0034 | ND(0.0013) | ND(0.00095) | ND(0.00083) | ND(0.00082) | ND(0.00082) | ND(0.0041) | ND(0.0037) | ND(0.011) | ND(0.0042) | ND(0.0025) | ND(0.0042) | ND(0.0014) | ND(0.0014) | ND(0.0014) | ND(0.012) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.00053) |
| | 4/8/05 | 0.013 | 0.0037 | ND(0.0011) | ND(0.0008) | ND(0.00071) | ND(0.00069) | ND(0.00069) | ND(0.0035) | ND(0.0032) | ND(0.0093) | ND(0.0036) | ND(0.0022) | ND(0.0036) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.01) | ND(0.00095) | ND(0.00095) | ND(0.00094) | ND(0.00045) |
| | 4/9/05 | 0.012 | ND(0.003) | ND(0.0013) | ND(0.00095) | ND(0.00083) | ND(0.00082) | ND(0.00082) | ND(0.0041) | ND(0.0037) | ND(0.011) | ND(0.0042) | ND(0.0025) | ND(0.0042) | ND(0.0014) | ND(0.0014) | ND(0.0014) | ND(0.012) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.00053) |
| | 4/11/05 | 0.012 | ND(0.003) | ND(0.0013) | ND(0.00095) | ND(0.00083) | ND(0.00082) | ND(0.00082) | ND(0.0041) | ND(0.0037) | ND(0.011) | ND(0.0042) | ND(0.0025) | ND(0.0042) | ND(0.0014) | ND(0.0014) | ND(0.0014) | ND(0.012) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.00053) |
| | 4/13/05 | 0.016 | 0.0038 | ND(0.001) | ND(0.00077) | ND(0.00068) | ND(0.00067) | ND(0.00067) | ND(0.0033) | ND(0.003) | ND(0.009) | ND(0.0034) | ND(0.0021) | ND(0.0034) | ND(0.0012) | ND(0.0012) | ND(0.0011) | ND(0.0099) | ND(0.00092) | ND(0.00092) | ND(0.0009) | ND(0.00043) |
| | 4/13/05 Dup | 0.041 | 0.0075 | ND(0.0012) | ND(0.00084) | ND(0.00074) | ND(0.00072) | ND(0.00072) | ND(0.0036) | ND(0.0033) | ND(0.0098) | ND(0.0037) | 0.0036 | ND(0.0037) | ND(0.0013) | ND(0.0012) | ND(0.0012) | ND(0.011) | ND(0.001) | ND(0.001) | ND(0.00098) | ND(0.00047) |
| | 4/14/05 | 0.0047 | ND(0.0025) | ND(0.0011) | ND(0.00079) | ND(0.00069) | ND(0.00068) | ND(0.00068) | ND(0.0034) | ND(0.0031) | ND(0.0091) | ND(0.0035) | ND(0.0021) | ND(0.0035) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.01) | ND(0.00093) | ND(0.00093) | ND(0.00092) | ND(0.00044) |
| | 4/15/05 | 0.0067 | ND(0.0034) | ND(0.0014) | ND(0.001) | ND(0.00093) | ND(0.00091) | ND(0.00091) | ND(0.0046) | ND(0.0041) | ND(0.012) | ND(0.0047) | ND(0.0028) | ND(0.0047) | ND(0.0016) | ND(0.0016) | ND(0.0016) | ND(0.014) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.00059) |
| | 5/3/05 | 0.0049 | ND(0.0034) | ND(0.0014) | ND(0.001) | ND(0.00093) | ND(0.00091) | ND(0.00091) | ND(0.0046) | ND(0.0041) | ND(0.012) | ND(0.0047) | ND(0.0028) | ND(0.0047) | ND(0.0016) | ND(0.0016) | ND(0.0016) | ND(0.014) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.00059) |
| | 5/11/05 | 0.013 | ND(0.0032) | ND(0.0014) | ND(0.001) | ND(0.00088) | ND(0.00086) | ND(0.00086) | ND(0.0043) | ND(0.0039) | ND(0.012) | ND(0.0044) | ND(0.0027) | ND(0.0044) | ND(0.0015) | ND(0.0015) | ND(0.0015) | ND(0.013) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.00055) |
| FIXED | 4/18/08 | 0.0099 J | 0.00097 J | ND(0.0013) | ND(0.00095) | ND(0.00083) | ND(0.00082) | ND(0.00082) | ND(0.00082) | ND(0.00074) | ND(0.011) | ND(0.0042) | 0.0039 J | ND(0.00084) | ND(0.0014) | ND(0.0014) | ND(0.0014) | ND(0.003) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.00053) |
| | 4/19/08 | 0.042 J | 0.0055 J | ND(0.0014) | ND(0.001) | ND(0.00088) | ND(0.00086) | ND(0.00086) | ND(0.00086) | ND(0.00078) | ND(0.012) | ND(0.0044) | 0.0089 J | ND(0.00089) | ND(0.0015) | ND(0.0015) | ND(0.0015) | ND(0.0032) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.00055) |
| | 4/20/08 | 0.015 J | 0.0022 J | ND(0.0013) | ND(0.00098) | ND(0.00086) | ND(0.00084) | ND(0.00084) | ND(0.00084) | ND(0.00076) | ND(0.011) | ND(0.0043) | 0.072 J | ND(0.00087) | ND(0.0015) | ND(0.0014) | ND(0.0014) | ND(0.0031) | ND(0.0012) | ND(0.0012) | ND(0.0011) | ND(0.00054) |
| | 4/22/08 | 0.087 J | 0.0028 J | ND(0.0011) | ND(0.0008) | ND(0.00071) | ND(0.00069) | ND(0.00069) | ND(0.00069) | ND(0.00063) | ND(0.0093) | ND(0.0036) | 0.39 J | ND(0.00072) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.0026) | ND(0.00095) | ND(0.00095) | ND(0.00094) | ND(0.00045) |
| | 4/23/08 | 0.011 J | 0.0014 J | ND(0.00098) | ND(0.00071) | ND(0.00063) | ND(0.00061) | ND(0.00061) | ND(0.00061) | ND(0.00056) | ND(0.0083) | ND(0.0032) | 0.017 J | ND(0.00063) | ND(0.0011) | ND(0.0011) | ND(0.001) | ND(0.0023) | ND(0.00084) | ND(0.00084) | ND(0.00083) | ND(0.0004) |
| | 4/24/08 | 0.011 J | 0.0011 J | ND(0.0012) | ND(0.0009) | ND(0.00079) | ND(0.00078) | ND(0.00078) | ND(0.00078) | ND(0.00071) | ND(0.01) | ND(0.004) | 0.05 J | ND(0.0008) | ND(0.0014) | ND(0.0013) | ND(0.0013) | ND(0.0029) | ND(0.0011) | ND(0.0011) | ND(0.001) | ND(0.0005) |
| | 4/25/08 | 0.012 J | 0.00065 J | ND(0.0011) | ND(0.00082) | ND(0.00072) | ND(0.00071) | ND(0.00071) | ND(0.00071) | ND(0.00064) | ND(0.0095) | ND(0.0037) | 0.024 J | ND(0.00073) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.0026) | ND(0.00098) | ND(0.00098) | ND(0.00096) | ND(0.00046) |
| | 4/25/08 Dup | 0.023 J | 0.0013 J | ND(0.00096) | ND(0.0007) | ND(0.00062) | ND(0.0006) | ND(0.0006) | ND(0.0006) | ND(0.00055) | ND(0.0081) | ND(0.0031) | 0.43 J | ND(0.00062) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.0022) | ND(0.00083) | ND(0.00083) | ND(0.00082) | ND(0.00039) |
| | 4/28/08 | 0.022 J | 0.002 J | ND(0.0021) | ND(0.0015) | ND(0.0014) | ND(0.0013) | ND(0.0013) | ND(0.0013) | ND(0.0012) | ND(0.018) | ND(0.0069) | 0.013 J | ND(0.0014) | ND(0.0023) | ND(0.0023) | ND(0.0023) | ND(0.0049) | ND(0.0018) | ND(0.0018) | ND(0.0018) | ND(0.00086) |
| | 12/6/08 | 0.016 JB | 0.002 J | ND(0.00099) | ND(0.00073) | ND(0.00064) | ND(0.00063) | ND(0.00063) | ND(0.00063) | ND(0.00057) | ND(0.0084) | ND(0.0032) | ND(0.0019) | ND(0.00065) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0023) | ND(0.00086) | ND(0.00086) | ND(0.00085) | ND(0.0004) |
| | 12/6/08 Dup | 0.0024 JB | 0.00066 J | ND(0.001) | ND(0.00074) | ND(0.00065) | ND(0.00064) | ND(0.00064) | ND(0.00064) | ND(0.00058) | ND(0.0086) | ND(0.0033) | ND(0.002) | ND(0.00066) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0024) | ND(0.00088) | ND(0.00088) | ND(0.00086) | ND(0.00041) |
| | 12/7/08 | 0.0064 JB | 0.0011 J | ND(0.001) | ND(0.00074) | ND(0.00065) | ND(0.00064) | ND(0.00064) | ND(0.00064) | ND(0.00058) | ND(0.0086) | ND(0.0033) | ND(0.002) | ND(0.00066) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0024) | ND(0.00088) | ND(0.00088) | ND(0.00086) | ND(0.00041) |
| | 12/8/08 | 0.0096 JB | 0.002 J | ND(0.00081) | ND(0.00059) | ND(0.00052) | ND(0.00051) | ND(0.00051) | ND(0.00051) | ND(0.00046) | ND(0.0069) | ND(0.0026) | 0.0036 | ND(0.00053) | ND(0.0009) | ND(0.00088) | ND(0.00088) | ND(0.0019) | ND(0.0007) | ND(0.0007) | ND(0.00069) | ND(0.00033) |
| | 12/9/08 | 0.14 J | 0.025 J | ND(0.0028) | ND(0.002) | ND(0.0018) | ND(0.0018) | ND(0.0018) | ND(0.0018) | ND(0.0016) | ND(0.024) | ND(0.0092) | 0.024 | 0.0019 | ND(0.0031) | ND(0.0031) | ND(0.003) | ND(0.0066) | ND(0.0024) | ND(0.0024) | ND(0.0024) | ND(0.0011) |
| | 12/10/08 | 0.023 J | 0.0063 J | ND(0.001) | ND(0.00076) | ND(0.00066) | ND(0.00065) | ND(0.00065) | ND(0.00065) | ND(0.00059) | ND(0.0087) | ND(0.0034) | 0.0057 | ND(0.00067) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0024) | ND(0.00089) | ND(0.00089) | ND(0.00088) | ND(0.00042) |
| | 12/11/08 | 0.0092 JB | 0.0025 J | ND(0.001) | ND(0.00076) | ND(0.00066) | ND(0.00065) | ND(0.00065) | ND(0.00065) | ND(0.00059) | ND(0.0087) | ND(0.0034) | ND(0.002) | ND(0.00067) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0024) | ND(0.00089) | ND(0.00089) | ND(0.00088) | ND(0.00042) |
| | 12/12/08 | 0.028 J | 0.0081 J | ND(0.0015) | ND(0.0011) | ND(0.00096) | ND(0.00094) | ND(0.00094) | ND(0.00094) | 0.0015 | ND(0.012) | ND(0.0048) | ND(0.0029) | ND(0.00097) | ND(0.0016) | ND(0.0016) | ND(0.0016) | ND(0.0035) | ND(0.0013) | ND(0.0013) | ND(0.0013) | ND(0.0006) |
| | 12/12/08 Dup | 0.0033 JB | ND(0.0007) UJ | ND(0.0015) | ND(0.0011) | ND(0.00096) | ND(0.00094) | ND(0.00094) | ND(0.00094) | ND(0.00085) | ND(0.012) | ND(0.0048) | ND(0.0029) | ND(0.00097) | ND(0.0016) | ND(0.0016) | ND(0.0016) | ND(0.0035) | ND(0.0013) | ND(0.0013) | ND(0.0013) | ND(0.0006) |
| | 12/13/2008 | 0.0041 JB | 0.00079 J | ND(0.0012) | ND(0.0009) | ND(0.00079) | ND(0.00078) | ND(0.00078) | ND(0.00078) | ND(0.00071) | ND(0.01) | ND(0.004) | ND(0.0024) | ND(0.0008) | ND(0.0014) | ND(0.0013) | ND(0.0013) | ND(0.0029) | ND(0.0011) | ND(0.0011) | ND(0.001) | ND(0.0005) |
| Float-OA3 | 3/22/05 | 0.0044 | ND(0.0025) | ND(0.001) | ND(0.00077) | ND(0.00068) | ND(0.00067) | ND(0.00067) | ND(0.0033) | ND(0.003) | ND(0.009) | ND(0.0034) | ND(0.0021) | ND(0.0034) | ND(0.0012) | ND(0.0012) | ND(0.0011) | ND(0.0025) | ND(0.00092) | ND(0.00092) | ND(0.0009) | ND(0.00043) |
| | 3/23/05 | 0.01 | ND(0.0027) | ND(0.0012) | ND(0.00084) | ND(0.00074) | ND(0.00072) | ND(0.00072) | ND(0.0036) | ND(0.0033) | ND(0.0098) | ND(0.0037) | ND(0.0022) | ND(0.0037) | ND(0.0013) | ND(0.0012) | ND(0.0012) | ND(0.0027) | ND(0.001) | ND(0.001) | ND(0.00098) | ND(0.00047) |
| | 3/24/05 | 0.0075 | ND(0.0032) | ND(0.0014) | ND(0.001) | ND(0.00088) | ND(0.00086) | ND(0.00086) | ND(0.0043) | ND(0.0039) | ND(0.012) | ND(0.0044) | ND(0.0027) | ND(0.0044) | ND(0.0015) | ND(0.0015) | ND(0.0015) | ND(0.0032) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.00055) |
| | 3/25/05 | 0.017 | 0.0055 | ND(0.0012) | ND(0.00088) | ND(0.00077) | ND(0.00076) | ND(0.00076) | ND(0.0038) | ND(0.0034) | ND(0.01) | ND(0.0039) | ND(0.0023) | ND(0.0039) | ND(0.0013) | ND(0.0013) | ND(0.0013) | ND(0.0028) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.00049) |
| | 3/26/05 | 0.0075 J | ND(0.0025) | ND(0.0011) | ND(0.00079) | ND(0.00069) | ND(0.00068) | ND(0.00068) | ND(0.0034) | ND(0.0031) | ND(0.0091) | ND(0.0035) | ND(0.0021) | ND(0.0035) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.01) | ND(0.00093) | ND(0.00093) | ND(0.00092) | ND(0.00044) |
| | 3/28/05 | 0.01 | ND(0.003) | ND(0.0013) | ND(0.00092) | ND(0.00081) | ND(0.0008) | ND(0.0008) | ND(0.004) | ND(0.0036) | ND(0.011) | ND(0.0041) | ND(0.0025) | ND(0.0041) | ND(0.0014) | ND(0.0014) | ND(0.0014) | ND(0.012) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.00051) |
| | 3/29/05 | 0.024 | ND(0.0034) | 0.0014 J | ND(0.001) | ND(0.00093) | ND(0.00091) | ND(0.00091) | ND(0.0046) | ND(0.0041) | ND(0.012) | ND(0.0047) | ND(0.0028) | ND(0.0047) | ND(0.0016) | ND(0.0016) | ND(0.0016) | ND(0.014) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.00059) |
| | 3/30/05 | 0.0081 | ND(0.0026) | ND(0.0011) | ND(0.00082) | ND(0.00072) | ND(0.00071) | ND(0.00071) | ND(0.0035) | ND(0.0032) | ND(0.0095) | ND(0.0037) | ND(0.0022) | ND(0.0037) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.01) | ND(0.00098) | ND(0.00098) | ND(0.00096) | ND(0.00046) |
| | 4/2/05 | 0.011 | ND(0.0037) | ND(0.0016) | ND(0.0012) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.005) | ND(0.0045) | ND(0.013) | ND(0.0051) | ND(0.0031) | ND(0.0051) | ND(0.0017) | ND(0.0017) | ND(0.0017) | ND(0.015) | ND(0.0014) | ND(0.0014) | ND(0.0013) | ND(0.00064) |

US EPA ARCHIVE DOCUMENT

# TABLE 2-9b. OUTDOOR AIR ANALYTICAL RESULTS SUMMARY, SOLVENT RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Sample ID | Date | Acetone mg/m$^3$ | 2-Butanone mg/m$^3$ | Carbon tetrachloride mg/m$^3$ | Chloro-benzene mg/m$^3$ | 1,1-Dichloro-ethane mg/m$^3$ | 1,1-Dichloro-ethene mg/m$^3$ | cis-1,2-Dichloroethene mg/m$^3$ | trans-1,2-Dichloroethene mg/m$^3$ | 1,4-Dioxane mg/m$^3$ | Hexachloro-butadiene mg/m$^3$ | 2-Hexanone mg/m$^3$ | Isopropanol mg/m$^3$ | 4-Methyl-2-Pentanone mg/m$^3$ | Methylene Chloride mg/m$^3$ | 1,1,2,2-Tetrachloro-ethane mg/m$^3$ | Tetrachloro-ethene mg/m$^3$ | Tetrahydro-furan mg/m$^3$ | 1,1,1-Trichloro-ethane mg/m$^3$ | 1,1,2-Trichloro-ethane mg/m$^3$ | Trichloro-ethene mg/m$^3$ | Vinyl Chloride mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Float-OA3 | 4/4/05 | 0.025 | 0.0045 | ND(0.0015) | ND(0.0011) | ND(0.00099) | ND(0.00097) | ND(0.00097) | ND(0.0048) | ND(0.0044) | ND(0.013) | ND(0.005) | ND(0.003) | ND(0.005) | ND(0.0017) | ND(0.0017) | ND(0.0016) | ND(0.014) | ND(0.0013) | ND(0.0013) | ND(0.0013) | ND(0.00062) |
| | 4/5/05 | 0.011 | ND(0.0074) | 0.0032 J | ND(0.0023) | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.01) | ND(0.0091) | ND(0.027) | ND(0.01) | ND(0.0062) | ND(0.01) | ND(0.0035) | ND(0.0034) | ND(0.0034) | ND(0.03) | ND(0.0027) | ND(0.0027) | ND(0.0027) | ND(0.0013) |
| | 4/6/05 | 0.012 | 0.0034 | ND(0.0012) | ND(0.00088) | ND(0.00077) | ND(0.00076) | ND(0.00076) | ND(0.0038) | ND(0.0034) | ND(0.01) | ND(0.0039) | ND(0.0023) | ND(0.0039) | 0.0028 | ND(0.0013) | ND(0.0013) | ND(0.011) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.00049) |
| | 4/7/05 | 0.016 | 0.0047 | ND(0.0011) | ND(0.00082) | ND(0.00072) | ND(0.00071) | ND(0.00071) | ND(0.0035) | ND(0.0032) | ND(0.0095) | ND(0.0037) | ND(0.0022) | ND(0.0037) | 0.0014 | ND(0.0012) | ND(0.0012) | ND(0.01) | ND(0.00098) | ND(0.00098) | ND(0.00096) | ND(0.00046) |
| | 4/8/05 | 0.0076 | ND(0.0031) | ND(0.0013) | ND(0.00098) | ND(0.00086) | ND(0.00084) | ND(0.00084) | ND(0.0042) | ND(0.0038) | ND(0.011) | ND(0.0043) | ND(0.0026) | ND(0.0043) | ND(0.0015) | ND(0.0014) | ND(0.0014) | ND(0.012) | ND(0.0012) | ND(0.0012) | ND(0.0011) | ND(0.00054) |
| | 4/9/05 | 0.015 | ND(0.003) | ND(0.0013) | ND(0.00095) | ND(0.00083) | ND(0.00082) | ND(0.00082) | ND(0.0041) | ND(0.0037) | ND(0.011) | ND(0.0042) | ND(0.0025) | ND(0.0042) | ND(0.0014) | ND(0.0014) | ND(0.0014) | ND(0.012) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.00053) |
| | 4/9/05 Dup | 0.0057 | ND(0.0029) | ND(0.0012) | ND(0.0009) | ND(0.00079) | ND(0.00078) | ND(0.00078) | ND(0.0039) | ND(0.0035) | ND(0.01) | ND(0.004) | ND(0.0024) | ND(0.004) | ND(0.0014) | ND(0.0013) | ND(0.0013) | ND(0.012) | ND(0.0011) | ND(0.0011) | ND(0.001) | ND(0.0005) |
| | 4/11/05 | 0.027 | 0.0051 | ND(0.0015) | ND(0.0011) | ND(0.00096) | ND(0.00094) | ND(0.00094) | ND(0.0047) | ND(0.0042) | ND(0.012) | ND(0.0048) | ND(0.0029) | ND(0.0048) | ND(0.0016) | ND(0.0016) | ND(0.0016) | ND(0.014) | ND(0.0013) | ND(0.0013) | ND(0.0013) | ND(0.0006) |
| | 4/12/05 | 0.0088 | ND(0.0033) | ND(0.0014) | ND(0.001) | ND(0.0009) | ND(0.00088) | ND(0.00088) | ND(0.0044) | ND(0.004) | ND(0.012) | ND(0.0046) | ND(0.0027) | ND(0.0046) | ND(0.0015) | ND(0.0015) | 0.0068 | ND(0.013) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.00057) |
| | 4/13/05 | 0.011 | 0.0038 | ND(0.0013) | ND(0.00092) | ND(0.00081) | ND(0.0008) | ND(0.0008) | ND(0.004) | ND(0.0036) | ND(0.011) | ND(0.0041) | ND(0.0025) | ND(0.0041) | ND(0.0014) | ND(0.0014) | ND(0.0014) | ND(0.012) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.00051) |
| | 4/14/05 | 0.015 | ND(0.0056) | ND(0.0024) | ND(0.0018) | ND(0.0016) | ND(0.0015) | ND(0.0015) | ND(0.0076) | ND(0.0069) | ND(0.02) | ND(0.0078) | ND(0.0047) | ND(0.0078) | ND(0.0027) | ND(0.0026) | 0.0037 | ND(0.022) | ND(0.0021) | ND(0.0021) | ND(0.002) | ND(0.00098) |
| | 4/15/05 | 0.015 | ND(0.0031) | ND(0.0013) | ND(0.00098) | ND(0.00086) | ND(0.00084) | ND(0.00084) | ND(0.0042) | ND(0.0038) | ND(0.011) | ND(0.0043) | ND(0.0026) | ND(0.0043) | ND(0.0015) | ND(0.0014) | ND(0.0014) | ND(0.012) | ND(0.0012) | ND(0.0012) | ND(0.0011) | ND(0.00054) |
| | 5/2/05 | 0.0043 | ND(0.0032) | ND(0.0014) | ND(0.001) | ND(0.00088) | ND(0.00086) | ND(0.00086) | ND(0.0043) | ND(0.0039) | ND(0.012) | ND(0.0044) | ND(0.0027) | ND(0.0044) | ND(0.0015) | ND(0.0015) | ND(0.0015) | ND(0.013) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.00055) |
| | 5/3/05 | 0.0056 | ND(0.0033) | ND(0.0014) | ND(0.001) | ND(0.0009) | ND(0.00088) | ND(0.00088) | ND(0.0044) | ND(0.004) | ND(0.012) | ND(0.0046) | ND(0.0027) | ND(0.0046) | ND(0.0015) | ND(0.0015) | ND(0.0015) | ND(0.013) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.00057) |
| | 5/4/05 | 0.0062 | ND(0.0052) | ND(0.0022) | ND(0.0016) | ND(0.0014) | ND(0.0014) | ND(0.0014) | ND(0.0069) | ND(0.0063) | ND(0.019) | ND(0.0072) | ND(0.0043) | ND(0.0072) | ND(0.0024) | ND(0.0024) | ND(0.0024) | ND(0.021) | ND(0.0019) | ND(0.0019) | ND(0.0019) | ND(0.00089) |
| | 5/11/05 | 0.03 | ND(0.0032) | ND(0.0014) | ND(0.001) | ND(0.00088) | ND(0.00086) | ND(0.00086) | ND(0.0043) | ND(0.0039) | ND(0.012) | ND(0.0044) | ND(0.0027) | ND(0.0044) | 0.0043 | ND(0.0015) | ND(0.0015) | ND(0.013) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.00055) |
| | 9/6/05 | 0.024 | 0.0039 | ND(0.0012) | ND(0.00088) | ND(0.00077) | ND(0.00076) | ND(0.00076) | ND(0.0038) | ND(0.0034) | ND(0.01) | ND(0.0039) | ND(0.0023) | ND(0.0039) | ND(0.0013) | ND(0.0013) | ND(0.0013) | ND(0.011) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.00049) |
| | 9/7/05 | 0.017 | ND(0.003) | ND(0.0013) | ND(0.00092) | ND(0.00081) | ND(0.0008) | ND(0.0008) | ND(0.004) | ND(0.0036) | ND(0.011) | ND(0.0041) | ND(0.0025) | ND(0.0041) | ND(0.0014) | ND(0.0014) | ND(0.0014) | ND(0.012) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.00051) |
| | 9/8/05 | 0.053 | 0.01 | ND(0.0012) | ND(0.0009) | ND(0.00079) | ND(0.00078) | ND(0.00078) | ND(0.0039) | ND(0.0035) | ND(0.01) | ND(0.004) | ND(0.0024) | ND(0.004) | ND(0.0014) | ND(0.0013) | ND(0.0013) | ND(0.012) | ND(0.0011) | ND(0.0011) | ND(0.001) | ND(0.0005) |
| | 9/9/05 | 0.016 | ND(0.0062) | ND(0.0027) | ND(0.0019) | ND(0.0017) | ND(0.0017) | ND(0.0017) | ND(0.0084) | ND(0.0076) | ND(0.022) | ND(0.0087) | ND(0.0052) | ND(0.0087) | ND(0.0029) | ND(0.0029) | ND(0.0029) | ND(0.025) | ND(0.0023) | ND(0.0023) | ND(0.0023) | ND(0.0011) |
| | 6/27/06 | 0.022 | ND(0.0025) | ND(0.0011) | ND(0.00079) | ND(0.00069) | ND(0.00068) | ND(0.00068) | ND(0.0034) | ND(0.0031) | ND(0.0091) | ND(0.0035) | ND(0.0021) | ND(0.0035) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.01) | ND(0.00093) | ND(0.00093) | ND(0.00092) | ND(0.00044) |
| | 6/28/06 | 0.011 | ND(0.0038) | ND(0.0016) | ND(0.0012) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.0051) | ND(0.0047) | ND(0.014) | ND(0.0053) | ND(0.0032) | ND(0.0053) | ND(0.0018) | ND(0.0018) | ND(0.0018) | ND(0.015) | ND(0.0014) | ND(0.0014) | ND(0.0014) | ND(0.00066) |
| | 7/5/06 | 0.018 | ND(0.0033) | ND(0.0014) | ND(0.001) | ND(0.0009) | ND(0.00088) | ND(0.00088) | ND(0.0044) | ND(0.004) | ND(0.012) | ND(0.0046) | ND(0.0027) | ND(0.0046) | ND(0.0015) | ND(0.0015) | ND(0.0015) | ND(0.013) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.00057) |
| | 7/6/06 | 0.013 | ND(0.0028) | ND(0.0012) | ND(0.00088) | ND(0.00077) | ND(0.00076) | ND(0.00076) | ND(0.0038) | ND(0.0034) | ND(0.01) | ND(0.0039) | ND(0.0023) | ND(0.0039) | ND(0.0013) | ND(0.0013) | ND(0.0013) | ND(0.011) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.00049) |
| | 7/7/06 | 0.01 | ND(0.0032) | ND(0.0014) | ND(0.001) | ND(0.00088) | ND(0.00086) | ND(0.00086) | ND(0.0043) | ND(0.0039) | ND(0.012) | ND(0.0044) | ND(0.0027) | ND(0.0044) | ND(0.0015) | ND(0.0015) | 0.0029 | ND(0.013) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.00055) |
| | 11/27/06 | 0.024 | 0.0032 J | ND(0.0013) | ND(0.00098) | ND(0.00086) | ND(0.00084) | ND(0.00084) | ND(0.00084) | ND(0.00076) | ND(0.011) | ND(0.0043) | 0.0062 | ND(0.00087) | ND(0.0015) | ND(0.0014) | ND(0.0014) | ND(0.0031) | ND(0.0012) | ND(0.0012) | ND(0.0011) | ND(0.00054) |
| | 11/30/06 | 0.029 | 0.0058 J | ND(0.0012) | ND(0.0009) | ND(0.00079) | ND(0.00078) | ND(0.00078) | ND(0.00078) | ND(0.00071) | ND(0.01) | ND(0.004) | ND(0.0024) | ND(0.0008) | 0.0028 | ND(0.0013) | ND(0.0013) | ND(0.0029) | ND(0.0011) | ND(0.0011) | ND(0.001) | ND(0.0005) |
| | 12/14/06 | 0.0076 | ND(0.00046) | ND(0.00099) | ND(0.00073) | ND(0.00064) | ND(0.00063) | ND(0.00063) | ND(0.00063) | ND(0.00057) | ND(0.0084) | ND(0.0032) | ND(0.0019) | ND(0.00065) | 0.00056 J | ND(0.0011) | ND(0.0011) | ND(0.0023) | ND(0.00086) | ND(0.00086) | ND(0.00085) | ND(0.0004) |
| | 12/15/06 | 0.0053 | ND(0.00045) | ND(0.00096) | ND(0.0007) | ND(0.00062) | ND(0.0006) | ND(0.0006) | ND(0.0006) | ND(0.00055) | ND(0.0081) | ND(0.0031) | ND(0.0019) | ND(0.00062) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.0022) | ND(0.00083) | ND(0.00083) | ND(0.00082) | ND(0.00039) |
| | 12/16/06 | 0.02 J | 0.002 J | ND(0.0012) | ND(0.0009) | ND(0.00079) | ND(0.00078) | ND(0.00078) | ND(0.00078) | ND(0.00071) | ND(0.01) | ND(0.004) | ND(0.0024) | ND(0.0008) | ND(0.0014) | ND(0.0013) | ND(0.0013) | ND(0.0029) | ND(0.0011) | ND(0.0011) | ND(0.001) | ND(0.0005) |
| | 12/16/06 Dup | 0.0045 J | 0.00073 J | ND(0.0012) | ND(0.00084) | ND(0.00074) | ND(0.00072) | ND(0.00072) | ND(0.00072) | ND(0.00066) | ND(0.0098) | ND(0.0037) | ND(0.0022) | ND(0.00075) | ND(0.0013) | ND(0.0012) | ND(0.0012) | ND(0.0027) | ND(0.001) | ND(0.001) | ND(0.00098) | ND(0.00047) |
| | 6/26/07 | 0.03 | 0.0027 | ND(0.0016) | ND(0.0012) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.0009) | ND(0.013) | ND(0.0051) | ND(0.0031) | ND(0.001) | ND(0.0017) | ND(0.0017) | ND(0.0017) | ND(0.0037) | ND(0.0014) | ND(0.0014) | ND(0.0013) | ND(0.00064) |
| | 6/27/07 | 0.014 | 0.0012 | ND(0.0014) | ND(0.001) | ND(0.0009) | ND(0.00088) | ND(0.00088) | ND(0.00088) | ND(0.0008) | ND(0.012) | ND(0.0046) | ND(0.0027) | ND(0.00091) | ND(0.0015) | ND(0.0015) | ND(0.0015) | ND(0.0033) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.00057) |
| | 6/28/07 | 0.019 | 0.0024 | ND(0.0014) | ND(0.001) | ND(0.0009) | ND(0.00088) | ND(0.00088) | ND(0.00088) | ND(0.0008) | ND(0.012) | ND(0.0046) | ND(0.0027) | 0.0016 | ND(0.0015) | ND(0.0015) | ND(0.0015) | ND(0.0033) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.00057) |
| | 7/2/07 | 0.011 | 0.0013 | ND(0.0013) | ND(0.00092) | ND(0.00081) | ND(0.0008) | ND(0.0008) | ND(0.0008) | ND(0.00072) | ND(0.011) | ND(0.0041) | ND(0.0025) | ND(0.00082) | ND(0.0014) | ND(0.0014) | ND(0.0014) | ND(0.003) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.00051) |
| | 7/3/07 | 0.0082 | 0.0012 | ND(0.0012) | ND(0.00088) | ND(0.00077) | ND(0.00076) | ND(0.00076) | ND(0.00076) | ND(0.00069) | ND(0.01) | ND(0.0039) | ND(0.0023) | ND(0.00078) | ND(0.0013) | ND(0.0013) | ND(0.0013) | ND(0.0028) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.00049) |
| FLOAT | 4/18/08 | 0.014 J | 0.0011 J | ND(0.0019) | ND(0.0014) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.0011) | ND(0.016) | ND(0.0063) | 0.0084 J | ND(0.0013) | ND(0.0021) | ND(0.0021) | ND(0.0021) | ND(0.0046) | ND(0.0017) | ND(0.0017) | ND(0.0017) | ND(0.00079) |
| | 4/19/08 | 0.01 J | 0.00082 J | ND(0.0017) | ND(0.0012) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.00096) | ND(0.014) | ND(0.0055) | 0.22 J | ND(0.0011) | ND(0.0019) | ND(0.0018) | ND(0.0018) | ND(0.004) | ND(0.0015) | ND(0.0015) | ND(0.0014) | ND(0.00068) |
| | 4/20/08 | 0.044 J | 0.0051 J | ND(0.0025) | ND(0.0018) | ND(0.0016) | ND(0.0016) | ND(0.0016) | ND(0.0016) | ND(0.0014) | ND(0.021) | ND(0.0082) | ND(0.0049) J | ND(0.0016) | ND(0.0028) | ND(0.0028) | ND(0.0027) | ND(0.0059) | ND(0.0022) | ND(0.0022) | ND(0.0022) | ND(0.001) |
| | 4/21/08 | 0.014 J | 0.0015 J | ND(0.001) | ND(0.00074) | ND(0.00065) | ND(0.00064) | ND(0.00064) | ND(0.00064) | ND(0.00058) | ND(0.0086) | ND(0.0033) | 0.0053 J | ND(0.00066) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0024) | ND(0.00088) | ND(0.00088) | ND(0.00086) | ND(0.00041) |
| | 4/22/08 | 0.023 J | 0.0028 J | ND(0.0011) | ND(0.00082) | ND(0.00072) | ND(0.00071) | ND(0.00071) | ND(0.00071) | ND(0.00064) | ND(0.0095) | ND(0.0037) | 0.008 J | ND(0.00073) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.0026) | ND(0.00098) | ND(0.00098) | ND(0.00096) | ND(0.00046) |
| | 4/23/08 | 0.019 J | 0.004 J | ND(0.0012) | ND(0.00086) | ND(0.00076) | ND(0.00074) | ND(0.00074) | ND(0.00074) | ND(0.00067) | ND(0.01) | ND(0.0038) | 0.0091 J | ND(0.00077) | ND(0.0013) | ND(0.0013) | ND(0.0013) | ND(0.0028) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.00048) |
| | 4/24/08 | 0.009 J | 0.00096 J | ND(0.0014) | ND(0.001) | ND(0.00088) | ND(0.00086) | ND(0.00086) | ND(0.00086) | ND(0.00078) | ND(0.012) | ND(0.0044) | 0.0074 J | ND(0.00089) | ND(0.0015) | ND(0.0015) | ND(0.0015) | ND(0.0032) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.00055) |
| | 4/25/08 | 0.024 J | 0.0019 J | ND(0.0012) | ND(0.00084) | ND(0.00074) | ND(0.00072) | ND(0.00072) | ND(0.00072) | ND(0.00066) | ND(0.0098) | ND(0.0037) | 0.054 J | ND(0.00075) | ND(0.0013) | ND(0.0012) | ND(0.0012) | ND(0.0027) | ND(0.001) | ND(0.001) | ND(0.00098) | ND(0.00047) |
| | 4/25/08 Dup | 0.027 J | 0.0084 J | ND(0.0012) | ND(0.00084) | ND(0.00074) | ND(0.00072) | ND(0.00072) | ND(0.00072) | ND(0.00066) | ND(0.0098) | ND(0.0037) | 0.02 J | ND(0.00075) | ND(0.0013) | ND(0.0012) | ND(0.0012) | ND(0.0027) | ND(0.001) | ND(0.001) | ND(0.00098) | ND(0.00047) |
| | 4/28/08 | 0.006 J | ND(0.00074) J | ND(0.0016) | ND(0.0012) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.0009) | ND(0.013) | ND(0.0051) | ND(0.0031) J | ND(0.001) | ND(0.0017) | ND(0.0017) | ND(0.0017) | ND(0.0037) | ND(0.0014) | ND(0.0014) | ND(0.0013) | ND(0.00064) |

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# TABLE 2-9b. OUTDOOR AIR ANALYTICAL RESULTS SUMMARY, SOLVENT RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Sample ID | Date | Acetone mg/m$^3$ | 2-Butanone mg/m$^3$ | Carbon tetrachloride mg/m$^3$ | Chloro-benzene mg/m$^3$ | 1,1-Dichloro-ethane mg/m$^3$ | 1,1-Dichloro-ethene mg/m$^3$ | cis-1,2-Dichloroethene mg/m$^3$ | trans-1,2-Dichloroethene mg/m$^3$ | 1,4-Dioxane mg/m$^3$ | Hexachloro-butadiene mg/m$^3$ | 2-Hexanone mg/m$^3$ | Isopropanol mg/m$^3$ | 4-Methyl-2-Pentanone mg/m$^3$ | Methylene Chloride mg/m$^3$ | 1,1,2,2-Tetrachloro-ethane mg/m$^3$ | Tetrachloro-ethene mg/m$^3$ | Tetrahydro-furan mg/m$^3$ | 1,1,1-Trichloro-ethane mg/m$^3$ | 1,1,2-Trichloro-ethane mg/m$^3$ | Trichloro-ethene mg/m$^3$ | Vinyl Chloride mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FLOAT | 9/5/08 | 0.028 JB | 0.01 JB | ND(0.00092) | ND(0.00067) | ND(0.00059) | ND(0.00058) | ND(0.00058) | ND(0.00058) | ND(0.00053) | ND(0.0078) | ND(0.003) | 0.082 JB | ND(0.0006) | 0.0032 | ND(0.001) | 0.0027 | ND(0.0022) | ND(0.0008) | ND(0.0008) | ND(0.00078) | ND(0.00037) |
| | 9/6/08 | 0.019 U | 0.0032 U | ND(0.0011) | ND(0.0008) | ND(0.00071) | ND(0.00069) | ND(0.00069) | ND(0.00069) | ND(0.00063) | ND(0.0093) | ND(0.0036) | 0.004 U | ND(0.00072) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.0026) | ND(0.00095) | ND(0.00095) | ND(0.00094) | ND(0.00045) |
| | 9/7/08 | 0.064 JB | 0.015 JB | ND(0.0016) | ND(0.0012) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.0009) | ND(0.013) | ND(0.0051) | 0.0061 U | ND(0.001) | ND(0.0017) | ND(0.0017) | ND(0.0017) | ND(0.0037) | ND(0.0014) | ND(0.0014) | ND(0.0013) | ND(0.00064) |
| | 9/8/08 | 0.0087 U | 0.0012 U | ND(0.0012) | ND(0.00084) | ND(0.00074) | ND(0.00072) | ND(0.00072) | ND(0.00072) | ND(0.00066) | ND(0.0098) | ND(0.0037) | 0.0042 U | ND(0.00075) | ND(0.0013) | ND(0.0012) | ND(0.0012) | ND(0.0027) | ND(0.001) | ND(0.001) | ND(0.00098) | ND(0.00047) |
| | 9/9/08 | 0.01 U | 0.0014 U | ND(0.0013) | ND(0.00092) | ND(0.00081) | ND(0.0008) | ND(0.0008) | ND(0.0008) | ND(0.00072) | ND(0.011) | ND(0.0041) | 0.0048 U | ND(0.00082) | ND(0.0014) | ND(0.0014) | ND(0.0014) | ND(0.003) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.00051) |
| | 9/9/08 Dup | 0.0089 U | 0.0014 U | ND(0.0013) | ND(0.00092) | ND(0.00081) | ND(0.0008) | ND(0.0008) | ND(0.0008) | ND(0.00072) | ND(0.011) | ND(0.0041) | 0.0049 U | ND(0.00082) | ND(0.0014) | ND(0.0014) | ND(0.0014) | ND(0.003) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.00051) |
| | 12/6/08 | 0.0062 JB | 0.0011 J | ND(0.001) | ND(0.00074) | ND(0.00065) | ND(0.00064) | ND(0.00064) | ND(0.00064) | ND(0.00058) | ND(0.0086) | ND(0.0033) | 0.0082 | ND(0.00066) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0024) | ND(0.00088) | ND(0.00088) | ND(0.00086) | ND(0.00041) |
| | 12/7/08 | 0.016 JB | 0.0032 J | ND(0.001) | ND(0.00077) | ND(0.00068) | ND(0.00067) | ND(0.00067) | ND(0.00067) | ND(0.0006) | ND(0.009) | ND(0.0034) | ND(0.0021) | ND(0.00069) | ND(0.0012) | ND(0.0012) | ND(0.0011) | ND(0.0025) | ND(0.00092) | ND(0.00092) | ND(0.0009) | ND(0.00043) |
| | 12/8/08 | 0.021 J | 0.0013 J | ND(0.0011) | ND(0.00082) | ND(0.00072) | ND(0.00071) | ND(0.00071) | ND(0.00071) | ND(0.00064) | ND(0.0095) | ND(0.0037) | ND(0.0022) | ND(0.00073) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.0026) | ND(0.00098) | ND(0.00098) | ND(0.00096) | ND(0.00046) |
| | 12/9/08 | 0.018 JB | 0.0077 J | ND(0.0016) | ND(0.0012) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.00093) | ND(0.014) | ND(0.0053) | 0.01 | ND(0.0011) | ND(0.0018) | ND(0.0018) | ND(0.0018) | ND(0.0038) | ND(0.0014) | ND(0.0014) | ND(0.0014) | ND(0.00066) |
| | 12/10/08 | 0.01 JB | 0.0032 J | ND(0.0011) | ND(0.00079) | ND(0.00069) | ND(0.00068) | ND(0.00068) | ND(0.00068) | ND(0.00062) | ND(0.0091) | ND(0.0035) | 0.0024 | ND(0.0007) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.0025) | ND(0.00093) | ND(0.00093) | ND(0.00092) | ND(0.00044) |
| | 12/11/08 | 0.0065 JB | 0.0026 J | ND(0.0015) | ND(0.0011) | ND(0.00096) | ND(0.00094) | ND(0.00094) | ND(0.00094) | ND(0.00085) | ND(0.012) | ND(0.0048) | ND(0.0029) | ND(0.00097) | ND(0.0016) | ND(0.0016) | ND(0.0016) | ND(0.0035) | ND(0.0013) | ND(0.0013) | ND(0.0013) | ND(0.0006) |
| | 12/12/08 | 0.0096 JB | 0.0021 J | ND(0.0011) | ND(0.00079) | ND(0.00069) | ND(0.00068) | ND(0.00068) | ND(0.00068) | ND(0.00062) | ND(0.0091) | ND(0.0035) | 0.0028 | ND(0.0007) | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.0025) | ND(0.00093) | ND(0.00093) | ND(0.00092) | ND(0.00044) |
| | 12/13/08 | 0.0071 JB | 0.00096 J | ND(0.001) | ND(0.00074) | ND(0.00065) | ND(0.00064) | ND(0.00064) | ND(0.00064) | ND(0.00058) | ND(0.0086) | ND(0.0033) | 0.0036 | ND(0.00066) | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0024) | ND(0.00088) | ND(0.00088) | ND(0.00086) | ND(0.00041) |
| **Average Outdoor Air Concentration** | | 0.0064 | 0.0013 | ND(0.00025) | ND(0.00025) | ND(0.00025) | ND(0.00025) | ND(0.00025) | -- | -- | ND(0.00025) | -- | -- | ND(0.00025) | ND(0.00025) | ND(0.00025) | ND(0.00025) | ND(0.00025) | ND(0.00025) | ND(0.00025) | ND(0.00025) | ND(0.00025) |

**NOTES:**

Average outdoor air concentrations are reported as the 50th percentile values from the *New York State Department of Health Summary of Indoor and Outdoor Levels of Volatile Organic Compounds from Fuel Oil Heated Homes in New York State (1997-2003)*, updated November 14, 2005

**D** – Analyte concentration in the initial dilution exceeded instrument calibration range. The reported value for the qualified analyte is from an analysis run at higher dilution.

**E** – Concentration of analyte exceeded instrument calibration range

**J** – Value is estimated and should be used with consideration or qualitative purposes

**R** – Value has been rejected and should not be used for qualitative or quantitative purposes

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# TABLE 2-9c. OUTDOOR AIR ANALYTICAL RESULTS SUMMARY, WATER TREATMENT RELATED AND OTHER CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Sample ID | Date | Benzyl chloride mg/m$^3$ | Bromo-methane mg/m$^3$ | Carbon Disulfide mg/m$^3$ | Chloro-ethane mg/m$^3$ | Chloro-methane mg/m$^3$ | 1,2-Dichloro-benzene mg/m$^3$ | 1,3-Dichloro-benzene mg/m$^3$ | 1,4-Dichloro-benzene mg/m$^3$ | Dichloro-difluoro-methane mg/m$^3$ | 1,2-Dichloro-propane mg/m$^3$ | cis-1,3-Dichloro-propene mg/m$^3$ | trans-1,3-Dichloro-propene mg/m$^3$ | 1,2-Dichloro-1,1,2,2-tetrafluoro-ethane mg/m$^3$ | Ethanol mg/m$^3$ | 1,1,2-Trichloro-trifluoroethane mg/m$^3$ | 1,2,4-Trichloro-benzene mg/m$^3$ | Trichloro-fluoromethane mg/m$^3$ | Bromo-dichloro-methane mg/m$^3$ | Bromoform mg/m$^3$ | Chloroform mg/m$^3$ | Dibromo-chloro-methane mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OA-VW-18 | 4/10/08 | ND(0.00076) UJ | ND(0.00057) | ND(0.0023) | ND(0.00038) | 0.00077 | ND(0.00088) | ND(0.00088) | ND(0.00088) | 0.0023 | ND(0.00067) | ND(0.00066) | ND(0.00066) | ND(0.001) | 0.0051 J | ND(0.0011) | ND(0.0054) | 0.0011 | ND(0.00098) | ND(0.0015) | ND(0.00071) | ND(0.0012) |
| | 4/10/08 Dup | ND(0.0008) UJ | ND(0.0006) | ND(0.0024) | ND(0.00041) | 0.00083 | ND(0.00093) | ND(0.00093) | ND(0.00093) | 0.0022 | ND(0.00072) | ND(0.0007) | ND(0.0007) | ND(0.0011) | 0.0038 J | ND(0.0012) | ND(0.0058) | 0.0012 | ND(0.001) | ND(0.0016) | ND(0.00076) | ND(0.0013) |
| | 09/25/08 | ND(0.00083) UJ | ND(0.00062) | ND(0.0025) | ND(0.00042) | 0.00066 J | ND(0.00097) | ND(0.00097) | ND(0.00097) | 0.0027 | ND(0.00074) | ND(0.00073) | ND(0.00073) | ND(0.0011) | 0.0047 | ND(0.0012) | ND(0.006) | 0.0013 | ND(0.0011) | ND(0.0017) | ND(0.00079) | ND(0.0014) |
| OA-VW-20 | 4/9/08 | ND(0.00074) | ND(0.00056) | ND(0.0022) | ND(0.00038) | 0.0011 | ND(0.00086) | ND(0.00086) | ND(0.00086) | 0.0023 | ND(0.00066) | ND(0.00065) | ND(0.00065) | ND(0.001) | 0.0027 | ND(0.0011) | ND(0.0053) | 0.00099 | ND(0.00096) | ND(0.0015) | ND(0.0007) | ND(0.0012) |
| | 09/25/08 | ND(0.0009) UJ | ND(0.00068) | ND(0.0027) | ND(0.00046) | 0.00052 J | ND(0.001) | ND(0.001) | ND(0.001) | 0.0024 J | ND(0.00081) | ND(0.00079) | ND(0.00079) | ND(0.0012) | 0.003 J | ND(0.0013) | ND(0.0065) | 0.0012 | ND(0.0012) | ND(0.0018) | ND(0.00085) | ND(0.0015) |
| | 9/25/08 Dup | ND(0.0009) UJ | ND(0.00068) | ND(0.0027) | ND(0.00046) | 0.001 J | ND(0.001) | ND(0.001) | ND(0.001) | 0.0038 J | ND(0.00081) | ND(0.00079) | ND(0.00079) | ND(0.0012) | 0.0056 J | ND(0.0013) | ND(0.0065) | 0.0013 | ND(0.0012) | ND(0.0018) | ND(0.00085) | ND(0.0015) |
| OA-VW-21 | 4/11/08 | ND(0.00073) | ND(0.00055) | ND(0.0022) | ND(0.00037) | 0.00098 | ND(0.00085) | ND(0.00085) | ND(0.00085) | 0.0022 | ND(0.00065) | ND(0.00064) | ND(0.00064) | ND(0.00098) | 0.0032 | ND(0.0011) | ND(0.0052) | 0.001 | ND(0.00094) | ND(0.0014) | ND(0.00069) | ND(0.0012) |
| | 09/24/08 | ND(0.00087) UJ | ND(0.00065) | ND(0.0026) | ND(0.00044) | 0.001 J | ND(0.001) | ND(0.001) | ND(0.001) | 0.0032 | ND(0.00078) | ND(0.00076) | ND(0.00076) | ND(0.0012) | 0.0049 | ND(0.0013) | ND(0.0062) | 0.0015 | ND(0.0011) | ND(0.0017) | ND(0.00082) | ND(0.0014) |
| CHI2-OA2 | 3/22/05 | ND(0.00083) | ND(0.00062) | ND(0.0025) | 0.0011 | 0.0008 | ND(0.00097) | ND(0.00097) | ND(0.00097) | 0.0024 | ND(0.00074) | ND(0.00073) | ND(0.00073) | ND(0.0011) | 0.0037 J | ND(0.0012) | ND(0.006) | 0.0012 | ND(0.0054) | ND(0.0083) | ND(0.00079) | ND(0.0068) |
| | 3/23/05 | ND(0.00082) | ND(0.00061) | ND(0.0025) | ND(0.00042) | ND(0.00033) | ND(0.00095) | ND(0.00095) | ND(0.00095) | 0.0026 | ND(0.00073) | ND(0.00072) | ND(0.00072) | ND(0.0011) | 0.0034 | ND(0.0012) | ND(0.0059) | 0.0011 | ND(0.0053) | ND(0.0082) | ND(0.00077) | ND(0.0067) |
| | 3/24/05 | ND(0.00082) | ND(0.00061) | ND(0.0025) | ND(0.00042) | ND(0.00033) | ND(0.00095) | ND(0.00095) | ND(0.00095) | 0.0025 | ND(0.00073) | ND(0.00072) | ND(0.00072) | ND(0.0011) | 0.0051 | ND(0.0012) | ND(0.0059) | 0.0013 | ND(0.0053) | ND(0.0082) | ND(0.00077) | ND(0.0067) |
| | 3/25/05 | ND(0.00099) | ND(0.00074) | ND(0.003) | ND(0.0005) | 0.001 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0025 | ND(0.00088) | ND(0.00087) | ND(0.00087) | ND(0.0013) | 0.0036 | ND(0.0015) | ND(0.0071) | 0.0012 | ND(0.0064) | ND(0.0099) | ND(0.00093) | ND(0.0081) |
| | 3/26/05 | ND(0.00087) | ND(0.00065) | ND(0.0026) | ND(0.00044) | 0.0016 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0036 | ND(0.00078) | ND(0.00076) | ND(0.00076) | ND(0.0012) | 0.0056 | ND(0.0013) | ND(0.0062) | 0.0018 | ND(0.0056) | ND(0.0087) | ND(0.00082) | ND(0.0072) |
| | 3/28/05 | ND(0.00097) | ND(0.00073) | ND(0.0029) | ND(0.00049) | 0.0011 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0033 | ND(0.00086) | ND(0.00085) | ND(0.00085) | ND(0.0013) | 0.0032 | ND(0.0014) | ND(0.0069) | 0.0017 | ND(0.0063) | ND(0.0097) | ND(0.00091) | ND(0.008) |
| | 3/29/05 | ND(0.00087) | ND(0.00065) | 0.0047 | ND(0.00044) | 0.0012 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0026 | ND(0.00078) | ND(0.00076) | ND(0.00076) | ND(0.0012) | 0.0029 J | ND(0.0013) | ND(0.0062) | 0.0015 | ND(0.0056) | ND(0.0087) | ND(0.00082) | ND(0.0072) |
| | 3/30/05 | ND(0.00093) | ND(0.0007) | ND(0.0028) | ND(0.00047) | 0.00091 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0022 | ND(0.00083) | ND(0.00081) | ND(0.00081) | ND(0.0012) | 0.0023 J | ND(0.0014) | ND(0.0066) | 0.0011 | ND(0.006) | ND(0.0092) | ND(0.00087) | ND(0.0076) |
| | 4/1/05 | ND(0.00087) | ND(0.00065) | ND(0.0026) | ND(0.00044) | 0.0013 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0027 | ND(0.00078) | ND(0.00076) | ND(0.00076) | ND(0.0012) | ND(0.0016) | ND(0.0013) | ND(0.0062) | 0.0014 | ND(0.0056) | ND(0.0087) | ND(0.00082) | ND(0.0072) |
| | 4/2/05 | ND(0.0012) | ND(0.00092) | ND(0.0037) | ND(0.00062) | 0.0011 | ND(0.0014) | ND(0.0014) | ND(0.0014) | 0.0025 | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0016) | 0.0024 J | ND(0.0018) | ND(0.0088) | ND(0.0013) | ND(0.0079) | ND(0.012) | ND(0.0012) | ND(0.01) |
| | 4/4/05 | ND(0.00093) | ND(0.0007) | ND(0.0028) | ND(0.00047) | 0.0013 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0028 | ND(0.00083) | ND(0.00081) | ND(0.00081) | ND(0.0012) | 0.0035 J | ND(0.0014) | ND(0.0066) | 0.0016 | ND(0.006) | ND(0.0092) | ND(0.00087) | ND(0.0076) |
| | 4/4/05 Dup | ND(0.00093) | ND(0.0007) | ND(0.0028) | ND(0.00047) | 0.0011 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0027 | ND(0.00083) | ND(0.00081) | ND(0.00081) | ND(0.0012) | 0.0035 J | ND(0.0014) | ND(0.0066) | 0.0013 | ND(0.006) | ND(0.0092) | ND(0.00087) | ND(0.0076) |
| | 4/5/05 | ND(0.00093) | ND(0.0007) | ND(0.0028) | ND(0.00047) | 0.001 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0026 | ND(0.00083) | ND(0.00081) | ND(0.00081) | ND(0.0012) | 0.0058 J | ND(0.0014) | ND(0.0066) | 0.0014 | ND(0.006) | ND(0.0092) | ND(0.00087) | ND(0.0076) |
| | 4/6/05 | ND(0.00082) | ND(0.00061) | ND(0.0025) | ND(0.00042) | 0.0012 | ND(0.00095) | ND(0.00095) | ND(0.00095) | 0.0032 | ND(0.00073) | ND(0.00072) | ND(0.00072) | ND(0.0011) | 0.0058 J | ND(0.0012) | ND(0.0059) | 0.0017 | ND(0.0053) | ND(0.0082) | ND(0.00077) | ND(0.0067) |
| | 4/7/05 | ND(0.00088) | ND(0.00066) | ND(0.0027) | ND(0.00045) | 0.001 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0026 | ND(0.00079) | ND(0.00078) | ND(0.00078) | ND(0.0012) | 0.0032 J | ND(0.0013) | ND(0.0063) | 0.0016 | ND(0.0057) | ND(0.0088) | ND(0.00083) | ND(0.0073) |
| | 4/8/05 | ND(0.0009) | ND(0.00068) | ND(0.0027) | ND(0.00046) | 0.0014 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0028 | ND(0.00081) | ND(0.00079) | ND(0.00079) | ND(0.0012) | 0.0037 J | ND(0.0013) | ND(0.0065) | 0.0014 | ND(0.0059) | ND(0.009) | ND(0.00085) | ND(0.0074) |
| | 4/9/05 | ND(0.001) | ND(0.00078) | ND(0.0031) | ND(0.00053) | 0.0011 | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.0026 | ND(0.00093) | ND(0.00091) | ND(0.00091) | ND(0.0014) | 0.0024 J | ND(0.0015) | ND(0.0074) | 0.0014 | ND(0.0067) | ND(0.01) | ND(0.00098) | ND(0.0086) |
| | 4/11/05 | ND(0.00093) | ND(0.0007) | ND(0.0028) | ND(0.00047) | 0.0011 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0026 | ND(0.00083) | ND(0.00081) | ND(0.00081) | ND(0.0012) | 0.0032 J | ND(0.0014) | ND(0.0066) | 0.0014 | ND(0.006) | ND(0.0092) | ND(0.00087) | ND(0.0076) |
| | 4/12/05 | ND(0.00087) | ND(0.00065) | 0.022 | ND(0.00044) | 0.0015 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0026 | ND(0.00078) | ND(0.00076) | ND(0.00076) | ND(0.0012) | 0.0038 J | ND(0.0013) | ND(0.0062) | 0.0015 | ND(0.0056) | ND(0.0087) | ND(0.00082) | ND(0.0072) |
| | 4/13/05 | ND(0.0009) | ND(0.00068) | ND(0.0027) | ND(0.00046) | 0.001 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0025 | ND(0.00081) | ND(0.00079) | ND(0.00079) | ND(0.0012) | 0.0046 | ND(0.0013) | ND(0.0065) | 0.0014 | ND(0.0059) | ND(0.009) | ND(0.00085) | ND(0.0074) |
| | 4/14/05 | ND(0.0011) | ND(0.00082) | ND(0.0033) | ND(0.00056) | 0.00099 | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.0026 | ND(0.00098) | ND(0.00096) | ND(0.00096) | ND(0.0015) | 0.0029 | ND(0.0016) | ND(0.0079) | ND(0.0012) | ND(0.0071) | ND(0.011) | ND(0.001) | ND(0.009) |
| | 4/14/05 Dup | ND(0.0009) | ND(0.00068) | ND(0.0027) | ND(0.00046) | 0.0011 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0028 | ND(0.00081) | ND(0.00079) | ND(0.00079) | ND(0.0012) | 0.0034 | ND(0.0013) | ND(0.0065) | 0.0014 | ND(0.0059) | ND(0.009) | ND(0.00085) | ND(0.0074) |
| | 4/15/05 | ND(0.0012) | ND(0.00087) | ND(0.0035) | ND(0.00059) | 0.00096 | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.0024 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.0016) | 0.011 | ND(0.0017) | ND(0.0083) | 0.0013 | ND(0.0075) | ND(0.012) | ND(0.0011) | ND(0.0095) |
| | 5/3/05 | ND(0.0012) | ND(0.00087) | ND(0.0035) | ND(0.00059) | 0.001 | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.0026 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.0016) | 0.0022 | ND(0.0017) | ND(0.0083) | ND(0.0012) | ND(0.0075) | ND(0.012) | ND(0.0011) | ND(0.0095) |
| | 5/4/05 Dup | ND(0.0023) | ND(0.0017) | ND(0.0069) | ND(0.0012) | 0.0011 | ND(0.0027) | ND(0.0027) | ND(0.0027) | 0.0026 | ND(0.002) | ND(0.002) | ND(0.002) | ND(0.0031) | 0.0094 | ND(0.0034) | ND(0.016) | ND(0.0025) | ND(0.015) | ND(0.023) | ND(0.0022) | ND(0.019) |
| | 5/11/05 | ND(0.0011) | ND(0.00082) | ND(0.0033) | ND(0.00056) | 0.001 | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.0029 | ND(0.00098) | ND(0.00096) | ND(0.00096) | ND(0.0015) | 0.0069 J | ND(0.0016) | ND(0.0079) | 0.0018 | ND(0.0071) | ND(0.011) | ND(0.001) | ND(0.009) |
| HOO8-OA1 | 3/22/05 | ND(0.00087) | ND(0.00065) | ND(0.0026) | ND(0.00044) | 0.00082 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0026 | ND(0.00078) | ND(0.00076) | ND(0.00076) | ND(0.0012) | 0.0018 J | ND(0.0013) | ND(0.0062) | 0.0014 | ND(0.0056) | ND(0.0087) | ND(0.00082) | ND(0.0072) |
| | 3/23/05 | ND(0.00083) | ND(0.00062) | ND(0.0025) | ND(0.00042) | ND(0.00033) | ND(0.00097) | ND(0.00097) | ND(0.00097) | 0.0024 | ND(0.00074) | ND(0.00073) | ND(0.00073) | ND(0.0011) | 0.002 | ND(0.0012) | ND(0.006) | 0.0015 | ND(0.0054) | ND(0.0083) | ND(0.00079) | ND(0.0068) |
| | 3/24/05 | ND(0.00087) | ND(0.00065) | ND(0.0026) | ND(0.00044) | 0.001 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0025 | ND(0.00078) | ND(0.00076) | ND(0.00076) | ND(0.0012) | 0.0081 | ND(0.0013) | ND(0.0062) | 0.0013 | ND(0.0056) | ND(0.0087) | ND(0.00082) | ND(0.0072) |
| | 3/25/05 | ND(0.0008) | ND(0.0006) | ND(0.0024) | ND(0.00041) | 0.00096 | ND(0.00093) | ND(0.00093) | ND(0.00093) | 0.0027 | ND(0.00072) | ND(0.0007) | ND(0.0007) | ND(0.0011) | 0.0029 | ND(0.0012) | ND(0.0058) | 0.0013 | ND(0.0052) | ND(0.008) | ND(0.00076) | ND(0.0066) |
| | 3/26/05 | ND(0.00087) | ND(0.00065) | ND(0.0026) | ND(0.00044) | 0.00092 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0029 | ND(0.00078) | ND(0.00076) | ND(0.00076) | ND(0.0012) | 0.002 | ND(0.0013) | ND(0.0062) | 0.0017 | ND(0.0056) | ND(0.0087) | ND(0.00082) | ND(0.0072) |
| | 3/28/05 | ND(0.00093) | ND(0.0007) | ND(0.0028) | ND(0.00047) | 0.001 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0023 | ND(0.00083) | ND(0.00081) | ND(0.00081) | ND(0.0012) | 0.0018 | ND(0.0014) | ND(0.0066) | 0.0014 | ND(0.006) | ND(0.0092) | ND(0.00087) | ND(0.0076) |
| | 3/29/05 | ND(0.0009) | ND(0.00068) | ND(0.0027) | ND(0.00046) | 0.0011 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0027 | ND(0.00081) | ND(0.00079) | ND(0.00079) | ND(0.0012) | 0.0073 J | ND(0.0013) | ND(0.0065) | 0.0017 | ND(0.0059) | ND(0.009) | ND(0.00085) | ND(0.0074) |

US EPA ARCHIVE DOCUMENT

# TABLE 2-9c. OUTDOOR AIR ANALYTICAL RESULTS SUMMARY, WATER TREATMENT RELATED AND OTHER CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Sample ID | Date | Benzyl chloride mg/m$^3$ | Bromo-methane mg/m$^3$ | Carbon Disulfide mg/m$^3$ | Chloro-ethane mg/m$^3$ | Chloro-methane mg/m$^3$ | 1,2-Dichloro-benzene mg/m$^3$ | 1,3-Dichloro-benzene mg/m$^3$ | 1,4-Dichloro-benzene mg/m$^3$ | Dichloro-difluoro-methane mg/m$^3$ | 1,2-Dichloro-propane mg/m$^3$ | cis-1,3-Dichloro-propene mg/m$^3$ | trans-1,3-Dichloro-propene mg/m$^3$ | 1,2-Dichloro-1,1,2,2-tetrafluoro-ethane mg/m$^3$ | Ethanol mg/m$^3$ | 1,1,2-Trichloro-trifluoroethane mg/m$^3$ | 1,2,4-Trichloro-benzene mg/m$^3$ | Trichloro-fluoromethane mg/m$^3$ | Bromo-dichloro-methane mg/m$^3$ | Bromoform mg/m$^3$ | Chloroform mg/m$^3$ | Dibromo-chloro-methane mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HOO8-OA1 | 3/30/05 | ND(0.00093) | ND(0.0007) | ND(0.0028) | ND(0.00047) | 0.0011 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0028 | ND(0.00083) | ND(0.00081) | ND(0.00081) | ND(0.0012) | 0.0055 J | ND(0.0014) | ND(0.0066) | 0.0021 | ND(0.006) | ND(0.0092) | ND(0.00087) | ND(0.0076) |
| | 3/30/05 Dup | ND(0.00073) | ND(0.00055) | ND(0.0022) | ND(0.00037) | 0.0012 | ND(0.00085) | ND(0.00085) | ND(0.00085) | 0.0028 | ND(0.00065) | ND(0.00064) | ND(0.00064) | ND(0.00098) | 0.0044 J | ND(0.0011) | ND(0.0052) | 0.002 | ND(0.0047) | ND(0.0073) | ND(0.00069) | ND(0.006) |
| | 3/31/05 | ND(0.00087) | ND(0.00065) | 0.015 | ND(0.00044) | 0.0011 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0026 | ND(0.00078) | ND(0.00076) | ND(0.00076) | ND(0.0012) | 0.0072 J | ND(0.0013) | ND(0.0062) | 0.0023 | ND(0.0056) | ND(0.0087) | ND(0.00082) | ND(0.0072) |
| | 4/1/05 | ND(0.00095) | ND(0.00071) | ND(0.0028) | ND(0.00048) | 0.0011 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0027 | ND(0.00084) | ND(0.00083) | ND(0.00083) | ND(0.0013) | 0.0027 J | ND(0.0014) | ND(0.0068) | 0.0014 | ND(0.0061) | ND(0.0094) | ND(0.00089) | ND(0.0078) |
| | 4/2/05 | ND(0.0011) | ND(0.0008) | ND(0.0032) | ND(0.00054) | 0.0011 | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.0027 | ND(0.00095) | ND(0.00093) | ND(0.00093) | ND(0.0014) | ND(0.0019) | ND(0.0016) | ND(0.0076) | 0.0012 | ND(0.0069) | ND(0.011) | ND(0.001) | ND(0.0088) |
| | 4/4/05 | ND(0.001) | ND(0.00078) | ND(0.0031) | ND(0.00053) | 0.0012 | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.0027 | ND(0.00093) | ND(0.00091) | ND(0.00091) | ND(0.0014) | 0.0047 J | ND(0.0015) | ND(0.0074) | 0.0013 | ND(0.0067) | ND(0.01) | ND(0.00098) | ND(0.0086) |
| | 4/5/05 | ND(0.00095) | ND(0.00071) | ND(0.0028) | ND(0.00048) | 0.0012 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0032 | ND(0.00084) | ND(0.00083) | ND(0.00083) | ND(0.0013) | 0.0077 J | ND(0.0014) | ND(0.0068) | 0.0029 | ND(0.0061) | ND(0.0094) | ND(0.00089) | ND(0.0078) |
| | 4/6/05 | ND(0.00085) | ND(0.00064) | 0.0031 | ND(0.00043) | 0.0012 | ND(0.00099) | ND(0.00099) | ND(0.00099) | 0.003 | ND(0.00076) | ND(0.00074) | ND(0.00074) | ND(0.0011) | 0.0057 J | ND(0.0012) | ND(0.0061) | 0.0021 | ND(0.0055) | ND(0.0085) | ND(0.0008) | ND(0.007) |
| | 4/7/05 | ND(0.0011) | ND(0.0008) | ND(0.0032) | ND(0.00054) | 0.0014 | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.0027 | ND(0.00095) | ND(0.00093) | ND(0.00093) | ND(0.0014) | 0.0044 J | ND(0.0016) | ND(0.0076) | 0.0018 | ND(0.0069) | ND(0.011) | ND(0.001) | ND(0.0088) |
| | 4/8/05 | ND(0.0009) | ND(0.00068) | 0.021 | ND(0.00046) | 0.0012 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0027 | ND(0.00081) | ND(0.00079) | ND(0.00079) | ND(0.0012) | 0.0024 J | ND(0.0013) | ND(0.0065) | 0.0014 | ND(0.0059) | ND(0.009) | ND(0.00085) | ND(0.0074) |
| | 4/9/05 | ND(0.0011) | ND(0.0008) | ND(0.0032) | ND(0.00054) | 0.0011 | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.0026 | ND(0.00095) | ND(0.00093) | ND(0.00093) | ND(0.0014) | 0.003 J | ND(0.0016) | ND(0.0076) | 0.0014 | ND(0.0069) | ND(0.011) | ND(0.001) | ND(0.0088) |
| | 4/11/05 | ND(0.0011) | ND(0.0008) | ND(0.0032) | ND(0.00054) | 0.0012 | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.0025 | ND(0.00095) | ND(0.00093) | ND(0.00093) | ND(0.0014) | 0.0077 J | ND(0.0016) | ND(0.0076) | 0.0016 | ND(0.0069) | ND(0.011) | ND(0.001) | ND(0.0088) |
| | 4/13/05 | ND(0.00087) | ND(0.00065) | ND(0.0026) | ND(0.00044) | 0.0011 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0028 | ND(0.00078) | ND(0.00076) | ND(0.00076) | ND(0.0012) | 0.0033 J | ND(0.0013) | ND(0.0062) | 0.0016 | ND(0.0056) | ND(0.0087) | ND(0.00082) | ND(0.0072) |
| | 4/13/05 Dup | ND(0.00095) | ND(0.00071) | ND(0.0028) | ND(0.00048) | 0.001 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0026 | ND(0.00084) | ND(0.00083) | ND(0.00083) | ND(0.0013) | 0.012 J | ND(0.0014) | ND(0.0068) | 0.0013 | ND(0.0061) | ND(0.0094) | ND(0.00089) | ND(0.0078) |
| | 4/14/05 | ND(0.00088) | ND(0.00066) | ND(0.0027) | ND(0.00045) | 0.001 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0026 | ND(0.00079) | ND(0.00078) | ND(0.00078) | ND(0.0012) | 0.003 | ND(0.0013) | ND(0.0063) | 0.0014 | ND(0.0057) | ND(0.0088) | ND(0.00083) | ND(0.0073) |
| | 4/15/05 | ND(0.0012) | ND(0.00089) | ND(0.0036) | ND(0.00061) | 0.001 | ND(0.0014) | ND(0.0014) | ND(0.0014) | 0.0025 | ND(0.0011) | ND(0.001) | ND(0.001) | ND(0.0016) | 0.0028 | ND(0.0018) | ND(0.0085) | 0.0013 | ND(0.0077) | ND(0.012) | ND(0.0011) | ND(0.0098) |
| | 5/3/05 | ND(0.0012) | ND(0.00089) | ND(0.0036) | ND(0.00061) | 0.00092 | ND(0.0014) | ND(0.0014) | ND(0.0014) | 0.0023 | ND(0.0011) | ND(0.001) | ND(0.001) | ND(0.0016) | 0.0024 | ND(0.0018) | ND(0.0085) | 0.0013 | ND(0.0077) | ND(0.012) | ND(0.0011) | ND(0.0098) |
| | 5/11/05 | ND(0.0011) | ND(0.00084) | ND(0.0034) | ND(0.00057) | 0.0011 | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.0031 | ND(0.001) | ND(0.00098) | ND(0.00098) | ND(0.0015) | 0.014 J | ND(0.0017) | ND(0.008) | 0.003 | ND(0.0073) | ND(0.011) | ND(0.001) | ND(0.0092) |
| FIXED | 4/18/08 | ND(0.0011) J | ND(0.0008) | ND(0.0032) | ND(0.00054) | 0.0014 J | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.0026 | ND(0.00095) | ND(0.00093) | ND(0.00093) | ND(0.0014) | 0.0069 | ND(0.0016) | ND(0.0076) | 0.0029 | ND(0.0014) | ND(0.0021) | ND(0.001) | ND(0.0018) |
| | 4/19/08 | ND(0.0011) J | ND(0.00084) | ND(0.0034) | ND(0.00057) | 0.0016 J | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.0024 | ND(0.001) | ND(0.00098) | ND(0.00098) | ND(0.0015) | 0.011 | ND(0.0017) | ND(0.008) | 0.0017 | ND(0.0014) | ND(0.0022) | ND(0.001) | ND(0.0018) |
| | 4/20/08 | ND(0.0011) J | 0.0033 | ND(0.0033) | ND(0.00056) | 0.0016 J | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.0026 | ND(0.00098) | ND(0.00096) | ND(0.00096) | ND(0.0015) | 0.015 | ND(0.0016) | ND(0.0079) | 0.0015 | ND(0.0014) | 0.0064 | ND(0.001) | ND(0.0018) |
| | 4/22/08 | ND(0.0009) J | ND(0.00068) | ND(0.0027) | ND(0.00046) | 0.0017 J | ND(0.001) | ND(0.001) | ND(0.001) | 0.0032 | ND(0.00081) | ND(0.00079) | ND(0.00079) | ND(0.0012) | 0.0063 | ND(0.0013) | ND(0.0065) | 0.0018 | ND(0.0012) | ND(0.0018) | ND(0.00085) | ND(0.0015) |
| | 4/23/08 | ND(0.0008) J | ND(0.0006) | ND(0.0024) | ND(0.00041) | 0.0014 J | ND(0.00093) | ND(0.00093) | ND(0.00093) | 0.0031 | ND(0.00072) | ND(0.0007) | ND(0.0007) | ND(0.0011) | 0.0045 | ND(0.0012) | ND(0.0058) | 0.0023 | ND(0.001) | ND(0.0016) | ND(0.00076) | ND(0.0013) |
| | 4/24/08 | ND(0.001) J | ND(0.00076) | ND(0.003) | ND(0.00052) | 0.0016 J | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.003 | ND(0.0009) | ND(0.00089) | ND(0.00089) | ND(0.0014) | 0.0043 | ND(0.0015) | ND(0.0073) | 0.0013 | ND(0.0013) | ND(0.002) | ND(0.00096) | ND(0.0017) |
| | 4/25/08 | ND(0.00093) J | ND(0.0007) | ND(0.0028) | ND(0.00047) | 0.001 J | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0028 | ND(0.00083) | ND(0.00081) | ND(0.00081) | ND(0.0012) | 0.0054 | ND(0.0014) | ND(0.0066) | 0.0094 | ND(0.0012) | ND(0.0018) | ND(0.00087) | ND(0.0015) |
| | 4/25/08 Dup | ND(0.00079) J | ND(0.00059) | ND(0.0024) | ND(0.0004) | 0.0012 J | ND(0.00091) | ND(0.00091) | ND(0.00091) | 0.0024 | ND(0.0007) | ND(0.00069) | ND(0.00069) | ND(0.0011) | 0.0052 | ND(0.0012) | ND(0.0056) | 0.0088 | ND(0.001) | ND(0.0016) | ND(0.00074) | ND(0.0013) |
| | 4/28/08 | ND(0.0017) J | ND(0.0013) | ND(0.0052) | ND(0.00088) | 0.0014 J | ND(0.002) | ND(0.002) | ND(0.002) | 0.0032 | ND(0.0015) | ND(0.0015) | ND(0.0015) | ND(0.0023) | 0.0071 | ND(0.0026) | ND(0.012) | ND(0.0019) | ND(0.0022) | ND(0.0035) | ND(0.0016) | ND(0.0028) |
| | 12/6/08 | ND(0.00082) | ND(0.00061) | ND(0.0025) | ND(0.00042) | 0.001 | ND(0.00095) | ND(0.00095) | ND(0.00095) | 0.0032 | ND(0.00073) | ND(0.00072) | ND(0.00072) | ND(0.0011) | 0.0048 J | ND(0.0012) | ND(0.0059) | 0.0021 | ND(0.001) | ND(0.0016) | ND(0.00077) | ND(0.0013) |
| | 12/6/08 Dup | ND(0.00083) | ND(0.00062) | ND(0.0025) | ND(0.00042) | 0.00091 | ND(0.00097) | ND(0.00097) | ND(0.00097) | 0.0031 | ND(0.00074) | ND(0.00073) | ND(0.00073) | ND(0.0011) | 0.0035 J | ND(0.0012) | ND(0.006) | 0.0023 | ND(0.0011) | ND(0.0017) | ND(0.00079) | ND(0.0014) |
| | 12/7/08 | ND(0.00083) | ND(0.00062) | ND(0.0025) | ND(0.00042) | 0.0013 | ND(0.00097) | ND(0.00097) | ND(0.00097) | 0.0031 | ND(0.00074) | ND(0.00073) | ND(0.00073) | ND(0.0011) | 0.0037 | ND(0.0012) | ND(0.006) | 0.0021 | ND(0.0011) | ND(0.0017) | ND(0.00079) | ND(0.0014) |
| | 12/8/08 | ND(0.00067) | ND(0.0005) | ND(0.002) | ND(0.00034) | 0.001 | ND(0.00078) | ND(0.00078) | ND(0.00078) | 0.003 | ND(0.0006) | ND(0.00058) | ND(0.00058) | ND(0.0009) | 0.0044 | ND(0.00099) | ND(0.0048) | 0.0024 | ND(0.00086) | ND(0.0013) | ND(0.00063) | ND(0.0011) |
| | 12/9/08 | ND(0.0023) | ND(0.0017) | ND(0.007) | ND(0.0012) | 0.0017 | ND(0.0027) | ND(0.0027) | ND(0.0027) | 0.0025 | ND(0.0021) | ND(0.002) | ND(0.002) | ND(0.0031) | 0.054 | ND(0.0034) | ND(0.016) | 0.0032 | ND(0.003) | ND(0.0046) | ND(0.0022) | ND(0.0038) |
| | 12/10/08 | ND(0.00085) | ND(0.00064) | ND(0.0026) | ND(0.00043) | 0.001 | ND(0.00099) | ND(0.00099) | ND(0.00099) | 0.0028 | ND(0.00076) | ND(0.00074) | ND(0.00074) | ND(0.0011) | 0.0061 | ND(0.0012) | ND(0.0061) | 0.0019 | ND(0.0011) | ND(0.0017) | ND(0.0008) | ND(0.0014) |
| | 12/11/08 | ND(0.00085) | ND(0.00064) | ND(0.0026) | ND(0.00043) | 0.0012 | ND(0.00099) | ND(0.00099) | ND(0.00099) | 0.0031 | ND(0.00076) | ND(0.00074) | ND(0.00074) | ND(0.0011) | 0.0036 | ND(0.0012) | ND(0.0061) | 0.0021 | ND(0.0011) | ND(0.0017) | ND(0.0008) | ND(0.0014) |
| | 12/12/08 | ND(0.0012) | ND(0.00092) | 0.024 J | ND(0.00062) | 0.00093 | ND(0.0014) | ND(0.0014) | ND(0.0014) | 0.0031 | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0016) | 0.0035 | ND(0.0018) | ND(0.0088) | 0.0022 | ND(0.0016) | ND(0.0024) | ND(0.0012) | ND(0.002) |
| | 12/12/08 Dup | ND(0.0012) | ND(0.00092) | ND(0.0037) UJ | ND(0.00062) | 0.00089 | ND(0.0014) | ND(0.0014) | ND(0.0014) | 0.003 | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0016) | 0.0028 | ND(0.0018) | ND(0.0088) | 0.002 | ND(0.0016) | ND(0.0024) | ND(0.0012) | ND(0.002) |
| | 12/13/2008 | ND(0.001) | ND(0.00076) | ND(0.003) | ND(0.00052) | 0.00093 | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.0032 | ND(0.0009) | ND(0.00089) | ND(0.00089) | ND(0.0014) | 0.01 | ND(0.0015) | ND(0.0073) | ND(0.0011) | ND(0.0013) | ND(0.002) | ND(0.00096) | ND(0.0017) |
| Float-OA3 | 3/22/05 | ND(0.00087) | ND(0.00065) | ND(0.0026) | ND(0.00044) | 0.00086 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0024 | ND(0.00078) | ND(0.00076) | ND(0.00076) | ND(0.0012) | 0.002 J | ND(0.0013) | ND(0.0062) | 0.0012 | ND(0.0056) | ND(0.0087) | ND(0.00082) | ND(0.0072) |
| | 3/23/05 | ND(0.00095) | ND(0.00071) | ND(0.0028) | ND(0.00048) | 0.0011 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0027 | ND(0.00084) | ND(0.00083) | ND(0.00083) | ND(0.0013) | 0.0018 | ND(0.0014) | ND(0.0068) | 0.0013 | ND(0.0061) | ND(0.0094) | ND(0.00089) | ND(0.0078) |
| | 3/24/05 | ND(0.0011) | ND(0.00084) | ND(0.0034) | ND(0.00057) | 0.001 | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.0022 | ND(0.001) | ND(0.00098) | ND(0.00098) | ND(0.0015) | 0.0027 | ND(0.0017) | ND(0.008) | 0.0016 | ND(0.0073) | ND(0.011) | ND(0.001) | ND(0.0092) |
| | 3/25/05 | ND(0.00099) | ND(0.00074) | ND(0.003) | ND(0.0005) | 0.00069 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0026 | ND(0.00088) | ND(0.00087) | ND(0.00087) | ND(0.0013) | 0.0061 | ND(0.0015) | ND(0.0071) | 0.0013 | ND(0.0064) | ND(0.0099) | ND(0.00093) | ND(0.0081) |
| | 3/26/05 | ND(0.00088) | ND(0.00066) | ND(0.0027) | 0.0014 J | 0.0011 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0033 | ND(0.00079) | ND(0.00078) | ND(0.00078) | ND(0.0012) | 0.0038 J | ND(0.0013) | ND(0.0063) | 0.0015 | ND(0.0057) | ND(0.0088) | ND(0.00083) | ND(0.0073) |
| | 3/28/05 | ND(0.001) | ND(0.00078) | ND(0.0031) | ND(0.00053) | 0.00089 | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.0022 | ND(0.00093) | ND(0.00091) | ND(0.00091) | ND(0.0014) | 0.003 | ND(0.0015) | ND(0.0074) | 0.0013 | ND(0.0067) | ND(0.01) | ND(0.00098) | ND(0.0086) |
| | 3/29/05 | ND(0.0012) | ND(0.00089) | ND(0.0036) | ND(0.00061) | 0.0018 | ND(0.0014) | ND(0.0014) | ND(0.0014) | 0.0026 | ND(0.0011) | ND(0.001) | ND(0.001) | ND(0.0016) | 0.0032 J | ND(0.0018) | ND(0.0085) | 0.0017 | ND(0.0077) | ND(0.012) | ND(0.0011) | ND(0.0098) |
| | 3/30/05 | ND(0.00093) | ND(0.0007) | 0.005 | ND(0.00047) | 0.00099 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0021 | ND(0.00083) | ND(0.00081) | ND(0.00081) | ND(0.0012) | 0.0032 J | ND(0.0014) | ND(0.0066) | 0.0011 | ND(0.006) | ND(0.0092) | ND(0.00087) | ND(0.0076) |

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# TABLE 2-9c. OUTDOOR AIR ANALYTICAL RESULTS SUMMARY, WATER TREATMENT RELATED AND OTHER CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Sample ID | Date | Benzyl chloride mg/m$^3$ | Bromo-methane mg/m$^3$ | Carbon Disulfide mg/m$^3$ | Chloro-ethane mg/m$^3$ | Chloro-methane mg/m$^3$ | 1,2-Dichloro-benzene mg/m$^3$ | 1,3-Dichloro-benzene mg/m$^3$ | 1,4-Dichloro-benzene mg/m$^3$ | Dichloro-difluoro-methane mg/m$^3$ | 1,2-Dichloro-propane mg/m$^3$ | cis-1,3-Dichloro-propene mg/m$^3$ | trans-1,3-Dichloro-propene mg/m$^3$ | 1,2-Dichloro-1,1,2,2-tetrafluoro-ethane mg/m$^3$ | Ethanol mg/m$^3$ | 1,1,2-Trichloro-trifluoroethane mg/m$^3$ | 1,2,4-Trichloro-benzene mg/m$^3$ | Trichloro-fluoromethane mg/m$^3$ | Bromo-dichloro-methane mg/m$^3$ | Bromoform mg/m$^3$ | Chloroform mg/m$^3$ | Dibromo-chloro-methane mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Float-OA3 | 4/2/05 | ND(0.0013) | 0.0093 | ND(0.0039) | ND(0.00066) | 0.0012 | ND(0.0015) | ND(0.0015) | ND(0.0015) | 0.0026 | ND(0.0012) | ND(0.0011) | ND(0.0011) | ND(0.0018) | ND(0.0024) | ND(0.0019) | ND(0.0093) | ND(0.0014) | ND(0.0084) | ND(0.013) | ND(0.0012) | ND(0.011) |
| | 4/4/05 | ND(0.0013) | ND(0.00095) | ND(0.0038) | ND(0.00064) | 0.0011 | ND(0.0015) | ND(0.0015) | ND(0.0015) | 0.0029 | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0017) | 0.007 J | ND(0.0019) | ND(0.009) | 0.0016 | ND(0.0082) | ND(0.013) | ND(0.0012) | ND(0.01) |
| | 4/5/05 | ND(0.0026) | ND(0.002) | ND(0.0078) | ND(0.0013) | 0.0012 | ND(0.003) | ND(0.003) | ND(0.003) | 0.0024 J | ND(0.0023) | ND(0.0023) | ND(0.0023) | ND(0.0035) | 0.0069 J | ND(0.0038) | ND(0.019) | ND(0.0028) | ND(0.017) | ND(0.026) | ND(0.0024) | ND(0.021) |
| | 4/6/05 | ND(0.00099) | ND(0.00074) | 0.0048 | ND(0.0005) | 0.0012 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0027 | ND(0.00088) | ND(0.00087) | ND(0.00087) | ND(0.0013) | 0.0049 J | ND(0.0015) | ND(0.0071) | 0.0017 | ND(0.0064) | ND(0.0099) | ND(0.00093) | ND(0.0081) |
| | 4/7/05 | ND(0.00093) | ND(0.0007) | ND(0.0028) | ND(0.00047) | 0.0012 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0026 | ND(0.00083) | ND(0.00081) | ND(0.00081) | ND(0.0012) | 0.0053 J | ND(0.0014) | ND(0.0066) | 0.0017 | ND(0.006) | ND(0.0092) | ND(0.00087) | ND(0.0076) |
| | 4/8/05 | ND(0.0011) | ND(0.00082) | ND(0.0033) | ND(0.00056) | 0.0015 | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.003 | ND(0.00098) | ND(0.00096) | ND(0.00096) | ND(0.0015) | 0.0035 J | ND(0.0016) | ND(0.0079) | 0.0015 | ND(0.0071) | ND(0.011) | ND(0.001) | ND(0.009) |
| | 4/9/05 | ND(0.0011) | ND(0.0008) | ND(0.0032) | ND(0.00054) | 0.0011 | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.0028 | ND(0.00095) | ND(0.00093) | ND(0.00093) | ND(0.0014) | 0.0073 J | ND(0.0016) | ND(0.0076) | 0.0014 | ND(0.0069) | ND(0.011) | ND(0.001) | ND(0.0088) |
| | 4/9/05 Dup | ND(0.001) | ND(0.00076) | ND(0.003) | ND(0.00052) | 0.0011 | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.0027 | ND(0.0009) | ND(0.00089) | ND(0.00089) | ND(0.0014) | 0.0051 J | ND(0.0015) | ND(0.0073) | 0.0015 | ND(0.0066) | ND(0.01) | ND(0.00096) | ND(0.0083) |
| | 4/11/05 | ND(0.0012) | ND(0.00092) | ND(0.0037) | ND(0.00062) | 0.0011 | ND(0.0014) | ND(0.0014) | ND(0.0014) | 0.0026 | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0016) | 0.0057 J | ND(0.0018) | ND(0.0088) | 0.0015 | ND(0.0079) | ND(0.012) | ND(0.0012) | ND(0.01) |
| | 4/12/05 | ND(0.0012) | ND(0.00087) | ND(0.0035) | ND(0.00059) | 0.0015 | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.003 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.0016) | 0.0037 J | ND(0.0017) | ND(0.0083) | 0.0015 | ND(0.0075) | ND(0.012) | ND(0.0011) | ND(0.0095) |
| | 4/13/05 | ND(0.001) | ND(0.00078) | ND(0.0031) | ND(0.00053) | 0.001 | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.0026 | ND(0.00093) | ND(0.00091) | ND(0.00091) | ND(0.0014) | 0.0034 | ND(0.0015) | ND(0.0074) | 0.0014 | ND(0.0067) | ND(0.01) | ND(0.00098) | ND(0.0086) |
| | 4/14/05 | ND(0.002) | ND(0.0015) | ND(0.006) | ND(0.001) | 0.0012 | ND(0.0023) | ND(0.0023) | ND(0.0023) | 0.0024 | ND(0.0018) | ND(0.0017) | ND(0.0017) | ND(0.0027) | 0.0065 | ND(0.0029) | ND(0.014) | ND(0.0022) | ND(0.013) | ND(0.02) | ND(0.0019) | ND(0.016) |
| | 4/15/05 | ND(0.0011) | ND(0.00082) | ND(0.0033) | ND(0.00056) | 0.0018 | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.0026 | ND(0.00098) | ND(0.00096) | ND(0.00096) | ND(0.0015) | 0.0072 | ND(0.0016) | ND(0.0079) | 0.0015 | ND(0.0071) | ND(0.011) | ND(0.001) | ND(0.009) |
| | 5/2/05 | ND(0.0011) | ND(0.00084) | ND(0.0034) | ND(0.00057) | 0.00089 | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.0024 | ND(0.001) | ND(0.00098) | ND(0.00098) | ND(0.0015) | 0.0026 | ND(0.0017) | ND(0.008) | 0.0013 | ND(0.0073) | ND(0.011) | ND(0.001) | ND(0.0092) |
| | 5/3/05 | ND(0.0012) | ND(0.00087) | ND(0.0035) | ND(0.00059) | 0.00099 | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.0024 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.0016) | 0.0027 | ND(0.0017) | ND(0.0083) | ND(0.0012) | ND(0.0075) | ND(0.012) | ND(0.0011) | ND(0.0095) |
| | 5/4/05 | ND(0.0018) | ND(0.0014) | ND(0.0054) | ND(0.00092) | 0.001 | ND(0.0021) | ND(0.0021) | ND(0.0021) | 0.0024 | ND(0.0016) | ND(0.0016) | ND(0.0016) | ND(0.0024) | 0.008 | ND(0.0027) | ND(0.013) | ND(0.002) | ND(0.012) | ND(0.018) | ND(0.0017) | ND(0.015) |
| | 5/11/05 | ND(0.0011) | ND(0.00084) | ND(0.0034) | ND(0.00057) | 0.001 | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.0028 | ND(0.001) | ND(0.00098) | ND(0.00098) | ND(0.0015) | 0.016 J | ND(0.0017) | ND(0.008) | 0.0019 | ND(0.0073) | ND(0.011) | ND(0.001) | ND(0.0092) |
| | 9/6/05 | ND(0.00099) | ND(0.00074) | ND(0.003) | ND(0.0005) | 0.0011 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0022 | ND(0.00088) | ND(0.00087) | ND(0.00087) | ND(0.0013) | 0.0067 | ND(0.0015) | ND(0.0071) | 0.0017 | ND(0.0064) | ND(0.0099) | ND(0.00093) | ND(0.0081) |
| | 9/7/05 | ND(0.001) | ND(0.00078) | ND(0.0031) | ND(0.00053) | 0.0011 | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.0032 | ND(0.00093) | ND(0.00091) | ND(0.00091) | ND(0.0014) | 0.005 | ND(0.0015) | ND(0.0074) | 0.002 | ND(0.0067) | ND(0.01) | ND(0.00098) | ND(0.0086) |
| | 9/8/05 | ND(0.001) | ND(0.00076) | ND(0.003) | ND(0.00052) | 0.0011 | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.0052 | ND(0.0009) | ND(0.00089) | ND(0.00089) | ND(0.0014) | 0.0068 | ND(0.0015) | ND(0.0073) | 0.011 | ND(0.0066) | ND(0.01) | ND(0.00096) | ND(0.0083) |
| | 9/9/05 | ND(0.0022) | ND(0.0016) | ND(0.0066) | ND(0.0011) | 0.0011 | ND(0.0025) | ND(0.0025) | ND(0.0025) | 0.003 | ND(0.002) | ND(0.0019) | ND(0.0019) | ND(0.003) | 0.0078 | ND(0.0032) | ND(0.016) | ND(0.0024) | ND(0.014) | ND(0.022) | ND(0.0021) | ND(0.018) |
| | 6/27/06 | ND(0.00088) | ND(0.00066) | ND(0.0027) | ND(0.00045) | 0.0013 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0024 | ND(0.00079) | ND(0.00078) | ND(0.00078) | ND(0.0012) | 0.0045 | ND(0.0013) | ND(0.0063) | 0.0015 | ND(0.0057) | ND(0.0088) | ND(0.00083) | ND(0.0073) |
| | 6/28/06 | ND(0.0013) | ND(0.001) | ND(0.004) | ND(0.00068) | 0.0011 | ND(0.0016) | ND(0.0016) | ND(0.0016) | 0.0023 | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.0018) | 0.0042 | ND(0.002) | ND(0.0096) | 0.0016 | ND(0.0087) | ND(0.013) | ND(0.0013) | ND(0.011) |
| | 7/5/06 | ND(0.0012) | ND(0.00087) | ND(0.0035) | ND(0.00059) | 0.0013 | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.0031 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.0016) | 0.007 | ND(0.0017) | ND(0.0083) | 0.0015 | ND(0.0075) | ND(0.012) | ND(0.0011) | ND(0.0095) |
| | 7/6/06 | ND(0.00099) | ND(0.00074) | ND(0.003) | ND(0.0005) | 0.0012 | ND(0.0011) | ND(0.0011) | 0.0019 | 0.0028 | ND(0.00088) | ND(0.00087) | ND(0.00087) | ND(0.0013) | 0.0022 | ND(0.0015) | ND(0.0071) | 0.0015 | ND(0.0064) | ND(0.0099) | ND(0.00093) | ND(0.0081) |
| | 7/7/06 | ND(0.0011) | ND(0.00084) | ND(0.0034) | ND(0.00057) | 0.0014 | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.0025 | ND(0.001) | ND(0.00098) | ND(0.00098) | ND(0.0015) | 0.0045 | ND(0.0017) | ND(0.008) | 0.0017 | ND(0.0073) | ND(0.011) | ND(0.001) | ND(0.0092) |
| | 11/27/06 | ND(0.0011) | ND(0.00082) | ND(0.0033) | ND(0.00056) | 0.0011 | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.0034 | ND(0.00098) | ND(0.00096) | ND(0.00096) | ND(0.0015) | 0.018 | ND(0.0016) | ND(0.0079) | 0.0021 | ND(0.0014) | ND(0.0022) | ND(0.001) | ND(0.0018) |
| | 11/30/06 | ND(0.001) | 0.00073 J | 0.068 | ND(0.00052) | 0.0014 | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.0026 | ND(0.0009) | ND(0.00089) | ND(0.00089) | ND(0.0014) | 0.0059 | ND(0.0015) | ND(0.0073) | 0.0015 | ND(0.0013) | ND(0.002) | ND(0.00096) | ND(0.0017) |
| | 12/14/06 | ND(0.00082) | ND(0.00061) | ND(0.0025) | ND(0.00042) | 0.0012 | ND(0.00095) | ND(0.00095) | ND(0.00095) | 0.003 | ND(0.00073) | ND(0.00072) | ND(0.00072) | ND(0.0011) | 0.0045 | ND(0.0012) | ND(0.0059) | 0.0016 | ND(0.001) | ND(0.0016) | ND(0.00077) | ND(0.0013) |
| | 12/15/06 | ND(0.00079) | ND(0.00059) | ND(0.0024) | ND(0.0004) | 0.0012 | ND(0.00091) | ND(0.00091) | ND(0.00091) | 0.0019 | ND(0.0007) | ND(0.00069) | ND(0.00069) | ND(0.0011) | 0.0092 | ND(0.0012) | ND(0.0056) | 0.0018 | ND(0.001) | ND(0.0016) | ND(0.00074) | ND(0.0013) |
| | 12/16/06 | ND(0.001) | ND(0.00076) | ND(0.003) | ND(0.00052) | 0.0012 | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.0033 | ND(0.0009) | ND(0.00089) | ND(0.00089) | ND(0.0014) | 0.0046 | ND(0.0015) | ND(0.0073) | 0.0022 | ND(0.0013) | ND(0.002) | ND(0.00096) | ND(0.0017) |
| | 12/16/06 Dup | ND(0.00095) | ND(0.00071) | ND(0.0028) | ND(0.00048) | 0.0011 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0036 | ND(0.00084) | ND(0.00083) | ND(0.00083) | ND(0.0013) | 0.0046 | ND(0.0014) | ND(0.0068) | 0.002 | ND(0.0012) | ND(0.0019) | ND(0.00089) | ND(0.0016) |
| | 6/26/07 | ND(0.0013) | ND(0.00097) | ND(0.0039) | ND(0.00066) | 0.0012 | ND(0.0015) | ND(0.0015) | ND(0.0015) | 0.0022 | ND(0.0012) | ND(0.0011) | ND(0.0011) | ND(0.0018) | 0.0079 | ND(0.0019) | ND(0.0093) | ND(0.0014) | ND(0.0017) | ND(0.0026) | ND(0.0012) | ND(0.0021) |
| | 6/27/07 | ND(0.0012) | ND(0.00087) | ND(0.0035) | ND(0.00059) | 0.0012 | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.0021 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.0016) | 0.012 | ND(0.0017) | ND(0.0083) | ND(0.0012) | ND(0.0015) | ND(0.0023) | ND(0.0011) | ND(0.0019) |
| | 6/28/07 | ND(0.0012) | ND(0.00087) | 0.032 | ND(0.00059) | 0.0011 | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.0022 | ND(0.001) | ND(0.001) | ND(0.001) | ND(0.0016) | 0.0066 | ND(0.0017) | ND(0.0083) | ND(0.0012) | ND(0.0015) | ND(0.0023) | ND(0.0011) | ND(0.0019) |
| | 7/2/07 | ND(0.001) | ND(0.00078) | ND(0.0031) | ND(0.00053) | 0.00095 | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.0022 | ND(0.00093) | ND(0.00091) | ND(0.00091) | ND(0.0014) | 0.0054 | ND(0.0015) | ND(0.0074) | 0.0012 | ND(0.0013) | ND(0.0021) | ND(0.00098) | ND(0.0017) |
| | 7/3/07 | ND(0.00099) | ND(0.00074) | ND(0.003) | ND(0.0005) | 0.001 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0023 | ND(0.00088) | ND(0.00087) | ND(0.00087) | ND(0.0013) | 0.0059 | ND(0.0015) | ND(0.0071) | 0.0014 | ND(0.0013) | ND(0.002) | ND(0.00093) | ND(0.0016) |
| FLOAT | 4/18/08 | ND(0.0016) J | ND(0.0012) | ND(0.0048) | ND(0.00082) | 0.0015 J | ND(0.0018) | ND(0.0018) | ND(0.0018) | 0.0028 | ND(0.0014) | ND(0.0014) | ND(0.0014) | ND(0.0022) | 0.0071 | ND(0.0024) | ND(0.011) | ND(0.0017) | ND(0.0021) | ND(0.0032) | ND(0.0015) | ND(0.0026) |
| | 4/19/08 | ND(0.0014) J | ND(0.001) | ND(0.0042) | ND(0.00071) | 0.0012 J | ND(0.0016) | ND(0.0016) | ND(0.0016) | 0.0022 | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.0019) | 0.0058 | ND(0.002) | ND(0.0099) | 0.0019 | ND(0.0018) | ND(0.0028) | ND(0.0013) | ND(0.0023) |
| | 4/20/08 | ND(0.0021) J | ND(0.0016) | ND(0.0062) | ND(0.0011) | 0.0013 J | ND(0.0024) | ND(0.0024) | ND(0.0024) | 0.0032 | ND(0.0018) | ND(0.0018) | ND(0.0018) | ND(0.0028) | 0.0096 | ND(0.0031) | ND(0.015) | ND(0.0022) | ND(0.0027) | ND(0.0042) | ND(0.002) | ND(0.0034) |
| | 4/21/08 | ND(0.00083) J | ND(0.00062) | ND(0.0025) | ND(0.00042) | 0.0013 J | ND(0.00097) | ND(0.00097) | ND(0.00097) | 0.0026 | ND(0.00074) | ND(0.00073) | ND(0.00073) | ND(0.0011) | 0.0038 | ND(0.0012) | ND(0.006) | 0.0011 | ND(0.0011) | ND(0.0017) | ND(0.00079) | ND(0.0014) |
| | 4/22/08 | ND(0.00093) J | ND(0.0007) | ND(0.0028) | ND(0.00047) | 0.0014 J | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0031 | ND(0.00083) | ND(0.00081) | ND(0.00081) | ND(0.0012) | 0.0057 | ND(0.0014) | ND(0.0066) | 0.0013 | ND(0.0012) | ND(0.0018) | ND(0.00087) | ND(0.0015) |
| | 4/23/08 | ND(0.00097) J | ND(0.00073) | ND(0.0029) | ND(0.00049) | 0.0016 J | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0032 | ND(0.00086) | ND(0.00085) | ND(0.00085) | ND(0.0013) | 0.0053 | ND(0.0014) | ND(0.0069) | 0.0026 | ND(0.0012) | ND(0.0019) | ND(0.00091) | ND(0.0016) |
| | 4/24/08 | ND(0.0011) J | ND(0.00084) | ND(0.0034) | ND(0.00057) | 0.0013 J | ND(0.0013) | ND(0.0013) | ND(0.0013) | 0.0029 | ND(0.001) | ND(0.00098) | ND(0.00098) | ND(0.0015) | 0.0051 | ND(0.0017) | ND(0.008) | 0.0016 | ND(0.0014) | ND(0.0022) | ND(0.001) | ND(0.0018) |
| | 4/25/08 | ND(0.00095) J | ND(0.00071) | 0.0029 J | ND(0.00048) | 0.0012 J | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0031 | ND(0.00084) | ND(0.00083) | ND(0.00083) | ND(0.0013) | 0.005 J | ND(0.0014) | ND(0.0068) | 0.0013 | ND(0.0012) | ND(0.0019) | ND(0.00089) | ND(0.0016) |
| | 4/25/08 Dup | ND(0.00095) J | ND(0.00071) | 0.0037 J | ND(0.00048) | 0.0014 J | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0026 | ND(0.00084) | ND(0.00083) | ND(0.00083) | ND(0.0013) | 0.0069 J | ND(0.0014) | ND(0.0068) | 0.0014 | ND(0.0012) | ND(0.0019) | ND(0.00089) | ND(0.0016) |

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# TABLE 2-9c. OUTDOOR AIR ANALYTICAL RESULTS SUMMARY, WATER TREATMENT RELATED AND OTHER CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Sample ID | Date | Benzyl chloride mg/m$^3$ | Bromo-methane mg/m$^3$ | Carbon Disulfide mg/m$^3$ | Chloro-ethane mg/m$^3$ | Chloro-methane mg/m$^3$ | 1,2-Dichloro-benzene mg/m$^3$ | 1,3-Dichloro-benzene mg/m$^3$ | 1,4-Dichloro-benzene mg/m$^3$ | Dichloro-difluoro-methane mg/m$^3$ | 1,2-Dichloro-propane mg/m$^3$ | cis-1,3-Dichloro-propene mg/m$^3$ | trans-1,3-Dichloro-propene mg/m$^3$ | 1,2-Dichloro-1,1,2,2-tetrafluoro-ethane mg/m$^3$ | Ethanol mg/m$^3$ | 1,1,2-Trichloro-trifluoroethane mg/m$^3$ | 1,2,4-Trichloro-benzene mg/m$^3$ | Trichloro-fluoromethane mg/m$^3$ | Bromo-dichloro-methane mg/m$^3$ | Bromoform mg/m$^3$ | Chloroform mg/m$^3$ | Dibromo-chloro-methane mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FLOAT | 4/28/08 | ND(0.0013) J | ND(0.00097) | ND(0.0039) | ND(0.00066) | 0.0012 J | ND(0.0015) | ND(0.0015) | ND(0.0015) | 0.0024 | ND(0.0012) | ND(0.0011) | ND(0.0011) | ND(0.0018) | 0.0024 | ND(0.0019) | ND(0.0093) | 0.0014 | ND(0.0017) | ND(0.0026) | ND(0.0012) | ND(0.0021) |
| | 9/5/08 | ND(0.00076) | ND(0.00057) UJ | ND(0.0023) | ND(0.00038) | 0.0011 | ND(0.00088) | ND(0.00088) | ND(0.00088) | 0.0025 | 0.0087 | ND(0.00066) | ND(0.00066) | ND(0.001) | 0.013 JB | ND(0.0011) | ND(0.0054) | 0.0018 | ND(0.00098) | ND(0.0015) | ND(0.00071) | ND(0.0012) |
| | 9/6/08 | ND(0.0009) | ND(0.00068) UJ | ND(0.0027) | ND(0.00046) | 0.001 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0029 | ND(0.00081) | ND(0.00079) | ND(0.00079) | ND(0.0012) | 0.0048 UJ | ND(0.0013) | ND(0.0065) | 0.0016 | ND(0.0012) | ND(0.0018) | ND(0.00085) | ND(0.0015) |
| | 9/7/08 | ND(0.0013) | ND(0.00097) UJ | ND(0.0039) | ND(0.00066) | 0.001 | ND(0.0015) | ND(0.0015) | ND(0.0015) | 0.0028 | ND(0.0012) | ND(0.0011) | ND(0.0011) | ND(0.0018) | 0.012 JB | ND(0.0019) | ND(0.0093) | 0.0019 | ND(0.0017) | ND(0.0026) | ND(0.0012) | ND(0.0021) |
| | 9/8/08 | ND(0.00095) | ND(0.00071) UJ | ND(0.0028) | ND(0.00048) | 0.0011 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0029 | ND(0.00084) | ND(0.00083) | ND(0.00083) | ND(0.0013) | 0.008 JB | ND(0.0014) | ND(0.0068) | 0.0025 | ND(0.0012) | ND(0.0019) | ND(0.00089) | ND(0.0016) |
| | 9/9/08 | ND(0.001) | ND(0.00078) UJ | ND(0.0031) | ND(0.00053) | 0.0011 | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.003 | ND(0.00093) | ND(0.00091) | ND(0.00091) | ND(0.0014) | 0.0039 UJ | ND(0.0015) | ND(0.0074) | 0.0019 | ND(0.0013) | ND(0.0021) | ND(0.00098) | ND(0.0017) |
| | 9/9/08 Dup | ND(0.001) | ND(0.00078) UJ | ND(0.0031) | ND(0.00053) | 0.0011 | ND(0.0012) | ND(0.0012) | ND(0.0012) | 0.003 | ND(0.00093) | ND(0.00091) | ND(0.00091) | ND(0.0014) | 0.0051 UJ | ND(0.0015) | ND(0.0074) | 0.0018 | ND(0.0013) | ND(0.0021) | ND(0.00098) | ND(0.0017) |
| | 12/6/08 | ND(0.00083) | ND(0.00062) | ND(0.0025) | ND(0.00042) | 0.00091 | ND(0.00097) | ND(0.00097) | ND(0.00097) | 0.0031 | ND(0.00074) | ND(0.00073) | ND(0.00073) | ND(0.0011) | 0.0059 | ND(0.0012) | ND(0.006) | 0.0021 | ND(0.0011) | ND(0.0017) | ND(0.00079) | ND(0.0014) |
| | 12/7/08 | ND(0.00087) | ND(0.00065) | ND(0.0026) | ND(0.00044) | 0.001 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0033 | ND(0.00078) | ND(0.00076) | ND(0.00076) | ND(0.0012) | 0.0059 | ND(0.0013) | ND(0.0062) | 0.002 | ND(0.0011) | ND(0.0017) | ND(0.00082) | ND(0.0014) |
| | 12/8/08 | ND(0.00093) | ND(0.0007) | ND(0.0028) | ND(0.00047) | 0.0011 | ND(0.0011) | ND(0.0011) | ND(0.0011) | 0.0033 | ND(0.00083) | ND(0.00081) | ND(0.00081) | ND(0.0012) | 0.0028 | ND(0.0014) | ND(0.0066) | 0.002 | ND(0.0012) | ND(0.0018) | ND(0.00087) | ND(0.0015) |
| | 12/9/08 | ND(0.0013) | ND(0.001) | 0.012 | ND(0.00068) | 0.00097 | ND(0.0016) | ND(0.0016) | ND(0.0016) | 0.0032 | ND(0.0012) | ND(0.0012) | ND(0.0012) | ND(0.0018) | 0.012 | ND(0.002) | ND(0.0096) | 0.0025 | ND(0.0017) | ND(0.0027) | ND(0.0013) | ND(0.0022) |
| | 12/10/08 | ND(0.00088) | ND(0.00066) | 0.0042 | ND(0.00045) | 0.0014 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0029 | ND(0.00079) | ND(0.00078) | ND(0.00078) | ND(0.0012) | 0.0049 | ND(0.0013) | ND(0.0063) | 0.0022 | ND(0.0011) | ND(0.0018) | ND(0.00083) | ND(0.0014) |
| | 12/11/08 | ND(0.0012) | ND(0.00092) | ND(0.0037) | ND(0.00062) | 0.00096 | ND(0.0014) | ND(0.0014) | ND(0.0014) | 0.0033 | ND(0.0011) | ND(0.0011) | ND(0.0011) | ND(0.0016) | 0.0034 | ND(0.0018) | ND(0.0088) | 0.0018 | ND(0.0016) | ND(0.0024) | ND(0.0012) | ND(0.002) |
| | 12/12/08 | ND(0.00088) | ND(0.00066) | ND(0.0027) | ND(0.00045) | 0.00087 | ND(0.001) | ND(0.001) | ND(0.001) | 0.0034 | ND(0.00079) | ND(0.00078) | ND(0.00078) | ND(0.0012) | 0.0044 | ND(0.0013) | ND(0.0063) | 0.002 | ND(0.0011) | ND(0.0018) | ND(0.00083) | ND(0.0014) |
| | 12/13/08 | ND(0.00083) | ND(0.00062) | ND(0.0025) | ND(0.00042) | 0.00094 | ND(0.00097) | ND(0.00097) | ND(0.00097) | 0.0032 | ND(0.00074) | ND(0.00073) | ND(0.00073) | ND(0.0011) | 0.014 | ND(0.0012) | ND(0.006) | 0.0028 | ND(0.0011) | ND(0.0017) | ND(0.00079) | ND(0.0014) |
| **Average Outdoor Air Concentration** | | -- | ND(0.00025) | -- | ND(0.00025) | 0.00051 | ND(0.00025) | ND(0.00025) | ND(0.00025) | ND(0.00025) | ND(0.00025) | ND(0.00025) | ND(0.00025) | ND(0.00025) | -- | 0.00046 | ND(0.00025) | 0.00078 | -- | -- | ND(0.00025) | -- |

**NOTES:**

Average outdoor air concentrations are reported as the 50th percentile values from the *New York State Department of Health Summary of Indoor and Outdoor Levels of Volatile Organic Compounds from Fuel Oil Heated Homes in New York State (1997-2003)*, updated November 14, 2005

**D** – Analyte concentration in the initial dilution exceeded instrument calibration range. The reported value for the qualified analyte is from an analysis run at higher dilution.

**E** – Concentration of analyte exceeded instrument calibration range

**J** – Value is estimated and should be used with consideration or qualitative purposes

**R** – Value has been rejected and should not be used for qualitative or quantitative purposes

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# TABLE 3-1a. SCREENING EVALUATION FOR NESTED SOIL VAPOR RESULTS, GASOLINE RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth | Dilution Factor | n-Butylbenzene mg/m$^3$ | sec-Butylbenzene mg/m$^3$ | Isopropylbenzene mg/m$^3$ | n-Propylbenzene mg/m$^3$ | 1,2-Dichloroethane mg/m$^3$ | 1,2-Dibromoethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethylbenzene mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclohexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 2,2,4-Trimethylpentane mg/m$^3$ | 1,3,5-Trimethylbenzene mg/m$^3$ | 1,2,4-Trimethylbenzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyltoluene mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-20 | Apr 2008 | 20 | 2.42 | ND(0.026) | ND(0.026) | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) | ND(0.0039) | ND(0.0046) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.0042) | 0.0043 | ND(0.005) | ND(0.0052) | ND(0.0056) | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) |
| | | 25 | 7.93 | ND(0.087) | ND(0.087) | ND(0.019) | ND(0.019) | ND(0.016) | ND(0.03) | ND(0.014) | ND(0.083) UJ | 0.016 | ND(0.015) | ND(0.017) | 0.24 | ND(0.017) | 0.2 J | 0.057 J | ND(0.016) | ND(0.017) | 4.6 J | 0.63 J | 0.63 J | ND(0.0088) | 0.12 |
| | | Dup-25 | 12.3 | ND(0.14) | ND(0.14) | ND(0.03) | ND(0.03) | ND(0.025) | ***ND(0.047)*** | ND(0.022) | ND(0.13) UJ | ND(0.02) | ND(0.023) | ND(0.027) | 0.31 | ND(0.027) | 0.28 J | 0.084 J | ND(0.025) | ND(0.026) | 6.4 J | 0.83 J | 0.83 J | ND(0.014) | 0.15 |
| | Sep 2008 | 20 | 46.6 | ND(5.1) | ND(5.1) | ND(1.1) | ND(1.1) | ***ND(0.94)*** | ***ND(1.8)*** | ND(0.84) | ***ND(4.9)*** | ***3.6*** | ND(0.88) | ND(1) | 0.54 J | ND(1) | 84 | 38 | 4.2 | ND(0.99) | 810 | ND(1.1) | ND(1.1) | ***ND(0.52)*** | ND(1.1) |
| | | 25 | 116 | ND(13) | ND(13) | ND(2.8) | ND(2.8) | ***ND(2.3)*** | ***ND(4.4)*** | ND(2.1) | ***ND(12)*** | ***16*** | ND(2.2) | 2.3 J | 4.5 J | ND(2.5) | 290 | 200 | 49 | ND(2.5) | 1400 | ND(2.8) | ND(2.8) | ***ND(1.3)*** | ND(2.8) |
| | | 30 | 432 | ND(47) | ND(47) | 16 | 36 J | ***ND(8.7)*** | ***ND(16)*** | ND(7.8) UJ | ***ND(45)*** | ***89*** | 17 | ***290 J*** | 620 J | 6.9 J | 2000 | ***2000*** | 1900 | ND(9.2) | 5500 | ***36 J*** | ***76 J*** | ***ND(4.8)*** | 53 J |
| | | 30 Dup | 432 | ND(47) | ND(47) | 10 J | 20 J | ***ND(8.7)*** | ***ND(16)*** | ND(7.8) | ***ND(45)*** | ***86*** | 16 | ***220 J*** | 440 J | 4.8 J | 1900 | ***2000*** | 1800 | ND(9.2) | 5200 | ***18 J*** | ***35 J*** | ***ND(4.8)*** | 28 J |
| | | 35 | 404 | ND(44) | ND(44) | 16 | 35 | ***ND(8.2)*** | ***ND(16)*** | ND(7.3) UJ | ***ND(42)*** | ***90*** | 17 | ***270*** | 670 J | 7.8 J | 1600 | ***1700*** | 930 | ND(8.6) | 5100 | ***43*** | ***99*** | ***ND(4.5)*** | 60 |
| VW-21 | Apr 2008 | 20 | 8960 | *ND(98)* | *ND(98)* | ND(22) | ND(22) | ***ND(18)*** | ***ND(34)*** | ND(16) | ***ND(94) UJ*** | ***13 J*** | 3 J | ***ND(19)*** | ND(19) | 2 J | 340 J | 140 | ND(18) | ND(19) | 3900 J | ***ND(22)*** | ***ND(22)*** | ***ND(9.9)*** | ND(22) |
| | Sep 2008 | 20 | 710 | ND(78) | ND(78) | ND(17) | 21 | ***ND(14)*** | ***ND(27)*** | ND(13) | ***ND(74)*** | ***12*** | ND(13) | ***ND(15)*** | 4.6 J | ND(15) | 340 | 220 | 34 | ND(15) | 4200 | ***ND(17)*** | ***ND(17)*** | ***ND(7.8)*** | ND(17) |
| VW-93 | Apr 2008 | 20 | 2.58 | ND(0.028) | ND(0.028) | ND(0.0063) | ND(0.0063) | ND(0.0052) J | ND(0.0099) | ND(0.0046) | ND(0.027) J | ND(0.0041) | 0.011 J | ND(0.0056) | 0.012 J | ND(0.0056) | ND(0.0044) | ND(0.0045) J | ND(0.0053) J | ND(0.0055) | ND(0.006) | ND(0.0063) | ND(0.0063) | ND(0.0028) | ND(0.0063) |
| | | 20 Dup | 2.58 | ND(0.028) | ND(0.028) | ND(0.0063) | ND(0.0063) | ND(0.0052) J | ND(0.0099) | ND(0.0046) | ND(0.027) J | ND(0.0041) | ND(0.0049) J | ND(0.0056) | ND(0.0056) J | ND(0.0056) | ND(0.0044) | ND(0.0045) J | ND(0.0053) J | ND(0.0055) | ND(0.006) | ND(0.0063) | ND(0.0063) | ND(0.0028) | ND(0.0063) |
| | | 25 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) J | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) J | ND(0.0037) | ND(0.0044) | ND(0.005) J | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) J | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) |
| | | 30 | 2.42 | ND(0.026) | ND(0.026) | ND(0.0059) J | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) J | ND(0.0039) | ND(0.0046) | ND(0.0052) J | ND(0.0052) | ND(0.0052) | ND(0.0042) | ND(0.0043) | ND(0.005) J | ND(0.0052) | ND(0.0056) | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) |
| | | 35 | 2.29 | ND(0.025) | ND(0.025) | ND(0.0056) | ND(0.0056) | ND(0.0046) | ND(0.0088) | ND(0.0041) | ND(0.024) J | ND(0.0036) | ND(0.0043) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) J | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) |
| | | 40 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) J | ND(0.004) | ND(0.0048) | ND(0.0055) | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) J | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) |
| | | 45 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) J | ND(0.0038) | ND(0.0045) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) J | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) |
| | | 50 | 2.47 | ND(0.027) | ND(0.027) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) J | ND(0.0039) | ND(0.0046) | ND(0.0054) | ND(0.0054) | ND(0.0054) | ND(0.0042) | 0.02 | ND(0.0051) J | ND(0.0053) | ND(0.0058) | ND(0.0061) | ND(0.0061) | ND(0.0027) | ND(0.0061) |
| | | 55 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) J | ND(0.004) | ND(0.0048) | ND(0.0055) | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) J | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) |
| | Sep 2008 | 20 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) |
| | | 20 Dup | 2.47 | ND(0.027) | ND(0.027) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) | ND(0.0039) | ND(0.0046) | ND(0.0054) | ND(0.0054) | ND(0.0054) | ND(0.0042) | ND(0.0044) | ND(0.0051) | ND(0.0053) | ND(0.0058) | ND(0.0061) | ND(0.0061) | ND(0.0027) | ND(0.0061) |
| | | 25 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.0038) | 0.0047 JB | 0.011 | ND(0.0048) | 0.0062 | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) |
| | | 30 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) |
| | | 35 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | 0.006 JB | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) |
| | | 40 | 2.29 | ND(0.025) | ND(0.025) | 0.0061 | ND(0.0056) | ND(0.0046) | ND(0.0088) | ND(0.0041) | 0.046 | ND(0.0036) | ND(0.0043) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) |
| | | 45 | 2.47 | ND(0.027) | ND(0.027) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) | ND(0.0039) | ND(0.0046) | ND(0.0054) | ND(0.0054) | ND(0.0054) | ND(0.0042) | ND(0.0044) | ND(0.0051) | ND(0.0053) | ND(0.0058) | ND(0.0061) | ND(0.0061) | ND(0.0027) | ND(0.0061) |
| | | 50 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) |
| | | 55 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) |
| | | 60 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) |
| | Dec 2008 | 20 | 2.02 | ND(0.022) | ND(0.022) | ND(0.005) | 0.0059 J | ND(0.0041) | ND(0.0078) | ND(0.0036) | ND(0.021) | ND(0.0032) | 0.16 | 0.035 | 0.15 | 0.059 | ND(0.0035) | ND(0.0036) | 0.0074 | ND(0.0043) | ND(0.0047) | 0.0067 | 0.014 | ND(0.0022) | 0.021 |
| | | 25 | 2.09 | ND(0.023) | ND(0.023) | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) | 0.0056 | 0.043 | 0.012 | 0.052 | 0.022 | ND(0.0036) | ND(0.0037) | ND(0.0043) | ND(0.0044) | ND(0.0049) | 0.0067 | 0.021 | ND(0.0023) | 0.02 |
| | | 30 | 2.13 | ND(0.023) | ND(0.023) | ND(0.0052) | ND(0.0052) | ND(0.0043) | ND(0.0082) | ND(0.0038) | ND(0.022) | ND(0.0034) | ND(0.004) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0045) | ND(0.005) | ND(0.0052) | ND(0.0052) | ND(0.0024) | ND(0.0052) |
| | | 35 | 2.16 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) |
| | | 40 | 2.09 | ND(0.023) | ND(0.023) | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | 0.11 | 0.0057 | 0.031 | 0.0076 | 0.029 | 0.035 | ND(0.0036) | ND(0.0037) | ND(0.0043) | 0.013 | ND(0.0049) | ND(0.0051) | 0.018 | ND(0.0023) | 0.014 |
| | | 45 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) |
| | | 50 | 2.13 | ND(0.023) | ND(0.023) | ND(0.0052) | ND(0.0052) | ND(0.0043) | ND(0.0082) | ND(0.0038) | ND(0.022) | 0.0043 | ND(0.004) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0045) | ND(0.005) | ND(0.0052) | ND(0.0052) | ND(0.0024) | ND(0.0052) |
| | | 55 | 2.02 | ND(0.022) | ND(0.022) | ND(0.005) | ND(0.005) | ND(0.0041) | ND(0.0078) | ND(0.0036) | ND(0.021) | ND(0.0032) | ND(0.0038) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0035) | ND(0.0036) | 0.0042 | ND(0.0043) | ND(0.0047) | ND(0.005) | ND(0.005) | ND(0.0022) | ND(0.005) |
| | | 55 Dup | 2.16 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) |
| | | 60 | 2.09 | ND(0.023) | ND(0.023) | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) | ND(0.0033) | ND(0.0039) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.0036) | ND(0.0037) | ND(0.0043) | ND(0.0044) | ND(0.0049) | ND(0.0051) | ND(0.0051) | ND(0.0023) | ND(0.0051) |
| VW-96 | Apr 2008 | 20 | 2.42 | ND(0.026) | ND(0.026) | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) J | 0.047 | 0.13 | 0.028 | 0.039 | 0.019 | ND(0.0042) | 0.0063 | 0.0078 J | ND(0.0052) | 0.0094 | ND(0.0059) | 0.0067 | ND(0.0027) | ND(0.0059) |
| | | 25 | 2.09 | ND(0.023) | ND(0.023) | ND(0.0051) J | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) J | ND(0.0033) | ND(0.0039) | ND(0.0045) J | 0.0074 | ND(0.0045) | ND(0.0036) | ND(0.0037) | ND(0.0043) J | ND(0.0044) | ND(0.0049) | ND(0.0051) | 0.0087 | ND(0.0023) | 0.0061 |
| | | 30 | 2.02 | ND(0.022) | ND(0.022) | ND(0.005) J | ND(0.005) | ND(0.0041) | ND(0.0078) | ND(0.0036) | ND(0.021) J | ND(0.0032) | ND(0.0038) | ND(0.0044) J | ND(0.0044) | ND(0.0044) | ND(0.0035) | ND(0.0036) | ND(0.0041) J | ND(0.0043) | 0.014 | ND(0.005) | ND(0.005) | ND(0.0022) | ND(0.005) |
| | | 35 | 2.47 | ND(0.027) | ND(0.027) | ND(0.0061) | ND(0.0061) | ND(0.005) J | ND(0.0095) | ND(0.0044) | ND(0.026) J | ND(0.0039) | ND(0.0046) | ND(0.0054) | 0.011 | ND(0.0054) | ND(0.0042) | ND(0.0044) | ND(0.0051) J | ND(0.0053) | ND(0.0058) | 0.016 | 0.0076 | ND(0.0027) | 0.0069 |
| | | 40 | 2.16 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) J | ND(0.0034) | 0.012 | ND(0.0047) | ND(0.0047) | ND(0.0047) | 0.005 | 0.055 | ND(0.0044) J | ND(0.0046) | ND(0.005) | 0.014 | ND(0.0053) | ND(0.0024) | ND(0.0053) |
| | | 45 | 2.29 | ND(0.025) | ND(0.025) | ND(0.0056) | 0.028 | ND(0.0046) J | ND(0.0088) | ND(0.0041) | ND(0.024) J | 0.004 | 0.028 | 0.053 | 0.078 | 0.061 | ND(0.0039) | ND(0.004) | ND(0.0047) J | ND(0.0049) | 0.012 | 0.089 | 0.17 | ND(0.0025) | 0.11 |
| | | 50 | 2.64 | ND(0.029) | ND(0.029) | ND(0.0065) | ND(0.0065) | ND(0.0053) J | ND(0.01) | ND(0.0048) | ND(0.028) J | ND(0.0042) | ND(0.005) | ND(0.0057) | 0.0076 | ND(0.0057) | ND(0.0045) | ND(0.0046) | ND(0.0054) J | ND(0.0056) | 0.033 | 0.054 | 0.068 | ND(0.0029) | 0.012 |
| | | 55 | 129 | ND(1.4) | ND(1.4) | ND(0.32) | ND(0.32) | ND(0.26) | ***ND(0.5)*** | ND(0.23) | ***ND(1.4) J*** | 1.1 J | ND(0.24) | ND(0.28) | ND(0.28) | ND(0.28) | 1.9 J | 1.1 J | 0.62 J | ND(0.27) | 160 J | ND(0.32) | 0.44 J | ND(0.14) | ND(0.32) |

US EPA ARCHIVE DOCUMENT

# TABLE 3-1a. SCREENING EVALUATION FOR NESTED SOIL VAPOR RESULTS, GASOLINE RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth | Dilution Factor | n-Butylbenzene mg/m$^3$ | sec-Butylbenzene mg/m$^3$ | Isopropylbenzene mg/m$^3$ | n-Propylbenzene mg/m$^3$ | 1,2-Dichloroethane mg/m$^3$ | 1,2-Dibromoethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethylbenzene mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclohexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 2,2,4-Trimethylpentane mg/m$^3$ | 1,3,5-Trimethylbenzene mg/m$^3$ | 1,2,4-Trimethylbenzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyltoluene mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-96 | Sep 2008 | 20 | 2.47 | ND(0.027) | ND(0.027) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) | ND(0.0039) | ND(0.0046) | 0.042 | 0.16 | 0.045 | ND(0.0042) | ND(0.0044) | ND(0.0051) | ND(0.0053) | ND(0.0058) | 0.0092 | 0.01 | ND(0.0027) | ND(0.0061) |
| | | 25 | 2.42 | ND(0.026) | ND(0.026) | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | 0.028 | ND(0.0039) | 0.028 | 0.0063 | 0.05 | 0.022 | ND(0.0042) | ND(0.0043) | ND(0.005) | ND(0.0052) | 0.0068 | 0.017 | 0.052 | ND(0.0027) | 0.029 |
| | | 30 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) | ND(0.0054) | 0.0075 | 0.016 | ND(0.0062) | ND(0.0028) | ND(0.0062) |
| | | 35 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | ND(0.0038) | ND(0.0045) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) | ND(0.0051) | ND(0.0056) | 0.015 | ND(0.0058) | ND(0.0026) | ND(0.0058) |
| | | 40 | 2.47 | ND(0.027) | ND(0.027) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) | ND(0.0039) | ND(0.0046) | ND(0.0054) | ND(0.0054) | ND(0.0054) | ND(0.0042) | ND(0.0044) | ND(0.0051) | ND(0.0053) | ND(0.0058) | 0.019 | ND(0.0061) | ND(0.0027) | ND(0.0061) |
| | | 45 | 2.58 | ND(0.028) | ND(0.028) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0099) | ND(0.0046) | ND(0.027) | ND(0.0041) | ND(0.0049) | ND(0.0056) | ND(0.0056) | ND(0.0056) | ND(0.0044) | ND(0.0045) | ND(0.0053) | ND(0.0055) | ND(0.006) | 0.0099 | 0.0088 | ND(0.0028) | ND(0.0063) |
| | | 50 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | ND(0.0038) | 0.0083 JB | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.0041) | 0.034 | ND(0.0049) | ND(0.0051) | 0.13 | 0.037 | 0.02 | ND(0.0026) | ND(0.0058) |
| | | 55 | 84.3 | ND(9.2) | ND(9.2) | ND(2.1) | ND(2.1) | ***ND(1.7)*** | ***ND(3.2)*** | ND(1.5) | ***ND(8.8)*** | ND(1.3) | ND(1.6) | ND(1.8) | ND(1.8) | ND(1.8) | 90 | 120 | 39 | ND(1.8) | 640 | ND(2.1) | ND(2.1) | ND(0.93) | ND(2.1) |
| | | 60 | 2.42 | ND(26) | ND(26) | 16 | 32 | ***ND(4.9)*** | ***ND(9.3)*** | ND(4.4) | ***ND(25)*** | ***23*** | ND(4.6) | ***62*** | 88 | ND(5.2) | 740 | ***1700*** | 780 | ND(5.2) | 2500 | ***12*** | ***75*** | ***ND(2.7)*** | 25 |
| | Dec 2008 | 20 | 7.47 | ND(0.82) | ND(0.82) | ND(0.18) | ND(0.18) | ND(0.15) | ***ND(0.29)*** | ND(0.13) | ***ND(0.78)*** | ND(0.12) | ND(0.14) | ND(0.16) | ND(0.16) | ND(0.16) | ND(0.13) | ND(0.13) | ND(0.15) | ND(0.16) | 110 | ND(0.18) | ND(0.18) | ND(0.083) | ND(0.18) |
| | | 25 | 8.2 | ND(0.9) | ND(0.9) | ND(0.2) | ND(0.2) | ND(0.16) | ***ND(0.32)*** | ND(0.15) | ***ND(0.86)*** | ND(0.13) | ND(0.15) | ND(0.18) | ND(0.18) | ND(0.18) | ND(0.14) | ND(0.14) | ND(0.17) | ND(0.17) | 170 | ND(0.2) | ND(0.2) | ND(0.091) | ND(0.2) |
| | | 30 | 17.4 | ND(1.9) | ND(1.9) | ND(0.43) | ND(0.43) | ND(0.35) | ***ND(0.67)*** | ND(0.31) | ***ND(1.8)*** | ND(0.28) | ND(0.33) | ND(0.38) | ND(0.38) | ND(0.38) | ND(0.3) | 0.31 | ND(0.36) | ND(0.37) | 220 | ND(0.43) | ND(0.43) | ND(0.19) | ND(0.43) |
| | | 35 | 18.3 | ND(2) | ND(2) | ND(0.45) | ND(0.45) | ND(0.37) | ***ND(0.7)*** | ND(0.33) | ***ND(1.9)*** | ND(0.29) | ND(0.34) | ND(0.4) | ND(0.4) | ND(0.4) | ND(0.31) | ND(0.32) | ND(0.37) | ND(0.39) | 230 | ND(0.45) | ND(0.45) | ND(0.2) | ND(0.45) |
| | | 40 | 23.3 | ND(2.6) | ND(2.6) | ND(0.57) | ND(0.57) | ND(0.47) | ***ND(0.9)*** | ND(0.42) | ***ND(2.4)*** | ND(0.37) | ND(0.44) | ND(0.5) | ND(0.5) | ND(0.5) | ND(0.4) | 0.7 | ND(0.48) | ND(0.5) | 420 | ND(0.57) | ND(0.57) | ND(0.26) | ND(0.57) |
| | | 45 | 34.6 | ND(3.8) | ND(3.8) | ND(0.85) | ND(0.85) | ND(0.7) | ***ND(1.3)*** | ND(0.62) | ***ND(3.6)*** | ND(0.55) | ND(0.65) | ND(0.75) | ND(0.75) | ND(0.75) | 5.9 | 9.3 | ND(0.71) | ND(0.74) | 580 | ND(0.85) | ND(0.85) | ND(0.38) | ND(0.85) |
| | | 50 | 106 | ND(12) | ND(12) | ND(2.6) | ND(2.6) | ***ND(2.1)*** | ***ND(4.1)*** | ND(1.9) | ***ND(11)*** | ND(1.7) | ND(2) | ND(2.3) | ND(2.3) | ND(2.3) | 72 | 82 | 21 | ND(2.2) | 1200 | ND(2.6) | ND(2.6) | ***ND(1.2)*** | ND(2.6) |
| | | 50 Dup | 108 | ND(12) | ND(12) | ND(2.6) | ND(2.6) | ***ND(2.2)*** | ***ND(4.1)*** | ND(1.9) | ***ND(11)*** | ND(1.7) | ND(2) | ND(2.3) | ND(2.3) | ND(2.3) | 73 | 84 | 20 | ND(2.3) | 1200 | ND(2.6) | ND(2.6) | ***ND(1.2)*** | ND(2.6) |
| | | 55 | 104 | ND(11) | ND(11) | ND(2.6) | ND(2.6) | ***ND(2.1)*** | ***ND(4)*** | ND(1.9) | ***ND(11)*** | ND(1.7) | ND(2) | ND(2.2) | ND(2.2) | ND(2.2) | 150 | 180 | 75 | ND(2.2) | 1200 | ND(2.6) | ND(2.6) | ***ND(1.2)*** | ND(2.6) |
| | | 60 | 220 | ND(24) | ND(24) | 15 | 29 | ***ND(4.4)*** | ***ND(8.4)*** | ND(4) | ***ND(23)*** | ***22*** | ND(4.1) | 13 | 51 | ND(4.8) | 560 | ***1100*** | 890 | ND(4.7) | 2600 | 6.7 | ***50*** | ***ND(2.4)*** | 18 |
| VW-99 | Apr 2008 | 20 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) J | ND(0.0036) | ND(0.0042) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) J | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) |
| | | 25 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) J | ND(0.0038) | ND(0.0045) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) J | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) |
| | | 30 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) J | ND(0.004) | 0.0049 | ND(0.0055) | 0.006 | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) J | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) |
| | | 35 | 22.9 | ND(0.25) | ND(0.25) | ND(0.056) | ND(0.056) | ND(0.046) | ***ND(0.088)*** | ND(0.041) | ND(0.24) J | ND(0.036) | ND(0.043) | ND(0.05) | ND(0.05) | ND(0.05) | ND(0.039) | ND(0.04) | ND(0.047) J | ND(0.049) | 8.7 | ND(0.056) | ND(0.056) | ND(0.025) | ND(0.056) |
| | | 40 | 22.4 | ND(0.24) | ND(0.24) | ND(0.055) | ND(0.055) | ND(0.045) | ***ND(0.086)*** | ND(0.04) | ND(0.23) J | ND(0.036) | ND(0.042) | ND(0.049) | ND(0.049) | ND(0.049) | ND(0.038) | ND(0.039) | ND(0.046) J | ND(0.048) | 16 | ND(0.055) | ND(0.055) | ND(0.025) | ND(0.055) |
| | | 45 | 46.6 | ND(0.51) | ND(0.51) | ND(0.11) | ND(0.11) | ND(0.094) | ***ND(0.18)*** | ND(0.084) | ND(0.49) J | ND(0.074) | ND(0.088) | ND(0.1) | ND(0.1) | ND(0.1) | ND(0.08) | ND(0.082) | ND(0.095) J | ND(0.099) | 36 | ND(0.11) | ND(0.11) | ND(0.052) | ND(0.11) |
| | | 50 | 110 | ND(1.2) | ND(1.2) | ND(0.27) | ND(0.27) | ND(0.22) J | ***ND(0.42)*** | ND(0.2) | ***ND(1.2) J*** | ND(0.18) | ND(0.21) | ND(0.24) | ND(0.24) | ND(0.24) | ND(0.19) | ND(0.19) | ND(0.22) J | ND(0.23) | 56 J | ND(0.27) | ND(0.27) | ND(0.12) | ND(0.27) |
| | | 50 Dup | 110 | ND(1.2) | ND(1.2) | ND(0.27) | ND(0.27) | ND(0.22) | ***ND(0.42)*** | ND(0.2) | ***ND(1.2) J*** | ND(0.18) | ND(0.21) | ND(0.24) | ND(0.24) | ND(0.24) | ND(0.19) | 0.23 | ND(0.22) J | ND(0.23) | 96 | ND(0.27) | ND(0.27) J | ND(0.12) | ND(0.27) |
| | Sep 2008 | 20 | 2.58 | ND(0.028) | ND(0.028) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0099) | ND(0.0046) | ND(0.027) | ND(0.0041) | ND(0.0049) | ND(0.0056) | ND(0.0056) | ND(0.0056) | ND(0.0044) | ND(0.0045) | ND(0.0053) | ND(0.0055) | ND(0.006) | ND(0.0063) | ND(0.0063) | ND(0.0028) | ND(0.0063) |
| | | 25 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) |
| | | 30 | 2.13 | ND(0.023) | ND(0.023) | ND(0.0052) | ND(0.0052) | ND(0.0043) | ND(0.0082) | ND(0.0038) | ND(0.022) | 0.023 | ND(0.004) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0045) | ND(0.005) | ND(0.0052) | ND(0.0052) | ND(0.0024) | ND(0.0052) |
| | | 35 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | ND(0.0038) | ND(0.0045) UJ | ND(0.0052) | ND(0.0052) UJ | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) | ND(0.0051) | ND(0.0056) | ND(0.0058) UJ | 0.0076 J | ND(0.0026) | ND(0.0058) UJ |
| | | 35 Dup | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) | ND(0.0038) | 0.013 J | ND(0.0052) | 0.021 J | 0.0085 | ND(0.0041) | ND(0.0042) | ND(0.0049) | ND(0.0051) | ND(0.0056) | 0.0059 J | 0.02 J | ND(0.0026) | 0.015 J |
| | | 40 | 2.29 | ND(0.025) | ND(0.025) | ND(0.0056) | ND(0.0056) | 0.058 | ND(0.0088) | ND(0.0041) | ND(0.024) | ND(0.0036) | ND(0.0043) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.0039) | ND(0.004) | ND(0.0047) | ND(0.0049) | 0.026 | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) |
| | | 45 | 3.73 | ND(0.41) | ND(0.41) | ND(0.092) | ND(0.092) | ND(0.075) | ***ND(0.14)*** | ND(0.067) | ND(0.39) | ND(0.06) | ND(0.07) | ND(0.081) | ND(0.081) | ND(0.081) | ND(0.064) | ND(0.066) | ND(0.076) | ND(0.079) | 49 | ND(0.092) | ND(0.092) | ND(0.041) | ND(0.092) |
| | | 50 | 16 | ND(1.8) | ND(1.8) | ND(0.39) | ND(0.39) | ND(0.32) | ***ND(0.61)*** | ND(0.29) | ***ND(1.7)*** | ND(0.26) | ND(0.3) | ND(0.35) | ND(0.35) | ND(0.35) | 13 | 8.8 | ND(0.33) | ND(0.34) | 200 | ND(0.39) | ND(0.39) | ND(0.18) | ND(0.39) |
| | | 55 | 74.7 | ND(8.2) | ND(8.2) | ND(1.8) | ND(1.8) | ***ND(1.5)*** | ***ND(2.9)*** | ND(1.3) | ***ND(7.8)*** | ND(1.2) | ND(1.4) | ND(1.6) | ND(1.6) | ND(1.6) | 130 | 210 | 44 | ND(1.6) | 560 | ND(1.8) | ND(1.8) | ND(0.83) | ND(1.8) |
| | | 55 Dup | 74.4 | ND(8.2) | ND(8.2) | ND(1.8) | ND(1.8) | ***ND(1.5)*** | ***ND(2.9)*** | ND(1.3) | ***ND(7.8)*** | ND(1.2) | ND(1.4) | ND(1.6) | ND(1.6) | ND(1.6) | 130 | 200 | 44 | ND(1.6) | 550 | ND(1.8) | ND(1.8) | ND(0.83) | ND(1.8) |
| | | 60 | 2.29 | ND(0.025) | ND(0.025) | 0.027 | 0.06 | ND(0.0046) | ND(0.0088) | ND(0.0041) | ND(0.024) | ND(0.0036) | 0.006 JB | 0.007 | 0.021 | 0.03 | ND(0.0039) | ND(0.004) | ND(0.0047) | ND(0.0049) | ND(0.0053) | 0.056 | 0.15 | ND(0.0025) | 0.18 |
| | Dec 2008 | 20 | 2.09 | ND(0.023) | ND(0.023) | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) | ND(0.0033) | ND(0.0039) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.0036) | ND(0.0037) | ND(0.0043) | ND(0.0044) | ND(0.0049) | ND(0.0051) | ND(0.0051) | ND(0.0023) | ND(0.0051) |
| | | 25 | 3.44 | ND(0.38) | ND(0.38) | ND(0.084) | ND(0.084) | ND(0.07) | ***ND(0.13)*** | ND(0.062) | ND(0.36) | ND(0.055) | ND(0.065) | ND(0.075) | ND(0.075) | ND(0.075) | ND(0.059) | 0.066 J | ND(0.07) | ND(0.073) | 49 J | ND(0.084) | ND(0.084) | ND(0.038) | ND(0.084) |
| | | 30 | 42.6 | ND(4.7) | ND(4.7) | ND(1) | ND(1) | ND(0.86) | ***ND(1.6)*** | ND(0.77) | ***ND(4.5)*** | ND(0.68) | ND(0.8) | ND(0.92) | ND(0.92) | ND(0.92) | ND(0.73) | 2.2 | ND(0.87) | ND(0.91) | 430 | ND(1) | ND(1) | ND(0.47) | ND(1) |
| | | 35 | 30.8 | ND(3.4) | ND(3.4) | ND(0.76) | ND(0.76) | ND(0.62) | ***ND(1.2)*** | ND(0.56) | ***ND(3.2)*** | ND(0.49) | ND(0.58) | ND(0.67) | ND(0.67) | ND(0.67) | ND(0.53) | 1.3 J | ND(0.63) | ND(0.66) | 380 J | ND(0.76) | ND(0.76) | ND(0.34) | ND(0.76) |
| | | 40 | 27.7 | ND(3) | ND(3) | ND(0.68) | ND(0.68) | ND(0.56) | ***ND(1.1)*** | ND(0.5) | ***ND(2.9)*** | ND(0.44) | ND(0.52) | ND(0.6) | ND(0.6) | ND(0.6) | 9.9 | 10 | ND(0.57) | ND(0.59) | 490 | ND(0.68) | ND(0.68) | ND(0.31) | ND(0.68) |
| | | 45 | 34.2 | ND(3.8) | ND(3.8) | ND(0.84) | ND(0.84) | ND(0.69) | ***ND(1.3)*** | ND(0.62) | ***ND(3.6)*** | 0.67 | ND(0.64) | ND(0.74) | 0.99 | ND(0.74) | 40 | 56 | 5.8 | ND(0.73) | 660 | ND(0.84) | ND(0.84) | ND(0.38) | ND(0.84) |
| | | 50 | 52.2 | ND(5.7) | ND(5.7) | ND(1.3) | ND(1.3) | ND(1) | ***ND(2)*** | ND(0.94) | ***ND(5.5)*** | 1.0 | ND(0.98) | ND(1.1) | ND(1.1) | ND(1.1) | 120 | 160 | 38 | ND(1.1) | 870 | ND(1.3) | ND(1.3) | ND(0.58) | ND(1.3) |
| | | 55 | 109 | ND(12) | ND(12) | ND(2.7) | ND(2.7) | ***ND(2.2)*** | ***ND(4.2)*** | ND(2) | ***ND(11)*** | 1.8 J | ND(2) | 3.7 J | 4.6 J | ND(2.4) | 220 J | 420 J | 140 J | ND(2.3) | 1000 J | ND(2.7) | ND(2.7) | ***ND(1.2)*** | ND(2.7) |
| | | 55 Dup | 205 | ND(22) | ND(22) | ND(5) | ND(5) | ***ND(4.1)*** | ***ND(7.9)*** | ND(3.7) | ***ND(21)*** | ND(3.3) | ND(3.9) | 7.1 J | 5.8 | ND(4.4) | 270 | 490 | 180 J | ND(4.4) | 1300 J | ND(5) | ND(5) | ***ND(2.3)*** | ND(5) |
| | | 60 | 51.2 | 49 | 5.5 | 5.4 | 2.8 | ND(1) | ***ND(2)*** | ND(0.92) | ***ND(5.4)*** | 1.3 | 1.4 | ***23*** | 93 | 3.4 | 180 | 320 | 170 | ND(1.1) | 870 | ***77*** | ***74*** | ND(0.57) | 41 |

US EPA ARCHIVE DOCUMENT

# TABLE 3-1a. SCREENING EVALUATION FOR NESTED SOIL VAPOR RESULTS, GASOLINE RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth | Dilution Factor | n-Butyl-benzene mg/m$^3$ | sec-Butyl-benzene mg/m$^3$ | Isopropyl-benzene mg/m$^3$ | n-Propyl-benzene mg/m$^3$ | 1,2-Dichloro-ethane mg/m$^3$ | 1,2-Dibromo-ethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethyl-benzene mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclo-hexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 2,2,4-Trimethyl-pentane mg/m$^3$ | 1,3,5-Trimethyl-benzene mg/m$^3$ | 1,2,4-Trimethyl-benzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyl-toluene mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-127 | Apr 2008 | 20 | 2.64 | ND(0.029) | ND(0.029) | ND(0.0065) | ND(0.0065) | ND(0.0053) J | ND(0.01) | ND(0.0048) | ND(0.028) J | ND(0.0042) | ND(0.005) | ND(0.0057) | ND(0.0057) | ND(0.0057) | ND(0.0045) | ND(0.0046) | ND(0.0054) J | ND(0.0056) | ND(0.0062) | ND(0.0065) | ND(0.0065) | ND(0.0029) | ND(0.0065) |
| | | 30 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) J | ND(0.0091) | ND(0.0043) | ND(0.025) J | ND(0.0038) | ND(0.0045) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | 0.0087 J | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) |
| | | 40 | 2.42 | ND(0.026) | ND(0.026) | ND(0.0059) | ND(0.0059) | ND(0.0049) J | ND(0.0093) | ND(0.0044) | ND(0.025) J | ND(0.0039) | ND(0.0046) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.0042) | ND(0.0043) | ND(0.005) J | ND(0.0052) | ND(0.0056) | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) |
| | | 50 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) J | ND(0.009) | ND(0.0042) | ND(0.024) J | ND(0.0037) | ND(0.0044) | ND(0.005) | ND(0.005) | ND(0.005) | 0.0053 | ND(0.0041) | ND(0.0048) J | ND(0.005) | 0.0085 | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) |
| | Sep 2008 | 20 | 2.47 | ND(0.027) | ND(0.027) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) | ND(0.0039) | ND(0.0046) | ND(0.0054) | ND(0.0054) | ND(0.0054) | ND(0.0042) | ND(0.0044) | ND(0.0051) | ND(0.0053) | ND(0.0058) | ND(0.0061) | ND(0.0061) | ND(0.0027) | ND(0.0061) |
| | | 30 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) |
| | | 40 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) |
| | | 50 | 2.2 | ND(0.024) | ND(0.024) | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | 0.0038 | ND(0.0041) | 0.0049 | 0.037 | 0.011 | 0.0064 | 0.0046 JB | 0.0072 | ND(0.0047) | 0.0085 | 0.0097 | 0.024 | ND(0.0024) UJ | 0.016 |
| | Dec 2008 | 20 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) |
| | | 30 | 2.16 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | 0.026 | 0.036 | 0.012 | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) |
| | | 40 | 2.09 | ND(0.023) | ND(0.023) | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) | ND(0.0033) | ND(0.0039) | ND(0.0045) | 0.031 U | 0.013 U | ND(0.0036) | ND(0.0037) | ND(0.0043) | ND(0.0044) | ND(0.0049) | 0.0081 U | 0.029 U | ND(0.0023) | 0.02 U |
| | | 40 Dup | 2.05 | ND(0.022) | ND(0.022) | ND(0.005) | ND(0.005) | ND(0.0041) | ND(0.0079) | ND(0.0037) | ND(0.021) | ND(0.0033) | ND(0.0039) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0035) | ND(0.0036) | ND(0.0042) | ND(0.0044) | ND(0.0048) | ND(0.005) | ND(0.005) | ND(0.0023) | ND(0.005) |
| | | 50 | 2.05 | ND(0.022) | ND(0.022) | ND(0.005) | ND(0.005) | ND(0.0041) | ND(0.0079) | ND(0.0037) | ND(0.021) | ND(0.0033) | ND(0.0039) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0035) | ND(0.0036) | ND(0.0042) | ND(0.0044) | ND(0.0048) | ND(0.005) | ND(0.005) | ND(0.0023) | ND(0.005) |
| VW-128 | Apr 2008 | 20 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) J | ND(0.0038) | ND(0.0045) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) J | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) |
| | | 30 | 2.02 | ND(0.022) | ND(0.022) | ND(0.005) | ND(0.005) | ND(0.0041) | ND(0.0078) | ND(0.0036) | ND(0.021) J | ND(0.0032) | 0.013 | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0035) | 0.0089 | ND(0.0041) J | ND(0.0043) | ND(0.0047) | ND(0.005) | ND(0.005) | ND(0.0022) | ND(0.005) |
| | | 40 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | 0.029 J | ND(0.0038) | 0.02 | 0.0089 | 0.044 | 0.018 | ND(0.0041) | ND(0.0042) | ND(0.0049) J | ND(0.0051) | ND(0.0056) | 0.0088 | 0.034 | ND(0.0026) | 0.02 |
| | | 50 | 2.09 | ND(0.023) | ND(0.023) | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) J | ND(0.0033) | ND(0.0039) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.0036) | ND(0.0037) | ND(0.0043) J | ND(0.0044) | ND(0.0049) | ND(0.0051) | ND(0.0051) | ND(0.0023) | ND(0.0051) |
| | | 50 Dup | 2.09 | ND(0.023) | ND(0.023) | ND(0.0051) | ND(0.0051) | ND(0.0042) | ND(0.008) | ND(0.0038) | ND(0.022) J | ND(0.0033) | ND(0.0039) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.0036) | ND(0.0037) | ND(0.0043) J | ND(0.0044) | ND(0.0049) | ND(0.0051) | ND(0.0051) | ND(0.0023) | ND(0.0051) |
| | Sep 2008 | 20 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) |
| | | 30 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) |
| | | 40 | 2.29 | ND(0.025) | ND(0.025) | ND(0.0056) | ND(0.0056) | ND(0.0046) | ND(0.0088) | ND(0.0041) | ND(0.024) | ND(0.0036) | 0.0095 JB | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.0039) | 0.005 JB | ND(0.0047) | ND(0.0049) | ND(0.0053) | ND(0.0056) | ND(0.0056) | ND(0.0025) | ND(0.0056) |
| | | 50 | 2.33 | ND(0.026) | ND(0.026) | 0.032 | 0.16 | ND(0.0047) | ND(0.009) | ND(0.0042) | 0.058 | 0.05 | 0.7 | 0.18 | 0.74 | 0.34 | 0.02 | 0.014 | 0.067 | ND(0.005) | ND(0.0054) | 0.22 | 1 .0 | ND(0.0026) | 0.7 |
| | Dec 2008 | 20 | 2.2 | ND(0.024) | ND(0.024) | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) |
| | | 30 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) |
| | | 40 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) | ND(0.0036) | ND(0.0042) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) |
| | | 50 | 2.2 | ND(0.024) | ND(0.024) | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) |
| VW-129 | Apr 2008 | 20 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) J | ND(0.0037) | ND(0.0044) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) J | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) |
| | | 30 | 2.24 | ND(0.024) | ND(0.024) | ND(0.0055) | ND(0.0055) | ND(0.0045) | ND(0.0086) | ND(0.004) | ND(0.023) J | ND(0.0036) | 0.0051 | ND(0.0049) | 0.0052 | ND(0.0049) | ND(0.0038) | ND(0.0039) | ND(0.0046) J | ND(0.0048) | ND(0.0052) | ND(0.0055) | ND(0.0055) | ND(0.0025) | ND(0.0055) |
| | | 40 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) J | ND(0.0038) | ND(0.0045) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) J | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) |
| | | 50 | 2.47 | ND(0.027) | ND(0.027) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) J | ND(0.0039) | ND(0.0046) | ND(0.0054) | ND(0.0054) | ND(0.0054) | ND(0.0042) | ND(0.0044) | ND(0.0051) J | ND(0.0053) | ND(0.0058) | ND(0.0061) | ND(0.0061) | ND(0.0027) | ND(0.0061) |
| | Sep 2008 | 20 | 2.47 | ND(0.027) | ND(0.027) UJ | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0095) | ND(0.0044) | ND(0.026) UJ | ND(0.0039) | ND(0.0046) | ND(0.0054) | ND(0.0054) | ND(0.0054) | ND(0.0042) | ND(0.0044) | ND(0.0051) | ND(0.0053) | 0.014 J | ND(0.0061) | ND(0.0061) | ND(0.0027) | ND(0.0061) |
| | | 20 Dup | 2.42 | ND(0.026) | ND(0.026) UJ | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) UJ | ND(0.0039) | ND(0.0046) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.0042) | ND(0.0043) | ND(0.005) | ND(0.0052) | ND(0.0056) UJ | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) |
| | | 30 | 2.38 | ND(0.026) | ND(0.026) UJ | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) UJ | ND(0.0038) | 0.007 JB | 0.0078 | 0.0085 | ND(0.0052) | ND(0.0041) | ND(0.0042) | ND(0.0049) | ND(0.0051) | ND(0.0056) | ND(0.0058) | 0.0087 | ND(0.0026) | 0.0087 |
| | | 40 | 2.2 | ND(0.024) | ND(0.024) | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) |
| | | 50 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) |
| | | 50 Dup | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) |
| | Dec 2008 | 20 | 2.13 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) |
| | | 30 | 2.2 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) |
| | | 40 | 2.29 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) |
| | | 50 | 2.09 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | ND(0.0041) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | ND(0.0053) | ND(0.0053) | ND(0.0024) | ND(0.0053) |
| VW-130 | Apr 2008 | 20 | 2.33 | ND(0.026) J | ND(0.026) J | ND(0.0057) J | ND(0.0057) J | ND(0.0047) J | ND(0.009) J | ND(0.0042) J | ND(0.024) J | ND(0.0037) J | ND(0.0044) J | ND(0.005) J | ND(0.005) J | ND(0.005) J | ND(0.004) J | 0.039 J | ND(0.0048) J | ND(0.005) J | ND(0.0054) J | ND(0.0057) J | ND(0.0057) J | ND(0.0026) J | ND(0.0057) J |
| | | 30 | 77.7 | ND(0.85) J | ND(0.85) J | ND(0.19) J | ND(0.19) J | ND(0.16) J | ***ND(0.3) J*** | ND(0.14) J | ***ND(0.81) J*** | ND(0.12) J | ND(0.15) J | ND(0.17) J | ND(0.17) J | ND(0.17) J | ND(0.13) J | ND(0.14) J | ND(0.16) J | ND(0.16) J | ND(0.18) J | ND(0.19) J | ND(0.19) J | ND(0.086) J | ND(0.19) J |
| | | 40 | 2.38 | ND(0.026) | ND(0.026) | ND(0.0058) | ND(0.0058) | ND(0.0048) | ND(0.0091) | ND(0.0043) | ND(0.025) J | ND(0.0038) | ND(0.0045) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.0041) | 0.01 J | 0.0088 J | ND(0.0051) | ND(0.0056) | ND(0.0058) | ND(0.0058) | ND(0.0026) | ND(0.0058) |
| | | 40 Dup | 2.42 | ND(0.026) | ND(0.026) | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) J | ND(0.0039) | ND(0.0046) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.0042) | ND(0.0043) J | ND(0.005) J | ND(0.0052) | ND(0.0056) | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) |

US EPA ARCHIVE DOCUMENT

# TABLE 3-1a. SCREENING EVALUATION FOR NESTED SOIL VAPOR RESULTS, GASOLINE RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth | Dilution Factor | n-Butyl-benzene mg/m$^3$ | sec-Butyl-benzene mg/m$^3$ | Isopropyl-benzene mg/m$^3$ | n-Propyl-benzene mg/m$^3$ | 1,2-Dichloro-ethane mg/m$^3$ | 1,2-Dibromo-ethane mg/m$^3$ | MTBE mg/m$^3$ | Naphthalene mg/m$^3$ | Benzene mg/m$^3$ | Toluene mg/m$^3$ | Ethyl-benzene mg/m$^3$ | m,p-Xylene mg/m$^3$ | o-Xylene mg/m$^3$ | Cyclo-hexane mg/m$^3$ | Hexane mg/m$^3$ | Heptane mg/m$^3$ | Styrene mg/m$^3$ | 2,2,4-Trimethyl-pentane mg/m$^3$ | 1,3,5-Trimethyl-benzene mg/m$^3$ | 1,2,4-Trimethyl-benzene mg/m$^3$ | 1,3-Butadiene mg/m$^3$ | 4-Ethyl-toluene mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-130 | Sep 2008 | 20 | 2.2 | ND(0.024) | ND(0.024) | ND(0.0054) | ND(0.0054) | ND(0.0044) | ND(0.0084) | ND(0.004) | ND(0.023) | ND(0.0035) | ND(0.0041) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.0038) | ND(0.0039) | ND(0.0045) | ND(0.0047) | ND(0.0051) | ND(0.0054) | ND(0.0054) | ND(0.0024) | ND(0.0054) |
| | | 30 | 2.33 | ND(0.026) | ND(0.026) | ND(0.0057) | ND(0.0057) | ND(0.0047) | ND(0.009) | ND(0.0042) | ND(0.024) | ND(0.0037) | ND(0.0044) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.004) | ND(0.0041) | ND(0.0048) | ND(0.005) | ND(0.0054) | ND(0.0057) | ND(0.0057) | ND(0.0026) | ND(0.0057) |
| | | 40 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) |
| | | 40 Dup | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) |
| | Dec 2008 | 20 | 2.16 | ND(0.024) | ND(0.024) | ND(0.0053) | ND(0.0053) | ND(0.0044) | ND(0.0083) | ND(0.0039) | ND(0.023) | ND(0.0034) | 0.01 | ND(0.0047) | 0.017 | 0.0084 | ND(0.0037) | ND(0.0038) | ND(0.0044) | ND(0.0046) | ND(0.005) | 0.0069 | 0.029 | ND(0.0024) | 0.014 |
| | | 30 | 2.05 | ND(0.022) | ND(0.022) | ND(0.005) | ND(0.005) | ND(0.0041) | ND(0.0079) | ND(0.0037) | ND(0.021) | ND(0.0033) | ND(0.0039) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0035) | ND(0.0036) | ND(0.0042) | ND(0.0044) | ND(0.0048) | ND(0.005) | ND(0.005) | ND(0.0023) | ND(0.005) |
| | | 40 | 2.53 | ND(0.028) | ND(0.028) | ND(0.0062) | ND(0.0062) | ND(0.0051) | ND(0.0097) | ND(0.0046) | ND(0.026) | ND(0.004) | ND(0.0048) | ND(0.0055) | ND(0.0055) | ND(0.0055) | ND(0.0044) | ND(0.0044) | ND(0.0052) | ND(0.0054) | ND(0.0059) | ND(0.0062) | ND(0.0062) | ND(0.0028) | ND(0.0062) |
| | | 40 Dup | 2.42 | ND(0.026) | ND(0.026) | ND(0.0059) | ND(0.0059) | ND(0.0049) | ND(0.0093) | ND(0.0044) | ND(0.025) | ND(0.0039) | ND(0.0046) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.0042) | ND(0.0043) | ND(0.005) | ND(0.0052) | ND(0.0056) | ND(0.0059) | ND(0.0059) | ND(0.0027) | ND(0.0059) |

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| USEPA RSL Screening Value for Depths of 20 ft-bgs | NA | NA | 2.10E+02 | NA | 4.70E-01 | 2.05E-02 | 4.70E+01 | 3.60E-01 | 1.55E+00 | 2.60E+03 | 4.85E+00 | 3.65E+03 | 3.65E+03 | 3.15E+03 | 3.65E+02 | NA | 5.00E+02 | NA | 3.15E+00 | 3.65E+00 | 4.05E-01 | NA |
| USEPA RSL Screening Value for Depths Greater than 20 ft-bgs to 35 ft-bgs | NA | NA | 4.20E+02 | NA | 9.40E-01 | 4.10E-02 | 9.40E+01 | 7.20E-01 | 3.10E+00 | 5.20E+03 | 9.70E+00 | 7.30E+03 | 7.30E+03 | 6.30E+03 | 7.30E+02 | NA | 1.00E+03 | NA | 6.30E+00 | 7.30E+00 | 8.10E-01 | NA |
| USEPA RSL Screening Value for Depths Greater than 35 ft-bgs | NA | NA | 6.00E+02 | NA | 1.34E+00 | 5.86E-02 | 1.34E+02 | 1.03E+00 | 4.43E+00 | 7.43E+03 | 1.39E+01 | 1.04E+04 | 1.04E+04 | 9.00E+03 | 1.04E+03 | NA | 1.43E+03 | NA | 9.00E+00 | 1.04E+01 | 1.16E+00 | NA |

**NOTES:**

Screening levels calculated using the Regional Screening Levels for residential air and semi-site specific attenuation factors from Figure 3a. For depths of 20 ft-bgs an attenuation of 0.002 was used, for depths of greater than 20 ft-bgs to 35 ft-bgs an attenuation factor of 0.001 was used, and for depths greater than 35 ft-bgs and greater, an attenuation factor of 0.0007 was used.

***BOLD ITALICS*** - reported value is above the adjusted USEPA April 2009 RSL screening standard at the specified depth

**Dup** - Blind Duplicate Sample

**J** – estimated concentration

**mg/m$^3$** - milligram per cubic meter

**NA** - Not Available

**ND** - Not detected

**U** – Detected in blank sample, 1997-1999 results changed to non detect; subsequent results reported

US EPA ARCHIVE DOCUMENT

# TABLE 3-1b. SCREENING EVALUATION FOR NESTED SOIL VAPOR RESULTS, SOLVENT RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth | Dilution Factor | Acetone mg/m$^3$ | 2-Butanone mg/m$^3$ | Carbon tetrachloride mg/m$^3$ | Chloro-benzene mg/m$^3$ | 1,1-Dichloro-ethane mg/m$^3$ | 1,1-Dichloro-ethene mg/m$^3$ | cis-1,2-Dichloro-ethene mg/m$^3$ | trans-1,2-Dichloro-ethene mg/m$^3$ | 1,4-Dioxane mg/m$^3$ | Hexachloro-butadiene mg/m$^3$ | 2-Hexanone mg/m$^3$ | Isopropanol mg/m$^3$ | 4-Methyl-2-Pentanone mg/m$^3$ | Methylene Chloride mg/m$^3$ | 1,1,2,2-Tetrachloro-ethane mg/m$^3$ | Tetrachloro-ethene mg/m$^3$ | Tetrahydro-furan mg/m$^3$ | 1,1,1-Trichloro-ethane mg/m$^3$ | 1,1,2-Trichloro-ethane mg/m$^3$ | Trichloro-ethene mg/m$^3$ | Vinyl Chloride mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-20 | Apr 2008 | 20 | 2.42 | 0.12 | 0.042 | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | 0.052 | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | ND(0.0036) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 25 | 7.93 | ND(0.038) | 0.014 | ND(0.025) | ND(0.018) | ND(0.016) | ND(0.016) | ND(0.016) | ND(0.016) | ND(0.057) | ND(0.17) UJ | ND(0.065) | 0.1 | ND(0.016) | ND(0.014) | ND(0.027) | ND(0.027) | ND(0.012) | ND(0.022) | ND(0.022) | ND(0.021) | ND(0.01) |
| | | Dup-25 | 12.3 | ND(0.058) | ND(0.018) | ND(0.039) | ND(0.028) | ND(0.025) | ND(0.024) | ND(0.024) | ND(0.024) | ND(0.089) | ND(0.26) UJ | ND(0.1) | ND(0.06) | ND(0.025) | ND(0.021) | ND(0.042) | ND(0.042) | ND(0.018) | ND(0.034) | ND(0.034) | ND(0.033) | ND(0.016) |
| | Sep 2008 | 20 | 46.6 | ND(2.2) | ND(0.69) | ***ND(1.5)*** | ND(1.1) | ND(0.94) | ND(0.92) | ND(0.92) | ND(0.92) | ***ND(3.4)*** | ***ND(9.9)*** | ND(3.8) | ND(2.3) | ND(0.95) | ND(0.81) | ***ND(1.6)*** | ND(1.6) | ND(0.69) | ND(1.3) | ***ND(1.3)*** | ND(1.2) | ND(0.6) |
| | | 25 | 116 | ND(5.5) | ND(1.7) | ***ND(3.6)*** | ND(2.7) | ND(2.3) | ND(2.3) | ND(2.3) | ND(2.3) | ***ND(8.4)*** | ***ND(25)*** | ND(9.5) | ND(5.7) | ND(2.4) | ND(2) | ***ND(4)*** | ND(3.9) | ND(1.7) | ND(3.2) | ***ND(3.2)*** | ND(3.1) | ND(1.5) |
| | | 30 | 432 | ND(20) | ND(6.4) | ***ND(14)*** | ND(9.9) | ND(8.7) | ND(8.6) | ND(8.6) | ND(8.6) | ***ND(31)*** | ***ND(92)*** | ND(35) | ND(21) | ND(8.8) | ND(7.5) | ***ND(15)*** | ND(15) | ND(6.4) | ND(12) | ***ND(12)*** | ND(12) | ***ND(5.5)*** |
| | | 30 Dup | 432 | ND(20) | ND(6.4) | ***ND(14)*** | ND(9.9) | ND(8.7) | ND(8.6) | ND(8.6) | ND(8.6) | ***ND(31)*** | ***ND(92)*** | ND(35) | ND(21) | ND(8.8) | ND(7.5) | ***ND(15)*** | ND(15) | ND(6.4) | ND(12) | ***ND(12)*** | ND(12) | ***ND(5.5)*** |
| | | 35 | 404 | ND(19) | ND(6) | ***ND(13)*** | ND(9.3) | ND(8.2) | ND(8) | ND(8) | ND(8) | ***ND(29)*** | ***ND(86)*** | ND(33) | ND(20) | ND(8.3) | ND(7) | ***ND(14)*** | ND(14) | ND(6) | ND(11) | ***ND(11)*** | ND(11) | ***ND(5.2)*** |
| VW-21 | Apr 2008 | 20 | 8960 | ND(42) | ND(13) | ***ND(28)*** | ND(21) | ***ND(18)*** | ND(18) | ND(18) | ND(18) | ***ND(64)*** | ***ND(190) UJ*** | ND(73) | ND(44) | ND(18) | ND(16) | ***ND(31)*** | ***ND(30)*** | ND(13) | ND(24) | ***ND(24)*** | ***ND(24)*** | ***ND(11)*** |
| | Sep 2008 | 20 | 710 | ND(34) | ND(10) | ***ND(22)*** | ND(16) | ***ND(14)*** | ND(14) | ND(14) | ND(14) | ***ND(51)*** | ***ND(150)*** | ND(58) | ND(35) | ND(14) | ND(12) | ***ND(24)*** | ***ND(24)*** | ND(10) | ND(19) | ***ND(19)*** | ***ND(19)*** | ***ND(9.1)*** |
| VW-93 | Apr 2008 | 20 | 2.58 | ND(0.012) J | ND(0.0038) | ND(0.0081) | ND(0.0059) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0051) | ND(0.018) | ND(0.055) | ND(0.021) | ND(0.013) J | ND(0.0053) | ND(0.0045) | ND(0.0088) | ND(0.0088) | ND(0.0038) | ND(0.007) | ND(0.007) | ND(0.0069) | ND(0.0033) |
| | | 20 Dup | 2.58 | 0.029 J | 0.0048 | ND(0.0081) | ND(0.0059) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0051) | ND(0.018) | ND(0.055) | ND(0.021) | 0.052 J | ND(0.0053) | ND(0.0045) | ND(0.0088) | ND(0.0088) | ND(0.0038) | ND(0.007) | ND(0.007) | ND(0.0069) | ND(0.0033) |
| | | 25 | 2.33 | ND(0.011) J | 0.0037 | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 30 | 2.42 | ND(0.011) J | 0.0074 | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | ND(0.012) | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | 0.021 | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 35 | 2.29 | ND(0.011) | ND(0.0034) | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | ND(0.011) | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.0034) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 40 | 2.53 | 0.17 | 0.033 | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | 0.029 | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.0037) | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 45 | 2.38 | 0.048 | 0.0097 | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 50 | 2.47 | 0.028 | ND(0.0036) | ND(0.0078) | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) | ND(0.02) | ND(0.012) | ND(0.005) | 0.18 | ND(0.0085) | ND(0.0084) | ND(0.0036) | ND(0.0067) | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | | 55 | 2.53 | 0.084 | 0.031 | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | 0.082 | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | 0.0038 | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | Sep 2008 | 20 | 2.53 | 0.016 U | 0.0039 U | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | 0.042 JB | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.0037) | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 20 Dup | 2.47 | 0.084 JB | 0.024 JB | ND(0.0078) | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) | ND(0.02) | 0.029 U | ND(0.005) | ND(0.0043) | ND(0.0085) | ND(0.0084) | ND(0.0036) | ND(0.0067) | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | | 25 | 2.24 | 0.017 U | 0.015 JB | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | 0.013 U | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 30 | 2.38 | 0.024 JB | 0.012 JB | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | 0.0059 | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 35 | 2.33 | 0.016 U | ND(0.0034) | ND(0.0073) | ND(0.0054) | 0.0052 | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | 0.01 | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 40 | 2.29 | 0.042 JB | 0.0098 JB | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | ND(0.011) | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | 0.0042 | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 45 | 2.47 | 0.014 U | 0.03 U | ND(0.0078) | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) | ND(0.02) | 0.088 JB | ND(0.005) | ND(0.0043) | ND(0.0085) | ND(0.0084) | 0.0041 | ND(0.0067) | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | | 50 | 2.33 | 0.014 U | 0.018 JB | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 55 | 2.33 | 0.021 U | 0.0077 JB | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | 0.012 U | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 60 | 2.38 | ND(0.011) | 0.013 JB | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | Dec 2008 | 20 | 2.02 | ND(0.0096) UJ | ND(0.003) | ND(0.0064) | ND(0.0046) | ND(0.0041) | ND(0.004) | ND(0.004) | ND(0.004) | ND(0.014) | ND(0.043) | ND(0.016) | ND(0.0099) | ND(0.0041) | ND(0.0035) | ND(0.0069) | ND(0.0068) | ND(0.003) | ND(0.0055) | ND(0.0055) | ND(0.0054) | ND(0.0026) |
| | | 25 | 2.09 | ND(0.0099) UJ | ND(0.0031) | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | ND(0.0071) | ND(0.0031) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | | 30 | 2.13 | 0.055 JB | 0.086 | ND(0.0067) | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.045) | ND(0.017) | ND(0.01) | ND(0.0044) | ND(0.0037) | ND(0.0073) | ND(0.0072) | 0.16 | ND(0.0058) | ND(0.0058) | ND(0.0057) | ND(0.0027) |
| | | 35 | 2.16 | 0.06 JB | 0.0088 JB | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | ND(0.011) | ND(0.0044) | ND(0.0038) | ND(0.0074) | ND(0.0073) | ND(0.0032) | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 40 | 2.09 | 0.34 J | 0.097 | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | ND(0.0071) | ND(0.0031) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | | 45 | 2.24 | ND(0.011) UJ | ND(0.0033) | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 50 | 2.13 | 0.091 JB | 0.018 JB | ND(0.0067) | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.045) | ND(0.017) | ND(0.01) | ND(0.0044) | ND(0.0037) | ND(0.0073) | ND(0.0072) | ND(0.0031) | ND(0.0058) | ND(0.0058) | ND(0.0057) | ND(0.0027) |
| | | 55 | 2.02 | ND(0.0096) UJ | ND(0.003) | ND(0.0064) | ND(0.0046) | ND(0.0041) | ND(0.004) | ND(0.004) | ND(0.004) | ND(0.014) | ND(0.043) | ND(0.016) | 0.038 J | ND(0.0041) | ND(0.0035) | ND(0.0069) | 0.024 J | ND(0.003) | ND(0.0055) | ND(0.0055) | ND(0.0054) | ND(0.0026) |
| | | 55 Dup | 2.16 | ND(0.01) UJ | ND(0.0032) | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | 0.029 J | ND(0.0044) | ND(0.0038) | ND(0.0074) | ND(0.0073) UJ | ND(0.0032) | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 60 | 2.09 | ND(0.0099) | ND(0.0031) | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | ND(0.0071) | ND(0.0031) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| VW-96 | Apr 2008 | 20 | 2.42 | ND(0.011) | ND(0.0036) | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | 0.012 | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | ND(0.0036) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 25 | 2.09 | 0.018 J | 0.0051 | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | 0.15 | ND(0.0043) | ND(0.0036) | ND(0.0072) | ND(0.0071) | ND(0.0031) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | | 30 | 2.02 | 0.02 J | ND(0.003) | ND(0.0064) | ND(0.0046) | ND(0.0041) | ND(0.004) | ND(0.004) | ND(0.004) | ND(0.014) | ND(0.043) | ND(0.016) | 0.27 | ND(0.0041) | 0.0051 | ND(0.0069) | ND(0.0068) | ND(0.003) | ND(0.0055) | ND(0.0055) | ND(0.0054) | ND(0.0026) |
| | | 35 | 2.47 | ND(0.012) | ND(0.0036) | ND(0.0078) | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) | ND(0.02) | 0.054 | ND(0.005) | ND(0.0043) | ND(0.0085) | ND(0.0084) | ND(0.0036) | ND(0.0067) | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | | 40 | 2.16 | 0.027 | 0.0053 | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | 0.34 | ND(0.0044) | ND(0.0038) | ND(0.0074) | 0.01 | ND(0.0032) | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 45 | 2.29 | 0.023 | ND(0.0034) | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | 0.018 | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.0034) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 50 | 2.64 | ND(0.012) | ND(0.0039) | ND(0.0083) | ND(0.0061) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.019) | ND(0.056) | ND(0.022) | ND(0.013) | ND(0.0054) | ND(0.0046) | ND(0.0091) | 0.0092 | ND(0.0039) | ND(0.0072) | ND(0.0072) | ND(0.0071) | ND(0.0034) |
| | | 55 | 129 | ND(0.61) | ND(0.19) | ND(0.4) | ND(0.3) | ND(0.26) | ND(0.26) | ND(0.26) | ND(0.26) | ND(0.93) | ***ND(2.8)*** | ND(1) | ND(0.63) | ND(0.26) | ND(0.22) | ND(0.44) | ND(0.44) | ND(0.19) | ND(0.35) | ND(0.35) | ND(0.35) | ND(0.16) |

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# TABLE 3-1b. SCREENING EVALUATION FOR NESTED SOIL VAPOR RESULTS, SOLVENT RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth | Dilution Factor | Acetone mg/m$^3$ | 2-Butanone mg/m$^3$ | Carbon tetrachloride mg/m$^3$ | Chloro-benzene mg/m$^3$ | 1,1-Dichloro-ethane mg/m$^3$ | 1,1-Dichloro-ethene mg/m$^3$ | cis-1,2-Dichloro-ethene mg/m$^3$ | trans-1,2-Dichloro-ethene mg/m$^3$ | 1,4-Dioxane mg/m$^3$ | Hexachloro-butadiene mg/m$^3$ | 2-Hexanone mg/m$^3$ | Isopropanol mg/m$^3$ | 4-Methyl-2-Pentanone mg/m$^3$ | Methylene Chloride mg/m$^3$ | 1,1,2,2-Tetrachloro-ethane mg/m$^3$ | Tetrachloro-ethene mg/m$^3$ | Tetrahydro-furan mg/m$^3$ | 1,1,1-Trichloro-ethane mg/m$^3$ | 1,1,2-Trichloro-ethane mg/m$^3$ | Trichloro-ethene mg/m$^3$ | Vinyl Chloride mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-96 | Sep 2008 | 20 | 2.47 | ND(0.012) | ND(0.0036) | ND(0.0078) | ND(0.0057) | ND(0.005) | 0.0049 | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) | ND(0.02) | 0.012 U | ND(0.005) | ND(0.0043) | ND(0.0085) | 0.015 | ND(0.0036) | ND(0.0067) | ND(0.0067) | 0.05 | ND(0.0032) |
| | | 25 | 2.42 | 0.012 U | ND(0.0036) | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | 0.016 U | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | ND(0.0036) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 30 | 2.53 | 0.026 JB | 0.0059 U | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | ND(0.012) | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.0037) | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 35 | 2.38 | 0.032 JB | 0.0039 U | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | 0.012 U | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 40 | 2.47 | 0.012 U | ND(0.0036) | ND(0.0078) | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) | ND(0.02) | 0.013 U | ND(0.005) | ND(0.0043) | ND(0.0085) | ND(0.0084) | ND(0.0036) | ND(0.0067) | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | | 45 | 2.58 | ND(0.012) | ND(0.0038) | ND(0.0081) | ND(0.0059) | ND(0.0052) | ND(0.0051) | 0.011 | ND(0.0051) | ND(0.018) | ND(0.055) | ND(0.021) | ND(0.013) | ND(0.0053) | ND(0.0045) | ND(0.0088) | ND(0.0088) | ND(0.0038) | ND(0.007) | ND(0.007) | 0.24 | ND(0.0033) |
| | | 50 | 2.38 | 0.089 JB | ND(0.0035) | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | 0.025 U | ND(0.0049) | ND(0.0041) | ND(0.0082) | 0.015 | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 55 | 84.3 | ND(4) | ND(1.2) | ***ND(2.6)*** | ND(1.9) | ND(1.7) | ND(1.7) | ND(1.7) | ND(1.7) | ***ND(6.1)*** | ***ND(18)*** | ND(6.9) | ND(4.1) | ND(1.7) | ND(1.5) | ***ND(2.9)*** | ND(2.8) | ND(1.2) | ND(2.3) | ***ND(2.3)*** | ND(2.3) | ND(1.1) |
| | | 60 | 2.42 | ND(11) | ND(3.6) | ***ND(7.6)*** | ND(5.6) | ND(4.9) | ND(4.8) | ND(4.8) | ND(4.8) | ***ND(17)*** | ***ND(52)*** | ND(20) | ND(12) | ND(5) | ND(4.2) | ***ND(8.3)*** | ***ND(8.2)*** | ND(3.6) | ND(6.6) | ***ND(6.6)*** | ND(6.5) | ***ND(3.1)*** |
| | Dec 2008 | 20 | 7.47 | ND(0.35) | ND(0.11) | ND(0.24) | ND(0.17) | ND(0.15) | ND(0.15) | ND(0.15) | ND(0.15) | ND(0.54) | ***ND(1.6)*** | ND(0.61) | ND(0.37) | ND(0.15) | ND(0.13) | ***ND(0.26)*** | ND(0.25) | ND(0.11) | ND(0.2) | ND(0.2) | ND(0.2) | ND(0.095) |
| | | 25 | 8.2 | ND(0.39) | ND(0.12) | ND(0.26) | ND(0.19) | ND(0.16) | ND(0.16) | ND(0.16) | ND(0.16) | ND(0.59) | ***ND(1.7)*** | ND(0.67) | ND(0.4) | ND(0.17) | ND(0.14) | ND(0.28) | ND(0.28) | ND(0.12) | ND(0.22) | ND(0.22) | ND(0.22) | ND(0.1) |
| | | 30 | 17.4 | ND(0.83) | ND(0.26) | ND(0.55) | ND(0.4) | ND(0.35) | ND(0.34) | ND(0.34) | ND(0.34) | ND(1.2) | ***ND(3.7)*** | ND(1.4) | ND(0.86) | ND(0.36) | ND(0.3) | ***ND(0.6)*** | ND(0.59) | ND(0.26) | ND(0.47) | ND(0.47) | ND(0.47) | ND(0.22) |
| | | 35 | 18.3 | ND(0.87) | ND(0.27) | ND(0.58) | ND(0.42) | ND(0.37) | ND(0.36) | ND(0.36) | ND(0.36) | ND(1.3) | ***ND(3.9)*** | ND(1.5) | ND(0.9) | ND(0.37) | ND(0.32) | ***ND(0.63)*** | ND(0.62) | ND(0.27) | ND(0.5) | ND(0.5) | ND(0.49) | ND(0.23) |
| | | 40 | 23.3 | ND(1.1) | ND(0.34) | ND(0.73) | ND(0.54) | ND(0.47) | ND(0.46) | ND(0.46) | ND(0.46) | ND(1.7) | ***ND(5)*** | ND(1.9) | ND(1.1) | ND(0.48) | ND(0.4) | ***ND(0.8)*** | ND(0.79) | ND(0.34) | ND(0.64) | ND(0.64) | ND(0.63) | ND(0.3) |
| | | 45 | 34.6 | ND(1.6) | ND(0.51) | ND(1.1) | ND(0.8) | ND(0.7) | ND(0.68) | ND(0.68) | ND(0.68) | ND(2.5) | ***ND(7.4)*** | ND(2.8) | ND(1.7) | ND(0.71) | ND(0.6) | ***ND(1.2)*** | ND(1.2) | ND(0.51) | ND(0.94) | ND(0.94) | ND(0.93) | ND(0.44) |
| | | 50 | 106 | ND(5) | ND(1.6) | ***ND(3.3)*** | ND(2.4) | ND(2.1) | ND(2.1) | ND(2.1) | ND(2.1) | ***ND(7.6)*** | ***ND(23)*** | ND(8.7) | ND(5.2) | ND(2.2) | ND(1.8) | ***ND(3.6)*** | ND(3.6) | ND(1.6) | ND(2.9) | ***ND(2.9)*** | ND(2.8) | ND(1.4) |
| | | 50 Dup | 108 | ND(5.1) | ND(1.6) | ***ND(3.4)*** | ND(2.5) | ND(2.2) | ND(2.1) | ND(2.1) | ND(2.1) | ***ND(7.8)*** | ***ND(23)*** | ND(8.8) | ND(5.3) | ND(2.2) | ND(1.9) | ***ND(3.7)*** | ND(3.7) | ND(1.6) | ND(2.9) | ***ND(2.9)*** | ND(2.9) | ND(1.4) |
| | | 55 | 104 | ND(4.9) | ND(1.5) | ***ND(3.3)*** | ND(2.4) | ND(2.1) | ND(2.1) | ND(2.1) | ND(2.1) | ***ND(7.5)*** | ***ND(22)*** | ND(8.5) | ND(5.1) | ND(2.1) | ND(1.8) | ***ND(3.6)*** | ND(3.5) | ND(1.5) | ND(2.8) | ***ND(2.8)*** | ND(2.8) | ND(1.3) |
| | | 60 | 220 | ND(10) | ND(3.2) | ***ND(6.9)*** | ND(5.1) | ND(4.4) | ND(4.4) | ND(4.4) | ND(4.4) | ***ND(16)*** | ***ND(47)*** | ND(18) | ND(11) | ND(4.5) | ND(3.8) | ***ND(7.6)*** | ***ND(7.5)*** | ND(3.2) | ND(6) | ***ND(6)*** | ND(5.9) | ***ND(2.8)*** |
| VW-99 | Apr 2008 | 20 | 2.24 | 0.014 | 0.0049 | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | 0.0042 | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 25 | 2.38 | 0.04 | 0.0058 | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | 0.0087 | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 30 | 2.53 | 0.045 | 0.0084 | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | 0.024 | ND(0.0052) | ND(0.0044) | ND(0.0087) | 0.016 | ND(0.0037) | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 35 | 22.9 | ND(0.11) | ND(0.034) | ND(0.072) | ND(0.053) | ND(0.046) | ND(0.045) | ND(0.045) | ND(0.045) | ND(0.16) | ND(0.49) | ND(0.19) | ND(0.11) | ND(0.047) | ND(0.04) | ND(0.079) | ND(0.078) | ND(0.034) | ND(0.062) | ND(0.062) | ND(0.062) | ND(0.029) |
| | | 40 | 22.4 | ND(0.11) | ND(0.033) | ND(0.07) | ND(0.052) | ND(0.045) | ND(0.044) | ND(0.044) | ND(0.044) | ND(0.16) | ND(0.48) | ND(0.18) | ND(0.11) | ND(0.046) | ND(0.039) | ND(0.077) | ND(0.076) | ND(0.033) | ND(0.061) | ND(0.061) | ND(0.06) | ND(0.029) |
| | | 45 | 46.6 | ND(0.22) | ND(0.069) | ND(0.15) | ND(0.11) | ND(0.094) | ND(0.092) | ND(0.092) | ND(0.092) | ND(0.34) | ND(0.99) | ND(0.38) | ND(0.23) | ND(0.095) | ND(0.081) | ND(0.16) | ND(0.16) | ND(0.069) | ND(0.13) | ND(0.13) | ND(0.12) | ND(0.06) |
| | | 50 | 110 | ND(0.52) | ND(0.16) | ND(0.35) | ND(0.25) | ND(0.22) | ND(0.22) | ND(0.22) | ND(0.22) | ND(0.79) | ***ND(2.3)*** | ND(0.9) | ND(0.54) | ND(0.22) | ND(0.19) | ND(0.38) | ND(0.37) | ND(0.16) | ND(0.3) | ND(0.3) | ND(0.3) | ND(0.14) |
| | | 50 Dup | 110 | ND(0.52) | ND(0.16) | ND(0.35) | ND(0.25) | ND(0.22) | ND(0.22) | ND(0.22) | ND(0.22) | ND(0.79) | ***ND(2.3)*** | ND(0.9) | ND(0.54) | ND(0.22) | ND(0.19) | ND(0.38) | ND(0.37) | ND(0.16) | ND(0.3) | ND(0.3) | ND(0.3) | ND(0.14) |
| | Sep 2008 | 20 | 2.58 | 0.058 JB | 0.03 JB | ND(0.0081) | ND(0.0059) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0051) | ND(0.018) | ND(0.055) | ND(0.021) | ND(0.013) | ND(0.0053) | ND(0.0045) | ND(0.0088) | 0.012 | ND(0.0038) | ND(0.007) | ND(0.007) | ND(0.0069) | ND(0.0033) |
| | | 25 | 2.24 | 0.05 JB | 0.018 JB | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | 0.013 U | ND(0.0046) | ND(0.0039) | ND(0.0077) | 0.016 | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 30 | 2.13 | ND(0.01) | ND(0.0031) | ND(0.0067) | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.045) | ND(0.017) | ND(0.01) | ND(0.0044) | ND(0.0037) | ND(0.0073) | 0.019 | ND(0.0031) | ND(0.0058) | ND(0.0058) | ND(0.0057) | ND(0.0027) |
| | | 35 | 2.38 | ND(0.011) UJ | ND(0.0035) | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | 0.029 | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 35 Dup | 2.38 | 0.012 U | ND(0.0035) | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | 0.014 U | ND(0.0049) | ND(0.0041) | ND(0.0082) | 0.028 | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 40 | 2.29 | 0.016 U | 0.0034 U | 0.0078 | ND(0.0053) | 0.011 | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | ND(0.011) | ND(0.0047) | 0.0048 | ND(0.0079) | 0.039 | ND(0.0034) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 45 | 3.73 | ND(0.18) | ND(0.055) | ND(0.12) | ND(0.086) | ND(0.075) | ND(0.074) | ND(0.074) | ND(0.074) | ND(0.27) | ND(0.8) | ND(0.3) | ND(0.18) | ND(0.076) | ND(0.065) | ND(0.13) | ND(0.13) | ND(0.055) | ND(0.1) | ND(0.1) | ND(0.1) | ND(0.048) |
| | | 50 | 16 | ND(0.76) | ND(0.24) | ND(0.5) | ND(0.37) | ND(0.32) | ND(0.32) | ND(0.32) | ND(0.32) | ND(1.2) | ***ND(3.4)*** | ND(1.3) | ND(0.79) | ND(0.33) | ND(0.28) | ND(0.55) | ND(0.54) | ND(0.24) | ND(0.44) | ND(0.44) | ND(0.43) | ND(0.2) |
| | | 55 | 74.7 | ND(3.5) | ND(1.1) | ***ND(2.4)*** | ND(1.7) | ND(1.5) | ND(1.5) | ND(1.5) | ND(1.5) | ***ND(5.4)*** | ***ND(16)*** | ND(6.1) | ND(3.7) | ND(1.5) | ND(1.3) | ***ND(2.6)*** | ND(2.5) | ND(1.1) | ND(2) | ND(2) | ND(2) | ND(0.95) |
| | | 55 Dup | 74.4 | ND(3.5) | ND(1.1) | ***ND(2.4)*** | ND(1.7) | ND(1.5) | ND(1.5) | ND(1.5) | ND(1.5) | ***ND(5.4)*** | ***ND(16)*** | ND(6.1) | ND(3.7) | ND(1.5) | ND(1.3) | ***ND(2.6)*** | ND(2.5) | ND(1.1) | ND(2) | ND(2) | ND(2) | ND(0.95) |
| | | 60 | 2.29 | 0.032 JB | 0.0058 U | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | ND(0.011) UJ | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.0034) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | Dec 2008 | 20 | 2.09 | 0.038 | ND(0.0031) | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | ND(0.0071) | ND(0.0031) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | | 25 | 3.44 | ND(0.16) | ND(0.051) | ND(0.11) | ND(0.079) | ND(0.07) | ND(0.068) | ND(0.068) | ND(0.068) | ND(0.25) | ND(0.73) | ND(0.28) | ND(0.17) | ND(0.07) | ND(0.06) | ND(0.12) | ND(0.12) | ND(0.051) | ND(0.094) | ND(0.094) | ND(0.092) | ND(0.044) |
| | | 30 | 42.6 | ND(2) | ND(0.63) | ND(1.3) | ND(0.98) | ND(0.86) | ND(0.84) | ND(0.84) | ND(0.84) | ND(3.1) | ***ND(9.1)*** | ND(3.5) | ND(2.1) | ND(0.87) | ND(0.74) | ***ND(1.5)*** | ND(1.4) | ND(0.63) | ND(1.2) | ND(1.2) | ND(1.1) | ND(0.54) |
| | | 35 | 30.8 | ND(1.5) | ND(0.45) | ND(0.97) | ND(0.71) | ND(0.62) | ND(0.61) | ND(0.61) | ND(0.61) | ND(2.2) | ***ND(6.6)*** | ND(2.5) | ND(1.5) | ND(0.63) | ND(0.54) | ***ND(1)*** | ND(1) | ND(0.45) | ND(0.84) | ND(0.84) | ND(0.83) | ND(0.39) |
| | | 40 | 27.7 | ND(1.3) | ND(0.41) | ND(0.87) | ND(0.64) | ND(0.56) | ND(0.55) | ND(0.55) | ND(0.55) | ND(2) | ***ND(5.9)*** | ND(2.3) | ND(1.4) | ND(0.57) | ND(0.48) | ***ND(0.95)*** | ND(0.94) | ND(0.41) | ND(0.76) | ND(0.76) | ND(0.74) | ND(0.35) |
| | | 45 | 34.2 | ND(1.6) | ND(0.5) | ND(1.1) | ND(0.79) | ND(0.69) | ND(0.68) | ND(0.68) | ND(0.68) | ND(2.5) | ***ND(7.3)*** | ND(2.8) | ND(1.7) | ND(0.7) | ND(0.59) | ***ND(1.2)*** | ND(1.2) | ND(0.5) | ND(0.93) | ND(0.93) | ND(0.92) | ND(0.44) |
| | | 50 | 52.2 | ND(2.5) | ND(0.77) | ND(1.6) | ND(1.2) | ND(1) | ND(1) | ND(1) | ND(1) | ND(3.8) | ***ND(11)*** | ND(4.3) | ND(2.6) | ND(1.1) | ND(0.91) | ***ND(1.8)*** | ND(1.8) | ND(0.77) | ND(1.4) | ND(1.4) | ND(1.4) | ND(0.67) |
| | | 55 | 109 | ND(5.2) | ND(1.6) | ***ND(3.4)*** | ND(2.5) | ND(2.2) | ND(2.2) | ND(2.2) | ND(2.2) | ***ND(7.8)*** | ***ND(23)*** | ND(8.9) | ND(5.4) | ND(2.2) | ND(1.9) | ***ND(3.7)*** | ND(3.7) | ND(1.6) | ND(3) | ***ND(3)*** | ND(2.9) | ND(1.4) |
| | | 55 Dup | 205 | ND(9.7) | ND(3) | ***ND(6.4)*** | ND(4.7) | ND(4.1) | ND(4.1) | ND(4.1) | ND(4.1) | ***ND(15)*** | ***ND(44)*** | ND(17) | ND(10) | ND(4.2) | ND(3.6) | ***ND(7)*** | ***ND(7)*** | ND(3) | ND(5.6) | ***ND(5.6)*** | ND(5.5) | ***ND(2.6)*** |
| | | 60 | 51.2 | ND(2.4) | ND(0.75) | ND(1.6) | ND(1.2) | ND(1) | ND(1) | ND(1) | ND(1) | ND(3.7) | ***ND(11)*** | ND(4.2) | ND(2.5) | ND(1) | ND(0.89) | ***ND(1.8)*** | ND(1.7) | ND(0.75) | ND(1.4) | ND(1.4) | ND(1.4) | ND(0.65) |

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# TABLE 3-1b. SCREENING EVALUATION FOR NESTED SOIL VAPOR RESULTS, SOLVENT RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth | Dilution Factor | Acetone mg/m$^3$ | 2-Butanone mg/m$^3$ | Carbon tetrachloride mg/m$^3$ | Chloro-benzene mg/m$^3$ | 1,1-Dichloro-ethane mg/m$^3$ | 1,1-Dichloro-ethene mg/m$^3$ | cis-1,2-Dichloro-ethene mg/m$^3$ | trans-1,2-Dichloro-ethene mg/m$^3$ | 1,4-Dioxane mg/m$^3$ | Hexachloro-butadiene mg/m$^3$ | 2-Hexanone mg/m$^3$ | Isopropanol mg/m$^3$ | 4-Methyl-2-Pentanone mg/m$^3$ | Methylene Chloride mg/m$^3$ | 1,1,2,2-Tetrachloro-ethane mg/m$^3$ | Tetrachloro-ethene mg/m$^3$ | Tetrahydro-furan mg/m$^3$ | 1,1,1-Trichloro-ethane mg/m$^3$ | 1,1,2-Trichloro-ethane mg/m$^3$ | Trichloro-ethene mg/m$^3$ | Vinyl Chloride mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-127 | Apr 2008 | 20 | 2.64 | 0.015 | 0.004 | ND(0.0083) | ND(0.0061) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.0052) | ND(0.019) | ND(0.056) | ND(0.022) | ND(0.013) | ND(0.0054) | ND(0.0046) | ND(0.0091) | ND(0.009) | ND(0.0039) | ND(0.0072) | ND(0.0072) | ND(0.0071) | ND(0.0034) |
| | | 30 | 2.38 | 0.028 | 0.0084 | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | 0.036 | ND(0.0035) | ND(0.0065) | ND(0.0065) | 0.0077 | ND(0.003) |
| | | 40 | 2.42 | 0.048 | 0.013 | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | 0.024 | ND(0.005) | 0.12 | ND(0.0083) | 0.17 | ND(0.0036) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 50 | 2.33 | 0.074 | 0.013 | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | 0.059 | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | Sep 2008 | 20 | 2.47 | 0.044 JB | 0.016 JB | ND(0.0078) | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) | ND(0.02) | 0.012 U | ND(0.005) | ND(0.0043) | ND(0.0085) | ND(0.0084) | ND(0.0036) | ND(0.0067) | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | | 30 | 2.24 | 0.011 U | 0.0059 JB | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | 0.043 | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 40 | 2.33 | 0.15 JB | 0.052 JB | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | 0.035 | 0.016 U | ND(0.0048) | 0.005 | ND(0.008) | 0.17 | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 50 | 2.2 | 0.075 JB | 0.012 JB | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | 0.069 | ND(0.0032) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | Dec 2008 | 20 | 2.33 | 0.027 | 0.013 | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | ND(0.011) | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 30 | 2.16 | 0.013 | 0.035 | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | ND(0.011) | ND(0.0044) | ND(0.0038) | ND(0.0074) | 0.046 | 0.058 | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 40 | 2.09 | 0.029 J | 0.01 J | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | 0.2 | ND(0.0031) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | | 40 Dup | 2.05 | 0.017 J | ND(0.003) UJ | ND(0.0064) | ND(0.0047) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0042) | ND(0.0036) | ND(0.007) | 0.2 | ND(0.003) | ND(0.0056) | ND(0.0056) | ND(0.0055) | ND(0.0026) |
| | | 50 | 2.05 | ND(0.0097) | ND(0.003) | ND(0.0064) | ND(0.0047) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0042) | ND(0.0036) | ND(0.007) | 0.083 | ND(0.003) | ND(0.0056) | ND(0.0056) | ND(0.0055) | ND(0.0026) |
| VW-128 | Apr 2008 | 20 | 2.38 | 0.011 | ND(0.0035) | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) | ND(0.0049) | ND(0.0041) | ND(0.0082) | 0.028 | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 30 | 2.02 | 0.022 | 0.0066 | ND(0.0064) | ND(0.0046) | ND(0.0041) | ND(0.004) | ND(0.004) | ND(0.004) | ND(0.014) | ND(0.043) | ND(0.016) | 0.06 | ND(0.0041) | 0.0039 | ND(0.0069) | ND(0.0068) | ND(0.003) | ND(0.0055) | ND(0.0055) | ND(0.0054) | ND(0.0026) |
| | | 40 | 2.38 | 0.023 | 0.0067 | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | 0.11 | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 50 | 2.09 | 0.014 | ND(0.0031) | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | ND(0.0071) | ND(0.0031) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | | 50 Dup | 2.09 | 0.011 | ND(0.0031) | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | ND(0.0071) | ND(0.0031) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| | Sep 2008 | 20 | 2.24 | 0.031 JB | ND(0.0033) UJ | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | 0.0570 | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 30 | 2.24 | 0.031 JB | 0.0075 JB | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | 0.027 U | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 40 | 2.29 | 0.013 U | 0.0034 U | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | 0.017 U | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.0034) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 50 | 2.33 | 0.32 J | 0.42 J | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | 1.4000 | 0.04 JB | 0.4500 | ND(0.004) | ND(0.008) | ND(0.0079) | 0.015 | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | Dec 2008 | 20 | 2.2 | 0.011 | ND(0.0032) | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.0032) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 30 | 2.24 | 0.014 | ND(0.0033) | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 40 | 2.24 | 0.014 | ND(0.0033) | ND(0.007) | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | ND(0.011) | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.0033) | ND(0.0061) | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 50 | 2.2 | ND(0.01) | ND(0.0032) | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | ND(0.011) | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.0032) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| VW-129 | Apr 2008 | 20 | 2.33 | 0.018 | 0.0072 | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | 0.012 | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 30 | 2.24 | 0.057 | 0.0091 | 0.0089 | ND(0.0052) | ND(0.0045) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.048) | ND(0.018) | 0.22 | ND(0.0046) | ND(0.0039) | ND(0.0077) | ND(0.0076) | ND(0.0033) | 0.0087 | ND(0.0061) | ND(0.006) | ND(0.0029) |
| | | 40 | 2.38 | 0.047 | 0.0086 | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | 0.014 | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.0035) | 0.0067 | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 50 | 2.47 | 0.032 | 0.0095 | 0.01 | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) | ND(0.02) | 0.031 | ND(0.005) | ND(0.0043) | ND(0.0085) | ND(0.0084) | 0.0042 | 0.014 | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | Sep 2008 | 20 | 2.47 | 0.039 JB | ND(0.0036) | ND(0.0078) | ND(0.0057) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0049) | ND(0.018) | ND(0.053) UJ | ND(0.02) | 0.013 U | ND(0.005) | ND(0.0043) | ND(0.0085) | ND(0.0084) | ND(0.0036) | 0.0086 J | ND(0.0067) | ND(0.0066) | ND(0.0032) |
| | | 20 Dup | 2.42 | 0.042 JB | ND(0.0036) | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) UJ | ND(0.02) | 0.014 U | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | ND(0.0036) | 0.0085 J | ND(0.0066) | ND(0.0065) | ND(0.0031) |
| | | 30 | 2.38 | 0.052 JB | 0.0062 JB | 0.0096 | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) UJ | ND(0.019) | 0.014 U | ND(0.0049) | ND(0.0041) | ND(0.0082) | ND(0.0081) | ND(0.0035) | 0.0097 J | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 40 | 2.2 | 0.03 JB | 0.004 U | 0.0078 | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | 0.024 U | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.0032) | 0.0083 | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 50 | 2.53 | 0.062 JB | 0.021 JB | 0.0099 | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | 0.02 U | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.0037) | 0.012 | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 50 Dup | 2.53 | 0.036 JB | 0.015 JB | 0.0110 | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | 0.014 U | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.0037) | 0.013 | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | Dec 2008 | 20 | 2.13 | 0.058 U | 0.016 | ND(0.0067) | ND(0.0049) | ND(0.0043) | ND(0.0042) | ND(0.0042) | ND(0.0042) | ND(0.015) | ND(0.045) | ND(0.017) | ND(0.01) | ND(0.0044) | ND(0.0037) | ND(0.0073) | ND(0.0072) | ND(0.0031) | ND(0.0058) | ND(0.0058) | ND(0.0057) | ND(0.0027) |
| | | 30 | 2.2 | 0.036 U | ND(0.0032) | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | 0.025 | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.0032) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 40 | 2.29 | 0.12 JB | 0.02 | ND(0.0072) | ND(0.0053) | ND(0.0046) | ND(0.0045) | ND(0.0045) | ND(0.0045) | ND(0.016) | ND(0.049) | ND(0.019) | ND(0.011) | ND(0.0047) | ND(0.004) | ND(0.0079) | ND(0.0078) | ND(0.0034) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0029) |
| | | 50 | 2.09 | 0.043 U | ND(0.0031) | ND(0.0066) | ND(0.0048) | ND(0.0042) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0043) | ND(0.0036) | ND(0.0072) | ND(0.0071) | ND(0.0031) | ND(0.0057) | ND(0.0057) | ND(0.0056) | ND(0.0027) |
| VW-130 | Apr 2008 | 20 | 2.33 | 0.034 J | ND(0.0034) J | ND(0.0073) J | ND(0.0054) J | ND(0.0047) J | ND(0.0046) J | ND(0.0046) J | ND(0.0046) J | ND(0.017) J | ND(0.05) J | ND(0.019) J | ND(0.011) J | ND(0.0048) J | 0.14 J | ND(0.008) J | ND(0.0079) J | ND(0.0034) J | ND(0.0064) J | ND(0.0064) J | ND(0.0063) J | ND(0.003) J |
| | | 30 | 77.7 | ND(0.37) J | ND(0.11) J | ND(0.24) J | ND(0.18) J | ND(0.16) J | ND(0.15) J | ND(0.15) J | ND(0.15) J | ND(0.56) J | ***ND(1.6) J*** | ND(0.64) J | 52 J | ND(0.16) J | ND(0.13) J | ND(0.27) J | ND(0.26) J | ND(0.11) J | ND(0.21) J | ND(0.21) J | ND(0.21) J | ND(0.099) J |
| | | 40 | 2.38 | 0.021 | ND(0.0035) | ND(0.0075) | ND(0.0055) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0047) | ND(0.017) | ND(0.051) | ND(0.019) | ND(0.012) J | ND(0.0049) | 0.037 J | ND(0.0082) | ND(0.0081) | ND(0.0035) | ND(0.0065) | ND(0.0065) | ND(0.0064) | ND(0.003) |
| | | 40 Dup | 2.42 | ND(0.011) | 0.0052 | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | 0.037 J | ND(0.005) | ND(0.0042) J | ND(0.0083) | ND(0.0082) | ND(0.0036) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |

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# TABLE 3-1b. SCREENING EVALUATION FOR NESTED SOIL VAPOR RESULTS, SOLVENT RELATED CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth | Dilution Factor | Acetone mg/m$^3$ | 2-Butanone mg/m$^3$ | Carbon tetrachloride mg/m$^3$ | Chloro-benzene mg/m$^3$ | 1,1-Dichloro-ethane mg/m$^3$ | 1,1-Dichloro-ethene mg/m$^3$ | cis-1,2-Dichloro-ethene mg/m$^3$ | trans-1,2-Dichloro-ethene mg/m$^3$ | 1,4-Dioxane mg/m$^3$ | Hexachloro-butadiene mg/m$^3$ | 2-Hexanone mg/m$^3$ | Isopropanol mg/m$^3$ | 4-Methyl-2-Pentanone mg/m$^3$ | Methylene Chloride mg/m$^3$ | 1,1,2,2-Tetrachloro-ethane mg/m$^3$ | Tetrachloro-ethene mg/m$^3$ | Tetrahydro-furan mg/m$^3$ | 1,1,1-Trichloro-ethane mg/m$^3$ | 1,1,2-Trichloro-ethane mg/m$^3$ | Trichloro-ethene mg/m$^3$ | Vinyl Chloride mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-130 | Sep 2008 | 20 | 2.2 | ND(0.01) UJ | ND(0.0032) UJ | ND(0.0069) | ND(0.0051) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.0044) | ND(0.016) | ND(0.047) | ND(0.018) | 0.011 U | ND(0.0045) | ND(0.0038) | ND(0.0076) | ND(0.0075) | ND(0.0032) | ND(0.006) | ND(0.006) | ND(0.0059) | ND(0.0028) |
| | | 30 | 2.33 | 0.058 JB | 0.011 JB | ND(0.0073) | ND(0.0054) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0046) | ND(0.017) | ND(0.05) | ND(0.019) | 0.012 U | ND(0.0048) | ND(0.004) | ND(0.008) | ND(0.0079) | ND(0.0034) | ND(0.0064) | ND(0.0064) | ND(0.0063) | ND(0.003) |
| | | 40 | 2.53 | ND(0.012) UJ | 0.0046 U | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | ND(0.012) | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.0037) | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 40 Dup | 2.53 | 0.081 JB | 0.036 JB | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | ND(0.012) | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.0037) | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | Dec 2008 | 20 | 2.16 | 0.04 JB | 0.0047 U | ND(0.0068) | ND(0.005) | ND(0.0044) | ND(0.0043) | ND(0.0043) | ND(0.0043) | ND(0.016) | ND(0.046) | ND(0.018) | ND(0.011) | ND(0.0044) | ND(0.0038) | ND(0.0074) | 0.0077 | 0.0041 | ND(0.0059) | ND(0.0059) | ND(0.0058) | ND(0.0028) |
| | | 30 | 2.05 | 0.06 JB | 0.0086 JB | ND(0.0064) | ND(0.0047) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.0041) | ND(0.015) | ND(0.044) | ND(0.017) | ND(0.01) | ND(0.0042) | ND(0.0036) | ND(0.007) | ND(0.007) | ND(0.003) | ND(0.0056) | ND(0.0056) | ND(0.0055) | ND(0.0026) |
| | | 40 | 2.53 | 0.02 JB | 0.0082 JB | ND(0.008) | ND(0.0058) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.005) | ND(0.018) | ND(0.054) | ND(0.021) | ND(0.012) | ND(0.0052) | ND(0.0044) | ND(0.0087) | ND(0.0086) | ND(0.0037) | ND(0.0069) | ND(0.0069) | ND(0.0068) | ND(0.0032) |
| | | 40 Dup | 2.42 | 0.023 JB | 0.0097 JB | ND(0.0076) | ND(0.0056) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0048) | ND(0.017) | ND(0.052) | ND(0.02) | ND(0.012) | ND(0.005) | ND(0.0042) | ND(0.0083) | ND(0.0082) | ND(0.0036) | ND(0.0066) | ND(0.0066) | ND(0.0065) | ND(0.0031) |

| | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| USEPA RSL Screening Value for Depths of 20 ft-bgs | 1.60E+04 | 2.60E+03 | 8.00E-01 | 2.60E+01 | 7.50E+00 | 1.05E+02 | NA | 3.15E+01 | 1.60E+00 | 5.50E-01 | NA | 3.65E+03 | 1.55E+03 | 2.60E+01 | 2.10E-01 | 2.05E+00 | NA | 2.60E+03 | 7.50E-01 | 6.00E+00 | 8.00E-01 |
| USEPA RSL Screening Value for Depths Greater than 20 ft-bgs to 35 ft-bgs | 3.20E+04 | 5.20E+03 | 1.60E+00 | 5.20E+01 | 1.50E+01 | 2.10E+02 | NA | 6.30E+01 | 3.20E+00 | 1.10E+00 | NA | 7.30E+03 | 3.10E+03 | 5.20E+01 | 4.20E-01 | 4.10E+00 | NA | 5.20E+03 | 1.50E+00 | 1.20E+01 | 1.60E+00 |
| USEPA RSL Screening Value for Depths Greater than 35 ft-bgs | 4.57E+04 | 7.43E+03 | 2.29E+00 | 7.43E+01 | 2.14E+01 | 3.00E+02 | NA | 9.00E+01 | 4.57E+00 | 1.57E+00 | NA | 1.04E+04 | 4.43E+03 | 7.43E+01 | 6.00E-01 | 5.86E+00 | NA | 7.43E+03 | 2.14E+00 | 1.71E+01 | 2.29E+00 |

NOTES:

Screening levels calculated using the Regional Screening Levels for residential air and semi-site specific attenuation factors from Figure 3a. For depths of 20 ft-bgs an attenuation of 0.002 was used, for depths of greater than 20 ft-bgs to 35 ft-bgs an attenuation factor of 0.001 was used, and for depths greater than 35 ft-bgs and greater, an attenuation factor of 0.0007 was used.

***BOLD ITALICS*** - reported value is above the adjusted USEPA April 2009 RSL screening standard at the specified depth

**Dup** - Blind Duplicate Sample

**J** – estimated concentration

**mg/m$^3$** - milligram per cubic meter

**NA** - Not Available

**ND** - Not detected

**U** – Detected in blank sample, 1997-1999 results changed to non detect; subsequent results reported

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# TABLE 3-1c. SCREENING EVALUATION FOR NESTED SOIL VAPOR RESULTS, WATER TREATMENT RELATED AND OTHER CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth | Dilution Factor | Allyl Chloride mg/m$^3$ | Benzyl chloride mg/m$^3$ | Bromo-methane mg/m$^3$ | Carbon Disulfide mg/m$^3$ | Chloro-ethane mg/m$^3$ | Chloro-methane mg/m$^3$ | 1,2-Dichloro-benzene mg/m$^3$ | 1,3-Dichloro-benzene mg/m$^3$ | 1,4-Dichloro-benzene mg/m$^3$ | Dichloro-difluoro-methane mg/m$^3$ | 1,2-Dichloro-propane mg/m$^3$ | cis-1,3-dichloro-propene mg/m$^3$ | trans-1,3-Dichloro-propene mg/m$^3$ | 1,2-Dichloro-1,1,2,2-tetrafluoro-ethane mg/m$^3$ | Ethanol mg/m$^3$ | 1,2,4-Trichloro-benzene mg/m$^3$ | Trichloro-fluoromethane mg/m$^3$ | 1,1,2-Trichloro-trifluoroethane mg/m$^3$ | Bromo-dichloro-methane mg/m$^3$ | Bromoform mg/m$^3$ | Chloroform mg/m$^3$ | Dibromo-chloro-methane mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-20 | Apr 2008 | 20 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | 0.0089 | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | | 25 | 7.93 | ND(0.05) | ND(0.02) UJ | ND(0.015) | ND(0.012) | ND(0.01) | ND(0.033) | ND(0.024) | ND(0.024) | ND(0.024) | ND(0.02) | ND(0.018) | ND(0.018) | ND(0.018) | ND(0.028) | ND(0.03) | ND(0.12) UJ | ND(0.022) | ND(0.03) | ND(0.026) | ND(0.041) UJ | ND(0.019) | ND(0.034) |
| | | Dup-25 | 12.3 | ND(0.077) | ND(0.032) UJ | ND(0.024) | ND(0.019) | ND(0.016) | ND(0.051) | ND(0.037) | ND(0.037) | ND(0.037) | ND(0.03) | ND(0.028) | ND(0.028) | ND(0.028) | ND(0.043) | ND(0.046) | ND(0.18) UJ | ND(0.034) | ND(0.047) | ND(0.041) | ND(0.064) UJ | ND(0.03) | ND(0.052) |
| | Sep 2008 | 20 | 46.6 | ***ND(2.9)*** | ***ND(1.2)*** | ND(0.9) | ND(0.72) | ND(0.61) | ND(1.9) | ND(1.4) | ND(1.4) | ***ND(1.4)*** | ND(1.2) | ND(1.1) | ND(1) | ND(1) | ND(1.6) | ND(1.8) | ***ND(6.9)*** | ND(1.3) | ND(1.8) | ***ND(1.6)*** | ND(2.4) | ***ND(1.1)*** | ***ND(2)*** |
| | | 25 | 116 | ***ND(7.3)*** | ***ND(3)*** | ND(2.2) | ND(1.8) | ND(1.5) | ND(4.8) | ND(3.5) | ND(3.5) | ***ND(3.5)*** | ND(2.9) | ***ND(2.7)*** | ND(2.6) | ND(2.6) | ND(4) | ND(4.4) | ***ND(17)*** | ND(3.2) | ND(4.4) | ***ND(3.9)*** | ND(6) | ***ND(2.8)*** | ***ND(4.9)*** |
| | | 30 | 432 | ***ND(27)*** | ***ND(11)*** | ***ND(8.4)*** | ND(6.7) | ND(5.7) | ND(18) | ND(13) | ND(13) | ***ND(13)*** | ND(11) | ***ND(10)*** | ND(9.8) | ND(9.8) | ND(15) | ND(16) | ***ND(64)*** | ND(12) | ND(16) | ***ND(14)*** | ND(22) | ***ND(10)*** | ***ND(18)*** |
| | | 30 Dup | 432 | ***ND(27)*** | ***ND(11)*** | ***ND(8.4)*** | ND(6.7) | ND(5.7) | ND(18) | ND(13) | ND(13) | ***ND(13)*** | ND(11) | ***ND(10)*** | ND(9.8) | ND(9.8) | ND(15) | ND(16) | ***ND(64)*** | ND(12) | ND(16) | ***ND(14)*** | ND(22) | ***ND(10)*** | ***ND(18)*** |
| | | 35 | 404 | ***ND(25)*** | ***ND(10)*** | ***ND(7.8)*** | ND(6.3) | ND(5.3) | ND(17) | ND(12) | ND(12) | ***ND(12)*** | ND(10) | ***ND(9.3)*** | ND(9.2) | ND(9.2) | ND(14) | ND(15) | ***ND(60)*** | ND(11) | ND(15) | ***ND(14)*** | ND(21) | ***ND(9.9)*** | ***ND(17)*** |
| VW-21 | Apr 2008 | 20 | 8960 | ***ND(56)*** | ***ND(23) UJ*** | ***ND(17)*** | ND(14) | ND(12) | ND(37) | ND(27) | ND(27) | ***ND(27)*** | ND(22) | ***ND(21)*** | ND(20) | ND(20) | ND(31) | ND(34) | ***ND(130) UJ*** | ND(25) | ND(34) | ***ND(30)*** | ***ND(46) UJ*** | ***ND(22)*** | ***ND(38)*** |
| | Sep 2008 | 20 | 710 | ***ND(44)*** | ***ND(18)*** | ***ND(14)*** | ND(11) | ND(9.4) | ND(29) | ND(21) | ND(21) | ***ND(21)*** | ND(18) | ***ND(16)*** | ND(16) | ND(16) | ND(25) | ND(27) | ***ND(100)*** | ND(20) | ND(27) | ***ND(24)*** | ***ND(37)*** | ***ND(17)*** | ***ND(30)*** |
| VW-93 | Apr 2008 | 20 | 2.58 | ND(0.016) | ND(0.0067) | ND(0.005) | ND(0.004) | ND(0.0034) | ND(0.011) | ND(0.0078) | ND(0.0078) | ND(0.0078) | ND(0.0064) | ND(0.006) | ND(0.0058) | ND(0.0058) | ND(0.009) | ND(0.0097) | ND(0.038) | ND(0.0072) | ND(0.0099) | ND(0.0086) | ND(0.013) J | ND(0.0063) | ND(0.011) |
| | | 20 Dup | 2.58 | ND(0.016) | ND(0.0067) | ND(0.005) | ND(0.004) | ND(0.0034) | ND(0.011) | ND(0.0078) | ND(0.0078) | ND(0.0078) | ND(0.0064) | ND(0.006) | ND(0.0058) | ND(0.0058) | ND(0.009) | ND(0.0097) | ND(0.038) | ND(0.0072) | ND(0.0099) | ND(0.0086) | ND(0.013) J | ND(0.0063) | ND(0.011) |
| | | 25 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | 0.0082 | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) J | ND(0.0057) | ND(0.0099) |
| | | 30 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) J | ND(0.0059) | ND(0.01) |
| | | 35 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | ND(0.0036) | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) J | ND(0.0056) | ND(0.0098) |
| | | 40 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | ND(0.0062) | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) J | ND(0.0062) | ND(0.011) |
| | | 45 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | 0.01 | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 50 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | ND(0.0038) | ND(0.0032) | ND(0.01) | 0.014 | ND(0.0074) | ND(0.0074) | 0.0069 | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | 0.058 | ND(0.037) | ND(0.0069) | ND(0.0095) | ND(0.0083) | ND(0.013) J | ND(0.006) | ND(0.01) |
| | | 55 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | ND(0.0062) | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | Sep 2008 | 20 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | ND(0.0062) | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | | 20 Dup | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0074) | ND(0.0074) | ND(0.0074) | ND(0.0061) | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | 0.0098 JB | ND(0.037) | ND(0.0069) | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) | ND(0.01) |
| | | 25 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) UJ | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 30 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 35 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | 0.0094 | 0.034 | 0.056 J | ND(0.007) | ND(0.007) | ND(0.007) | 0.0058 J | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 40 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | ND(0.0036) | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | ND(0.0056) | ND(0.0098) |
| | | 45 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0074) | ND(0.0074) | ND(0.0074) | ND(0.0061) | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | ND(0.0093) | ND(0.037) | ND(0.0069) | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) | ND(0.01) |
| | | 50 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 55 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) UJ | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 60 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) UJ | ND(0.0072) | ND(0.0072) | ND(0.0072) | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | Dec 2008 | 20 | 2.02 | ND(0.013) | ND(0.0052) | ND(0.0039) | ND(0.0031) | ND(0.0027) | ND(0.0083) | ND(0.0061) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0071) | ND(0.0076) | ND(0.03) | ND(0.0057) | ND(0.0077) | ND(0.0068) | ND(0.01) | ND(0.0049) | ND(0.0086) |
| | | 25 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | ND(0.0032) | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | ND(0.0079) | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| | | 30 | 2.13 | ND(0.013) | ND(0.0055) | ND(0.0041) | ND(0.0033) | ND(0.0028) | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | ND(0.0053) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0074) | ND(0.008) | ND(0.032) | ND(0.006) | ND(0.0082) | ND(0.0071) | ND(0.011) | ND(0.0052) | ND(0.0091) |
| | | 35 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | ND(0.0034) | ND(0.0028) | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | 0.0055 | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) | 0.01 JB | ND(0.032) | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | ND(0.0053) | ND(0.0092) |
| | | 40 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | 0.01 JB | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | 0.024 JB | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| | | 45 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 50 | 2.13 | ND(0.013) | ND(0.0055) | ND(0.0041) | ND(0.0033) | ND(0.0028) | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | ND(0.0053) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0074) | ND(0.008) | ND(0.032) | ND(0.006) | ND(0.0082) | ND(0.0071) | ND(0.011) | ND(0.0052) | ND(0.0091) |
| | | 55 | 2.02 | ND(0.013) | ND(0.0052) | ND(0.0039) | ND(0.0031) | ND(0.0027) | ND(0.0083) | ND(0.0061) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0071) | ND(0.0076) | ND(0.03) | ND(0.0057) | ND(0.0077) | ND(0.0068) | ND(0.01) | ND(0.0049) | ND(0.0086) |
| | | 55 Dup | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | ND(0.0034) | ND(0.0028) | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) | ND(0.0081) | ND(0.032) | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | ND(0.0053) | ND(0.0092) |
| | | 60 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | ND(0.0032) | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | ND(0.0079) | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| VW-96 | Apr 2008 | 20 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | 0.0056 | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | | 25 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | ND(0.0032) | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | ND(0.0079) | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| | | 30 | 2.02 | ND(0.013) | ND(0.0052) | ND(0.0039) | ND(0.0031) | ND(0.0027) | ND(0.0083) | ND(0.0061) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0071) | ND(0.0076) | ND(0.03) | ND(0.0057) | ND(0.0077) | ND(0.0068) | ND(0.01) | ND(0.0049) | ND(0.0086) |
| | | 35 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0074) | ND(0.0074) | ND(0.0074) | ND(0.0061) | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | ND(0.0093) | ND(0.037) | ND(0.0069) | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) | ND(0.01) |
| | | 40 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) J | ND(0.0034) | ND(0.0028) | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | ND(0.0053) | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) | ND(0.0081) | ND(0.032) | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | ND(0.0053) | ND(0.0092) |
| | | 45 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | ND(0.0036) | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | ND(0.0056) | ND(0.0098) |
| | | 50 | 2.64 | ND(0.016) | ND(0.0068) | ND(0.0051) | ND(0.0041) | ND(0.0035) | ND(0.011) | ND(0.0079) | ND(0.0079) | ND(0.0079) | ND(0.0065) | ND(0.0061) | ND(0.006) | ND(0.006) | ND(0.0092) | ND(0.0099) | ND(0.039) | ND(0.0074) | ND(0.01) | ND(0.0088) | ND(0.014) | 0.072 | ND(0.011) |
| | | 55 | 129 | ND(0.81) | ND(0.33) | ND(0.25) | ND(0.2) | ND(0.17) | ND(0.53) | ND(0.39) | ND(0.39) | ND(0.39) | ND(0.32) | ND(0.3) | ND(0.29) | ND(0.29) | ND(0.45) | ND(0.49) | ND(1.9) | ND(0.36) | ND(0.49) | ND(0.43) | ND(0.67) | ***ND(0.31)*** | ND(0.55) |

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## TABLE 3-1c. SCREENING EVALUATION FOR NESTED SOIL VAPOR RESULTS, WATER TREATMENT RELATED AND OTHER CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth | Dilution Factor | Allyl Chloride mg/m$^3$ | Benzyl chloride mg/m$^3$ | Bromo-methane mg/m$^3$ | Carbon Disulfide mg/m$^3$ | Chloro-ethane mg/m$^3$ | Chloro-methane mg/m$^3$ | 1,2-Dichloro-benzene mg/m$^3$ | 1,3-Dichloro-benzene mg/m$^3$ | 1,4-Dichloro-benzene mg/m$^3$ | Dichloro-difluoro-methane mg/m$^3$ | 1,2-Dichloro-propane mg/m$^3$ | cis-1,3-dichloro-propene mg/m$^3$ | trans-1,3-Dichloro-propene mg/m$^3$ | 1,2-Dichloro-1,1,2,2-tetrafluoro-ethane mg/m$^3$ | Ethanol mg/m$^3$ | 1,2,4-Trichloro-benzene mg/m$^3$ | Trichloro-fluoromethane mg/m$^3$ | 1,1,2-Trichloro-trifluoroethane mg/m$^3$ | Bromo-dichloro-methane mg/m$^3$ | Bromoform mg/m$^3$ | Chloroform mg/m$^3$ | Dibromo-chloro-methane mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-96 | Sep 2008 | 20 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | ND(0.0038) | ND(0.0032) | ND(0.01) | 0.24 | ND(0.0074) | ND(0.0074) | ND(0.0061) | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | ND(0.0093) | 0.097 | ND(0.0069) | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) | ND(0.01) |
| | | 25 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0073) UJ | ND(0.0073) | ND(0.0073) UJ | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | | 30 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) UJ | ND(0.0076) | ND(0.0076) UJ | ND(0.0062) | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | | 35 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) UJ | ND(0.0072) | ND(0.0072) UJ | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 40 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0074) UJ | ND(0.0074) | ND(0.0074) UJ | ND(0.0061) | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | ND(0.0093) | ND(0.037) | ND(0.0069) | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) | ND(0.01) |
| | | 45 | 2.58 | ND(0.016) | ND(0.0067) | ND(0.005) | ND(0.004) | ND(0.0034) | ND(0.011) | ND(0.0078) UJ | ND(0.0078) | ND(0.0078) UJ | ND(0.0064) | ND(0.006) | ND(0.0058) | ND(0.0058) | ND(0.009) | ND(0.0097) | ND(0.038) | ND(0.0072) | ND(0.0099) | ND(0.0086) | ND(0.013) | ND(0.0063) | ND(0.011) |
| | | 50 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) UJ | ND(0.0072) | ND(0.0072) UJ | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | 0.071 | ND(0.01) |
| | | 55 | 84.3 | ND(5.3) | ***ND(2.2)*** | ND(1.6) | ND(1.3) | ND(1.1) | ND(3.5) | ND(2.5) | ND(2.5) | ND(2.5) | ND(2.1) | ND(1.9) | ND(1.9) | ND(1.9) | ND(2.9) | ND(3.2) | ***ND(12)*** | ND(2.4) | ND(3.2) | ***ND(2.8)*** | ND(4.4) | ***ND(2)*** | ***ND(3.6)*** |
| | | 60 | 2.42 | ***ND(15)*** | ***ND(6.3)*** | ND(4.7) | ND(3.8) | ND(3.2) | ND(10) | ND(7.3) | ND(7.3) | ***ND(7.3)*** | ND(6) | ***ND(5.6)*** | ND(5.5) | ND(5.5) | ND(8.4) | ND(9.1) | ***ND(36)*** | ND(6.8) | ND(9.3) | ***ND(8.1)*** | ND(12) | ***ND(5.9)*** | ***ND(10)*** |
| | Dec 2008 | 20 | 7.47 | ND(0.47) | ND(0.19) | ND(0.14) UJ | ND(0.12) | ND(0.098) | ND(0.31) | ND(0.22) | ND(0.22) | ND(0.22) | ND(0.18) | ND(0.17) | ND(0.17) | ND(0.17) | ND(0.26) | ND(0.28) | ND(1.1) | ND(0.21) | ND(0.29) | ND(0.25) | ND(0.39) | ***ND(0.18)*** | ND(0.32) |
| | | 25 | 8.2 | ND(0.51) | ND(0.21) | ND(0.16) | ND(0.13) | ND(0.11) | ND(0.34) | ND(0.25) | ND(0.25) | ND(0.25) | ND(0.2) | ND(0.19) | ND(0.19) | ND(0.19) | ND(0.29) | ND(0.31) | ND(1.2) | ND(0.23) | ND(0.31) | ND(0.27) | ND(0.42) | ***ND(0.2)*** | ND(0.35) |
| | | 30 | 17.4 | ND(1.1) | ND(0.45) | ND(0.34) UJ | ND(0.27) | ND(0.23) | ND(0.72) | ND(0.52) | ND(0.52) | ND(0.52) | ND(0.43) | ND(0.4) | ND(0.39) | ND(0.39) | ND(0.61) | ND(0.66) | ND(2.6) | ND(0.49) | ND(0.67) | ND(0.58) | ND(0.9) | ***ND(0.42)*** | ND(0.74) |
| | | 35 | 18.3 | ND(1.1) | ND(0.47) | ND(0.36) | ND(0.28) | ND(0.24) | ND(0.76) | ND(0.55) | ND(0.55) | ND(0.55) | ND(0.45) | ND(0.42) | ND(0.42) | ND(0.42) | ND(0.64) | ND(0.69) | ND(2.7) | ND(0.51) | ND(0.7) | ND(0.61) | ND(0.94) | ***ND(0.45)*** | ND(0.78) |
| | | 40 | 23.3 | ND(1.4) | ND(0.6) | ND(0.45) UJ | ND(0.36) | ND(0.31) | ND(0.96) | ND(0.7) | ND(0.7) | ND(0.7) | ND(0.58) | ND(0.54) | ND(0.53) | ND(0.53) | ND(0.81) | ND(0.88) | ND(3.4) | ND(0.65) | ND(0.89) | ND(0.78) | ND(1.2) | ***ND(0.57)*** | ND(0.99) |
| | | 45 | 34.6 | ND(2.2) | ***ND(0.9)*** | ND(0.67) | ND(0.54) | ND(0.46) | ND(1.4) | ND(1) | ND(1) | ND(1) | ND(0.86) | ND(0.8) | ND(0.78) | ND(0.78) | ND(1.2) | ND(1.3) | ND(5.1) | ND(0.97) | ND(1.3) | ***ND(1.2)*** | ND(1.8) | ***ND(0.84)*** | ***ND(1.5)*** |
| | | 50 | 106 | ***ND(6.6)*** | ***ND(2.7)*** | ND(2) UJ | ND(1.6) | ND(1.4) | ND(4.4) | ND(3.2) | ND(3.2) | ***ND(3.2)*** | ND(2.6) | ND(2.4) | ND(2.4) | ND(2.4) | ND(3.7) | ND(4) | ***ND(16)*** | ND(3) | ND(4.1) | ***ND(3.6)*** | ND(5.5) | ***ND(2.6)*** | ***ND(4.5)*** |
| | | 50 Dup | 108 | ***ND(6.8)*** | ***ND(2.8)*** | ND(2.1) UJ | ND(1.7) | ND(1.4) | ND(4.5) | ND(3.2) | ND(3.2) | ***ND(3.2)*** | ND(2.7) | ND(2.5) | ND(2.4) | ND(2.4) | ND(3.8) | ND(4.1) | ***ND(16)*** | ND(3) | ND(4.1) | ***ND(3.6)*** | ND(5.6) | ***ND(2.6)*** | ***ND(4.6)*** |
| | | 55 | 104 | ***ND(6.5)*** | ***ND(2.7)*** | ND(2) | ND(1.6) | ND(1.4) | ND(4.3) | ND(3.1) | ND(3.1) | ND(3.1) | ND(2.6) | ND(2.4) | ND(2.4) | ND(2.4) | ND(3.6) | ND(3.9) | ***ND(15)*** | ND(2.9) | ND(4) | ***ND(3.5)*** | ND(5.4) | ***ND(2.5)*** | ***ND(4.4)*** |
| | | 60 | 220 | ***ND(14)*** | ***ND(5.7)*** | ND(4.3) | ND(3.4) | ND(2.9) | ND(9.1) | ND(6.6) | ND(6.6) | ***ND(6.6)*** | ND(5.4) | ***ND(5.1)*** | ND(5) | ND(5) | ND(7.7) | ND(8.3) | ***ND(33)*** | ND(6.2) | ND(8.4) | ***ND(7.4)*** | ND(11) | ***ND(5.4)*** | ***ND(9.4)*** |
| VW-99 | Apr 2008 | 20 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 25 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | 0.0064 | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | 0.012 | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 30 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | 0.011 | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | | 35 | 22.9 | ND(0.14) | ND(0.059) | ND(0.044) | ND(0.036) | ND(0.03) | ND(0.094) | ND(0.069) | ND(0.069) | ND(0.069) | ND(0.057) | ND(0.053) | ND(0.052) | ND(0.052) | ND(0.08) | ND(0.086) | ND(0.34) | ND(0.064) | ND(0.088) | ND(0.077) | ND(0.12) | ND(0.056) | ND(0.098) |
| | | 40 | 22.4 | ND(0.14) | ND(0.058) | ND(0.043) | ND(0.035) | ND(0.03) | ND(0.092) | ND(0.067) | ND(0.067) | ND(0.067) | ND(0.055) | ND(0.052) | ND(0.051) | ND(0.051) | ND(0.078) | ND(0.084) | ND(0.33) | ND(0.063) | ND(0.086) | ND(0.075) | ND(0.12) | ND(0.055) | ND(0.095) |
| | | 45 | 46.6 | ND(0.29) | ND(0.12) | ND(0.09) | ND(0.072) | ND(0.061) | ND(0.19) | ND(0.14) | ND(0.14) | ND(0.14) | ND(0.12) | ND(0.11) | ND(0.1) | ND(0.1) | ND(0.16) | ND(0.18) | ND(0.69) | ND(0.13) | ND(0.18) | ND(0.16) | ND(0.24) | ND(0.11) | ND(0.2) |
| | | 50 | 110 | ND(0.69) | ND(0.28) | ND(0.21) | ND(0.17) | ND(0.14) | ND(0.45) | ND(0.33) | ND(0.33) | ND(0.33) | ND(0.27) | ND(0.25) | ND(0.25) | ND(0.25) | ND(0.38) | ND(0.41) | ND(1.6) | ND(0.31) | ND(0.42) | ND(0.37) | ND(0.57) J | ***ND(0.27)*** | ND(0.47) |
| | | 50 Dup | 110 | ND(0.69) | ND(0.28) | ND(0.21) | ND(0.17) | ND(0.14) | ND(0.45) | ND(0.33) | ND(0.33) | ND(0.33) | ND(0.27) | ND(0.25) | ND(0.25) | ND(0.25) | ND(0.38) | ND(0.41) | ND(1.6) | ND(0.31) | ND(0.42) | ND(0.37) | ND(0.57) | ***ND(0.27)*** | ND(0.47) |
| | Sep 2008 | 20 | 2.58 | ND(0.016) | ND(0.0067) | ND(0.005) | ND(0.004) | ND(0.0034) | ND(0.011) | ND(0.0078) | ND(0.0078) | ND(0.0078) | ND(0.0064) | ND(0.006) | ND(0.0058) | ND(0.0058) | ND(0.009) | ND(0.0097) | ND(0.038) | ND(0.0072) | ND(0.0099) | ND(0.0086) | ND(0.013) | ND(0.0063) | ND(0.011) |
| | | 25 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | 0.0048 | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | 0.0091 JB | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 30 | 2.13 | ND(0.013) | ND(0.0055) | ND(0.0041) | ND(0.0033) | ND(0.0028) | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | ND(0.0053) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0074) | ND(0.008) | ND(0.032) | ND(0.006) | ND(0.0082) | ND(0.0071) | ND(0.011) | 0.0052 | ND(0.0091) |
| | | 35 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | 0.01 | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | 0.01 | ND(0.01) |
| | | 35 Dup | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | 0.0095 | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | 0.0099 | ND(0.01) |
| | | 40 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | ND(0.0036) | ND(0.003) | 0.016 | ND(0.0069) | ND(0.0069) | ND(0.0069) | 0.014 | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | 0.023 | ND(0.0098) |
| | | 45 | 3.73 | ND(0.23) | ND(0.096) | ND(0.072) | ND(0.058) | ND(0.049) | ND(0.15) | ND(0.11) | ND(0.11) | ND(0.11) | ND(0.092) | ND(0.086) | ND(0.085) | ND(0.085) | ND(0.13) | ND(0.14) | ND(0.55) | ND(0.1) | ND(0.14) | ND(0.12) | ND(0.19) | ND(0.091) | ND(0.16) |
| | | 50 | 16 | ND(1) | ND(0.41) | ND(0.31) | ND(0.25) | ND(0.21) | ND(0.66) | ND(0.48) | ND(0.48) | ND(0.48) | ND(0.4) | ND(0.37) | ND(0.36) | ND(0.36) | ND(0.56) | ND(0.6) | ND(2.4) | ND(0.45) | ND(0.61) | ND(0.54) | ND(0.83) | ***ND(0.39)*** | ND(0.68) |
| | | 55 | 74.7 | ND(4.7) | ***ND(1.9)*** | ND(1.4) | ND(1.2) | ND(0.98) | ND(3.1) | ND(2.2) | ND(2.2) | ND(2.2) | ND(1.8) | ND(1.7) | ND(1.7) | ND(1.7) | ND(2.6) | ND(2.8) | ***ND(11)*** | ND(2.1) | ND(2.9) | ***ND(2.5)*** | ND(3.9) | ***ND(1.8)*** | ***ND(3.2)*** |
| | | 55 Dup | 74.4 | ND(4.7) | ***ND(1.9)*** | ND(1.4) | ND(1.2) | ND(0.98) | ND(3.1) | ND(2.2) | ND(2.2) | ND(2.2) | ND(1.8) | ND(1.7) | ND(1.7) | ND(1.7) | ND(2.6) | ND(2.8) | ***ND(11)*** | ND(2.1) | ND(2.9) | ***ND(2.5)*** | ND(3.9) | ***ND(1.8)*** | ***ND(3.2)*** |
| | | 60 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | ND(0.0036) | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) UJ | ND(0.0056) | ND(0.0098) UJ |
| | Dec 2008 | 20 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | ND(0.0032) | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | ND(0.0079) | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| | | 25 | 3.44 | ND(0.22) | ND(0.089) | ND(0.067) UJ | ND(0.054) | ND(0.045) | ND(0.14) | ND(0.1) | ND(0.1) | ND(0.1) | ND(0.085) | ND(0.079) | ND(0.078) | ND(0.078) | ND(0.12) | ND(0.13) | ND(0.51) | ND(0.097) | ND(0.13) | ND(0.12) | ND(0.18) | ND(0.084) | ND(0.15) |
| | | 30 | 42.6 | ND(2.7) | ***ND(1.1)*** | ND(0.83) UJ | ND(0.66) | ND(0.56) | ND(1.8) | ND(1.3) | ND(1.3) | ND(1.3) | ND(1) | ND(0.98) | ND(0.97) | ND(0.97) | ND(1.5) | ND(1.6) | ***ND(6.3)*** | ND(1.2) | ND(1.6) | ***ND(1.4)*** | ND(2.2) | ***ND(1)*** | ***ND(1.8)*** |
| | | 35 | 30.8 | ND(1.9) | ***ND(0.8)*** | ND(0.6) UJ | ND(0.48) | ND(0.41) | ND(1.3) | ND(0.92) | ND(0.92) | ND(0.92) | ND(0.76) | ND(0.71) | ND(0.7) | ND(0.7) | ND(1.1) | ND(1.2) | ***ND(4.6)*** | ND(0.86) | ND(1.2) | ***ND(1)*** | ND(1.6) | ***ND(0.75)*** | ***ND(1.3)*** |
| | | 40 | 27.7 | ND(1.7) | ***ND(0.72)*** | ND(0.54) | ND(0.43) | ND(0.36) | ND(1.1) | ND(0.83) | ND(0.83) | ND(0.83) | ND(0.68) | ND(0.64) | ND(0.63) | ND(0.63) | ND(0.97) | ND(1) | ND(4.1) | ND(0.78) | ND(1.1) | ND(0.93) | ND(1.4) | ***ND(0.68)*** | ***ND(1.2)*** |
| | | 45 | 34.2 | ND(2.1) | ***ND(0.88)*** | ND(0.66) | ND(0.53) | ND(0.45) | ND(1.4) | ND(1) | ND(1) | ND(1) | ND(0.84) | ND(0.79) | ND(0.78) | ND(0.78) | ND(1.2) | ND(1.3) | ND(5.1) | ND(0.96) | ND(1.3) | ***ND(1.1)*** | ND(1.8) | ***ND(0.83)*** | ***ND(1.4)*** |
| | | 50 | 52.2 | ND(3.3) | ***ND(1.4)*** | ND(1) | ND(0.81) | ND(0.69) | ND(2.2) | ND(1.6) | ND(1.6) | ND(1.6) | ND(1.3) | ND(1.2) | ND(1.2) | ND(1.2) | ND(1.8) | ND(2) | ***ND(7.7)*** | ND(1.5) | ND(2) | ***ND(1.7)*** | ND(2.7) | ***ND(1.3)*** | ***ND(2.2)*** |
| | | 55 | 109 | ***ND(6.8)*** | ***ND(2.8)*** | ND(2.1) UJ | ND(1.7) | ND(1.4) | ND(4.5) | ND(3.3) | ND(3.3) | ***ND(3.3)*** | ND(2.7) | ND(2.5) | ND(2.5) | ND(2.5) | ND(3.8) | ND(4.1) | ***ND(16)*** | ND(3.1) UJ | ND(4.2) | ***ND(3.6)*** | ND(5.6) | ***ND(2.7)*** | ***ND(4.6)*** |
| | | 55 Dup | 205 | ***ND(13)*** | ***ND(5.3)*** | ND(4) UJ | ND(3.2) | ND(2.7) | ND(8.5) | ND(6.2) | ND(6.2) | ***ND(6.2)*** | ND(5.1) | ***ND(4.7)*** | ND(4.6) | ND(4.6) | ND(7.2) | ND(7.7) | ***ND(30)*** | ND(5.8) | ND(7.8) | ***ND(6.9)*** | ND(10) | ***ND(5)*** | ***ND(8.7)*** |
| | | 60 | 51.2 | ND(3.2) | ***ND(1.3)*** | ND(0.99) | ND(0.8) | ND(0.68) | ND(2.1) | ND(1.5) | ND(1.5) | ND(1.5) | ND(1.3) | ND(1.2) | ND(1.2) | ND(1.2) | ND(1.8) | ND(1.9) | ***ND(7.6)*** | ND(1.4) | ND(2) | ***ND(1.7)*** | ND(2.6) | ***ND(1.2)*** | ***ND(2.2)*** |

US EPA ARCHIVE DOCUMENT

## TABLE 3-1c. SCREENING EVALUATION FOR NESTED SOIL VAPOR RESULTS, WATER TREATMENT RELATED AND OTHER CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth | Dilution Factor | Allyl Chloride mg/m$^3$ | Benzyl chloride mg/m$^3$ | Bromo-methane mg/m$^3$ | Carbon Disulfide mg/m$^3$ | Chloro-ethane mg/m$^3$ | Chloro-methane mg/m$^3$ | 1,2-Dichloro-benzene mg/m$^3$ | 1,3-Dichloro-benzene mg/m$^3$ | 1,4-Dichloro-benzene mg/m$^3$ | Dichloro-difluoro-methane mg/m$^3$ | 1,2-Dichloro-propane mg/m$^3$ | cis-1,3-dichloro-propene mg/m$^3$ | trans-1,3-Dichloro-propene mg/m$^3$ | 1,2-Dichloro-1,1,2,2-tetrafluoro-ethane mg/m$^3$ | Ethanol mg/m$^3$ | 1,2,4-Trichloro-benzene mg/m$^3$ | Trichloro-fluoromethane mg/m$^3$ | 1,1,2-Trichloro-trifluoroethane mg/m$^3$ | Bromo-dichloro-methane mg/m$^3$ | Bromoform mg/m$^3$ | Chloroform mg/m$^3$ | Dibromo-chloro-methane mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-127 | Apr 2008 | 20 | 2.64 | ND(0.016) | ND(0.0068) | ND(0.0051) J | ND(0.0041) | ND(0.0035) | ND(0.011) | ND(0.0079) | ND(0.0079) | ND(0.0079) | ND(0.0065) | ND(0.0061) | ND(0.006) | ND(0.006) | ND(0.0092) | ND(0.0099) | ND(0.039) | ND(0.0074) | ND(0.01) | ND(0.0088) | ND(0.014) J | ND(0.0064) | ND(0.011) |
| | | 30 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) J | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | 0.014 | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) J | ND(0.0058) | ND(0.01) |
| | | 40 | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) J | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | ND(0.006) | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | 0.023 | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) J | ND(0.0059) | ND(0.01) |
| | | 50 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) J | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | 0.024 | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) J | ND(0.0057) | ND(0.0099) |
| | Sep 2008 | 20 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | ND(0.0038) | ND(0.0032) | ND(0.01) UJ | ND(0.0074) | ND(0.0074) | ND(0.0074) | 0.0075 J | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | 0.012 JB | ND(0.037) | ND(0.0069) | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) | ND(0.01) |
| | | 30 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 40 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | 0.014 JB | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 50 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | 0.0056 | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) UJ | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) UJ | ND(0.0054) | ND(0.0094) UJ |
| | Dec 2008 | 20 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 30 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | ND(0.0034) | ND(0.0028) | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | 0.0057 | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) | ND(0.0081) | ND(0.032) | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | ND(0.0053) | ND(0.0092) |
| | | 40 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | ND(0.0032) | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | 0.012 J | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | ND(0.0079) | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| | | 40 Dup | 2.05 | ND(0.013) | ND(0.0053) | ND(0.004) | ND(0.0032) | ND(0.0027) | ND(0.0085) | ND(0.0062) | ND(0.0062) | ND(0.0062) | ND(0.0051) UJ | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0072) | ND(0.0077) | ND(0.03) | ND(0.0058) | ND(0.0078) | ND(0.0069) | ND(0.01) | ND(0.005) | ND(0.0087) |
| | | 50 | 2.05 | ND(0.013) | ND(0.0053) | ND(0.004) | ND(0.0032) | ND(0.0027) | ND(0.0085) | ND(0.0062) | ND(0.0062) | ND(0.0062) | 0.0095 | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0072) | ND(0.0077) | ND(0.03) | ND(0.0058) | ND(0.0078) | ND(0.0069) | ND(0.01) | ND(0.005) | ND(0.0087) |
| VW-128 | Apr 2008 | 20 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) J | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 30 | 2.02 | ND(0.013) | ND(0.0052) | ND(0.0039) J | ND(0.0031) | ND(0.0027) | ND(0.0083) | ND(0.0061) | ND(0.0061) | ND(0.0061) | ND(0.005) | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0071) | 0.0084 | ND(0.03) | ND(0.0057) | ND(0.0077) | ND(0.0068) | ND(0.01) | ND(0.0049) | ND(0.0086) |
| | | 40 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) J | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | ND(0.0059) | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 50 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) J | ND(0.0032) | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | ND(0.0079) | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| | | 50 Dup | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) J | ND(0.0032) | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | ND(0.0079) | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| | Sep 2008 | 20 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | 0.012 JB | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 30 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 40 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | 0.021 | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | ND(0.0056) | ND(0.0098) |
| | | 50 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | 0.0041 | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | ND(0.0058) | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | 0.027 JB | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | Dec 2008 | 20 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 30 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 40 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) | ND(0.0035) | ND(0.003) | ND(0.0092) | 0.049 | ND(0.0067) | ND(0.0067) | ND(0.0055) | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | 0.048 | ND(0.0063) | ND(0.0086) | ND(0.0075) | ND(0.012) | ND(0.0055) | ND(0.0095) |
| | | 50 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| VW-129 | Apr 2008 | 20 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) J | ND(0.0036) | ND(0.0031) | ND(0.0096) | ND(0.007) | ND(0.007) | ND(0.007) | 0.009 | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | 0.013 | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 30 | 2.24 | ND(0.014) | ND(0.0058) | ND(0.0043) J | ND(0.0035) | ND(0.003) | ND(0.0092) | ND(0.0067) | ND(0.0067) | ND(0.0067) | 0.011 | ND(0.0052) | ND(0.0051) | ND(0.0051) | ND(0.0078) | ND(0.0084) | ND(0.033) | 0.011 | ND(0.0086) | ND(0.0075) | ND(0.012) | 0.012 | ND(0.0095) |
| | | 40 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) J | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | 0.009 | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | 0.01 | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 50 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0074) | ND(0.0074) | ND(0.0074) | 0.014 | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | ND(0.0093) | ND(0.037) | 0.019 | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) | ND(0.01) |
| | Sep 2008 | 20 | 2.47 | ND(0.015) | ND(0.0064) | ND(0.0048) | 0.0041 | ND(0.0032) | ND(0.01) | ND(0.0074) | ND(0.0074) | ND(0.0074) | 0.0081 | ND(0.0057) | ND(0.0056) | ND(0.0056) | ND(0.0086) | ND(0.0093) | ND(0.037) | 0.015 | ND(0.0095) | ND(0.0083) | ND(0.013) | ND(0.006) | ND(0.01) |
| | | 20 Dup | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | 0.0078 | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | 0.015 | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |
| | | 30 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | 0.0096 | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | ND(0.009) | ND(0.035) | 0.018 | ND(0.0091) | ND(0.008) | ND(0.012) | 0.015 | ND(0.01) |
| | | 40 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | 0.0085 | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | 0.014 | ND(0.0084) | ND(0.0074) | ND(0.011) UJ | 0.0059 | ND(0.0094) UJ |
| | | 50 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) UJ | ND(0.0076) | ND(0.0076) | ND(0.0076) | 0.012 J | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | 0.019 J | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | | 50 Dup | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) UJ | ND(0.0076) | ND(0.0076) | ND(0.0076) | 0.013 J | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | 0.022 J | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | Dec 2008 | 20 | 2.13 | ND(0.013) | ND(0.0055) | ND(0.0041) | ND(0.0033) | ND(0.0028) | ND(0.0088) | ND(0.0064) | ND(0.0064) | ND(0.0064) | ND(0.0053) | ND(0.0049) | ND(0.0048) | ND(0.0048) | ND(0.0074) | ND(0.008) | ND(0.032) | ND(0.006) | ND(0.0082) | ND(0.0071) | ND(0.011) | ND(0.0052) | ND(0.0091) |
| | | 30 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | 0.025 | ND(0.0094) |
| | | 40 | 2.29 | ND(0.014) | ND(0.0059) | ND(0.0044) | ND(0.0036) | ND(0.003) | ND(0.0094) | ND(0.0069) | ND(0.0069) | ND(0.0069) | ND(0.0057) | ND(0.0053) | ND(0.0052) | ND(0.0052) | ND(0.008) | ND(0.0086) | ND(0.034) | ND(0.0064) | ND(0.0088) | ND(0.0077) | ND(0.012) | ND(0.0056) | ND(0.0098) |
| | | 50 | 2.09 | ND(0.013) | ND(0.0054) | ND(0.004) | ND(0.0032) | ND(0.0028) | ND(0.0086) | ND(0.0063) | ND(0.0063) | ND(0.0063) | ND(0.0052) | ND(0.0048) | ND(0.0047) | ND(0.0047) | ND(0.0073) | ND(0.0079) | ND(0.031) | ND(0.0059) | ND(0.008) | ND(0.007) | ND(0.011) | ND(0.0051) | ND(0.0089) |
| VW-130 | Apr 2008 | 20 | 2.33 | ND(0.014) J | ND(0.006) J | ND(0.0045) J | ND(0.0036) J | ND(0.0031) J | ND(0.0096) J | ND(0.007) J | ND(0.007) J | ND(0.007) J | 0.0063 J | ND(0.0054) J | ND(0.0053) J | ND(0.0053) J | ND(0.0081) J | 0.027 J | ND(0.034) J | ND(0.0065) J | ND(0.0089) J | ND(0.0078) J | ND(0.012) | ND(0.0057) J | ND(0.0099) J |
| | | 30 | 77.7 | ND(0.49) J | ND(0.2) J | ND(0.15) J | ND(0.12) J | ND(0.1) J | ND(0.32) J | ND(0.23) J | ND(0.23) J | ND(0.23) J | ND(0.19) J | ND(0.18) J | ND(0.18) J | ND(0.18) J | ND(0.27) J | ND(0.29) J | ND(1.2) J | ND(0.22) J | ND(0.3) J | ND(0.26) J | ND(0.4) | ***ND(0.19) J*** | ND(0.33) J |
| | | 40 | 2.38 | ND(0.015) | ND(0.0062) | ND(0.0046) | ND(0.0037) | ND(0.0031) | ND(0.0098) | ND(0.0072) | ND(0.0072) | ND(0.0072) | 0.006 | ND(0.0055) | ND(0.0054) | ND(0.0054) | ND(0.0083) | 0.016 | ND(0.035) | ND(0.0067) | ND(0.0091) | ND(0.008) | ND(0.012) | ND(0.0058) | ND(0.01) |
| | | 40 Dup | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | 0.0075 | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |

US EPA ARCHIVE DOCUMENT

## TABLE 3-1c. SCREENING EVALUATION FOR NESTED SOIL VAPOR RESULTS, WATER TREATMENT RELATED AND OTHER CONSTITUENTS
## SECOND 2008 SEMIANNUAL MONITORING EVENT
## CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO

| Nested Well Location | Date | Depth | Dilution Factor | Allyl Chloride mg/m$^3$ | Benzyl chloride mg/m$^3$ | Bromo-methane mg/m$^3$ | Carbon Disulfide mg/m$^3$ | Chloro-ethane mg/m$^3$ | Chloro-methane mg/m$^3$ | 1,2-Dichloro-benzene mg/m$^3$ | 1,3-Dichloro-benzene mg/m$^3$ | 1,4-Dichloro-benzene mg/m$^3$ | Dichloro-difluoro-methane mg/m$^3$ | 1,2-Dichloro-propane mg/m$^3$ | cis-1,3-dichloro-propene mg/m$^3$ | trans-1,3-Dichloro-propene mg/m$^3$ | 1,2-Dichloro-1,1,2,2-tetrafluoro-ethane mg/m$^3$ | Ethanol mg/m$^3$ | 1,2,4-Trichloro-benzene mg/m$^3$ | Trichloro-fluoromethane mg/m$^3$ | 1,1,2-Trichloro-trifluoroethane mg/m$^3$ | Bromo-dichloro-methane mg/m$^3$ | Bromoform mg/m$^3$ | Chloroform mg/m$^3$ | Dibromo-chloro-methane mg/m$^3$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-130 | Sep 2008 | 20 | 2.2 | ND(0.014) | ND(0.0057) | ND(0.0043) | ND(0.0034) | ND(0.0029) | ND(0.0091) | ND(0.0066) | ND(0.0066) | ND(0.0066) | ND(0.0054) | ND(0.0051) | ND(0.005) | ND(0.005) | ND(0.0077) | ND(0.0083) | ND(0.033) | ND(0.0062) | ND(0.0084) | ND(0.0074) | ND(0.011) | ND(0.0054) | ND(0.0094) |
| | | 30 | 2.33 | ND(0.014) | ND(0.006) | ND(0.0045) | 0.0041 | 0.0035 | 0.013 | ND(0.007) | ND(0.007) | ND(0.007) | 0.01 | ND(0.0054) | ND(0.0053) | ND(0.0053) | ND(0.0081) | ND(0.0088) | ND(0.034) | ND(0.0065) | ND(0.0089) | ND(0.0078) | ND(0.012) | ND(0.0057) | ND(0.0099) |
| | | 40 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) UJ | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | 0.0072 | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | | 40 Dup | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | 0.0073 | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | Dec 2008 | 20 | 2.16 | ND(0.014) | ND(0.0056) | ND(0.0042) | ND(0.0034) | ND(0.0028) | ND(0.0089) | ND(0.0065) | ND(0.0065) | ND(0.0065) | 0.01 | ND(0.005) | ND(0.0049) | ND(0.0049) | ND(0.0076) | ND(0.0081) | ND(0.032) | ND(0.0061) | ND(0.0083) | ND(0.0072) | ND(0.011) | ND(0.0053) | ND(0.0092) |
| | | 30 | 2.05 | ND(0.013) | ND(0.0053) | ND(0.004) | ND(0.0032) | ND(0.0027) | ND(0.0085) | ND(0.0062) | ND(0.0062) | ND(0.0062) | 0.0089 | ND(0.0047) | ND(0.0046) | ND(0.0046) | ND(0.0072) | 0.0091 JB | ND(0.03) | 0.0059 | ND(0.0078) | ND(0.0069) | ND(0.01) | ND(0.005) | ND(0.0087) |
| | | 40 | 2.53 | ND(0.016) | ND(0.0065) | ND(0.0049) | ND(0.0039) | ND(0.0033) | ND(0.01) | ND(0.0076) | ND(0.0076) | ND(0.0076) | 0.0084 | ND(0.0058) | ND(0.0057) | ND(0.0057) | ND(0.0088) | ND(0.0095) | ND(0.038) | ND(0.0071) | ND(0.0097) | ND(0.0085) | ND(0.013) | ND(0.0062) | ND(0.011) |
| | | 40 Dup | 2.42 | ND(0.015) | ND(0.0063) | ND(0.0047) | ND(0.0038) | ND(0.0032) | ND(0.01) | ND(0.0073) | ND(0.0073) | ND(0.0073) | 0.0085 | ND(0.0056) | ND(0.0055) | ND(0.0055) | ND(0.0084) | ND(0.0091) | ND(0.036) | ND(0.0068) | ND(0.0093) | ND(0.0081) | ND(0.012) | ND(0.0059) | ND(0.01) |

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| USEPA RSL Screening Value for Depths of 20 ft-bgs | 2.05E+00 | 2.50E-01 | 2.60E+00 | 3.65E+02 | 5.00E+03 | 4.70E+01 | 1.05E+02 | NA | 1.10E+00 | 1.05E+02 | 1.20E+00 | NA | NA | NA | NA | 2.10E+00 | 3.65E+02 | 1.55E+04 | 3.30E-01 | 1.10E+01 | 5.50E-02 | 4.50E-01 |
| USEPA RSL Screening Value for Depths Greater than 20 ft-bgs to 35 ft-bgs | 4.10E+00 | 5.00E-01 | 5.20E+00 | 7.30E+02 | 1.00E+04 | 9.40E+01 | 2.10E+02 | NA | 2.20E+00 | 2.10E+02 | 2.40E+00 | NA | NA | NA | NA | 4.20E+00 | 7.30E+02 | 3.10E+04 | 6.60E-01 | 2.20E+01 | 1.10E-01 | 9.00E-01 |
| USEPA RSL Screening Value for Depths Greater than 35 ft-bgs | 5.86E+00 | 7.14E-01 | 7.43E+00 | 1.04E+03 | 1.43E+04 | 1.34E+02 | 3.00E+02 | NA | 3.14E+00 | 3.00E+02 | 3.43E+00 | NA | NA | NA | NA | 6.00E+00 | 1.04E+03 | 4.43E+04 | 9.43E-01 | 3.14E+01 | 1.57E-01 | 1.29E+00 |

NOTES:

Screening levels calculated using the Regional Screening Levels for residential air and semi-site specific attenuation factors from Figure 3a. For depths of 20 ft-bgs an attenuation of 0.002 was used, for depths of greater than 20 ft-bgs to 35 ft-bgs an attenuation factor of 0.001 was used, and for depths greater than 35 ft-bgs and greater, an attenuation factor of 0.0007 was used.

***BOLD ITALICS*** - reported value is above the adjusted USEPA April 2009 RSL screening standard at the specified depth

**Dup** - Blind Duplicate Sample

**J** – estimated concentration

**mg/m$^3$** - milligram per cubic meter

**NA** - Not Available

**ND** - Not detected

**U** – Detected in blank sample, 1997-1999 results changed to non detect; subsequent results reported

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**TABLE 3-2. DISTRIBUTION OF DISSOLVED PHASE CONSTITUENTS**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**CHEVRON CINCINNATI FACILITY, HOOVEN, OHIO**

| Constituent | Up-gradient of Smear Zone[1] | Within Smear Zone[2] | Down-gradient of Smear Zone[3] |
|---|---|---|---|
| Average TPH Concentration | 0.026 | 11.1 | -- |
| Average BTEX Concentration | 0.010 | 1.95 | 0.023 |
| Average Benzene Concentration | 0.001 | 1.30 | 0.019 |
| Average Nitrate Concentration | 5.41 | 0.110 | 0.040 |
| Average Sulfate Concentration | 70.5 | 13.0 | 1.5 |
| Average Ferrous Iron Concentration | 0.015 | 11.44 | 0.085 |
| Average Dissolved Manganese Concentration | 0.180 | 0.615 | 1.660 |
| Average Methane Concentration | 0.007 | 11.13 | 13.000 |

NOTES:
[1] - Wells up-gradient of smear zone include MW-51, MW-95S, MW-100S, and MW-114
[2] - Wells within smear zone include L-1RR, L-3R, MW-10, MW-17, MW-18R, MW-21, MW-22, MW-26R, MW-33, MW-38, MW-48S, MW-52, MW-64, MW-80, MW-81S, MW-85S, MW-88, MW-93S, MW-94S, MW-99S, MW-112, and MW-115S
[3] - Wells down-gradient of smear zone include MW-35, MW-37, MW-120, MW-131, MW-132, MW-133, and MW-134
MW-18R sulfate concentration set to ND(1.5), consistent with laboratory analytical results from nearby nested well NW-18
Concentrations reported in milligrams per liter
Average values estimated assuming non-detect concentrations equal one half the detection limit, or average of detection limits when all constituents are non-detect.

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**TABLE 5-1. SOIL VAPOR FIELD SCREENING RESULTS**
**SECOND 2008 SEMIANNUAL MONITORING EVENT**
**GULF PARK, CLEVES, OHIO**

| Well ID | Oxygen (System Inactive) (%) | Oxygen (System Active) (%) | Carbon Dioxide (System Inactive) (%) | Carbon Dioxide (System Active) (%) | Methane (System Inactive) (%) | Methane (System Active) (%) | Total Organic Vapor (System Inactive) (ppmv) | Total Organic Vapor (System Active) (ppmv) |
|---|---|---|---|---|---|---|---|---|
| VP1-25S | 13.6 | 21.3 | 0.7 | 0.0 | 0.0 | 0.0 | 30.3 | 35 |
| VP1-25D | 13.3 | 21.6 | 1.0 | 0.0 | 0.0 | 0.0 | 46.9 | 6.0 |
| VP1-50S | 13.4 | 21.0 | 0.9 | 0.0 | 0.0 | 0.0 | 62.5 | 110 |
| VP2-25S | 0.6 | 20.8 | 6.7 | 0.7 | 4.3 | 0.1 | 70 | 94.2 |
| VP2-50S | 2.2 | 11.2 | 12.4 | 7.8 | 75.8 | 2.6 | 648 | 1,788 |
| VP3-35S | 12.4 | 21.6 | 1.7 | 0.0 | 0.0 | 0.0 | 16 | 7.8 |
| VP4-25S | 0.0 | 22.3 | 1.2 | 0.0 | 0.6 | 0.0 | 217 | 11.3 |
| VP4-25D | 0.0 | 22.1 | 0.8 | 0.0 | 0.1 | 0.0 | 48 | 9.4 |
| VP6-35S | 0.0 | 21.7 | 7.6 | 0.5 | 15.5 | 0.0 | 148 | 7.0 |

**NOTES:**
% - percent
ppmv - parts per million by volume