# APPENDIX C

# WATER LEVEL AND SLUG TEST DATA

# Table C-1
# Groundwater Levels and Sump Water Levels
# Univar USA Inc. Facility
# Kent, Washington

| Location | Measuring Point Elevation | Date | Time | Depth to Water | Water Elevation |
|---|---|---|---|---|---|
| Groundwater Levels | | | | | |
| MW-1 | 33.45 | 04/17/95 | 12:14 | 4.70 | 28.75 |
| | | 09/07/95 | NR | 6.24 | 27.21 |
| | | 11/10/95 | NR | 5.86 | 27.59 |
| | | 12/07/95 | NR | 5.13 | 28.32 |
| | | 01/29/96 | NR | 4.57 | 28.88 |
| | | 09/04/96 | 13:50 | 6.04 | 27.41 |
| | | 10/11/96 | 11:00 | 6.04 | 27.41 |
| | | 11/06/96 | 9:25 | 5.53 | 27.92 |
| | | 12/10/96 | 10:55 | 4.46 | 28.99 |
| | | 01/10/97 | NR | 4.20 | 29.25 |
| | | 02/21/97 | 12:45 | 4.33 | 29.12 |
| | | 03/04/97 | 9:55 | 4.33 | 29.12 |
| | | 06/27/97 | 10:57 | 4.81 | 28.64 |
| | | 09/04/97 | 11:08 | 5.63 | 27.82 |
| | | 12/22/97 | 8:46 | 4.82 | 28.63 |
| | | 03/06/98 | 10:03 | 4.50 | 28.95 |
| | | 06/18/98 | 9:19 | 5.02 | 28.43 |
| | | 09/29/98 | 9:25 | 6.52 | 26.93 |
| | | 12/15/98 | 9:45 | 4.78 | 28.67 |
| | | 01/07/99 | 9:02 | 4.33 | 29.12 |
| | | 01/13/99 | 9:29 | 4.35 | 29.10 |
| | | 03/02/99 | 12:43 | 3.60 | 29.85 |
| | | 06/16/99 | 10:26 | 4.87 | 28.58 |
| | | 09/16/99 | 10:43 | 5.72 | 27.73 |
| | | 12/08/99 | 8:43 | 4.63 | 28.82 |
| | | 03/07/00 | 8:58 | 4.28 | 29.17 |
| | | 06/21/00 | 9:45 | 4.80 | 28.65 |
| | | 09/12/00 | 9:30 | 5.81 | 27.64 |
| | | 12/07/00 | 8:45 | 5.36 | 28.09 |
| | | 03/15/01 | 9:30 | 4.91 | 28.54 |
| | | 07/12/01 | 11:00 | 5.10 | 28.35 |
| | | 09/24/01 | 11:29 | 5.95 | 27.50 |
| | 33.15 | 01/02/02 | 11:07 | 4.35 | 28.80 |
| | | 03/27/02 | 9:55 | 4.12 | 29.03 |
| | | 06/11/02 | 10:42 | 4.75 | 28.40 |
| | | 09/17/02 | 12:36 | 6.03 | 27.12 |
| | | 12/16/02 | 11:40 | 5.60 | 27.55 |
| | | 03/17/03 | 11:00 | 4.91 | 28.24 |
| | | 06/10/03 | NR | 5.11 | 28.04 |
| | | 09/11/03 | 10:05 | 6.66 | 26.49 |
| | | 12/04/03 | 7:30 | 4.96 | 28.19 |
| | | 01/12/04 | 11:12 | 4.70 | 28.45 |
| | | 03/16/04 | 12:20 | 4.80 | 28.35 |
| | | 06/10/04 | 8:25 | 5.25 | 27.90 |
| | | 09/22/04 | 11:15 | 5.88 | 27.27 |

# Table C-1
## Groundwater Levels and Sump Water Levels
## Univar USA Inc. Facility
## Kent, Washington

| Location | Measuring Point Elevation | Date | Time | Depth to Water | Water Elevation |
|---|---|---|---|---|---|
| MW-2 | 34.07 | 04/17/95 | 12:09 | 6.26 | 27.81 |
| | | 09/07/95 | NR | 7.72 | 26.35 |
| | | 11/10/95 | NR | 7.21 | 26.86 |
| | | 12/07/95 | NR | 6.01 | 28.06 |
| | | 01/29/96 | NR | 5.37 | 28.70 |
| | | 09/04/96 | 9:00 | 7.93 | 26.14 |
| | | 10/11/96 | 10:30 | 7.71 | 26.36 |
| | | 11/06/96 | 8:50 | 7.02 | 27.05 |
| | | 12/10/96 | 10:50 | 5.55 | 28.52 |
| | | 01/10/97 | NR | 5.02 | 29.05 |
| | | 02/21/97 | 12:10 | 5.31 | 28.76 |
| | | 03/04/97 | 9:50 | 5.29 | 28.78 |
| | | 06/27/97 | 10:53 | 6.11 | 27.96 |
| | | 09/04/97 | 11:04 | 7.07 | 27.00 |
| | | 12/22/97 | 8:44 | 5.92 | 28.15 |
| | | 03/06/98 | 2:20 | 5.67 | 28.40 |
| | | 06/18/98 | 9:22 | 6.54 | 27.53 |
| | | 09/29/98 | 9:28 | 7.95 | 26.12 |
| | | 12/15/98 | 9:52 | 5.71 | 28.36 |
| | | 01/07/99 | 8:50 | 5.51 | 28.56 |
| | | 01/13/99 | 9:25 | 5.62 | 28.45 |
| | | 03/02/99 | 9:29 | 4.73 | 29.34 |
| | | 06/16/99 | 10:31 | 6.40 | 27.67 |
| | | 09/16/99 | 10:41 | 7.39 | 26.68 |
| | | 12/08/99 | 8:40 | 5.84 | 28.23 |
| | | 03/07/00 | 8:52 | 5.36 | 28.71 |
| | | 06/21/00 | 9:54 | 6.43 | 27.64 |
| | | 09/12/00 | 11:25 | 7.92 | 26.15 |
| | | 12/07/00 | 8:40 | 7.11 | 26.96 |
| | | 03/15/01 | 9:40 | 6.44 | 27.63 |
| | | 07/12/01 | 13:00 | 6.83 | 27.24 |
| | | 09/24/01 | 11:33 | 7.64 | 26.43 |
| | 33.79 | 01/02/02 | 10:30 | 5.61 | 28.18 |
| | | 03/27/02 | 10:00 | 5.49 | 28.30 |
| | | 06/11/02 | 10:45 | 6.28 | 27.51 |
| | | 09/17/02 | 12:33 | 7.67 | 26.12 |
| | | 12/16/02 | 11:37 | 7.07 | 26.72 |
| | | 03/17/03 | 10:55 | 5.75 | 28.04 |
| | | 06/10/03 | NR | 6.68 | 27.11 |
| | | 09/10/03 | 9:10 | 8.16 | 25.63 |
| | | 12/04/03 | 9:30 | 6.24 | 27.55 |
| | | 01/12/04 | 10:55 | 5.75 | 28.04 |
| | | 03/15/04 | 11:15 | 5.90 | 27.89 |
| | | 06/10/04 | 8:10 | 6.50 | 27.29 |
| | | 09/23/04 | 8:10 | 7.12 | 26.67 |

# Table C-1
## Groundwater Levels and Sump Water Levels
## Univar USA Inc. Facility
## Kent, Washington

| Location | Measuring Point Elevation | Date | Time | Depth to Water | Water Elevation |
|---|---|---|---|---|---|
| MW-3 | 33.21 | 04/17/95 | 12:01 | 6.54 | 26.67 |
| | | 09/07/95 | NR | 7.34 | 25.87 |
| | | 11/10/95 | NR | 6.93 | 26.28 |
| | | 12/07/95 | NR | 6.24 | 26.97 |
| | | 01/29/96 | NR | 5.73 | 27.48 |
| | | 09/04/96 | 14:50 | 7.17 | 26.04 |
| | | 10/11/96 | 10:20 | 7.32 | 25.89 |
| | | 11/06/96 | 9:10 | 6.85 | 26.36 |
| | | 12/10/96 | 10:25 | 5.75 | 27.46 |
| | | 01/10/97 | NR | 5.30 | 27.91 |
| | | 02/21/97 | 11:55 | 5.51 | 27.70 |
| | | 03/04/97 | 9:27 | 5.50 | 27.71 |
| | | 06/27/97 | 10:30 | 6.24 | 26.97 |
| | | 09/04/97 | 10:47 | 6.87 | 26.34 |
| | | 12/22/97 | 8:10 | 6.03 | 27.18 |
| | | 03/06/98 | 9:34 | 5.90 | 27.31 |
| | | 06/18/98 | 8:57 | 6.51 | 26.70 |
| | | 09/29/98 | 9:05 | 5.73 | 27.48 |
| | | 12/14/98 | 9:32 | 5.92 | 27.29 |
| | | 01/07/99 | 8:44 | 5.81 | 27.40 |
| | | 01/13/99 | 9:12 | 5.93 | 27.28 |
| | | 03/02/99 | 9:04 | 5.21 | 28.00 |
| | | 06/16/99 | 9:55 | 6.48 | 26.73 |
| | | 09/16/99 | 10:23 | 7.20 | 26.01 |
| | | 12/08/99 | 8:24 | 6.08 | 27.13 |
| | | 03/07/00 | 8:23 | 5.74 | 27.47 |
| | | 06/21/00 | 9:15 | 6.48 | 26.73 |
| | | 09/12/00 | 10:30 | 7.40 | 25.81 |
| | | 12/07/00 | 9:25 | 6.94 | 26.27 |
| | | 03/15/01 | 9:57 | 6.41 | 26.80 |
| | | 07/12/01 | 15:55 | 6.77 | 26.44 |
| | | 09/24/01 | 11:37 | 7.48 | 25.73 |
| | 32.94 | 01/02/02 | 11:12 | 5.71 | 27.23 |
| | | 03/27/02 | 10:05 | 5.65 | 27.29 |
| | | 06/11/02 | 10:27 | 6.28 | 26.66 |
| | | 09/17/02 | 12:00 | 7.41 | 25.53 |
| | | 12/16/02 | 11:05 | 6.81 | 26.13 |
| | | 03/17/03 | 10:05 | 5.84 | 27.10 |
| | | 06/10/03 | NR | 6.60 | 26.34 |
| | | 09/11/03 | 9:50 | 7.82 | 25.12 |
| | | 12/03/03 | 12:00 | 6.26 | 26.68 |
| | | 01/12/04 | 11:59 | 5.80 | 27.14 |
| | | 03/15/04 | 10:00 | 5.98 | 26.96 |
| | | 06/10/04 | 10:00 | 6.22 | 26.72 |
| | | 09/22/04 | 10:05 | 7.87 | 25.07 |

# Table C-1
# Groundwater Levels and Sump Water Levels
# Univar USA Inc. Facility
# Kent, Washington

| Location | Measuring Point Elevation | Date | Time | Depth to Water | Water Elevation |
|---|---|---|---|---|---|
| MW-4 | 33.20 | 09/04/96 | 13:00 | 5.89 | 27.31 |
| | | 10/11/96 | 10:40 | 6.21 | 26.99 |
| | | 11/06/96 | 9:15 | 5.75 | 27.45 |
| | | 12/10/96 | 10:40 | 4.68 | 28.52 |
| | | 01/10/97 | NR | 3.95 | 29.25 |
| | | 02/21/97 | 12:40 | 4.10 | 29.10 |
| | | 03/04/97 | 11:35 | 4.16 | 29.04 |
| | | 06/27/97 | 10:44 | 4.59 | 28.61 |
| | | 09/04/97 | 10:55 | 5.44 | 27.76 |
| | | 12/22/97 | 8:39 | 4.78 | 28.42 |
| | | 03/06/98 | 9:51 | 4.28 | 28.92 |
| | | 06/18/98 | 9:16 | 5.00 | 28.20 |
| | | 09/29/98 | 9:20 | 6.44 | 26.76 |
| | | 12/14/98 | 9:43 | 5.16 | 28.04 |
| | | 01/07/99 | 9:06 | 4.38 | 28.82 |
| | | 01/13/99 | 9:17 | 4.38 | 28.82 |
| | | 03/02/99 | 9:26 | 3.73 | 29.47 |
| | | 06/16/99 | 10:23 | 4.77 | 28.43 |
| | | 09/16/99 | 10:45 | 5.78 | 27.42 |
| | | 12/08/99 | 8:45 | 4.81 | 28.39 |
| | | 03/07/00 | 9:03 | 4.17 | 29.03 |
| | | 06/21/00 | 9:41 | 4.85 | 28.35 |
| | | 09/12/00 | 9:40 | 6.22 | 26.98 |
| | | 12/07/00 | 8:50 | 6.78 | 26.42 |
| | | 03/15/01 | 9:35 | 5.10 | 28.10 |
| | | 07/12/01 | 10:00 | 5.14 | 28.06 |
| | | 09/24/01 | 11:41 | 6.02 | 27.18 |
| | 32.86 | 01/02/02 | 11:05 | 4.41 | 28.45 |
| | | 03/27/02 | 9:53 | 4.17 | 28.69 |
| | | 06/11/02 | 10:37 | 4.69 | 28.17 |
| | | 09/17/02 | 12:38 | 6.25 | 26.61 |
| | | 12/16/02 | 11:45 | 6.22 | 26.64 |
| | | 03/17/03 | 11:02 | 4.74 | 28.12 |
| | | 06/10/03 | NR | 5.17 | 27.69 |
| | | 09/10/03 | 9:20 | 7.02 | 25.84 |
| | | 12/04/03 | 7:25 | 5.49 | 27.37 |
| | | 01/12/04 | 11:20 | 4.88 | 27.98 |
| | | 03/15/04 | 11:25 | 4.83 | 28.03 |
| | | 06/10/04 | 8:35 | 5.33 | 27.53 |
| | | 09/22/04 | 11:30 | 6.11 | 26.75 |
| MW-5 | 32.77 | 09/04/96 | 11:50 | 6.74 | 26.03 |
| | | 10/11/96 | 10:45 | 6.82 | 25.95 |
| | | 11/06/96 | 9:05 | 6.24 | 26.53 |
| | | 12/10/96 | 10:30 | 5.01 | 27.76 |
| | | 01/10/97 | NR | 4.54 | 28.23 |
| | | 02/21/97 | 12:30 | 4.79 | 27.98 |

# Table C-1
## Groundwater Levels and Sump Water Levels
## Univar USA Inc. Facility
## Kent, Washington

| Location | Measuring Point Elevation | Date | Time | Depth to Water | Water Elevation |
|---|---|---|---|---|---|
| MW-5 (continued) | | 03/04/97 | 9:40 | 4.78 | 27.99 |
| | | 06/27/97 | 10:40 | 5.54 | 27.23 |
| | | 09/04/97 | 10:59 | 6.29 | 26.48 |
| | | 12/22/97 | 8:32 | 5.36 | 27.41 |
| | | 03/06/98 | 9:43 | 5.15 | 27.62 |
| | | 06/18/98 | 9:11 | 5.89 | 26.88 |
| | | 09/29/98 | 9:39 | 7.13 | 25.64 |
| | | 12/15/98 | 9:38 | 5.18 | 27.59 |
| | | 01/07/99 | 9:08 | 5.04 | 27.73 |
| | | 01/13/99 | 9:00 | 5.97 | 26.80 |
| | | 03/02/99 | 9:16 | 4.38 | 28.39 |
| | | 06/16/99 | 10:07 | 5.81 | 26.96 |
| | | 09/16/99 | 10:36 | 6.58 | 26.19 |
| | | 12/08/99 | 8:34 | 5.33 | 27.44 |
| | | 03/07/00 | 8:44 | 4.92 | 27.85 |
| | | 06/21/00 | 9:24 | 5.31 | 27.46 |
| | | 09/12/00 | 10:05 | 6.84 | 25.93 |
| | | 12/07/00 | 8:55 | 6.42 | 26.35 |
| | | 03/15/01 | 9:55 | 5.82 | 26.95 |
| | | 07/09/01 | 10:08 | 6.22 | 26.55 |
| | | 08/27/01 | 10:11 | 6.67 | 26.10 |
| | | 09/24/01 | 11:43 | 6.98 | 25.79 |
| | | 10/22/01 | 11:37 | 6.94 | 25.83 |
| | | 11/19/01 | 13:10 | 6.31 | 26.46 |
| | 32.60 | 01/02/02 | 10:57 | 5.14 | 27.46 |
| | | 03/27/02 | 10:36 | 5.05 | 27.55 |
| | | 06/11/02 | 10:13 | 5.75 | 26.85 |
| | | 09/17/02 | 12:15 | 6.98 | 25.62 |
| | | 12/16/02 | 11:22 | 6.31 | 26.29 |
| | | 03/17/03 | 10:30 | 5.31 | 27.29 |
| | | 06/10/03 | NR | 6.08 | 26.52 |
| | | 09/11/03 | 9:55 | 7.39 | 25.21 |
| | | 12/03/03 | 11:40 | 5.70 | 26.90 |
| | | 01/12/04 | 10:23 | 5.24 | 27.36 |
| | | 03/15/04 | 10:45 | 5.39 | 27.21 |
| | | 06/10/04 | NR | NR | NR |
| | | 09/22/04 | 11:00 | 6.44 | 26.16 |
| MW-6 | 33.33 | 09/04/96 | 9:50 | 6.26 | 27.07 |
| | | 10/11/96 | 10:35 | 6.55 | 26.78 |
| | | 11/06/96 | 8:58 | 5.98 | 27.35 |
| | | 12/10/96 | 10:45 | 5.08 | 28.25 |
| | | 01/10/97 | NR | 4.17 | 29.16 |
| | | 02/21/97 | 12:15 | 4.33 | 29.00 |
| | | 03/04/97 | 9:45 | 4.42 | 28.91 |
| | | 06/27/97 | 10:49 | 5.05 | 28.28 |
| | | 09/04/97 | 11:01 | 5.87 | 27.46 |

# Table C-1
## Groundwater Levels and Sump Water Levels
## Univar USA Inc. Facility
## Kent, Washington

| Location | Measuring Point Elevation | Date | Time | Depth to Water | Water Elevation |
|---|---|---|---|---|---|
| MW-6 (continued) | | 12/22/97 | 8:36 | 5.11 | 28.22 |
| | | 03/06/98 | 9:49 | 4.57 | 28.76 |
| | | 06/18/98 | 9:26 | 5.48 | 27.85 |
| | | 09/29/98 | 9:32 | 6.87 | 26.46 |
| | | 12/15/98 | 9:50 | 5.15 | 28.18 |
| | | 01/07/99 | 8:55 | 4.39 | 28.94 |
| | | 01/13/99 | 9:20 | 4.44 | 28.89 |
| | | 03/02/99 | 9:24 | 3.64 | 29.69 |
| | | 06/16/99 | 10:19 | 5.04 | 28.29 |
| | | 09/16/99 | 10:39 | 6.03 | 27.30 |
| | | 12/08/99 | 8:37 | 4.82 | 28.51 |
| | | 03/07/00 | 8:48 | 4.44 | 28.89 |
| | | 06/21/00 | 9:50 | 5.08 | 28.25 |
| | | 09/12/00 | 11:15 | 6.24 | 27.09 |
| | | 12/07/00 | 9:05 | 5.85 | 27.48 |
| | | 03/15/01 | 9:45 | 5.25 | 28.08 |
| | | 07/12/01 | 15:30 | 5.61 | 27.72 |
| | | 09/24/01 | 11:46 | 6.35 | 26.98 |
| | 33.05 | 01/02/02 | 10:37 | 4.52 | 28.53 |
| | | 03/27/02 | 9:50 | 4.00 | 29.05 |
| | | 06/11/02 | 10:51 | 4.87 | 28.18 |
| | | 06/11/02 | 12:30 | 6.39 | 26.66 |
| | | 12/16/02 | 11:35 | 6.27 | 26.78 |
| | | 03/17/03 | 10:46 | 4.67 | 28.38 |
| | | 06/10/03 | NR | 5.65 | 27.40 |
| | | 09/10/03 | 8:55 | 7.90 | 25.15 |
| | | 12/04/03 | 8:00 | 5.91 | 27.14 |
| | | 01/12/04 | 10:45 | 5.62 | 27.43 |
| | | 03/15/04 | 11:10 | 5.33 | 27.72 |
| | | 06/10/04 | 8:05 | 6.40 | 26.65 |
| | | 09/22/04 | 11:10 | 7.27 | 25.78 |
| MW-7 | 33.24 | 12/22/97 | 8:26 | 5.86 | 27.38 |
| | | 03/06/98 | 9:41 | 5.66 | 27.58 |
| | | 06/18/98 | 9:04 | 6.38 | 26.86 |
| | | 09/29/98 | 9:15 | 7.62 | 25.62 |
| | | 12/14/98 | 9:36 | 5.66 | 27.58 |
| | | 01/07/99 | 8:34 | 5.58 | 27.66 |
| | | 01/13/99 | 9:05 | 5.68 | 27.56 |
| | | 03/02/99 | 9:09 | 4.89 | 28.35 |
| | | 06/16/99 | 10:03 | 6.32 | 26.92 |
| | | 09/16/99 | 10:30 | 7.09 | 26.15 |
| | | 12/08/99 | 8:28 | 5.89 | 27.35 |
| | | 03/07/00 | 8:38 | 5.45 | 27.79 |
| | | 06/21/00 | 10:00 | 6.47 | 26.77 |
| | | 09/12/00 | 10:25 | 7.31 | 25.93 |
| | | 12/07/00 | 9:20 | 6.91 | 26.33 |

# Table C-1
# Groundwater Levels and Sump Water Levels
# Univar USA Inc. Facility
# Kent, Washington

| Location | Measuring Point Elevation | Date | Time | Depth to Water | Water Elevation |
|---|---|---|---|---|---|
| MW-7 (continued) | | 03/15/01 | 10:00 | 6.32 | 26.92 |
| | | 07/12/01 | 13:45 | 6.75 | 26.49 |
| | | 08/27/01 | 10:30 | 7.09 | 26.15 |
| | | 09/24/01 | 11:49 | 7.33 | 25.91 |
| | | 10/22/01 | 18:37 | 7.20 | 26.04 |
| | | 11/19/01 | 12:50 | 6.33 | 26.91 |
| | 32.96 | 01/02/02 | 10:23 | 5.55 | 27.41 |
| | | 03/27/02 | 10:12 | 5.45 | 27.51 |
| | | 06/11/02 | 10:23 | 6.16 | 26.80 |
| | | 09/17/02 | 12:41 | 7.34 | 25.62 |
| | | 12/16/02 | 11:10 | 6.71 | 26.25 |
| | | 03/17/03 | 10:15 | 5.70 | 27.26 |
| | | 06/10/03 | NR | 6.48 | 26.48 |
| | | 09/10/03 | 8:23 | 7.80 | 25.16 |
| | | 12/03/03 | 11:30 | 6.17 | 26.79 |
| | | 01/12/04 | 10:07 | 5.64 | 27.32 |
| | | 03/15/04 | 10:23 | 5.79 | 27.17 |
| | | 06/10/04 | 7:25 | 6.22 | 26.74 |
| | | 09/22/04 | 10:35 | 6.84 | 26.12 |
| MW-8 | 33.83 | 12/22/97 | 8:30 | 6.39 | 27.44 |
| | | 03/06/98 | 9:46 | 6.20 | 27.63 |
| | | 06/18/98 | 9:13 | 6.94 | 26.89 |
| | | 09/29/98 | 9:42 | 8.22 | 25.61 |
| | | 12/14/98 | 9:55 | 6.21 | 27.62 |
| | | 01/07/99 | 9:12 | 6.10 | 27.73 |
| | | 01/13/99 | 8:55 | 6.22 | 27.61 |
| | | 03/02/99 | 9:21 | 5.38 | 28.45 |
| | | 06/16/99 | 10:12 | 6.88 | 26.95 |
| | | 09/16/99 | 10:33 | 7.65 | 26.18 |
| | | 12/08/99 | 8:33 | 6.42 | 27.41 |
| | | 03/07/00 | 8:42 | 5.97 | 27.86 |
| | | 06/21/00 | 10:06 | 6.77 | 27.06 |
| | | 09/12/00 | 10:20 | 7.90 | 25.93 |
| | | 12/07/00 | 9:10 | 7.46 | 26.37 |
| | | 03/15/01 | 9:50 | 6.95 | 26.88 |
| | | 07/12/01 | 12:00 | 7.31 | 26.52 |
| | | 08/27/01 | 10:27 | 7.65 | 26.18 |
| | | 09/24/01 | 11:52 | 7.98 | 25.85 |
| | | 10/22/01 | 17:50 | 7.95 | 25.88 |
| | | 11/19/01 | 14:15 | 6.88 | 26.95 |
| | 33.57 | 01/02/02 | 10:48 | 6.07 | 27.50 |
| | | 03/27/02 | 10:21 | 5.98 | 27.59 |
| | | 06/11/02 | 10:08 | 6.71 | 26.86 |
| | | 09/17/02 | 12:26 | 7.94 | 25.63 |
| | | 12/16/02 | 11:28 | 7.29 | 26.28 |
| | | 03/17/03 | 10:37 | 6.58 | 26.99 |

# Table C-1
## Groundwater Levels and Sump Water Levels
## Univar USA Inc. Facility
## Kent, Washington

| Location | Measuring Point Elevation | Date | Time | Depth to Water | Water Elevation |
|---|---|---|---|---|---|
| MW-8 (continued) | | 06/10/03 | NR | 7.05 | 26.52 |
| | | 09/10/03 | 8:44 | 8.38 | 25.19 |
| | | 12/03/03 | 11:00 | 6.70 | 26.87 |
| | | 01/12/04 | 10:33 | 6.19 | 27.38 |
| | | 03/15/04 | 11:00 | 6.32 | 27.25 |
| | | 06/10/04 | 7:55 | 6.78 | 26.79 |
| | | 09/23/04 | 8:05 | 7.40 | 26.17 |
| MW-9 | 33.77 | 08/27/01 | 10:26 | 7.80 | 25.97 |
| | | 10/22/01 | 16:55 | 7.95 | 25.82 |
| | | 11/19/01 | 14:23 | 7.02 | 26.75 |
| | | 01/02/02 | 10:44 | 6.21 | 27.56 |
| | | 03/27/02 | 10:25 | 6.06 | 27.71 |
| | | 06/11/02 | 10:05 | 6.84 | 26.93 |
| | | 09/17/02 | 12:28 | 8.11 | 25.66 |
| | | 12/16/02 | 11:30 | 7.51 | 26.26 |
| | | 03/17/03 | 10:41 | 6.36 | 27.41 |
| | | 06/10/03 | NR | 7.20 | 26.57 |
| | | 09/10/03 | 8:49 | 8.61 | 25.16 |
| | | 12/03/03 | 11:05 | 6.90 | 26.87 |
| | | 01/12/04 | 10:40 | 6.34 | 27.43 |
| | | 03/15/04 | 11:05 | 6.41 | 27.36 |
| | | 06/10/04 | 8:00 | 7.00 | 26.77 |
| | | 09/22/04 | 11:05 | 7.81 | 25.96 |
| MW-10 | 32.89 | 01/02/02 | 10:18 | 5.48 | 27.41 |
| | | 03/27/02 | 10:08 | 5.42 | 27.47 |
| | | 06/11/02 | 10:25 | 6.08 | 26.81 |
| | | 09/17/02 | 12:46 | 7.25 | 25.64 |
| | | 12/16/02 | 11:07 | 6.58 | 26.31 |
| | | 03/17/03 | 10:10 | 5.62 | 27.27 |
| | | 06/10/03 | NR | 6.40 | 26.49 |
| | | 09/10/03 | 8:20 | 7.72 | 25.17 |
| | | 12/03/03 | 10:30 | 6.07 | 26.82 |
| | | 01/12/04 | 10:03 | 5.58 | 27.31 |
| | | 03/15/04 | 10:17 | 5.73 | 27.16 |
| | | 06/10/04 | 7:15 | 6.13 | 26.76 |
| | | 09/22/04 | 10:25 | 6.71 | 26.18 |
| MW-11 | 32.79 | 08/27/01 | 10:16 | 6.88 | 25.91 |
| | | 10/15/02 | 11:50 | 8.20 | 24.59 |
| | | 10/22/01 | 12:20 | 7.14 | 25.65 |
| | | 10/29/01 | 16:04 | 6.98 | 25.81 |
| | | 11/19/01 | 12:55 | 6.27 | 26.52 |
| | | 01/02/02 | 11:00 | 5.34 | 27.45 |
| | | 03/27/02 | 10:34 | 5.25 | 27.54 |
| | | 06/11/02 | 10:16 | 5.95 | 26.84 |
| | | 09/17/02 | 12:14 | 7.16 | 25.63 |

# Table C-1
## Groundwater Levels and Sump Water Levels
## Univar USA Inc. Facility
## Kent, Washington

| Location | Measuring Point Elevation | Date | Time | Depth to Water | Water Elevation |
|---|---|---|---|---|---|
| MW-11 (continued) | | 12/16/02 | 11:21 | 6.50 | 26.29 |
| | | 37,697.00 | 0.43 | 5.48 | 27.31 |
| | | 06/10/03 | NR | 6.28 | 26.51 |
| | | 09/10/03 | 8:36 | 7.61 | 25.18 |
| | | 12/03/03 | 10:44 | 5.94 | 26.85 |
| | | 01/12/04 | 10:18 | 5.43 | 27.36 |
| | | 03/15/04 | 10:40 | 5.57 | 27.22 |
| | | 06/10/04 | 7:45 | 6.01 | 26.78 |
| | | 09/22/04 | 10:55 | 6.62 | 26.17 |
| MW-12 | 32.81 | 08/27/01 | 10:15 | 6.89 | 25.92 |
| | | 10/15/01 | 11:40 | 8.24 | 24.57 |
| | | 10/22/01 | 14:05 | 7.13 | 25.68 |
| | | 10/29/01 | 14:17 | 7.12 | 25.69 |
| | | 11/19/01 | 11:07 | 6.22 | 26.59 |
| | | 01/02/02 | 11:02 | 5.36 | 27.45 |
| | | 03/27/02 | 10:31 | 5.28 | 27.53 |
| | | 06/11/02 | 10:18 | 5.97 | 26.84 |
| | | 09/17/02 | 12:11 | 7.16 | 25.65 |
| | | 12/16/02 | 11:19 | 6.51 | 26.30 |
| | | 03/17/03 | 10:23 | 5.50 | 27.31 |
| | | 06/10/03 | NR | 6.30 | 26.51 |
| | | 09/10/03 | 8:33 | 7.64 | 25.17 |
| | | 12/03/03 | 10:42 | 5.98 | 26.83 |
| | | 01/12/04 | 10:16 | 5.45 | 27.36 |
| | | 03/15/04 | 10:35 | 5.60 | 27.21 |
| | | 06/10/04 | 7:40 | 6.03 | 26.78 |
| | | 09/22/04 | 10:50 | 6.64 | 26.17 |
| MW-13 | 32.81 | 03/31/03 | 13:05 | 5.43 | 27.38 |
| | | 06/10/03 | NR | 6.09 | 26.72 |
| | | 09/10/03 | 9:26 | 7.65 | 25.16 |
| | | 12/03/03 | 11:20 | 5.91 | 26.90 |
| | | 01/12/04 | 11:23 | 5.37 | 27.44 |
| | | 03/15/04 | 11:20 | 5.55 | 27.26 |
| | | 06/10/04 | 8:30 | 6.44 | 26.37 |
| | | 09/22/04 | 11:25 | 6.60 | 26.21 |
| MW-14 | 32.60 | 12/03/03 | 10:03 | 5.65 | 26.95 |
| | | 01/12/04 | 11:30 | 5.07 | 27.53 |
| | | 03/16/04 | 13:00 | 5.21 | 27.39 |
| | | 06/10/04 | 8:20 | 5.68 | 26.92 |
| | | 09/23/04 | 8:20 | 6.30 | 26.30 |
| MW-15 | 32.57 | 12/03/03 | 10:00 | 5.46 | 27.11 |
| | | 01/12/04 | 11:09 | 4.86 | 27.71 |
| | | 03/16/04 | 13:35 | 4.98 | 27.59 |
| | | 06/10/04 | 8:15 | 5.50 | 27.07 |
| | | 09/23/04 | 8:15 | 6.23 | 26.34 |

# Table C-1
# Groundwater Levels and Sump Water Levels
# Univar USA Inc. Facility
# Kent, Washington

| Location | Measuring Point Elevation | Date | Time | Depth to Water | Water Elevation |
|---|---|---|---|---|---|
| MW-16 | 36.92 | 12/03/03 | 10:10 | 10.11 | 26.81 |
| | | 01/12/04 | 11:40 | 9.56 | 27.36 |
| | | 03/15/04 | 11:30 | 9.68 | 27.24 |
| | | 06/10/04 | 8:40 | 10.12 | 26.80 |
| | | 09/22/04 | 11:35 | 10.72 | 26.20 |
| MW-17 | 32.60 | 12/03/03 | 10:20 | 5.91 | 26.69 |
| | | 01/12/04 | 12:05 | 5.43 | 27.17 |
| | | 03/15/04 | 10:05 | 5.59 | 27.01 |
| | | 06/10/04 | 7:05 | 5.95 | 26.65 |
| | | 09/22/04 | 10:15 | 6.50 | 26.10 |
| MW-18 | 32.73 | 12/03/03 | 11:50 | 5.94 | 26.79 |
| | | 01/12/04 | 10:00 | 5.43 | 27.30 |
| | | 03/15/04 | 10:15 | 5.60 | 27.13 |
| | | 06/10/04 | 7:10 | 6.00 | 26.73 |
| | | 09/22/04 | 10:15 | 6.50 | 26.23 |
| MW-19 | 33.52 | 03/16/04 | 10:10 | 6.54 | 26.98 |
| | | 06/10/04 | 7:20 | 6.87 | 26.65 |
| | | 09/22/04 | 10:30 | 7.44 | 26.08 |
| INJ-1 | 32.77 | 11/19/01 | 14:27 | 6.50 | 26.27 |
| | | 03/27/02 | 10:38 | 5.23 | 27.54 |
| | | 06/11/02 | 10:11 | 5.94 | 26.83 |
| | | 09/17/02 | 12:16 | 7.14 | 25.63 |
| | | 12/16/02 | 11:24 | 6.48 | 26.29 |
| | | 03/17/03 | 10:32 | 5.47 | 27.30 |
| | | 06/10/03 | NR | 6.09 | 26.68 |
| | | 09/11/03 | 10:00 | 7.56 | 25.21 |
| | | 12/03/03 | NR | NR | NR |
| | | 01/12/04 | 10:27 | 5.44 | 27.33 |
| | | 03/15/04 | 10:50 | 5.55 | 27.22 |
| | | 06/10/04 | NR | NR | NR |
| | | 09/22/04 | NR | NR | NR |
| INJ-2 | 32.81 | 10/15/01 | 11:35 | 8.22 | 24.59 |
| | | 10/22/01 | 15:43 | 7.12 | 25.69 |
| | | 10/29/01 | 13:10 | 7.02 | 25.79 |
| | | 11/19/01 | 11:05 | 6.30 | 26.51 |
| | | 03/27/02 | 10:28 | 5.29 | 27.52 |
| | | 06/11/02 | 10:20 | 5.99 | 26.82 |
| | | 09/17/02 | 12:10 | 7.18 | 25.63 |
| | | 12/16/02 | 11:17 | 6.52 | 26.29 |
| | | 03/17/03 | 10:20 | 5.51 | 27.30 |
| | | 06/10/03 | NR | 6.31 | 26.50 |
| | | 09/10/03 | 8:30 | 7.65 | 25.16 |
| | | 12/03/03 | 10:40 | 6.00 | 26.81 |
| | | 01/12/04 | 10:14 | 5.46 | 27.35 |
| | | 03/15/04 | 10:30 | 5.62 | 27.19 |

# Table C-1
## Groundwater Levels and Sump Water Levels
## Univar USA Inc. Facility
## Kent, Washington

| Location | Measuring Point Elevation | Date | Time | Depth to Water | Water Elevation |
|---|---|---|---|---|---|
| INJ-2 (continued) | | 06/10/04 | 7:35 | 6.05 | 26.76 |
| | | 09/22/04 | 10:45 | 6.65 | 26.16 |
| INJ-3 | 33.01 | 11/19/01 | 14:40 | 6.45 | 26.56 |
| | | 06/11/02 | 10:21 | 6.19 | 26.82 |
| | | 09/17/02 | 12:43 | 7.38 | 25.63 |
| | | 12/16/02 | 11:15 | 7.00 | 26.01 |
| | | 03/17/03 | 10:17 | 5.74 | 27.27 |
| | | 06/10/03 | NR | 6.50 | 26.51 |
| | | 09/10/03 | 8:27 | 7.73 | 25.28 |
| | | 12/03/03 | 10:50 | 6.32 | 26.69 |
| | | 01/12/03 | 10:11 | 5.70 | 27.31 |
| | | 03/15/04 | 10:27 | 5.81 | 27.20 |
| | | 06/10/04 | 7:30 | 6.18 | 26.83 |
| | | 09/22/04 | 10:40 | 6.90 | 26.11 |
| P-1 | 33.85 | 01/13/99 | 8:55 | 6.25 | 27.60 |
| | | 03/02/99 | 9:19 | 5.42 | 28.43 |
| | | 06/16/99 | 10:15 | 6.82 | 27.03 |
| | | 09/16/99 | 10:34 | 7.57 | 26.28 |
| | | 12/08/99 | 8:32 | 6.49 | 27.36 |
| | | 03/07/00 | 8:41 | 6.15 | 27.70 |
| | | 06/21/00 | 9:33 | 6.96 | 26.89 |
| | | 09/12/00 | 10:15 | 7.91 | 25.94 |
| | | 12/07/00 | 9:15 | 7.50 | 26.35 |
| | | 03/15/01 | 9:52 | 6.10 | 27.75 |
| | 33.62 | 01/02/02 | 10:55 | 6.12 | 27.50 |
| | | 09/17/02 | 12:18 | 7.94 | 25.68 |
| | | 12/16/02 | 11:26 | 7.28 | 26.34 |
| | | 03/17/03 | 10:35 | 6.28 | 27.34 |
| | | 09/10/03 | 8:42 | 8.40 | 25.22 |
| | | 12/03/03 | 10:53 | 7.03 | 26.59 |
| | | 01/12/04 | 10:35 | 6.20 | 27.42 |
| | | 03/15/04 | 10:55 | 6.35 | 27.27 |
| | | 06/10/04 | 7:50 | 6.81 | 26.81 |
| | | 09/23/04 | 8:00 | 7.41 | 26.21 |
| EMW-1 | 34.80 | 04/17/95 | NR | 7.48 | 27.32 |
| | | 09/07/95 | NR | 8.91 | 25.89 |
| | | 11/10/95 | NR | 9.07 | 25.73 |
| | | 12/07/95 | NR | 6.79 | 28.01 |
| | | 01/29/96 | NR | 6.41 | 28.39 |
| EMW-2 | 34.87 | 04/17/95 | NR | 7.59 | 27.28 |
| | | 09/07/95 | NR | 8.96 | 25.91 |
| | | 11/10/95 | NR | 8.21 | 26.66 |
| | | 12/07/95 | NR | 7.20 | 27.67 |
| | | 01/29/96 | NR | 6.71 | 28.16 |
| EMW-3 | 34.49 | 04/17/95 | NR | 7.19 | 27.30 |

# Table C-1
## Groundwater Levels and Sump Water Levels
## Univar USA Inc. Facility
## Kent, Washington

| Location | Measuring Point Elevation | Date | Time | Depth to Water | Water Elevation |
|---|---|---|---|---|---|
| EMW-4 | 34.52 | 04/17/95 | NR | 7.10 | 27.42 |
| | | 09/07/95 | NR | 8.57 | 25.95 |
| | | 11/10/95 | NR | 7.82 | 26.70 |
| | | 12/07/95 | NR | 6.76 | 27.76 |
| | | 01/29/96 | NR | 6.12 | 28.40 |
| EMW-5 | 35.04 | 04/17/95 | NR | 7.63 | 27.41 |
| | | 09/07/95 | NR | 9.13 | 25.91 |
| | | 11/10/95 | NR | 8.21 | 26.83 |
| | | 12/07/95 | NR | 7.26 | 27.78 |
| | | 01/29/96 | NR | 6.68 | 28.36 |
| EMW-6 | 35.45 | 04/17/95 | NR | 8.14 | 27.31 |
| | | 09/07/95 | NR | 9.52 | 25.93 |
| | | 11/10/95 | NR | 8.61 | 26.84 |
| | | 12/07/95 | NR | 7.68 | 27.77 |
| | | 01/29/96 | NR | 7.09 | 28.36 |
| EMW-7 | 33.31 | 04/17/95 | NR | 8.19 | 25.12 |
| | | 09/07/95 | NR | 8.04 | 25.27 |
| | | 11/10/95 | NR | 6.99 | 26.32 |
| | | 12/07/95 | NR | 7.18 | 26.13 |
| | | 01/29/96 | NR | 5.61 | 27.70 |
| | | 09/04/96 | 16:00 | 7.31 | 26.00 |
| | | 10/11/96 | 11:05 | 7.40 | 25.91 |
| | | 11/06/96 | 9:45 | 6.85 | 26.46 |
| | | 12/10/96 | 10:20 | 5.60 | 27.71 |
| | | 01/10/97 | NR | 5.19 | 28.12 |
| | | 02/21/97 | 12:05 | 7.43 | 25.88 |
| | | 03/04/97 | NR | 5.41 | 27.90 |
| | | 06/27/97 | 10:36 | 6.15 | 27.16 |
| | | 09/04/97 | 10:52 | 6.90 | 26.41 |
| | | 12/22/97 | 8:18 | 5.99 | 27.32 |
| | | 03/06/98 | 9:39 | 5.77 | 27.54 |
| | | 06/18/98 | 9:08 | 6.49 | 26.82 |
| | | 09/29/98 | 9:10 | 7.60 | 25.71 |
| | | 12/14/98 | 9:34 | 5.77 | 27.54 |
| | | 01/07/99 | 8:39 | 5.67 | 27.64 |
| | | 01/13/99 | 9:10 | 5.77 | 27.54 |
| | | 03/02/99 | 9:11 | 5.04 | 28.27 |
| | | 06/16/99 | 9:59 | 6.43 | 26.88 |
| | | 09/16/99 | 10:26 | 7.22 | 26.09 |
| | | 12/08/99 | 8:20 | 6.04 | 27.27 |
| | | 03/07/00 | 8:30 | 5.45 | 27.86 |
| | | 06/21/00 | 10:00 | 6.47 | 26.84 |
| | | 09/13/00 | 12:00 | 7.30 | 26.01 |
| | | 12/07/00 | 9:30 | 7.02 | 26.29 |
| | | 03/15/01 | 9:25 | 6.46 | 26.85 |
| | 33.10 | 01/02/02 | 11:15 | 5.63 | 27.47 |

# Table C-1
# Groundwater Levels and Sump Water Levels
# Univar USA Inc. Facility
# Kent, Washington

| Location | Measuring Point Elevation | Date | Time | Depth to Water | Water Elevation |
|---|---|---|---|---|---|
| | | 03/27/02 | 10:17 | 5.58 | 27.52 |
| | | 06/11/02 | 10:31 | 6.27 | 26.83 |
| | | 09/17/02 | 12:54 | 7.43 | 25.67 |
| | | 03/17/03 | 10:00 | 5.78 | 27.32 |
| | | 09/10/03 | 8:00 | 7.92 | 25.18 |
| | | 12/03/03 | 12:25 | 6.25 | 26.85 |
| | | 01/12/04 | 12:10 | 5.78 | 27.32 |
| | | 03/15/04 | 12:00 | 5.90 | 27.20 |
| | | 06/10/04 | 8:45 | 6.39 | 26.71 |
| | | 09/22/04 | 10:00 | 7.01 | 26.09 |
| Barrel Wash Sump Water Levels | | | | | |
| Sump Wash | 34.17 | 09/04/96 | NR | 6.50 | 27.67 |
| | | 10/11/96 | 10:55 | 6.11 | 28.06 |
| | | 11/06/96 | NR | 6.57 | 27.60 |
| | | 12/10/96 | 11:00 | 5.54 | 28.63 |
| | | 01/10/97 | NR | 5.84 | 28.33 |
| | | 02/21/97 | 12:50 | 4.48 | 29.69 |
| | | 03/04/97 | NR | 6.36 | 27.81 |
| | | 06/27/97 | 11:00 | 5.42 | 28.75 |
| | | 09/04/97 | 11:07 | 4.46 | 29.71 |
| | | 12/22/97 | NR | 4.00 | 30.17 |
| | | 03/06/98 | 10:06 | 5.17 | 29.00 |
| | | 06/16/99 | 10:35 | 4.98 | 29.19 |
| | | 12/08/99 | 8:40 | 3.66 | 30.51 |
| | | 03/07/00 | 8:55 | 5.17 | 29.00 |
| | | 06/21/00 | 10:09 | 5.03 | 29.14 |
| | | 09/12/00 | 10:00 | 5.60 | 28.57 |
| | | 12/07/00 | 8:48 | dry | dry |
| | | 03/15/01 | 9:20 | 5.20 | 28.97 |

NOTE: Depth = depth to water relative to the top of PVC.
Elev. = elevation relative to NAVD 88.
NR = not recorded.
NA = not available.

# MW-2 Slug Test Calculations
# VWR Kent Facility

## BOUWER AND RICE SLUG TEST ANALYSIS (high k part of curve)

| | | INPUT | (KGS) | |
|---|---|---|---|---|
| H = Saturated Thickness of Aquifer (ft) | | 30 | 914.4 | cm |
| Lw = Water Table Elevation - Bottom of Well (ft) | | 13.5 | 411.48 | cm |
| Le = Saturated Well Screen Length (ft) | | 13.5 | 411.48 | cm |
| 2rw = Boring Diameter (in) | | 11 | 27.94 | cm |
| 2rc = Well Diameter (in) | | 2.067 | 5.25018 | cm |
| h1 = Initial Head (ft) | | 3.2 | 97.536 | cm |
| h2 = Final Head (ft) | | 0.1 | 3.048 | cm |
| t1 = Initial Time (sec) | | 0 | 0 | sec |
| t2 = Final Time (sec) | 4.00 min | 240 | 240 | sec |
| Porosity of Gravel Pack (%) | | 40 | 0.4 | |

Le/rw = 29.45

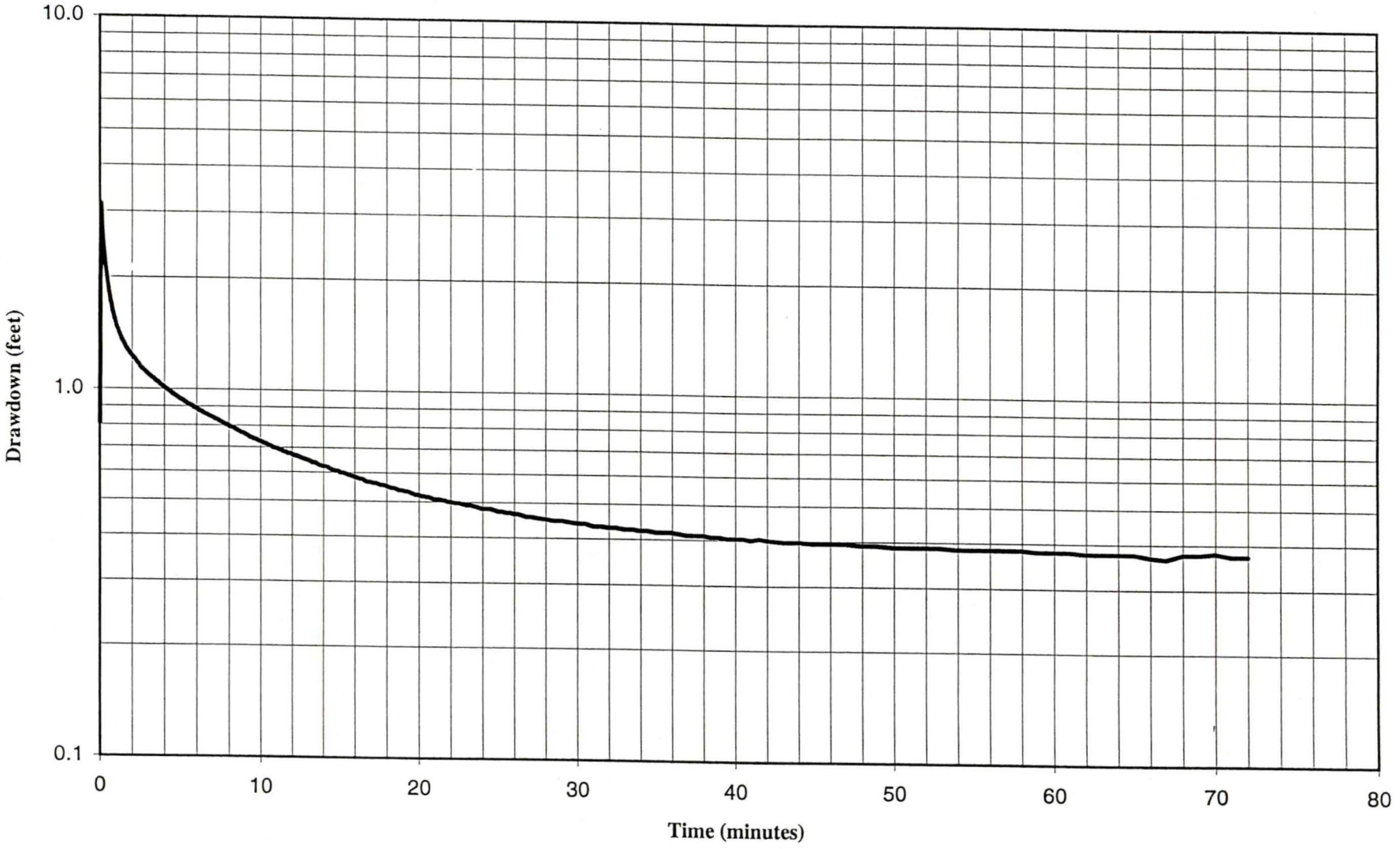
| | INPUT | (from Bouwer, 1989; PAGE DOWN for values for A, B, and C) |
|---|---|---|
| A = | 2.49 | |
| B = | 0.407 | |
| C = | 1.99 | |

### CALCULATIONS

**Effective Radius of Well** 9.07 cm

| | | | | | |
|---|---|---|---|---|---|
| If Lw < H | ln (Re/rw) = | 2.18 | | | |
| **Horizontal Hydraulic Conductivity =** | | | 3.14E-03 | cm/sec | |
| If Lw = H | ln (Re/rw) = | 2.55 | | | |
| **Horizontal Hydraulic Conductivity =** | | | 3.67E-03 | cm/sec | |

## MW-2 Slug Test Results
## VWR Kent Facility




MW2-SLUG.XLS

1/15/97

| | | | | |
|---|---|---|---|---|
| 1/10/97 | 12:47:25 | 7.53 | 0.55 | 1.86 |
| 1/10/97 | 12:47:26 | 7.55 | 0.56 | 1.84 |
| 1/10/97 | 12:47:27 | 7.57 | 0.57 | 1.82 |
| 1/10/97 | 12:47:28 | 7.57 | 0.58 | 1.82 |
| 1/10/97 | 12:47:29 | 7.59 | 0.60 | 1.80 |
| 1/10/97 | 12:47:29 | 7.61 | 0.62 | 1.78 |
| 1/10/97 | 12:47:32 | 7.64 | 0.65 | 1.75 |
| 1/10/97 | 12:47:32 | 7.67 | 0.66 | 1.71 |
| 1/10/97 | 12:47:33 | 7.67 | 0.68 | 1.72 |
| 1/10/97 | 12:47:34 | 7.68 | 0.69 | 1.71 |
| 1/10/97 | 12:47:35 | 7.69 | 0.70 | 1.70 |
| 1/10/97 | 12:47:36 | 7.70 | 0.72 | 1.69 |
| 1/10/97 | 12:47:36 | 7.72 | 0.73 | 1.67 |
| 1/10/97 | 12:47:39 | 7.76 | 0.77 | 1.63 |
| 1/10/97 | 12:47:39 | 7.77 | 0.78 | 1.61 |
| 1/10/97 | 12:47:40 | 7.77 | 0.79 | 1.62 |
| 1/10/97 | 12:47:41 | 7.78 | 0.80 | 1.61 |
| 1/10/97 | 12:47:42 | 7.79 | 0.82 | 1.60 |
| 1/10/97 | 12:47:43 | 7.79 | 0.83 | 1.60 |
| 1/10/97 | 12:47:43 | 7.81 | 0.85 | 1.58 |
| 1/10/97 | 12:47:46 | 7.84 | 0.89 | 1.54 |
| 1/10/97 | 12:47:46 | 7.83 | 0.90 | 1.56 |
| 1/10/97 | 12:47:47 | 7.84 | 0.91 | 1.54 |
| 1/10/97 | 12:47:48 | 7.85 | 0.92 | 1.54 |
| 1/10/97 | 12:47:49 | 7.86 | 0.93 | 1.53 |
| 1/10/97 | 12:47:50 | 7.87 | 0.95 | 1.52 |
| 1/10/97 | 12:47:50 | 7.87 | 0.97 | 1.52 |
| 1/10/97 | 12:47:53 | 7.89 | 1.00 | 1.49 |
| 1/10/97 | 12:47:53 | 7.91 | 1.01 | 1.48 |
| 1/10/97 | 12:47:54 | 7.90 | 1.03 | 1.48 |
| 1/10/97 | 12:47:55 | 7.91 | 1.04 | 1.48 |
| 1/10/97 | 12:47:56 | 7.92 | 1.05 | 1.47 |
| 1/10/97 | 12:47:57 | 7.93 | 1.07 | 1.46 |
| 1/10/97 | 12:47:57 | 7.93 | 1.08 | 1.46 |
| 1/10/97 | 12:48:00 | 7.94 | 1.12 | 1.45 |
| 1/10/97 | 12:48:00 | 7.94 | 1.13 | 1.44 |
| 1/10/97 | 12:48:01 | 7.95 | 1.14 | 1.44 |
| 1/10/97 | 12:48:02 | 7.96 | 1.15 | 1.43 |
| 1/10/97 | 12:48:03 | 7.96 | 1.17 | 1.43 |
| 1/10/97 | 12:48:03 | 7.97 | 1.18 | 1.42 |
| 1/10/97 | 12:48:04 | 7.97 | 1.20 | 1.42 |
| 1/10/97 | 12:48:07 | 7.98 | 1.24 | 1.40 |
| 1/10/97 | 12:48:07 | 7.99 | 1.25 | 1.40 |
| 1/10/97 | 12:48:08 | 7.99 | 1.26 | 1.40 |
| 1/10/97 | 12:48:09 | 7.99 | 1.27 | 1.39 |
| 1/10/97 | 12:48:10 | 8.00 | 1.28 | 1.39 |
| 1/10/97 | 12:48:10 | 8.01 | 1.30 | 1.38 |
| 1/10/97 | 12:48:11 | 8.01 | 1.32 | 1.38 |
| 1/10/97 | 12:48:14 | 8.02 | 1.35 | 1.36 |
| 1/10/97 | 12:48:14 | 8.02 | 1.36 | 1.37 |
| 1/10/97 | 12:48:15 | 8.02 | 1.38 | 1.36 |
| 1/10/97 | 12:48:16 | 8.03 | 1.39 | 1.36 |

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|---|---|---|---|---|
| 1/10/97 | 12:49:57 | 8.30 | 3.07 | 1.09 |
| 1/10/97 | 12:49:59 | 8.30 | 3.10 | 1.09 |
| 1/10/97 | 12:50:00 | 8.30 | 3.13 | 1.09 |
| 1/10/97 | 12:50:03 | 8.31 | 3.17 | 1.08 |
| 1/10/97 | 12:50:04 | 8.31 | 3.20 | 1.08 |
| 1/10/97 | 12:50:06 | 8.31 | 3.23 | 1.08 |
| 1/10/97 | 12:50:09 | 8.32 | 3.27 | 1.07 |
| 1/10/97 | 12:50:11 | 8.32 | 3.30 | 1.07 |
| 1/10/97 | 12:50:13 | 8.32 | 3.34 | 1.07 |
| 1/10/97 | 12:50:14 | 8.32 | 3.37 | 1.06 |
| 1/10/97 | 12:50:16 | 8.33 | 3.40 | 1.06 |
| 1/10/97 | 12:50:19 | 8.33 | 3.43 | 1.06 |
| 1/10/97 | 12:50:21 | 8.33 | 3.47 | 1.05 |
| 1/10/97 | 12:50:23 | 8.33 | 3.50 | 1.05 |
| 1/10/97 | 12:50:25 | 8.34 | 3.54 | 1.05 |
| 1/10/97 | 12:50:27 | 8.34 | 3.57 | 1.05 |
| 1/10/97 | 12:50:28 | 8.34 | 3.60 | 1.05 |
| 1/10/97 | 12:50:31 | 8.34 | 3.63 | 1.04 |
| 1/10/97 | 12:50:33 | 8.35 | 3.67 | 1.04 |
| 1/10/97 | 12:50:35 | 8.36 | 3.70 | 1.03 |
| 1/10/97 | 12:50:37 | 8.36 | 3.74 | 1.03 |
| 1/10/97 | 12:50:39 | 8.36 | 3.77 | 1.03 |
| 1/10/97 | 12:50:41 | 8.36 | 3.80 | 1.03 |
| 1/10/97 | 12:50:43 | 8.36 | 3.83 | 1.03 |
| 1/10/97 | 12:50:45 | 8.37 | 3.87 | 1.02 |
| 1/10/97 | 12:50:46 | 8.37 | 3.90 | 1.02 |
| 1/10/97 | 12:50:49 | 8.37 | 3.94 | 1.01 |
| 1/10/97 | 12:50:51 | 8.37 | 3.97 | 1.01 |
| 1/10/97 | 12:50:53 | 8.38 | 4.00 | 1.01 |
| 1/10/97 | 12:50:55 | 8.38 | 4.03 | 1.01 |
| 1/10/97 | 12:50:57 | 8.38 | 4.07 | 1.01 |
| 1/10/97 | 12:50:58 | 8.38 | 4.10 | 1.00 |
| 1/10/97 | 12:51:00 | 8.39 | 4.13 | 1.00 |
| 1/10/97 | 12:51:03 | 8.39 | 4.17 | 1.00 |
| 1/10/97 | 12:51:05 | 8.39 | 4.20 | 1.00 |
| 1/10/97 | 12:51:07 | 8.40 | 4.23 | 0.99 |
| 1/10/97 | 12:51:08 | 8.40 | 4.27 | 0.99 |
| 1/10/97 | 12:51:10 | 8.40 | 4.30 | 0.99 |
| 1/10/97 | 12:51:12 | 8.40 | 4.33 | 0.99 |
| 1/10/97 | 12:51:15 | 8.40 | 4.37 | 0.99 |
| 1/10/97 | 12:51:17 | 8.41 | 4.40 | 0.98 |
| 1/10/97 | 12:51:19 | 8.41 | 4.44 | 0.98 |
| 1/10/97 | 12:51:21 | 8.41 | 4.47 | 0.97 |
| 1/10/97 | 12:51:26 | 8.42 | 4.55 | 0.97 |
| 1/10/97 | 12:51:31 | 8.42 | 4.64 | 0.96 |
| 1/10/97 | 12:51:36 | 8.43 | 4.72 | 0.96 |
| 1/10/97 | 12:51:41 | 8.44 | 4.80 | 0.95 |
| 1/10/97 | 12:51:46 | 8.44 | 4.88 | 0.95 |
| 1/10/97 | 12:51:51 | 8.45 | 4.97 | 0.94 |
| 1/10/97 | 12:51:56 | 8.45 | 5.05 | 0.94 |
| 1/10/97 | 12:52:01 | 8.45 | 5.14 | 0.93 |
| 1/10/97 | 12:52:06 | 8.46 | 5.22 | 0.93 |

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|---|---|---|---|---|
| 1/10/97 | 12:56:31 | 8.65 | 9.64 | 0.74 |
| 1/10/97 | 12:56:36 | 8.65 | 9.72 | 0.74 |
| 1/10/97 | 12:56:41 | 8.66 | 9.80 | 0.73 |
| 1/10/97 | 12:56:46 | 8.66 | 9.89 | 0.73 |
| 1/10/97 | 12:56:51 | 8.66 | 9.97 | 0.73 |
| 1/10/97 | 12:56:56 | 8.66 | 10.05 | 0.73 |
| 1/10/97 | 12:57:01 | 8.67 | 10.13 | 0.72 |
| 1/10/97 | 12:57:06 | 8.67 | 10.22 | 0.72 |
| 1/10/97 | 12:57:11 | 8.67 | 10.30 | 0.72 |
| 1/10/97 | 12:57:16 | 8.67 | 10.39 | 0.71 |
| 1/10/97 | 12:57:21 | 8.68 | 10.47 | 0.71 |
| 1/10/97 | 12:57:26 | 8.68 | 10.55 | 0.71 |
| 1/10/97 | 12:57:31 | 8.68 | 10.63 | 0.71 |
| 1/10/97 | 12:57:36 | 8.68 | 10.72 | 0.70 |
| 1/10/97 | 12:57:41 | 8.69 | 10.80 | 0.70 |
| 1/10/97 | 12:57:46 | 8.69 | 10.88 | 0.70 |
| 1/10/97 | 12:57:51 | 8.69 | 10.97 | 0.70 |
| 1/10/97 | 12:57:56 | 8.69 | 11.05 | 0.70 |
| 1/10/97 | 12:58:01 | 8.70 | 11.14 | 0.69 |
| 1/10/97 | 12:58:06 | 8.70 | 11.22 | 0.69 |
| 1/10/97 | 12:58:11 | 8.70 | 11.30 | 0.69 |
| 1/10/97 | 12:58:16 | 8.70 | 11.38 | 0.69 |
| 1/10/97 | 12:58:21 | 8.71 | 11.47 | 0.68 |
| 1/10/97 | 12:58:26 | 8.71 | 11.55 | 0.68 |
| 1/10/97 | 12:58:31 | 8.71 | 11.64 | 0.68 |
| 1/10/97 | 12:58:36 | 8.71 | 11.72 | 0.68 |
| 1/10/97 | 12:58:41 | 8.71 | 11.80 | 0.68 |
| 1/10/97 | 12:58:46 | 8.71 | 11.89 | 0.68 |
| 1/10/97 | 12:58:51 | 8.72 | 11.97 | 0.67 |
| 1/10/97 | 12:59:01 | 8.72 | 12.13 | 0.67 |
| 1/10/97 | 12:59:11 | 8.72 | 12.30 | 0.66 |
| 1/10/97 | 12:59:21 | 8.73 | 12.47 | 0.66 |
| 1/10/97 | 12:59:31 | 8.73 | 12.63 | 0.66 |
| 1/10/97 | 12:59:41 | 8.73 | 12.80 | 0.65 |
| 1/10/97 | 12:59:51 | 8.74 | 12.97 | 0.65 |
| 1/10/97 | 13:00:01 | 8.74 | 13.14 | 0.65 |
| 1/10/97 | 13:00:11 | 8.75 | 13.30 | 0.64 |
| 1/10/97 | 13:00:21 | 8.75 | 13.47 | 0.64 |
| 1/10/97 | 13:00:31 | 8.76 | 13.64 | 0.63 |
| 1/10/97 | 13:00:41 | 8.76 | 13.80 | 0.63 |
| 1/10/97 | 13:00:51 | 8.76 | 13.97 | 0.62 |
| 1/10/97 | 13:01:01 | 8.76 | 14.14 | 0.62 |
| 1/10/97 | 13:01:11 | 8.77 | 14.30 | 0.62 |
| 1/10/97 | 13:01:21 | 8.77 | 14.47 | 0.61 |
| 1/10/97 | 13:01:31 | 8.78 | 14.63 | 0.61 |
| 1/10/97 | 13:01:41 | 8.78 | 14.80 | 0.61 |
| 1/10/97 | 13:01:51 | 8.78 | 14.97 | 0.61 |
| 1/10/97 | 13:02:01 | 8.79 | 15.13 | 0.60 |
| 1/10/97 | 13:02:11 | 8.79 | 15.30 | 0.60 |
| 1/10/97 | 13:02:21 | 8.79 | 15.47 | 0.60 |
| 1/10/97 | 13:02:31 | 8.80 | 15.64 | 0.59 |
| 1/10/97 | 13:02:41 | 8.80 | 15.80 | 0.59 |

| | | | | |
|---|---|---|---|---|
| 1/10/97 | 13:12:51 | 8.92 | 25.97 | 0.47 |
| 1/10/97 | 13:13:06 | 8.92 | 26.22 | 0.47 |
| 1/10/97 | 13:13:21 | 8.93 | 26.47 | 0.46 |
| 1/10/97 | 13:13:36 | 8.93 | 26.72 | 0.46 |
| 1/10/97 | 13:13:51 | 8.93 | 26.97 | 0.46 |
| 1/10/97 | 13:14:21 | 8.93 | 27.47 | 0.45 |
| 1/10/97 | 13:14:51 | 8.94 | 27.97 | 0.45 |
| 1/10/97 | 13:15:21 | 8.94 | 28.47 | 0.45 |
| 1/10/97 | 13:15:51 | 8.94 | 28.97 | 0.45 |
| 1/10/97 | 13:16:21 | 8.94 | 29.47 | 0.44 |
| 1/10/97 | 13:16:51 | 8.95 | 29.97 | 0.44 |
| 1/10/97 | 13:17:21 | 8.95 | 30.47 | 0.44 |
| 1/10/97 | 13:17:51 | 8.95 | 30.97 | 0.43 |
| 1/10/97 | 13:18:21 | 8.95 | 31.47 | 0.43 |
| 1/10/97 | 13:18:51 | 8.96 | 31.97 | 0.43 |
| 1/10/97 | 13:19:21 | 8.96 | 32.47 | 0.43 |
| 1/10/97 | 13:19:51 | 8.96 | 32.97 | 0.43 |
| 1/10/97 | 13:20:21 | 8.96 | 33.47 | 0.43 |
| 1/10/97 | 13:20:51 | 8.97 | 33.97 | 0.42 |
| 1/10/97 | 13:21:21 | 8.97 | 34.47 | 0.42 |
| 1/10/97 | 13:21:51 | 8.97 | 34.97 | 0.42 |
| 1/10/97 | 13:22:21 | 8.97 | 35.47 | 0.42 |
| 1/10/97 | 13:22:51 | 8.97 | 35.97 | 0.42 |
| 1/10/97 | 13:23:21 | 8.97 | 36.47 | 0.42 |
| 1/10/97 | 13:23:51 | 8.98 | 36.97 | 0.41 |
| 1/10/97 | 13:24:21 | 8.98 | 37.47 | 0.41 |
| 1/10/97 | 13:24:51 | 8.98 | 37.97 | 0.41 |
| 1/10/97 | 13:25:21 | 8.98 | 38.47 | 0.41 |
| 1/10/97 | 13:25:51 | 8.98 | 38.97 | 0.41 |
| 1/10/97 | 13:26:21 | 8.98 | 39.47 | 0.40 |
| 1/10/97 | 13:26:51 | 8.98 | 39.97 | 0.40 |
| 1/10/97 | 13:27:21 | 8.98 | 40.47 | 0.40 |
| 1/10/97 | 13:27:51 | 8.99 | 40.97 | 0.40 |
| 1/10/97 | 13:28:21 | 8.98 | 41.47 | 0.40 |
| 1/10/97 | 13:28:51 | 8.99 | 41.97 | 0.40 |
| 1/10/97 | 13:29:51 | 8.99 | 42.97 | 0.40 |
| 1/10/97 | 13:30:51 | 8.99 | 43.97 | 0.40 |
| 1/10/97 | 13:31:51 | 8.99 | 44.97 | 0.39 |
| 1/10/97 | 13:32:51 | 8.99 | 45.97 | 0.39 |
| 1/10/97 | 13:33:51 | 8.99 | 46.97 | 0.39 |
| 1/10/97 | 13:34:51 | 9.00 | 47.97 | 0.39 |
| 1/10/97 | 13:35:51 | 9.00 | 48.97 | 0.39 |
| 1/10/97 | 13:36:51 | 9.00 | 49.97 | 0.39 |
| 1/10/97 | 13:37:51 | 9.00 | 50.97 | 0.39 |
| 1/10/97 | 13:38:51 | 9.00 | 51.97 | 0.39 |
| 1/10/97 | 13:39:51 | 9.00 | 52.97 | 0.39 |
| 1/10/97 | 13:40:51 | 9.01 | 53.97 | 0.38 |
| 1/10/97 | 13:41:51 | 9.01 | 54.97 | 0.38 |
| 1/10/97 | 13:42:51 | 9.01 | 55.97 | 0.38 |
| 1/10/97 | 13:43:51 | 9.01 | 56.97 | 0.38 |
| 1/10/97 | 13:44:51 | 9.01 | 57.97 | 0.38 |
| 1/10/97 | 13:45:51 | 9.01 | 58.97 | 0.38 |

# MW-3 Slug Test Calculations
# VWR Kent Facility

## BOUWER AND RICE SLUG TEST ANALYSIS

| | | INPUT | (KGS) | |
|---|---|---|---|---|
| H = Saturated Thickness of Aquifer (ft) | | 30 | 914.4 | cm |
| Lw = Water Table Elevation - Bottom of Well (ft) | | 13.2 | 402.336 | cm |
| Le = Saturated Well Screen Length (ft) | | 13.2 | 402.336 | cm |
| 2rw = Boring Diameter (in) | | 11 | 27.94 | cm |
| 2rc = Well Diameter (in) | | 2.067 | 5.25018 | cm |
| h1 = Initial Head (ft) | | 5 | 152.4 | cm |
| h2 = Final Head (ft) | | 0.1 | 3.048 | cm |
| t1 = Initial Time (sec) | | 0 | 0 | sec |
| t2 = Final Time (sec) | 0.50 min | 30 | 30 | sec |
| Porosity of Gravel Pack (%) | | 40 | 0.4 | |

Le/rw = 28.80

| | INPUT | (from Bouwer, 1989; PAGE DOWN for values for A, B, and C) |
|---|---|---|
| A = | 2.48 | |
| B = | 0.404 | |
| C = | 1.98 | |

### CALCULATIONS

**Effective Radius of Well** 9.07 cm

| | | | | | |
|---|---|---|---|---|---|
| If Lw < H | ln (Re/rw) = | 2.16 | | | |
| **Horizontal Hydraulic Conductivity =** | | | 2.87E-02 | cm/sec | |
| If Lw = H | ln (Re/rw) = | 2.52 | | | |
| **Horizontal Hydraulic Conductivity =** | | | 3.36E-02 | cm/sec | |

Date Friday January 10, 1997 1:21 PM
PlotFile B:\VWRMW301.PRN
DataFile B:\VWRMW3.HEX

Time of First Log in Specified Window
3.54405583483577E+0004 5.58348379629933E-0001

**VWR SLUG TEST MW-3**

| Date | Time | Feet | Elapsed Time (min) | Drawdown (feet) |
|---|---|---|---|---|
| 1/10/97 | 13:24:01 | 9.65 | | |
| 1/10/97 | 13:24:06 | 9.64 | | |
| 1/10/97 | 13:24:09 | 9.64 | | |
| 1/10/97 | 13:24:12 | 9.64 | | |
| 1/10/97 | 13:24:16 | 9.64 | | |
| 1/10/97 | 13:25:27 | 9.65 | | |
| 1/10/97 | 13:25:27 | 9.64 | | |
| 1/10/97 | 13:25:29 | 9.64 | | |
| 1/10/97 | 13:25:29 | 9.64 | | |
| 1/10/97 | 13:25:31 | 9.64 | | |
| 1/10/97 | 13:25:33 | 9.64 | | |
| 1/10/97 | 13:25:33 | 9.64 | | |
| 1/10/97 | 13:25:34 | 9.64 | | |
| 1/10/97 | 13:25:35 | 9.64 | | |
| 1/10/97 | 13:25:36 | 9.64 | | |
| 1/10/97 | 13:25:38 | 9.65 | | |
| 1/10/97 | 13:25:38 | 9.66 | | |
| 1/10/97 | 13:25:39 | 9.65 | | |
| 1/10/97 | 13:25:40 | 9.67 | | |
| 1/10/97 | 13:25:41 | 9.64 | | |
| 1/10/97 | 13:25:41 | 9.97 | | |
| 1/10/97 | 13:25:44 | 10.03 | | |
| 1/10/97 | 13:25:44 | 10.05 | | |
| 1/10/97 | 13:25:45 | 10.01 | | |
| 1/10/97 | 13:25:46 | 9.98 | | |
| 1/10/97 | 13:25:47 | 9.88 | | |
| 1/10/97 | 13:25:49 | 9.81 | | |
| 1/10/97 | 13:25:50 | 9.78 | | |
| 1/10/97 | 13:25:50 | 9.73 | | |
| 1/10/97 | 13:25:51 | 9.90 | | |
| 1/10/97 | 13:25:52 | 9.98 | | |
| 1/10/97 | 13:25:52 | 9.96 | | |
| 1/10/97 | 13:25:54 | 10.03 | 0.00 | 0.00 |
| 1/10/97 | 13:25:55 | 9.67 | 0.02 | 0.36 |
| 1/10/97 | 13:25:55 | 8.84 | 0.03 | 1.18 |
| 1/10/97 | 13:25:58 | 6.51 | 0.07 | 3.52 |
| 1/10/97 | 13:25:58 | 6.88 | 0.08 | 3.14 |
| 1/10/97 | 13:25:59 | 7.43 | 0.10 | 2.60 |
| 1/10/97 | 13:26:00 | 7.81 | 0.11 | 2.22 |
| 1/10/97 | 13:26:01 | 8.19 | 0.12 | 1.84 |
| 1/10/97 | 13:26:03 | 8.80 | 0.15 | 1.23 |

| | | | | |
|---|---|---|---|---|
| 1/10/97 | 13:26:55 | 9.63 | 1.02 | 0.39 |
| 1/10/97 | 13:26:56 | 9.63 | 1.03 | 0.40 |
| 1/10/97 | 13:26:57 | 9.63 | 1.05 | 0.40 |
| 1/10/97 | 13:26:59 | 9.63 | 1.08 | 0.40 |
| 1/10/97 | 13:27:01 | 9.63 | 1.12 | 0.40 |
| 1/10/97 | 13:27:03 | 9.63 | 1.15 | 0.40 |
| 1/10/97 | 13:27:05 | 9.64 | 1.19 | 0.39 |
| 1/10/97 | 13:27:07 | 9.64 | 1.22 | 0.39 |
| 1/10/97 | 13:27:09 | 9.64 | 1.25 | 0.39 |
| 1/10/97 | 13:27:11 | 9.63 | 1.28 | 0.39 |
| 1/10/97 | 13:27:13 | 9.63 | 1.32 | 0.40 |
| 1/10/97 | 13:27:15 | 9.63 | 1.35 | 0.40 |
| 1/10/97 | 13:27:17 | 9.64 | 1.39 | 0.39 |
| 1/10/97 | 13:27:19 | 9.64 | 1.42 | 0.38 |
| 1/10/97 | 13:27:21 | 9.63 | 1.45 | 0.39 |
| 1/10/97 | 13:27:23 | 9.64 | 1.48 | 0.39 |
| 1/10/97 | 13:27:25 | 9.65 | 1.52 | 0.38 |
| 1/10/97 | 13:27:27 | 9.63 | 1.55 | 0.39 |
| 1/10/97 | 13:27:29 | 9.64 | 1.59 | 0.38 |
| 1/10/97 | 13:27:31 | 9.63 | 1.62 | 0.39 |
| 1/10/97 | 13:27:33 | 9.63 | 1.65 | 0.39 |
| 1/10/97 | 13:27:35 | 9.63 | 1.68 | 0.39 |
| 1/10/97 | 13:27:37 | 9.64 | 1.72 | 0.39 |
| 1/10/97 | 13:27:39 | 9.64 | 1.75 | 0.39 |
| 1/10/97 | 13:27:41 | 9.65 | 1.79 | 0.38 |
| 1/10/97 | 13:27:43 | 9.63 | 1.82 | 0.39 |
| 1/10/97 | 13:27:45 | 9.63 | 1.85 | 0.39 |
| 1/10/97 | 13:27:47 | 9.64 | 1.88 | 0.39 |
| 1/10/97 | 13:27:49 | 9.64 | 1.92 | 0.39 |
| 1/10/97 | 13:27:51 | 9.64 | 1.95 | 0.38 |
| 1/10/97 | 13:27:53 | 9.64 | 1.98 | 0.38 |
| 1/10/97 | 13:27:55 | 9.63 | 2.02 | 0.39 |
| 1/10/97 | 13:27:57 | 9.65 | 2.05 | 0.38 |
| 1/10/97 | 13:27:59 | 9.66 | 2.09 | 0.37 |
| 1/10/97 | 13:28:01 | 9.66 | 2.12 | 0.37 |
| 1/10/97 | 13:28:03 | 9.64 | 2.15 | 0.39 |
| 1/10/97 | 13:28:05 | 9.63 | 2.18 | 0.39 |
| 1/10/97 | 13:28:07 | 9.64 | 2.22 | 0.39 |
| 1/10/97 | 13:28:09 | 9.64 | 2.25 | 0.39 |
| 1/10/97 | 13:28:11 | 9.66 | 2.29 | 0.37 |
| 1/10/97 | 13:28:13 | 9.64 | 2.32 | 0.39 |
| 1/10/97 | 13:28:15 | 9.64 | 2.35 | 0.39 |
| 1/10/97 | 13:28:17 | 9.64 | 2.38 | 0.39 |
| 1/10/97 | 13:28:19 | 9.66 | 2.42 | 0.37 |
| 1/10/97 | 13:28:21 | 9.64 | 2.45 | 0.39 |
| 1/10/97 | 13:28:23 | 9.66 | 2.49 | 0.37 |
| 1/10/97 | 13:28:25 | 9.64 | 2.52 | 0.39 |
| 1/10/97 | 13:28:27 | 9.64 | 2.55 | 0.39 |
| 1/10/97 | 13:28:29 | 9.64 | 2.58 | 0.38 |
| 1/10/97 | 13:28:31 | 9.66 | 2.62 | 0.36 |
| 1/10/97 | 13:28:33 | 9.64 | 2.65 | 0.39 |
| 1/10/97 | 13:28:35 | 9.64 | 2.69 | 0.39 |

| | | | | |
|---|---|---|---|---|
| 1/10/97 | 13:30:57 | 9.64 | 5.05 | 0.39 |
| 1/10/97 | 13:31:02 | 9.64 | 5.14 | 0.38 |
| 1/10/97 | 13:31:07 | 9.64 | 5.22 | 0.38 |
| 1/10/97 | 13:31:12 | 9.64 | 5.30 | 0.39 |
| 1/10/97 | 13:31:17 | 9.64 | 5.39 | 0.39 |
| 1/10/97 | 13:31:22 | 9.64 | 5.47 | 0.39 |
| 1/10/97 | 13:31:27 | 9.64 | 5.55 | 0.39 |
| 1/10/97 | 13:31:32 | 9.64 | 5.63 | 0.38 |
| 1/10/97 | 13:31:37 | 9.64 | 5.72 | 0.38 |
| 1/10/97 | 13:31:42 | 9.64 | 5.80 | 0.39 |
| 1/10/97 | 13:31:47 | 9.63 | 5.89 | 0.39 |
| 1/10/97 | 13:31:52 | 9.63 | 5.97 | 0.39 |
| 1/10/97 | 13:31:57 | 9.63 | 6.05 | 0.39 |
| 1/10/97 | 13:32:02 | 9.63 | 6.13 | 0.39 |
| 1/10/97 | 13:32:07 | 9.63 | 6.22 | 0.39 |
| 1/10/97 | 13:32:12 | 9.63 | 6.30 | 0.39 |
| 1/10/97 | 13:32:17 | 9.64 | 6.38 | 0.39 |
| 1/10/97 | 13:32:22 | 9.64 | 6.47 | 0.39 |
| 1/10/97 | 13:32:27 | 9.64 | 6.55 | 0.39 |
| 1/10/97 | 13:32:32 | 9.64 | 6.64 | 0.39 |
| 1/10/97 | 13:32:37 | 9.64 | 6.72 | 0.39 |
| 1/10/97 | 13:32:42 | 9.64 | 6.80 | 0.39 |
| 1/10/97 | 13:32:47 | 9.64 | 6.88 | 0.39 |
| 1/10/97 | 13:32:52 | 9.64 | 6.97 | 0.39 |
| 1/10/97 | 13:32:57 | 9.64 | 7.05 | 0.39 |
| 1/10/97 | 13:33:02 | 9.64 | 7.14 | 0.39 |
| 1/10/97 | 13:33:07 | 9.64 | 7.22 | 0.39 |
| 1/10/97 | 13:33:12 | 9.64 | 7.30 | 0.39 |
| 1/10/97 | 13:33:17 | 9.64 | 7.38 | 0.39 |
| 1/10/97 | 13:33:22 | 9.64 | 7.47 | 0.39 |
| 1/10/97 | 13:33:27 | 9.64 | 7.55 | 0.39 |
| 1/10/97 | 13:33:32 | 9.64 | 7.63 | 0.39 |
| 1/10/97 | 13:33:37 | 9.64 | 7.72 | 0.39 |
| 1/10/97 | 13:33:42 | 9.64 | 7.80 | 0.39 |
| 1/10/97 | 13:33:47 | 9.64 | 7.89 | 0.39 |
| 1/10/97 | 13:33:52 | 9.64 | 7.97 | 0.39 |
| 1/10/97 | 13:33:57 | 9.64 | 8.05 | 0.39 |
| 1/10/97 | 13:34:02 | 9.64 | 8.13 | 0.39 |
| 1/10/97 | 13:34:07 | 9.64 | 8.22 | 0.39 |
| 1/10/97 | 13:34:12 | 9.64 | 8.30 | 0.39 |
| 1/10/97 | 13:34:17 | 9.64 | 8.39 | 0.39 |
| 1/10/97 | 13:34:22 | 9.64 | 8.47 | 0.39 |
| 1/10/97 | 13:34:27 | 9.64 | 8.55 | 0.39 |
| 1/10/97 | 13:34:32 | 9.64 | 8.64 | 0.39 |
| 1/10/97 | 13:34:37 | 9.64 | 8.72 | 0.39 |
| 1/10/97 | 13:34:42 | 9.64 | 8.80 | 0.39 |
| 1/10/97 | 13:34:47 | 9.64 | 8.88 | 0.39 |
| 1/10/97 | 13:34:52 | 9.64 | 8.97 | 0.39 |
| 1/10/97 | 13:34:57 | 9.64 | 9.05 | 0.39 |
| 1/10/97 | 13:35:02 | 9.64 | 9.14 | 0.39 |
| 1/10/97 | 13:35:07 | 9.64 | 9.22 | 0.39 |
| 1/10/97 | 13:35:12 | 9.64 | 9.30 | 0.39 |

| | | | | |
|---|---|---|---|---|
| 1/10/97 | 13:41:47 | 9.64 | 15.88 | 0.39 |
| 1/10/97 | 13:41:57 | 9.64 | 16.05 | 0.39 |
| 1/10/97 | 13:42:07 | 9.64 | 16.22 | 0.39 |
| 1/10/97 | 13:42:17 | 9.64 | 16.38 | 0.38 |
| 1/10/97 | 13:42:27 | 9.64 | 16.55 | 0.39 |
| 1/10/97 | 13:42:37 | 9.64 | 16.72 | 0.39 |
| 1/10/97 | 13:42:47 | 9.64 | 16.89 | 0.39 |
| 1/10/97 | 13:42:57 | 9.64 | 17.05 | 0.38 |
| 1/10/97 | 13:43:07 | 9.64 | 17.22 | 0.39 |
| 1/10/97 | 13:43:17 | 9.64 | 17.39 | 0.39 |
| 1/10/97 | 13:43:27 | 9.64 | 17.55 | 0.39 |
| 1/10/97 | 13:43:37 | 9.64 | 17.72 | 0.39 |
| 1/10/97 | 13:43:47 | 9.64 | 17.88 | 0.39 |
| 1/10/97 | 13:43:57 | 9.64 | 18.05 | 0.39 |
| 1/10/97 | 13:44:07 | 9.64 | 18.22 | 0.39 |
| 1/10/97 | 13:44:17 | 9.64 | 18.38 | 0.39 |
| 1/10/97 | 13:44:27 | 9.64 | 18.55 | 0.39 |
| 1/10/97 | 13:44:37 | 9.64 | 18.72 | 0.38 |
| 1/10/97 | 13:44:47 | 9.64 | 18.89 | 0.39 |
| 1/10/97 | 13:44:57 | 9.64 | 19.05 | 0.38 |
| 1/10/97 | 13:45:07 | 9.64 | 19.22 | 0.39 |
| 1/10/97 | 13:45:17 | 9.64 | 19.39 | 0.38 |
| 1/10/97 | 13:45:27 | 9.64 | 19.55 | 0.38 |
| 1/10/97 | 13:45:37 | 9.64 | 19.72 | 0.38 |
| 1/10/97 | 13:45:47 | 9.64 | 19.88 | 0.39 |
| 1/10/97 | 13:45:57 | 9.64 | 20.05 | 0.38 |
| 1/10/97 | 13:46:07 | 9.64 | 20.22 | 0.39 |
| 1/10/97 | 13:46:17 | 9.64 | 20.38 | 0.39 |
| 1/10/97 | 13:46:27 | 9.64 | 20.55 | 0.38 |
| 1/10/97 | 13:46:37 | 9.64 | 20.72 | 0.39 |
| 1/10/97 | 13:46:47 | 9.64 | 20.88 | 0.39 |
| 1/10/97 | 13:46:57 | 9.64 | 21.05 | 0.38 |
| 1/10/97 | 13:47:07 | 9.64 | 21.22 | 0.38 |
| 1/10/97 | 13:47:17 | 9.64 | 21.39 | 0.38 |
| 1/10/97 | 13:47:27 | 9.64 | 21.55 | 0.38 |
| 1/10/97 | 13:47:42 | 9.64 | 21.80 | 0.38 |
| 1/10/97 | 13:47:57 | 9.64 | 22.05 | 0.39 |
| 1/10/97 | 13:48:12 | 9.64 | 22.30 | 0.38 |
| 1/10/97 | 13:48:27 | 9.64 | 22.55 | 0.38 |
| 1/10/97 | 13:48:42 | 9.64 | 22.80 | 0.38 |
| 1/10/97 | 13:48:57 | 9.64 | 23.05 | 0.38 |
| 1/10/97 | 13:49:12 | 9.64 | 23.30 | 0.39 |
| 1/10/97 | 13:49:27 | 9.64 | 23.55 | 0.39 |
| 1/10/97 | 13:49:42 | 9.64 | 23.80 | 0.38 |
| 1/10/97 | 13:49:57 | 9.64 | 24.05 | 0.38 |
| 1/10/97 | 13:50:12 | 9.64 | 24.30 | 0.39 |
| 1/10/97 | 13:50:27 | 9.65 | 24.55 | 0.38 |
| 1/10/97 | 13:50:42 | 9.65 | 24.80 | 0.38 |
| 1/10/97 | 13:50:57 | 9.65 | 25.05 | 0.38 |
| 1/10/97 | 13:51:12 | 9.65 | 25.30 | 0.38 |
| 1/10/97 | 13:51:27 | 9.66 | 25.55 | 0.37 |
| 1/10/97 | 13:51:42 | 9.66 | 25.80 | 0.37 |

# MW-5 Slug Test Calculations
# VWR Kent Facility

## BOUWER AND RICE SLUG TEST ANALYSIS

| | | INPUT | (KGS) | |
|---|---|---|---|---|
| H = Saturated Thickness of Aquifer (ft) | | 30 | 914.4 | cm |
| Lw = Water Table Elevation - Bottom of Well (ft) | | 9.5 | 289.56 | cm |
| Le = Saturated Well Screen Length (ft) | | 9.5 | 289.56 | cm |
| 2rw = Boring Diameter (in) | | 11 | 27.94 | cm |
| 2rc = Well Diameter (in) | | 2.067 | 5.25018 | cm |
| h1 = Initial Head (ft) | | 3.5 | 106.68 | cm |
| h2 = Final Head (ft) | | 0.2 | 6.096 | cm |
| t1 = Initial Time (sec) | | 0 | 0 | sec |
| t2 = Final Time (sec) | 1.10 min | 66 | 66 | sec |
| Porosity of Gravel Pack (%) | | 40 | 0.4 | |

Le/rw = 20.73

| | INPUT | (from Bouwer, 1989; PAGE DOWN for values for A, B, and C) |
|---|---|---|
| A = | 2.1 | |
| B = | 0.3 | |
| C = | 1.6 | |

### CALCULATIONS

**Effective Radius of Well** 9.07 cm

| | | | | | |
|---|---|---|---|---|---|
| If Lw < H | ln (Re/rw) = | 1.93 | | | |
| **Horizontal Hydraulic Conductivity =** | | | 1.19E-02 | cm/sec | |
| If Lw = H | ln (Re/rw) = | 2.27 | | | |
| **Horizontal Hydraulic Conductivity =** | | | 1.40E-02 | cm/sec | |

Date Friday January 10, 1997 2:06 PM
PlotFile B:\VWRMW501.PRN
DataFile B:\VWRMW5.HEX

Time of First Log in Specified Window
3.54405569606423E+0004 5.56960648148561E-0001

" " " Analog#01"
**VWR SLUG TEST MW-5**

| DATE | TIME | FEET | Elapsed Time (min) | Drawdown (feet) |
|---|---|---|---|---|
| 1/10/97 | 13:22:01 | 7.65 | | |
| 1/10/97 | 13:22:04 | 7.65 | | |
| 1/10/97 | 13:22:07 | 7.64 | | |
| 1/10/97 | 13:22:10 | 7.66 | | |
| 1/10/97 | 13:22:13 | 7.64 | | |
| 1/10/97 | 13:23:06 | 7.64 | | |
| 1/10/97 | 13:23:07 | 7.64 | | |
| 1/10/97 | 13:23:07 | 7.65 | | |
| 1/10/97 | 13:23:08 | 7.64 | | |
| 1/10/97 | 13:23:10 | 7.65 | | |
| 1/10/97 | 13:23:10 | 7.64 | | |
| 1/10/97 | 13:23:12 | 7.64 | | |
| 1/10/97 | 13:23:13 | 7.64 | | |
| 1/10/97 | 13:23:13 | 7.65 | | |
| 1/10/97 | 13:23:15 | 7.65 | | |
| 1/10/97 | 13:23:15 | 7.65 | | |
| 1/10/97 | 13:23:17 | 7.66 | | |
| 1/10/97 | 13:23:17 | 7.66 | | |
| 1/10/97 | 13:23:18 | 7.65 | | |
| 1/10/97 | 13:23:20 | 7.66 | | |
| 1/10/97 | 13:23:20 | 7.88 | | |
| 1/10/97 | 13:23:22 | 7.73 | | |
| 1/10/97 | 13:23:22 | 7.75 | | |
| 1/10/97 | 13:23:24 | 7.85 | | |
| 1/10/97 | 13:23:24 | 7.97 | | |
| 1/10/97 | 13:23:25 | 8.09 | | |
| 1/10/97 | 13:23:27 | 8.25 | | |
| 1/10/97 | 13:23:27 | 8.11 | | |
| 1/10/97 | 13:23:29 | 7.96 | | |
| 1/10/97 | 13:23:29 | 7.93 | | |
| 1/10/97 | 13:23:31 | 7.90 | | |
| 1/10/97 | 13:23:31 | 7.87 | | |
| 1/10/97 | 13:23:32 | 7.86 | | |
| 1/10/97 | 13:23:34 | 7.87 | | |
| 1/10/97 | 13:23:34 | 7.96 | | |
| 1/10/97 | 13:23:36 | 7.98 | | |
| 1/10/97 | 13:23:36 | 7.90 | | |
| 1/10/97 | 13:23:38 | 7.89 | | |
| 1/10/97 | 13:23:38 | 7.87 | | |
| 1/10/97 | 13:23:39 | 7.86 | | |
| 1/10/97 | 13:23:41 | 7.84 | | |

| | | | | |
|---|---|---|---|---|
| 1/10/97 | 13:24:33 | 6.91 | 0.38 | 1.24 |
| 1/10/97 | 13:24:34 | 6.95 | 0.40 | 1.19 |
| 1/10/97 | 13:24:36 | 7.01 | 0.42 | 1.14 |
| 1/10/97 | 13:24:37 | 7.09 | 0.45 | 1.06 |
| 1/10/97 | 13:24:40 | 7.15 | 0.48 | 1.00 |
| 1/10/97 | 13:24:42 | 7.20 | 0.52 | 0.94 |
| 1/10/97 | 13:24:44 | 7.25 | 0.55 | 0.90 |
| 1/10/97 | 13:24:46 | 7.29 | 0.58 | 0.86 |
| 1/10/97 | 13:24:47 | 7.32 | 0.62 | 0.82 |
| 1/10/97 | 13:24:49 | 7.35 | 0.65 | 0.80 |
| 1/10/97 | 13:24:51 | 7.37 | 0.68 | 0.77 |
| 1/10/97 | 13:24:54 | 7.39 | 0.72 | 0.76 |
| 1/10/97 | 13:24:56 | 7.40 | 0.75 | 0.74 |
| 1/10/97 | 13:24:58 | 7.41 | 0.78 | 0.73 |
| 1/10/97 | 13:25:00 | 7.42 | 0.82 | 0.72 |
| 1/10/97 | 13:25:01 | 7.44 | 0.85 | 0.70 |
| 1/10/97 | 13:25:03 | 7.45 | 0.88 | 0.70 |
| 1/10/97 | 13:25:05 | 7.45 | 0.92 | 0.69 |
| 1/10/97 | 13:25:08 | 7.46 | 0.95 | 0.69 |
| 1/10/97 | 13:25:10 | 7.47 | 0.98 | 0.67 |
| 1/10/97 | 13:25:12 | 7.47 | 1.02 | 0.67 |
| 1/10/97 | 13:25:13 | 7.48 | 1.05 | 0.66 |
| 1/10/97 | 13:25:15 | 7.49 | 1.08 | 0.66 |
| 1/10/97 | 13:25:17 | 7.49 | 1.12 | 0.65 |
| 1/10/97 | 13:25:19 | 7.49 | 1.15 | 0.65 |
| 1/10/97 | 13:25:22 | 7.50 | 1.18 | 0.65 |
| 1/10/97 | 13:25:24 | 7.50 | 1.22 | 0.64 |
| 1/10/97 | 13:25:26 | 7.50 | 1.25 | 0.64 |
| 1/10/97 | 13:25:27 | 7.50 | 1.28 | 0.64 |
| 1/10/97 | 13:25:29 | 7.52 | 1.32 | 0.63 |
| 1/10/97 | 13:25:31 | 7.52 | 1.35 | 0.63 |
| 1/10/97 | 13:25:34 | 7.52 | 1.38 | 0.63 |
| 1/10/97 | 13:25:36 | 7.52 | 1.42 | 0.62 |
| 1/10/97 | 13:25:38 | 7.53 | 1.45 | 0.62 |
| 1/10/97 | 13:25:40 | 7.53 | 1.48 | 0.62 |
| 1/10/97 | 13:25:41 | 7.53 | 1.52 | 0.62 |
| 1/10/97 | 13:25:43 | 7.53 | 1.55 | 0.61 |
| 1/10/97 | 13:25:45 | 7.53 | 1.58 | 0.61 |
| 1/10/97 | 13:25:48 | 7.53 | 1.62 | 0.61 |
| 1/10/97 | 13:25:50 | 7.53 | 1.65 | 0.61 |
| 1/10/97 | 13:25:52 | 7.54 | 1.68 | 0.61 |
| 1/10/97 | 13:25:54 | 7.54 | 1.72 | 0.60 |
| 1/10/97 | 13:25:55 | 7.54 | 1.75 | 0.60 |
| 1/10/97 | 13:25:57 | 7.54 | 1.78 | 0.60 |
| 1/10/97 | 13:25:59 | 7.54 | 1.82 | 0.60 |
| 1/10/97 | 13:26:02 | 7.55 | 1.85 | 0.60 |
| 1/10/97 | 13:26:04 | 7.55 | 1.88 | 0.60 |
| 1/10/97 | 13:26:06 | 7.55 | 1.92 | 0.59 |
| 1/10/97 | 13:26:07 | 7.55 | 1.95 | 0.59 |
| 1/10/97 | 13:26:09 | 7.55 | 1.98 | 0.59 |
| 1/10/97 | 13:26:11 | 7.55 | 2.02 | 0.59 |
| 1/10/97 | 13:26:13 | 7.55 | 2.05 | 0.59 |

| | | | | |
|---|---|---|---|---|
| 1/10/97 | 13:28:36 | 7.60 | 4.42 | 0.54 |
| 1/10/97 | 13:28:41 | 7.61 | 4.50 | 0.54 |
| 1/10/97 | 13:28:46 | 7.61 | 4.58 | 0.54 |
| 1/10/97 | 13:28:51 | 7.61 | 4.67 | 0.54 |
| 1/10/97 | 13:28:55 | 7.61 | 4.75 | 0.54 |
| 1/10/97 | 13:29:00 | 7.61 | 4.83 | 0.54 |
| 1/10/97 | 13:29:05 | 7.61 | 4.92 | 0.53 |
| 1/10/97 | 13:29:10 | 7.61 | 5.00 | 0.53 |
| 1/10/97 | 13:29:16 | 7.61 | 5.08 | 0.53 |
| 1/10/97 | 13:29:21 | 7.61 | 5.17 | 0.53 |
| 1/10/97 | 13:29:26 | 7.61 | 5.25 | 0.53 |
| 1/10/97 | 13:29:31 | 7.61 | 5.33 | 0.53 |
| 1/10/97 | 13:29:35 | 7.61 | 5.42 | 0.53 |
| 1/10/97 | 13:29:40 | 7.61 | 5.50 | 0.53 |
| 1/10/97 | 13:29:45 | 7.61 | 5.58 | 0.53 |
| 1/10/97 | 13:29:50 | 7.61 | 5.67 | 0.53 |
| 1/10/97 | 13:29:56 | 7.61 | 5.75 | 0.53 |
| 1/10/97 | 13:30:01 | 7.62 | 5.83 | 0.53 |
| 1/10/97 | 13:30:06 | 7.62 | 5.92 | 0.53 |
| 1/10/97 | 13:30:11 | 7.62 | 6.00 | 0.53 |
| 1/10/97 | 13:30:15 | 7.62 | 6.08 | 0.53 |
| 1/10/97 | 13:30:20 | 7.62 | 6.17 | 0.53 |
| 1/10/97 | 13:30:25 | 7.62 | 6.25 | 0.53 |
| 1/10/97 | 13:30:30 | 7.62 | 6.33 | 0.53 |
| 1/10/97 | 13:30:36 | 7.62 | 6.42 | 0.52 |
| 1/10/97 | 13:30:41 | 7.62 | 6.50 | 0.52 |
| 1/10/97 | 13:30:46 | 7.62 | 6.58 | 0.52 |
| 1/10/97 | 13:30:50 | 7.62 | 6.67 | 0.52 |
| 1/10/97 | 13:30:55 | 7.62 | 6.75 | 0.52 |
| 1/10/97 | 13:31:00 | 7.62 | 6.83 | 0.52 |
| 1/10/97 | 13:31:05 | 7.62 | 6.92 | 0.52 |
| 1/10/97 | 13:31:11 | 7.62 | 7.00 | 0.52 |
| 1/10/97 | 13:31:16 | 7.62 | 7.08 | 0.52 |
| 1/10/97 | 13:31:21 | 7.62 | 7.17 | 0.52 |
| 1/10/97 | 13:31:26 | 7.62 | 7.25 | 0.52 |
| 1/10/97 | 13:31:30 | 7.62 | 7.33 | 0.52 |
| 1/10/97 | 13:31:35 | 7.62 | 7.42 | 0.52 |
| 1/10/97 | 13:31:40 | 7.62 | 7.50 | 0.52 |
| 1/10/97 | 13:31:45 | 7.63 | 7.58 | 0.52 |
| 1/10/97 | 13:31:51 | 7.63 | 7.67 | 0.52 |
| 1/10/97 | 13:31:56 | 7.62 | 7.75 | 0.52 |
| 1/10/97 | 13:32:01 | 7.63 | 7.83 | 0.52 |
| 1/10/97 | 13:32:06 | 7.62 | 7.92 | 0.52 |
| 1/10/97 | 13:32:10 | 7.63 | 8.00 | 0.52 |
| 1/10/97 | 13:32:15 | 7.63 | 8.08 | 0.52 |
| 1/10/97 | 13:32:20 | 7.63 | 8.17 | 0.52 |
| 1/10/97 | 13:32:25 | 7.63 | 8.25 | 0.52 |
| 1/10/97 | 13:32:31 | 7.63 | 8.33 | 0.52 |
| 1/10/97 | 13:32:36 | 7.63 | 8.42 | 0.52 |
| 1/10/97 | 13:32:41 | 7.63 | 8.50 | 0.52 |
| 1/10/97 | 13:32:46 | 7.63 | 8.58 | 0.52 |
| 1/10/97 | 13:32:50 | 7.63 | 8.67 | 0.51 |

| | | | | |
|---|---|---|---|---|
| 1/10/97 | 13:39:25 | 7.64 | 15.25 | 0.51 |
| 1/10/97 | 13:39:36 | 7.64 | 15.42 | 0.51 |
| 1/10/97 | 13:39:46 | 7.64 | 15.58 | 0.51 |
| 1/10/97 | 13:39:55 | 7.64 | 15.75 | 0.51 |
| 1/10/97 | 13:40:05 | 7.64 | 15.92 | 0.51 |
| 1/10/97 | 13:40:16 | 7.64 | 16.08 | 0.51 |
| 1/10/97 | 13:40:26 | 7.64 | 16.25 | 0.51 |
| 1/10/97 | 13:40:35 | 7.64 | 16.42 | 0.50 |

Terra8 Data Collection Report

Firmware Version 2.2/90
Number of Bytes in Data Dump 3212
User Supplied Comment
Time Header Block Loaded 1997/01/10 13:22:01.60
Time Data File Dumped 1997/01/10 13:41:47.70
Remaining Memory 21364
Number of Logs 309
Type of Data Memory Main Memory
Logs/Timestamp 1
Power was OK During Data Collection Period

Terra8 Channel Setup

Number of ANALOG Channels = 1

| Ch# | Description | Units | Delay | M | B |
|---|---|---|---|---|---|
| 1 | VWR SLUG TEST MW-5 FT..... | 100 | 2.8875E+0000 | -2.8800E+0000 | |

Number of DIGITAL Channels = 0

| Ch# | Description | Units | Delay | M | B |
|---|---|---|---|---|---|

•

# APPENDIX D

# SOIL AND GROUNDWATER CHEMISTRY DATA TABLES

## VOCs Detected in Soil Samples
## Univar USA Inc. Facility, Kent, Washington

| Location | Depth | Date | vinyl chloride | chloroethane | acetone | 1,1-dichloroethene | carbon disulfide | methylene chloride | trans-1,2-dichloroethene | 1,1-dichloroethane | 2-butanone (MEK) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SB-8 | 1 | 8/22/94 | < 10 | < 10 | < 100 | < 5 | < 100 | **12** | < 5 | < 5 | < 100 |
| SB-8 | 6 | 8/22/94 | < 1,000 | < 1,000 | < 10,000 | < 500 | < 10,000 | **1400 JB** | < 500 | < 500 | < 10,000 |
| SB-10 | 1 | 8/13/96 | < 5 | < 5 | **81** | < 5 | < 5 | < 10 | < 5 | < 5 | < 20 |
| SB-10 | 3.5 | 8/13/96 | < 5 | < 5 | **280** | < 5 | < 5 | < 10 | < 5 | < 5 | **44** |
| SB-10 | 3.5 (dup) | 8/13/96 | < 5 | < 5 | **250** | < 5 | < 5 | < 10 | < 5 | < 5 | **48** |
| SB-14 | 6 | 6/13/01 | < 60 | < 60 | – | < 60 | – | < 120 | < 60 | < 60 | – |
| SB-16 | 6 | 6/13/01 | < 57 | < 57 | – | < 57 | – | < 110 | < 57 | < 57 | – |
| SB-17 | 6 | 6/13/01 | < 57 | < 57 | – | < 57 | – | < 110 | < 57 | < 57 | – |
| GP-4 | 2 | 10/10/97 | < 5 | < 5 | < 50 | < 5 | < 5 | < 10 | < 5 | < 5 | < 20 |
| GP-6 | 2 | 10/10/97 | < 5 | < 5 | **180** | < 5 | < 5 | < 10 | < 5 | < 5 | **37** |
| GP-7 | 2 | 10/10/97 | < 5 | < 5 | < 50 | < 5 | < 5 | < 10 | < 5 | < 5 | < 20 |
| GP-10 | 2 | 10/10/97 | < 5 | < 5 | < 50 | < 5 | < 5 | < 10 | < 5 | < 5 | < 20 |
| SB-19 | 10 | 11/20/01 | < 29 | < 29 | < 290 | < 29 | – | < 57 | < 29 | < 29 | – |
| SB-20 | 10 | 11/20/01 | < 33 | < 33 | **1,400** | < 33 | – | < 65 | < 33 | < 33 | – |
| SB-21 | 7 | 9/12/02 | < 29 | < 24 | < 320 | < 17 | < 22 | **62 JB** | < 19 | < 13 | < 440 |
| SB-21 | 11 | 9/12/02 | < 28 | < 23 | < 300 | < 16 | < 21 | **61 JB** | < 19 | < 12 | < 430 |
| SB-21 | 16 | 9/12/02 | < 0.80 | < 1.1 | < 13 | < 0.89 | < 2.0 | **5.7 JB** | < 0.94 | < 1.1 | < 11 |
| SB-21 | 17.7 | 9/12/02 | < 0.80 | < 1.1 | **39 J** | < 0.90 | < 2.0 | **4.1 JB** | < 0.95 | < 1.1 | < 11 |
| SB-22 | 11.3 | 9/12/02 | **1.3 J** | **4.4 J** | **18 J** | < 0.90 | < 2.0 | **4.6 JB** | < 0.95 | < 1.1 | < 11 |
| SB-22 | 17.7 | 9/12/02 | < 0.77 | < 0.96 | **52 J** | < 0.85 | < 1.9 | **5.6 JB** | < 0.90 | < 0.96 | < 11 |
| SB-23 | 10 | 9/12/02 | **1.6 J** | **3.7 J** | **48 J** | < 0.98 | < 2.2 | **5.8 JB** | < 1.1 | < 1.2 | < 12 |
| SB-23 | 15.4 | 9/12/02 | < 0.81 | < 1.1 | **46 J** | < 0.90 | < 2.0 | **8.0 JB** | < 0.96 | < 1.1 | < 11 |
| SB-24 | 10 | 9/12/02 | < 29 | < 24 | < 320 | < 17 | < 22 | **69 JB** | < 19 | < 13 | < 440 |
| SB-24 | 14.8 | 9/12/02 | < 0.85 | < 1.1 | **27 J** | < 0.94 | < 2.1 | **5.2 JB** | < 1.0 | < 1.1 | < 12 |
| SB-25 | 11 | 9/12/02 | < 0.84 | < 1.1 | **30 J** | < 0.93 | < 2.1 | **6.3 JB** | < 0.99 | < 1.1 | < 12 |
| SB-25 | 15.5 | 9/12/02 | < 0.85 | < 1.1 | **58 J** | < 0.95 | < 2.1 | **5.9 JB** | < 1.0 | < 1.1 | < 12 |
| SB-26 | 11.9 | 9/13/02 | < 0.83 | < 1.1 | **70** | < 0.92 | < 2.0 | **7.4 JB** | < 0.98 | < 1.1 | < 12 |
| SB-26 | 17.5 | 9/13/02 | < 0.87 | **6.2 J** | **210** | < 0.96 | < 2.1 | **6.3 JB** | < 1.1 | < 1.1 | **55** |
| SB-27 | 11.5 | 9/13/02 | < 0.99 | **21** | **87** | < 1.1 | < 2.4 | **6.6 JB** | < 1.2 | **11** | **18 J** |
| SB-27 | 17 | 9/13/02 | < 0.78 | < 0.98 | **100** | < 0.87 | < 1.9 | **6.1 JB** | < 0.92 | < 0.98 | **14 J** |
| SB-28 | 5 | 9/13/02 | < 23 | < 19 | **470 J** | < 13 | < 18 | **38 JB** | < 15 | < 9.8 | < 350 |
| SB-29 | 6 | 9/13/02 | < 120 | < 94 | < 1,300 | < 65 | < 86 | **240 J** | < 75 | < 49 | < 1,800 |
| SB-30 | 8.5-9.4 | 11/21/02 | < 6.2 | < 6.2 | **76** | < 6.2 | < 6.2 | < 13 | < 6.2 | < 6.2 | < 25 R |
| SB-30 | 14.4-15.3 | 11/21/02 | < 9.9 | < 9.9 | **130** | < 9.9 | < 9.9 | < 20 | < 9.9 | < 9.9 | < 40 R |
| SB-30 | 24-24.9 | 11/21/02 | < 6.5 | < 6.5 | **100** | < 6.5 | < 6.5 | < 13 | < 6.5 | < 6.5 | < 26 R |
| SB-30 | 29-29.9 | 11/21/02 | < 6.3 | **18** | < 6.3 | < 6.3 | < 6.3 | < 13 | < 6.3 | **7.9** | < 26 R |
| SB-30 | 40.5-41.4 | 11/21/02 | < 6.4 | < 6.4 | < 6.4 | < 6.4 | < 6.4 | < 13 | < 6.4 | < 6.4 | < 26 R |
| SB-30 | 44.5-45.4 | 11/21/02 | < 30 | < 30 | **360** | < 30 | < 30 | < 59 | < 30 | **130** | < 120 R |
| SB-31 | 10.2 -11.1 | 11/21/02 | < 24 | < 24 | **270** | < 24 | < 24 | < 48 | < 24 | < 24 | < 95 R |
| SB-31 | 28.8 - 29.7 | 11/21/02 | < 6.2 | **12** | **93** | < 6.2 | < 6.2 | < 13 | < 6.2 | < 6.2 | < 25 R |
| SB-31 | 35-35.9 | 11/21/02 | < 6.1 | < 6.1 | < 6.1 | < 6.1 | < 6.1 | < 13 | < 6.1 | < 6.1 | < 25 R |
| SB-32 | 24.6-25.5 | 11/22/02 | < 6.3 | < 6.3 | < 63 | < 6.3 | < 6.3 | < 13 | < 6.3 | < 6.3 | < 25 R |
| SB-33 | 10-10.9 | 11/22/02 | < 34 | < 34 | < 340 | < 34 | < 34 | < 67 | < 34 | < 34 | < 140 R |
| SB-33 | 14.1-15 | 11/22/02 | < 32 | < 32 | < 320 | < 32 | < 32 | < 63 | < 32 | < 32 | < 130 R |
| SB-33 | 24.6-25.5 | 11/22/02 | < 6.4 | < 6.4 | < 6.4 | < 6.4 | < 6.4 | < 13 | < 6.4 | < 6.4 | < 26 R |
| SB-34 | 10.6-11.5 | 11/23/02 | < 6.6 | < 6.6 | < 6.6 | < 6.6 | < 6.6 | < 14 | < 6.6 | < 6.6 | < 27 R |
| SB-34 | 14.7-15.6 | 11/23/02 | < 6.3 | < 6.3 | < 63 | < 6.3 | < 6.3 | < 13 | < 6.3 | < 6.3 | < 26 R |
| SB-34 | 26.4-27.3 | 11/25/02 | < 6.2 | < 6.2 | < 62 | < 6.2 | < 6.2 | < 13 | < 6.2 | < 6.2 | < 25 J |
| SB-35 | 4 - 4.9 | 3/19/03 | < 0.82 | < 1.1 | < 14 | < 0.91 | < 2.0 | **3.2 JB** | < 0.96 | < 1.1 | < 11 |
| SB-35 | 6 - 6.9 | 3/19/03 | < 0.85 | < 1.1 | < 14 | < 0.95 | < 2.1 | **3.6 JB** | < 1.0 | < 1.1 | < 12 |
| SB-35 | 10 - 10.9 | 3/19/03 | < 0.79 | < 1.0 | **15 J** | < 0.88 | < 2.0 | **3.4 JB** | < 0.93 | < 1.0 | < 11 |

## VOCs Detected in Soil Samples
## Univar USA Inc. Facility, Kent, Washington

| Location | Depth | Date | vinyl chloride | chloroethane | acetone | 1,1-dichloroethene | carbon disulfide | methylene chloride | trans-1,2-dichloroethene | 1,1-dichloroethane | 2-butanone (MEK) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SB-35 | 12 - 12.9 | 3/19/03 | < 0.81 | < 1.1 | **26 J** | < 0.90 | < 2.0 | **3.5 JB** | < 0.96 | < 1.1 | < 11 |
| SB-35 | 16 -16.9 | 3/19/03 | < 0.79 | < 0.99 | **16 J** | < 0.88 | < 1.9 | **3.8 JB** | < 0.93 | < 0.99 | < 11 |
| SB-35 | 20 - 20.9 | 3/19/03 | < 0.77 | < 0.97 | **17 J** | < 0.86 | < 1.9 | **2.9 JB** | < 0.91 | < 0.97 | < 11 |
| SB-35 | 24 - 24.9 | 3/19/03 | < 0.76 | < 0.95 | < 13 | < 0.84 | < 1.9 | **3.0 JB** | < 0.89 | < 0.95 | < 11 |
| SB-38 | 3 | 5/28/03 | **73** | **25** | **35 J** | **160** | < 2.1 | **6.9 J** | **1.8 J** | **420** | < 12 |
| SB-38 | 6.4 | 5/28/03 | < 0.93 | **39** | **26 J** | < 1.1 | < 2.3 | < 1.5 | < 1.1 | **170** | < 13 |
| SB-38 | 12.4 | 5/28/03 | < 0.84 | **69** | **21 J** | < 0.94 | < 2.1 | < 1.3 | **1.0 J** | **23** | < 12 |
| SB-38 | 17.3 | 5/28/03 | < 0.79 | **46** | **26 J** | < 0.88 | < 2.0 | **1.3 J** | **1.1 J** | **120** | < 11 |
| SB-38 | 25 | 5/28/03 | **190** | **43** | **30 J** | **120** | < 1.9 | **8.8 J** | **3.9 J** | **2,000** | **14 J** |
| SB-38 | 27.8 | 5/28/03 | **610** | < 1.1 | **39 J** | **37** | < 2.0 | < 1.3 | **5.7 J** | **1,400** | **13 J** |
| SB-38 | 32.8 | 5/28/03 | **3.2 J** | **5.3 J** | **21 J** | < 0.90 | < 2.0 | < 1.3 | < 0.96 | **33** | < 11 |
| SB-38 | 37.8 | 5/28/03 | **7.5** | **3.7 J** | **67** | **4.8 J** | **2.5 J** | **2.5 J** | **2.5 J** | **110** | < 12 |
| SB-41 | 37 | 6/2/03 | < 0.75 | **2.9 J** | **30 J** | < 0.84 | < 1.9 | **2.2 J** | < 0.89 | < 0.95 | < 11 |
| SB-41 | 42.5 | 6/2/03 | < 0.73 | < 0.92 | **14 J** | < 0.81 | < 1.8 | **2.2 J** | < 0.86 | < 0.92 | < 9.9 |
| MW-1 | 4.5 | 3/13/95 | < 10 | < 10 | **3,100** | < 5 | < 100 | < 5 | < 5 | **17** | < 100 |
| MW-1 | 6 | 3/13/95 | < 10 | < 10 | **290** | < 5 | < 100 | < 5 | < 5 | **6** | < 100 |
| MW-2 | 4.5 | 3/13/95 | < 10 | < 10 | **570** | < 5 | < 100 | < 5 | < 5 | < 5 | < 100 |
| MW-2 | 6 | 3/13/95 | < 10 | < 10 | **200** | < 5 | < 100 | < 5 | < 5 | < 5 | < 100 |
| MW-3 | 4.5 | 3/13/95 | < 10 | < 10 | **1,900** | < 5 | < 100 | < 5 | < 5 | < 5 | **200** |
| MW-3 | 6 | 3/13/95 | < 10 | < 10 | **410** | < 5 | < 100 | < 5 | < 5 | < 5 | < 100 |
| MW-4 | 1.5 | 8/13/96 | < 5 | < 5 | **60** | < 5 | < 5 | < 10 | < 5 | < 5 | < 20 |
| MW-4 | 3 | 8/13/96 | < 5 | < 5 | **77** | < 5 | < 5 | < 10 | < 5 | < 5 | < 20 |
| MW-5 | 1.5 | 8/13/96 | < 5 | < 5 | < 50 | < 5 | < 5 | < 10 | < 5 | < 5 | < 20 |
| MW-5 | 3 | 8/13/96 | < 5 | < 5 | **74** | < 5 | < 5 | < 10 | < 5 | < 5 | < 20 |
| MW-6 | 1.5 | 8/13/96 | < 5 | < 5 | < 50 | < 5 | < 5 | < 10 | < 5 | < 5 | < 20 |
| MW-6 | 3 | 8/13/96 | < 5 | < 5 | **85** | < 5 | < 5 | < 10 | < 5 | < 5 | < 20 |
| MW-11 | 10 | 6/25/01 | < 6.6 | < 6.6 | – | < 6.6 | – | < 14 | < 6.6 | < 6.6 | – |
| MW-19 | 44.5 | 1/29/04 | < 0.85 | < 1.1 | **20 J** | < 0.95 | < 2.1 | **4.7 J** | < 1.0 | < 1.1 | < 12 |
| INJ-2 | 10 | 6/25/01 | < 6.5 | < 6.5 | – | < 6.5 | – | < 13 | < 6.5 | < 6.5 | – |
| Minimum Detected Concentration | | | 1.3 J | 2.9 J | 14 J | 4.8 J | 2.5 J | 1.3 J | 1.0 J | 6 | 13 J |
| Maximum Detected Concentration | | | 610 | 69 | 3,100 | 160 | 2.5 J | 1,400 JB | 5.7 J | 2,000 | 200 |
| Total Samples Quantitated for Analyte | | | 80 | 80 | 75 | 80 | 73 | 80 | 80 | 80 | 73 |
| Number of Samples in which Analyte Detected | | | 7 | 14 | 49 | 4 | 1 | 34 | 6 | 13 | 9 |
| Frequency of Detection | | | 9% | 18% | 65% | 5% | 1% | 43% | 8% | 16% | 12% |
| Mimimum Detection Limit | | | 0.73 | 0.92 | 6.1 | 0.81 | 1.8 | 1.3 | 0.86 | 0.92 | 9.9 |
| Maximum Detection Limit | | | 1,000 | 1,000 | 10,000 | 500 | 10,000 | 67 | 500 | 500 | 10,000 |

NOTES:

1. Results in µg/kg (dry weight basis).
2. Detections shown in bold; – = not quantitated.
3. < = not detected at the method reporting or detection limit shown.
4. J = the result is an estimated concentration that is less than the method reporting limit but greater than or equal to the method detection limit.
5. B = the analyte was found in the associated method blank at a level that is significant relative to the sample result.
6. R = the analyte was outside of control criteria in the associated laboratory control sample and is rejected due to serious deficiencies in the ability to anlyze the sample and meet QC criteria.
7. Insufficient soil available for total solids determination for SB-38-17.3 and SB-38-32.8; dry weight basis results determined using average total solids of the six other SB-38 samples.
8. Where only m- & p-xylenes are reported, the value represents total xylenes, as reported by the laboratory.

## VOCs Detected in Soil Samples
## Univar USA Inc. Facility, Kent, Washington

| Location | Depth | Date | cis-1,2-dichloroethene | chloroform | 1,1,1-trichloroethane (TCA) | 1,2-dichloroethane (EDC) | benzene | trichloroethene (TCE) | bromodichloromethane | toluene |
|---|---|---|---|---|---|---|---|---|---|---|
| SB-8 | 1 | 8/22/94 | **36** | < 5 | **10** | < 5 | < 5 | **7** | < 5 | < 5 |
| SB-8 | 6 | 8/22/94 | < 500 | < 500 | < 500 | < 500 | < 500 | < 500 | < 500 | **800** |
| SB-10 | 1 | 8/13/96 | **6** | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| SB-10 | 3.5 | 8/13/96 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| SB-10 | 3.5 (dup) | 8/13/96 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| SB-14 | 6 | 6/13/01 | < 60 | < 60 | < 60 | < 60 | < 60 | < 60 | < 60 | **340** |
| SB-16 | 6 | 6/13/01 | < 57 | < 57 | < 57 | < 57 | < 57 | < 57 | < 57 | < 57 |
| SB-17 | 6 | 6/13/01 | < 57 | < 57 | < 57 | < 57 | < 57 | < 57 | < 57 | < 57 |
| GP-4 | 2 | 10/10/97 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| GP-6 | 2 | 10/10/97 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| GP-7 | 2 | 10/10/97 | **77** | < 5 | < 5 | < 5 | < 5 | **21** | < 5 | < 5 |
| GP-10 | 2 | 10/10/97 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| SB-19 | 10 | 11/20/01 | < 29 | < 29 | < 29 | < 29 | < 29 | **56** | < 29 | < 29 |
| SB-20 | 10 | 11/20/01 | **210** | < 33 | < 33 | < 33 | < 33 | **630** | < 33 | < 33 |
| SB-21 | 7 | 9/12/02 | < 16 | < 14 | < 16 | < 16 | < 15 | < 26 | < 12 | < 14 |
| SB-21 | 11 | 9/12/02 | < 16 | < 13 | < 15 | < 15 | < 14 | < 25 | < 12 | < 13 |
| SB-21 | 16 | 9/12/02 | < 1.1 | < 0.74 | < 0.74 | < 0.87 | < 1.1 | **1.2 J** | < 0.69 | < 1.1 |
| SB-21 | 17.7 | 9/12/02 | < 1.1 | < 0.74 | < 0.74 | < 0.87 | < 1.1 | **2.5 J** | < 0.69 | < 1.1 |
| SB-22 | 11.3 | 9/12/02 | **4.2 J** | < 0.74 | < 0.74 | < 0.87 | < 1.1 | **0.79 J** | < 0.69 | < 1.1 |
| SB-22 | 17.7 | 9/12/02 | < 1.1 | < 0.70 | < 0.70 | < 0.83 | < 0.97 | < 0.35 | < 0.66 | **3.9 J** |
| SB-23 | 10 | 9/12/02 | **5.0 J** | < 0.81 | < 0.81 | < 0.95 | < 1.2 | < 0.40 | < 0.75 | < 1.2 |
| SB-23 | 15.4 | 9/12/02 | **3.5 J** | < 0.75 | < 0.75 | < 0.88 | < 1.1 | **3.9 J** | < 0.70 | **2.5 J** |
| SB-24 | 10 | 9/12/02 | < 16 | < 13 | < 16 | < 16 | < 15 | **120** | < 12 | < 14 |
| SB-24 | 14.8 | 9/12/02 | < 1.2 | < 0.78 | < 0.78 | < 0.92 | < 1.1 | **12** | < 0.73 | < 1.2 |
| SB-25 | 11 | 9/12/02 | < 1.2 | < 0.77 | < 0.77 | < 0.91 | < 1.1 | **31** | < 0.72 | **1.9 J** |
| SB-25 | 15.5 | 9/12/02 | **18** | < 0.78 | < 0.78 | < 0.92 | < 1.1 | **160** | < 0.73 | < 1.2 |
| SB-26 | 11.9 | 9/13/02 | < 1.2 | < 0.76 | < 0.76 | < 0.90 | < 1.1 | < 0.38 | < 0.71 | < 1.2 |
| SB-26 | 17.5 | 9/13/02 | < 1.2 | < 0.80 | < 0.80 | < 0.94 | **2.3 J** | < 0.39 | < 0.74 | < 1.2 |
| SB-27 | 11.5 | 9/13/02 | < 1.4 | < 0.91 | < 0.91 | < 1.1 | **4.6 J** | < 0.45 | < 0.85 | **18** |
| SB-27 | 17 | 9/13/02 | < 1.1 | < 0.72 | < 0.72 | < 0.85 | < 1.0 | < 0.36 | < 0.67 | < 1.1 |
| SB-28 | 5 | 9/13/02 | < 13 | < 11 | < 12 | < 13 | < 12 | < 21 | < 9.1 | **24 J** |
| SB-29 | 6 | 9/13/02 | < 63 | < 52 | **110 J** | < 62 | < 57 | **250 J** | < 46 | **180 J** |
| SB-30 | 8.5-9.4 | 11/21/02 | < 6.2 | < 6.2 | < 6.2 | < 6.2 | < 6.2 | < 6.2 | < 6.2 | < 6.2 |
| SB-30 | 14.4-15.3 | 11/21/02 | **12** | < 9.9 | < 9.9 | < 9.9 | < 9.9 | < 9.9 | < 9.9 | < 9.9 |
| SB-30 | 24-24.9 | 11/21/02 | < 6.5 | < 6.5 | < 6.5 | < 6.5 | < 6.5 | < 6.5 | < 6.5 | **8.3** |
| SB-30 | 29-29.9 | 11/21/02 | < 6.3 | < 6.3 | < 6.3 | < 6.3 | < 6.3 | < 6.3 | < 6.3 | < 6.3 |
| SB-30 | 40.5-41.4 | 11/21/02 | **18** | < 6.4 | < 6.4 | < 6.4 | < 6.4 | < 6.4 | < 6.4 | < 6.4 |
| SB-30 | 44.5-45.4 | 11/21/02 | < 30 | < 30 | < 30 | < 30 | < 30 | < 30 | < 30 | **1,000** |
| SB-31 | 10.2 -11.1 | 11/21/02 | < 24 | < 24 | < 24 | < 24 | < 24 | < 24 | < 24 | < 24 |
| SB-31 | 28.8 - 29.7 | 11/21/02 | **7.1** | < 6.2 | < 6.2 | < 6.2 | < 6.2 | < 6.2 | < 6.2 | < 6.2 |
| SB-31 | 35-35.9 | 11/21/02 | < 6.1 | < 6.1 | < 6.1 | < 6.1 | < 6.1 | < 6.1 | < 6.1 | < 6.1 |
| SB-32 | 24.6-25.5 | 11/22/02 | **11** | < 6.3 | < 6.3 | < 6.3 | < 6.3 | < 6.3 | < 6.3 | < 6.3 |
| SB-33 | 10-10.9 | 11/22/02 | **39** | < 34 | < 34 | < 34 | < 34 | **59** | < 34 | < 34 |
| SB-33 | 14.1-15 | 11/22/02 | < 32 | < 32 | < 32 | < 32 | < 32 | < 32 | < 32 | < 32 |
| SB-33 | 24.6-25.5 | 11/22/02 | < 6.4 | < 6.4 | < 6.4 | < 6.4 | < 6.4 | < 6.4 | < 6.4 | < 6.4 |
| SB-34 | 10.6-11.5 | 11/23/02 | < 6.6 | < 6.6 | < 6.6 | < 6.6 | < 6.6 | < 6.6 | < 6.6 | < 6.6 |
| SB-34 | 14.7-15.6 | 11/23/02 | < 6.3 | < 6.3 | < 6.3 | < 6.3 | < 6.3 | < 6.3 | < 6.3 | < 6.3 |
| SB-34 | 26.4-27.3 | 11/25/02 | < 6.2 | < 6.2 | < 6.2 | < 6.2 | < 6.2 | < 6.2 | < 6.2 | < 6.2 |
| SB-35 | 4 - 4.9 | 3/19/03 | < 1.1 | < 0.75 | < 0.75 | < 0.88 | < 1.1 | < 0.37 | < 0.70 | **2.2 J** |
| SB-35 | 6 - 6.9 | 3/19/03 | < 1.2 | < 0.78 | < 0.78 | < 0.92 | < 1.1 | < 0.39 | < 0.73 | < 1.2 |
| SB-35 | 10 - 10.9 | 3/19/03 | < 1.1 | < 0.73 | < 0.73 | < 0.86 | < 1.1 | < 0.36 | < 0.68 | < 1.1 |

## VOCs Detected in Soil Samples
## Univar USA Inc. Facility, Kent, Washington

| Location | Depth | Date | cis-1,2-dichloroethene | chloroform | 1,1,1-trichloroethane (TCA) | 1,2-dichloroethane (EDC) | benzene | trichloroethene (TCE) | bromodichloromethane | toluene |
|---|---|---|---|---|---|---|---|---|---|---|
| SB-35 | 12 - 12.9 | 3/19/03 | < 1.1 | < 0.75 | < 0.75 | < 0.88 | < 1.1 | < 0.37 | < 0.70 | < 1.1 |
| SB-35 | 16 -16.9 | 3/19/03 | < 1.1 | < 0.72 | < 0.72 | < 0.85 | < 1.0 | **1.6 J** | < 0.67 | < 1.1 |
| SB-35 | 20 - 20.9 | 3/19/03 | < 1.1 | < 0.71 | < 0.71 | < 0.84 | < 0.99 | **0.76 J** | < 0.66 | < 1.1 |
| SB-35 | 24 - 24.9 | 3/19/03 | < 1.1 | < 0.70 | < 0.70 | < 0.82 | < 0.96 | < 0.34 | < 0.65 | < 1.1 |
| SB-38 | 3 | 5/28/03 | **4,200** | **15** | **22,000** | **1.5 J** | **8.6** | **23,000** | **3.5 J** | **28,000** |
| SB-38 | 6.4 | 5/28/03 | **5.9 J** | < 0.86 | **24** | < 1.1 | < 1.2 | **22** | < 0.8 | **56** |
| SB-38 | 12.4 | 5/28/03 | **6.1 J** | < 0.78 | **30** | < 0.91 | **1.9 J** | **21** | < 0.72 | **47** |
| SB-38 | 17.3 | 5/28/03 | < 1.1 | < 0.73 | **0.78 J** | < 0.86 | < 1.1 | **1.4 J** | < 0.68 | **370** |
| SB-38 | 25 | 5/28/03 | **7,400** | < 0.71 | **220** | **1.1 J** | **1.5 J** | **10** | < 0.66 | **8,000** |
| SB-38 | 27.8 | 5/28/03 | **2,700** | < 0.76 | **1.1 J** | **0.93 J** | **2.7 J** | **1.6 J** | < 0.71 | **5,100** |
| SB-38 | 32.8 | 5/28/03 | **53** | < 0.75 | **2.4 J** | < 0.88 | < 1.1 | **4.1 J** | < 0.70 | **150** |
| SB-38 | 37.8 | 5/28/03 | **3,100** | **2.1 J** | **450** | < 0.90 | < 1.1 | **25** | < 0.71 | **3,500** |
| SB-41 | 37 | 6/2/03 | < 1.1 | < 0.69 | < 0.69 | < 0.81 | < 0.96 | < 0.34 | < 0.64 | < 1.1 |
| SB-41 | 42.5 | 6/2/03 | < 0.98 | < 0.67 | < 0.67 | < 0.79 | < 0.93 | < 0.33 | < 0.63 | < 0.99 |
| MW-1 | 4.5 | 3/13/95 | **150** | < 5 | **22** | < 5 | < 5 | **28** | < 5 | **78** |
| MW-1 | 6 | 3/13/95 | **77** | < 5 | **14** | < 5 | < 5 | **21** | < 5 | **49** |
| MW-2 | 4.5 | 3/13/95 | **8** | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| MW-2 | 6 | 3/13/95 | **10** | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| MW-3 | 4.5 | 3/13/95 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| MW-3 | 6 | 3/13/95 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| MW-4 | 1.5 | 8/13/96 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| MW-4 | 3 | 8/13/96 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| MW-5 | 1.5 | 8/13/96 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| MW-5 | 3 | 8/13/96 | < 5 | < 5 | < 5 | < 5 | < 5 | **21** | < 5 | < 5 |
| MW-6 | 1.5 | 8/13/96 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| MW-6 | 3 | 8/13/96 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| MW-11 | 10 | 6/25/01 | < 6.6 | < 6.6 | < 6.6 | < 6.6 | < 6.6 | **7** | < 6.6 | < 6.6 |
| MW-19 | 44.5 | 1/29/04 | < 1.2 | < 0.78 | < 0.78 | < 0.92 | < 1.1 | < 0.39 | < 0.73 | < 1.2 |
| INJ-2 | 10 | 6/25/01 | **50** | – | < 6.5 | < 6.5 | < 6.5 | **62** | < 6.5 | < 6.5 |
| Minimum Detected Concentration | | | 3.5 J | 2.1 J | 0.78 J | 0.93 J | 1.5 J | 0.76 J | 3.5 J | 1.9 J |
| Maximum Detected Concentration | | | 7,400 | 15 | 22,000 | 1.5 | 8.6 | 23,000 | 3.5 J | 28,000 |
| Total Samples Quantitated for Analyte | | | 80 | 79 | 80 | 80 | 80 | 80 | 80 | 80 |
| Number of Samples in which Analyte Detected | | | 25 | 2 | 12 | 3 | 6 | 29 | 1 | 21 |
| Frequency of Detection | | | 31% | 3% | 15% | 4% | 8% | 36% | 1% | 26% |
| Mimimum Detection Limit | | | 0.98 | 0.67 | 0.67 | 0.79 | 0.93 | 0.33 | 0.63 | 0.99 |
| Maximum Detection Limit | | | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 57 |

NOTES:

1. Results in µg/kg (dry weight basis).
2. Detections shown in bold; – = not quantitated.
3. < = not detected at the method reporting or detection limit shown.
4. J = the result is an estimated concentration that is less than the method reporting limit but greater than or equal to the method detection limit.
5. B = the analyte was found in the associated method blank at a level that is significant relative to the sample result.
6. R = the analyte was outside of control criteria in the associated laboratory control sample and is rejected due to serious deficiencies in the ability to anlyze the sample and meet QC criteria.
7. Insufficient soil available for total solids determination for SB-38-17.3 and SB-38-32.8; dry weight basis results determined using average total solids of the six other SB-38 samples.
8. Where only m- & p-xylenes are reported, the value represents total xylenes, as reported by the laboratory.

## VOCs Detected in Soil Samples
## Univar USA Inc. Facility, Kent, Washington

| Location | Depth | Date | 1,1,2-trichloroethane | tetrachloroethene (PCE) | dibromochloromethane | ethylbenzene | m- & p-xylenes | o-xylene | styrene | isopropylbenzene | 1,1,2,2-tetrachloroethane |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SB-8 | 1 | 8/22/94 | < 5 | **17** | < 5 | < 5 | < 5 | < 5 | < 5 | – | < 5 |
| SB-8 | 6 | 8/22/94 | < 500 | < 500 | < 500 | **600** | **3,900** | – | < 500 | – | < 500 |
| SB-10 | 1 | 8/13/96 | < 5 | **23** | < 5 | < 5 | < 5 | < 5 | < 5 | < 20 | < 5 |
| SB-10 | 3.5 | 8/13/96 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 20 | < 5 |
| SB-10 | 3.5 (dup) | 8/13/96 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 20 | < 5 |
| SB-14 | 6 | 6/13/01 | < 60 | < 60 | < 60 | **64** | **250** | **87** | – | – | < 60 |
| SB-16 | 6 | 6/13/01 | < 57 | < 57 | < 57 | < 57 | < 57 | < 57 | – | – | < 57 |
| SB-17 | 6 | 6/13/01 | < 57 | < 57 | < 57 | < 57 | < 57 | < 57 | – | – | < 57 |
| GP-4 | 2 | 10/10/97 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 20 | < 5 |
| GP-6 | 2 | 10/10/97 | < 5 | < 5 | < 5 | < 5 | **5** | – | < 5 | < 20 | < 5 |
| GP-7 | 2 | 10/10/97 | < 5 | **310** | < 5 | < 5 | < 5 | < 5 | < 5 | < 20 | **6** |
| GP-10 | 2 | 10/10/97 | < 5 | **60** | < 5 | < 5 | < 5 | < 5 | < 5 | < 20 | < 5 |
| SB-19 | 10 | 11/20/01 | < 29 | **3,500** | < 29 | < 29 | < 29 | < 29 | – | – | < 29 |
| SB-20 | 10 | 11/20/01 | < 33 | **910** | < 33 | < 33 | < 33 | < 33 | – | – | < 33 |
| SB-21 | 7 | 9/12/02 | < 14 | **2,500** | < 12 | < 14 | < 26 | < 11 | < 13 | < 9.3 | < 19 |
| SB-21 | 11 | 9/12/02 | < 13 | **800** | < 11 | < 13 | < 25 | < 11 | < 13 | < 9.0 | < 19 |
| SB-21 | 16 | 9/12/02 | < 0.89 | **28** | < 0.78 | < 0.74 | < 2.0 | < 0.89 | < 0.94 | < 0.88 | < 0.94 |
| SB-21 | 17.7 | 9/12/02 | < 0.90 | **33** | < 0.78 | < 0.74 | < 2.0 | < 0.90 | < 0.95 | < 0.88 | < 0.95 |
| SB-22 | 11.3 | 9/12/02 | < 0.90 | **30** | < 0.78 | < 0.74 | < 2.0 | < 0.90 | < 0.95 | < 0.88 | < 0.95 |
| SB-22 | 17.7 | 9/12/02 | < 0.85 | < 0.39 | < 0.74 | **3.8 J** | **5.6 J** | **2.3 J** | < 0.90 | < 0.84 | < 0.90 |
| SB-23 | 10 | 9/12/02 | < 0.98 | **0.96 J** | < 0.85 | < 0.81 | **3.5 J** | **6.1 J** | < 1.1 | < 0.96 | < 1.1 |
| SB-23 | 15.4 | 9/12/02 | < 0.90 | **81** | < 0.79 | < 0.75 | **2.8 J** | **0.99 J** | < 0.96 | < 0.89 | < 0.96 |
| SB-24 | 10 | 9/12/02 | < 14 | **830** | < 12 | < 14 | < 26 | < 11 | < 13 | < 9.3 | < 19 |
| SB-24 | 14.8 | 9/12/02 | < 0.94 | **56** | < 0.82 | < 0.78 | < 2.1 | < 0.94 | < 1.0 | < 0.93 | < 1.0 |
| SB-25 | 11 | 9/12/02 | < 0.93 | < 0.42 | < 0.81 | < 0.77 | < 2.1 | < 0.93 | < 0.99 | < 0.92 | < 0.99 |
| SB-25 | 15.5 | 9/12/02 | < 0.95 | **0.63 J** | < 0.83 | < 0.78 | < 2.1 | < 0.95 | < 1.0 | < 0.94 | < 1.0 |
| SB-26 | 11.9 | 9/13/02 | < 0.92 | < 0.42 | < 0.80 | < 0.76 | < 2.0 | < 0.92 | < 0.98 | < 0.91 | < 0.98 |
| SB-26 | 17.5 | 9/13/02 | < 0.96 | < 0.44 | < 0.84 | < 0.80 | < 2.1 | < 0.96 | < 1.1 | < 0.95 | < 1.1 |
| SB-27 | 11.5 | 9/13/02 | < 1.1 | **3.3 J** | < 0.96 | < 0.91 | < 2.4 | < 1.1 | < 1.2 | < 1.1 | < 1.2 |
| SB-27 | 17 | 9/13/02 | < 0.87 | < 0.39 | < 0.76 | **0.73 J** | **2.7 J** | **1.9 J** | < 0.92 | < 0.86 | < 0.92 |
| SB-28 | 5 | 9/13/02 | < 11 | **14 J** | < 8.8 | **270** | **910** | **330** | < 11 | **270** | < 15 |
| SB-29 | 6 | 9/13/02 | < 54 | **160,000** | < 45 | **75 J** | **270 J** | **100 J** | < 51 | < 37 | < 75 |
| SB-30 | 8.5-9.4 | 11/21/02 | < 6.2 | < 6.2 | < 6.2 | **17** | **49** | **27** | < 6.2 | < 25 | < 6.2 |
| SB-30 | 14.4-15.3 | 11/21/02 | < 9.9 | < 9.9 | < 9.9 | < 9.9 | < 9.9 | < 9.9 | < 9.9 | < 40 | < 9.9 |
| SB-30 | 24-24.9 | 11/21/02 | < 6.5 | < 6.5 | < 6.5 | < 6.5 | < 6.5 | < 6.5 | < 6.5 | < 26 | < 6.5 |
| SB-30 | 29-29.9 | 11/21/02 | < 6.3 | < 6.3 | < 6.3 | < 6.3 | **7.6** | < 6.3 | < 6.3 | < 26 | < 6.3 |
| SB-30 | 40.5-41.4 | 11/21/02 | < 6.4 | < 6.4 | < 6.4 | < 6.4 | **10** | < 6.4 | < 6.4 | < 26 | < 6.4 |
| SB-30 | 44.5-45.4 | 11/21/02 | < 30 | < 30 | < 30 | < 30 | **67** | **31** | < 30 | < 120 | < 30 |
| SB-31 | 10.2 -11.1 | 11/21/02 | < 24 | < 24 | < 24 | **180** | **610** | **230** | < 24 | < 95 | < 24 |
| SB-31 | 28.8 - 29.7 | 11/21/02 | < 6.2 | < 6.2 | < 6.2 | < 6.2 | < 6.2 | < 6.2 | < 6.2 | < 25 | < 6.2 |
| SB-31 | 35-35.9 | 11/21/02 | < 6.1 | < 6.1 | < 6.1 | < 6.1 | < 6.1 | < 6.1 | < 6.1 | < 25 | < 6.1 |
| SB-32 | 24.6-25.5 | 11/22/02 | < 6.3 | < 6.3 | < 6.3 | < 6.3 | < 6.3 | < 6.3 | < 6.3 | < 25 | < 6.3 |
| SB-33 | 10-10.9 | 11/22/02 | < 34 | **1,800** | < 34 | < 34 | < 34 | < 34 | < 34 | < 140 | < 34 |
| SB-33 | 14.1-15 | 11/22/02 | < 32 | **420** | **300** | < 32 | < 32 | < 32 | < 32 | < 130 | < 32 |
| SB-33 | 24.6-25.5 | 11/22/02 | < 6.4 | < 6.4 | < 6.4 | < 6.4 | < 6.4 | < 6.4 | < 6.4 | < 26 | < 6.4 |
| SB-34 | 10.6-11.5 | 11/23/02 | < 6.6 | < 6.6 | < 6.6 | < 6.6 | < 6.6 | < 6.6 | < 6.6 | < 27 | < 6.6 |
| SB-34 | 14.7-15.6 | 11/23/02 | < 6.3 | < 6.3 | < 6.3 | < 6.3 | < 6.3 | < 6.3 | < 6.3 | < 26 | < 6.3 |
| SB-34 | 26.4-27.3 | 11/25/02 | < 6.2 | < 6.2 | < 6.2 | < 6.2 | < 6.2 | < 6.2 | < 6.2 | < 25 | < 6.2 |
| SB-35 | 4 - 4.9 | 3/19/03 | < 0.91 | **4.9 J** | < 0.79 | < 0.75 | < 2.0 | < 0.91 | < 0.96 | < 0.89 | < 0.96 |
| SB-35 | 6 - 6.9 | 3/19/03 | < 0.95 | **1.6 J** | < 0.82 | < 0.78 | < 2.1 | < 0.95 | < 1.0 | < 0.93 | < 0.96 |
| SB-35 | 10 - 10.9 | 3/19/03 | < 0.88 | < 0.40 | < 0.77 | < 0.73 | < 2.0 | < 0.88 | < 0.93 | < 0.87 | < 0.93 |

## VOCs Detected in Soil Samples
## Univar USA Inc. Facility, Kent, Washington

| Location | Depth | Date | 1,1,2-trichloroethane | tetrachloroethene (PCE) | dibromochloromethane | ethylbenzene | m- & p-xylenes | o-xylene | styrene | isopropylbenzene | 1,1,2,2-tetrachloroethane |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SB-35 | 12 - 12.9 | 3/19/03 | < 0.90 | < 0.41 | < 0.79 | < 0.75 | < 2.0 | < 0.90 | < 0.96 | < 0.89 | < 0.96 |
| SB-35 | 16 -16.9 | 3/19/03 | < 0.88 | < 0.4 | < 0.76 | < 0.72 | < 1.9 | < 0.88 | < 0.93 | < 0.86 | < 0.93 |
| SB-35 | 20 - 20.9 | 3/19/03 | < 0.86 | < 0.39 | < 0.75 | < 0.71 | < 1.9 | < 0.86 | < 0.91 | < 0.85 | < 0.91 |
| SB-35 | 24 - 24.9 | 3/19/03 | < 0.84 | < 0.38 | < 0.73 | < 0.70 | < 1.9 | < 0.84 | < 0.89 | < 0.83 | < 0.89 |
| SB-38 | 3 | 5/28/03 | **1.7 J** | **8,100** | < 0.84 | **2,000** | **7,500** | **2,200** | < 64 | **170** | < 1.1 |
| SB-38 | 6.4 | 5/28/03 | < 1.1 | **6.2 J** | < 0.90 | **2,600** | **10,000** | **2,700** | < 17 | **81** | < 1.1 |
| SB-38 | 12.4 | 5/28/03 | < 0.94 | **7.2** | < 0.82 | **6.5 J** | **19** | **4.7 J** | < 0.99 | < 0.93 | < 0.99 |
| SB-38 | 17.3 | 5/28/03 | < 0.88 | < 0.40 | < 0.77 | **110** | **360** | **91** | **2.7 J** | **3.6 J** | < 0.93 |
| SB-38 | 25 | 5/28/03 | < 0.86 | **6.1** | < 0.75 | **1,100** | **3,600** | **1,100** | < 13 | **28** | < 0.91 |
| SB-38 | 27.8 | 5/28/03 | < 0.92 | **0.95 J** | < 0.80 | **1,400** | **4,800** | **1,300** | < 17 | **34** | < 0.98 |
| SB-38 | 32.8 | 5/28/03 | < 0.90 | **1.6 J** | < 0.79 | **47** | **170** | **56** | **3.0 J** | **3.3 J** | < 0.96 |
| SB-38 | 37.8 | 5/28/03 | < 0.92 | **130** | < 0.80 | **620** | **2,100** | **680** | < 0.98 | **12 J** | < 0.98 |
| SB-41 | 37 | 6/2/03 | < 0.84 | < 0.38 | < 0.73 | **120** | **370** | **2.7 J** | < 0.89 | **4.0 J** | < 0.89 |
| SB-41 | 42.5 | 6/2/03 | < 0.81 | < 0.37 | < 0.71 | **2.6 J** | **46** | < 0.81 | < 0.86 | < 0.80 | < 0.86 |
| MW-1 | 4.5 | 3/13/95 | < 5 | **47** | < 5 | **25** | **150** | – | < 5 | – | < 5 |
| MW-1 | 6 | 3/13/95 | < 5 | **48** | < 5 | **21** | **140** | – | < 5 | – | < 5 |
| MW-2 | 4.5 | 3/13/95 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | – | < 5 |
| MW-2 | 6 | 3/13/95 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | – | < 5 |
| MW-3 | 4.5 | 3/13/95 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | – | < 5 |
| MW-3 | 6 | 3/13/95 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | – | < 5 |
| MW-4 | 1.5 | 8/13/96 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 20 | < 5 |
| MW-4 | 3 | 8/13/96 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 20 | < 5 |
| MW-5 | 1.5 | 8/13/96 | < 5 | **110** | < 5 | < 5 | < 5 | < 5 | < 5 | < 20 | < 5 |
| MW-5 | 3 | 8/13/96 | < 5 | **500** | < 5 | < 5 | < 5 | < 5 | < 5 | < 20 | < 5 |
| MW-6 | 1.5 | 8/13/96 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 20 | < 5 |
| MW-6 | 3 | 8/13/96 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 20 | < 5 |
| MW-11 | 10 | 6/25/01 | < 6.6 | **1,500** | < 6.6 | < 6.6 | < 6.6 | < 6.6 | – | – | < 6.6 |
| MW-19 | 44.5 | 1/29/04 | < 0.95 | < 0.43 | < 0.82 | < 0.78 | < 2.1 | < 0.95 | < 1.0 | < 0.93 | < 1.0 |
| INJ-2 | 10 | 6/25/01 | < 6.5 | **9,300** | < 6.5 | < 6.5 | < 6.5 | < 6.5 | – | – | < 6.5 |
| Minimum Detected Concentration | | | 1.7 J | 0.63 J | 300 | 0.73 J | 2.7 J | 1.9 J | 2.7 J | 3.3 J | 6 |
| Maximum Detected Concentration | | | 1.7 J | 160,000 | 300 | 2,600 | 10,000 | 2,700 | 3.0 J | 270 | 6 |
| Total Samples Quantitated for Analyte | | | 80 | 80 | 80 | 80 | 80 | 76 | 73 | 65 | 80 |
| Number of Samples in which Analyte Detected | | | 1 | 36 | 1 | 20 | 26 | 19 | 2 | 9 | 1 |
| Frequency of Detection | | | 1% | 45% | 1% | 25% | 33% | 25% | 3% | 14% | 1% |
| Mimimum Detection Limit | | | 0.81 | 0.37 | 0.71 | 0.70 | 1.9 | 0.81 | 0.86 | 0.80 | 0.86 |
| Maximum Detection Limit | | | 500 | 500 | 500 | 57 | 57 | 57 | 500 | 140 | 500 |

NOTES:

1. Results in µg/kg (dry weight basis).
2. Detections shown in bold; – = not quantitated.
3. < = not detected at the method reporting or detection limit shown.
4. J = the result is an estimated concentration that is less than the method reporting limit but greater than or equal to the method detection limit.
5. B = the analyte was found in the associated method blank at a level that is significant relative to the sample result.
6. R = the analyte was outside of control criteria in the associated laboratory control sample and is rejected due to serious deficiencies in the ability to anlyze the sample and meet QC criteria.
7. Insufficient soil available for total solids determination for SB-38-17.3 and SB-38-32.8; dry weight basis results determined using average total solids of the six other SB-38 samples.
8. Where only m- & p-xylenes are reported, the value represents total xylenes, as reported by the laboratory.

# VOCs Detected in Soil Samples
## Univar USA Inc. Facility, Kent, Washington

| Location | Depth | Date | n-propylbenzene | 4-chlorotoluene | 1,3,5-trimethylbenzene | 1,2,4-trimethylbenzene | sec-butylbenzene | 4-isopropyltoluene | n-butylbenzene | naphthalene | hexachlorobutadiene | n-hexane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SB-8 | 1 | 8/22/94 | – | – | – | – | – | – | – | – | – | < 100 |
| SB-8 | 6 | 8/22/94 | – | – | – | – | – | – | – | – | – | < 10,000 |
| SB-10 | 1 | 8/13/96 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 100 |
| SB-10 | 3.5 | 8/13/96 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 100 |
| SB-10 | 3.5 (dup) | 8/13/96 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 100 |
| SB-14 | 6 | 6/13/01 | – | – | – | – | – | – | – | – | – | – |
| SB-16 | 6 | 6/13/01 | – | – | – | – | – | – | – | – | – | – |
| SB-17 | 6 | 6/13/01 | – | – | – | – | – | – | – | – | – | – |
| GP-4 | 2 | 10/10/97 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | – |
| GP-6 | 2 | 10/10/97 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | – |
| GP-7 | 2 | 10/10/97 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | – |
| GP-10 | 2 | 10/10/97 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | – |
| SB-19 | 10 | 11/20/01 | – | – | – | – | – | – | – | – | – | – |
| SB-20 | 10 | 11/20/01 | – | – | – | – | – | – | – | – | – | – |
| SB-21 | 7 | 9/12/02 | < 14 | < 13 | < 17 | < 20 | < 18 | < 18 | < 31 | < 39 | < 52 | < 25 |
| SB-21 | 11 | 9/12/02 | < 13 | < 12 | < 16 | < 19 | < 17 | < 17 | < 29 | < 38 | < 50 | < 24 |
| SB-21 | 16 | 9/12/02 | < 0.93 | < 0.96 | < 4.9 | < 1.1 | < 0.96 | < 0.93 | < 0.97 | < 1.2 | < 0.97 | < 5.2 |
| SB-21 | 17.7 | 9/12/02 | < 0.93 | < 0.96 | < 5.0 | < 1.1 | < 0.96 | < 0.93 | < 0.97 | < 1.2 | < 0.97 | < 5.2 |
| SB-22 | 11.3 | 9/12/02 | < 0.94 | < 0.96 | < 5.0 | < 1.1 | < 0.96 | < 0.94 | < 0.98 | < 1.2 | < 0.98 | < 5.2 |
| SB-22 | 17.7 | 9/12/02 | < 0.89 | < 0.91 | < 4.7 | **2.2 J** | < 0.91 | < 0.89 | < 0.93 | < 1.1 | < 0.93 | < 5.0 |
| SB-23 | 10 | 9/12/02 | < 1.1 | < 1.1 | < 5.4 | **4.2 J** | < 1.1 | < 1.1 | < 1.1 | < 1.3 | < 1.1 | < 5.7 |
| SB-23 | 15.4 | 9/12/02 | < 0.94 | < 0.97 | < 5.0 | < 1.1 | < 0.97 | < 0.94 | < 0.98 | < 1.2 | < 0.98 | < 5.3 |
| SB-24 | 10 | 9/12/02 | < 14 | < 12 | < 17 | < 20 | < 18 | < 18 | < 30 | < 39 | < 52 | **26 JB** |
| SB-24 | 14.8 | 9/12/02 | < 0.98 | < 1.1 | < 5.2 | < 1.2 | < 1.1 | < 0.98 | < 1.1 | < 1.3 | < 1.1 | < 5.5 |
| SB-25 | 11 | 9/12/02 | < 0.97 | < 1.0 | < 5.2 | < 1.2 | < 1.0 | < 0.97 | < 1.1 | < 1.2 | < 1.1 | < 5.4 |
| SB-25 | 15.5 | 9/12/02 | < 0.99 | < 1.1 | < 5.2 | < 1.2 | < 1.1 | < 0.99 | < 1.1 | < 1.3 | < 1.1 | < 5.5 |
| SB-26 | 11.9 | 9/13/02 | < 0.96 | < 0.99 | < 5.1 | < 1.1 | < 0.99 | < 0.96 | < 1.0 | < 1.2 | < 1.0 | < 5.4 |
| SB-26 | 17.5 | 9/13/02 | < 1.0 | < 1.1 | < 5.3 | < 1.2 | < 1.1 | <1.0 | < 1.1 | < 1.3 | < 1.1 | < 5.6 |
| SB-27 | 11.5 | 9/13/02 | < 1.2 | < 1.2 | < 6.1 | < 1.4 | < 1.2 | < 1.2 | < 1.2 | < 1.5 | < 1.2 | < 6.4 |
| SB-27 | 17 | 9/13/02 | < 0.91 | < 0.93 | < 4.8 | < 1.1 | < 0.93 | < 0.91 | < 0.95 | < 1.2 | < 0.95 | < 5.1 |
| SB-28 | 5 | 9/13/02 | **730** | < 9.5 | **1,600** | **2,800** | **180 J** | **270** | **310** | < 31 | **74 J** | **99 JB** |
| SB-29 | 6 | 9/13/02 | < 53 | < 48 | < 66 | **630 J** | < 69 | < 69 | < 120 | < 160 | < 210 | < 98 |
| SB-30 | 8.5-9.4 | 11/21/02 | < 25 | < 25 | < 25 | < 25 R | < 25 | < 25 | < 25 R | < 25 R | < 25 | < 13 |
| SB-30 | 14.4-15.3 | 11/21/02 | < 40 | < 40 | < 40 | < 40 R | < 40 | < 40 | < 40 R | < 40 R | < 40 | < 20 |
| SB-30 | 24-24.9 | 11/21/02 | < 26 | < 26 | < 26 | < 26 R | < 26 | < 26 | < 26 R | < 26 R | < 26 | < 13 |
| SB-30 | 29-29.9 | 11/21/02 | < 26 | < 26 | < 26 | < 26 R | < 26 | < 26 | < 26 R | < 26 R | < 26 | < 13 |
| SB-30 | 40.5-41.4 | 11/21/02 | < 26 | < 26 | < 26 | < 26 R | < 26 | < 26 | < 26 R | < 26 R | < 26 | < 13 |
| SB-30 | 44.5-45.4 | 11/21/02 | < 120 | < 120 | < 120 | < 120 R | < 120 | < 120 | < 120 R | < 120 R | < 120 | < 59 |
| SB-31 | 10.2 -11.1 | 11/21/02 | < 95 | < 95 | < 95 | **110 J** | < 95 | < 95 | < 95 | < 95 R | < 95 | < 48 |
| SB-31 | 28.8 - 29.7 | 11/21/02 | < 25 | < 25 | < 25 | < 25 R | < 25 | < 25 | < 25 | < 25 R | < 25 | < 13 |
| SB-31 | 35-35.9 | 11/21/02 | < 25 | < 25 | < 25 | < 25 R | < 25 | < 25 | < 25 | < 25 R | < 25 | < 13 |
| SB-32 | 24.6-25.5 | 11/22/02 | < 25 | < 25 | < 25 | < 25 R | < 25 | < 25 | < 25 | < 25 R | < 25 | < 13 |
| SB-33 | 10-10.9 | 11/22/02 | < 140 | < 140 | < 140 | < 140 R | < 140 | < 140 | < 140 | < 140 R | < 140 | < 67 |
| SB-33 | 14.1-15 | 11/22/02 | < 130 | < 130 | < 130 | < 130 R | < 130 | < 130 | < 130 R | < 130 R | < 130 | < 63 |
| SB-33 | 24.6-25.5 | 11/22/02 | < 26 | < 26 | < 26 | < 26 R | < 26 | < 26 | < 26 R | < 26 R | < 26 | < 13 |
| SB-34 | 10.6-11.5 | 11/23/02 | < 27 | < 27 | < 27 | < 27 R | < 27 | < 27 | < 27 R | < 27 R | < 27 | < 14 |
| SB-34 | 14.7-15.6 | 11/23/02 | < 26 | < 26 | < 26 | < 26 R | < 26 | < 26 | < 26 R | < 26 R | < 26 | < 13 |
| SB-34 | 26.4-27.3 | 11/25/02 | < 25 | < 25 | < 25 | < 25 | < 25 | < 25 | < 25 | < 25 | < 25 | < 13 |
| SB-35 | 4 - 4.9 | 3/19/03 | < 0.95 | < 0.97 | < 5.0 | < 1.1 | < 0.97 | < 0.95 | < 0.99 | < 1.2 | < 0.99 | < 5.3 |
| SB-35 | 6 - 6.9 | 3/19/03 | < 0.99 | < 1.1 | < 5.2 | < 1.2 | < 1.1 | < 0.99 | < 1.1 | < 1.3 | < 1.1 | < 5.5 |
| SB-35 | 10 - 10.9 | 3/19/03 | < 0.92 | < 0.95 | < 4.9 | < 1.1 | < 0.95 | < 0.92 | < 0.96 | < 1.2 | < 0.96 | < 5.1 |

## VOCs Detected in Soil Samples
## Univar USA Inc. Facility, Kent, Washington

| Location | Depth | Date | n-propylbenzene | 4-chlorotoluene | 1,3,5-trimethylbenzene | 1,2,4-trimethylbenzene | sec-butylbenzene | 4-isopropyltoluene | n-butylbenzene | naphthalene | hexachlorobutadiene | n-hexane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SB-35 | 12 - 12.9 | 3/19/03 | < 0.94 | < 0.97 | < 5.0 | < 1.1 | < 0.97 | < 0.94 | < 0.98 | < 1.2 | < 0.98 | < 5.3 |
| SB-35 | 16 -16.9 | 3/19/03 | < 0.91 | < 0.94 | < 4.8 | < 1.1 | < 0.94 | < 0.91 | < 0.95 | < 1.2 | < 0.95 | < 5.1 |
| SB-35 | 20 - 20.9 | 3/19/03 | < 0.90 | < 0.92 | < 4.8 | < 1.1 | < 0.92 | < 0.90 | < 0.94 | < 1.2 | < 0.94 | < 5.0 |
| SB-35 | 24 - 24.9 | 3/19/03 | < 0.88 | < 0.9 | < 4.7 | < 1.0 | < 0.90 | < 0.88 | < 0.92 | < 1.1 | < 0.92 | < 4.9 |
| SB-38 | 3 | 5/28/03 | **1,500** | < 1.1 | **2,500** | **490** | **12 J** | **13 J** | **10 J** | **18 J** | < 1.1 | – |
| SB-38 | 6.4 | 5/28/03 | **140** | **1.9 J** | **240** | **460** | < 1.2 | **3.2 J** | < 1.2 | **3.5 J** | < 1.2 | – |
| SB-38 | 12.4 | 5/28/03 | **1.5 J** | < 1.1 | < 5.2 | **4.3 J** | < 1.1 | < 0.98 | < 1.1 | < 1.3 | < 1.1 | – |
| SB-38 | 17.3 | 5/28/03 | **8.1 J** | < 0.94 | **13 J** | **21 J** | < 0.94 | < 0.92 | < 0.96 | < 1.2 | < 0.96 | – |
| SB-38 | 25 | 5/28/03 | **54** | < 0.93 | **84** | **150** | < 0.93 | < 0.90 | < 0.94 | **1.2 J** | < 0.94 | – |
| SB-38 | 27.8 | 5/28/03 | **50** | < 0.99 | **82** | **150** | < 0.99 | < 0.96 | < 1.0 | < 1.2 | < 1.0 | – |
| SB-38 | 32.8 | 5/28/03 | **6.9 J** | < 0.97 | **11 J** | **19 J** | < 0.97 | < 0.94 | < 0.98 | < 1.2 | < 0.98 | – |
| SB-38 | 37.8 | 5/28/03 | **27 J** | < 0.99 | **44** | **86** | < 0.99 | < 0.96 | < 1.0 | < 1.2 | < 1.0 | – |
| SB-41 | 37 | 6/2/03 | **5.7 J** | < 0.90 | **11 J** | **23** | < 0.90 | **8.5 J** | < 0.91 | < 1.1 | < 0.91 | < 4.9 |
| SB-41 | 42.5 | 6/2/03 | < 0.85 | < 0.87 | < 4.5 | **1.5 J** | < 0.87 | < 0.85 | < 0.88 | < 1.1 | < 0.88 | < 4.7 |
| MW-1 | 4.5 | 3/13/95 | – | – | – | – | – | – | – | – | – | – |
| MW-1 | 6 | 3/13/95 | – | – | – | – | – | – | – | – | – | – |
| MW-2 | 4.5 | 3/13/95 | – | – | – | – | – | – | – | – | – | – |
| MW-2 | 6 | 3/13/95 | – | – | – | – | – | – | – | – | – | – |
| MW-3 | 4.5 | 3/13/95 | – | – | – | – | – | – | – | – | – | – |
| MW-3 | 6 | 3/13/95 | – | – | – | – | – | – | – | – | – | – |
| MW-4 | 1.5 | 8/13/96 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 100 |
| MW-4 | 3 | 8/13/96 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 100 |
| MW-5 | 1.5 | 8/13/96 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 100 |
| MW-5 | 3 | 8/13/96 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 100 |
| MW-6 | 1.5 | 8/13/96 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 100 |
| MW-6 | 3 | 8/13/96 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 100 |
| MW-11 | 10 | 6/25/01 | – | – | – | – | – | – | – | – | – | – |
| MW-19 | 44.5 | 1/29/04 | < 0.99 | < 1.1 | < 5.2 | < 1.2 | < 1.1 | < 0.99 | < 1.1 | < 1.3 | < 1.1 | < 5.5 |
| INJ-2 | 10 | 6/25/01 | – | – | – | – | – | – | – | – | – | – |
| Minimum Detected Concentration | | | 1.5 J | 1.9 J | 11 J | 1.5 J | 12 J | 3.2 J | 10 J | 1.2 J | 74 J | 26 JB |
| Maximum Detected Concentration | | | 1,500 | 1.9 J | 2,500 | 2,800 | 180 J | 270 | 310 | 18 J | 74 J | 99 JB |
| Total Samples Quantitated for Analyte | | | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 63 |
| Number of Samples in which Analyte Detected | | | 10 | 1 | 9 | 15 | 2 | 4 | 2 | 3 | 1 | 2 |
| Frequency of Detection | | | 15% | 2% | 14% | 23% | 3% | 6% | 3% | 5% | 2% | 3% |
| Mimimum Detection Limit | | | 0.85 | 0.87 | 4.5 | 1.0 | 0.87 | 0.85 | 0.88 | 1.1 | 0.88 | 4.7 |
| Maximum Detection Limit | | | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 160 | 210 | 10,000 |

NOTES:

1. Results in µg/kg (dry weight basis).
2. Detections shown in bold; – = not quantitated.
3. < = not detected at the method reporting or detection limit shown.
4. J = the result is an estimated concentration that is less than the method reporting limit but greater than or equal to the method detection limit.
5. B = the analyte was found in the associated method blank at a level that is significant relative to the sample result.
6. R = the analyte was outside of control criteria in the associated laboratory control sample and is rejected due to serious deficiencies in the ability to anlyze the sample and meet QC criteria.
7. Insufficient soil available for total solids determination for SB-38-17.3 and SB-38-32.8; dry weight basis results determined using average total solids of the six other SB-38 samples.
8. Where only m- & p-xylenes are reported, the value represents total xylenes, as reported by the laboratory.

# Table D-2

## TOC in Soil Samples
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Sample Depth (feet bgs) | Date Collected | Total Organic Carbon (EPA Method 415.1) |
|---|---|---|---|
| SB-33 | 10 - 10.9 | 11/22/02 | 0.35 |
| | 14.1 - 15.0 | 11/22/02 | 0.43 |
| | 24.6 - 25.5 | 11/22/02 | 0.02 |
| SB-34 | 10.6 - 11.5 | 11/23/02 | 0.29 |
| | 14.7 - 15.6 | 11/23/02 | 0.08 |
| | 26.4 - 27.3 | 11/25/05 | 0.08 |
| SB-35 | 2 - 2.9 | 03/19/03 | 0.25 |
| | 6 - 6.9 | 03/19/03 | 0.46 |
| | 16 - 16.9 | 03/19/03 | < 0.05 |
| | 24 - 24.9 | 03/19/03 | < 0.05 |
| SB-36 | 45.5 - 46 | 05/28/03 | 1.02 |
| SB-37 | 13 - 13.5 | 05/29/03 | 16.4 |
| SB-41 | 18 - 18.5 | 06/02/03 | 0.46 |
| NOTE: All results in percent. | | | |

# Table D-3

## VOCs Detected in Groundwater Samples from Temporary Borings
## Univar USA Inc. Facility
## Kent, Washington

| Boring | GP-1 | GP-2 | GP-3 | GP-4 | GP-5 | GP-6 | GP-6 (dup) | GP-7 | GP-8 | GP-9 |
|---|---|---|---|---|---|---|---|---|---|---|
| Depth (feet) | 6-8.5 | 8-10.5 | 8-10.5 | 8-10.5 | 8-10.5 | 8-10.5 | 8-10.5 | 8-10.5 | 8-10.5 | 8-10.5 |
| Sample Date | 10/10/97 | 10/10/97 | 10/10/97 | 10/10/97 | 10/10/97 | 10/10/97 | 10/10/97 | 10/10/97 | 10/10/97 | 10/10/97 |
| vinyl chloride | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | **0.7** | **0.8** | **1,000** | **1.1** | **0.6** |
| chloroethane | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | **290** | **300** | < 10 | **35** | < 0.5 |
| acetone | < 20 | **24** | < 20 | < 20 | < 20 | < 20 | < 20 | < 400 | < 20 | < 20 |
| 1,1-dichloroethene | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 10 | < 0.5 | **4.8** |
| carbon disulfide | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 10 | < 0.5 | < 0.5 |
| methylene chloride | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | **22** | < 1 | < 1 |
| trans-1,2-dichloroethene | < 0.5 | < 0.5 | < 0.5 | < 0.5 | **0.7** | **2.2** | **2.1** | **230** | **0.5** | **2.1** |
| 1,1-dichloroethane | < 0.5 | < 0.5 | < 0.5 | < 0.5 | **0.8** | **11** | **11** | < 10 | **6.3** | < 0.5 |
| 2-butanone (MEK) | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 400 | < 20 | < 20 |
| cis-1,2-dichloroethene | **0.8** | < 0.5 | < 0.5 | < 0.5 | **12** | < 0.5 | < 0.5 | **5,200** | **1** | **31** |
| chloroform | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 10 | < 0.5 | < 0.5 |
| 1,1,1-trichloroethane (TCA) | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 10 | < 0.5 | < 0.5 |
| 1,2-dichloroethane (EDC) | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | **1.8** | < 10 | < 0.5 | < 0.5 |
| benzene | < 0.5 | **320** | < 0.5 | < 0.5 | < 0.5 | **17** | **17** | < 10 | < 0.5 | < 0.5 |
| trichloroethene (TCE) | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 10 | < 0.5 | **290** |
| toluene | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | **39** | **39** | < 10 | < 0.5 | < 0.5 |
| 4 ''ıyl-2-pentanone (MIBK) | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 20 | < 400 | < 20 | < 20 |
| t loroethene (PCE) | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 10 | < 0.5 | < 0.5 |
| chlorobenzene | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 10 | < 0.5 | < 0.5 |
| ethylbenzene | < 0.5 | **3.2** | < 0.5 | < 0.5 | < 0.5 | **150** | **150** | < 10 | < 0.5 | < 0.5 |
| m- & p-xylenes | < 0.5 | **3** | < 0.5 | < 0.5 | < 0.5 | **580** | **600** | < 10 | < 0.5 | < 0.5 |
| o-xylene | < 0.5 | – | < 0.5 | < 0.5 | < 0.5 | – | – | < 10 | < 0.5 | < 0.5 |
| styrene | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 10 | < 0.5 | < 0.5 |
| isopropylbenzene | < 2 | **24** | < 2 | < 2 | < 2 | < 2 | < 2 | < 40 | < 2 | < 2 |
| n-propylbenzene | < 2 | **28** | < 2 | < 2 | < 2 | < 2 | < 2 | < 40 | < 2 | < 2 |
| 1,3,5-trimethylbenzene | < 2 | < 2 | < 2 | < 2 | < 2 | < 2 | < 2 | < 40 | < 2 | < 2 |
| 1,2,4-trimethylbenzene | < 2 | < 2 | < 2 | < 2 | < 2 | < 2 | < 2 | < 40 | < 2 | < 2 |
| sec-butylbenzene | < 2 | < 2 | < 2 | < 2 | < 2 | < 2 | < 2 | < 40 | < 2 | < 2 |
| 4-isopropyltoluene | < 2 | < 2 | < 2 | < 2 | < 2 | < 2 | < 2 | < 40 | < 2 | < 2 |
| n-butylbenzene | < 2 | < 2 | < 2 | < 2 | < 2 | < 2 | < 2 | < 40 | < 2 | < 2 |
| naphthalene | < 2 | **7** | < 2 | < 2 | < 2 | < 2 | < 2 | < 40 | < 2 | < 2 |
| n-hexane | – | – | – | – | – | – | – | – | – | – |

NOTES:

1. Results in µg/L.
2. Analyses performed using EPA Method 8240 (pre-1996) or EPA Method 8240 (since 1996).
3. Only detected VOCs shown; detections shown in bold.
3. < = not detected at the MDL shown.
4. J = the result is an estimated concentration that is less than the MRL but greater than or equal to the MRL.
5. B = the analyte was found in the associated method blank at a level that is significant relative to the sample result.
6. R = the analyte was outside of control criteria in the associated laboratory control sample and is rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria.

## Table D-3

## VOCs Detected in Groundwater Samples from Temporary Borings
## Univar USA Inc. Facility
## Kent, Washington

| Boring | GP-10 | GP-12 | GP-12 | GP-12 | GP-12 | SB-9 | SB-10 | SB-11 | SB-12 | SB-13 | SB-14 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Depth (feet) | 8-10.5 | 15-16 | 23-24 | 31-32 | 39-40 | 6-7 | 4-9.5 | 8-12 | 8-10 | 8-10 | 12-16 |
| Sample Date | 10/10/97 | 1/6/99 | 1/6/99 | 1/6/99 | 1/6/99 | 1/20/95 | 8/13/96 | 6/13/01 | 6/13/01 | 6/13/01 | 6/13/01 |
| vinyl chloride | < 0.5 | **0.8** | < 0.5 | < 0.5 | < 0.5 | **510** | **0.6** | < 0.5 | **0.69** | < 0.5 | < 5 |
| chloroethane | **550** | < 0.5 | < 0.5 | < 0.5 | < 0.5 | **28** | **2.7** | < 0.5 | < 0.5 | **0.51** | **1,700** |
| acetone | < 20 | < 20 | < 20 | < 20 | < 20 | **1,900** | < 20 | – | – | – | – |
| 1,1-dichloroethene | < 0.5 | **5.4** | < 0.5 | < 0.5 | < 0.5 | < 5 | < 0.5 | < 0.5 | **1.6** | < 0.5 | < 5 |
| carbon disulfide | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 100 | < 0.5 | – | – | – | – |
| methylene chloride | < 1 | < 1 | < 1 | < 1 | < 1 | **38** | < 1 | < 1 | < 1 | < 1 | **23** |
| trans-1,2-dichloroethene | **1.3** | **0.9** | < 0.5 | < 0.5 | < 0.5 | < 5 | < 0.5 | < 0.5 | **3.1** | **0.81** | < 5 |
| 1,1-dichloroethane | **5.9** | < 0.5 | < 0.5 | **0.6** | < 0.5 | **2,600** | **16** | < 0.5 | < 0.5 | < 0.5 | **29** |
| 2-butanone (MEK) | < 20 | < 20 | < 20 | < 20 | < 20 | **200** | < 20 | – | – | – | – |
| cis-1,2-dichloroethene | **1.6** | **5.9** | **1** | < 0.5 | < 0.5 | **7,400** | < 0.5 | < 0.5 | **48** | **9.3** | < 5 |
| chloroform | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | **140** | < 0.5 | < 0.5 | < 0.5 | **0.5** | < 5 |
| 1,1,1-trichloroethane (TCA) | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | **1,100** | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 5 |
| 1,2-dichloroethane (EDC) | **5.1** | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 5 |
| benzene | **11** | < 0.5 | < 0.5 | < 0.5 | < 0.5 | **7** | < 0.5 | < 0.5 | < 0.5 | < 0.5 | **24** |
| trichloroethene (TCE) | < 0.5 | **100** | < 0.5 | < 0.5 | < 0.5 | **480** | < 0.5 | < 0.5 | **64** | **1.2** | < 5 |
| toluene | **11** | < 0.5 | < 0.5 | < 0.5 | < 0.5 | **9,300** | < 0.5 | < 0.5 | < 0.5 | < 0.5 | **19** |
| ethyl-2-pentanone (MIBK) | < 20 | < 20 | < 20 | < 20 | < 20 | **120** | < 20 | – | – | – | – |
| chloroethene (PCE) | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | **680** | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 5 |
| chlorobenzene | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 5 |
| ethylbenzene | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | **2,000** | **5.1** | < 0.5 | < 0.5 | < 0.5 | < 5 |
| m- & p-xylenes | **2** | < 0.5 | < 0.5 | < 0.5 | < 0.5 | **9,400** | **13** | < 0.5 | < 0.5 | < 0.5 | < 5 |
| o-xylene | – | < 0.5 | < 0.5 | < 0.5 | < 0.5 | – | – | < 0.5 | < 0.5 | < 0.5 | < 5 |
| styrene | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | **410** | < 0.5 | – | – | – | – |
| isopropylbenzene | < 2 | < 2 | < 2 | < 2 | < 2 | – | < 2 | – | – | – | – |
| n-propylbenzene | < 2 | < 2 | < 2 | < 2 | < 2 | – | < 2 | – | – | – | – |
| 1,3,5-trimethylbenzene | < 2 | < 2 | < 2 | < 2 | < 2 | – | < 2 | – | – | – | – |
| 1,2,4-trimethylbenzene | < 2 | < 2 | < 2 | < 2 | < 2 | – | < 2 | – | – | – | – |
| sec-butylbenzene | < 2 | < 2 | < 2 | < 2 | < 2 | – | < 2 | – | – | – | – |
| 4-isopropyltoluene | < 2 | < 2 | < 2 | < 2 | < 2 | – | < 2 | – | – | – | – |
| n-butylbenzene | < 2 | < 2 | < 2 | < 2 | < 2 | – | < 2 | – | – | – | – |
| naphthalene | < 2 | < 2 | < 2 | < 2 | < 2 | – | < 2 | – | – | – | – |
| n-hexane | – | – | – | – | – | – | < 10 | – | – | – | – |

NOTES:

1. Results in µg/L.
2. Analyses performed using EPA Method 8240 (pre-1996) or EPA Method 8240 (since 1996).
3. Only detected VOCs shown; detections shown in bold.
3. < = not detected at the MDL shown.
4. J = the result is an estimated concentration that is less than the MRL but greater than or equal to the MRL.
5. B = the analyte was found in the associated method blank at a level that is significant relative to the sample result.
6. R = the analyte was outside of control criteria in the associated laboratory control sample and is rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria.

## Table D-3

## VOCs Detected in Groundwater Samples from Temporary Borings
## Univar USA Inc. Facility
## Kent, Washington

| Boring | SB-16 | SB-17 | SB-18 | SB-21 | | SB-22 | | SB-23 | | SB-24 |
|---|---|---|---|---|---|---|---|---|---|---|
| Depth (feet) | 10-14 | 10-14 | 6-10 | 10-12 | 17-19 | 10-12 | 17-19 | 10-12 | 17-19 | 10-12 |
| Sample Date | 6/13/01 | 6/13/01 | 6/13/01 | 9/12/02 | 9/12/02 | 9/12/02 | 9/12/02 | 9/12/02 | 9/12/02 | 9/12/02 |
| vinyl chloride | < 0.5 | **0.68** | < 0.5 | < 2.2 | **20** | **970** | **4.0** | < 5.3 | **160** | < 2.2 |
| chloroethane | **76** | **11** | < 0.5 | < 2.3 | **1.6** | **58** | **51** | < 5.7 | < 2.3 | < 2.3 |
| acetone | – | – | – | < 41 | < 4.1 | < 21 | < 4.1 | < 110 | < 41 | < 41 |
| 1,1-dichloroethene | < 0.5 | < 0.5 | < 0.5 | < 1.2 | **1.3** | **6.1** | < 0.12 | < 3.0 | **5.6** | **3.7 J** |
| carbon disulfide | – | – | – | < 1.6 | < 0.16 | < 0.80 | < 0.16 | < 4.0 | < 1.6 | < 1.6 |
| methylene chloride | **1.2** | < 1 | < 1 | **2.7 J** | < 0.20 | < 0.97 | **0.82 J** | < 4.9 | < 2.0 | < 2.0 |
| trans-1,2-dichloroethene | **0.79** | < 0.5 | < 0.5 | < 1.4 | **3.2** | **1.5 J** | **0.46 J** | **52** | **9.4** | < 1.4 |
| 1,1-dichloroethane | **6.5** | **4.1** | **1.3** | < 0.91 | **4.9** | **7.8** | **19** | < 2.3 | **1.6 J** | **6.5** |
| 2-butanone (MEK) | – | – | – | < 41 | < 4.1 | < 21 | < 4.1 | < 110 | < 41 | < 41 |
| cis-1,2-dichloroethene | < 0.5 | **0.88** | < 0.5 | **8.2** | **25** | **880** | **5.6** | **1,000** | **740** | **6.5** |
| chloroform | < 0.5 | **0.53** | < 0.5 | < 0.96 | < 0.096 | < 0.48 | < 0.096 | < 2.4 | < 0.96 | < 0.96 |
| 1,1,1-trichloroethane (TCA) | < 0.5 | < 0.5 | < 0.5 | < 1.2 | < 0.12 | < 0.57 | < 0.12 | < 2.9 | < 1.2 | < 1.2 |
| 1,2-dichloroethane (EDC) | < 0.5 | < 0.5 | < 0.5 | < 1.2 | < 0.12 | < 0.57 | < 0.12 | < 2.9 | < 1.2 | < 1.2 |
| benzene | **3.6** | **1.6** | < 0.5 | < 1.1 | **1.9** | **0.90 J** | **2.8** | < 2.7 | **1.5 J** | < 1.1 |
| trichloroethene (TCE) | < 0.5 | < 0.5 | < 0.5 | **57** | **57** | **2.3 J** | **6.1** | **460** | **240** | **850** |
| toluene | **0.87** | < 0.5 | < 0.5 | < 0.98 | **0.26 J** | **6.7** | **0.60** | < 2.5 | < 0.98 | < 0.98 |
| ıethyl-2-pentanone (MIBK) | – | – | – | < 51 | < 5.1 | < 26 | < 5.1 | < 130 | < 51 | < 51 |
| achloroethene (PCE) | < 0.5 | < 0.5 | < 0.5 | **1,800** | **57** | **3.1** | **0.95** | **5,800** | **2,400** | **3,100** |
| chlorobenzene | < 0.5 | < 0.5 | < 0.5 | < 0.94 | < 0.094 | **5.6** | < 0.094 | < 2.4 | < 0.94 | < 0.94 |
| ethylbenzene | < 0.5 | < 0.5 | < 0.5 | < 1.3 | < 0.13 | **1.1 J** | **26** | < 3.3 | < 1.3 | < 1.3 |
| m- & p-xylenes | < 0.5 | < 0.5 | < 0.5 | < 2.2 | < 0.22 | **6.6** | **36** | < 5.5 | < 2.2 | < 2.2 |
| o-xylene | < 0.5 | < 0.5 | < 0.5 | < 0.79 | < 0.079 | **16** | **1.8** | < 2.0 | < 0.79 | < 0.79 |
| styrene | – | – | – | < 0.95 R | < 0.095 R | < 0.48 R | < 0.095 R | < 2.4 R | < 0.95 R | < 0.95 |
| isopropylbenzene | – | – | – | < 0.68 | < 0.068 | **0.40 J** | **2.1** | < 1.7 | < 0.68 | < 0.68 |
| n-propylbenzene | – | – | – | < 0.98 | < 0.098 | < 0.49 | **0.38 J** | < 2.5 | < 0.98 | < 0.98 |
| 1,3,5-trimethylbenzene | – | – | – | < 1.3 | < 0.13 | < 0.61 | **4.1** | < 3.1 | < 1.3 | < 1.3 |
| 1,2,4-trimethylbenzene | – | – | – | < 1.5 | < 0.15 | **1.2 J** | **5.6** | < 3.6 | < 1.5 | < 1.5 |
| sec-butylbenzene | – | – | – | < 1.3 | < 0.13 | < 0.64 | < 0.13 | < 3.2 | < 1.3 | < 1.3 |
| 4-isopropyltoluene | – | – | – | < 1.3 | < 0.13 | < 0.64 | < 0.13 | < 3.2 | < 1.3 | < 1.3 |
| n-butylbenzene | – | – | – | < 2.3 | < 0.23 | < 1.2 | < 0.23 | < 5.6 | < 2.3 | < 2.3 |
| naphthalene | – | – | – | < 2.9 | < 0.29 | < 1.5 | < 0.29 | < 7.2 | < 2.9 | < 2.9 |
| n-hexane | – | – | – | < 1.8 | < 0.18 | < 0.9 | < 0.18 | < 4.5 | < 1.8 | < 1.8 |

NOTES:

1. Results in µg/L.
2. Analyses performed using EPA Method 8240 (pre-1996) or EPA Method 8240 (since 1996).
3. Only detected VOCs shown; detections shown in bold.
3. < = not detected at the MDL shown.
4. J = the result is an estimated concentration that is less than the MRL but greater than or equal to the MRL.
5. B = the analyte was found in the associated method blank at a level that is significant relative to the sample result.
6. R = the analyte was outside of control criteria in the associated laboratory control sample and is rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria.

# Table D-3

## VOCs Detected in Groundwater Samples from Temporary Borings
## Univar USA Inc. Facility
## Kent, Washington

| Boring | SB-24 | SB-25 | | SB-26 | | SB-27 | | SB-30 | |
|---|---|---|---|---|---|---|---|---|---|
| Depth (feet) | 17-19 | 10-12 | 17-19 | 10-12 | 17-19 | 10-12 | 17-19 | 5-7 | 10-12 |
| Sample Date | 9/12/02 | 9/12/02 | 9/12/02 | 9/13/02 | 9/13/02 | 9/13/02 | 9/13/02 | 11/21/02 | 11/21/02 |
| vinyl chloride | **2.7** | < 0.22 | **3.4** | **11** | < 0.22 | **690** | **21** | **14** | **0.39 J** |
| chloroethane | < 1.2 | < 0.23 | **11** | **0.75** | **140** | **48** | **0.36 J** | **1,800** | **350** |
| acetone | < 21 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 21 | < 4.1 | < 82 | < 4.1 |
| 1,1-dichloroethene | **0.95 J** | **1.2** | **0.84** | **0.14 J** | < 0.12 | < 0.60 | < 0.12 | < 2.4 | < 0.12 |
| carbon disulfide | < 0.80 | < 0.16 | < 0.16 | < 0.16 | **0.23 J** | < 0.80 | < 0.16 | < 3.2 | < 0.16 |
| methylene chloride | < 0.97 | < 0.20 | < 0.20 | < 0.20 | **0.38 J** | **1.6 J** | < 0.20 | **9.6 J** | **6.2** |
| trans-1,2-dichloroethene | **2.8** | **1.4** | **3.4** | **0.22 J** | **2.0** | **1.1 J** | < 0.14 | **6.0 J** | **2.2** |
| 1,1-dichloroethane | **2.2 J** | **0.88** | **2.4** | **13** | **13** | **15** | **0.36 J** | **280** | **5.5** |
| 2-butanone (MEK) | < 21 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 21 | < 4.1 | < 82 | < 4.1 |
| cis-1,2-dichloroethene | **27** | **15** | **110** | **0.98** | **0.37 J** | **190** | **1.6** | **15** | **0.52** |
| chloroform | < 0.48 | **0.31 J** | < 0.096 | < 0.096 | < 0.096 | < 0.48 | < 0.096 | < 2.0 | < 0.096 |
| 1,1,1-trichloroethane (TCA) | < 0.57 | **0.47 J** | < 0.12 | < 0.12 | < 0.12 | < 0.57 | < 0.12 | **24** | < 0.12 |
| 1,2-dichloroethane (EDC) | < 0.57 | < 0.12 | < 0.12 | < 0.12 | **2.1** | < 0.57 | < 0.12 | < 2.3 | < 0.12 |
| benzene | **0.70 J** | < 0.11 | < 0.11 | **0.16 J** | **9.0** | **4.3** | < 0.11 | **9.6 J** | **28** |
| trichloroethene (TCE) | **180** | **520** | **55** | **0.44 J** | < 0.12 | < 0.59 | **0.67** | < 2.4 | **0.17 J** |
| toluene | < 0.49 | **0.23 J** | **0.15 J** | **0.45 J** | **1.2** | **29** | **0.52** | **4,000** | **8.9** |
| nethyl-2-pentanone (MIBK) | < 26 | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 26 | < 5.1 | < 110 | < 5.1 |
| achloroethene (PCE) | **660** | **8.3** | **0.67** | **0.42 J** | < 0.11 | < 0.55 | **8.0** | **3.6 J** | < 0.11 |
| chlorobenzene | < 0.47 | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.47 | < 0.094 | < 1.9 | < 0.094 |
| ethylbenzene | < 0.65 | < 0.13 | < 0.13 | **1.2** | **1.2** | **190** | **1.3** | **1,700** | **40** |
| m- & p-xylenes | < 1.1 | < 0.22 | < 0.22 | < 0.22 | **1.2** | **520** | **3.3** | **5,900** | **92** |
| o-xylene | < 0.40 | < 0.079 | < 0.079 | **0.66** | **2.7** | **330** | **2.1** | **2,100** | **80** |
| styrene | < 0.48 | < 0.095 R | < 0.095 R | < 0.095 | < 0.095 | < 0.48 | < 0.095 | < 1.9 | < 0.095 |
| isopropylbenzene | < 0.34 | < 0.068 | < 0.068 | **0.23 J** | < 0.068 | **4.5 J** | < 0.068 | **120** | **1.4 J** |
| n-propylbenzene | < 0.49 | < 0.098 | < 0.098 | **0.21 J** | < 0.098 | **3.1 J** | < 0.098 | **230** | **1.5 J** |
| 1,3,5-trimethylbenzene | < 0.61 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | **13** | < 0.13 | **450** | **3.5** |
| 1,2,4-trimethylbenzene | < 0.71 | < 0.15 | < 0.15 | < 0.15 | < 0.15 | **35** | **0.19 J** | **860** | **6.9** |
| sec-butylbenzene | < 0.64 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.64 | < 0.13 | **8.4 J** | < 0.13 |
| 4-isopropyltoluene | < 0.64 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.64 | < 0.13 | **16 J** | **0.17 J** |
| n-butylbenzene | < 1.2 | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 1.2 | < 0.23 | < 4.5 | < 0.23 |
| naphthalene | < 1.5 | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 1.5 | < 0.29 | **13 J** | < 0.29 |
| n-hexane | < 0.9 | < 0.18 | < 0.18 | < 0.18 | < 0.18 | < 0.90 | < 0.18 | **15** | < 0.18 |

NOTES:

1. Results in µg/L.
2. Analyses performed using EPA Method 8240 (pre-1996) or EPA Method 8240 (since 1996).
3. Only detected VOCs shown; detections shown in bold.
3. < = not detected at the MDL shown.
4. J = the result is an estimated concentration that is less than the MRL but greater than or equal to the MRL.
5. B = the analyte was found in the associated method blank at a level that is significant relative to the sample result.
6. R = the analyte was outside of control criteria in the associated laboratory control sample and is rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria.

## Table D-3

## VOCs Detected in Groundwater Samples from Temporary Borings
## Univar USA Inc. Facility
## Kent, Washington

| Boring | SB-30 | | | | | | SB-31 | | |
|---|---|---|---|---|---|---|---|---|---|
| Depth (feet) | 15-17 | 20-22 | 24-26 | 28-30 | 35-37 | 40-42 | 5-7 | 10-12 | 15-17 |
| Sample Date | 11/21/02 | 11/21/02 | 11/21/02 | 11/21/02 | 11/21/02 | 11/21/02 | 11/22/2002 | 11/22/02 | 11/22/02 |
| vinyl chloride | **5.6** | **1.1 J** | < 5.3 | < 1.1 | < 0.22 | **1,900** | **14** | < 2.2 | **3.9** |
| chloroethane | **17** | **680** | **2,100** | **770** | **27** | < 12 | **300** | **1,000** | **250** |
| acetone | **24** | < 21 | < 110 | < 21 | < 4.1 | < 210 | **26 J** | < 41 | **16 J** |
| 1,1-dichloroethene | **0.42 J** | < 0.60 | < 3.0 | < 0.60 | < 0.12 | **120** | < 0.69 | < 1.2 | < 0.24 |
| carbon disulfide | < 0.16 | < 0.80 | < 4.0 | < 0.80 | **0.20 J** | < 8.0 | < 1.5 | < 1.6 | < 0.32 |
| methylene chloride | **1.0 J** | **16** | **38 J** | **8.5 J** | **0.40 J** | **18 J** | **3.1 J** | **8.1 J** | **1.4 J** |
| trans-1,2-dichloroethene | **0.68** | **12** | **16** | **8.1** | **0.15 J** | **21 J** | **2.5 J** | **6.7 J** | **12** |
| 1,1-dichloroethane | **76** | **870** | **630** | **67** | **31** | **750** | **5.9** | **46** | **590** |
| 2-butanone (MEK) | **20** | < 21 | < 110 | < 21 | < 4.1 | < 210 | < 8.4 | < 41 | **8.5 J** |
| cis-1,2-dichloroethene | **50** | **1.3 J** | < 2.9 | < 0.58 | < 0.12 | **12,000** | **35** | **1.9 J** | **17** |
| chloroform | **0.52** | < 0.48 | < 2.4 | < 0.48 | < 0.096 | < 4.8 | < 0.57 | < .96 | < 0.20 |
| 1,1,1-trichloroethane (TCA) | < 0.12 | < 0.57 | < 2.9 | < 0.57 | < 0.12 | **370** | < 0.57 | < 1.2 | < 0.23 |
| 1,2-dichloroethane (EDC) | **0.28 J** | **4.1** | **9.8 J** | **4.5** | < 0.12 | < 5.7 | < 0.67 | < 1.2 | < 0.23 |
| benzene | **0.83** | **5.2** | **9.8 J** | **4.5** | **0.20 J** | < 5.3 | **3.5 J** | **20** | **21** |
| trichloroethene (TCE) | < 0.12 | < 0.59 | < 3.0 | < 0.59 | < 0.12 | **7,200** | **5.1** | < 1.2 | < 0.24 |
| toluene | **10** | **1,000** | **5,100** | **530** | **4.1** | **9,800** | **330** | **1,700** | **650** |
| nethyl-2-pentanone (MIBK) | < 5.1 | < 26 | < 130 | < 26 | < 5.1 | < 260 | < 5.5 | < 51 | < 11 |
| achloroethene (PCE) | < 0.11 | < 0.55 | < 2.8 | < 0.55 | < 0.11 | **7,400** | **11** | **3.1 J** | < 0.22 |
| chlorobenzene | < 0.094 | < 0.47 | < 2.4 | < 0.47 | < 0.094 | < 4.7 | < 0.7 | < .94 | < 0.19 |
| ethylbenzene | **2.2** | **190** | **530** | **5.3** | **52** | **2,200** | **180** | **1,400** | **36** |
| m- & p-xylenes | **7.7** | **560** | **1,500** | **9.6** | **150** | **6,300** | **760** | **4,700** | **45** |
| o-xylene | **3.3** | **190** | **520** | **7.4** | **56** | **2,300** | **310** | **1,800** | **24** |
| styrene | < 0.095 | < 0.48 | < 2.4 | < 0.48 | < 0.095 | < 4.8 | **11** | < .95 | < 0.19 |
| isopropylbenzene | **0.29 J** | **3.2 J** | **19 J** | < 0.34 | **1.6 J** | **69 J** | **21** | **62** | **0.76 J** |
| n-propylbenzene | **0.49 J** | **1.4 J** | **17 J** | < 0.49 | **1.6 J** | **86 J** | **35** | **85** | **0.84 J** |
| 1,3,5-trimethylbenzene | **1.3 J** | **4.1 J** | **40 J** | < 0.61 | **3.8** | **160** | **75** | **210** | **2.5 J** |
| 1,2,4-trimethylbenzene | **2.2** | **6.8 J** | **68** | < 0.71 | **6.8** | **320** | **150** | **470** | **5.6** |
| sec-butylbenzene | < 0.13 | < 0.64 | < 3.2 | < 0.64 | < 0.13 | < 6.4 | **1.8 J** | **2.6 J** | < 0.26 |
| 4-isopropyltoluene | < 0.13 | < 0.64 | < 3.2 | < 0.64 | < 0.13 | < 6.4 | **17 J** | **11 J** | < 0.26 |
| n-butylbenzene | < 0.23 | < 1.2 | < 5.6 | < 1.2 | < 0.23 | < 12 | **1.1 J** | < 2.3 | < 0.45 |
| naphthalene | < 0.29 | < 1.5 | < 7.2 | < 1.5 | < 0.29 | < 15 | **3.7 J** | **9.1 J** | < 0.57 |
| n-hexane | **0.32 J** | < 0.90 | < 4.5 | < 0.90 | **0.56** | **19 J** | **23** | **16** | **6.4** |

NOTES:

1. Results in µg/L.
2. Analyses performed using EPA Method 8240 (pre-1996) or EPA Method 8240 (since 1996).
3. Only detected VOCs shown; detections shown in bold.
3. < = not detected at the MDL shown.
4. J = the result is an estimated concentration that is less than the MRL but greater than or equal to the MRL.
5. B = the analyte was found in the associated method blank at a level that is significant relative to the sample result.
6. R = the analyte was outside of control criteria in the associated laboratory control sample and is rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria.

# Table D-3

## VOCs Detected in Groundwater Samples from Temporary Borings
## Univar USA Inc. Facility
## Kent, Washington

| Boring | SB-31 | | | | | | SB-32 | SB-32 | |
|---|---|---|---|---|---|---|---|---|---|
| Depth (feet) | 20-22 | 24-26 | 28-30 | 34-36 | 34-36 (dup) | 40-42 | 15-17 | 20-22 | 25-27 |
| Sample Date | 11/22/02 | 11/22/02 | 11/22/02 | 11/22/02 | 11/22/02 | 11/22/02 | 11/25/02 | 11/25/02 | 11/25/02 |
| vinyl chloride | < 11 | < 5.3 | < 2.2 | **4,700** | **4,800** | **0.43 J** | < 2.2 | < 0.22 | < 0.22 |
| chloroethane | **1,600** | **2,400** | **2,100** | **710** | **710** | **9.8** | < 2.3 | **16** | < 0.23 |
| acetone | < 210 | < 110 | < 41 | < 210 | < 210 | < 4.1 | < 41 | < 4.1 | < 4.1 |
| 1,1-dichloroethene | < 6.0 | < 3.0 | < 1.2 | **13 J** | < 6.0 | < 0.12 | < 1.2 | < 0.12 | < 0.12 |
| carbon disulfide | < 8.0 | < 4.0 | < 1.6 | < 8.0 | < 8.0 | **0.46 J** | < 1.6 | < 0.16 | < 0.16 |
| methylene chloride | < 9.7 | **9.0 J** | < 2.0 | < 9.7 | **10 J** | **0.50 J** | < 2 | < 0.20 | < 0.20 |
| trans-1,2-dichloroethene | **19 J** | **28** | **12** | **13 J** | **13 J** | **0.18 J** | < 1.4 | **0.22 J** | < 0.14 |
| 1,1-dichloroethane | **220** | **43** | **21** | **3,400** | **3,400** | **20** | < .91 | **2.3** | **0.14 J** |
| 2-butanone (MEK) | < 210 | < 110 | < 41 | < 210 | < 210 | **5.0 J** | < 41 | < 4.1 | **4.6 J** |
| cis-1,2-dichloroethene | < 5.8 | < 2.9 | < 1.2 | **1,800** | **1,800** | **0.7** | **15** | **0.18 J** | **0.53** |
| chloroform | < 4.8 | < 2.4 | < .96 | < 4.8 | < 4.8 | < 0.096 | < .96 | < 0.096 | < 0.096 |
| 1,1,1-trichloroethane (TCA) | < 5.7 | < 2.9 | < 1.2 | **19 J** | **18 J** | < 0.12 | < 1.2 | < 0.12 | < 0.12 |
| 1,2-dichloroethane (EDC) | **11 J** | **25** | **21** | < 5.7 | < 5.7 | < 0.12 | < 1.2 | **0.18 J** | < 0.12 |
| benzene | **34** | **31** | **30** | **6.0 J** | **5.5 J** | < 0.11 | < 1.1 | **1.2** | **0.12 J** |
| trichloroethene (TCE) | < 5.9 | < 3.0 | < 1.2 | < 5.9 | < 5.9 | < 0.12 | **65** | **0.76** | < 0.12 |
| toluene | **8,900** | **7,300** | **88** | **11,000** | **11,000** | **39** | < .98 | **0.31 J** | **0.13 J** |
| ' ıethyl-2-pentanone (MIBK) | < 260 | < 130 | < 51 | < 260 | < 260 | < 5.1 | < 51 | < 5.1 | < 5.1 |
| ıchloroethene (PCE) | < 5.5 | < 2.8 | < 1.1 | < 5.5 | < 5.5 | **0.28 J** | **1,400** | **14** | **0.80** |
| chlorobenzene | < 4.7 | < 2.4 | < .94 | < 4.7 | < 4.7 | < 0.094 | < .94 | < 0.094 | < 0.094 |
| ethylbenzene | **180** | **430** | **28** | **1,000** | **1,000** | **9** | < 1.3 | < 0.13 | < 0.13 |
| m- & p-xylenes | **390** | **1,100** | **33** | **3,000** | **3,000** | **26** | < 2.2 | < 0.22 | < 0.22 |
| o-xylene | **190** | **550** | **31** | **1,100** | **1,100** | **6.3** | < .79 | **0.22 J** | < 0.079 |
| styrene | < 4.8 | < 2.4 | < .95 | < 4.8 | < 4.8 | < 0.095 | < .95 | < 0.095 | < 0.095 |
| isopropylbenzene | < 3.4 | **4.5 J** | < 0.68 | **28 J** | **28 J** | **0.39 J** | < .68 | < 0.068 | < 0.068 |
| n-propylbenzene | < 4.9 | **5.5 J** | < 0.98 | **43 J** | **43 J** | **0.83 J** | < 0.98 | < 0.098 | < 0.098 |
| 1,3,5-trimethylbenzene | < 6.1 | **14 J** | < 1.3 | **77 J** | **77 J** | **1.2 J** | < 1.3 | < 0.13 | < 0.13 |
| 1,2,4-trimethylbenzene | **9.0 J** | **33 J** | < 1.5 | **130** | **130** | **2.4** | < 1.5 | < 0.15 | < 0.15 |
| sec-butylbenzene | < 6.4 | < 3.2 | < 1.3 | < 6.4 | < 6.4 | < 0.13 | < 1.3 | < 0.13 | < 0.13 |
| 4-isopropyltoluene | < 6.4 | **4.0 J** | < 1.3 | < 6.4 | < 6.4 | **0.21 J** | < 1.3 | < 0.13 | < 0.13 |
| n-butylbenzene | < 12 | < 5.6 | < 2.3 | < 12 | < 12 | < 0.23 | < 2.3 | < 0.23 | < 0.23 |
| naphthalene | < 15 | < 7.2 | < 2.9 | < 15 | < 15 | < 0.29 | < 2.9 | < 0.29 | < 0.29 |
| n-hexane | < 9.0 | < 4.5 | < 1.8 | **18 J** | **18 J** | **0.72** | < 1.8 | < 0.18 | < 0.18 |

NOTES:

1. Results in µg/L.
2. Analyses performed using EPA Method 8240 (pre-1996) or EPA Method 8240 (since 1996).
3. Only detected VOCs shown; detections shown in bold.
3. < = not detected at the MDL shown.
4. J = the result is an estimated concentration that is less than the MRL but greater than or equal to the MRL.
5. B = the analyte was found in the associated method blank at a level that is significant relative to the sample result.
6. R = the analyte was outside of control criteria in the associated laboratory control sample and is rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria.

# Table D-3

## VOCs Detected in Groundwater Samples from Temporary Borings
## Univar USA Inc. Facility
## Kent, Washington

| Boring | SB-32 | | | SB-33 | | | | | SB-33 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Depth (feet) | 30-32 | 35-37 | 40-42 | 10-12 | 15-17 | 20-22 | 25-27 | 30-32 | 35-37 | 40-42 |
| Sample Date | 11/25/02 | 11/25/02 | 11/25/02 | 11/22/02 | 11/22/02 | 11/22/02 | 11/22/02 | 11/22/02 | 11/22/02 | 11/22/02 |
| vinyl chloride | < 0.22 | < 0.22 | < 0.22 | **19** | **11 J** | < 0.22 | < 0.22 | < 0.22 | < 0.22 | < 0.22 |
| chloroethane | < 0.23 | < 0.23 | < 0.23 | < 4.6 | < 5.7 | **13** | **30** | < 0.23 | < 0.23 | < 0.23 |
| acetone | < 4.1 | < 4.1 | < 4.1 | < 82 | < 110 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 |
| 1,1-dichloroethene | < 0.12 | < 0.12 | < 0.12 | **3.0 J** | < 3.0 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 |
| carbon disulfide | < 0.16 | < 0.16 | < 0.16 | < 3.2 | < 4.0 | < 0.16 | < 0.16 | < 0.16 | < 0.16 | < 0.16 |
| methylene chloride | < 0.20 | < 0.20 | < 0.20 | < 3.9 | < 4.9 | < 0.20 | **0.31 J** | **0.34 J** | **0.51 J** | **0.20 J** |
| trans-1,2-dichloroethene | < 0.14 | < 0.14 | < 0.14 | **15** | **17** | < 0.14 | < 0.14 | < 0.14 | < 0.14 | < 0.14 |
| 1,1-dichloroethane | < 0.091 | < 0.091 | < 0.091 | < 1.9 | < 2.3 | **0.78** | **0.87** | < 0.091 | < 0.091 | < 0.091 |
| 2-butanone (MEK) | < 4.1 | < 4.1 | < 4.1 | < 82 | < 110 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | **5.3 J** |
| cis-1,2-dichloroethene | **0.25 J** | **0.20 J** | **0.20 J** | **400** | **580** | < 0.12 | **0.22 J** | **0.16 J** | **0.23 J** | **0.24 J** |
| chloroform | **0.13 J** | < 0.096 | < 0.096 | < 2.0 | < 2.4 | < 0.096 | < 0.096 | < 0.096 | < 0.096 | < 0.096 |
| 1,1,1-trichloroethane (TCA) | < 0.12 | < 0.12 | < 0.12 | < 2.3 | < 2.9 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 |
| 1,2-dichloroethane (EDC) | < 0.12 | < 0.12 | < 0.12 | < 2.3 | < 2.9 | **0.26 J** | < 0.12 | < 0.12 | < 0.12 | < 0.12 |
| benzene | < 0.11 | < 0.11 | < 0.11 | < 2.1 | < 2.7 | **0.49 J** | **0.28 J** | < 0.11 | < 0.11 | < 0.11 |
| trichloroethene (TCE) | < 0.12 | < 0.12 | < 0.12 | **550** | **710** | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 |
| toluene | < 0.098 | < 0.098 | < 0.098 | < 2.0 | < 2.5 | **0.11 J** | **0.10 J** | < 0.098 | < 0.098 | < 0.098 |
| thyl-2-pentanone (MIBK) | < 5.1 | < 5.1 | < 5.1 | < 110 | < 130 | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 5.1 |
| hloroethene (PCE) | **0.39 J** | **0.96** | **1.40** | **3,900** | **8,100** | **0.44 J** | **0.65** | < 0.11 | < 0.11 | **0.19 J** |
| chlorobenzene | < 0.094 | < 0.094 | < 0.094 | < 1.9 | < 2.4 | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.094 |
| ethylbenzene | < 0.13 | < 0.13 | < 0.13 | < 2.6 | < 3.3 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 |
| m- & p-xylenes | < 0.22 | < 0.22 | < 0.22 | < 4.4 | < 5.5 | < 0.22 | < 0.22 | < 0.22 | < 0.22 | < 0.22 |
| o-xylene | < 0.079 | < 0.079 | < 0.079 | < 1.6 | < 2.0 | < 0.079 | < 0.079 | < 0.079 | < 0.079 | < 0.079 |
| styrene | < 0.095 | < 0.095 | < 0.095 | < 1.9 | < 2.4 | < 0.095 | < 0.095 | < 0.095 | < 0.095 | < 0.095 |
| isopropylbenzene | < 0.068 | < 0.068 | < 0.068 | < 1.8 | < 1.7 | < 0.068 | < 0.068 | < 0.068 | < 0.068 | < 0.068 |
| n-propylbenzene | < 0.098 | < 0.098 | < 0.098 | < 2.0 | < 2.5 | < 0.098 | < 0.098 | < 0.098 | < 0.098 | < 0.098 |
| 1,3,5-trimethylbenzene | < 0.13 | < 0.13 | < 0.13 | < 2.5 | < 3.1 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 |
| 1,2,4-trimethylbenzene | < 0.15 | < 0.15 | < 0.15 | < 2.9 | < 3.6 | < 0.15 | < 0.15 | < 0.15 | < 0.15 | < 0.15 |
| sec-butylbenzene | < 0.13 | < 0.13 | < 0.13 | < 2.6 | < 3.2 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 |
| 4-isopropyltoluene | < 0.13 | < 0.13 | < 0.13 | < 2.6 | < 3.2 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 |
| n-butylbenzene | < 0.23 | < 0.23 | < 0.23 | < 4.5 | < 5.6 | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 |
| naphthalene | < 0.29 | < 0.29 | < 0.29 | < 5.7 | < 7.2 | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 0.29 |
| n-hexane | < 0.18 | < 0.18 | < 0.18 | < 3.6 | < 4.5 | < 0.18 | < 0.18 | < 0.18 | < 0.18 | < 0.18 |

NOTES:

1. Results in µg/L.
2. Analyses performed using EPA Method 8240 (pre-1996) or EPA Method 8240 (since 1996).
3. Only detected VOCs shown; detections shown in bold.
3. < = not detected at the MDL shown.
4. J = the result is an estimated concentration that is less than the MRL but greater than or equal to the MRL.
5. B = the analyte was found in the associated method blank at a level that is significant relative to the sample result.
6. R = the analyte was outside of control criteria in the associated laboratory control sample and is rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria.

# Table D-3

## VOCs Detected in Groundwater Samples from Temporary Borings
## Univar USA Inc. Facility
## Kent, Washington

| Boring | SB-34 | | | | | | SB-34 | SB-35 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Depth (feet) | 10-12 | 15-17 | 20-22 | 25-27 | 30-32 | 35-37 | 40-42 | 5 | 10 | 15 |
| Sample Date | 11/25/02 | 11/25/02 | 11/25/02 | 11/25/02 | 11/25/02 | 11/25/02 | 11/25/02 | 03/19/03 | 03/19/03 | 03/19/03 |
| vinyl chloride | **11** | **11** | **77** | **2.0** | **0.39 J** | < 0.22 | **0.25 J** | < 0.22 | < 0.22 | **2.7** |
| chloroethane | **0.65** | **0.8** | **0.74** | **4.0** | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 |
| acetone | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | **7.5 J** | < 4.1 | < 4.1 |
| 1,1-dichloroethene | **5.3** | **5.5** | **1.9** | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | **1.6** |
| carbon disulfide | < 0.16 | < 0.16 | < 0.16 | < 0.16 | < 0.16 | < 0.16 | < 0.16 | < 0.16 | < 0.16 | < 0.16 |
| methylene chloride | **0.48 J** | **0.41 J** | **0.44 J** | < 0.20 | < 0.20 | < 0.20 | **0.34 J** | < 0.20 | < 0.20 | < 0.20 |
| trans-1,2-dichloroethene | **28** | **28** | **18** | **0.15 J** | < 0.14 | < 0.14 | < 0.14 | < 0.14 | < 0.14 | **2.7** |
| 1,1-dichloroethane | < 0.091 | < 0.091 | **0.37 J** | **1.3** | **0.45 J** | **0.30 J** | **0.28 J** | < 0.091 | **0.47 J** | < 0.091 |
| 2-butanone (MEK) | < 4.1 | < 4.1 | < 4.1 | **4.6 J** | **5.8 J** | **4.6 J** | **4.6 J** | < 4.1 | < 4.1 | < 4.1 |
| cis-1,2-dichloroethene | **280** | **290** | **260** | **3.0** | **1.5** | **1.5** | **0.91** | < 0.12 | < 0.12 | **43** |
| chloroform | < 0.096 | < 0.096 | < 0.096 | < 0.096 | **0.13 J** | **0.11 J** | < 0.096 | **0.30 J** | < 0.096 | < 0.096 |
| 1,1,1-trichloroethane (TCA) | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 |
| 1,2-dichloroethane (EDC) | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 |
| benzene | **3.2** | **3.3** | **60** | **0.55** | < 0.11 | < 0.11 | < 0.11 | **0.13 J** | < 0.11 | **0.23 J** |
| trichloroethene (TCE) | **220** | **240** | **11** | < 0.12 | < 0.12 | < 0.12 | < 0.12 | **0.24 J** | < 0.12 | **27** |
| toluene | **0.12 J** | < 0.098 | **0.18 J** | < 0.098 | < 0.098 | < 0.098 | < 0.098 | **0.23 J** | < 0.098 | < 0.098 |
| [illegible]thyl-2-pentanone (MIBK) | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 5.1 |
| [illegible]hloroethene (PCE) | **0.21 J** | **0.28 J** | < 0.11 | < 0.11 | **0.56** | < 0.11 | < 0.11 | **1.5** | **0.15 J** | < 0.11 |
| chlorobenzene | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.094 |
| ethylbenzene | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 |
| m- & p-xylenes | < 0.22 | < 0.22 | < 0.22 | < 0.22 | < 0.22 | < 0.22 | < 0.22 | < 0.22 | < 0.22 | < 0.22 |
| o-xylene | < 0.079 | < 0.079 | < 0.079 | < 0.079 | < 0.079 | < 0.079 | < 0.079 | < 0.079 | < 0.079 | < 0.079 |
| styrene | < 0.095 | < 0.095 | < 0.095 | < 0.095 | < 0.095 | < 0.095 | < 0.095 | < 0.095 | < 0.095 | < 0.095 |
| isopropylbenzene | < 0.068 | < 0.068 | < 0.068 | < 0.068 | < 0.068 | < 0.068 | < 0.068 | < 0.068 | < 0.068 | < 0.068 |
| n-propylbenzene | < 0.098 | < 0.098 | < 0.098 | < 0.098 | < 0.098 | < 0.098 | < 0.098 | < 0.098 | < 0.098 | < 0.098 |
| 1,3,5-trimethylbenzene | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 |
| 1,2,4-trimethylbenzene | < 0.15 | < 0.15 | < 0.15 | < 0.15 | < 0.15 | < 0.15 | < 0.15 | < 0.15 | < 0.15 | < 0.15 |
| sec-butylbenzene | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 |
| 4-isopropyltoluene | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 |
| n-butylbenzene | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 |
| naphthalene | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 0.29 |
| n-hexane | < 0.18 | < 0.18 | < 0.18 | < 0.18 | < 0.18 | < 0.18 | < 0.18 | < 0.18 | < 0.18 | < 0.18 |

NOTES:

1. Results in µg/L.
2. Analyses performed using EPA Method 8240 (pre-1996) or EPA Method 8240 (since 1996).
3. Only detected VOCs shown; detections shown in bold.
3. < = not detected at the MDL shown.
4. J = the result is an estimated concentration that is less than the MRL but greater than or equal to the MRL.
5. B = the analyte was found in the associated method blank at a level that is significant relative to the sample result.
6. R = the analyte was outside of control criteria in the associated laboratory control sample and is rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria.

# Table D-3

## VOCs Detected in Groundwater Samples from Temporary Borings
## Univar USA Inc. Facility
## Kent, Washington

| Boring | SB-35 | | SB-36 | | | | | SB-37 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Depth (feet) | 20 | 25 | 10-12 | 20-22 | 30-32 | 35-37 | 40-42 | 10-12 | 20-22 | 30-32 |
| Sample Date | 03/19/03 | 03/19/03 | 05/28/03 | 05/28/03 | 05/28/03 | 05/28/03 | 05/28/03 | 06/02/03 | 06/02/03 | 06/02/03 |
| vinyl chloride | **10** | **1.6** | **0.33 J** | **2.1** | < 0.22 | **0.47 J** | < 0.22 | **0.30 J** | < 0.22 | **0.26 J** |
| chloroethane | **0.73** | **2.7** | **15** | < 0.23 | **24** | **0.42 J** | < 0.23 | **50** | **32** | < 0.23 |
| acetone | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 |
| 1,1-dichloroethene | **0.27 J** | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 |
| carbon disulfide | < 0.16 | < 0.16 | < 0.16 | **0.53** | **0.17 J** | **0.20 J** | **0.22 J** | < 0.16 | < 0.16 | < 0.16 |
| methylene chloride | < 0.20 | < 0.20 | **0.33 J** | < 0.20 | < 0.20 | < 0.20 | < 0.20 | **0.48 J** | < 0.20 | < 0.20 |
| trans-1,2-dichloroethene | **2.2** | **0.25 J** | **1.5** | < 0.14 | < 0.14 | < 0.14 | < 0.14 | **3.1** | **1.6** | < 0.14 |
| 1,1-dichloroethane | **1.1** | **1.3** | **3.0** | < 0.091 | **6.9** | **0.53** | < 0.091 | **2.1** | **5.2** | < 0.091 |
| 2-butanone (MEK) | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 |
| cis-1,2-dichloroethene | **23** | **3.3** | **0.37 J** | < 0.12 | **0.23 J** | **0.53 J** | < 0.12 | **0.16 J** | < 0.12 | < 0.12 |
| chloroform | < 0.096 | < 0.096 | < 0.096 | < 0.096 | < 0.096 | < 0.096 | < 0.096 | < 0.096 | < 0.096 | < 0.096 |
| 1,1,1-trichloroethane (TCA) | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 |
| 1,2-dichloroethane (EDC) | < 0.12 | < 0.12 | **0.21 J** | < 0.12 | **0.14 J** | < 0.12 | < 0.12 | < 0.12 | **0.45 J** | < 0.12 |
| benzene | **1.4** | **0.16 J** | **1.1** | < 0.11 | < 0.11 | < 0.11 | < 0.11 | **3.0** | **0.32 J** | < 0.11 |
| trichloroethene (TCE) | **32** | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 |
| toluene | < 0.098 | < 0.098 | **1.1** | **0.16 J** | **0.38 J** | **0.19 J** | < 0.098 | **0.26 JB** | **0.56 B** | **0.15 JB** |
| thyl-2-pentanone (MIBK) | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 5.1 |
| hloroethene (PCE) | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 |
| chlorobenzene | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.094 |
| ethylbenzene | < 0.13 | < 0.13 | **20** | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | **0.25 J** | < 0.13 |
| m- & p-xylenes | < 0.22 | < 0.22 | **56** | **0.40 J** | **0.24 J** | < 0.22 | < 0.22 | < 0.22 | **0.73** | < 0.22 |
| o-xylene | < 0.079 | < 0.079 | **3.2** | < 0.079 | < 0.079 | < 0.079 | < 0.079 | **0.12 J** | **1.6** | < 0.079 |
| styrene | < 0.095 | < 0.095 | < 0.095 | < 0.095 | < 0.095 | < 0.095 | < 0.095 | < 0.095 | < 0.095 | < 0.095 |
| isopropylbenzene | < 0.068 | < 0.068 | **0.10 J** | < 0.068 | < 0.068 | < 0.068 | < 0.068 | < 0.068 | < 0.068 | < 0.068 |
| n-propylbenzene | < 0.098 | < 0.098 | < 0.098 | < 0.098 | < 0.098 | < 0.098 | < 0.098 | < 0.098 | < 0.098 | < 0.098 |
| 1,3,5-trimethylbenzene | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 |
| 1,2,4-trimethylbenzene | < 0.15 | < 0.15 | **0.17 J** | < 0.15 | < 0.15 | < 0.15 | < 0.15 | < 0.15 | < 0.15 | < 0.15 |
| sec-butylbenzene | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 |
| 4-isopropyltoluene | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 |
| n-butylbenzene | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 |
| naphthalene | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 0.29 |
| n-hexane | < 0.18 | < 0.18 | **0.26 J** | < 0.18 | < 0.18 | < 0.18 | < 0.18 | < 0.18 | < 0.18 | < 0.18 |

NOTES:

1. Results in µg/L.
2. Analyses performed using EPA Method 8240 (pre-1996) or EPA Method 8240 (since 1996).
3. Only detected VOCs shown; detections shown in bold.
3. < = not detected at the MDL shown.
4. J = the result is an estimated concentration that is less than the MRL but greater than or equal to the MRL.
5. B = the analyte was found in the associated method blank at a level that is significant relative to the sample result.
6. R = the analyte was outside of control criteria in the associated laboratory control sample and is rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria.

## Table D-3

## VOCs Detected in Groundwater Samples from Temporary Borings
## Univar USA Inc. Facility
## Kent, Washington

| Boring | SB-37 | | SB-38 | | | SB-38 | | SB-39 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Depth (feet) | 35-37 | 40-42 | 10-12 | 20-22 | 30-32 | 35-37 | 40-42 | 10-12 | 20-22 | 30-32 |
| Sample Date | 06/02/03 | 06/02/03 | 05/28/03 | 05/28/03 | 05/28/03 | 05/28/03 | 05/29/03 | 05/29/03 | 05/29/03 | 05/29/03 |
| vinyl chloride | **1.8** | < 0.22 | < 2.2 | **1,100** | **820** | **570** | **950** | < 2.2 | **0.41 J** | < 0.22 |
| chloroethane | < 0.23 | < 0.23 | **270** | **1,700** | **120** | **110** | **130** | **4.6** | < 0.23 | < 0.23 |
| acetone | < 4.1 | < 4.1 | < 41 | **1,500** | < 410 | < 210 | < 410 | < 41 | **4.4 J** | < 4.1 |
| 1,1-dichloroethene | < 0.12 | < 0.12 | < 1.2 | **11 J** | **460** | **190** | **300** | < 1.2 | < 0.12 | < 0.12 |
| carbon disulfide | **0.18 J** | < 0.16 | <1.6 | < 8.0 | < 16 | < 8.0 | < 16 | <1.6 | **0.52** | < 0.16 |
| methylene chloride | < 0.20 | < 0.20 | < 2.0 | **26 J** | **41 J** | **22 J** | **25 J** | < 2.0 | < 0.20 | < 0.20 |
| trans-1,2-dichloroethene | < 0.14 | < 0.14 | **2.0 J** | **37** | **34 J** | **19 J** | **20 J** | **4.1** | < 0.14 | < 0.14 |
| 1,1-dichloroethane | **0.19 J** | < 0.091 | **3.5 J** | **4,100** | **4,400** | **2,200** | **1,200** | **9.0** | **0.33 J** | < 0.091 |
| 2-butanone (MEK) | < 4.1 | < 4.1 | < 41 | **490 J** | < 410 | < 210 | < 410 | < 41 | < 4.1 | < 4.1 |
| cis-1,2-dichloroethene | < 0.12 | < 0.12 | < 1.2 | **1,000** | **36,000** | **19,000** | **26,000** | **0.46 J** | < 0.12 | < 0.12 |
| chloroform | < 0.096 | < 0.096 | < 0.96 | < 4.8 | **15 J** | **7.5 J** | **20 J** | < 0.96 | < 0.096 | < 0.096 |
| 1,1,1-trichloroethane (TCA) | < 0.12 | < 0.12 | < 1.2 | < 5.7 | **7,200** | **6,300** | **14,000** | **0.20 J** | < 0.12 | < 0.12 |
| 1,2-dichloroethane (EDC) | < 0.12 | < 0.12 | < 1.2 | < 5.7 | < 12 | < 5.7 | < 12 | < 0.12 | < 0.12 | < 0.12 |
| benzene | < 0.11 | < 0.11 | **3.2 J** | **10 J** | < 11 | < 5.3 | < 11 | **0.36 J** | < 0.11 | < 0.11 |
| trichloroethene (TCE) | < 0.12 | < 0.12 | < 1.2 | < 5.9 | **12 J** | **9.0 J** | **1,000** | < 0.12 | < 0.12 | < 0.12 |
| toluene | **0.17 JB** | **0.14 JB** | **11** | **18,000** | **33,000** | **18,000** | **30,000** | **0.61** | **0.28 J** | **0.15 J** |
| 4- yl-2-pentanone (MIBK) | < 5.1 | < 5.1 | < 51 | **610 J** | < 510 | < 260 | < 510 | < 5.1 | < 5.1 | < 5.1 |
| te oroethene (PCE) | < 0.11 | < 0.11 | < 1.1 | < 5.5 | < 11 | **8.5 J** | **13,000** | **0.15 J** | < 0.11 | < 0.11 |
| chlorobenzene | < 0.094 | < 0.094 | < 0.94 | < 4.7 | < 9.4 | < 4.7 | < 9.4 | < 0.094 | < 0.094 | < 0.094 |
| ethylbenzene | < 0.13 | < 0.13 | **1,600** | **1,500** | **3,300** | **2,300** | **4,000** | < 0.13 | < 0.13 | < 0.13 |
| m- & p-xylenes | < 0.22 | < 0.22 | **4,500** | **4,500** | **10,000** | **7,300** | **13,000** | **0.23 J** | **0.23 J** | < 0.22 |
| o-xylene | < 0.079 | < 0.079 | **740** | **1,600** | **3,500** | **2,400** | **4,200** | **0.080 J** | < 0.079 | < 0.079 |
| styrene | < 0.095 | < 0.095 | < 0.95 | < 4.8 | < 9.5 | < 4.8 | < 64 | < 0.095 | < 0.095 | < 0.095 |
| isopropylbenzene | < 0.068 | < 0.068 | **9.9 J** | **35 J** | **72 J** | **55 J** | **130 J** | < 0.068 | < 0.068 | < 0.068 |
| n-propylbenzene | < 0.098 | < 0.098 | **1.6 J** | **51 J** | **130 J** | **98 J** | **230** | < 0.098 | < 0.098 | < 0.098 |
| 1,3,5-trimethylbenzene | < 0.13 | < 0.13 | **5.6 J** | **91 J** | **230** | **170** | **410** | < 0.13 | < 0.13 | < 0.13 |
| 1,2,4-trimethylbenzene | < 0.15 | < 0.15 | **7.7 J** | **150** | **360** | **270** | **710** | < 0.15 | < 0.15 | < 0.15 |
| sec-butylbenzene | < 0.13 | < 0.13 | < 1.3 | < 6.4 | < 13 | < 6.4 | < 13 | < 0.13 | < 0.13 | < 0.13 |
| 4-isopropyltoluene | < 0.13 | < 0.13 | < 1.3 | < 6.4 | < 13 | < 6.4 | < 13 | < 0.13 | < 0.13 | < 0.13 |
| n-butylbenzene | < 0.23 | < 0.23 | < 2.3 | < 12 | < 23 | < 12 | < 23 | < 0.23 | < 0.23 | < 0.23 |
| naphthalene | < 0.29 | < 0.29 | < 2.9 | < 15 | < 29 | < 15 | < 29 | < 0.29 | < 0.29 | < 0.29 |
| n-hexane | < 0.18 | < 0.18 | < 1.8 | **14 J** | **63** | **70** | **100** | < 0.18 | **0.34 J** | **0.54** |

NOTES:

1. Results in µg/L.
2. Analyses performed using EPA Method 8240 (pre-1996) or EPA Method 8240 (since 1996).
3. Only detected VOCs shown; detections shown in bold.
3. < = not detected at the MDL shown.
4. J = the result is an estimated concentration that is less than the MRL but greater than or equal to the MRL.
5. B = the analyte was found in the associated method blank at a level that is significant relative to the sample result.
6. R = the analyte was outside of control criteria in the associated laboratory control sample and is rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria.

# Table D-3

## VOCs Detected in Groundwater Samples from Temporary Borings
## Univar USA Inc. Facility
## Kent, Washington

| Boring | SB-39 | | | SB-40 | | | | | SB-41 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Depth (feet) | 35-37 | 35-37 (dup) | 40-42 | 14-16 | 24-26 | 34-36 | 39-41 | 44-46 | 14-16 | 24-26 |
| Sample Date | 05/29/03 | 05/29/03 | 05/29/03 | 05/29/03 | 05/29/03 | 05/29/03 | 05/29/03 | 05/29/03 | 06/02/03 | 06/02/03 |
| vinyl chloride | < 0.22 | < 0.22 | < 0.22 | **1.0** | < 0.22 | < 0.22 | < 0.22 | < 0.22 | < 0.22 | **4.4** |
| chloroethane | < 0.23 | < 0.23 | < 0.23 | < 72 | < 0.23 | < 0.23 | < 0.23 | < 0.23 | **74** | **45** |
| acetone | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 |
| 1,1-dichloroethene | < 0.12 | < 0.12 | < 0.12 | **0.20 J** | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 |
| carbon disulfide | < 0.16 | < 0.16 | **0.37 J** | **0.58** | < 0.16 | < 0.16 | < 0.16 | < 0.16 | < 0.16 | < 0.16 |
| methylene chloride | < 0.20 | < 0.20 | < 0.20 | **0.80 J** | < 0.20 | < 0.20 | < 0.20 | < 0.20 | **0.43 J** | < 0.20 |
| trans-1,2-dichloroethene | < 0.14 | < 0.14 | < 0.14 | **0.38 J** | < 0.14 | < 0.14 | < 0.14 | < 0.14 | < 0.14 | < 0.14 |
| 1,1-dichloroethane | < 0.091 | < 0.091 | < 0.091 | **40** | **0.20 J** | < 0.091 | < 0.091 | < 0.091 | **3.4** | **12** |
| 2-butanone (MEK) | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 | < 4.1 |
| cis-1,2-dichloroethene | < 0.12 | < 0.12 | < 0.12 | **7.4** | **0.33 J** | < 0.12 | < 0.12 | < 0.12 | **0.37 J** | **0.25 J** |
| chloroform | < 0.096 | < 0.096 | < 0.096 | **0.11 J** | < 0.096 | < 0.096 | < 0.096 | < 0.096 | < 0.096 | < 0.096 |
| 1,1,1-trichloroethane (TCA) | < 0.12 | < 0.12 | < 0.12 | **12** | **1.2** | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 |
| 1,2-dichloroethane (EDC) | < 0.12 | < 0.12 | < 0.12 | **0.13 J** | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 |
| benzene | < 0.11 | < 0.11 | < 0.11 | **0.12 J** | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | **0.41 J** |
| trichloroethene (TCE) | < 0.12 | < 0.12 | < 0.12 | **6.2** | **0.50** | < 0.12 | < 0.12 | < 0.12 | < 0.12 | < 0.12 |
| toluene | **0.19 J** | **0.14 J** | **0.19 J** | **17** | **1.3** | **0.41 J** | **0.24 J** | **0.24 J** | **0.19 JB** | **0.18 JB** |
| 4 `yl-2-pentanone (MIBK) | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 5.1 | < 5.1 |
| t loroethene (PCE) | < 0.11 | < 0.11 | < 0.11 | **10** | **0.98** | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 |
| chlorobenzene | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.094 | < 0.094 |
| ethylbenzene | < 0.13 | < 0.13 | **0.15 J** | **2.8** | **0.24 J** | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 |
| m- & p-xylenes | < 0.22 | < 0.22 | **0.51** | **9.4** | **0.7** | **0.22 J** | < 0.22 | < 0.22 | < 0.22 | < 0.22 |
| o-xylene | < 0.079 | < 0.079 | < 0.079 | **2.5** | **0.22 J** | < 0.079 | < 0.079 | < 0.079 | < 0.079 | < 0.079 |
| styrene | < 0.095 | < 0.095 | < 0.095 | < 0.095 | < 0.095 | < 0.095 | < 0.095 | < 0.095 | < 0.095 | < 0.095 |
| isopropylbenzene | < 0.068 | < 0.068 | < 0.068 | **0.35 J** | < 0.068 | < 0.068 | < 0.068 | < 0.068 | < 0.068 | < 0.068 |
| n-propylbenzene | < 0.098 | < 0.098 | < 0.098 | **0.93 J** | < 0.098 | < 0.098 | < 0.098 | < 0.098 | < 0.098 | < 0.098 |
| 1,3,5-trimethylbenzene | < 0.13 | < 0.13 | < 0.13 | **1.6 J** | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 |
| 1,2,4-trimethylbenzene | < 0.15 | < 0.15 | < 0.15 | **2.0** | **0.17 J** | < 0.15 | < 0.15 | < 0.15 | < 0.15 | < 0.15 |
| sec-butylbenzene | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 |
| 4-isopropyltoluene | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 | < 0.13 |
| n-butylbenzene | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 | < 0.23 |
| naphthalene | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 0.29 | < 0.29 |
| n-hexane | **0.51** | **0.49 J** | **0.50** | **1.0** | **0.86** | **0.76** | **1.0** | **1.0** | < 0.18 | < 0.18 |

NOTES:

1. Results in µg/L.
2. Analyses performed using EPA Method 8240 (pre-1996) or EPA Method 8240 (since 1996).
3. Only detected VOCs shown; detections shown in bold.
3. < = not detected at the MDL shown.
4. J = the result is an estimated concentration that is less than the MRL but greater than or equal to the MRL.
5. B = the analyte was found in the associated method blank at a level that is significant relative to the sample result.
6. R = the analyte was outside of control criteria in the associated laboratory control sample and is rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria.

# Table D-3

## VOCs Detected in Groundwater Samples from Temporary Borings
## Univar USA Inc. Facility
## Kent, Washington

| Boring | SB-41 | | | | SB-42 | SB-43 | | |
|---|---|---|---|---|---|---|---|---|
| Depth (feet) | 34-36 | 36-38 | 39-41 | 44-46 | 44-46 | 8 - 10 | 18 - 20 | 28 - 30 |
| Sample Date | 06/02/03 | 06/02/03 | 06/02/03 | 06/02/03 | 06/02/03 | 02/12/04 | 02/12/04 | 02/12/04 |
| vinyl chloride | < 1.1 | < 1.1 | < 2.2 | < 1.1 | < 0.22 | < 0.22 | < 0.22 | < 0.22 |
| chloroethane | **300** | **320** | **310** | **55** | < 0.23 | < 0.23 | < 0.23 | < 0.23 |
| acetone | < 21 | < 21 | < 41 | < 21 | < 4.1 | < 4.1 | < 4.1 | < 4.1 |
| 1,1-dichloroethene | < 0.60 | < 0.60 | < 1.2 | < 0.60 | < 0.12 | < 0.12 | < 0.12 | < 0.12 |
| carbon disulfide | < 0.80 | < 0.80 | < 1.6 | < 0.80 | **0.16 J** | **0.18 J** | < 0.16 | < 0.16 |
| methylene chloride | **5.5 J** | **5.9 J** | **6.2 J** | **1.2 J** | < 0.20 | < 0.20 | < 0.20 | < 0.20 |
| trans-1,2-dichloroethene | **3.6** | **3.8** | **7.3** | **4.7** | < 0.14 | < 0.14 | < 0.14 | < 0.14 |
| 1,1-dichloroethane | **4.3** | **4.6** | **3.2 J** | **1.7 J** | **0.15 J** | < 0.091 | < 0.091 | < 0.091 |
| 2-butanone (MEK) | < 21 | < 21 | < 41 | < 21 | < 4.1 | < 4.1 | < 4.1 | < 4.1 |
| cis-1,2-dichloroethene | < 0.58 | < 0.58 | < 1.2 | < 0.58 | < 0.12 | < 0.12 | < 0.12 | < 0.12 |
| chloroform | < 0.48 | < 0.48 | < 0.96 | < 0.48 | < 0.096 | < 0.096 | < 0.096 | < 0.096 |
| 1,1,1-trichloroethane (TCA) | < 0.57 | < 0.57 | < 1.2 | < 0.57 | < 0.12 | < 0.12 | < 0.12 | < 0.12 |
| 1,2-dichloroethane (EDC) | **2.2 J** | **2.3 J** | **2.9 J** | < 0.57 | < 0.12 | < 0.12 | < 0.12 | < 0.12 |
| benzene | **17** | **18** | **16** | **3.1** | < 0.11 | < 0.11 | < 0.11 | < 0.11 |
| trichloroethene (TCE) | < 0.59 | < 0.59 | < 1.2 | < 1.2 | < 0.12 | < 0.12 | < 0.12 | < 0.12 |
| toluene | **3.7** | **3.9** | **3.7 J** | **1.7 J** | **0.22 JB** | < 0.098 | < 0.098 | < 0.098 |
| 4-methyl-2-pentanone (MIBK) | < 26 | < 26 | < 51 | < 51 | < 5.1 | < 5.1 | < 5.1 | < 5.1 |
| tetrachloroethene (PCE) | < 0.55 | < 0.55 | < 1.1 | < 1.1 | < 0.11 | < 0.11 | < 0.11 | < 0.11 |
| chlorobenzene | < 0.47 | < 0.47 | < 0.94 | < 0.94 | < 0.094 | < 0.094 | < 0.094 | < 0.094 |
| ethylbenzene | **360** | **350** | **550** | **77** | < 0.13 | < 0.13 | < 0.13 | < 0.13 |
| m- & p-xylenes | **1,400** | **1,400** | **3,700** | **1,600** | **0.82** | < 0.22 | < 0.22 | < 0.22 |
| o-xylene | **22** | **24** | **12** | **4.8** | < 0.079 | < 0.079 | < 0.079 | < 0.079 |
| styrene | < 0.48 | < 0.48 | **1.6 J** | **0.65 JB** | < 0.095 | < 0.095 | < 0.095 | < 0.095 |
| isopropylbenzene | **6.6 J** | **7.0 J** | **21** | **7.8 J** | < 0.068 | < 0.068 | < 0.068 | < 0.068 |
| n-propylbenzene | **6.7 J** | **6.7 J** | **19** | **7.5 J** | < 0.098 | < 0.098 | < 0.098 | < 0.098 |
| 1,3,5-trimethylbenzene | **14** | **15** | **43** | **16** | < 0.13 | < 0.13 | < 0.13 | < 0.13 |
| 1,2,4-trimethylbenzene | **24** | **25** | **74** | **27** | < 0.15 | < 0.15 | < 0.15 | < 0.15 |
| sec-butylbenzene | < 0.64 | < 0.64 | < 1.3 | < 0.64 | < 0.13 | < 0.13 | < 0.13 | < 0.13 |
| 4-isopropyltoluene | **2.8 J** | **3.1 J** | **11 J** | **0.85 J** | < 0.13 | < 0.13 | < 0.13 | < 0.13 |
| n-butylbenzene | < 1.2 | < 1.2 | < 2.3 | < 1.2 | < 0.23 | < 0.23 | < 0.23 | < 0.23 |
| naphthalene | < 1.5 | < 1.5 | < 2.9 | < 1.5 | < 0.29 | < 0.29 | < 0.29 | < 0.29 |
| n-hexane | < 0.90 | < 0.90 | < 1.8 | < 0.90 | < 0.18 | < 0.18 | < 0.18 | < 0.18 |

NOTES:

1. Results in µg/L.
2. Analyses performed using EPA Method 8240 (pre-1996) or EPA Method 8240 (since 1996).
3. Only detected VOCs shown; detections shown in bold.
3. < = not detected at the MDL shown.
4. J = the result is an estimated concentration that is less than the MRL but greater than or equal to the MRL.
5. B = the analyte was found in the associated method blank at a level that is significant relative to the sample result.
6. R = the analyte was outside of control criteria in the associated laboratory control sample and is rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria.

## Table D-4

## Petroleum Hydrocarbons, Glycols, and Alcohols in Groundwater Samples from Temporary Borings Univar USA Inc. Facility, Kent, Washington

| Laboratory Method | Analyte | Units | Concentration in SB-10 |
|---|---|---|---|
| Method WTPH-G | Gasoline | mg/L | 0.05[a] |
| | Petroleum Naphtha | mg/L | < 0.05 |
| | Mineral Spirits | mg/L | < 0.05 |
| Method WTPH-D (extended) | Diesel | mg/L | 0.42[b] |
| | Oil | mg/L | < 0.75 |
| | Kerosene | mg/L | < 0.25 |
| Modified EPA Method 8015B | Ethylene Glycol | mg/L | < 10 |
| | Propylene Glycol | mg/L | < 10 |
| EPA Method 5031/8015B | Ethanol | mg/L | < 0.05 |
| | Isopropanol | mg/L | < 0.05 |
| | 1-Butanol | mg/L | < 0.05 |

Note: NA = not available

[a] The gasoline-range response detected is due to ethylbenzene and total xylenes present in the sample. No other petroleum product pattern could be detected.

[b] Quantified as diesel/kerosene. The sample contained components that eluted in the diesel/kerosene range, but the chromatogram did not match the typical diesel/kerosene fingerprint.

# Table D-5

## TOC in Groundwater Samples from Temporary Borings
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Sample Depth (feet bgs) | Date Collected | Total Organic Carbon (EPA Method 415.1) |
|---|---|---|---|
| SB-21 | 10 - 12 | 09/12/02 | 8.2 |
| | 17 - 19 | 09/12/02 | 9.2 |
| SB-22 | 10 - 12 | 09/12/02 | 19.8 |
| | 17 - 19 | 09/12/02 | 30.2 |
| SB-25 | 10 - 12 | 09/12/02 | 9.6 |
| | 17 - 19 | 09/12/02 | 16.9 |
| NOTE: All results in mg/L. | | | |

## Table D-6

## VOCs Detected in Groundwater Samples from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | Benzene | Toluene | Ethyl-benzene | Total Xylenes | Isopropyl-benzene | n-propyl-benzene | Styrene | 1,3,5-TMB | 1,2,4-TMB | 4-isopropyl-toluene | Chloro-benzene | 1,4-Dichloro benzene | 2-Nitro-propane | 1,2-Dichloro-propane | 1,2,3-TCP | 2-Chloro-toluene | 4-Chloro-toluene | *sec*-butyl-benzene | *n*-butyl-benzene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 04/17/95 | < 25 | 2,900 | 1,300 | 3,600 | — | — | — | — | — | — | < 25 | — | — | < 25 | — | — | — | — | — |
| dup | 04/17/95 | < 25 | 3,100 | 1,500 | 3,900 | — | — | — | — | — | — | < 25 | — | — | < 25 | — | — | — | — | — |
| | 09/04/96 | < 50 | 1,600 | 1,300 | 4,400 | < 200 | < 200 | < 50 | < 200 | < 200 | < 200 | < 50 | < 200 | < 1,000 | < 50 | <50 | < 200 | < 200 | < 200 | < 200 |
| | 12/10/96 | 7.7 J | 3,500 J | 1,600 J | 6,300 J | 46 EJ | 69 EJ | < 0.5 | 130 EJ | 210 J | 3 J | < 0.5 | < 2 | < 10 | < 0.5 | <0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/04/97 | 5.3 J | 4,700 J | 1,600 J | 7,100 J | 39 J | 80 EJ | < 0.5 J | 150 EJ | 210 EJ | 4 J | < 0.5 J | < 2 J | < 10 | < 0.5 J | < 0.5 J | < 2 J | < 2 J | < 2 J | < 2 J |
| | 06/27/97 | 8 | 3,000 | 2,000 | 7,400 | 45 | 71 | < 5 | 110 | 200 | < 20 | < 5 | < 20 | <100 | < 5 | < 5 | < 20 | < 20 | < 20 | < 20 |
| | 09/04/97 | 7.5 | 1,500 | 1,500 | 4,200 | 28 | 43 | < 0.5 | 88 | < 2 | 3 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 12/04/97 | 4.5 J | 4,700 J | 1,800 J | 7,000 J | 23 J | 34 J | < 0.5 J | 60 J | 97 J | 7 J | < 0.5 J | < 2 J | < 1 | < 0.5 J | < 0.5 J | <2 J | 4 J | 3 J | 2 J |
| | 03/06/98 | 8 | 1,600 | 1,500 | 4,400 | 24 | 33 | < 5 | 60 | 110 | < 20 | < 5 | < 20 | < 50 | < 5 | < 5 | < 20 | < 20 | < 20 | < 20 |
| dup | 03/06/98 | 8 | 1,500 | 1,500 | 4,300 | 26 | 36 | < 5 | 68 | 120 | < 20 | < 5 | < 20 | < 50 | < 5 | < 5 | < 20 | < 20 | < 20 | < 20 |
| | 06/18/98 | < 10 | 2,900 | 1,700 | 6,700 | 47 | 70 | < 10 | 130 | 190 | < 40 | < 10 | < 40 | < 100 | < 10 | < 10 | < 40 | < 40 | < 40 | < 40 |
| | 09/29/98 | 7 J | 1,400 J | 1,800 J | 5,400 J | 15 J | 20 J | < 2 J | 44 J | 81 J | < 10 J | < 2 J | < 8 J | < 25 J | < 2 J | < 2 J | < 10 J | < 10 J | < 10 J | < 10 J |
| | 12/15/98 | 6 | 2,000 | 1,600 | 4,600 | 31 | 36 | < 5 | 68 | 110 | < 20 | < 5 | < 20 | < 50 | < 5 | < 5 | < 20 | < 20 | < 20 | < 20 |
| | 03/02/99 | 5 | 1,600 B | 1,700 | 5,970 | 27 | 20 | < 5 | 63 | 94 | < 20 | < 5 | < 20 | < 50 | < 5 | < 5 | < 20 | < 20 | < 20 | < 20 |
| | 06/17/99 | < 50 | 2,500 | 1,400 | 6,000 | < 200 | < 200 | < 50 | < 200 | < 200 | < 200 | < 50 | < 200 | < 500 | < 50 | < 50 | < 200 | < 200 | < 200 | < 200 |
| | 09/17/99 | 4.3 E | 1,500 | 1,400 | 4,100 | 26 | 36 | < 0.2 | 68 | 110 | 3 E | < 0.2 | < 0.21 | < 5 | < 0.2 | < 0.3 | 7 E | < 0.2 | < 0.2 | < 0.2 |
| | 12/08/99 | < 12 | 860 J | 1,300 J | 5,500 J | <50 | 51 | < 12 | 93 | 130 | <50 | < 12 | < 48 | < 50 | < 12 | < 12 | < 50 | <50 | < 50 | < 50 |
| | 03/07/00 | < 2 | 1,100 | 970 | 4,310 | 30 | 84 | < 2 | 140 | 220 | <10 | < 2 | < 8 | < 25 | < 2 | < 2 | < 10 | <10 | < 10 | < 10 |
| | 06/21/00 | < 6 | 1,300 | 860 | 3,700 | 50 J | 90J | < 5 | 180 | 260 | < 7 | < 5 | < 20 | <0.3 | < 7 | < 20 | < 6 | < 6 | < 7 | < 20 |
| dup | 06/21/00 | < 3 | 1,300 | 860 | 3,420 | 40 J | 65 | < 3 | 120 | 170 | 4 J | < 3 | < 12 | < 0.3 | < 4 | < 9 | < 3 | < 3 | < 4 | < 6 |
| | 09/12/00 | 3 | 980 | 1,100 | 3,730 | 23 | 32 | < 1 | 64 | 91 | 3 | < 1 | < 4 | < 10 | < 1 | < 5 | < 1 | < 1 | < 1 | < 1 |
| | 12/07/00 | < 6 | 630 | 830 | 3,290 | 30 J | 50 J | < 5 | 90 J | 130 | < 7 | < 5 | < 20 | < 0.3 | < 7 | < 20 | < 6 | < 5 | < 7 | < 20 |
| dup | 12/07/00 | < 6 | 480 | 890 | 3,330 | 30 J | 50 J | < 5 | 90 J | 120 | < 7 | < 5 | < 20 | < 0.3 | < 7 | < 20 | < 6 | < 5 | < 7 | < 20 |
| | 03/15/01 | <2 | 290 | 690 | 2,890 | 36 | 78 | < 1 | 140 | 190 | 4 J | < 1 | < 4 | < 0.3 | < 2 | < 3 | < 2 | < 0.9 | 3 J | < 3 |
| dup | 03/15/01 | <2 | 320 | 740 | 2,830 | 42 | 94 | < 1 | 160 | 230 | 5 J | < 1 | < 4 | < 0.3 | < 2 | < 3 | < 2 | < 0.9 | 3 J | < 3 |
| | 07/12/01 | < 2.7 | 130 | 480 | 1,930 | 21 J | 47 J | < 2.4 | 87 | 120 | < 3.2 | < 2.4 | < 9.6 | < 6 | < 3.1 | < 5.4 | < 2.8 | < 2.3 | < 3.2 | < 5.6 |
| | 09/25/01 | < 5 | 320 | 480 | 1,970 | — | — | < 5 | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 01/02/02 | < 0.53 | 270 | 570 | 2,300 | 28 | 51 | < 0.48 | 94 | 130 | 3.8 J | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.45 | < 0.64 | < 1.2 |
| | 03/28/02 | 0.75 J | 240 | 690 | 2,620 | 30 | 59 | < 0.48 | 110 | 160 | 4.0 J | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.52 | 2.1 J | < 1.2 |
| | 06/11/02 | < 0.53 | 170 | 500 | 1,570 | 27 | 67 | < 0.48 | 120 | 160 | 3.9 J | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.52 | 2.4 J | < 1.2 |
| | 09/18/02 | 2.0 J | 58 | 880 | 2,840 | 20 | 23 | < 0.48 | 47 | 70 | 2.9 J | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.52 | 0.75 J | < 1.2 |
| | 12/17/02 | < 1.3 | 80 | 520 | 1,030 | 22 | 56 | < 1.3 | 100 | 130 | < 5 | < 1.3 | < 1.3 | < 13 | < 1.3 | < 1.3 | < 5 | < 5 | < 5 | < 5 |
| | 03/20/03 | < 0.5 | 69 | 380 | 940 | 22 | 50 | < 0.5 | 80 | 110 | 3.6 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 11 |
| | 06/11/03 | 0.35 J | 200 | 330 | 730 | 22 | 55 | < 0.095 | 81 | 120 | 3.7 | < 0.094 | < 0.097 | <0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | 2.2 | < 5.1 |
| | 09/11/03 | 0.82 JB | 1,200 | 510 | 1,480 | 21 | 40 | < 0.19 | 61 | 93 | 3.5 J | < 0.19 | < 0.20 | < 0.48 | < 0.25 | < 0.43 | < 0.23 | < 0.21 | 1.8 J | < 9.1 |
| | 12/04/03 | 0.80 J | 360 | 370 | 1,170 | 24 | 49 | < 0.24 | 81 | 120 | 3.9 J | < 0.24 | < 0.25 | < 0.60 | < 0.31 | < 0.54 | < 0.28 | < 0.26 | 2.2 J | < 0.56 |
| | 03/16/04 | 0.56 J | 520 | 390 | 1,590 | 20 | 42 | < 0.38 | 73 | 110 | 3.3 J | < 0.38 | < 0.40 | < 0.96 | < 0.50 | < 0.86 | < 0.45 | < 0.42 | 2.1 J | < 0.89 |
| MW-2 | 04/17/95 | < 5 | < 5 | < 5 | < 5 | — | — | | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 09/04/96 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 10 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 12/10/96 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 10 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/04/97 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 10 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/27/97 | 2.1 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 10 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 09/04/97 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 12/04/97 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 1 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/06/98 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/18/98 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 09/29/98 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |

## Table D-6

## VOCs Detected in Groundwater Samples from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | 1,2,4-TCB | Acetone | Carbon Disulfide | HCBD | CFC 113 | CFC 12 | MIBK | Chloro-ethane | Chloro-form | 1,1-DCA | 1,2-DCA | 1,1-DCE | cis-1,2-DCE | trans-1,2-DCE | MEK | Methylene Chloride | Naphth-alene | Hexane | TCA | TCE | PCE | Vinyl Chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 04/17/95 | — | 540 | — | — | < 50 | — | < 250 | 560 | < 25 | 710 | < 25 | 53 | 1,400 | < 25 | < 500 | 29 | — | — | 540 | 150 | 180 | 120 |
| dup | 04/17/95 | — | 520 | — | — | < 50 | — | < 250 | 610 | < 25 | 770 | < 25 | 65 | 1,600 | < 25 | < 500 | 31 | — | — | 640 | 180 | 230 | 130 |
| | 09/04/96 | < 200 | < 2,000 | < 50 | < 200 | — | <50 | < 2,000 | 220 | < 50 | 1,300 | < 50 | < 50 | 700 | < 50 | < 2,000 | < 100 | < 200 | < 1,000 | 180 | < 50 | < 50 | 82 |
| | 12/10/96 | < 2 | 140 JB | 1.0 J | < 2 | — | < 0.5 | < 20 | 120 J | 5.1 J | 1,400 J | 1.5 J | 67 J | 2,700 J | 5.0 J | < 20 | 9 JB | < 2 | < 10 | 1,200 J | 62 J | 31 J | 91 J |
| | 03/04/97 | < 2 J | 54 J | < 0.5 J | < 2 J | 13 J | < 0.5 J | < 20 J | 73 J | 2.1 J | 640 J | 1.2 J | 24 J | 1,000 J | 3.7 J | < 20 J | 5 J | < 2 J | < 10 J | 420 J | 68 J | 66 J | 80 J |
| | 06/27/97 | < 20 | < 200 | < 5 | < 20 | — | < 5 | < 200 | 200 | < 5 | 900 | < 5 | 21 | 860 | < 5 | < 200 | < 10 | < 20 | < 100 | 290 | 26 | 34 | 120 |
| | 09/04/97 | 120 | < 5 | < 0.5 | < 2 | — | < 0.5 | 7 | 150 | 0.9 | 790 | < 0.5 | 7.6 | 350 | 3.7 | < 5 | 2.9 | < 2 | < 5 | 74 | 12 | 12 | 52 |
| | 12/04/97 | < 2 J | 84 J | 0.8 J | < 2 J | — | 0.7 J | < 20 J | 31 J | 2.4 J | 540 J | 0.8 J | 27 J | 320 J | 4.4 J | < 5 J | 3 J | 4 J | 8 J | 250 J | 20 J | 22 J | 38 J |
| | 03/06/98 | < 20 | < 200 | < 5 | < 20 | — | < 5 | < 200 | 320 | < 5 | 420 | < 5 | 9 | 340 | < 5 | < 200 | < 10 | < 20 | < 50 | 160 | 7 | 10 | 50 |
| dup | 03/06/98 | < 20 | < 200 | < 5 | < 20 | — | < 5 | < 200 | 380 | < 5 | 400 | < 5 | 10 | 400 | < 5 | < 200 | < 10 | < 20 | < 50 | 190 | 8 | 8 | 56 |
| | 06/18/98 | < 40 | < 400 | < 10 | < 40 | — | < 10 | < 400 | 120 | < 10 | 420 | < 10 | 16 | 450 | < 10 | < 400 | < 20 | < 40 | < 100 | 400 | 10 | 14 | 120 |
| | 09/29/98 | < 10 J | < 100 J | < 2 J | < 10 J | — | < 2 J | < 100 J | 300 J | < 2 J | 330 J | < 2 J | < 2 J | 94 J | 4 J | < 100 J | < 5 J | < 10 J | < 25 J | 46 J | 2 J | < 2 J | 14 J |
| | 12/15/98 | < 20 | < 200 | < 5 | < 20 | — | < 5 | < 200 | 190 | < 5 | 330 | < 5 | 14 | 390 | < 5 | < 200 | < 10 | < 20 | < 50 | 270 | 6 | 6 | 54 |
| | 03/02/99 | < 20 | < 200 | < 5 | < 20 | — | < 5 | < 200 | 390 | < 5 | 320 | < 5 | 11 | 490 | < 5 | < 200 | < 10 | < 20 | < 50 | 220 | 7 | 6 | 73 |
| | 06/17/99 | < 200 | < 2,000 | < 50 | < 200 | — | < 50 | < 5,000 | 140 | < 50 | 230 | < 50 | < 50 | 400 | < 50 | < 5,000 | < 500 | < 200 | < 500 | 270 | < 50 | < 50 | 180 |
| | 09/17/99 | < 0.2 | < 8 | < 0.2 | 3 EB | — | < 0.2 | < 7 | 200 | < 0.2 | 250 | < 0.2 | 6.4 | 210 | 3.3 E | < 6 | < 0.3 | < 0.2 | < 5 | 240 | 8.9 | 7.8 B | 88 |
| | 12/08/99 | < 50 | <500 | < 12 | < 50 | — | <12 | < 500 | 79 J | <12 | 310 | < 12 | <12 | 330 | < 12 | < 500 | < 25 | < 50 | < 50 | 240 | < 12 J | < 12 J | 110 |
| | 03/07/00 | < 10 | 730 | < 2 | < 10 | — | < 2 | < 100 | 22 | <2 | 310 | < 2 | 17 | 1,100 | < 2 | 140 | < 5 | < 10 | < 25 | 300 | 17 | 14 | 450 |
| | 06/21/00 | 260 | < 200 | < 8 | < 20 | — | — | < 200 | 32 | <5 | 290 | < 6 | 9J | 380 | < 7 | < 200 | 50 J | < 20 | < 10 | 390 | 10 J | 10 J | 290 |
| dup | 06/21/00 | < 6 | < 60 | < 4 | < 10 | — | < 5 | < 70 | 58 | < 3 | 210 | < 3 | 7 J | 340 | < 4 | < 90 | 20 J | < 8 | < 10 | 310 | 10 J | 10 J | 290 |
| | 09/12/00 | < 10 | 57 | < 5 | < 10 | — | < 5 | < 25 | 110 | 2 | 190 | < 1 | 5 | 170 | 2 | < 25 | < 5 | < 10 | < 10 | 180 | 8 | 4.0 | 61 |
| | 12/07/00 | < 20 | < 200 | < 8 | < 20 | — | < 9 | < 200 | 42 J | 9 J | 310 | < 6 | 20 J | 390 | < 7 | < 200 | < 10 | < 20 | 4 J | 270 | 10 J | 10 J | 100 |
| dup | 12/07/00 | < 20 | < 200 | < 8 | < 20 | — | < 9 | < 200 | 76 J | 8 J | 260 | < 6 | 10 J | 300 | < 7 | < 200 | < 10 | < 20 | 4 J | 250 | 9 J | 10 J | 79 |
| | 03/15/01 | < 3 | < 30 | < 2 | < 4 | — | < 2 | < 30 | 13 | 31 | 350 J | < 2 | 27 | 500 | < 2 | < 40 | 12 | < 3 | 5.8 | 480 J | 23 | 14 J | 110 J |
| dup | 03/15/01 | < 3 | < 30 | < 2 | < 4 | — | < 2 | < 30 | 13 | 43 | 450 | < 2 | 35 | 620 | < 2 | < 40 | 13 | < 3 | 5.6 | 610 | 27 | 20 | 150 |
| | 07/12/01 | < 5.5 | < 58 | < 4 | < 9.5 | — | — | < 70 | 12 J | 21 | 370 | < 2.9 | 16 | 290 | < 3.5 | < 81 | 9.5 J | < 7.2 | < 4.5 | 610 | 31 | 8.8 J | 210 |
| | 09/25/01 | — | — | — | — | — | — | — | 17 | 18 | 790 | < 5 | 23 | 460 | < 5 | — | 10 | — | — | 480 | 41 | 16 | 240 |
| | 01/02/02 | < 1.1 | 28 J | < 0.80 | < 1.9 | — | — | < 26 | 27 | 22 | 660 | < 0.57 | 30 | 690 | 2.9 | < 21 | 2.2 J | < 1.5 | 3.6 J | 510 | 22 | 9.1 | 300 |
| | 03/28/02 | < 1.1 | < 21 | < 0.80 | < 1.9 | — | — | < 26 | 18 | 28 | 540 | < 0.57 | 25 | 800 | 2.7 | < 21 | 2.8 J | < 1.5 | 4.8 | 510 | 25 | 14 | 390 |
| | 06/11/02 | 160 | 97 J | < 0.80 | < 1.9 | — | — | < 26 | 12 | 10 | 250 | < 0.57 | 5.5 | 240 | 1.5 J | < 21 | 1.0 J | < 1.5 | 4.4 | 230 | 7.8 | 6.4 | 270 |
| | 09/18/02 | < 1.1 | 62 J | < 0.80 | < 1.9 | — | < 0.83 | < 26 | 81 | 1.7 J | 130 | < 0.57 | 2.3 J | 100 | 1.6 J | < 21 | 2.5 J | < 1.5 | 1.2 J | 44 | 7.2 | 3.8 | 35 |
| | 12/17/02 | < 5 | 240 | 2.6 | < 5 | — | < 1.3 | < 50 | 7.8 | 4.3 B | 560 | < 1.3 | 22 | 340 | 1.7 | < 50 | < 5 | < 5 | 3.3 B | 600 | 25 | 10 | 100 |
| | 03/20/03 | < 2 | 41 | < 0.5 | < 2 | — | < 0.5 | < 20 | 7.5 | 3.2 | 490 | < 0.5 | 16 | 160 | 1.1 | < 20 | < 2 | < 2 | 3.7 | 440 | 15 | 7.3 | 120 |
| | 06/11/03 | 120 | 30 | 0.35 J | < 0.38 | — | < 0.17 | < 5.1 | 4.4 | 1.3 | 270 | < 0.12 | 5.4 | 64 | 0.72 | 17 J | 1.0 J | 0.88 J | 3.2 | 260 | 6.7 | 4.2 | 60 |
| | 09/11/03 | < 0.44 | 82 | 0.60 J | < 0.76 | — | < 0.34 | < 11 | 19 | 1.3 | 610 | < 0.23 | 12 | 170 | 1.3 | 33 J | 2.9 J | 0.72 J | 1.1 | 290 | 15 | 5.0 | 71 |
| | 12/04/03 | < 0.55 | 60 | 0.65 J | < 0.95 | — | < 0.42 | < 13 | 38 | 9.0 | 1,300 | 2.0 | 36 | 390 | 2 | < 11 | 8.6 | 0.78 J | 3.4 | 1,200 | 29 | 7.6 | 140 |
| | 03/16/04 | < 0.88 | 23 J | < 0.64 | < 1.6 | — | < 0.67 | < 21 | 14 | 5.3 | 410 | 2.1 | 11 | 66 | 1.1 J | < 17 | 5.4 J | < 1.2 | 3.4 J | 370 | 13 | 5.8 | 50 |
| MW-2 | 04/17/95 | — | < 100 | — | — | < 10 | — | < 50 | < 10 | 9 | < 5 | < 5 | < 5 | < 5 | < 5 | 130 | < 5 | — | — | < 5 | < 5 | < 5 | < 10 |
| | 09/04/96 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | 0.8 | < 0.5 | < 0.5 | 3.2 | < 0.5 | < 20 | 2 | < 2 | <10 | < 0.5 | 0.6 | < 0.5 | < 0.5 |
| | 12/10/96 | < 2 | < 20 | < 0.5 | < 2 | < 0.5 | < 0.5 | < 20 | < 0.5 | < 0.5 | 0.6 | < 0.5 | < 0.5 | 4.0 | < 0.5 | < 20 | < 1 | < 2 | <10 | < 0.5 | 2.5 | 4.3 | < 0.5 |
| | 03/04/97 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | 0.8 | < 0.5 | < 0.5 | 5.4 | < 0.5 | < 20 | < 1 | < 2 | <10 | < 0.5 | 2.6 | 1.6 | < 0.5 |
| | 06/27/97 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | 1.0 | < 0.5 | < 0.5 | 7.2 | < 0.5 | < 20 | < 1 | < 2 | < 10 | < 0.5 | 2.1 | 1.9 | < 0.5 |
| | 09/04/97 | < 2 | < 5 | < 0.5 | < 2 | — | < 0.5 | < 5 | < 0.5 | < 0.5 | 0.8 | < 0.5 | < 0.5 | 3.1 | < 0.5 | < 5 | < 1 | < 2 | < 5 | < 0.5 | 0.5 | < 0.5 | < 0.5 |
| | 12/04/97 | < 2 | < 5 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | 0.6 | < 0.5 | < 0.5 | 1.8 | < 0.5 | < 20 | < 1 | < 2 | < 1 | < 0.5 | < 0.5 | 0.8 | < 0.5 |
| | 03/06/98 | < 2 | < 5 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | 0.8 | < 0.5 | < 0.5 | 5.9 | < 0.5 | < 20 | < 1 | < 2 | < 1 | < 0.5 | 2.8 | 2.5 | < 0.5 |
| | 06/18/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | 0.9 | < 0.5 | < 0.5 | 3.8 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | 2 | 1.8 | < 0.5 |
| | 09/29/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | 1.1 | < 0.5 | < 0.5 | 2.9 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |

## Table D-6

## VOCs Detected in Groundwater Samples from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | Benzene | Toluene | Ethyl-benzene | Total Xylenes | Isopropyl-benzene | n-propyl-benzene | Styrene | 1,3,5-TMB | 1,2,4-TMB | 4-isopropyl-toluene | Chloro-benzene | 1,4-Dichloro benzene | 2-Nitro-propane | 1,2-Dichloro-propane | 1,2,3-TCP | 2-Chloro-toluene | 4-Chloro-toluene | *sec*-butyl-benzene | *n*-butyl-benzene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-2 | 12/15/98 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| (cont.) | 03/02/99 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/16/99 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| dup | 06/16/99 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 09/16/99 | < 0.2 | < 0.2 | < 0.2 | < 0.4 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 5 | < 0.2 | < 0.3 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| | 12/08/99 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/07/00 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/21/00 | < 0.2 | < 0.1 | < 0.1 | < 0.2 | < 0.07 | < 0.1 | < 0.1 | < 0.2 | < 0.2 | < 0.2 | < 0.1 | < 0.1 | <0.3 | < 0.2 | < 0.3 | < 0.2 | < 0.09 | < 0.2 | < 0.3 |
| | 09/12/00 | < 1 | < 1 | < 1 | < 3 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 10 | < 1 | < 5 | < 1 | < 1 | < 1 | < 1 |
| | 12/07/00 | < 0.2 | 0.1 J | < 0.1 | < 0.2 | < 0.07 | < 0.1 | < 0.1 | < 0.2 | < 0.2 | < 0.2 | < 0.1 | < 0.1 | < 0.3 | < 0.2 | < 0.3 | < 0.2 | < 0.09 | < 0.2 | < 0.3 |
| | 03/15/01 | < 0.2 | 0.2 J | < 0.1 | < 0.2 | < 0.07 | < 0.1 | < 0.1 | < 0.2 | < 0.2 | < 0.2 | < 0.1 | < 0.1 | < 0.3 | < 0.2 | < 0.3 | < 0.2 | < 0.09 | < 0.2 | < 0.3 |
| | 07/12/01 | < 0.11 | 0.13 J | < 0.098 | < 0.19 | < 0.068 | < 0.097 | < 0.094 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.097 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.089 | < 0.13 | < 0.23 |
| | 09/25/01 | < 0.5 | 0.57 | 0.67 | 2.12 | — | — | < 0.5 | — | — | — | < 0.5 | — | — | < 0.5 | — | — | — | — | — |
| | 01/03/02 | < 0.11 | 0.35 JB | < 0.098 | < 0.19 | < 0.068 | < 0.097 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.097 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.089 | < 0.13 | < 0.23 |
| | 03/28/02 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 06/14/02 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 09/18/02 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 12/16/02 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/20/03 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/11/03 | < 0.11 | 0.81 B | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 09/10/03 | < 0.11 | 0.32 B | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 12/05/03 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 03/16/04 | < 0.11 | 0.13 J | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| MW-3 | 04/17/95 | < 5 | < 5 | < 5 | < 5 | — | — | — | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 09/04/96 | < 5 | 5 | < 5 | < 5 | < 20 | < 20 | < 5 | < 20 | < 20 | < 20 | < 5 | < 20 | < 10 | < 5 | < 5 | < 2 | < 2 | < 20 | < 2 |
| dup | 09/04/96 | < 5 | < 5 | < 5 | < 5 | < 20 | < 20 | < 5 | < 20 | < 20 | < 20 | < 5 | < 20 | < 100 | < 5 | < 5 | < 2 | < 2 | < 20 | < 2 |
| | 12/11/96 | 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 10 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/04/97 | 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 10 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/27/97 | 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 10 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 09/04/97 | 0.6 | < 0.5 | 0.6 | 1.7 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 12/04/97 | 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 1 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/06/98 | 0.6 | 0.6 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/18/98 | 0.7 B | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 09/29/98 | 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| dup | 09/29/98 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 12/14/98 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/03/99 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/17/99 | < 1 | < 1 | < 1 | < 1 | < 4 | < 4 | < 1 | < 4 | < 4 | < 4 | < 1 | < 4 | < 10 | < 1 | < 1 | < 4 | < 4 | < 4 | < 4 |
| | 09/17/99 | 0.4 E | < 0.2 | < 0.2 | < 0.4 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 5 | < 0.2 | < 0.3 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| | 12/08/99 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/07/00 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/21/00 | 0.5 J | < 0.1 | < 0.1 | < 0.2 | < 0.07 | < 0.1 | < 0.1 | < 0.2 | < 0.2 | < 0.2 | < 0.1 | < 0.1 | <0.3 | < 0.2 | < 0.3 | < 0.2 | < 0.09 | < 0.2 | < 0.3 |
| | 09/12/00 | < 1 | < 1 | < 1 | < 2 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | <10 | < 1 | < 5 | < 1 | < 1 | < 1 | < 1 |
| dup | 09/12/00 | < 1 | < 1 | < 1 | < 3 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | <10 | < 1 | < 5 | < 1 | < 1 | < 1 | < 1 |
| | 12/07/00 | 0.4 J | < 0.1 | < 0.1 | < 0.2 | < 0.07 | < 0.1 | < 0.1 | < 0.2 | < 0.2 | < 0.2 | < 0.1 | < 0.1 | < 0.3 | < 0.2 | < 0.3 | < 0.2 | < 0.09 | < 0.2 | < 0.3 |
| | 03/15/01 | 0.4 J | 0.1J | < 0.1 | < 0.2 | < 0.07 | < 0.1 | < 0.1 | < 0.2 | < 0.2 | < 0.2 | < 0.1 | < 0.1 | < 0.3 | < 0.2 | < 0.3 | < 0.2 | < 0.09 | < 0.2 | < 0.3 |
| | 07/12/01 | 0.43 J | 0.31 J | < 0.098 | < 0.19 | < 0.068 | < 0.097 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.097 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.089 | < 0.13 | < 0.23 |
| | 09/24/01 | 0.51 | < 0.5 | < 0.5 | 0.59 | — | — | — | — | — | — | < 0.5 | — | — | < 0.5 | — | — | — | — | — |

## Table D-6

## VOCs Detected in Groundwater Samples from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | 1,2,4-TCB | Acetone | Carbon Disulfide | HCBD | CFC 113 | CFC 12 | MIBK | Chloro-ethane | Chloro-form | 1,1-DCA | 1,2-DCA | 1,1-DCE | cis-1,2-DCE | trans-1,2-DCE | MEK | Methylene Chloride | Naphth-alene | Hexane | TCA | TCE | PCE | Vinyl Chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-2 | 12/15/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | 1.0 | < 0.5 | < 0.5 | 5.7 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | 1.7 | 0.7 | < 0.5 |
| (cont.) | 03/02/99 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | 0.9 | < 0.5 | < 0.5 | 8.5 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | 1.5 | 2.2 | < 0.5 |
| | 06/16/99 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 50 | < 0.5 | < 0.5 | 0.6 | < 0.5 | < 0.5 | 3.3 | < 0.5 | < 50 | < 5 | < 2 | < 5 | < 0.5 | 1.5 | 3.4 | < 0.5 |
| dup | 06/16/99 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 50 | < 0.5 | < 0.5 | 0.7 | < 0.5 | < 0.5 | 3.4 | < 0.5 | < 50 | < 5 | < 2 | < 5 | < 0.5 | 1.4 | 2.8 | < 0.5 |
| | 09/16/99 | < 0.2 | < 8 | < 0.2 | < 0.2 | — | < 0.2 | < 7 | < 0.2 | < 0.2 | 0.9 | < 0.2 | < 0.2 | 2.5 | < 0.2 | < 6 | < 0.3 | < 0.2 | < 5 | < 0.3 | < 0.3 | 0.3 EB | < 0.3 |
| | 12/08/99 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.2 | < 0.5 | 0.9 | < 0.5 | < 0.5 | 4.4 | < 0.5 | < 20 | < 1 | < 2 | < 2 | < 0.5 | 1.1 | < 0.5 | < 0.5 |
| | 03/07/00 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.2 | < 0.5 | 0.8 | < 0.5 | < 0.5 | 3.6 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | 1.2 | 3.7 | < 0.5 |
| | 06/21/00 | < 0.3 | < 3 | < 0.2 | < 0.4 | — | < 0.2 | < 3 | < 0.2 | < 0.1 | 0.67 | < 0.2 | < 0.2 | 3.3 | < 0.2 | < 4 | < 0.20 | < 0.3 | < 0.2 | < 0.2 | 2.4 | 3.2 | < 0.3 |
| | 09/12/00 | <10 | <50 | <5 | <10 | — | <5 | <25 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | <25 | <5 | <10 | <10 | < 1 | < 1 | < 1 | < 1 |
| | 12/07/00 | < 0.3 | < 3 | < 0.2 | < 0.4 | — | < 0.2 | < 3 | < 0.2 | < 0.1 | 1.1 | < 0.2 | < 0.2 | 1.5 | < 0.2 | < 4 | < 0.20 | < 0.3 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | 0.4 J |
| | 03/15/01 | < 0.3 | < 3 | < 0.2 | < 0.4 | — | < 0.2 | < 3 | < 0.2 | < 0.1 | 1.2 J | < 0.2 | < 0.2 | 1.3 | < 0.2 | < 4 | 0.20 J | < 0.3 | < 0.2 | < 0.2 | 0.5 J | 1 J | 0.68 |
| | 07/12/01 | < 0.22 | < 2.3 | < 0.16 | < 0.38 | — | — | < 2.8 | < 0.18 | < 0.096 | 1.0 | < 0.12 | < 0.12 | 2.0 | < 0.14 | < 3.3 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 0.14 J | < 0.11 | 0.44 J |
| | 09/25/01 | — | — | — | — | — | — | — | < 0.5 | < 0.5 | 2.1 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | — | < 1 | — | — | < 0.5 | < 0.5 | < 0.5 | 0.75 |
| | 01/03/02 | < 0.22 | < 2.3 | < 0.16 | < 0.38 | — | — | < 5.1 | < 0.23 | < 0.096 | 1.1 | < 0.12 | < 0.12 | 1.7 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 0.57 | 1.5 | 1.0 |
| | 03/28/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | — | < 5.1 | < 0.23 | < 0.096 | 1.0 | < 0.12 | < 0.12 | 1.8 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 1.0 | 1.7 | 0.79 |
| | 06/14/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | — | < 5.1 | < 0.23 | < 0.096 | 0.71 | < 0.12 | < 0.12 | 2.5 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 1.1 | 1.5 | 0.59 |
| | 09/18/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | 1.2 | < 0.12 | < 0.12 | 1.3 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | 0.79 |
| | 12/16/02 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | 1.2 | < 0.5 | < 0.5 | 1.1 | < 0.5 | < 20 | < 2 | < 2 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 1.4 |
| | 03/20/03 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | 0.86 | < 0.5 | < 0.5 | 1.0 | < 0.5 | < 20 | < 2 | < 2 | < 0.5 | < 0.5 | < 0.5 | 0.57 | 1.0 |
| | 06/11/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | 0.88 | < 0.12 | < 0.12 | 1.1 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 0.22 J | < 0.11 | 1.2 |
| | 09/10/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | 1.30 | < 0.12 | < 0.12 | 0.75 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | 0.69 |
| | 12/05/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | 1.00 | < 0.12 | < 0.12 | 1.5 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 0.13 J | < 0.11 | 0.89 |
| | 03/16/04 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | 0.70 | < 0.12 | < 0.12 | 1.3 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 0.59 | 2.2 | 0.75 |
| MW-3 | 04/17/95 | — | < 100 | — | — | < 10 | — | < 50 | 30 | < 5 | 230 | < 5 | < 5 | 42 | < 5 | < 100 | < 5 | — | — | < 5 | < 5 | < 5 | < 10 |
| | 09/04/96 | < 20 | < 200 | < 5 | < 20 | — | <5 | < 200 | 9 | < 5 | 330 | < 5 | < 5 | 56 | < 5 | < 200 | < 10 | < 20 | < 10 | < 5 | 5 | < 5 | < 5 |
| dup | 09/04/96 | < 20 | < 200 | < 5 | < 20 | — | < 0.5 | < 200 | 13 | < 5 | 460 | < 5 | < 5 | 7.2 | 5 | < 200 | < 10 | < 20 | < 100 | < 5 | < 5 | < 5 | < 5 |
| | 12/11/96 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 4.0 | < 0.5 | 120 | < 0.5 | < 0.5 | 9.7 | 2.3 | < 20 | 2 B | < 2 | < 10 | < 0.5 | < 0.5 | < 0.5 | 0.7 |
| | 03/04/97 | < 2 | < 20 | < 0.5 | < 2 | < 0.5 | < 0.5 | < 20 | 4.5 | < 0.5 | 73 | < 0.5 | < 0.5 | 5.8 | 1.6 | < 20 | < 1 | < 2 | < 10 | < 0.5 | < 0.5 | < 0.5 | 0.8 |
| | 06/27/97 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 18 | < 0.5 | 140 J | < 0.5 | < 0.5 | 17 | 2.1 | < 20 | < 1 | < 2 | < 10 | < 0.5 | < 0.5 | < 0.5 | 2.0 |
| | 09/04/97 | < 2 | < 5 | 1.3 | < 2 | — | < 0.5 | < 5 | 1 | < 0.5 | 190 | < 0.5 | < 0.5 | 25 | < 0.5 | < 5 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | < 0.5 | 2.5 |
| | 12/04/97 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 2 | < 0.5 | 48 | < 0.5 | < 0.5 | 2.1 | 1.4 | < 20 | < 1 | < 2 | < 1 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 03/06/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 4 | < 0.5 | 100 | < 0.5 | < 0.5 | 8.6 | 2.2 | < 20 | < 1 | < 2 | < 1 | < 0.5 | < 0.5 | < 0.5 | 0.9 |
| | 06/18/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 3 | < 0.5 | 38 | < 0.5 | < 0.5 | 1.8 | 1.9 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | < 0.5 | 0.6 |
| | 09/29/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 0.7 | < 0.5 | 160 | < 0.5 | < 0.5 | 14 | 3.2 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | < 0.5 | 1.1 |
| dup | 09/29/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 1.6 | < 0.5 | 200 | < 0.5 | < 0.5 | 18 | 4.2 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | < 0.5 | 1.5 |
| | 12/14/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 5.8 | < 0.5 | 37 | < 0.5 | < 0.5 | 1.5 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | < 0.5 | 1.5 |
| | 03/03/99 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 11 | < 0.5 | 47 | < 0.5 | < 0.5 | 4.1 | 0.7 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | < 0.5 | 1.0 |
| | 06/17/99 | < 4 | < 40 | < 1 | < 4 | — | < 1 | < 100 | < 1 | < 1 | 66 | < 1 | < 1 | 3.0 | 1 | < 100 | < 10 | < 4 | < 10 | < 1 | < 1 | < 1 | < 1 |
| | 09/17/99 | < 0.2 | < 8 | < 0.2 | < 0.2 | — | < 0.2 | < 7 | 0.8 | < 0.2 | 97 J | < 0.2 | < 0.2 | 6.5 | 2.2 | < 6 | < 0.3 | < 0.2 | < 5 | < 0.3 | < 0.3 | < 0.2 | 0.6 |
| | 12/08/99 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 7.9 | < 0.5 | 26 | < 0.5 | < 0.5 | 1.1 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | 0.6 | 0.5 |
| | 03/07/00 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 17 | < 0.5 | 33 | < 0.5 | < 0.5 | 1.7 | 0.8 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | < 0.5 | 0.6 |
| | 06/21/00 | < 0.3 | < 3 | 0.5 J | < 0.4 | — | < 0.2 | < 3 | < 0.2 | < 0.1 | 24 | < 0.2 | < 0.2 | 1.3 | 1.0 | < 4 | < 0.20 | < 0.3 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | 0.4 J |
| | 09/12/00 | < 10 | < 50 | < 5 | < 10 | — | < 5 | < 25 | 2 | < 1 | 54 | < 1 | < 1 | 3.0 | 1.0 | < 25 | < 5 | < 10 | < 10 | < 1 | < 1 | < 1 | < 1 |
| dup | 09/12/00 | < 10 | < 50 | < 5 | < 10 | — | < 5 | < 25 | 2 | < 1 | 61 | < 1 | < 1 | 3.0 | 1.0 | < 25 | < 5 | < 10 | < 10 | < 1 | < 1 | < 1 | < 1 |
| | 12/07/00 | < 0.3 | < 3 | < 0.2 | < 0.4 | — | < 0.2 | < 3 | < 0.2 | < 0.1 | 26 | < 0.2 | < 0.2 | 1.7 | 1.0 | < 4 | < 0.2 | < 0.3 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | 0.3 J |
| | 03/15/01 | < 0.3 | < 3 | < 0.2 | < 0.4 | — | < 0.2 | < 3 | < 0.2 | < 0.1 | 46 J | < 0.2 | < 0.2 | 2.3 | 1.1 | < 4 | 0.2 J | < 0.3 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | 0.6 |
| | 07/12/01 | < 0.22 | < 2.3 | < 0.16 | < 0.38 | — | — | < 2.8 | < 0.18 | < 0.096 | 27 | < 0.12 | < 0.12 | 1.9 | 1.1 | < 3.3 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | 0.31 J |
| | 09/24/01 | — | — | — | — | — | — | — | < 0.5 | < 0.5 | 37 | < 0.5 | < 0.5 | 3.00 | 1.4 | — | < 1 | — | — | < 0.5 | < 0.5 | < 0.5 | < 0.5 |

## Table D-6

## VOCs Detected in Groundwater Samples from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | Benzene | Toluene | Ethyl-benzene | Total Xylenes | Isopropyl-benzene | n-propyl-benzene | Styrene | 1,3,5-TMB | 1,2,4-TMB | 4-isopropyl-toluene | Chloro-benzene | 1,4-Dichloro benzene | 2-Nitro-propane | 1,2-Dichloro-propane | 1,2,3-TCP | 2-Chloro-toluene | 4-Chloro-toluene | *sec*-butyl-benzene | *n*-butyl-benzene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-3 | 01/03/02 | < 0.11 | 0.46 JB | < 0.098 | < 0.19 | < 0.068 | < 0.097 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.097 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.089 | < 0.13 | < 0.23 |
| (cont.) | 03/28/02 | 0.41 J | 0.16 J | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 06/14/02 | 0.35 J | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 09/17/02 | 0.43 J | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 12/17/02 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/20/03 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/11/03 | 0.41 J | 0.47 JB | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 09/11/03 | 0.41 JB | 0.32 JB | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 12/04/03 | 0.35 J | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 03/15/04 | 0.48 J | 0.17 J | 0.29 J | 2.4 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| MW-4 | 09/04/96 | < 50 | 2,000 | 200 | 1,500 | < 200 | < 200 | < 50 | < 200 | < 200 | < 200 | < 50 | < 200 | < 100 | < 50 | < 50 | < 200 | < 200 | < 200 | < 200 |
| | 12/10/96 | 38 | 310 | 430 | 340 | 19 | 22 | < 0.5 | 59 E | 110 E | 4 | < 0.5 | < 2 | < 10 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/04/97 | 29 | 160 | 580 | 210 | 31 | 39 | < 0.5 | 86 | 170 | 5 | < 0.5 | < 2 | < 10 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/27/97 | 31 | 62 | 900 | 53 | 38 | 56 | < 0.5 | 98 | 230 | 4.5 | < 0.5 | < 2 | < 10 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 09/04/97 | 23 | 120 | 570 | 42 | 30 | 43 | < 0.5 | 96 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| dup | 09/04/97 | 22 | 300 | 1,300 | 110 | 28 | 39 | < 0.5 | 88 | 510 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | 2 | < 2 |
| | 12/04/97 | 23 J | 320 J | 860 J | 250 J | 34 J | 53 J | < 0.5 J | 73 J | 180 J | 3 J | < 0.5 J | < 2 | < 1 | < 0.5 J | < 0.5 | < 2 J | < 2 J | < 2 J | < 2 J |
| | 03/06/98 | 29 | 48 | 970 | 140 | 53 | 76 | < 1 | 60 | 220 | < 4 | < 1 | < 4 | 28 | < 1 | < 1 | <4 | <4 | <4 | <4 |
| | 06/18/98 | 140 | 390 | 1,200 | 1,800 | 290 | 400 | < 12 | 150 | 260 | < 50 | < 12 | < 48 | < 120 | < 12 | < 12 | <50 | <50 | <50 | <50 |
| | 09/29/98 | 23 J | 1,600 J | 780 J | 1,300 J | 35 J | 46 J | < 2 | 57 J | 240 J | < 10 | < 2 | < 8 | < 25 | < 2 | < 2 | <10 | <10 | <10 | <10 |
| | 12/14/98 | 37 | 1,100 | 840 | 1,900 | 43 | 64 | < 2 | 94 | 250 | < 10 | < 2 | < 8 | < 25 | < 2 | < 2 | <10 | <10 | <10 | 11 |
| | 03/03/99 | 18 | 8 B | 790 | 13 B | 29 | 34 | < 2 | < 10 | 110 | < 10 | < 2 | < 8 | < 25 | < 2 | < 2 | <10 | <10 | <10 | <10 |
| | 06/17/99 | < 25 | 110 | 1,200 | 142 | < 100 | < 100 | < 25 | < 100 | 240 | < 100 | < 25 | < 100 | < 250 | < 25 | < 25 | < 100 | < 100 | < 100 | < 100 |
| | 09/17/99 | 18 | 540 | 850 J | 1,230 | 23 | 47 | < 0.2 | 51 | 220 | 2 E | < 0.2 | < 0.8 | < 5 | < 0.2 | 2 E | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| | 12/08/99 | 24 | 380 J | 980 J | 1,570 J | 42 | 57 | < 5 | 78 | 270 | < 20 | < 5 | < 20 | < 20 | < 5 | < 20 | < 20 | < 20 | < 20 | < 20 |
| dup | 12/08/99 | 23 | 360 J | 970 J | 1,560 J | 40 | 57 | < 5 | 74 | 260 | < 20 | < 5 | < 20 | < 20 | < 5 | < 20 | < 20 | < 20 | < 20 | < 20 |
| | 03/07/00 | 17 | 8 | 1,200 | 389 | 33 | 66 | < 2 | 15 | 240 | < 10 | < 2 | < 8 | < 25 | < 2 | < 2 | < 10 | < 10 | < 10 | < 10 |
| dup | 03/07/00 | 17 | 8 | 1,200 | 389 | 32 | 63 | < 2 | 16 | 240 | < 10 | < 2 | < 8 | < 25 | < 2 | < 2 | < 10 | < 10 | < 10 | < 10 |
| | 06/21/00 | 17 | 58 | 1,100 | 1,040 | 50 | 65 | < 2 | 41 | 230 | 4J | < 2 | < 8 | < 0.3 | < 3 | < 5 | < 3 | < 2 | 3J | < 5 |
| | 09/12/00 | 10 | 25 | 610 | 820 | 31 | 42 | < 1 | 67 | 140 | 3 | < 1 | < 4 | < 10 | < 1 | < 5 | < 1 | < 1 | < 1 | < 1 |
| | 12/07/00 | 10 J | 32 | 850 | 2,540 | 40 J | 50 J | < 5 | 90 J | 230 | 7 J | < 5 | < 20 | < 0.3 | < 7 | < 20 | < 6 | < 5 | < 7 | < 20 |
| | 03/15/01 | 19 | 37 | 820 | 850 | 40 | 57 | < 0.5 | 41 | 210 | 5 J | < 0.5 | < 2 | < 0.3 | < 0.7 | < 2 | < 0.6 | < 0.5 | 2 J | < 2 |
| | 07/12/01 | 14 | 5 J | 960 | 370 | 33 J | 47 J | < 2.4 | 18 J | 93 | < 3.2 | < 2.4 | < 9.6 | < 6 | < 3.1 | < 5.4 | < 2.8 | < 2.3 | < 3.2 | < 5.6 |
| | 09/25/01 | 6.5 | 2.1 | 230 | 38 | 10 | 12 | < 0.5 | 4.4 | 27 | < 2 | < 0.5 | < 2 | — | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 01/02/02 | 10 | 5.5 | 450 | 164 | 23 | 23 | < 0.48 | 3.6 J | 55 | 0.95 J | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.45 | 1.2 J | < 1.2 |
| | 03/28/02 | 12 | 18 | 700 | 184 | 30 | 33 | < 0.48 | 1.2 J | 65 | 1.7 J | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.52 | 1.4 J | < 1.2 |
| | 06/11/02 | 12 | 6.7 | 630 | 64 | 27 | 34 | < 0.48 | 2.7 J | 36 | < 0.64 | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.52 | < 0.64 | < 1.2 |
| | 09/18/02 | 11 | 11 | 690 | 1,640 | 31 | 36 | < 0.24 | 50 | 160 | 3.4 J | < 0.24 | < 0.25 | < 0.60 | < 0.31 | < 0.54 | < 0.28 | < 0.26 | 1.7 J | < 0.56 |
| | 12/17/02 | 14 | 10 | 620 | 1,290 | 22 | 31 | < 1.0 | 45 | 150 | < 4 | < 1 | < 4 | < 10 | < 1 | < 1 | < 4 | < 4 | < 4 | < 4 |
| | 03/20/03 | 16 | 2.3 | 740 | 325 | 31 | 41 | < 1.0 | 36 | 140 | < 4 | < 1 | < 4 | < 10 | < 1 | < 1 | < 4 | < 4 | < 4 | < 9.5 |
| | 06/11/03 | 13 | 1.8 B | 750 | 114 | 28 | 38 | < 0.24 | 9.7 | 120 | 1.3 J | < 0.24 | < 0.25 | < 0.60 | < 0.31 | < 0.54 | < 0.28 | < 0.26 | 1.6 J | < 0.56 |
| | 09/11/03 | 13 | 9.3 | 780 | 1,990 | 26 | 36 | < 0.19 | 62 | 200 | 3.0 J | < 0.19 | < 0.20 | < 0.48 | < 0.25 | < 0.43 | < 0.23 | < 0.21 | 1.0 J | < 0.45 |
| | 12/04/03 | 27 | 11 | 800 | 1,787 | 30 | 39 | < 0.19 | 68 | 180 | 3.2 J | < 0.19 | < 0.20 | < 0.48 | < 0.25 | < 0.43 | < 0.23 | < 0.21 | 1.4 J | < 8.0 |
| | 03/15/04 | 24 | 5.6 | 730 | 702 | 40 | 54 | < 0.095 | 35 | 160 | 4.1 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | 3.3 | < 0.11 | 2.5 | < 0.23 |
| MW-5 | 09/04/96 | < 25 | < 25 | < 25 | < 25 | < 100 | < 100 | < 25 | < 100 | < 100 | < 100 | < 25 | < 100 | <500 | < 25 | < 25 | < 100 | < 100 | < 100 | < 100 |
| | 12/10/96 | < 0.5 | 1.3 B | 1.0 | 1.6 B | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 10 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| dup | 12/10/96 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 10 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |

## Table D-6

## VOCs Detected in Groundwater Samples from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | 1,2,4-TCB | Acetone | Carbon Disulfide | HCBD | CFC 113 | CFC 12 | MIBK | Chloro-ethane | Chloro-form | 1,1-DCA | 1,2-DCA | 1,1-DCE | cis-1,2-DCE | trans-1,2-DCE | MEK | Methylene Chloride | Naphth-alene | Hexane | TCA | TCE | PCE | Vinyl Chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-3 | 01/03/02 | < 0.22 | < 3.7 | < 0.16 | < 0.38 | — | — | < 5.1 | 0.47 J | < 0.096 | 16 | < 0.12 | < 0.12 | 1.0 | 0.76 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | 0.25 J |
| (cont.) | 03/28/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | 22 | < 0.12 | < 0.12 | 1.4 | 0.92 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | 0.26 J |
| | 06/14/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | 19 | < 0.12 | < 0.12 | 1.3 | 0.83 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | 0.25 J |
| | 09/17/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | 27 | < 0.12 | < 0.12 | 2.1 | 1.1 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | 0.32 J |
| | 12/17/02 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 18 | < 0.5 | 38 | < 0.5 | < 0.5 | 0.93 | < 0.5 | < 20 | < 2 | < 2 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 0.58 |
| | 03/20/03 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | 12 | < 0.5 | < 0.5 | 0.83 | 0.66 | < 20 | < 2 | < 2 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 06/11/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | 9.5 | < 0.12 | < 0.12 | 0.94 | 0.70 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | 0.25 J |
| | 09/11/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | 9.9 | < 0.12 | < 0.12 | 0.94 | 0.74 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | 0.27 J |
| | 12/04/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | 19 | < 0.096 | 19 | < 0.12 | < 0.12 | 0.99 | 0.18 J | < 4.1 | 0.27 J | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | 0.46 J |
| | 03/15/04 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | 16 | < 0.12 | < 0.12 | 1.50 | 0.90 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | 0.36 J |
| MW-4 | 09/04/96 | < 200 | < 2,000 | < 50 | < 200 | — | < 50 | < 2,000 | 830 | < 50 | 76 | < 50 | < 50 | < 50 | < 50 | < 2,000 | < 100 | < 200 | < 100 | < 50 | < 50 | < 50 | < 50 |
| | 12/10/96 | < 2 | < 20 | 0.7 | < 2 | — | < 0.5 | < 20 | 950 | < 0.5 | 33 | 2.6 | < 0.5 | 2.1 | 3.8 | < 20 | 7 B | < 2 | < 10 | < 0.5 | < 0.5 | < 0.5 | 6.1 |
| | 03/04/97 | < 2 | < 20 | < 0.5 | < 2 | 0.7 | < 0.5 | 21 | 1,100 | < 0.5 | 140 | 1.9 | < 0.5 | 12 | 4.3 | < 20 | 7 | 4 | < 10 | 4.8 | 1.0 | < 0.5 | 15 |
| | 06/27/97 | < 2 | < 20 | < 0.5 | < 10 | — | < 0.5 | < 20 | 2,000 | < 0.5 | 160 | 1.2 | < 0.5 | 2.8 | 4.9 | < 20 | 9.6 | 9 | < 10 | 2.6 | 2.0 | < 0.5 | 6.3 |
| | 09/04/97 | < 2 | < 5 | 0.7 | < 2 | — | < 0.5 | < 5 | 820 | < 0.5 | 52 | 1.4 | < 0.5 | 2.5 | 2.5 | < 5 | 7 | 4 | < 5 | < 0.5 | 0.8 | < 0.5 | 6.9 |
| dup | 09/04/97 | < 2 | < 5 | 2.6 | < 2 | — | < 0.5 | < 5 | 2,100 | < 0.5 | 47 | 1.5 | < 0.5 | < 0.5 | 2.3 | < 5 | 7.1 | 4 | < 5 | < 0.5 | 0.7 | < 0.5 | 6.5 |
| | 12/04/97 | < 2 J | < 20 J | < 0.5 J | < 2 J | — | < 0.5 J | < 20 J | 960 J | < 0.5 J | 22 J | 1.3 J | < 0.5 J | 1.2 J | 3.3 J | < 20 J | 7 J | 6 J | 4 J | < 0.5 J | 1 J | < 0.5 J | 3.4 J |
| | 03/06/98 | <4 | <40 | < 1 | <4 | — | < 1 | < 40 | 1,400 | < 1 | 84 | < 1 | < 1 | 4 | 6 | < 40 | 10 | 5 | 27 | 11 | 1.0 | < 1 | 8 |
| | 06/18/98 | <50 | <500 | < 12 | <50 | — | < 12 | < 500 | 1,700 | < 12 | 410 | < 12 | < 12 | < 12 | 26 | < 500 | 45 | < 50 | < 120 | < 12 | < 12 | < 12 | < 12 |
| | 09/29/98 | <10 | <100 | < 2 | <10 | — | < 2 | < 100 | 1000 J | < 2 | 33 J | < 2 | < 2 | < 2 | 3 J | < 100 | 8 J | < 10 | < 25 | < 2 | < 2 | < 2 | < 2 |
| | 12/14/98 | <10 | <100 | < 2 | <10 | — | < 2 | < 100 | 1,000 | < 2 | 26 | < 2 | < 2 | < 2 | 3 | < 100 | 7 | < 10 | < 25 | < 2 | < 2 | < 2 | < 2 |
| | 03/03/99 | <10 | <100 | < 2 | <10 | — | < 2 | < 100 | 1,300 | 4 | 72 | < 2 | < 2 | 6 | 4 | < 100 | 9 | < 10 | < 25 | < 2 | < 2 | < 2 | 8 |
| | 06/17/99 | < 100 | < 1,000 | < 25 | < 100 | — | < 25 | < 2,500 | 1,200 | < 25 | 210 | < 25 | < 25 | < 25 | < 25 | < 2,500 | < 250 | < 100 | < 250 | < 25 | < 25 | < 25 | < 25 |
| | 09/17/99 | < 0.2 | < 8 | < 0.2 | < 0.2 | — | < 0.2 | < 7 | 820 J | < 0.2 | 36 | < 0.2 | < 0.2 | 1.4 E | 4 | < 6 | 9 | 5 EB | < 5 | < 0.3 | < 0.3 | < 0.2 | < 0.3 |
| | 12/08/99 | < 20 | < 200 | < 5 | < 20 | — | < 5 | < 200 | 1,000 J | < 5 | 19 | < 5 | < 5 | < 5 | <10 | < 200 | < 10 | < 20 | < 20 | < 5 | < 5 J | < 5 J | < 5 |
| dup | 12/08/99 | < 20 | < 200 | < 5 | < 20 | — | < 5 | < 200 | 1,100 J | < 5 | 20 | < 5 | < 5 | < 5 | <5 | < 200 | < 10 | < 20 | < 20 | < 5 | < 5 J | < 5 J | < 5 |
| | 03/07/00 | < 10 | < 100 | < 2 | < 10 | — | < 2 | < 100 | 1,200 | < 2 | 29 | < 2 | < 2 | < 2 | 5 | < 100 | 9 | < 10 | < 25 | < 2 | < 2 | < 2 | < 2 |
| dup | 03/07/00 | < 10 | < 100 | < 2 | < 10 | — | < 2 | < 100 | 1,200 | < 2 | 28 | < 2 | < 2 | < 2 | 5 | < 100 | 9 | < 10 | < 25 | < 2 | < 2 | < 2 | < 2 |
| | 06/21/00 | < 5 | < 50 | < 4 | < 8 | — | — | < 50 | 980 | < 2 | 43 | < 3 | < 3 | < 3 | 6J | < 70 | 20 | 6 J | < 0.2 | < 3 | < 3 | < 3 | < 5 |
| | 09/12/00 | < 10 | < 50 | < 5 | < 10 | — | < 5 | < 25 | 840 | < 1 | 14 | < 1 | < 1 | < 1 | 3 | < 25 | 6 | < 10 | < 10 | < 1 | < 1 | < 1 | 1 |
| | 12/07/00 | < 20 | < 200 | < 8 | < 20 | — | < 9 | < 200 | 750 J | < 5 | 10 J | < 6 | < 6 | < 6 | < 7 | < 200 | 10 J | < 20 | 12 | < 6 | < 6 | < 6 | < 20 |
| | 03/15/01 | < 2 | < 20 | < 0.8 | < 2 | — | < 0.9 | < 20 | 770 | < 0.5 | 23 J | 2 J | < 0.6 | 0.7 J | 5.5 | < 20 | 11 | 6 J | 11 | < 0.6 | < 0.6 | < 0.6 | < 2 |
| | 07/12/01 | < 5.5 | < 58 | < 4 | < 9.5 | — | — | < 70 | 710 | < 2.4 | 43 | < 2.9 | < 3 | < 3 | 4.8 J | < 81 | 16 J | < 7.2 | < 4.5 | < 2.8 | < 3 | < 2.8 | < 5.3 |
| | 09/25/01 | < 2 | < 20 | < 0.5 | < 2 | — | — | < 20 | 340 | < 0.5 | 27 | 0.71 | < 0.5 | 0.74 | 3.2 | < 20 | 5.9 | < 2 | — | < 0.5 | < 0.5 | < 0.5 | 3.6 |
| | 01/02/02 | < 1.1 | < 19 | < 0.80 | < 1.9 | — | — | < 26 | 570 | < 0.48 | 25 | < 0.57 | < 0.60 | 1.4 J | 4.7 | < 21 | 7.5 J | < 1.5 | 13 J | < 0.56 | 1.2 J | < 0.55 | 1.6 J |
| | 03/28/02 | < 1.1 | < 21 | < 0.80 | < 1.9 | — | < 0.83 | < 26 | 810 | < 0.48 | 87 | < 0.57 | < 0.60 | 2.6 | 5.8 | < 21 | 13 | < 1.5 | 22 | < 0.57 | 2.3 J | < 0.55 | 6.2 |
| | 06/11/02 | < 1.1 | < 21 | < 0.80 | < 1.9 | — | < 0.83 | < 26 | 760 | < 0.48 | 58 | < 0.57 | < 0.60 | < 0.58 | 4.8 | < 21 | 9.2 J | 2.2 J | 5.9 | < 0.57 | 1.7 J | 1.6 J | < 1.1 |
| | 09/18/02 | < 0.55 | < 11 | < 0.40 | < 0.95 | — | < 0.42 | < 13 | 570 | < 0.24 | 20 | < 0.29 | < 0.30 | 1.1 J | 4.0 | < 11 | 7.6 | 4.5 J | 3.3 | < 0.29 | 0.70 J | < 0.28 | 1.9 |
| | 12/17/02 | < 4 | < 40 | 4.1 | < 4 | — | < 1 | < 40 | 500 | < 1 | 18 | < 1 | < 1 | 1 | 4.2 | < 40 | 6.2 | < 4 | 5.8 B | < 1 | < 1 | < 1 | 3.1 |
| | 03/20/03 | < 4 | < 40 | < 1 | < 4 | — | < 1 | < 40 | 530 | < 1 | 13 | < 1 | < 1 | < 1 | 4.1 | < 40 | 5.3 | < 4 | 7.8 | < 1 | < 1 | < 1 | 1.3 |
| | 06/11/03 | < 0.55 | < 11 | 0.73 J | < 0.95 | — | < 0.42 | < 13 | 530 | < 0.24 | 24 | 0.58 J | < 0.30 | 1.0 J | 4.4 | < 11 | 7.2 | 1.6 J | 3.3 | < 0.29 | 0.68 J | < 0.28 | 1.5 |
| | 09/11/03 | < 0.44 | < 8.2 | < 0.32 | < 0.76 | — | < 0.34 | < 11 | 460 | < 0.20 | 18 | < 0.23 | < 0.24 | 1.1 | 3.9 | < 8.2 | 6.8 | 6.2 | 2.4 | < 0.23 | 0.34 J | < 0.22 | 2.3 |
| | 12/04/03 | < 0.44 | < 8.2 | < 0.32 | < 0.76 | — | < 0.34 | < 11 | 370 | < 0.20 | 11 | < 0.23 | < 0.24 | 0.56 J | 4.4 | < 8.2 | 4.2 | 4.8 | 8.7 | < 0.23 | 0.32 J | < 0.22 | 0.70 J |
| | 03/15/04 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | 420 | < 0.096 | 15 | < 0.12 | < 0.12 | 0.67 | 6.3 | < 4.1 | 6.2 | 3 | 17 | < 0.12 | 0.48 J | < 0.11 | 0.59 |
| MW-5 | 09/04/96 | < 100 | < 1,000 | < 25 | < 100 | — | < 25 | < 1,000 | < 25 | < 25 | < 25 | < 25 | < 25 | 34 | < 25 | < 1,000 | < 50 | < 100 | < 500 | < 25 | 180 | 2,600 | < 25 |
| | 12/10/96 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | 0.9 | 0.7 | < 0.5 | < 0.5 | 28 | 0.9 | < 20 | < 1 | < 2 | < 10 | 3.4 | 130 | 3,400 | < 0.5 |
| dup | 12/10/96 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | 0.9 | 0.8 | < 0.5 | 0.6 | 34 | 1.1 | < 20 | < 1 | < 2 | < 10 | 3.4 | 130 | 3,300 | < 0.5 |

## Table D-6

## VOCs Detected in Groundwater Samples from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | Benzene | Toluene | Ethyl-benzene | Total Xylenes | Isopropyl-benzene | n-propyl-benzene | Styrene | 1,3,5-TMB | 1,2,4-TMB | 4-isopropyl-toluene | Chloro-benzene | 1,4-Dichloro benzene | 2-Nitro-propane | 1,2-Dichloro-propane | 1,2,3-TCP | 2-Chloro-toluene | 4-Chloro-toluene | *sec*-butyl-benzene | *n*-butyl-benzene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-5 | 03/04/97 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 10 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| (cont.) | 06/27/97 | < 5 J | < 5 J | < 5 J | < 5 J | < 20 J | < 20 J | < 5 J | < 20 J | < 20 J | < 20 J | < 5 J | < 20 J | < 100 | < 5 J | < 5 J | < 20 J | < 20 J | < 20 J | < 20 J |
| | 09/04/97 | < 0.5 | < 0.5 | 0.9 | 0.9 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 12/04/97 | < 0.5 | < 0.5 | < 1.0 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | 0.6 | < 2 | < 1 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/06/98 | < 5 | < 5 | < 5 | < 5 | < 20 | < 20 | < 5 | < 20 | < 20 | < 20 | <5 | < 20 | < 50 | < 5 | < 5 | < 20 | < 20 | < 20 | < 20 |
| | 06/18/98 | < 12 | < 12 | < 12 | < 12 | < 50 | < 50 | < 12 | < 50 | < 50 | < 50 | < 12 | < 50 | < 120 | < 12 | < 12 | < 50 | < 50 | < 50 | < 50 |
| | 09/29/98 | < 10 | < 10 | < 10 | < 10 | < 40 | < 40 | < 10 | < 40 | < 40 | < 40 | < 10 | < 40 | < 100 | < 10 | < 10 | < 40 | < 40 | < 40 | < 40 |
| | 12/15/98 | < 5 | < 5 | < 5 | < 5 | < 20 | < 20 | < 5 | < 20 | < 20 | < 20 | < 5 | < 20 | < 50 | < 5 | < 5 | < 20 | < 20 | < 20 | < 20 |
| | 03/02/99 | < 12 | < 12 | < 12 | < 24 | < 50 | < 50 | < 12 | < 50 | < 50 | < 50 | < 12 | < 50 | < 125 | < 12 | < 12 | < 50 | < 50 | < 50 | < 50 |
| | 06/16/99 | < 10 | < 10 | < 10 | < 10 | < 40 | < 40 | < 10 | < 40 | < 40 | < 40 | < 10 | < 40 | < 100 | < 10 | < 10 | < 40 | < 40 | < 40 | < 40 |
| | 09/16/99 | < 0.2 | < 0.2 | < 0.2 | < 0.4 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 5 | < 0.2 | < 0.3 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| dup | 09/16/99 | < 0.2 | < 0.2 | < 0.2 | < 0.4 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | 0.4 E | < 0.2 | < 5 | < 0.2 | < 0.3 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| | 12/08/99 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/07/00 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/21/00 | < 6 | < 5 | < 5 | < 14 | <4 | < 5 | < 7 | <7 | < 8 | < 7 | < 5 | < 5 | < 0.3 | < 7 | < 20 | < 6 | < 5 | < 7 | < 20 |
| | 09/12/00 | < 1 | < 1 | < 1 | < 3 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 10 | < 1 | < 5 | < 1 | < 1 | < 1 | < 1 |
| | 12/07/00 | < 6 | < 5 | < 5 | < 14 | <4 | < 5 | < 7 | < 7 | < 8 | < 7 | < 5 | < 5 | < 0.3 | < 7 | < 20 | < 6 | < 5 | < 7 | < 20 |
| | 03/15/01 | < 2 | < 1 | 3 J | 2 J | < 0.7 | < 1 | < 2 | < 2 | < 2 | < 2 | < 1 | < 1 | < 0.3 | < 2 | < 3 | < 2 | < 0.9 | < 2 | < 3 |
| | 07/12/01 | < 1.1 | < 0.98 | < 0.98 | < 1.9 | < 0.68 | < 0.97 | < 1.3 | < 1.3 | < 1.5 | < 1.3 | < 0.94 | < 0.97 | < 2.4 | < 1.3 | < 2.2 | < 1.2 | < 0.89 | < 1.3 | < 2.3 |
| | 08/27/01 | < 5 | < 5 | < 5 | < 5 | — | — | — | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 09/24/01 | < 5 | < 5 | < 5 | < 5 | — | — | — | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 10/22/01 | < 5 | < 5 | < 5 | < 5 | — | — | — | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 11/19/01 | < 5 | < 5 | < 5 | < 5 | — | — | — | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 01/02/02 | < 0.53 | < 0.49 | < 0.49 | < 0.93 | < 0.34 | < 0.49 | < 0.48 | < 0.61 | < 0.71 | < 0.64 | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.45 | < 0.64 | < 1.2 |
| | 03/27/02 | < 1.1 | < 0.98 | < 1.3 | < 2.2 | < 0.68 | < 0.98 | < 0.95 | < 1.3 | < 1.5 | < 1.3 | < 0.94 | < 0.98 | < 2.4 | < 1.3 | < 2.2 | < 1.2 | < 1.1 | < 1.3 | < 2.3 |
| | 06/11/02 | < 0.53 | < 0.49 | < 0.65 | < 1.5 | < 0.34 | < 0.49 | < 0.48 | < 0.61 | < 0.71 | < 0.64 | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.52 | < 0.64 | < 1.2 |
| | 09/18/02 | < 1.1 | < 0.98 | < 1.3 | < 2.2 | < 0.68 | < 0.98 | < 0.95 | < 1.3 | < 1.5 | < 1.3 | < 0.94 | < 0.98 | < 2.4 | 0.76 | < 2.2 | < 1.2 | < 1.1 | < 1.3 | < 2.3 |
| | 12/16/02 | < 5 | < 5 | < 5 | < 5 | < 20 | < 20 | < 5 | < 20 | < 20 | < 20 | < 5 | < 20 | < 50 | < 5 | < 5 | < 20 | < 20 | < 20 | < 20 |
| | 03/17/03 | < 0.53 | < 0.49 | < 0.65 | < 1.1 | < 0.34 | < 0.49 | < 0.48 | < 0.61 | < 0.71 | < 0.64 | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.52 | < 064 | < 1.2 |
| | 06/10/03 | < 1.1 | < 0.98 | < 1.3 | < 2.2 | < 0.68 | < 0.98 | 1.0 J | < 1.3 | < 1.5 | < 1.3 | < 0.94 | < 0.98 | < 2.4 | < 1.3 | < 2.2 | < 1.2 | < 1.1 | < 1.3 | < 2.3 |
| | 09/11/03 | < 0.53 | < 0.49 | < 0.65 | < 1.1 | < 0.34 | < 0.49 | < 0.48 | < 0.61 | < 0.71 | < 0.64 | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.52 | < 0.64 | < 1.2 |
| | 12/05/03 | < 0.53 | < 0.49 | < 0.65 | < 1.1 | < 0.34 | < 0.49 | < 0.48 | < 0.61 | < 0.71 | < 0.64 | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.52 | < 0.64 | < 1.2 |
| | 03/16/04 | < 0.53 | < 0.49 | < 0.65 | < 1.1 | < 0.34 | < 0.49 | < 0.48 | < 0.61 | < 0.71 | < 0.64 | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.52 | < 0.64 | < 1.2 |
| MW-6 | 09/04/96 | 1.7 | 31 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 10 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 12/10/96 | 1.2 | 26 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 10 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/04/97 | 0.7 | 5.0 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 10 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/27/97 | 1.2 | 7.3 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 10 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 09/04/97 | 1.6 | 13.0 | < 0.5 | 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 12/04/97 | 0.7 | 4.9 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 1 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/06/98 | 1.1 B | 9.4 B | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/18/98 | 1.7 B | 11 B | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 09/29/98 | 1.5 | 8.9 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 12/15/98 | < 0.5 | 3.7 B | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/02/99 | < 0.5 | 3.2 B | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| dup | 03/02/99 | < 0.5 | 3.1 B | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/16/99 | 0.5 B | 2.3 B | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | 0.9 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 09/16/99 | 0.5 E | 2.3 E | < 0.2 | < 0.4 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 5 | < 0.2 | < 0.3 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| | 12/08/99 | < 0.5 | 1.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |

## Table D-6

## VOCs Detected in Groundwater Samples from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | 1,2,4-TCB | Acetone | Carbon Disulfide | HCBD | CFC 113 | CFC 12 | MIBK | Chloro-ethane | Chloro-form | 1,1-DCA | 1,2-DCA | 1,1-DCE | cis-1,2-DCE | trans-1,2-DCE | MEK | Methylene Chloride | Naphth-alene | Hexane | TCA | TCE | PCE | Vinyl Chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-5 | 03/04/97 | < 2 | < 20 | < 0.5 | < 2 | < 0.5 | < 0.5 | < 20 | < 0.5 | 0.7 | < 0.5 | < 0.5 | < 0.5 | 21 | 0.6 | < 20 | < 1 | < 2 | < 10 | 3.1 | 100 | 3,100 | < 0.5 |
| (cont.) | 06/27/97 | < 20 J | < 200 J | < 5 J | <100 J | — | < 5 J | < 200 J | < 5 J | < 5 J | < 5 J | < 5 J | < 5 J | 32 | < 5 J | < 200 J | < 10 J | < 20 J | < 100 J | < 5 J | 140 J | 4,700 J | < 5 J |
| | 09/04/97 | < 2 | < 5 | 4.7 | < 20 | — | < 0.5 | < 5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 30 | 0.6 | < 5 | < 1 | < 2 | < 5 | 3.2 | 150 | 4,800 | < 0.5 |
| | 12/04/97 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | 0.6 | < 0.5 | < 0.5 | < 0.5 | 18 | 0.8 | < 20 | < 1 | < 2 | < 1 | 3 | 120 | 4,400 | < 0.5 |
| | 03/06/98 | < 20 | < 200 | < 5 | < 20 | — | <5 | < 200 | < 5 | < 5 | < 5 | < 5 | < 5 | 30 | < 5 | < 200 | < 10 | < 20 | < 10 | < 5 | 140 | 4,000 | < 5 |
| | 06/18/98 | < 50 | < 500 | < 12 | < 50 | — | < 12 | < 500 | < 12 | < 12 | < 12 | < 12 | < 12 | 28 | < 12 | < 500 | < 25 | < 50 | < 120 | < 12 | 130 | 4,100 | < 12 |
| | 09/29/98 | < 40 | < 400 | < 10 | < 40 | — | < 10 | < 400 | < 10 | <10 | <10 | <10 | <10 | 25 | < 10 | < 400 | < 20 | < 40 | < 100 | < 10 | 130 | 3,800 | < 10 |
| | 12/15/98 | < 20 | < 200 | < 5 | < 20 | — | < 5 | < 200 | < 5 | < 5 | < 5 | < 5 | < 5 | 34 | < 5 | < 200 | < 10 | < 20 | < 10 | < 5 | 120 | 3,300 | 7 |
| | 03/02/99 | < 50 | < 500 | < 12 | < 50 | — | < 12 | < 500 | < 12 | < 12 | < 12 | < 12 | < 12 | 14 | < 12 | < 500 | < 25 | < 50 | < 125 | < 12 | 96 | 4,400 | < 12 |
| | 06/16/99 | < 40 | < 400 | < 10 | < 40 | — | < 10 | < 1,000 | < 10 | <10 | <10 | <10 | <10 | 12 | < 10 | < 1,000 | < 100 | < 40 | < 100 | < 10 | 110 | 3,400 | < 10 |
| | 09/16/99 | < 0.2 | < 8 | < 0.2 | < 0.2 | — | < 0.2 | < 7 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.3 | < 0.2 | < 6 | < 0.3 | < 0.2 | < 5 | < 0.3 | 120 | 3,000 | < 0.3 |
| dup | 09/16/99 | < 0.2 | < 8 | < 0.2 | < 0.2 | — | < 0.2 | < 7 | < 0.2 | 0.4 E | < 0.2 | 0.3 E | 0.3 E | 15 | 0.5 E | < 6 | < 0.3 | < 0.2 | < 5 | 1.6 | 94 | 2,500 | < 0.3 |
| | 12/08/99 | < 2 | < 20 | < 0.5 | < 2 | — | < 5 | < 20 | < 0.5 J | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 23 | < 0.5 | < 20 | <1 | < 2 | < 2 | 1.2 | 120 J | 2,600 J | < 0.5 |
| | 03/07/00 | < 2 | < 20 | < 0.5 | < 2 | — | < 5 | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 17 | < 0.5 | < 20 | <1 | < 2 | < 5 | 1.3 | 94 | 2,700 | < 0.5 |
| | 06/21/00 | < 20 | < 200 | < 8 | < 20 | — | < 9 | < 200 | < 9 | < 5 | < 5 | < 6 | < 6 | 6J | < 7 | < 200 | 30 J | < 20 | < 0.2 | < 6 | 92 | 2,900 | < 20 |
| | 09/12/00 | < 10 | < 50 | < 5 | < 10 | — | < 5 | < 25 | < 1 | < 1 | < 1 | < 1 | < 1 | 11 | < 1 | < 25 | < 5 | < 10 | < 10 | 1 | 99 | 2,500 | < 1 |
| | 12/07/00 | < 20 | < 200 | < 8 | < 20 | — | < 9 | < 200 | < 9 | < 5 | < 5 | < 6 | < 6 | 10 J | < 7 | < 200 | <10 | < 20 | <0.2 | < 6 | 88 | 2,600 | < 20 |
| | 03/15/01 | < 3 | < 30 | < 2 | < 4 | — | < 2 | < 30 | < 2 | < 1 | < 1 | < 2 | < 2 | 8.2 | < 2 | < 40 | 5 J | < 3 | < 0.2 | < 2 | 87 | 2,300 J | < 3 |
| | 07/12/01 | < 2.2 | < 23 | < 1.6 | < 3.8 | — | — | < 28 | < 1.8 | < 0.96 | < 0.91 | < 1.2 | < 1.2 | 5.4 | < 1.4 | < 33 | < 2 | < 2.9 | < 1.8 | < 1.2 | 84 | 2,800 | < 2.2 |
| | 08/27/01 | — | — | — | — | — | — | — | < 5 | < 5 | < 5 | < 5 | < 5 | 7.4 | < 5 | — | < 10 | — | — | < 5 | 68 | 1,800 | < 5 |
| | 09/24/01 | — | — | — | — | — | — | — | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 | — | < 10 | — | — | < 5 | 74 | 1,800 | < 5 |
| | 10/22/01 | — | < 200 | — | — | — | — | — | < 5 | < 5 | < 5 | < 5 | < 5 | 7.1 | < 5 | — | < 10 | — | — | < 5 | 76 | 1,600 | < 5 |
| | 11/19/01 | — | < 200 | — | — | — | — | — | < 5 | < 5 | < 5 | < 5 | < 5 | 12 | < 5 | — | < 10 | — | — | < 5 | 75 | 2,000 | < 5 |
| | 01/02/02 | < 1.1 | < 19 | 4.2 | < 1.9 | — | — | < 26 | < 1.2 | < 0.48 | 0.80 J | < 0.57 | < 0.60 | 7.4 | < 0.70 | < 21 | < 0.97 | < 1.5 | < 0.90 | 0.90 J | 69 | 1,600 | < 1.1 |
| | 03/27/02 | < 2.2 | < 41 | < 1.6 | < 3.8 | — | < 1.7 | < 51 | < 2.3 | < 0.96 | < 0.91 | < 1.2 | < 1.2 | 2.9 J | < 1.4 | < 41 | < 2.0 | < 2.9 | < 1.8 | < 1.2 | 70 | 2,500 | < 2.2 |
| | 06/11/02 | < 1.1 | < 21 | < 0.8 | < 1.9 | — | < 1.7 | < 26 | < 1.2 | < 0.48 | < 0.46 | < 0.57 | < 0.60 | 2.2 J | < 0.70 | < 21 | < 0.97 | < 1.5 | < 0.90 | 0.75 J | 63 | 2,100 | < 1.1 |
| | 09/18/02 | < 2.2 | < 41 | < 1.6 | < 3.8 | — | < 1.7 | < 51 | < 2.3 | < 0.96 | < 0.91 | < 1.2 | < 1.2 | 3.7 J | < 1.4 | < 41 | 4.0 J | < 2.9 | < 1.8 | < 1.2 | 76 | 2,600 | < 2.2 |
| | 12/16/02 | < 20 | < 200 | < 5 | < 20 | — | < 5 | < 200 | < 5 | < 5 | < 5 | < 5 | < 5 | 7.2 | < 5 | < 200 | < 20 | < 20 | < 5 | < 5 | 82 | 2,200 | < 5 |
| | 03/17/03 | < 1.1 | < 21 | < 0.8 | < 1.9 | — | < 0.83 | < 26 | < 1.2 | < 0.48 | < 0.46 | < 0.57 | < 0.6 | 7.6 | < 0.7 | < 21 | 1.1 J | < 1.5 | < 0.9 | 0.6 J | 57 | 1,500 | < 1.1 |
| | 06/10/03 | < 2.2 | < 41 | < 1.6 | < 3.8 | — | < 1.7 | < 51 | < 2.3 | < 0.96 | < 0.91 | < 1.2 | < 1.2 | 1.4 J | < 1.4 | < 41 | < 2.0 | < 2.9 | < 1.8 | < 1.2 | 57 | 2,200 | < 2.2 |
| | 09/11/03 | < 1.1 | < 21 | < 0.8 | < 1.9 | — | < 0.83 | < 26 | < 1.2 | < 0.48 | < 0.46 | < 0.57 | < 0.6 | 1.5 J | < 0.7 | < 21 | < 0.97 | < 1.5 | < 0.9 | < 0.57 | 86 | 2,400 | < 1.1 |
| | 12/05/03 | < 1.1 | < 21 | < 0.8 | < 1.9 | — | < 0.83 | < 26 | < 1.2 | < 0.48 | < 0.46 | < 0.57 | < 0.6 | 5 | < 0.7 | < 21 | < 0.97 | < 1.5 | < 0.9 | < 0.57 | 76 | 1,600 | < 1.1 |
| | 03/16/04 | < 1.1 | < 21 | < 0.8 | < 1.9 | — | < 0.83 | < 26 | < 1.2 | < 0.48 | < 0.46 | < 0.57 | < 0.6 | 0.80 J | < 0.7 | < 21 | < 0.97 | < 1.5 | < 0.9 | 0.70 J | 47 | 1,700 | < 1.1 |
| MW-6 | 09/04/96 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 460 | < 0.5 | 12 | 3.2 | < 0.5 | 0.6 | 3.8 | < 20 | 2 B | < 2 | < 10 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 12/10/96 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 240 | < 0.5 | 13 | 2.1 | < 0.5 | 0.7 | 2.7 | < 20 | 1 B | < 2 | < 10 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 03/04/97 | < 2 | < 20 | < 0.5 | < 2 | < 0.5 | < 0.5 | < 20 | 190 J | < 0.5 | 12 | 1.4 | < 0.5 | 0.5 | 1.4 | < 20 | < 1 | < 2 | < 10 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 06/27/97 | < 2 | < 20 | < 0.5 | < 10 | — | < 0.5 | < 20 | 370 | < 0.5 | 13 | 2.2 | < 0.5 | 0.9 | 3.0 | < 20 | < 1 | < 2 | < 10 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 09/04/97 | < 2 | < 5 | 6.2 | < 2 | — | < 0.5 | < 5 | 320 | < 0.5 | 9.5 | 2.4 | < 0.5 | < 0.5 | 2.9 | < 5 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | 2.7 | < 0.5 |
| | 12/04/97 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 180 | < 0.5 | 9.1 | 1.4 | < 0.5 | 0.6 | 1.2 | < 20 | < 1 | < 2 | < 1 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 03/06/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 150 | < 0.5 | 11 | 1.8 | < 0.5 | 0.6 | < 0.5 | < 20 | 2.5 | < 2 | < 1 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 06/18/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 190 | < 0.5 | 12 | 2.6 | < 0.5 | 0.8 | 3.9 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 09/29/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 190 E | < 0.5 | 10 | 2.1 | < 0.5 | 0.7 | 4.0 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 12/15/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 110 | < 0.5 | 9.9 | 0.9 | < 0.5 | 0.6 | 0.9 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 03/02/99 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 180 | < 0.5 | 10 | 0.9 | < 0.5 | 0.6 | 1.0 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| dup | 03/02/99 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 170 | < 0.5 | 9.5 | 0.8 | < 0.5 | 0.6 | 1.0 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 06/16/99 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 50 | 100 | < 0.5 | 7.4 | < 0.5 | < 0.5 | 0.5 | 1.0 | < 50 | < 5 | < 2 | < 5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 09/16/99 | < 0.2 | < 8 | < 0.2 | < 0.2 | — | < 0.2 | < 7 | 81 | < 0.2 | 7.5 | 0.8 | < 0.2 | 0.5 | 0.8 | < 6 | < 0.3 | < 0.2 | < 5 | < 0.3 | < 0.3 | < 0.2 J | < 0.3 |
| | 12/08/99 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 73 J | < 0.5 | 7.2 | 0.7 | < 0.5 | 0.6 | 0.70 | < 20 | <1 | < 2 | < 2 | < 0.5 | < 0.5 J | < 0.5 J | < 0.5 |

## Table D-6

## VOCs Detected in Groundwater Samples from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | Benzene | Toluene | Ethyl-benzene | Total Xylenes | Isopropyl-benzene | n-propyl-benzene | Styrene | 1,3,5-TMB | 1,2,4-TMB | 4-isopropyl-toluene | Chloro-benzene | 1,4-Dichloro benzene | 2-Nitro-propane | 1,2-Dichloro-propane | 1,2,3-TCP | 2-Chloro-toluene | 4-Chloro-toluene | *sec*-butyl-benzene | *n*-butyl-benzene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-6 | 03/07/00 | < 0.5 | 1.8 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| (cont.) | 06/21/00 | < 0.2 | 0.7 | 0.78 | 0.7 J | < 0.07 | < 0.1 | < 0.1 | < 0.2 | < 0.2 | < 0.2 | < 0.1 | < 0.1 | <0.3 | < 0.2 | < 0.3 | < 0.2 | < 0.09 | < 0.2 | < 0.3 |
| | 09/12/00 | < 1 | < 1 | < 1 | < 3 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 10 | < 1 | < 5 | < 1 | < 1 | < 1 | < 1 |
| | 12/07/00 | 0.4 J | 1.6 B | < 0.1 | < 0.2 | < 0.07 | < 0.1 | < 0.1 | < 0.2 | < 0.2 | < 0.2 | < 0.1 | < 0.1 | < 0.3 | < 0.2 | < 0.3 | < 0.2 | < 0.09 | < 0.2 | < 0.3 |
| | 03/15/01 | 0.3 J | 1.6 | < 0.1 | < 0.2 | < 0.07 | < 0.1 | < 0.1 | < 0.2 | < 0.2 | < 0.2 | < 0.1 | < 0.1 | < 0.3 | < 0.2 | < 0.3 | < 0.2 | < 0.09 | < 0.2 | < 0.3 |
| | 07/12/01 | 0.25 J | 0.83 | < 0.098 | < 0.19 | < 0.068 | < 0.097 | < 0.094 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.097 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.089 | < 0.13 | < 0.23 |
| | 09/25/01 | < 0.5 | 1.2 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | — | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 01/03/02 | <0.11 | 1.4 B | < 0.098 | < 0.19 | < 0.068 | < 0.097 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.097 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.089 | < 0.13 | < 0.23 |
| | 03/27/02 | 0.43 J | 1.2 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 06/14/02 | <0.11 | 0.37 J | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 09/18/02 | 0.50 | 1.2 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 12/16/02 | 0.58 | 1.2 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/20/03 | < 0.5 | 0.6 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/11/03 | < 0.11 | 0.8 B | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 09/10/03 | 0.20 JB | 0.59 B | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 12/04/03 | 0.23 J | 0.45 J | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 03/16/04 | < 0.11 | 0.16 J | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| MW-7 | 12/22/97 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | 2.0 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/06/98 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | 1.3 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/18/98 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | 1.0 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| dup | 06/18/98 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | 1.0 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 09/29/98 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | 1.1 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 12/14/98 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/03/99 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | 2.1 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/17/99 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | 0.6 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 09/17/99 | < 0.2 | 0.2 EB | 0.2 E | < 0.4 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 5 | 0.9 | < 0.3 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| | 12/08/99 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 2 | 2.3 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/07/00 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 2 | 2.0 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/21/00 | < 0.2 | < 0.1 | 0.58 | 0.4 J | < 0.07 | < 0.1 | < 0.1 | < 0.2 | < 0.2 | < 0.2 | < 0.1 | < 0.1 | < 0.3 | 0.3 J | < 0.3 | < 0.2 | < 0.09 | < 0.2 | < 0.3 |
| | 09/12/00 | < 1 | < 1 | < 1 | < 3 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 10 | < 1 | < 5 | < 1 | < 1 | < 1 | < 1 |
| | 12/07/00 | < 0.2 | < 0.1 | < 0.1 | < 0.2 | < 0.07 | < 0.1 | < 0.1 | < 0.2 | < 0.2 | < 0.2 | < 0.1 | < 0.1 | < 0.3 | 1.7 | < 0.3 | < 0.2 | < 0.09 | < 0.2 | < 0.3 |
| | 03/15/01 | < 0.2 | 0.1 J | < 0.1 | < 0.2 | < 0.07 | < 0.1 | < 0.1 | < 0.2 | < 0.2 | < 0.2 | < 0.1 | < 0.1 | < 0.3 | 0.91 | < 0.3 | < 0.2 | < 0.09 | < 0.2 | < 0.3 |
| | 07/12/01 | < 0.11 | 0.11 J | < 0.098 | < 0.19 | < 0.068 | < 0.097 | < 0.094 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.097 | < 0.24 | 0.28 J | < 0.22 | < 0.12 | < 0.089 | < 0.13 | < 0.23 |
| | 08/27/01 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | — | 0.72 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 09/25/01 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | — | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 10/22/01 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | — | 0.69 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 11/20/01 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | — | 1.30 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 01/03/02 | < 0.11 | 0.20 JB | < 0.098 | < 0.19 | < 0.068 | < 0.097 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.097 | < 0.24 | 1.2 | < 0.22 | < 0.12 | < 0.089 | < 0.13 | < 0.23 |
| | 03/28/02 | < 0.11 | 0.20 J | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | 0.58 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 06/14/02 | < 0.11 | <0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | 0.31 J | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 09/17/02 | < 0.11 | <0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | 0.37 J | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| dup | 09/17/02 | < 0.11 | <0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | 0.36 J | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 12/17/02 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.50 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | 1.4 | < 2 | < 2 | < 2 | < 2 | < 2 |
| | 03/17/03 | < 0.11 | <0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | 1.3 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 06/10/03 | < 0.11 | 0.5 B | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 09/10/03 | < 0.11 | 0.33 JB | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | 0.17 J | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 12/04/03 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | 1.7 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |

## Table D-6

## VOCs Detected in Groundwater Samples from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | 1,2,4-TCB | Acetone | Carbon Disulfide | HCBD | CFC 113 | CFC 12 | MIBK | Chloro-ethane | Chloro-form | 1,1-DCA | 1,2-DCA | 1,1-DCE | cis-1,2-DCE | trans-1,2-DCE | MEK | Methylene Chloride | Naphth-alene | Hexane | TCA | TCE | PCE | Vinyl Chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-6 | 03/07/00 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 72 | < 0.5 | 6.9 | 0.8 | < 0.5 | 0.5 | 0.8 | < 20 | <1 | < 2 | < 5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| (cont.) | 06/21/00 | < 0.3 | < 3 | < 0.2 | < 0.4 | — | < 0.2 | < 3 | 29 | < 0.1 | 6.6 | 0.4 J | < 0.2 | 0.3 J | 0.3 J | < 4 | < 0.20 | < 0.3 | < 0.2 | < 0.2 | 0.3 J | 2.6 | < 0.3 |
| | 09/12/00 | < 10 | < 50 | < 5 | < 10 | — | < 5 | < 25 | 53 | < 1 | 5 | < 1 | < 1 | < 1 | < 1 | < 25 | < 5 | < 10 | < 10 | < 1 | < 1 | < 1 | < 1 |
| | 12/07/00 | < 0.3 | < 3 | < 0.2 | < 0.4 | — | < 0.2 | < 3 | 52 J | < 0.1 | 5.8 | 0.5 J | < 0.2 | 0.51 | 0.7 | < 4 | < 0.20 | < 0.3 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.3 |
| | 03/15/01 | < 0.3 | < 3 | < 0.2 | < 0.4 | — | < 0.2 | < 3 | 54 | < 0.1 | 6 J | 0.64 | < 0.2 | 0.4 J | 0.5 | < 4 | 0.4 J | < 0.3 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.3 |
| | 07/12/01 | < 0.22 | < 2.3 | < 0.16 | < 0.38 | — | — | < 2.8 | 29 | < 0.096 | 4.8 | 0.40 J | < 0.12 | 0.27 J | 0.39 J | < 3.3 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 09/25/01 | < 2 | < 20 | < 0.5 | < 2 | — | — | < 20 | 47 | < 0.5 | 5.9 | 0.53 | < 0.5 | < 0.5 | 0.81 | < 20 | < 1 | < 2 | — | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 01/03/02 | < 0.22 | < 3.7 | < 0.16 | < 0.38 | — | — | < 5.1 | 44 | < 0.096 | 5.3 | 0.62 | < 0.12 | 0.33 J | 0.74 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 03/27/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | 63 | < 0.096 | 5.1 | 0.78 | < 0.12 | 0.38 J | 1.0 | < 4.1 | 0.29 J | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 06/14/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | 11 | < 0.096 | 3.4 | 0.15 J | < 0.12 | 0.22 J | 0.17 J | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 09/18/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | 36 | < 0.096 | 4.9 | 0.52 | < 0.12 | 0.40 J | 0.92 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 12/16/02 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 51 | < 0.5 | 4.6 | 0.76 | < 0.5 | < 0.5 | 1.3 | < 20 | < 2 | < 2 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 03/20/03 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 31 | < 0.5 | 3.4 | < 0.5 | < 0.5 | < 0.5 | 0.57 | < 20 | < 2 | < 2 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 06/11/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | 0.72 | < 0.096 | 2.7 | < 0.12 | < 0.12 | 0.13 J | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 09/10/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | 4.9 | < 0.096 | 3.4 | < 0.12 | < 0.12 | 0.20 J | 0.36 J | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 12/04/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | 13 | < 0.096 | 3.2 | 0.34 J | < 0.12 | 0.26 J | 0.48 J | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 03/16/04 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | 2.2 | < 0.096 | 1.5 | < 0.12 | < 0.12 | 0.13 J | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| MW-7 | 12/22/97 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | 0.9 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 03/06/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | 2.4 | < 0.5 |
| | 06/18/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | 4.5 | < 0.5 |
| dup | 06/18/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | 4.4 | < 0.5 |
| | 09/29/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | 1.7 | < 0.5 |
| | 12/14/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | 0.8 | < 0.5 |
| | 03/03/99 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | < 0.5 | 3.8 | < 0.5 |
| | 06/17/99 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 50 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 50 | < 5 | < 2 | < 5 | < 0.5 | < 0.5 | 4.3 | < 0.5 |
| | 09/17/99 | < 0.2 | < 20 | < 0.2 | < 0.2 | — | < 0.2 | < 7 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.3 | < 0.2 | < 6 | < 0.3 | < 0.2 | < 5 | < 0.3 | < 0.3 | 2 B | < 0.3 |
| | 12/08/99 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | <20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 1 | < 2 | < 2 | < 0.5 | < 0.5 | 14 | < 0.5 |
| | 03/07/00 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | <20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 1 | < 2 | < 2 | < 0.5 | < 0.5 | 1.4 | < 0.5 |
| | 06/21/00 | < 0.3 | < 3 | < 0.2 | < 0.4 | — | <0.2 | < 3 | 0.82 | < 0.1 | 0.1 J | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 4 | < 0.2 | < 0.3 | < 0.2 | < 0.2 | < 0.2 | 9.0 | < 0.3 |
| | 09/12/00 | < 10 | < 50 | <5 | <10 | — | <5 | <25 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | <25 | <5 | < 10 | < 10 | < 1 | < 1 | 5 | < 1 |
| | 12/07/00 | < 0.3 | < 3 | < 0.2 | < 0.4 | — | < 0.2 | < 3 | < 0.2 | < 0.1 | < 0.1 | < 0.2 | < 0.2 | < 0.09 | < 0.2 | < 4 | < 0.20 | < 0.3 | < 0.2 | < 0.2 | < 0.2 | 1 | < 0.3 |
| | 03/15/01 | < 0.3 | < 3 | < 0.2 | < 0.4 | — | < 0.2 | < 3 | < 0.2 | < 0.1 | < 0.1 | < 0.2 | < 0.2 | < 0.09 | < 0.2 | < 4 | < 0.20 | < 0.3 | < 0.2 | < 0.2 | < 0.2 | 2.1 | < 0.3 |
| | 07/12/01 | < 0.22 | < 2.3 | < 0.16 | < 0.38 | — | — | < 2.8 | < 0.18 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 3.3 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | 4.9 | < 0.22 |
| | 08/27/01 | < 2 | < 20 | < 0.5 | < 2 | — | — | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 1 | < 2 | — | < 0.5 | < 0.5 | 3 | < 0.5 |
| | 09/25/01 | < 2 | < 20 | < 0.5 | < 2 | — | — | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 1 | < 2 | — | < 0.5 | < 0.5 | 2.4 | < 0.5 |
| | 10/22/01 | < 2 | < 20 | < 0.5 | < 2 | — | — | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 1 | < 2 | — | < 0.5 | < 0.5 | 1.4 | < 0.5 |
| | 11/20/01 | < 2 | < 20 | < 0.5 | < 2 | — | — | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 1 | < 2 | — | < 0.5 | < 0.5 | 1.8 | < 0.5 |
| | 01/03/02 | < 0.22 | < 3.7 | < 0.16 | < 0.38 | — | — | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | 1.4 | < 0.22 |
| | 03/28/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 4.1 | 0.28 J | < 0.29 | < 0.18 | < 0.12 | < 0.12 | 3.5 | < 0.22 |
| | 06/14/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | 4.7 | < 0.22 |
| | 09/17/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | 2.9 | < 0.22 |
| dup | 09/17/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | 2.7 | < 0.22 |
| | 12/17/02 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 2 | < 2 | < 0.5 | < 0.5 | < 0.5 | 1.0 | < 0.5 |
| | 03/17/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | 1.5 | < 0.22 |
| | 06/10/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | 8.5 | < 0.22 |
| | 09/10/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | 4.1 | < 0.22 |
| | 12/04/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | 0.86 | < 0.22 |

## Table D-6

## VOCs Detected in Groundwater Samples from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | Benzene | Toluene | Ethyl-benzene | Total Xylenes | Isopropyl-benzene | n-propyl-benzene | Styrene | 1,3,5-TMB | 1,2,4-TMB | 4-isopropyl-toluene | Chloro-benzene | 1,4-Dichloro benzene | 2-Nitro-propane | 1,2-Dichloro-propane | 1,2,3-TCP | 2-Chloro-toluene | 4-Chloro-toluene | *sec*-butyl-benzene | *n*-butyl-benzene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-7 | 03/16/04 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | 0.20 J | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| MW-8 | 12/22/97 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/06/98 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/18/98 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 09/29/98 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 12/14/98 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| dup | 12/14/98 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/02/99 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/16/99 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 09/16/99 | < 0.2 | < 0.2 | < 0.2 | < 0.4 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 5 | < 0.2 | < 0.3 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| | 12/08/99 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/07/00 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/21/00 | < 0.2 | < 0.1 | 0.4 J | 0.3 J | < 0.07 | < 0.1 | < 0.1 | < 0.2 | < 0.2 | < 0.2 | < 0.1 | < 0.1 | <0.3 | < 0.2 | < 0.3 | < 0.2 | < 0.09 | < 0.2 | < 0.3 |
| | 09/12/00 | < 1 | < 1 | < 1 | < 3 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 10 | < 1 | < 5 | < 1 | < 1 | < 1 | < 1 |
| | 12/07/00 | < 0.2 | 0.2 J | < 0.1 | < 0.2 | < 0.07 | < 0.1 | < 0.1 | < 0.2 | < 0.2 | < 0.2 | < 0.1 | < 0.1 | < 0.3 | < 0.2 | < 0.3 | < 0.2 | < 0.09 | < 0.2 | < 0.3 |
| | 03/15/01 | < 0.2 | 0.2 J | < 0.1 | < 0.2 | < 0.07 | < 0.1 | < 0.1 | < 0.2 | < 0.2 | < 0.2 | < 0.1 | < 0.1 | < 0.3 | < 0.2 | < 0.3 | < 0.2 | < 0.09 | < 0.2 | < 0.3 |
| | 07/12/01 | < 0.11 | 0.14 J | < 0.098 | < 0.19 | < 0.068 | < 0.097 | < 0.094 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.097 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.089 | < 0.13 | < 0.23 |
| | 08/27/01 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | — | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 09/25/01 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | — | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 10/22/01 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | — | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 11/20/01 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | — | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 01/03/02 | < 0.11 | 0.31 JB | < 0.098 | < 0.19 | < 0.068 | < 0.097 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.097 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.089 | < 0.13 | < 0.23 |
| | 03/27/02 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 06/14/02 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 09/18/02 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 12/16/02 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.50 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/17/03 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 06/11/03 | < 0.11 | 0.66 B | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 09/10/03 | < 0.11 | 0.39 JB | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| dup | 09/10/03 | < 0.11 | 0.22 JB | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 12/04/03 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 03/16/04 | < 0.11 | 0.12 J | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| MW-9 | 07/12/01 | 3.5 | 1.2 | 0.12 J | 0.18 J | < 0.068 | < 0.097 | < 0.094 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.097 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.089 | < 0.13 | < 0.23 |
| dup | 07/12/01 | 3.4 | 1.0 | < 0.098 | 0.13 J | < 0.068 | < 0.097 | < 0.094 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.097 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.089 | < 0.13 | < 0.23 |
| | 08/27/02 | 4 | 1.7 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | — | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 09/25/01 | 3.6 | 1.2 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | — | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 10/22/01 | 4.1 | 1.4 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | — | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 11/20/01 | 4.5 | 1.4 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.5 | < 2 | < 2 | < 2 | < 0.5 | < 2 | — | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 01/03/02 | 1.8 | 0.59 B | < 0.098 | < 0.19 | < 0.068 | < 0.097 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.097 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.089 | < 0.13 | < 0.23 |
| | 03/27/02 | < 0.11 | 0.14 J | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 06/14/02 | 2.6 | 1.0 | 0.13 J | 0.23 J | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 09/17/02 | 2.9 | 1.2 | 0.20 J | 0.28 J | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | 0.11 J | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 12/16/02 | 2.7 | 0.93 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.50 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/17/03 | 1.4 | 0.33 J | < 0.13 | 0.12 J | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 06/11/03 | 1.9 | 0.99 B | < 0.13 | 0.13 J | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | 0.12 J | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 09/10/03 | 2.3 B | 1.1 B | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 12/04/03 | 3.1 | 0.88 | < 0.13 | 0.21 J | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |

## Table D-6

## VOCs Detected in Groundwater Samples from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | 1,2,4-TCB | Acetone | Carbon Disulfide | HCBD | CFC 113 | CFC 12 | MIBK | Chloro-ethane | Chloro-form | 1,1-DCA | 1,2-DCA | 1,1-DCE | cis-1,2-DCE | trans-1,2-DCE | MEK | Methylene Chloride | Naphth-alene | Hexane | TCA | TCE | PCE | Vinyl Chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-7 | 03/16/04 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | 5.9 | < 0.22 |
| MW-8 | 12/22/97 | < 2 | 26 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | 1.4 | < 0.5 | < 0.5 | 3.3 | 2.9 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | 33 | < 0.5 | 0.7 |
| | 03/06/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 1.2 | 1.3 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | 20 | < 0.5 | 0.7 |
| | 06/18/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 3 | 2.5 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | 34 | < 0.5 | 0.8 |
| | 09/29/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 3.2 | 2.8 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | 35 | < 0.5 | 0.6 |
| | 12/14/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 2.9 | 2.6 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | 35 | < 0.5 | 0.6 |
| dup | 12/14/98 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 3 | 2.8 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | 35 | < 0.5 | 0.6 |
| | 03/02/99 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 1.9 | 1.9 | < 0.5 | < 20 | < 1 | < 2 | < 5 | < 0.5 | 29 | < 0.5 | 0.6 |
| | 06/16/99 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 50 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 1.3 | 1.3 | < 0.5 | < 50 | < 5 | < 2 | < 5 | < 0.5 | 16 | < 0.5 | 0.6 |
| | 09/16/99 | < 0.2 | < 8 | < 0.2 | < 0.2 | — | < 0.2 | < 7 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | 1.1 | 1.3 | 0.2 E | < 6 | < 0.3 | < 0.2 | < 5 | < 0.3 | 15 | 0.2 EB | 0.3 E |
| | 12/08/99 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 2 | 2.3 | < 0.5 | < 20 | < 1 | < 2 | < 2 | < 0.5 | 25 | < 0.5 | < 0.5 |
| | 03/07/00 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 1.2 | 1.4 | < 0.5 | < 20 | < 1 | < 2 | < 2 | < 0.5 | 18 | < 0.5 | < 0.5 |
| | 06/21/00 | < 0.3 | < 3 | < 0.2 | < 0.4 | — | < 0.2 | < 3 | 0.5 J | < 0.1 | < 0.1 | < 0.2 | 1.3 | 1.5 | < 0.2 | < 4 | < 0.20 | < 0.3 | < 0.2 | < 0.2 | 16 | 1.2 | < 0.3 |
| | 09/12/00 | < 10 | < 50 | < 5 | < 10 | — | < 5 | < 25 | < 1 | < 1 | < 1 | < 1 | < 1 | 2 | < 1 | < 25 | < 5 | < 10 | < 10 | < 1 | 19 | < 1 | < 1 |
| | 12/07/00 | < 0.3 | < 3 | < 0.2 | < 0.4 | — | < 0.2 | < 3 | < 0.2 | < 0.1 | < 0.1 | < 0.2 | 2 | 2.4 | 0.3 J | < 4 | < 0.20 | < 0.3 | < 0.2 | < 0.2 | 23 | < 0.2 | 0.3 J |
| | 03/15/01 | < 0.3 | < 3 | < 0.2 | < 0.4 | — | < 0.2 | < 3 | < 0.2 | < 0.1 | < 0.1 | < 0.2 | 1.4 | 1.4 | < 0.2 | < 4 | < 0.20 | < 0.3 | < 0.2 | < 0.2 | 18 | < 0.2 | < 0.3 |
| | 07/12/01 | < 0.22 | < 2.3 | < 0.16 | < 0.38 | — | — | < 2.8 | < 0.18 | < 0.096 | < 0.091 | < 0.12 | 2.5 | 2.3 | 0.28 J | < 3.3 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 28 | < 0.11 | 0.37 J |
| | 08/27/01 | < 2 | < 20 | < 0.5 | < 2 | — | — | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 1 | < 2 | — | < 0.5 | 0.91 | < 0.5 | < 0.5 |
| | 09/25/01 | < 2 | < 20 | < 0.5 | < 2 | — | — | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 1 | < 2 | — | < 0.5 | < 0.5 | < 0.5 | 0.59 |
| | 10/22/01 | < 2 | < 20 | < 0.5 | < 2 | — | — | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 1 | < 2 | — | < 0.5 | < 0.5 | < 0.5 | 0.5 |
| | 11/20/01 | < 2 | < 20 | < 0.5 | < 2 | — | — | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 1 | < 2 | — | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 01/03/02 | < 0.22 | < 3.7 | < 0.16 | < 0.38 | — | — | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | 2 | 2.3 | 0.24 J | < 4.1 | < 0.20 | < 0.29 | < 0.38 | < 0.12 | 27 | < 0.11 | < 0.22 |
| | 03/27/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | 0.72 | 1.0 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 14 | 0.17 J | < 0.22 |
| | 06/14/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | 0.77 | 1.0 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 11 | 0.13 J | < 0.22 |
| | 09/18/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | 2.5 | 2.8 | 0.30 J | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 29 | 0.21 J | 0.5 |
| | 12/16/02 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 3.1 | 3.0 | < 0.5 | < 20 | < 2 | < 2 | < 0.5 | < 0.5 | 34 | < 0.5 | 0.62 |
| | 03/17/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | 2.5 | 2.6 | 0.24 J | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 29 | 0.12 J | < 0.22 |
| | 06/11/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | 1.2 | 1.7 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 16 | 0.51 | < 0.22 |
| | 09/10/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | 2.2 | 2.4 | 0.24 J | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 32 | 0.26 J | 0.41 J |
| dup | 09/10/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | 2.3 | 2.5 | 0.24 J | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 32 | 0.21 J | 0.45 J |
| | 12/04/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | 2.8 | 3.2 | 0.39 J | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 36 | < 0.11 | 0.6 |
| | 03/16/04 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | 0.59 | 0.92 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 11 | 0.31 J | < 0.22 |
| MW-9 | 07/12/01 | < 0.22 | < 2.3 | < 0.16 | < 0.38 | — | — | < 2.8 | 15 | 0.10 J | 2.3 | < 0.12 | < 0.12 | 4.1 | 0.39 J | < 3.3 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 0.28 J | 0.15 J | 0.26 J |
| dup | 07/12/01 | < 0.22 | < 2.3 | < 0.16 | < 0.38 | — | — | < 2.8 | 14 | 0.15 J | 2.3 | < 0.12 | < 0.12 | 3.4 | 0.30 J | < 3.3 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 0.28 J | 0.18 J | 0.23 J |
| | 08/27/02 | < 2 | < 20 | < 0.5 | < 2 | — | — | < 20 | 12 | < 0.5 | 2.4 | < 0.5 | < 0.5 | 5.2 | 0.52 | < 20 | < 1 | < 2 | — | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 09/25/01 | < 2 | < 20 | < 0.5 | < 2 | — | — | < 20 | 12 | < 0.5 | 2.3 | < 0.5 | < 0.5 | 4.8 | < 0.5 | < 20 | < 1 | < 2 | — | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 10/22/01 | < 2 | < 20 | < 0.5 | < 2 | — | — | < 20 | 12 | < 0.5 | 2.3 | < 0.5 | < 0.5 | 5.9 | 0.57 | < 20 | < 1 | < 2 | — | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 11/20/01 | < 2 | < 20 | < 0.5 | < 2 | — | — | < 20 | 10 | < 0.5 | 1.8 | < 0.5 | < 0.5 | 8.4 | 0.86 | < 20 | < 1 | < 2 | — | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 01/03/02 | < 0.22 | < 3.7 | 0.94 | < 0.38 | — | — | < 5.1 | 2.9 | < 0.096 | 0.65 | < 0.12 | 0.78 | 31 | 2.0 | < 4.1 | < 0.20 | < 0.29 | < 0.38 | < 0.12 | 18 | < 0.11 | 0.29 J |
| | 03/27/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | 0.38 J | < 0.096 | < 0.091 | < 0.12 | 0.95 | 27 | 1.8 | < 4.1 | 0.21 J | < 0.29 | < 0.18 | < 0.12 | 45 | < 0.11 | 0.26 J |
| | 06/14/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | 19 | < 0.096 | 1.8 | 0.21 J | 0.25 J | 12 | 1.1 | < 4.1 | 0.28 J | < 0.29 | < 0.18 | < 0.12 | 6.2 | < 0.11 | 0.25 J |
| | 09/17/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | 21 | < 0.096 | 2.2 | < 0.12 | < 0.12 | 5.5 | 0.59 | < 4.1 | 0.27 J | < 0.29 | < 0.18 | < 0.12 | 2.0 | < 0.11 | 0.23 J |
| | 12/16/02 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | 21 | < 0.5 | 2.4 | < 0.5 | < 0.5 | 4.2 | < 0.5 | < 20 | < 2 | < 2 | < 0.5 | < 0.5 | 0.9 | < 0.5 | < 0.5 |
| | 03/17/03 | < 0.22 | < 4.1 | 0.20 J | < 0.38 | — | < 0.17 | < 5.1 | 2.70 | < 0.096 | 0.48 J | < 0.12 | 0.74 | 27 | 1.8 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 12 | < 0.11 | < 0.22 |
| | 06/11/03 | < 0.22 | < 4.1 | 0.21 J | < 0.38 | — | < 0.17 | < 5.1 | 34 | < 0.096 | 2.3 | 0.41 J | < 0.12 | 4.3 | 0.42 J | < 4.1 | 0.40 J | < 0.29 | < 0.18 | < 0.12 | 2 | < 0.11 | 0.22 J |
| | 09/10/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | 32 | < 0.096 | 2.5 | 0.43 J | < 0.12 | 6.3 | 0.47 J | < 4.1 | 0.32 J | < 0.29 | < 0.18 | < 0.12 | 1.2 | < 0.11 | 0.32 J |
| | 12/04/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | 27 | < 0.096 | 2.5 | < 0.12 | < 0.12 | 6.4 | 0.66 | < 4.1 | 0.24 J | < 0.29 | < 0.18 | < 0.12 | 0.48 J | < 0.11 | < 0.22 |

## Table D-6

## VOCs Detected in Groundwater Samples from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | Benzene | Toluene | Ethyl-benzene | Total Xylenes | Isopropyl-benzene | n-propyl-benzene | Styrene | 1,3,5-TMB | 1,2,4-TMB | 4-isopropyl-toluene | Chloro-benzene | 1,4-Dichloro benzene | 2-Nitro-propane | 1,2-Dichloro-propane | 1,2,3-TCP | 2-Chloro-toluene | 4-Chloro-toluene | *sec*-butyl-benzene | *n*-butyl-benzene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-9 | 03/16/04 | 0.98 | 0.24 J | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| MW-10 | 07/12/01 | < 0.11 | 0.14 J | < 0.098 | < 0.19 | < 0.068 | < 0.097 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.097 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.089 | < 0.13 | < 0.23 |
| | 09/25/01 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.50 | < 2 | < 2 | < 2 | < 0.5 | < 2 | — | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 01/03/02 | < 0.11 | 0.45 JB | < 0.098 | < 0.19 | < 0.068 | < 0.097 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.097 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.089 | < 0.13 | < 0.23 |
| dup | 01/03/02 | < 0.11 | 0.44 JB | < 0.098 | < 0.19 | < 0.068 | < 0.097 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.097 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.089 | < 0.13 | < 0.23 |
| | 03/28/02 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 06/14/02 | < 0.11 | 0.24 J | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 09/17/02 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 12/17/02 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.50 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 03/20/03 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.50 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/10/03 | < 0.11 | 0.43 JB | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 09/10/03 | < 0.11 | 0.22 JB | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 12/04/03 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 03/16/04 | < 0.11 | 0.17 J | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| MW-11 | 07/12/01 | — | — | — | — | — | — | — | — | — | — | < 0.94 | — | — | < 1.3 | — | — | — | — | — |
| | 08/27/01 | < 5 | < 5 | < 5 | < 5 | — | — | — | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 09/24/01 | < 5 | < 5 | < 5 | < 5 | — | — | — | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 10/15/01 | <0.5 | <0.5 | <0.5 | <0.5 | — | — | — | — | — | — | <0.5 | — | — | <0.5 | — | — | — | — | — |
| | 10/15/01 | <0.5 | <0.5 | <0.5 | <0.5 | — | — | — | — | — | — | <0.5 | — | — | <0.5 | — | — | — | — | — |
| | 10/22/01 | < 5 | < 5 | < 5 | < 5 | — | — | — | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 10/22/01 | <2.5 | <2.5 | <2.5 | <2.5 | — | — | — | — | — | — | <2.5 | — | — | <2.5 | — | — | — | — | — |
| | 10/29/01 | < 5 | < 5 | < 5 | < 5 | — | — | — | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 10/29/01 | < 5 | < 5 | < 5 | < 5 | — | — | — | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 11/19/01 | < 5 | < 5 | < 5 | < 5 | — | — | — | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 01/02/02 | < 0.53 | < 0.49 | < 0.49 | < 0.93 | < 0.34 | < 0.49 | < 0.48 | < 0.61 | < 0.71 | < 0.64 | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.45 | < 0.64 | < 1.2 |
| | 03/27/02 | < 1.1 | < 0.98 | < 1.3 | < 2.2 | < 0.68 | < 0.98 | < 0.95 | < 1.3 | < 1.5 | < 1.3 | < 0.94 | < 0.98 | < 2.4 | < 1.3 | < 2.2 | < 1.2 | < 1.1 | < 1.3 | < 2.3 |
| | 06/11/02 | < 0.53 | < 0.49 | < 0.49 | < 1.5 | < 0.34 | < 0.49 | < 0.48 | < 0.61 | < 0.71 | < 0.64 | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.45 | < 0.64 | < 1.2 |
| | 09/17/02 | < 1.1 | < 0.98 | < 1.3 | < 2.2 | < 0.68 | < 0.98 | < 0.95 | < 1.3 | < 1.5 | < 1.3 | < 0.94 | < 0.98 | < 2.4 | < 1.3 | < 2.2 | < 1.2 | < 1.1 | < 1.3 | < 2.3 |
| | 12/16/02 | 1.1 | < 1 | < 1 | < 1 | < 4 | < 4 | < 1.0 | < 4 | < 4 | < 4 | < 1 | < 4 | < 10 | < 1 | < 1 | < 4 | < 4 | < 4 | < 4 |
| | 03/17/03 | < 0.53 | < 0.49 | < 0.65 | < 1.1 | < 0.34 | < 0.49 | < 0.48 | < 0.61 | < 0.71 | < 0.64 | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.52 | < 0.64 | < 1.2 |
| dup | 03/17/03 | < 0.53 | < 0.49 | < 0.65 | < 1.1 | < 0.34 | < 0.49 | < 0.48 | < 0.61 | < 0.71 | < 0.64 | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.52 | < 0.64 | < 1.2 |
| | 06/10/03 | < 0.53 | 0.85 JB | < 0.65 | < 1.1 | < 0.34 | < 0.49 | < 0.48 | < 0.61 | < 0.71 | < 0.64 | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.52 | < 0.64 | < 1.2 |
| | 09/10/03 | < 0.53 | < 0.49 | < 0.65 | < 1.1 | < 0.34 | < 0.49 | < 0.48 | < 0.61 | < 0.71 | < 0.64 | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.52 | < 0.64 | < 1.2 |
| | 12/05/03 | 0.86 J | < 0.2 | < 0.26 | < 0.44 | < 0.14 | < 0.20 | < 0.19 | < 0.25 | < 0.29 | < 0.26 | < 0.19 | < 0.20 | < 0.48 | < 0.25 | < 0.43 | < 0.23 | < 0.21 | < 0.26 | < 0.45 |
| | 03/16/04 | < 0.53 | < 0.49 | < 0.65 | < 1.5 | < 0.34 | < 0.49 | < 0.48 | < 0.61 | < 0.71 | < 0.64 | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.52 | < 0.64 | < 1.2 |
| MW-12 | 07/12/01 | — | — | — | — | — | — | — | — | — | — | < 2.4 | — | — | < 3.1 | — | — | — | — | — |
| | 08/27/01 | < 25 | < 25 | < 25 | < 25 | — | — | — | — | — | — | < 25 | — | — | < 25 | — | — | — | — | — |
| | 09/24/01 | < 5 | < 5 | < 5 | < 5 | — | — | — | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 10/15/01 | < 5 | < 5 | < 5 | < 5 | — | — | — | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 10/15/01 | < 5 | < 5 | < 5 | < 5 | — | — | — | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 10/22/01 | < 5 | < 5 | < 5 | < 5 | — | — | — | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 10/22/01 | < 5 | < 5 | < 5 | < 5 | — | — | — | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 10/29/01 | < 5 | < 5 | < 5 | < 5 | — | — | — | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 10/29/01 | < 5 | < 5 | < 5 | < 5 | — | — | — | — | — | — | < 5 | — | — | < 5 | — | — | — | — | — |
| | 11/19/01 | < 10 | < 10 | < 10 | < 10 | — | — | — | — | — | — | < 10 | — | — | < 10 | — | — | — | — | — |
| | 01/03/02 | < 0.21 | 0.4 JB | < 0.20 | 0.62 J | < 0.14 | < 0.20 | < 0.19 | < 0.25 | < 0.29 | < 0.26 | < 0.19 | < 0.20 | < 0.48 | < 0.25 | < 0.43 | < 0.23 | < 0.18 | < 0.26 | < 0.45 |

## Table D-6

## VOCs Detected in Groundwater Samples from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | 1,2,4-TCB | Acetone | Carbon Disulfide | HCBD | CFC 113 | CFC 12 | MIBK | Chloro-ethane | Chloro-form | 1,1-DCA | 1,2-DCA | 1,1-DCE | cis-1,2-DCE | trans-1,2-DCE | MEK | Methylene Chloride | Naphth-alene | Hexane | TCA | TCE | PCE | Vinyl Chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-9 | 03/16/04 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | 2.2 | < 0.096 | 0.79 | < 0.12 | 0.39 J | 14 | 1.0 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | 11 | < 0.11 | 0.23 J |
| MW-10 | 07/12/01 | < 0.22 | < 2.3 | < 0.16 | < 0.38 | — | — | < 2.8 | < 0.18 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | 0.65 | < 0.14 | < 3.3 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 09/25/01 | < 2 | < 20 | < 0.5 | < 2 | — | — | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 0.59 | < 0.5 | < 20 | < 1 | < 2 | — | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 01/03/02 | < 0.22 | < 3.7 | < 0.16 | < 0.38 | — | — | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | 0.48 J | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| dup | 01/03/02 | < 0.22 | < 3.7 | < 0.16 | < 0.38 | — | — | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | 0.44 J | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 03/28/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | 0.48 J | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 06/14/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | 0.41 J | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 09/17/02 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | 0.59 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 12/17/02 | < 2 | < 20 | 0.51 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 2 | < 2 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 03/20/03 | < 2 | < 20 | < 0.5 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 20 | < 2 | < 2 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| | 06/10/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | 0.37 J | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 09/10/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | 0.47 J | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 12/04/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | 0.46 J | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 03/16/04 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | 0.45 J | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| MW-11 | 07/12/01 | — | — | — | — | — | — | — | < 1.8 | < 0.96 | < 0.91 | < 1.2 | < 1.2 | 19 | < 1.4 | — | < 2.0 | — | — | < 1.2 | 78 | 2,000 | 2.5 J |
| | 08/27/01 | — | — | — | — | — | — | — | < 5 | < 5 | < 5 | < 5 | < 5 | 19 | < 5 | — | < 10 | — | — | < 5 | 69 | 1,600 | < 5 |
| | 09/24/01 | — | < 200 | — | — | — | — | — | < 5 | < 5 | < 5 | < 5 | < 5 | 22 | < 5 | — | < 10 | — | — | < 5 | 84 | 1,900 | < 5 |
| | 10/15/01 | — | < 20 | — | — | — | — | — | <0.5 | <0.5 | 1.4 | <0.5 | 0.53 | 28 | 1.4 | — | <1.0 | — | — | < 0.5 | 83 | 1,600 | 1.2 |
| | 10/15/01 | — | < 20 | — | — | — | — | — | <0.5 | <0.5 | 1.4 | <0.5 | 0.54 | 29 | 1.4 | — | <1.0 | — | — | < 0.5 | 86 | 1,700 | 1.2 |
| | 10/22/01 | — | < 200 | — | — | — | — | — | < 5 | < 5 | < 5 | < 5 | < 5 | 25 | < 5 | — | <10 | — | — | < 5 | 92 | 2,000 | < 5 |
| | 10/22/01 | — | < 100 | — | — | — | — | — | <2.5 | <2.5 | <2.5 | <2.5 | <2.5 | 25 | < 2.5 | — | < 5 | — | — | < 2.5 | 92 | 2,000 | < 2.5 |
| | 10/29/01 | — | < 200 | — | — | — | — | — | < 5 | < 5 | < 5 | < 5 | < 5 | 25 | < 5 | — | < 10 | — | — | < 5 | 91 | 1,700 | < 5 |
| | 10/29/01 | — | < 200 | — | — | — | — | — | < 5 | < 5 | < 5 | < 5 | < 5 | 25 | < 5 | — | < 10 | — | — | < 5 | 92 | 1,800 | < 5 |
| | 11/19/01 | — | < 200 | — | — | — | — | — | < 5 | < 5 | < 5 | < 5 | < 5 | 20 | < 5 | — | < 10 | — | — | < 5 | 78 | 1,900 | < 5 |
| | 01/02/02 | < 1.1 | < 19 | < 0.80 | < 1.9 | — | — | < 26 | < 1.2 | < 0.48 | < 0.46 | < 0.57 | < 0.60 | 18 | 0.75 J | < 21 | < 0.97 | < 1.5 | < 0.90 | < 0.56 | 78 | 1,900 | < 1.1 |
| | 03/27/02 | < 2.2 | < 41 | < 1.6 | < 3.8 | — | < 1.7 | < 51 | < 2.3 | < 0.96 | < 0.91 | < 1.2 | < 1.2 | 19 | < 1.4 | < 41 | 4.0 J | < 2.9 | < 1.8 | < 1.2 | 67 | 1,800 | < 2.2 |
| | 06/11/02 | < 1.1 | < 21 | < 0.80 | < 1.9 | — | < 1.7 | < 26 | < 1.2 | < 0.48 | < 0.46 | < 0.57 | < 0.60 | 19 | < 0.70 | < 21 | < 0.97 | < 1.5 | < 0.90 | < 0.57 | 64 | 1,500 | < 1.1 |
| | 09/17/02 | < 2.2 | < 41 | < 1.6 | < 3.8 | — | < 1.7 | < 51 | < 2.3 | < 0.96 | < 0.91 | < 1.2 | < 1.2 | 16 | < 1.4 | < 41 | < 2.0 | < 2.9 | < 1.8 | < 1.2 | 67 | 2,000 | < 2.2 |
| | 12/16/02 | < 4 | < 40 | < 1 | < 4 | — | < 1 | < 40 | < 1 | < 1 | 2.2 | < 1 | < 1 | 7.9 | < 1 | < 40 | < 4 | < 4 | < 1 | < 1 | 40 | 680 | 1.7 |
| | 03/17/03 | < 1.1 | < 21 | < 0.8 | < 1.9 | — | < 0.83 | < 26 | < 1.2 | < 0.48 | 1.0 J | < 0.57 | < 0.60 | 7.5 | < 0.70 | < 21 | 1.3 J | < 1.5 | < 0.90 | < 0.57 | 46 | 1,100 | < 1.1 |
| dup | 03/17/03 | < 1.1 | < 21 | < 0.8 | < 1.9 | — | < 0.83 | < 26 | < 1.2 | < 0.48 | 1.0 J | < 0.57 | < 0.60 | 7.5 | < 0.70 | < 21 | 1.3 J | < 1.5 | < 0.90 | < 0.57 | 45 | 1,100 | < 1.1 |
| | 06/10/03 | < 1.1 | < 21 | < 0.8 | < 1.9 | — | < 0.83 | < 26 | < 1.2 | 0.50 J | 0.9 J | < 0.57 | < 0.60 | 7.4 | < 0.70 | < 21 | < 0.97 | < 1.5 | < 0.90 | < 0.57 | 53 | 1,500 | 1.5 J |
| | 09/10/03 | < 1.1 | < 21 | < 0.8 | < 1.9 | — | < 0.83 | < 26 | < 1.2 | 0.50 J | < 0.46 | < 0.57 | < 0.60 | 6.0 | < 0.70 | < 21 | < 0.97 | < 1.5 | < 0.90 | 0.75 J | 62 | 1,700 | 1.6 J |
| | 12/05/03 | < 0.44 | < 8.2 | < 0.32 | < 0.76 | — | < 0.34 | < 11 | < 0.46 | 0.20 J | 2.9 | < 0.23 | 0.40 J | 8.8 | 0.68 J | < 8.2 | < 0.39 | < 0.57 | < 0.36 | 0.30 J | 58 | 1,100 | 2.1 |
| | 03/16/04 | < 1.1 | < 21 | < 0.8 | < 1.9 | — | < 0.83 | < 26 | < 1.2 | 0.55 J | 0.55 J | < 0.57 | < 0.60 | 5.2 | < 0.70 | < 21 | < 0.97 | < 1.5 | < 0.90 | 0.65 J | 47 | 1,500 | < 1.1 |
| MW-12 | 07/12/01 | — | — | — | — | — | — | — | < 4.4 | < 2.4 | < 2.3 | < 2.9 | < 3.0 | 170 | 5.0 J | — | < 4.9 | — | — | < 2.8 | 200 | 6,100 | < 5.3 |
| | 08/27/01 | — | — | — | — | — | — | — | < 25 | < 25 | < 25 | < 25 | < 25 | 150 | < 25 | — | < 25 | — | — | < 25 | 160 | 6,000 | < 25 |
| | 09/24/01 | — | < 200 | — | — | — | — | — | < 5 | < 5 | < 5 | < 5 | < 5 | 52 | < 5 | — | < 10 | — | — | < 5 | 86 | 2,400 | < 5 |
| | 10/15/01 | — | 9,300 | — | — | — | — | — | < 5 | < 5 | < 5 | < 5 | < 5 | 23 | < 5 | — | < 10 | — | — | < 5 | 43 | 1,500 | < 5 |
| | 10/15/01 | — | 8,800 | — | — | — | — | — | < 5 | < 5 | < 5 | < 5 | < 5 | 22 | < 5 | — | < 10 | — | — | < 5 | 40 | 1,600 | < 5 |
| | 10/22/01 | — | 7,500 | — | — | — | — | — | < 5 | < 5 | < 5 | < 5 | < 5 | 48 | < 5 | — | < 10 | — | — | < 5 | 66 | 2,600 | < 5 |
| | 10/22/01 | — | 8,400 | — | — | — | — | — | < 5 | < 5 | < 5 | < 5 | < 5 | 39 | < 5 | — | < 10 | — | — | < 5 | 62 | 2,400 | < 5 |
| | 10/29/01 | — | 4,900 | — | — | — | — | — | < 5 | < 5 | < 5 | < 5 | < 5 | 61 | < 5 | — | < 10 | — | — | < 5 | 76 | 2,300 | < 5 |
| | 10/29/01 | — | 4,500 | — | — | — | — | — | < 5 | < 5 | < 5 | < 5 | < 5 | 60 | < 5 | — | < 10 | — | — | < 5 | 70 | 2,100 | < 5 |
| | 11/19/01 | — | 1,900 | — | — | — | — | — | < 10 | < 10 | < 10 | < 10 | < 10 | 190 | < 10 | — | < 20 | — | — | < 10 | 210 | 3,300 | < 10 |
| | 01/03/02 | < 0.44 | 19 J | 1.2 | < 0.76 | — | — | < 11 | 2.6 | 0.22 J | 0.52 J | < 0.23 | 1.1 | 340 | 3.8 | < 8.2 | < 0.39 | < 0.57 | < 0.36 | < 0.23 | 72 | 440 | < 0.43 |

## Table D-6

## VOCs Detected in Groundwater Samples from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | Benzene | Toluene | Ethyl-benzene | Total Xylenes | Isopropyl-benzene | n-propyl-benzene | Styrene | 1,3,5-TMB | 1,2,4-TMB | 4-isopropyl-toluene | Chloro-benzene | 1,4-Dichloro benzene | 2-Nitro-propane | 1,2-Dichloro-propane | 1,2,3-TCP | 2-Chloro-toluene | 4-Chloro-toluene | *sec*-butyl-benzene | *n*-butyl-benzene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-12 | 03/27/02 | < 1.1 | < 0.98 | < 1.3 | < 2.2 | < 0.68 | < 0.98 | < 0.95 | < 1.3 | < 1.5 | < 1.3 | < 0.94 | < 0.98 | < 2.4 | < 1.3 | < 2.2 | < 1.2 | < 1.1 | < 1.3 | < 2.3 |
| dup | 03/27/02 | < 1.1 | < 0.98 | < 1.3 | < 2.2 | < 0.68 | < 0.98 | < 0.95 | < 1.3 | < 1.5 | < 1.3 | < 0.94 | < 0.98 | < 2.4 | < 1.3 | < 2.2 | < 1.2 | < 1.1 | < 1.3 | < 2.3 |
| | 06/11/02 | < 1.1 | < 0.98 | < 1.3 | < 2.2 | < 0.68 | < 0.98 | < 0.95 | < 1.3 | < 1.5 | < 1.3 | < 0.94 | < 0.98 | < 2.4 | < 1.3 | < 2.2 | < 1.2 | < 1.1 | < 1.3 | < 2.3 |
| dup | 06/11/02 | < 1.1 | < 0.98 | < 1.3 | < 2.2 | < 0.68 | < 0.98 | < 0.95 | < 1.3 | < 1.5 | < 1.3 | < 0.94 | < 0.98 | < 2.4 | < 1.3 | < 2.2 | < 1.2 | < 1.1 | < 1.3 | < 2.3 |
| | 09/17/02 | < 1.1 | < 0.98 | < 1.3 | < 2.2 | <0.68 | < 0.98 | < 0.95 | < 1.3 | < 1.5 | < 1.3 | < 0.94 | < 0.98 | < 2.4 | < 1.3 | < 2.2 | < 1.2 | < 1.1 | < 1.3 | < 2.3 |
| | 12/16/02 | < 5 | < 5 | < 5 | < 5 | < 20 | < 20 | < 5.0 | < 20 | < 20 | < 20 | < 5 | < 20 | < 50 | < 5 | < 5 | < 20 | < 20 | < 20 | < 20 |
| | 03/17/03 | < 0.53 | < 0.49 | < 0.65 | < 1.1 | < 0.34 | < 0.49 | < 0.48 | < 0.61 | < 0.71 | < 0.64 | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.52 | < 0.64 | < 1.2 |
| | 06/10/03 | < 1.1 | < 0.98 | < 1.3 | < 2.2 | < 0.68 | < 0.98 | < 0.95 | < 1.3 | < 1.5 | < 1.3 | < 0.94 | < 0.98 | < 2.4 | < 1.3 | < 2.2 | < 1.2 | < 1.1 | < 1.3 | < 2.3 |
| | 09/10/03 | < 1.1 | 1.0 JB | < 1.3 | < 2.2 | < 0.68 | < 0.98 | < 0.95 | < 1.3 | < 1.5 | < 1.3 | < 0.94 | < 0.98 | < 2.4 | < 1.3 | < 2.2 | < 1.2 | < 1.1 | < 1.3 | < 2.3 |
| | 12/05/03 | < 0.53 | < 0.49 | < 0.65 | < 1.1 | < 0.34 | < 0.49 | < 0.48 | < 0.61 | < 0.71 | < 0.64 | 0.50 J | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.52 | < 0.64 | < 1.2 |
| | 03/16/04 | < 0.42 | < 0.39 | < 0.52 | < 1.2 | < 0.28 | < 0.40 | < 0.38 | < 0.49 | < 0.57 | < 0.52 | 0.44 J | < 0.40 | < 0.96 | < 0.50 | < 0.86 | < 0.45 | < 0.42 | < 0.51 | < 0.89 |
| MW-13 | 03/31/03 | < 25 | 21,000 | 1,600 | 6,900 | < 100 | < 100 | < 25 | 140 | 260 | < 100 | < 25 | < 100 | < 250 | < 25 | < 25 | < 100 | < 100 | < 100 | < 100 |
| | 05/14/03 | < 11 | 21,000 | 1,900 | 8,100 | 55 J | 93 J | < 9.5 | 170 J | 320 | < 13 | < 9.4 | < 9.8 | < 24 | < 13 | < 22 | < 12 | < 11 | < 13 | < 23 |
| | 06/11/03 | < 11 | 20,000 | 2,300 | 9,800 | 77 J | 120 J | < 9.5 | 210 | 370 | < 13 | < 9.4 | < 9.8 | < 24 | < 13 | < 22 | < 12 | < 11 | < 13 | < 23 |
| dup | 06/11/03 | < 11 | 22,000 | 2,500 | 10,600 | 82 J | 130 J | < 9.5 | 240 | 410 | < 13 | < 9.4 | < 9.8 | < 24 | < 13 | < 22 | < 12 | < 11 | < 13 | < 23 |
| | 09/11/03 | 5.5 J | 25,000 | 2,400 | 10,200 | 73 J | < 4.9 | < 4.8 | 230 | 400 | < 6.4 | < 4.7 | < 4.9 | < 12 | < 6.2 | < 11 | < 5.6 | < 5.2 | < 6.4 | < 12 |
| | 12/04/03 | 6.5 J | 29,000 | 2,900 | 12,300 | 100 | 160 | < 4.8 | 280 | 510 | < 6.4 | < 4.7 | < 4.9 | < 12 | < 6.2 | < 11 | < 5.6 | < 5.2 | < 6.4 | < 12 |
| | 03/15/04 | 7 J | 32,000 | 2,900 | 14,000 | 110 | 170 | 84 | 280 | 540 | < 6.4 | < 4.7 | < 4.9 | < 12 | < 6.2 | < 11 | < 5.6 | < 5.2 | < 6.4 | < 12 |
| | 06/10/04 | < 11 | 25,000 | 2,300 | 10,300 | 71 J | 100 J | < 9.5 | 190 J | 310 | < 13 | < 9.4 | < 9.8 | < 24 | < 13 | < 22 | < 12 | < 11 | < 13 | < 23 |
| MW-14 | 10/30/03 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 12/04/03 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 03/16/04 | < 0.11 | 0.21 J | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 06/10/04 | < 0.11 | 0.10 J | < 0.13 | 0.31 J | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| MW-15 | 10/30/03 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 12/04/03 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 03/16/04 | < 0.11 | 0.17 J | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 06/10/04 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| MW-16 | 10/30/03 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 12/05/03 | < 0.11 | < 0.098 | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 03/16/04 | < 0.11 | 0.12 J | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 06/10/04 | < 0.11 | 0.15 J | < 0.13 | < 0.22 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| MW-17 | 10/30/03 | 15 | 5.8 | 260 | 1,616 | 7.1 | 4.7 | < 0.19 | 11 | 22 | 4.0 | < 0.19 | < 0.20 | < 0.48 | < 0.25 | < 0.43 | < 0.23 | < 0.21 | < 0.26 | < 0.45 |
| | 12/04/03 | 11 | 5.8 | 180 | 1,412 | 5.4 | 3.6 J | < 0.19 | 9.5 | 17 | 4.1 | < 0.19 | < 0.20 | < 0.48 | < 0.25 | < 0.43 | < 0.23 | < 0.21 | < 0.26 | < 0.45 |
| | 03/15/04 | 21 | 9.6 | 170 | 1,428 | 8.1 | 6.4 | < 0.095 | 14 | 29 | 5.9 | < 0.094 | 0.12 J | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 06/10/04 | 14 | 5.4 | 190 | 2,114 | 7.3 | 5.1 | < 0.095 | 13 | 22 | 3.3 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| MW-18 | 10/30/03 | < 2.1 | 120 | 14 | 93 | < 1.4 | < 2.0 | < 1.9 | < 2.5 | < 2.9 | < 2.6 | < 1.9 | < 2.0 | < 4.8 | < 2.5 | < 4.3 | < 2.3 | < 2.1 | < 2.6 | < 4.5 |
| | 12/04/03 | 1.6 J | 71 | 9 | 50 | < 0.68 | < 0.98 | < 0.95 | < 1.3 | < 1.5 | < 1.3 | 1.1 J | < 0.98 | < 2.4 | < 1.3 | < 2.2 | < 1.2 | < 1.1 | < 1.3 | < 2.3 |
| dup | 12/04/03 | 1.6 J | 68 | 8.5 | 48 | < 0.68 | < 0.98 | < 0.95 | < 1.3 | < 1.5 | < 1.3 | < 0.94 | < 0.98 | < 2.4 | < 1.3 | < 2.2 | < 1.2 | < 1.1 | < 1.3 | < 2.3 |
| | 03/16/04 | 0.17 J | 1.4 | 1.7 | 6.4 | < 0.068 | < 0.098 | < 0.095 | 0.13 J | 0.28 J | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 06/10/04 | < 0.11 | 0.42 J | 0.83 | 3.6 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| MW-19 | 02/20/04 | 3.1 J | 180 | 13 | 73 | 0.32 J | 0.22 J | < 0.095 | 0.66 J | 1.3 J | 0.5 J | < 0.094 | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 03/16/04 | 3.0 | 110 | 9.5 | 42 | 0.24 J | 0.15 J | < 0.095 | 0.47 J | 0.90 J | 0.42 J | 0.23 J | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| dup | 03/16/04 | 3.0 | 99 | 10 | 44 | 0.26 J | 0.18 J | < 0.095 | 0.50 J | 1.0 J | 0.45 J | 0.23 J | < 0.098 | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |
| | 06/10/04 | 1.6 | 1.3 | 0.47 J | 2.06 | < 0.068 | < 0.098 | < 0.095 | < 0.13 | < 0.15 | < 0.13 | < 0.094 | 0.10 J | < 0.24 | < 0.13 | < 0.22 | < 0.12 | < 0.11 | < 0.13 | < 0.23 |

## Table D-6

## VOCs Detected in Groundwater Samples from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | 1,2,4-TCB | Acetone | Carbon Disulfide | HCBD | CFC 113 | CFC 12 | MIBK | Chloro-ethane | Chloro-form | 1,1-DCA | 1,2-DCA | 1,1-DCE | cis-1,2-DCE | trans-1,2-DCE | MEK | Methylene Chloride | Naphth-alene | Hexane | TCA | TCE | PCE | Vinyl Chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-12 | 03/27/02 | < 2.2 | < 41 | < 1.6 | < 3.8 | — | < 1.7 | < 51 | < 2.3 | < 0.96 | < 0.91 | < 1.2 | 7.7 | 2,700 | 12 | < 41 | < 2.0 | < 2.9 | < 1.8 | < 1.2 | 640 | 2,100 | < 2.2 |
| dup | 03/27/02 | < 2.2 | < 41 | < 1.6 | < 3.8 | — | < 1.7 | < 51 | < 2.3 | < 0.96 | < 0.91 | < 1.2 | 8.5 | 2,800 | 13 | < 41 | < 2.0 | < 2.9 | < 1.8 | < 1.2 | 660 | 2,300 | < 2.2 |
| | 06/11/02 | < 2.2 | < 41 | < 1.6 | < 3.8 | — | < 1.7 | < 51 | < 2.3 | < 0.96 | < 0.91 | < 1.2 | 5.5 | 2,000 | 9.9 | < 41 | < 2.0 | < 2.9 | < 1.8 | < 1.2 | 600 | 2,400 | < 2.2 |
| dup | 06/11/02 | < 2.2 | < 41 | < 1.6 | < 3.8 | — | < 1.7 | < 51 | < 2.3 | < 0.96 | < 0.91 | < 1.2 | 5.6 | 2,000 | 9.5 | < 41 | < 2.0 | < 2.9 | < 1.8 | < 1.2 | 580 | 2,400 | < 2.2 |
| | 09/17/02 | < 2.2 | < 41 | < 1.6 | <3.8 | — | < 1.7 | <51 | < 2.3 | < 0.96 | < 0.91 | < 1.2 | 9.4 | 3,500 | 14 | <41 | < 2.0 | < 2.9 | < 1.8 | < 1.2 | 720 | 1,300 | <2.2 |
| | 12/16/02 | < 20 | < 200 | < 5 | < 20 | — | < 5 | < 200 | < 5 | < 5 | < 5 | < 5 | 9.3 | 3,600 | 17 | < 200 | < 20 | < 20 | < 5 | < 5 | 1,300 | 430 | < 5 |
| | 03/17/03 | < 1.1 | < 21 | < 0.8 | < 1.9 | — | < 0.83 | < 26 | < 1.2 | < 0.48 | < 0.46 | < 0.57 | 5.5 | 2,500 | 14 | < 21 | 1.5 J | < 1.5 | < 0.90 | < 0.57 | 1,200 | 460 | < 1.1 |
| | 06/10/03 | < 2.2 | < 41 | < 1.6 | < 3.8 | — | < 1.7 | < 51 | < 2.3 | < 0.96 | < 0.91 | < 1.2 | 4.8 J | 2,200 | 20 | < 41 | < 2.0 | < 2.9 | < 1.8 | < 1.2 | 1,500 | 2,100 | < 2.2 |
| | 09/10/03 | < 2.2 | < 41 | < 1.6 | < 3.8 | — | < 1.7 | < 51 | < 2.3 | < 0.96 | < 0.91 | < 1.2 | 4.5 J | 2,400 | 16 | < 41 | < 2.0 | < 2.9 | < 1.8 | < 1.2 | 3,500 | 900 | 12 |
| | 12/05/03 | < 1.1 | < 21 | < 0.8 | < 1.9 | — | < 0.83 | < 26 | < 1.2 | < 0.48 | < 0.46 | < 0.57 | 4.7 | 2,000 | 20 | < 21 | 1.3 J | < 1.5 | < 0.90 | < 0.57 | 2,100 | 1,500 | 37 |
| | 03/16/04 | < 0.88 | < 17 | < 0.64 | < 1.6 | — | < 0.67 | < 21 | < 0.91 | < 0.39 | < 0.37 | < 0.46 | 4.8 | 2,500 | 25 | < 17 | < 0.78 | < 1.2 | < 0.72 | < 0.46 | 1,200 | 2,100 | 57 |
| MW-13 | 03/31/03 | < 100 | < 1,000 | < 25 | < 100 | — | < 25 | < 1,000 | 260 | < 25 | 2,700 | < 25 | 320 | 23,000 | < 25 | < 1,000 | < 100 | < 100 | 33 | 2,900 | < 25 | < 25 | 1,100 |
| | 05/14/03 | < 22 | < 410 | < 16 | < 38 | — | < 17 | < 510 | 440 | < 9.6 | 3,600 | < 12 | 440 | 25,000 | 33 J | < 410 | 23 J | < 29 | 47 J | 3,700 | < 12 | < 11 | 1,200 |
| | 06/11/03 | < 22 | < 410 | 20 J | < 38 | — | < 17 | < 510 | 490 | < 9.6 | 3,900 | < 12 | 440 | 26,000 | 25 J | < 410 | 25 J | < 29 | 38 J | 3,600 | < 12 | < 11 | 1,200 |
| dup | 06/11/03 | < 22 | < 410 | 58 J | < 38 | — | < 17 | < 510 | 470 | < 9.6 | 4,000 | < 12 | 450 | 29,000 | 28 J | < 410 | 30 J | < 29 | 47 J | 3,800 | < 12 | < 11 | 1,300 |
| | 09/11/03 | < 11 | < 210 | < 8 | < 19 | — | < 8.3 | < 260 | 490 | < 4.8 | 4,400 | < 5.7 | 460 | 30,000 | 20 J | < 210 | 25 J | < 15 | 25 J | 4,100 | < 5.9 | < 5.5 | 1,400 |
| | 12/04/03 | < 11 | < 210 | < 8 | < 19 | — | < 8.3 | < 260 | 380 | < 4.8 | 5,600 | < 5.7 | 490 | 33,000 | 66 J | < 210 | 25 J | < 15 | 53 | 3,300 | < 5.9 | < 5.5 | 1,800 |
| | 03/15/04 | < 11 | < 210 | < 8 | < 19 | — | < 8.3 | < 260 | 310 | < 4.8 | 6,200 | < 5.7 | 490 | 38,000 | 32 | < 210 | 26 J | < 15 | 63 | 2,900 | < 5.9 | < 5.5 | 1,700 |
| | 06/10/04 | < 22 | < 410 | < 16 | < 28 | — | < 17 | < 180 | 260 | < 9.6 | 5,300 | < 12 | 470 | 31,000 | 26 J | < 190 | 58 J | < 29 | 38 J | 2,800 | < 12 | < 11 | 2,200 |
| MW-14 | 10/30/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 12/04/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 03/16/04 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 06/10/04 | < 0.22 | < 4.1 | < 0.16 | < 0.28 | — | < 0.17 | < 1.8 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 1.9 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| MW-15 | 10/30/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | 0.14 J | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | 0.29 J |
| | 12/04/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | 0.14 J | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | 0.35 J |
| | 03/16/04 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | 0.14 J | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | 0.24 J |
| | 06/10/04 | < 0.22 | < 4.1 | < 0.16 | < 0.28 | — | < 0.17 | < 1.8 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 1.9 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | 0.23 J |
| MW-16 | 10/30/03 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | 0.27 J | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 12/05/03 | < 0.22 | < 4.1 | 0.46 J | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 03/16/04 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| | 06/10/04 | < 0.22 | < 4.1 | < 0.16 | < 0.28 | — | < 0.17 | < 1.8 | < 0.23 | < 0.096 | < 0.091 | < 0.12 | < 0.12 | < 0.12 | < 0.14 | < 1.9 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | < 0.22 |
| MW-17 | 10/30/03 | < 0.44 | < 8.2 | < 0.32 | < 0.76 | — | < 0.34 | < 11 | 190 | 0.34 J | 4.3 | 2.1 | < 0.24 | 2.8 | < 0.28 | < 8.2 | 1.5 J | < 0.57 | < 0.36 | < 0.23 | < 0.24 | < 0.22 | 9.1 |
| | 12/04/03 | < 0.44 | < 8.2 | < 0.32 | < 0.76 | — | < 0.34 | < 11 | 140 | < 0.20 | 4.1 | 1.4 | < 0.24 | < 0.24 | < 0.28 | < 8.2 | 0.68 J | < 0.57 | < 0.36 | < 0.23 | < 0.24 | < 0.22 | 0.54 J |
| | 03/15/04 | < 0.22 | < 4.1 | 0.43 J | < 0.38 | — | < 0.17 | < 5.1 | 230 | 0.34 J | 5.3 | 2.5 | < 0.12 | 13 | < 0.14 | < 4.1 | 2.7 | 0.85 J | 0.76 J | < 0.12 | < 0.12 | < 0.11 | 57 |
| | 06/10/04 | < 0.22 | < 4.1 | < 0.16 | < 0.28 | — | < 0.17 | < 1.8 | 180 | < 0.096 | 4.1 | 1.9 | < 0.12 | 0.32 J | < 0.14 | < 1.9 | 1.4 J | 0.54 J | 0.33 J | < 0.12 | < 0.12 | < 0.11 | 0.93 |
| MW-18 | 10/30/03 | < 4.4 | < 82 | < 3.2 | < 7.6 | — | < 3.4 | < 110 | 14 | < 2.0 | 12 | < 2.3 | 6.2 J | 5,400 | < 2.8 | < 82 | < 3.9 | < 5.7 | < 3.6 | < 2.3 | < 2.4 | < 2.2 | 7,900 |
| | 12/04/03 | < 2.2 | < 41 | < 1.6 | < 3.8 | — | < 1.7 | < 51 | 23 | < 0.96 | 15 | < 1.2 | 3.7 J | 3,500 | 3.4 J | < 41 | < 2.0 | < 2.9 | < 1.8 | < 1.2 | < 1.2 | < 1.1 | 4,700 |
| dup | 12/04/03 | < 2.2 | < 41 | < 1.6 | < 3.8 | — | < 1.7 | < 51 | 20 | < 0.96 | 14 | < 1.2 | 3.7 J | 3,700 | 4.5 J | < 41 | < 2.0 | < 2.9 | < 1.8 | < 1.2 | < 1.2 | < 1.1 | 5,400 |
| | 03/16/04 | < 0.22 | < 4.1 | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | 1.8 | < 0.096 | 4.9 | < 0.12 | < 0.12 | 16 | < 0.14 | < 4.1 | < 0.20 | < 0.29 | 0.44 J | < 0.12 | < 0.12 | < 0.11 | 23 |
| | 06/10/04 | < 0.22 | < 4.1 | < 0.16 | < 0.28 | — | < 0.17 | < 1.8 | 0.91 | < 0.096 | 2.7 | < 0.12 | < 0.12 | 5.0 | < 0.14 | < 1.9 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | 6.6 |
| MW-19 | 02/20/04 | < 0.22 | 5.2 J | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | 11 | < 0.096 | 11 | < 0.12 | < 0.12 | 0.51 | < 0.14 | < 4.1 | 0.23 J | < 0.29 | 1.5 | < 0.12 | < 0.12 | < 0.11 | 3 |
| | 03/16/04 | < 0.22 | 5.3 J | < 0.16 | < 0.38 | — | < 0.17 | < 5.1 | 5.8 | < 0.096 | 9.2 | < 0.12 | < 0.12 | 0.32 J | < 0.14 | < 4.1 | < 0.20 | < 0.29 | 1.6 | < 0.12 | < 0.12 | < 0.11 | 12 |
| dup | 03/16/04 | < 0.22 | 5.3 J | < 0.16 | < 0.28 | — | < 0.17 | < 5.1 | 6.1 | < 0.096 | 9.6 | < 0.12 | < 0.12 | 0.39 J | < 0.14 | < 4.1 | < 0.20 | < 0.29 | 1.9 | < 0.12 | < 0.12 | < 0.11 | 12 |
| | 06/10/04 | < 0.22 | < 4.1 | 0.16 J | < 0.28 | — | < 0.17 | < 1.8 | < 0.23 | < 0.096 | 1.4 | < 0.12 | < 0.12 | 2.7 | < 0.14 | < 1.9 | < 0.20 | < 0.29 | < 0.18 | < 0.12 | < 0.12 | < 0.11 | 42 |

## Table D-6

## VOCs Detected in Groundwater Samples from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | Benzene | Toluene | Ethyl-benzene | Total Xylenes | Isopropyl-benzene | n-propyl-benzene | Styrene | 1,3,5-TMB | 1,2,4-TMB | 4-isopropyl-toluene | Chloro-benzene | 1,4-Dichloro benzene | 2-Nitro-propane | 1,2-Dichloro-propane | 1,2,3-TCP | 2-Chloro-toluene | 4-Chloro-toluene | *sec*-butyl-benzene | *n*-butyl-benzene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| INJ-1 | 07/09/01 | — | — | — | — | — | — | — | — | — | — | < 0.47 | — | — | < 0.62 | — | — | — | — | — |
| | 11/20/01 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | — | — | — | — | — | — | <0.5 | — | — | <0.5 | — | — | — | — | — |
| | 06/11/02 | < 0.21 | < 0.20 | < 0.26 | < 0.6 | < 0.14 | < 0.20 | < 0.19 | < 0.25 | < 0.29 | < 0.26 | < 0.19 | < 0.20 | < 0.48 | < 0.26 | < 0.43 | < 0.23 | < 0.21 | < 0.26 | < 0.45 |
| INJ-2 | 07/09/01 | — | — | — | — | — | — | — | — | — | — | < 2.4 | — | — | < 3.1 | — | — | — | — | — |
| | 10/15/01 | < 0.5 | < 0.5 | 1.6 | 6 | — | — | — | — | — | — | <0.5 | — | — | <0.5 | — | — | — | — | — |
| | 10/22/01 | < 0.5 | 0.53 | 2.9 | 11.3 | — | — | — | — | — | — | <0.5 | — | — | <0.5 | — | — | — | — | — |
| | 10/29/01 | < 0.5 | 0.65 | 1.4 | 6.8 | — | — | — | — | — | — | <0.5 | — | — | <0.5 | — | — | — | — | — |
| | 11/19/01 | < 0.5 | < 0.5 | 0.89 | 4.4 | — | — | — | — | — | — | <0.5 | — | — | <0.5 | — | — | — | — | — |
| | 06/11/02 | <1.1 | < 0.98 | < 1.3 | < 2.9 | < 0.68 | < 0.98 | < 0.95 | < 1.3 | < 1.5 | < 1.3 | < 0.94 | < 0.98 | < 2.4 | < 1.3 | < 2.2 | < 1.2 | < 1.1 | < 1.3 | < 2.3 |
| | 06/10/03 | <1.1 | 1.1 JB | < 1.3 | < 2.9 | < 0.68 | < 0.98 | 1.0 J | < 1.3 | < 1.5 | < 1.3 | < 0.94 | < 0.98 | < 2.4 | < 1.3 | < 2.2 | < 1.2 | < 1.1 | < 1.3 | < 2.3 |
| INJ-3 | 07/09/01 | — | — | — | — | — | — | — | — | — | — | < 0.47 | — | — | < 0.62 | — | — | — | — | — |
| | 11/20/01 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | — | — | — | — | — | — | <1.0 | — | — | <1.0 | — | — | — | — | — |
| | 06/11/02 | < 0.53 | < 0.49 | < 0.65 | < 1.5 | < 0.34 | < 0.49 | < 0.48 | < 0.61 | < 0.71 | < 0.64 | < 0.47 | < 0.49 | < 1.2 | < 0.62 | < 1.1 | < 0.56 | < 0.45 | < 0.64 | < 1.2 |
| | 12/17/02 | 1.3 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.50 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 5 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| dup | 12/17/02 | 1.2 | < 0.5 | < 0.5 | < 0.5 | < 2 | < 2 | < 0.50 | < 2 | < 2 | < 2 | < 0.5 | < 2 | < 6 | < 0.5 | < 0.5 | < 2 | < 2 | < 2 | < 2 |
| | 06/10/03 | < 0.21 | 0.80 JB | < 0.26 | < 0.44 | < 0.14 | < 0.2 | 0.20 J | < 0.25 | < 0.29 | < 0.26 | < 0.19 | < 0.2 | < 0.48 | < 0.25 | < 0.43 | < 0.23 | < 0.21 | < 0.26 | < 0.45 |
| Minimum Detection | | 0.17 J | 0.10 J | 0.12 J | 0.12 J | 0.24 J | 0.15 J | 0.20 J | 0.13 J | 0.28 J | 0.42 J | 0.23 J | 0.10 J | 28 | 0.17 J | 2 E | 3.3 | 4 J | 0.75 J | 2 J |
| Maximum Detection | | 140 | 32,000 | 2,900 | 14,000 | 290 | 400 | 84 | 280 | 540 | 7 J | 1.1 J | 0.12 J | 28 | 2.3 | 2 E | 7 E | 4 J | 3 J | 11 |
| Analytes Quantitated | | 358 | 358 | 358 | 358 | 323 | 323 | 325 | 323 | 323 | 323 | 363 | 323 | 308 | 363 | 323 | 323 | 323 | 323 | 323 |
| Number of Detections | | 116 | 177 | 99 | 105 | 68 | 68 | 4 | 70 | 70 | 38 | 6 | 4 | 1 | 27 | 1 | 2 | 1 | 18 | 2 |
| Frequency of Detection | | 32% | 49% | 28% | 29% | 21% | 21% | 1% | 22% | 22% | 12% | 2% | 1% | 0.3% | 7% | 0.3% | 0.6% | 0.3% | 6% | 0.6% |
| Mimimum Detection Limit | | 0.11 | 0.098 | 0.098 | 0.19 | 0.068 | 0.097 | 0.094 | 0.13 | 0.15 | 0.13 | 0.094 | 0.097 | 0.24 | 0.13 | 0.22 | 0.12 | 0.089 | 0.13 | 0.20 |
| Maximum Detection Limit | | 50 | 25 | 25 | 25 | 200 | 200 | 50 | 200 | 200 | 200 | 50 | 200 | 1,000 | 50 | 50 | 200 | 200 | 200 | 200 |

NOTE:
All results in µg/L.
1995 analyses performed using EPA Method 8240A.
Analyses since 1996 performed using EPA Method 8260A.
Only detected VOCs shown.
< = less than the reporting limit shown.
— = not quantitated.
dup = duplicate sample.
NA = not available.
B = the analyte was also detected in an associated blank.
J = the associated numerical value is an estimated quantity based on data review or laboratory estimate below the MRL but above the MDL.
Y = the chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z = the chromatographic fingerprint does not resemble a petroleum product.
Results from June 2000 and from December 2000 onward are reported relative to the method detection limits (MDLs) due to elevated method reporting limits.
E = laboratory estimated concentration.
1,2,4-TCB = 1,2,4-trichlorobenzene.
1,2,4-TMB = 1,2,4-trimethylbenzene.
1,3,5-TMB = 1,3,5-trimethylbenzene.
1,2,3-TCP = 1,2,3-trichloropropane.

## Table D-6

## VOCs Detected in Groundwater Samples from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | 1,2,4-TCB | Acetone | Carbon Disulfide | HCBD | CFC 113 | CFC 12 | MIBK | Chloro-ethane | Chloro-form | 1,1-DCA | 1,2-DCA | 1,1-DCE | cis-1,2-DCE | trans-1,2-DCE | MEK | Methylene Chloride | Naphth-alene | Hexane | TCA | TCE | PCE | Vinyl Chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| INJ-1 | 07/09/01 | — | — | — | — | — | — | — | 25 | < 0.48 | 9.3 | < 0.58 | 0.65 J | 29 | 1.5 J | — | < 0.97 | — | — | < 0.56 | 97 | 620 | 2.9 |
| | 11/20/01 | — | 1,900 | — | — | — | — | — | 2.8 | < 0.5 | 1.2 | < 0.50 | < 0.50 | 8.1 | 0.71 J | — | < 1.0 | — | — | < 0.5 | 30 | 17 | <0.5 |
| | 06/11/02 | < 0.44 | 20 J | < 0.32 | < 0.76 | — | < 1.7 | < 11 | < 0.46 | < 0.20 | 0.60 J | < 0.23 | 1.9 | 520 | 3.9 | < 8.2 | < 0.39 | < 0.57 | < 0.36 | < 0.23 | 3.7 | 8.5 | 0.44 J |
| INJ-2 | 07/09/01 | — | — | — | — | — | — | — | < 4.4 | < 2.4 | < 2.3 | < 2.9 | < 3.0 | 200 | 5.3 J | — | < 4.9 | — | — | < 2.8 | 240 | 6,300 | 5.5 J |
| | 10/15/01 | — | 780 | — | — | — | — | — | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 1.1 | <0.5 | — | <1.0 | — | — | <0.5 | 1.8 | 33 | <0.5 |
| | 10/22/01 | — | 210 | — | — | — | — | — | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 2 | <0.5 | — | <1.0 | — | — | <0.5 | 2.8 | 57 | <0.5 |
| | 10/29/01 | — | 140 | — | — | — | — | — | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 2.9 | <0.5 | — | <1.0 | — | — | <0.5 | 4.3 | 68 | <0.5 |
| | 11/19/01 | — | 200 | — | — | — | — | — | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 7.3 | 0.53 | — | <1.0 | — | — | <0.5 | 9.2 | 230 | <0.5 |
| | 06/11/02 | < 2.2 | < 41 | < 1.6 | < 3.8 | — | < 1.7 | < 51 | < 2.3 | < 0.96 | < 0.91 | < 1.2 | 5.4 | 2,100 | 16 | < 41 | < 2.0 | < 2.9 | < 1.8 | < 1.2 | 600 | 1,000 | < 2.2 |
| | 06/10/03 | < 2.2 | < 41 | < 1.6 | < 3.8 | — | < 1.7 | < 51 | < 2.3 | < 0.96 | < 0.91 | < 1.2 | 5.3 | 2,100 | 19 | < 41 | < 2.0 | < 2.9 | < 1.8 | < 1.2 | 610 | 2,700 | < 2.2 |
| INJ-3 | 07/09/01 | — | — | — | — | — | — | — | 5.9 | < 0.48 | 3.4 | < 0.58 | 0.95 J | 39 | 2.2 J | — | < 0.97 | — | — | < 0.56 | 250 | 520 | 7.3 |
| | 11/20/01 | — | <1.0 | — | — | — | — | — | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 49 | 1.2 | — | <2 | — | — | <1.0 | 130 | 670 | 1.8 |
| | 06/11/02 | < 1.1 | 25 J | < 0.80 | < 1.9 | — | < 1.7 | < 26 | < 1.2 | < 0.48 | 1.2 J | < 0.57 | 3.4 | 1,200 | 6.4 | < 21 | < 0.97 | < 1.5 | < 0.90 | < 0.57 | 240 | 530 | 180 |
| | 12/17/02 | < 2 | < 20 | 3.7 | < 2 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | 2.0 | < 0.5 | 0.53 | 250 | 5.5 | < 20 | < 2 | < 2 | < 0.5 | < 0.5 | 100 | 150 | 90 |
| dup | 12/17/02 | < 2 | < 20 | 1.4 | < 3 | — | < 0.5 | < 20 | < 0.5 | < 0.5 | 1.9 | < 0.5 | 0.6 | 270 | 5.5 | < 20 | < 2 | < 2 | < 0.5 | < 0.5 | 120 | 180 | 91 |
| | 06/10/03 | < 0.44 | < 8.2 | 0.50 J | < 0.76 | — | < 0.34 | < 11 | 2.2 | < 0.20 | 0.40 J | < 0.23 | 0.98 J | 350 | 5.1 | < 8.2 | < 0.39 | < 0.57 | < 0.36 | < 0.23 | 140 | 390 | 78 |
| Minimum Detection | | 120 | 5.2 J | 0.16 J | 3 EB | 0.7 | 0.7 J | 7 | 0.38 J | 0.10 J | 0.48 J | 0.15 J | 0.25 J | 0.13 J | 0.17 J | 17 J | 0.20 J | 0.54 J | 0.33 J | 0.30 J | 0.13 J | 0.12 J | 0.22 J |
| Maximum Detection | | 260 | 9,300 | 20 J | 3 EB | 13 J | 0.7 J | 21 | 2,000 | 31 | 6,200 | 3.2 | 490 | 38,000 | 66 | 140 | 58 J | 9 | 63 | 4,100 | 3,500 | 6,300 | 7,900 |
| Analytes Quantitated | | 323 | 351 | 323 | 323 | 9 | 280 | 326 | 362 | 362 | 362 | 362 | 362 | 362 | 362 | 327 | 362 | 324 | 309 | 362 | 362 | 362 | 362 |
| Number of Detections | | 4 | 33 | 26 | 1 | 2 | 1 | 2 | 157 | 38 | 208 | 45 | 87 | 291 | 156 | 4 | 81 | 20 | 39 | 56 | 191 | 177 | 154 |
| Frequency of Detection | | 1% | 9% | 8% | 0.3% | 22% | 0.4% | 0.6% | 43% | 10% | 57% | 12% | 24% | 80% | 43% | 1% | 22% | 6% | 13% | 15% | 53% | 49% | 43% |
| Mimimum Detection Limit | | 0.20 | 2.3 | 0.16 | 0.038 | 0.5 | 0.17 | 1.8 | 0.18 | 0.096 | 0.091 | 0.12 | 0.12 | 0.09 | 0.14 | 1.9 | 0.20 | 0.20 | 0.18 | 0.12 | 0.12 | 0.11 | 0.22 |
| Maximum Detection Limit | | 200 | 2,000 | 50 | 200 | 50 | 50 | 5,000 | 25 | 50 | 25 | 50 | 50 | 50 | 50 | 5,000 | 500 | 200 | 1,000 | 50 | 50 | 50 | 50 |

HCBD = hexachlorobutadiene.
CFC 113 = trichlorotrifluoroethane.
CFC 12 = dichlorodifluoromethane.
MIBK = 4-methyl-2-pentanone.
1,1-DCA = 1,1-dichlorethane.
1,2-DCA = 1,2-dichlorethane.
1,1-DCE = 1,1-dichlorethene.
cis-1,2-DCE = cis-1,2-dichloroethene.
trans-1,2-DCE = trans-1,2-dichloroethene.
MEK = methyl ethyl ketone (2-butanone).
TCA = 1,1,1-trichloroethane.
TCE = trichloroethene.
PCE = tetrachloroethene.

# Table D-7

## Total Petroleum Hydrocarbons in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | Gasoline | Petroleum Naphtha | Mineral Spirits | Diesel | Oil | Kerosene |
|---|---|---|---|---|---|---|---|
| MW-1 | 04/17/95 | 50 | na | na | na | na | na |
| dup | 04/17/95 | 54 | na | na | na | na | na |
| | 09/04/96 | 24.3 | < 0.05 | < 0.05 | 0.96[a] | < 0.75 | < 1 |
| | 12/10/96 | 30 | < 0.05 | < 0.05 | 0.76[a] | < 0.75 | < 1 |
| | 03/04/97 | 52 | < 0.50 | < 0.50 | 0.66[a] | < 0.75 | < 0.25 |
| | 06/27/97 | 28 | < 0.50 | < 0.50 | 0.56[a] | < 0.75 | < 0.50 |
| | 09/04/97 | 21 | < 0.05 | < 0.25 | 0.74[a] | < 0.50 | < 0.25 |
| | 12/04/97 | 27 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/06/98 | 18 | < 0.25 | <0.10 | < 0.10 | < 0.25 | < 0.10 |
| dup | 03/06/98 | 15 | < 0.25 | <0.10 | < 0.10 | < 0.25 | < 0.10 |
| | 06/18/98 | 22 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/29/98 | 14 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/15/98 | 11 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/02/99 | 14 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 06/17/99 | 18 | < 2.5 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/17/99 | 24 J | < 2.5 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/08/99 | 20 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/07/00 | 15 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 06/21/00 | 12[d] | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| dup | 06/21/00 | 12[d] | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/12/00 | 12[d] | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/07/00 | 12[d] | < 0.05 | < 0.25 | 0.49[a] | < 0.50 | < 0.25 |
| dup | 12/07/00 | 11[d] | < 0.05 | < 0.25 | 0.50[a] | < 0.50 | < 0.50 |
| | 03/15/01 | 9.1 Y | < 0.05 | < 0.25 | 0.70 L | < 0.50 | < 0.25 |
| | 07/12/01 | 6.3 Z | < 0.05 | < 0.25 | 0.71 L | < 0.25 | < 0.25 |
| | 09/24/01 | 4.2 Z | — | — | 1.1 Y | — | — |
| | 01/02/02 | 7.7 Z | — | — | 0.56 L | 0.049 J | — |
| | 03/28/02 | na | — | — | 0.50 L | < 0.50 | 3.1 L |
| | 06/11/02 | na | — | — | 0.88 L | < 0.50 | 2.1 Y |
| | 09/18/02 | na | — | — | 0.79 Z | 0.092 J | — |
| | 12/17/02 | na | — | — | 0.80 Y | < 0.59 | < 0.30 |
| | 03/20/03 | na | — | — | 0.48 Z | < 0.50 | — |
| | 06/11/03 | na | — | — | 0.63 Z | < 0.52 | 1.1 Y |
| | 09/11/03 | na | — | — | 0.74 Z | < 0.53 | < 0.27 |
| | 12/04/03 | na | — | — | 0.57 Y | < 0.53 | 0.88 Y |
| | 03/16/04 | na | — | — | 0.4 Z | < 0.50 | 0.88 Y |
| MW-2 | 04/17/95 | < 0.05 | na | na | na | na | na |
| | 09/04/96 | < 0.05 | < 0.05 | < 0.05 | 0.28[a] | < 0.75 | < 0.25 |
| | 12/10/96 | < 0.05 | < 0.05 | < 0.05 | 0.29[a] | < 0.75 | < 0.25 |
| | 03/04/97 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.75 | < 0.25 |
| | 06/27/97 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.75 | < 0.25 |
| | 09/04/97 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/04/97 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| | 03/06/98 | < 0.25 | < 0.25 | < 0.10 | < 0.10 | < 0.25 | < 0.10 |
| | 06/18/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/29/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/15/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/02/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |

## Table D-7

## Total Petroleum Hydrocarbons in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | Gasoline | Petroleum Naphtha | Mineral Spirits | Diesel | Oil | Kerosene |
|---|---|---|---|---|---|---|---|
| MW-2 | 06/16/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| dup | 06/16/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/16/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/08/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/07/00 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 06/21/00 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/12/00 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/07/00 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/15/01 | < 0.05 | < 0.05 | < 0.25 | < 0.25 J | < 0.50 | < 0.25 |
| | 07/12/01 | <0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| | 09/24/01 | <0.25 | — | — | <0.05 | — | — |
| | 01/03/02 | <0.021 | — | — | 0.058 J | 0.048 J | — |
| | 03/28/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 06/14/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 09/18/02 | na | — | — | 0.087 J | 0.091 J | — |
| | 12/16/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 03/20/03 | na | — | — | < 0.26 | < 0.52 | — |
| | 06/11/03 | na | — | — | < 0.27 | < 0.53 | < 0.27 |
| | 09/10/03 | na | — | — | < 0.27 | < 0.54 | < 0.27 |
| | 12/05/03 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 03/16/04 | na | — | — | < 0.28 | < 0.55 | < 0.28 |
| /-3 | 04/17/95 | < 0.05 | na | na | na | na | na |
| | 09/04/96 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.75 | < 0.25 |
| dup | 09/04/96 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.75 | < 0.25 |
| | 12/11/96 | < 0.05 | < 0.05 | < 0.05 | < 0.25 J | < 0.75 J | < 0.25 J |
| | 03/04/97 | < 0.05 | < 0.05 | < 0.05 | < 0.25 J | < 0.75 J | < 0.25 J |
| | 06/27/97 | < 0.05 | < 0.05 | < 0.05 | < 0.25 J | < 0.75 J | < 0.25 J |
| | 09/04/97 | < 0.05 | < 0.05 | < 0.25 J | < 0.25 J | < 0.5 J | < 0.25 J |
| | 12/04/97 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/06/98 | < 0.25 | < 0.25 | < 0.10 | < 0.10 | < 0.25 | < 0.10 |
| | 06/18/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/29/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/29/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/14/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| dup | 03/03/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 06/17/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/17/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/08/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/07/00 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 06/21/00 | < 0.25 | < 0.25 | < 0.25 | 0.61[a] | < 0.50 | < 0.25 |
| | 09/12/00 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/12/00 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/07/00 | <0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/15/01 | < 0.05 | < 0.05 | < 0.25 | < 0.25 J | < 0.50 | < 0.25 |
| | 07/12/01 | <0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| | 09/24/01 | < 0.05 | — | — | < 0.25 | — | — |
| | 01/03/02 | < 0.021 | — | — | 0.14 J | 0.092 J | — |
| | 03/28/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 06/14/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |

## Table D-7

## Total Petroleum Hydrocarbons in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | Gasoline | Petroleum Naphtha | Mineral Spirits | Diesel | Oil | Kerosene |
|---|---|---|---|---|---|---|---|
| MW-3 | 09/17/02 | na | — | — | < 0.25 | < 0.50 | — |
| (cont.) | 12/17/02 | na | — | — | < 0.27 | < 0.53 | < 0.27 |
| | 03/20/03 | na | — | — | < 0.25 | < 0.50 | — |
| | 06/11/03 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 09/11/03 | na | — | — | < 0.28 | < 0.56 | < 0.28 |
| | 12/04/03 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 03/15/04 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| MW-4 | 09/04/96 | 8.49 | < 0.05 | < 0.05 | 0.78[a] | 0.76[b] | < 1 |
| | 12/10/96 | 4.24 | < 0.05 | < 0.05 | 0.87[a] | < 0.75 | < 1 |
| | 03/04/97 | < 0.05 | < 0.05 | < 0.05 | < 0.25 J | < 0.75 J | < 0.25 J |
| | 06/27/97 | 3.13 | < 0.50 | < 0.50 | 0.7[a] | < 0.75 | < 0.80 |
| | 09/04/97 | 3.78 | < 0.05 | < 0.25 | 1.01[a] | < 0.50 | < 0.25 |
| dup | 09/04/97 | 3.8 | < 0.05 | < 0.25 | 0.82[a] | < 0.50 | < 0.25 |
| | 12/04/97 | 6.08 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/06/98 | 4.2 | < 0.25 | < 0.10 | < 0.10 | < 0.25 | < 0.10 |
| | 06/18/98 | 4.5 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/29/98 | 8.0 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/14/98 | 7.5 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/03/99 | 2.1 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 06/17/99 | 1.3 | < 1.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/17/99 | 9.2 | < 1.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/08/99 | 8.4 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| dup | 12/08/99 | 8.6 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/07/00 | 4.6 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| dup | 03/07/00 | 4.2 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 06/21/00 | 6.0[d] | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/12/00 | 3.8[d] | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/07/00 | 8.4[d] | < 0.05 | < 0.25 | 0.73[a] | < 0.50 | < 0.25 |
| | 03/15/01 | 6.1 Y | < 0.05 | < 0.25 | 1.5 L | < 0.50 | < 0.25 |
| | 07/12/01 | 3.3 Z | < 0.05 | < 0.25 | 1.6 L | < 0.25 | < 0.25 |
| | 09/24/01 | 0.79 Z | — | — | 1.5 Y | — | — |
| | 01/02/02 | 1.9 Z | — | — | 1.1 L | 0.060 J | — |
| | 03/28/02 | na | — | — | 0.95 L | < 0.50 | 1.8 Y |
| | 06/11/02 | na | — | — | 1.3 Y | < 0.50 | 1.5 Y |
| | 09/18/02 | na | — | — | 1.2 Y | 0.12 J | — |
| | 12/17/02 | na | — | — | 0.91 Y | < 0.50 | < 0.25 |
| | 03/20/03 | na | — | — | 0.62 Y | < 0.51 | — |
| | 06/11/03 | na | — | — | 0.98 Y | < 0.55 | 1.3 Y |
| | 09/11/03 | na | — | — | 0.78 L | < 0.50 | < 0.25 |
| | 12/04/03 | na | — | — | 0.51 L | < 0.52 | 1.1 Y |
| | 03/15/04 | na | — | — | 0.64 L | < 0.50 | 1.0 Y |
| MW-5 | 09/04/96 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.75 | < 0.25 |
| | 12/10/96 | < 0.05 | < 0.05 | < 0.05 | 0.26[a] | < 0.75 | < 0.25 |
| dup | 12/10/96 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.75 | < 0.25 |
| | 03/04/97 | < 0.05 | < 0.05 | < 0.05 | 0.81[a] | < 0.75 | < 0.25 |
| | 06/27/97 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.75 | < 0.25 |
| | 09/04/97 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/04/97 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |

## Table D-7

## Total Petroleum Hydrocarbons in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | Gasoline | Petroleum Naphtha | Mineral Spirits | Diesel | Oil | Kerosene |
|---|---|---|---|---|---|---|---|
| MW-5 | 03/06/98 | < 0.25 | < 0.25 | < 0.10 | < 0.10 | < 0.25 | < 0.10 |
| (cont.) | 06/18/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/29/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/15/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/02/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 06/16/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/16/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| dup | 09/16/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/08/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/07/00 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 06/21/00 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/12/00 | < 0.25 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/07/00 | 0.87[d] | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/15/01 | 0.93 Z | < 0.05 | < 0.25 | < 0.25 J | < 0.50 | < 0.25 |
| | 07/12/01 | 0.83 Z | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/24/01 | 0.61 Z | — | — | < 0.25 | — | — |
| | 01/02/02 | 0.76 Z | — | — | 0.02 J | < 0.030 | — |
| | 03/27/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 06/11/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 09/18/02 | na | — | — | < 0.25 | < 0.50 | — |
| | 12/16/02 | na | — | — | < 0.26 | < 0.52 | < 0.26 |
| | 03/17/03 | na | — | — | < 0.26 | < 0.51 | < 0.26 |
| | 06/10/03 | na | — | — | < 0.27 | < 0.53 | < 0.27 |
| | 09/11/03 | na | — | — | < 0.27 | < 0.54 | < 0.27 |
| | 12/05/03 | na | — | — | < 0.27 | < 0.53 | < 0.27 |
| | 03/16/04 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| MW-6 | 09/04/96 | 0.074 | < 0.05 | < 0.05 | 0.38[a] | < 0.75 | < 1.00 |
| | 12/10/96 | 0.06[c] | < 0.05 | < 0.05 | 0.30[a] | < 0.75 | < 0.25 |
| | 03/04/97 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.75 | < 0.25 |
| | 06/27/97 | < 0.05 | < 0.05 | < 0.05 | 0.25[a] | < 0.75 | < 0.25 |
| | 09/04/97 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/04/97 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/06/98 | < 0.25 | < 0.25 | < 0.10 | < 0.10 | < 0.25 | < 0.10 |
| | 06/18/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/29/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/15/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/02/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| dup | 03/02/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 06/16/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/16/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/08/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/07/00 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 06/21/00 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/12/00 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/07/00 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/15/01 | < 0.05 | < 0.05 | < 0.25 | < 0.25 J | < 0.50 | < 0.25 |
| | 07/12/01 | <0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| | 07/12/01 | < 0.5 | < 0.5 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |

## Table D-7

## Total Petroleum Hydrocarbons in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | Gasoline | Petroleum Naphtha | Mineral Spirits | Diesel | Oil | Kerosene |
|---|---|---|---|---|---|---|---|
| MW-6 | 09/25/01 | < 0.05 | — | — | < 0.25 | — | — |
| (cont.) | 01/03/02 | 0.027 JB | — | — | 0.055 JB | 0.035 J | — |
| | 03/27/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 06/14/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 09/18/02 | na | — | — | 0.068 J | 0.079 J | — |
| | 12/16/02 | na | — | — | < 0.26 | < 0.52 | < 0.26 |
| | 03/20/03 | na | — | — | < 0.26 | < 0.52 | — |
| | 06/11/03 | na | — | — | < 0.26 | < 0.51 | < 0.26 |
| | 09/10/03 | na | — | — | < 0.26 | < 0.51 | < 0.26 |
| | 12/04/03 | na | — | — | < 0.27 | < 0.53 | < 0.27 |
| | 03/16/04 | na | — | — | < 0.27 | < 0.53 | < 0.27 |
| MW-7 | 12/22/97 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.50 | < 0.25 |
| | 03/06/98 | < 0.25 | < 0.25 | < 0.10 | < 0.10 | < 0.25 | < 0.10 |
| | 06/18/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| dup | 06/18/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/29/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/14/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/03/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 06/17/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/17/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/08/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/07/00 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 06/21/00 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/12/00 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/07/00 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/15/01 | < 0.05 | < 0.05 | < 0.25 | < 0.25 J | < 0.50 | < 0.25 |
| | 07/12/01 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| | 09/25/01 | < 0.05 | — | — | < 0.25 | — | — |
| | 01/03/02 | <0.021 | — | — | 0.038 JB | 0.034 J | — |
| | 03/28/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 06/14/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 09/17/02 | na | — | — | < 0.25 | < 0.50 | — |
| dup | 09/17/02 | na | — | — | < 0.25 | < 0.50 | — |
| | 12/17/02 | na | — | — | < 0.27 | < 0.53 | < 0.27 |
| | 03/17/03 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 06/10/03 | na | — | — | < 0.26 | < 0.52 | < 0.26 |
| | 09/10/03 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 12/04/03 | na | — | — | < 0.28 | < 0.56 | < 0.28 |
| | 03/16/04 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| MW-8 | 12/22/97 | < 0.05 | < 0.05 | < 0.05 | < 0.25 | < 0.50 | < 0.25 |
| | 03/06/98 | < 0.25 | < 0.25 | < 0.10 | < 0.10 | < 0.25 | < 0.10 |
| | 06/18/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/29/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/14/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| dup | 12/14/98 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/02/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 06/16/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/16/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/08/99 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |

## Table D-7

## Total Petroleum Hydrocarbons in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | Gasoline | Petroleum Naphtha | Mineral Spirits | Diesel | Oil | Kerosene |
|---|---|---|---|---|---|---|---|
| MW-8 | 03/07/00 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| (cont.) | 06/21/00 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/12/00 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 12/07/00 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 03/15/01 | < 0.05 | < 0.05 | < 0.25 | < 0.25 J | < 0.50 | < 0.25 |
| | 07/12/01 | 0.024 J | < 0.05 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| | 09/24/01 | < 0.05 | — | — | < 0.25 | — | — |
| | 01/03/02 | 0.034 JB | — | — | 0.037 JB | 0.035 J | — |
| | 03/27/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 06/14/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 09/18/02 | na | — | — | < 0.25 | 0.078 J | — |
| | 12/16/02 | na | — | — | < 0.26 | < 0.52 | < 0.26 |
| | 03/17/03 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 06/11/03 | na | — | — | < 0.27 | < 0.53 | < 0.27 |
| | 09/10/03 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| dup | 09/10/03 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 12/04/03 | na | — | — | < 0.28 | < 0.55 | < 0.28 |
| | 03/16/04 | na | — | — | < 0.28 | < 0.55 | < 0.28 |
| MW-9 | 07/12/01 | 0.034 J | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| dup | 07/12/01 | 0.026 J | < 0.05 | < 0.25 | < 0.25 | < 0.50 | < 0.25 |
| | 09/25/01 | 0.053 Z | — | — | < 0.25 | — | — |
| | 01/03/02 | 0.054 ZB | — | — | 0.048 J | 0.035 J | — |
| | 03/27/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 06/14/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 09/17/02 | na | — | — | < 0.25 | < 0.50 | — |
| | 12/16/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 03/17/03 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 06/11/03 | na | — | — | < 0.26 | < 0.52 | < 0.26 |
| | 09/10/03 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 12/04/03 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 03/16/04 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| MW-10 | 07/12/01 | < 0.05 | < 0.05 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| | 09/25/01 | < 0.05 | — | — | < 0.25 | — | — |
| | 01/03/02 | < 0.021 | — | — | 0.048 JB | 0.036 J | — |
| dup | 01/03/02 | < 0.021 | — | — | 0.044 JB | 0.033 J | — |
| | 03/28/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 06/14/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 09/17/02 | na | — | — | < 0.25 | < 0.50 | — |
| | 12/17/02 | na | — | — | < 0.30 | < 0.59 | < 0.30 |
| | 03/20/03 | na | — | — | < 0.26 | < 0.51 | — |
| | 06/10/03 | na | — | — | < 0.27 | < 0.53 | < 0.27 |
| | 09/10/03 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 12/04/03 | na | — | — | < 0.27 | < 0.54 | < 0.27 |
| | 03/16/04 | na | — | — | < 0.26 | < 0.52 | < 0.26 |
| MW-11 | 09/24/01 | — | — | — | — | — | — |
| | 01/02/02 | 0.73 Z | — | — | 0.021 J | < 0.030 | — |
| | 03/27/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 06/11/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |

## Table D-7

## Total Petroleum Hydrocarbons in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | Gasoline | Petroleum Naphtha | Mineral Spirits | Diesel | Oil | Kerosene |
|---|---|---|---|---|---|---|---|
| MW-11 | 09/17/02 | na | — | — | < 0.25 | < 0.50 | — |
| (cont.) | 12/16/02 | na | — | — | < 0.27 | < 0.53 | < 0.27 |
| | 03/17/03 | na | — | — | < 0.26 | < 0.52 | < 0.26 |
| dup | 03/17/03 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 06/10/03 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 09/10/03 | na | — | — | < 0.27 | < 0.53 | < 0.27 |
| | 12/05/03 | na | — | — | < 0.28 | < 0.55 | < 0.28 |
| | 03/16/04 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| MW-12 | 09/24/01 | na | na | na | na | na | na |
| | 01/03/02 | 0.22 Z | — | — | 0.22 J | 0.068 J | — |
| | 03/27/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| dup | 03/27/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 06/11/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| dup | 06/11/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 09/17/02 | na | — | — | < 0.25 | < 0.50 | — |
| | 12/16/02 | na | — | — | < 0.27 | < 0.53 | < 0.27 |
| | 03/17/03 | na | — | — | < 0.27 | < 0.54 | < 0.27 |
| | 06/10/03 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 09/10/03 | na | — | — | < 0.26 | < 0.52 | < 0.26 |
| | 12/05/03 | na | — | — | < 0.26 | < 0.52 | < 0.26 |
| | 03/16/04 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| MW-13 | 03/31/03 | na | — | — | 1.00 | < 0.51 | — |
| | 05/14/03 | na | — | — | 0.98 | < 0.50 | < 0.25 |
| | 06/11/03 | na | — | — | 1.1 Z | < 0.51 | 4.3 Y |
| dup | 06/11/03 | na | — | — | 1.1 Z | < 0.56 | 4.2 Y |
| | 09/11/03 | na | — | — | 0.78 L | < 0.50 | < 0.25 |
| | 12/04/03 | na | — | — | 0.92 L | < 0.54 | 4.7 Y |
| | 03/15/04 | na | — | — | 0.7 Z | < 0.50 | 4.4 Y |
| MW-14 | 10/30/03 | na | — | — | < 0.27 | < 0.53 | < 0.27 |
| | 12/04/03 | na | — | — | < 0.26 | < 0.52 | < 0.26 |
| | 03/16/04 | na | — | — | < 0.28 | < 0.56 | < 0.28 |
| MW-15 | 10/30/03 | na | — | — | < 0.28 | < 0.56 | < 0.28 |
| | 12/04/03 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 03/16/04 | na | — | — | < 0.26 | < 0.52 | < 0.26 |
| MW-16 | 10/30/03 | na | — | — | < 0.28 | < 0.56 | < 0.28 |
| MW-16 | 12/05/03 | na | — | — | < 0.28 | < 0.55 | < 0.28 |
| | 03/16/04 | na | — | — | < 0.29 | < 0.58 | < 0.29 |
| MW-17 | 10/30/03 | na | — | — | < 0.27 | < 0.53 | < 0.27 |
| | 12/04/03 | na | — | — | < 0.28 | < 0.55 | < 0.28 |
| | 03/15/04 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| MW-18 | 10/30/03 | na | — | — | < 0.27 | < 0.53 | < 0.27 |
| | 12/04/03 | na | — | — | < 0.26 | < 0.52 | < 0.26 |
| up | 12/04/03 | na | — | — | < 0.28 | < 0.56 | < 0.28 |
| | 03/16/04 | na | — | — | < 0.27 | < 0.53 | < 0.27 |

# Table D-7

## Total Petroleum Hydrocarbons in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | Gasoline | Petroleum Naphtha | Mineral Spirits | Diesel | Oil | Kerosene |
|---|---|---|---|---|---|---|---|
| MW-19 | 02/20/04 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| | 03/16/04 | na | — | — | < 0.27 | < 0.53 | < 0.27 |
| dup | 03/16/04 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| INJ-1 | 06/11/02 | na | — | — | 0.73 Y | < 0.50 | 0.68 Y |
| INJ-2 | 06/11/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| INJ-3 | 06/11/02 | na | — | — | 0.46 Y | < 0.50 | 0.48 Y |
| | 12/17/02 | na | — | — | < 0.25 | < 0.50 | < 0.25 |
| dup | 12/17/02 | na | — | — | < 0.28 | < 0.56 | < 0.28 |

NOTE: All results in mg/L.
Gasoline, Petroleum Naphtha, and Mineral Spirits analyzed by Method WTPH-G prior to September 1997;
Gasoline and Petroleum Naphtha analyzed by Method NWTPH-Gx in samples collected after June 1997.
Diesel, Oil, and Kerosene analyzed by Method WTPH-D (extended) prior to September 1997;
Mineral Spirits, Diesel, Oil, and Kerosene analyzed by Method NWTPH-Dx in samples collected after June 1997.
< = less than the method reporting limit shown.
dup = duplicate sample.
na = not analyzed.
— = not quantitated.
B = the analyte was also detected in an associated blank.
J = the associated numerical value is an estimated quantity based on data review.
L = the chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
Y = the chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z = the chromatographic fingerprint does not resemble a petroleum product.

[a] Quantified as diesel/kerosene. The sample contained components that eluted in the diesel/kerosene range, but the chromatogram did not match the typical diesel/kerosene fingerprint.

[b] Quantified as oil. The sample contained components that eluted in the oil range, but the chromatogram did not match the typical oil fingerprint.

[c] The gasoline-range response is due to toluene.

d Quantified as gasoline. The sample contained components that eluted in the gasoline range, but the chromatogram did not match the typical gasoline fingerprint.

## Table D-8

## Glycols and Alcohols in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | Modified EPA Method 8015B | | EPA Method 5031/8015B | | |
|---|---|---|---|---|---|---|
| | | Ethylene Glycol | Propylene Glycol | Ethanol | Isopropanol | 1-Butanol |
| MW-1 | 12/10/1996 | < 10 | < 10 | < 0.05 | 0.147 | < 0.05 |
| MW-2 | 12/10/1996 | < 10 | < 10 | < 0.05 | < 0.05 | < 0.05 |
| MW-3 | 12/11/1996 | < 10 | < 10 | < 0.05 | < 0.05 | < 0.05 |
| MW-4 | 12/10/1996 | < 10 | < 10 | < 0.05 | < 0.05 | < 0.05 |
| MW-5 | 12/10/1996 | < 10 | < 10 | < 0.05 | < 0.05 | < 0.05 |
| dup | 12/10/1996 | < 10 | < 10 | < 0.05 | < 0.05 | < 0.05 |
| MW-6 | 12/10/1996 | < 10 | < 10 | < 0.05 | < 0.05 | < 0.05 |

NOTE: All results in mg/L
< = less than the method reporting limit shown.
dup = duplicate sample.

# Table D-9

## General Chemistry Parameters in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | EPA Method 300.0 | | | Hach Method 8131 | Hach Method AL AP MG-L | EPA Method 415.1 | EPA Method 6010A | | Hach Method 8008 | Hach Method 8146 | EPA Method 160.1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Chloride | Nitrate as Nitrogen | Sulfate | Sulfide | Total Alkalinity | Total Organic Carbon | Manganese | Total Iron | Total Iron | Ferrous Iron | Total Dissolved Solids |
| MW-1 | 09/04/96 | 130 | — | 88.0 | — | — | — | 2.1 | 29.6 | — | — | 990 |
| | 12/15/98 | 68.5 | < 0.2 | 4.3 | 0.070 | 500 | 47.0 | — | — | 23.4 | 24.6 | — |
| | 03/02/99 | 64.5 | 0.2 | 5.8 | 0.266 | 540 | 37.0 | — | — | 29.4 | 18.2 | — |
| | 06/17/99 | 49 | 0.3 | 6.7 | 0.110 | 460 | 40.5 | — | — | 24.0 | 20.8 | — |
| | 09/16/99 | 59.8 | < 0.2 | 7.2 | 0.249 | 400 | 42.1 | — | — | 11.0 | 18.8 | — |
| | 09/18/02 | — | — | — | — | — | 37 | — | — | — | — | — |
| MW-2 | 09/04/96 | 18.0 | — | 0.3 | — | — | — | 3.21 | 112 | — | — | 576 |
| | 12/15/98 | 13.6 | 0.3 | 5.3 | 0.017 | 260 | 26.4 | — | — | 23.9 | 30.4 | — |
| | 03/02/99 | 14.3 | 0.9 | 13.1 | 0.037 | 360 | 22.8 | — | — | 46.4 | 23.0 | — |
| | 06/16/99 | 13 | 1.0 | 7.5 | 0.054 | 420 | 24.2 | — | — | 86.5 | 66.7 | — |
| dup | 06/16/99 | 12.2 | 1.3 | 12.8 | — | — | 25.1 | — | — | — | — | — |
| | 09/16/99 | 14.6 | < 0.2 | < 0.2 | 0.037 | 400 | 27.2 | — | — | 94.6 | 61.9 | — |
| | 09/18/02 | — | — | — | — | — | 33 | — | — | — | — | — |
| MW-3 | 09/04/96 | 26.0 | — | 0.9 | — | — | — | 3.17 | 36.3 | — | — | 952 |
| dup | 09/04/96 | 26.0 | — | 1.1 | — | — | — | 3.13 | 38.5 | — | — | 976 |
| | 12/14/98 | 29.8 | < 0.2 | < 0.2 | < 0.001 | 660 | 44.5 | — | — | 34.4 | 34.2 | — |
| | 03/03/99 | 25.6 | < 0.2 | 0.3 | 0.013 | 640 | 52.8 | — | — | 33.0 | 31.7 | — |
| | 06/17/99 | 17.1 | < 0.2 | < 0.2 | 0.013 | 640 | 57.9 | — | — | 59.7 | 38.0 | — |
| | 09/17/99 | 14.5 | < 0.2 | < 0.2 | 0.047 | 520 | 62.4 | — | — | 100.1 | 47.7 | — |
| MW-4 | 09/04/96 | 110 | — | 37.0 | — | — | — | 9.89 | 83.9 | — | — | 796 |
| | 12/14/98 | 89.7 | < 0.2 | 15.6 | 0.026 | 840 | 23.4 | — | — | 59.8 | 59.1 | — |
| | 03/03/99 | 45.0 | < 0.2 | 183 | 0.880 | 900 | 12.8 | — | — | 12.9 | 7.5 | — |
| | 06/17/99 | 60.9 | 0.3 | 61.7 | 0.159 | 840 | 18.2 | — | — | 6.99 | 4.75 | — |
| | 09/17/99 | 77.3 | < 0.2 | 2.0 | 0.071 | 870 | 18.4 | — | — | 24.3 | 13.4 | — |
| | 09/18/02 | — | — | — | — | — | 19 | — | — | — | — | — |
| MW-5 | 09/04/96 | 17.0 | — | 32 | — | — | — | 0.34 | 0.107 | — | — | 332 |
| | 12/15/98 | 17.5 | < 0.2 | 17.3 | 0 | 200 | 7.8 | — | — | 0.090 | 0.024 | — |

## Table D-9

## General Chemistry Parameters in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | EPA Method 300.0 | | | Hach Method 8131 | Hach Method AL AP MG-L | EPA Method 415.1 | EPA Method 6010A | | Hach Method 8008 | Hach Method 8146 | EPA Method 160.1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Chloride | Nitrate as Nitrogen | Sulfate | Sulfide | Total Alkalinity | Total Organic Carbon | Manganese | Total Iron | Total Iron | Ferrous Iron | Total Dissolved Solids |
| MW-5 | 03/02/99 | 6.9 | 2.4 | 22.0 | 0.002 | 145 | 4.8 | — | — | 0.137 | 0.060 | — |
| (continued) | 06/16/99 | 6.2 | 2.5 | 20.5 | 0.002 | 180 | 6.0 | — | — | 0.125 | 0.042 | — |
| | 09/16/99 | 6.8 | 1.5 | 20.7 | 0.001 | 160 | 5.9 | — | — | 0.052 | 0.008 | — |
| dup | 09/16/99 | 6.2 | 1.5 | 20.4 | — | — | 5.9 | — | — | — | — | — |
| | 09/18/02 | — | — | — | — | — | 7.2 | — | — | — | — | — |
| MW-6 | 09/04/96 | 340 | — | 0.6 | — | — | — | 9.28 | 222 | — | — | 1,260 |
| | 12/15/98 | 199 | < 0.2 | 11.7 | 0.014 | 460 | 22.6 | — | — | 114 | 125 | — |
| | 03/02/99 | 213 | 0.6 | 19.8 | 0.015 | 500 | 15.8 | — | — | 170 | 63 | — |
| dup | 03/02/99 | 208 | 0.6 | 46.6 | — | — | 15.9 | — | — | — | — | — |
| | 06/16/99 | 232 | 0.3 | 11.6 | 0.009 | 520 | 21 | — | — | 192 | 120 | — |
| | 09/16/99 | 130 | < 0.5 | 27.3 | 0.047 | 480 | 18.5 | — | — | 169 | 95 | — |
| | 09/18/02 | — | — | — | — | — | 20 | — | — | — | — | — |
| MW-7 | 12/14/98 | 5.4 | < 0.2 | 1.6 | 0.003 | 260 | 9.4 | — | — | 3.36 | 3.17 | — |
| | 03/03/99 | 5.7 | 1.3 | 12.7 | 0.010 | 180 | 6.5 | — | — | 1.79 | 1.72 | — |
| | 06/17/99 | 6.8 | 2.3 | 25.1 | 0.005 | 200 | 9.2 | — | — | 2.21 | 1.86 | — |
| | 09/17/99 | 8.1 | 0.3 | 21.4 | 0.004 | 240 | 10.6 | — | — | 3.58 | 2.98 | — |
| MW-8 | 12/14/98 | 9.2 | < 0.2 | 20.4 | — | 260 | 10.0 | — | — | 1.13 | 0.98 | — |
| dup | 12/14/98 | 9.3 | < 0.2 | 20.4 | — | — | 10.1 | — | — | — | — | — |
| | 03/02/99 | 12.7 | 0.3 | 29.7 | 0.023 | 260 | 8.9 | — | — | 2.03 | 0.77 | — |
| | 06/16/99 | 12.8 | < 0.2 | 29.1 | 0.009 | 240 | 9.6 | — | — | 0.70 | 0.50 | — |
| | 09/16/99 | 10.5 | < 0.2 | 21.1 | 0.007 | 260 | 10.5 | — | — | 1.02 | 0.45 | — |
| | 09/18/02 | — | — | — | — | — | 11.4 | — | — | — | — | — |

NOTE: All results in mg/L.
— = not analyzed.
< = less than the method reporting limit shown.
dup = duplicate sample.

# Table D-10

## Dissolved Organic Gases in Groundwater from Wells
## Univar USA Inc. Facility
## Kent, Washington

| Sample Location | Date Collected | Modified RSK Method 175 | | |
|---|---|---|---|---|
| | | Methane | Ethene | Ethane |
| MW-1 | 12/15/98 | 18 | 0.310 | 0.110 |
| | 03/02/99 | 15 | 0.270 | 0.075 |
| | 06/17/99 | 8.4 | 0.170 | 0.044 |
| | 09/17/99 | 14 | 0.230 | 0.083 |
| MW-2 | 12/15/98 | 13 | < 0.0005 | 0.0011 |
| | 03/02/99 | 8.6 | < 0.0005 | 0.00088 |
| | 06/16/99 | 13 | < 0.0005 | 0.001 |
| dup | 06/16/99 | 13 | < 0.0005 | 0.00097 |
| | 09/16/99 | 17 | < 0.0005 | 0.0012 |
| MW-3 | 12/14/98 | 10 | 0.00095 | 0.0069 |
| | 03/03/99 | 5.7 | 0.0012 | 0.0093 |
| | 06/17/99 | 3.8 | 0.00093 | 0.0032 |
| | 09/17/99 | 4.3 | 0.00088 | 0.0068 |
| MW-4 | 12/14/98 | 16 | 1.5 | 0.130 |
| | 03/03/99 | 10 | 0.730 | 0.110 |
| | 06/17/99 | 12 | 1.3 | 0.110 |
| | 09/17/99 | 14 | 1.0 | 0.150 |
| MW-5 | 12/15/98 | < 0.0005 | < 0.0005 | < 0.0005 |
| | 03/02/99 | 0.066 | < 0.0005 | < 0.0005 |
| | 06/16/99 | 0.0078 | < 0.0005 | < 0.0005 |
| | 09/16/99 | 0.028 | < 0.0005 | < 0.0005 |
| dup | 09/16/99 | 0.026 | < 0.0005 | < 0.0005 |
| MW-6 | 12/15/98 | 14 | 0.031 | 0.13 |
| | 03/02/99 | 9.8 | 0.015 | 0.094 |
| dup | 03/02/99 | 12 | 0.016 | 0.12 |
| | 06/16/99 | 11 | 0.01 | 0.10 |
| | 09/16/99 | 13 | 0.0082 | 0.098 |
| MW-7 | 12/14/98 | 0.0019 | < 0.0005 | < 0.0005 |
| | 03/03/99 | 0.034 | < 0.0005 | < 0.0005 |
| | 06/17/99 | 0.0079 | < 0.0005 | < 0.0005 |
| | 09/17/99 | 0.015 | < 0.0005 | < 0.0005 |
| MW-8 | 12/14/98 | 0.023 | < 0.0005 | < 0.0005 |
| dup | 12/14/98 | 0.025 | < 0.0005 | < 0.0005 |
| | 03/02/99 | 0.012 | < 0.0005 | < 0.0005 |
| | 06/16/99 | 0.0052 | < 0.0005 | < 0.0005 |
| | 09/16/99 | 0.018 | < 0.0005 | < 0.0005 |

NOTE: All results in mg/L.
dup = duplicate sample.
< = less than the method reporting limit shown.

# Table D-11

## Field Parameters in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | pH | Specific Conductance (µS/cm) | Temperature (°C) | Turbidity (NTUs) | Dissolved Oxygen (mg/L) | Oxidation Reduction Potential (mv) |
|---|---|---|---|---|---|---|---|
| MW-1 | 04/17/95 | 6.37 | 2,310 | 11 | NM | NM | NM |
| | 09/04/96 | 6.49 | 1,620 | 18.5 | 227 | 1.20 | NM |
| | 12/10/96 | 6.37 | 1,653 | 9.8 | 427 | 1.18 | NM |
| | 03/04/97 | 6.65 | 1,359 | 11 | 37 | 1.70 | NM |
| | 06/27/97 | 6.62 | 1,195 | 15 | > 1,000 | 1.00 | NM |
| | 09/04/97 | 6.78 | 837 | 18 | 40 | 1.71 | NM |
| | 12/04/97 | 6.23 | 1,076 | 12 | 16 | 8.9 | NM |
| | 03/06/98 | 6.83 | 1,284 | 10 | 16 | 2.15 | NM |
| | 06/18/98 | 6.85 | 1,045 | 15.5 | 61 | 2.60 | NM |
| | 09/29/98 | 6.58 | 851 | 18.5 | 46 | 1.27 | NM |
| | 12/14/98 | 6.50 | 973 | 13.1 | 16 | 1.14 | -147 |
| | 03/03/99 | 6.70 | 849 | 10 | 55 | 3.02 | -148 |
| | 06/17/99 | 6.51 | 790 | 14 | 6.7 | 1.30 | -176 |
| | 09/16/99 | 6.60 | 905 | 17 | 14 | 0.1 | -189 |
| | 12/08/99 | 7.12 | 408 | 12.9 | 10 | 0.3 | -158 |
| | 03/07/00 | 7.51 | 599 | 10 | 6 | 0.2 | -126 |
| | 06/21/00 | 7.10 | 505 | 16 | 4.6 | 1.2 | 7 |
| | 09/12/00 | 6.80 | 790 | 14.5 | NM | 2.6 | -69 |
| | 12/07/00 | 7.04 | 830 | 12 | 6.9 | 1.1 | -60 |
| | 03/15/01 | 7.06 | 999 | 10 | 4.9 | 2.0 | -48 |
| | 07/12/01 | 7.03 | 925 | 15.6 | 7.8 | 2.65 | -141 |
| | 09/24/01 | 6.54 | NM | 20.2 | 4.3 | 1.08 | NM |
| | 01/02/02 | 7.19 | 1,150 | 11.8 | NM | NM | NM |
| | 03/28/02 | 7.26 | 351 | 10.2 | NM | 0.20 | NM |
| | 06/11/02 | 7.34 | 613 | 15.2 | NM | 0.22 | NM |
| | 09/18/02 | 6.93 | 771 | 18.6 | NM | 0.04 | -200 |
| | 12/17/02 | 7.01 | 601 | 12.6 | 3.5 | 0.19 | NM |
| | 03/20/03 | 7.19 | 517 | 10.9 | 5.8 | 0.13 | -111 |
| | 05/14/03 | 7.00 | 493 | 12.9 | NM | 0.74 | -75 |
| | 06/11/03 | 7.02 | 405 | 15 | 8.0 | 0.23 | NM |
| | 09/11/03 | 7.03 | 474 | 18.7 | 4.0 | 0.21 | NM |
| | 12/04/03 | 7.00 | 451 | 13.7 | 4.2 | 0.23 | -51 |
| | 03/16/04 | 6.71 | 391 | 11.0 | 4.6 | 0.32 | -63 |
| MW-2 | 04/17/95 | 6.30 | 1,000 | 13 | NM | NM | NM |
| | 09/04/96 | 6.11 | 964 | 14.8 | 8.5 | 1.00 | NM |
| | 12/10/96 | 6.27 | 704 | 13.1 | 1,000 | 0.92 | NM |
| | 03/04/97 | 6.20 | 754 | 13 | 9.4 | 1.77 | NM |
| | 06/27/97 | 6.54 | 667 | 14 | 322 | 3.00 | NM |
| | 09/04/97 | 6.41 | 638 | 15 | 332 | 1.17 | NM |

## Table D-11

## Field Parameters in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | pH | Specific Conductance (µS/cm) | Temperature (°C) | Turbidity (NTUs) | Dissolved Oxygen (mg/L) | Oxidation Reduction Potential (mv) |
|---|---|---|---|---|---|---|---|
| MW-2 | 12/04/97 | 5.25 | 612 | 14 | 74 | 1.80 | NM |
| (continued) | 03/06/98 | 6.48 | 826 | 12 | 67 | 1.12 | NM |
| | 06/18/98 | 6.60 | 899 | 14 | 334 | 3.5 | NM |
| | 09/29/98 | 6.35 | 705 | 17 | 17 | 16.6[a] | NM |
| | 12/14/98 | 6.20 | 632 | 15.1 | NM | 1.14 | -84 |
| | 03/02/99 | 6.29 | 560 | 12 | 59 | 1.3 | -91.9 |
| | 06/16/99 | 6.02 | 663 | 13 | NM | 0.90 | -76 |
| | 09/16/99 | 6.39 | 734 | 13 | 12 | < 0.1 | -475 |
| | 12/08/99 | 6.74 | 421 | 14.8 | 16 | 1.30 | -121 |
| | 03/07/00 | 6.40 | 491 | 12 | 19 | 0.4 | -70 |
| | 06/21/00 | 6.55 | 320 | 15 | 6.1 | 1.51 | 8 |
| | 09/12/00 | 6.10 | 667 | 13 | 11 | 3.9 | -57 |
| | 12/07/00 | 6.21 | 574 | 13 | 6 | 1.9 | -18 |
| | 03/15/01 | 6.60 | 556 | 12 | 39 | 0.6 | -49 |
| | 07/12/01 | 6.53 | 652 | 15.1 | 77 | 2.54 | -116 |
| | 09/24/01 | 6.69 | NM | 19.5 | 5.0 | 1.10 | NM |
| | 01/03/02 | 5.81 | 531 | 13.7 | 12 | 0.00 | NM |
| | 03/28/02 | 6.28 | 229 | 12.6 | 6.2 | 0.63 | NM |
| | 06/11/02 | 6.72 | 526 | 14.2 | 7.1 | 0.43 | NM |
| | 09/18/02 | 6.63 | 597 | 17.9 | NM | 0.08 | -11 |
| | 12/16/02 | 6.04 | 480 | 15.2 | 5.1 | 0.34 | NM |
| | 03/20/03 | 6.63 | 413 | 12.5 | 29 | 0.12 | -57 |
| | 06/11/03 | 6.59 | 306 | 13.9 | 10 | 0.31 | NM |
| | 09/10/03 | 6.33 | 416 | 15.9 | 4.2 | 0.34 | NM |
| | 12/05/03 | 6.58 | 293 | 14.3 | 5.3 | 0.31 | -20 |
| | 03/16/04 | 6.54 | 306 | 12.8 | 25.4 | 0.30 | -23 |
| MW-3 | 04/17/95 | 6.40 | 1,580 | 12 | NM | NM | NM |
| | 09/04/96 | 6.33 | 1,357 | 14.9 | 5.1 | 1.6 | NM |
| | 12/11/96 | 6.48 | 979 | 12.4 | 15 | 1 | NM |
| | 03/04/97 | 6.44 | 1,152 | 13 | 9.4 | 1.69 | NM |
| | 06/27/97 | 6.64 | 937 | 13 | 423 | 1 | NM |
| | 09/04/97 | 6.47 | 765 | 15 | 132 | 1.81 | NM |
| | 12/04/97 | 6.20 | 844 | 13.5 | 7.5 | 1.29 | NM |
| | 03/06/98 | 6.53 | 1,255 | 12 | 3.4 | 1.9 | NM |
| | 06/18/98 | 6.55 | 1,225 | 13 | 5.3 | 0.9 | NM |
| | 09/29/98 | 6.41 | 947 | 14 | 7.91 | 1.22 | NM |
| | 12/14/98 | 6.25 | 1,054 | 13.5 | 0.9 | 1.14 | -79 |
| | 03/03/99 | 6.45 | 765 | 12 | 4.7 | NM | -105 |
| | 06/16/99 | 6.31 | 837 | 12 | NM | 1.00 | -120.0 |

## Table D-11

## Field Parameters in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | pH | Specific Conductance (µS/cm) | Temperature (°C) | Turbidity (NTUs) | Dissolved Oxygen (mg/L) | Oxidation Reduction Potential (mv) |
|---|---|---|---|---|---|---|---|
| MW-3 (continued) | 09/17/99 | 6.48 | 964 | 14 | 4.2 | 0.1 | -129 |
| | 12/08/99 | 6.80 | 137 | 13.5 | 6.7 | 1.5 | -63 |
| | 03/07/00 | 6.62 | 766 | 12 | 8.0 | 0.8 | -75 |
| | 06/21/00 | 6.92 | 452 | 14 | 7.5 | 1.25 | -81 |
| | 09/12/00 | 6.70 | 836 | 10.7 | NM | 1.4 | -36 |
| | 12/07/00 | 6.09 | 732 | 12 | 2.7 | 1.8 | -62 |
| | 03/15/01 | 6.80 | 809 | 11 | 7.5 | 0.9 | NM |
| | 07/12/01 | 6.63 | 746 | 13.1 | 8.2 | 1.36 | -42 |
| | 09/24/01 | 6.49 | NM | 16.9 | 12 | 0.16 | NM |
| | 01/03/02 | 6.52 | 955 | 13.1 | 2.0 | 0.00 | NM |
| | 03/28/02 | 6.74 | 330 | 12.3 | 5.8 | 0.19 | NM |
| | 06/11/02 | 6.89 | 786 | 12.8 | 14.3 | 0.4 | NM |
| | 09/17/02 | 6.80 | 773 | 15.2 | NM | 0.10 | -135 |
| | 12/17/02 | 6.44 | 821 | 13.0 | 7.5 | 0.40 | NM |
| | 03/20/03 | 6.85 | 521 | 12.1 | 3.3 | 0.12 | -73 |
| | 06/11/03 | 7.17 | 411 | 13.8 | 3.6 | 0.24 | NM |
| | 09/11/03 | 6.72 | 395 | 16.1 | 2.5 | 0.24 | NM |
| | 12/04/03 | 6.69 | 388 | 13.2 | 2.2 | 0.68 | 94 |
| | 03/15/04 | 6.61 | 425 | 12.3 | 2.1 | 0.32 | -81 |
| MW-4 | 09/04/96 | 6.29 | 1,452 | 17.9 | 99 | 1.5 | NM |
| | 12/10/96 | 6.29 | 1,690 | 11.9 | 427 | 0.83 | NM |
| | 03/04/97 | 6.75 | 1,868 | 10 | 2.6 | 2.82 | NM |
| | 06/27/97 | 6.78 | 1,431 | 11 | 55 | 1 | NM |
| | 09/04/97 | 6.82 | 1,120 | 19 | 51 | 1.4 | NM |
| | 12/04/97 | 6.33 | 1,578 | 13 | 6.5 | 1.8 | NM |
| | 03/06/98 | 6.88 | 1,847 | 10 | 3.6 | 1.92 | NM |
| | 06/18/98 | 6.79 | 1,862 | 15 | 4.5 | 2.2 | NM |
| | 09/29/98 | 6.63 | 1,288 | 18 | 11 | 1.26 | NM |
| | 12/14/98 | 6.18 | 1,560 | 13.9 | 2.6 | 1.16 | -150 |
| | 03/03/99 | 6.69 | 1,288 | 9 | 9.6 | NM | 155 |
| | 06/17/99 | 6.69 | NM | 13 | 1.9 | 0.1 | -186 |
| | 09/17/99 | 6.57 | 1,623 | 17 | 2.5 | 1.9 | -178 |
| | 12/08/99 | 6.94 | 394 | 13.6 | 4.3 | 0.5 | -109 |
| | 03/07/00 | 6.92 | 1,344 | 12 | 5.8 | 1.1 | -68 |
| | 06/21/00 | 6.90 | 992 | 15 | 2.4 | 1.29 | -67 |
| | 09/12/00 | 6.58 | 1,450 | 14 | 1.6 | 2.2 | -86 |
| | 12/07/00 | 6.60 | 1,210 | 13 | 3.6 | 2.4 | 15 |
| | 03/15/01 | 6.60 | 1,361 | 10 | 5.2 | 1.5 | -24 |
| | 07/12/01 | 6.70 | 1,594 | 15.2 | 6.2 | 2.73 | -108 |

## Table D-11

## Field Parameters in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | pH | Specific Conductance (µS/cm) | Temperature (°C) | Turbidity (NTUs) | Dissolved Oxygen (mg/L) | Oxidation Reduction Potential (mv) |
|---|---|---|---|---|---|---|---|
| MW-4 (continued) | 09/25/01 | 6.17 | NM | 17.7 | 48 | 1.04 | NM |
| | 01/02/02 | 6.73 | 1,840 | 11.9 | 74 | NM | NM |
| | 03/28/02 | 6.95 | 655 | 10.5 | 25 | 0.39 | NM |
| | 06/11/02 | 6.97 | 817 | 13.3 | NM | 0.17 | NM |
| | 09/18/02 | 6.81 | 1,452 | 18.1 | NM | 0.04 | -106 |
| | 12/17/02 | 6.54 | 1,011 | 12.4 | 2.7 | 0.34 | NM |
| | 03/20/03 | 6.74 | 877 | 10.8 | 3.6 | 0.07 | -78 |
| | 05/14/03 | 6.70 | 864 | 12.2 | NM | 0.74 | -45 |
| | 06/11/03 | 6.89 | 776 | 13.9 | 4.0 | 0.21 | NM |
| | 09/11/03 | 6.60 | 756 | 17.1 | 3.7 | 0.25 | NM |
| | 12/04/03 | 6.68 | 437 | 13.1 | 4.2 | 0.22 | -52 |
| | 03/15/04 | 6.60 | 518 | 10.6 | 1.9 | 0.46 | -58 |
| MW-5 | 09/04/96 | 6.23 | 422 | 15.9 | 22 | 2.1 | NM |
| | 12/10/96 | 6.15 | 463 | 12.7 | 984 | 1.53 | NM |
| | 03/04/97 | 6.22 | 506 | 13 | 8.9 | 2.48 | NM |
| | 06/27/97 | 6.46 | 329 | 15 | 245 | 2 | NM |
| | 09/04/97 | 6.79 | 285 | 16 | 51 | 1.39 | NM |
| | 12/04/97 | 5.90 | 367 | 13 | 3.6 | 1.35 | NM |
| | 03/06/98 | 6.38 | 425 | 12 | 4.9 | 1.97 | NM |
| | 06/18/98 | 6.36 | 439 | 14 | 8.5 | 2.2 | NM |
| | 09/29/98 | 6.29 | 326 | 17 | 8.7 | 1.54 | NM |
| | 12/15/98 | 5.94 | 394 | 14.8 | 3.6 | 1.72 | 111 |
| | 03/02/99 | 5.87 | 301 | 12 | 8.9 | 1.47 | 237 |
| | 06/16/99 | 5.99 | 375 | 12 | < 10 | 0.2 | 161 |
| | 09/16/99 | 6.19 | 449 | 14 | 2.9 | 0.4 | -159 |
| | 12/08/99 | 6.59 | 238 | 14.9 | 5.1 | 0.2 | 72 |
| | 03/07/00 | 6.34 | 278 | 12 | 7.9 | 1.1 | 67 |
| | 06/21/00 | 6.45 | 185 | 14 | 1.6 | 1.68 | -8 |
| | 09/12/00 | 7.24 | 349 | 12.4 | 1.9 | 1.2 | -18 |
| | 12/07/00 | 6.15 | 314 | 13 | 14 | 2.3 | -45 |
| | 03/15/01 | 6.55 | 371 | 11 | 9.1 | 3.5 | -61 |
| | 07/09/01 | 6.32 | 352 | 14.2 | 4.6 | 1.01 | 111 |
| | 09/24/01 | 6.16 | 256 | 18.1 | 64 | 6.17 | NM |
| | 01/02/02 | 6.09 | 468 | 15.3 | NM | NM | NM |
| | 03/27/02 | 6.51 | 5,000 | 9.7 | 5.10 | 3.84 | NM |
| | 06/11/02 | 6.29 | 439 | 13.9 | 2.38 | 1.05 | NM |
| | 09/18/02 | 6.28 | 429 | 15.6 | NM | 0.25 | -4 |
| | 12/16/02 | 6.18 | 341 | 14.2 | 2.7 | 0.48 | NM |
| | 03/17/03 | 6.29 | 350 | 13.4 | 3.4 | 0.36 | 79 |

## Table D-11

## Field Parameters in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | pH | Specific Conductance (µS/cm) | Temperature (°C) | Turbidity (NTUs) | Dissolved Oxygen (mg/L) | Oxidation Reduction Potential (mv) |
|---|---|---|---|---|---|---|---|
| MW-5 (continued) | 05/14/03 | 6.42 | 286 | 12.3 | NM | 0.69 | 34 |
| | 06/10/03 | 6.35 | 218 | 13.8 | 12 | 0.3 | NM |
| | 09/11/03 | 6.32 | 267 | 16.5 | 1.4 | 0.37 | NM |
| | 12/05/03 | 6.40 | 219 | 13.8 | 7.1 | 0.34 | 281 |
| | 03/16/04 | 6.40 | 219 | 12.7 | 7.1 | 0.77 | 73 |
| MW-6 | 09/04/96 | 6.30 | 1,930 | 14.5 | 23 | 4.8 | NM |
| | 12/10/96 | 6.17 | 1,909 | 12 | > 1,000 | 1.02 | NM |
| | 03/04/97 | 6.32 | 1,683 | 11 | 6.1 | 3.44 | NM |
| | 06/27/97 | 6.41 | 1,469 | 14 | 73 | 1 | NM |
| | 09/04/97 | 6.30 | 1,157 | 15 | 98 | 1.15 | NM |
| | 12/04/97 | 5.92 | 1,286 | 14 | 5.7 | 1.05 | NM |
| | 03/06/98 | 6.33 | 1,620 | 11 | 5.7 | 1.1 | NM |
| | 06/18/98 | 6.33 | 1,804 | 14 | 7.0 | 1.8 | NM |
| | 09/29/98 | 6.25 | 1,440 | 17.5 | 7.9 | 1.91 | NM |
| | 12/15/98 | 5.93 | 1,390 | 14.4 | NM | 1.26 | -89 |
| | 03/02/99 | 6.03 | 1,107 | 11 | 7.7 | 1.38 | -85 |
| | 06/16/99 | 6.15 | 1,441 | 12 | < 10 | < 0.1 | -117 |
| | 09/16/99 | 6.27 | 1,621 | 13 | 9.1 | 0.6 | -476 |
| | 12/08/99 | 6.63 | 315 | 13.7 | 3.7 | 0.7 | -91 |
| | 03/07/00 | 6.36 | 1,147 | 11 | 5.5 | 0.6 | -54 |
| | 06/21/00 | 6.66 | 810 | 14 | 1.0 | 1.75 | -37 |
| | 09/12/00 | 6.50 | 1,378 | 12 | NM | 2.3 | -43 |
| | 12/07/00 | 5.79 | 1,270 | 14 | 3.6 | 1.6 | -15 |
| | 03/15/01 | 6.35 | 1,079 | 11 | 16 | 0.4 | -31 |
| | 07/12/01 | 6.39 | 1,210 | 14.1 | 7.6 | 1.07 | -44 |
| | 09/25/01 | 6.63 | NM | 16.4 | 19 | 1.02 | NM |
| | 01/03/02 | 6.19 | 1,120 | 12.9 | 1.5 | 0 | NM |
| | 03/27/02 | 6.32 | NM | 9 | NM | 0.45 | NM |
| | 06/11/02 | 6.78 | 891 | 13.5 | NM | 0.34 | NM |
| | 09/18/02 | 6.49 | 1,312 | 16.7 | NM | 0.16 | -157 |
| | 12/16/02 | 6.25 | 1,179 | 14.2 | 8.8 | 0.24 | NM |
| | 03/20/03 | 6.53 | 721 | 12.1 | 5.3 | 0.17 | -70 |
| | 06/11/03 | 6.74 | 387 | 14.1 | 21 | 0.33 | NM |
| | 09/10/03 | 6.44 | 601 | 16.9 | 4.2 | 0.31 | NM |
| | 12/04/03 | 6.60 | 393 | 14.3 | 6.2 | 0.26 | -12 |
| | 03/16/04 | 6.75 | 286 | 12.9 | 6.9 | 0.25 | -37 |
| MW-7 | 12/22/97 | 6.56 | 550 | 11 | 139 | 2.15 | NM |
| | 03/06/98 | 6.63 | 536 | 12 | 13.4 | 1.53 | NM |

## Table D-11

## Field Parameters in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | pH | Specific Conductance (µS/cm) | Temperature (°C) | Turbidity (NTUs) | Dissolved Oxygen (mg/L) | Oxidation Reduction Potential (mv) |
|---|---|---|---|---|---|---|---|
| MW-7 (continued) | 06/18/98 | 6.36 | 543 | 14 | 13 | 2.4 | NM |
| | 09/29/98 | 6.38 | 438 | 17 | 21 | 1.41 | NM |
| | 12/14/98 | 5.98 | 409 | 15.2 | 3.2 | 1.23 | 68 |
| | 03/03/99 | 7.07 | 288 | 12 | 5.5 | NM | -8.4 |
| | 06/17/99 | 6.07 | 462 | 13 | NM | 0.8 | 1 |
| | 09/17/99 | 6.13 | 506 | 16 | 11 | < 0.1 | -72 |
| | 12/08/99 | 6.71 | 342 | 15.3 | 7.6 | 1.3 | -2 |
| | 03/07/00 | 6.44 | 362 | 12 | 6.7 | 0.8 | -11 |
| | 06/21/00 | 6.57 | 241 | 14 | 0.7 | 2.04 | 24 |
| | 09/12/00 | 6.00 | 493 | 13 | 13 | 1.4 | 5 |
| | 12/07/00 | 6.46 | 505 | 14 | 31 | 2.6 | -39 |
| | 03/15/01 | 6.58 | 425 | 12 | 20 | 1.5 | NM |
| | 07/12/01 | 6.45 | 493 | 14.1 | 11 | 1.87 | 54 |
| | 09/25/01 | 6.48 | NM | 15.6 | 2.8 | 1.12 | NM |
| | 01/03/02 | 6.17 | 628 | 13.9 | 4.1 | 0 | NM |
| | 03/28/02 | 6.37 | 184 | 12.3 | 4.7 | 2.61 | NM |
| | 06/11/02 | 6.66 | 383 | 13.2 | 5.7 | 0.70 | NM |
| | 09/17/02 | 6.56 | 427 | 16.0 | NM | 0.15 | 4 |
| | 12/17/02 | 6.46 | 351 | 13.2 | 2.4 | 0.32 | NM |
| | 03/17/03 | 6.49 | 436 | 13.3 | 20 | 0.13 | 27 |
| | 06/10/03 | 6.88 | 282 | 13.8 | 52 | 0.18 | NM |
| | 09/10/03 | 6.27 | 257 | 16.0 | 3.0 | 0.49 | NM |
| | 12/04/03 | 6.68 | 239 | 13.4 | 4.7 | 0.29 | 159 |
| | 03/16/04 | 6.62 | 268 | 13.9 | 7.3 | 0.84 | 34 |
| MW-8 | 12/22/97 | 6.37 | 495 | 12 | 67 | 4.06 | NM |
| | 03/06/98 | 6.49 | 758 | 12 | 70 | 2.72 | NM |
| | 06/18/98 | 6.66 | 662 | 13 | 243 | 2.8 | NM |
| | 09/29/98 | 6.33 | 428 | 14.5 | 48 | 1.7 | NM |
| | 12/14/98 | 6.11 | 413 | 13.9 | 14 | 1.83 | 72 |
| | 03/02/99 | 6.10 | 442 | 12 | 91 | 2.11 | 117 |
| | 06/16/99 | 5.95 | 534 | 11 | < 10 | 0.1 | 132 |
| | 09/16/99 | 6.22 | 588 | 13 | 11 | 1.8 | -205 |
| | 12/08/99 | 6.50 | 140 | 13.9 | 133 | 2.4 | 55 |
| | 03/07/00 | 6.90 | 455 | 12 | 25 | 1.5 | 38 |
| | 06/21/00 | 6.30 | 313 | 14 | 1.2 | 1.73 | 37 |
| | 09/12/00 | 6.52 | 447 | 11.6 | 2.6 | 3.5 | 52 |
| | 12/07/00 | 6.99 | 387 | 14 | 6.5 | 1.8 | -10 |
| | 03/15/01 | 6.45 | 433 | 11 | 8.3 | 2.7 | -50 |
| | 07/12/01 | 6.30 | 427 | 13.8 | 5 | 2.03 | 53.1 |

## Table D-11

## Field Parameters in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | pH | Specific Conductance (µS/cm) | Temperature (°C) | Turbidity (NTUs) | Dissolved Oxygen (mg/L) | Oxidation Reduction Potential (mv) |
|---|---|---|---|---|---|---|---|
| MW-8 (continued) | 09/25/01 | 6.48 | NM | 14.4 | 22 | 1.02 | NM |
| | 01/03/02 | 5.64 | 468 | 13.4 | 2.8 | 0 | NM |
| | 03/27/02 | 6.31 | NM | 8.9 | 5.1 | 1.95 | NM |
| | 06/11/02 | 6.41 | 576 | 12.9 | 6.4 | 0.40 | NM |
| | 09/18/02 | 6.32 | 415 | 15.0 | NM | 0.15 | -88 |
| | 12/16/02 | 6.23 | 294 | 13.6 | 12 | 0.35 | NM |
| | 03/17/03 | 6.31 | 279 | 12.4 | 2.4 | 0.28 | 87 |
| | 05/14/03 | 6.36 | 338 | 13.6 | NM | 0.83 | 35 |
| | 06/11/03 | 6.54 | 249 | 13.4 | 3.5 | 0.54 | NM |
| | 09/10/03 | 6.12 | 249 | 15.5 | 1.3 | 0.70 | NM |
| | 12/04/03 | 6.62 | 165 | 13.5 | 4.7 | 0.17 | 153 |
| | 03/16/04 | 6.48 | 292 | 12.6 | 6.1 | 0.72 | 47 |
| MW-9 | 07/09/01 | 6.24 | 812 | 13.9 | 8.2 | 2.28 | -63 |
| | 09/25/01 | 6.33 | NM | 14.7 | 52 | 1.06 | NM |
| | 01/03/02 | 6.13 | 763 | 13.4 | 1.4 | 0 | NM |
| | 03/27/02 | 6.37 | NM | 8.2 | NM | 0.59 | NM |
| | 06/11/02 | 6.61 | 700 | 12.8 | NM | 0.61 | NM |
| | 09/17/02 | 6.41 | 728 | 14.7 | NM | 0.13 | -131 |
| | 12/16/02 | 6.24 | 614 | 13.7 | 28 | 0.26 | NM |
| | 03/17/03 | 6.52 | 460 | 12.7 | 19 | 0.08 | -47 |
| | 06/11/03 | 6.28 | 395 | 13.3 | 65 | 0.41 | NM |
| | 09/10/03 | 6.12 | 494 | 15.1 | 22 | 0.33 | NM |
| | 12/04/03 | 6.49 | 351 | 14.5 | 16 | 0.18 | 21 |
| | 03/16/04 | 6.46 | 269 | 12.4 | 5.1 | 0.44 | 46 |
| MW-10 | 07/09/01 | 6.47 | 463 | 14.2 | 14 | 2.11 | 72 |
| | 09/25/01 | 6.53 | NM | 15.6 | 184 | 0.98 | NM |
| | 01/03/02 | 6.33 | 460 | 13.6 | 3.2 | 0 | NM |
| | 03/28/02 | 6.57 | 159 | 12 | NM | 0.32 | NM |
| | 06/11/02 | 6.90 | 397 | 13.1 | NM | 0.22 | NM |
| | 09/17/02 | 6.76 | 390 | 15.1 | NM | 0.10 | -97 |
| | 12/17/02 | 6.65 | 300 | 13.5 | 20 | 0.21 | NM |
| | 03/20/02 | 6.82 | 336 | 12.9 | 3.2 | 0.10 | -62 |
| | 06/10/03 | 6.97 | 222 | 14.1 | 15.9 | 0.18 | NM |
| | 09/10/03 | 6.09 | 267 | 16.3 | 9.0 | 0.49 | NM |
| | 12/04/03 | 6.61 | 179 | 13.4 | 7.6 | 0.37 | 44 |
| | 03/16/04 | 6.51 | 245 | 11.7 | 3.4 | 0.56 | -24 |
| MW-11 | 07/0901 | 6.69 | 406 | 12.8 | 134 | 0.89 | 22 |
| | 09/24/01 | 6.28 | 418 | 17.5 | 112.0 | 6.13 | NM |

## Table D-11

## Field Parameters in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | pH | Specific Conductance (µS/cm) | Temperature (°C) | Turbidity (NTUs) | Dissolved Oxygen (mg/L) | Oxidation Reduction Potential (mv) |
|---|---|---|---|---|---|---|---|
| MW-11 | 01/02/02 | 6.24 | 431 | 14.8 | NM | NM | NM |
| (continued) | 03/27/02 | 6.58 | 5,000 | 9.1 | 12 | 4.42 | NM |
| | 06/11/02 | 6.35 | 444 | 14.2 | 6.4 | 2.74 | NM |
| | 09/17/02 | 6.22 | 530 | 16.3 | NM | 0.14 | 83 |
| | 12/16/02 | 6.00 | 593 | 14.0 | 1.8 | 0.30 | NM |
| | 03/17/03 | 6.15 | 539 | 13.4 | 4.6 | 0.16 | 26 |
| | 06/10/03 | 6.20 | 321 | 13.7 | 8.7 | 0.35 | NM |
| | 09/10/03 | 6.08 | 411 | 15.4 | 5.0 | 0.31 | NM |
| | 12/05/03 | 6.25 | 337 | 13.5 | 5.1 | 0.29 | 260 |
| | 03/16/04 | 6.36 | 269 | 12.7 | 1.7 | 0.50 | 73 |
| MW-12 | 07/09/01 | 6.67 | 590 | 14.5 | 95 | 1.4 | 37 |
| | 09/24/01 | 6.41 | NM | 19.2 | 79 | 1.17 | NM |
| | 01/03/02 | 5.37 | 1,480 | 16.2 | 7.9 | NM | NM |
| | 03/27/02 | 5.59 | NM | 12.3 | 16 | 0.43 | NM |
| | 06/11/02 | 6.33 | 865 | 14.6 | 5.4 | 0.31 | NM |
| | 09/17/02 | 6.29 | 737 | 16.8 | NM | 0.18 | -147 |
| | 12/16/02 | 6.14 | 475 | 14.7 | 2.1 | 0.12 | NM |
| | 03/17/03 | 6.13 | 620 | 14.1 | 47 | 0.21 | 1 |
| | 05/14/03 | 6.21 | 383 | 13.7 | NM | 0.66 | 31 |
| | 06/10/03 | 6.30 | 367 | 13.8 | 67 | 0.45 | NM |
| | 09/10/03 | 6.06 | 419 | 15.9 | 28 | 0.35 | NM |
| | 12/05/03 | 6.18 | 410 | 13.4 | 9.2 | 0.33 | 40 |
| | 03/16/04 | 6.40 | 317 | 12.5 | 3.4 | 0.30 | 60 |
| MW-13 | 03/31/03 | 6.41 | 506 | 14.3 | 76 | 0.22 | -37 |
| | 05/14/03 | 6.29 | 491 | 13.8 | NM | 0.84 | -53 |
| | 06/11/03 | 6.63 | 425 | 14.7 | 16 | 0.25 | NM |
| | 09/11/03 | 6.60 | 470 | 16.8 | 23 | 0.58 | NM |
| | 12/04/03 | 6.86 | 379 | 13.1 | 5.7 | 0.28 | -11 |
| | 03/15/04 | 6.58 | 458 | 12.8 | 9.7 | 0.31 | -44 |
| | 06/10/04 | 6.55 | 383 | 14.4 | NM | 0.62 | -21 |
| MW-14 | 12/04/03 | 6.80 | 207 | 13.5 | 8.2 | 0.22 | 44 |
| | 03/16/04 | 6.52 | 294 | 13.6 | 1.6 | 0.57 | -9 |
| | 06/10/04 | 6.68 | 274 | 14.4 | NM | 0.55 | -3 |
| MW-15 | 12/04/03 | 7.00 | 259 | 13.2 | 9.1 | 0.18 | 48 |
| | 03/16/04 | 6.92 | 290 | 13.4 | 2.8 | 0.39 | -25 |
| | 06/10/04 | 6.66 | 297 | 14.1 | NM | 0.56 | -17 |
| MW-16 | 12/05/03 | 6.35 | 385 | 12.7 | 6.1 | 0.59 | 19 |

## Table D-11

## Field Parameters in Groundwater from Wells
## Univar USA Inc. Facility, Kent, Washington

| Sample Location | Date Collected | pH | Specific Conductance (µS/cm) | Temperature (°C) | Turbidity (NTUs) | Dissolved Oxygen (mg/L) | Oxidation Reduction Potential (mv) |
|---|---|---|---|---|---|---|---|
| MW-16 | 03/16/04 | 6.42 | 370 | 12.7 | 7.2 | 0.39 | -14 |
| (continued) | 06/10/04 | 6.36 | 366 | 14.4 | NM | 0.54 | -5 |
| MW-17 | 12/04/03 | 6.59 | 384 | 12 | 5.7 | 0.51 | 93 |
| | 03/15/04 | 6.32 | 619 | 12.3 | 7.1 | 0.78 | -24 |
| | 06/10/04 | 6.41 | 489 | 13.1 | NM | 0.68 | -12 |
| MW-18 | 12/04/03 | 6.54 | 308 | 13 | 8.1 | 0.33 | 21 |
| | 03/16/04 | 6.46 | 363 | 12.4 | 19.4 | 0.36 | -14 |
| | 06/10/04 | 6.41 | 415 | 13.8 | NM | 0.66 | -3 |
| MW-19 | 03/16/04 | 6.49 | 403 | 13.2 | 12.0 | 0.38 | -23 |
| | 06/10/04 | 6.31 | 379 | 14.5 | NM | 0.89 | -15 |
| Inj-1 | 07/09/01 | 6.39 | 703 | 14.2 | 48 | 1.55 | -18 |
| Inj-1 | 06/11/02 | 6.63 | 1,541 | 14.1 | 19 | 0.28 | NM |
| Inj-2 | 07/09/01 | 6.45 | 384 | 15.1 | 62 | 1.2 | 17 |
| | 06/11/02 | 6.49 | 950 | 15.6 | 14 | 0.23 | NM |
| | 06/10/03 | 6.38 | 381 | 14.5 | 10 | 0.25 | NM |
| Inj-3 | 07/09/01 | 6.37 | 407 | 14.2 | 30 | 1.51 | 17 |
| | 06/11/02 | 6.59 | 1,971 | 15.1 | 14 | 0.11 | NM |
| | 12/17/02 | 6.27 | 417 | 13.4 | 12 | 0.11 | NM |
| | 06/10/03 | 6.50 | 634 | 14.2 | 24 | 0.21 | NM |

NOTE: NM = not measured

[a] Likely meter malfunction

# APPENDIX E

# CLEANUP LEVEL DEVELOPMENT BACKUP

## Table E-1

## Toxicological, Physical, and Chemical Properties for Selected VOCs
## Univar USA Inc. Facility, Kent, Washington

| CAS Number | Constituent | Frequency of Detected | | RFDo Value | RFDo Reference | CPFo Value | CPFo | RFDi Value | RFDi Reference | CPFi Value | CPFi Reference | VP mm Hg (68°F), | Koc | Hcc | S (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Groundwater | Soil | (mg/kg-day) | | (kg-day/mg) | (kg-day/mg) | (mg/kg-day) | | (kg-day/mg) | (kg-day/mg) | unless specified | (unitless) | (unitless) | |
| 75-34-3 | 1,1-DCA | x | x | 0.1 | (H97; NI 12/97) | - | - | 0.1 | (H97; NI 12/97) | - | - | 182 mm Hg | 5.30E+01 | 2.30E-01 | 5.06E+03 |
| 75-35-4 | 1,1-DCE | x | x | 0.05 | (I8/02) | 0.6 | (H97; NI8/02) | 0.0571429 | (I8/02) | 0.175 | (H97; NI8/02) | 500 mm Hg | 6.50E+01 | 1.07E+00 | 2.25E+03 |
| 107-06-2 | 1,2-DCA | x | x | - | (H97; NI 12/97) | 0.091 | (I7/93;10/95) | - | (H97; NI 12/97) | 0.091 | (H97;I12/00) | 64 mm Hg | 3.80E+01 | 4.01E-02 | 8.52E+03 |
| 108-67-8 | 1,3,5-TMB | x | x | 0.05 [a] | (EPA-R9PRG/02) | - | - | 0.0017 [a] | (EPA-R9PRG/02) | - | - | 2 mm Hg | 8.20E+02 | 3.20E-01 | 4.80E+01 |
| 95-63-6 | 1,2,4-TMB | x | x | 0.05 [a] | (EPA-R9PRG/02) | - | - | 0.0017 [a] | (EPA-R9PRG/02) | - | - | 1 mm Hg (56°F) | 3.70E+03 | 2.30E-01 | 5.70E+01 |
| 78-93-3 | 2-butanone (MEK) | | x | 0.6 | (I9/03) | - | (H97; NI 9/03) | 1.43 | (I9/03) | - | (H97; NI 9/03) | 78 mm Hg | 4.50E+00 | 1.10E-03 | 2.70E+03 |
| 99-87-6 | 4-isopropyltoluene | x | x | - | - | - | - | - | - | - | - | - | - | - | - |
| 67-64-1 | Acetone | x | x | 0.9 | (I7/03) | - | (H97; NI 7/03) | - | (H97; NI 7/03) | - | (H97; NI 7/03) | 180 mm Hg | 5.75E-01 | 1.59E-03 | 1.00E+06 |
| 71-43-2 | Benzene | x | x | 0.004 | I4/03 | 0.055 | (RX0601/0601) | 0.0085714 | (I4/03) | 0.0273 | (H97; I 12/00) | 75 mm Hg | 6.20E+01 | 2.28E-01 | 1.75E+03 |
| 76-13-1 | CFC-113 | x | | 30 | (I2/96; 12/97) | - | (H97; NI 11/00) | 8.5714286 | (H97; NI12/97) | - | (H97; NI 11/00) | 285 mm Hg | 1.60E+02 | 2.10E+01 | 1.10E+03 |
| 75-00-3 | Chloroethane | x | x | 0.4 | (H97; NI 12/97) | 0.0029 | (H97; NI 11/00) | 2.8571429 | (I1/95; 12/97) | 0.0029 | (H97; NI 10/95) | 1000 mm Hg | 1.50E+01 | 4.50E-01 | 5.70E+03 |
| 67-66-3 | Chloroform | x | | 0.01 | (I9/92; 12/97) | 0.0061 | (I9/92; 12/97) | - | (H97; NI 12/97) | 0.08 | (H97; I 12/00) | 160 mm Hg | 5.30E+01 | 1.50E-01 | 7.92E+03 |
| 156-59-2 | cis-1,2-DCE | x | | 0.01 | (H97; NI 12/97) | - | (H97; NI 11/00) | - | (H97a; NI 12/97) | - | (H97; NI 10/95) | 180-265 mm Hg [a] | 3.55E+01 | 1.67E-01 | 3.50E+03 |
| 100-41-4 | Ethylbenzene | x | x | 0.1 | (I6/91; 12/97) | - | (H97; NI 11/00) | 2.8571429 | (I1/92; 12/97) | - | (H97; NI 10/95) | 7 mm Hg | 2.04E+02 | 3.23E-01 | 1.69E+02 |
| 110-54-3 | Hexane | x | | 0.06 | (H97; NI 12/97) | - | (H97; NI 11/00) | 0.0571429 | (I7/93; 12/97) | - | (H97; NI 10/95) | 124 mm Hg | 3.41E+03 | 7.40E+01 | 9.50E+00 |
| 98-82-8 | Isopropylbenzene | x | x | 0.1 | (I08/97; 12/00) | - | (H97; NI 12/00) | 0.1142857 | (IO7/97; 12/00) | - | (H97; NI 12/00) | 8 mm Hg | 2.20E+02 | 4.70E-01 | 6.10E+01 |
| 75-09-2 | Methylene Chloride | x | x | 0.06 | (I3/88; 12/97) | 0.0075 | (I2/95;10/95) | 0.8571429 | (H97a; NI 12/97) | 0.001645 | (H91a;7/94) | 350 mm Hg | 1.00E+01 | 8.98E-02 | 1.30E+04 |
| 103-65-1 | n-propylbenzene | | x | 0.04 [a] | (EPA-R9PRG/02) | - | - | 0.04 [a] | (EPA-R9PRG/02) | - | - | 3.4 mm Hg (77°F) | 2.80E+03 | 5.40E-01 | 1.40E+01 |
| 127-18-4 | PCE | x | x | 0.01 | (I3/88; 12/97) | 0.051 | (H91a;RI10/95) | - | (H97; NI 12/97) | - | (H97; NI 10/95) | 14 mm Hg | 2.65E+02 | 7.54E-01 | 2.00E+02 |
| 79-00-5 | TCA | x | x | 0.9 | (H91a;WI9/95) | - | (I2/94;10/95) | 3 | (H97; NI 12/00) | - | (H97;NI12/00) | 100 mm Hg | 1.35E+02 | 7.00E-01 | 1.33E+03 |
| 79-01-6 | TCE | x | x | - | (H97; NI 12/97) | 0.011 | (H91a;WI10/95) | - | (H97; NI 12/97) | 0.017 | (H91a;NI12/00) | 58 mm Hg | 9.40E+01 | 4.22E-01 | 1.10E+03 |
| 108-88-3 | Toluene | x | x | 0.2 | (I4/94; 12/97) | - | (H97; NI 11/00) | 0.1142857 | (I4/94; 12/97) | - | (H97; NI 10/95) | 21 mm Hg | 1.40E+02 | 2.72E-01 | 5.26E+02 |
| 1330-20-7 | Total Xylenes | x | x | 0.2 | (I2/03) | - | (H97; NI 2/03) | 0.02857143 | (I2/03) | - | (H97; NI 2/03) | 9 mm Hg | 2.33E+02 | 2.79E-01 | 1.71E+02 |
| 156-60-5 | trans-1,2-DCE | x | x | 0.02 | (I1/89; 12/97) | - | (H97; NI 11/00) | - | (H97a; NI 12/97) | - | (H97; NI 10/95) | 180-265 mm Hg [a] | 3.80E+01 | 3.85E-01 | 6.30E+03 |
| 75-01-4 | Vinyl Chloride | x | x | 0.003 | (I8/00; 12/00) | 1.5 | (I8/00; 12/00) | 0.02857143 | (I8/00; 12/00) | 0.0308 | (I8/00; 12/00) | 3.3 atm | 1.86E+01 | 1.11E+00 | 2.76E+03 |

Notes: 1. Toxicological, physical, and chemical properties from *Cleanup Levels and Risk Calculations under the Model Toxics Control Act Cleanup Regulation, CLARC Version 3.1* , Ecology Publication No. 94-145, Updated November 2001.

2. Toxicological references: the most recent versions of the Heast (H) and IRIS (I) databases, with values supplied by the EPA Region 10 (RX) or the EPA Region 9 Superfund Preliminary Remediation Goals Table (EPA-R9PRG) used if no toxicological properties were listed in the Heast or IRIS databases; date of database entry and CLARC adoption provided; N = not in the referenced database on the date listed, W = withdrawn from the referenced database on the date listed.

3. VP = vapor pressure, from *Pocket Guide to Chemical Hazards* , National Institute for Occupational Safety and Health (NIOSH) 2004 on-line version.

[a] cis/trans 1,2-DCE listed in NIOSH as 1,2-DCE (CAS No. 540-59-0).