# Report of Analysis



**Client Sample ID:** P03SV-09
**Lab Sample ID:** JA27118-1 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A780 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22414.D | 1 | 09/10/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 2W25495.D | 1 | 09/12/09 | YMH | n/a | n/a | V2W1075 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 20.0 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | ND | 0.20 | 0.039 | ppbv | | ND | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.49 | 0.20 | 0.021 | ppbv | | 1.6 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | 1.6 | 0.20 | 0.034 | ppbv | | 5.0 | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | ND | 0.20 | 0.028 | ppbv | | ND | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | ND | 0.040 | 0.022 | ppbv | | ND | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 108 [a] | 4.0 | 0.65 | ppbv | | 437 [a] | 16 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | 1.8 | 0.20 | 0.044 | ppbv | | 7.1 | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | 0.056 | 0.20 | 0.035 | ppbv | J | 0.22 | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | 0.077 | 0.040 | 0.037 | ppbv | | 0.46 | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.44 | 0.10 | 0.032 | ppbv | | 2.6 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-09
**Lab Sample ID:** JA27118-1 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A780 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | ND | 0.50 | 0.077 | ppbv | | ND | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.45 | 0.20 | 0.019 | ppbv | | 2.0 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | ND | 0.20 | 0.051 | ppbv | | ND | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | 0.33 | 0.20 | 0.043 | ppbv | | 1.6 | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 13.1 | 0.040 | 0.022 | ppbv | | 100 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.28 | 0.20 | 0.026 | ppbv | | 1.1 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.12 | 0.20 | 0.025 | ppbv | J | 0.42 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | ND | 0.20 | 0.039 | ppbv | | ND | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | 0.39 | 0.20 | 0.045 | ppbv | | 1.6 | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.061 | ppbv | | ND | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.29 | 0.20 | 0.018 | ppbv | | 1.2 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 411 [a] | 0.80 | 0.49 | ppbv | | 2240 [a] | 4.4 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 1.5 | 0.20 | 0.021 | ppbv | | 7.4 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 0.56 | 0.20 | 0.026 | ppbv | | 2.8 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 35.8 | 0.040 | 0.021 | ppbv | | 243 | 0.27 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 1.1 | 0.20 | 0.018 | ppbv | | 4.1 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 34.9 | 0.040 | 0.019 | ppbv | | 188 | 0.21 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 2.9 | 0.040 | 0.021 | ppbv | | 16 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 0.66 | 0.20 | 0.045 | ppbv | | 2.9 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.46 | 0.20 | 0.023 | ppbv | | 2.0 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 1.1 | 0.20 | 0.023 | ppbv | | 4.8 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 93% | 91% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P03SV-09 | | |
| **Lab Sample ID:** | JA27118-1 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A780 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-10
**Lab Sample ID:** JA27118-2 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A898 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22415.D | 1 | 09/10/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 2W25496.D | 1 | 09/12/09 | YMH | n/a | n/a | V2W1075 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 80.0 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 85.3 [a] | 1.0 | 0.20 | ppbv | | 203 [a] | 2.4 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 5.3 | 0.20 | 0.021 | ppbv | | 17 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | 0.24 | 0.20 | 0.034 | ppbv | | 0.75 | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | 1.3 | 0.20 | 0.040 | ppbv | | 3.4 | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 0.28 | 0.20 | 0.028 | ppbv | | 1.4 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | 1.1 | 0.20 | 0.047 | ppbv | | 2.3 | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.21 | 0.040 | 0.022 | ppbv | | 1.3 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | ND | 0.20 | 0.032 | ppbv | | ND | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.044 | ppbv | | ND | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | 0.053 | 0.20 | 0.036 | ppbv | J | 0.21 | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | 12.9 | 0.20 | 0.063 | ppbv | | 46.5 | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.89 | 0.20 | 0.024 | ppbv | | 4.4 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.035 | ppbv | | ND | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.98 | 0.10 | 0.032 | ppbv | | 5.9 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-10
**Lab Sample ID:** JA27118-2 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A898 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | 2.7 | 0.50 | 0.077 | ppbv | | 5.1 | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 8.6 | 0.20 | 0.019 | ppbv | | 37 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | ND | 0.20 | 0.051 | ppbv | | ND | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.043 | ppbv | | ND | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 3.4 | 0.040 | 0.022 | ppbv | | 26 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 1.8 | 0.20 | 0.026 | ppbv | | 7.4 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | 1.5 | 0.20 | 0.019 | ppbv | | 5.3 | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | 0.43 | 0.20 | 0.030 | ppbv | | 1.8 | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | 2.7 | 0.20 | 0.035 | ppbv | | 6.6 | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.24 | 0.20 | 0.025 | ppbv | | 0.83 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 8.1 | 0.20 | 0.039 | ppbv | | 24 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | 2.2 | 0.20 | 0.045 | ppbv | | 9.0 | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | 33.3 | 0.50 | 0.061 | ppbv | | 57.2 | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 4.3 | 0.20 | 0.018 | ppbv | | 18 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 9.8 | 0.040 | 0.025 | ppbv | | 53 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 13.6 | 0.20 | 0.021 | ppbv | | 66.9 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 5.2 | 0.20 | 0.026 | ppbv | | 26 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | 0.42 | 0.20 | 0.020 | ppbv | | 2.0 | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | 3.1 | 0.20 | 0.023 | ppbv | | 9.4 | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 17.8 | 0.040 | 0.021 | ppbv | | 121 | 0.27 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 85.8 [a] | 1.0 | 0.089 | ppbv | | 323 [a] | 3.8 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 5.1 | 0.040 | 0.019 | ppbv | | 27 | 0.21 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 5.4 | 0.040 | 0.021 | ppbv | | 30 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 27.9 | 0.20 | 0.045 | ppbv | | 121 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 13.2 | 0.20 | 0.023 | ppbv | | 57.3 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 41.1 | 0.20 | 0.023 | ppbv | | 179 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 102% | 109% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P03SV-10 | | |
| **Lab Sample ID:** | JA27118-2 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A898 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-11
**Lab Sample ID:** JA27118-3 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A639 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22416.D | 1 | 09/10/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 2W25497.D | 1 | 09/12/09 | YMH | n/a | n/a | V2W1075 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 20.0 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 11.1 | 0.20 | 0.039 | ppbv | | 26.4 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.38 | 0.20 | 0.021 | ppbv | | 1.2 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | 2.1 | 0.20 | 0.034 | ppbv | | 6.5 | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 13.2 | 0.20 | 0.028 | ppbv | | 64.5 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.086 | 0.040 | 0.022 | ppbv | | 0.54 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | 1.1 | 0.20 | 0.061 | ppbv | | 3.8 | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 2.2 | 0.20 | 0.032 | ppbv | | 8.9 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | 0.33 | 0.20 | 0.044 | ppbv | | 1.3 | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.75 | 0.20 | 0.024 | ppbv | | 3.7 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | 0.10 | 0.20 | 0.035 | ppbv | J | 0.40 | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | 0.11 | 0.20 | 0.028 | ppbv | J | 0.44 | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.38 | 0.10 | 0.032 | ppbv | | 2.3 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-11
**Lab Sample ID:** JA27118-3 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A639 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | ND | 0.50 | 0.077 | ppbv | | ND | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 1.5 | 0.20 | 0.019 | ppbv | | 6.5 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | ND | 0.20 | 0.051 | ppbv | | ND | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | 0.075 | 0.20 | 0.043 | ppbv | J | 0.37 | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 8.5 | 0.040 | 0.022 | ppbv | | 65 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.75 | 0.20 | 0.026 | ppbv | | 3.1 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | 1.8 | 0.20 | 0.019 | ppbv | | 6.3 | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.22 | 0.20 | 0.025 | ppbv | | 0.76 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 3.7 | 0.20 | 0.039 | ppbv | | 11 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | 3.0 | 0.20 | 0.045 | ppbv | | 12 | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | 2.7 | 0.50 | 0.061 | ppbv | | 4.6 | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.11 | 0.20 | 0.018 | ppbv | J | 0.47 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 192 [a] | 0.80 | 0.49 | ppbv | | 1050 [a] | 4.4 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | 0.32 | 0.040 | 0.021 | ppbv | | 1.7 | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.43 | 0.20 | 0.021 | ppbv | | 2.1 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 0.14 | 0.20 | 0.026 | ppbv | J | 0.69 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | 0.97 | 0.20 | 0.023 | ppbv | | 2.9 | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 17.4 | 0.040 | 0.021 | ppbv | | 118 | 0.27 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 2.7 | 0.20 | 0.018 | ppbv | | 10 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 694 [a] | 0.80 | 0.37 | ppbv | | 3730 [a] | 4.3 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 2.7 | 0.040 | 0.021 | ppbv | | 15 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 6.0 | 0.20 | 0.045 | ppbv | | 26 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 1.0 | 0.20 | 0.023 | ppbv | | 4.3 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 7.0 | 0.20 | 0.023 | ppbv | | 30 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 98% | 92% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P03SV-11 | | |
| **Lab Sample ID:** | JA27118-3 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A639 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-12
**Lab Sample ID:** JA27118-4 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A300 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22417.D | 1 | 09/10/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 2W25540.D | 1 | 09/14/09 | YMH | n/a | n/a | V2W1077 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 100 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 88.6 [a] | 0.80 | 0.16 | ppbv | | 210 [a] | 1.9 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.55 | 0.20 | 0.021 | ppbv | | 1.8 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | 0.33 | 0.20 | 0.034 | ppbv | | 1.0 | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 1.4 | 0.20 | 0.028 | ppbv | | 6.8 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.31 | 0.040 | 0.022 | ppbv | | 2.0 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 1.1 | 0.20 | 0.032 | ppbv | | 4.5 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | 1.9 | 0.20 | 0.044 | ppbv | | 7.5 | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | 102 [a] | 0.80 | 0.25 | ppbv | | 368 [a] | 2.9 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.70 | 0.20 | 0.024 | ppbv | | 3.5 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | 0.072 | 0.20 | 0.035 | ppbv | J | 0.29 | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 1.1 | 0.10 | 0.032 | ppbv | | 6.6 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-12
**Lab Sample ID:** JA27118-4 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A300 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | 7.0 | 0.50 | 0.077 | ppbv | | 13 | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 3.5 | 0.20 | 0.019 | ppbv | | 15 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 2.4 | 0.20 | 0.051 | ppbv | | 8.6 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | 0.85 | 0.20 | 0.043 | ppbv | | 4.2 | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 6.7 | 0.040 | 0.022 | ppbv | | 51 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.71 | 0.20 | 0.026 | ppbv | | 2.9 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | 0.37 | 0.20 | 0.019 | ppbv | | 1.3 | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | 0.41 | 0.20 | 0.030 | ppbv | | 1.7 | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | 2.7 | 0.20 | 0.035 | ppbv | | 6.6 | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.17 | 0.20 | 0.025 | ppbv | J | 0.59 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 3.5 | 0.20 | 0.039 | ppbv | | 10 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | 2.1 | 0.20 | 0.045 | ppbv | | 8.6 | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | 1.4 | 0.50 | 0.061 | ppbv | | 2.4 | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 1.4 | 0.20 | 0.018 | ppbv | | 6.0 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 49.7 [a] | 0.16 | 0.098 | ppbv | | 271 [a] | 0.87 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 6.5 | 0.20 | 0.021 | ppbv | | 32 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 1.6 | 0.20 | 0.026 | ppbv | | 7.9 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | 17.4 | 0.20 | 0.023 | ppbv | | 52.7 | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 43.0 [a] | 0.16 | 0.083 | ppbv | | 292 [a] | 1.1 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 3.7 | 0.20 | 0.018 | ppbv | | 14 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 75.0 [a] | 0.16 | 0.074 | ppbv | | 403 [a] | 0.86 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 1.0 | 0.040 | 0.021 | ppbv | | 5.6 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 12.5 | 0.20 | 0.045 | ppbv | | 54.3 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 3.2 | 0.20 | 0.023 | ppbv | | 14 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 15.7 | 0.20 | 0.023 | ppbv | | 68.2 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 100% | 96% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P03SV-12 | | |
| **Lab Sample ID:** | JA27118-4 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A300 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-13
**Lab Sample ID:** JA27118-5 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A237,A407 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22418.D | 1 | 09/10/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 2W25541.D | 80 | 09/15/09 | YMH | n/a | n/a | V2W1077 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 100 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 10.9 | 0.20 | 0.039 | ppbv | | 25.9 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 1.1 | 0.20 | 0.021 | ppbv | | 3.5 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | 0.17 | 0.20 | 0.034 | ppbv | J | 0.53 | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 8.5 | 0.20 | 0.028 | ppbv | | 42 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.32 | 0.040 | 0.022 | ppbv | | 2.0 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 0.42 | 0.20 | 0.032 | ppbv | | 1.7 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.044 | ppbv | | ND | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.67 | 0.20 | 0.024 | ppbv | | 3.3 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | 0.51 | 0.20 | 0.035 | ppbv | | 2.0 | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | 2.6 | 0.20 | 0.028 | ppbv | | 10 | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.47 | 0.10 | 0.032 | ppbv | | 2.8 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-13
**Lab Sample ID:** JA27118-5 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A237,A407 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | ND | 0.50 | 0.077 | ppbv | | ND | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.085 | 0.20 | 0.019 | ppbv | J | 0.37 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | ND | 0.20 | 0.051 | ppbv | | ND | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.043 | ppbv | | ND | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 5.3 | 0.040 | 0.022 | ppbv | | 41 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | ND | 0.20 | 0.026 | ppbv | | ND | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.25 | 0.20 | 0.025 | ppbv | | 0.87 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | ND | 0.20 | 0.039 | ppbv | | ND | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.045 | ppbv | | ND | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | 0.86 | 0.50 | 0.061 | ppbv | | 1.5 | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.078 | 0.20 | 0.018 | ppbv | J | 0.33 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 12.4 | 0.040 | 0.025 | ppbv | | 67.7 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | 1.2 | 0.040 | 0.021 | ppbv | | 6.5 | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.15 | 0.20 | 0.021 | ppbv | J | 0.74 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 781 [a] | 13 | 6.7 | ppbv | | 5300 [a] | 88 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.49 | 0.20 | 0.018 | ppbv | | 1.8 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 6950 [a] | 13 | 5.9 | ppbv | | 37400 [a] | 70 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 1.1 | 0.040 | 0.021 | ppbv | | 6.2 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 0.27 | 0.20 | 0.045 | ppbv | | 1.2 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.13 | 0.20 | 0.023 | ppbv | J | 0.56 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 0.40 | 0.20 | 0.023 | ppbv | | 1.7 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 95% | 81% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P03SV-13 | | |
| **Lab Sample ID:** | JA27118-5 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A237,A407 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-21
**Lab Sample ID:** JA27118-7 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A378 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22421.D | 1 | 09/10/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 2W25542.D | 1 | 09/15/09 | YMH | n/a | n/a | V2W1077 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 20.0 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 4.9 | 0.20 | 0.039 | ppbv | | 12 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.15 | 0.20 | 0.021 | ppbv | J | 0.48 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.034 | ppbv | | ND | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 19.8 | 0.20 | 0.028 | ppbv | | 96.7 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.13 | 0.040 | 0.022 | ppbv | | 0.82 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 0.37 | 0.20 | 0.032 | ppbv | | 1.5 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | 0.31 | 0.20 | 0.044 | ppbv | | 1.2 | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | 0.14 | 0.20 | 0.036 | ppbv | J | 0.57 | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.81 | 0.20 | 0.024 | ppbv | | 4.0 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | 0.081 | 0.20 | 0.035 | ppbv | J | 0.32 | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | 0.084 | 0.20 | 0.028 | ppbv | J | 0.33 | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.50 | 0.10 | 0.032 | ppbv | | 3.0 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-21
**Lab Sample ID:** JA27118-7 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A378 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | ND | 0.50 | 0.077 | ppbv | | ND | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.86 | 0.20 | 0.019 | ppbv | | 3.7 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 1.4 | 0.20 | 0.051 | ppbv | | 5.0 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | 0.066 | 0.20 | 0.043 | ppbv | J | 0.32 | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 4.6 | 0.040 | 0.022 | ppbv | | 35 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.13 | 0.20 | 0.026 | ppbv | J | 0.53 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | 0.11 | 0.20 | 0.019 | ppbv | J | 0.39 | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.25 | 0.20 | 0.025 | ppbv | | 0.87 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.23 | 0.20 | 0.039 | ppbv | | 0.68 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | 0.088 | 0.20 | 0.045 | ppbv | J | 0.36 | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | 2.4 | 0.50 | 0.061 | ppbv | | 4.1 | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.082 | 0.20 | 0.018 | ppbv | J | 0.35 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 22.8 | 0.040 | 0.025 | ppbv | | 124 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | 0.32 | 0.040 | 0.021 | ppbv | | 1.7 | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.44 | 0.20 | 0.021 | ppbv | | 2.2 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 0.097 | 0.20 | 0.026 | ppbv | J | 0.48 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 87.1 [a] | 0.80 | 0.42 | ppbv | | 591 [a] | 5.4 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 1.8 | 0.20 | 0.018 | ppbv | | 6.8 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 537 [a] | 0.80 | 0.37 | ppbv | | 2890 [a] | 4.3 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 4.8 | 0.040 | 0.021 | ppbv | | 27 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 2.2 | 0.20 | 0.045 | ppbv | | 9.6 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.37 | 0.20 | 0.023 | ppbv | | 1.6 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 2.6 | 0.20 | 0.023 | ppbv | | 11 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 96% | 81% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P03SV-21 | | |
| **Lab Sample ID:** | JA27118-7 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A378 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-22
**Lab Sample ID:** JA27118-8 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A656 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22422.D | 1 | 09/10/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 2W25543.D | 1 | 09/15/09 | YMH | n/a | n/a | V2W1077 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 20.0 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 6.6 | 0.20 | 0.039 | ppbv | | 16 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.41 | 0.20 | 0.021 | ppbv | | 1.3 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.034 | ppbv | | ND | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 45.1 [a] | 4.0 | 0.56 | ppbv | | 220 [a] | 20 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.30 | 0.040 | 0.022 | ppbv | | 1.9 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 0.90 | 0.20 | 0.032 | ppbv | | 3.6 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | 0.29 | 0.20 | 0.044 | ppbv | | 1.1 | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 1.3 | 0.20 | 0.024 | ppbv | | 6.4 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | 0.085 | 0.20 | 0.035 | ppbv | J | 0.34 | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 1.2 | 0.10 | 0.032 | ppbv | | 7.2 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-22
**Lab Sample ID:** JA27118-8 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A656 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | ND | 0.50 | 0.077 | ppbv | | ND | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.51 | 0.20 | 0.019 | ppbv | | 2.2 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | ND | 0.20 | 0.051 | ppbv | | ND | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | 0.15 | 0.20 | 0.043 | ppbv | J | 0.74 | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 14.6 | 0.040 | 0.022 | ppbv | | 112 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.14 | 0.20 | 0.026 | ppbv | J | 0.57 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | 0.22 | 0.20 | 0.030 | ppbv | | 0.90 | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.17 | 0.20 | 0.025 | ppbv | J | 0.59 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.41 | 0.20 | 0.039 | ppbv | | 1.2 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | 0.21 | 0.20 | 0.045 | ppbv | | 0.86 | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.061 | ppbv | | ND | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 1.3 | 0.20 | 0.018 | ppbv | | 5.5 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 27.9 | 0.040 | 0.025 | ppbv | | 152 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | 1.2 | 0.040 | 0.021 | ppbv | | 6.5 | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.87 | 0.20 | 0.021 | ppbv | | 4.3 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 0.20 | 0.20 | 0.026 | ppbv | | 0.98 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 403 [a] | 0.80 | 0.42 | ppbv | | 2730 [a] | 5.4 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 1.4 | 0.20 | 0.018 | ppbv | | 5.3 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 311 [a] | 0.80 | 0.37 | ppbv | | 1670 [a] | 4.3 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 11.7 | 0.040 | 0.021 | ppbv | | 65.7 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 2.0 | 0.20 | 0.045 | ppbv | | 8.7 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.59 | 0.20 | 0.023 | ppbv | | 2.6 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 2.6 | 0.20 | 0.023 | ppbv | | 11 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 108% | 83% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P03SV-22 | | |
| **Lab Sample ID:** | JA27118-8 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A656 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-23
**Lab Sample ID:** JA27118-9 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A473,A807 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22423.D | 1 | 09/10/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 2W25544.D | 29 | 09/15/09 | YMH | n/a | n/a | V2W1077 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 200 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 2.6 | 0.20 | 0.039 | ppbv | | 6.2 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.29 | 0.20 | 0.021 | ppbv | | 0.93 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.034 | ppbv | | ND | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 4.9 | 0.20 | 0.028 | ppbv | | 24 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.27 | 0.040 | 0.022 | ppbv | | 1.7 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 0.16 | 0.20 | 0.032 | ppbv | J | 0.65 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | 0.065 | 0.20 | 0.044 | ppbv | J | 0.26 | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.92 | 0.20 | 0.024 | ppbv | | 4.5 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | 0.084 | 0.20 | 0.035 | ppbv | J | 0.33 | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | 0.064 | 0.20 | 0.028 | ppbv | J | 0.25 | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.27 | 0.10 | 0.032 | ppbv | | 1.6 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-23
**Lab Sample ID:** JA27118-9 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A473,A807 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | 2.8 | 0.50 | 0.077 | ppbv | | 5.3 | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.068 | 0.20 | 0.019 | ppbv | J | 0.30 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 1.6 | 0.20 | 0.051 | ppbv | | 5.8 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.043 | ppbv | | ND | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 3.9 | 0.040 | 0.022 | ppbv | | 30 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | ND | 0.20 | 0.026 | ppbv | | ND | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.34 | 0.20 | 0.025 | ppbv | | 1.2 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.48 | 0.20 | 0.039 | ppbv | | 1.4 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.045 | ppbv | | ND | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.061 | ppbv | | ND | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.17 | 0.20 | 0.018 | ppbv | J | 0.72 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 18.1 | 0.040 | 0.025 | ppbv | | 98.8 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | 0.049 | 0.040 | 0.021 | ppbv | | 0.27 | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | ND | 0.20 | 0.021 | ppbv | | ND | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 1500 [a] | 2.3 | 1.2 | ppbv | | 10200 [a] | 16 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.16 | 0.20 | 0.018 | ppbv | J | 0.60 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 269 [a] | 2.3 | 1.1 | ppbv | | 1450 [a] | 12 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 3.2 | 0.040 | 0.021 | ppbv | | 18 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 0.23 | 0.20 | 0.045 | ppbv | | 1.0 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.16 | 0.20 | 0.023 | ppbv | J | 0.69 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 0.39 | 0.20 | 0.023 | ppbv | | 1.7 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 98% | 81% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P03SV-23 | | |
| **Lab Sample ID:** | JA27118-9 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A473,A807 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-24
**Lab Sample ID:** JA27118-10 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A091,A402 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22424.D | 1 | 09/10/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 2W25545.D | 31 | 09/15/09 | YMH | n/a | n/a | V2W1077 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 200 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 12.7 | 0.20 | 0.039 | ppbv | | 30.2 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.29 | 0.20 | 0.021 | ppbv | | 0.93 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.034 | ppbv | | ND | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 7.2 | 0.20 | 0.028 | ppbv | | 35 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.31 | 0.040 | 0.022 | ppbv | | 2.0 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 0.23 | 0.20 | 0.032 | ppbv | | 0.93 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.044 | ppbv | | ND | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 1.0 | 0.20 | 0.024 | ppbv | | 4.9 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | 0.080 | 0.20 | 0.035 | ppbv | J | 0.32 | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | 0.11 | 0.20 | 0.028 | ppbv | J | 0.44 | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.51 | 0.10 | 0.032 | ppbv | | 3.1 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-24
**Lab Sample ID:** JA27118-10 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A091,A402 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | ND | 0.50 | 0.077 | ppbv | | ND | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.16 | 0.20 | 0.019 | ppbv | J | 0.69 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 1.8 | 0.20 | 0.051 | ppbv | | 6.5 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.043 | ppbv | | ND | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 6.3 | 0.040 | 0.022 | ppbv | | 48 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | ND | 0.20 | 0.026 | ppbv | | ND | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | 0.29 | 0.20 | 0.030 | ppbv | | 1.2 | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.11 | 0.20 | 0.025 | ppbv | J | 0.38 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.90 | 0.20 | 0.039 | ppbv | | 2.7 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | 0.087 | 0.20 | 0.045 | ppbv | J | 0.36 | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.061 | ppbv | | ND | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.85 | 0.20 | 0.018 | ppbv | | 3.6 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 6.4 | 0.040 | 0.025 | ppbv | | 35 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | 0.13 | 0.040 | 0.021 | ppbv | | 0.71 | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.28 | 0.20 | 0.021 | ppbv | | 1.4 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 0.061 | 0.20 | 0.026 | ppbv | J | 0.30 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 1520 [a] | 2.5 | 1.3 | ppbv | | 10300 [a] | 17 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.43 | 0.20 | 0.018 | ppbv | | 1.6 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 636 [a] | 2.5 | 1.1 | ppbv | | 3420 [a] | 13 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 2.4 | 0.040 | 0.021 | ppbv | | 13 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 0.63 | 0.20 | 0.045 | ppbv | | 2.7 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.22 | 0.20 | 0.023 | ppbv | | 0.96 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 0.85 | 0.20 | 0.023 | ppbv | | 3.7 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 97% | 81% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P03SV-24 | | |
| **Lab Sample ID:** | JA27118-10 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A091,A402 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-30
**Lab Sample ID:** JA27118-11 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A347 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22425.D | 1 | 09/10/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 2W25546.D | 1 | 09/15/09 | YMH | n/a | n/a | V2W1077 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 40.0 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 8.1 | 0.20 | 0.039 | ppbv | | 19 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.33 | 0.20 | 0.021 | ppbv | | 1.1 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | 0.37 | 0.20 | 0.034 | ppbv | | 1.2 | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 101 [a] | 2.0 | 0.28 | ppbv | | 493 [a] | 9.8 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.13 | 0.040 | 0.022 | ppbv | | 0.82 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 0.68 | 0.20 | 0.032 | ppbv | | 2.8 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | 0.14 | 0.20 | 0.044 | ppbv | J | 0.56 | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.86 | 0.20 | 0.024 | ppbv | | 4.3 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | 0.060 | 0.20 | 0.035 | ppbv | J | 0.24 | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | 0.047 | 0.20 | 0.028 | ppbv | J | 0.19 | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.99 | 0.10 | 0.032 | ppbv | | 6.0 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-30
**Lab Sample ID:** JA27118-11 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A347 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | ND | 0.50 | 0.077 | ppbv | | ND | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.24 | 0.20 | 0.019 | ppbv | | 1.0 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 0.75 | 0.20 | 0.051 | ppbv | | 2.7 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | 0.11 | 0.20 | 0.043 | ppbv | J | 0.54 | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 21.6 | 0.040 | 0.022 | ppbv | | 166 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.10 | 0.20 | 0.026 | ppbv | J | 0.41 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.63 | 0.20 | 0.025 | ppbv | | 2.2 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.55 | 0.20 | 0.039 | ppbv | | 1.6 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | 0.29 | 0.20 | 0.045 | ppbv | | 1.2 | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.061 | ppbv | | ND | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.14 | 0.20 | 0.018 | ppbv | J | 0.60 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 8.7 | 0.040 | 0.025 | ppbv | | 47 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | 0.56 | 0.040 | 0.021 | ppbv | | 3.1 | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.78 | 0.20 | 0.021 | ppbv | | 3.8 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 0.19 | 0.20 | 0.026 | ppbv | J | 0.93 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 60.9 [a] | 0.40 | 0.21 | ppbv | | 413 [a] | 2.7 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.94 | 0.20 | 0.018 | ppbv | | 3.5 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 205 [a] | 0.40 | 0.19 | ppbv | | 1100 [a] | 2.1 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 3.4 | 0.040 | 0.021 | ppbv | | 19 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 0.88 | 0.20 | 0.045 | ppbv | | 3.8 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.38 | 0.20 | 0.023 | ppbv | | 1.7 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 1.3 | 0.20 | 0.023 | ppbv | | 5.6 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 97% | 85% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P03SV-30 | | |
| **Lab Sample ID:** | JA27118-11 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A347 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-31
**Lab Sample ID:** JA27118-12 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A480 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22426.D | 1 | 09/10/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 2W25547.D | 1 | 09/15/09 | YMH | n/a | n/a | V2W1077 |
| Run #3 | 2W25565.D | 1 | 09/15/09 | YMH | n/a | n/a | V2W1078 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 40.0 ml |
| Run #3 | 20.0 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 4.5 | 0.20 | 0.039 | ppbv | | 11 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.54 | 0.20 | 0.021 | ppbv | | 1.7 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.034 | ppbv | | ND | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 45.8 [a] | 2.0 | 0.28 | ppbv | | 224 [a] | 9.8 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.14 | 0.040 | 0.022 | ppbv | | 0.88 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 0.40 | 0.20 | 0.032 | ppbv | | 1.6 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | 0.14 | 0.20 | 0.044 | ppbv | J | 0.56 | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.98 | 0.20 | 0.024 | ppbv | | 4.8 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | 0.053 | 0.20 | 0.035 | ppbv | J | 0.21 | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | 0.058 | 0.20 | 0.028 | ppbv | J | 0.23 | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-31
**Lab Sample ID:** JA27118-12 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A480 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 106-46-7 | 147 | p-Dichlorobenzene | 0.25 | 0.10 | 0.032 | ppbv | | 1.5 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |
| 64-17-5 | 46.07 | Ethanol | ND | 0.50 | 0.077 | ppbv | | ND | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.14 | 0.20 | 0.019 | ppbv | J | 0.61 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 0.89 | 0.20 | 0.051 | ppbv | | 3.2 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.043 | ppbv | | ND | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 18.1 | 0.040 | 0.022 | ppbv | | 139 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.11 | 0.20 | 0.026 | ppbv | J | 0.45 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.22 | 0.20 | 0.025 | ppbv | | 0.76 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.46 | 0.20 | 0.039 | ppbv | | 1.4 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.045 | ppbv | | ND | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.061 | ppbv | | ND | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.86 | 0.20 | 0.018 | ppbv | | 3.7 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 9.7 | 0.040 | 0.025 | ppbv | | 53 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | 0.81 | 0.040 | 0.021 | ppbv | | 4.4 | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.28 | 0.20 | 0.021 | ppbv | | 1.4 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 0.084 | 0.20 | 0.026 | ppbv | J | 0.41 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 199 [a] | 0.40 | 0.21 | ppbv | | 1350 [a] | 2.7 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 1.2 | 0.20 | 0.018 | ppbv | | 4.5 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 520 [b] | 0.80 | 0.37 | ppbv | | 2790 [b] | 4.3 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 6.9 | 0.040 | 0.021 | ppbv | | 39 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 0.76 | 0.20 | 0.045 | ppbv | | 3.3 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.29 | 0.20 | 0.023 | ppbv | | 1.3 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 1.1 | 0.20 | 0.023 | ppbv | | 4.8 | 0.87 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-31
**Lab Sample ID:** JA27118-12 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A480 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Run# 3 | Limits |
|---|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 96% | 84% | 77% | 65-128% |

(a) Result is from Run# 2
(b) Result is from Run# 3

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-32
**Lab Sample ID:** JA27118-13 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A017 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22427.D | 1 | 09/10/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 2W25548.D | 1 | 09/15/09 | YMH | n/a | n/a | V2W1077 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 20.0 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 7.4 | 0.20 | 0.039 | ppbv | | 18 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.27 | 0.20 | 0.021 | ppbv | | 0.86 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.034 | ppbv | | ND | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 23.6 | 0.20 | 0.028 | ppbv | | 115 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.19 | 0.040 | 0.022 | ppbv | | 1.2 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 0.31 | 0.20 | 0.032 | ppbv | | 1.3 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | 0.33 | 0.20 | 0.044 | ppbv | | 1.3 | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 1.8 | 0.20 | 0.024 | ppbv | | 8.9 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | 0.068 | 0.20 | 0.035 | ppbv | J | 0.27 | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | 0.10 | 0.20 | 0.028 | ppbv | J | 0.40 | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.34 | 0.10 | 0.032 | ppbv | | 2.0 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-32
**Lab Sample ID:** JA27118-13 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A017 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | ND | 0.50 | 0.077 | ppbv | | ND | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.042 | 0.20 | 0.019 | ppbv | J | 0.18 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 2.8 | 0.20 | 0.051 | ppbv | | 10 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.043 | ppbv | | ND | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 4.2 | 0.040 | 0.022 | ppbv | | 32 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | ND | 0.20 | 0.026 | ppbv | | ND | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | 0.14 | 0.20 | 0.030 | ppbv | J | 0.57 | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.20 | 0.20 | 0.025 | ppbv | | 0.69 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.95 | 0.20 | 0.039 | ppbv | | 2.8 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | 0.13 | 0.20 | 0.045 | ppbv | J | 0.53 | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.061 | ppbv | | ND | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.070 | 0.20 | 0.018 | ppbv | J | 0.30 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 6.2 | 0.040 | 0.025 | ppbv | | 34 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | 0.27 | 0.040 | 0.021 | ppbv | | 1.5 | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.11 | 0.20 | 0.021 | ppbv | J | 0.54 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 399 [a] | 0.80 | 0.42 | ppbv | | 2710 [a] | 5.4 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.18 | 0.20 | 0.018 | ppbv | J | 0.68 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 530 [a] | 0.80 | 0.37 | ppbv | | 2850 [a] | 4.3 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 5.0 | 0.040 | 0.021 | ppbv | | 28 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 0.15 | 0.20 | 0.045 | ppbv | J | 0.65 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.050 | 0.20 | 0.023 | ppbv | J | 0.22 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 0.20 | 0.20 | 0.023 | ppbv | | 0.87 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 97% | 83% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P03SV-32 | | |
| **Lab Sample ID:** | JA27118-13 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A017 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-34
**Lab Sample ID:** JA27118-15 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A269,A702 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22428.D | 1 | 09/10/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 3W12532.D | 71.5 | 09/14/09 | YMH | n/a | n/a | V3W512 |
| Run #3 | 3W12549.D | 71.5 | 09/15/09 | YMH | n/a | n/a | V3W513 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 100 ml |
| Run #3 | 40.0 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 5.2 | 0.20 | 0.039 | ppbv | | 12 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.96 | 0.20 | 0.021 | ppbv | | 3.1 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.034 | ppbv | | ND | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 33.0 | 0.20 | 0.028 | ppbv | | 161 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 1.2 | 0.040 | 0.022 | ppbv | | 7.5 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 9.8 | 0.20 | 0.032 | ppbv | | 40 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | 13.1 | 0.20 | 0.044 | ppbv | | 51.9 | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | 1.1 | 0.20 | 0.036 | ppbv | | 4.5 | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.86 | 0.20 | 0.024 | ppbv | | 4.3 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | 1.7 | 0.20 | 0.035 | ppbv | | 6.7 | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | 35.3 | 0.20 | 0.028 | ppbv | | 140 | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-34
**Lab Sample ID:** JA27118-15 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A269,A702 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 106-46-7 | 147 | p-Dichlorobenzene | 1.7 | 0.10 | 0.032 | ppbv | | 10 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |
| 64-17-5 | 46.07 | Ethanol | ND | 0.50 | 0.077 | ppbv | | ND | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.48 | 0.20 | 0.019 | ppbv | | 2.1 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | ND | 0.20 | 0.051 | ppbv | | ND | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | 0.10 | 0.20 | 0.043 | ppbv | J | 0.49 | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 36.8 | 0.040 | 0.022 | ppbv | | 282 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | ND | 0.20 | 0.026 | ppbv | | ND | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.13 | 0.20 | 0.025 | ppbv | J | 0.45 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.71 | 0.20 | 0.039 | ppbv | | 2.1 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | 0.36 | 0.20 | 0.045 | ppbv | | 1.5 | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.061 | ppbv | | ND | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.19 | 0.20 | 0.018 | ppbv | J | 0.81 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 99.8 [a] | 11 | 7.0 | ppbv | | 545 [a] | 60 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | 2.1 | 0.040 | 0.021 | ppbv | | 11 | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.54 | 0.20 | 0.021 | ppbv | | 2.7 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 0.12 | 0.20 | 0.026 | ppbv | J | 0.59 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 9430 [b] | 29 | 15 | ppbv | | 63900 [b] | 200 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.98 | 0.20 | 0.018 | ppbv | | 3.7 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 3180 [a] | 11 | 5.3 | ppbv | | 17100 [a] | 59 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 4.9 | 0.040 | 0.021 | ppbv | | 28 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 1.4 | 0.20 | 0.045 | ppbv | | 6.1 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.41 | 0.20 | 0.023 | ppbv | | 1.8 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 1.8 | 0.20 | 0.023 | ppbv | | 7.8 | 0.87 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P03SV-34 | | |
| **Lab Sample ID:** | JA27118-15 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A269,A702 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Run# 3 | Limits |
|---|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 98% | 92% | 85% | 65-128% |

(a) Result is from Run# 2
(b) Result is from Run# 3

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-35
**Lab Sample ID:** JA27118-16 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A897,A528 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22429.D | 1 | 09/10/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 3W12533.D | 74 | 09/14/09 | YMH | n/a | n/a | V3W512 |
| Run #3 | 3W12550.D | 74 | 09/15/09 | YMH | n/a | n/a | V3W513 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 100 ml |
| Run #3 | 40.0 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 119 [a] | 59 | 12 | ppbv | | 283 [a] | 140 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.62 | 0.20 | 0.021 | ppbv | | 2.0 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | 0.26 | 0.20 | 0.034 | ppbv | | 0.81 | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 20.9 | 0.20 | 0.028 | ppbv | | 102 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.30 | 0.040 | 0.022 | ppbv | | 1.9 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | 1.5 | 0.20 | 0.061 | ppbv | | 5.2 | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 24.2 | 0.20 | 0.032 | ppbv | | 97.9 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | 1.0 | 0.20 | 0.044 | ppbv | | 4.0 | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | 1.3 | 0.20 | 0.036 | ppbv | | 5.3 | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.60 | 0.20 | 0.024 | ppbv | | 3.0 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | 4.4 | 0.20 | 0.035 | ppbv | | 17 | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | 14.0 | 0.20 | 0.028 | ppbv | | 55.5 | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-35
**Lab Sample ID:** JA27118-16 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A897,A528 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 106-46-7 | 147 | p-Dichlorobenzene | 0.60 | 0.10 | 0.032 | ppbv | | 3.6 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |
| 64-17-5 | 46.07 | Ethanol | ND | 0.50 | 0.077 | ppbv | | ND | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 2.6 | 0.20 | 0.019 | ppbv | | 11 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | ND | 0.20 | 0.051 | ppbv | | ND | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | 0.11 | 0.20 | 0.043 | ppbv | J | 0.54 | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 13.4 | 0.040 | 0.022 | ppbv | | 103 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | ND | 0.20 | 0.026 | ppbv | | ND | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.31 | 0.20 | 0.025 | ppbv | | 1.1 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 1.3 | 0.20 | 0.039 | ppbv | | 3.8 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.045 | ppbv | | ND | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.061 | ppbv | | ND | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.093 | 0.20 | 0.018 | ppbv | J | 0.40 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 90.9 [a] | 12 | 7.3 | ppbv | | 496 [a] | 65 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | 0.42 | 0.040 | 0.021 | ppbv | | 2.3 | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.41 | 0.20 | 0.021 | ppbv | | 2.0 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 0.099 | 0.20 | 0.026 | ppbv | J | 0.49 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 9660 [b] | 30 | 15 | ppbv | | 65500 [b] | 200 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 2.3 | 0.20 | 0.018 | ppbv | | 8.7 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 1940 [a] | 12 | 5.5 | ppbv | | 10400 [a] | 64 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 0.92 | 0.040 | 0.021 | ppbv | | 5.2 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 5.9 | 0.20 | 0.045 | ppbv | | 26 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 1.7 | 0.20 | 0.023 | ppbv | | 7.4 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 7.6 | 0.20 | 0.023 | ppbv | | 33 | 0.87 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P03SV-35 | | |
| **Lab Sample ID:** | JA27118-16 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A897,A528 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Run# 3 | Limits |
|---|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 85% | 90% | 85% | 65-128% |

(a) Result is from Run# 2
(b) Result is from Run# 3

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-42
**Lab Sample ID:** JA27118-17 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A831 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22430.D | 1 | 09/11/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 3W12534.D | 1 | 09/14/09 | YMH | n/a | n/a | V3W512 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 100 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 4.5 | 0.20 | 0.039 | ppbv | | 11 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.21 | 0.20 | 0.021 | ppbv | | 0.67 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.034 | ppbv | | ND | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 3.8 | 0.20 | 0.028 | ppbv | | 19 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.11 | 0.040 | 0.022 | ppbv | | 0.69 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 0.17 | 0.20 | 0.032 | ppbv | J | 0.69 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | 0.054 | 0.20 | 0.044 | ppbv | J | 0.21 | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.71 | 0.20 | 0.024 | ppbv | | 3.5 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.035 | ppbv | | ND | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.62 | 0.10 | 0.032 | ppbv | | 3.7 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-42
**Lab Sample ID:** JA27118-17 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A831 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | 173 [a] | 2.0 | 0.31 | ppbv | E | 326 [a] | 3.8 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.28 | 0.20 | 0.019 | ppbv | | 1.2 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 1.6 | 0.20 | 0.051 | ppbv | | 5.8 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | 0.056 | 0.20 | 0.043 | ppbv | J | 0.28 | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 12.3 | 0.040 | 0.022 | ppbv | | 94.3 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.094 | 0.20 | 0.026 | ppbv | J | 0.39 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.14 | 0.20 | 0.025 | ppbv | J | 0.49 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.44 | 0.20 | 0.039 | ppbv | | 1.3 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | 0.15 | 0.20 | 0.045 | ppbv | J | 0.61 | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.061 | ppbv | | ND | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.18 | 0.20 | 0.018 | ppbv | J | 0.77 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 7.3 | 0.040 | 0.025 | ppbv | | 40 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | 0.048 | 0.040 | 0.021 | ppbv | | 0.26 | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.33 | 0.20 | 0.021 | ppbv | | 1.6 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 0.078 | 0.20 | 0.026 | ppbv | J | 0.38 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | 1.1 | 0.20 | 0.023 | ppbv | | 3.3 | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 37.0 [a] | 0.16 | 0.083 | ppbv | | 251 [a] | 1.1 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.74 | 0.20 | 0.018 | ppbv | | 2.8 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 15.7 | 0.040 | 0.019 | ppbv | | 84.4 | 0.21 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 3.6 | 0.040 | 0.021 | ppbv | | 20 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 0.96 | 0.20 | 0.045 | ppbv | | 4.2 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.27 | 0.20 | 0.023 | ppbv | | 1.2 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 1.2 | 0.20 | 0.023 | ppbv | | 5.2 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 97% | 90% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P03SV-42 | | |
| **Lab Sample ID:** | JA27118-17 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A831 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-43
**Lab Sample ID:** JA27118-18 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A206 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22431.D | 1 | 09/11/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 3W12535.D | 1 | 09/14/09 | YMH | n/a | n/a | V3W512 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 80.0 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 4.0 | 0.20 | 0.039 | ppbv | | 9.5 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.18 | 0.20 | 0.021 | ppbv | J | 0.58 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.034 | ppbv | | ND | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 7.4 | 0.20 | 0.028 | ppbv | | 36 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.11 | 0.040 | 0.022 | ppbv | | 0.69 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 0.097 | 0.20 | 0.032 | ppbv | J | 0.39 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | 0.085 | 0.20 | 0.044 | ppbv | J | 0.34 | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.70 | 0.20 | 0.024 | ppbv | | 3.5 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.035 | ppbv | | ND | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.29 | 0.10 | 0.032 | ppbv | | 1.7 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-43
**Lab Sample ID:** JA27118-18 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A206 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | ND | 0.50 | 0.077 | ppbv | | ND | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 2.2 | 0.20 | 0.019 | ppbv | | 9.6 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 1.2 | 0.20 | 0.051 | ppbv | | 4.3 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | 0.096 | 0.20 | 0.043 | ppbv | J | 0.47 | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 1.4 | 0.040 | 0.022 | ppbv | | 11 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.089 | 0.20 | 0.026 | ppbv | J | 0.36 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | 0.13 | 0.20 | 0.019 | ppbv | J | 0.46 | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.18 | 0.20 | 0.025 | ppbv | J | 0.63 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.25 | 0.20 | 0.039 | ppbv | | 0.74 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | 0.076 | 0.20 | 0.045 | ppbv | J | 0.31 | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.061 | ppbv | | ND | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.045 | 0.20 | 0.018 | ppbv | J | 0.19 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 7.0 | 0.040 | 0.025 | ppbv | | 38 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | 0.046 | 0.040 | 0.021 | ppbv | | 0.25 | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.63 | 0.20 | 0.021 | ppbv | | 3.1 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 0.22 | 0.20 | 0.026 | ppbv | | 1.1 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 95.1 [a] | 0.20 | 0.10 | ppbv | | 645 [a] | 1.4 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 1.4 | 0.20 | 0.018 | ppbv | | 5.3 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 52.5 [a] | 0.20 | 0.093 | ppbv | | 282 [a] | 1.1 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 6.2 | 0.040 | 0.021 | ppbv | | 35 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 8.5 | 0.20 | 0.045 | ppbv | | 37 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 1.9 | 0.20 | 0.023 | ppbv | | 8.3 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 10.4 | 0.20 | 0.023 | ppbv | | 45.2 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 96% | 91% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P03SV-43 | | |
| **Lab Sample ID:** | JA27118-18 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A206 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-44
**Lab Sample ID:** JA27118-19 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A710 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22432.D | 1 | 09/11/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 3W12536.D | 1 | 09/15/09 | YMH | n/a | n/a | V3W512 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 20.0 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 3.5 | 0.20 | 0.039 | ppbv | | 8.3 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.21 | 0.20 | 0.021 | ppbv | | 0.67 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.034 | ppbv | | ND | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 1.2 | 0.20 | 0.028 | ppbv | | 5.9 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.12 | 0.040 | 0.022 | ppbv | | 0.75 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 0.041 | 0.20 | 0.032 | ppbv | J | 0.17 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.044 | ppbv | | ND | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.62 | 0.20 | 0.024 | ppbv | | 3.1 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.035 | ppbv | | ND | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.41 | 0.10 | 0.032 | ppbv | | 2.5 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-44
**Lab Sample ID:** JA27118-19 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A710 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | ND | 0.50 | 0.077 | ppbv | | ND | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.062 | 0.20 | 0.019 | ppbv | J | 0.27 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 1.3 | 0.20 | 0.051 | ppbv | | 4.7 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.043 | ppbv | | ND | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 1.3 | 0.040 | 0.022 | ppbv | | 10 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.073 | 0.20 | 0.026 | ppbv | J | 0.30 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | 0.12 | 0.20 | 0.030 | ppbv | J | 0.49 | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.14 | 0.20 | 0.025 | ppbv | J | 0.49 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.38 | 0.20 | 0.039 | ppbv | | 1.1 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.045 | ppbv | | ND | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | 1.1 | 0.50 | 0.061 | ppbv | | 1.9 | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.066 | 0.20 | 0.018 | ppbv | J | 0.28 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 6.6 | 0.040 | 0.025 | ppbv | | 36 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.23 | 0.20 | 0.021 | ppbv | | 1.1 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 0.069 | 0.20 | 0.026 | ppbv | J | 0.34 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 158 [a] | 0.80 | 0.42 | ppbv | | 1070 [a] | 5.4 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.66 | 0.20 | 0.018 | ppbv | | 2.5 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 61.9 [a] | 0.80 | 0.37 | ppbv | | 333 [a] | 4.3 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 7.8 | 0.040 | 0.021 | ppbv | | 44 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 0.25 | 0.20 | 0.045 | ppbv | | 1.1 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.10 | 0.20 | 0.023 | ppbv | J | 0.43 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 0.35 | 0.20 | 0.023 | ppbv | | 1.5 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 97% | 90% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P03SV-44 | | |
| **Lab Sample ID:** | JA27118-19 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A710 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-45
**Lab Sample ID:** JA27118-20 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A487,A503 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22433.D | 1 | 09/11/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 3W12537.D | 29 | 09/15/09 | YMH | n/a | n/a | V3W512 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 200 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 2.6 | 0.20 | 0.039 | ppbv | | 6.2 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.23 | 0.20 | 0.021 | ppbv | | 0.73 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.034 | ppbv | | ND | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 0.22 | 0.20 | 0.028 | ppbv | | 1.1 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.095 | 0.040 | 0.022 | ppbv | | 0.60 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | ND | 0.20 | 0.032 | ppbv | | ND | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.044 | ppbv | | ND | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.61 | 0.20 | 0.024 | ppbv | | 3.0 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.035 | ppbv | | ND | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 1.3 | 0.10 | 0.032 | ppbv | | 7.8 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-45
**Lab Sample ID:** JA27118-20 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A487,A503 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | ND | 0.50 | 0.077 | ppbv | | ND | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.066 | 0.20 | 0.019 | ppbv | J | 0.29 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 2.6 | 0.20 | 0.051 | ppbv | | 9.4 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.043 | ppbv | | ND | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 1.6 | 0.040 | 0.022 | ppbv | | 12 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.073 | 0.20 | 0.026 | ppbv | J | 0.30 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.21 | 0.20 | 0.025 | ppbv | | 0.73 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.27 | 0.20 | 0.039 | ppbv | | 0.80 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.045 | ppbv | | ND | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.061 | ppbv | | ND | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.25 | 0.20 | 0.018 | ppbv | | 1.1 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 10.3 | 0.040 | 0.025 | ppbv | | 56.2 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | ND | 0.20 | 0.021 | ppbv | | ND | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 725 [a] | 2.3 | 1.2 | ppbv | | 4920 [a] | 16 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.60 | 0.20 | 0.018 | ppbv | | 2.3 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 23.4 | 0.040 | 0.019 | ppbv | | 126 | 0.21 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 12.9 | 0.040 | 0.021 | ppbv | | 72.5 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 0.30 | 0.20 | 0.045 | ppbv | | 1.3 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.21 | 0.20 | 0.023 | ppbv | | 0.91 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 0.51 | 0.20 | 0.023 | ppbv | | 2.2 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 98% | 88% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P03SV-45 | | |
| **Lab Sample ID:** | JA27118-20 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A487,A503 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-46
**Lab Sample ID:** JA27118-21 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A709,A676 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22434.D | 1 | 09/11/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 3W12538.D | 28.6 | 09/15/09 | YMH | n/a | n/a | V3W512 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 200 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 11.0 | 0.20 | 0.039 | ppbv | | 26.1 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.17 | 0.20 | 0.021 | ppbv | J | 0.54 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.034 | ppbv | | ND | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 0.66 | 0.20 | 0.028 | ppbv | | 3.2 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.11 | 0.040 | 0.022 | ppbv | | 0.69 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 7.8 | 0.20 | 0.032 | ppbv | | 32 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | 0.59 | 0.20 | 0.044 | ppbv | | 2.3 | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.61 | 0.20 | 0.024 | ppbv | | 3.0 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | 0.51 | 0.20 | 0.035 | ppbv | | 2.0 | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | 1.9 | 0.20 | 0.028 | ppbv | | 7.5 | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.39 | 0.10 | 0.032 | ppbv | | 2.3 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P03SV-46
**Lab Sample ID:** JA27118-21 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A709,A676 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | 2.3 | 0.50 | 0.077 | ppbv | | 4.3 | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.95 | 0.20 | 0.019 | ppbv | | 4.1 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 2.3 | 0.20 | 0.051 | ppbv | | 8.3 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.043 | ppbv | | ND | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 1.4 | 0.040 | 0.022 | ppbv | | 11 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | ND | 0.20 | 0.026 | ppbv | | ND | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | 0.18 | 0.20 | 0.019 | ppbv | J | 0.63 | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.24 | 0.20 | 0.025 | ppbv | | 0.83 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.82 | 0.20 | 0.039 | ppbv | | 2.4 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.045 | ppbv | | ND | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.061 | ppbv | | ND | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.055 | 0.20 | 0.018 | ppbv | J | 0.23 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 17.3 | 0.040 | 0.025 | ppbv | | 94.4 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.18 | 0.20 | 0.021 | ppbv | J | 0.88 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 0.052 | 0.20 | 0.026 | ppbv | J | 0.26 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 1580 [a] | 2.3 | 1.2 | ppbv | | 10700 [a] | 16 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.85 | 0.20 | 0.018 | ppbv | | 3.2 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 84.5 [a] | 2.3 | 1.1 | ppbv | | 454 [a] | 12 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 1.3 | 0.040 | 0.021 | ppbv | | 7.3 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 3.2 | 0.20 | 0.045 | ppbv | | 14 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.55 | 0.20 | 0.023 | ppbv | | 2.4 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 3.7 | 0.20 | 0.023 | ppbv | | 16 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 100% | 91% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P03SV-46 | | |
| **Lab Sample ID:** | JA27118-21 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A709,A676 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P10SV-01
**Lab Sample ID:** JA27118-22 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A270 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22435.D | 1 | 09/11/09 | YMH | n/a | n/a | VW940 |
| Run #2 | 3W12539.D | 1 | 09/15/09 | YMH | n/a | n/a | V3W512 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 20.0 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 370 [a] | 4.0 | 0.78 | ppbv | | 879 [a] | 9.5 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.87 | 0.20 | 0.021 | ppbv | | 2.8 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.034 | ppbv | | ND | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 2.9 | 0.20 | 0.028 | ppbv | | 14 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.21 | 0.040 | 0.022 | ppbv | | 1.3 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 0.78 | 0.20 | 0.032 | ppbv | | 3.2 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.044 | ppbv | | ND | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.53 | 0.20 | 0.024 | ppbv | | 2.6 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | 0.76 | 0.20 | 0.035 | ppbv | | 3.0 | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | 3.3 | 0.20 | 0.028 | ppbv | | 13 | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 6.1 | 0.10 | 0.032 | ppbv | | 37 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P10SV-01
**Lab Sample ID:** JA27118-22 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A270 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | 15.3 | 0.50 | 0.077 | ppbv | | 28.8 | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 27.9 [a] | 4.0 | 0.39 | ppbv | | 121 [a] | 17 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 0.50 | 0.20 | 0.051 | ppbv | | 1.8 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | 0.82 | 0.20 | 0.043 | ppbv | | 4.0 | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 57.3 [a] | 0.80 | 0.44 | ppbv | | 439 [a] | 6.1 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.32 | 0.20 | 0.026 | ppbv | | 1.3 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | 1.2 | 0.20 | 0.030 | ppbv | | 4.9 | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | 179 [a] | 4.0 | 0.69 | ppbv | | 440 [a] | 9.8 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.17 | 0.20 | 0.025 | ppbv | J | 0.59 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 14.0 | 0.20 | 0.039 | ppbv | | 41.3 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | 3.8 | 0.20 | 0.045 | ppbv | | 16 | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | 0.74 | 0.50 | 0.061 | ppbv | | 1.3 | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.75 | 0.20 | 0.018 | ppbv | | 3.2 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 4.3 | 0.040 | 0.025 | ppbv | | 23 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 3.9 | 0.20 | 0.021 | ppbv | | 19 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 1.1 | 0.20 | 0.026 | ppbv | | 5.4 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | 1.0 | 0.20 | 0.023 | ppbv | | 3.0 | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 15.7 | 0.040 | 0.021 | ppbv | | 106 | 0.27 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 32.1 | 0.20 | 0.018 | ppbv | | 121 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 233 [a] | 0.80 | 0.37 | ppbv | | 1250 [a] | 4.3 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 0.34 | 0.040 | 0.021 | ppbv | | 1.9 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 106 [a] | 4.0 | 0.90 | ppbv | | 460 [a] | 17 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 33.2 [a] | 4.0 | 0.47 | ppbv | | 144 [a] | 17 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 139 [a] | 4.0 | 0.47 | ppbv | | 604 [a] | 17 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 136% [b] | 97% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P10SV-01 | | |
| **Lab Sample ID:** | JA27118-22 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A270 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2
(b) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P10SV-02
**Lab Sample ID:** JA27118-23 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A088 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22446.D | 1 | 09/11/09 | YMH | n/a | n/a | VW941 |
| Run #2 | 3W12540.D | 1 | 09/15/09 | YMH | n/a | n/a | V3W512 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 20.0 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 386 [a] | 4.0 | 0.78 | ppbv | | 917 [a] | 9.5 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 1.4 | 0.20 | 0.021 | ppbv | | 4.5 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.034 | ppbv | | ND | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 34.2 | 0.20 | 0.028 | ppbv | | 167 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.79 | 0.040 | 0.022 | ppbv | | 5.0 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 3.7 | 0.20 | 0.032 | ppbv | | 15 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.044 | ppbv | | ND | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.51 | 0.20 | 0.024 | ppbv | | 2.5 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | 0.42 | 0.20 | 0.035 | ppbv | | 1.7 | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 1.3 | 0.10 | 0.032 | ppbv | | 7.8 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P10SV-02
**Lab Sample ID:** JA27118-23 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A088 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | 122 [a] | 10 | 1.5 | ppbv | | 230 [a] | 19 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 27.1 | 0.20 | 0.019 | ppbv | | 118 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | ND | 0.20 | 0.051 | ppbv | | ND | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | 2.0 | 0.20 | 0.043 | ppbv | | 9.8 | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 224 [a] | 0.80 | 0.44 | ppbv | | 1720 [a] | 6.1 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.38 | 0.20 | 0.026 | ppbv | | 1.6 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | 0.33 | 0.20 | 0.019 | ppbv | | 1.2 | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | 31.6 | 0.20 | 0.035 | ppbv | | 77.7 | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.23 | 0.20 | 0.025 | ppbv | | 0.80 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 34.2 | 0.20 | 0.039 | ppbv | | 101 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | 30.5 | 0.20 | 0.045 | ppbv | | 125 | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | 3.5 | 0.50 | 0.061 | ppbv | | 6.0 | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.44 | 0.20 | 0.018 | ppbv | | 1.9 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 23.8 | 0.040 | 0.025 | ppbv | | 130 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 10.9 | 0.20 | 0.021 | ppbv | | 53.6 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 7.1 | 0.20 | 0.026 | ppbv | | 35 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | 4.6 | 0.20 | 0.023 | ppbv | | 14 | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 61.9 [a] | 0.80 | 0.42 | ppbv | | 420 [a] | 5.4 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 8.8 | 0.20 | 0.018 | ppbv | | 33 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 214 [a] | 0.80 | 0.37 | ppbv | | 1150 [a] | 4.3 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 0.58 | 0.040 | 0.021 | ppbv | | 3.3 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 95.9 [a] | 4.0 | 0.90 | ppbv | | 417 [a] | 17 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 43.9 [a] | 4.0 | 0.47 | ppbv | | 191 [a] | 17 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 140 [a] | 4.0 | 0.47 | ppbv | | 608 [a] | 17 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 214% [b] | 92% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P10SV-02 | | |
| **Lab Sample ID:** | JA27118-23 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A088 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2
(b) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-01
**Lab Sample ID:** JA27118-24 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A652 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22448.D | 1 | 09/11/09 | YMH | n/a | n/a | VW941 |
| Run #2 | | | | | | | |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 2.6 | 0.20 | 0.039 | ppbv | | 6.2 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.14 | 0.20 | 0.021 | ppbv | J | 0.45 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.034 | ppbv | | ND | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 0.10 | 0.20 | 0.028 | ppbv | J | 0.49 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.12 | 0.040 | 0.022 | ppbv | | 0.75 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | ND | 0.20 | 0.032 | ppbv | | ND | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.044 | ppbv | | ND | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.46 | 0.20 | 0.024 | ppbv | | 2.3 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.035 | ppbv | | ND | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.23 | 0.10 | 0.032 | ppbv | | 1.4 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-01
**Lab Sample ID:** JA27118-24 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A652 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | 1.1 | 0.50 | 0.077 | ppbv | | 2.1 | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.33 | 0.20 | 0.019 | ppbv | | 1.4 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 0.53 | 0.20 | 0.051 | ppbv | | 1.9 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.043 | ppbv | | ND | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 0.25 | 0.040 | 0.022 | ppbv | | 1.9 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | ND | 0.20 | 0.026 | ppbv | | ND | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | 3.3 | 0.20 | 0.035 | ppbv | | 8.1 | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 1.2 | 0.20 | 0.025 | ppbv | | 4.2 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.35 | 0.20 | 0.039 | ppbv | | 1.0 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.045 | ppbv | | ND | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | 0.47 | 0.50 | 0.061 | ppbv | J | 0.81 | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | ND | 0.20 | 0.018 | ppbv | | ND | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 0.16 | 0.040 | 0.025 | ppbv | | 0.87 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.13 | 0.20 | 0.021 | ppbv | J | 0.64 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 19.5 | 0.040 | 0.021 | ppbv | | 132 | 0.27 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.64 | 0.20 | 0.018 | ppbv | | 2.4 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 3.5 | 0.040 | 0.019 | ppbv | | 19 | 0.21 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 2.6 | 0.040 | 0.021 | ppbv | | 15 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 1.0 | 0.20 | 0.045 | ppbv | | 4.3 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.39 | 0.20 | 0.023 | ppbv | | 1.7 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 1.4 | 0.20 | 0.023 | ppbv | | 6.1 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 99% | | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-03
**Lab Sample ID:** JA27118-26 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A227 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22515.D | 1 | 09/15/09 | YMH | n/a | n/a | VW944 |
| Run #2 | 3W12541.D | 1 | 09/15/09 | YMH | n/a | n/a | V3W512 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 100 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 31.2 | 0.20 | 0.039 | ppbv | | 74.1 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.44 | 0.20 | 0.021 | ppbv | | 1.4 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | 0.44 | 0.20 | 0.034 | ppbv | | 1.4 | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | ND | 0.20 | 0.028 | ppbv | | ND | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.11 | 0.040 | 0.022 | ppbv | | 0.69 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | ND | 0.20 | 0.032 | ppbv | | ND | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.044 | ppbv | | ND | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.71 | 0.20 | 0.024 | ppbv | | 3.5 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.035 | ppbv | | ND | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | 0.11 | 0.10 | 0.032 | ppbv | | 0.66 | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 1.9 | 0.10 | 0.032 | ppbv | | 11 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-03
**Lab Sample ID:** JA27118-26 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A227 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | ND | 0.50 | 0.077 | ppbv | | ND | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 7.3 | 0.20 | 0.019 | ppbv | | 32 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | ND | 0.20 | 0.051 | ppbv | | ND | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | 0.12 | 0.20 | 0.043 | ppbv | J | 0.59 | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 4.9 | 0.040 | 0.022 | ppbv | | 38 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.13 | 0.20 | 0.026 | ppbv | J | 0.53 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | 0.11 | 0.20 | 0.019 | ppbv | J | 0.39 | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | 0.12 | 0.20 | 0.030 | ppbv | J | 0.49 | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.12 | 0.20 | 0.025 | ppbv | J | 0.42 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 2.7 | 0.20 | 0.039 | ppbv | | 8.0 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | 0.27 | 0.20 | 0.045 | ppbv | | 1.1 | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | 2.1 | 0.50 | 0.061 | ppbv | | 3.6 | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.34 | 0.20 | 0.018 | ppbv | | 1.4 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 1.2 | 0.040 | 0.025 | ppbv | | 6.5 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.55 | 0.20 | 0.021 | ppbv | | 2.7 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 0.15 | 0.20 | 0.026 | ppbv | J | 0.74 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 30.6 [a] | 0.16 | 0.083 | ppbv | | 208 [a] | 1.1 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 4.8 | 0.20 | 0.018 | ppbv | | 18 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 0.12 | 0.040 | 0.019 | ppbv | | 0.64 | 0.21 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 0.96 | 0.040 | 0.021 | ppbv | | 5.4 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 22.9 | 0.20 | 0.045 | ppbv | | 99.5 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 5.9 | 0.20 | 0.023 | ppbv | | 26 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 28.9 | 0.20 | 0.023 | ppbv | | 126 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 108% | 91% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17SSV-03 | | |
| **Lab Sample ID:** | JA27118-26 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A227 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-04
**Lab Sample ID:** JA27118-27 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A093 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22450.D | 1 | 09/11/09 | YMH | n/a | n/a | VW941 |
| Run #2 | | | | | | | |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 14.2 | 0.20 | 0.039 | ppbv | | 33.7 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.25 | 0.20 | 0.021 | ppbv | | 0.80 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | 0.58 | 0.20 | 0.034 | ppbv | | 1.8 | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | ND | 0.20 | 0.028 | ppbv | | ND | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | ND | 0.040 | 0.022 | ppbv | | ND | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | ND | 0.20 | 0.032 | ppbv | | ND | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.044 | ppbv | | ND | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.54 | 0.20 | 0.024 | ppbv | | 2.7 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.035 | ppbv | | ND | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.32 | 0.10 | 0.032 | ppbv | | 1.9 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-04
**Lab Sample ID:** JA27118-27 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A093 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | 2.3 | 0.50 | 0.077 | ppbv | | 4.3 | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 14.3 | 0.20 | 0.019 | ppbv | | 62.1 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 3.3 | 0.20 | 0.051 | ppbv | | 12 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.043 | ppbv | | ND | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 0.85 | 0.040 | 0.022 | ppbv | | 6.5 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.096 | 0.20 | 0.026 | ppbv | J | 0.39 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | 0.14 | 0.20 | 0.019 | ppbv | J | 0.49 | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | 6.5 | 0.20 | 0.035 | ppbv | | 16 | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 1.3 | 0.20 | 0.025 | ppbv | | 4.5 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 1.3 | 0.20 | 0.039 | ppbv | | 3.8 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | 0.097 | 0.20 | 0.045 | ppbv | J | 0.40 | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | 0.97 | 0.50 | 0.061 | ppbv | | 1.7 | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.10 | 0.20 | 0.018 | ppbv | J | 0.43 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 1.3 | 0.040 | 0.025 | ppbv | | 7.1 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.32 | 0.20 | 0.021 | ppbv | | 1.6 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | 0.089 | 0.20 | 0.020 | ppbv | J | 0.42 | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 5.9 | 0.040 | 0.021 | ppbv | | 40 | 0.27 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 3.6 | 0.20 | 0.018 | ppbv | | 14 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 0.040 | 0.040 | 0.019 | ppbv | | 0.21 | 0.21 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 8.5 | 0.040 | 0.021 | ppbv | | 48 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 48.6 | 0.20 | 0.045 | ppbv | | 211 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 15.6 | 0.20 | 0.023 | ppbv | | 67.8 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 64.2 | 0.20 | 0.023 | ppbv | | 279 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 115% | | 65-128% |

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-05
**Lab Sample ID:** JA27118-28 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A484 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22451.D | 1 | 09/11/09 | YMH | n/a | n/a | VW941 |
| Run #2 | 3W12551.D | 1 | 09/15/09 | YMH | n/a | n/a | V3W513 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 100 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 2.4 | 0.20 | 0.039 | ppbv | | 5.7 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.61 | 0.20 | 0.021 | ppbv | | 1.9 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | 0.24 | 0.20 | 0.034 | ppbv | | 0.75 | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 0.74 | 0.20 | 0.028 | ppbv | | 3.6 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 1.2 | 0.040 | 0.022 | ppbv | | 7.5 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 0.38 | 0.20 | 0.032 | ppbv | | 1.5 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.044 | ppbv | | ND | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.52 | 0.20 | 0.024 | ppbv | | 2.6 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.035 | ppbv | | ND | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.11 | 0.10 | 0.032 | ppbv | | 0.66 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-05
**Lab Sample ID:** JA27118-28 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A484 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | 1.1 | 0.50 | 0.077 | ppbv | | 2.1 | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.072 | 0.20 | 0.019 | ppbv | J | 0.31 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 1.7 | 0.20 | 0.051 | ppbv | | 6.1 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | 0.11 | 0.20 | 0.043 | ppbv | J | 0.54 | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 1.2 | 0.040 | 0.022 | ppbv | | 9.2 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | ND | 0.20 | 0.026 | ppbv | | ND | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | 0.16 | 0.20 | 0.019 | ppbv | J | 0.56 | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | 1.2 | 0.20 | 0.035 | ppbv | | 2.9 | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.30 | 0.20 | 0.025 | ppbv | | 1.0 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.24 | 0.20 | 0.039 | ppbv | | 0.71 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.045 | ppbv | | ND | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | 0.39 | 0.50 | 0.061 | ppbv | J | 0.67 | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | ND | 0.20 | 0.018 | ppbv | | ND | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 22.9 | 0.040 | 0.025 | ppbv | | 125 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 2.1 | 0.20 | 0.021 | ppbv | | 10 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 1.7 | 0.20 | 0.026 | ppbv | | 8.4 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 60.6 [a] | 0.16 | 0.083 | ppbv | | 411 [a] | 1.1 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.49 | 0.20 | 0.018 | ppbv | | 1.8 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 38.7 | 0.040 | 0.019 | ppbv | | 208 | 0.21 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 9.8 | 0.040 | 0.021 | ppbv | | 55 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 0.38 | 0.20 | 0.045 | ppbv | | 1.7 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.50 | 0.20 | 0.023 | ppbv | | 2.2 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 0.88 | 0.20 | 0.023 | ppbv | | 3.8 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 101% | 87% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17SSV-05 | | |
| **Lab Sample ID:** | JA27118-28 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A484 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-06
**Lab Sample ID:** JA27118-29 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A646 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22452.D | 1 | 09/11/09 | YMH | n/a | n/a | VW941 |
| Run #2 | 3W12552.D | 1 | 09/15/09 | YMH | n/a | n/a | V3W513 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 80.0 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 5.0 | 0.20 | 0.039 | ppbv | | 12 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.22 | 0.20 | 0.021 | ppbv | | 0.70 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | 0.11 | 0.20 | 0.034 | ppbv | J | 0.34 | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 0.39 | 0.20 | 0.028 | ppbv | | 1.9 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.14 | 0.040 | 0.022 | ppbv | | 0.88 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 0.22 | 0.20 | 0.032 | ppbv | | 0.89 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.044 | ppbv | | ND | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.55 | 0.20 | 0.024 | ppbv | | 2.7 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.035 | ppbv | | ND | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 1.3 | 0.10 | 0.032 | ppbv | | 7.8 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-06
**Lab Sample ID:** JA27118-29 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A646 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | 1.2 | 0.50 | 0.077 | ppbv | | 2.3 | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.21 | 0.20 | 0.019 | ppbv | | 0.91 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 1.1 | 0.20 | 0.051 | ppbv | | 4.0 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.043 | ppbv | | ND | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 0.77 | 0.040 | 0.022 | ppbv | | 5.9 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | ND | 0.20 | 0.026 | ppbv | | ND | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | 0.11 | 0.20 | 0.030 | ppbv | J | 0.45 | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | 1.1 | 0.20 | 0.035 | ppbv | | 2.7 | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.18 | 0.20 | 0.025 | ppbv | J | 0.63 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.45 | 0.20 | 0.039 | ppbv | | 1.3 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.045 | ppbv | | ND | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | 0.72 | 0.50 | 0.061 | ppbv | | 1.2 | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.10 | 0.20 | 0.018 | ppbv | J | 0.43 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 10.2 | 0.040 | 0.025 | ppbv | | 55.7 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.29 | 0.20 | 0.021 | ppbv | | 1.4 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 68.1 [a] | 0.20 | 0.10 | ppbv | | 462 [a] | 1.4 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.60 | 0.20 | 0.018 | ppbv | | 2.3 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 3.2 | 0.040 | 0.019 | ppbv | | 17 | 0.21 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 11.1 | 0.040 | 0.021 | ppbv | | 62.4 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 0.74 | 0.20 | 0.045 | ppbv | | 3.2 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.28 | 0.20 | 0.023 | ppbv | | 1.2 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 1.0 | 0.20 | 0.023 | ppbv | | 4.3 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 101% | 87% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17SSV-06 | | |
| **Lab Sample ID:** | JA27118-29 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A646 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-07
**Lab Sample ID:** JA27118-30 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A755 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22453.D | 1 | 09/12/09 | YMH | n/a | n/a | VW941 |
| Run #2 | 3W12553.D | 1 | 09/15/09 | YMH | n/a | n/a | V3W513 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 20.0 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 1.9 | 0.20 | 0.039 | ppbv | | 4.5 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.44 | 0.20 | 0.021 | ppbv | | 1.4 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | 1.3 | 0.20 | 0.034 | ppbv | | 4.0 | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 2.4 | 0.20 | 0.028 | ppbv | | 12 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.35 | 0.040 | 0.022 | ppbv | | 2.2 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 7.4 | 0.20 | 0.032 | ppbv | | 30 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | 2.8 | 0.20 | 0.044 | ppbv | | 11 | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.53 | 0.20 | 0.024 | ppbv | | 2.6 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.035 | ppbv | | ND | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | 0.57 | 0.20 | 0.028 | ppbv | | 2.3 | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-07
**Lab Sample ID:** JA27118-30 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A755 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | ND | 0.50 | 0.077 | ppbv | | ND | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | ND | 0.20 | 0.019 | ppbv | | ND | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 2.0 | 0.20 | 0.051 | ppbv | | 7.2 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.043 | ppbv | | ND | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 2.0 | 0.040 | 0.022 | ppbv | | 15 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | ND | 0.20 | 0.026 | ppbv | | ND | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | 0.10 | 0.20 | 0.019 | ppbv | J | 0.35 | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | 1.1 | 0.20 | 0.035 | ppbv | | 2.7 | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.12 | 0.20 | 0.025 | ppbv | J | 0.42 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.21 | 0.20 | 0.039 | ppbv | | 0.62 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.045 | ppbv | | ND | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | 0.12 | 0.20 | 0.022 | ppbv | J | 0.43 | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.061 | ppbv | | ND | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | ND | 0.20 | 0.018 | ppbv | | ND | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 31.3 | 0.040 | 0.025 | ppbv | | 171 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | ND | 0.20 | 0.021 | ppbv | | ND | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 286 [a] | 0.80 | 0.42 | ppbv | | 1940 [a] | 5.4 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.19 | 0.20 | 0.018 | ppbv | J | 0.72 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 51.2 [a] | 0.80 | 0.37 | ppbv | | 275 [a] | 4.3 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 10.6 | 0.040 | 0.021 | ppbv | | 59.6 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 0.17 | 0.20 | 0.045 | ppbv | J | 0.74 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | ND | 0.20 | 0.023 | ppbv | | ND | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 0.17 | 0.20 | 0.023 | ppbv | J | 0.74 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 98% | 86% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17SSV-07 | | |
| **Lab Sample ID:** | JA27118-30 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A755 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-08
**Lab Sample ID:** JA27118-31 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A633 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22454.D | 1 | 09/12/09 | YMH | n/a | n/a | VW941 |
| Run #2 | 3W12554.D | 1 | 09/15/09 | YMH | n/a | n/a | V3W513 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 50.0 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 4.8 | 0.20 | 0.039 | ppbv | | 11 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.35 | 0.20 | 0.021 | ppbv | | 1.1 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | 0.23 | 0.20 | 0.034 | ppbv | | 0.72 | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 2.9 | 0.20 | 0.028 | ppbv | | 14 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.37 | 0.040 | 0.022 | ppbv | | 2.3 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | 3.6 | 0.20 | 0.032 | ppbv | | 15 | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | 0.72 | 0.20 | 0.044 | ppbv | | 2.9 | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.56 | 0.20 | 0.024 | ppbv | | 2.8 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.035 | ppbv | | ND | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.51 | 0.10 | 0.032 | ppbv | | 3.1 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-08
**Lab Sample ID:** JA27118-31 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A633 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | 0.81 | 0.50 | 0.077 | ppbv | | 1.5 | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 1.2 | 0.20 | 0.019 | ppbv | | 5.2 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 1.5 | 0.20 | 0.051 | ppbv | | 5.4 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.043 | ppbv | | ND | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 0.83 | 0.040 | 0.022 | ppbv | | 6.4 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.045 | 0.20 | 0.026 | ppbv | J | 0.18 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | ND | 0.20 | 0.025 | ppbv | | ND | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.27 | 0.20 | 0.039 | ppbv | | 0.80 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.045 | ppbv | | ND | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.061 | ppbv | | ND | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | 0.11 | 0.20 | 0.018 | ppbv | J | 0.47 | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 23.2 | 0.040 | 0.025 | ppbv | | 127 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.17 | 0.20 | 0.021 | ppbv | J | 0.84 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 119 [a] | 0.32 | 0.17 | ppbv | | 807 [a] | 2.2 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.66 | 0.20 | 0.018 | ppbv | | 2.5 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 19.6 | 0.040 | 0.019 | ppbv | | 105 | 0.21 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 10.1 | 0.040 | 0.021 | ppbv | | 56.8 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 4.5 | 0.20 | 0.045 | ppbv | | 20 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 1.6 | 0.20 | 0.023 | ppbv | | 6.9 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 6.1 | 0.20 | 0.023 | ppbv | | 26 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 100% | 90% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17SSV-08 | | |
| **Lab Sample ID:** | JA27118-31 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A633 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-09
**Lab Sample ID:** JA27118-32 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A739 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22455.D | 1 | 09/12/09 | YMH | n/a | n/a | VW941 |
| Run #2 | | | | | | | |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | ND | 0.20 | 0.039 | ppbv | | ND | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.41 | 0.20 | 0.021 | ppbv | | 1.3 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.034 | ppbv | | ND | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | ND | 0.20 | 0.028 | ppbv | | ND | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | ND | 0.040 | 0.022 | ppbv | | ND | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | ND | 0.20 | 0.032 | ppbv | | ND | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.044 | ppbv | | ND | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.035 | ppbv | | ND | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.93 | 0.10 | 0.032 | ppbv | | 5.6 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-09
**Lab Sample ID:** JA27118-32 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A739 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | ND | 0.50 | 0.077 | ppbv | | ND | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 0.35 | 0.20 | 0.019 | ppbv | | 1.5 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | ND | 0.20 | 0.051 | ppbv | | ND | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.043 | ppbv | | ND | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | ND | 0.040 | 0.022 | ppbv | | ND | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.12 | 0.20 | 0.026 | ppbv | J | 0.49 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | ND | 0.20 | 0.035 | ppbv | | ND | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | ND | 0.20 | 0.025 | ppbv | | ND | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | ND | 0.20 | 0.039 | ppbv | | ND | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.045 | ppbv | | ND | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.061 | ppbv | | ND | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | ND | 0.20 | 0.018 | ppbv | | ND | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | ND | 0.040 | 0.025 | ppbv | | ND | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.38 | 0.20 | 0.021 | ppbv | | 1.9 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 12.7 | 0.040 | 0.021 | ppbv | | 86.1 | 0.27 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.61 | 0.20 | 0.018 | ppbv | | 2.3 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | ND | 0.040 | 0.019 | ppbv | | ND | 0.21 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 10.1 | 0.040 | 0.021 | ppbv | | 56.8 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 0.86 | 0.20 | 0.045 | ppbv | | 3.7 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 0.35 | 0.20 | 0.023 | ppbv | | 1.5 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 1.2 | 0.20 | 0.023 | ppbv | | 5.2 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 91% | | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-10
**Lab Sample ID:** JA27118-33 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A775 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22456.D | 1 | 09/12/09 | YMH | n/a | n/a | VW941 |
| Run #2 | 3W12555.D | 1 | 09/15/09 | YMH | n/a | n/a | V3W513 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 20.0 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 2.7 | 0.20 | 0.039 | ppbv | | 6.4 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.16 | 0.20 | 0.021 | ppbv | J | 0.51 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.034 | ppbv | | ND | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 0.50 | 0.20 | 0.028 | ppbv | | 2.4 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.25 | 0.040 | 0.022 | ppbv | | 1.6 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | ND | 0.20 | 0.032 | ppbv | | ND | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.044 | ppbv | | ND | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.64 | 0.20 | 0.024 | ppbv | | 3.2 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.035 | ppbv | | ND | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.82 | 0.10 | 0.032 | ppbv | | 4.9 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-10
**Lab Sample ID:** JA27118-33 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A775 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | 1.5 | 0.50 | 0.077 | ppbv | | 2.8 | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 1.1 | 0.20 | 0.019 | ppbv | | 4.8 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 1.5 | 0.20 | 0.051 | ppbv | | 5.4 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.043 | ppbv | | ND | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 3.5 | 0.040 | 0.022 | ppbv | | 27 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | ND | 0.20 | 0.026 | ppbv | | ND | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | 0.79 | 0.20 | 0.035 | ppbv | | 1.9 | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.11 | 0.20 | 0.025 | ppbv | J | 0.38 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.23 | 0.20 | 0.039 | ppbv | | 0.68 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.045 | ppbv | | ND | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | 1.2 | 0.50 | 0.061 | ppbv | | 2.1 | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | ND | 0.20 | 0.018 | ppbv | | ND | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 3.2 | 0.040 | 0.025 | ppbv | | 17 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.17 | 0.20 | 0.021 | ppbv | J | 0.84 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 94.5 [a] | 0.80 | 0.42 | ppbv | | 641 [a] | 5.4 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 0.75 | 0.20 | 0.018 | ppbv | | 2.8 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 0.079 | 0.040 | 0.019 | ppbv | | 0.42 | 0.21 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 18.7 | 0.040 | 0.021 | ppbv | | 105 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 3.9 | 0.20 | 0.045 | ppbv | | 17 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 1.1 | 0.20 | 0.023 | ppbv | | 4.8 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 5.0 | 0.20 | 0.023 | ppbv | | 22 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 98% | 88% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17SSV-10 | | |
| **Lab Sample ID:** | JA27118-33 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A775 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-11
**Lab Sample ID:** JA27118-34 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A148 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22457.D | 1 | 09/12/09 | YMH | n/a | n/a | VW941 |
| Run #2 | 3W12556.D | 1 | 09/15/09 | YMH | n/a | n/a | V3W513 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 100 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 75.4 [a] | 0.80 | 0.16 | ppbv | | 179 [a] | 1.9 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.38 | 0.20 | 0.021 | ppbv | | 1.2 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | 0.22 | 0.20 | 0.034 | ppbv | | 0.69 | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 0.60 | 0.20 | 0.028 | ppbv | | 2.9 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.14 | 0.040 | 0.022 | ppbv | | 0.88 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | ND | 0.20 | 0.032 | ppbv | | ND | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.044 | ppbv | | ND | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.68 | 0.20 | 0.024 | ppbv | | 3.4 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.035 | ppbv | | ND | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 2.9 | 0.10 | 0.032 | ppbv | | 17 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-11
**Lab Sample ID:** JA27118-34 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A148 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | 4.3 | 0.50 | 0.077 | ppbv | | 8.1 | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 38.8 [a] | 0.80 | 0.077 | ppbv | | 169 [a] | 3.5 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 10.1 | 0.20 | 0.051 | ppbv | | 36.4 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | 0.38 | 0.20 | 0.043 | ppbv | | 1.9 | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 0.74 | 0.040 | 0.022 | ppbv | | 5.7 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.16 | 0.20 | 0.026 | ppbv | J | 0.66 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | 0.23 | 0.20 | 0.019 | ppbv | | 0.81 | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | 0.37 | 0.20 | 0.030 | ppbv | | 1.5 | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | 1.4 | 0.20 | 0.035 | ppbv | | 3.4 | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.49 | 0.20 | 0.025 | ppbv | | 1.7 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 3.5 | 0.20 | 0.039 | ppbv | | 10 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | 0.23 | 0.20 | 0.045 | ppbv | | 0.94 | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | 0.89 | 0.50 | 0.061 | ppbv | | 1.5 | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | ND | 0.20 | 0.018 | ppbv | | ND | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 0.18 | 0.040 | 0.025 | ppbv | | 0.98 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.79 | 0.20 | 0.021 | ppbv | | 3.9 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 0.20 | 0.20 | 0.026 | ppbv | | 0.98 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | 0.21 | 0.20 | 0.023 | ppbv | | 0.64 | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 3.6 | 0.040 | 0.021 | ppbv | | 24 | 0.27 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 21.5 | 0.20 | 0.018 | ppbv | | 81.0 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 38.5 | 0.040 | 0.019 | ppbv | | 207 | 0.21 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 1.3 | 0.040 | 0.021 | ppbv | | 7.3 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 132 [a] | 0.80 | 0.18 | ppbv | | 573 [a] | 3.5 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 36.5 [a] | 0.80 | 0.094 | ppbv | | 159 [a] | 3.5 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 169 [a] | 0.80 | 0.094 | ppbv | | 734 [a] | 3.5 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 125% | 67% | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17SSV-11 | | |
| **Lab Sample ID:** | JA27118-34 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A148 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-12
**Lab Sample ID:** JA27118-35 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A288 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22458.D | 1 | 09/12/09 | YMH | n/a | n/a | VW941 |
| Run #2 | | | | | | | |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 4.6 | 0.20 | 0.039 | ppbv | | 11 | 0.48 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.19 | 0.20 | 0.021 | ppbv | J | 0.61 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | 0.73 | 0.20 | 0.034 | ppbv | | 2.3 | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | 0.13 | 0.20 | 0.028 | ppbv | J | 0.63 | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.13 | 0.040 | 0.022 | ppbv | | 0.82 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | ND | 0.20 | 0.032 | ppbv | | ND | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.044 | ppbv | | ND | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.51 | 0.20 | 0.024 | ppbv | | 2.5 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.035 | ppbv | | ND | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.87 | 0.10 | 0.032 | ppbv | | 5.2 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-12
**Lab Sample ID:** JA27118-35 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A288 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | 1.0 | 0.50 | 0.077 | ppbv | | 1.9 | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 12.0 | 0.20 | 0.019 | ppbv | | 52.1 | 0.87 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 1.4 | 0.20 | 0.051 | ppbv | | 5.0 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | ND | 0.20 | 0.043 | ppbv | | ND | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 0.54 | 0.040 | 0.022 | ppbv | | 4.1 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | ND | 0.20 | 0.026 | ppbv | | ND | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | 0.51 | 0.20 | 0.035 | ppbv | | 1.3 | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | ND | 0.20 | 0.025 | ppbv | | ND | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 0.31 | 0.20 | 0.039 | ppbv | | 0.91 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.045 | ppbv | | ND | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | ND | 0.50 | 0.061 | ppbv | | ND | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | ND | 0.20 | 0.018 | ppbv | | ND | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 0.53 | 0.040 | 0.025 | ppbv | | 2.9 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.31 | 0.20 | 0.021 | ppbv | | 1.5 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | ND | 0.20 | 0.023 | ppbv | | ND | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 25.7 | 0.040 | 0.021 | ppbv | | 174 | 0.27 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 5.5 | 0.20 | 0.018 | ppbv | | 21 | 0.75 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 0.060 | 0.040 | 0.019 | ppbv | | 0.32 | 0.21 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 4.1 | 0.040 | 0.021 | ppbv | | 23 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 39.0 | 0.20 | 0.045 | ppbv | | 169 | 0.87 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 11.7 | 0.20 | 0.023 | ppbv | | 50.8 | 0.87 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 50.6 | 0.20 | 0.023 | ppbv | | 220 | 0.87 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 102% | | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-13
**Lab Sample ID:** JA27118-36 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A360 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | W22459.D | 1 | 09/12/09 | YMH | n/a | n/a | VW941 |
| Run #2 | 3W12557.D | 1 | 09/15/09 | YMH | n/a | n/a | V3W513 |

| | Initial Volume |
|---|---|
| Run #1 | 400 ml |
| Run #2 | 40.0 ml |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | 58.08 | Acetone | 212 [a] | 2.0 | 0.39 | ppbv | | 504 [a] | 4.8 | ug/m3 |
| 106-99-0 | 54.09 | 1,3-Butadiene | ND | 0.20 | 0.036 | ppbv | | ND | 0.44 | ug/m3 |
| 71-43-2 | 78.11 | Benzene | 0.49 | 0.20 | 0.021 | ppbv | | 1.6 | 0.64 | ug/m3 |
| 75-27-4 | 163.8 | Bromodichloromethane | ND | 0.040 | 0.028 | ppbv | | ND | 0.27 | ug/m3 |
| 75-25-2 | 252.8 | Bromoform | ND | 0.040 | 0.022 | ppbv | | ND | 0.41 | ug/m3 |
| 74-83-9 | 94.94 | Bromomethane | ND | 0.20 | 0.024 | ppbv | | ND | 0.78 | ug/m3 |
| 593-60-2 | 106.9 | Bromoethene | ND | 0.20 | 0.018 | ppbv | | ND | 0.87 | ug/m3 |
| 100-44-7 | 126 | Benzyl Chloride | ND | 0.20 | 0.033 | ppbv | | ND | 1.0 | ug/m3 |
| 75-15-0 | 76.14 | Carbon disulfide | ND | 0.20 | 0.034 | ppbv | | ND | 0.62 | ug/m3 |
| 108-90-7 | 112.6 | Chlorobenzene | ND | 0.20 | 0.026 | ppbv | | ND | 0.92 | ug/m3 |
| 75-00-3 | 64.52 | Chloroethane | ND | 0.20 | 0.040 | ppbv | | ND | 0.53 | ug/m3 |
| 67-66-3 | 119.4 | Chloroform | ND | 0.20 | 0.028 | ppbv | | ND | 0.98 | ug/m3 |
| 74-87-3 | 50.49 | Chloromethane | ND | 0.20 | 0.047 | ppbv | | ND | 0.41 | ug/m3 |
| 107-05-1 | 76.53 | 3-Chloropropene | ND | 0.20 | 0.031 | ppbv | | ND | 0.63 | ug/m3 |
| 95-49-8 | 126.6 | 2-Chlorotoluene | ND | 0.20 | 0.022 | ppbv | | ND | 1.0 | ug/m3 |
| 56-23-5 | 153.8 | Carbon tetrachloride | 0.11 | 0.040 | 0.022 | ppbv | | 0.69 | 0.25 | ug/m3 |
| 110-82-7 | 84.16 | Cyclohexane | ND | 0.20 | 0.061 | ppbv | | ND | 0.69 | ug/m3 |
| 75-34-3 | 98.96 | 1,1-Dichloroethane | ND | 0.20 | 0.032 | ppbv | | ND | 0.81 | ug/m3 |
| 75-35-4 | 96.94 | 1,1-Dichloroethylene | ND | 0.20 | 0.044 | ppbv | | ND | 0.79 | ug/m3 |
| 106-93-4 | 187.9 | 1,2-Dibromoethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.31 | ug/m3 |
| 107-06-2 | 98.96 | 1,2-Dichloroethane | ND | 0.20 | 0.036 | ppbv | | ND | 0.81 | ug/m3 |
| 78-87-5 | 113 | 1,2-Dichloropropane | ND | 0.20 | 0.029 | ppbv | | ND | 0.92 | ug/m3 |
| 123-91-1 | 88.12 | 1,4-Dioxane | ND | 0.20 | 0.063 | ppbv | | ND | 0.72 | ug/m3 |
| 75-71-8 | 120.9 | Dichlorodifluoromethane | 0.54 | 0.20 | 0.024 | ppbv | | 2.7 | 0.99 | ug/m3 |
| 124-48-1 | 208.3 | Dibromochloromethane | ND | 0.040 | 0.034 | ppbv | | ND | 0.34 | ug/m3 |
| 156-60-5 | 96.94 | trans-1,2-Dichloroethylene | ND | 0.20 | 0.035 | ppbv | | ND | 0.79 | ug/m3 |
| 156-59-2 | 96.94 | cis-1,2-Dichloroethylene | ND | 0.20 | 0.028 | ppbv | | ND | 0.79 | ug/m3 |
| 10061-01-5 | 111 | cis-1,3-Dichloropropene | ND | 0.20 | 0.019 | ppbv | | ND | 0.91 | ug/m3 |
| 541-73-1 | 147 | m-Dichlorobenzene | ND | 0.10 | 0.032 | ppbv | | ND | 0.60 | ug/m3 |
| 95-50-1 | 147 | o-Dichlorobenzene | ND | 0.040 | 0.037 | ppbv | | ND | 0.24 | ug/m3 |
| 106-46-7 | 147 | p-Dichlorobenzene | 0.61 | 0.10 | 0.032 | ppbv | | 3.7 | 0.60 | ug/m3 |
| 10061-02-6 | 111 | trans-1,3-Dichloropropene | ND | 0.20 | 0.016 | ppbv | | ND | 0.91 | ug/m3 |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17SSV-13
**Lab Sample ID:** JA27118-36 **Date Sampled:** 09/03/09
**Matrix:** AIR - Air Summa ID: A360 **Date Received:** 09/03/09
**Method:** TO-15 **Percent Solids:** n/a
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|
| 64-17-5 | 46.07 | Ethanol | ND | 0.50 | 0.077 | ppbv | | ND | 0.94 | ug/m3 |
| 100-41-4 | 106.2 | Ethylbenzene | 30.4 [a] | 2.0 | 0.19 | ppbv | | 132 [a] | 8.7 | ug/m3 |
| 141-78-6 | 88 | Ethyl Acetate | 0.80 | 0.20 | 0.051 | ppbv | | 2.9 | 0.72 | ug/m3 |
| 622-96-8 | 120.2 | 4-Ethyltoluene | 0.22 | 0.20 | 0.043 | ppbv | | 1.1 | 0.98 | ug/m3 |
| 76-13-1 | 187.4 | Freon 113 | 0.25 | 0.040 | 0.022 | ppbv | | 1.9 | 0.31 | ug/m3 |
| 76-14-2 | 170.9 | Freon 114 | ND | 0.040 | 0.022 | ppbv | | ND | 0.28 | ug/m3 |
| 142-82-5 | 100.2 | Heptane | 0.12 | 0.20 | 0.026 | ppbv | J | 0.49 | 0.82 | ug/m3 |
| 87-68-3 | 260.8 | Hexachlorobutadiene | ND | 0.090 | 0.043 | ppbv | | ND | 0.96 | ug/m3 |
| 110-54-3 | 86.17 | Hexane | ND | 0.20 | 0.019 | ppbv | | ND | 0.70 | ug/m3 |
| 591-78-6 | 100 | 2-Hexanone | ND | 0.20 | 0.030 | ppbv | | ND | 0.82 | ug/m3 |
| 67-63-0 | 60.1 | Isopropyl Alcohol | 1.6 | 0.20 | 0.035 | ppbv | | 3.9 | 0.49 | ug/m3 |
| 75-09-2 | 84.94 | Methylene chloride | 0.15 | 0.20 | 0.025 | ppbv | J | 0.52 | 0.69 | ug/m3 |
| 78-93-3 | 72.11 | Methyl ethyl ketone | 1.7 | 0.20 | 0.039 | ppbv | | 5.0 | 0.59 | ug/m3 |
| 108-10-1 | 100.2 | Methyl Isobutyl Ketone | ND | 0.20 | 0.045 | ppbv | | ND | 0.82 | ug/m3 |
| 1634-04-4 | 88.15 | Methyl Tert Butyl Ether | ND | 0.20 | 0.022 | ppbv | | ND | 0.72 | ug/m3 |
| 115-07-1 | 42 | Propylene | 2.8 | 0.50 | 0.061 | ppbv | | 4.8 | 0.86 | ug/m3 |
| 100-42-5 | 104.1 | Styrene | ND | 0.20 | 0.018 | ppbv | | ND | 0.85 | ug/m3 |
| 71-55-6 | 133.4 | 1,1,1-Trichloroethane | 0.38 | 0.040 | 0.025 | ppbv | | 2.1 | 0.22 | ug/m3 |
| 79-34-5 | 167.9 | 1,1,2,2-Tetrachloroethane | ND | 0.040 | 0.023 | ppbv | | ND | 0.27 | ug/m3 |
| 79-00-5 | 133.4 | 1,1,2-Trichloroethane | ND | 0.040 | 0.021 | ppbv | | ND | 0.22 | ug/m3 |
| 120-82-1 | 181.5 | 1,2,4-Trichlorobenzene | ND | 0.10 | 0.065 | ppbv | | ND | 0.74 | ug/m3 |
| 95-63-6 | 120.2 | 1,2,4-Trimethylbenzene | 0.52 | 0.20 | 0.021 | ppbv | | 2.6 | 0.98 | ug/m3 |
| 108-67-8 | 120.2 | 1,3,5-Trimethylbenzene | 0.14 | 0.20 | 0.026 | ppbv | J | 0.69 | 0.98 | ug/m3 |
| 540-84-1 | 114.2 | 2,2,4-Trimethylpentane | ND | 0.20 | 0.020 | ppbv | | ND | 0.93 | ug/m3 |
| 75-65-0 | 74.12 | Tertiary Butyl Alcohol | 0.29 | 0.20 | 0.023 | ppbv | | 0.88 | 0.61 | ug/m3 |
| 127-18-4 | 165.8 | Tetrachloroethylene | 20.2 | 0.040 | 0.021 | ppbv | | 137 | 0.27 | ug/m3 |
| 109-99-9 | 72.11 | Tetrahydrofuran | ND | 0.20 | 0.032 | ppbv | | ND | 0.59 | ug/m3 |
| 108-88-3 | 92.14 | Toluene | 75.4 [a] | 2.0 | 0.18 | ppbv | | 284 [a] | 7.5 | ug/m3 |
| 79-01-6 | 131.4 | Trichloroethylene | 0.069 | 0.040 | 0.019 | ppbv | | 0.37 | 0.21 | ug/m3 |
| 75-69-4 | 137.4 | Trichlorofluoromethane | 6.5 | 0.040 | 0.021 | ppbv | | 37 | 0.22 | ug/m3 |
| 75-01-4 | 62.5 | Vinyl chloride | ND | 0.20 | 0.023 | ppbv | | ND | 0.51 | ug/m3 |
| 108-05-4 | 86 | Vinyl Acetate | ND | 0.20 | 0.046 | ppbv | | ND | 0.70 | ug/m3 |
| | 106.2 | m,p-Xylene | 260 [a] | 2.0 | 0.45 | ppbv | | 1130 [a] | 8.7 | ug/m3 |
| 95-47-6 | 106.2 | o-Xylene | 73.3 [a] | 2.0 | 0.23 | ppbv | | 318 [a] | 8.7 | ug/m3 |
| 1330-20-7 | 106.2 | Xylenes (total) | 333 [a] | 2.0 | 0.23 | ppbv | | 1450 [a] | 8.7 | ug/m3 |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 460-00-4 | 4-Bromofluorobenzene | 152% [b] | 57% [b] | 65-128% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17SSV-13 | | |
| **Lab Sample ID:** | JA27118-36 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | AIR - Air Summa ID: A360 | **Date Received:** | 09/03/09 |
| **Method:** | TO-15 | **Percent Solids:** | n/a |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| CAS No. | MW | Compound | Result | RL | MDL | Units | Q | Result | RL | Units |
|---|---|---|---|---|---|---|---|---|---|---|

(a) Result is from Run# 2
(b) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-01
**Lab Sample ID:** JA26923-1 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8260B **Percent Solids:** 73.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Y91416.D | 1 | 09/03/09 | YXC | n/a | n/a | VY3837 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.2 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 36.2 | 16 | 3.6 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.6 | 0.56 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 8.1 | 0.42 | ug/kg | |
| 75-25-2 | Bromoform | ND | 8.1 | 0.25 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 8.1 | 0.66 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 16 | 3.2 | ug/kg | |
| 75-15-0 | Carbon disulfide | 1.0 | 8.1 | 0.50 | ug/kg | J |
| 56-23-5 | Carbon tetrachloride | ND | 8.1 | 0.90 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 8.1 | 0.55 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 8.1 | 1.9 | ug/kg | |
| 67-66-3 | Chloroform | ND | 8.1 | 0.52 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 8.1 | 0.27 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 8.1 | 0.25 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 16 | 0.88 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 8.1 | 0.18 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.6 | 0.22 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 8.1 | 0.44 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 8.1 | 0.45 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 8.1 | 0.55 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 8.1 | 1.5 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 8.1 | 0.22 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.6 | 0.56 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 8.1 | 1.1 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 8.1 | 0.39 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 8.1 | 0.73 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 8.1 | 0.21 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 8.1 | 0.22 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 8.1 | 0.16 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.6 | 0.60 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 8.1 | 0.92 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 8.1 | 1.6 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 8.1 | 0.84 | ug/kg | |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | DRYWELL-01 | | |
| **Lab Sample ID:** | JA26923-1 | **Date Sampled:** | 08/31/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 73.1 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | 9.3 | 8.1 | 1.3 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 8.1 | 1.1 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.6 | 0.46 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 8.1 | 1.3 | ug/kg | |
| 75-09-2 | Methylene chloride | 5.1 | 8.1 | 0.36 | ug/kg | J |
| 100-42-5 | Styrene | ND | 8.1 | 0.17 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 8.1 | 0.48 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 8.1 | 0.24 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.6 | 0.48 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 8.1 | 0.56 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 8.1 | 0.21 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 8.1 | 0.30 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 8.1 | 0.86 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 8.1 | 0.37 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 8.1 | 0.29 | ug/kg | |
| | m,p-Xylene | ND | 3.3 | 0.76 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.6 | 0.76 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 3.3 | 0.76 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 93% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 73% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 104% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 96% | | 62-138% |

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RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-01
**Lab Sample ID:** JA26923-1 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 73.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | F83452.D | 1 | 09/12/09 | NAP | 09/02/09 | OP39730 | EF3948 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 200 | 32 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 200 | 47 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 200 | 41 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 200 | 48 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 780 | 420 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 780 | 41 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 78 | 42 | ug/kg | |
| | 3&4-Methylphenol | ND | 78 | 52 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 200 | 41 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 390 | 50 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 390 | 50 | ug/kg | |
| 108-95-2 | Phenol | ND | 78 | 30 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 200 | 42 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 200 | 52 | ug/kg | |
| 83-32-9 | Acenaphthene | 47.6 | 39 | 21 | ug/kg | |
| 208-96-8 | Acenaphthylene | 26.1 | 39 | 17 | ug/kg | J |
| 98-86-2 | Acetophenone | ND | 200 | 19 | ug/kg | |
| 120-12-7 | Anthracene | 188 | 39 | 18 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 200 | 25 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | 527 | 39 | 24 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | 578 | 39 | 16 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | 893 | 39 | 21 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | 464 | 39 | 19 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | 506 | 39 | 20 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 78 | 21 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 78 | 19 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 78 | 20 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 200 | 110 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 78 | 17 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 200 | 16 | ug/kg | |
| 86-74-8 | Carbazole | 110 | 78 | 17 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 78 | 31 | ug/kg | |

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | DRYWELL-01 | | |
| **Lab Sample ID:** | JA26923-1 | **Date Sampled:** | 08/31/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 73.1 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | 869 | 39 | 18 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 78 | 19 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 78 | 18 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 78 | 20 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 78 | 26 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 78 | 21 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 78 | 18 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 200 | 68 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | 74.9 | 39 | 19 | ug/kg | |
| 132-64-9 | Dibenzofuran | 30.5 | 78 | 18 | ug/kg | J |
| 84-74-2 | Di-n-butyl phthalate | ND | 78 | 24 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 78 | 17 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 78 | 18 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 78 | 19 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 531 | 78 | 20 | ug/kg | |
| 206-44-0 | Fluoranthene | 2470 | 39 | 18 | ug/kg | |
| 86-73-7 | Fluorene | 80.3 | 39 | 18 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 78 | 22 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 39 | 19 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 780 | 37 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 200 | 25 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 450 | 39 | 14 | ug/kg | |
| 78-59-1 | Isophorone | ND | 78 | 34 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 78 | 18 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 200 | 29 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 200 | 16 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 200 | 24 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 39 | 17 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 78 | 18 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 78 | 24 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 200 | 26 | ug/kg | |
| 85-01-8 | Phenanthrene | 954 | 39 | 19 | ug/kg | |
| 129-00-0 | Pyrene | 1580 | 39 | 17 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 77% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 78% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 103% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 91% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | DRYWELL-01 | | |
| **Lab Sample ID:** | JA26923-1 | **Date Sampled:** | 08/31/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 73.1 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 86% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 76% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-01
**Lab Sample ID:** JA26923-1 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 73.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G48317.D | 1 | 09/09/09 | OPM | 09/02/09 | OP39731 | G1G1760 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.6 | 0.72 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.6 | 0.49 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.6 | 0.78 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.6 | 0.44 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.6 | 0.49 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | 1.7 | 1.6 | 0.54 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | 1.9 | 1.6 | 0.63 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.6 | 0.54 | ug/kg | |
| 72-54-8 | 4,4'-DDD | 4.2 | 1.6 | 0.68 | ug/kg | |
| 72-55-9 | 4,4'-DDE | 18.4 | 1.6 | 0.55 | ug/kg | |
| 50-29-3 | 4,4'-DDT [a] | 5.9 | 1.6 | 0.67 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.6 | 0.55 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.6 | 0.61 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.6 | 0.75 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.6 | 0.55 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.6 | 0.61 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.6 | 0.72 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.6 | 0.61 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.6 | 0.71 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.6 | 0.57 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 20 | 19 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 59% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 75% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 64% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 68% | | 22-156% |

(a) Reported from 2nd signal. %D of check on 1st signal excess method criteria (15 %) so using for confirmation only.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-01
**Lab Sample ID:** JA26923-1 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 73.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85448.D | 1 | 09/08/09 | VDT | 09/02/09 | OP39732 | GEF3817 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 40 | 14 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 40 | 26 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 40 | 13 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 40 | 14 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | 102 | 40 | 7.9 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 40 | 10 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 40 | 16 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 101% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 91% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 91% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 98% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-01
**Lab Sample ID:** JA26923-1 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Percent Solids:** 73.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.7 | 2.7 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Arsenic | 5.2 | 2.7 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Beryllium | < 0.67 | 0.67 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Cadmium | 1.4 | 0.67 | mg/kg | 1 | 09/04/09 | 09/12/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Chromium | 16.6 | 1.3 | mg/kg | 1 | 09/04/09 | 09/12/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Copper | 33.1 | 3.4 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Lead | 95.0 | 2.7 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Mercury | 0.053 | 0.045 | mg/kg | 1 | 09/10/09 | 09/10/09 | TG | SW846 7471A [2] | SW846 7471A [5] |
| Nickel | 18.0 | 5.4 | mg/kg | 1 | 09/04/09 | 09/12/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Selenium | < 2.7 | 2.7 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Silver | < 1.3 | 1.3 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Thallium | < 1.3 | 1.3 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Zinc | 283 | 2.7 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |

(1) Instrument QC Batch: MA23090
(2) Instrument QC Batch: MA23092
(3) Instrument QC Batch: MA23108
(4) Prep QC Batch: MP49525
(5) Prep QC Batch: MP49569

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** DRYWELL-02
**Lab Sample ID:** JA26923-2 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8260B **Percent Solids:** 79.9
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Y91417.D | 1 | 09/03/09 | YXC | n/a | n/a | VY3837 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.6 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 38.3 | 14 | 3.0 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.4 | 0.46 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 6.8 | 0.35 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.8 | 0.21 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.8 | 0.55 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 14 | 2.7 | ug/kg | |
| 75-15-0 | Carbon disulfide | 1.2 | 6.8 | 0.41 | ug/kg | J |
| 56-23-5 | Carbon tetrachloride | ND | 6.8 | 0.76 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 6.8 | 0.46 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.8 | 1.6 | ug/kg | |
| 67-66-3 | Chloroform | ND | 6.8 | 0.43 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.8 | 0.22 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 6.8 | 0.21 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 14 | 0.74 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 6.8 | 0.15 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.4 | 0.19 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 6.8 | 0.37 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 6.8 | 0.37 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 6.8 | 0.46 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.8 | 1.3 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.8 | 0.19 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.4 | 0.47 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 6.8 | 0.90 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 6.8 | 0.33 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 6.8 | 0.61 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.8 | 0.18 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.8 | 0.18 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.8 | 0.13 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.4 | 0.50 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.8 | 0.76 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.8 | 1.3 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 6.8 | 0.70 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | DRYWELL-02 | | |
| **Lab Sample ID:** | JA26923-2 | **Date Sampled:** | 08/31/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 79.9 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | 5.8 | 6.8 | 1.1 | ug/kg | J |
| 108-87-2 | Methylcyclohexane | ND | 6.8 | 0.89 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.4 | 0.38 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.8 | 1.1 | ug/kg | |
| 75-09-2 | Methylene chloride | 3.6 | 6.8 | 0.30 | ug/kg | J |
| 100-42-5 | Styrene | ND | 6.8 | 0.15 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.8 | 0.40 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 6.8 | 0.20 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.4 | 0.40 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.8 | 0.47 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.8 | 0.17 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.8 | 0.25 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 6.8 | 0.72 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.8 | 0.31 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 6.8 | 0.24 | ug/kg | |
| | m,p-Xylene | ND | 2.7 | 0.64 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.4 | 0.64 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.7 | 0.64 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 93% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 71% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 103% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 100% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-02
**Lab Sample ID:** JA26923-2 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 79.9
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | F83453.D | 1 | 09/12/09 | NAP | 09/02/09 | OP39730 | EF3948 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 180 | 30 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 180 | 43 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 180 | 37 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 180 | 44 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 720 | 390 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 720 | 38 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 72 | 39 | ug/kg | |
| | 3&4-Methylphenol | ND | 72 | 48 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 180 | 38 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 360 | 46 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 360 | 46 | ug/kg | |
| 108-95-2 | Phenol | ND | 72 | 27 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 180 | 39 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 180 | 48 | ug/kg | |
| 83-32-9 | Acenaphthene | 45.8 | 36 | 19 | ug/kg | |
| 208-96-8 | Acenaphthylene | 15.1 | 36 | 15 | ug/kg | J |
| 98-86-2 | Acetophenone | ND | 180 | 18 | ug/kg | |
| 120-12-7 | Anthracene | 105 | 36 | 16 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 180 | 22 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | 421 | 36 | 22 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | 513 | 36 | 15 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | 683 | 36 | 19 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | 404 | 36 | 17 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | 447 | 36 | 18 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 72 | 19 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | 199 | 72 | 18 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 72 | 18 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 180 | 100 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 72 | 16 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 180 | 15 | ug/kg | |
| 86-74-8 | Carbazole | 64.6 | 72 | 15 | ug/kg | J |
| 105-60-2 | Caprolactam | ND | 72 | 29 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | DRYWELL-02 | | |
| **Lab Sample ID:** | JA26923-2 | **Date Sampled:** | 08/31/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 79.9 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | 662 | 36 | 16 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 72 | 18 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 72 | 17 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 72 | 19 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 72 | 24 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 72 | 19 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 72 | 16 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 180 | 62 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | 91.8 | 36 | 17 | ug/kg | |
| 132-64-9 | Dibenzofuran | 24.4 | 72 | 17 | ug/kg | J |
| 84-74-2 | Di-n-butyl phthalate | ND | 72 | 22 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | 223 | 72 | 16 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 72 | 16 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 72 | 17 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 2310 | 72 | 19 | ug/kg | |
| 206-44-0 | Fluoranthene | 1430 | 36 | 16 | ug/kg | |
| 86-73-7 | Fluorene | 67.7 | 36 | 17 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 72 | 20 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 36 | 17 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 720 | 34 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 180 | 23 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 382 | 36 | 13 | ug/kg | |
| 78-59-1 | Isophorone | ND | 72 | 31 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | 18.1 | 72 | 16 | ug/kg | J |
| 88-74-4 | 2-Nitroaniline | ND | 180 | 26 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 180 | 14 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 180 | 22 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 36 | 16 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 72 | 16 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 72 | 22 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 180 | 24 | ug/kg | |
| 85-01-8 | Phenanthrene | 637 | 36 | 18 | ug/kg | |
| 129-00-0 | Pyrene | 932 | 36 | 16 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 83% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 84% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 109% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 99% | | 28-113% |

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | DRYWELL-02 | | |
| **Lab Sample ID:** | JA26923-2 | **Date Sampled:** | 08/31/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 79.9 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 90% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 80% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-02
**Lab Sample ID:** JA26923-2 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 79.9
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G48318.D | 1 | 09/09/09 | OPM | 09/02/09 | OP39731 | G1G1760 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.5 | 0.65 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.5 | 0.45 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.5 | 0.71 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.5 | 0.40 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.5 | 0.45 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | 1.6 | 1.5 | 0.49 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | 2.1 | 1.5 | 0.57 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.5 | 0.49 | ug/kg | |
| 72-54-8 | 4,4'-DDD | 1.5 | 1.5 | 0.62 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.5 | 0.50 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.5 | 0.61 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.5 | 0.50 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.5 | 0.56 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.5 | 0.68 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.5 | 0.50 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.5 | 0.56 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.5 | 0.65 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.5 | 0.56 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.5 | 0.65 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.5 | 0.52 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 18 | 17 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 46% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 54% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 42% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 55% | | 22-156% |

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-02
**Lab Sample ID:** JA26923-2 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 79.9
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85449.D | 1 | 09/08/09 | VDT | 09/02/09 | OP39732 | GEF3817 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 36 | 13 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 36 | 24 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 36 | 12 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 36 | 13 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | 500 | 36 | 7.2 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 36 | 9.2 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 36 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 77% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 72% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 71% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 77% | | 32-154% |

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N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-02
**Lab Sample ID:** JA26923-2
**Matrix:** SO - Soil
**Date Sampled:** 08/31/09
**Date Received:** 09/01/09
**Percent Solids:** 79.9
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.5 | 2.5 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Arsenic | 3.3 | 2.5 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Beryllium | < 0.61 | 0.61 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Cadmium | 1.7 | 0.61 | mg/kg | 1 | 09/04/09 | 09/12/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Chromium | 20.1 | 1.2 | mg/kg | 1 | 09/04/09 | 09/12/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Copper | 22.1 | 3.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Lead | 112 | 2.5 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Mercury | 0.076 | 0.038 | mg/kg | 1 | 09/10/09 | 09/10/09 | TG | SW846 7471A [2] | SW846 7471A [5] |
| Nickel | 18.5 | 4.9 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Selenium | < 2.5 | 2.5 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Silver | < 1.2 | 1.2 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Thallium | < 1.2 | 1.2 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Zinc | 146 | 2.5 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |

(1) Instrument QC Batch: MA23090
(2) Instrument QC Batch: MA23092
(3) Instrument QC Batch: MA23108
(4) Prep QC Batch: MP49525
(5) Prep QC Batch: MP49569

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** DRYWELL-03
**Lab Sample ID:** JA26923-3 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8260B **Percent Solids:** 77.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Y91418.D | 1 | 09/03/09 | YXC | n/a | n/a | VY3837 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.3 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 20.8 | 15 | 3.4 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.5 | 0.51 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 7.5 | 0.39 | ug/kg | |
| 75-25-2 | Bromoform | ND | 7.5 | 0.23 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 7.5 | 0.61 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 15 | 3.0 | ug/kg | |
| 75-15-0 | Carbon disulfide | 0.67 | 7.5 | 0.46 | ug/kg | J |
| 56-23-5 | Carbon tetrachloride | ND | 7.5 | 0.83 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 7.5 | 0.51 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 7.5 | 1.7 | ug/kg | |
| 67-66-3 | Chloroform | ND | 7.5 | 0.48 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 7.5 | 0.25 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 7.5 | 0.23 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 15 | 0.81 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 7.5 | 0.17 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.5 | 0.21 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 7.5 | 0.41 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 7.5 | 0.41 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 7.5 | 0.51 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 7.5 | 1.4 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 7.5 | 0.21 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.5 | 0.52 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 7.5 | 1.0 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 7.5 | 0.36 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 7.5 | 0.68 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 7.5 | 0.20 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 7.5 | 0.20 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 7.5 | 0.14 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.5 | 0.56 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 7.5 | 0.85 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 7.5 | 1.4 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 7.5 | 0.78 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | DRYWELL-03 | | |
| **Lab Sample ID:** | JA26923-3 | **Date Sampled:** | 08/31/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 77.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 7.5 | 1.2 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 7.5 | 0.98 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.5 | 0.42 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 7.5 | 1.2 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 7.5 | 0.34 | ug/kg | |
| 100-42-5 | Styrene | ND | 7.5 | 0.16 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 7.5 | 0.44 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 7.5 | 0.22 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.5 | 0.44 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 7.5 | 0.52 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 7.5 | 0.19 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 7.5 | 0.28 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 7.5 | 0.79 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 7.5 | 0.34 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 7.5 | 0.27 | ug/kg | |
| | m,p-Xylene | ND | 3.0 | 0.71 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.5 | 0.71 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 3.0 | 0.71 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 92% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 71% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 104% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 96% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-03
**Lab Sample ID:** JA26923-3 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 77.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | F83454.D | 1 | 09/12/09 | NAP | 09/02/09 | OP39730 | EF3948 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 180 | 31 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 180 | 45 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 180 | 38 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 180 | 45 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 740 | 400 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 740 | 39 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 74 | 40 | ug/kg | |
| | 3&4-Methylphenol | ND | 74 | 50 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 180 | 39 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 370 | 47 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 370 | 48 | ug/kg | |
| 108-95-2 | Phenol | ND | 74 | 28 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 180 | 40 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 180 | 49 | ug/kg | |
| 83-32-9 | Acenaphthene | 82.3 | 37 | 20 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 37 | 16 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 180 | 18 | ug/kg | |
| 120-12-7 | Anthracene | 172 | 37 | 17 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 180 | 23 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | 490 | 37 | 22 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | 487 | 37 | 15 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | 590 | 37 | 20 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | 345 | 37 | 18 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | 428 | 37 | 19 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 74 | 20 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | 193 | 74 | 18 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 74 | 19 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 180 | 110 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 74 | 16 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 180 | 15 | ug/kg | |
| 86-74-8 | Carbazole | 103 | 74 | 16 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 74 | 30 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-03
**Lab Sample ID:** JA26923-3 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 77.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | 622 | 37 | 17 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 74 | 18 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 74 | 17 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 74 | 19 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 74 | 25 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 74 | 20 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 74 | 17 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 180 | 64 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | 86.7 | 37 | 18 | ug/kg | |
| 132-64-9 | Dibenzofuran | 64.1 | 74 | 17 | ug/kg | J |
| 84-74-2 | Di-n-butyl phthalate | ND | 74 | 23 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | 201 | 74 | 16 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 74 | 17 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 74 | 18 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 2100 | 74 | 19 | ug/kg | |
| 206-44-0 | Fluoranthene | 1590 | 37 | 17 | ug/kg | |
| 86-73-7 | Fluorene | 122 | 37 | 17 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 74 | 21 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 37 | 18 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 740 | 35 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 180 | 24 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 336 | 37 | 14 | ug/kg | |
| 78-59-1 | Isophorone | ND | 74 | 32 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | 41.4 | 74 | 17 | ug/kg | J |
| 88-74-4 | 2-Nitroaniline | ND | 180 | 27 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 180 | 15 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 180 | 23 | ug/kg | |
| 91-20-3 | Naphthalene | 56.7 | 37 | 16 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 74 | 17 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 74 | 23 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 180 | 25 | ug/kg | |
| 85-01-8 | Phenanthrene | 1020 | 37 | 18 | ug/kg | |
| 129-00-0 | Pyrene | 1030 | 37 | 16 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 75% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 76% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 99% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 92% | | 28-113% |

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | DRYWELL-03 | | |
| **Lab Sample ID:** | JA26923-3 | **Date Sampled:** | 08/31/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 77.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 83% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 75% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-03
**Lab Sample ID:** JA26923-3 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 77.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G48468.D | 1 | 09/16/09 | OPM | 09/02/09 | OP39731 | G1G1767 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.0 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.5 | 0.68 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.5 | 0.47 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.5 | 0.74 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.5 | 0.42 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.5 | 0.47 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.5 | 0.51 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.5 | 0.60 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.5 | 0.51 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.5 | 0.65 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.5 | 0.53 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.5 | 0.64 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.5 | 0.53 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.5 | 0.58 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.5 | 0.71 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.5 | 0.52 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.5 | 0.58 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.5 | 0.68 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.5 | 0.58 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.5 | 0.68 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.5 | 0.54 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 19 | 18 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 77% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 82% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 55% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 75% | | 22-156% |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-03
**Lab Sample ID:** JA26923-3 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 77.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85450.D | 1 | 09/08/09 | VDT | 09/02/09 | OP39732 | GEF3817 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.0 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 38 | 14 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 38 | 25 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 38 | 12 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 38 | 14 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | 1180 | 38 | 7.5 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 38 | 9.6 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 38 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 88% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 72% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 71% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 89% | | 32-154% |

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-03
**Lab Sample ID:** JA26923-3
**Matrix:** SO - Soil
**Date Sampled:** 08/31/09
**Date Received:** 09/01/09
**Percent Solids:** 77.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.6 | 2.6 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Arsenic | 6.2 | 2.6 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Beryllium | < 0.65 | 0.65 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Cadmium | 2.0 | 0.65 | mg/kg | 1 | 09/04/09 | 09/12/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Chromium | 27.4 | 1.3 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Copper | 28.4 | 3.2 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Lead | 115 | 2.6 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Mercury | 0.069 | 0.041 | mg/kg | 1 | 09/10/09 | 09/10/09 | TG | SW846 7471A [2] | SW846 7471A [5] |
| Nickel | 17.7 | 5.2 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Selenium | < 2.6 | 2.6 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Silver | < 1.3 | 1.3 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Thallium | < 1.3 | 1.3 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Zinc | 183 | 2.6 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |

(1) Instrument QC Batch: MA23090
(2) Instrument QC Batch: MA23092
(3) Instrument QC Batch: MA23108
(4) Prep QC Batch: MP49525
(5) Prep QC Batch: MP49569

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** DRYWELL-04
**Lab Sample ID:** JA26923-4 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8260B **Percent Solids:** 96.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Y91419.D | 1 | 09/03/09 | YXC | n/a | n/a | VY3837 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.6 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 11 | 2.5 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.1 | 0.39 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.7 | 0.29 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.7 | 0.17 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.7 | 0.46 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 11 | 2.2 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.7 | 0.34 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.7 | 0.63 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.7 | 0.38 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.7 | 1.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.7 | 0.36 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.7 | 0.19 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.7 | 0.17 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 11 | 0.61 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.7 | 0.12 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.1 | 0.15 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.7 | 0.31 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.7 | 0.31 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.7 | 0.38 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.7 | 1.1 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.7 | 0.16 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.1 | 0.39 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.7 | 0.75 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 5.7 | 0.27 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.7 | 0.51 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.7 | 0.15 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.7 | 0.15 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.7 | 0.11 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.1 | 0.42 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.7 | 0.64 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.7 | 1.1 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.7 | 0.59 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | DRYWELL-04 | | |
| **Lab Sample ID:** | JA26923-4 | **Date Sampled:** | 08/31/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 96.1 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.7 | 0.93 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.7 | 0.74 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.1 | 0.32 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.7 | 0.92 | ug/kg | |
| 75-09-2 | Methylene chloride | 3.0 | 5.7 | 0.25 | ug/kg | J |
| 100-42-5 | Styrene | ND | 5.7 | 0.12 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.7 | 0.33 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.7 | 0.16 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.1 | 0.33 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.7 | 0.39 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.7 | 0.14 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.7 | 0.21 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 5.7 | 0.59 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.7 | 0.26 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.7 | 0.20 | ug/kg | |
| | m,p-Xylene | ND | 2.3 | 0.53 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.1 | 0.53 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.3 | 0.53 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 94% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 73% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 105% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 95% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-04
**Lab Sample ID:** JA26923-4 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 96.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | F83455.D | 1 | 09/12/09 | NAP | 09/02/09 | OP39730 | EF3948 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 25 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 36 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 31 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 36 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 590 | 320 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 590 | 32 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 59 | 32 | ug/kg | |
| | 3&4-Methylphenol | ND | 59 | 40 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 31 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 300 | 38 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 300 | 38 | ug/kg | |
| 108-95-2 | Phenol | ND | 59 | 22 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 32 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 40 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 30 | 16 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 30 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 15 | ug/kg | |
| 120-12-7 | Anthracene | ND | 30 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 19 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | 19.9 | 30 | 18 | ug/kg | J |
| 50-32-8 | Benzo(a)pyrene | 23.1 | 30 | 12 | ug/kg | J |
| 205-99-2 | Benzo(b)fluoranthene | 32.7 | 30 | 16 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | 22.5 | 30 | 14 | ug/kg | J |
| 207-08-9 | Benzo(k)fluoranthene | 16.6 | 30 | 15 | ug/kg | J |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 59 | 16 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 59 | 15 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 59 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 87 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 59 | 13 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 59 | 13 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 59 | 24 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | DRYWELL-04 | | |
| **Lab Sample ID:** | JA26923-4 | **Date Sampled:** | 08/31/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 96.1 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | 30.8 | 30 | 14 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 59 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 59 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 59 | 15 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 59 | 20 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 59 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 59 | 13 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 51 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 30 | 14 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 59 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 59 | 19 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 59 | 13 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 59 | 13 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 59 | 14 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 59 | 16 | ug/kg | |
| 206-44-0 | Fluoranthene | 52.9 | 30 | 14 | ug/kg | |
| 86-73-7 | Fluorene | ND | 30 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 59 | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 30 | 14 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 590 | 28 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 19 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 21.6 | 30 | 11 | ug/kg | J |
| 78-59-1 | Isophorone | ND | 59 | 26 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 59 | 13 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 22 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 19 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 30 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 59 | 13 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 59 | 18 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 20 | ug/kg | |
| 85-01-8 | Phenanthrene | 33.0 | 30 | 15 | ug/kg | |
| 129-00-0 | Pyrene | 38.9 | 30 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 73% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 76% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 95% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 90% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | DRYWELL-04 | | |
| **Lab Sample ID:** | JA26923-4 | **Date Sampled:** | 08/31/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 96.1 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 83% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 70% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-04
**Lab Sample ID:** JA26923-4 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 96.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G48469.D | 1 | 09/16/09 | OPM | 09/02/09 | OP39731 | G1G1767 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.54 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.37 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.58 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.33 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.37 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.40 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.47 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.40 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.51 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.2 | 0.42 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.2 | 0.50 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.42 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.46 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.56 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.41 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.46 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.54 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.46 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.54 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.43 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 15 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 74% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 73% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 90% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 79% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-04
**Lab Sample ID:** JA26923-4 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 96.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85451.D | 1 | 09/08/09 | VDT | 09/02/09 | OP39732 | GEF3817 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 30 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 30 | 20 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 30 | 9.7 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 30 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | 701 | 30 | 6.0 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 30 | 7.6 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 30 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 94% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 92% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 87% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 82% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-04
**Lab Sample ID:** JA26923-4 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Percent Solids:** 96.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.1 | 2.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Arsenic | < 2.1 | 2.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Beryllium | < 0.53 | 0.53 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Cadmium | < 0.53 | 0.53 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Chromium | 6.0 | 1.1 | mg/kg | 1 | 09/04/09 | 09/12/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Copper | 7.2 | 2.7 | mg/kg | 1 | 09/04/09 | 09/12/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Lead | 7.7 | 2.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Mercury | < 0.033 | 0.033 | mg/kg | 1 | 09/10/09 | 09/10/09 | TG | SW846 7471A [2] | SW846 7471A [5] |
| Nickel | < 4.2 | 4.2 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Selenium | < 2.1 | 2.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Silver | < 1.1 | 1.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Zinc | 27.0 | 2.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |

(1) Instrument QC Batch: MA23090
(2) Instrument QC Batch: MA23092
(3) Instrument QC Batch: MA23108
(4) Prep QC Batch: MP49525
(5) Prep QC Batch: MP49569

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** DRYWELL-05
**Lab Sample ID:** JA26923-5 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8260B **Percent Solids:** 79.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Y91544.D | 1 | 09/08/09 | YXC | n/a | n/a | VY3843 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.2 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 12 | 2.7 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.2 | 0.41 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 6.0 | 0.31 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.0 | 0.18 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.0 | 0.49 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 12 | 2.4 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 6.0 | 0.37 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 6.0 | 0.67 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 6.0 | 0.41 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.0 | 1.4 | ug/kg | |
| 67-66-3 | Chloroform | ND | 6.0 | 0.38 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.0 | 0.20 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 6.0 | 0.18 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 12 | 0.65 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 6.0 | 0.13 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.2 | 0.17 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 6.0 | 0.33 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 6.0 | 0.33 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 6.0 | 0.41 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.0 | 1.1 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.0 | 0.17 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.2 | 0.42 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 6.0 | 0.80 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 6.0 | 0.29 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 6.0 | 0.54 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.0 | 0.16 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.0 | 0.16 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.0 | 0.12 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.2 | 0.45 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.0 | 0.68 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.0 | 1.2 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 6.0 | 0.62 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | DRYWELL-05 | | |
| **Lab Sample ID:** | JA26923-5 | **Date Sampled:** | 08/31/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 79.8 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | 11.9 | 6.0 | 0.99 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 6.0 | 0.79 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.2 | 0.34 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.0 | 0.98 | ug/kg | |
| 75-09-2 | Methylene chloride | 2.5 | 6.0 | 0.27 | ug/kg | J |
| 100-42-5 | Styrene | ND | 6.0 | 0.13 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.0 | 0.35 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 6.0 | 0.17 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.2 | 0.35 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.0 | 0.42 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.0 | 0.15 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.0 | 0.22 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 6.0 | 0.63 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.0 | 0.28 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 6.0 | 0.21 | ug/kg | |
| | m,p-Xylene | ND | 2.4 | 0.57 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.2 | 0.57 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.4 | 0.57 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 107% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 99% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 108% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 101% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-05
**Lab Sample ID:** JA26923-5 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 79.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | F83456.D | 1 | 09/12/09 | NAP | 09/02/09 | OP39730 | EF3948 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 180 | 30 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 180 | 43 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 180 | 37 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 180 | 44 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 720 | 390 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 720 | 38 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 72 | 39 | ug/kg | |
| | 3&4-Methylphenol | ND | 72 | 48 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 180 | 38 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 360 | 46 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 360 | 46 | ug/kg | |
| 108-95-2 | Phenol | ND | 72 | 27 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 180 | 39 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 180 | 48 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 36 | 19 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 36 | 15 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 180 | 18 | ug/kg | |
| 120-12-7 | Anthracene | 49.0 | 36 | 16 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 180 | 23 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | 188 | 36 | 22 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | 228 | 36 | 15 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | 254 | 36 | 19 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | 187 | 36 | 17 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | 194 | 36 | 18 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 72 | 20 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | 177 | 72 | 18 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 72 | 18 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 180 | 100 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 72 | 16 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 180 | 15 | ug/kg | |
| 86-74-8 | Carbazole | 30.0 | 72 | 15 | ug/kg | J |
| 105-60-2 | Caprolactam | ND | 72 | 29 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-05
**Lab Sample ID:** JA26923-5 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 79.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | 229 | 36 | 17 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 72 | 18 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 72 | 17 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 72 | 19 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 72 | 24 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 72 | 20 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 72 | 16 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 180 | 62 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | 41.3 | 36 | 17 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 72 | 17 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | 303 | 72 | 22 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 72 | 16 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 72 | 16 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 72 | 17 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 577 | 72 | 19 | ug/kg | |
| 206-44-0 | Fluoranthene | 489 | 36 | 16 | ug/kg | |
| 86-73-7 | Fluorene | 17.2 | 36 | 17 | ug/kg | J |
| 118-74-1 | Hexachlorobenzene | ND | 72 | 20 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 36 | 17 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 720 | 34 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 180 | 23 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 175 | 36 | 13 | ug/kg | |
| 78-59-1 | Isophorone | ND | 72 | 31 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 72 | 16 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 180 | 26 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 180 | 15 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 180 | 22 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 36 | 16 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 72 | 16 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 72 | 22 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 180 | 24 | ug/kg | |
| 85-01-8 | Phenanthrene | 194 | 36 | 18 | ug/kg | |
| 129-00-0 | Pyrene | 320 | 36 | 16 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 72% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 76% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 98% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 89% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | DRYWELL-05 | | |
| **Lab Sample ID:** | JA26923-5 | **Date Sampled:** | 08/31/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 79.8 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 82% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 73% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-05
**Lab Sample ID:** JA26923-5 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 79.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G48470.D | 1 | 09/16/09 | OPM | 09/02/09 | OP39731 | G1G1767 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.4 | 0.65 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.4 | 0.45 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.4 | 0.70 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.4 | 0.40 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.4 | 0.45 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | 1.7 | 1.4 | 0.49 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | 1.8 | 1.4 | 0.57 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.4 | 0.49 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.4 | 0.62 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.4 | 0.50 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.4 | 0.61 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.4 | 0.50 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.4 | 0.55 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.4 | 0.68 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.4 | 0.49 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.4 | 0.55 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.4 | 0.65 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.4 | 0.56 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.4 | 0.65 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.4 | 0.51 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 18 | 17 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 99% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 86% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 70% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 88% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-05
**Lab Sample ID:** JA26923-5 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 79.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85452.D | 1 | 09/08/09 | VDT | 09/02/09 | OP39732 | GEF3817 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 36 | 13 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 36 | 24 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 36 | 12 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | 250 | 36 | 13 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 36 | 7.2 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 36 | 9.1 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 36 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 93% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 91% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 85% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 85% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-05
**Lab Sample ID:** JA26923-5
**Matrix:** SO - Soil
**Date Sampled:** 08/31/09
**Date Received:** 09/01/09
**Percent Solids:** 79.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.6 | 2.6 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Arsenic | 3.6 | 2.6 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Beryllium | < 0.66 | 0.66 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Cadmium | < 0.66 | 0.66 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Chromium | 26.3 | 1.3 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Copper | 20.9 | 3.3 | mg/kg | 1 | 09/04/09 | 09/13/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Lead | 57.8 | 2.6 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Mercury | < 0.037 | 0.037 | mg/kg | 1 | 09/10/09 | 09/10/09 | TG | SW846 7471A [2] | SW846 7471A [5] |
| Nickel | 10.9 | 5.3 | mg/kg | 1 | 09/04/09 | 09/13/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Selenium | < 2.6 | 2.6 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Silver | < 1.3 | 1.3 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Thallium | < 1.3 | 1.3 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Zinc | 87.8 | 2.6 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |

(1) Instrument QC Batch: MA23090
(2) Instrument QC Batch: MA23092
(3) Instrument QC Batch: MA23108
(4) Prep QC Batch: MP49525
(5) Prep QC Batch: MP49569

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** DRYWELL-06
**Lab Sample ID:** JA26923-6 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8260B **Percent Solids:** 80.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Y91545.D | 1 | 09/08/09 | YXC | n/a | n/a | VY3843 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.8 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 50.7 | 13 | 2.9 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.3 | 0.44 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 6.5 | 0.33 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.5 | 0.20 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.5 | 0.52 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 13 | 2.5 | ug/kg | |
| 75-15-0 | Carbon disulfide | 1.1 | 6.5 | 0.39 | ug/kg | J |
| 56-23-5 | Carbon tetrachloride | ND | 6.5 | 0.72 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 6.5 | 0.44 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.5 | 1.5 | ug/kg | |
| 67-66-3 | Chloroform | ND | 6.5 | 0.41 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.5 | 0.21 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 6.5 | 0.20 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 13 | 0.70 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 6.5 | 0.14 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.3 | 0.18 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 6.5 | 0.35 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 6.5 | 0.36 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 6.5 | 0.44 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.5 | 1.2 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.5 | 0.18 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.3 | 0.45 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 6.5 | 0.86 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 6.5 | 0.31 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 6.5 | 0.58 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.5 | 0.17 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.5 | 0.17 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.5 | 0.12 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.3 | 0.48 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.5 | 0.73 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.5 | 1.2 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 6.5 | 0.67 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-06
**Lab Sample ID:** JA26923-6 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8260B **Percent Solids:** 80.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | 9.0 | 6.5 | 1.1 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 6.5 | 0.85 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.3 | 0.36 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.5 | 1.0 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 6.5 | 0.29 | ug/kg | |
| 100-42-5 | Styrene | ND | 6.5 | 0.14 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.5 | 0.38 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 6.5 | 0.19 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.3 | 0.38 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.5 | 0.45 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.5 | 0.17 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.5 | 0.24 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 6.5 | 0.68 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.5 | 0.30 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 6.5 | 0.23 | ug/kg | |
| | m,p-Xylene | ND | 2.6 | 0.61 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.3 | 0.61 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.6 | 0.61 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 109% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 100% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 107% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 102% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-06
**Lab Sample ID:** JA26923-6 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 80.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | F83476.D | 1 | 09/14/09 | NAP | 09/02/09 | OP39730 | EF3949 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 180 | 29 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 180 | 43 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 180 | 37 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 180 | 43 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 710 | 380 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 710 | 38 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 71 | 38 | ug/kg | |
| | 3&4-Methylphenol | ND | 71 | 48 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 180 | 37 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 350 | 45 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 350 | 46 | ug/kg | |
| 108-95-2 | Phenol | ND | 71 | 27 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 180 | 38 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 180 | 47 | ug/kg | |
| 83-32-9 | Acenaphthene | 38.0 | 35 | 19 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 35 | 15 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 180 | 17 | ug/kg | |
| 120-12-7 | Anthracene | 79.4 | 35 | 16 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 180 | 22 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | 161 | 35 | 21 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | 209 | 35 | 15 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | 269 | 35 | 19 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | 184 | 35 | 17 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | 170 | 35 | 18 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 71 | 19 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | 73.9 | 71 | 18 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 71 | 18 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 180 | 100 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 71 | 16 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 180 | 14 | ug/kg | |
| 86-74-8 | Carbazole | 31.1 | 71 | 15 | ug/kg | J |
| 105-60-2 | Caprolactam | ND | 71 | 28 | ug/kg | |

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RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | DRYWELL-06 | | |
| **Lab Sample ID:** | JA26923-6 | **Date Sampled:** | 08/31/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 80.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | 243 | 35 | 16 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 71 | 18 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 71 | 17 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 71 | 18 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 71 | 24 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 71 | 19 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 71 | 16 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 180 | 61 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | 40.0 | 35 | 17 | ug/kg | |
| 132-64-9 | Dibenzofuran | 36.0 | 71 | 17 | ug/kg | J |
| 84-74-2 | Di-n-butyl phthalate | ND | 71 | 22 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 71 | 16 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 71 | 16 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 71 | 17 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 301 | 71 | 19 | ug/kg | |
| 206-44-0 | Fluoranthene | 560 | 35 | 16 | ug/kg | |
| 86-73-7 | Fluorene | 63.1 | 35 | 17 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 71 | 20 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 35 | 17 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 710 | 33 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 180 | 23 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 174 | 35 | 13 | ug/kg | |
| 78-59-1 | Isophorone | ND | 71 | 31 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 71 | 16 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 180 | 26 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 180 | 14 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 180 | 22 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 35 | 15 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 71 | 16 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 71 | 22 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 180 | 24 | ug/kg | |
| 85-01-8 | Phenanthrene | 472 | 35 | 17 | ug/kg | |
| 129-00-0 | Pyrene | 346 | 35 | 16 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 73% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 73% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 105% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 91% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | DRYWELL-06 | | |
| **Lab Sample ID:** | JA26923-6 | **Date Sampled:** | 08/31/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 80.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 85% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 73% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-06
**Lab Sample ID:** JA26923-6 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 80.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G48471.D | 1 | 09/16/09 | OPM | 09/02/09 | OP39731 | G1G1767 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.4 | 0.64 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.4 | 0.44 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.4 | 0.70 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.4 | 0.39 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.4 | 0.44 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.4 | 0.48 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.4 | 0.56 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.4 | 0.48 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.4 | 0.61 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.4 | 0.50 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.4 | 0.60 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.4 | 0.50 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.4 | 0.55 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.4 | 0.67 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.4 | 0.49 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.4 | 0.55 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.4 | 0.65 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.4 | 0.55 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.4 | 0.64 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.4 | 0.51 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 18 | 17 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 90% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 99% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 74% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 91% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-06
**Lab Sample ID:** JA26923-6 **Date Sampled:** 08/31/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 80.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85453.D | 1 | 09/08/09 | VDT | 09/02/09 | OP39732 | GEF3817 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 36 | 13 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 36 | 24 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 36 | 12 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 36 | 13 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | 47.9 | 36 | 7.1 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 36 | 9.0 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 36 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 100% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 93% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 87% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 92% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** DRYWELL-06
**Lab Sample ID:** JA26923-6
**Matrix:** SO - Soil
**Date Sampled:** 08/31/09
**Date Received:** 09/01/09
**Percent Solids:** 80.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.4 | 2.4 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Arsenic | < 2.4 | 2.4 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Beryllium | < 0.59 | 0.59 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Cadmium | 0.93 | 0.59 | mg/kg | 1 | 09/04/09 | 09/13/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Chromium | 13.4 | 1.2 | mg/kg | 1 | 09/04/09 | 09/13/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Copper | 15.3 | 3.0 | mg/kg | 1 | 09/04/09 | 09/13/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Lead | 30.5 | 2.4 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Mercury | < 0.038 | 0.038 | mg/kg | 1 | 09/10/09 | 09/10/09 | TG | SW846 7471A [2] | SW846 7471A [5] |
| Nickel | 7.5 | 4.7 | mg/kg | 1 | 09/04/09 | 09/13/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Selenium | < 2.4 | 2.4 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Silver | < 1.2 | 1.2 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Thallium | < 1.2 | 1.2 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Zinc | 79.2 | 2.4 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |

(1) Instrument QC Batch: MA23090
(2) Instrument QC Batch: MA23092
(3) Instrument QC Batch: MA23108
(4) Prep QC Batch: MP49525
(5) Prep QC Batch: MP49569

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** P17NB01-0'-4'
**Lab Sample ID:** JA26923-7 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8260B **Percent Solids:** 98.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Y91546.D | 1 | 09/08/09 | YXC | n/a | n/a | VY3843 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.6 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 11 | 2.5 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.1 | 0.38 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.5 | 0.28 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.5 | 0.17 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.5 | 0.45 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 11 | 2.2 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.5 | 0.34 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.5 | 0.61 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.5 | 0.38 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.5 | 1.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.5 | 0.35 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.5 | 0.18 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.5 | 0.17 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 11 | 0.60 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.5 | 0.12 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.1 | 0.15 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.5 | 0.30 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.5 | 0.30 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.5 | 0.37 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.5 | 1.0 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.5 | 0.15 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.1 | 0.38 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.5 | 0.73 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 5.5 | 0.26 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.5 | 0.50 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.5 | 0.14 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.5 | 0.15 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.5 | 0.11 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.1 | 0.41 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.5 | 0.62 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.5 | 1.1 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.5 | 0.57 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB01-0'-4' | | |
| **Lab Sample ID:** | JA26923-7 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 98.1 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.5 | 0.91 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.5 | 0.72 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.1 | 0.31 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.5 | 0.90 | ug/kg | |
| 75-09-2 | Methylene chloride | 2.4 | 5.5 | 0.25 | ug/kg | J |
| 100-42-5 | Styrene | ND | 5.5 | 0.12 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.5 | 0.32 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.5 | 0.16 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.1 | 0.32 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.5 | 0.38 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.5 | 0.14 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.5 | 0.20 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 5.5 | 0.58 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.5 | 0.25 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.5 | 0.20 | ug/kg | |
| | m,p-Xylene | ND | 2.2 | 0.52 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.1 | 0.52 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.2 | 0.52 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 114% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 108% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 108% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 98% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB01-0'-4'
**Lab Sample ID:** JA26923-7 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 98.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | F83440.D | 1 | 09/12/09 | NAP | 09/02/09 | OP39730 | EF3948 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.1 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 24 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 35 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 30 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 35 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 580 | 310 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 580 | 31 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 58 | 31 | ug/kg | |
| | 3&4-Methylphenol | ND | 58 | 39 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 30 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 290 | 37 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 290 | 37 | ug/kg | |
| 108-95-2 | Phenol | ND | 58 | 22 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 31 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 39 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 29 | 15 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 29 | 12 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 14 | ug/kg | |
| 120-12-7 | Anthracene | ND | 29 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 18 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 29 | 18 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 29 | 12 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 29 | 16 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 29 | 14 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 29 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 58 | 16 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 58 | 14 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 58 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 85 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 58 | 13 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 58 | 12 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 58 | 23 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB01-0'-4' | | |
| **Lab Sample ID:** | JA26923-7 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 98.1 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 29 | 13 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 58 | 14 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 58 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 58 | 15 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 58 | 19 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 58 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 58 | 13 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 50 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 29 | 14 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 58 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 58 | 18 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 58 | 13 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 58 | 13 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 58 | 14 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 58 | 15 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 29 | 13 | ug/kg | |
| 86-73-7 | Fluorene | ND | 29 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 58 | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 29 | 14 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 580 | 27 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 19 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 29 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 58 | 25 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 58 | 13 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 21 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 18 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 29 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 58 | 13 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 58 | 18 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 20 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 29 | 14 | ug/kg | |
| 129-00-0 | Pyrene | ND | 29 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 72% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 72% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 89% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 83% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB01-0'-4' | | |
| **Lab Sample ID:** | JA26923-7 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 98.1 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 75% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 79% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB01-0'-4'
**Lab Sample ID:** JA26923-7 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 98.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G48194.D | 1 | 09/02/09 | OPM | 09/02/09 | OP39731 | G1G1756 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.53 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.37 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.57 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.32 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.37 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.40 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.46 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.40 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.51 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.2 | 0.41 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.2 | 0.50 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.41 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.45 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.56 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.40 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.45 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.53 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.46 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.53 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.42 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 15 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 91% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 85% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 79% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 95% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB01-0'-4'
**Lab Sample ID:** JA26923-7 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 98.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85458.D | 1 | 09/09/09 | VDT | 09/02/09 | OP39732 | GEF3817 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 30 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 30 | 20 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 30 | 9.5 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 30 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 30 | 5.9 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 30 | 7.5 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 30 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 101% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 98% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 108% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 105% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB01-0'-4'
**Lab Sample ID:** JA26923-7 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Percent Solids:** 98.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.0 | 2.0 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Arsenic | < 2.0 | 2.0 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Beryllium | < 0.50 | 0.50 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Cadmium | < 0.50 | 0.50 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Chromium | 1.4 | 1.0 | mg/kg | 1 | 09/04/09 | 09/13/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Copper | 2.9 | 2.5 | mg/kg | 1 | 09/04/09 | 09/13/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Lead | < 2.0 | 2.0 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Mercury | < 0.032 | 0.032 | mg/kg | 1 | 09/10/09 | 09/10/09 | TG | SW846 7471A [2] | SW846 7471A [5] |
| Nickel | < 4.0 | 4.0 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Selenium | < 2.0 | 2.0 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Silver | < 1.0 | 1.0 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Thallium | < 1.0 | 1.0 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Zinc | 4.5 | 2.0 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |

(1) Instrument QC Batch: MA23090
(2) Instrument QC Batch: MA23092
(3) Instrument QC Batch: MA23108
(4) Prep QC Batch: MP49525
(5) Prep QC Batch: MP49569

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** P17NB01-4'-8'
**Lab Sample ID:** JA26923-8 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8260B **Percent Solids:** 97.7
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Y91547.D | 1 | 09/08/09 | YXC | n/a | n/a | VY3843 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.4 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 12 | 2.6 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.2 | 0.40 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.8 | 0.30 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.8 | 0.18 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.8 | 0.47 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 12 | 2.3 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.8 | 0.35 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.8 | 0.65 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.8 | 0.39 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.8 | 1.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.8 | 0.37 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.8 | 0.19 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.8 | 0.18 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 12 | 0.63 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.8 | 0.13 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.2 | 0.16 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.8 | 0.31 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.8 | 0.32 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.8 | 0.39 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.8 | 1.1 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.8 | 0.16 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.2 | 0.40 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.8 | 0.77 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 5.8 | 0.28 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.8 | 0.52 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.8 | 0.15 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.8 | 0.15 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.8 | 0.11 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.2 | 0.43 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.8 | 0.65 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.8 | 1.1 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.8 | 0.60 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB01-4'-8'
**Lab Sample ID:** JA26923-8 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8260B **Percent Solids:** 97.7
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.8 | 0.96 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.8 | 0.76 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.2 | 0.33 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.8 | 0.94 | ug/kg | |
| 75-09-2 | Methylene chloride | 3.2 | 5.8 | 0.26 | ug/kg | J |
| 100-42-5 | Styrene | ND | 5.8 | 0.12 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.8 | 0.34 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.8 | 0.17 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.2 | 0.34 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.8 | 0.40 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.8 | 0.15 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.8 | 0.22 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 5.8 | 0.61 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.8 | 0.27 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.8 | 0.21 | ug/kg | |
| | m,p-Xylene | ND | 2.3 | 0.55 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.2 | 0.55 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.3 | 0.55 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 111% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 104% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 109% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 99% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB01-4'-8'
**Lab Sample ID:** JA26923-8 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 97.7
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | F83443.D | 1 | 09/12/09 | NAP | 09/02/09 | OP39730 | EF3948 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 24 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 35 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 30 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 36 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 580 | 320 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 580 | 31 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 58 | 32 | ug/kg | |
| | 3&4-Methylphenol | ND | 58 | 39 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 31 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 290 | 37 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 290 | 38 | ug/kg | |
| 108-95-2 | Phenol | ND | 58 | 22 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 32 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 39 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 29 | 15 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 29 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 14 | ug/kg | |
| 120-12-7 | Anthracene | ND | 29 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 18 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 29 | 18 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 29 | 12 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 29 | 16 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 29 | 14 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 29 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 58 | 16 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 58 | 15 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 58 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 85 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 58 | 13 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 58 | 12 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 58 | 23 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB01-4'-8'
**Lab Sample ID:** JA26923-8 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 97.7
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 29 | 13 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 58 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 58 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 58 | 15 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 58 | 19 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 58 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 58 | 13 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 51 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 29 | 14 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 58 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 58 | 18 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 58 | 13 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 58 | 13 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 58 | 14 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 58 | 15 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 29 | 13 | ug/kg | |
| 86-73-7 | Fluorene | ND | 29 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 58 | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 29 | 14 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 580 | 28 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 19 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 29 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 58 | 26 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 58 | 13 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 21 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 18 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 29 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 58 | 13 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 58 | 18 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 20 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 29 | 14 | ug/kg | |
| 129-00-0 | Pyrene | ND | 29 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 73% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 74% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 89% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 88% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB01-4'-8' | | |
| **Lab Sample ID:** | JA26923-8 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 97.7 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 78% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 78% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB01-4'-8'
**Lab Sample ID:** JA26923-8 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 97.7
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G48195.D | 1 | 09/02/09 | OPM | 09/02/09 | OP39731 | G1G1756 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.53 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.37 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.58 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.32 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.37 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.40 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.47 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.40 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.51 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.2 | 0.41 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.2 | 0.50 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.41 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.45 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.56 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.41 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.45 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.54 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.46 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.53 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.42 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 15 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 85% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 86% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 90% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 99% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB01-4'-8'
**Lab Sample ID:** JA26923-8 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 97.7
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85459.D | 1 | 09/09/09 | VDT | 09/02/09 | OP39732 | GEF3817 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 30 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 30 | 20 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 30 | 9.6 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 30 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 30 | 5.9 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 30 | 7.5 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 30 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 98% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 95% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 110% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 105% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB01-4'-8'
**Lab Sample ID:** JA26923-8 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Percent Solids:** 97.7
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.1 | 2.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Arsenic | < 2.1 | 2.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Beryllium | < 0.53 | 0.53 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Cadmium | < 0.53 | 0.53 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Chromium | 3.0 | 1.1 | mg/kg | 1 | 09/04/09 | 09/13/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Copper | 9.7 | 2.6 | mg/kg | 1 | 09/04/09 | 09/13/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Lead | 3.8 | 2.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Mercury | < 0.032 | 0.032 | mg/kg | 1 | 09/10/09 | 09/10/09 | TG | SW846 7471A [2] | SW846 7471A [5] |
| Nickel | < 4.2 | 4.2 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Selenium | < 2.1 | 2.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Silver | < 1.1 | 1.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 09/04/09 | 09/13/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Zinc | 8.6 | 2.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |

(1) Instrument QC Batch: MA23090
(2) Instrument QC Batch: MA23092
(3) Instrument QC Batch: MA23108
(4) Prep QC Batch: MP49525
(5) Prep QC Batch: MP49569

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** P17NB02-0'-4'
**Lab Sample ID:** JA26923-9 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8260B **Percent Solids:** 95.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Y91548.D | 1 | 09/08/09 | YXC | n/a | n/a | VY3843 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.3 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 12 | 2.7 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.2 | 0.42 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 6.1 | 0.31 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.1 | 0.18 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.1 | 0.49 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 12 | 2.4 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 6.1 | 0.37 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 6.1 | 0.68 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 6.1 | 0.41 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.1 | 1.4 | ug/kg | |
| 67-66-3 | Chloroform | ND | 6.1 | 0.39 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.1 | 0.20 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 6.1 | 0.18 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 12 | 0.66 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 6.1 | 0.13 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.2 | 0.17 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 6.1 | 0.33 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 6.1 | 0.34 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 6.1 | 0.41 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.1 | 1.2 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.1 | 0.17 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.2 | 0.42 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 6.1 | 0.81 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 6.1 | 0.29 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 6.1 | 0.55 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.1 | 0.16 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.1 | 0.16 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.1 | 0.12 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.2 | 0.45 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.1 | 0.69 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.1 | 1.2 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 6.1 | 0.63 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB02-0'-4' | | |
| **Lab Sample ID:** | JA26923-9 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 95.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 6.1 | 1.0 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 6.1 | 0.80 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.2 | 0.34 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.1 | 0.99 | ug/kg | |
| 75-09-2 | Methylene chloride | 3.1 | 6.1 | 0.27 | ug/kg | J |
| 100-42-5 | Styrene | ND | 6.1 | 0.13 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.1 | 0.36 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 6.1 | 0.18 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.2 | 0.36 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.1 | 0.42 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.1 | 0.16 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.1 | 0.23 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 6.1 | 0.64 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.1 | 0.28 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 6.1 | 0.22 | ug/kg | |
| | m,p-Xylene | ND | 2.4 | 0.57 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.2 | 0.57 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.4 | 0.57 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 108% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 103% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 108% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 99% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB02-0'-4'
**Lab Sample ID:** JA26923-9 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 95.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | F83444.D | 1 | 09/12/09 | NAP | 09/02/09 | OP39730 | EF3948 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 25 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 36 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 31 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 37 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 600 | 320 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 600 | 32 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 60 | 32 | ug/kg | |
| | 3&4-Methylphenol | ND | 60 | 40 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 31 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 300 | 38 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 300 | 39 | ug/kg | |
| 108-95-2 | Phenol | ND | 60 | 23 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 32 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 40 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 30 | 16 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 30 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 15 | ug/kg | |
| 120-12-7 | Anthracene | ND | 30 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 19 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 30 | 18 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 30 | 12 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 30 | 16 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 30 | 15 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 30 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 60 | 16 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 60 | 15 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 60 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 88 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 60 | 13 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 60 | 13 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 60 | 24 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB02-0'-4'
**Lab Sample ID:** JA26923-9 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 95.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 30 | 14 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 60 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 60 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 60 | 16 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 60 | 20 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 60 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 60 | 14 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 52 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 30 | 14 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 60 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 60 | 19 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 60 | 13 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 60 | 14 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 60 | 14 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 60 | 16 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 30 | 14 | ug/kg | |
| 86-73-7 | Fluorene | ND | 30 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 60 | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 30 | 14 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 600 | 28 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 19 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 30 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 60 | 26 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 60 | 13 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 22 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 19 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 30 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 60 | 14 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 60 | 19 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 20 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 30 | 15 | ug/kg | |
| 129-00-0 | Pyrene | ND | 30 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 74% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 74% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 87% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 87% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB02-0'-4' | | |
| **Lab Sample ID:** | JA26923-9 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 95.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 78% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 77% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB02-0'-4'
**Lab Sample ID:** JA26923-9 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 95.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G48472.D | 1 | 09/16/09 | OPM | 09/02/09 | OP39731 | G1G1767 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.0 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.55 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.38 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.60 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.34 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.38 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.42 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.48 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.42 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.53 | ug/kg | |
| 72-55-9 | 4,4'-DDE [a] | 11.8 | 1.2 | 0.43 | ug/kg | |
| 50-29-3 | 4,4'-DDT [a] | 13.3 | 1.2 | 0.52 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.43 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.47 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.58 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.42 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.47 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.56 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.47 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.55 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.44 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 15 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 82% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 95% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 79% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 90% | | 22-156% |

(a) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB02-0'-4'
**Lab Sample ID:** JA26923-9 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 95.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85460.D | 1 | 09/09/09 | VDT | 09/02/09 | OP39732 | GEF3817 |
| Run #2 | EF85470.D | 5 | 09/09/09 | VDT | 09/02/09 | OP39732 | GEF3818 |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.0 g | 10.0 ml |
| Run #2 | 17.0 g | 10.0 ml |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 31 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 31 | 20 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 31 | 9.9 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 31 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | 1930 [a] | 150 | 31 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 31 | 7.8 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 31 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 103% | 79% | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 99% | 70% | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 112% | 90% | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 117% | 83% | 32-154% |

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB02-0'-4'
**Lab Sample ID:** JA26923-9
**Matrix:** SO - Soil
**Date Sampled:** 09/01/09
**Date Received:** 09/01/09
**Percent Solids:** 95.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.1 | 2.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Arsenic | 36.5 | 2.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Beryllium | < 0.54 | 0.54 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Cadmium | < 0.54 | 0.54 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Chromium | 11.6 | 1.1 | mg/kg | 1 | 09/04/09 | 09/13/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Copper | 9.6 | 2.7 | mg/kg | 1 | 09/04/09 | 09/13/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Lead | 19.5 | 2.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Mercury | < 0.031 | 0.031 | mg/kg | 1 | 09/10/09 | 09/10/09 | TG | SW846 7471A [2] | SW846 7471A [5] |
| Nickel | 5.8 | 4.3 | mg/kg | 1 | 09/04/09 | 09/13/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Selenium | < 2.1 | 2.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Silver | < 1.1 | 1.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Zinc | 23.2 | 2.1 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |

(1) Instrument QC Batch: MA23090
(2) Instrument QC Batch: MA23092
(3) Instrument QC Batch: MA23108
(4) Prep QC Batch: MP49525
(5) Prep QC Batch: MP49569

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** P17NB02-4'-8'
**Lab Sample ID:** JA26923-10 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8260B **Percent Solids:** 95.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | G123310.D | 1 | 09/03/09 | SJM | n/a | n/a | VG5872 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.6 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 11 | 2.5 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.1 | 0.39 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.7 | 0.29 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.7 | 0.17 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.7 | 0.46 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 11 | 2.2 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.7 | 0.35 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.7 | 0.63 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.7 | 0.38 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.7 | 1.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.7 | 0.36 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.7 | 0.19 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.7 | 0.17 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 11 | 0.61 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.7 | 0.12 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.1 | 0.16 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.7 | 0.31 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.7 | 0.31 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.7 | 0.38 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.7 | 1.1 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.7 | 0.16 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.1 | 0.39 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.7 | 0.75 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 5.7 | 0.27 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.7 | 0.51 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.7 | 0.15 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.7 | 0.15 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.7 | 0.11 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.1 | 0.42 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.7 | 0.64 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.7 | 1.1 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.7 | 0.59 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB02-4'-8' | | |
| **Lab Sample ID:** | JA26923-10 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 95.8 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.7 | 0.93 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.7 | 0.74 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.1 | 0.32 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.7 | 0.92 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 5.7 | 0.25 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.7 | 0.12 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.7 | 0.33 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.7 | 0.16 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.1 | 0.33 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.7 | 0.39 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.7 | 0.15 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.7 | 0.21 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 5.7 | 0.60 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.7 | 0.26 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.7 | 0.20 | ug/kg | |
| | m,p-Xylene | ND | 2.3 | 0.53 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.1 | 0.53 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.3 | 0.53 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 90% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 76% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 109% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 97% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB02-4'-8'
**Lab Sample ID:** JA26923-10 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 95.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | F83469.D | 1 | 09/14/09 | NAP | 09/02/09 | OP39730 | EF3949 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 25 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 36 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 31 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 36 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 600 | 320 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 600 | 32 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 60 | 32 | ug/kg | |
| | 3&4-Methylphenol | ND | 60 | 40 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 31 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 300 | 38 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 300 | 38 | ug/kg | |
| 108-95-2 | Phenol | ND | 60 | 23 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 32 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 40 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 30 | 16 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 30 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 15 | ug/kg | |
| 120-12-7 | Anthracene | ND | 30 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 19 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 30 | 18 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 30 | 12 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 30 | 16 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 30 | 14 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 30 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 60 | 16 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 60 | 15 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 60 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 87 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 60 | 13 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 60 | 13 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 60 | 24 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB02-4'-8'
**Lab Sample ID:** JA26923-10 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 95.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 30 | 14 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 60 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 60 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 60 | 16 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 60 | 20 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 60 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 60 | 13 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 52 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 30 | 14 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 60 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 60 | 19 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 60 | 13 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 60 | 13 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 60 | 14 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 60 | 16 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 30 | 14 | ug/kg | |
| 86-73-7 | Fluorene | ND | 30 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 60 | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 30 | 14 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 600 | 28 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 19 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 30 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 60 | 26 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 60 | 13 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 22 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 19 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 30 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 60 | 13 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 60 | 18 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 20 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 30 | 15 | ug/kg | |
| 129-00-0 | Pyrene | ND | 30 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 69% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 69% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 85% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 83% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB02-4'-8' | | |
| **Lab Sample ID:** | JA26923-10 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 95.8 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 74% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 72% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB02-4'-8'
**Lab Sample ID:** JA26923-10 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 95.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G48196.D | 1 | 09/02/09 | OPM | 09/02/09 | OP39731 | G1G1756 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.54 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.37 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.59 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.33 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.37 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.41 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.47 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.41 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.52 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.2 | 0.42 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.2 | 0.51 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.42 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.46 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.57 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.41 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.46 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.55 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.47 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.54 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.43 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 15 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 87% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 89% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 92% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 102% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB02-4'-8'
**Lab Sample ID:** JA26923-10 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 95.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85471.D | 1 | 09/09/09 | VDT | 09/02/09 | OP39732 | GEF3818 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 30 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 30 | 20 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 30 | 9.8 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 30 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 30 | 6.0 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 30 | 7.6 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 30 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 99% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 97% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 110% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 103% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB02-4'-8'
**Lab Sample ID:** JA26923-10 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Percent Solids:** 95.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.0 | 2.0 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Arsenic | 2.2 | 2.0 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Beryllium | < 0.51 | 0.51 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Cadmium | < 0.51 | 0.51 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Chromium | 5.5 | 1.0 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Copper | 8.0 | 2.6 | mg/kg | 1 | 09/04/09 | 09/13/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Lead | 2.6 | 2.0 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Mercury | < 0.032 | 0.032 | mg/kg | 1 | 09/10/09 | 09/10/09 | TG | SW846 7471A [2] | SW846 7471A [5] |
| Nickel | 4.9 | 4.1 | mg/kg | 1 | 09/04/09 | 09/13/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Selenium | < 2.0 | 2.0 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Silver | < 1.0 | 1.0 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Thallium | < 1.0 | 1.0 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |
| Zinc | 11.0 | 2.0 | mg/kg | 1 | 09/04/09 | 09/09/09 | GT | SW846 6010B [1] | SW846 3050B [4] |

(1) Instrument QC Batch: MA23090
(2) Instrument QC Batch: MA23092
(3) Instrument QC Batch: MA23108
(4) Prep QC Batch: MP49525
(5) Prep QC Batch: MP49569

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** P17NB03-0'-4'
**Lab Sample ID:** JA26923-11 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8260B **Percent Solids:** 83.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | G123311.D | 1 | 09/03/09 | SJM | n/a | n/a | VG5872 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.2 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 144 | 14 | 3.2 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.4 | 0.49 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 7.1 | 0.37 | ug/kg | |
| 75-25-2 | Bromoform | ND | 7.1 | 0.22 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 7.1 | 0.58 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | 40.7 | 14 | 2.8 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 7.1 | 0.44 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 7.1 | 0.79 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 7.1 | 0.48 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 7.1 | 1.6 | ug/kg | |
| 67-66-3 | Chloroform | ND | 7.1 | 0.45 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 7.1 | 0.24 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 7.1 | 0.22 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 14 | 0.77 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 7.1 | 0.16 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.4 | 0.20 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 7.1 | 0.39 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 7.1 | 0.39 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 7.1 | 0.48 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 7.1 | 1.4 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 7.1 | 0.20 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.4 | 0.49 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 7.1 | 0.95 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | 1.5 | 7.1 | 0.34 | ug/kg | J |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 7.1 | 0.64 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 7.1 | 0.19 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 7.1 | 0.19 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 7.1 | 0.14 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.4 | 0.53 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 7.1 | 0.80 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 7.1 | 1.4 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 7.1 | 0.74 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB03-0'-4' | | |
| **Lab Sample ID:** | JA26923-11 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 83.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 7.1 | 1.2 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 7.1 | 0.93 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.4 | 0.40 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 7.1 | 1.2 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 7.1 | 0.32 | ug/kg | |
| 100-42-5 | Styrene | ND | 7.1 | 0.15 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 7.1 | 0.42 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 7.1 | 0.21 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.4 | 0.42 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 7.1 | 0.49 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 7.1 | 0.18 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 7.1 | 0.26 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 7.1 | 0.75 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 7.1 | 0.33 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 7.1 | 0.25 | ug/kg | |
| | m,p-Xylene | ND | 2.9 | 0.67 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.4 | 0.67 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.9 | 0.67 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 91% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 79% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 109% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 95% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB03-0'-4'
**Lab Sample ID:** JA26923-11 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 83.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | F83470.D | 1 | 09/14/09 | NAP | 09/02/09 | OP39730 | EF3949 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 170 | 28 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 170 | 42 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 170 | 36 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 170 | 42 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 690 | 370 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 690 | 36 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 69 | 37 | ug/kg | |
| | 3&4-Methylphenol | ND | 69 | 46 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 170 | 36 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 340 | 44 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 340 | 44 | ug/kg | |
| 108-95-2 | Phenol | ND | 69 | 26 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 170 | 37 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 170 | 46 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 34 | 18 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 34 | 15 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 170 | 17 | ug/kg | |
| 120-12-7 | Anthracene | ND | 34 | 15 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 170 | 22 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 34 | 21 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 34 | 14 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 34 | 19 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 34 | 17 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 34 | 17 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 69 | 19 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 69 | 17 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 69 | 17 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 170 | 100 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 69 | 15 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 170 | 14 | ug/kg | |
| 86-74-8 | Carbazole | ND | 69 | 15 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 69 | 27 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB03-0'-4'
**Lab Sample ID:** JA26923-11 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 83.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 34 | 16 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 69 | 17 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 69 | 16 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 69 | 18 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 69 | 23 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 69 | 19 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 69 | 15 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 170 | 59 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 34 | 16 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 69 | 16 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 69 | 21 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 69 | 15 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 69 | 15 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 69 | 16 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 69 | 18 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 34 | 16 | ug/kg | |
| 86-73-7 | Fluorene | ND | 34 | 16 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 69 | 20 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 34 | 16 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 690 | 32 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 170 | 22 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 34 | 13 | ug/kg | |
| 78-59-1 | Isophorone | ND | 69 | 30 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 69 | 15 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 170 | 25 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 170 | 14 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 170 | 21 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 34 | 15 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 69 | 15 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 69 | 21 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 170 | 23 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 34 | 17 | ug/kg | |
| 129-00-0 | Pyrene | ND | 34 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 73% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 75% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 100% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 87% | | 28-113% |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB03-0'-4' | | |
| **Lab Sample ID:** | JA26923-11 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 83.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 80% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 79% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB03-0'-4'
**Lab Sample ID:** JA26923-11 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 83.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G48197.D | 1 | 09/02/09 | OPM | 09/02/09 | OP39731 | G1G1756 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.0 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.4 | 0.63 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.4 | 0.43 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.4 | 0.68 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.4 | 0.39 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.4 | 0.44 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.4 | 0.48 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.4 | 0.55 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.4 | 0.48 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.4 | 0.60 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.4 | 0.49 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.4 | 0.59 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.4 | 0.49 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.4 | 0.54 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.4 | 0.66 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.4 | 0.48 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.4 | 0.54 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.4 | 0.64 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.4 | 0.54 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.4 | 0.63 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.4 | 0.50 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 18 | 16 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 70% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 73% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 85% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 86% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB03-0'-4'
**Lab Sample ID:** JA26923-11 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 83.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85462.D | 1 | 09/09/09 | VDT | 09/02/09 | OP39732 | GEF3817 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.0 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 35 | 13 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 35 | 23 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 35 | 11 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 35 | 13 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 35 | 7.0 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 35 | 8.9 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 35 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 77% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 75% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 94% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 88% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB03-0'-4'
**Lab Sample ID:** JA26923-11 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Percent Solids:** 83.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.5 | 2.5 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Arsenic | 5.2 | 2.5 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Beryllium | < 0.62 | 0.62 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Cadmium | < 0.62 | 0.62 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Chromium | 18.0 | 1.2 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Copper | 9.4 | 3.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Lead | 9.2 | 2.5 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Mercury | < 0.038 | 0.038 | mg/kg | 1 | 09/10/09 | 09/10/09 | TG | SW846 7471A [1] | SW846 7471A [5] |
| Nickel | 9.4 | 4.9 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Selenium | < 2.5 | 2.5 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Silver | < 1.2 | 1.2 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Thallium | < 1.2 | 1.2 | mg/kg | 1 | 09/08/09 | 09/12/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Zinc | 22.7 | 2.5 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |

(1) Instrument QC Batch: MA23092
(2) Instrument QC Batch: MA23097
(3) Instrument QC Batch: MA23108
(4) Prep QC Batch: MP49541
(5) Prep QC Batch: MP49569

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** P17NB03-4'-8'
**Lab Sample ID:** JA26923-12 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8260B **Percent Solids:** 96.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | G123312.D | 1 | 09/03/09 | SJM | n/a | n/a | VG5872 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.2 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 12 | 2.7 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.2 | 0.42 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 6.2 | 0.32 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.2 | 0.19 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.2 | 0.50 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 12 | 2.4 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 6.2 | 0.38 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 6.2 | 0.68 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 6.2 | 0.42 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.2 | 1.4 | ug/kg | |
| 67-66-3 | Chloroform | ND | 6.2 | 0.39 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.2 | 0.20 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 6.2 | 0.19 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 12 | 0.67 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 6.2 | 0.14 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.2 | 0.17 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 6.2 | 0.33 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 6.2 | 0.34 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 6.2 | 0.42 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.2 | 1.2 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.2 | 0.17 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.2 | 0.43 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 6.2 | 0.82 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 6.2 | 0.29 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 6.2 | 0.55 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.2 | 0.16 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.2 | 0.16 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.2 | 0.12 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.2 | 0.46 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.2 | 0.69 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.2 | 1.2 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 6.2 | 0.64 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB03-4'-8' | | |
| **Lab Sample ID:** | JA26923-12 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 96.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 6.2 | 1.0 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 6.2 | 0.81 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.2 | 0.35 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.2 | 1.0 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 6.2 | 0.27 | ug/kg | |
| 100-42-5 | Styrene | ND | 6.2 | 0.13 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.2 | 0.36 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 6.2 | 0.18 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.2 | 0.36 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.2 | 0.43 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.2 | 0.16 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.2 | 0.23 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 6.2 | 0.65 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.2 | 0.28 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 6.2 | 0.22 | ug/kg | |
| | m,p-Xylene | ND | 2.5 | 0.58 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.2 | 0.58 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.5 | 0.58 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 90% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 77% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 108% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 93% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB03-4'-8'
**Lab Sample ID:** JA26923-12 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 96.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | F83471.D | 1 | 09/14/09 | NAP | 09/02/09 | OP39730 | EF3949 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 24 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 36 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 31 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 36 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 590 | 320 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 590 | 31 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 59 | 32 | ug/kg | |
| | 3&4-Methylphenol | ND | 59 | 40 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 31 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 300 | 38 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 300 | 38 | ug/kg | |
| 108-95-2 | Phenol | ND | 59 | 22 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 32 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 39 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 30 | 16 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 30 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 14 | ug/kg | |
| 120-12-7 | Anthracene | ND | 30 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 19 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 30 | 18 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 30 | 12 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 30 | 16 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 30 | 14 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 30 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 59 | 16 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 59 | 15 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 59 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 86 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 59 | 13 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 59 | 13 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 59 | 24 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB03-4'-8' | | |
| **Lab Sample ID:** | JA26923-12 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 96.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 30 | 14 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 59 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 59 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 59 | 15 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 59 | 20 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 59 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 59 | 13 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 51 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 30 | 14 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 59 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 59 | 18 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 59 | 13 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 59 | 13 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 59 | 14 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 59 | 15 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 30 | 13 | ug/kg | |
| 86-73-7 | Fluorene | ND | 30 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 59 | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 30 | 14 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 590 | 28 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 19 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 30 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 59 | 26 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 59 | 13 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 22 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 18 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 30 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 59 | 13 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 59 | 18 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 20 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 30 | 15 | ug/kg | |
| 129-00-0 | Pyrene | ND | 30 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 65% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 65% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 84% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 79% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB03-4'-8' | | |
| **Lab Sample ID:** | JA26923-12 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 96.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 71% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 69% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB03-4'-8'
**Lab Sample ID:** JA26923-12 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 96.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G48198.D | 1 | 09/02/09 | OPM | 09/02/09 | OP39731 | G1G1756 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.54 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.37 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.59 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.33 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.37 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.41 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.47 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.41 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.52 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.2 | 0.42 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.2 | 0.51 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.42 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.46 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.57 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.41 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.46 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.54 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.46 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.54 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.43 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 15 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 81% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 82% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 90% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 93% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB03-4'-8'
**Lab Sample ID:** JA26923-12 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 96.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85463.D | 1 | 09/09/09 | VDT | 09/02/09 | OP39732 | GEF3817 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 30 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 30 | 20 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 30 | 9.7 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 30 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 30 | 6.0 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 30 | 7.6 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 30 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 89% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 86% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 101% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 98% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB03-4'-8'
**Lab Sample ID:** JA26923-12 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Percent Solids:** 96.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.1 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Arsenic | < 2.1 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Beryllium | < 0.51 | 0.51 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Cadmium | < 0.51 | 0.51 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Chromium | 3.9 | 1.0 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Copper | 4.1 | 2.6 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Lead | 2.8 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Mercury | < 0.030 | 0.030 | mg/kg | 1 | 09/10/09 | 09/10/09 | TG | SW846 7471A [1] | SW846 7471A [4] |
| Nickel | < 4.1 | 4.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Selenium | < 2.1 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Silver | < 1.0 | 1.0 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Thallium | < 1.0 | 1.0 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Zinc | 9.9 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23092
(2) Instrument QC Batch: MA23097
(3) Prep QC Batch: MP49541
(4) Prep QC Batch: MP49569

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** P17NB04-0'-4'
**Lab Sample ID:** JA26923-13 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8260B **Percent Solids:** 97.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | G123313.D | 1 | 09/03/09 | SJM | n/a | n/a | VG5872 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.1 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 13 | 2.8 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.3 | 0.43 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 6.3 | 0.32 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.3 | 0.19 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.3 | 0.51 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 13 | 2.5 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 6.3 | 0.38 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 6.3 | 0.70 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 6.3 | 0.43 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.3 | 1.4 | ug/kg | |
| 67-66-3 | Chloroform | ND | 6.3 | 0.40 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.3 | 0.21 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 6.3 | 0.19 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 13 | 0.68 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 6.3 | 0.14 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.3 | 0.17 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 6.3 | 0.34 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 6.3 | 0.35 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 6.3 | 0.42 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.3 | 1.2 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.3 | 0.17 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.3 | 0.43 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 6.3 | 0.83 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 6.3 | 0.30 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 6.3 | 0.56 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.3 | 0.16 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.3 | 0.17 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.3 | 0.12 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.3 | 0.47 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.3 | 0.71 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.3 | 1.2 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 6.3 | 0.65 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB04-0'-4' | | |
| **Lab Sample ID:** | JA26923-13 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 97.2 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 6.3 | 1.0 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 6.3 | 0.82 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.3 | 0.35 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.3 | 1.0 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 6.3 | 0.28 | ug/kg | |
| 100-42-5 | Styrene | ND | 6.3 | 0.13 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.3 | 0.37 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 6.3 | 0.18 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.3 | 0.37 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.3 | 0.43 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.3 | 0.16 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.3 | 0.23 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 6.3 | 0.66 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.3 | 0.29 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 6.3 | 0.22 | ug/kg | |
| | m,p-Xylene | ND | 2.5 | 0.59 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.3 | 0.59 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.5 | 0.59 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 89% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 77% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 107% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 94% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB04-0'-4'
**Lab Sample ID:** JA26923-13 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 97.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | F83472.D | 1 | 09/14/09 | NAP | 09/02/09 | OP39730 | EF3949 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 24 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 36 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 31 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 36 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 590 | 320 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 590 | 31 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 59 | 32 | ug/kg | |
| | 3&4-Methylphenol | ND | 59 | 39 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 31 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 290 | 38 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 290 | 38 | ug/kg | |
| 108-95-2 | Phenol | ND | 59 | 22 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 32 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 39 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 29 | 16 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 29 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 14 | ug/kg | |
| 120-12-7 | Anthracene | ND | 29 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 18 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 29 | 18 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 29 | 12 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 29 | 16 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 29 | 14 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 29 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 59 | 16 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 59 | 15 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 59 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 86 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 59 | 13 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 59 | 13 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 59 | 24 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB04-0'-4'
**Lab Sample ID:** JA26923-13 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 97.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 29 | 14 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 59 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 59 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 59 | 15 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 59 | 20 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 59 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 59 | 13 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 51 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 29 | 14 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 59 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 59 | 18 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 59 | 13 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 59 | 13 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 59 | 14 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 59 | 15 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 29 | 13 | ug/kg | |
| 86-73-7 | Fluorene | ND | 29 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 59 | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 29 | 14 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 590 | 28 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 19 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 29 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 59 | 26 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 59 | 13 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 22 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 18 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 29 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 59 | 13 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 59 | 18 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 20 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 29 | 14 | ug/kg | |
| 129-00-0 | Pyrene | ND | 29 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 65% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 65% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 77% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 75% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB04-0'-4' | | |
| **Lab Sample ID:** | JA26923-13 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 97.2 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 68% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 69% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB04-0'-4'
**Lab Sample ID:** JA26923-13 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 97.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G48199.D | 1 | 09/02/09 | OPM | 09/02/09 | OP39731 | G1G1756 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.54 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.37 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.58 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.33 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.37 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.40 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.47 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.40 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.51 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.2 | 0.41 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.2 | 0.50 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.41 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.46 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.56 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.41 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.46 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.54 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.46 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.53 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.42 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 15 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 94% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 98% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 102% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 113% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB04-0'-4'
**Lab Sample ID:** JA26923-13 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 97.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85464.D | 1 | 09/09/09 | VDT | 09/02/09 | OP39732 | GEF3817 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 30 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 30 | 20 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 30 | 9.6 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 30 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 30 | 5.9 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 30 | 7.5 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 30 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 119% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 116% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 129% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 126% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB04-0'-4'
**Lab Sample ID:** JA26923-13 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Percent Solids:** 97.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.1 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Arsenic | < 2.1 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Beryllium | < 0.52 | 0.52 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Cadmium | < 0.52 | 0.52 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Chromium | 3.4 | 1.0 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Copper | 3.9 | 2.6 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Lead | < 2.1 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Mercury | < 0.034 | 0.034 | mg/kg | 1 | 09/10/09 | 09/10/09 | TG | SW846 7471A [1] | SW846 7471A [4] |
| Nickel | < 4.2 | 4.2 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Selenium | < 2.1 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Silver | < 1.0 | 1.0 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Thallium | < 1.0 | 1.0 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Zinc | 5.8 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23092
(2) Instrument QC Batch: MA23097
(3) Prep QC Batch: MP49541
(4) Prep QC Batch: MP49569

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** P17NB04-4'-8'
**Lab Sample ID:** JA26923-14 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8260B **Percent Solids:** 96.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Y91543.D | 1 | 09/08/09 | YXC | n/a | n/a | VY3843 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.6 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 14.2 | 11 | 2.5 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.1 | 0.38 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.6 | 0.29 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.6 | 0.17 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.6 | 0.45 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 11 | 2.2 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.6 | 0.34 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.6 | 0.62 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.6 | 0.38 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.6 | 1.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.6 | 0.36 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.6 | 0.19 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.6 | 0.17 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 11 | 0.61 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.6 | 0.12 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.1 | 0.15 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.6 | 0.30 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.6 | 0.31 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.6 | 0.38 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.6 | 1.1 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.6 | 0.16 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.1 | 0.39 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.6 | 0.74 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 5.6 | 0.27 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.6 | 0.51 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.6 | 0.15 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.6 | 0.15 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.6 | 0.11 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.1 | 0.42 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.6 | 0.63 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.6 | 1.1 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.6 | 0.58 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB04-4'-8' | | |
| **Lab Sample ID:** | JA26923-14 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 96.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.6 | 0.93 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.6 | 0.74 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.1 | 0.32 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.6 | 0.91 | ug/kg | |
| 75-09-2 | Methylene chloride | 5.6 | 5.6 | 0.25 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.6 | 0.12 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.6 | 0.33 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.6 | 0.16 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.1 | 0.33 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.6 | 0.39 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.6 | 0.14 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.6 | 0.21 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 5.6 | 0.59 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.6 | 0.26 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.6 | 0.20 | ug/kg | |
| | m,p-Xylene | ND | 2.3 | 0.53 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.1 | 0.53 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.3 | 0.53 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 104% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 94% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 108% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 99% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB04-4'-8'
**Lab Sample ID:** JA26923-14 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 96.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | F83473.D | 1 | 09/14/09 | NAP | 09/02/09 | OP39730 | EF3949 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 24 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 36 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 31 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 36 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 590 | 320 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 590 | 31 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 59 | 32 | ug/kg | |
| | 3&4-Methylphenol | ND | 59 | 40 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 31 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 300 | 38 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 300 | 38 | ug/kg | |
| 108-95-2 | Phenol | ND | 59 | 22 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 32 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 39 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 30 | 16 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 30 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 14 | ug/kg | |
| 120-12-7 | Anthracene | ND | 30 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 19 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 30 | 18 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 30 | 12 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 30 | 16 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 30 | 14 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 30 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 59 | 16 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 59 | 15 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 59 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 86 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 59 | 13 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 59 | 13 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 59 | 24 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB04-4'-8' | | |
| **Lab Sample ID:** | JA26923-14 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 96.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 30 | 14 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 59 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 59 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 59 | 15 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 59 | 20 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 59 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 59 | 13 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 51 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 30 | 14 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 59 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 59 | 18 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 59 | 13 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 59 | 13 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 59 | 14 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 59 | 15 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 30 | 13 | ug/kg | |
| 86-73-7 | Fluorene | ND | 30 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 59 | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 30 | 14 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 590 | 28 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 19 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 30 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 59 | 26 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 59 | 13 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 22 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 18 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 30 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 59 | 13 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 59 | 18 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 20 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 30 | 15 | ug/kg | |
| 129-00-0 | Pyrene | ND | 30 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 66% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 67% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 86% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 75% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB04-4'-8' | | |
| **Lab Sample ID:** | JA26923-14 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 96.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 69% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 73% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB04-4'-8'
**Lab Sample ID:** JA26923-14 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 96.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G48200.D | 1 | 09/03/09 | OPM | 09/02/09 | OP39731 | G1G1756 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.54 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.37 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.58 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.33 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.37 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.41 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.47 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.41 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.52 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.2 | 0.42 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.2 | 0.50 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.42 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.46 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.56 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.41 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.46 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.54 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.46 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.54 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.43 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 15 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 75% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 75% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 80% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 88% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB04-4'-8'
**Lab Sample ID:** JA26923-14 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 96.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85465.D | 1 | 09/09/09 | VDT | 09/02/09 | OP39732 | GEF3817 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 30 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 30 | 20 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 30 | 9.7 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 30 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 30 | 6.0 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 30 | 7.6 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 30 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 89% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 86% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 101% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 98% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB04-4'-8'
**Lab Sample ID:** JA26923-14 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Percent Solids:** 96.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.1 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Arsenic | < 2.1 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Beryllium | < 0.52 | 0.52 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Cadmium | < 0.52 | 0.52 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Chromium | 2.5 | 1.0 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Copper | 3.5 | 2.6 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Lead | < 2.1 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Mercury | < 0.033 | 0.033 | mg/kg | 1 | 09/10/09 | 09/10/09 | TG | SW846 7471A [1] | SW846 7471A [4] |
| Nickel | < 4.2 | 4.2 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Selenium | < 2.1 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Silver | < 1.0 | 1.0 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Thallium | < 1.0 | 1.0 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |
| Zinc | 5.2 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23092
(2) Instrument QC Batch: MA23097
(3) Prep QC Batch: MP49541
(4) Prep QC Batch: MP49569

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** P17NB05-0'-4'
**Lab Sample ID:** JA26923-15 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8260B **Percent Solids:** 97.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Y91549.D | 1 | 09/08/09 | YXC | n/a | n/a | VY3843 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.2 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 16.8 | 12 | 2.7 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.2 | 0.42 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 6.1 | 0.31 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.1 | 0.18 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.1 | 0.49 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 12 | 2.4 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 6.1 | 0.37 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 6.1 | 0.68 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 6.1 | 0.41 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.1 | 1.4 | ug/kg | |
| 67-66-3 | Chloroform | ND | 6.1 | 0.39 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.1 | 0.20 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 6.1 | 0.18 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 12 | 0.66 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 6.1 | 0.13 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.2 | 0.17 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 6.1 | 0.33 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 6.1 | 0.34 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 6.1 | 0.41 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.1 | 1.2 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.1 | 0.17 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.2 | 0.42 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 6.1 | 0.81 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 6.1 | 0.29 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 6.1 | 0.55 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.1 | 0.16 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.1 | 0.16 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.1 | 0.12 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.2 | 0.45 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.1 | 0.69 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.1 | 1.2 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 6.1 | 0.63 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB05-0'-4' | | |
| **Lab Sample ID:** | JA26923-15 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 97.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 6.1 | 1.0 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 6.1 | 0.80 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.2 | 0.34 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.1 | 0.99 | ug/kg | |
| 75-09-2 | Methylene chloride | 6.4 | 6.1 | 0.27 | ug/kg | |
| 100-42-5 | Styrene | ND | 6.1 | 0.13 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.1 | 0.36 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 6.1 | 0.18 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.2 | 0.36 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.1 | 0.42 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.1 | 0.16 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.1 | 0.23 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 6.1 | 0.64 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.1 | 0.28 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 6.1 | 0.22 | ug/kg | |
| | m,p-Xylene | ND | 2.4 | 0.57 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.2 | 0.57 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.4 | 0.57 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 105% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 100% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 109% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 98% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB05-0'-4'
**Lab Sample ID:** JA26923-15 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 97.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | F83474.D | 1 | 09/14/09 | NAP | 09/02/09 | OP39730 | EF3949 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.4 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 140 | 24 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 140 | 35 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 140 | 30 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 140 | 35 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 580 | 310 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 580 | 31 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 58 | 31 | ug/kg | |
| | 3&4-Methylphenol | ND | 58 | 39 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 140 | 30 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 290 | 37 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 290 | 37 | ug/kg | |
| 108-95-2 | Phenol | ND | 58 | 22 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 140 | 31 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 140 | 38 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 29 | 15 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 29 | 12 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 140 | 14 | ug/kg | |
| 120-12-7 | Anthracene | ND | 29 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 140 | 18 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 29 | 18 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 29 | 12 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 29 | 16 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 29 | 14 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 29 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 58 | 16 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 58 | 14 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 58 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 140 | 85 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 58 | 13 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 140 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 58 | 12 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 58 | 23 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB05-0'-4'
**Lab Sample ID:** JA26923-15 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 97.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 29 | 13 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 58 | 14 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 58 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 58 | 15 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 58 | 19 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 58 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 58 | 13 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 140 | 50 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 29 | 14 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 58 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 58 | 18 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 58 | 13 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 58 | 13 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 58 | 14 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 58 | 15 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 29 | 13 | ug/kg | |
| 86-73-7 | Fluorene | ND | 29 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 58 | 16 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 29 | 14 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 580 | 27 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 140 | 19 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 29 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 58 | 25 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 58 | 13 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 140 | 21 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 140 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 140 | 18 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 29 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 58 | 13 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 58 | 18 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 140 | 20 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 29 | 14 | ug/kg | |
| 129-00-0 | Pyrene | ND | 29 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 74% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 75% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 100% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 86% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB05-0'-4' | | |
| **Lab Sample ID:** | JA26923-15 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 97.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 79% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 81% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB05-0'-4'
**Lab Sample ID:** JA26923-15 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 97.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G48431.D | 1 | 09/14/09 | OPM | 09/02/09 | OP39731 | G1G1764 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.53 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.36 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.57 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.32 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.37 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.40 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.46 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.40 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.51 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.2 | 0.41 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.2 | 0.50 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.41 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.45 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.55 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.40 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.45 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.53 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.45 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.53 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.42 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 15 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 89% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 86% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 95% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 97% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB05-0'-4'
**Lab Sample ID:** JA26923-15 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 97.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85456.D | 1 | 09/08/09 | VDT | 09/02/09 | OP39732 | GEF3817 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 30 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 30 | 20 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 30 | 9.5 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 30 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 30 | 5.9 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 30 | 7.5 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 30 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 98% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 94% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 101% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 100% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB05-0'-4'
**Lab Sample ID:** JA26923-15
**Matrix:** SO - Soil
**Date Sampled:** 09/01/09
**Date Received:** 09/01/09
**Percent Solids:** 97.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.1 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Arsenic | < 2.1 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Beryllium | < 0.52 | 0.52 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Cadmium | < 0.52 | 0.52 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Chromium | 2.4 | 1.0 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Copper | 4.8 | 2.6 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Lead | 2.1 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Mercury | < 0.030 | 0.030 | mg/kg | 1 | 09/10/09 | 09/10/09 | TG | SW846 7471A [1] | SW846 7471A [5] |
| Nickel | < 4.1 | 4.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Selenium | < 2.1 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Silver | < 1.0 | 1.0 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Thallium | < 1.0 | 1.0 | mg/kg | 1 | 09/08/09 | 09/12/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Zinc | 7.1 | 2.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |

(1) Instrument QC Batch: MA23092
(2) Instrument QC Batch: MA23097
(3) Instrument QC Batch: MA23108
(4) Prep QC Batch: MP49541
(5) Prep QC Batch: MP49569

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** P17NB05-4'-8'
**Lab Sample ID:** JA26923-16 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8260B **Percent Solids:** 96.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Y91550.D | 1 | 09/08/09 | YXC | n/a | n/a | VY3843 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.2 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 17.7 | 12 | 2.8 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.2 | 0.42 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 6.2 | 0.32 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.2 | 0.19 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.2 | 0.50 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 12 | 2.4 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 6.2 | 0.38 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 6.2 | 0.69 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 6.2 | 0.42 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.2 | 1.4 | ug/kg | |
| 67-66-3 | Chloroform | ND | 6.2 | 0.39 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.2 | 0.20 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 6.2 | 0.19 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 12 | 0.67 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 6.2 | 0.14 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.2 | 0.17 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 6.2 | 0.33 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 6.2 | 0.34 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 6.2 | 0.42 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.2 | 1.2 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.2 | 0.17 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.2 | 0.43 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 6.2 | 0.82 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 6.2 | 0.30 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 6.2 | 0.56 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.2 | 0.16 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.2 | 0.16 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.2 | 0.12 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.2 | 0.46 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.2 | 0.69 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.2 | 1.2 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 6.2 | 0.64 | ug/kg | |

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB05-4'-8' | | |
| **Lab Sample ID:** | JA26923-16 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 96.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 6.2 | 1.0 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 6.2 | 0.81 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.2 | 0.35 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.2 | 1.0 | ug/kg | |
| 75-09-2 | Methylene chloride | 6.4 | 6.2 | 0.28 | ug/kg | |
| 100-42-5 | Styrene | ND | 6.2 | 0.13 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.2 | 0.36 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 6.2 | 0.18 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.2 | 0.36 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.2 | 0.43 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.2 | 0.16 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.2 | 0.23 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 6.2 | 0.65 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.2 | 0.28 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 6.2 | 0.22 | ug/kg | |
| | m,p-Xylene | ND | 2.5 | 0.58 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.2 | 0.58 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.5 | 0.58 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 106% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 100% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 109% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 98% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB05-4'-8'
**Lab Sample ID:** JA26923-16 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 96.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | F83475.D | 1 | 09/14/09 | NAP | 09/02/09 | OP39730 | EF3949 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.2 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 24 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 36 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 31 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 36 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 590 | 320 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 590 | 31 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 59 | 32 | ug/kg | |
| | 3&4-Methylphenol | ND | 59 | 40 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 31 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 300 | 38 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 300 | 38 | ug/kg | |
| 108-95-2 | Phenol | ND | 59 | 22 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 32 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 39 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 30 | 16 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 30 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 14 | ug/kg | |
| 120-12-7 | Anthracene | ND | 30 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 19 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 30 | 18 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 30 | 12 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 30 | 16 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 30 | 14 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 30 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 59 | 16 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 59 | 15 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 59 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 86 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 59 | 13 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 59 | 13 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 59 | 24 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB05-4'-8'
**Lab Sample ID:** JA26923-16 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 96.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 30 | 14 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 59 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 59 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 59 | 15 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 59 | 20 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 59 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 59 | 13 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 51 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 30 | 14 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 59 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 59 | 18 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 59 | 13 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 59 | 13 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 59 | 14 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 59 | 15 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 30 | 13 | ug/kg | |
| 86-73-7 | Fluorene | ND | 30 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 59 | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 30 | 14 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 590 | 28 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 19 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 30 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 59 | 26 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 59 | 13 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 22 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 18 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 30 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 59 | 13 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 59 | 18 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 20 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 30 | 15 | ug/kg | |
| 129-00-0 | Pyrene | ND | 30 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 74% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 75% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 96% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 90% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB05-4'-8' | | |
| **Lab Sample ID:** | JA26923-16 | **Date Sampled:** | 09/01/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/01/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 96.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 83% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 82% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB05-4'-8'
**Lab Sample ID:** JA26923-16 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 96.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 1G48467.D | 1 | 09/16/09 | OPM | 09/02/09 | OP39731 | G1G1767 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.54 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.37 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.59 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.33 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.37 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.41 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.47 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.41 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.52 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.2 | 0.42 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.2 | 0.51 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.42 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.46 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.57 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.41 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.46 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.54 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.46 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.54 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.43 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 15 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 78% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 80% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 71% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 93% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB05-4'-8'
**Lab Sample ID:** JA26923-16 **Date Sampled:** 09/01/09
**Matrix:** SO - Soil **Date Received:** 09/01/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 96.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85457.D | 1 | 09/09/09 | VDT | 09/02/09 | OP39732 | GEF3817 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 30 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 30 | 20 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 30 | 9.7 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 30 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 30 | 6.0 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 30 | 7.6 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 30 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 85% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 82% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 95% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 91% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB05-4'-8'
**Lab Sample ID:** JA26923-16
**Matrix:** SO - Soil
**Date Sampled:** 09/01/09
**Date Received:** 09/01/09
**Percent Solids:** 96.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.2 | 2.2 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Arsenic | < 2.2 | 2.2 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Beryllium | < 0.54 | 0.54 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Cadmium | < 0.54 | 0.54 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Chromium | 6.2 | 1.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Copper | 3.4 | 2.7 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Lead | 2.5 | 2.2 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Mercury | < 0.031 | 0.031 | mg/kg | 1 | 09/10/09 | 09/10/09 | TG | SW846 7471A [1] | SW846 7471A [5] |
| Nickel | < 4.3 | 4.3 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Selenium | < 2.2 | 2.2 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Silver | < 1.1 | 1.1 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 09/08/09 | 09/12/09 | ND | SW846 6010B [3] | SW846 3050B [4] |
| Zinc | 14.0 | 2.2 | mg/kg | 1 | 09/08/09 | 09/11/09 | ND | SW846 6010B [2] | SW846 3050B [4] |

(1) Instrument QC Batch: MA23092
(2) Instrument QC Batch: MA23097
(3) Instrument QC Batch: MA23108
(4) Prep QC Batch: MP49541
(5) Prep QC Batch: MP49569

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** IR3B01-0'-4'
**Lab Sample ID:** JA27176-1 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 85.5
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3C54734.D | 1 | 09/15/09 | NDJ | n/a | n/a | V3C2395 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.0 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 12 | 2.6 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.2 | 0.40 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.8 | 0.30 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.8 | 0.18 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.8 | 0.47 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 12 | 2.3 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.8 | 0.36 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.8 | 0.65 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.8 | 0.40 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.8 | 1.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.8 | 0.37 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.8 | 0.19 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.8 | 0.18 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 12 | 0.63 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.8 | 0.13 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.2 | 0.16 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.8 | 0.32 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.8 | 0.32 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.8 | 0.39 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.8 | 1.1 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.8 | 0.16 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.2 | 0.40 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.8 | 0.77 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | 0.49 | 5.8 | 0.28 | ug/kg | J |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.8 | 0.53 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.8 | 0.15 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.8 | 0.16 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.8 | 0.11 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.2 | 0.43 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.8 | 0.66 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.8 | 1.1 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.8 | 0.61 | ug/kg | |

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B01-0'-4' | | |
| **Lab Sample ID:** | JA27176-1 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 85.5 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.8 | 0.96 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.8 | 0.76 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.2 | 0.33 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.8 | 0.95 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 5.8 | 0.26 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.8 | 0.13 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.8 | 0.34 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.8 | 0.17 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.2 | 0.34 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.8 | 0.40 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.8 | 0.15 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.8 | 0.22 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 5.8 | 0.62 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.8 | 0.27 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.8 | 0.21 | ug/kg | |
| | m,p-Xylene | ND | 2.3 | 0.55 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.2 | 0.55 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.3 | 0.55 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 116% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 119% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 88% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 87% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B01-0'-4'
**Lab Sample ID:** JA27176-1 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 85.5
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50958.D | 1 | 09/17/09 | LP | 09/04/09 | OP39784 | EZ1858 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 170 | 28 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 170 | 40 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 170 | 35 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 170 | 41 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 670 | 360 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 670 | 35 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 67 | 36 | ug/kg | |
| | 3&4-Methylphenol | ND | 67 | 45 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 170 | 35 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 330 | 43 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 330 | 43 | ug/kg | |
| 108-95-2 | Phenol | ND | 67 | 25 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 170 | 36 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 170 | 44 | ug/kg | |
| 83-32-9 | Acenaphthene | 22.7 | 33 | 18 | ug/kg | J |
| 208-96-8 | Acenaphthylene | 82.8 | 33 | 14 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 170 | 16 | ug/kg | |
| 120-12-7 | Anthracene | 112 | 33 | 15 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 170 | 21 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | 271 | 33 | 20 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | 598 | 33 | 14 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | 615 | 33 | 18 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | 399 | 33 | 16 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | 241 | 33 | 17 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 67 | 18 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 67 | 17 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 67 | 17 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 170 | 98 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 67 | 15 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 170 | 14 | ug/kg | |
| 86-74-8 | Carbazole | 18.1 | 67 | 14 | ug/kg | J |
| 105-60-2 | Caprolactam | ND | 67 | 27 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B01-0'-4' | | |
| **Lab Sample ID:** | JA27176-1 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 85.5 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | 355 | 33 | 15 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 67 | 17 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 67 | 16 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 67 | 17 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 67 | 22 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 67 | 18 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 67 | 15 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 170 | 58 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | 118 | 33 | 16 | ug/kg | |
| 132-64-9 | Dibenzofuran | 18.3 | 67 | 16 | ug/kg | J |
| 84-74-2 | Di-n-butyl phthalate | ND | 67 | 21 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 67 | 15 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 67 | 15 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 67 | 16 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 67 | 17 | ug/kg | |
| 206-44-0 | Fluoranthene | 423 | 33 | 15 | ug/kg | |
| 86-73-7 | Fluorene | 27.2 | 33 | 16 | ug/kg | J |
| 118-74-1 | Hexachlorobenzene | ND | 67 | 19 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 33 | 16 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 670 | 32 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 170 | 22 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 419 | 33 | 12 | ug/kg | |
| 78-59-1 | Isophorone | ND | 67 | 29 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 67 | 15 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 170 | 25 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 170 | 14 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 170 | 21 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 33 | 15 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 67 | 15 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 67 | 21 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 170 | 23 | ug/kg | |
| 85-01-8 | Phenanthrene | 95.9 | 33 | 16 | ug/kg | |
| 129-00-0 | Pyrene | 508 | 33 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 73% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 73% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 89% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 74% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B01-0'-4' | | |
| **Lab Sample ID:** | JA27176-1 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 85.5 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 82% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 73% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B01-0'-4'
**Lab Sample ID:** JA27176-1 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 85.5
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3G40043.D | 1 | 09/14/09 | OYA | 09/05/09 | OP39803 | G3G1496 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.4 | 0.61 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.4 | 0.42 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.4 | 0.66 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.4 | 0.37 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.4 | 0.42 | ug/kg | |
| 5103-71-9 | alpha-Chlordane [a] | 3.9 | 1.4 | 0.46 | ug/kg | |
| 5103-74-2 | gamma-Chlordane [a] | 3.1 | 1.4 | 0.53 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.4 | 0.46 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.4 | 0.59 | ug/kg | |
| 72-55-9 | 4,4'-DDE | 1.8 | 1.4 | 0.47 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.4 | 0.57 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.4 | 0.47 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.4 | 0.52 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.4 | 0.64 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.4 | 0.47 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.4 | 0.52 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.4 | 0.62 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.4 | 0.53 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.4 | 0.61 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.4 | 0.48 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 17 | 16 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 86% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 86% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 100% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 105% | | 22-156% |

(a) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B01-0'-4'
**Lab Sample ID:** JA27176-1 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 85.5
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85591.D | 1 | 09/14/09 | VDT | 09/05/09 | OP39804 | GEF3821 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 34 | 12 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 34 | 23 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 34 | 11 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 34 | 12 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 34 | 6.8 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 34 | 8.6 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 34 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 91% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 87% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 81% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 97% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B01-0'-4'
**Lab Sample ID:** JA27176-1 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Percent Solids:** 85.5
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.4 | 2.4 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | 2.9 | 2.4 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.60 | 0.60 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.60 | 0.60 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 13.3 | 1.2 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 9.8 | 3.0 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 17.7 | 2.4 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | 0.059 | 0.036 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | 7.6 | 4.8 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.4 | 2.4 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 72.5 | 2.4 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49620
(4) Prep QC Batch: MP49634

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** IR3B01-4'-8'
**Lab Sample ID:** JA27176-2 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 95.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3C54735.D | 1 | 09/15/09 | NDJ | n/a | n/a | V3C2395 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.8 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 11 | 2.4 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.1 | 0.37 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.4 | 0.28 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.4 | 0.16 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.4 | 0.44 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 11 | 2.1 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.4 | 0.33 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.4 | 0.60 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.4 | 0.37 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.4 | 1.2 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.4 | 0.35 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.4 | 0.18 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.4 | 0.16 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 11 | 0.59 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.4 | 0.12 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.1 | 0.15 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.4 | 0.29 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.4 | 0.30 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.4 | 0.37 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.4 | 1.0 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.4 | 0.15 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.1 | 0.38 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.4 | 0.72 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 5.4 | 0.26 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.4 | 0.49 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.4 | 0.14 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.4 | 0.14 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.4 | 0.10 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.1 | 0.40 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.4 | 0.61 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.4 | 1.0 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.4 | 0.56 | ug/kg | |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B01-4'-8' | | |
| **Lab Sample ID:** | JA27176-2 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 95.8 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.4 | 0.89 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.4 | 0.71 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.1 | 0.31 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.4 | 0.88 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 5.4 | 0.24 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.4 | 0.12 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.4 | 0.32 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.4 | 0.16 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.1 | 0.32 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.4 | 0.38 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.4 | 0.14 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.4 | 0.20 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 5.4 | 0.57 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.4 | 0.25 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.4 | 0.19 | ug/kg | |
| | m,p-Xylene | ND | 2.2 | 0.51 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.1 | 0.51 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.2 | 0.51 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 113% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 113% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 90% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 86% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B01-4'-8'
**Lab Sample ID:** JA27176-2 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 95.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50943.D | 1 | 09/16/09 | LP | 09/04/09 | OP39784 | EZ1858 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 25 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 36 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 31 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 36 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 600 | 320 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 600 | 32 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 60 | 32 | ug/kg | |
| | 3&4-Methylphenol | ND | 60 | 40 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 31 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 300 | 38 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 300 | 38 | ug/kg | |
| 108-95-2 | Phenol | ND | 60 | 23 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 32 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 40 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 30 | 16 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 30 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 15 | ug/kg | |
| 120-12-7 | Anthracene | ND | 30 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 19 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 30 | 18 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 30 | 12 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 30 | 16 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 30 | 14 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 30 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 60 | 16 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 60 | 15 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 60 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 87 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 60 | 13 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 60 | 13 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 60 | 24 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B01-4'-8'
**Lab Sample ID:** JA27176-2 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 95.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 30 | 14 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 60 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 60 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 60 | 16 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 60 | 20 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 60 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 60 | 13 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 52 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 30 | 14 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 60 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 60 | 19 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 60 | 13 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 60 | 13 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 60 | 14 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 60 | 16 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 30 | 14 | ug/kg | |
| 86-73-7 | Fluorene | ND | 30 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 60 | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 30 | 14 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 600 | 28 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 19 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 30 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 60 | 26 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 60 | 13 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 22 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 19 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 30 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 60 | 13 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 60 | 18 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 20 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 30 | 15 | ug/kg | |
| 129-00-0 | Pyrene | ND | 30 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 71% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 72% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 94% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 71% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B01-4'-8' | | |
| **Lab Sample ID:** | JA27176-2 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 95.8 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 82% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 73% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B01-4'-8'
**Lab Sample ID:** JA27176-2 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 95.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3G39914.D | 1 | 09/09/09 | TDR | 09/05/09 | OP39803 | G3G1492 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.55 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.38 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.59 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.33 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.38 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.41 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.48 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.41 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.52 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.2 | 0.42 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.2 | 0.51 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.42 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.47 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.57 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.42 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.47 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.55 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.47 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.54 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.43 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 15 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 93% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 90% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 81% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 117% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B01-4'-8'
**Lab Sample ID:** JA27176-2 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 95.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85592.D | 1 | 09/14/09 | VDT | 09/05/09 | OP39804 | GEF3821 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 31 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 31 | 20 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 31 | 9.8 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 31 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 31 | 6.1 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 31 | 7.7 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 31 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 100% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 96% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 95% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 95% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B01-4'-8'
**Lab Sample ID:** JA27176-2 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Percent Solids:** 95.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.52 | 0.52 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.52 | 0.52 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 3.5 | 1.0 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 2.8 | 2.6 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | < 0.033 | 0.033 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | < 4.1 | 4.1 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.0 | 1.0 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.0 | 1.0 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 6.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49620
(4) Prep QC Batch: MP49634

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** IR3B02-0'-4'
**Lab Sample ID:** JA27176-3 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 82.9
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3C54736.D | 1 | 09/15/09 | NDJ | n/a | n/a | V3C2395 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.8 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 13 | 2.8 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.3 | 0.43 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 6.3 | 0.32 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.3 | 0.19 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.3 | 0.51 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 13 | 2.5 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 6.3 | 0.38 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 6.3 | 0.70 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 6.3 | 0.43 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.3 | 1.4 | ug/kg | |
| 67-66-3 | Chloroform | ND | 6.3 | 0.40 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.3 | 0.21 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 6.3 | 0.19 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 13 | 0.68 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 6.3 | 0.14 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.3 | 0.17 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 6.3 | 0.34 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 6.3 | 0.35 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 6.3 | 0.42 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.3 | 1.2 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.3 | 0.17 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.3 | 0.43 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 6.3 | 0.83 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 6.3 | 0.30 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 6.3 | 0.56 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.3 | 0.16 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.3 | 0.17 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.3 | 0.12 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.3 | 0.47 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.3 | 0.71 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.3 | 1.2 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 6.3 | 0.65 | ug/kg | |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B02-0'-4' | | |
| **Lab Sample ID:** | JA27176-3 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 82.9 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 6.3 | 1.0 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 6.3 | 0.82 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.3 | 0.35 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.3 | 1.0 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 6.3 | 0.28 | ug/kg | |
| 100-42-5 | Styrene | ND | 6.3 | 0.13 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.3 | 0.37 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 6.3 | 0.18 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.3 | 0.37 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.3 | 0.43 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.3 | 0.16 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.3 | 0.23 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 6.3 | 0.66 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.3 | 0.29 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 6.3 | 0.22 | ug/kg | |
| | m,p-Xylene | ND | 2.5 | 0.59 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.3 | 0.59 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.5 | 0.59 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 117% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 117% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 91% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 85% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B02-0'-4'
**Lab Sample ID:** JA27176-3 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 82.9
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50957.D | 1 | 09/17/09 | LP | 09/04/09 | OP39784 | EZ1858 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 170 | 29 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 170 | 42 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 170 | 36 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 170 | 42 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 690 | 370 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 690 | 37 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 69 | 37 | ug/kg | |
| | 3&4-Methylphenol | ND | 69 | 46 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 170 | 36 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 340 | 44 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 340 | 44 | ug/kg | |
| 108-95-2 | Phenol | ND | 69 | 26 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 170 | 37 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 170 | 46 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 34 | 18 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 34 | 15 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 170 | 17 | ug/kg | |
| 120-12-7 | Anthracene | ND | 34 | 15 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 170 | 22 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | 26.1 | 34 | 21 | ug/kg | J |
| 50-32-8 | Benzo(a)pyrene | 26.8 | 34 | 14 | ug/kg | J |
| 205-99-2 | Benzo(b)fluoranthene | 40.7 | 34 | 19 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | 19.2 | 34 | 17 | ug/kg | J |
| 207-08-9 | Benzo(k)fluoranthene | ND | 34 | 17 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 69 | 19 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 69 | 17 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 69 | 17 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 170 | 100 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 69 | 15 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 170 | 14 | ug/kg | |
| 86-74-8 | Carbazole | ND | 69 | 15 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 69 | 28 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B02-0'-4' | | |
| **Lab Sample ID:** | JA27176-3 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 82.9 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | 36.0 | 34 | 16 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 69 | 17 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 69 | 16 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 69 | 18 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 69 | 23 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 69 | 19 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 69 | 16 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 170 | 60 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 34 | 16 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 69 | 16 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 69 | 22 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 69 | 15 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 69 | 16 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 69 | 16 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 652 | 69 | 18 | ug/kg | |
| 206-44-0 | Fluoranthene | 62.1 | 34 | 16 | ug/kg | |
| 86-73-7 | Fluorene | ND | 34 | 16 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 69 | 20 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 34 | 16 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 690 | 33 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 170 | 22 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 20.4 | 34 | 13 | ug/kg | J |
| 78-59-1 | Isophorone | ND | 69 | 30 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 69 | 15 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 170 | 25 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 170 | 14 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 170 | 22 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 34 | 15 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 69 | 16 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 69 | 21 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 170 | 23 | ug/kg | |
| 85-01-8 | Phenanthrene | 22.8 | 34 | 17 | ug/kg | J |
| 129-00-0 | Pyrene | 40.6 | 34 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 73% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 76% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 104% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 74% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B02-0'-4' | | |
| **Lab Sample ID:** | JA27176-3 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 82.9 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 86% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 69% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B02-0'-4'
**Lab Sample ID:** JA27176-3 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 82.9
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3G39915.D | 1 | 09/09/09 | TDR | 09/05/09 | OP39803 | G3G1492 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.4 | 0.63 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.4 | 0.43 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.4 | 0.68 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.4 | 0.39 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.4 | 0.44 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.4 | 0.47 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.4 | 0.55 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.4 | 0.47 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.4 | 0.60 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.4 | 0.49 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.4 | 0.59 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.4 | 0.49 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.4 | 0.54 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.4 | 0.66 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.4 | 0.48 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.4 | 0.54 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.4 | 0.63 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.4 | 0.54 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.4 | 0.63 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.4 | 0.50 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 18 | 16 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 57% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 58% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 67% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 84% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B02-0'-4'
**Lab Sample ID:** JA27176-3 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 82.9
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85593.D | 1 | 09/14/09 | VDT | 09/05/09 | OP39804 | GEF3821 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 35 | 13 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 35 | 23 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 35 | 11 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 35 | 13 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 35 | 7.0 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 35 | 8.9 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 35 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 66% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 62% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 76% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 76% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B02-0'-4'
**Lab Sample ID:** JA27176-3
**Matrix:** SO - Soil
**Date Sampled:** 09/02/09
**Date Received:** 09/03/09
**Percent Solids:** 82.9
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.4 | 2.4 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | 3.9 | 2.4 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.59 | 0.59 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.59 | 0.59 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 10.0 | 1.2 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 7.5 | 3.0 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 5.2 | 2.4 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | < 0.040 | 0.040 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | 7.8 | 4.7 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.4 | 2.4 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 32.7 | 2.4 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49620
(4) Prep QC Batch: MP49634

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** IR3B02-4'-8'
**Lab Sample ID:** JA27176-4 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 98.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3C54737.D | 1 | 09/15/09 | NDJ | n/a | n/a | V3C2395 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.8 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 11 | 2.4 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.1 | 0.36 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.3 | 0.27 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.3 | 0.16 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.3 | 0.43 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 11 | 2.1 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.3 | 0.32 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.3 | 0.59 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.3 | 0.36 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.3 | 1.2 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.3 | 0.34 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.3 | 0.17 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.3 | 0.16 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 11 | 0.57 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.3 | 0.12 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.1 | 0.15 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.3 | 0.29 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.3 | 0.29 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.3 | 0.36 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.3 | 1.0 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.3 | 0.15 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.1 | 0.37 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.3 | 0.70 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 5.3 | 0.25 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.3 | 0.48 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.3 | 0.14 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.3 | 0.14 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.3 | 0.10 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.1 | 0.39 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.3 | 0.60 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.3 | 1.0 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.3 | 0.55 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B02-4'-8' | | |
| **Lab Sample ID:** | JA27176-4 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 98.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.3 | 0.87 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.3 | 0.69 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.1 | 0.30 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.3 | 0.86 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 5.3 | 0.24 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.3 | 0.11 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.3 | 0.31 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.3 | 0.15 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.1 | 0.31 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.3 | 0.37 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.3 | 0.14 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.3 | 0.20 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 5.3 | 0.56 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.3 | 0.24 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.3 | 0.19 | ug/kg | |
| | m,p-Xylene | ND | 2.1 | 0.50 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.1 | 0.50 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.1 | 0.50 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 117% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 113% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 92% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 85% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B02-4'-8'
**Lab Sample ID:** JA27176-4 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 98.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50944.D | 1 | 09/16/09 | LP | 09/04/09 | OP39784 | EZ1858 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 24 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 35 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 30 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 35 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 580 | 310 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 580 | 31 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 58 | 31 | ug/kg | |
| | 3&4-Methylphenol | ND | 58 | 39 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 31 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 290 | 37 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 290 | 37 | ug/kg | |
| 108-95-2 | Phenol | ND | 58 | 22 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 31 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 39 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 29 | 15 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 29 | 12 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 14 | ug/kg | |
| 120-12-7 | Anthracene | ND | 29 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 18 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 29 | 18 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 29 | 12 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 29 | 16 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 29 | 14 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 29 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 58 | 16 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 58 | 14 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 58 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 85 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 58 | 13 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 58 | 12 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 58 | 23 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B02-4'-8' | | |
| **Lab Sample ID:** | JA27176-4 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 98.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 29 | 13 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 58 | 14 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 58 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 58 | 15 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 58 | 19 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 58 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 58 | 13 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 50 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 29 | 14 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 58 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 58 | 18 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 58 | 13 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 58 | 13 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 58 | 14 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 58 | 15 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 29 | 13 | ug/kg | |
| 86-73-7 | Fluorene | ND | 29 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 58 | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 29 | 14 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 580 | 27 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 19 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 29 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 58 | 26 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 58 | 13 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 21 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 18 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 29 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 58 | 13 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 58 | 18 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 20 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 29 | 14 | ug/kg | |
| 129-00-0 | Pyrene | ND | 29 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 72% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 69% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 92% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 73% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B02-4'-8' | | |
| **Lab Sample ID:** | JA27176-4 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 98.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 82% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 73% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B02-4'-8'
**Lab Sample ID:** JA27176-4 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 98.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3G39916.D | 1 | 09/09/09 | TDR | 09/05/09 | OP39803 | G3G1492 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.53 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.36 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.57 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.32 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.36 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.40 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.46 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.40 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.51 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.2 | 0.41 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.2 | 0.50 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.41 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.45 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.55 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.40 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.45 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.53 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.45 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.53 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.42 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 15 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 74% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 72% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 74% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 109% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B02-4'-8'
**Lab Sample ID:** JA27176-4 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 98.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85594.D | 1 | 09/14/09 | VDT | 09/05/09 | OP39804 | GEF3821 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 30 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 30 | 20 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 30 | 9.5 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 30 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 30 | 5.9 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 30 | 7.5 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 30 | 11 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 82% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 78% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 100% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 98% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B02-4'-8'
**Lab Sample ID:** JA27176-4
**Matrix:** SO - Soil
**Date Sampled:** 09/02/09
**Date Received:** 09/03/09
**Percent Solids:** 98.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.53 | 0.53 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.53 | 0.53 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 1.9 | 1.1 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 3.0 | 2.6 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | < 0.030 | 0.030 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | < 4.2 | 4.2 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 6.3 | 2.1 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49620
(4) Prep QC Batch: MP49634

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** IR3B03-0'-4'
**Lab Sample ID:** JA27176-5 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 88.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3C54738.D | 1 | 09/15/09 | NDJ | n/a | n/a | V3C2395 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.9 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 12 | 2.6 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.2 | 0.40 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.8 | 0.30 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.8 | 0.18 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.8 | 0.47 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 12 | 2.3 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.8 | 0.35 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.8 | 0.64 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.8 | 0.39 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.8 | 1.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.8 | 0.37 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.8 | 0.19 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.8 | 0.18 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 12 | 0.63 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.8 | 0.13 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.2 | 0.16 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.8 | 0.31 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.8 | 0.32 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.8 | 0.39 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.8 | 1.1 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.8 | 0.16 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.2 | 0.40 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.8 | 0.77 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 5.8 | 0.28 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.8 | 0.52 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.8 | 0.15 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.8 | 0.15 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.8 | 0.11 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.2 | 0.43 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.8 | 0.65 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.8 | 1.1 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.8 | 0.60 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B03-0'-4' | | |
| **Lab Sample ID:** | JA27176-5 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 88.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.8 | 0.95 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.8 | 0.76 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.2 | 0.33 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.8 | 0.94 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 5.8 | 0.26 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.8 | 0.12 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.8 | 0.34 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.8 | 0.17 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.2 | 0.34 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.8 | 0.40 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.8 | 0.15 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.8 | 0.21 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 5.8 | 0.61 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.8 | 0.27 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.8 | 0.21 | ug/kg | |
| | m,p-Xylene | ND | 2.3 | 0.54 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.2 | 0.54 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.3 | 0.54 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 122% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 119% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 93% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 82% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B03-0'-4'
**Lab Sample ID:** JA27176-5 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 88.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50945.D | 1 | 09/16/09 | LP | 09/04/09 | OP39784 | EZ1858 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 160 | 27 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 160 | 39 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 160 | 34 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 160 | 40 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 650 | 350 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 650 | 34 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 65 | 35 | ug/kg | |
| | 3&4-Methylphenol | ND | 65 | 44 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 160 | 34 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 320 | 42 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 320 | 42 | ug/kg | |
| 108-95-2 | Phenol | ND | 65 | 25 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 160 | 35 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 160 | 43 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 32 | 17 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 32 | 14 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 160 | 16 | ug/kg | |
| 120-12-7 | Anthracene | ND | 32 | 15 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 160 | 20 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 32 | 20 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 32 | 13 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 32 | 18 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 32 | 16 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 32 | 16 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 65 | 18 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 65 | 16 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 65 | 16 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 160 | 95 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 65 | 14 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 160 | 13 | ug/kg | |
| 86-74-8 | Carbazole | ND | 65 | 14 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 65 | 26 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B03-0'-4' | | |
| **Lab Sample ID:** | JA27176-5 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 88.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 32 | 15 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 65 | 16 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 65 | 15 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 65 | 17 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 65 | 22 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 65 | 18 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 65 | 15 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 160 | 56 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 32 | 15 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 65 | 15 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | 68.9 | 65 | 20 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 65 | 14 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 65 | 15 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 65 | 15 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 65 | 17 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 32 | 15 | ug/kg | |
| 86-73-7 | Fluorene | ND | 32 | 15 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 65 | 18 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 32 | 16 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 650 | 31 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 160 | 21 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 32 | 12 | ug/kg | |
| 78-59-1 | Isophorone | ND | 65 | 29 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 65 | 15 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 160 | 24 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 160 | 13 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 160 | 20 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 32 | 14 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 65 | 15 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 65 | 20 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 160 | 22 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 32 | 16 | ug/kg | |
| 129-00-0 | Pyrene | ND | 32 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 73% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 72% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 99% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 72% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B03-0'-4' | | |
| **Lab Sample ID:** | JA27176-5 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 88.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 80% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 73% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B03-0'-4'
**Lab Sample ID:** JA27176-5 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 88.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3G39917.D | 1 | 09/09/09 | TDR | 09/05/09 | OP39803 | G3G1492 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.3 | 0.59 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.3 | 0.41 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.3 | 0.64 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.3 | 0.36 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.3 | 0.41 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.3 | 0.45 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.3 | 0.52 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.3 | 0.45 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.3 | 0.57 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.3 | 0.46 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.3 | 0.56 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.3 | 0.46 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.3 | 0.51 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.3 | 0.62 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.3 | 0.45 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.3 | 0.51 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.3 | 0.60 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.3 | 0.51 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.3 | 0.59 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.3 | 0.47 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 17 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 72% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 69% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 85% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 119% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B03-0'-4'
**Lab Sample ID:** JA27176-5 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 88.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85595.D | 1 | 09/14/09 | VDT | 09/05/09 | OP39804 | GEF3821 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 33 | 12 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 33 | 22 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 33 | 11 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 33 | 12 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 33 | 6.6 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 33 | 8.4 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 33 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 68% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 64% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 99% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 97% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B03-0'-4'
**Lab Sample ID:** JA27176-5
**Matrix:** SO - Soil
**Date Sampled:** 09/02/09
**Date Received:** 09/03/09
**Percent Solids:** 88.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.4 | 2.4 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Arsenic | < 2.4 | 2.4 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Beryllium | < 0.59 | 0.59 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Cadmium | < 0.59 | 0.59 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Chromium | 12.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Copper | 7.9 | 3.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Lead | 6.1 | 2.4 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Mercury | < 0.038 | 0.038 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [5] |
| Nickel | 9.3 | 4.7 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Selenium | < 2.4 | 2.4 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Silver | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Thallium | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | GT | SW846 6010B [3] | SW846 3050B [4] |
| Zinc | 21.2 | 2.4 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Instrument QC Batch: MA23124
(4) Prep QC Batch: MP49620
(5) Prep QC Batch: MP49634

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** IR3B03-4'-8'
**Lab Sample ID:** JA27176-6 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 98.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3C54739.D | 1 | 09/15/09 | NDJ | n/a | n/a | V3C2395 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.8 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 11 | 2.4 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.1 | 0.36 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.3 | 0.27 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.3 | 0.16 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.3 | 0.43 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 11 | 2.1 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.3 | 0.32 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.3 | 0.59 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.3 | 0.36 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.3 | 1.2 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.3 | 0.34 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.3 | 0.18 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.3 | 0.16 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 11 | 0.58 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.3 | 0.12 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.1 | 0.15 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.3 | 0.29 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.3 | 0.29 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.3 | 0.36 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.3 | 1.0 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.3 | 0.15 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.1 | 0.37 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.3 | 0.70 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 5.3 | 0.25 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.3 | 0.48 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.3 | 0.14 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.3 | 0.14 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.3 | 0.10 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.1 | 0.39 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.3 | 0.60 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.3 | 1.0 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.3 | 0.55 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B03-4'-8' | | |
| **Lab Sample ID:** | JA27176-6 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 98.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.3 | 0.87 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.3 | 0.70 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.1 | 0.30 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.3 | 0.86 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 5.3 | 0.24 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.3 | 0.11 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.3 | 0.31 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.3 | 0.15 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.1 | 0.31 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.3 | 0.37 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.3 | 0.14 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.3 | 0.20 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 5.3 | 0.56 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.3 | 0.24 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.3 | 0.19 | ug/kg | |
| | m,p-Xylene | ND | 2.1 | 0.50 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.1 | 0.50 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.1 | 0.50 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 122% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 118% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 94% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 85% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B03-4'-8'
**Lab Sample ID:** JA27176-6 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 98.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50946.D | 1 | 09/16/09 | LP | 09/04/09 | OP39784 | EZ1858 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 24 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 35 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 30 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 36 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 580 | 310 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 580 | 31 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 58 | 31 | ug/kg | |
| | 3&4-Methylphenol | ND | 58 | 39 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 31 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 290 | 37 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 290 | 38 | ug/kg | |
| 108-95-2 | Phenol | ND | 58 | 22 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 31 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 39 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 29 | 15 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 29 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 14 | ug/kg | |
| 120-12-7 | Anthracene | ND | 29 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 18 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 29 | 18 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 29 | 12 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 29 | 16 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 29 | 14 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 29 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 58 | 16 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 58 | 14 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 58 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 85 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 58 | 13 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 58 | 12 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 58 | 23 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B03-4'-8' | | |
| **Lab Sample ID:** | JA27176-6 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 98.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 29 | 13 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 58 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 58 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 58 | 15 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 58 | 19 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 58 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 58 | 13 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 50 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 29 | 14 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 58 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | 52.3 | 58 | 18 | ug/kg | J |
| 117-84-0 | Di-n-octyl phthalate | ND | 58 | 13 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 58 | 13 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 58 | 14 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 58 | 15 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 29 | 13 | ug/kg | |
| 86-73-7 | Fluorene | ND | 29 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 58 | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 29 | 14 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 580 | 28 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 19 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 29 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 58 | 26 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 58 | 13 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 21 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 18 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 29 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 58 | 13 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 58 | 18 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 20 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 29 | 14 | ug/kg | |
| 129-00-0 | Pyrene | ND | 29 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 69% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 69% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 91% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 73% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B03-4'-8' | | |
| **Lab Sample ID:** | JA27176-6 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 98.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 79% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 66% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B03-4'-8'
**Lab Sample ID:** JA27176-6 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 98.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3G39918.D | 1 | 09/09/09 | TDR | 09/05/09 | OP39803 | G3G1492 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.53 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.37 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.58 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.33 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.37 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.40 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.47 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.40 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.51 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.2 | 0.41 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.2 | 0.50 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.41 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.46 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.56 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.41 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.46 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.54 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.46 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.53 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.42 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 15 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 84% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 81% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 80% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 102% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B03-4'-8'
**Lab Sample ID:** JA27176-6 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 98.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85596.D | 1 | 09/14/09 | VDT | 09/05/09 | OP39804 | GEF3821 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 30 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 30 | 20 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 30 | 9.6 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 30 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 30 | 5.9 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 30 | 7.5 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 30 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 90% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 87% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 100% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 98% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B03-4'-8'
**Lab Sample ID:** JA27176-6
**Matrix:** SO - Soil
**Date Sampled:** 09/02/09
**Date Received:** 09/03/09
**Percent Solids:** 98.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Arsenic | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Beryllium | < 0.53 | 0.53 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Cadmium | < 0.53 | 0.53 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Chromium | 13.3 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Copper | 5.0 | 2.7 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Lead | 4.0 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Mercury | < 0.031 | 0.031 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [5] |
| Nickel | < 4.3 | 4.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Selenium | 2.2 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Silver | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | GT | SW846 6010B [3] | SW846 3050B [4] |
| Zinc | 9.5 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Instrument QC Batch: MA23124
(4) Prep QC Batch: MP49620
(5) Prep QC Batch: MP49634

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** IR3B04-0'-4'
**Lab Sample ID:** JA27176-7 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 93.4
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3C54740.D | 1 | 09/15/09 | NDJ | n/a | n/a | V3C2395 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.6 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 12 | 2.6 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.2 | 0.40 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.8 | 0.30 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.8 | 0.18 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.8 | 0.47 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 12 | 2.3 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.8 | 0.35 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.8 | 0.65 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.8 | 0.39 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.8 | 1.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.8 | 0.37 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.8 | 0.19 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.8 | 0.18 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 12 | 0.63 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.8 | 0.13 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.2 | 0.16 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.8 | 0.31 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.8 | 0.32 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.8 | 0.39 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.8 | 1.1 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.8 | 0.16 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.2 | 0.40 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.8 | 0.77 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 5.8 | 0.28 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.8 | 0.52 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.8 | 0.15 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.8 | 0.15 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.8 | 0.11 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.2 | 0.43 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.8 | 0.65 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.8 | 1.1 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.8 | 0.60 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B04-0'-4' | | |
| **Lab Sample ID:** | JA27176-7 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 93.4 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.8 | 0.96 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.8 | 0.76 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.2 | 0.33 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.8 | 0.94 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 5.8 | 0.26 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.8 | 0.12 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.8 | 0.34 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.8 | 0.17 | ug/kg | |
| 108-88-3 | Toluene | 0.44 | 1.2 | 0.34 | ug/kg | J |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.8 | 0.40 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.8 | 0.15 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.8 | 0.22 | ug/kg | |
| 79-01-6 | Trichloroethene | 1.6 | 5.8 | 0.61 | ug/kg | J |
| 75-69-4 | Trichlorofluoromethane | ND | 5.8 | 0.27 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.8 | 0.21 | ug/kg | |
| | m,p-Xylene | ND | 2.3 | 0.55 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.2 | 0.55 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.3 | 0.55 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 125% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 122% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 95% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 84% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B04-0'-4'
**Lab Sample ID:** JA27176-7 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 93.4
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50961.D | 1 | 09/17/09 | LP | 09/04/09 | OP39784 | EZ1858 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 25 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 37 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 32 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 37 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 610 | 330 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 610 | 32 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 61 | 33 | ug/kg | |
| | 3&4-Methylphenol | ND | 61 | 41 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 32 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 310 | 39 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 310 | 39 | ug/kg | |
| 108-95-2 | Phenol | ND | 61 | 23 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 33 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 41 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 31 | 16 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 31 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 15 | ug/kg | |
| 120-12-7 | Anthracene | ND | 31 | 14 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 19 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 31 | 19 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | 20.6 | 31 | 13 | ug/kg | J |
| 205-99-2 | Benzo(b)fluoranthene | 20.9 | 31 | 17 | ug/kg | J |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 31 | 15 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 31 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 61 | 17 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 61 | 15 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 61 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 89 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 61 | 14 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 61 | 13 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 61 | 25 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B04-0'-4' | | |
| **Lab Sample ID:** | JA27176-7 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 93.4 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | 16.7 | 31 | 14 | ug/kg | J |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 61 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 61 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 61 | 16 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 61 | 20 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 61 | 17 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 61 | 14 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 53 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 31 | 15 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 61 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | 78.9 | 61 | 19 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 61 | 14 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 61 | 14 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 61 | 15 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 61 | 16 | ug/kg | |
| 206-44-0 | Fluoranthene | 37.2 | 31 | 14 | ug/kg | |
| 86-73-7 | Fluorene | ND | 31 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 61 | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 31 | 15 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 610 | 29 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 20 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 31 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 61 | 27 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 61 | 14 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 22 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 19 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 31 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 61 | 14 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 61 | 19 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 21 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 31 | 15 | ug/kg | |
| 129-00-0 | Pyrene | 30.2 | 31 | 13 | ug/kg | J |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 69% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 67% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 79% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 70% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B04-0'-4' | | |
| **Lab Sample ID:** | JA27176-7 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 93.4 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 77% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 73% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B04-0'-4'
**Lab Sample ID:** JA27176-7 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 93.4
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3G40044.D | 1 | 09/14/09 | OYA | 09/05/09 | OP39803 | G3G1496 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.56 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.38 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.60 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.34 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.38 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.42 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.49 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.42 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.53 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.2 | 0.43 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.2 | 0.52 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.43 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.47 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.58 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.43 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.47 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.56 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.48 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.55 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.44 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 16 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 33% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 32% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 31% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 35% | | 22-156% |

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# Report of Analysis



**Client Sample ID:** IR3B04-0'-4'
**Lab Sample ID:** JA27176-7 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 93.4
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85599.D | 1 | 09/14/09 | VDT | 09/05/09 | OP39804 | GEF3821 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 31 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 31 | 21 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 31 | 10 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 31 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | 342 | 31 | 6.2 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | 119 | 31 | 7.8 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 31 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 36% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 33% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 38% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 39% | | 32-154% |

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# Report of Analysis



**Client Sample ID:** IR3B04-0'-4'
**Lab Sample ID:** JA27176-7
**Matrix:** SO - Soil
**Date Sampled:** 09/02/09
**Date Received:** 09/03/09
**Percent Solids:** 93.4
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.2 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | < 2.2 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.55 | 0.55 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.55 | 0.55 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 9.3 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 13.4 | 2.7 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 9.1 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | < 0.036 | 0.036 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | 5.9 | 4.4 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.2 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 25.9 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49620
(4) Prep QC Batch: MP49634

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** IR3B04-4'-8'
**Lab Sample ID:** JA27176-8 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 92.7
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3C54771.D | 1 | 09/16/09 | NDJ | n/a | n/a | V3C2397 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.9 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 11 | 2.5 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.1 | 0.38 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.5 | 0.28 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.5 | 0.17 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.5 | 0.44 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 11 | 2.2 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.5 | 0.34 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.5 | 0.61 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.5 | 0.37 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.5 | 1.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.5 | 0.35 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.5 | 0.18 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.5 | 0.17 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 11 | 0.60 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.5 | 0.12 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.1 | 0.15 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.5 | 0.30 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.5 | 0.30 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.5 | 0.37 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.5 | 1.0 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.5 | 0.15 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.1 | 0.38 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.5 | 0.73 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 5.5 | 0.26 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.5 | 0.49 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.5 | 0.14 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.5 | 0.15 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.5 | 0.11 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.1 | 0.41 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.5 | 0.62 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.5 | 1.1 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.5 | 0.57 | ug/kg | |

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# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B04-4'-8' | | |
| **Lab Sample ID:** | JA27176-8 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 92.7 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.5 | 0.91 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.5 | 0.72 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.1 | 0.31 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.5 | 0.89 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 5.5 | 0.25 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.5 | 0.12 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.5 | 0.32 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.5 | 0.16 | ug/kg | |
| 108-88-3 | Toluene | 0.41 | 1.1 | 0.32 | ug/kg | J |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.5 | 0.38 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.5 | 0.14 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.5 | 0.20 | ug/kg | |
| 79-01-6 | Trichloroethene | 0.73 | 5.5 | 0.58 | ug/kg | J |
| 75-69-4 | Trichlorofluoromethane | ND | 5.5 | 0.25 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.5 | 0.20 | ug/kg | |
| | m,p-Xylene | ND | 2.2 | 0.52 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.1 | 0.52 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.2 | 0.52 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 107% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 96% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 95% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 93% | | 62-138% |

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# Report of Analysis



**Client Sample ID:** IR3B04-4'-8'
**Lab Sample ID:** JA27176-8 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 92.7
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50970.D | 1 | 09/17/09 | VN | 09/04/09 | OP39784 | EZ1859 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 25 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 37 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 32 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 38 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 620 | 330 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 620 | 33 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 62 | 33 | ug/kg | |
| | 3&4-Methylphenol | ND | 62 | 41 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 32 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 310 | 39 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 310 | 40 | ug/kg | |
| 108-95-2 | Phenol | ND | 62 | 23 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 33 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 41 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 31 | 16 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 31 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 15 | ug/kg | |
| 120-12-7 | Anthracene | ND | 31 | 14 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 19 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | 70.1 | 31 | 19 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | 61.6 | 31 | 13 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | 90.2 | 31 | 17 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | 38.3 | 31 | 15 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | 32.1 | 31 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 62 | 17 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 62 | 15 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 62 | 16 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 90 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 62 | 14 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 13 | ug/kg | |
| 86-74-8 | Carbazole | ND | 62 | 13 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 62 | 25 | ug/kg | |

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# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B04-4'-8' | | |
| **Lab Sample ID:** | JA27176-8 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 92.7 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | 73.5 | 31 | 14 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 62 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 62 | 15 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 62 | 16 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 62 | 21 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 62 | 17 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 62 | 14 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 53 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | 15.7 | 31 | 15 | ug/kg | J |
| 132-64-9 | Dibenzofuran | ND | 62 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | 71.6 | 62 | 19 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 62 | 14 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 62 | 14 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 62 | 15 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 104 | 62 | 16 | ug/kg | |
| 206-44-0 | Fluoranthene | 139 | 31 | 14 | ug/kg | |
| 86-73-7 | Fluorene | ND | 31 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 62 | 18 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 31 | 15 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 620 | 29 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 20 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 41.4 | 31 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 62 | 27 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 62 | 14 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 23 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 19 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 31 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 62 | 14 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 62 | 19 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 21 | ug/kg | |
| 85-01-8 | Phenanthrene | 37.4 | 31 | 15 | ug/kg | |
| 129-00-0 | Pyrene | 101 | 31 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 68% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 67% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 102% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 73% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B04-4' -8' | | |
| **Lab Sample ID:** | JA27176-8 | **Date Sampled:** | 09/02/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 92.7 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 85% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 66% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B04-4'-8'
**Lab Sample ID:** JA27176-8 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 92.7
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3G40045.D | 1 | 09/14/09 | OYA | 09/05/09 | OP39803 | G3G1496 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.3 | 0.56 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.3 | 0.39 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.3 | 0.61 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.3 | 0.34 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.3 | 0.39 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.3 | 0.42 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.3 | 0.49 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.3 | 0.42 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.3 | 0.54 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.3 | 0.43 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.3 | 0.53 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.3 | 0.43 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.3 | 0.48 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.3 | 0.59 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.3 | 0.43 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.3 | 0.48 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.3 | 0.56 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.3 | 0.48 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.3 | 0.56 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.3 | 0.44 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 16 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 91% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 95% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 84% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 93% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B04-4'-8'
**Lab Sample ID:** JA27176-8 **Date Sampled:** 09/02/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 92.7
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85600.D | 1 | 09/14/09 | VDT | 09/05/09 | OP39804 | GEF3821 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 31 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 31 | 21 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 31 | 10 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 31 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | 1020 | 31 | 6.2 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | 365 | 31 | 7.9 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | 43.2 | 31 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 110% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 107% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 104% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 108% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B04-4'-8'
**Lab Sample ID:** JA27176-8
**Matrix:** SO - Soil
**Date Sampled:** 09/02/09
**Date Received:** 09/03/09
**Percent Solids:** 92.7
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.2 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Arsenic | 3.1 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Beryllium | < 0.54 | 0.54 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Cadmium | < 0.54 | 0.54 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Chromium | 10.3 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Copper | 8.5 | 2.7 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Lead | 7.6 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Mercury | < 0.035 | 0.035 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [5] |
| Nickel | 13.7 | 4.4 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Selenium | < 2.2 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Silver | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | GT | SW846 6010B [3] | SW846 3050B [4] |
| Zinc | 44.3 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Instrument QC Batch: MA23124
(4) Prep QC Batch: MP49620
(5) Prep QC Batch: MP49634

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** IR3B05-0'-4'
**Lab Sample ID:** JA27176-9 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 92.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3C54772.D | 1 | 09/16/09 | NDJ | n/a | n/a | V3C2397 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.9 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 42.4 | 11 | 2.5 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.1 | 0.38 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.5 | 0.28 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.5 | 0.17 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.5 | 0.45 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 11 | 2.2 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.5 | 0.34 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.5 | 0.61 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.5 | 0.38 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.5 | 1.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.5 | 0.35 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.5 | 0.18 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.5 | 0.17 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 11 | 0.60 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.5 | 0.12 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.1 | 0.15 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.5 | 0.30 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.5 | 0.30 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.5 | 0.37 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.5 | 1.0 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.5 | 0.15 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.1 | 0.38 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.5 | 0.73 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | 0.27 | 5.5 | 0.26 | ug/kg | J |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.5 | 0.50 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.5 | 0.14 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.5 | 0.15 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.5 | 0.11 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.1 | 0.41 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.5 | 0.62 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.5 | 1.1 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.5 | 0.57 | ug/kg | |

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B05-0'-4' | | |
| **Lab Sample ID:** | JA27176-9 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 92.2 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.5 | 0.91 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.5 | 0.72 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.1 | 0.31 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.5 | 0.90 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 5.5 | 0.25 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.5 | 0.12 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.5 | 0.32 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.5 | 0.16 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.1 | 0.32 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.5 | 0.38 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.5 | 0.14 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.5 | 0.20 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 5.5 | 0.58 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.5 | 0.25 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.5 | 0.20 | ug/kg | |
| | m,p-Xylene | ND | 2.2 | 0.52 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.1 | 0.52 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.2 | 0.52 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 106% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 96% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 95% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 91% | | 62-138% |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B05-0'-4'
**Lab Sample ID:** JA27176-9 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 92.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50968.D | 1 | 09/17/09 | VN | 09/04/09 | OP39784 | EZ1859 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 26 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 37 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 32 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 38 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 620 | 330 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 620 | 33 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 62 | 33 | ug/kg | |
| | 3&4-Methylphenol | ND | 62 | 42 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 33 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 310 | 40 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 310 | 40 | ug/kg | |
| 108-95-2 | Phenol | ND | 62 | 23 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 33 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 41 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 31 | 16 | ug/kg | |
| 208-96-8 | Acenaphthylene | 46.0 | 31 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 15 | ug/kg | |
| 120-12-7 | Anthracene | 75.1 | 31 | 14 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 19 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | 140 | 31 | 19 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | 121 | 31 | 13 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | 119 | 31 | 17 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | 105 | 31 | 15 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | 42.5 | 31 | 16 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 62 | 17 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 62 | 15 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | 19.9 | 62 | 16 | ug/kg | J |
| 100-52-7 | Benzaldehyde | ND | 150 | 90 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 62 | 14 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 13 | ug/kg | |
| 86-74-8 | Carbazole | ND | 62 | 13 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 62 | 25 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B05-0'-4'
**Lab Sample ID:** JA27176-9 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 92.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | 163 | 31 | 14 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 62 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 62 | 15 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 62 | 16 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 62 | 21 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 62 | 17 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 62 | 14 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 54 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | 32.2 | 31 | 15 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 62 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 62 | 19 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 62 | 14 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 62 | 14 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 62 | 15 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 58.5 | 62 | 16 | ug/kg | J |
| 206-44-0 | Fluoranthene | 199 | 31 | 14 | ug/kg | |
| 86-73-7 | Fluorene | 58.1 | 31 | 15 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 62 | 18 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 31 | 15 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 620 | 29 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 20 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 83.3 | 31 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 62 | 27 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | 106 | 62 | 14 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 23 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 13 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 19 | ug/kg | |
| 91-20-3 | Naphthalene | 66.1 | 31 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 62 | 14 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 62 | 19 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 21 | ug/kg | |
| 85-01-8 | Phenanthrene | 296 | 31 | 15 | ug/kg | |
| 129-00-0 | Pyrene | 350 | 31 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 68% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 68% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 87% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 75% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B05-0'-4' | | |
| **Lab Sample ID:** | JA27176-9 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 92.2 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 86% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 85% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B05-0'-4'
**Lab Sample ID:** JA27176-9 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 92.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3G40087.D | 1 | 09/15/09 | TDR | 09/05/09 | OP39803 | G3G1497 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.3 | 0.56 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.3 | 0.39 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.3 | 0.61 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.3 | 0.34 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.3 | 0.39 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.3 | 0.42 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.3 | 0.49 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.3 | 0.42 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.3 | 0.54 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.3 | 0.43 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.3 | 0.53 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.3 | 0.43 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.3 | 0.48 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.3 | 0.59 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.3 | 0.43 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.3 | 0.48 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.3 | 0.56 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.3 | 0.48 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.3 | 0.56 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.3 | 0.44 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 16 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 69% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 76% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 69% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 76% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B05-0'-4'
**Lab Sample ID:** JA27176-9 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 92.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85601.D | 1 | 09/14/09 | VDT | 09/05/09 | OP39804 | GEF3821 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 31 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 31 | 21 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 31 | 10 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | 206 | 31 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 31 | 6.2 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | 85.1 | 31 | 7.9 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 31 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 89% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 81% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 79% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 84% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B05-0'-4'
**Lab Sample ID:** JA27176-9
**Matrix:** SO - Soil
**Date Sampled:** 09/03/09
**Date Received:** 09/03/09
**Percent Solids:** 92.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | 5.3 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.53 | 0.53 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.53 | 0.53 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 15.5 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 15.0 | 2.7 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 17.6 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | 0.19 | 0.034 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | 5.1 | 4.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 23.6 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49620
(4) Prep QC Batch: MP49634

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** IR3B05-4'-8'
**Lab Sample ID:** JA27176-10 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 97.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3C54733.D | 1 | 09/15/09 | NDJ | n/a | n/a | V3C2395 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.2 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 9.9 | 2.2 | ug/kg | |
| 71-43-2 | Benzene | ND | 0.99 | 0.34 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 4.9 | 0.25 | ug/kg | |
| 75-25-2 | Bromoform | ND | 4.9 | 0.15 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 4.9 | 0.40 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 9.9 | 1.9 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 4.9 | 0.30 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 4.9 | 0.55 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 4.9 | 0.34 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 4.9 | 1.1 | ug/kg | |
| 67-66-3 | Chloroform | ND | 4.9 | 0.31 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 4.9 | 0.16 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 4.9 | 0.15 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 9.9 | 0.53 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 4.9 | 0.11 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 0.99 | 0.14 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 4.9 | 0.27 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 4.9 | 0.27 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 4.9 | 0.33 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 4.9 | 0.93 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 4.9 | 0.14 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 0.99 | 0.34 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 4.9 | 0.65 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 4.9 | 0.24 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 4.9 | 0.44 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 4.9 | 0.13 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 4.9 | 0.13 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 4.9 | 0.095 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 0.99 | 0.37 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 4.9 | 0.56 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 4.9 | 0.95 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 4.9 | 0.51 | ug/kg | |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B05-4'-8' | | |
| **Lab Sample ID:** | JA27176-10 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 97.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 4.9 | 0.81 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 4.9 | 0.65 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 0.99 | 0.28 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 4.9 | 0.80 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 4.9 | 0.22 | ug/kg | |
| 100-42-5 | Styrene | ND | 4.9 | 0.11 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 4.9 | 0.29 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 4.9 | 0.14 | ug/kg | |
| 108-88-3 | Toluene | ND | 0.99 | 0.29 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 4.9 | 0.34 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 4.9 | 0.13 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 4.9 | 0.18 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 4.9 | 0.52 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 4.9 | 0.23 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 4.9 | 0.18 | ug/kg | |
| | m,p-Xylene | ND | 2.0 | 0.46 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 0.99 | 0.46 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.0 | 0.46 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 102% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 99% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 89% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 86% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B05-4'-8'
**Lab Sample ID:** JA27176-10 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 97.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50947.D | 1 | 09/16/09 | LP | 09/04/09 | OP39784 | EZ1858 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 24 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 36 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 31 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 36 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 590 | 320 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 590 | 31 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 59 | 32 | ug/kg | |
| | 3&4-Methylphenol | ND | 59 | 39 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 31 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 290 | 38 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 290 | 38 | ug/kg | |
| 108-95-2 | Phenol | ND | 59 | 22 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 32 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 39 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 29 | 16 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 29 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 14 | ug/kg | |
| 120-12-7 | Anthracene | ND | 29 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 18 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 29 | 18 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 29 | 12 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 29 | 16 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 29 | 14 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 29 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 59 | 16 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 59 | 15 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 59 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 86 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 59 | 13 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 59 | 13 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 59 | 24 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B05-4'-8' | | |
| **Lab Sample ID:** | JA27176-10 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 97.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 29 | 14 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 59 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 59 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 59 | 15 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 59 | 20 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 59 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 59 | 13 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 51 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 29 | 14 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 59 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 59 | 18 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 59 | 13 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 59 | 13 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 59 | 14 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 59 | 15 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 29 | 13 | ug/kg | |
| 86-73-7 | Fluorene | ND | 29 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 59 | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 29 | 14 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 590 | 28 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 19 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 29 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 59 | 26 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 59 | 13 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 22 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 18 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 29 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 59 | 13 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 59 | 18 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 20 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 29 | 14 | ug/kg | |
| 129-00-0 | Pyrene | ND | 29 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 65% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 65% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 86% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 66% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B05-4'-8' | | |
| **Lab Sample ID:** | JA27176-10 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 97.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 75% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 66% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B05-4'-8'
**Lab Sample ID:** JA27176-10 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 97.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3G39910.D | 1 | 09/09/09 | TDR | 09/05/09 | OP39803 | G3G1492 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.54 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.37 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.58 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.33 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.37 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.40 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.47 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.40 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.51 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.2 | 0.42 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.2 | 0.50 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.42 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.46 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.56 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.41 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.46 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.54 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.46 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.54 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.43 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 15 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 72% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 69% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 74% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 90% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B05-4'-8'
**Lab Sample ID:** JA27176-10 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 97.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85602.D | 1 | 09/14/09 | VDT | 09/05/09 | OP39804 | GEF3821 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 30 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 30 | 20 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 30 | 9.7 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 30 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 30 | 6.0 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 30 | 7.6 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 30 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 80% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 76% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 89% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 89% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B05-4'-8'
**Lab Sample ID:** JA27176-10
**Matrix:** SO - Soil
**Date Sampled:** 09/03/09
**Date Received:** 09/03/09
**Percent Solids:** 97.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.0 | 2.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | < 2.0 | 2.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.50 | 0.50 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.50 | 0.50 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 3.9 | 1.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 3.2 | 2.5 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 2.7 | 2.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | 0.064 | 0.033 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | < 4.0 | 4.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.0 | 2.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.0 | 1.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.0 | 1.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 11.9 | 2.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49620
(4) Prep QC Batch: MP49634

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** IR3B06-0'-4'
**Lab Sample ID:** JA27176-11 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 83.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3C54773.D | 1 | 09/16/09 | NDJ | n/a | n/a | V3C2397 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.0 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 12 | 2.7 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.2 | 0.41 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 6.0 | 0.31 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.0 | 0.18 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.0 | 0.48 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 12 | 2.4 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 6.0 | 0.37 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 6.0 | 0.67 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 6.0 | 0.41 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.0 | 1.4 | ug/kg | |
| 67-66-3 | Chloroform | ND | 6.0 | 0.38 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.0 | 0.20 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 6.0 | 0.18 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 12 | 0.65 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 6.0 | 0.13 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.2 | 0.16 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 6.0 | 0.32 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 6.0 | 0.33 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 6.0 | 0.40 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.0 | 1.1 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.0 | 0.17 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.2 | 0.41 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 6.0 | 0.79 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 6.0 | 0.29 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 6.0 | 0.54 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.0 | 0.16 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.0 | 0.16 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.0 | 0.12 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.2 | 0.45 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.0 | 0.67 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.0 | 1.2 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 6.0 | 0.62 | ug/kg | |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B06-0'-4' | | |
| **Lab Sample ID:** | JA27176-11 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 83.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 6.0 | 0.99 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 6.0 | 0.79 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.2 | 0.34 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.0 | 0.97 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 6.0 | 0.27 | ug/kg | |
| 100-42-5 | Styrene | ND | 6.0 | 0.13 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.0 | 0.35 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 6.0 | 0.17 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.2 | 0.35 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.0 | 0.41 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.0 | 0.15 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.0 | 0.22 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 6.0 | 0.63 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.0 | 0.27 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 6.0 | 0.21 | ug/kg | |
| | m,p-Xylene | ND | 2.4 | 0.56 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.2 | 0.56 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.4 | 0.56 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 111% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 100% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 95% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 89% | | 62-138% |

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B06-0'-4'
**Lab Sample ID:** JA27176-11 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 83.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50948.D | 1 | 09/17/09 | LP | 09/04/09 | OP39784 | EZ1858 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 170 | 28 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 170 | 42 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 170 | 36 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 170 | 42 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 690 | 370 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 690 | 36 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 69 | 37 | ug/kg | |
| | 3&4-Methylphenol | ND | 69 | 46 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 170 | 36 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 340 | 44 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 340 | 44 | ug/kg | |
| 108-95-2 | Phenol | ND | 69 | 26 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 170 | 37 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 170 | 46 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 34 | 18 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 34 | 15 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 170 | 17 | ug/kg | |
| 120-12-7 | Anthracene | ND | 34 | 15 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 170 | 22 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 34 | 21 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 34 | 14 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 34 | 19 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 34 | 17 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 34 | 17 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 69 | 19 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 69 | 17 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 69 | 17 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 170 | 100 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 69 | 15 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 170 | 14 | ug/kg | |
| 86-74-8 | Carbazole | ND | 69 | 15 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 69 | 27 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B06-0'-4' | | |
| **Lab Sample ID:** | JA27176-11 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 83.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 34 | 16 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 69 | 17 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 69 | 16 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 69 | 18 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 69 | 23 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 69 | 19 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 69 | 15 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 170 | 59 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 34 | 16 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 69 | 16 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | 38.7 | 69 | 21 | ug/kg | J |
| 117-84-0 | Di-n-octyl phthalate | ND | 69 | 15 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 69 | 15 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 69 | 16 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 69 | 18 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 34 | 16 | ug/kg | |
| 86-73-7 | Fluorene | ND | 34 | 16 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 69 | 20 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 34 | 16 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 690 | 32 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 170 | 22 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 34 | 13 | ug/kg | |
| 78-59-1 | Isophorone | ND | 69 | 30 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 69 | 15 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 170 | 25 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 170 | 14 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 170 | 21 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 34 | 15 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 69 | 15 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 69 | 21 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 170 | 23 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 34 | 17 | ug/kg | |
| 129-00-0 | Pyrene | ND | 34 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 69% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 67% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 93% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 68% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B06-0'-4' | | |
| **Lab Sample ID:** | JA27176-11 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 83.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 78% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 70% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B06-0'-4'
**Lab Sample ID:** JA27176-11 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 83.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3G39909.D | 1 | 09/09/09 | TDR | 09/05/09 | OP39803 | G3G1492 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.4 | 0.63 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.4 | 0.43 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.4 | 0.68 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.4 | 0.38 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.4 | 0.43 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.4 | 0.47 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.4 | 0.55 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.4 | 0.47 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.4 | 0.60 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.4 | 0.49 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.4 | 0.59 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.4 | 0.49 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.4 | 0.54 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.4 | 0.66 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.4 | 0.48 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.4 | 0.54 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.4 | 0.63 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.4 | 0.54 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.4 | 0.63 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.4 | 0.50 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 18 | 16 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 86% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 84% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 88% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 98% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B06-0'-4'
**Lab Sample ID:** JA27176-11 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 83.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85603.D | 1 | 09/14/09 | VDT | 09/05/09 | OP39804 | GEF3821 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 35 | 13 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 35 | 23 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 35 | 11 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 35 | 13 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 35 | 7.0 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 35 | 8.8 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 35 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 92% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 88% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 100% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 99% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B06-0'-4'
**Lab Sample ID:** JA27176-11
**Matrix:** SO - Soil
**Date Sampled:** 09/03/09
**Date Received:** 09/03/09
**Percent Solids:** 83.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | 9.1 | 2.4 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | 6.9 | 2.4 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.59 | 0.59 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | 1.9 | 0.59 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 27.9 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 86.6 | 3.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 200 | 2.4 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | < 0.037 | 0.037 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | 13.4 | 4.8 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.4 | 2.4 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 136 | 2.4 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49620
(4) Prep QC Batch: MP49635

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** IR3B06-4'-8'
**Lab Sample ID:** JA27176-12 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 82.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | V94640.D | 1 | 09/15/09 | JLI | n/a | n/a | VV3906 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.8 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 13 | 2.8 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.3 | 0.43 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 6.4 | 0.33 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.4 | 0.19 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.4 | 0.51 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 13 | 2.5 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 6.4 | 0.39 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 6.4 | 0.71 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 6.4 | 0.43 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.4 | 1.4 | ug/kg | |
| 67-66-3 | Chloroform | ND | 6.4 | 0.40 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.4 | 0.21 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 6.4 | 0.19 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 13 | 0.69 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 6.4 | 0.14 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.3 | 0.17 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 6.4 | 0.34 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 6.4 | 0.35 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 6.4 | 0.43 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.4 | 1.2 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.4 | 0.18 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.3 | 0.44 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 6.4 | 0.84 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 6.4 | 0.30 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 6.4 | 0.57 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.4 | 0.17 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.4 | 0.17 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.4 | 0.12 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.3 | 0.47 | ug/kg | |
| 76-13-1 | Freon 113 | 3.6 | 6.4 | 0.71 | ug/kg | J |
| 591-78-6 | 2-Hexanone | ND | 6.4 | 1.2 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 6.4 | 0.66 | ug/kg | |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B06-4'-8' | | |
| **Lab Sample ID:** | JA27176-12 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 82.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 6.4 | 1.0 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 6.4 | 0.83 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.3 | 0.36 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.4 | 1.0 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 6.4 | 0.28 | ug/kg | |
| 100-42-5 | Styrene | ND | 6.4 | 0.14 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.4 | 0.37 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 6.4 | 0.18 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.3 | 0.37 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.4 | 0.44 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.4 | 0.16 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.4 | 0.24 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 6.4 | 0.67 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.4 | 0.29 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 6.4 | 0.23 | ug/kg | |
| | m,p-Xylene | ND | 2.5 | 0.60 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.3 | 0.60 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.5 | 0.60 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 88% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 78% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 89% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 70% | | 62-138% |

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N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B06-4'-8'
**Lab Sample ID:** JA27176-12 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 82.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50949.D | 1 | 09/17/09 | LP | 09/04/09 | OP39784 | EZ1858 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 170 | 29 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 170 | 42 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 170 | 36 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 170 | 43 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 700 | 380 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 700 | 37 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 70 | 38 | ug/kg | |
| | 3&4-Methylphenol | ND | 70 | 47 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 170 | 37 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 350 | 45 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 350 | 45 | ug/kg | |
| 108-95-2 | Phenol | ND | 70 | 26 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 170 | 38 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 170 | 46 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 35 | 18 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 35 | 15 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 170 | 17 | ug/kg | |
| 120-12-7 | Anthracene | ND | 35 | 16 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 170 | 22 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 35 | 21 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 35 | 14 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 35 | 19 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 35 | 17 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 35 | 17 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 70 | 19 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 70 | 17 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 70 | 18 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 170 | 100 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 70 | 15 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 170 | 14 | ug/kg | |
| 86-74-8 | Carbazole | ND | 70 | 15 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 70 | 28 | ug/kg | |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B06-4'-8' | | |
| **Lab Sample ID:** | JA27176-12 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 82.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 35 | 16 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 70 | 17 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 70 | 16 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 70 | 18 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 70 | 23 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 70 | 19 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 70 | 16 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 170 | 60 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 35 | 17 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 70 | 16 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | 44.3 | 70 | 22 | ug/kg | J |
| 117-84-0 | Di-n-octyl phthalate | ND | 70 | 15 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 70 | 16 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 70 | 17 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 70 | 18 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 35 | 16 | ug/kg | |
| 86-73-7 | Fluorene | ND | 35 | 16 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 70 | 20 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 35 | 17 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 700 | 33 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 170 | 23 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 35 | 13 | ug/kg | |
| 78-59-1 | Isophorone | ND | 70 | 31 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 70 | 16 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 170 | 26 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 170 | 14 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 170 | 22 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 35 | 15 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 70 | 16 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 70 | 22 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 170 | 24 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 35 | 17 | ug/kg | |
| 129-00-0 | Pyrene | ND | 35 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 65% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 65% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 84% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 67% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B06-4'-8' | | |
| **Lab Sample ID:** | JA27176-12 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 82.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 74% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 62% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B06-4'-8' | | |
| **Lab Sample ID:** | JA27176-12 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8081A SW846 3545 | **Percent Solids:** | 82.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3G40088.D | 1 | 09/15/09 | TDR | 09/05/09 | OP39803 | G3G1497 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.4 | 0.63 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.4 | 0.44 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.4 | 0.69 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.4 | 0.39 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.4 | 0.44 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.4 | 0.48 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.4 | 0.55 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.4 | 0.48 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.4 | 0.61 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.4 | 0.49 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.4 | 0.59 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.4 | 0.49 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.4 | 0.54 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.4 | 0.66 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.4 | 0.48 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.4 | 0.54 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.4 | 0.64 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.4 | 0.54 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.4 | 0.63 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.4 | 0.50 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 18 | 17 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 74% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 72% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 64% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 64% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B06-4'-8'
**Lab Sample ID:** JA27176-12 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 82.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85604.D | 1 | 09/15/09 | VDT | 09/05/09 | OP39804 | GEF3821 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 35 | 13 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 35 | 23 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 35 | 11 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 35 | 13 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 35 | 7.0 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 35 | 8.9 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 35 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 117% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 113% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 105% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 105% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B06-4'-8'
**Lab Sample ID:** JA27176-12 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Percent Solids:** 82.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | 5.3 | 2.4 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | 5.4 | 2.4 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.60 | 0.60 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | 1.2 | 0.60 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 15.8 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 56.7 | 3.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 120 | 2.4 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | 0.075 | 0.040 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | 7.5 | 4.8 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.4 | 2.4 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 77.2 | 2.4 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49620
(4) Prep QC Batch: MP49635

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** IR3B07-0'-4'
**Lab Sample ID:** JA27176-13 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 90.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | V94641.D | 1 | 09/15/09 | JLI | n/a | n/a | VV3906 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.0 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 11 | 2.5 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.1 | 0.38 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.5 | 0.28 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.5 | 0.17 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.5 | 0.45 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 11 | 2.2 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.5 | 0.34 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.5 | 0.62 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.5 | 0.38 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.5 | 1.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.5 | 0.35 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.5 | 0.18 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.5 | 0.17 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 11 | 0.60 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.5 | 0.12 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.1 | 0.15 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.5 | 0.30 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.5 | 0.30 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.5 | 0.37 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.5 | 1.0 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.5 | 0.15 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.1 | 0.38 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.5 | 0.73 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 5.5 | 0.26 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.5 | 0.50 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.5 | 0.14 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.5 | 0.15 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.5 | 0.11 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.1 | 0.41 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.5 | 0.62 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.5 | 1.1 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.5 | 0.57 | ug/kg | |

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B07-0'-4' | | |
| **Lab Sample ID:** | JA27176-13 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 90.2 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.5 | 0.91 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.5 | 0.73 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | 0.34 | 1.1 | 0.31 | ug/kg | J |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.5 | 0.90 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 5.5 | 0.25 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.5 | 0.12 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.5 | 0.32 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.5 | 0.16 | ug/kg | |
| 108-88-3 | Toluene | 0.93 | 1.1 | 0.32 | ug/kg | J |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.5 | 0.38 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.5 | 0.14 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.5 | 0.21 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 5.5 | 0.58 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.5 | 0.25 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.5 | 0.20 | ug/kg | |
| | m,p-Xylene | 1.1 | 2.2 | 0.52 | ug/kg | J |
| 95-47-6 | o-Xylene | ND | 1.1 | 0.52 | ug/kg | |
| 1330-20-7 | Xylene (total) | 1.4 | 2.2 | 0.52 | ug/kg | J |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 88% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 76% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 88% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 67% | | 62-138% |

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B07-0'-4'
**Lab Sample ID:** JA27176-13 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 90.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50950.D | 1 | 09/17/09 | LP | 09/04/09 | OP39784 | EZ1858 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 160 | 26 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 160 | 38 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 160 | 33 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 160 | 39 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 630 | 340 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 630 | 34 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 63 | 34 | ug/kg | |
| | 3&4-Methylphenol | ND | 63 | 42 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 160 | 33 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 320 | 41 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 320 | 41 | ug/kg | |
| 108-95-2 | Phenol | ND | 63 | 24 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 160 | 34 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 160 | 42 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 32 | 17 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 32 | 14 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 160 | 16 | ug/kg | |
| 120-12-7 | Anthracene | ND | 32 | 14 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 160 | 20 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 32 | 19 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 32 | 13 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 32 | 17 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 32 | 15 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 32 | 16 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 63 | 17 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 63 | 16 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 63 | 16 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 160 | 92 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 63 | 14 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 160 | 13 | ug/kg | |
| 86-74-8 | Carbazole | ND | 63 | 13 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 63 | 25 | ug/kg | |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B07-0'-4' | | |
| **Lab Sample ID:** | JA27176-13 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 90.2 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 32 | 15 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 63 | 16 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 63 | 15 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 63 | 16 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 63 | 21 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 63 | 17 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 63 | 14 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 160 | 55 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 32 | 15 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 63 | 15 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | 50.7 | 63 | 20 | ug/kg | J |
| 117-84-0 | Di-n-octyl phthalate | ND | 63 | 14 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 63 | 14 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 63 | 15 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 63 | 17 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 32 | 14 | ug/kg | |
| 86-73-7 | Fluorene | ND | 32 | 15 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 63 | 18 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 32 | 15 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 630 | 30 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 160 | 20 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 32 | 12 | ug/kg | |
| 78-59-1 | Isophorone | ND | 63 | 28 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 63 | 14 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 160 | 23 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 160 | 13 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 160 | 20 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 32 | 14 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 63 | 14 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 63 | 20 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 160 | 21 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 32 | 16 | ug/kg | |
| 129-00-0 | Pyrene | ND | 32 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 66% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 66% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 93% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 69% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B07-0'-4' | | |
| **Lab Sample ID:** | JA27176-13 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 90.2 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 78% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 69% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B07-0'-4' | | |
| **Lab Sample ID:** | JA27176-13 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8081A SW846 3545 | **Percent Solids:** | 90.2 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3G39908.D | 1 | 09/09/09 | TDR | 09/05/09 | OP39803 | G3G1492 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.3 | 0.58 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.3 | 0.40 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.3 | 0.63 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.3 | 0.35 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.3 | 0.40 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.3 | 0.44 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.3 | 0.51 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.3 | 0.44 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.3 | 0.55 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.3 | 0.45 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.3 | 0.54 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.3 | 0.45 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.3 | 0.49 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.3 | 0.61 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.3 | 0.44 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.3 | 0.49 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.3 | 0.58 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.3 | 0.50 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.3 | 0.58 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.3 | 0.46 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 16 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 83% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 84% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 78% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 97% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B07-0'-4'
**Lab Sample ID:** JA27176-13 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 90.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85605.D | 1 | 09/15/09 | VDT | 09/05/09 | OP39804 | GEF3821 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 32 | 12 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 32 | 21 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 32 | 10 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 32 | 12 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 32 | 6.4 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 32 | 8.2 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 32 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 94% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 90% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 100% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 106% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B07-0'-4'
**Lab Sample ID:** JA27176-13
**Matrix:** SO - Soil
**Date Sampled:** 09/03/09
**Date Received:** 09/03/09
**Percent Solids:** 90.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.2 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | 9.6 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | 0.80 | 0.56 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | 1.5 | 0.56 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 52.7 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 35.1 | 2.8 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 19.5 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | 0.070 | 0.035 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | 19.0 | 4.5 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | 2.9 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 158 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49620
(4) Prep QC Batch: MP49635

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B07-4'-8' | | |
| **Lab Sample ID:** | JA27176-14 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 81.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | V94698.D | 1 | 09/17/09 | JLI | n/a | n/a | VV3910 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.5 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 14 | 3.0 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.4 | 0.46 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 6.8 | 0.35 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.8 | 0.21 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.8 | 0.55 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 14 | 2.7 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 6.8 | 0.42 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 6.8 | 0.76 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 6.8 | 0.46 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.8 | 1.6 | ug/kg | |
| 67-66-3 | Chloroform | ND | 6.8 | 0.43 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.8 | 0.22 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 6.8 | 0.21 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 14 | 0.74 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 6.8 | 0.15 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.4 | 0.19 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 6.8 | 0.37 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 6.8 | 0.37 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 6.8 | 0.46 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.8 | 1.3 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.8 | 0.19 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.4 | 0.47 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 6.8 | 0.90 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 6.8 | 0.33 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 6.8 | 0.61 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.8 | 0.18 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.8 | 0.18 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.8 | 0.13 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.4 | 0.51 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.8 | 0.77 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.8 | 1.3 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 6.8 | 0.71 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B07-4'-8' | | |
| **Lab Sample ID:** | JA27176-14 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 81.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 6.8 | 1.1 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 6.8 | 0.89 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.4 | 0.38 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.8 | 1.1 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 6.8 | 0.30 | ug/kg | |
| 100-42-5 | Styrene | ND | 6.8 | 0.15 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.8 | 0.40 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 6.8 | 0.20 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.4 | 0.40 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.8 | 0.47 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.8 | 0.17 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.8 | 0.25 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 6.8 | 0.72 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.8 | 0.31 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 6.8 | 0.24 | ug/kg | |
| | m,p-Xylene | ND | 2.7 | 0.64 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.4 | 0.64 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.7 | 0.64 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 92% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 83% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 93% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 72% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B07-4'-8'
**Lab Sample ID:** JA27176-14 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 81.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50951.D | 1 | 09/17/09 | LP | 09/04/09 | OP39784 | EZ1858 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 180 | 29 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 180 | 42 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 180 | 36 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 180 | 43 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 700 | 380 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 700 | 37 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 70 | 38 | ug/kg | |
| | 3&4-Methylphenol | ND | 70 | 47 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 180 | 37 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 350 | 45 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 350 | 45 | ug/kg | |
| 108-95-2 | Phenol | ND | 70 | 26 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 180 | 38 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 180 | 47 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 35 | 18 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 35 | 15 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 180 | 17 | ug/kg | |
| 120-12-7 | Anthracene | ND | 35 | 16 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 180 | 22 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 35 | 21 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 35 | 14 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 35 | 19 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 35 | 17 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 35 | 18 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 70 | 19 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 70 | 17 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 70 | 18 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 180 | 100 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 70 | 16 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 180 | 14 | ug/kg | |
| 86-74-8 | Carbazole | ND | 70 | 15 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 70 | 28 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B07-4'-8' | | |
| **Lab Sample ID:** | JA27176-14 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 81.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 35 | 16 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 70 | 17 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 70 | 17 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 70 | 18 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 70 | 23 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 70 | 19 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 70 | 16 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 180 | 61 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 35 | 17 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 70 | 16 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | 36.7 | 70 | 22 | ug/kg | J |
| 117-84-0 | Di-n-octyl phthalate | ND | 70 | 15 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 70 | 16 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 70 | 17 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 70 | 18 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 35 | 16 | ug/kg | |
| 86-73-7 | Fluorene | ND | 35 | 16 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 70 | 20 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 35 | 17 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 700 | 33 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 180 | 23 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 35 | 13 | ug/kg | |
| 78-59-1 | Isophorone | ND | 70 | 31 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 70 | 16 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 180 | 26 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 180 | 14 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 180 | 22 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 35 | 15 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 70 | 16 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 70 | 22 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 180 | 24 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 35 | 17 | ug/kg | |
| 129-00-0 | Pyrene | ND | 35 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 62% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 63% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 86% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 66% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B07-4' -8' | | |
| **Lab Sample ID:** | JA27176-14 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 81.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 76% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 71% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B07-4'-8'
**Lab Sample ID:** JA27176-14 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 81.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3G40053.D | 1 | 09/14/09 | OYA | 09/12/09 | OP39893 | G3G1496 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.4 | 0.64 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.4 | 0.44 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.4 | 0.70 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.4 | 0.39 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.4 | 0.44 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.4 | 0.48 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.4 | 0.56 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.4 | 0.48 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.4 | 0.61 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.4 | 0.50 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.4 | 0.60 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.4 | 0.50 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.4 | 0.55 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.4 | 0.67 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.4 | 0.49 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.4 | 0.55 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.4 | 0.64 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.4 | 0.55 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.4 | 0.64 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.4 | 0.51 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 18 | 17 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 66% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 61% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 79% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 100% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B07-4'-8'
**Lab Sample ID:** JA27176-14 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 81.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OA56845.D | 1 | 09/17/09 | TDR | 09/12/09 | OP39894 | GOA2052 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 36 | 13 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 36 | 24 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 36 | 12 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 36 | 13 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 36 | 7.1 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 36 | 9.0 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 36 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 68% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 66% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 100% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 99% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B07-4'-8'
**Lab Sample ID:** JA27176-14 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Percent Solids:** 81.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.4 | 2.4 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | < 2.4 | 2.4 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.59 | 0.59 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.59 | 0.59 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 2.0 | 1.2 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | < 2.9 | 2.9 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | < 2.4 | 2.4 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | 0.085 | 0.040 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | < 4.7 | 4.7 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.4 | 2.4 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 4.6 | 2.4 | mg/kg | 1 | 09/15/09 | 09/15/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49620
(4) Prep QC Batch: MP49635

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** IR3B08-0'-4'
**Lab Sample ID:** JA27176-15 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 92.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | V94643.D | 1 | 09/15/09 | JLI | n/a | n/a | VV3906 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.7 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 11 | 2.6 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.1 | 0.39 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.7 | 0.30 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.7 | 0.17 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.7 | 0.46 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 11 | 2.3 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.7 | 0.35 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.7 | 0.64 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.7 | 0.39 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.7 | 1.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.7 | 0.37 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.7 | 0.19 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.7 | 0.17 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 11 | 0.62 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.7 | 0.13 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.1 | 0.16 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.7 | 0.31 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.7 | 0.32 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.7 | 0.39 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.7 | 1.1 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.7 | 0.16 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.1 | 0.40 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.7 | 0.76 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 5.7 | 0.27 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.7 | 0.52 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.7 | 0.15 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.7 | 0.15 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.7 | 0.11 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.1 | 0.43 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.7 | 0.65 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.7 | 1.1 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.7 | 0.60 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B08-0'-4' | | |
| **Lab Sample ID:** | JA27176-15 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 92.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.7 | 0.95 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.7 | 0.75 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.1 | 0.32 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.7 | 0.93 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 5.7 | 0.26 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.7 | 0.12 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.7 | 0.34 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.7 | 0.17 | ug/kg | |
| 108-88-3 | Toluene | 0.36 | 1.1 | 0.34 | ug/kg | J |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.7 | 0.40 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.7 | 0.15 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.7 | 0.21 | ug/kg | |
| 79-01-6 | Trichloroethene | 0.83 | 5.7 | 0.60 | ug/kg | J |
| 75-69-4 | Trichlorofluoromethane | ND | 5.7 | 0.26 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.7 | 0.20 | ug/kg | |
| | m,p-Xylene | ND | 2.3 | 0.54 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.1 | 0.54 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.3 | 0.54 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 88% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 77% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 88% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 67% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B08-0'-4'
**Lab Sample ID:** JA27176-15 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 92.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50969.D | 1 | 09/17/09 | VN | 09/04/09 | OP39784 | EZ1859 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 26 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 37 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 32 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 38 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 620 | 330 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 620 | 33 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 62 | 33 | ug/kg | |
| | 3&4-Methylphenol | ND | 62 | 41 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 32 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 310 | 39 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 310 | 40 | ug/kg | |
| 108-95-2 | Phenol | ND | 62 | 23 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 33 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 41 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 31 | 16 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 31 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 15 | ug/kg | |
| 120-12-7 | Anthracene | ND | 31 | 14 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 19 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | 24.4 | 31 | 19 | ug/kg | J |
| 50-32-8 | Benzo(a)pyrene | 18.7 | 31 | 13 | ug/kg | J |
| 205-99-2 | Benzo(b)fluoranthene | 26.1 | 31 | 17 | ug/kg | J |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 31 | 15 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 31 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 62 | 17 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 62 | 15 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 62 | 16 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 90 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 62 | 14 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 13 | ug/kg | |
| 86-74-8 | Carbazole | ND | 62 | 13 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 62 | 25 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B08-0'-4' | | |
| **Lab Sample ID:** | JA27176-15 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 92.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | 37.2 | 31 | 14 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 62 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 62 | 15 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 62 | 16 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 62 | 21 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 62 | 17 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 62 | 14 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 53 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 31 | 15 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 62 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | 37.3 | 62 | 19 | ug/kg | J |
| 117-84-0 | Di-n-octyl phthalate | ND | 62 | 14 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 62 | 14 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 62 | 15 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 62 | 16 | ug/kg | |
| 206-44-0 | Fluoranthene | 24.1 | 31 | 14 | ug/kg | J |
| 86-73-7 | Fluorene | ND | 31 | 15 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 62 | 18 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 31 | 15 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 620 | 29 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 20 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 14.2 | 31 | 11 | ug/kg | J |
| 78-59-1 | Isophorone | ND | 62 | 27 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 62 | 14 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 23 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 19 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 31 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 62 | 14 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 62 | 19 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 21 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 31 | 15 | ug/kg | |
| 129-00-0 | Pyrene | 33.2 | 31 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 73% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 74% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 108% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 79% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B08-0'-4' | | |
| **Lab Sample ID:** | JA27176-15 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 92.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 89% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 76% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B08-0'-4'
**Lab Sample ID:** JA27176-15 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 92.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | 3G40089.D | 1 | 09/15/09 | TDR | 09/05/09 | OP39803 | G3G1497 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.3 | 0.57 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.3 | 0.39 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.3 | 0.61 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.3 | 0.34 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.3 | 0.39 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.3 | 0.43 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.3 | 0.49 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.3 | 0.43 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.3 | 0.54 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.3 | 0.44 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.3 | 0.53 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.3 | 0.44 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.3 | 0.48 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.3 | 0.59 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.3 | 0.43 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.3 | 0.48 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.3 | 0.57 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.3 | 0.49 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.3 | 0.56 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.3 | 0.45 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 16 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 90% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 84% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 82% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 79% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B08-0'-4'
**Lab Sample ID:** JA27176-15 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 92.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | EF85607.D | 1 | 09/15/09 | VDT | 09/05/09 | OP39804 | GEF3821 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 32 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 32 | 21 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 32 | 10 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 32 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 32 | 6.3 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 32 | 8.0 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 32 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 94% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 90% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 98% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 97% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B08-0'-4'
**Lab Sample ID:** JA27176-15
**Matrix:** SO - Soil
**Date Sampled:** 09/03/09
**Date Received:** 09/03/09
**Percent Solids:** 92.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.2 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | 5.5 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.54 | 0.54 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.54 | 0.54 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 12.5 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 12.2 | 2.7 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 34.7 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | < 0.036 | 0.036 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | 10.3 | 4.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.2 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 27.0 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49620
(4) Prep QC Batch: MP49635

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B08-4'-8' | | |
| **Lab Sample ID:** | JA27176-16 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 86.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | V94644.D | 1 | 09/15/09 | JLI | n/a | n/a | VV3906 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.5 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 13 | 2.9 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.3 | 0.44 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 6.4 | 0.33 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.4 | 0.19 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.4 | 0.52 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 13 | 2.5 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 6.4 | 0.39 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 6.4 | 0.71 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 6.4 | 0.43 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.4 | 1.5 | ug/kg | |
| 67-66-3 | Chloroform | ND | 6.4 | 0.41 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.4 | 0.21 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 6.4 | 0.19 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 13 | 0.69 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 6.4 | 0.14 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.3 | 0.18 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 6.4 | 0.35 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 6.4 | 0.35 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 6.4 | 0.43 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.4 | 1.2 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.4 | 0.18 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.3 | 0.44 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 6.4 | 0.85 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 6.4 | 0.31 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 6.4 | 0.58 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.4 | 0.17 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.4 | 0.17 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.4 | 0.12 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.3 | 0.48 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.4 | 0.72 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.4 | 1.2 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 6.4 | 0.66 | ug/kg | |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B08-4'-8' | | |
| **Lab Sample ID:** | JA27176-16 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 86.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 6.4 | 1.1 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 6.4 | 0.84 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.3 | 0.36 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.4 | 1.0 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 6.4 | 0.29 | ug/kg | |
| 100-42-5 | Styrene | ND | 6.4 | 0.14 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.4 | 0.38 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 6.4 | 0.19 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.3 | 0.37 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.4 | 0.44 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.4 | 0.16 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.4 | 0.24 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 6.4 | 0.67 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.4 | 0.29 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 6.4 | 0.23 | ug/kg | |
| | m,p-Xylene | ND | 2.6 | 0.60 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.3 | 0.60 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.6 | 0.60 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 88% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 76% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 89% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 70% | | 62-138% |

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B08-4'-8'
**Lab Sample ID:** JA27176-16 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 86.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50952.D | 1 | 09/17/09 | LP | 09/04/09 | OP39784 | EZ1858 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 160 | 27 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 160 | 40 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 160 | 34 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 160 | 40 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 660 | 360 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 660 | 35 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 66 | 36 | ug/kg | |
| | 3&4-Methylphenol | ND | 66 | 44 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 160 | 35 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 330 | 42 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 330 | 43 | ug/kg | |
| 108-95-2 | Phenol | ND | 66 | 25 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 160 | 36 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 160 | 44 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 33 | 17 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 33 | 14 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 160 | 16 | ug/kg | |
| 120-12-7 | Anthracene | ND | 33 | 15 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 160 | 21 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 33 | 20 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 33 | 14 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 33 | 18 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 33 | 16 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 33 | 17 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 66 | 18 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 66 | 16 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 66 | 17 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 160 | 96 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 66 | 15 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 160 | 13 | ug/kg | |
| 86-74-8 | Carbazole | ND | 66 | 14 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 66 | 26 | ug/kg | |

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B08-4'-8' | | |
| **Lab Sample ID:** | JA27176-16 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 86.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 33 | 15 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 66 | 16 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 66 | 16 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 66 | 17 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 66 | 22 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 66 | 18 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 66 | 15 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 160 | 57 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 33 | 16 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 66 | 15 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 66 | 21 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 66 | 15 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 66 | 15 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 66 | 16 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 66 | 17 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 33 | 15 | ug/kg | |
| 86-73-7 | Fluorene | ND | 33 | 16 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 66 | 19 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 33 | 16 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 660 | 31 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 160 | 21 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 33 | 12 | ug/kg | |
| 78-59-1 | Isophorone | ND | 66 | 29 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 66 | 15 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 160 | 24 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 160 | 13 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 160 | 21 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 33 | 14 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 66 | 15 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 66 | 20 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 160 | 22 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 33 | 16 | ug/kg | |
| 129-00-0 | Pyrene | ND | 33 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 86% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 83% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 113% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 89% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B08-4'-8' | | |
| **Lab Sample ID:** | JA27176-16 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 86.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 98% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 88% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B08-4'-8' | | |
| **Lab Sample ID:** | JA27176-16 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8081A SW846 3545 | **Percent Solids:** | 86.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | XX89422.D | 1 | 09/11/09 | OPM | 09/10/09 | OP39852 | GXX3579 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.4 | 0.60 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.4 | 0.42 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.4 | 0.66 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.4 | 0.37 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.4 | 0.42 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.4 | 0.45 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.4 | 0.53 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.4 | 0.45 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.4 | 0.58 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.4 | 0.47 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.4 | 0.57 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.4 | 0.47 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.4 | 0.52 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.4 | 0.63 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.4 | 0.46 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.4 | 0.52 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.4 | 0.61 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.4 | 0.52 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.4 | 0.60 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.4 | 0.48 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 17 | 16 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 61% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 58% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 69% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 68% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B08-4'-8'
**Lab Sample ID:** JA27176-16 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 86.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OA56769.D | 1 | 09/12/09 | TDR | 09/10/09 | OP39853 | GOA2049 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 34 | 12 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 34 | 22 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 34 | 11 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 34 | 12 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 34 | 6.7 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 34 | 8.5 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 34 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 54% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 57% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 67% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 61% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B08-4'-8'
**Lab Sample ID:** JA27176-16
**Matrix:** SO - Soil
**Date Sampled:** 09/03/09
**Date Received:** 09/03/09
**Percent Solids:** 86.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.3 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | < 2.3 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.57 | 0.57 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.57 | 0.57 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 7.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 4.7 | 2.8 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 3.6 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | < 0.038 | 0.038 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | < 4.5 | 4.5 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.3 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 11.9 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49620
(4) Prep QC Batch: MP49635

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B09-0'-4' | | |
| **Lab Sample ID:** | JA27176-17 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 89.2 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | V94645.D | 1 | 09/15/09 | JLI | n/a | n/a | VV3906 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.6 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 92.3 | 12 | 2.7 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.2 | 0.42 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 6.1 | 0.31 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.1 | 0.18 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.1 | 0.49 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | 12.2 | 12 | 2.4 | ug/kg | |
| 75-15-0 | Carbon disulfide | 0.68 | 6.1 | 0.37 | ug/kg | J |
| 56-23-5 | Carbon tetrachloride | ND | 6.1 | 0.68 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 6.1 | 0.41 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.1 | 1.4 | ug/kg | |
| 67-66-3 | Chloroform | ND | 6.1 | 0.39 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.1 | 0.20 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 6.1 | 0.18 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 12 | 0.66 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 6.1 | 0.13 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.2 | 0.17 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 6.1 | 0.33 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 6.1 | 0.34 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 6.1 | 0.41 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.1 | 1.2 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.1 | 0.17 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.2 | 0.42 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 6.1 | 0.81 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | 0.48 | 6.1 | 0.29 | ug/kg | J |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 6.1 | 0.55 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.1 | 0.16 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.1 | 0.16 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.1 | 0.12 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.2 | 0.45 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.1 | 0.68 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.1 | 1.2 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 6.1 | 0.63 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B09-0'-4' | | |
| **Lab Sample ID:** | JA27176-17 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 89.2 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 6.1 | 1.0 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 6.1 | 0.80 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.2 | 0.34 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.1 | 0.99 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 6.1 | 0.27 | ug/kg | |
| 100-42-5 | Styrene | ND | 6.1 | 0.13 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.1 | 0.36 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 6.1 | 0.18 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.2 | 0.36 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.1 | 0.42 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.1 | 0.16 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.1 | 0.23 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 6.1 | 0.64 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.1 | 0.28 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 6.1 | 0.22 | ug/kg | |
| | m,p-Xylene | ND | 2.4 | 0.57 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.2 | 0.57 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.4 | 0.57 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 89% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 80% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 89% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 69% | | 62-138% |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B09-0'-4'
**Lab Sample ID:** JA27176-17 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 89.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50953.D | 1 | 09/17/09 | LP | 09/04/09 | OP39784 | EZ1858 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 160 | 26 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 160 | 39 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 160 | 33 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 160 | 39 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 640 | 350 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 640 | 34 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 64 | 35 | ug/kg | |
| | 3&4-Methylphenol | ND | 64 | 43 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 160 | 34 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 320 | 41 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 320 | 41 | ug/kg | |
| 108-95-2 | Phenol | ND | 64 | 24 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 160 | 35 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 160 | 43 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 32 | 17 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 32 | 14 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 160 | 16 | ug/kg | |
| 120-12-7 | Anthracene | ND | 32 | 14 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 160 | 20 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 32 | 19 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | 13.1 | 32 | 13 | ug/kg | J |
| 205-99-2 | Benzo(b)fluoranthene | 18.5 | 32 | 17 | ug/kg | J |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 32 | 16 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 32 | 16 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 64 | 17 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 64 | 16 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 64 | 16 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 160 | 94 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 64 | 14 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 160 | 13 | ug/kg | |
| 86-74-8 | Carbazole | ND | 64 | 14 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 64 | 26 | ug/kg | |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B09-0'-4' | | |
| **Lab Sample ID:** | JA27176-17 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 89.2 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 32 | 15 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 64 | 16 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 64 | 15 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 64 | 17 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 64 | 21 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 64 | 17 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 64 | 14 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 160 | 55 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 32 | 15 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 64 | 15 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | 33.2 | 64 | 20 | ug/kg | J |
| 117-84-0 | Di-n-octyl phthalate | ND | 64 | 14 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 64 | 14 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 64 | 15 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 64 | 17 | ug/kg | |
| 206-44-0 | Fluoranthene | 23.1 | 32 | 15 | ug/kg | J |
| 86-73-7 | Fluorene | ND | 32 | 15 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 64 | 18 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 32 | 15 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 640 | 30 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 160 | 21 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 32 | 12 | ug/kg | |
| 78-59-1 | Isophorone | ND | 64 | 28 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 64 | 14 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 160 | 24 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 160 | 13 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 160 | 20 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 32 | 14 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 64 | 14 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 64 | 20 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 160 | 22 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 32 | 16 | ug/kg | |
| 129-00-0 | Pyrene | 17.9 | 32 | 14 | ug/kg | J |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 70% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 73% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 101% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 75% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B09-0'-4' | | |
| **Lab Sample ID:** | JA27176-17 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 89.2 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 86% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 69% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B09-0'-4'
**Lab Sample ID:** JA27176-17 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 89.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | XX89442.D | 1 | 09/12/09 | OPM | 09/10/09 | OP39852 | GXX3580 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.3 | 0.58 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.3 | 0.40 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.3 | 0.63 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.3 | 0.35 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.3 | 0.40 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.3 | 0.44 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.3 | 0.51 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.3 | 0.44 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.3 | 0.55 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.3 | 0.45 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.3 | 0.54 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.3 | 0.45 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.3 | 0.49 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.3 | 0.61 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.3 | 0.44 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.3 | 0.49 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.3 | 0.58 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.3 | 0.50 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.3 | 0.58 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.3 | 0.46 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 16 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 61% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 55% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 74% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 73% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B09-0'-4'
**Lab Sample ID:** JA27176-17 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 89.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OA56770.D | 1 | 09/12/09 | TDR | 09/10/09 | OP39853 | GOA2049 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 32 | 12 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 32 | 21 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 32 | 10 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 32 | 12 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 32 | 6.4 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 32 | 8.2 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 32 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 46% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 48% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 62% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 57% | | 32-154% |

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N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B09-0'-4'
**Lab Sample ID:** JA27176-17 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Percent Solids:** 89.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | 2.4 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.53 | 0.53 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.53 | 0.53 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 8.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 6.4 | 2.7 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 14.4 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | < 0.036 | 0.036 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | 5.1 | 4.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 23.6 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49620
(4) Prep QC Batch: MP49635

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B09-4'-8' | | |
| **Lab Sample ID:** | JA27176-18 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 87.9 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | V94646.D | 1 | 09/15/09 | JLI | n/a | n/a | VV3906 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.3 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 59.0 | 11 | 2.4 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.1 | 0.37 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.4 | 0.28 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.4 | 0.16 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.4 | 0.43 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | 11.1 | 11 | 2.1 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.4 | 0.33 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.4 | 0.60 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.4 | 0.36 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.4 | 1.2 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.4 | 0.34 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.4 | 0.18 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.4 | 0.16 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 11 | 0.58 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.4 | 0.12 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.1 | 0.15 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.4 | 0.29 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.4 | 0.30 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.4 | 0.36 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.4 | 1.0 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.4 | 0.15 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.1 | 0.37 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.4 | 0.71 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | 0.56 | 5.4 | 0.26 | ug/kg | J |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.4 | 0.48 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.4 | 0.14 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.4 | 0.14 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.4 | 0.10 | ug/kg | |
| 100-41-4 | Ethylbenzene | 0.48 | 1.1 | 0.40 | ug/kg | J |
| 76-13-1 | Freon 113 | ND | 5.4 | 0.60 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.4 | 1.0 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.4 | 0.56 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B09-4'-8' | | |
| **Lab Sample ID:** | JA27176-18 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 87.9 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.4 | 0.88 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.4 | 0.70 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.1 | 0.30 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.4 | 0.87 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 5.4 | 0.24 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.4 | 0.11 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.4 | 0.31 | ug/kg | |
| 127-18-4 | Tetrachloroethene | 0.27 | 5.4 | 0.16 | ug/kg | J |
| 108-88-3 | Toluene | 0.52 | 1.1 | 0.31 | ug/kg | J |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.4 | 0.37 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.4 | 0.14 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.4 | 0.20 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 5.4 | 0.56 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.4 | 0.25 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.4 | 0.19 | ug/kg | |
| | m,p-Xylene | 1.4 | 2.1 | 0.50 | ug/kg | J |
| 95-47-6 | o-Xylene | ND | 1.1 | 0.50 | ug/kg | |
| 1330-20-7 | Xylene (total) | 1.8 | 2.1 | 0.50 | ug/kg | J |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 90% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 78% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 89% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 70% | | 62-138% |

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B09-4'-8'
**Lab Sample ID:** JA27176-18 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 87.9
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50954.D | 1 | 09/17/09 | LP | 09/04/09 | OP39784 | EZ1858 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 160 | 27 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 160 | 39 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 160 | 34 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 160 | 40 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 650 | 350 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 650 | 34 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 65 | 35 | ug/kg | |
| | 3&4-Methylphenol | ND | 65 | 44 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 160 | 34 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 330 | 42 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 330 | 42 | ug/kg | |
| 108-95-2 | Phenol | ND | 65 | 25 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 160 | 35 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 160 | 43 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 33 | 17 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 33 | 14 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 160 | 16 | ug/kg | |
| 120-12-7 | Anthracene | ND | 33 | 15 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 160 | 20 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 33 | 20 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 33 | 13 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 33 | 18 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 33 | 16 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 33 | 16 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 65 | 18 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 65 | 16 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 65 | 16 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 160 | 95 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 65 | 14 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 160 | 13 | ug/kg | |
| 86-74-8 | Carbazole | ND | 65 | 14 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 65 | 26 | ug/kg | |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B09-4'-8' | | |
| **Lab Sample ID:** | JA27176-18 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 87.9 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 33 | 15 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 65 | 16 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 65 | 15 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 65 | 17 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 65 | 22 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 65 | 18 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 65 | 15 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 160 | 56 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 33 | 16 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 65 | 15 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 65 | 20 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 65 | 14 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 65 | 15 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 65 | 16 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 65 | 17 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 33 | 15 | ug/kg | |
| 86-73-7 | Fluorene | ND | 33 | 15 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 65 | 18 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 33 | 16 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 650 | 31 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 160 | 21 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 33 | 12 | ug/kg | |
| 78-59-1 | Isophorone | ND | 65 | 29 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 65 | 15 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 160 | 24 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 160 | 13 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 160 | 20 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 33 | 14 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 65 | 15 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 65 | 20 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 160 | 22 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 33 | 16 | ug/kg | |
| 129-00-0 | Pyrene | ND | 33 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 75% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 74% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 102% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 75% | | 28-113% |

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B09-4' -8' | | |
| **Lab Sample ID:** | JA27176-18 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 87.9 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 85% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 73% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B09-4'-8' | | |
| **Lab Sample ID:** | JA27176-18 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8081A SW846 3545 | **Percent Solids:** | 87.9 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | XX89443.D | 1 | 09/12/09 | OPM | 09/10/09 | OP39852 | GXX3580 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.3 | 0.59 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.3 | 0.41 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.3 | 0.64 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.3 | 0.36 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.3 | 0.41 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.3 | 0.44 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.3 | 0.51 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.3 | 0.44 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.3 | 0.56 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.3 | 0.46 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.3 | 0.55 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.3 | 0.46 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.3 | 0.50 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.3 | 0.62 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.3 | 0.45 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.3 | 0.50 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.3 | 0.59 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.3 | 0.51 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.3 | 0.59 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.3 | 0.47 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 16 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 83% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 78% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 88% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 95% | | 22-156% |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B09-4' -8'
**Lab Sample ID:** JA27176-18 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 87.9
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OA56771.D | 1 | 09/12/09 | TDR | 09/10/09 | OP39853 | GOA2049 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 33 | 12 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 33 | 22 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 33 | 11 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 33 | 12 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 33 | 6.5 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 33 | 8.3 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 33 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 72% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 73% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 86% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 79% | | 32-154% |

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E = Indicates value exceeds calibration range
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N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B09-4'-8'
**Lab Sample ID:** JA27176-18 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Percent Solids:** 87.9
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.3 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | < 2.3 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.59 | 0.59 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.59 | 0.59 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 5.3 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 4.4 | 2.9 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 4.8 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | 0.041 | 0.037 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | < 4.7 | 4.7 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.3 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 11.6 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49620
(4) Prep QC Batch: MP49635

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** IR3B10-0'-4'
**Lab Sample ID:** JA27176-19 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 84.5
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | V94647.D | 1 | 09/15/09 | JLI | n/a | n/a | VV3906 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.8 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 12 | 2.7 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.2 | 0.42 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 6.2 | 0.32 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.2 | 0.19 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.2 | 0.50 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 12 | 2.4 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 6.2 | 0.38 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 6.2 | 0.68 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 6.2 | 0.42 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.2 | 1.4 | ug/kg | |
| 67-66-3 | Chloroform | ND | 6.2 | 0.39 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.2 | 0.20 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 6.2 | 0.19 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 12 | 0.67 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 6.2 | 0.14 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.2 | 0.17 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 6.2 | 0.33 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 6.2 | 0.34 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 6.2 | 0.42 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.2 | 1.2 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.2 | 0.17 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.2 | 0.43 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 6.2 | 0.82 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 6.2 | 0.29 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 6.2 | 0.55 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.2 | 0.16 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.2 | 0.16 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.2 | 0.12 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.2 | 0.46 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.2 | 0.69 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.2 | 1.2 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 6.2 | 0.64 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B10-0'-4' | | |
| **Lab Sample ID:** | JA27176-19 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 84.5 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 6.2 | 1.0 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 6.2 | 0.81 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.2 | 0.35 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.2 | 1.0 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 6.2 | 0.27 | ug/kg | |
| 100-42-5 | Styrene | ND | 6.2 | 0.13 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.2 | 0.36 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 6.2 | 0.18 | ug/kg | |
| 108-88-3 | Toluene | 0.58 | 1.2 | 0.36 | ug/kg | J |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.2 | 0.43 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.2 | 0.16 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.2 | 0.23 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 6.2 | 0.65 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.2 | 0.28 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 6.2 | 0.22 | ug/kg | |
| | m,p-Xylene | ND | 2.5 | 0.58 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.2 | 0.58 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.5 | 0.58 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 89% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 80% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 89% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 67% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B10-0'-4'
**Lab Sample ID:** JA27176-19 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 84.5
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50955.D | 1 | 09/17/09 | LP | 09/04/09 | OP39784 | EZ1858 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 170 | 28 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 170 | 41 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 170 | 35 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 170 | 41 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 680 | 370 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 680 | 36 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 68 | 37 | ug/kg | |
| | 3&4-Methylphenol | ND | 68 | 45 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 170 | 36 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 340 | 43 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 340 | 44 | ug/kg | |
| 108-95-2 | Phenol | ND | 68 | 26 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 170 | 37 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 170 | 45 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 34 | 18 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 34 | 15 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 170 | 17 | ug/kg | |
| 120-12-7 | Anthracene | ND | 34 | 15 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 170 | 21 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 34 | 20 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 34 | 14 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 34 | 18 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 34 | 16 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 34 | 17 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 68 | 18 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 68 | 17 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 68 | 17 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 170 | 99 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 68 | 15 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 170 | 14 | ug/kg | |
| 86-74-8 | Carbazole | ND | 68 | 14 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 68 | 27 | ug/kg | |

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RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B10-0'-4' | | |
| **Lab Sample ID:** | JA27176-19 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 84.5 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 34 | 16 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 68 | 17 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 68 | 16 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 68 | 18 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 68 | 23 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 68 | 18 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 68 | 15 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 170 | 58 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 34 | 16 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 68 | 16 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | 73.6 | 68 | 21 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 68 | 15 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 68 | 15 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 68 | 16 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 68 | 18 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 34 | 15 | ug/kg | |
| 86-73-7 | Fluorene | ND | 34 | 16 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 68 | 19 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 34 | 16 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 680 | 32 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 170 | 22 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 34 | 13 | ug/kg | |
| 78-59-1 | Isophorone | ND | 68 | 30 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 68 | 15 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 170 | 25 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 170 | 14 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 170 | 21 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 34 | 15 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 68 | 15 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 68 | 21 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 170 | 23 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 34 | 17 | ug/kg | |
| 129-00-0 | Pyrene | ND | 34 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 73% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 74% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 94% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 75% | | 28-113% |

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B10-0'-4' | | |
| **Lab Sample ID:** | JA27176-19 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 84.5 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 86% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 62% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B10-0'-4'
**Lab Sample ID:** JA27176-19 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 84.5
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | XX89444.D | 1 | 09/12/09 | OPM | 09/10/09 | OP39852 | GXX3580 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.0 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.4 | 0.62 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.4 | 0.43 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.4 | 0.68 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.4 | 0.38 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.4 | 0.43 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.4 | 0.47 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.4 | 0.54 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.4 | 0.47 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.4 | 0.60 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.4 | 0.48 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.4 | 0.58 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.4 | 0.48 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.4 | 0.53 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.4 | 0.65 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.4 | 0.48 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.4 | 0.53 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.4 | 0.63 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.4 | 0.53 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.4 | 0.62 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.4 | 0.49 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 17 | 16 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 80% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 88% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 99% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 101% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B10-0'-4'
**Lab Sample ID:** JA27176-19 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 84.5
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OA56772.D | 1 | 09/12/09 | TDR | 09/10/09 | OP39853 | GOA2049 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.0 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 35 | 12 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 35 | 23 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 35 | 11 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 35 | 12 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 35 | 6.9 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 35 | 8.8 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 35 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 71% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 74% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 97% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 90% | | 32-154% |

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N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B10-0'-4'
**Lab Sample ID:** JA27176-19
**Matrix:** SO - Soil
**Date Sampled:** 09/03/09
**Date Received:** 09/03/09
**Percent Solids:** 84.5
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.5 | 2.5 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | 4.4 | 2.5 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.62 | 0.62 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.62 | 0.62 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 19.5 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 19.5 | 3.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 21.8 | 2.5 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | 0.058 | 0.038 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | 13.4 | 5.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.5 | 2.5 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 47.2 | 2.5 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49620
(4) Prep QC Batch: MP49635

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** IR3B10-4'-8'
**Lab Sample ID:** JA27176-20 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 95.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | V94697.D | 1 | 09/17/09 | JLI | n/a | n/a | VV3910 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.6 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 11 | 2.5 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.1 | 0.39 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.7 | 0.29 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.7 | 0.17 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.7 | 0.46 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 11 | 2.2 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.7 | 0.35 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.7 | 0.63 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.7 | 0.39 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.7 | 1.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.7 | 0.36 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.7 | 0.19 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.7 | 0.17 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 11 | 0.62 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.7 | 0.13 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.1 | 0.16 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.7 | 0.31 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.7 | 0.31 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.7 | 0.38 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.7 | 1.1 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.7 | 0.16 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.1 | 0.39 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.7 | 0.75 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 5.7 | 0.27 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.7 | 0.51 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.7 | 0.15 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.7 | 0.15 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.7 | 0.11 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.1 | 0.42 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.7 | 0.64 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.7 | 1.1 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.7 | 0.59 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B10-4'-8' | | |
| **Lab Sample ID:** | JA27176-20 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 95.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.7 | 0.94 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.7 | 0.74 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | 0.35 | 1.1 | 0.32 | ug/kg | J |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.7 | 0.92 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 5.7 | 0.25 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.7 | 0.12 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.7 | 0.33 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.7 | 0.16 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.1 | 0.33 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.7 | 0.39 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.7 | 0.15 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.7 | 0.21 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 5.7 | 0.60 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.7 | 0.26 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.7 | 0.20 | ug/kg | |
| | m,p-Xylene | ND | 2.3 | 0.53 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.1 | 0.53 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.3 | 0.53 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 94% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 86% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 92% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 73% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B10-4'-8'
**Lab Sample ID:** JA27176-20 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3510C **Percent Solids:** 95.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | Z50956.D | 1 | 09/17/09 | LP | 09/04/09 | OP39784 | EZ1858 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 25 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 36 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 31 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 36 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 600 | 320 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 600 | 32 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 60 | 32 | ug/kg | |
| | 3&4-Methylphenol | ND | 60 | 40 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 31 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 300 | 38 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 300 | 39 | ug/kg | |
| 108-95-2 | Phenol | ND | 60 | 23 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 32 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 40 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 30 | 16 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 30 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 15 | ug/kg | |
| 120-12-7 | Anthracene | ND | 30 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 19 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 30 | 18 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 30 | 12 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 30 | 16 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 30 | 14 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 30 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 60 | 16 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 60 | 15 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 60 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 87 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 60 | 13 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 60 | 13 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 60 | 24 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B10-4'-8' | | |
| **Lab Sample ID:** | JA27176-20 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 95.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 30 | 14 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 60 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 60 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 60 | 16 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 60 | 20 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 60 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 60 | 13 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 52 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 30 | 14 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 60 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 60 | 19 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 60 | 13 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 60 | 13 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 60 | 14 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 60 | 16 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 30 | 14 | ug/kg | |
| 86-73-7 | Fluorene | ND | 30 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 60 | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 30 | 14 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 600 | 28 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 19 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 30 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 60 | 26 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 60 | 13 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 22 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 19 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 30 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 60 | 13 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 60 | 18 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 20 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 30 | 15 | ug/kg | |
| 129-00-0 | Pyrene | ND | 30 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 72% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 69% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 96% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 76% | | 28-113% |

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B10-4'-8' | | |
| **Lab Sample ID:** | JA27176-20 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3510C | **Percent Solids:** | 95.6 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 84% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 74% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B10-4'-8'
**Lab Sample ID:** JA27176-20 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 95.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | XX89445.D | 1 | 09/12/09 | OPM | 09/10/09 | OP39852 | GXX3580 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.54 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.37 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.59 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.33 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.37 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.41 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.47 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.41 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.52 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.2 | 0.42 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.2 | 0.51 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.42 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.46 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.57 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.41 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.46 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.54 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.46 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.54 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.43 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 15 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 107% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 106% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 104% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 106% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B10-4'-8'
**Lab Sample ID:** JA27176-20 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 95.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OA56766.D | 1 | 09/12/09 | TDR | 09/10/09 | OP39853 | GOA2049 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 30 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 30 | 20 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 30 | 9.7 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 30 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 30 | 6.0 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 30 | 7.6 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 30 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 86% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 90% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 96% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 89% | | 32-154% |

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RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B10-4'-8'
**Lab Sample ID:** JA27176-20
**Matrix:** SO - Soil
**Date Sampled:** 09/03/09
**Date Received:** 09/03/09
**Percent Solids:** 95.6
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.53 | 0.53 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.53 | 0.53 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 3.4 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 2.7 | 2.6 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 2.2 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | < 0.031 | 0.031 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | < 4.2 | 4.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 6.4 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49620
(4) Prep QC Batch: MP49635

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** IR3B11-0'-4'
**Lab Sample ID:** JA27176-21 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 90.5
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | V94678.D | 1 | 09/16/09 | JLI | n/a | n/a | VV3908 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.0 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 11 | 2.5 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.1 | 0.38 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.5 | 0.28 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.5 | 0.17 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.5 | 0.45 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 11 | 2.2 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.5 | 0.34 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.5 | 0.61 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.5 | 0.37 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.5 | 1.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.5 | 0.35 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.5 | 0.18 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.5 | 0.17 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 11 | 0.60 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.5 | 0.12 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.1 | 0.15 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.5 | 0.30 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.5 | 0.30 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.5 | 0.37 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.5 | 1.0 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.5 | 0.15 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.1 | 0.38 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.5 | 0.73 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 5.5 | 0.26 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.5 | 0.50 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.5 | 0.14 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.5 | 0.15 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.5 | 0.11 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.1 | 0.41 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.5 | 0.62 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.5 | 1.1 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.5 | 0.57 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B11-0'-4' | | |
| **Lab Sample ID:** | JA27176-21 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 90.5 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.5 | 0.91 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.5 | 0.72 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.1 | 0.31 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.5 | 0.90 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 5.5 | 0.25 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.5 | 0.12 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.5 | 0.32 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.5 | 0.16 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.1 | 0.32 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.5 | 0.38 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.5 | 0.14 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.5 | 0.20 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 5.5 | 0.58 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.5 | 0.25 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.5 | 0.20 | ug/kg | |
| | m,p-Xylene | ND | 2.2 | 0.52 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.1 | 0.52 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.2 | 0.52 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 88% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 76% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 89% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 67% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B11-0'-4'
**Lab Sample ID:** JA27176-21 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 90.5
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M67419.D | 1 | 09/15/09 | LP | 09/04/09 | OP39785 | EM2506 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 160 | 26 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 160 | 38 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 160 | 33 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 160 | 39 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 630 | 340 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 630 | 33 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 63 | 34 | ug/kg | |
| | 3&4-Methylphenol | ND | 63 | 42 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 160 | 33 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 320 | 40 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 320 | 41 | ug/kg | |
| 108-95-2 | Phenol | ND | 63 | 24 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 160 | 34 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 160 | 42 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 32 | 17 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 32 | 14 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 160 | 15 | ug/kg | |
| 120-12-7 | Anthracene | ND | 32 | 14 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 160 | 20 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | 49.7 | 32 | 19 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | 39.9 | 32 | 13 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | 83.7 | 32 | 17 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | 40.1 | 32 | 15 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | 19.2 | 32 | 16 | ug/kg | J |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 63 | 17 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 63 | 16 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 63 | 16 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 160 | 92 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 63 | 14 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 160 | 13 | ug/kg | |
| 86-74-8 | Carbazole | ND | 63 | 13 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 63 | 25 | ug/kg | |

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RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B11-0'-4' | | |
| **Lab Sample ID:** | JA27176-21 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 90.5 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | 70.4 | 32 | 15 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 63 | 16 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 63 | 15 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 63 | 16 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 63 | 21 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 63 | 17 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 63 | 14 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 160 | 55 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 32 | 15 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 63 | 15 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | 70.2 | 63 | 20 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 63 | 14 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 63 | 14 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 63 | 15 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 63 | 17 | ug/kg | |
| 206-44-0 | Fluoranthene | 58.1 | 32 | 14 | ug/kg | |
| 86-73-7 | Fluorene | ND | 32 | 15 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 63 | 18 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 32 | 15 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 630 | 30 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 160 | 20 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 34.2 | 32 | 12 | ug/kg | |
| 78-59-1 | Isophorone | ND | 63 | 28 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | 14.9 | 63 | 14 | ug/kg | J |
| 88-74-4 | 2-Nitroaniline | ND | 160 | 23 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 160 | 13 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 160 | 20 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 32 | 14 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 63 | 14 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 63 | 20 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 160 | 21 | ug/kg | |
| 85-01-8 | Phenanthrene | 42.8 | 32 | 16 | ug/kg | |
| 129-00-0 | Pyrene | 65.3 | 32 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 63% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 58% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 81% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 74% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B11-0'-4' | | |
| **Lab Sample ID:** | JA27176-21 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 90.5 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 75% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 73% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B11-0'-4' | | |
| **Lab Sample ID:** | JA27176-21 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8081A SW846 3545 | **Percent Solids:** | 90.5 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | XX89446.D | 1 | 09/12/09 | OPM | 09/10/09 | OP39852 | GXX3580 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.3 | 0.57 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.3 | 0.39 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.3 | 0.62 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.3 | 0.35 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.3 | 0.39 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.3 | 0.43 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.3 | 0.50 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.3 | 0.43 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.3 | 0.55 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.3 | 0.44 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.3 | 0.54 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.3 | 0.44 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.3 | 0.49 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.3 | 0.60 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.3 | 0.44 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.3 | 0.49 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.3 | 0.57 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.3 | 0.49 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.3 | 0.57 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.3 | 0.45 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 16 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 104% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 104% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 99% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 103% | | 22-156% |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B11-0'-4'
**Lab Sample ID:** JA27176-21 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 90.5
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OA56765.D | 1 | 09/12/09 | TDR | 09/10/09 | OP39853 | GOA2049 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 32 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 32 | 21 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 32 | 10 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 32 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 32 | 6.3 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 32 | 8.0 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 32 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 87% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 91% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 98% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 90% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B11-0'-4'
**Lab Sample ID:** JA27176-21 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Percent Solids:** 90.5
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.2 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | < 2.2 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.55 | 0.55 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.55 | 0.55 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 13.7 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 5.8 | 2.8 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 2.8 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | < 0.036 | 0.036 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | < 4.4 | 4.4 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.2 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 9.5 | 2.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49621
(4) Prep QC Batch: MP49635

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** IR3B11-4'-8'
**Lab Sample ID:** JA27176-22 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 97.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | V94677.D | 1 | 09/16/09 | JLI | n/a | n/a | VV3908 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.5 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 11 | 2.5 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.1 | 0.39 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.7 | 0.29 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.7 | 0.17 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.7 | 0.46 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 11 | 2.2 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.7 | 0.35 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.7 | 0.63 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.7 | 0.39 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.7 | 1.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.7 | 0.36 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.7 | 0.19 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.7 | 0.17 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 11 | 0.61 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.7 | 0.12 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.1 | 0.16 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.7 | 0.31 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.7 | 0.31 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.7 | 0.38 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.7 | 1.1 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.7 | 0.16 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.1 | 0.39 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.7 | 0.75 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 5.7 | 0.27 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.7 | 0.51 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.7 | 0.15 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.7 | 0.15 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.7 | 0.11 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.1 | 0.42 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.7 | 0.64 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.7 | 1.1 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.7 | 0.59 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B11-4'-8' | | |
| **Lab Sample ID:** | JA27176-22 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 97.8 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.7 | 0.94 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.7 | 0.74 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.1 | 0.32 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.7 | 0.92 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 5.7 | 0.25 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.7 | 0.12 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.7 | 0.33 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.7 | 0.16 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.1 | 0.33 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.7 | 0.39 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.7 | 0.15 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.7 | 0.21 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 5.7 | 0.60 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.7 | 0.26 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.7 | 0.20 | ug/kg | |
| | m,p-Xylene | ND | 2.3 | 0.53 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.1 | 0.53 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.3 | 0.53 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 88% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 76% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 88% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 70% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B11-4'-8'
**Lab Sample ID:** JA27176-22 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 97.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M67420.D | 1 | 09/15/09 | LP | 09/04/09 | OP39785 | EM2506 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 24 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 35 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 30 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 36 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 580 | 320 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 580 | 31 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 58 | 32 | ug/kg | |
| | 3&4-Methylphenol | ND | 58 | 39 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 31 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 290 | 37 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 290 | 38 | ug/kg | |
| 108-95-2 | Phenol | ND | 58 | 22 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 32 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 39 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 29 | 15 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 29 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 14 | ug/kg | |
| 120-12-7 | Anthracene | ND | 29 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 18 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 29 | 18 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 29 | 12 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 29 | 16 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 29 | 14 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 29 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 58 | 16 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 58 | 15 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 58 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 85 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 58 | 13 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 58 | 12 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 58 | 23 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B11-4'-8' | | |
| **Lab Sample ID:** | JA27176-22 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 97.8 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 29 | 13 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 58 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 58 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 58 | 15 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 58 | 19 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 58 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 58 | 13 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 51 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 29 | 14 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 58 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 58 | 18 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 58 | 13 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 58 | 13 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 58 | 14 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 58 | 15 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 29 | 13 | ug/kg | |
| 86-73-7 | Fluorene | ND | 29 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 58 | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 29 | 14 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 580 | 28 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 19 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 29 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 58 | 26 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 58 | 13 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 21 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 18 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 29 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 58 | 13 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 58 | 18 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 20 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 29 | 14 | ug/kg | |
| 129-00-0 | Pyrene | ND | 29 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 59% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 57% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 75% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 71% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B11-4'-8' | | |
| **Lab Sample ID:** | JA27176-22 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 97.8 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 71% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 66% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B11-4'-8'
**Lab Sample ID:** JA27176-22 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 97.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | XX89454.D | 1 | 09/12/09 | OPM | 09/10/09 | OP39852 | GXX3580 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.53 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.37 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.58 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.32 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.37 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.40 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.46 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.40 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.51 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.2 | 0.41 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.2 | 0.50 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.41 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.45 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.56 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.41 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.45 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.54 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.46 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.53 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.42 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 15 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 93% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 92% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 90% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 92% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B11-4'-8'
**Lab Sample ID:** JA27176-22 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 97.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OA56764.D | 1 | 09/12/09 | TDR | 09/10/09 | OP39853 | GOA2049 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.2 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 30 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 30 | 20 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 30 | 9.6 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 30 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 30 | 5.9 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 30 | 7.5 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 30 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 79% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 81% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 88% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 81% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B11-4'-8'
**Lab Sample ID:** JA27176-22 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Percent Solids:** 97.8
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.0 | 2.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Arsenic | < 2.0 | 2.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Beryllium | < 0.51 | 0.51 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Cadmium | < 0.51 | 0.51 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Chromium | 3.5 | 1.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Copper | 4.3 | 2.5 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Lead | 2.7 | 2.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Mercury | < 0.033 | 0.033 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [5] |
| Nickel | < 4.0 | 4.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Selenium | < 2.0 | 2.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Silver | < 1.0 | 1.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |
| Thallium | < 1.0 | 1.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | GT | SW846 6010B [3] | SW846 3050B [4] |
| Zinc | 8.7 | 2.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [4] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Instrument QC Batch: MA23124
(4) Prep QC Batch: MP49621
(5) Prep QC Batch: MP49635

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** IR3B12-0'-4'
**Lab Sample ID:** JA27176-23 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 91.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | V94676.D | 1 | 09/16/09 | JLI | n/a | n/a | VV3908 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.6 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 12 | 2.7 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.2 | 0.41 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 6.0 | 0.31 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.0 | 0.18 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.0 | 0.48 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 12 | 2.3 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 6.0 | 0.36 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 6.0 | 0.66 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 6.0 | 0.40 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.0 | 1.4 | ug/kg | |
| 67-66-3 | Chloroform | ND | 6.0 | 0.38 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.0 | 0.20 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 6.0 | 0.18 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 12 | 0.64 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 6.0 | 0.13 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.2 | 0.16 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 6.0 | 0.32 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 6.0 | 0.33 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 6.0 | 0.40 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.0 | 1.1 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.0 | 0.16 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.2 | 0.41 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 6.0 | 0.79 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 6.0 | 0.28 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 6.0 | 0.54 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.0 | 0.15 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.0 | 0.16 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.0 | 0.11 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.2 | 0.44 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.0 | 0.67 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.0 | 1.1 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 6.0 | 0.62 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B12-0'-4' | | |
| **Lab Sample ID:** | JA27176-23 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 91.2 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 6.0 | 0.98 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 6.0 | 0.78 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | 0.57 | 1.2 | 0.34 | ug/kg | J |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.0 | 0.97 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 6.0 | 0.27 | ug/kg | |
| 100-42-5 | Styrene | ND | 6.0 | 0.13 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.0 | 0.35 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 6.0 | 0.17 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.2 | 0.35 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.0 | 0.41 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.0 | 0.15 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.0 | 0.22 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 6.0 | 0.63 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.0 | 0.27 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 6.0 | 0.21 | ug/kg | |
| | m,p-Xylene | ND | 2.4 | 0.56 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.2 | 0.56 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.4 | 0.56 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 87% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 73% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 88% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 70% | | 62-138% |

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B12-0'-4'
**Lab Sample ID:** JA27176-23 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 91.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M67421.D | 1 | 09/15/09 | LP | 09/04/09 | OP39785 | EM2506 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 160 | 26 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 160 | 38 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 160 | 33 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 160 | 38 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 630 | 340 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 630 | 33 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 63 | 34 | ug/kg | |
| | 3&4-Methylphenol | ND | 63 | 42 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 160 | 33 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 310 | 40 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 310 | 40 | ug/kg | |
| 108-95-2 | Phenol | ND | 63 | 24 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 160 | 34 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 160 | 42 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 31 | 17 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 31 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 160 | 15 | ug/kg | |
| 120-12-7 | Anthracene | ND | 31 | 14 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 160 | 20 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 31 | 19 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 31 | 13 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 31 | 17 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 31 | 15 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 31 | 16 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 63 | 17 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 63 | 16 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 63 | 16 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 160 | 91 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 63 | 14 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 160 | 13 | ug/kg | |
| 86-74-8 | Carbazole | ND | 63 | 13 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 63 | 25 | ug/kg | |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B12-0'-4' | | |
| **Lab Sample ID:** | JA27176-23 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 91.2 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 31 | 14 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 63 | 16 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 63 | 15 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 63 | 16 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 63 | 21 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 63 | 17 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 63 | 14 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 160 | 54 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 31 | 15 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 63 | 15 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 63 | 20 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 63 | 14 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 63 | 14 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 63 | 15 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 63 | 16 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 31 | 14 | ug/kg | |
| 86-73-7 | Fluorene | ND | 31 | 15 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 63 | 18 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 31 | 15 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 630 | 30 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 160 | 20 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 31 | 12 | ug/kg | |
| 78-59-1 | Isophorone | ND | 63 | 28 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 63 | 14 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 160 | 23 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 160 | 13 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 160 | 20 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 31 | 14 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 63 | 14 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 63 | 19 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 160 | 21 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 31 | 15 | ug/kg | |
| 129-00-0 | Pyrene | ND | 31 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 51% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 47% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 65% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 63% | | 28-113% |

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B12-0'-4' | | |
| **Lab Sample ID:** | JA27176-23 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 91.2 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 63% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 53% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B12-0'-4' | | |
| **Lab Sample ID:** | JA27176-23 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8081A SW846 3545 | **Percent Solids:** | 91.2 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | XX89453.D | 1 | 09/12/09 | OPM | 09/10/09 | OP39852 | GXX3580 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.3 | 0.57 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.3 | 0.39 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.3 | 0.62 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.3 | 0.35 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.3 | 0.40 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.3 | 0.43 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.3 | 0.50 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.3 | 0.43 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.3 | 0.55 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.3 | 0.44 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.3 | 0.54 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.3 | 0.44 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.3 | 0.49 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.3 | 0.60 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.3 | 0.44 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.3 | 0.49 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.3 | 0.58 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.3 | 0.49 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.3 | 0.57 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.3 | 0.45 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 16 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 85% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 83% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 89% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 91% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B12-0'-4'
**Lab Sample ID:** JA27176-23 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 91.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OA56763.D | 1 | 09/12/09 | TDR | 09/10/09 | OP39853 | GOA2049 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 32 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 32 | 21 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 32 | 10 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 32 | 12 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 32 | 6.4 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 32 | 8.1 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 32 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 78% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 81% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 91% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 83% | | 32-154% |

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RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B12-0'-4'
**Lab Sample ID:** JA27176-23 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Percent Solids:** 91.2
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.3 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | 5.6 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.58 | 0.58 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.58 | 0.58 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 23.0 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 11.3 | 2.9 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 7.4 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | 0.036 | 0.033 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | 9.7 | 4.6 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.3 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 17.5 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49621
(4) Prep QC Batch: MP49635

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B12-4'-8' | | |
| **Lab Sample ID:** | JA27176-24 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 93.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | V94679.D | 1 | 09/16/09 | JLI | n/a | n/a | VV3908 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.7 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 11 | 2.5 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.1 | 0.39 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.7 | 0.29 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.7 | 0.17 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.7 | 0.46 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 11 | 2.2 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.7 | 0.35 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.7 | 0.63 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.7 | 0.39 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.7 | 1.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.7 | 0.36 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.7 | 0.19 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.7 | 0.17 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 11 | 0.62 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.7 | 0.13 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.1 | 0.16 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.7 | 0.31 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.7 | 0.31 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.7 | 0.38 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.7 | 1.1 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.7 | 0.16 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.1 | 0.39 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.7 | 0.75 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 5.7 | 0.27 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.7 | 0.51 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.7 | 0.15 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.7 | 0.15 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.7 | 0.11 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.1 | 0.42 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.7 | 0.64 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.7 | 1.1 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.7 | 0.59 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B12-4'-8' | | |
| **Lab Sample ID:** | JA27176-24 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 93.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.7 | 0.94 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.7 | 0.75 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.1 | 0.32 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.7 | 0.92 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 5.7 | 0.25 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.7 | 0.12 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.7 | 0.33 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.7 | 0.17 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.1 | 0.33 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.7 | 0.39 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.7 | 0.15 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.7 | 0.21 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 5.7 | 0.60 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.7 | 0.26 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.7 | 0.20 | ug/kg | |
| | m,p-Xylene | ND | 2.3 | 0.53 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.1 | 0.53 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.3 | 0.53 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 90% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 81% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 89% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 71% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B12-4'-8'
**Lab Sample ID:** JA27176-24 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 93.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M67422.D | 1 | 09/15/09 | LP | 09/04/09 | OP39785 | EM2506 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 25 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 37 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 32 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 37 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 610 | 330 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 610 | 32 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 61 | 33 | ug/kg | |
| | 3&4-Methylphenol | ND | 61 | 41 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 32 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 310 | 39 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 310 | 40 | ug/kg | |
| 108-95-2 | Phenol | ND | 61 | 23 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 33 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 41 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 31 | 16 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 31 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 15 | ug/kg | |
| 120-12-7 | Anthracene | ND | 31 | 14 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 19 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 31 | 19 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 31 | 13 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 31 | 17 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 31 | 15 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 31 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 61 | 17 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 61 | 15 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 61 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 89 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 61 | 14 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 61 | 13 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 61 | 25 | ug/kg | |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B12-4'-8' | | |
| **Lab Sample ID:** | JA27176-24 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 93.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 31 | 14 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 61 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 61 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 61 | 16 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 61 | 20 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 61 | 17 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 61 | 14 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 53 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 31 | 15 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 61 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 61 | 19 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 61 | 14 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 61 | 14 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 61 | 15 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 61 | 16 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 31 | 14 | ug/kg | |
| 86-73-7 | Fluorene | ND | 31 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 61 | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 31 | 15 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 610 | 29 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 20 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 31 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 61 | 27 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 61 | 14 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 23 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 19 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 31 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 61 | 14 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 61 | 19 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 21 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 31 | 15 | ug/kg | |
| 129-00-0 | Pyrene | ND | 31 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 57% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 55% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 80% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 70% | | 28-113% |

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | IR3B12-4'-8' | | |
| **Lab Sample ID:** | JA27176-24 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 93.3 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 71% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 69% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B12-4'-8'
**Lab Sample ID:** JA27176-24 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 93.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | XX89441.D | 1 | 09/12/09 | OPM | 09/10/09 | OP39852 | GXX3580 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.55 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.38 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.60 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.34 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.38 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.42 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.48 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.42 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.53 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.2 | 0.43 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.2 | 0.52 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.43 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.47 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.58 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.42 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.47 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.56 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.48 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.55 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.44 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 15 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 107% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 104% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 96% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 107% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B12-4'-8'
**Lab Sample ID:** JA27176-24 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 93.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OA56762.D | 1 | 09/12/09 | TDR | 09/10/09 | OP39853 | GOA2049 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 31 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 31 | 20 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 31 | 10 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 31 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 31 | 6.1 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 31 | 7.8 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 31 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 87% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 90% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 100% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 92% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** IR3B12-4'-8'
**Lab Sample ID:** JA27176-24 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Percent Solids:** 93.3
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.3 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | 4.8 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.56 | 0.56 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.56 | 0.56 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 18.2 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 10.3 | 2.8 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 6.4 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | 0.042 | 0.034 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | 6.5 | 4.5 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.3 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 11.9 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49621
(4) Prep QC Batch: MP49635

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** P17NB11-0'-4'
**Lab Sample ID:** JA27176-25 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 84.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | V94680.D | 1 | 09/16/09 | JLI | n/a | n/a | VV3908 |
| Run #2 | V94696.D | 1 | 09/17/09 | JLI | n/a | n/a | VV3910 |

| | Initial Weight |
|---|---|
| Run #1 | 4.6 g |
| Run #2 | 2.1 g |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 126 [a] | 28 | 6.3 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.3 | 0.44 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 6.5 | 0.33 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.5 | 0.20 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.5 | 0.52 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | 67.1 | 13 | 2.5 | ug/kg | |
| 75-15-0 | Carbon disulfide | 1.9 | 6.5 | 0.39 | ug/kg | J |
| 56-23-5 | Carbon tetrachloride | ND | 6.5 | 0.72 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 6.5 | 0.44 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.5 | 1.5 | ug/kg | |
| 67-66-3 | Chloroform | ND | 6.5 | 0.41 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.5 | 0.21 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 6.5 | 0.20 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 13 | 0.70 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 6.5 | 0.14 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.3 | 0.18 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 6.5 | 0.35 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 6.5 | 0.36 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 6.5 | 0.44 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.5 | 1.2 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.5 | 0.18 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.3 | 0.45 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 6.5 | 0.86 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 6.5 | 0.31 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 6.5 | 0.58 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.5 | 0.17 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.5 | 0.17 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.5 | 0.12 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.3 | 0.48 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.5 | 0.73 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.5 | 1.2 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 6.5 | 0.67 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB11-0'-4' | | |
| **Lab Sample ID:** | JA27176-25 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 84.1 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 6.5 | 1.1 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 6.5 | 0.85 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.3 | 0.36 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.5 | 1.0 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 6.5 | 0.29 | ug/kg | |
| 100-42-5 | Styrene | ND | 6.5 | 0.14 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.5 | 0.38 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 6.5 | 0.19 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.3 | 0.38 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.5 | 0.45 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.5 | 0.17 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.5 | 0.24 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 6.5 | 0.68 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.5 | 0.30 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 6.5 | 0.23 | ug/kg | |
| | m,p-Xylene | ND | 2.6 | 0.61 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.3 | 0.61 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.6 | 0.61 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 90% | 91% | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 81% | 78% | 65-132% |
| 2037-26-5 | Toluene-D8 | 88% | 90% | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 69% | 70% | 62-138% |

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB11-0'-4'
**Lab Sample ID:** JA27176-25 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 84.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M67423.D | 1 | 09/15/09 | LP | 09/04/09 | OP39785 | EM2506 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 170 | 28 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 170 | 41 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 170 | 35 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 170 | 41 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 680 | 370 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 680 | 36 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 68 | 37 | ug/kg | |
| | 3&4-Methylphenol | ND | 68 | 46 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 170 | 36 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 340 | 43 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 340 | 44 | ug/kg | |
| 108-95-2 | Phenol | ND | 68 | 26 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 170 | 37 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 170 | 45 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 34 | 18 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 34 | 15 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 170 | 17 | ug/kg | |
| 120-12-7 | Anthracene | ND | 34 | 15 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 170 | 21 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | 34.5 | 34 | 21 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | 33.9 | 34 | 14 | ug/kg | J |
| 205-99-2 | Benzo(b)fluoranthene | 41.5 | 34 | 18 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | 26.2 | 34 | 16 | ug/kg | J |
| 207-08-9 | Benzo(k)fluoranthene | 19.7 | 34 | 17 | ug/kg | J |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 68 | 19 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 68 | 17 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 68 | 17 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 170 | 99 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 68 | 15 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 170 | 14 | ug/kg | |
| 86-74-8 | Carbazole | ND | 68 | 14 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 68 | 27 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB11-0'-4' | | |
| **Lab Sample ID:** | JA27176-25 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 84.1 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | 32.8 | 34 | 16 | ug/kg | J |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 68 | 17 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 68 | 16 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 68 | 18 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 68 | 23 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 68 | 19 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 68 | 15 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 170 | 59 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 34 | 16 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 68 | 16 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 68 | 21 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 68 | 15 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 68 | 15 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 68 | 16 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 68 | 18 | ug/kg | |
| 206-44-0 | Fluoranthene | 50.2 | 34 | 15 | ug/kg | |
| 86-73-7 | Fluorene | ND | 34 | 16 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 68 | 19 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 34 | 16 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 680 | 32 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 170 | 22 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 22.3 | 34 | 13 | ug/kg | J |
| 78-59-1 | Isophorone | ND | 68 | 30 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 68 | 15 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 170 | 25 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 170 | 14 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 170 | 21 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 34 | 15 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 68 | 15 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 68 | 21 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 170 | 23 | ug/kg | |
| 85-01-8 | Phenanthrene | 24.6 | 34 | 17 | ug/kg | J |
| 129-00-0 | Pyrene | 46.0 | 34 | 15 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 56% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 55% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 81% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 69% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB11-0'-4' | | |
| **Lab Sample ID:** | JA27176-25 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 84.1 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 69% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 70% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB11-0'-4'
**Lab Sample ID:** JA27176-25 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 84.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | XX89452.D | 1 | 09/12/09 | OPM | 09/10/09 | OP39852 | GXX3580 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.4 | 0.62 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.4 | 0.43 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.4 | 0.67 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.4 | 0.38 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.4 | 0.43 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.4 | 0.47 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.4 | 0.54 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.4 | 0.47 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.4 | 0.60 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.4 | 0.48 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.4 | 0.58 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.4 | 0.48 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.4 | 0.53 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.4 | 0.65 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.4 | 0.47 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.4 | 0.53 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.4 | 0.63 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.4 | 0.53 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.4 | 0.62 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.4 | 0.49 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 17 | 16 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 87% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 70% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 105% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 101% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB11-0'-4'
**Lab Sample ID:** JA27176-25 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 84.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OA56761.D | 1 | 09/12/09 | TDR | 09/10/09 | OP39853 | GOA2049 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.1 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 35 | 12 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 35 | 23 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 35 | 11 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 35 | 12 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 35 | 6.9 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 35 | 8.8 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 35 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 64% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 66% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 91% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 82% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB11-0'-4'
**Lab Sample ID:** JA27176-25 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Percent Solids:** 84.1
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.3 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | 2.8 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.57 | 0.57 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.57 | 0.57 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 9.4 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 7.5 | 2.9 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 12.1 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | < 0.039 | 0.039 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | 4.9 | 4.6 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.3 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 27.3 | 2.3 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49621
(4) Prep QC Batch: MP49635

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** P17NB11-4'-8'
**Lab Sample ID:** JA27176-26 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 96.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | V94681.D | 1 | 09/16/09 | JLI | n/a | n/a | VV3908 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 5.0 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 10 | 2.3 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.0 | 0.36 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.2 | 0.27 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.2 | 0.16 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.2 | 0.42 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 10 | 2.1 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.2 | 0.32 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.2 | 0.58 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.2 | 0.35 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.2 | 1.2 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.2 | 0.33 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.2 | 0.17 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.2 | 0.16 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 10 | 0.56 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.2 | 0.11 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | 0.14 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.2 | 0.28 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.2 | 0.29 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.2 | 0.35 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.2 | 0.98 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.2 | 0.14 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | 0.36 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.2 | 0.69 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 5.2 | 0.25 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.2 | 0.47 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.2 | 0.14 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.2 | 0.14 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.2 | 0.10 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.39 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.2 | 0.59 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.2 | 1.0 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.2 | 0.54 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB11-4'-8' | | |
| **Lab Sample ID:** | JA27176-26 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 96.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.2 | 0.86 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.2 | 0.68 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | 0.29 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.2 | 0.84 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 5.2 | 0.23 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.2 | 0.11 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.2 | 0.31 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.2 | 0.15 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.0 | 0.30 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.2 | 0.36 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.2 | 0.13 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.2 | 0.19 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 5.2 | 0.55 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.2 | 0.24 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.2 | 0.19 | ug/kg | |
| | m,p-Xylene | ND | 2.1 | 0.49 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.0 | 0.49 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.1 | 0.49 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 85% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 74% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 90% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 69% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB11-4'-8'
**Lab Sample ID:** JA27176-26 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 96.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M67424.D | 1 | 09/15/09 | LP | 09/04/09 | OP39785 | EM2506 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 25 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 36 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 31 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 36 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 600 | 320 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 600 | 32 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 60 | 32 | ug/kg | |
| | 3&4-Methylphenol | ND | 60 | 40 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 31 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 300 | 38 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 300 | 38 | ug/kg | |
| 108-95-2 | Phenol | ND | 60 | 22 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 32 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 40 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 30 | 16 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 30 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 15 | ug/kg | |
| 120-12-7 | Anthracene | ND | 30 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 19 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 30 | 18 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 30 | 12 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 30 | 16 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 30 | 14 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 30 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 60 | 16 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 60 | 15 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 60 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 87 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 60 | 13 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 60 | 13 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 60 | 24 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB11-4'-8' | | |
| **Lab Sample ID:** | JA27176-26 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 96.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 30 | 14 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 60 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 60 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 60 | 15 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 60 | 20 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 60 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 60 | 13 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 51 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 30 | 14 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 60 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 60 | 19 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 60 | 13 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 60 | 13 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 60 | 14 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 60 | 16 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 30 | 14 | ug/kg | |
| 86-73-7 | Fluorene | ND | 30 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 60 | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 30 | 14 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 600 | 28 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 19 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 30 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 60 | 26 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 60 | 13 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 22 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 19 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 30 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 60 | 13 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 60 | 18 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 20 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 30 | 15 | ug/kg | |
| 129-00-0 | Pyrene | ND | 30 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 58% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 55% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 69% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 71% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB11-4'-8' | | |
| **Lab Sample ID:** | JA27176-26 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 96.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 75% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 69% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB11-4'-8'
**Lab Sample ID:** JA27176-26 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 96.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | XX89451.D | 1 | 09/12/09 | OPM | 09/10/09 | OP39852 | GXX3580 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.0 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.55 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.38 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.59 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.33 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.38 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.41 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.48 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.41 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.52 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.2 | 0.42 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.2 | 0.51 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.42 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.47 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.57 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.42 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.47 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.55 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.47 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.55 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.43 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 15 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 98% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 85% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 93% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 96% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB11-4'-8'
**Lab Sample ID:** JA27176-26 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 96.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OA56760.D | 1 | 09/12/09 | TDR | 09/10/09 | OP39853 | GOA2049 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.0 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 31 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 31 | 20 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 31 | 9.9 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 31 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 31 | 6.1 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 31 | 7.7 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 31 | 12 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 85% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 88% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 96% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 89% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB11-4'-8'
**Lab Sample ID:** JA27176-26 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Percent Solids:** 96.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.53 | 0.53 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.53 | 0.53 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 5.5 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 4.3 | 2.6 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 2.7 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | < 0.035 | 0.035 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | 4.2 | 4.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.1 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.1 | 1.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 9.7 | 2.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49621
(4) Prep QC Batch: MP49635

RL = Reporting Limit

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB12-0'-4' | | |
| **Lab Sample ID:** | JA27176-27 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 81.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | V94682.D | 1 | 09/16/09 | JLI | n/a | n/a | VV3908 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.5 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 156 | 14 | 3.1 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.4 | 0.47 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 6.9 | 0.35 | ug/kg | |
| 75-25-2 | Bromoform | ND | 6.9 | 0.21 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 6.9 | 0.55 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | 32.2 | 14 | 2.7 | ug/kg | |
| 75-15-0 | Carbon disulfide | 0.74 | 6.9 | 0.42 | ug/kg | J |
| 56-23-5 | Carbon tetrachloride | ND | 6.9 | 0.76 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 6.9 | 0.47 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 6.9 | 1.6 | ug/kg | |
| 67-66-3 | Chloroform | ND | 6.9 | 0.44 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 6.9 | 0.23 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 6.9 | 0.21 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 14 | 0.74 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 6.9 | 0.15 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.4 | 0.19 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 6.9 | 0.37 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 6.9 | 0.38 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 6.9 | 0.46 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 6.9 | 1.3 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 6.9 | 0.19 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.4 | 0.47 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 6.9 | 0.91 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 6.9 | 0.33 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 6.9 | 0.62 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 6.9 | 0.18 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 6.9 | 0.18 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 6.9 | 0.13 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.4 | 0.51 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 6.9 | 0.77 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 6.9 | 1.3 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 6.9 | 0.71 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB12-0'-4' | | |
| **Lab Sample ID:** | JA27176-27 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 81.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 6.9 | 1.1 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 6.9 | 0.90 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.4 | 0.39 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 6.9 | 1.1 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 6.9 | 0.31 | ug/kg | |
| 100-42-5 | Styrene | ND | 6.9 | 0.15 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 6.9 | 0.40 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 6.9 | 0.20 | ug/kg | |
| 108-88-3 | Toluene | 0.52 | 1.4 | 0.40 | ug/kg | J |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 6.9 | 0.47 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 6.9 | 0.18 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 6.9 | 0.25 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 6.9 | 0.72 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 6.9 | 0.31 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 6.9 | 0.24 | ug/kg | |
| | m,p-Xylene | 0.79 | 2.7 | 0.64 | ug/kg | J |
| 95-47-6 | o-Xylene | ND | 1.4 | 0.64 | ug/kg | |
| 1330-20-7 | Xylene (total) | 1.1 | 2.7 | 0.64 | ug/kg | J |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 89% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 79% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 89% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 69% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB12-0'-4'
**Lab Sample ID:** JA27176-27 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 81.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M67425.D | 1 | 09/15/09 | LP | 09/04/09 | OP39785 | EM2506 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 180 | 29 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 180 | 43 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 180 | 37 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 180 | 43 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 710 | 380 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 710 | 37 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 71 | 38 | ug/kg | |
| | 3&4-Methylphenol | ND | 71 | 47 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 180 | 37 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 350 | 45 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 350 | 46 | ug/kg | |
| 108-95-2 | Phenol | ND | 71 | 27 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 180 | 38 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 180 | 47 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 35 | 19 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 35 | 15 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 180 | 17 | ug/kg | |
| 120-12-7 | Anthracene | ND | 35 | 16 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 180 | 22 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 35 | 21 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 35 | 15 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 35 | 19 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 35 | 17 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 35 | 18 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 71 | 19 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 71 | 18 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 71 | 18 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 180 | 100 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 71 | 16 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 180 | 14 | ug/kg | |
| 86-74-8 | Carbazole | ND | 71 | 15 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 71 | 28 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB12-0'-4' | | |
| **Lab Sample ID:** | JA27176-27 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 81.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 35 | 16 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 71 | 18 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 71 | 17 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 71 | 18 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 71 | 23 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 71 | 19 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 71 | 16 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 180 | 61 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 35 | 17 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 71 | 16 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 71 | 22 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 71 | 16 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 71 | 16 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 71 | 17 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 71 | 18 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 35 | 16 | ug/kg | |
| 86-73-7 | Fluorene | ND | 35 | 17 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 71 | 20 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 35 | 17 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 710 | 33 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 180 | 23 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 35 | 13 | ug/kg | |
| 78-59-1 | Isophorone | ND | 71 | 31 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 71 | 16 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 180 | 26 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 180 | 14 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 180 | 22 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 35 | 15 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 71 | 16 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 71 | 22 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 180 | 24 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 35 | 17 | ug/kg | |
| 129-00-0 | Pyrene | ND | 35 | 16 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 69% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 63% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 89% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 80% | | 28-113% |

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB12-0'-4' | | |
| **Lab Sample ID:** | JA27176-27 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 81.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 79% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 73% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB12-0'-4'
**Lab Sample ID:** JA27176-27 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 81.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | XX89450.D | 1 | 09/12/09 | OPM | 09/10/09 | OP39852 | GXX3580 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.0 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.5 | 0.65 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.5 | 0.45 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.5 | 0.70 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.5 | 0.40 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.5 | 0.45 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.5 | 0.49 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.5 | 0.57 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.5 | 0.49 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.5 | 0.62 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.5 | 0.50 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.5 | 0.61 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.5 | 0.50 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.5 | 0.55 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.5 | 0.68 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.5 | 0.50 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.5 | 0.55 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.5 | 0.65 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.5 | 0.56 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.5 | 0.65 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.5 | 0.51 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 18 | 17 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 56% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 58% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 63% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 61% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB12-0'-4'
**Lab Sample ID:** JA27176-27 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 81.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OA56755.D | 1 | 09/11/09 | TDR | 09/10/09 | OP39853 | GOA2049 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.0 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 36 | 13 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 36 | 24 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 36 | 12 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 36 | 13 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 36 | 7.2 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 36 | 9.2 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 36 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 49% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 50% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 58% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 51% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB12-0'-4'
**Lab Sample ID:** JA27176-27
**Matrix:** SO - Soil
**Date Sampled:** 09/03/09
**Date Received:** 09/03/09
**Percent Solids:** 81.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.5 | 2.5 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | 5.0 | 2.5 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.62 | 0.62 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.62 | 0.62 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 16.6 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 10.2 | 3.1 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 14.3 | 2.5 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | < 0.039 | 0.039 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | 9.2 | 5.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.5 | 2.5 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.2 | 1.2 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 31.3 | 2.5 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49621
(4) Prep QC Batch: MP49635

RL = Reporting Limit

# Report of Analysis



**Client Sample ID:** P17NB12-4'-8'
**Lab Sample ID:** JA27176-28 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8260B **Percent Solids:** 98.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | V94683.D | 1 | 09/16/09 | JLI | n/a | n/a | VV3908 |
| Run #2 | | | | | | | |

| | Initial Weight |
|---|---|
| Run #1 | 4.5 g |
| Run #2 | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 11 | 2.5 | ug/kg | |
| 71-43-2 | Benzene | ND | 1.1 | 0.39 | ug/kg | |
| 75-27-4 | Bromodichloromethane | ND | 5.7 | 0.29 | ug/kg | |
| 75-25-2 | Bromoform | ND | 5.7 | 0.17 | ug/kg | |
| 74-83-9 | Bromomethane | ND | 5.7 | 0.46 | ug/kg | |
| 78-93-3 | 2-Butanone (MEK) | ND | 11 | 2.2 | ug/kg | |
| 75-15-0 | Carbon disulfide | ND | 5.7 | 0.35 | ug/kg | |
| 56-23-5 | Carbon tetrachloride | ND | 5.7 | 0.63 | ug/kg | |
| 108-90-7 | Chlorobenzene | ND | 5.7 | 0.38 | ug/kg | |
| 75-00-3 | Chloroethane | ND | 5.7 | 1.3 | ug/kg | |
| 67-66-3 | Chloroform | ND | 5.7 | 0.36 | ug/kg | |
| 74-87-3 | Chloromethane | ND | 5.7 | 0.19 | ug/kg | |
| 110-82-7 | Cyclohexane | ND | 5.7 | 0.17 | ug/kg | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 11 | 0.61 | ug/kg | |
| 124-48-1 | Dibromochloromethane | ND | 5.7 | 0.12 | ug/kg | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.1 | 0.16 | ug/kg | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | 5.7 | 0.31 | ug/kg | |
| 541-73-1 | 1,3-Dichlorobenzene | ND | 5.7 | 0.31 | ug/kg | |
| 106-46-7 | 1,4-Dichlorobenzene | ND | 5.7 | 0.38 | ug/kg | |
| 75-71-8 | Dichlorodifluoromethane | ND | 5.7 | 1.1 | ug/kg | |
| 75-34-3 | 1,1-Dichloroethane | ND | 5.7 | 0.16 | ug/kg | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.1 | 0.39 | ug/kg | |
| 75-35-4 | 1,1-Dichloroethene | ND | 5.7 | 0.75 | ug/kg | |
| 156-59-2 | cis-1,2-Dichloroethene | ND | 5.7 | 0.27 | ug/kg | |
| 156-60-5 | trans-1,2-Dichloroethene | ND | 5.7 | 0.51 | ug/kg | |
| 78-87-5 | 1,2-Dichloropropane | ND | 5.7 | 0.15 | ug/kg | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 5.7 | 0.15 | ug/kg | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 5.7 | 0.11 | ug/kg | |
| 100-41-4 | Ethylbenzene | ND | 1.1 | 0.42 | ug/kg | |
| 76-13-1 | Freon 113 | ND | 5.7 | 0.64 | ug/kg | |
| 591-78-6 | 2-Hexanone | ND | 5.7 | 1.1 | ug/kg | |
| 98-82-8 | Isopropylbenzene | ND | 5.7 | 0.59 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB12-4'-8' | | |
| **Lab Sample ID:** | JA27176-28 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8260B | **Percent Solids:** | 98.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**VOA TCL List (OLM4.2)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 79-20-9 | Methyl Acetate | ND | 5.7 | 0.93 | ug/kg | |
| 108-87-2 | Methylcyclohexane | ND | 5.7 | 0.74 | ug/kg | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.1 | 0.32 | ug/kg | |
| 108-10-1 | 4-Methyl-2-pentanone(MIBK) | ND | 5.7 | 0.92 | ug/kg | |
| 75-09-2 | Methylene chloride | ND | 5.7 | 0.25 | ug/kg | |
| 100-42-5 | Styrene | ND | 5.7 | 0.12 | ug/kg | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 5.7 | 0.33 | ug/kg | |
| 127-18-4 | Tetrachloroethene | ND | 5.7 | 0.16 | ug/kg | |
| 108-88-3 | Toluene | ND | 1.1 | 0.33 | ug/kg | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 5.7 | 0.39 | ug/kg | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 5.7 | 0.15 | ug/kg | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 5.7 | 0.21 | ug/kg | |
| 79-01-6 | Trichloroethene | ND | 5.7 | 0.60 | ug/kg | |
| 75-69-4 | Trichlorofluoromethane | ND | 5.7 | 0.26 | ug/kg | |
| 75-01-4 | Vinyl chloride | ND | 5.7 | 0.20 | ug/kg | |
| | m,p-Xylene | ND | 2.3 | 0.53 | ug/kg | |
| 95-47-6 | o-Xylene | ND | 1.1 | 0.53 | ug/kg | |
| 1330-20-7 | Xylene (total) | ND | 2.3 | 0.53 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 89% | | 67-127% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 81% | | 65-132% |
| 2037-26-5 | Toluene-D8 | 89% | | 74-129% |
| 460-00-4 | 4-Bromofluorobenzene | 70% | | 62-138% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB12-4'-8'
**Lab Sample ID:** JA27176-28 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8270C SW846 3550B **Percent Solids:** 98.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | M67426.D | 1 | 09/15/09 | LP | 09/04/09 | OP39785 | EM2506 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 35.0 g | 1.0 ml |
| Run #2 | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 95-57-8 | 2-Chlorophenol | ND | 150 | 24 | ug/kg | |
| 59-50-7 | 4-Chloro-3-methyl phenol | ND | 150 | 35 | ug/kg | |
| 120-83-2 | 2,4-Dichlorophenol | ND | 150 | 30 | ug/kg | |
| 105-67-9 | 2,4-Dimethylphenol | ND | 150 | 36 | ug/kg | |
| 51-28-5 | 2,4-Dinitrophenol | ND | 580 | 310 | ug/kg | |
| 534-52-1 | 4,6-Dinitro-o-cresol | ND | 580 | 31 | ug/kg | |
| 95-48-7 | 2-Methylphenol | ND | 58 | 31 | ug/kg | |
| | 3&4-Methylphenol | ND | 58 | 39 | ug/kg | |
| 88-75-5 | 2-Nitrophenol | ND | 150 | 31 | ug/kg | |
| 100-02-7 | 4-Nitrophenol | ND | 290 | 37 | ug/kg | |
| 87-86-5 | Pentachlorophenol | ND | 290 | 38 | ug/kg | |
| 108-95-2 | Phenol | ND | 58 | 22 | ug/kg | |
| 95-95-4 | 2,4,5-Trichlorophenol | ND | 150 | 31 | ug/kg | |
| 88-06-2 | 2,4,6-Trichlorophenol | ND | 150 | 39 | ug/kg | |
| 83-32-9 | Acenaphthene | ND | 29 | 15 | ug/kg | |
| 208-96-8 | Acenaphthylene | ND | 29 | 13 | ug/kg | |
| 98-86-2 | Acetophenone | ND | 150 | 14 | ug/kg | |
| 120-12-7 | Anthracene | ND | 29 | 13 | ug/kg | |
| 1912-24-9 | Atrazine | ND | 150 | 18 | ug/kg | |
| 56-55-3 | Benzo(a)anthracene | ND | 29 | 18 | ug/kg | |
| 50-32-8 | Benzo(a)pyrene | ND | 29 | 12 | ug/kg | |
| 205-99-2 | Benzo(b)fluoranthene | ND | 29 | 16 | ug/kg | |
| 191-24-2 | Benzo(g,h,i)perylene | ND | 29 | 14 | ug/kg | |
| 207-08-9 | Benzo(k)fluoranthene | ND | 29 | 15 | ug/kg | |
| 101-55-3 | 4-Bromophenyl phenyl ether | ND | 58 | 16 | ug/kg | |
| 85-68-7 | Butyl benzyl phthalate | ND | 58 | 14 | ug/kg | |
| 92-52-4 | 1,1'-Biphenyl | ND | 58 | 15 | ug/kg | |
| 100-52-7 | Benzaldehyde | ND | 150 | 85 | ug/kg | |
| 91-58-7 | 2-Chloronaphthalene | ND | 58 | 13 | ug/kg | |
| 106-47-8 | 4-Chloroaniline | ND | 150 | 12 | ug/kg | |
| 86-74-8 | Carbazole | ND | 58 | 12 | ug/kg | |
| 105-60-2 | Caprolactam | ND | 58 | 23 | ug/kg | |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB12-4'-8' | | |
| **Lab Sample ID:** | JA27176-28 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 98.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 218-01-9 | Chrysene | ND | 29 | 13 | ug/kg | |
| 111-91-1 | bis(2-Chloroethoxy)methane | ND | 58 | 15 | ug/kg | |
| 111-44-4 | bis(2-Chloroethyl)ether | ND | 58 | 14 | ug/kg | |
| 108-60-1 | bis(2-Chloroisopropyl)ether | ND | 58 | 15 | ug/kg | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | ND | 58 | 19 | ug/kg | |
| 121-14-2 | 2,4-Dinitrotoluene | ND | 58 | 16 | ug/kg | |
| 606-20-2 | 2,6-Dinitrotoluene | ND | 58 | 13 | ug/kg | |
| 91-94-1 | 3,3'-Dichlorobenzidine | ND | 150 | 50 | ug/kg | |
| 53-70-3 | Dibenzo(a,h)anthracene | ND | 29 | 14 | ug/kg | |
| 132-64-9 | Dibenzofuran | ND | 58 | 14 | ug/kg | |
| 84-74-2 | Di-n-butyl phthalate | ND | 58 | 18 | ug/kg | |
| 117-84-0 | Di-n-octyl phthalate | ND | 58 | 13 | ug/kg | |
| 84-66-2 | Diethyl phthalate | ND | 58 | 13 | ug/kg | |
| 131-11-3 | Dimethyl phthalate | ND | 58 | 14 | ug/kg | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | ND | 58 | 15 | ug/kg | |
| 206-44-0 | Fluoranthene | ND | 29 | 13 | ug/kg | |
| 86-73-7 | Fluorene | ND | 29 | 14 | ug/kg | |
| 118-74-1 | Hexachlorobenzene | ND | 58 | 17 | ug/kg | |
| 87-68-3 | Hexachlorobutadiene | ND | 29 | 14 | ug/kg | |
| 77-47-4 | Hexachlorocyclopentadiene | ND | 580 | 28 | ug/kg | |
| 67-72-1 | Hexachloroethane | ND | 150 | 19 | ug/kg | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | ND | 29 | 11 | ug/kg | |
| 78-59-1 | Isophorone | ND | 58 | 26 | ug/kg | |
| 91-57-6 | 2-Methylnaphthalene | ND | 58 | 13 | ug/kg | |
| 88-74-4 | 2-Nitroaniline | ND | 150 | 21 | ug/kg | |
| 99-09-2 | 3-Nitroaniline | ND | 150 | 12 | ug/kg | |
| 100-01-6 | 4-Nitroaniline | ND | 150 | 18 | ug/kg | |
| 91-20-3 | Naphthalene | ND | 29 | 13 | ug/kg | |
| 98-95-3 | Nitrobenzene | ND | 58 | 13 | ug/kg | |
| 621-64-7 | N-Nitroso-di-n-propylamine | ND | 58 | 18 | ug/kg | |
| 86-30-6 | N-Nitrosodiphenylamine | ND | 150 | 20 | ug/kg | |
| 85-01-8 | Phenanthrene | ND | 29 | 14 | ug/kg | |
| 129-00-0 | Pyrene | ND | 29 | 13 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 65% | | 30-109% |
| 4165-62-2 | Phenol-d5 | 61% | | 28-108% |
| 118-79-6 | 2,4,6-Tribromophenol | 78% | | 28-125% |
| 4165-60-0 | Nitrobenzene-d5 | 77% | | 28-113% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



| | | | |
|---|---|---|---|
| **Client Sample ID:** | P17NB12-4'-8' | | |
| **Lab Sample ID:** | JA27176-28 | **Date Sampled:** | 09/03/09 |
| **Matrix:** | SO - Soil | **Date Received:** | 09/03/09 |
| **Method:** | SW846 8270C SW846 3550B | **Percent Solids:** | 98.0 |
| **Project:** | NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY | | |

**ABN TCL List (CLP4.2 list)**

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 321-60-8 | 2-Fluorobiphenyl | 78% | | 38-107% |
| 1718-51-0 | Terphenyl-d14 | 69% | | 31-116% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB12-4'-8'
**Lab Sample ID:** JA27176-28 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8081A SW846 3545 **Percent Solids:** 98.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | XX89449.D | 1 | 09/12/09 | OPM | 09/10/09 | OP39852 | GXX3580 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**Pesticide TCL List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 309-00-2 | Aldrin | ND | 1.2 | 0.53 | ug/kg | |
| 319-84-6 | alpha-BHC | ND | 1.2 | 0.36 | ug/kg | |
| 319-85-7 | beta-BHC | ND | 1.2 | 0.57 | ug/kg | |
| 319-86-8 | delta-BHC | ND | 1.2 | 0.32 | ug/kg | |
| 58-89-9 | gamma-BHC (Lindane) | ND | 1.2 | 0.36 | ug/kg | |
| 5103-71-9 | alpha-Chlordane | ND | 1.2 | 0.40 | ug/kg | |
| 5103-74-2 | gamma-Chlordane | ND | 1.2 | 0.46 | ug/kg | |
| 60-57-1 | Dieldrin | ND | 1.2 | 0.40 | ug/kg | |
| 72-54-8 | 4,4'-DDD | ND | 1.2 | 0.50 | ug/kg | |
| 72-55-9 | 4,4'-DDE | ND | 1.2 | 0.41 | ug/kg | |
| 50-29-3 | 4,4'-DDT | ND | 1.2 | 0.49 | ug/kg | |
| 72-20-8 | Endrin | ND | 1.2 | 0.41 | ug/kg | |
| 1031-07-8 | Endosulfan sulfate | ND | 1.2 | 0.45 | ug/kg | |
| 7421-93-4 | Endrin aldehyde | ND | 1.2 | 0.55 | ug/kg | |
| 959-98-8 | Endosulfan-I | ND | 1.2 | 0.40 | ug/kg | |
| 33213-65-9 | Endosulfan-II | ND | 1.2 | 0.45 | ug/kg | |
| 76-44-8 | Heptachlor | ND | 1.2 | 0.53 | ug/kg | |
| 1024-57-3 | Heptachlor epoxide | ND | 1.2 | 0.45 | ug/kg | |
| 72-43-5 | Methoxychlor | ND | 1.2 | 0.53 | ug/kg | |
| 53494-70-5 | Endrin ketone | ND | 1.2 | 0.42 | ug/kg | |
| 8001-35-2 | Toxaphene | ND | 15 | 14 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 63% | | 28-138% |
| 877-09-8 | Tetrachloro-m-xylene | 63% | | 28-138% |
| 2051-24-3 | Decachlorobiphenyl | 72% | | 22-156% |
| 2051-24-3 | Decachlorobiphenyl | 68% | | 22-156% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB12-4'-8'
**Lab Sample ID:** JA27176-28 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Method:** SW846 8082 SW846 3545 **Percent Solids:** 98.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | OA56749.D | 1 | 09/11/09 | TDR | 09/10/09 | OP39853 | GOA2049 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 17.3 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 29 | 11 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 29 | 19 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 29 | 9.5 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 29 | 11 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 29 | 5.9 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 29 | 7.4 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 29 | 11 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 55% | | 33-141% |
| 877-09-8 | Tetrachloro-m-xylene | 55% | | 33-141% |
| 2051-24-3 | Decachlorobiphenyl | 67% | | 32-154% |
| 2051-24-3 | Decachlorobiphenyl | 60% | | 32-154% |

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis



**Client Sample ID:** P17NB12-4'-8'
**Lab Sample ID:** JA27176-28 **Date Sampled:** 09/03/09
**Matrix:** SO - Soil **Date Received:** 09/03/09
**Percent Solids:** 98.0
**Project:** NWIRP, Steel Equities, Former Grumman Plant 3, Bethpage, NY

**Metals Analysis**

| Analyte | Result | RL | Units | DF | Prep | Analyzed | By | Method | Prep Method |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | < 2.0 | 2.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Arsenic | < 2.0 | 2.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Beryllium | < 0.51 | 0.51 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Cadmium | < 0.51 | 0.51 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Chromium | 5.5 | 1.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Copper | 5.3 | 2.5 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Lead | 3.0 | 2.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Mercury | < 0.033 | 0.033 | mg/kg | 1 | 09/15/09 | 09/16/09 | JW | SW846 7471A [2] | SW846 7471A [4] |
| Nickel | 7.4 | 4.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Selenium | < 2.0 | 2.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Silver | < 1.0 | 1.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Thallium | < 1.0 | 1.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |
| Zinc | 18.2 | 2.0 | mg/kg | 1 | 09/15/09 | 09/16/09 | ND | SW846 6010B [1] | SW846 3050B [3] |

(1) Instrument QC Batch: MA23117
(2) Instrument QC Batch: MA23121
(3) Prep QC Batch: MP49621
(4) Prep QC Batch: MP49635

RL = Reporting Limit

9
10
11
12
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