Kirk Wills
Environmental Planning Specialists
1936 Bruce B Downs Blvd
\#328
Wesley Chapel, FL 33543

## Laboratory Results for: JED SWDF

Dear Kirk:
Enclosed are the results of the samples) submitted to our laboratory on May 18, 2011. For your reference, these analyses have been assigned our service request number $\mathbf{J 1 1 0 2 1 9 8}$.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. This report shall not be reproduced except in full without written approval of the laboratory, as all results are intended to be considered in their entirity, and Columbia Analytical Services, Inc.
(CAS) cannot be held responsible for use of the less than the complete report.
Results apply only to the items submitted to the laboratory for analysis and individual items (samples)
Please contact me if you have any questions. My extension is 4409. You may also contact me via email at CMyers@caslab.com.

Respectfully submitted,
Columbia Analytical Services, Inc.


Craig Myers
Project Manager
Page 1 of $\qquad$

CAS Jacksonville is NELAC-accredited by the State of Florida, \#E82502. Other state accreditation include: Georgia, \#958; Kentucky, \#63; Louisiana, \#02086; North Carolina, \#527; South Carolina, \#96021001; Texas, \#T104704197-09-TX; Maine, \#2011006; DoD \#66206.

## Florida DEP Data Qualifiers

B Results based upon colony counts outside the acceptable range.
D Measurement was made in the field.

H Value based on field kit determination; results may not be accurate.
i The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J Estimated value (one of the following reasons is discussed in the project case narrative).

1. The result may be inaccurate because the surrogate recovery limits have been exceeded.
2. No known quality control criteria exists for the component.
3. The reported value failed to meet the established quality control criteria for either precision or accuracy.
4. The sample matrix interfered with the ability to make any accurate determination (e.g., primary and confirmation results show greater than $40 \% \mathrm{RPD}$ ).
5. The data is questionable because of improper laboratory or field protocols (e.g., GC/MS Tune did not meet method criteria).
$\mathrm{K} \quad$ Off scale low. The value is less than the lowest calibration standard but greater than the method reporting limit (MRL).

L Off scale high. The analyte is above the upper limit of the linear calibration range.
M The MDL/MRL has been elevated because the analyte could not be accurately quantified due to matrix interference.
$\mathrm{N} \quad$ Presumptive evidence of the analyte. Confirmation was not performed.
Q Sample held beyond the accepted holding time.
T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only.

U Indicates that the compound was analyzed for but not detected.
V Indicates that the analyte was detected in both the sample and the associated method blank.
Y The laboratory analysis was from an improperly preserved sample.
Z Too many colonies were present (TNTC). The numeric value represents the filtration volume.

## Acronyms

| ASTM | American Society for Testing and Materials |
| :---: | :---: |
| A 2 LA | American Association for Laboratory Accreditation |
| CARB | California Air Resources Board |
| CAS Number | Chemical Abstract Service registry Number |
| CFC | Chlorofluorocarbon |
| CFU | Colony-Forming Unit |
| DEC | Department of Environmental Conservation |
| DEQ | Department of Environmental Quality |
| DHS | Department of Health Services |
| DOE | Department of Ecology |
| DOH | Department of Health |
| EPA | U. S. Environmental Protection Agency |
| ELAP | Environmental Laboratory Accreditation Program |
| GC | Gas Chromatography |
| GC/MS | Gas Chromatography/Mass Spectrometry |
| LUFT | Leaking Underground Fuel Tank |
| M | Modified |
| MCL | Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA. |
| MDL | Method Detection Limit |
| MPN | Most Probable Number |
| MRL | Method Reporting Limit |
| NA | Not Applicable |
| NC | Not Calculated |
| NCASI | National Council of the Paper Industry for Air and Stream Improvement |
| ND | Not Detected |
| NIOSH | National Institute for Occupational Safety and Health |
| PQL | Practical Quantitation Limit |
| RCRA | Resource Conservation and Recovery Act |
| SIM | Selected Ion Monitoring |
| TPH | Totai Petroleum Hydrocarbons |
| tr | Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL. |

## SAMPLE CROSS-REFERENCE

| SAMPLE \# | CLIENT SAMPLE ID | DATE | TIME |
| :--- | :--- | :--- | :--- |
| J1102198-001 | MW-13A | $5 / 17 / 11$ | $08: 12$ |
| J1102198-002 | MW-13B | $5 / 17 / 11$ | $07: 45$ |
| J1102198-003 | MW-12A | $5 / 17 / 11$ | $11: 10$ |
| J1102198-004 | MW-12B | $5 / 17 / 11$ | $10: 15$ |
| J1102198-005 | MW-11A | $5 / 17 / 11$ | $13: 05$ |
| J1102198-006 | MW-11B | $5 / 17 / 11$ | $13: 25$ |
| J1102198-007 | MW-10A | $5 / 17 / 11$ | $15: 27$ |
| J1102198-008 | MW-10B | $5 / 17 / 11$ | $14: 50$ |
| J1102198-009 | Trip Blank | $5 / 17 / 11$ | $00: 00$ |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 |
| :---: | :---: | :---: |
| Project: | JED SWDF | Date Collected: 5/17/11 0812 |
| Sample Matrix: | Water | Date Received: 5/18/11 |
| Sample Name: <br> Lab Code: | $\begin{aligned} & \text { MW-13A } \\ & \text { J1102198-001 } \end{aligned}$ | Units: $\mu \mathrm{g} / \mathrm{L}$ <br> Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/27/1113:41 |  | 247970 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1. | NA | 5/27/11 13:41 |  | 247970 |  |
| Benzene | 1.28 |  | 1.00 | 0.210 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/27/11 13:41 |  | 247970 |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J 1102198 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | Water | Date Received: $5 / 118 / 11$ |
| Sample Name: | MW-13A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102198-001 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B Analysis Lot: 247970

| Analyte Name | Result Q | MRL | MDL | Dilution | Date <br> Factor | Date <br> Analyzed | Extraction Analysis <br> Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lot |  |  |  |  |  |  |  | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed$\quad \mathbf{Q}$ |  |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 95 | $68-118$ | $5 / 27 / 1113: 41$ |  |
| 4-Bromofluorobenzene | 105 | $78-129$ | $5 / 27 / 1113: 41$ |  |
| Dibromofluoromethane | 96 | $80-114$ | $5 / 27 / 1113: 41$ |  |
| Toluene-d8 | 103 | $87-118$ | $5 / 27 / 1113: 41$ |  |


| Client: | Environmental Planning Specialists | Service Request: J1102198 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | Water | Date Received: $5 / 18 / 110745$ |
| Sample Name: | MW-13B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102198-002 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247970

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/1114:11 |  | 247970 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/27/1114:11 |  | 247970 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/27/11 14:11 |  | 247970 |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: <br> Project: |
| :--- | :--- | ---: |
| JED SWDF | Date Collected: $5 / 17 / 1102198$ |  |
| Sample Matrix: | Water | Date Received: |
| Sample Name: | MW-13B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102198-002 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

|  | Result Q | MRL | MDL | Dilution | Date <br> Extracted | Date <br> Analyzed | Extraction Analysis <br> Lot | Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |  |  |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | $\mathbf{Q}$ |
| :--- | :---: | :---: | :---: | :---: |


| Client: | Environmental Planning Specialists | Service Request: J1102198 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | JED SWDF | Dater |
| Sample Name: | MW-12A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code $:$ | J1102198-003 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247970

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| 4-Methyl-2-pentanone (MİBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| Benzene | 2.69 |  | 1.00 | 0.210 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| cis-1,2-Dichloroethene | 0.610 | I | 1.00 | 0.360 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/27/11 14:41 |  | 247970 |  |

\(\left.$$
\begin{array}{llr}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: } \\
\text { Project: }\end{array} \\
\text { Jample Matrix: } & \text { Water } & \begin{array}{r}\text { Date Collected: } \\
\text { Date Received: }\end{array}
$$ <br>

Sa/17/11 \& 5 / 18 / 110\end{array}\right]\)| Sample Name: | MW-12A |
| :--- | :--- |

## Volatile Organic Compounds by GC/MS

| Analytical Method: 8260B |  |  |  |  | Analysis Lot: 247970 <br> Extraction <br> Analysis |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lot |  |  |  |  |  |$\quad$ Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed$\quad \mathbf{Q}$ |
| :--- | :---: | :---: | :---: | :---: | | \%-Dichloroethane-d4 | 95 | $68-118$ | $5 / 27 / 1114: 41$ |
| :--- | :---: | :---: | :---: |
| 4-Bromofluorobenzene | 113 | $78-129$ | $5 / 27 / 1114: 41$ |
| Dibromofluoromethane | 94 | $80-114$ | $5 / 27 / 1114: 41$ |
| Toluene-d8 | 95 | $87-118$ | $5 / 27 / 1114: 41$ |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: <br> Project: | JED SWDF |
| :--- | :--- | ---: | :--- |
| Dample Matrix: | Water | Date Received: $5 / 17 / 111015$ <br> Date Receis $5 / 18 / 11$ |  |
| Sample Name: | MW-12B | Units: | $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102198-004 | Basis: | NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247970

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/27/1115:10 |  | 247970 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/27/1115:10 |  | 247970 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/1115:10 |  | 247970 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/27/11 15:10 |  | 247970 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 |
| :---: | :---: | :---: |
| Project: | JED SWDF | Date Collected: 5/17/11 1015 |
| Sample Matrix: | Water | Date Received: 5/18/11 |
| Sample Name: | MW-12B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102198-004 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247970

|  | Result Q | MRL | MDL | Dilution | Date <br> Factor | Date <br> Extracted | Extraction Analysis |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lotyzed | Lot | Note |  |  |  |  |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed$\quad$ Q |  |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 93 | $68-118$ | $5 / 27 / 1115: 10$ |  |
| 4-Bromofluorobenzene | 110 | $78-129$ | $5 / 27 / 1115: 10$ |  |
| Dibromofluoromethane | 94 | $80-114$ | $5 / 27 / 1115: 10$ |  |
| Toiuene-d8 | 102 | $87-118$ | $5 / 27 / 1115: 10$ |  |


| Client: | Environmental Planning Specialists | Service Request: J1102198 |
| :---: | :---: | :---: |
| Project: | JED SWDF | Date Collected: 5/17/11 1305 |
| Sample Matrix: | Water | Date Received: 5/18/11 |
| Sample Name: | MW-11A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102198-005 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247970

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| 4-Miethyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/27/1115:40 |  | 247970 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| Benzene | 0.730 | I | 1.00 | 0.210 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| lodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/27/11 15:40 |  | 247970 |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J 1102198 <br> Project: |
| :--- | :--- | ---: |
| Date Collected: $5 / 17 / 11$ <br> Sample Matrix: Water | Date Received: <br> Sample Name: | MW-11A |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B Analysis Lot: 247970

|  | Result Q | MRL | MDL | Factor | Dilution <br> Extracted | Date <br> Analyzed | Extraction Analysis <br> Lot | Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Q |
| :--- | :---: | :---: | :---: | :---: |

$\left.\begin{array}{llr}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: } \\ \text { Project: } \\ \text { Sample Matrix: }\end{array} \\ \text { JED SWDF } & \text { Water } & \text { Date Received: } \\ \text { Sample Name: } & \text { MW-11B } & \text { Units: } \\ \text { Lab Code: } & \text { M1 } / 102111\end{array}\right]$

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

|  |  |  | Dilution | Date | Date | Extraction Analysis |
| :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lot |  |  |  |  |  |  | Note

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: <br> Project: |
| :--- | :--- | ---: |
| JED SWDF | Date Collected: | $5 / 17 / 111325$ |
| Sample Matrix: | Water | Date Received: $5 / 18 / 11$ |
| Sample Name: | MW-11B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102198-006 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247970

| Analyte Name | Result Q | MRL | MDL | Dilution | Date <br> Fatracted | Date <br> Analyzed | Extraction Analysis <br> Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lot | Note |  |  |  |  |  |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed$\quad$ Q |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 103 | $68-118$ | $5 / 27 / 1116: 10$ |
| 4-Bromofluorobenzene | 113 | $78-129$ | $5 / 27 / 1116: 10$ |
| Dibromofluoromethane | 102 | $80-114$ | $5 / 27 / 1116: 10$ |
| Toluene-d8 | 99 | $87-118$ | $5 / 27 / 1116: 10$ |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: <br> Project: | JED SWDF |
| :--- | :--- | ---: | :--- |
| Dample Matrix: | Water | Datlected: | $5 / 17 / 111527$ |
| Dample Name: | MW-10A | Units: | $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102198-007 | Basis: | NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247970

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| 4-Methyl-2-pentanone (MiBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| Benzene | 0.790 | I | 1.00 | 0.210 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |
| m,p-Xylenes | 0.760 | I | 2.00 | 0.310 | 1 | NA | 5/27/11 16:40 |  | 247970 |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 |
| :---: | :---: | :---: |
| Project: | JED SWDF | Date Collected: 5/17/11 1527 |
| Sample Matrix: | Water | Date Received: 5/18/11 |
| Sample Name: | MW-10A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102198-007 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result Q | MRL | MDL | Dilution | Date <br> Extracted | Date <br> Analyzed | Extraction Analysis <br> Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lot | Note |  |  |  |  |  |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed$\quad$ Q |  |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 107 | $68-118$ | $5 / 27 / 1116: 40$ |  |
| 4-Bromofluorobenzene | 114 | $78-129$ | $5 / 27 / 1116: 40$ |  |
| Dibromofluoromethane | 105 | $80-114$ | $5 / 27 / 1116: 40$ |  |
| Toluene-d8 | 98 | $87-118$ | $5 / 27 / 1116: 40$ |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J 1102198 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | WED SWDF | Dater |
| Sample Name: | MW-10B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102195-008 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247970

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/27/11 17:09 |  | 247970 |  |


| Client: | Environmental Planning Specialists | Service Request: J1102198 |
| :---: | :---: | :---: |
| Project: | JED SWDF | Date Collected: 5/17/11 1450 |
| Sample Matrix: | Water | Date Received: 5/18/11 |
| Sample Name: | MW-10B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102198-008 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B Analysis Lot: 247970

| Analyte Name | Result Q | MRL | MDL | Dilution | Date <br> Factor | Date <br> Extracted | Extraction Analysis <br> Analyzed |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Let | Lot | Note |  |  |  |  |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed Q |  |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 95 | $68-118$ | $5 / 27 / 1117: 09$ |  |
| 4-Bromofluorobenzene | 111 | $78-129$ | $5 / 27 / 1117: 09$ |  |
| Dibromofluoromethane | 97 | $80-114$ | $5 / 27 / 1117: 09$ |  |
| Toluene-d8 | 99 | $87-118$ | $5 / 27 / 1117: 09$ |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | JED SWDF | Water |
| Dample Name: | Trip Blank | Received: $5 / 18 / 11$ |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| 1,2-Dibromo-3-chíoropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/27/1117:39 |  | 247970 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/27/1117:39 |  | 247970 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/27/1117:39 |  | 247970 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/27/11 17:39 |  | 247970 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 |  |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $5 / 17 / 110000$ |
| Sample Matrix: | Water | Date Received: $5 / 18 / 11$ |  |
| Sample Name: | Trip Blank | Units: $\mu \mathrm{g} / \mathrm{L}$ |  |
| Lab Code: | J1102198-009 | Basis: NA |  |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B Analysis Lot: 247970

| Analyte Name | Result Q | MRL | MDL | Dilution | Date <br> Factor | DateExtraction Analysis <br> Lot | Note |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed$\quad$ Q |
| :--- | :---: | :---: | :---: | :---: |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report
\(\left.$$
\begin{array}{llr}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: J1102198 } \\
\text { Droject: }\end{array} \\
\begin{array}{ll}\text { Dample Collected: NA }\end{array}
$$ <br>

Satrix: \& Water \& Date Received: NA\end{array}\right]\)| Sample Name: | Method Blank |
| :--- | :--- |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/27/1113:11 |  | 247970 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |

\(\left.$$
\begin{array}{llr}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: J1102198 } \\
\text { Date Collected: NA }\end{array}
$$ <br>

Project: \& JED SWDF \& Date Received: NA\end{array}\right]\)| Sample Matrix: | Water |
| :--- | :--- |
| Sample Name: | Method Blank |
| Lab Code: | JQ1102964-02 |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B Analysis Lot: 247970

|  | Result Q | MRL | MDL | Dilution | Date <br> Factor | Date <br> Extracted | Extraction Analysis <br> Analyzed | Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed$\quad \mathbf{Q}$ |  |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 95 | $68-118$ | $5 / 27 / 1113: 11$ |  |
| 4-Bromofluorobenzene | 105 | $78-129$ | $5 / 27 / 1113: 11$ |  |
| Dibromofluoromethane | 93 | $80-114$ | $5 / 27 / 1113: 11$ |  |
| Toluene-d8 | 99 | $87-118$ | $5 / 27 / 1113: 11$ |  |


| Client: | Environmental Planning Specialists | Service Request: | J1102198 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 17 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 18 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

Sample Name: $\quad$ MW-13A

Extraction Method: METHOD
Units: ug/L
$\begin{array}{ll}\text { Sample Name: } & \text { MW-13A } \\ \text { Lab Code: } & \text { J1102198-001 }\end{array}$
Basis: NA
Level: Low

## Analysis Method: 8011

|  |  |  | Dilution |  |  |  |  | Date <br> Extracted |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Result $\mathbf{A}$ | MRL | MDL | Factor | Extraction |  |  |  |
| 1,2-Dibromoethane (EDB) | ND U | 0.021 | 0.00015 | 1 | $05 / 25 / 11$ | $05 / 26 / 11$ | JWG1101220 | Note |
| 1,2-Dibromo-3-chloropropane (DI | ND U | 0.021 | 0.00040 | 1 | $05 / 25 / 11$ | $05 / 26 / 11$ | JWG1101220 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 112 | $77-150$ | $05 / 26 / 11$ | Acceptable |

Comments:

| Client: | Environmental Planning Specialists | Service Request: | J1102198 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 17 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 18 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-13B | Units: ug/L |
| :--- | :--- | :---: |
| Lab Code: | J1102198-002 | Basis: |
| ExA |  |  |
| Extraction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


|  |  |  | Dilution | Date <br> Analyte Name | Result $\mathbf{Q}$ | MRL | MDL | Factor | Extracted |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyzed | Extraction |  |  |  |  |  |  |  |  |
| Lot | Note |  |  |  |  |  |  |  |  |
| 1,2-Dibromoethane (EDB) | ND U | 0.021 | 0.00015 | 1 | $05 / 25 / 11$ | $05 / 26 / 11$ | JWG1101220 |  |  |
| 1,2-Dibromo-3-chloropropane (DI | ND U | 0.021 | 0.00039 | 1 | $05 / 25 / 11$ | $05 / 26 / 11$ | JWG1101220 |  |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 103 | $77-150$ | $05 / 26 / 11$ | Acceptable |

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | J1102198 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 17 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 18 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-12A | Units: ug/L |
| :--- | :--- | :---: |
| Lab Code: | J1102198-003 | Basis: |
| ExA |  |  |
| Extraction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dibromoethane (EDB) | ND | U | 0.021 | 0.00015 | 1 | 05/25/11 | 05/26/11 | JWG1101220 |  |
| 1,2-Dibromo-3-chloropropane (DF | ND | U | 0.021 | 0.00040 | 1 | 05/25/11 | 05/26/11 | JWG1101220 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 105 | $77-150$ | $05 / 26 / 11$ | Acceptable |

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | J1102198 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 17 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 18 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-12B | Units: ug/L |
| :--- | :--- | :--- |
| Lab Code: | J1102198-004 | Basis: NA |
| Extraction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


|  |  |  | Dilution | Date <br> Analyte Name | Result Q | MRL | MDL | Factor |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Extracted | Analyzed |
| :---: | | Extraction |
| :---: |
| Lot | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2$-Tetrachloroethane | 98 | $77-150$ | $05 / 26 / 11$ | Acceptable |


| Client: | Environmental Planning Specialists | Service Request: | J 1102198 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 17 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 18 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-11A | Units: $\mathrm{ug} / \mathrm{L}$ |
| :--- | :--- | :---: |
| Lab Code: | $\mathrm{J} 1102198-005$ | Basis: |
| Extraction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


|  |  |  | Dilution | Date <br> Analyte Name | Result $\mathbf{Q}$ | MRL | MDL | Date |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Factor | Extracted | Analyzed | Lot | Note |  |  |  |  |
| 1,2-Dibromoethane (EDB) | ND U | 0.021 | 0.00015 | 1 | $05 / 25 / 11$ | $05 / 26 / 11$ | JWG1101220 |  |
| 1,2-Dibromo-3-chloropropane (DI | ND U | 0.021 | 0.00039 | 1 | $05 / 25 / 11$ | $05 / 26 / 11$ | JWG1101220 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2$-Tetrachloroethane | 111 | $77-150$ | $05 / 26 / 11$ | Acceptable |

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | J1102198 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 17 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 18 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-11B | Units: $\mathrm{ug} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | J1102198-006 | Basis: |
| ExA |  |  |
| Extraction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


|  |  |  |  | Dilution | Date <br> Analyte Name | Result Q | MRL | MDL |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Factor | Date | Extraction |  |  |  |  |  |  |
| Extracted | Analyzed | Lot | Note |  |  |  |  |  |
| 1,2-Dibromoethane (EDB) | ND U | 0.021 | 0.00015 | 1 | $05 / 25 / 11$ | $05 / 26 / 11$ | JWG1101220 |  |
| 1,2-Dibromo-3-chloropropane (DI | ND U | 0.021 | 0.00039 | 1 | $05 / 25 / 11$ | $05 / 26 / 11$ | JWG1101220 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :--- |
| $1,1,1,2-$ Tetrachloroethane | 108 | $77=150$ | $05 / 26 / 11$ | Acceptable |

Comments:

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | J1102198 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 17 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 18 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-10A | Units: ug/L |
| :--- | :--- | :--- |
| Lab Code: | J1102198-007 | Basis: NA |
| Extraction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


|  |  |  | Dilution | Date <br> Analyte Name | Result Q | MRL | MDL | Factor |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | | Date |
| :---: |
| Extracted | Analyzed | Extraction |
| :---: |
| Lot | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 114 | $77-150$ | $05 / 27 / 11$ | Acceptable |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | J1102198 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 17 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 18 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-10B | Units: $\mathrm{ug} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | J1102198-008 | Basis: |
| ExA |  |  |
| Exaction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


|  |  |  | Dilution | Date <br> Añalyte Name | Result Q | MRL | MDL | Factor |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Extracted | Dnalyzed |
| :---: | | Extraction |
| :---: |
| Lot | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 95 | $77-150$ | $05 / 27 / 11$ | Acceptable |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: J1102198 |  |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | NA |
| Sample Matrix: | Water | Date Received: | NA |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | Method Blank | Units: ug/L |
| :--- | :--- | :--- |
| Lab Code: | JWG1101220-4 | Basis: NA |
| Extraction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


|  |  |  | Dilution | Date <br> Analyte Name | Result Q | MRL | MDL | Factor |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | | Date |
| :---: |
| Extracted | Analyzed | Extraction |
| :---: |
| Lot | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 103 | $77-150$ | $05 / 26 / 11$ | Acceptable |

Comments:

| Client: | Environmental Planning Specialists |
| :--- | :--- |
| Project: | JED SWDF |
| Sample Matrix: | Water |
| Sample Name: | MW-13A |
| Lab Code: | J1102198-001 |

Service Request: J1102198
Date Collected: 5/17/11 0812
Date Received: 5/18/11

Basis: NA

## Inorganic Parameters

| Dilation | Date |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date |  |  |  |  |
| Analyzed | Note |  |  |  |


| Client: | Environmental Planning Specialists | Service Request: J1102198 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | Water | Date Received: |
| Sample Name: | MW-13B |  |
| Sampl11 |  |  |
| Lab Code: | J1102198-002 | Basis: NA |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | 0.3 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/19/11 | 5/24/11 18:50 |  |
| Arsenic, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/19/11 | 5/24/11 18:50 |  |
| Barium, Total Recoverable | 6020 | 16.6 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/19/11 | 5/24/1118:50 |  |
| Beryllium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/19/11 | 5/24/11 18:50 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/19/11 | 5/24/11 18:50 |  |
| Chromium, Total Recoverable | 6020 | 1.1 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/19/11 | 5/24/11 18:50 |  |
| Cobalt, Total Recoverable | 6020 | 0.2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/19/11 | 5/24/11 18:50 |  |
| Copper, Total Recoverable | 6020 | 3.8 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/19/11 | 5/24/11 18:50 |  |
| Iron, Total Recoverable | 6010B | 1110 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/24/11 | 5/27/11 19:54 |  |
| Lead, Total Recoverable | 6020 | 1.4 |  | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/19/11 | 5/24/11 18:50 |  |
| Mercury, Total | 7470A | 0.19 | I | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/24/11 | 5/24/11 16:49 |  |
| Nickel, Total Recoverable | 6020 | 4.3 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/19/11 | 5/24/11 18:50 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/19/11 | 5/24/11 18:50 |  |
| Silver, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/19/11 | 5/24/11 18:50 |  |
| Sodium, Total Recoverable | 6010B | 8.76 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/24/11 | 5/27/11 19:54 |  |
| Thallium, Total Recoverable | 6020 | 0.2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | , | 5/19/11 | 5/24/11 18:50 |  |
| Vanadium, Total Recoverable | 6020 | 1.1 | I | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/19/11 | 5/24/11 18:50 |  |
| Zinc, Total Recoverable | 6020 | 4 | I | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/19/11 | 5/24/11 18:50 |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | WED SWDF | Dater Received: $5 / 18 / 111110$ |
| Sample Name: | MW-12A | Basis: NA |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/19/11 | 5/24/11 18:55 |  |
| Arsenic, Total Recoverable | 6020 | 5.27 |  | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/19/11 | 5/24/1118:55 |  |
| Barium, Total Recoverable | 6020 | 15.4 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/19/11 | 5/24/11 18:55 |  |
| Beryllium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/19/11 | 5/24/11 18:55 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/19/11 | 5/24/1118:55 |  |
| Chromium, Total Recoverable | 6020 | 2.0 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/19/11 | 5/24/11 18:55 |  |
| Cobalt, Total Recoverable | 6020 | 1.2 |  | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/19/11 | 5/24/11 18:55 |  |
| Copper, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/19/11 | 5/24/11 18:55 |  |
| Iron, Total Recoverable | 6010B | 29000 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/24/11 | 5/27/11 19:58 |  |
| Lead, Total Recoverable | 6020 | 0.6 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/19/11 | 5/24/11 18:55 |  |
| Mercury, Totai | 7470A |  | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/24/11 | 5/24/1116:50 |  |
| Nickel, Total Recoverable | 6020 | 1.5 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/19/11 | 5/24/11 18:55 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/19/11 | 5/24/11 18:55 |  |
| Silver, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/19/11 | 5/24/11 18:55 |  |
| Sodium, Total Recoverable | 6010B | 10.7 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/24/11 | 5/27/11 19:58 |  |
| Thallium, Total Recoverable | 6020 | 0.05 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/19/11 | 5/24/11 18:55 |  |
| Vanadium, Total Recoverable | 6020 | 2.0 | I | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/19/11 | 5/24/11 18:55 |  |
| Zinc, Total Recoverable | 6020 | 1 | I | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/19/11 | 5/24/11 18:55 |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | JED SWDF | Dater |
| Dample Name: | MW-12B |  |
| Lab Code: | J1102198-004 | Basis: NA |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/19/11 | 5/24/11 19:01 |  |
| Arsenic, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/19/11 | 5/24/11 19:01 |  |
| Barium, Total Recoverable | 6020 | 32.3 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/19/11 | 5/24/11 19:01 |  |
| Beryllium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/19/11 | 5/24/11 19:01 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/19/11 | 5/24/11 19:01 |  |
| Chromium, Total Recoverable | 6020 | 1.2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/19/11 | 5/24/11 19:01 |  |
| Cobalt, Total Recoverable | 6020 | 0.2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/19/11 | 5/24/11 19:01 |  |
| Copper, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/19/11 | 5/24/11 19:01 |  |
| Iron, Total Recoverable | 6010B | 1180 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/24/11 | 5/27/11 20:04 |  |
| Lead, Total Recoverable | 6020 | 0.2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/19/11 | 5/24/11 19:01 |  |
| Mercury, Total | 7470A | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/24/11 | 5/24/1 $116: 52$ |  |
| Nickel, Total Recoverable | 6020 | 0.7 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/19/11 | 5/24/11 19:01 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/19/11 | 5/24/11 19:01 |  |
| Silver, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/19/11 | 5/24/11 19:01 |  |
| Sodium, Total Recoverable | 6010B | 7.80 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/24/11 | 5/27/11 20:03 |  |
| Thallium, Total Recoverable | 6020 | 0.06 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/19/11 | 5/24/11 19:01 |  |
| Vanadium, Total Recoverable | 6020 | 0.7 | I | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/19/11 | 5/24/11 19:01 |  |
| Zinc, Total Recoverable | 6020 | 11 |  | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/19/11 | 5/24/11 19:01 |  |


| Client: | Environmental Planning Specialists | Service Request: J1102198 <br> Droject: |
| :--- | :--- | :--- |
| JED SWDF Collected: | $5 / 17 / 111305$ |  |
| Sample Matrix: | Water | Date Received: 5/18/11 |
| Sample Name: | MW-11A | Basis: NA |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution <br> Factor | Date <br> Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/19/11 | 5/24/11 19:06 |  |
| Arsenic, Total Recoverable | 6020 | 4.37 |  | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/19/11 | 5/24/11 19:06 |  |
| Barium, Total Recoverable | 6020 | 11.3 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/19/11 | 5/24/11 19:06 |  |
| Beryllium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/19/11 | 5/24/11 19:06 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/19/11 | 5/24/1119:06 |  |
| Chromium, Total Recoverable | 6020 | 3.1 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/19/11 | 5/24/11 19:06 |  |
| Cobalt, Total Recoverable | 6020 | 0.3 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/19/11 | 5/24/11 19:06 |  |
| Copper, Total Recoverable | 6020 | 2.5 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/19/11 | 5/24/11 19:06 |  |
| Iron, Total Recoverable | 6010B | 2170 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/24/11 | 5/27/11 20:08 |  |
| Lead, Total Recoverable | 6020 | 1.0 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/19/11 | 5/24/11 19:06 |  |
| Mercury, Total | 7470A | 0.21 |  | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/24/11 | 5/24/11 16:59 |  |
| Nickel, Total Recoverable | 6020 | 1.0 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/19/11 | 5/24/11 19:06 |  |
| Selenium, Total Recoverable | 6020 | 3.3 | I | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/19/11 | 5/24/11 19:06 |  |
| Silver, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/19/11 | 5/24/11 19:06 |  |
| Sodium, Total Recoverable | 6010B | 30.2 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/24/11 | 5/27/11 20:08 |  |
| Thallium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/19/11 | 5/24/11 19:06 |  |
| Vanadium, Total Recoverable | 6020 | 5.8 |  | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/19/11 | 5/24/11 19:06 |  |
| Zinc, Total Recoverable | 6020 | 2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/19/11 | 5/24/11 19:06 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: <br> Project: |
| :--- | :--- | ---: |
| JED SWDF | Date Collected: | $5 / 17 / 111325$ |
| Sample Matrix: | Water | Date Received: $5 / 18 / 11$ |
| Sample Name: | MW-11B | Basis: NA |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/19/11 | 5/24/11 19:11 |  |
| Arsenic, Total Recoverable | 6020 | 1.13 |  | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/19/11 | 5/24/11 19:11 |  |
| Barium, Total Recoverable | 6020 | 16.8 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/19/11 | 5/24/11 19:11 |  |
| Beryllium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/19/11 | 5/24/11 19:11 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/19/11 | 5/24/11 19:11 |  |
| Chromium, Total Recoverable | 6020 | 1.7 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/19/11 | 5/24/11 19:11 |  |
| Cobalt, Total Recoverable | 6020 | 0.09 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/19/11 | 5/24/11 19:11 |  |
| Copper, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/19/11 | 5/24/11 19:11 |  |
| Iron, Total Recoverable | 6010B | 500 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/24/11 | 5/27/11 20:30 |  |
| Lead, Total Recoverable | 6020 | 0.4 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/19/11 | 5/24/11 19:11 |  |
| Mercury, Total | 7470A | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/24/11 | 5/24/11 17:03 |  |
| Nickel, Total Recoverable | 6020 | 0.2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/19/11 | 5/24/11 19:11 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/19/11 | 5/24/11 19:11 |  |
| Silver, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/19/11 | 5/24/11 19:11 |  |
| Sodium, Total Recoverable | 6010B | 11.8 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/24/11 | 5/27/11 20:29 |  |
| Thallium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/19/11 | 5/24/11 19:11 |  |
| Vanadium, Total Recoverable | 6020 | 2.9 | I | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/19/11 | 5/24/11 19:11 |  |
| Zinc, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/19/11 | 5/24/11 19:11 |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | WED SWDF | Dater |
| Sample Name: | MW-10A |  |
| Lab Code: | J1102198-007 | Basis: NA |

## Inorganic Parameters

| Date |  |  |  |  |  |  |  |
| :--- | :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Method | Result $\mathbf{Q}$ | Units | MRL | MDL | Dilution <br> Factor <br> Extracted | Date <br> Analyzed |
| Note |  |  |  |  |  |  |  |


|  | Analytical Report |  |
| :--- | :--- | ---: |
| Client: | Environmental Planning Specialists | Service Request: <br> Project: |
| JED SWDF | Date Collected: $5 / 17 / 111450$ |  |
| Sample Matrix: | Water | Date Received: $5 / 18 / 11$ |
| Sample Name: | MW-10B | Basis: NA |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/19/11 | 5/24/11 19:32 |  |
| Arsenic, Total Recoverable | 6020 | 0.85 |  | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/19/11 | 5/24/11 19:32 |  |
| Barium, Total Recoverable | 6020 | 71.1 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/19/11 | 5/24/1119:32 |  |
| Beryllium, Total Recoverable | 6020 | 0.2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/19/11 | 5/24/11 19:32 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/19/11 | 5/24/i $119: 32$ |  |
| Chromium, Total Recoverable | 6020 | 1.1 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/19/11 | 5/24/11 19:32 |  |
| Cobalt, Total Recoverable | 6020 | 2.4 |  | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/19/11 | 5/24/1119:32 |  |
| Copper, Total Recoverable | 6020 | 11.5 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/19/11 | 5/24/11 19:32 |  |
| Iron, Total Recoverable | 6010B | 3380 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/24/11 | 5/27/11 20:52 |  |
| Lead, Total Recoverable | 6020 | 1.1 |  | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/19/11 | 5/24/11 19:32 |  |
| Mercury, Total | 7470A | 0.02 | I | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/24/11 | 5/24/11 17:06 |  |
| Nickel, Total Recoverable | 6020 | 79.0 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/19/11 | 5/24/11 19:32 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/19/11 | 5/24/11 19:32 |  |
| Silver, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/19/11 | 5/24/11 19:32 |  |
| Sodium, Total Recoverable | 6010B | 35.9 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/24/11 | 5/27/11 20:52 |  |
| Thallium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/19/11 | 5/24/11 19:32 |  |
| Vanadium, Total Recoverable | 6020 | 4.0 | I | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/19/11 | 5/24/11 19:32 |  |
| Zinc, Total Recoverable | 6020 | 19 |  | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/19/11 | 5/24/11 19:32 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 <br> Date Collected: NA |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Received: NA |
| Sample Matrix: | Water |  |
| Sample Name: | Method Blank | Basis: NA |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution <br> Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/19/11 | 5/24/11 17:26 |  |
| Arsenic, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/19/11 | 5/24/11 17:26 |  |
| Barium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/19/11 | 5/24/1117:26 |  |
| Beryllium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/19/11 | 5/24/11 17:26 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/19/11 | 5/24/11 17:26 |  |
| Chromium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/19/11 | 5/24/11 17:26 |  |
| Cobalt, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/19/11 | 5/24/11 17:26 |  |
| Copper, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/19/11 | 5/24/11 17:26 |  |
| Iron, Total Recoverable | 6010B | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/24/11 | 5/27/1118:38 |  |
| Lead, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/19/11 | 5/24/1117:26 |  |
| Mercury, Total | 7470A | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/24/11 | 5/24/1116:38 |  |
| Nickel, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/19/11 | 5/24/11 17:26 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/19/11 | 5/24/1117:26 |  |
| Silver, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/19/11 | 5/24/11 17:26 |  |
| Sodium, Total Recoverable | 6010B | 0.11 | I | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/24/11 | 5/27/11 18:38 |  |
| Thallium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/19/11 | 5/24/11 17:26 |  |
| Vanadium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/19/11 | 5/24/11 17:26 |  |
| Zinc, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/19/11 | 5/24/11 17:26 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| JED SWDF | Date Received: $5 / 18 / 110812$ |  |
| Sample Matrix: | Water |  |
| Sample Name: | MW-13A | Basis: NA |

General Chemistry Parameters

|  |  |  |  | Dilution | Date | Date <br> Analyte Name | Method | Result $\mathbf{Q}$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J 1102198 <br> Date Collected: $5 / 17 / 110745$ <br> Project: |
| :--- | :--- | ---: |
| Jate Received: $5 / 18 / 11$ |  |  |

## General Chemistry Parameters

|  |  |  |  | Dilution <br> Date <br> Analyte Name | Method | Result $\mathbf{Q}$ | Units |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | MRL | DDLe |
| :---: |
| Factor Extracted |
| Analyzed |
| Note |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 <br> Date Collected: $5 / 17 / 111110$ <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | Water | Date Received: $5 / 18 / 11$ |
| Sample Name: | MW-12A |  |
| Lab Code: | J1102198-003 | Basis: NA |

## General Chemistry Parameters

|  |  |  |  | Dilution <br> Analyte Name | Method | Result | Q |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Dator | Units | MRL | MDL | Date <br> Analyzed |  |  |  |
| Note |  |  |  |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report
\(\left.$$
\begin{array}{lll}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: J1102198 } \\
\text { Date Collected: } \\
\text { Project: }\end{array}
$$ <br>
Sample Matrix: \& JED SWDF \& Water <br>

Date Received: \& 5 / 18 / 111015\end{array}\right]\)| Sample Name: |
| :--- |

## General Chemistry Parameters

| Analyte Name | Method | Result Q | Units | MRL | MDL | Dilution Factor | Date <br> Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ammonia as Nitrogen | 350.1 | 0.124 | $\mathrm{mg} / \mathrm{L}$ | 0.010 | 0.005 | 1 | NA | 5/23/11 11:28 |  |
| Chloride | 300.0 | 24.1 | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.10 | 1 | NA | 5/19/11 04:07 |  |
| Nitrate as Nitrogen | 300.0 | ND U | $\mathrm{mg} / \mathrm{L}$ | 0.20 | 0.04 | 1 | NA | 5/19/11 04:07 |  |
| Solids, Total Dissolved | SM 2540 C | 76 | $\mathrm{mg} / \mathrm{L}$ | 10 | 10 | 1 | NA | 5/20/11 09:12 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | WED SWDF |  |
| Dater Received: | $5 / 18 / 111305$ |  |
| Sample Name: | MW-11A | Basis: NA |

## General Chemistry Parameters

| Analyte Name | Method | Result $\mathbf{Q}$ | Units | MRL | MDL | Dilution <br> Factor Extracted | Date <br> Analyzed |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 <br> Project: |
| :--- | :--- | ---: |
| Date Collected: $5 / 17 / 111325$ <br> Sample Matrix: Water | Date Received: <br> Sample Name: | MW-11B B |

## General Chemistry Parameters

|  |  |  |  | Dilution <br> Date | Date <br> Analyzed |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: $J 1102198$ <br> Project: |
| :--- | :--- | ---: |
| JED SWDF Collected: | $5 / 17 / 111527$ |  |
| Sample Matrix: | Water | Date Received: $5 / 18 / 11$ |
| Sample Name: | MW-10A |  |
| Lab Code: | J1102198-007 | Basis: NA |

## General Chemistry Parameters

| Analyte Name | Method | Result Q | Units | MRL | MDL | Dilution Factor | Date <br> Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ammonia as Nitrogen | 350.1 | 7.21 | mg/L | 0.010 | 0.005 | 1 | NA | 5/23/1111:36 |  |
| Chloride | 300.0 | 10.5 | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.10 | 1 | NA | 5/19/11 05:22 |  |
| Nitrate as Nitrogen | 300.0 | ND U | $\mathrm{mg} / \mathrm{L}$ | 0.20 | 0.04 | 1 | NA | 5/19/11 05:22 |  |
| Solids, Total Dissolved | SM 2540 C | 157 | $\mathrm{mg} / \mathrm{L}$ | 10 | 10 | 1 | NA | 5/20/11 09:12 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

## Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 <br> Date Collected: $5 / 17 / 111450$ <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | Water | Date Received: $5 / 18 / 11$ |

## General Chemistry Parameters

| Analyte Name | Method | Result $\mathbf{Q}$ | Units | MRL | MDL | Dilution <br> Factor Extracted | Date <br> Analyzed |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report
\(\left.$$
\begin{array}{llr}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: J1102198 } \\
\text { Date Collected: NA }\end{array}
$$ <br>

Project: \& JED SWDF \& Date Received: NA\end{array}\right]\)| Sample Matrix: |
| :--- |
| Sample Name: |
| Lab Code: |

## General Chemistry Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution <br> Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ammonia as Nitrogen | 350.1 | ND | U | $\mathrm{mg} / \mathrm{L}$ | 0.010 | 0.005 | 1 | NA | 5/23/1110:56 |  |
| Chloride | 300.0 | ND | U | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.10 | 1 | NA | 5/18/11 23:08 |  |
| Nitrate as Nitrogen | 300.0 | ND | U | $\mathrm{mg} / \mathrm{L}$ | 0.20 | 0.04 | 1 | NA | 5/18/11 23:08 |  |
| Solids, Total Dissolved | SM 2540 C | ND | U | $\mathrm{mg} / \mathrm{L}$ | 10 | 10 | 1 | NA | 5/20/11 09:12 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 <br> Date Collected: NA |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Received: NA |
| Sample Matrix: | Water |  |
| Sample Name: Method Blank <br> Lab Code: J1102198-MB2 | Basis: NA |  |

General Chemistry Parameters

| Analyte Name | Method | Result $\mathbf{Q}$ | Units | MRL | MDL | Dilution <br> Factor Extracted | Date <br> Analyzed |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Note |  |  |  |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 |
| :--- | :--- | :--- |
| Project: | JED SWDF |  |
| Sample Matrix: | Water |  |

## Surrogate Recovery Summary Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Sample Name | Lab Code |  | Sur1 |  | Sur2 |
| :--- | :--- | :--- | :--- | :--- | ---: |
|  | Sur3 | Sur4 |  |  |  |
| MW-13A | J1102198-001 |  | 95 |  | 105 |
|  | 96 | 103 |  |  |  |
| MW-13B | J1102198-002 | 95 | 107 | 97 | 97 |
| MW-12A | J1102198-003 | 95 | 113 | 94 | 95 |
| MW-12B | J1102198-004 | 93 | 110 | 94 | 102 |
| MW-11A | J1102198-005 | 101 | 117 | 98 | 97 |
| MW-11B | J1102198-006 | 103 | 113 | 102 | 99 |
| MW-10A | J1102198-007 | 107 | 114 | 105 | 98 |
| MW-10B | J1102198-008 | 95 | 111 | 97 | 99 |
| Trip Blank | J1102198-009 | 101 | 114 | 99 | 97 |
| Method Blank | JQ1102964-02 | 95 | 105 | 93 | 99 |
| Lab Controi Sampie | JQ1102964-01 | 95 | 103 | 96 | 92 |

Surrogate Recovery Control Limits (\%)

| Sur1 | $=1,2$-Dichloroethane-d4 | $68-118$ |
| :--- | :--- | :--- |
| Sur2 $=4$-Bromofluorobenzene | $78-129$ |  |
| Sur3 $=$ Dibromofluoromethane | $80-114$ |  |
| Sur4 $=$ Toluene-d8 | $87-118$ |  |

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (\#) indicate the control criteria is not applicable.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $5 / 27 / 11$ |
| Sample Matrix: | Water |  |

## Lab Control Sample Summary <br> Volatile Organic Compounds by GC/MS

| Analytical Method: 8260 B | Units: $\mu \mathrm{g} / \mathrm{L}$ <br> Basis: |
| :--- | :--- |
|  | NA |



## Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 <br> Project: |
| :--- | :--- | ---: |
| JED SWDF | Date Analyzed: $5 / 27 / 11$ |  |

## Lab Control Sample Summary Volatile Organic Compounds by GC/MS

| Analytical Method: 8260 B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| :--- | ---: |
| Basis: | NA |



## Results flagged with an asterisk ( ${ }^{*}$ ) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

| Client: | Environmental Planning Specialists | Service Request: J1102198 |
| :--- | :--- | :--- |
| Project: | JED SWDF |  |
| Sample Matrix: | Water |  |

## Surrogate Recovery Summary <br> 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Extraction Method: | METHOD | Units: |
| :--- | :--- | :--- |
| Analysis Method: | 8011 | Level: |
| Low |  |  |


| Sample Name | Lab Code | Sur1 |
| :--- | :--- | ---: |
| Lab Control Sample | JWG1101220-3 | 104 |
| MW-13ADMS | JWG1101220-2 | 110 |
| MW-13AMS | JWG1101220-1 | 107 |
| Method Blank | JWG1101220-4 | 103 |
| MW-10B | J1102198-008 | 95 |
| MW-10A | J1102198-007 | 114 |
| MW-11B | J1102198-006 | 108 |
| MW-11A | J1102198-004 | 111 |
| MW-12B | J1102198-003 | 98 |
| MW-12A | J1102198-002 | 105 |
| MW-13B | J1102198-001 | 112 |

Surrogate Recovery Control Limits (\%)

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (\#) indicate the control criteria is not applicable.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: | J 1102198 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Extracted: | $05 / 25 / 2011$ |
| Sample Matrix: | Water | Date Analyzed: | $05 / 26 / 2011$ |

## Matrix Spike/Duplicate Matrix Spike Summary <br> 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-13A | Units: | ug/L |
| :--- | :--- | ---: | :--- |
| Lab Code: | J1102198-001 | Basis: | NA |
| Extraction Method: | METHOD | Level: | Low |
| Analysis Method: | 8011 | Extraction Lot: | JWG1101220 |


|  |  | MW-13AMS <br> JWG1101220-1 <br> Matrix Spike |  |  | MW-13ADMS <br> JWG1101220-2 <br> Duplicate Matrix Spike |  |  | \%Rec <br> Limits | RPD | RPD <br> Limit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Result | Result | Expected | \%Rec | Result | Expected | \%Rec |  |  |  |
| 1,2-Dibromoethane (EDB) | ND | 0.251 | 0.252 | 99 | 0.262 | 0.257 | 102 | 65-135 | 4 | 20 |
| 1,2-Dibromo-3-chloropropane (DBCP | ND | 0.253 | 0.252 | 100 | 0.265 | 0.257 | 103 | 65-135 | 5 | 20 |

[^0]Results flagged with a pound (\#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

# COLUMBIA ANALYTICAL SERVICES, INC. 

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: | J 1102198 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Extracted: | $05 / 25 / 2011$ |
| Sample Matrix: | Water | Date Analyzed: | $05 / 26 / 2011$ |

Lab Control Spike Summary 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Extraction Method: | METHOD | Units: | ug/L |
| :--- | :--- | ---: | :--- |
| Analysis Method: | 8011 | Basis: NA |  |
|  |  | Level: Low |  |


|  | Lab Control Sample |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| JWG1101220-3 |  |  |  |  |
|  | Lab Control Spike |  |  | \%Rec |
| Analyte Name | \%esult | Expected | \%Rec | Limits |
| 1,2-Dibromoethane (EDB) | 0.259 | 0.250 | 104 | $70-130$ |
| 1,2-Dibromo-3-chloropropane (DBCP | 0.233 | 0.250 | 93 | $70-130$ |

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 17 / 11$ |
| Sample Matrix: | Water | Date Received: $5 / 18 / 11$ |
|  |  | Date Analyzed: $5 / 24 / 11$ |


| Sample Name: | MW-13A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | $\mathrm{J} 1102198-001$ | Basis: NA |

Analytical Method: 6020
Prep Method: EPA 3020A

| Analyte Name | Sampie Result | $\begin{gathered} \text { MW-13AMS } \\ \text { Matrix Spike } \\ \text { J1102198-001MS1 } \end{gathered}$ |  |  | ```MW-13ADMS Duplicate Matrix Spike J1102198-001DMS1``` |  |  | \% Rec <br> Limits | RPD | RPD <br> Limit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Result | Spike Amount | \% Rec | Result | Spike Amount | \% Rec |  |  |  |
| Antimony, Total Recoverable | ND | 55.0 | 50.0 | 110 | 53.2 | 50.0 | 106 | 75-125 | 3 | 20 |
| Arsenic, Total Recoverable | 21.3 | 73.7 | 50.0 | 105 | 73.1 | 50.0 | 104 | 75-125 | $<1$ | 20 |
| Barium, Total Recoverable | 8.8 | 57.9 | 50.0 | 98 | 58.4 | 50.0 | 99 | 75-125 | <1 | 20 |
| Beryllium, Total Recoverable | ND | 46.2 | 50.0 | 92 | 52.3 | 50.0 | 105 | 75-125 | 12 | 20 |
| Cadmium, Total Recoverable | ND | 52.5 | 50.0 | 105 | 51.4 | 50.0 | 103 | 75-125 | 2 | 20 |
| Chromium, Total Recoverable | 3.3 | 52.9 | 50.0 | 99 | 52.6 | 50.0 | 99 | 75-125 | <1 | 20 |
| Cobalt, Total Recoverable | 0.5 | 50.0 | 50.0 | 99 | 49.5 | 50.0 | 98 | 75-125 | 1 | 20 |
| Copper, Total Recoverable | ND | 51.1 | 50.0 | 102 | 49.9 | 50.0 | 100 | 75-125 | 2 | 20 |
| Lead, Total Recoverable | ND | 50.4 | 50.0 | 101 | 50.1 | 50.0 | 100 | 75-125 | <1 | 20 |
| Nickel, Total Recoverable | 1.0 | 50.9 | 50.0 | 100 | 49.3 | 50.0 | 97 | 75-125 | 3 | 20 |
| Selenium, Total Recoverable | 2.0 | 46.8 | 50.0 | 90 | 47.5 | 50.0 | 91 | 75-125 | 2 | 20 |
| Silver, Total Recoverable | ND | 49.1 | 50.0 | 98 | 49.7 | 50.0 | 99 | 75-125 | 1 | 20 |
| Thallium, Total Recoverable | ND | 48.2 | 50.0 | 96 | 48.0 | 50.0 | 96 | 75-125 | $<1$ | 20 |
| Vanadium, Total Recoverable | 3.8 | 54.8 | 50.0 | 102 | 52.7 | 50.0 | 98 | 75-125 | 4 | 20 |
| Zinc, Total Recoverable | ND | 106 | 100 | 106 | 103 | 100 | 103 | 75-125 | 3 | 20 |

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (\#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J 1102198 <br> Project: | JED SWDF |
| :--- | :--- | ---: | :--- |
| Sample Matrix: | Water |  | Date Received: $5 / 17 / 11$ |
|  |  | Date Analyzed: $5 / 24 / 11$ |  |


| Sample Name: | MW-12B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | $\mathrm{J} 1102198-004$ | Basis: NA |

Analytical Method: 7470A
Prep Method: Method

| Analyte Name | Sample Result | $\begin{gathered} \text { MW-12BMS } \\ \text { Matrix Spike } \\ \text { J1 102198-004MS2 } \end{gathered}$ |  |  | ```MW-12BDMS Duplicate Matrix Spike J1102198-004DMS2``` |  |  | \% Rec <br> Limits | RPD | $\begin{aligned} & \text { RPD } \\ & \text { Limit } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Result | Spike Amount | \% Rec | Result | Spike Amount | \% Rec |  |  |  |
| Mercury, Total | ND | 5.23 | 5.00 | 105 | 5.30 | 5.00 | 106 | 75-125 | 1 | 20 |

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (\#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 <br> Project: |
| :--- | :--- | ---: |
| DED SWDF | Date Collected: $5 / 17 / 11$ |  |
| Sample Matrix: | Water | Date Received: $5 / 18 / 11$ |
|  |  | Date Analyzed: $5 / 27 / 11$ |


| Sample Name: | MW-11A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | $\mathrm{J} 1102198-005$ | Basis: NA |

Analytical Method: 6010B
Prep Method: EPA 3005A

|  |  | MW-11AMS Matrix Spike 1102198-005MS3 |  |  | MW-11ADMS <br> Duplicate Matrix Spike J1102198-005DMS3 |  |  | \% Rec Limits |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Sample Result | Result | Spike Amount | \% Rec | Result | Spike Amount | \% Rec |  | RPD | RPD <br> Limit |
| Iron, Total Recoverable | 2170 | 7120 | 5000 | 99 | 7150 | 5000 | 100 | 75-125 | $<1$ | 20 |

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (\#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J 1102198 <br> Project: | DED SWDF |
| :--- | :--- | ---: | :--- |
| Sample Matrix: | Water | Date Received: $5 / 17 / 11$ |  |
|  |  | Date Analyzed: $5 / 27 / 11$ |  |


| Sample Name: | MW-11A | Units: $\mathrm{mg} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | J1102198-005 | Basis: NA |

Analytical Method: 6010B
Prep Method: EPA 3005A

|  |  | MW-11AMS Matrix Spike J1102198-005MS3 |  |  | MW-11ADMS <br> Dupiicate Ī̄atrix Spike J1102198-005DMS3 |  |  | \% Rec <br> Limits |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Sample Result | Result | Spike Amount | \% Rec | Result | Spike Amount | \% Rec |  | RPD | RPD <br> Limit |
| Sodium, Total Recoverable | 30.2 | 60.8 | 25.0 | 123 | 60.7 | 25.0 | 122 | 75-125 | $<1$ | 20 |

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (\#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $5 / 24 / 11-$ |
| Sample Matrix: | Water | $5 / 27 / 11$ |

## Lab Control Sample Summary Inorganic Parameters

Units: $\mu \mathrm{g} / \mathrm{L}$
Basis: NA

| Lab Control Sample J1102198-LCS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Method | Result | Spike Amount | \% Rec | \% Rec <br> Limits |
| Antimony, Total Recoverable | 6020 | 52.7 | 50.0 | 105 | 80-120 |
| Arsenic, Total Recoverable | 6020 | 52.8 | 50.0 | 106 | 80-120 |
| Barium, Total Recoverable | 6020 | 50.3 | 50.0 | 101 | 80-120 |
| Beryllium, Total Recoverable | 6020 | 51.0 | 50.0 | 102 | 80-120 |
| Cadmium, Total Recoverable | 6020 | 52.3 | 50.0 | 105 | 80-120 |
| Chromium, Total Recoverable | 6020 | 49.9 | 50.0 | 100 | 80-120 |
| Cobalt, Total Recoverable | 6020 | 50.4 | 50.0 | 101 | 80-120 |
| Copper, Total Recoverable | 6020 | 50.7 | 50.0 | 101 | 80-120 |
| Iron, Total Recoverable | 6010B | 4990 | 5000 | 100 | 85-115 |
| Lead, Total Recoverable | 6020 | 49.6 | 50.0 | 99 | 80-120 |
| Mercury, Total | 7470A | 5.14 | 5.00 | 103 | 80-120 |
| Nickel, Total Recoverable | 6020 | 50.7 | 50.0 | 101 | 80-120 |
| Selenium, Total Recoverable | 6020 | 53.2 | 50.0 | 106 | 80-120 |
| Silver, Total Recoverable | 6020 | 49.6 | 50.0 | 99 | 80-120 |
| Thallium, Total Recoverable | 6020 | 48.3 | 50.0 | 97 | 80-120 |
| Vanadium, Total Recoverable | 6020 | 49.6 | 50.0 | 99 | 80-120 |
| Zinc, Total Recoverable | 6020 | 105 | 100 | 105 | 80-120 |

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.
QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $5 / 24 / 11-$ |
| Sample Matrix: | Water | $5 / 27 / 11$ |

## Lab Control Sample Summary <br> Inorganic Parameters

Units: mg/L
Basis: NA

|  |  | Lab <br> J1 | ontrol Sam $02198-\mathrm{LC}$ | mple is |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Spike |  | \% Rec |
| Analyte Name | Method | Result | Amount | \% Rec | Limits |
| Sodium, Total Recoverable | 6010B | 26.8 | 25.0 | 107 | 90-114 |

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 17 / 11$ |
| Sample Matrix: | Water | Date Received: $5 / 18 / 11$ |
|  |  | Date Analyzed: $5 / 19 / 11$ |

## Matrix Spike Summary General Chemistry Parameters

| Sample Name: | MW-13A | Units: $\mathrm{mg} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | J1102198-001 | Basis: NA |

Analytical Method: 300.0

|  | MW-13AMS <br> Matrix Spike <br> J1102198-001MS1 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Sample <br> Result | Result | Spike <br> Amount | \% Rec | \% Rec |
| Limits |  |  |  |  |  |

[^1]
## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: $J 1102198$ |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 17 / 11$ |
| Sample Matrix: | Water | Date Received: $5 / 18 / 11$ |
|  |  | Date Analyzed: $5 / 23 / 11$ |

## Matrix Spike Summary General Chemistry Parameters

| Sample Name: | MW-12B | Units: mg/L |
| :--- | :--- | :--- |
| Lab Code: | J1102198-004 | Basis: NA |

Analytical Method: 350.1

| Analyte Name | MW-12BMS <br> Matrix Spike J1102198-004MS2 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sample Result | Result | Spike Amount | \% Rec | \% Rec <br> Limits |
| Ammonia as Nitrogen | 0.124 | 1.08 | 1.00 | 96 | 90-110 |

[^2]
## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J 1102198 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 17 / 11$ |
| Sample Matrix: | Water | Date Received: $5 / 18 / 11$ |
|  |  | Date Analyzed: $5 / 19 / 11$ |

## Replicate Sample Summary General Chemistry Parameters

| Sample Name: | MW-13A | Units: mg/L |
| :--- | :--- | :--- |
| Lab Code: | J1102198-001 | Basis: NA |


| Analyte Name | Method | MRL | MDL |  |  |  |  | RPD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Result | Result | Average | RPD | Limit |
| Chloride | 300.0 | 0.50 | 0.10 | 11.4 | 11.5 | 11.4 | <1 | 20 |
| Nitrate as Nitrogen | 300.0 | 0.20 | 0.04 | ND U | ND U | NC | NC | 20 |

[^3]
## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: $J 1102198$ |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 17 / 11$ |
| Sample Matrix: | Water | Date Received: $5 / 18 / 11$ |
|  |  | Date Analyzed: $5 / 23 / 11$ |

## Replicate Sample Summary <br> General Chemistry Parameters

| Sample Name: | MW-12B | Units: $\mathrm{mg} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | $\mathrm{J} 1102198-004$ | Basis: NA |



[^4]
## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J 1102198 |  |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Analyzed: | $5 / 18 / 11-$ |
| Sample Matrix: | Water | $5 / 23 / 11$ |  |

## Lab Control Sample Summary <br> General Chemistry Parameters

Units: $\mathrm{mg} / \mathrm{L}$
Basis: NA

| Analyte Name | Method | Lab Control Sample J1102198-LCS 1 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Result | Spike Amount | $\% \operatorname{Rec}$ | \% Rec <br> Limits |
| Ammonia as Nitrogen | 350.1 | 0.980 | 1.00 | 98 | 90-110 |
| Chloride | 300.0 | 51.5 | 50.0 | 103 | 90-110 |
| Nitrate as Nitrogen | 300.0 | 4.92 | 5.00 | 98 | 90-110 |
| Solids, Total Dissolved | SM 2540 C | 285 | 300 | 95 | 85-115 |

[^5]
## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102198 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $5 / 23 / 11$ |
| Sample Matrix: | Water |  |

## Lab Control Sample Summary <br> General Chemistry Parameters

|  |  |  |  |  | Units: mg/L <br> Basis: NA |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Lab Control Sample J1102198-LCS2 |  |  |  |  |
| Analyte Name | Method | Result | Spike <br> Amount \% Rec | \% Rec <br> Limits |  |
| Ammonia as Nitrogen | 350.1 | 0.963 | 1.0096 | 90-110 |  |

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## Cooler Receipt Form

| Client: | EDS |
| :--- | :---: |
| Project: | JED SWDF |

Cooler received on $\qquad$
Service Request \#:
11102198

COURIER: CAS UPS FEDEX Client Other and opened on 5/18)/1 by by Sc Airbill \# 2 25 wo 98221000 3655
1 Were custody seals on outside of cooler?
If yes, how many and where?
2 Were seals intact and signature and date correct?
3 Were custody papers properly filled out?
4 Temperature of coolers) upon receipt (Should be $>0^{\circ} \mathrm{C}$ and $<6^{\circ} \mathrm{C}$ ) 4,3

| Yes) | No |  |
| :--- | :--- | :--- |
| $\#: L$ | other |  |
| res | No | NA |
| N | No | NA |

5 Thermometer ID
6 Temperature Blank Present?
7 Were Ice or Ice Packs present
8 Did all bottles arrive in good condition (unbroken, etc....)?
$9 \quad$ Type of packing material present
$T 13$
$\qquad$



10 Were all bottle labels complete (sample ID, preservation, etc....)?
11 Did all bottle labels and tags agree with custody papers?
12 Were the correct bottles used for the tests indicated?
13 Wereall of the preserved bottles received with the appropriate preservative?
HNO $8 \mathrm{pH}<2$ H2SO4 $\mathrm{pH}<2 \quad \mathrm{ZnAc} 2 / \mathrm{NaOH} \mathrm{pH}>9 \quad \mathrm{NaOH} \mathrm{pH}>12$
Preservative additions noted below
14 Were all samples received within analysis holding times?
15 Were all VOA vials free of air bubbles? If present, note below

| res | No | N/A |
| :--- | :--- | :--- |
| Yes | No | N/A |
| AS | Client |  |


| Sample ID | Reagent | Lot \# | ml added | Initials Date/Time |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Additional comments and/or explanation of all discrepancies noted above:


Kirk Wills
Environmental Planning Specialists
1936 Bruce B Downs Blvd
\#328
Wesley Chapel, FL 33543

## Laboratory Results for: JED SWDF

Dear Kirk:
Enclosed are the results of the sample(s) submitted to our laboratory on May 19, 2011. For your reference, these analyses have been assigned our service request number $\mathbf{J} 1102220$.
All analyses were performed according to our laboratory's quality assurance program. The test resuits meet requirements of the NELAP standards except as noted in the case narrative report. This report shall not be reproduced except in full without written approval of the laboratory, as all results are intended to be considered in their entirity, and Columbia Analytical Services, Inc.
(CAS) cannot be held responsible for use of the less than the complete report.
Results apply only to the items submitted to the laboratory for analysis and individual items (samples)
Please contact me if you have any questions. My extension is 4409. You may also contact me via email at CMyers@caslab.com.

Respectfully submitted,
Columbia Analytical Services, Inc.


Craig Myers
Project Manager
Page 1 of $\qquad$

CAS Jacksonville is NELAC-accredited by the State of Florida, \#E82502. Other state accreditations include: Georgia, \#958; Kentucky, \#63; Louisiana, \#02086; North Carolina, \#527; South Carolina, \#96021001; Texas, \#T104704197-09-TX; Maine, \#2011006; DoD \#66206.

## COLUMBIA ANALYTICAL SERVICES, INC.

| Client: | Environmental Planning Specialists | Service Request No.: | J1102220 |
| :--- | :--- | :--- | :--- |
| Project: | JED SWDF | Date Received: | $5 / 19 / 11$ |
| Sample Matrix: | Water |  |  |

## CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables, including results of QC samples analyzed from this delivery group. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

## Sample Receipt

Nine water samples and one trip blank were received for analysis at Columbia Analytical Services on 5/19/11. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at $\leq 6^{\circ} \mathrm{C}$ upon receipt at the lab except for aqueous samples designated for metals analyses, which were stored at room temperature.

## Volatile Organic Compounds by GC-MS

The samples were analyzed for Volatile Organics using EPA Method 8260. The following observations were made regarding this delivery group.

## Matrix Spike Summary Exceptions

The matrix spike recovery of 1,2-Dichlorobenzene, 1,2-Dichloropropane, and trans-1,4-Dichloro-2-butene for sample MW-8B were outside control criteria. Recoveries in the Laboratory Control Sample were acceptable, which indicates the analytical batch was in control. No further corrective action was appropriate.

## EDB and DBCP by GC-ECD

The samples were analyzed for EDB and DBCP using EPA Method 8011. No problems were observed.

## Metals by ICP-MS/ICP-OES/CVAA

The samples were analyzed for Total Metals using EPA Methods $6020 / 6010 \mathrm{~B} / 7470 \mathrm{~A}$. The following observations were made regarding this delivery group.

## Matrix Spike Recovery Exceptions

The matrix spike recovery of Sodium for sample MW-8A was outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The matrix spike outlier suggests a potential high bias in this matrix. No further corrective action was appropriate.

## General Chemistry Parameters

The samples were analyzed for Inorganic Parameters using various EPA and Standard Methods. No problems were observed.


## Florida DEP Data Qualifiers

B Results based upon colony counts outside the acceptable range.
D Measurement was made in the field.
H Value based on field kit determination; results may not be accurate.
i The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J Estimated value (one of the following reasons is discussed in the project case narrative).

1. The result may be inaccurate because the surrogate recovery limits have been exceeded.
2. No known quality control criteria exists for the component.
3. The reported value failed to meet the established quality control criteria for either precision or accuracy.
4. The sample matrix interfered with the ability to make any accurate determination (e.g., primary and confirmation results show greater than $40 \%$ RPD).
5. The data is questionable because of improper laboratory or field protocols (e.g., GC/MS Tune did not meet method criteria).

K Off scale low. The value is less than the lowest calibration standard but greater than the method reporting limit (MRL).

L Off scale high. The analyte is above the upper limit of the linear calibration range.
M . The MDL/MRL has been elevated because the analyte could not be accurately quantified due to matrix interference.
$\mathrm{N} \quad$ Presumptive evidence of the analyte. Confirmation was not performed.
Q Sample held beyond the accepted holding time.
T Vaiue reported is less than the laboratory method detection limit. The value is reported for informational purposes only.

U Indicates that the compound was analyzed for but not detected.
V Indicates that the analyte was detected in both the sample and the associated method blank.
Y The laboratory analysis was from an improperly preserved sample.
Z Too many colonies were present (TNTC). The numeric value represents the filtration volume.

## Acronyms

| ASTM | American Society for Testing and Materials |
| :---: | :---: |
| A 2 LA | American Association for Laboratory Accreditation |
| CARB | California Air Resources Board |
| CAS Number | Chemical Abstract Service registry Number |
| CFC | Chlorofluorocarbon |
| CFU | Colony-Forming Unit |
| DEC | Department of Environmental Conservation |
| DEQ | Department of Environmental Quality |
| DHS | Department of Health Services |
| DOE | Department of Ecology |
| DOH | Department of Health |
| EPA | U. S. Environmental Protection Agency |
| ELAP | Environmental Laboratory Accreditation Program |
| GC | Gas Chromatography |
| GC/MS | Gas Chromatography/Mass Spectrometry |
| LUFT | Leaking Underground Fuel Tank |
| M | Modified |
| MCL | Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA. |
| MDL | Method Detection Limit |
| MPN | Most Probable Number |
| MRL | Method Reporting Limit |
| NA | Not Applicable |
| NC | Not Calculated |
| NCASI | National Council of the Paper Industry for Air and Stream Improvement |
| ND | Not Detected |
| NIOSH | National Institute for Occupational Safety and Health |
| PQL | Practical Quantitation Limit |
| RCRA | Resource Conservation and Recovery Act |
| SIM | Selected Ion Monitoring |
| TPH | Total Petroleum Hydrocarbons |
| tr | Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL. |

## SAMPLE CROSS-REFERENCE

| SAMPLE \# | CLIENT SAMPLE ID | DATE | TIME |
| :--- | :--- | :--- | :--- |
| J1102220-001 | MW-9A | $5 / 18 / 11$ | $08: 25$ |
| J1102220-002 | MW-9B | $5 / 18 / 11$ | $07: 55$ |
| J1102220-003 | MW-8A | $5 / 18 / 11$ | $10: 17$ |
| J1102220-004 | MW-8B | $5 / 18 / 11$ | $10: 55$ |
| J1102220-005 | MW-7A | $5 / 18 / 11$ | $12: 55$ |
| J1102220-006 | MW-7B | $5 / 18 / 11$ | $12: 27$ |
| J1102220-007 | MW-6A | $5 / 18 / 11$ | $15: 00$ |
| J1102220-008 | MW-6B | $5 / 18 / 11$ | $14: 25$ |
| J1102220-009 | EB-1 | $5 / 18 / 11$ | $08: 40$ |
| J1102220-010 | Trip Blank | $5 / 18 / 11$ | $00: 00$ |


| Client: | Environmental Planning Specialists | Service Request: J 1102220 <br> Project: | JED SWDF |
| :--- | :--- | ---: | :--- |
| Sample Matrix: | Water | Date Received: $: 5 / 19 / 11$ |  |
| Sample Name: | MW-9A | Units: $\mu \mathrm{g} / \mathrm{L}$ |  |
| Lab Code: | J1102220-001 | Basis: NA |  |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247970

|  |  |  | Dilution | Date | Date | Extraction Analysis |
| :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lot |  |  |  |  |  |  | Note

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 <br> Date Collected: |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Received: $: 5 / 19 / 11$ |
| Sample Matrix: | Water | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Sample Name: | MW-9A | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247970

| Analyte Name | Result $\mathbf{Q}$ | MRL | MDL | Dilution | Dater <br> Extracted | Date <br> Analyzed | Extraction Analysis <br> Lot | Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Q |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 104 | $68-118$ | $5 / 27 / 1119: 39$ |  |
| 4-Bromofluorobenzene | 121 | $78-129$ | $5 / 27 / 1119: 39$ |  |
| Dibromofluoromethane | 98 | $80-114$ | $5 / 27 / 1119: 39$ |  |
| Toluene-d8 | 101 | $87-118$ | $5 / 27 / 1119: 39$ |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J 1102220 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | Water | Date Received: $5 / 19 / 110755$ |
| Sample Name: | MW-9B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102220-002 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date <br> Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/27/11 20:08 |  | 247970 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :---: | :---: | :---: |
| Project: | JED SWDF | Date Collected: 5/18/11 0755 |
| Sample Matrix: | Water | Date Received: 5/19/11 |
| Sample Name: | MW-9B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102220-002 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B Analysis Lot: 247970

|  | Result Q | MRL | MDL | Dilution | Factor | Date | Date <br> Extracted | Extraction Analysis <br> Analyzed <br> Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Note |  |  |  |  |  |  |  |
| Methylene Chloride | ND U | 5.00 | 0.210 | 1 | NA | $5 / 27 / 1120: 08$ | 247970 |  |
| o-Xylene | ND U | 1.00 | 0.140 | 1 | NA | $5 / 27 / 1120: 08$ | 247970 |  |
| Styrene | ND U | 1.00 | 0.290 | 1 | NA | $5 / 27 / 1120: 08$ | 247970 |  |
| Tetrachloroethene (PCE) | ND U | 1.00 | 0.220 | 1 | NA | $5 / 27 / 1120: 08$ | 247970 |  |
| Toluene | ND U | 1.00 | 0.190 | 1 | NA | $5 / 27 / 1120: 08$ | 247970 |  |
| trans-1,2-Dichloroethene | ND U | 1.00 | 0.190 | 1 | NA | $5 / 27 / 1120: 08$ | 247970 |  |
| trans-1,3-Dichloropropene | ND U | 1.00 | 0.230 | 1 | NA | $5 / 27 / 1120: 08$ | 247970 |  |
| trans-1,4-Dichloro-2-butene | ND U | 20.0 | 2.20 | 1 | NA | $5 / 27 / 1120: 08$ | 247970 |  |
| Trichloroethene (TCE) | ND U | 1.00 | 0.360 | 1 | NA | $5 / 27 / 1120: 08$ | 247970 |  |
| Trichlorofluoromethane | ND U | 20.0 | 0.240 | 1 | NA | $5 / 27 / 1120: 08$ | 247970 |  |
| Vinyl Acetate | ND U | 10.0 | 1.90 | 1 | NA | $5 / 27 / 1120: 08$ | 247970 |  |
| Vinyl Chloride | ND U | 1.00 | 0.360 | 1 | NA | $5 / 27 / 1120: 08$ | 247970 |  |


| Surrogate Name | \%Rec | Control Limits | Date Analyzed | Q |
| :---: | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 102 | 68-118 | 5/27/11 20:08 |  |
| 4-Bromofluorobenzene | 108 | 78-129 | 5/27/11 20:08 |  |
| Dibromofluoromethane | 99 | 80-114 | 5/27/11 20:08 |  |
| Toluene-d8 | 95 | 87-118 | 5/27/11 20:08 |  |


| Client: | Environmental Planning Specialists | Service Request: J1102220 <br> Droject: | JED SWDF |
| :--- | :--- | ---: | :--- |$\quad$| Date Collected: | $5 / 18 / 111017$ |
| ---: | :--- |
| Sample Matrix: | Water |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247970

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/27/1120:38 |  | 247970 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| Benzene | 1.00 |  | 1.00 | 0.210 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/27/11 $20: 38$ |  | 247970 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/27/11 20:38 |  | 247970 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | JED SWDF | Water |
| Date Received: | $5 / 19 / 11017$ |  |
| Sample Name: | MW-8A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102220-003 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247970

| Analyte Name | Result Q | MRL | MDL | Dilution | Date <br> Factor | Date | Extraction Analysis <br> Lot | Note |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Q |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 101 | $68-118$ | $5 / 27 / 1120: 38$ |  |
| 4-Bromofluorobenzene | 116 | $78-129$ | $5 / 27 / 1120: 38$ |  |
| Dibromofluoromethane | 100 | $80-114$ | $5 / 27 / 1120: 38$ |  |
| Toluene-d8 | 98 | $87-118$ | $5 / 27 / 1120: 38$ |  |


| Client: | Environmental Planning Specialists | Service Request: J 1102220 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| JED SWDF | Date Received: $5 / 19 / 11055$ |  |
| Sample Matrix: | Water | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Sample Name: | MW-8B | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247970

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/27/1121:08 |  | 247970 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/27/1121:08 |  | 247970 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/1121:08 |  | 247970 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/1121:08 |  | 247970 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | -1 | NA | 5/27/11 21:08 |  | 247970 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/27/1121:08 |  | 247970 |  |
| 2-Hexanone | ND | U | *25.0 | 2.20 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/27/1121:08 |  | 247970 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/27/11 21:08 |  | 247970 |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J 1102220 <br> Droject: |
| :--- | :--- | ---: |
| DED SWDF | Date Collected: $5 / 18 / 111055$ |  |
| Sample Matrix: | Water | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Sample Name: | MW-8B | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247970

|  | Result Q | MRL | MDL | Dilution | Date <br> Factor | Date Extraction Analysis |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lot |  |  |  |  |  |  | Note

$\left.\begin{array}{lcccc}\text { Surrogate Name } & \text { \%Rec } & \begin{array}{c}\text { Control } \\ \text { Limits }\end{array} & \begin{array}{c}\text { Date } \\ \text { Analyzed }\end{array} & \text { Q }\end{array}\right]$

| Client: | Environmental Planning Specialists | Service Request: J1102220 <br> Project: |
| :--- | :--- | ---: |
| DED SWDF | Date Collected: $5 / 18 / 111255$ |  |
| Sample Matrix: | Water | Date Received: $5 / 19 / 11$ |
| Sample Name: | MW-7A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102220-005 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B Analysis Lot: 247998

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| 1,2-Dibromo-3-chioropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/31/1113:30 |  | 247998 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/1113:30 |  | 247998 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/31/11 13:30 |  | 247998 |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J 1102220 <br> Droject: | JED SWDF |
| :--- | :--- | ---: | :--- |$\quad$| Date Received: $: 5 / 18 / 111255$ |
| ---: |
| Sample Matrix: |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247998

|  | Result Q | MRL | MDL | Dilution | Date <br> Fator | Date <br> Extracted | Extraction Analysis <br> Analyzed | Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Q |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 101 | $68-118$ | $5 / 31 / 1113: 30$ |  |
| 4-Bromofluorobenzene | 110 | $78-129$ | $5 / 31 / 1113: 30$ |  |
| Dibromofluoromethane | 102 | $80-114$ | $5 / 31 / 1113: 30$ |  |
| Toluene-d8 | 99 | $87-118$ | $5 / 31 / 1113: 30$ |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: <br> Project: |
| :--- | :--- | ---: |
| JED SWDF | Date Collected: $5 / 18 / 1112220$ |  |
| Sample Matrix: | Water | Date Received: $5 / 19 / 11$ |
| Sample Name: | MW-7B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102220-006 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247998

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/1113:59 |  | 247998 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/31/1113:59 |  | 247998 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/31/1113:59 |  | 247998 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/31/1113:59 |  | 247998 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/31/1113:59 |  | 247998 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/1113:59 |  | 247998 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/31/1113:59 |  | 247998 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/1113:59 |  | 247998 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 13:59 | \% | 247998 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/1113:59 |  | 247998 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/31/1113:59 |  | 247998 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/31/11 13:59 |  | 247998 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: <br> Project: |
| :--- | :--- | ---: |
| JED SWDF | Date Collected: | $5 / 18 / 1112222$ |
| Sample Matrix: | Water | Date Received: |
| Sample Name: | MW-7B | Units: $: \mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102220-006 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247998

|  |  |  | Dilution | Date <br> Analyte Name | Date <br> Analyzed | Extraction Analysis <br> Lot | Lot | Note |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | $\mathbf{Q}$ |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 101 | $68-118$ | $5 / 31 / 1113: 59$ |  |
| 4-Bromofluorobenzene | 112 | $78-129$ | $5 / 31 / 1113: 59$ |  |
| Dibromofluoromethane | 99 | $80-114$ | $5 / 31 / 1113: 59$ |  |
| Toluene-d8 | 100 | $87-118$ | $5 / 31 / 1113: 59$ |  |


| Client: | Environmental Planning Specialists | Service Request: J 1102220 <br> Project: |
| :--- | :--- | ---: |
| Date Collected: $5 / 18 / 11$ <br> Sample Matrix: Water <br> Date Received: $5 / 19 / 11$ |  |  |
| Sample Name: | MW-6A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102220-007 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution <br> Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/31/1114:29 |  | 247998 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/1114:29 |  | 247998 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/31/1114:29 |  | 247998 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | - 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| Benzene | 0.370 | I | 1.00 | 0.210 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/31/1114:29 |  | 247998 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/31/1114:29 |  | 247998 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/1114:29 |  | 247998 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/1114:29 |  | 247998 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/31/1114:29 |  | 247998 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/31/11 14:29 |  | 247998 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: <br> Project: <br> Sample Matrix: |
| :--- | :--- | ---: |
| JED SWDF | Water | Date Collected: <br> Date Received: $: 5 / 18 / 11$ <br> Sample Name: |
| MW-6A | Units: $\mu \mathrm{g} / \mathrm{L}$ |  |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247998

| Analyte Name | Result Q | MRL | MDL | Dilution | Date <br> Factor | Date <br> Extracted | Exalyzed | Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lot | Note |  |  |  |  |  |  |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Q |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 99 | $68-118$ | $5 / 31 / 1114: 29$ |  |
| 4-Bromofluorobenzene | 116 | $78-129$ | $5 / 31 / 1114: 29$ |  |
| Dibromofluoromethane | 99 | $80-114$ | $5 / 31 / 1114: 29$ |  |
| Toluene-d8 | 99 | $87-118$ | $5 / 31 / 1114: 29$ |  |


| Client: | Environmental Planning Specialists | Service Request: J1102220 <br> Project: |
| :--- | :--- | ---: |
| JED SWDF | Date Collected: $5 / 18 / 111425$ |  |
| Sample Matrix: | Water | Date Received: $5 / 19 / 11$ |
| Sample Name: | MW-6B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102220-008 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247998

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/31/1114:59 |  | 247998 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/31/1114:59 |  | 247998 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/1114:59 |  | 247998 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/1114:59 |  | 247998 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/31/1114:59 |  | 247998 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/1114:59 |  | 247998 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/31/1114:59 |  | 247998 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/1114:59 |  | 247998 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/31/1114:59 |  | 247998 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/31/1114:59 |  | 247998 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/1114:59 |  | 247998 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/31/11 14:59 |  | 247998 |  |


| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :---: | :---: | :---: |
| Project: | JED SWDF | Date Collected: 5/18/11 1425 |
| Sample Matrix: | Water | Date Received: 5/19/11 |
| Sample Name: | MW-6B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102220-008 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247998

|  | Result Q | MRL | MDL | Dilution | Date <br> Factor | Date | Extraction Analysis <br> Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Note |  |  |  |  |  |  |


| Surrogate Name |  | Control <br> Limits | Date <br> Analyzed$\quad$ Q |  |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 104 | $68-118$ | $5 / 31 / 1114: 59$ |  |
| 4-Bromofluorobenzene | 111 | $78-129$ | $5 / 31 / 1114: 59$ |  |
| Dibromofluoromethane | 100 | $80-114$ | $5 / 31 / 1114: 59$ |  |
| Toluene-d8 | 102 | $87-118$ | $5 / 31 / 1114: 59$ |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :---: | :---: | :---: |
| Project: | JED SWDF | Date Collected: 5/18/11 0840 |
| Sample Matrix: | Water | Date Received: 5/19/11 |
| Sample Name: | EB-1 | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102220-009 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

|  |  |  | Dilution | Date | Date <br> Analyzed | Extraction Analysis <br> Lot | Lot |
| :--- | :---: | :--- | :---: | :--- | :--- | :--- | :--- | :--- | Note


| Client: | Environmental Planning Specialists | Service Request: <br> Project: <br> Sample Matrix: |
| :--- | :--- | ---: |
| JED SWDF | Water | Date Collected: <br> Date Received: $: 5 / 18 / 110 / 11$ |
| Sample Name: | EB-1 | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | $\mathrm{J} 1102220-009$ | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247998

|  | Result Q | MRL | MDL | Dilution | Factor | Date <br> Extracted | Date <br> Analyzed | Extraction Analysis <br> Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lot | Note |  |  |  |  |  |  |  |


| Control | Date <br> Analyzed | Q |
| :--- | :---: | :---: | :---: | :---: |

## COLUMBIA ANALYTICAL SERVICES, INC.

| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :---: | :---: | :---: |
| Project: | JED SWDF | Date Collected: 5/18/11 0000 |
| Sample Matrix: | Water | Date Received: 5/19/11 |
| Sample Name: | Trip Blank | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102220-010 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247998

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| 1,2-Dibromocthane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/31/1112:00 |  | 247998 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/31/1112:00 |  | 247998 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/1.1 12:00 |  | 247998 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: $J 1102220$ |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 18 / 110000$ |
| Sample Matrix: | Water | Date Received: $5 / 19 / 11$ |
| Sample Name: | Trip Blank | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102220-010 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247998

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date <br> Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Methylene Chloride | ND | U | 5.00 | 0.210 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| o-Xylene | ND | U | 1.00 | 0.140 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Styrene | ND | U | 1.00 | 0.290 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Tetrachloroethene (PCE) | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Toluene | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| trans-1,2-Dichloroethene | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| trans-1,3-Dichloropropene | ND | U | 1.00 | 0.230 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| trans-1,4-Dichloro-2-butene | ND | U | 20.0 | 2.20 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Trichloroethene (TCE) | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Trichlorofluoromethane | ND | U | 20.0 | 0.240 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Vinyl Acetate | ND | U | 10.0 | 1.90 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |
| Vinyl Chloride | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 12:00 |  | 247998 |  |

\(\left.$$
\begin{array}{lcccc}\text { Surrogate Name } & \text { \%Rec } & \begin{array}{c}\text { Control } \\
\text { Limits }\end{array}
$$ \& \begin{array}{c}Date <br>

Analyzed\end{array} \& Q\end{array}\right]\)| \%-Dichloroethane-d4 | 98 | $68-118$ | $5 / 31 / 1112: 00$ |  |
| :--- | :---: | :---: | :---: | :---: |
| 4-Bromofluorobenzene | 110 | $78-129$ | $5 / 31 / 1112: 00$ |  |
| Dibromofluoromethane | 96 | $80-114$ | $5 / 31 / 1112: 00$ |  |
| Toluene-d8 | 94 | $87-118$ | $5 / 31 / 1112: 00$ |  |

\(\left.$$
\begin{array}{llrl}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: J1102220 } \\
\text { Date Collected: NA }\end{array}
$$ <br>

Project: \& JED SWDF \& Date Received: NA\end{array}\right]\)| Sample Matrix: | Water |
| :--- | :--- |
| Sample Name: | Method Blank |
| Lab Code: | JQ1102964-02 |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution <br> Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/27/1113:11 |  | 247970 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/27/1113:11 |  | 247970 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/27/11 13:11 |  | 247970 |  |


| Client: | Environmental Planning Specialists | Service Request: J1102220 <br> Droject: |
| :--- | :--- | ---: |
| JED SWDF | Date Collected: NA |  |
| Dample Matrix: | Water | Received: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B Analysis Lot: 247970

| Analyte Name | Result $\mathbf{Q}$ | MRL | MDL | Dilution | Date <br> Factor | Date | Extraction Analysis <br> Lot | Note |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Q |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 95 | $68-118$ | $5 / 27 / 1113: 11$ |  |
| 4-Bromofluorobenzene | 105 | $78-129$ | $5 / 27 / 1113: 11$ |  |
| Dibromofluoromethane | 93 | $80-114$ | $5 / 27 / 1113: 11$ |  |
| Toluene-d8 | 99 | $87-118$ | $5 / 27 / 1113: 11$ |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :---: | :---: | :---: |
| Project: | JED SWDF | Date Collected: NA |
| Sample Matrix: | Water | Date Received: NA |
| Sample Name: | Method Blank | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | JQ1102965-01 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/1111:00 |  | 247998 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/31/1111:00 |  | 247998 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/31/1111:00 |  | 247998 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/31/1111:00 |  | 247998 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/1111:00 |  | 247998 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/31/1111:00 |  | 247998 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/31/1111:00 |  | 247998 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/31/1111:00 |  | 247998 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/1111:00 |  | 247998 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/1111:00 | amax. | 247998 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/31/1111:00 | - 4 -7 | 247998 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/31/1111:00 |  | 247998 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/1111:00 |  | 247998 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/1111:00 |  | 247998 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/1111:00 |  | 247998 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/31/1111:00 |  | 247998 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/31/11 11:00 |  | 247998 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report
$\left.\begin{array}{llrl}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: } \\ \text { Project: }\end{array} & \text { JED SWDF } \\ \text { Dample Matrix: } & \text { Water } & \begin{array}{rl}\text { Datlected: } & \text { NA }\end{array} \\ \text { Dample Received: NA }\end{array}\right]$

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B Analysis Lot: 247998

| Analyte Name | Result Q | MRL | MDL | Dilution | Date <br> Factor | Date <br> Enalyzed | Extraction Analysis <br> Lot | Lot <br> Note |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Methylene Chloride | ND U | 5.00 | 0.210 | 1 | NA | $5 / 31 / 1111: 00$ | 247998 |  |
| o-Xylene | ND U | 1.00 | 0.140 | 1 | NA | $5 / 31 / 1111: 00$ | 247998 |  |
| Styrene | ND U | 1.00 | 0.290 | 1 | NA | $5 / 31 / 1111: 00$ | 247998 |  |
| Tetrachloroethene (PCE) | ND U | 1.00 | 0.220 | 1 | NA | $5 / 31 / 1111: 00$ | 247998 |  |
| Toluene | ND U | 1.00 | 0.190 | 1 | NA | $5 / 31 / 1111: 00$ | 247998 |  |
| trans-1,2-Dichloroethene | ND U | 1.00 | 0.190 | 1 | NA | $5 / 31 / 1111: 00$ | 247998 |  |
| trans-1,3-Dichloropropene | ND U | 1.00 | 0.230 | 1 | NA | $5 / 31 / 1111: 00$ | 247998 |  |
| trans-1,4-Dichloro-2-buten | ND U | 20.0 | 2.20 | 1 | NA | $5 / 31 / 1111: 00$ | 247998 |  |
| Trichloroethene (TCE) | ND U | 1.00 | 0.360 | 1 | NA | $5 / 31 / 1111: 00$ | 247998 |  |
| Trichlorofluoromethane | ND U | 20.0 | 0.240 | 1 | NA | $5 / 31 / 1111: 00$ | 247998 |  |
| Vinyl Acetate | ND U | 10.0 | 1.90 | 1 | NA | $5 / 31 / 1111: 00$ | 247998 |  |
| Vinyl Chloride | ND U | 1.00 | 0.360 | 1 | NA | $5 / 31 / 1111: 00$ | 247998 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed$\quad \mathbf{Q}$ |  |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 96 | $68-118$ | $5 / 31 / 1111: 00$ |  |
| 4-Bromofluorobenzene | 99 | $78-129$ | $5 / 31 / 1111: 00$ |  |
| Dibromofluoromethane | 96 | $80-114$ | $5 / 31 / 1111: 00$ |  |
| Toluene-d8 | 98 | $87-118$ | $5 / 31 / 1111: 00$ |  |


| Client: | Environmental Planning Specialists | Service Request: | $J 1102220$ |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 18 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 19 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-9A | Units: ug/L |
| :--- | :--- | :---: |
| Lab Code: | Jl102220-001 | Basis: |
| Extraction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


|  |  |  | Dilution | Date | Date | Extraction |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Result $\mathbf{Q}$ | MRL | MDL | Factor | Extracted | Analyzed | Lot | Note |
| 1,2-Dibromoethane (EDB) | ND U | 0.021 | 0.00015 | 1 | $05 / 25 / 11$ | $05 / 27 / 11$ | JWG1101220 |  |
| 1,2-Dibromo-3-chloropropane (DI | ND U | 0.021 | 0.00039 | 1 | $05 / 25 / 11$ | $05 / 27 / 11$ | JWG1101220 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2$-Tetrachloroethane | 110 | $77-150$ | $05 / 27 / 11$ | Acceptable |

Comments:

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | J1102220 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: $05 / 18 / 2011$ |  |
| Sample Matrix: | Water | Date Received: | $05 / 19 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-9B | Units: $\mathrm{ug} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | J1102220-002 | Basis: |
| ExA |  |  |
| Enaction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


| Analyte Name | Result Q | MRL | MDL | Dilution | Factor | Date <br> Extracted | Date <br> Analyzed | Extraction <br> Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dibromoethane (EDB) | ND U | 0.021 | 0.00015 | 1 | $05 / 25 / 11$ | $05 / 27 / 11$ | JWG1101220 |  |
| 1,2-Dibromo-3-chloropropane (DI | ND U | 0.021 | 0.00040 | 1 | $05 / 25 / 11$ | $05 / 27 / 11$ | JWG1101220 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 102 | $77-150$ | $05 / 27 / 11$ | Acceptable |

[^6]
## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | J1102220 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 18 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 19 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-8A | Units: |
| :--- | :--- | :---: |
| Lab Code: | J1102220-003 | Basis: |
| Extraction Method: | METHOD | Level: |
| Lnaw |  |  |
| Analysis Method: | 8011 |  |


|  |  |  |  | Dilution | Date | Date | Extraction |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Result $\mathbf{Q}$ | MRL | MDL | Factor | Extracted | Analyzed | Lot | Note |
| 1,2-Dibromothane (EDB) | ND U | 0.021 | 0.00015 | 1 | $05 / 25 / 11$ | $05 / 27 / 11$ | JWG1101220 |  |
| 1,2-Dibromo-3-chloropropane (DI | ND U | 0.021 | 0.00039 | 1 | $05 / 25 / 11$ | $05 / 27 / 11$ | JWG1101220 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 98 | $77-150$ | $05 / 27 / 11$ | Acceptable |

[^7]Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | J1102220 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 18 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 19 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-8B | Units: $\mathrm{ug} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | J1102220-004 | Basis: |
| Extraction Method: | METHOD | Level: |
| Low |  |  |
| Analysis Method: | 8011 |  |


| Analyte Name | Result Q | MRL | MDL | Dilution | Factor | Date <br> Extracted | Date <br> Analyzed | Extraction <br> Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |  |  |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2$-Tetrachloroethane | 100 | $77-150$ | $05 / 27 / 11$ | Acceptable |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | J 1102220 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 18 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 19 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-7A | Units: $\mathrm{ug} / \mathrm{L}$ |
| :--- | :--- | :---: |
| Lab Code: | J1102220-005 | Basis: |
| ExA |  |  |
| Extraction Method: | METHOD | Level: $:$ Low |
| Analysis Method: | 8011 |  |


| Analyte Name | Result $\mathbf{Q}$ | MRL | MDL | Dilution | Date | Date | Extraction |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Extracted | Analyzed | Lot | Note |  |  |  |  |
| 1,2-Dibromoethane (EDB) | ND U | 0.021 | 0.00015 | 1 | $05 / 25 / 11$ | $05 / 27 / 11$ | JWG1101220 |
| 1,2-Dibromo-3-chloropropane (DI | ND U | 0.021 | 0.00039 | 1 | $05 / 25 / 11$ | $05 / 27 / 11$ | JWG1101220 |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2$-Tetrachloroethane | 101 | $77=150$ | $05 / 27 / 11$ | Acceptable |

Comments:

| Client: | Environmental Planning Specialists | Service Request: | J1102220 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 18 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 19 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sampīe N̄ame: | MW-7B | Units: |
| :--- | :--- | :---: |
| Lab Code: | J1102220-006 | Basis: |
| ExA |  |  |
| Extraction Method: | METHOD | Level: $:$ Low |
| Analysis Method: | 8011 |  |


|  |  |  | Dilution | Date | Date Extraction |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Result $\mathbf{Q}$ | MRL | MDL | Factor | Extracted | Analyzed | Lot | Note |
| 1,2-Dibromoethane (EDB) | ND U | 0.020 | 0.00014 | 1 | $05 / 25 / 11$ | $05 / 27 / 11$ | JWG1101220 |  |
| 1,2-Dibromo-3-chloropropane (DI | ND U | 0.020 | 0.00038 | 1 | $05 / 25 / 11$ | $05 / 27 / 11$ | JWG1101220 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 100 | $77-150$ | $05 / 27 / 11$ | Acceptable |

Comments:

| Client: | Environmental Planning Specialists | Service Request: | J1102220 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 18 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 19 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-6A | Units: $\mathrm{ug} / \mathrm{L}$ |
| :--- | :--- | :---: |
| Lab Code: | J1102220-007 | Basis: |
| ExA |  |  |
| Extraction Method: | METHOD | Level: Low |

## Analysis Method: 8011

| Analyte Name | Result Q | MRL | MDL | Dilution | Factor | Date <br> Extracted | Date <br> Analyzed | Extraction <br> Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |  |  |  |
| 1,2-Dibromoethane (EDB) | ND U | 0.021 | 0.00015 | 1 | $05 / 25 / 11$ | $05 / 27 / 11$ | JWG1101220 |  |
| 1,2-Dibromo-3-chloropropane (DI | ND U | 0.021 | 0,00039 | 1 | $05 / 25 / 11$ | $05 / 27 / 11$ | JWG1101220 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2$-Tetrachloroethane | 107 | $77-150$ | $05 / 27 / 11$ | Acceptable |

Comments:

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | J1102220 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 18 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 19 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-6B | Units: |
| :--- | :--- | :--- |
| Lab Code: | J1102220-008 |  |
| Extraction Method: | METHOD | Basis: |


| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dibromoethane (EDB) | ND | U | 0.021 | 0.00015 | 1 | 05/25/11 | 05/27/11 | JWG1101220 |  |
| 1,2-Dibromo-3-chloropropane (DF | ND | U | 0.021 | 0.00039 | 1 | 05/25/11 | 05/27/11 | JWG1101220 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2$-Tetrachloroethane | 106 | $77-150$ | $05 / 27 / 11$ | Acceptable |

Comments:

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | J1102220 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: $05 / 18 / 2011$ |  |
| Sample Matrix: | Water | Date Received: | $05 / 19 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | EB-1 | Units: $\mathrm{ug} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | J1102220-009 | Basis: |
| NA |  |  |
| Extraction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


|  |  |  | Dilution | Date <br> Analyte Name | Result Q | MRL | MDL | Factor |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Extracted | Analyzed | Lotraction | Note |  |  |  |  |  |
| 1,2-Dibromoethane (EDB) | ND U | 0.021 | 0.00015 | 1 | $05 / 31 / 11$ | $05 / 31 / 11$ | JWG1101266 |  |
| 1,2-Dibromo-3-chloropropanc (DI | ND U | 0.021 | 0.00039 | 1 | $05 / 31 / 11$ | $05 / 31 / 11$ | JWG1101266 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2$-Tetrachloroethane | 105 | $77-150$ | $05 / 31 / 11$ | Acceptable |

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | J1102220 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | NA |
| Sample Matrix: | Water | Date Received: | NA |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | Method Blank | Units: $\mathrm{ug} / \mathrm{L}$ |
| :--- | :--- | :---: |
| Lab Code: | JWG1101220-4 | Basis: |
| Extraction Method: | METHOD | Level: |
| Low |  |  |
| Analysis Method: | 8011 |  |


| Analyte Name | Result | 0 | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dibromoethane (EDB) | ND | U | 0.020 | 0.00014 | 1 | 05/25/11 | 05/26/11 | JWG1101220 |  |
| 1,2-Dibromo-3-chloropropane (DI | ND | U | 0.020 | 0.00038 | 1 | 05/25/11 | 05/26/11 | JWG1101220 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 103 | $77-150$ | $05 / 26 / 11$ | Acceptable |

[^8]
## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | J1102220 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | NA |
| Sample Matrix: | Water | Date Received: | NA |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | Method Blank | Units: |
| :--- | :--- | :---: |
| Lab Code: | JWG1101266-3 | Basis: |
| Extraction Method: | METHOD | Level: |


| Analyte Name | Result Q | MRL | MDL | Dilution | Date <br> Extracted | Date <br> Analyzed | Extraction <br> Lot | Note |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dibromoethane (EDB) | ND U | 0.020 | 0.00014 | 1 | $05 / 31 / 11$ | $05 / 31 / 11$ | JWG1101266 |  |
| 1,2-Dibromo-3-chloropropane (DI | ND U | 0.020 | 0.00038 | 1 | $05 / 31 / 11$ | $05 / 31 / 11$ | JWG1101266 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2$-Tetrachloroethane | 113 | $77-150$ | $05 / 31 / 11$ | Acceptable |

Comments:
\(\left.$$
\begin{array}{llr}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: J1102220 } \\
\text { Date Collected: } \\
\text { Project: }\end{array}
$$ <br>

Sample Matrix: \& Water \& Date Received: 5 / 19 / 110825\end{array}\right]\)| Sample Name: |
| :--- |
| Lab Code: |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 14:32 |  |
| Arsenic, Total Recoverable | 6020 | 1.45 |  | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/26/11 | 5/31/11 14:32 |  |
| Barium, Total Recoverable | 6020 | 4.5 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/1114:32 |  |
| Beryllium, Total Recoverable | 6020 | 0.3 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/26/11 | 5/31/1114:32 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/26/11 | 5/31/1114:32 |  |
| Chromium, Total Recoverable | 6020 | 3.5 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/11 14:32 |  |
| Cobalt, Total Recoverable | 6020 | 0.5 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/26/11 | 5/31/11 14:32 |  |
| Copper, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/26/11 | 5/31/11 14:32 |  |
| Iron, Total Recoverable | 6010B | 1420 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/26/11 | 5/27/11 23:11 |  |
| Lead, Total Recoverable | 6020 | 0.1 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/26/11 | 5/31/11 14:32 |  |
| Mercury, Total | 7470A | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/27/11 | 5/27/1117:28 |  |
| Nickel, Total Recoverable | 6020 | 2.3 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 14:32 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/26/11 | 5/31/11 14:32 |  |
| Silver, Total Recoverable | 6020 | 0.17 | I | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/26/11 | 5/31/11 14:32 |  |
| Sodium, Total Recoverable | 6010B | 10.0 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/26/11 | 5/27/11 23:10 |  |
| Thallium, Total Recoverable | 6020 | 0.05 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/26/11 | 5/31/11 14:32 |  |
| Vanadium, Total Recoverable | 6020 | 3.8 | I | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/26/11 | 5/31/11 14:32 |  |
| Zinc, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/26/11 | 5/31/11 14:32 |  |


| Client: | Environmental Planning Specialists | Service Request: <br> Project: |
| :--- | :--- | ---: |
| Dample Collected: | $5 / 18 / 110220755$ |  |
| Datrix: | Water | Date Received: $5 / 19 / 11$ |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 14:37 |  |
| Arsenic, Total Recoverable | 6020 | 0.52 |  | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/26/11 | 5/31/11 14:37 |  |
| Barium, Total Recoverable | 6020 | 94.5 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/11 14:37 |  |
| Beryllium, Total Recoverable | 6020 | 0.5 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/26/11 | 5/31/11 14:37 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/26/11 | 5/31/11 14:37 |  |
| Chromium, Total Recoverable | 6020 | 0.9 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/11 14:37 |  |
| Cobalt, Total Recoverable | 6020 | 0.8 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/26/11 | 5/31/11 14:37 |  |
| Copper, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/26/11 | 5/31/11 14:37 |  |
| Iron, Total Recoverable | 6010B | 3340 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/26/11 | 5/27/11 23:15 |  |
| Lead, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/26/11 | 5/31/11 14:37 |  |
| Mercury, Total | 7470A | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/27/11 | 5/27/1117:33 |  |
| Nickel, Total Recoverable | 6020 | 0.6 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 14:37 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/26/11 | 5/31/11 14:37 |  |
| Silver, Total Recoverable | 6020 | 0.17 | I | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/26/11 | 5/31/1114:37 |  |
| Sodium, Total Recoverable | 6010B | 19.1 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/26/11 | 5/27/11 23:15 |  |
| Thallium, Total Recoverable | 6020 | 0.04 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/26/11 | 5/31/11 14:37 |  |
| Vanadium, Total Recoverable | 6020 | 1.0 | I | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/26/11 | 5/31/11 14:37 |  |
| Zinc, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/26/11 | 5/31/11 14:37 |  |


| Client: | Environmental Planning Specialists | Service Request: J 1102220 <br> Droject: | JED SWDF Collected: |
| :--- | :--- | ---: | :--- |
| Dample Matrix: | Water | Date Received: | $5 / 19 / 111017$ |
| Sample Name: | MW-8A |  |  |
| Lab Code: | J1102220-003 | Basis: NA |  |

## Inorganic Parameters

|  |  |  |  | Dilution | Date <br> Daty | Date <br> Analyzed |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Note |  |  |  |  |  |  |


| Client: | Environmental Planning Specialists | Service Request: J1102220 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | JED SWDF | Dater Received: $5 / 19 / 111055$ |
| Sample Name: | MW-8B |  |
| Lab Code: | J1102220-004 | Basis: NA |

## Inorganic Parameters

| Analyte Name |  |  |  | DilutionDate |  | Date <br> Dnalyzed |
| :--- | :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |  |


| Client: | Environmental Planning Specialists | Service Request: J1102220 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | JED SWDF | Water |
| Date Received: | $5 / 19 / 111255$ |  |
| Sample Name: | MW-7A |  |
| Lade: | J1102220-005 | Basis: NA |

## Inorganic Parameters

|  |  |  |  |  | Dilution | Date <br> Dactor <br> Extracted | Date <br> Analyzed |
| :--- | :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | JED SWDF | Dater |
| Dample Name: | MW-7B | Beceived: |
| Lab Code: | J1102220-006 | Basis: |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | 0.2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 15:30 |  |
| Arsenic, Total Recoverable | 6020 | 0.56 |  | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/26/11 | 5/31/11 15:30 |  |
| Barium, Total Recoverabie | 6020 | 58.1 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/1115:30 |  |
| Beryllium, Total Recoverable | 6020 | 0.4 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/26/11 | 5/31/11 15:30 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/26/11 | 5/31/11 15:30 |  |
| Chromium, Total Recoverable | 6020 | 0.7 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/11 15:30 |  |
| Cobalt, Total Recoverable | 6020 | 0.4 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/26/11 | 5/31/11 15:30 |  |
| Copper, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/26/11 | 5/31/11 15:30 |  |
| Iron, Total Recoverable | 6010B | 2410 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/26/11 | 5/28/11 00:17 |  |
| Lead, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/26/11 | 5/31/11 15:30 |  |
| Mercury, Total | 7470A | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/27/11 | 5/27/11 17:44 |  |
| Nickel, Total Recoverable | 6020 | 1.0 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 15:30 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/26/11 | 5/31/11 15:30 |  |
| Silver, Total Recoverable | 6020 | 0.18 | I | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/26/11 | 5/31/11 15:30 |  |
| Sodium, Total Recoverable | 6010B | 12.1 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/26/11 | 5/28/11 00:16 |  |
| Thallium, Total Recoverable | 6020 | 0.04 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/26/11 | 5/31/11 15:30 |  |
| Vanadium, Total Recoverable | 6020 | 0.7 | I | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/26/11 | 5/31/11 15:30 |  |
| Zinc, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/26/11 | 5/31/1115:30 |  |


| Client: | Environmental Planning Specialists |
| :--- | :--- |
| Project: | JED SWDF |
| Sample Matrix: | Water |
| Sample Name: | MW-6A |
| Lab Code: | J1102220-007 |

Service Request: J1102220
Date Collected: 5/18/11 1500
Date Received: 5/19/11

Basis: NA

Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 15:35 |  |
| Arsenic, Total Recoverable | 6020 | 0.91 |  | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/26/11 | 5/31/11 15:35 |  |
| Barium, Total Recoverable | 6020 | 20.8 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/1115:35 |  |
| Beryllium, Total Recoverable | 6020 | 0.4 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/26/11 | 5/31/11 15:35 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/26/11 | 5/31/1115:35 |  |
| Chromium, Total Recoverable | 6020 | 1.0 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/1115:35 |  |
| Cobalt, Total Recoverable | 6020 | 1.6 |  | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/26/11 | 5/31/11 15:35 |  |
| Copper, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/26/11 | 5/31/11 15:35 |  |
| Iron, Total Recoverable | 6010B | 27500 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/26/11 | 5/28/11 00:21 |  |
| Lead, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/26/11 | 5/31/11 15:35 |  |
| Mercury, Total | 7470A | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/27/11 | 5/27/1117:46 |  |
| Nickel, Total Recoverable | 6020 | 1.3 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/1115:35 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/26/11 | 5/31/11 15:35 |  |
| Silver, Total Recoverable | 6020 | 0.18 | I | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/26/11 | 5/31/1115:35 |  |
| Sodium, Total Recoverable | 6010B | 58.9 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/26/11 | 5/28/11 00:21 |  |
| Thallium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/26/11 | 5/31/11 15:35 |  |
| Vanadium, Total Recoverable | 6020 | 1.3 | I | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/26/11 | 5/31/11 15:35 |  |
| Zinc, Total Recoverable | 6020 | 1 | I | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/26/11 | 5/31/11 15:35 |  |

COLUMBIA ANALYTICAL SERVICES, INC.
Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Jample Matrix: | Water | Date Received: $5 / 1114 / 11$ |
| Sample Name: | MW-6B |  |
| Lab Code: | J1102220-008 | Basis: NA |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 15:40 |  |
| Arsenic, Total Recoverable | 6020 | 0.64 |  | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/26/11 | 5/31/11 15:40 |  |
| Barium, Total Recoverable | 6020 | 20.4 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/1115:40 |  |
| Beryllium, Total Recoverable | 6020 | 0.4 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/26/11 | 5/31/11 15:40 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/26/11 | 5/31/11 15:40 |  |
| Chromium, Total Recoverable | 6020 | 1.1 | 1 | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/11 15:40 |  |
| Cobalt, Total Recoverable | 6020 | 0.1 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/26/11 | 5/31/11 15:40 |  |
| Copper, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/26/11 | 5/31/11 15:40 |  |
| Iron, Total Recoverable | 6010B | 800 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/26/11 | 5/28/11 00:26 |  |
| Lead, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/26/11 | 5/31/11 15:40 |  |
| Mercury, Total | 7470A | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/27/11 | 5/27/11 17:50 |  |
| Nickel, Total Recoverable | 6020 | 0.6 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 15:40 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/26/11 | 5/31/11 15:40 |  |
| Silver, Total Recoverable | 6020 | 0.16 | I | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/26/11 | 5/31/11 15:40 |  |
| Sodium, Total Recoverable | 6010B | 5.84 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/26/11 | 5/28/11 00:25 |  |
| Thallium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/26/11 | 5/31/11 15:40 |  |
| Vanadium, Total Recoverable | 6020 | 1.4 | I | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/26/11 | 5/31/11 15:40 |  |
| Zinc, Total Recoverable | 6020 | 1 | I | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/26/11 | 5/31/11 15:40 |  |

\(\left.$$
\begin{array}{lll}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: J1102220 } \\
\text { Date Collected: } \\
\text { Project: }\end{array}
$$ <br>
Sample Matrix: \& JED SWDF \& Water <br>

Date Received: \& 5 / 19 / 110840\end{array}\right]\)| Sample Name: |
| :--- |
| Lab Code: |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution <br> Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 15:45 |  |
| Arsenic, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/26/11 | 5/31/11 15:45 |  |
| Barium, Total Recoverable | 6020 | 0.5 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/1115:45 |  |
| Beryllium, Total Recoverable | 6020 | 0.3 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/26/11 | 5/31/11 15:45 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/26/11 | 5/31/1115:45 |  |
| Chromium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/11 15:45 |  |
| Cobalt, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/26/11 | 5/31/11 15:45 |  |
| Copper, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/26/11 | 5/31/11 15:45 |  |
| Iron, Total Recoverable | 6010B | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/26/11 | 5/28/11 00:30 |  |
| Lead, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/26/11 | 5/31/11 15:45 |  |
| Mercury, Total | 7470A | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/27/11 | 5/27/11 17:52 |  |
| Nickel, Total Recoverable | 6020 | 0.2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 15:45 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/26/11 | 5/31/11 15:45 |  |
| Silver, Total Recoverable | 6020 | 0.19 | I | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/26/11 | 5/31/11 15:45 |  |
| Sodium, Total Recoverable | 6010B | 0.28 | I | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/26/11 | 5/28/1100:30 |  |
| Thallium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/26/11 | 5/31/11 15:45 |  |
| Vanadium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/26/11 | 5/31/11 15:45 |  |
| Zinc, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/26/11 | 5/31/1115:45 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 <br> Droject: |
| :--- | :--- | ---: |
| Date Collected: NA  <br> Dample Matrix: Water | Date Received: NA |  |
| Sample Name: | Method Blank | Basis: NA |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | 0.3 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 14:11 |  |
| Arsenic, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/26/11 | 5/31/11 14:11 |  |
| Barium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/1114:11 |  |
| Beryllium, Total Recoverable | 6020 | 0.3 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/26/11 | 5/31/11 14:11 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/26/11 | 5/31/11 14:11 |  |
| Chromium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/11 14:11 |  |
| Cobalt, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/26/11 | 5/31/11 14:11 |  |
| Copper, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/26/11 | 5/31/11 14:11 |  |
| Iron, Total Recoverable | 6010B | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/26/11 | 5/27/11 22:33 |  |
| Lead, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/26/11 | 5/31/11 14:11 |  |
| Mercury, Total | 7470A | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/27/11 | 5/27/11 17:25 |  |
| Nickel, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 14:11 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 |  | 5/26/11 | 5/31/11 14:11 |  |
| Silver, Total Recoverable | 6020 | 0.19 | I | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/26/11 | 5/31/11 14:11 |  |
| Sodium, Total Recoverable | 6010B | 0.12 | I | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/26/11 | 5/27/11 22:33 |  |
| Thallium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/26/11 | 5/31/11 14:11 |  |
| Vanadium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/26/11 | 5/31/11 14:11 |  |
| Zinc, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/26/11 | 5/31/11 14:11 |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| JED SWDF |  |  |
| Sample Matrix: | Water | Date Received: $5 / 19 / 110825$ |
| Sample Name: | MW-9A |  |
| Lab Code: | J1102220-001 | Basis: NA |

## General Chemistry Parameters

|  |  |  |  | Dilution <br> Date | Date <br> Analyzed |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Namete |  |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 <br> Droject: |
| :--- | :--- | ---: |
| Date Collected: $5 / 18 / 110755$  <br> Sample Matrix: Water | Date Received: $5 / 19 / 11$ |  |
| Sample Name: | MW-9B | Basis: NA |

## General Chemistry Parameters

|  |  |  |  |  | Dilution <br> Date | Date <br> Analyzed |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name |  |  |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :---: | :---: | :---: |
| Project: | JED SWDF | Date Collected: 5/18/111017 |
| Sample Matrix: | Water | Date Received: 5/19/11 |
| Sample Name: | MW-8A |  |
| Lab Code: | J1102220-003 | Basis: NA |

## General Chemistry Parameters

| Analyte Name | Method | Result $\mathbf{Q}$ | Units | MRL | MDL | DilutionDate <br> Factor Extracted | Date <br> Analyzed |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| JED SWDF | Date Received: $5 / 1110 / 11$ |  |
| Sample Matrix: | Water | Basis: NA |

## General Chemistry Parameters

|  |  |  |  | DilutionDateDate <br> Analyzed |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 <br> Date Collected: $5 / 18 / 11$ <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | Water | Date Received: <br> Dample Name: |
| MW-7A | Basis: NA |  |

## General Chemistry Parameters

|  |  |  |  | Dilution <br> Date | Date <br> Analyzed |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Note Name |  |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 <br> Project: |
| :--- | :--- | ---: |
| JED SWDF | Date Collected: $5 / 18 / 111227$ |  |
| Sample Matrix: | Water | Date Received: |
| Sample Name: | MW-7B | Basis: |
| Lab Code: | Jl $102220-006$ |  |

## General Chemistry Parameters

| Analyte Name | Method | Result $\mathbf{Q}$ | Units | MRL | MDL | Dilution <br> Factor Extracted | Date <br> Analyzed |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: $J 1102220$ <br> Project: |
| :--- | :--- | ---: |
| Date Collected: $5 / 18 / 11$ <br> Sample Matrix: Water <br> Date Received: $5 / 19 / 11$ |  |  |
| Sample Name: | MW-6A | Basis: NA |

## General Chemistry Parameters

|  | Method | Result | Q | Units | MRL | MDL | Dilution <br> Factor Extracted |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Daty |  |  |  |  |  |  |
| Analyed | Note |  |  |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | WED SWDF | Dater |
| Date Received: $5 / 19 / 11$ |  |  |

## General Chemistry Parameters

|  |  |  |  | Dilution <br> Date | Date <br> Dactor <br> Analyzed | Note |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| JED SWDF | Date Received: $5 / 19 / 110840$ |  |
| Sample Matrix: | Water | Basis: NA |

## General Chemistry Parameters

|  |  |  |  |  | Dilution | Date | Date <br> Analyzed |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report
\(\left.$$
\begin{array}{llrl}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: J1102220 } \\
\text { Date Collected: NA }\end{array}
$$ <br>

Project: \& JED SWDF \& Date Received: NA\end{array}\right]\)| Sample Matrix: |
| :--- |
| Sample Name: |

## General Chemistry Parameters

|  |  |  |  | DilutionDate <br> Analyte Name | Method | Result $\mathbf{Q}$ | Units | MRL |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dator | MDL | Extracted | Analyzed | Note |  |  |  |  |

# COLUMBIA ANALYTICAL SERVICES, INC. 

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 <br> Droject: |
| :--- | :--- | ---: |
| JED SWDF Collected: NA |  |  |
| Sample Matrix: | Water | Date Received: NA |
| Sample Name: | Method Blank | Basis: NA |

## General Chemistry Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution <br> Factor Extracted | Date <br> Analyzed |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Ammonia as Nitrogen | 350.1 | ND | U | $\mathrm{mg} / \mathrm{L}$ | 0.010 | 0.005 | 1 | NA |

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists |
| :--- | :--- |
| Project: | JED SWDF |
| Sample Matrix: | Water |
|  |  |
|  |  |
|  |  |
|  |  |
|  | Volatile Organic Compounds by GC/MS |

Analytical Method: 8260B

| Sample Name | Lab Code |  | Sur1 |  | Sur2 |
| :--- | :--- | :--- | :--- | ---: | ---: |
|  | Sur3 | Sur4 |  |  |  |
| MW-9A | J1102220-001 |  | 104 |  | 121 |
|  | 98 | 101 |  |  |  |
| MW-9B | J1102220-002 | 102 | 108 | 99 | 95 |
| MW-8A | J1102220-003 | 101 | 116 | 100 | 98 |
| MW-8B | J1102220-004 | 100 | 112 | 94 | 92 |
| MW-7A | J1102220-005 | 101 | 110 | 102 | 99 |
| MW-7B | J1102220-006 | 101 | 112 | 99 | 100 |
| MW-6A | J1102220-007 | 99 | 116 | 99 | 99 |
| MW-6B | J1102220-008 | 104 | 111 | 100 | 102 |
| EB-1 | J1102220-009 | 93 | 105 | 98 | 103 |
| Trip Blank | J1102220-010 | 98 | 110 | 96 | 94 |
| Method Blank | JQ1102964-02 | 95 | 105 | 93 | 99 |
| Method Blank | JQ1102965-01 | 96 | 99 | 96 | 98 |
| Lab Control Sample | JQ1102964-01 | 95 | 103 | 96 | 92 |
| Lab Control Sample | JQ1102965-02 | 97 | 99 | 96 | 101 |
| MW-8BMS | JQ1102964-03 | 106 | 103 | 102 | 100 |
| MW-8BDMS | JQ1102964-04 | 106 | 111 | 104 | 96 |

Surrogate Recovery Control Limits (\%)

| Sur1 | $=1,2$-Dichloroethane-d4 | $68-118$ |
| :--- | :--- | :--- |
| Sur2 | $=4$-Bromofluorobenzene | $78-129$ |
| Sur3 | Dibromofluoromethane | $80-114$ |
| Sur $4=$ Toluene-d8 | $87-118$ |  |

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (\#) indicate the control criteria is not applicable

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 18 / 11$ |
| Sample Matrix: | Water | Date Received: $5 / 19 / 11$ |
|  |  | Date Analyzed: $5 / 27 / 11$ |

## Matrix Spike Summary <br> Volatile Organic Compounds by GC/MS

Sample Name: MW-8B Units: $\mu \mathrm{g} / \mathrm{L}$

Analytical Method: 8260B

| Analyte Name | Sample Result | MW-8BMS <br> Matrix Spike JQ1102964-03 |  |  | $\begin{gathered} \text { MW-8BDMS } \\ \text { Duplicate Matrix Spike } \\ \text { JQ1102964-04 } \end{gathered}$ |  |  | \% Rec <br> Limits | RPD | RPD <br> Limit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Result | Spike <br> Amount | \% Rec | Result | Spike <br> Amount | \% Rec |  |  |  |
| 1,1,1,2-Tetrachloroethane | ND | 21.7 | 20.0 | 108 | 20.4 | 20.0 | 102 | 79-120 | 6 | 30 |
| 1,1,1-Trichloroethane (TCA) | ND | 21.4 | 20.0 | 107 | 21.1 | 20.0 | 105 | 78-120 | 1 | 30 |
| 1,1,2,2-Tetrachloroethane | ND | 23.6 | 20.0 | 118 | 22.5 | 20.0 | 113 | 65-137 | 5 | 30 |
| 1,1,2-Trichloroethane | ND | 24.0 | 20.0 | 120 | 23.3 | 20.0 | 116 | 81-121 | 3 | 30 |
| 1,1-Dichloroethane (1,1-DCA) | ND | 21.5 | 20.0 | 107 | 22.3 | 20.0 | 112 | 83-119 | 4 | 30 |
| 1,1-Dichloroethene (1,1-DCE) | ND | 21.2 | 20.0 | 106 | 20.9 | 20.0 | 105 | 79-123 | 1 | 30 |
| 1,2,3-Trichloropropane | ND | 23.0 | 20.0 | 115 | 22.1 | 20.0 | 110 | 71-129 | 4 | 30 |
| 1,2-Dibromo-3-chloropropane (DBC | ND | 16.8 | 20.0 | 84 | 19.1 | 20.0 | 95 | 36-143 | 12 | 30 |
| 1,2-Dibromoethane (EDB) | ND | 23.6 | 20.0 | 118 | 22.5 | 20.0 | 112 | 80-122 | 5 | 30 |
| 1,2-Dichlorobenzene | ND | 23.7 | 20.0 | 118 | 23.6 | 20.0 | 118 | * 79-114 | <1 | 30 |
| 1,2-Dichloroethane | ND | 22.7 | 20.0 | 114 | 22.1 | 20.0 | 110 | 73-120 | 3 | 30 |
| 1,2-Dichloropropane | ND | 22.1 | 20.0 | 110 | 24.5 | 20.0 | 123 | * 86-116 | 11 | 30 |
| 1,4-Dichlorobenzene | ND | 23.3 | 20.0 | 116 | 22.2 | 20.0 | 111 | 77-117 | 5 | 30 |
| 2-Butanone (MEK) | ND | 107 | 100 | 107 | 116 | 100 | 116 | 38-152 | 8 | 30 |
| 2-Hexanone | ND | 110 | 100 | 110 | 112 | 100 | 112 | 63-131 | 1 | 30 |
| 4-Methyl-2-pentanone (MIBK) | ND | 112 | 100 | 112 | 111 | 100 | 111 | 69-127 | <1 | 30 |
| Acetone | ND | 120 | 100 | 120 | 130 | 100 | 130 | 45-157 | 9 | 30 |
| Acrylonitrile | ND | 111 | 100 | 111 | 122 | 100 | 122 | 56-139 | 9 | 30 |
| Benzene | ND | 22.4 | 20.0 | 112 | 22.2 | 20.0 | 111 | 83-118 | $<1$ | 30 |
| Bromochloromethane | ND | 21.5 | 20.0 | 107 | 22.2 | 20.0 | 111 | 82-117 | 3 | 30 |
| Bromodichloromethane | ND | 22.2 | 20.0 | 111 | 22.2 | 20.0 | 111 | 77-120 | $<1$ | 30 |
| Bromoform | ND | 19.9 | 20.0 | 99 | 19.0 | 20.0 | 95 | 38-149 | 5 | 30 |
| Bromomethane | ND | 21.1 | 20.0 | 106 | 20.9 | 20.0 | 104 | 78-132 | 1 | 30 |
| Carbon Disulfide | ND | 113 | 100 | 113 | 117 | 100 | 117 | 74-132 | 3 | 30 |
| Carbon Tetrachloride | ND | 18.7 | 20.0 | 93 | 17.8 | 20.0 | 89 | 67-129 | 5 | 30 |
| Chlorobenzene | ND | 24.1 | 20.0 | 121 | 21.4 | 20.0 | 107 | 83-122 | 12 | 30 |
| Chloroethane | ND | 20.5 | 20.0 | 103 | 23.9 | 20.0 | 120 | 80-129 | 15 | 30 |
| Results flagged with an asterisk (*) indicate values outside control criteria |  |  |  |  |  |  |  |  |  |  |
| Results flagged with a pound (\#) indicate the control criteria is not applicable |  |  |  |  |  |  |  |  |  |  |
| Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded |  |  |  |  |  |  |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists |
| :--- | :--- |
| Project: | JED SWDF |
| Sample Matrix: | Water |

Service Request: J1102220
Date Collected: 5/18/11
Date Received: 5/19/11
Date Analyzed: 5/27/11

## Matrix Spike Summary Volatile Organic Compounds by GC/MS

| Sample Name: | MW-8B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | $\mathrm{J} 1102220-004$ | Basis: NA |

Analytical Method: 8260B

| Analyte Name | Sample Result | MW-8BMS Matrix Spike JQ1102964-03 |  |  | MW-8BDMS <br> Duplicate Matrix Spike JQ1102964-04 |  |  | \% Rec <br> Limits | RPD | RPD <br> Limit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Result | Spike Amount | \% Rec | Result | Spike Amount | \% Rec |  |  |  |
| Chloroform | ND | 21.8 | 20.0 | 109 | 21.8 | 20.0 | 109 | 81-118 | <1 | 30 |
| Chloromethane | ND | 21.0 | 20.0 | 105 | 22.4 | 20.0 | 112 | 61-138 | 6 | 30 |
| cis-1,2-Dichloroethene | ND | 22.0 | 20.0 | 110 | 23.2 | 20.0 | 116 | 74-127 | 6 | 30 |
| cis-1,3-Dichloropropene | ND | 22.5 | 20.0 | 112 | 21.7 | 20.0 | 109 | 80-120 | 3 | 30 |
| Dibromochloromethane | ND | 21.2 | 20.0 | 106 | 19.7 | 20.0 | 99 | 71-122 | 7 | 30 |
| Dibromomethane | ND | 23.3 | 20.0 | 117 | 23.5 | 20.0 | 117 | 73-125 | <1 | 30 |
| Ethylbenzene | ND | 23.2 | 20.0 | 116 | 20.6 | 20.0 | 103 | 82-124 | 12 | 30 |
| Iodomethane | ND | 98.5 | 100 | 99 | 101 | 100 | 101 | 78-128 | 2 | 30 |
| m,p-Xylenes | ND | 43.0 | 40.0 | 108 | 41.6 | 40.0 | 104 | 82-125 | 3 | 30 |
| Methylene Chloride | ND | 23.6 | 20.0 | 118 | 24.0 | 20.0 | 120 | 70-134 | 2 | 30 |
| o-Xylene | ND | 22.3 | 20.0 | 112 | 21.4 | 20.0 | 107 | 82-122 | 4 | 30 |
| Styrene | ND | 21.8 | 20.0 | 109 | 21.0 | 20.0 | 105 | 82-123 | 4 | 30 |
| Tetrachloroethene (PCE) | ND | 20.5 | 20.0 | 102 | 20.2 | 20.0 | 101 | 77-129 | 2 | 30 |
| Toluene | ND | 23.2 | 20.0 | 116 | 21.3 | 20.0 | 107 | 82-122 | 8 | 30 |
| trans-1,2-Dichloroethene | ND | 22.2 | 20.0 | 111 | 22.4 | 20.0 | 112 | 81-119 | 1 | 30 |
| trans-1,3-Dichloropropene | ND | 20.7 | 20.0 | 104 | 20.0 | 20.0 | 100 | 71-124 | 4 | 30 |
| trans-1,4-Dichioro-2-butene | ND | 1.64 | 20.0 | 8 | 1.39 | 20.0 | 7 | 10-172 | 17 | 30 |
| Trichloroethene (TCE) | ND | 20.1 | 20.0 | 101 | 20.2 | 20.0 | 101 | 81-120 | $<1$ | 30 |
| Trichlorofluoromethane | ND | 20.4 | 20.0 | 102 | 20.0 | 20.0 | 100 | 72-127 | 2 | 30 |
| Vinyl Acetate | ND | 87.8 | 100 | 88 | 98.3 | 100 | 98 | 50-145 | 11 | 30 |
| Vinyl Chloride | ND | 20.6 | 20.0 | 103 | 22.2 | 20.0 | 111 | 72-133 | 7 | 30 |

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (\#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :--- | :--- | :---: |
| Project: | JED SWDF | Date Analyzed: $5 / 27 / 11$ |
| Sample Matrix: | Water |  |

## Lab Control Sample Summary Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

Units: $\mu \mathrm{g} / \mathrm{L}$
Basis: NA
Analysis Lot: 247970

## Lab Control Sample

JQ1102964-01

|  | Result | Spike <br> Amount | \% Rec | \% Rec <br> Limits |
| :--- | :---: | :---: | :---: | :---: |
| Analyte Name | 18.9 | 20.0 | 94 | $79-120$ |
| 1,1,1,2-Tetrachloroethane | 16.4 | 20.0 | 82 | $78-120$ |
| 1,1,1-Trichloroethane (TCA) | 19.9 | 20.0 | 99 | $65-137$ |
| 1,1,2,2-Tetrachloroethane | 20.0 | 20.0 | 100 | $81-121$ |
| 1,1,2-Trichloroethane | 18.7 | 20.0 | 94 | $83-119$ |
| 1,1-Dichloroethane (1,1-DCA) | 17.7 | 20.0 | 88 | $79-123$ |
| 1,1-Dichloroethene (1,1-DCE) | 19.9 | 20.0 | 99 | $71-129$ |
| 1,2,3-Trichloropropane | 15.7 | 20.0 | 79 | $36-143$ |
| 1,2-Dibromo-3-chloropropane (DBCP) | 19.6 | 20.0 | 98 | $80-122$ |
| 1,2-Dibromoethane (EDB) | 19.1 | 20.0 | 95 | $79-114$ |
| 1,2-Dichlorobenzene | 18.3 | 20.0 | 91 | $73-120$ |
| 1,2-Dichloroethane | 20.8 | 20.0 | 104 | $86-116$ |
| 1,2-Dichloropropane | 18.3 | 20.0 | 92 | $77-117$ |
| 1,4-Dichlorobenzene | 108 | 100 | 108 | $38-152$ |
| 2-Butanone (MEK) | 103 | 100 | 103 | $63-131$ |
| 2-Hexanone | 108 | 100 | 108 | $69-127$ |
| 4-Methyl-2-pentanone (MIBK) | 112 | 100 | 112 | $45-157$ |
| Acetone | 116 | 100 | 116 | $56-139$ |
| Acrylonitrile | 19.0 | 20.0 | 95 | $83-118$ |
| Benzene | 19.1 | 20.0 | 96 | $82-117$ |
| Bromochloromethane | 18.6 | 20.0 | 93 | $77-120$ |
| Bromodichloromethane | 17.4 | 20.0 | 87 | $38-149$ |
| Bromoform | 17.6 | 20.0 | 88 | $78-132$ |
| Bromomethane | 94.3 | 100 | 94 | $74-132$ |
| Carbon Disulfide | 15.1 | 20.0 | 75 | $67-129$ |
| Carbon Tetrachloride | 17.8 | 20.0 | 89 | $83-122$ |
| Chlorobenzene | 20.0 | 92 | $80-129$ |  |
| Chloroethane | 18.4 | 20.0 | 92 | $81-118$ |
| Chloroform | 20.0 | 99 | $61-138$ |  |
| Chloromethane | 20.0 | 98 | $74-127$ |  |
| cis-1,2-Dichloroethene | 20.0 | 93 | $80-120$ |  |
| cis-1,3-Dichloropropene | 20.0 | 92 | $71-122$ |  |
| Dibromochloromethane |  |  |  |  |

## Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :--- | :--- | :---: |
| Project: | JED SWDF | Date Analyzed: 5/27/11 |
| Sample Matrix: | Water |  |

## Lab Control Sample Summary Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Units: $\mu \mathrm{g} / \mathrm{L}$
Basis: NA
Analysis Lot: 247970

|  | Lab Control Sample |  |  |
| :--- | :---: | :---: | :---: | :---: |
| JQ1102964-01 |  |  |  |
| Spike |  |  |  |
| Amount |  |  |  |$\quad$ \% Rec \(\left.\begin{array}{c}\% Rec <br>

Limits\end{array}\right]\)

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $5 / 31 / 11$ |
| Sample Matrix: | Water |  |

## Lab Control Sample Summary Volatile Organic Compounds by GC/MS

| Analytical Method: 8260 B | Units: $\mu \mathrm{g} / \mathrm{L}$ <br> Basis: |
| :--- | ---: |
| NA |  |



Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $5 / 31 / 11$ |
| Sample Matrix: | Water |  |

## Lab Control Sample Summary Volatile Organic Compounds by GC/MS

| Analytical Method: 8260 B | Units: $\mu \mathrm{g} / \mathrm{L}$ <br> Basis: NA |
| ---: | ---: |
|  | Analysis Lot: 247998 |


|  | Lab Control Sample |  |  |
| :--- | :---: | :---: | :---: | :---: |
| JQ1102965-02 |  |  |  |
| Spike |  |  |  |, \(\left.\begin{array}{c}\% Rec <br>

Limits\end{array}\right]\)

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :--- | :--- | :--- |
| Project: | JED SWDF |  |
| Sample Matrix: | Water |  |

## Surrogate Recovery Summary <br> 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Extraction Method: | METHOD |
| :--- | :--- |
| Analysis Method: | 8011 |

Units: PERCENT
Level: Low

| Sample Name | Lab Code | Sur1 |
| :--- | :--- | :--- |
| Duplicate Lab Control Sample | JWG1101266-2 | 108 |
| Lab Control Sample | JWG1101266-1 | 106 |
| Lab Control Sample | JWG1101220-3 | 104 |
| Method Blank | JWG1101266-3 | 113 |
| Method Blank | JWG1101220-4 | 103 |
| EB-1 | J1102220-009 | 105 |
| MW-6B | J1102220-008 | 106 |
| MW-6A | J1102220-007 | 107 |
| MW-7B | J1102220-006 | 100 |
| MW-7A | J1102220-005 | 101 |
| MW-8B | J1102220-004 | 100 |
| MW-8A | J1102220-003 | 98 |
| MW-9B | J1102220-002 | 102 |
| MW-9A | J1102220-001 | 110 |

Surrogate Recovery Control Limits (\%)
Surl $=1,1,1,2$-Tetrachloroethane

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: |
| :--- | :--- | ---: |
| J11102220 |  |  |
| Project: | JED SWDF | Date Extracted: |
| Sample Matrix: | Water | Date Analyzed: |
| 05/26/2011 |  |  |

## Lab Control Spike Summary

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Extraction Method: | METHOD | Units: ug/L |  |
| :--- | :--- | ---: | :--- |
| Analysis Method: | 8011 | Basis: NA |  |
|  |  | Level: Low |  |
|  |  | Extraction Lot: | JWG1101220 |


|  | Lab Control Sample <br> JWG1101220-3 |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Lab Control Spike |  |  | \%Rec |
|  | Resuilt | Expected | \%Rec | Limits |
| Anailyte Name | 0.259 | 0.250 | 104 | $70-130$ |
| 1,2-Dibromoethane (EDB) | 0.233 | 0.250 | 93 | $70-130$ |

## Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

| Client: | Environmental Planning Specialists | Service Request: | $J 1102220$ |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Extracted: | $05 / 31 / 2011$ |
| Sample Matrix: | Water | Date Analyzed: | $05 / 31 / 2011$ |

Lab Control Spike/Duplicate Lab Control Spike Summary 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Extraction Method: | METHOD |
| :--- | :--- |
| Analysis Method: | 8011 |

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists |
| :--- | :--- |
| Project: | JED SWDF |
| Sample Matrix: | Water |

Service Request: J1102220
Project: Water

Date Collected: 5/18/11
Date Received: 5/19/11
Date Analyzed: 5/27/11
Matrix Spike Summary
Inorganic Parameters

| Sample Name: | MW-8A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | $\mathrm{J} 1102220-003$ | Basis: NA |

Analytical Method: 6010B
Prep Method: Method

|  |  | MW-8AMS Matrix Spike J1102220-003MS1 |  |  | MW-8ADMS <br> Duplicate Matrix Spike J1102220-003DMS1 |  |  | \% Rec Limits |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Sample Result | Result | Spike Amount | \% Rec | Result | Spike Amount | \% Rec |  | RPD | RPD <br> Limit |
| Iron, Total Recoverable | 4210 | 9360 | 5000 | 103 | 9230 | 5000 | 101 | 75-125 | 1 | 20 |

[^9]
## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists |
| :--- | :--- |
| Project: | JED SWDF |
| Sample Matrix: | Water |

Service Request: J1102220
Date Collected: 5/18/11
Date Received: 5/19/11
Date Analyzed: 5/27/11

## Matrix Spike Summary <br> Inorganic Parameters

| Sample Name: | MW-8A | Units: mg/L |
| :--- | :--- | :--- |
| Lab Code: | J1102220-003 | Basis: NA |

Analytical Method: 6010B
Prep Method: Method

|  |  | MW-8AMS Matrix Spike J1102220-003MS1 |  |  | $\begin{gathered} \text { MW-8ADMS } \\ \text { Duplicate Matrix Spike } \\ \text { J1102220-003DMS1 } \end{gathered}$ |  |  | \% Rec <br> Limits |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Sample <br> Result | Result | Spike Amount | \% Rec | Result | Spike Amount | \% Rec |  | RPD | RPD <br> Limit |
| Sodium, Total Recoverable | 28.5 | 59.9 | 25.0 | 126 | 58.2 | 25.0 | 119 | 75-125 | 3 | 20 |

[^10]
## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: $J 1102220$ <br> Project: | DED SWDF |
| :--- | :--- | ---: | :--- |
| Sample Matrix: | Water |  | Date Received: $5 / 18 / 11$ |
|  |  | Date Analyzed: $5 / 31 / 11$ |  |


| Sample Name: | MW-8B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | $\mathrm{J} 1102220-004$ | Basis: NA |

Analytical Method: 6020
Prep Method: EPA 3020A

| Analyte Name | Sample Result | MW-8BMSMatrix SpikeJ1102220-004MS2 |  |  | MW-8BDMS <br> Duplicate Matrix Spike J1102220-004DMS2 |  |  | \% Rec <br> Limits | RPD | RPD <br> Limit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Result | Spike Amount | \% Rec | Result | Spike Amount | \% Rec |  |  |  |
| Antimony, Total Recoverable | ND | 50.5 | 50.0 | 101 | 52.4 | 50.0 | 105 | 75-125 | 4 | 20 |
| Arsenic, Total Recoverable | ND | 47.4 | 50.0 | 95 | 50.6 | 50.0 | 101 | 75-125 | 7 | 20 |
| Barium, Total Recoverable | 32.4 | 84.3 | 50.0 | 104 | 84.8 | 50.0 | 105 | 75-125 | $<1$ | 20 |
| Beryllium, Total Recoverable | 0.4 | 45.6 | 50.0 | 90 | 48.2 | 50.0 | 96 | 75-125 | 6 | 20 |
| Cadmium, Total Recoverable | ND | 49.4 | 50.0 | 99 | 52.6 | 50.0 | 105 | 75-125 | 6 | 20 |
| Chromium, Total Recoverable | 2.8 | 52.3 | 50.0 | 99 | 52.3 | 50.0 | 99 | 75-125 | $<1$ | 20 |
| Cobalt, Total Recoverable | 0.2 | 50.2 | 50.0 | 100 | 50.6 | 50.0 | 101 | 75-125 | <1 | 20 |
| Copper, Total Recoverable | ND | 49.7 | 50.0 | 99 | 50.7 | 50.0 | 101 | 75-125 | 2 | 20 |
| Lead, Total Recoverable | 2.1 | 55.8 | 50.0 | 107 | 56.0 | 50.0 | 108 | 75-125 | $<1$ | 20 |
| Nickel, Total Recoverable | 0.6 | 49.6 | 50.0 | 98 | 50.1 | 50.0 | 99 | 75-125 | 1 | 20 |
| Selenium, Total Recoverable | ND | 39.9 | 50.0 | 80 | 44.5 | 50.0 | 89 | 75-125 | 11 | 20 |
| Silver, Total Recoverable | 0.16 | 50.8 | 50.0 | 101 | 51.7 | 50.0 | 103 | 75-125 | 2 | 20 |
| Thallium, Total Recoverable | 0.03 | 53.5 | 50.0 | 107 | 52.6 | 50.0 | 105 | 75-125 | 2 | 20 |
| Vanadium, Total Recoverable | 5.5 | 55.4 | 50.0 | 100 | 55.3 | 50.0 | 100 | 75-125 | <1 | 20 |
| Zinc, Total Recoverable | ND | 88.2 | 100 | 88 | 97.4 | 100 | 97 | 75-125 | 10 | 20 |

[^11]
## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists |
| :--- | :--- |
| Project: | JED SWDF |
| Sample Matrix: | Water |

Service Request: J1102220
Date Collected: 5/18/11
Date Received: 5/19/11
Date Analyzed: 5/27/11

## Matrix Spike Summary <br> Inorganic Parameters

| Sample Name: | MW-7A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | $\mathrm{J} 1102220-005$ | Basis: NA |

Analytical Method: 7470A
Prep Method: Method

| Analyte Name | Sample <br> Result | MW-7AMS <br> Matrix Spike J1102220-005MS3 |  |  | MW-7ADMS <br> Duplicate Matrix Spike J1102220-005DMS3 |  |  | \% Rec <br> Limits | RPD | RPD <br> Limit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Result | Spike Amount | \% Rec | Result | Spike Amount | \% Rec |  |  |  |
| Mercury, Total | ND | 4.94 | 5.00 | 99 | 4.93 | 5.00 | 99 | 75-125 | $<1$ | 20 |

[^12]
## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: $J 1102220$ |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $5 / 27 / 11-$ |
| Sample Matrix: | Water | $5 / 31 / 11$ |

## Lab Control Sample Summary <br> Inorganic Parameters

|  |  |  |  |  |  | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { ontrol Sam } \\ & 02220 \text {-LC } \end{aligned}$ | ple |  |  |
| Analyte Name | Method | Result | Spike Amount | \% Rec | \% Rec Limits |  |
| Antimony, Total Recoverable | 6020 | 52.5 | 50.0 | 105 | 80-120 |  |
| Arsenic, Total Recoverable | 6020 | 47.8 | 50.0 | 96 | 80-120 |  |
| Barium, Total Recoverable | 6020 | 51.4 | 50.0 | 103 | 80-120 |  |
| Beryllium, Total Recoverable | 6020 | 44.5 | 50.0 | 89 | 80-120 |  |
| Cadmium, Total Recoverable | 6020 | 49.1 | 50.0 | 98 | 80-120 |  |
| Chromium, Total Recoverable | 6020 | 52.5 | 50.0 | 105 | 80-120 |  |
| Cobalt, Total Recoverable | 6020 | 51.0 | 50.0 | 102 | 80-120 |  |
| Copper, Total Recoverable | 6020 | 51.8 | 50.0 | 104 | 80-120 |  |
| Iron, Total Recoverable | 6010B | 5060 | 5000 | 101 | 85-115 |  |
| Lead, Total Recoverable | 6020 | 53.1 | 50.0 | 106 | 80-120 |  |
| Mercury, Total | 7470A | 5.42 | 5.00 | 108 | 80-120 |  |
| Nickel, Total Recoverable | 6020 | 51.0 | 50.0 | 102 | 80-120 |  |
| Selenium, Total Recoverable | 6020 | 45.4 | 50.0 | 91 | 80-120 |  |
| Silver, Total Recoverable | 6020 | 52.4 | 50.0 | 105 | 80-120 |  |
| Thallium, Total Recoverable | 6020 | 52.1 | 50.0 | 104 | 80-120 |  |
| Vanadium, Total Recoverable | 6020 | 51.1 | 50.0 | 102 | 80-120 |  |
| Zinc, Total Recoverable | 6020 | 92.0 | 100 | 92 | 80-120 |  |

## Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $5 / 27 / 11-$ |
| Sample Matrix: | Water | $5 / 31 / 11$ |

## Lab Control Sample Summary Inorganic Parameters

Units: mg/L
Basis: NA

|  | Lab Control Sample |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | J1102220-LCS |  |  |  |  |
| Analyte Name | Method | Result | Spike | Amount | \% Rec | | \% Rec |
| :---: |
| Limits |

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: $5 / 18 / 11$ |
| Sample Matrix: | Water | Date Received: $5 / 19 / 11$ |
|  |  | Date Analyzed: $5 / 19 / 11-$ |
|  |  | $5 / 23 / 11$ |


| Sample Name: | MW-9B | Units: mg/L |
| :--- | :--- | :--- |
| Lab Code: | Jl102220-002 | Basis: NA |


| Analyte Name | Method | Sample <br> Result | MW-9BMSMatrix SpikeJ1 $102220-002 \mathrm{MS} 1$ |  |  | \% Rec <br> Limits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Result | Spike Amount | \% Rec |  |
| Ammonia as Nitrogen | 350.1 | 0.225 | 1.17 | 1.00 | 95 | 90-110 |
| Chloride | 300.0 | 58.2 | 106 | 50.0 | 97 | 90-110 |
| Nitrate as Nitrogen | 300.0 | ND | 4.88 | 5.00 | 98 | 90-110 |

[^13]
## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 18 / 11$ |
| Sample Matrix: | Water | Date Received: $5 / 19 / 11$ |
|  |  | Date Analyzed: $5 / 23 / 11$ |

## Matrix Spike Summary General Chemistry Parameters

| Sample Name: | MW-6A | Units: $\mathrm{mg} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | Jl $102220-007$ | Basis: NA |

Analytical Method: 350.1

|  | $\begin{array}{c}\text { MW-6AMS } \\ \text { Matrix Spike }\end{array}$ |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| J1102220-007MS2 |  |  |  |  |  |$]$

[^14]
## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :--- | :--- | ---: | :--- |
| Project: | DED SWDF | Date Collected: $5 / 18 / 11$ |
| Sample Matrix: | Water | Date Received: $5 / 19 / 11$ |
|  |  | Date Analyzed: $5 / 19 / 11-$ |
|  |  | $5 / 23 / 11$ |


| Sample Name: | MW-9B | Units: $\mathrm{mg} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | $\mathrm{J} 1102220-002$ | Basis: NA |


| Analyte Name | Method | MRL | MDL | MW-9BDUP |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Sample Result | Duplicate Sample <br> J1102220-002DUP1 |  | RPD | RPD <br> Limit |
|  |  |  |  |  | Result | Average |  |  |
| Ammonia as Nitrogen | 350.1 | 0.010 | 0.005 | 0.225 | 0.224 | 0.225 | $<1$ | 20 |
| Chloride | 300.0 | 0.50 | 0.10 | 58.2 | 57.8 | 58.0 | $<1$ | 20 |
| Nitrate as Nitrogen | 300.0 | 0.20 | 0.04 | ND U | ND U | NC | NC | 20 |

[^15]COLUMBIA ANALYTICAL SERVICES, INC.
QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: $J 1102220$ |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 18 / 11$ |
| Sample Matrix: | Water | Date Received: $5 / 19 / 11$ |
|  |  | Date Analyzed: $5 / 24 / 11$ |

## Replicate Sample Summary <br> General Chemistry Parameters

| Sample Name: | MW-7A | Units: $\mathrm{mg} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | $\mathrm{J} 1102220-005$ | Basis: NA |


| Analyte Name | Method | MRL | MDL | MW-7ADUP |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Sample | $\begin{gathered} \text { Duplic } \\ \mathrm{J} 11022 \end{gathered}$ | Sample <br> 05DUP2 |  | RPD |
|  |  |  |  | Result | Result | Average | RPD | Limit |
| Solids, Total Dissolved | SM 2540 C | 10 | 10 | 111 | 109 | 110 | 2 | 20 |

[^16]COLUMBIA ANALYTICAL SERVICES, INC.
QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 18 / 11$ |
| Sample Matrix: | Water | Date Received: $5 / 19 / 11$ |
|  |  | Date Analyzed: $5 / 23 / 11$ |

## Replicate Sample Summary <br> General Chemistry Parameters

| Sample Name: | MW-6A | Units: $\mathrm{mg} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | $\mathrm{J} 1102220-007$ | Basis: NA |



[^17]
## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :--- | :--- | :---: |
| Project: | JED SWDF | Date Analyzed: $5 / 24 / 11$ |
| Sample Matrix: | Water |  |

## Lab Control Sample Summary

General Chemistry Parameters

|  | Method |  |  |  |  | Units: mg/L <br> Basis: NA |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Lab Control Sample J1102220-LCS 1 |  | Duplicate Lab Control Sample J1102220-DLCS 1 |  |  |  |  |
| Analyte Name |  | Result | Spike <br> Amount \% Rec | Result | Spike <br> Amount \% Rec | \% Rec <br> Limits | RPD | RPD <br> Limit |
| Solids, Total Dissolved | SM 2540 C | 299 | $300 \quad 100$ | 300 | $300 \quad 100$ | 85-115 | $<1$ | 20 |

[^18]
## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $5 / 19 / 11-$ |
| Sample Matrix: | Water | $5 / 24 / 11$ |

## Lab Control Sample Summary

General Chemistry Parameters
Units: mg/L
Basis: NA

|  | Lab Control Sample <br> J1102220-LCS2 |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Analyte Name | Method | Result | Spike <br> Amount | \% Rec <br> \% Rec <br> Limits |  |
| Ammonia as Nitrogen | 350.1 | 0.963 | 1.00 | 96 | $90-110$ |
| Chloride | 300.0 | 51.4 | 50.0 | 103 | $90-110$ |
| Nitrate as Nitrogen | 300.0 | 4.89 | 5.00 | 98 | $90-110$ |
| Solids, Total Dissolved | SM 2540 C | 30.0 | 30 | 100 | $70-130$ |

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102220 |
| :--- | :--- | :---: |
| Project: | JED SWDF | Date Analyzed: $5 / 23 / 11$ |
| Sample Matrix: | Water |  |

## Lab Control Sample Summary

General Chemistry Parameters
Units: mg/L
Basis: NA

| Analyte Name | Method | Lab Control Sample J1102220-LCS3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Result | Spike Amount | \% Rec | \% Rec <br> Limits |
|  |  |  |  |  |  |
| Ammonia as Nitrogen | 350.1 | 0.970 | 1.00 | 97 | 90-110 |

[^19]

| Sample ID | Reagent | Lot \# | ml added | Initials Date/Time |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Additional comments and/or explanation of all discrepancies noted above:

|  |  |  |
| :--- | :--- | :--- |
|  |  |  |
| Client approval to run samples if discrepancies noted: | Date: | 86 |

- Collmbia
SR\#: J 110 Z220
Note that pH is check and meets the required pH criterion listed in the column heading unless otherwise noted on the cooler receipt form



June 03, 2011
Service Request No: J1 102246

Kirk Wills
Environmental Planning Specialists
1936 Bruce B Downs Blvd
\#328
Wesley Chapel, FL 33543

## Laboratory Results for: JED SWDF

## Dear Kirk:

Enclosed are the results of the samples) submitted to our laboratory on May 20, 2011. For your reference, these analyses have been assigned our service request number $\mathbf{J} 1 \mathbf{1 0 2 2 4 6}$.
All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. This report shall not be reproduced except in full without written approval of the laboratory, as all results are intended to be considered in their entirity, and Columbia Analytical Services, Inc.
(CAS) cannot be held responsible for use of the less than the complete report.
Results apply only to the items submitted to the laboratory for analysis and individual items (samples)

Please contact me if you have any questions. My extension is 4409 . You may also contact me via email at CMyers@caslab.com.

Respectfully submitted,

## Columbia Analytical Services, Inc.



Craig Myers
Project Manager
Page 1 of $\qquad$

CAS Jacksonville is NELAC-accredited by the State of Florida, \#E82502. Other state accreditation include: Georgia, \#958; Kentucky, \#63; Louisiana, \#02086; North Carolina, \#527; South Carolina, \#96021001; Texas, \#T104704197-09-TX; Maine, \#2011006; DoD \#66206.

## COLUMBIA ANALYTICAL SERVICES, INC.

| Client: | Environmental Planning Specialists |
| :--- | :--- |
| Project: | JED SWDF |
| Sample Matrix: | Water |

Service Request No.: J1102246<br>Date Received:

## CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables, including results of QC samples analyzed from this delivery group. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

## Sample Receipt

Eight water samples and one trip blank were received for analysis at Columbia Analytical Services on 5/20/11. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at $\leq 6^{\circ} \mathrm{C}$ upon receipt at the lab except for aqueous samples designated for metals analyses, which were stored at room temperature.

## Volatile Organic Compounds by GC-MS

The samples were analyzed for Volatile Organics using EPA Method 8260. The following observations were made regarding this delivery group.

## Lab Control Sample Exceptions

The primary evaluation criterion was exceeded for the following analyte in Laboratory Control Sample (LCS) JQ1 I02967-02: Vinyl Chloride. The analyte in question was not detected in the associated field samples. Since the analyte was detected in the MRL check standard, instrument sensitivity was documented. The data quality was not significantly affected and no further corrective action was taken.

## EDB and DBCP by GC-ECD

The samples were analyzed for EDB and DBCP using EPA Method 8011. The following observations were made regarding this delivery group.

## Holding Time Exceptions

The analysis of sample MW-5B initially performed on $5 / 24 / 2011$ and reanalyzed on $5 / 27 / 2011$. There were problems with the instrument that have now been corrected. Efforts were made to reanalyze sample MW-5B as soon as possible after the analytical system was back in control. However, the reanalysis of the sample was performed two hours past the recommended holding time. The quality of the sample data and associated quality control data was not significantly affected. The results from the reanalysis are reported. It is our opinion that the impact on the data is minimal.

## Metals by ICP-MS/ICP-OES/CVAA

The samples were analyzed for Total Metals using EPA Methods 6020/6010B/7470A. No problems were observed.


## General Chemistry Parameters

The samples were analyzed for Inorganic Parameters using various EPA and Standard Methods. No problems were observed.


## Florida DEP Data Qualifiers

B Results based upon colony counts outside the acceptable range.
D Measurement was made in the field.
H Value based on field kit determination; results may not be accurate.
The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J Estimated value (one of the following reasons is discussed in the project case narrative).

1. The result may be inaccurate because the surrogate recovery limits have been exceeded.
2. No known quality control criteria exists for the component.
3. The reported value failed to meet the established quality control criteria for either precision or accuracy.
4. The sample matrix interfered with the ability to make any accurate determination (e.g., primary and confirmation results show greater than $40 \%$ RPD).
5. The data is questionable because of improper laboratory or field protocols (e.g., GC/MS Tune did not meet method criteria).

K Off scale low. The value is less than the lowest calibration standard but greater than the method reporting limit (MRL).

L Off scale high. The analyte is above the upper limit of the linear calibration range.
M The MDL/MRL has been elevated because the analyte could not be accurately quantified due to matrix interference.

N Presumptive evidence of the analyte. Confirmation was not performed.
Q Sample held beyond the accepted holding time.
T. Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only.

U Indicates that the compound was analyzed for but not detected.
V Indicates that the analyte was detected in both the sample and the associated method blank.
Y The laboratory analysis was from an improperly preserved sample.
Z Too many colonies were present (TNTC). The numeric value represents the filtration volume.

## Acronyms

| ASTM | American Society for Testing and Materials |
| :---: | :---: |
| A2LA | American Association for Laboratory Accreditation |
| CARB | California Air Resources Board |
| CAS Number | Chemical Abstract Service registry Number |
| CFC | Chlorofluorocarbon |
| CFU | Colony-Forming Unit |
| DEC | Department of Environmental Conservation |
| DEQ | Department of Environmental Quality |
| DHS | Department of Health Services |
| DOE | Department of Ecology |
| DOH | Department of Health |
| EPA | U. S. Environmental Protection Agency |
| ELAP | Environmental Laboratory Accreditation Program |
| GC | Gas Chromatography |
| GC/MS | Gas Chromatography/Mass Spectrometry |
| LUFT | Leaking Underground Fuel Tank |
| M | Modified |
| MCL | Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA. |
| MDL | Method Detection Limit |
| MPN | Most Probable Number |
| MRL | Method Reporting Limit |
| NA | Not Applicable |
| NC | Not Calculated |
| NCASI | National Council of the Paper Industry for Air and Stream Improvement |
| ND | Not Detected |
| NIOSH | National Institute for Occupational Safety and Health |
| PQL | Practical Quantitation Limit |
| RCRA | Resource Conservation and Recovery Act |
| SIM | Selected Ion Monitoring |
| TPH | Total Petroleum Hydrocarbons |
| tr | Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL. |


| Client: | Environmental Planning Specialists | Service Request: J1102246 |
| :--- | :--- | :--- |
| Project: | JED SWDF |  |

## SAMPLE CROSS-REFERENCE

| SAMPLE \# | CLIENT SAMPLE ID | $\frac{\text { DATE }}{}$ | TIME |
| :--- | :--- | :--- | :--- |
| J1102246-001 | MW-5B | $5 / 19 / 11$ | $07: 42$ |
| J1102246-002 | MW-4B | $5 / 19 / 11$ | $09: 45$ |
| J1102246-003 | MW-3A | $5 / 19 / 11$ | $11: 52$ |
| J1102246-004 | MW-3B | $5 / 19 / 11$ | $11: 10$ |
| J1102246-005 | MW-2A | $5 / 19 / 11$ | $13: 25$ |
| J1102246-006 | MW-2B | $5 / 19 / 11$ | $13: 00$ |
| J1102246-007 | MW-1A | $5 / 19 / 11$ | $15: 32$ |
| J1102246-008 | MW-1B | $5 / 19 / 11$ | $15: 05$ |
| J1102246-009 | Trip Blank | $5 / 19 / 11$ | $00: 00$ |


| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: JED SWDF | Water | Date Received: |
| Sample Name: | MW-5B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102246-001 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/31/1118:28 |  | 247998 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/31/1118:28 |  | 247998 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/1118:28 |  | 247998 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/31/1118:28 |  | 247998 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/31/11 18:28 |  | 247998 |  |


| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Droject: |
| :--- | :--- | ---: |
| Dample Collected: $: 5 / 19 / 110742$ |  |  |
| Samix: | Water | Date Received: $5 / 20 / 11$ |
| Sample Name: | MW-5B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102246-001 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247998

| Analyte Name | Result $\mathbf{Q}$ | MRL | MDL | Dilution | Dater <br> Extracted | Date <br> Analyzed | Extraction Analysis <br> Lot | Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | $\mathbf{Q}$ |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 90 | $68-118$ | $5 / 31 / 1118: 28$ |  |
| 4-Bromofluorobenzene | 106 | $78-129$ | $5 / 31 / 1118: 28$ |  |
| Dibromofluoromethane | 94 | $80-114$ | $5 / 31 / 1118: 28$ |  |
| Toluene-d8 | 100 | $87-118$ | $5 / 31 / 1118: 28$ |  |


| Client: | Environmental Planning Specialists | Service Request: J 1102246 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | Water | Date Received: |
| Sam | $5 / 20 / 11$ |  |
| Sample Name: | MW-4B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | $\mathrm{J} 1102246-002$ | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247998

|  |  |  | Dilution | Date | Date | Extraction Analysis |
| :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lot |  |  |  |  |  |  | Note

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: <br> Project: |
| :--- | :--- | ---: |
| JED SWDF |  |  |
| Sample Matrix: | Water | Date Received: $: 5 / 20 / 11$ |
| Sample Name: | MW-4B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102246-002 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247998

| Analyte Name | Result $\mathbf{Q}$ | MRL | MDL | Dilution | Date <br> Extracted | Date <br> Analyzed | Extraction Analysis <br> Lot | Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Q |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 91 | $68-118$ | $5 / 31 / 1118: 58$ |  |
| 4-Bromofluorobenzene | 97 | $78-129$ | $5 / 31 / 1118: 58$ |  |
| Dibromofluoromethane | 95 | $80-114$ | $5 / 31 / 1118: 58$ |  |
| Toluene-d8 | 104 | $87-118$ | $5 / 31 / 1118: 58$ |  |

COLUMBIA ANALYTICAL SERVICES, INC.
Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | JED SWDF | Dater |
| Sample Name: | MW-3A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102246-003 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B


| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | JED SWDF | Dater |
| Dample Name: | MW-3A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102246-003 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247998

|  | Result Q | MRL | MDL | Dilution | Date <br> Factor | Date <br> Extracted | Extraction Analysis <br> Lot | Note |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Methylene Chloride | ND U | 5.00 | 0.210 | 1 | NA | $5 / 31 / 1119: 28$ | 247998 |  |
| o-Xylene | ND U | 1.00 | 0.140 | 1 | NA | $5 / 31 / 1119: 28$ | 247998 |  |
| Styrene | ND U | 1.00 | 0.290 | 1 | NA | $5 / 31 / 1119: 28$ | 247998 |  |
| Tetrachloroethene (PCE) | ND U | 1.00 | 0.220 | 1 | NA | $5 / 31 / 1119: 28$ | 247998 |  |
| Toluene | ND U | 1.00 | 0.190 | 1 | NA | $5 / 31 / 1119: 28$ | 247998 |  |
| trans-1,2-Dichloroethene | ND U | 1.00 | 0.190 | 1 | NA | $5 / 31 / 1119: 28$ | 247998 |  |
| trans-1,3-Dichloropropene | ND U | 1.00 | 0.230 | 1 | NA | $5 / 31 / 1119: 28$ | 247998 |  |
| trans-1,4-Dichloro-2-butene | ND U | 20.0 | 2.20 | 1 | NA | $5 / 31 / 1119: 28$ | 247998 |  |
| Trichloroethene (TCE | ND U | 1.00 | 0.360 | 1 | NA | $5 / 31 / 1119: 28$ | 247998 |  |
| Trichlorofluoromethane | ND U | 20.0 | 0.240 | 1 | NA | $5 / 31 / 1119: 28$ | 247998 |  |
| Vinyl Acetate | ND U | 10.0 | 1.90 | 1 | NA | $5 / 31 / 1119: 28$ | 247998 |  |
| Vinyl Chloride | ND U | 1.00 | 0.360 | 1 | NA | $5 / 31 / 1119: 28$ | 247998 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Q |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 92 | $68-118$ | $5 / 31 / 1119: 28$ |  |
| 4-Bromofluorobenzene | 105 | $78-129$ | $5 / 31 / 1119: 28$ |  |
| Dibromofluoromethane | 96 | $80-114$ | $5 / 31 / 1119: 28$ |  |
| Toluene-d8 | 99 | $87-118$ | $5 / 31 / 1119: 28$ |  |

COLUMBIA ANALYTICAL SERVICES, INC.
Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 19 / 111110$ |
| Sample Matrix: | Water | Date Received: $5 / 20 / 11$ |
| Sample Name: | MW-3B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102246-004 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Lesult |  |  | Dilution | Date | Date | Extraction Analysis |
| :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lot |  |  |  |  |  |  | Note

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: <br> Project: |
| :--- | :--- | ---: |
| Dample Matrix: JED SWDF <br> Sallected: $5 / 19 / 111110$ <br> Sample Name: Water | MW-3B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Codeceived: | $5 / 20 / 11$ |  |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247998

| Analyte Name | Result Q | MRL | MDL | Dilution | Date <br> Extracted | Date <br> Analyzed | Extraction Analysis <br> Lot | Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Note

$\left.\begin{array}{lcccc}\text { Surrogate Name } & \text { \%Rec } & \begin{array}{c}\text { Control } \\ \text { Limits }\end{array} & \begin{array}{c}\text { Date } \\ \text { Analyzed }\end{array} & \text { Q }\end{array}\right]$

| Client: | Environmental Planning Specialists | Service Request: J 1102246 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | Water | Date Received: |
| Sample Name: | MW-2A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Sab Code: | J1102246-005 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date <br> Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/29/1101:12 |  | 248001 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/29/1101:12 |  | 248001 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/29/1101:12 |  | 248001 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/29/1101:12 |  | 248001 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/29/1101:12 |  | 248001 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/29/1101:12 | 2 | 248001 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/29/1101:12 |  | 248001 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/29/1101:12 |  | 248001 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/29/1101:12 |  | 248001 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/29/11 01:12 |  | 248001 |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | JED SWDF | Dater |
| Dample Name: | MW-2A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | $\mathrm{J} 1102246-005$ | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 248001

| Analyte Name | Result Q | MRL | MDL | Dilution | Date <br> Factor | Date <br> Exacted | Extraction Analysis <br> Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lethylene Chloride | ND U | 5.00 | 0.210 | 1 | NA | $5 / 29 / 1101: 12$ | 248001 |
| Note |  |  |  |  |  |  |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed $\quad$ Q |  |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 99 | $68-118$ | $5 / 29 / 1101: 12$ |  |
| 4-Bromofluorobenzene | 88 | $78-129$ | $5 / 29 / 1101: 12$ |  |
| Dibromofluoromethane | 103 | $80-114$ | $5 / 29 / 1101: 12$ |  |
| Toluene-d8 | 103 | $87-118$ | $5 / 29 / 1101: 12$ |  |

COLUMBIA ANALYTICAL SERVICES, INC.
Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 |
| :---: | :---: | :---: |
| Project: | JED SWDF | Date Collected: 5/19/11 1300 |
| Sample Matrix: | Water | Date Received: 5/20/11 |
| Sample Name: | MW-2B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102246-006 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/29/11 01:34 | \% ** | 248001 |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| 2-Hexanone | ND | U | 25.0 * | 2.20 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/29/1101:34 |  | 248001 |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/29/1101:34 |  | 248001 |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/29/11 01:34 |  | 248001 |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/29/11 01:34 |  | 248001 |


| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Droject: |
| :--- | :--- | ---: |
| Date Collected: $: 5 / 19 / 111300$  <br> Sample Matrix: Water | Date Received: $5 / 20 / 11$ |  |
| Sample Name: | MW-2B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102246-006 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 248001

|  | Result Q | MRL | MDL | Dilution | Date <br> Factor | Date <br> Extracted | Extraction Analysis <br> Analyzed |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lot | Lot | Note |  |  |  |  |  |
| Methylene Chloride | ND U | 5.00 | 0.210 | 1 | NA | $5 / 29 / 1101: 34$ | 248001 |
| o-Xylene | ND U | 1.00 | 0.140 | 1 | NA | $5 / 29 / 1101: 34$ | 248001 |
| Styrene | ND U | 1.00 | 0.290 | 1 | NA | $5 / 29 / 1101: 34$ | 248001 |
| Tetrachloroethene (PCE) | ND U | 1.00 | 0.220 | 1 | NA | $5 / 29 / 1101: 34$ | 248001 |
| Toluene | ND U | 1.00 | 0.190 | 1 | NA | $5 / 29 / 1101: 34$ | 248001 |
| trans-1,2-Dichloroethene | ND U | 1.00 | 0.190 | 1 | NA | $5 / 29 / 1101: 34$ | 248001 |
| trans-1,3-Dichloropropene | ND U | 1.00 | 0.230 | 1 | NA | $5 / 29 / 1101: 34$ | 248001 |
| trans-1,4-Dichloro-2-butene | ND U | 20.0 | 2.20 | 1 | NA | $5 / 29 / 1101: 34$ | 248001 |
| Trichloroethene (TCE) | ND U | 1.00 | 0.360 | 1 | NA | $5 / 29 / 1101: 34$ | 248001 |
| Trichlorofiuoromethane | ND U | 20.0 | 0.240 | 1 | NA | $5 / 29 / 1101: 34$ | 248001 |
| Vinyl Acetate | ND U | 10.0 | 1.90 | 1 | NA | $5 / 29 / 1101: 34$ | 248001 |
| Vinyl Chloride | ND U | 1.00 | 0.360 | 1 | NA | $5 / 29 / 1101: 34$ | 248001 |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Q |
| :--- | :---: | :---: | :---: | :---: |


| Client: | Environmental Planning Specialists | Service Request: <br> Project: <br> Sample Matrix: |
| :--- | :--- | ---: |
| JED SWDF | Water | Date Collected: $5 / 19 / 111532$ |
| Dample Name: | MW-1A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102246-007 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| 1,2-Dichloropropane | 0.310 | I | 1.00 | 0.190 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| 1,4-Dichlorobenzene | 0.660 | I | - 1.00 | 0.160 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| 2-Hexanone | ND | U | + 25.0 | 2.20 | 1 | NA | 6/1/1117:26 |  | 248454 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Benzene | 7.78 |  | 1.00 | 0.210 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| cis-1,2-Dichloroethene | 0.820 | I | 1.00 | 0.360 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Ethylbenzene | 6.74 |  | 1.00 | 0.210 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| m,p-Xylenes | 6.84 |  | 2.00 | 0.310 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |


| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Droject: |
| :--- | :--- | ---: |
| DED SWDF Collected: $5 / 19 / 111532$ <br> Sample Matrix: Water | Date Received: <br> Sample Name: | MW-1A |

Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Methylene Chloride | 0.250 | I | 5.00 | 0.210 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| o-Xylene | 3.04 |  | 1.00 | 0.140 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Styrene | ND | U | 1.00 | 0.290 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Tetrachloroethene (PCE) | ND | U | 1.00 | 0.220 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Toluene | 1.79 |  | 1.00 | 0.190 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| trans-1,2-Dichloroethene | ND | U | 1.00 | 0.190 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| trans-1,3-Dichloropropene | ND | U | 1.00 | 0.230 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| trans-1,4-Dichloro-2-butene | ND | U | 20.0 | 2.20 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Trichloroethene (TCE) | ND | U | 1.00 | 0.360 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Trichiorofluoromethane | ND | U | 20.0 | 0.240 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Vinyl Acetate | ND | U | 10.0 | 1.90 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |
| Vinyl Chloride | ND | U | 1.00 | 0.360 | 1 | NA | 6/1/11 17:26 |  | 248454 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed$\quad$ Q |  |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 86 | $68-118$ | $6 / 1 / 1117: 26$ |  |
| 4-Bromofluorobenzene | 106 | $78-129$ | $6 / 1 / 1117: 26$ |  |
| Dibromofluoromethane | 92 | $80-114$ | $6 / 1 / 1117: 26$ |  |
| Toluene-d8 | 92 | $87-118$ | $6 / 1 / 1117: 26$ |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: <br> Project: |
| :--- | :--- | :--- |
| Sample Matrix: | JED SWDF | Water |
| Dample Name: | MW-1B | Deceived: $5 / 20 / 11$ |

## Volatile Organic Compounds by GC/MiS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date <br> Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/29/1102:18 |  | 248001 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/29/11 02:18 | \% | 248001 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/29/11 02:18 |  | 248001 |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Droject: |
| :--- | :--- | ---: |
| DED SWDF | Collected: $5 / 19 / 111505$ |  |
| Sample Matrix: | Water | Date Received: $5 / 20 / 11$ |
| Sample Name: | MW-1B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102246-008 | Basis: NA |

## Voiatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 248001

|  |  |  |  | Dilution | Date <br> Analyte Name | Date <br> Analyzed | Extraction Analysis <br> Lot | Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Note



| Client: | Environmental Planning Specialists | Service Request: J1102246 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 19 / 110000$ |
| Sample Matrix: | Water | Date Received: $5 / 20 / 11$ |
| Sample Name: | Trip Blank | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102246-009 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/29/1100:05 |  | 248001 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/29/1100:05 |  | 248001 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/29/1100:05 |  | 248001 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/29/1100:05 |  | 248001 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/29/1100:05 |  | 248001 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/29/1100:05 |  | 248001 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/29/1100:05 |  | 248001 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/29/1100:05 |  | 248001 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/29/1100:05 |  | 248001 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/29/1100:05 |  | 248001 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/29/1100:05 |  | 248001 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/29/1100:05 |  | 248001 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/29/1100:05 |  | 248001 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/29/1100:05 |  | 248001 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/29/1100:05 |  | 248001 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/29/1100:05 |  | 248001 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/29/11 00:05 |  | 248001 |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: <br> Project: |
| :--- | :--- | ---: |
| Dample Matrix: JED SWDF | Water | Date Received: |
| Sample Name: | $5 / 20 / 11$ |  |
| Lab Code: | Trip Blank | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| L1102246-009 | Basis: NA |  |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 248001

| Analyte Name | Result Q | MRL | MDL | Dilution | Date <br> Factor | Date <br> Enalyzed | Extraction Analysis <br> Lot | Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | $\mathbf{Q}$ |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 98 | $68-118$ | $5 / 29 / 1100: 05$ |  |
| 4-Bromofluorobenzene | 91 | $78-129$ | $5 / 29 / 1100: 05$ |  |
| Dibromofluoromethane | 100 | $80-114$ | $5 / 29 / 1100: 05$ |  |
| Toluene-d8 | 102 | $87-118$ | $5 / 29 / 1100: 05$ |  |

\(\left.$$
\begin{array}{llr}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: J1102246 } \\
\text { Droject: }\end{array} \\
\begin{array}{ll}\text { Dample Collected: Natrix: } & \text { JED SWDF }\end{array}
$$ <br>

Sater \& Date Received: NA\end{array}\right]\)| Sample Name: | Method Blank |
| :--- | :--- |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 247998

|  |  |  | Dilution | Date | Date | Extraction Analysis |
| :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lot |  |  |  |  |  |  | Note

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: NA <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | JED SWDF | Dater Received: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result Q | MRL | MDL | Dilution | Date <br> Factor | Date <br> Analyzed | Extraction Analysis <br> Lot | Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed |
| :--- | :---: | :---: | :---: |
| Q |  |  |  |
| 1,2-Dichloroethane-d4 | 96 | $68-118$ | $5 / 31 / 1111: 00$ |
| 4-Bromofluorobenzene | 99 | $78-129$ | $5 / 31 / 1111: 00$ |
| Dibromofluoromethane | 96 | $80-114$ | $5 / 31 / 1111: 00$ |
| Toluene-d8 | 98 | $87-118$ | $5 / 31 / 1111: 00$ |


| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: NA <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | JED SWDF | Dater Received: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 248001

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date <br> Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/28/11 23:43 | * | 248001 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/28/1123:43 | +104* | 248001 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/28/11 23:43 |  | 248001 |  |

Analytical Report
$\left.\begin{array}{llr}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: } \\ \text { Project: }\end{array} \\ \text { Sample Matrix: } & \text { JED SWDF } & \text { Dater Collected: NA } \\ \text { Date Received: NA }\end{array}\right]$

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B Analysis Lot: 248001

| Analyte Name | Result $\mathbf{Q}$ | MRL | MDL | Dilution | Dactor <br> Extracted | Date <br> Analyzed | Extraction Analysis <br> Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lot | Note |  |  |  |  |  |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Q |
| :--- | :---: | :---: | :---: | :---: |


| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: NA |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Received: NA |
| Sample Matrix: | Water | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Sample Name: | Method Blank | Basis: NA |

## Volatile Organic Compounds by GC/ViS

Analytical Method: 8260B

| Analyte Name R | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis <br> Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 6/1/1111:23 |  | 248454 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 6/1/1111:23 |  | 248454 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 6/1/1111:23 |  | 248454 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 6/1/1111:23 |  | 248454 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 6/1/1111:23 |  | 248454 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 6/1/11 11:23 |  | 248454 |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: NA <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | WED SWDF | Dater Received: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 248454

| Analyte Name | Result $\mathbf{Q}$ | MRL | MDL | Dilution | Date <br> Factor <br> Extracted | Date <br> Analyzed | Extraction Analysis <br> Lot | Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Note

\(\left.$$
\begin{array}{lcccc}\text { Surrogate Name } & \text { \%Rec } & \begin{array}{c}\text { Control } \\
\text { Limits }\end{array}
$$ \& \begin{array}{c}Date <br>

Analyzed\end{array} \& Q\end{array}\right]\)| \%-Dichloroethane-d4 | 93 | $68-118$ | $6 / 1 / 1111: 23$ |
| :--- | :---: | :---: | :---: |
| 4-Bromofluorobenzene | 93 | $78-129$ | $6 / 1 / 1111: 23$ |
| Dibromofluoromethane | 99 | $80-114$ | $6 / 1 / 1111: 23$ |
| Toluene-d8 | 96 | $87-118$ | $6 / 1 / 1111: 23$ |

COLUMBIA ANALYTICAL SERVICES, INC.
Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | $J 1102246$ |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 19 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 20 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-5B | Units: |
| :--- | :--- | :---: |
| Lab Code: | J1102246-001 |  |
| Extraction Method: | METHOD | Basis: |


| Analyte Name | Result Q | MRL | MDL | Dilution | Dactor <br> Extracted | Date <br> Analyzed | Extraction <br> Lot | Note |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dibromoethane (EDB) | ND U | 0.021 | 0.00015 | 1 | $05 / 25 / 11$ | $05 / 27 / 11$ | JWG1101221 |  |
| 1,2-Dibromo-3-chloropropane (DF | ND U | 0.021 | 0.00040 | 1 | $05 / 25 / 11$ | $05 / 27 / 11$ | JWG1101221 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 112 | $77-150$ | $05 / 27 / 11$ | Acceptable |

Comments:

| Client: | Environmental Planning Specialists | Service Request: | J1102246 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 19 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 20 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-4B | Units: |
| :--- | :--- | :---: |
| Lab Code: | J1102246-002 |  |
| Extraction Method: | METHOD | Basis: |
| Analysis Method: | 8011 | Level: |
| Low |  |  |


|  |  |  | Dilution | Date | Date Extraction |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Result Q | MRL | MDL | Factor | Extracted | Analyzed | Lot | Note |
| 1,2-Dibromoethane (EDB) | ND U | 0.021 | 0.00015 | 1 | $05 / 31 / 11$ | $05 / 31 / 11$ | JWG1101266 |  |
| 1,2-Dibromo-3-chloropropane (DI | ND U | 0.021 | 0.00039 | 1 | $05 / 31 / 11$ | $05 / 31 / 11$ | JWG1101266 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 103 | $77-150$ | $05 / 31 / 11$ | Acceptable |

[^20]Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | J1102246 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 19 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 20 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-3A | Units: |
| :--- | :--- | :---: |
| Lab Code: | J1102246-003 |  |
| Extraction Method: | METHOD | Basis: |
| Analysis Method: | 8011 | Level: |


| Analyte Name | Result Q | MRL | MDL | Dilution | Dater <br> Extracted | Date <br> Analyzed | Extraction <br> Lot | Note |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dibromoethane (EDB) | ND U | 0.021 | 0.00015 | 1 | $05 / 31 / 11$ | $05 / 31 / 11$ | JWG1101266 |  |
| 1,2-Dibromo-3-chloropropane (DF | ND U | 0.021 | 0.00039 | 1 | $05 / 31 / 11$ | $05 / 31 / 11$ | JWG1101266 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 107 | $77-150$ | $05 / 31 / 11$ | Acceptable |

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | J1102246 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 19 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 20 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-3B | Units: ug/L |
| :--- | :--- | :---: |
| Lab Code: | J1102246-004 | Basis: NA |
| Extraction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


| Analyte Name | Result $\mathbf{Q}$ | MRL | MDL | Dilution | Factor | Date <br> Extracted | Date <br> Analyzed | Extraction <br> Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |  |  |  |
| 1,2-Dibromoethane (EDB) | ND U | 0.021 | 0.00015 | 1 | $05 / 31 / 11$ | $05 / 31 / 11$ | JWG1101266 |  |
| Nibromo-3-chloropropane (DI | ND U | 0.021 | 0.00039 | 1 | $05 / 31 / 11$ | $05 / 31 / 11$ | JWG1101266 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 107 | $77-150$ | $05 / 31 / 11$ | Acceptable |

Comments:

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | J1102246 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 19 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 20 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-2A | Units: $\mathrm{ug} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | J1102246-005 | Basis: NA |
| Extraction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


|  |  |  | Dilution | Date <br> Analyte Name | Result Q | MRL | MDL | Factor |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Extracted | Date |
| :---: |
| Analyzed | | Extraction |
| :---: |
| Lot | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 109 | $77-150$ | $05 / 31 / 11$ | Acceptable |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | $J 1102246$ |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 19 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 20 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-2B | Units: |
| :--- | :--- | :--- |
| Lab Code: | J1102246-006 |  |
| Extraction Method: | METHOD | Basis: |


| Analyte Name | Result $\mathbf{Q}$ | MRL | MDL | Dilution | Dactor | Date <br> Extracted | Exalyzaction <br> Analyzed | Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 104 | $77-150$ | $05 / 31 / 11$ | Acceptable |


| Client: | Environmental Planning Specialists | Service Request: | J1102246 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 19 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 20 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-1A | Units: |
| :--- | :--- | :---: |
| Lab Code: | J1102246-007 |  |
| Extraction Method: | METHOD | Basis: |


| Analyte Name | Result Q | MRL | MDL | Dilution | Date <br> Dxtracted | Date <br> Analyzed | Extraction <br> Lot | Note |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dibromoethane (EDB) | ND U | 0.021 | 0.00015 | 1 | $05 / 31 / 11$ | $05 / 31 / 11$ | JWG1101266 |  |
| 1,2-Dibromo-3-chloropropane (DF | ND U | 0.021 | 0.00039 | 1 | $05 / 31 / 11$ | $05 / 31 / 11$ | JWG1101266 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 95 | $77-150$ | $05 / 31 / 11$ | Acceptable |

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | J1102246 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | $05 / 19 / 2011$ |
| Sample Matrix: | Water | Date Received: | $05 / 20 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-1B |
| :--- | :--- |
| Lab Code: | J1102246-008 |

Extraction Method: METHOD Analysis Method: 8011

| Analyte Name | Result Q | MRL | MDL | Dilution | Date <br> Extracted | Date <br> Analyzed | Extraction <br> Lot | Note |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dibromoethane (EDB) | ND U | 0.021 | 0.00015 | 1 | $05 / 31 / 11$ | $05 / 31 / 11$ | JWG1101266 |  |
| 1,2-Dibromo-3-chloropropane (DI | ND U | 0,021 | 0,00039 | 1 | $05 / 31 / 11$ | $05 / 31 / 11$ | JWG1101266 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 104 | $77-150$ | $05 / 31 / 11$ | Acceptable |

Comments:

| Client: | Environmental Planning Specialists | Service Request: | J1102246 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: | NA |
| Sample Matrix: | Water | Date Received: | NA |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

Sample Name: Method Blank
Lab Code: JWG1101221-4

Extraction Method: METHOD

## Analysis Method: 8011

|  |  |  | Dilution | Date <br> Analyte Name | Result Q | MRL | MDL | Factor |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Extracted | Analyzed |
| :---: | | Extraction |
| :---: |
| Lot | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 116 | $77-150$ | $05 / 27 / 11$ | Acceptable |

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: J1102246 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: NA |
| Sample Matrix: | Water | Date Received: NA |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

$\begin{array}{ll}\text { Sample Name: } & \text { Method Blank } \\ \text { Lab Code: } & \text { JWG1101266-3 }\end{array}$
Extraction Method: METHOD Analysis Method: 8011

| Analyte Name | Result $\mathbf{Q}$ | MRL | MDL | Dilution | Factor | Date <br> Extracted | Date <br> Analyzed | Extraction |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lot | Note |  |  |  |  |  |  |  |
| 1,2-Dibromoethane (EDB) | ND U | 0.020 | 0.00014 | 1 | $05 / 31 / 11$ | $05 / 31 / 11$ | JWG1101266 |  |
| 1,2-Dibromo-3-chloropropane (DF | ND U | 0.020 | 0.00038 | 1 | $05 / 31 / 11$ | $05 / 31 / 11$ | JWG1101266 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 113 | $77-150$ | $05 / 31 / 11$ | Acceptable |

Comments:

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: <br> Project: <br> Sample Matrix: |
| :--- | :--- | ---: |
| JED SWDF | Water | Date Received: $5 / 20 / 110742$ |
| Sample Name: | MW-5B | Basis: NA |

## Inorganic Parameters

|  |  |  |  | Dilution <br> Dactor <br> Datracted | Date <br> Analyzed | Note |
| :--- | :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Project: |
| :--- | :--- | ---: |
| Date Collected: $5 / 19 / 110945$ <br> Dample Matrix: Water | Date Received: <br> Sample Name: | MW-4B |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 16:17 |  |
| Arsenic, Total Recoverable | 6020 | 0.69 |  | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/26/11 | 5/31/11 16:17 |  |
| Barium, Total Recoverable | 6020 | 21.1 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/11 16:17 |  |
| Beryllium, Total Recoverable | 6020 | 0.4 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/26/11 | 5/31/11 16:17 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/26/11 | 5/31/11 16:17 |  |
| Chromium, Total Recoverable | 6020 | 0.5 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/11 16:17 |  |
| Cobalt, Total Recoverable | 6020 | 0.2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/26/11 | 5/31/11 16:17 |  |
| Copper, Total Recoverable | 6020 | 1.4 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/26/11 | 5/31/11 16:17 |  |
| Iron, Total Recoverable | 6010B | 1420 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 6/1/11 | 6/2/11 12:09 |  |
| Lead, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/26/11 | 5/31/11 16:17 |  |
| Mercury, Total | 7470 A | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/27/11 | 5/27/11 17:55 |  |
| Nickel, Total Recoverable | 6020 | 4.8 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 16:17 |  |
| Selenium, Total Recoverable | 6020 | 1.0 | I | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/26/11 | 5/31/11 16:17 |  |
| Silver, Total Recoverable | 6020 | 0.16 | I | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/26/11 | 5/31/11 16:17 |  |
| Sodium, Total Recoverable | 6010B | 14.5 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/26/11 | 5/28/11 03:20 |  |
| Thallium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/26/11 | 5/31/11 16:17 |  |
| Vanadium, Total Recoverable | 6020 | 0.6 | I | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/26/11 | 5/31/11 16:17 |  |
| Zinc, Total Recoverable | 6020 | 2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/26/11 | 5/31/11 16:17 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Droject: |
| :--- | :--- | ---: |
| JED SWDF Collected: | $5 / 19 / 111152$ |  |
| Sample Matrix: | Water | Date Received: $5 / 20 / 11$ |
| Sample Name: | MW-3A | Basis: NA |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution <br> Factor | Date <br> Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 16:22 |  |
| Arsenic, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/26/11 | 5/31/1116:22 |  |
| Barium, Total Recoverable | 6020 | 12.7 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/1 i i $6: 22$ |  |
| Beryllium, Total Recoverable | 6020 | 0.3 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/26/11 | 5/31/11 16:22 |  |
| Cadmium, Total Recoverable | 6020 | ND | Uu | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/26/11 | 5/31/1116:22 |  |
| Chromium, Total Recoverable | 6020 | 0.7 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/11 16:22 |  |
| Cobalt, Total Recoverable | 6020 | 0.2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/26/11 | 5/31/11 16:22 |  |
| Copper, Total Recoverable | 6020 | 5.0 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/26/11 | 5/31/11 16:22 |  |
| Iron, Total Recoverable | 6010B | 900 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 6/1/11 | 6/2/11 12:14 |  |
| Lead, Total Recoverable | 6020 | 0.4 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/26/11 | 5/31/11 16:22 |  |
| Mercury, Total | 7470 A | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/27/11 | 5/27/11 17:56 |  |
| Nickel, Total Recoverable | 6020 | 14.2 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 16:22 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/26/11 | 5/31/11 16:22 |  |
| Silver, Total Recoverable | 6020 | 0.16 | I | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/26/11 | 5/31/1116:22 |  |
| Sodium, Total Recoverable | 6010B | 26.4 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/26/11 | 5/28/11 03:24 |  |
| Thallium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/26/11 | 5/31/11 16:22 |  |
| Vanadium, Total Recoverable | 6020 | 2.2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/26/11 | 5/31/11 16:22 |  |
| Zinc, Total Recoverable | 6020 | 12 |  | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/26/11 | 5/31/11 16:22 |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Project: |
| :--- | :--- | ---: |
| Jample Matrix: | Water | Dallected: <br> Date Received: |
| Sam/20/11 | $5 / 110$ |  |
| Sample Name: | MW-3B | Basis: NA |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution <br> Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 16:27 |  |
| Arsenic, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/26/11 | 5/31/11 16:27 |  |
| Barium, Total Recoverable | 6020 | 16.6 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/1 1 16:27 |  |
| Beryllium, Total Recoverable | 6020 | 0.4 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/26/11 | 5/31/11 16:27 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/26/11 | 5/31/1116:27 |  |
| Chromium, Total Recoverable | 6020 | 0.5 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/11 16:27 |  |
| Cobalt, Total Recoverable | 6020 | 0.2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/26/11 | 5/31/11 16:27 |  |
| Copper, Total Recoverable | 6020 | 1.4 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/26/11 | 5/31/11 16:27 |  |
| Iron, Total Recoverable | 6010B | 800 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 6/1/11 | 6/2/11 12:19 |  |
| Lead, Total Recoverable | 6020 | 0.5 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/26/11 | 5/31/11 16:27 |  |
| Mercury, Total | 7470A | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/27/11 | 5/27/11 17:58 |  |
| Nickel, Total Recoverable | 6020 | 1.7 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 16:27 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/26/11 | 5/31/11 16:27 |  |
| Silver, Total Recoverable | 6020 | 0.16 | I | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/26/11 | 5/31/1116:27 |  |
| Sodium, Total Recoverable | 6010B | 5.83 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/26/11 | 5/28/11 03:29 |  |
| Thallium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/26/11 | 5/31/11 16:27 |  |
| Vanadium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/26/11 | 5/31/11 16:27 |  |
| Zinc, Total Recoverable | 6020 | 2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/26/11 | 5/31/11 16:27 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Droject: |
| :--- | :--- | ---: |
| JED SWDF Collected: | $5 / 19 / 111325$ |  |
| Sample Matrix: | Water | Date Received: $5 / 20 / 11$ |
| Sample Name: | MW-2A | Basis: NA |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution <br> Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 |  | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 16:32 |  |
| Arsenic, Total Recoverable | 6020 | 1.14 |  | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/26/11 | 5/31/11 16:32 |  |
| Barium, Total Recoverable | 6020 | 30.8 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/1 1 16:32 |  |
| Beryllium, Total Recoverable | 6020 | 0.5 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/26/11 | 5/31/11 16:32 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/26/11 | 5/31/1116:32 |  |
| Chromium, Total Recoverable | 6020 | 1.4 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/11 16:32 |  |
| Cobalt, Total Recoverable | 6020 | 3.1 |  | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/26/11 | 5/31/11 16:32 |  |
| Copper, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/26/11 | 5/31/11 16:32 |  |
| Iron, Total Recoverable | 6010B | 9860 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 6/1/11 | 6/2/11 12:23 |  |
| Lead, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/26/11 | 5/31/11 16:32 |  |
| Mercury, Total | 7470A | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/27/11 | 5/27/11 17:59 |  |
| Nickel, Total Recoverable | 6020 | 0.6 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 16:32 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/26/11 | 5/31/11 16:32 |  |
| Silver, Total Recoverable | 6020 | 0.16 | I | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/26/11 | 5/31/11 16:32 |  |
| Sodium, Total Recoverable | 6010B | 11.3 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/26/11 | 5/28/11 03:34 |  |
| Thallium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/26/11 | 5/31/1116:32 |  |
| Vanadium, Total Recoverable | 6020 | 0.7 | I | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/26/11 | 5/31/11 16:32 |  |
| Zinc, Total Recoverable | 6020 | 1 | I | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/26/11 | 5/31/1116:32 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | WED SWDF | Dater Received: $5 / 20 / 111300$ |
| Sample Name: | MW-2B |  |
| Lab Code: | J1102246-006 | Basis: NA |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution Factor | Date Extracted | Date <br> Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/1116:38 |  |
| Arsenic, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/26/11 | 5/31/11 16:38 |  |
| Barium, Total Recoverable | 6020 | 15.6 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/1 1 | 5/3i/1 $116: 38$ |  |
| Beryllium, Total Recoverable | 6020 | 0.4 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/26/11 | 5/31/11 16:38 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/26/11 | 5/31/1116:38 |  |
| Chromium, Total Recoverable | 6020 | 1.1 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/1116:38 |  |
| Cobalt, Total Recoverable | 6020 | 0.3 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/26/11 | 5/31/11 16:38 |  |
| Copper, Total Recoverable | 6020 | 24.5 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/26/11 | 5/31/11 16:38 |  |
| Iron, Total Recoverable | 6010B | 970 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 6/1/11 | 6/2/11 12:28 |  |
| Lead, Total Recoverable | 6020 | 8.6 |  | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/26/11 | 5/31/11 16:38 |  |
| Mercury, Total | 7470A | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/27/11 | 5/27/11 18:01 |  |
| Nickel, Total Recoverable | 6020 | 29.5 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/1116:38 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/26/11 | 5/31/11 16:38 |  |
| Silver, Total Recoverable | 6020 | 0.16 | I | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/26/11 | 5/31/11 16:38 |  |
| Sodium, Total Recoverable | 6010B | 4.90 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/26/11 | 5/28/11 03:39 |  |
| Thallium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/26/11 | 5/31/11 16:38 |  |
| Vanadium, Total Recoverable | 6020 | 1.7 | I | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/26/11 | 5/31/11 16:38 |  |
| Zinc, Total Recoverable | 6020 | 59 |  | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/26/11 | 5/31/1116:38 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: <br> Project: | JED SWDF |
| :--- | :--- | ---: | :--- |
| Sample Matrix: | Water | Date Received: | $5 / 20 / 11$ |
| Sample Name: | MW-1A |  |  |
| Lab Code: | J1102246-007 | Basis: NA |  |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution <br> Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/11 16:43 |  |
| Arsenic, Total Recoverable | 6020 | 1.56 |  | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/26/11 | 5/31/11 16:43 |  |
| Barium, Total Recoverable | 6020 | 15.2 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/11 16:43 |  |
| Beryllium, Total Recoverable | 6020 | 0.4 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/26/11 | 5/31/11 16:43 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/26/11 | 5/31/1116:43 |  |
| Chromium, Total Recoverable | 6020 | 2.1 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/26/11 | 5/31/11 16:43 |  |
| Cobalt, Total Recoverable | 6020 | 0.5 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/26/11 | 5/31/11 16:43 |  |
| Copper, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/26/11 | 5/31/11 16:43 |  |
| Iron, Total Recoverable | 6010B | 2580 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 6/1/11 | 6/2/11 12:33 |  |
| Lead, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/26/11 | 5/31/11 16:43 |  |
| Mercury, Total | 7470A | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/27/11 | 5/27/1118:02 |  |
| Nickel, Total Recoverable | 6020 | 0.4 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/26/11 | 5/31/1116:43 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/26/11 | 5/31/1116:43 |  |
| Silver, Total Recoverable | 6020 | 0.16 | I | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/26/11 | 5/31/11 16:43 |  |
| Sodium, Total Recoverable | 6010B | 16.9 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/26/11 | 5/28/11 03:44 |  |
| Thallium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/26/11 | 5/31/11 16:43 |  |
| Vanadium, Total Recoverable | 6020 | 1.5 | I | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/26/11 | 5/31/11 16:43 |  |
| Zinc, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/26/11 | 5/31/11 16:43 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: $5 / 19 / 11$ <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | JED SWDF | Dater Received: $5 / 20 / 11$ |

## Inorganic Parameters

|  |  |  |  | Dilution <br> Factor <br> Extracted | Date <br> Analyzed | Note |
| :--- | :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: NA |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Received: NA |
| Sample Matrix: | Water | Basis: NA |

## Inorganic Parameters

| Analyte Name | Method | Result Q | Units | MRL | MDL | Dilution <br> FactorDate <br> Extracted | Date <br> Analyzed |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |  |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: $5 / 19 / 110742$ |
| :--- | :--- | ---: |
| Sample Matrix: | JED SWDF | Water |
| Dample Name: | MW-5B | Received: $5 / 20 / 11$ |

## General Chemistry Parameters

|  |  |  |  | Dilution <br> Date | Date <br> Dathalyzed |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| JED SWDF | Date Received: $5 / 20 / 110945$ |  |
| Sample Matrix: | Water | Basis: NA |

## General Chemistry Parameters

|  |  |  |  | Dilution <br> Date | Date <br> Analyzed |
| :--- | :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | Water | Date Received: $5 / 20 / 111152$ |
| Sample Name: | MW-3A | Basis: NA |

## General Chemistry Parameters

|  |  |  | Dilution <br> Date |  |  | Date |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Method | Result $\mathbf{Q}$ | Units | MRL | MDL | Factor Extracted | Analyzed |
| Note |  |  |  |  |  |  |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | WED SWDF | Date Collected: $5 / 19 / 111110$ |
| Date Received: $5 / 20 / 11$ |  |  |

## General Chemistry Parameters

|  |  |  |  | DilutionDate <br> Analyte Name | Method | Result $\mathbf{Q}$ | Units | MRL |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | MDL | Factor Extracted |
| :---: |
| Analyzed |
| Note |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: $5 / 19 / 111325$ |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Received: $5 / 20 / 11$ |
| Sample Matrix: | Water | Basis: NA |

## General Chemistry Parameters

| Analyte Name | Method | Result Q | Units | MRL | MDL | Dilution <br> Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ammonia as Nitrogen | 350.1 | 3.20 | $\mathrm{mg} / \mathrm{L}$ | 0.010 | 0.005 | 1 | NA | 5/23/11 12:18 |  |
| Chloride | 300.0 | 44.5 | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.10 | 1 | NA | 5/20/11 17:36 |  |
| Nitrate as Nitrogen | 300.0 | ND U | $\mathrm{mg} / \mathrm{L}$ | 0.20 | 0.04 | 1 | NA | 5/20/11 17:36 |  |
| Solids, Total Dissolved | SM 2540 C | 101 | $\mathrm{mg} / \mathrm{L}$ | 10 | 10 | 1 | NA | 5/25/11 11:26 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: $5 / 19 / 11$ <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | Water | Date Received: <br> D/20/11 |
| Sample Name: | MW-2B | Basis: NA |

## General Chemistry Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution <br> Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ammonia as Nitrogen | 350.1 | 0.116 |  | $\mathrm{mg} / \mathrm{L}$ | 0.010 | 0.005 | 1 | NA | 5/23/11 12:22 |  |
| Chloride | 300.0 | 11.7 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.10 | 1 | NA | 5/20/11 18:20 |  |
| Nitrate as Nitrogen | 300.0 | ND | U | $\mathrm{mg} / \mathrm{L}$ | 0.20 | 0.04 | 1 | NA | 5/20/11 18:20 |  |
| Solids, Total Dissolved | SM 2540 C | 49 |  | $\mathrm{mg} / \mathrm{L}$ | 10 | 10 | 1 | NA | 5/25/11 11:26 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Project: |
| :--- | :--- | ---: |
| JED SWDF | Date Collected: $5 / 19 / 111532$ |  |
| Sample Matrix: | Water | Date Received: $5 / 20 / 11$ |
| Sample Name: | MW-1A | Basis: NA |

## General Chemistry Parameters

|  |  |  |  | Dilution <br> Date | Date <br> Analyzed |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |

# COLUMBIA ANALYTICAL SERVICES, INC. 

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | WED SWDF | Dater Received: <br> Date |
| Sample Name: | MW-1B |  |
| Lab Code: | J $1102246-008$ | Basis: NA |

## General Chemistry Parameters

|  |  |  |  | Dilution <br> Date | Date <br> Analyzed |
| :--- | :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 <br> Date Collected: NA <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | Water | Date Received: NA |

## General Chemistry Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ammonia as Nitrogen | 350.1 | ND | U | $\mathrm{mg} / \mathrm{L}$ | 0.010 | 0.005 | 1 | NA | 5/23/11 12:00 |  |
| Chloride | 300.0 | ND | U | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.10 | 1 | NA | 5/20/1115:21 |  |
| Nitrate as Nitrogen | 300.0 | ND | U | $\mathrm{mg} / \mathrm{L}$ | 0.20 | 0.04 | 1 | NA | 5/20/1115:21 |  |
| Solids, Total Dissolved | SM 2540 C | ND | U | $\mathrm{mg} / \mathrm{L}$ | 10 | 10 | 1 | NA | 5/25/11 11:26 |  |

QA/QC Report

|  |  |
| :--- | :--- |
| Client: | Environmental Planning Specialists |
| Project: | JED SWDF Report |
| Sample Matrix: | Water |
|  |  |
|  |  |
|  |  |
|  | Surrogate Recovery Summary |

Analytical Method: 8260B
Units: Percent

| Sample Name | Lab Code |  | Sur1 | Sur2 | Sur3 |
| :--- | :--- | :--- | ---: | ---: | ---: | Sur4

Surrogate Recovery Control Limits (\%)

| Sur $1=1,2$-Dichloroethane-d4 | $68-118$ |
| :--- | :--- | :--- |
| Sur2 $=4$-Bromofluorobenzene | $78-129$ |
| Sur3 $=$ Dibromofluoromethane | $80-114$ |
| Sur4 $=$ Toluene-d8 | $87-118$ |

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (\#) indicate the control criteria is not applicable.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $5 / 31 / 11$ |
| Sample Matrix: | Water |  |

## Lab Control Sample Summary Volatile Organic Compounds by GC/MS

Analytical Method: 8260 B
Units: $\mu \mathrm{g} / \mathrm{L}$
Basis: NA
Analysis Lot: 247998

|  | Lab Control Sample |  |  |
| :--- | :---: | :---: | :---: | :---: |
| JQ1102965-02 |  |  |  |
| Spike |  |  |  |$\quad$ \% Rec \(\left.\begin{array}{c}\% Rec <br>

Limits\end{array}\right]\)

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $5 / 31 / 11$ |
| Sample Matrix: | Water |  |

## Lab Control Sample Summary

 Volatile Organic Compounds by GC/MSAnalytical Method: 8260B

Units: $\mu \mathrm{g} / \mathrm{L}$
Basis: NA
Analysis Lot: 247998

## Lab Control Sample

JQ1102965-02

| Analyte Name | Result | Spike <br> Amount | \% Rec | \% Rec <br> Limits |
| :--- | :---: | :---: | :---: | :---: |
| Dibromomethane | 19.3 | 20.0 | 96 | $73-125$ |
| Ethylbenzene | 18.7 | 20.0 | 94 | $82-124$ |
| Iodomethane | 89.7 | 100 | 90 | $78-128$ |
| m,p-Xylenes | 34.5 | 40.0 | 86 | $82-125$ |
| Methylene Chloride | 19.6 | 20.0 | 98 | $70-134$ |
| o-Xylene | 18.6 | 20.0 | 93 | $82-122$ |
| Styrene | 20.0 | 20.0 | 100 | $82-123$ |
| Tetrachloroethene (PCE) | 18.2 | 20.0 | 91 | $77-129$ |
| Toluene | 19.5 | 20.0 | 98 | $82-122$ |
| trans-1,2-Dichloroethene | 19.2 | 20.0 | 96 | $81-119$ |
| trans-1,3-Dichloropropene | 18.5 | 20.0 | 93 | $71-124$ |
| trans-1,4-Dichloro-2-butene | 8.99 | 20.0 | 45 | $10-172$ |
| Trichloroethene (TCE) | 17.9 | 20.0 | 89 | $81-120$ |
| Trichlorofluoromethane | 17.4 | 20.0 | 87 | $72-127$ |
| Vinyl Acetate | 81.0 | 100 | 81 | $50-145$ |
| Vinyl Chloride | 19.1 | 20.0 | 96 | $72-133$ |

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists |
| :--- | :--- |
| Project: | JED SWDF |
| Sample Matrix: | Water |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  | Lab Control Sample Summary |


| Analytical Method: 8260 B | Units: $\mu \mathrm{g} / \mathrm{L}$ <br> Basis: |
| :--- | ---: |
|  | NA |

## Lab Control Sample <br> JQ1102967-02

| Analyte Name | Result | Spike <br> Amount | \% Rec | \% Rec <br> Limits |
| :--- | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | 18.9 | 20.0 | 95 | $79-120$ |
| 1,1,1-Trichloroethane (TCA) | 19.7 | 20.0 | 98 | $78-120$ |
| 1,1,2,2-Tetrachloroethane | 20.6 | 20.0 | 103 | $65-137$ |
| 1,1,2-Trichloroethane | 19.9 | 20.0 | 100 | $81-121$ |
| 1,1-Dichloroethane (1,1-DCA) | 19.5 | 20.0 | 98 | $83-119$ |
| 1,1-Dichloroethene (1,1-DCE) | 20.6 | 20.0 | 103 | $79-123$ |
| 1,2,3-Trichloropropane | 19.6 | 20.0 | 98 | $71-129$ |
| 1,2-Dibromo-3-chloropropane (DBCP) | 19.1 | 20.0 | 96 | $36-143$ |
| 1,2-Dibromoethane (EDB) | 20.6 | 20.0 | 103 | $80-122$ |
| 1,2-Dichiorobenzene | 20.2 | 20.0 | 101 | $79-114$ |
| 1,2-Dichloroethane | 19.2 | 20.0 | 96 | $73-120$ |
| 1,2-Dichloropropane | 20.2 | 20.0 | 101 | $86-116$ |
| 1,4-Dichlorobenzene | 20.0 | 20.0 | 100 | $77-117$ |
| 2-Butanone (MEK) | 107 | 100 | 107 | $38-152$ |
| 2-Hexanone | 108 | 100 | 108 | $63-131$ |
| 4-Methyl-2-pentanone (MIBK) | 103 | 100 | 103 | $69-127$ |
| Acetone | 89.7 | 100 | 90 | $45-157$ |
| Acrylonitrile | 107 | 100 | 107 | $56-139$ |
| Benzene | 20.4 | 20.0 | 102 | $83-118$ |
| Bromochloromethane | 19.5 | 20.0 | 98 | $82-117$ |
| Bromodichloromethane | 19.4 | 20.0 | 97 | $77-120$ |
| Bromoform | 17.8 | 20.0 | 89 | $38-149$ |
| Bromomethane | 18.2 | 20.0 | 91 | $78-132$ |
| Carbon Disulfide | 113 | 100 | 113 | $74-132$ |
| Carbon Tetrachloride | 20.1 | 20.0 | 100 | $67-129$ |
| Chlorobenzene | 19.2 | 20.0 | 102 | $83-122$ |
| Chloroethane | 81 | $80-129$ |  |  |
| Chloroform | 19.7 | 20.0 | 98 | $81-118$ |
| Chloromethane | 20.0 | 87 | $61-138$ |  |
| cis-1,2-Dichloroethene | 20.0 | 96 | $74-127$ |  |
| cis-1,3-Dichloropropene | 20.0 | 99 | $80-120$ |  |
| Dibromochloromethane | 20.0 | 96 | $71-122$ |  |

## Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $5 / 28 / 11$ |
| Sample Matrix: | Water |  |

## Lab Control Sample Summary Volatile Organic Compounds by GC/MS

Analytical Method: 8260 B
$\begin{aligned} \text { Units: } & \mu \mathrm{g} / \mathrm{L} \\ \text { Basis: } & \mathrm{NA} \\ \text { Analysis Lot: } & 248001\end{aligned}$

## Lab Control Sample

JQ1102967-02

| Analyte Name | Result | Spike <br> Amount | \% Rec <br> \% Rec <br> Limits |  |
| :--- | :---: | :---: | :---: | :---: |
| Dibromomethane | 20.2 | 20.0 | 101 | $73-125$ |
| Ethylbenzene | 20.7 | 20.0 | 103 | $82-124$ |
| Iodomethane | 102 | 100 | 102 | $78-128$ |
| m,p-Xylenes | 42.5 | 40.0 | 106 | $82-125$ |
| Methylene Chloride | 20.2 | 20.0 | 101 | $70-134$ |
| o-Xylene | 21.0 | 20.0 | 105 | $82-122$ |
| Styrene | 21.3 | 20.0 | 106 | $82-123$ |
| Tetrachloroethene (PCE) | 19.7 | 20.0 | 99 | $77-129$ |
| Toluene | 21.3 | 20.0 | 107 | $82-122$ |
| trans-1,2-Dichloroethene | 20.5 | 20.0 | 103 | $81-119$ |
| trans-1,3-Dichloropropene | 19.9 | 20.0 | 100 | $71-124$ |
| trans-1,4-Dichloro-2-butene | 19.4 | 20.0 | 97 | $10-172$ |
| Trichloroethene (TCE) | 19.9 | 20.0 | 100 | $81-120$ |
| Trichlorofluoromethane | 18.6 | 20.0 | 93 | $72-127$ |
| Vinyl Acetate | 102 | 100 | 102 | $50-145$ |
| Vinyl Chloride | 14.3 | 20.0 | 71 | $*$ |

## Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: 6/1/11 |
| Sample Matrix: | Water |  |

## Lab Control Sample Summary <br> Volatile Organic Compounds by GC/MS

| Analytical Method: 8260 B | Units: $\mu \mathrm{g} / \mathrm{L}$ <br> Basis: |
| ---: | ---: |
|  | Analysis Lot: 248454 |

## Lab Control Sample <br> JQ1 103044-01

| Analyte Name | Result | Spike <br> Amount | \% Rec | \% Rec <br> Limits |
| :--- | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | 18.6 | 20.0 | 93 | $79-120$ |
| 1,1,1-Trichloroethane (TCA) | 18.6 | 20.0 | 93 | $78-120$ |
| 1,1,2,2-Tetrachloroethane | 20.6 | 20.0 | 103 | $65-137$ |
| 1,1,2-Trichloroethane | 21.2 | 20.0 | 106 | $81-121$ |
| 1,1-Dichloroethane (1,1-DCA) | 20.4 | 20.0 | 102 | $83-119$ |
| 1,1-Dichloroethene (1,1-DCE) | 19.5 | 20.0 | 97 | $79-123$ |
| 1,2,3-Trichloropropane | 20.6 | 20.0 | 103 | $71-129$ |
| 1,2-Dibromo-3-chloropropane (DBCP) | 17.3 | 20.0 | 87 | $36-143$ |
| 1,2-Dibromoethane (EDB) | 18.8 | 20.0 | 94 | $80-122$ |
| 1,2-Dichlorobenzene | 20.2 | 20.0 | 101 | $79-114$ |
| 1,2-Dichloroethane | 18.5 | 20.0 | 92 | $73-120$ |
| 1,2-Dichloropropane | 20.7 | 20.0 | 103 | $86-116$ |
| 1,4-Dichlorobenzene | 19.4 | 20.0 | 97 | $77-117$ |
| 2-Butanone (MEK) | 107 | 100 | 107 | $38-152$ |
| 2-Hexanone | 108 | 100 | 108 | $63-131$ |
| 4-Methyl-2-pentanone (MIBK) | 106 | 100 | 106 | $69-127$ |
| Acetone | 114 | 100 | 114 | $45-157$ |
| Acrylonitrile | 118 | 100 | 118 | $56-139$ |
| Benzene | 21.9 | 20.0 | 109 | $83-118$ |
| Bromochloromethane | 19.9 | 20.0 | 99 | $82-117$ |
| Bromodichloromethane | 19.7 | 20.0 | 99 | $77-120$ |
| Bromoform | 17.7 | 20.0 | 88 | $38-149$ |
| Bromomethane | 21.2 | 20.0 | 106 | $78-132$ |
| Carbon Disulfide | 109 | 100 | 109 | $74-132$ |
| Carbon Tetrachloride | 17.3 | 20.0 | 86 | $67-129$ |
| Chlorobenzene | 20.4 | 20.0 | 102 | $83-122$ |
| Chloroethane | 20.0 | 107 | $80-129$ |  |
| Chloroform | 20.4 | 20.0 | 98 | $81-118$ |
| Chloromethane | 20.0 | 101 | $61-138$ |  |
| cis-1,2-Dichloroethene | 20.0 | 107 | $74-127$ |  |
| cis-1,3-Dichloropropene | 20.0 | 101 | $80-120$ |  |
| Dibromochloromethane | 20.0 | 94 | $71-122$ |  |

## Results flagged with an asterisk $\left({ }^{*}\right)$ indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $6 / 1 / 11$ |
| Sample Matrix: | Water |  |

## Lab Control Sample Summary

 Volatile Organic Compounds by GC/MSAnalytical Method: 8260B
Units: $\mu \mathrm{g} / \mathrm{L}$
Basis: NA
Analysis Lot: 248454

|  | Lab Control Sample <br> JQ1103044-01 <br> Spike |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Analyte Name | Result | \% Rec <br> Amount | \% Rec | Limits |
| Dibromomethane | 20.6 | 20.0 | 103 | $73-125$ |
| Ethylbenzene | 18.7 | 20.0 | 93 | $82-124$ |
| Iodomethane | 94.7 | 100 | 95 | $78-128$ |
| m,p-Xylenes | 35.5 | 40.0 | 89 | $82-125$ |
| Methylene Chloride | 22.2 | 20.0 | 111 | $70-134$ |
| o-Xylene | 19.7 | 20.0 | 98 | $82-122$ |
| Styrene | 19.6 | 20.0 | 98 | $82-123$ |
| Tetrachloroethene (PCE) | 18.7 | 20.0 | 94 | $77-129$ |
| Toluene | 21.0 | 20.0 | 105 | $82-122$ |
| trans-1,2-Dichloroethene | 20.7 | 20.0 | 104 | $81-119$ |
| trans-1,3-Dichloropropene | 18.9 | 20.0 | 94 | $71-124$ |
| trans-1,4-Dichloro-2-butene | 4.98 | 20.0 | 25 | $10-172$ |
| Trichloroethene (TCE) | 18.9 | 20.0 | 94 | $81-120$ |
| Trichlorofluoromethane | 18.1 | 20.0 | 91 | $72-127$ |
| Vinyl Acetate | 87.7 | 100 | 88 | $50-145$ |
| Vinyl Chloride | 20.8 | 20.0 | 104 | $72-133$ |

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 |
| :--- | :--- | :--- |
| Project: | JED SWDF |  |
| Sample Matrix: | Water |  |

Surrogate Recovery Summary
1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Extraction Method: | METHOD | Units: PERCENT |
| :--- | :--- | :---: |
| Analysis Method: | 8011 | Level: |


| Sample Name | Lab Code | Sur1 |
| :--- | :--- | :--- |
| Duplicate Lab Control Sample | JWG1101266-2 | 108 |
| Lab Control Sample | JWG1101266-1 | 106 |
| Lab Control Sample | JWG1101221-3 | 115 |
| MW-5BDMS | JWG1101221-2 | 111 |
| MW-5BMS | JWG1101221-1 | 109 |
| Method Blank | JWG1101266-3 | 113 |
| Method Blank | JWG1101221-4 | 116 |
| MW-1B | J1102246-008 | 104 |
| MW-1A | J1102246-007 | 95 |
| MW-2B | J1102246-006 | 104 |
| MW-2A | J1102246-005 | 109 |
| MW-3B | J1102246-004 | 107 |
| MW-3A | J1102246-003 | 107 |
| MW-4B | J1102246-002 | 103 |
| MW-5B | JI 102246-001 | 112 |

Surrogate Recovery Control Limits (\%)
Surl $=$ 1,1,1,2-Tetrachloroethane
77-150

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (\#) indicate the control criteria is not applicable.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: | J 1102246 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Extracted: | $05 / 25 / 2011$ |
| Sample Matrix: | Water | Date Analyzed: | $05 / 27 / 2011$ |

## Matrix Spike/Duplicate Matrix Spike Summary

1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-5B | Units: $\mathrm{ug} / \mathrm{L}$ |
| :--- | :--- | ---: |
| Lab Code: | J1102246-001 | Basis: |
| Extraction Method: | METHOD | Level: |
| Low |  |  |
| Analysis Method: | 8011 | Extraction Lot: |


| Analyte Name | Sample <br> Result | $\begin{aligned} & \text { MW-5BMS } \\ & \text { JWG1101221-1 } \\ & \text { Mätrix Spike } \end{aligned}$ |  |  | MW-5BDMSJWG1101221-2Duplicate Matrix Spike |  |  | \%Rec <br> Limits | RPD | RPD <br> Limit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Result | Expected | \%Rec | Result | Expected | \%Rec |  |  |  |
| 1,2-Dibromoethane (EDB) | ND | 0.282 | 0.252 | 112 | 0.278 | 0.255 | 109 | 65-135 | 1 | 20 |
| 1,2-Dibromo-3-chloropropane (DBCP | ND | 0.259 | 0.252 | 103 | 0.283 | 0.255 | 111 | 65-135 | 9 | 20 |

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (\#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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# COLUMBIA ANALYTICAL SERVICES, INC. 

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Extracted: |
| Sample Matrix: | Water | Date Analyzed: |
| Sa5/27/2011 |  |  |

Lab Control Spike Summary
1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Extraction Method: | METHOD |
| :--- | :--- |
| Analysis Method: | 8011 |

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: JWG1101221

|  | Lab Control Sample <br> JWG1101221-3 |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Analyte Name | Lab Control Spike |  |  | \%Rec |
|  | Result | Expected | \%Rec | Limits |
| 1,2-Dibromoethane (EDB) | 0.293 | 0.250 | 117 | $70-130$ |
| 1,2-Dibromo-3-chloropropane (DBCP | 0.275 | 0.250 | 110 | $70-130$ |

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

| Client: | Environmental Planning Specialists | Service Request: | J 1102246 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Extracted: | $05 / 31 / 2011$ |
| Sample Matrix: | Water | Date Analyzed: | $05 / 31 / 2011$ |

Lab Control Spike/Duplicate Lab Control Spike Summary 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Extraction Method: | METHOD |
| :--- | :--- |
| Analysis Method: | 8011 |


| And |  |  |  |  |  |  | xtracti | el: ot: | $1101266$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ntrol Sam 1101266-1 ontrol Spik |  | Duplicat Duplica | ab Control 1101266-2 Lab Control | ample <br> Spike | \%R |  | RPD |
| Analyte Name | Result | Expected | \%Rec | Result | Expected | \%Rec | Limits | RPD | Limit |
| 1,2-Dibromoethane (EDB) | 0.273 | 0.250 | 109 | 0.265 | 0.250 | 106 | 70-130 | 3 | 20 |
| 1,2-Dibromo-3-chloropropane (DBCP | 0.245 | 0.250 | 98 | 0.246 | 0.250 | 98 | 70-130 | 0 | 20 |

Results flagged with an asterisk (*) indicate values outside control criteria
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J 1102246 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $5 / 27 / 11-$ |
| Sample Matrix: | Water | $6 / 2 / 11$ |

## Lab Control Sample Summary Inorganic Parameters

|  |  |  |  |  |  | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Lab J1 | $\begin{aligned} & \text { ontrol Sam } \\ & 02246-\mathrm{LC} \end{aligned}$ | $\begin{aligned} & \text { nple } \\ & \text { S } \end{aligned}$ |  |  |
| Analyte Name | Method | Result | Spike Amount | \% Rec | \% Rec <br> Limits |  |
| Antimony, Total Recoverable | 6020 | 52.5 | 50.0 | 105 | 80-120 |  |
| Arsenic, Total Recoverable | 6020 | 47.8 | 50.0 | 96 | 80-120 |  |
| Barium, Total Recoverable | 6020 | 51.4 | 50.0 | 103 | 80-120 |  |
| Beryllium, Total Recoverable | 6020 | 44.5 | 50.0 | 89 | 80-120 |  |
| Cadmium, Total Recoverable | 6020 | 49.1 | 50.0 | 98 | 80-120 |  |
| Chromium, Total Recoverable | 6020 | 52.5 | 50.0 | 105 | 80-120 |  |
| Cobalt, Total Recoverable | 6020 | 51.0 | 50.0 | 102 | 80-120 |  |
| Copper, Total Recoverable | 6020 | 51.8 | 50.0 | 104 | 80-120 |  |
| Iron, Total Recoverable | 6010B | 4980 | 5000 | 100 | 85-115 |  |
| Lead, Total Recoverable | 6020 | 53.1 | 50.0 | 106 | 80-120 |  |
| Mercury, Total | 7470A | 5.42 | 5.00 | 108 | 80-120 |  |
| Nickel, Total Recoverable | 6020 | 51.0 | 50.0 | 102 | 80-120 |  |
| Selenium, Total Recoverable | 6020 | 45.4 | 50.0 | 91 | 80-120 |  |
| Silver, Total Recoverable | 6020 | 52.4 | 50.0 | 105 | 80-120 |  |
| Thallium, Total Recoverable | 6020 | 52.1 | 50.0 | 104 | 80-120 |  |
| Vanadium, Total Recoverable | 6020 | 51.1 | 50.0 | 102 | 80-120 |  |
| Zinc, Total Recoverable | 6020 | 92.0 | 100 | 92 | 80-120 |  |

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $5 / 27 / 11-$ |
| Sample Matrix: | Water | $6 / 2 / 11$ |

## Lab Control Sample Summary Inorganic Parameters



# COLUMBIA ANALYTICAL SERVICES, INC. 

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: $J 1102246$ |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 19 / 11$ |
| Sample Matrix: | Water | Date Received: $5 / 20 / 11$ |
|  |  | Date Analyzed: $5 / 23 / 11$ |

## Matrix Spike Summary General Chemistry Parameters

| Sample Name: | MW-5B | Units: $\mathrm{mg} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | $\mathrm{J} 1102246-001$ | Basis: NA |

Analytical Method: 350.1

|  | $\begin{array}{c}\text { MW-5BMS } \\ \text { Matrix Spike } \\ \text { J1102246-001MS }\end{array}$ |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Spike |  |  |  |  |  |$]$

[^21]
## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: $5 / 19 / 11$ |
| Sample Matrix: | Water | Date Received: $5 / 20 / 11$ |
|  |  | Date Analyzed: $5 / 23 / 11-$ |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |


| Sample Name: | MW-5B | Units: $\mathrm{mg} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | $\mathrm{J} 1102246-001$ | Basis: NA |


| Analyte Name | Method | MRL | MDL | Sample Result | MW-5BDUP <br> Duplicate Sample <br> J1102246-001DUP |  | RPD | RPD <br> Limit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Result | Average |  |  |
| Ammonia as Nitrogen | 350.1 | 0.010 | 0.005 | 0.281 | 0.283 | 0.282 | $<1$ | 20 |
| Solids, Total Dissolved | SM 2540 C | 10 | 10 | 54 | 54 | 54.0 | $<1$ | 20 |

[^22]Results flagged with a pound (\#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102246 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $5 / 20 / 11-$ |
| Sample Matrix: | Water | $5 / 25 / 11$ |

## Lab Control Sample Summary <br> General Chemistry Parameters

Units: mg/L
Basis: NA

|  |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  | $\begin{array}{c}\text { Lab Control Sample } \\ \text { J1102246-LCS }\end{array}$ |  |  |  |  |
| Analyte Name | Method | Result | Spike | Amount \% Rec | \% Rec |
| Limits |  |  |  |  |  |$]$

[^23]Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Service Request \#: and opened on $S .201 \mathrm{by}$
$\qquad$ Airbill \#12×5000982210003873

If yes, how many and where?
2 Were seals intact and signature and date correct?
3 Were custody papers properly filled out?
4 Temperature of coolers) upon receipt (Should be $>0^{\circ} \mathrm{C}$ and $<6^{\circ} \mathrm{C}$ )
5 Thermometer ID
6 Temperature Blank Present?
7 Were Ice or Ice Packs present
8 Did all bottles arrive in good condition (unbroken, etc....)?
9 Type of packing material present

10 Were all bottle labels complete (sample ID, preservation, etc....)?
11 Did all bottle labels and tags agree with custody papers?
12 Were the correct bottles used for the tests indicated?
13
Were all of the presery received with the appropriate preservative?
$\mathrm{HNO} 3 \mathrm{pH}<2$ (2SO4 $\mathrm{pH}<2$ ZnAc2 $2 \mathrm{NaOH} \mathrm{pH}>9 \quad \mathrm{NaOH} \mathrm{pH}>12$
Preservartye additions noted below

14 Were all samples received within analysis holding times?
15 Were all VOA vials free of air bubbles? If present, note below
16 Where did the bottles originate?

| Yes | No | N/A |
| :--- | :--- | :--- |
| Yes | No | N/A |
| CAD | Client |  |


| Sample ID | Reagent | Lot \# | ml added | Initials Date/Time |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
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|  |  |  |  |  |

Additional comments and/or explanation of all discrepancies noted above:



Kirk Wills
Environmental Planning Specialists
1936 Bruce B Downs Blyd
\#328
Wesley Chapel, FL 33543

## Laboratory Results for: JED SWDF

Dear Kirk:
Enclosed are the results of the sample(s) submitted to our laboratory on May 24, 2011. For your reference, these analyses have been assigned our service request number $\mathbf{J} 1102280$.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. This report shall not be reproduced except in full without written approval of the laboratory, as all results are intended to be considered in their entirity, and Columbia Analytical Services, Inc.
(CAS) cannot be held responsible for use of the less than the complete report.
Results apply only to the items submitted to the laboratory for analysis and individual items (samples)

Please contact me if you have any questions. My extension is 4409 . You may also contact me via email at CMyers@caslab.com.

Respectfully submitted,

## Columbia Analytical Services, Inc.



Project Manager
Page 1 of $\qquad$

CAS Jacksonville is NELAC-accredited by the State of Florida, \#E82502. Other state accreditations include: Georgia, \#958; Kentucky, \#63; Louisiana, \#02086; North Carolina, \#527; South Carolina, \#96021001; Texas, \#T104704197-09-TX; Maine, \#2011006; DoD \#66206.

## COLUMBIA ANALYTICAL SERVICES, INC.

| Client: | Environmental Planning Specialists | Service Request No.: | J1102280 |
| :--- | :--- | :--- | :--- |
| Project: | JED SWDF | Date Received: | $5 / 24 / 11$ |
| Sample Matrix: | Water |  |  |

## CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables, including results of QC samples analyzed from this delivery group. When appropriate to the procedure, method blank results have been reported with each analytical test. Analytical procedures performed by the lab are validated in accordance with NELAC standards. Parameters that are included in the NELAC Fields of Testing but are not included in the lab's NELAC accreditation are identified in the discussion of each analytical procedure.

## Sample Receipt

Eight water samples and one trip blank were received for analysis at Columbia Analytical Services on 5/24/11. The samples were received in good condition and consistent with the accompanying chain of custody form. Samples are refrigerated at $\leq 6^{\circ} \mathrm{C}$ upon receipt at the lab except for aqueous samples designated for metals analyses, which were stored at room temperature.

## Volatile Organic Compounds by GC-MS

The samples were analyzed for Volatile Organics using EPA Method 8260. The following observations were made regarding this delivery group.

## Laboratory Control Sample Recovery Notes and Discussion:

The spike recovery of Vinyl Chloride for Laboratory Control Sample (LCS) JQ1102991-02 was outside the upper control criterion. The analyte in question was not detected in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

## Elevated Method Reporting Limits:

Samples MW-23A and MW-19A required dilution due to the foaming nature of the matrix. The reporting limits are adjusted to reflect the dilution.

## EDB and DBCP by GC-ECD

The samples were analyzed for EDB and DBCP using EPA Method 8011 . The following observations were made regarding this delivery group.

## Surrogate Exceptions

The control criteria were exceeded for the following surrogate in samples MW-19A and MW-23A due to suspected matrix interferences: 1,1,1,2-Tetrachloroethane. A small emulsion was generated during the extraction of this sample which may have contributed to its poor surrogate recovery. No further corrective action was appropriate.


## Metals by ICP-MS/ICP-OES/CVAA

The samples were analyzed for Total and Dissolved Metals using EPA Methods 6020/6010B/7470A. The following observations were made regarding this delivery group.

## Matrix Spike Recovery Exceptions

The low matrix spike recovery of Selenium for sample MW-23A appears to be a function of the digestion procedure for this matrix. The post-spike recovery of $98 \%$ indicates the relative lack of matrix interference in the digestate, while the matrix spike recovery of $73 \%$ indicates the majority of the loss occurred during the digestion procedure itself and is not related to the instrument's ability to measure Selenium in this matrix. The other analytes of interest spiked in this sample all recovered within acceptable range, indicating that this loss was limited to Selenium and not due to any larger problem related to the spiking or preparation as a whole. Therefore, the reported results for Selenium in this sample may be biased low.

## General Chemistry Parameters

The samples were analyzed for Inorganic Parameters using various EPA and Standard Methods. No problems were observed.


## Florida DEP Data Qualifiers

B Results based upon colony counts outside the acceptable range.
D Measurement was made in the field.
H Value based on field kit determination; results may not be accurate.
i The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

J Estimated value (one of the following reasons is discussed in the project case narrative).

1. The result may be inaccurate because the surrogate recovery limits have been exceeded.
2. No known quality control criteria exists for the component.
3. The reported value falled to meet the established quality control criteria for either precision or accuracy.
4. The sample matrix interfered with the ability to make any accurate determination (e.g., primary and confirmation results show greater than $40 \%$ RPD).
5. The data is questionable because of improper laboratory or field protocols (e.g., GC/MS Tune did not meet method criteria).
K. Off scale low. The value is less than the lowest calibration standard but greater than the method reporting limit (MRL).

L Off scale high. The analyte is above the upper limit of the linear calibration range.
M The MDL/MRL has been elevated because the analyte could not be accurately quantified due to matrix interference.

N Presumptive evidence of the analyte. Confirmation was not performed.
Q Sample held beyond the accepted holding time.
T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes only.

U Indicates that the compound was analyzed for but not detected.
V Indicates that the analyte was detected in both the sample and the associated method blank.
Y The laboratory analysis was from an improperly preserved sample.
Z Too many colonies were present (TNTC). The numeric value represents the filtration volume.

## Acronyms

| ASTM | American Society for Testing and Materials |
| :---: | :---: |
| A2LA | American Association for Laboratory Accreditation |
| CARB | California Air Resources Board |
| CAS Number | Chemical Abstract Service registry Number |
| CFC | Chlorofluorocarbon |
| CFU | Colony-Forming Unit |
| DEC | Department of Environmental Conservation |
| DEQ | Department of Environmental Quality |
| DHS | Department of Health Services |
| DOE | Department of Ecology |
| DOH | Department of Health |
| EPA | U. S. Environmental Protection Agency |
| ELAP | Environmental Laboratory Accreditation Program |
| GC | Gas Chromatography |
| GC/MS | Gas Chromatography/Mass Spectrometry |
| LUFT | Leaking Underground Fuel Tank |
| M | Modified |
| MCL | Maximum Contaminant Level is the highest permissible concentration of a substance aliowed in drinking water as established by the USEPA. |
| MDL | Method Detection Limit |
| MPN | Most Probable Number |
| MRL | Method Reporting Limit |
| NA | Not Applicable |
| NC | Not Calculated |
| NCASI | National Council of the Paper Industry for Air and Stream Improvement |
| ND | Not Detected |
| NIOSH | National Institute for Occupational Safety and Health |
| PQL | Practical Quantitation Limit |
| RCRA | Resource Conservation and Recovery Act |
| SIM | Selected Ion Monitoring |
| TPH | Total Petroleum Hydrocarbons |
| tr | Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL. |

Client: Environmental Planning Specialists $\quad$ Service Request: J1102280

## SAMPLE CROSS-REFERENCE

| SAMPLE \# | CLIENT SAMPLE ID | $\underline{\text { DATE }}$ | TIME |
| :--- | :--- | :--- | :--- |
| J1102280-001 | MW-23A | $5 / 23 / 11$ | $10: 30$ |
| J1102280-002 | MW-23B | $5 / 23 / 11$ | $08: 55$ |
| J1102280-003 | MW-19A | $5 / 23 / 11$ | $11: 50$ |
| J1102280-004 | MW-19B | $5 / 23 / 11$ | $11: 25$ |
| J1102280-005 | MW-16A | $5 / 23 / 11$ | $14: 15$ |
| J1102280-006 | MW-16B | $5 / 23 / 11$ | $14: 45$ |
| J1102280-007 | MW-16C | $5 / 23 / 11$ | $13: 45$ |
| J1102280-008 | EB-2 | $5 / 23 / 11$ | $15: 25$ |
| J1102280-009 | Trip Blank | $5 / 23 / 11$ | $00: 00$ |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 23 / 11030$ |
| Sample Matrix: | Water | Date Received: $5 / 24 / 11$ |
| Sample Name: | MW-23A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102280-001 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 248104

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 2.00 | 0.380 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 2.00 | 0.340 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 2.00 | 0.580 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| 1,1,2-Trichloroethane | ND | U | 2.00 | 0.800 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 2.00 | 0.600 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 2.00 | 0.320 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| 1,2,3-Trichloropropane | ND | U | 4.00 | 0.840 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 10.0 | 4.60 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 2.00 | 0.920 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| 1,2-Dichlorobenzene | ND | U | 2.00 | 0.956 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| 1,2-Dichloroethane | ND | U | 2.00 | 0.440 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| 1,2-Dichloropropane | ND | U | 2.00 | 0.380 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| 1,4-Dichlorobenzene | ND | U | 2.00 | 0.320 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| 2-Butanone (MEK) | ND | U | 20.0 | 7.60 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| 2-Hexanone | ND | U | 50.0 | 4.40 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 50.0 | 2.20 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| Acetone | ND | U | 100 | 11.2 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| Acrylonitrile | ND | U | 20.0 | 3.00 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| Benzene | 0.560 | I | 2.00 | 0.420 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| Bromochloromethane | ND | U | 10.0 | 0.540 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| Bromodichloromethane | ND | U | 2.00 | 0.440 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| Bromoform | ND | U | 4.00 | 0.840 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| Bromomethane | ND | U | 2.00 | 0.460 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| Carbon Disulfide | ND | U | 20.0 | 4.72 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| Carbon Tetrachloride | ND | U | 2.00 | 0.680 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| Chlorobenzene | ND | U | 2.00 | 0.320 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| Chloroethane | ND | U | 10.0 | 1.04 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| Chloroform | ND | U | 2.00 | 0.700 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| Chloromethane | ND | U | 2.00 | 0.720 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| cis-1,2-Dichloroethene | ND | U | 2.00 | 0.720 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| cis-1,3-Dichloropropene | ND | U | 2.00 | 0.400 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| Dibromochloromethane | ND | U | 2.00 | 0.420 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| Dibromomethane | ND | U | 10.0 | 0.720 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| Ethylbenzene | ND | U | 2.00 | 0.420 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| Iodomethane | ND | U | 10.0 | 5.36 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| m,p-Xylenes | ND | U | 4.00 | 0.620 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: <br> Project: | JED SWDF |
| :--- | :--- | ---: | :--- |
| Date Collected: | $5 / 23 / 111030$ |  |  |
| Sample Matrix: | Water | Date Received: | $5 / 24 / 11$ |
| Sample Name: | MW-23A | Units: $\mu \mathrm{g} / \mathrm{L}$ |  |
| Lab Code: | J1102280-001 | Basis: NA |  |

## Volatile Organic Compounds by GC/MS

| Analytical Method: 8260B |  |  |  |  |  |  | Analysis Lot: 248104 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| Methylene Chloride | ND | U | 10.0 | 0.420 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| o-Xylene | ND | U | 2.00 | 0.280 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| Styrene | ND | U | 2.00 | 0.580 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| Tetrachloroethene (PCE) | ND | U | 2.00 | 0.440 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| Toluene | ND | U | 2.00 | 0.380 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| trans-1,2-Dichloroethene | ND | U | 2.00 | 0.380 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| trans-1,3-Dichloropropene | ND | U | 2.00 | 0.460 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| trans-1,4-Dichloro-2-butene | ND | U | 40.0 | 4.40 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| Trichloroethene (TCE) | ND | U | 2.00 | 0.720 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| Trichlorofluoromethane | ND | U | 40.0 | 0.480 | 2 | NA | 5/31/11 18:26 |  | 248104 |  |
| Vinyl Acetate | ND | U | 20.0 | 3.80 | 2 | NA | 5/31/1118:26 |  | 248104 |  |
| Vinyl Chloride | ND | U | 2.00 | 0.720 | 2 | NA | 5/31/1118:26 |  | 248104 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Q |
| :--- | :---: | :---: | :---: | :---: |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J 1102280 <br> Project: |
| :--- | :--- | ---: |
| DED SWDF | Collected: $5 / 23 / 110855$ |  |
| Sample Matrix: | Water | Date Received: $5 / 24 / 11$ |
| Sample Name: | MW-23B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102280-002 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date <br> Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/31/1118:48 |  | 248104 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/31/1118:48 |  | 248104 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/1118:48 |  | 248104 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/1118:48 |  | 248104 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/1118:48 |  | 248104 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/31/11 18:48 |  | 248104 |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J 1102280 <br> Project: | JED SWDF |
| :--- | :--- | ---: | :--- |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B Analysis Lot: 248104

|  | Result Q | MRL | MDL | Dilution | Date <br> Fator | Date <br> Extracted <br> Analyzed | Extraction Analysis <br> Lot | Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

$\left.\begin{array}{lcccc}\text { Surrogate Name } & \text { \%Rec } & \begin{array}{c}\text { Control } \\ \text { Limits }\end{array} & \begin{array}{c}\text { Date } \\ \text { Analyzed }\end{array} & \text { Q }\end{array}\right]$

## COLUMBIA ANALYTICAL SERVICES, INC

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 23 / 111150$ |
| Sample Matrix: | Water | Date Received: $5 / 24 / 11$ |
| Sample Name: | MW-19A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102280-003 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 5.00 | 0.950 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 5.00 | 0.851 | 5 | NA | 5/31/1119:10 |  | 248104 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 5.00 | 1.45 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| 1,1,2-Trichloroethane | ND | U | 5.00 | 2.00 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 5.00 | 1.50 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 5.00 | 0.800 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| 1,2,3-Trichloropropane | ND | U | 10.0 | 2.10 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 25.0 | 11.5 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 5.00 | 2.31 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| 1,2-Dichlorobenzene | ND | U | 5.00 | 2.39 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| 1,2-Dichloroethane | ND | U | 5.00 | 1.10 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| 1,2-Dichloropropane | ND | U | 5.00 | 0.950 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| 1,4-Dichlorobenzene | ND | U | 5.00 | 0.800 | 5 | NA | 5/31/11 19:10 | - incer | 248104 |  |
| 2-Butanone (MEK) | ND | U | 50.0 | 19.0 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| 2-Hexanone | ND | U | 125 | 11.0 | 5 | NA | 5/31/1119:10 |  | 248104 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 125 | 5.50 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| Acetone | ND | U | 250 | 28.0 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| Acrylonitrile | ND | U | 50.0 | 7.50 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| Benzene | ND | U | 5.00 | 1.05 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| Bromochloromethane | ND | U | 25.0 | 1.35 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| Bromodichloromethane | ND | U | 5.00 | 1.10 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| Bromoform | ND | U | 10.0 | 2.10 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| Bromomethane | ND | U | 5.00 | 1.16 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| Carbon Disulfide | ND | U | 50.0 | 11.8 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| Carbon Tetrachloride | ND | U | 5.00 | 1.71 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| Chlorobenzene | ND | U | 5.00 | 0.800 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| Chloroethane | ND | U | 25.0 | 2.60 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| Chloroform | ND | U | 5.00 | 1.75 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| Chloromethane | ND | U | 5.00 | 1.80 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| cis-1,2-Dichloroethene | ND | U | 5.00 | 1.80 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| cis-1,3-Dichloropropene | ND | U | 5.00 | 1.00 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| Dibromochloromethane | ND | U | 5.00 | 1.05 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| Dibromomethane | ND | U | 25.0 | 1.80 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| Ethylbenzene | ND | U | 5.00 | 1.05 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| Iodomethane | ND | U | 25.0 | 13.4 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |
| m,p-Xylenes | ND | U | 10.0 | 1.55 | 5 | NA | 5/31/11 19:10 |  | 248104 |  |


| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: $5 / 23 / 111150$ |
| Sample Matrix: | Water | Date Received: $5 / 24 / 11$ |
| Sample Name: | MW-19A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | $\mathrm{J} 1102280-003$ | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B Analysis Lot: 248104

|  |  |  | Dilution | Date <br> Analyte Name | Date <br> Analyzed | Extraction Analysis <br> Lot | Lot | Note |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Surrogate Nảme | \%Rec | Control <br> Limits | Date <br> Analyzed$\quad$ Q |  |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 88 | $68-118$ | $5 / 31 / 1119: 10$ |  |
| 4-Bromofluorobenzene | 85 | $78-129$ | $5 / 31 / 1119: 10$ |  |
| Dibromofluoromethane | 94 | $80-114$ | $5 / 31 / 1119: 10$ |  |
| Toluene-d8 | 101 | $87-118$ | $5 / 31 / 1119: 10$ |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :---: | :---: | :---: |
| Project: | JED SWDF | Date Collected: 5/23/111125 |
| Sample Matrix: | Water | Date Received: 5/24/11 |
| Sample Name: | MW-19B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102280-004 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

|  |  |  |  |  |  |  |  |  |
| :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name |  |  |  | Dilution | Date <br> Extracted | Date <br> Analyzed | Extraction Analysis <br> Lot | Note |

\(\left.$$
\begin{array}{llrl}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: } \\
\text { Project: }\end{array}
$$ \& JED SWDF <br>
Sample Matrix: \& Water \& Date Collected: \& 5 / 23 / 111125 <br>

Date Received:: 5 / 24 / 11\end{array}\right]\)| Sample Name: | MW-19B |
| :--- | :--- |
| Lab Code: | $\mathrm{J} 1102280-004$ |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B Analysis Lot: 248104

|  | Result Q | MRL | MDL | Dilution | Date <br> Factor | Date <br> Extracted | Extraction Analysis <br> Analyzed | Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

$\left.\begin{array}{lcccc}\text { Surrogate Name }\end{array} \quad \begin{array}{c}\text { Control } \\ \text { Limits }\end{array} \quad \begin{array}{c}\text { Date } \\ \text { Analyzed }\end{array} \quad \begin{array}{c}\text { Q }\end{array}\right]$

COLUMBIA ANALYTICAL SERVICES, INC.
Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 <br> Project: |
| :--- | :--- | ---: |
| JED SWDF | Date Collected: $5 / 23 / 111415$ |  |
| Sample Matrix: | Water | Date Received: |
| Sample Name: | MW-16A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | $\mathrm{J} 1102280-005$ | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name |  |  |  | Dilution | Date | Date <br> Analyzed | Extraction Analysis <br> Lot | Lot |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | Note

## Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | Water | Date Received: $5 / 24 / 111415$ |
| Sample Name: | MW-16A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102280-005 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

|  | Result Q | MRL | MDL | Dilution | Date <br> Fator | Date <br> Extracted | Extraction Analysis <br> Analyzed | Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


|  | \%Rec | Control <br> Limits | Date <br> Analyzed | Q |
| :--- | :---: | :---: | :---: | :---: |
| Surrogate Name | 94 | $68-118$ | $5 / 31 / 1119: 54$ |  |
| 1,2-Dichloroethane-d4 | 87 | $78-129$ | $5 / 31 / 1119: 54$ |  |
| 4-Bromofluorobenzene | 98 | $80-114$ | $5 / 31 / 1119: 54$ |  |
| Dibromofluoromethane | 104 | $87-118$ | $5 / 31 / 1119: 54$ |  |
| Toluene-d 8 |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :---: | :---: | :---: |
| Project: | JED SWDF | Date Collected: 5/23/11 1445 |
| Sample Matrix: | Water | Date Received: 5/24/11 |
| Sample Name: | MW-16B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102280-006 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: <br> Project: | JED SWDF |
| :--- | :--- | ---: | :--- |
| Dample Collected: $:$ | $5 / 23 / 111445$ |  |  |
| Datrix: | Water | Date Received: | $5 / 24 / 11$ |

## Volatile Organic Compounds by GC/MS

| Analytical Method: 8260B |  |  |  |  |  |  | Analysis Lot: 248104 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| Methylene Chloride | ND | U | 5.00 | 0.210 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| o-Xylene | ND | U | 1.00 | 0.140 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Styrene | ND | U | 1.00 | 0.290 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Tetrachloroethene (PCE) | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Toluene | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| trans-1,2-Dichloroethene | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| trans-1,3-Dichloropropene | ND | U | 1.00 | 0.230 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| trans-1,4-Dichloro-2-butene | ND | U | 20.0 | 2.20 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Trichloroethene (TCE) | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Trichlorofluoromethane | ND | U | 20.0 | 0.240 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Vinyl Acetate | ND | U | 10.0 | 1.90 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |
| Vinyl Chloride | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 20:16 |  | 248104 |  |

$\left.\begin{array}{lcccc}\text { Surrogate Name } & \text { \%Rec } & \begin{array}{c}\text { Control } \\ \text { Limits }\end{array} & \begin{array}{c}\text { Date } \\ \text { Analyzed }\end{array} & \mathbf{Q}\end{array}\right]$

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 <br> Project: |
| :--- | :--- | ---: |
| Dample Collected: Matrix: $5 / 23 / 111345$ <br> Sam SWDF Water <br> Sample Name: MW-16C | Units: $\mu \mathrm{g} / \mathrm{L}$ |  |
| Lab Code: | J1102280-007 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 248104

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/1120:38 |  | 248104 |  |
| 1,4-Dichlorobenzene | ND | U | - 1.00 | 0.160 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/31/11 $20: 38$ |  | 248104 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/1120:38 |  | 248104 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| Ethylbenzene | 1.02 |  | 1.00 | 0.210 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/31/11 20:38 |  | 248104 |  |


| Client: | Environmental Planning Specialists |
| :--- | :--- |
| Project: | JED SWDF |
| Sample Matrix: | Water |
| Sample Name: | MW-16C |
| Lab Code: | J1102280-007 |

Service Request: J1102280
Date Collected: 5/23/11 1345
Date Received: 5/24/11
Units: $\mu \mathrm{g} / \mathrm{L}$
Basis: NA

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 248104

|  | Result Q | MRL | MDL | Dilution | Date <br> Factor | Date <br> Extracted | Extraction Analysis <br> Lnalyzed | Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

$\left.\begin{array}{lcccc}\text { Surrogate Name } & \text { \%Rec } & \begin{array}{c}\text { Control } \\ \text { Limits }\end{array} & \begin{array}{c}\text { Date } \\ \text { Analyzed }\end{array} & \mathbf{Q}\end{array}\right]$

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J 1102280 <br> Droject: |
| :--- | :--- | ---: |
| DED SWDF | Date Collected: $5 / 23 / 111525$ |  |
| Sample Matrix: | Water | Date Received: $5 / 24 / 11$ |
| Sample Name: | EB-2 | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102280-008 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 248513

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 6/2/1114:54 |  | 248513 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 6/2/1114:54 |  | 248513 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 6/2/1114:54 |  | 248513 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 6/2/1114:54 |  | 248513 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 6/2/1114:54 |  | 248513 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 6/2/1114:54 |  | 248513 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 6/2/11 14:54 |  | 248513 |  |


| Client: | Environmental Planning Specialists | Service Request: J 1102280 <br> Project: |
| :--- | :--- | ---: |
| Date Collected: | $5 / 23 / 111525$ |  |
| Sample Matrix: | Water | Date Received: $5 / 24 / 11$ |
| Sample Name: | EB-2 | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | J1102280-008 | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

|  |  |  | Dilution | Date <br> Lnalyte Name | Date <br> Destraction Analysis |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed$\quad \mathbf{Q}$ |  |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 88 | $68-118$ | $6 / 2 / 1114: 54$ |  |
| 4-Bromofluorobenzene | 94 | $78-129$ | $6 / 2 / 1114: 54$ |  |
| Dibromofluoromethane | 93 | $80-114$ | $6 / 2 / 1114: 54$ |  |
| Toluene-d8 | 111 | $87-118$ | $6 / 2 / 1114: 54$ |  |


| Client: | Environmental Planning Specialists | Service Request: <br> Project: | JED SWDF |
| :--- | :--- | ---: | :--- |
| Sample Matrix: | Water | Date Collected: $5 / 23 / 110000$ |  |
| Dample Name: | Trip Blank | Units: $\mu \mathrm{g} / \mathrm{L}$ |  |
| Lab Code: | J1 $102280-009$ | Basis: | NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 6/2/1115:24 |  | 248513 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 6/2/1115:24 |  | 248513 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 6/2/1115:24 |  | 248513 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 6/2/1115:24 |  | 248513 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 6/2/11 15:24 |  | 248513 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | JED SWDF | Dater Collected: $5 / 23 / 110000$ |
| Sample Name: | Trip Blank | Date Received: $5 / 24 / 11$ |
| Lab Code: | J1 $102280-009$ | Units: $\mu \mathrm{g} / \mathrm{L}$ |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 248513

|  |  |  |  | Dilution | Date <br> Analyte Name | Date <br> Analyzed | Extraction Analysis <br> Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Let | Note |  |  |  |  |  |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Q |
| :--- | :---: | :---: | :---: | :---: |
| ,2-Dichloroethane-d4 | 89 | $68-118$ | $6 / 2 / 1115: 24$ |  |
| 4-Bromofluorobenzene | 103 | $78-129$ | $6 / 2 / 1115: 24$ |  |
| Dibromofluoromethane | 94 | $80-114$ | $6 / 2 / 1115: 24$ |  |
| Toluene-d8 | 100 | $87-118$ | $6 / 2 / 1115: 24$ |  |

# COLUMBIA ANALYTICAL SERVICES, INC. 

Analytical Report
\(\left.$$
\begin{array}{llrl}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: J1102280 } \\
\text { Date Collected: NA }\end{array}
$$ <br>

Project: \& JED SWDF \& Date Received: NA\end{array}\right]\)| Sample Matrix: | Water |
| :--- | :--- |
| Sample Name: | Method Blank |
| Lab Code: | JQ1102991-01 |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 5/31/1115:51 |  | 248104 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 5/31/1115:51 |  | 248104 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| Iodomethane | ND | U | 5.00 | 2.68 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 5/31/11 15:51 |  | 248104 |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :---: | :---: | :---: |
| Project: | JED SWDF | Date Collected: NA |
| Sample Matrix: | Water | Date Received: NA |
| Sample Name: | Method Blank | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Lab Code: | JQ1102991-01 | Basis: NA |

## Volatile Organic Compounds by GC/MS

| Analytical Method: 8260B |  |  |  |  | Analysis Lot: 248104 <br> Extraction Analysis <br> Lot | Note |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Q |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 93 | $68-118$ | $5 / 31 / 1115: 51$ |  |
| 4-Bromofluorobenzene | 89 | $78-129$ | $5 / 31 / 1115: 51$ |  |
| Dibromofluoromethane | 96 | $80-114$ | $5 / 31 / 1115: 51$ |  |
| Toluene-d8 | 103 | $87-118$ | $5 / 31 / 1115: 51$ |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report
\(\left.$$
\begin{array}{llr}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: J1102280 } \\
\text { Project: }\end{array} \\
\begin{array}{ll}\text { Dample Matrix: } & \text { JED SWDF } \\
\text { Satlected: NA }\end{array}
$$ <br>

Sample Name: \& Method Blank \& Date Received: NA\end{array}\right]\)| Lab Code: | JQ1103050-02 |
| :--- | :--- |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

| Analyte Name | Result | Q | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Extraction Lot | Analysis Lot | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,1,1,2-Tetrachloroethane | ND | U | 1.00 | 0.190 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| 1,1,1-Trichloroethane (TCA) | ND | U | 1.00 | 0.170 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| 1,1,2,2-Tetrachloroethane | ND | U | 1.00 | 0.290 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| 1,1,2-Trichloroethane | ND | U | 1.00 | 0.400 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| 1,1-Dichloroethane (1,1-DCA) | ND | U | 1.00 | 0.300 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| 1,1-Dichloroethene (1,1-DCE) | ND | U | 1.00 | 0.160 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| 1,2,3-Trichloropropane | ND | U | 2.00 | 0.420 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| 1,2-Dibromo-3-chloropropane (DBCP) | ND | U | 5.00 | 2.30 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| 1,2-Dibromoethane (EDB) | ND | U | 1.00 | 0.460 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| 1,2-Dichlorobenzene | ND | U | 1.00 | 0.478 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| 1,2-Dichloroethane | ND | U | 1.00 | 0.220 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| 1,2-Dichloropropane | ND | U | 1.00 | 0.190 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| 1,4-Dichlorobenzene | ND | U | 1.00 | 0.160 | - 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| 2-Butanone (MEK) | ND | U | 10.0 | 3.80 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| 2-Hexanone | ND | U | 25.0 | 2.20 | 1 | NA | 6/2/1114:24 |  | 248513 |  |
| 4-Methyl-2-pentanone (MIBK) | ND | U | 25.0 | 1.10 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| Acetone | ND | U | 50.0 | 5.60 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| Acrylonitrile | ND | U | 10.0 | 1.50 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| Benzene | ND | U | 1.00 | 0.210 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| Bromochloromethane | ND | U | 5.00 | 0.270 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| Bromodichloromethane | ND | U | 1.00 | 0.220 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| Bromoform | ND | U | 2.00 | 0.420 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| Bromomethane | ND | U | 1.00 | 0.230 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| Carbon Disulfide | ND | U | 10.0 | 2.36 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| Carbon Tetrachloride | ND | U | 1.00 | 0.340 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| Chlorobenzene | ND | U | 1.00 | 0.160 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| Chloroethane | ND | U | 5.00 | 0.520 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| Chloroform | ND | U | 1.00 | 0.350 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| Chloromethane | ND | U | 1.00 | 0.360 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| cis-1,2-Dichloroethene | ND | U | 1.00 | 0.360 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| cis-1,3-Dichloropropene | ND | U | 1.00 | 0.200 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| Dibromochloromethane | ND | U | 1.00 | 0.210 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| Dibromomethane | ND | U | 5.00 | 0.360 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| Ethylbenzene | ND | U | 1.00 | 0.210 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| Iodomethane | ND |  | 5.00 | 2.68 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |
| m,p-Xylenes | ND | U | 2.00 | 0.310 | 1 | NA | 6/2/11 14:24 |  | 248513 |  |


| Client: | Environmental Planning Specialists | Service Request: J1102280 <br> Date Collected: NA |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Received: NA |
| Sample Matrix: | Water | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| Sample Name: | Method Blank | Basis: NA |

## Volatile Organic Compounds by GC/MS

Analytical Method: 8260B
Analysis Lot: 248513

|  |  |  |  | Dilution | Date <br> Analyte Name | Date Extraction Analysis |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lot |  |  |  |  |  |  | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Q |
| :--- | :---: | :---: | :---: | :---: |
| 1,2-Dichloroethane-d4 | 89 | $68-118$ | $6 / 2 / 1114: 24$ |  |
| 4-Bromofluorobenzene | 101 | $78-129$ | $6 / 2 / 1114: 24$ |  |
| Dibromofluoromethane | 96 | $80-114$ | $6 / 2 / 1114: 24$ |  |
| Toluene-d8 | 99 | $87-118$ | $6 / 2 / 1114: 24$ |  |

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: $J 1102280$ |  |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: $05 / 23 / 2011$ |  |
| Sample Matrix: | Water | Date Received: | $05 / 24 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-23A | Units: ug/L |
| :--- | :--- | :--- |
| Lab Code: | J1102280-001 | Basis: NA |
| Extraction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


| Analyte Name | Result Q | MRL | MDL | Dilution <br> Factor | Date <br> Extracted | Date <br> Analyzed | Extraction <br> Lot | Note |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2$-Tetrachloroethane | 73 | $77-150$ | $05 / 31 / 11$ | Outside Control Limits |

[^24]| Client: | Environmental Planning Specialists | Service Request: J1102280 |  |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: $05 / 23 / 2011$ |  |
| Sample Matrix: | Water | Date Received: | $05 / 24 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-23B | Units: $\mathrm{ug} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | $\mathrm{J} 1102280-002$ | Basis: NA |
| Extraction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


| Analyte Name | Result Q | MRL | MDL | Dilution | Date <br> Factor | Date <br> Extracted | Extraction <br> Analyzed | Lot |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 101 | $77-150$ | $05 / 31 / 11$ | Acceptable |

[^25]| Client: | Environmental Planning Specialists | Service Request: $J 1102280$ |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $05 / 23 / 2011$ |
| Sample Matrix: | Water | Date Received: $05 / 24 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-19A | Units: |
| :--- | :--- | :--- |
| Lab Code: | J1102280-003 |  |
| Extraction Method: | METHOD | Basis: |
| Analysis Method: | 8011 | Level: Low |


|  |  |  |  | Dilution | Date <br> Analyte Name | Result $\mathbf{Q}$ | MRL | MDL |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Factor $_{\text {Extracted }}^{\text {Analyzed }}$| Extraction |
| :---: |
| Lot | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 69 | $77-150$ | $05 / 31 / 11$ | Outside Control Limits |

[^26]| Client: | Environmental Planning Specialists | Service Request: J1102280 |  |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: $05 / 23 / 2011$ |  |
| Sample Matrix: | Water | Date Received: | $05 / 24 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-19B | Units: ug/L |
| :--- | :--- | :--- |
| Lab Code: | $J 1102280-004$ | Basis: NA |
| Extraction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


|  |  |  | Dilution | Date <br> Analyte Name | Result $\mathbf{Q}$ | MRL | MDL | Factor |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Extracted | Analyzed |
| :---: | | Extraction |
| :---: |
| Lot | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 110 | $77-150$ | $05 / 31 / 11$ | Acceptable |


| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $05 / 23 / 2011$ |
| Sample Matrix: | Water | Date Received: $05 / 24 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-16A | Units: |
| :--- | :--- | :--- |
| Lab Code: | J1102280-005 | Basis: NA |
| Extraction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


|  |  |  |  | Dilution | Date <br> Analyte Name | Result $\mathbf{Q}$ | MRL | MDL |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | Factor $_{\text {Date }}^{\text {Extracted }}$| Analyzed |
| :---: | | Extraction |
| :---: |
| Lot | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 109 | $77-150$ | $06 / 01 / 11$ | Acceptable |

[^27]
## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: | J1102280 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: $05 / 23 / 2011$ |  |
| Sample Matrix: | Water | Date Received: | $05 / 24 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-16B | Units: ug/L |
| :--- | :--- | :--- |
| Lab Code: | J1102280-006 | Basis: NA |
| Extraction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


|  |  |  | Dilution | Date <br> Analyte Name | Result Q | MRL | MDL | Factor |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | | Date |
| :---: |
| Extracted | Analyzed | Extraction |
| :---: |
| Lot | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 108 | $77-150$ | $06 / 01 / 11$ | Acceptable |

[^28]
## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

| Client: | Environmental Planning Specialists | Service Request: J1102280 |  |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: $05 / 23 / 2011$ |  |
| Sample Matrix: | Water | Date Received: | $05 / 24 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | MW-16C | Units: ug/L |
| :--- | :--- | :--- |
| Lab Code: | J1102280-007 | Basis: NA |
| Extraction Method: | METHOD | Level: Low |

## Analysis Method: 8011

| Analyte Name | Result $\mathbf{Q}$ | MRL | MDL | Dilution <br> Factor | Date <br> Extracted | Date <br> Analyzed | Extraction <br> Lot | Note |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,2-Dibromoethane (EDB) | ND U | 0.021 | 0.00015 | 1 | $05 / 31 / 11$ | $06 / 01 / 11$ | JWG1101266 |  |
| 1,2-Dibromo-3-chloropropane (DI | ND U | 0.021 | 0.00039 | 1 | $05 / 31 / 11$ | $06 / 01 / 11$ | JWG1101266 |  |


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 110 | $77-150$ | $06 / 01 / 11$ | Acceptable |

[^29]Analytical Results

| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $05 / 23 / 2011$ |
| Sample Matrix: | Water | Date Received: $05 / 24 / 2011$ |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | EB-2 | Units: ug/L |
| :--- | :--- | :--- |
| Lab Code: | J1102280-008 | Basis: NA |
| Extraction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


|  |  |  | Dilution | Date <br> Analyte Name | Result Q | MRL | MDL | Factor |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | | Date |
| :---: |
| Extracted | Analyzed | Extraction |
| :---: |
| Lot | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 112 | $77-150$ | $06 / 01 / 11$ | Acceptable |

[^30]| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: NA |
| Sample Matrix: | Water | Date Received: NA |

## 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Sample Name: | Method Blank | Units: ug/L |
| :--- | :--- | :--- |
| Lab Code: | JWG1101266-3 | Basis: NA |
| Extraction Method: | METHOD | Level: Low |
| Analysis Method: | 8011 |  |


|  |  |  | Dilution | Date <br> Analyte Name | Result $\mathbf{Q}$ | MRL | MDL | Factor |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | | Date |
| :---: |
| Extracted | Analyzed | Extraction |
| :---: |
| Lot | Note


| Surrogate Name | \%Rec | Control <br> Limits | Date <br> Analyzed | Note |
| :--- | :---: | :---: | :---: | :---: |
| $1,1,1,2-$ Tetrachloroethane | 113 | $77-150$ | $05 / 31 / 11$ | Acceptable |

[^31]
## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J 1102280 <br> Project: |
| :--- | :--- | ---: |
| Date Collected: $5 / 23 / 111030$ <br> Dample Matrix: Water | Date Received: |  |
| Sample Name: | MW-23A | Basis: |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/31/11 | 6/1/11 11:24 |  |
| Antimony, Total Recoverable | 6020 | 0.3 | 1 | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/31/11 | 6/1/11 18:37 |  |
| Arsenic, Dissolved | 6020 | 1.22 |  | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/31/11 | 6/1/11 11:24 |  |
| Arsenic, Total Recoverable | 6020 | 1.81 |  | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/31/11 | 6/1/11 18:37 |  |
| Barium, Dissolved | 6020 | 8.7 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/31/11 | 6/1/11 11:24 |  |
| Barium, Total Recoverable | 6020 | 11.0 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/31/11 | 6/1/11 18:37 |  |
| Beryllium, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/31/11 | 6/1/11 11:24 |  |
| Beryllium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/31/11 | 6/1/11 18:37 |  |
| Cadmium, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/31/11 | 6/1/11 11:24 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/31/11 | 6/1/11 18:37 |  |
| Chromium, Dissolved | 6020 | 2.6 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/31/11 | 6/1/11 11:24 |  |
| Chromium, Total Recoverable | 6020 | 5.2 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/31/11 | 6/1/11 18:37 |  |
| Cobalt, Dissolved | 6020 | 0.4 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/31/11 | 6/1/11 11:24 |  |
| Cobalt, Total Recoverable | 6020 | 0.5 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/31/11 | 6/1/11 18:37 |  |
| Copper, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/31/11 | 6/1/11 11:24 |  |
| Copper, Total Recoverable | 6020 | 1.1 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/31/11 | 6/1/11 18:37 |  |
| Iron, Dissolved | 6010B | 1850 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/27/11 | 6/2/11 04:09 |  |
| Iron, Total Recoverable | 6010B | 2000 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/27/11 | 6/1/11 21:21 |  |
| Lead, Dissolved | 6020 | 0.1 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/31/11 | 6/1/11 11:24 |  |
| Lead, Total Recoverable | 6020 | 1.5 |  | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/31/11 | 6/1/11 18:37 |  |
| Mercury, Dissolved | 7470A | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | $6 / 2 / 11$ | 6/3/1114:43 |  |
| Mercury, Total | 7470A | 0.05 | I | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/31/11 | 6/1/11 13:22 |  |
| Nickel, Dissolved | 6020 | 1.8 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/31/11 | 6/1/11 11:24 |  |
| Nickel, Total Recoverable | 6020 | 2.2 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/31/11 | 6/1/11 18:37 |  |
| Selenium, Dissoived | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/31/11 | 6/1/1111:24 |  |
| Selenium, Total Recoverable | 6020 | 1.3 | I | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/31/11 | 6/1/11 18:37 |  |
| Silver, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/31/11 | 6/1/11 11:24 |  |
| Silver, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/31/11 | 6/1/11 18:37 |  |
| Sodium, Dissolved | 6010B | 21.4 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/27/11 | 6/2/11 04:09 |  |
| Sodium, Total Recoverable | 6010B | 22.2 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/27/11 | 6/1/11 21:21 |  |
| Thallium, Dissolved | 6020 | 0.2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/31/11 | 6/1/11 11:24 |  |
| Thallium, Total Recoverable | 6020 |  | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/31/11 | 6/1/11 18:37 |  |
| Vanadium, Dissolved | 6020 | 5.0 |  | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/31/11 | 6/1/11 11:24 |  |
| Vanadium, Total Recoverable | 6020 | 6.3 |  | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/31/11 | 6/1/11 18:37 |  |
| Zinc, Dissolved | 6020 | 1 | I | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/31/11 | 6/1/11 11:24 |  |
| Zinc, Total Recoverable | 6020 | 1 | I | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/31/11 | 6/1/11 18:37 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report
\(\left.$$
\begin{array}{llr}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: J1102280 } \\
\text { Date Collected: } \\
\text { Project: }\end{array}
$$ <br>
Sample Matrix: \& JED SWDF \& Water <br>

Date Received: 5 / 24 / 110855\end{array}\right]\)| Sample Name: |
| :--- |
| Lab Code: |

## Inorganic Parameters

|  |  |  |  |  | Dilution | Date <br> Factor <br> Extracted | Date <br> Analyzed |
| :--- | :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | Water | Date Received: <br> Sample Name: |
| MW-19A |  |  |
| Lab Code: | J1102280-003 | Basis: NA |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Dissolved | 6020 | 0.4 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/31/11 | 6/1/11 11:50 |  |
| Antimony, Total Recoverable | 6020 | 0.3 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/31/11 | 6/1/11 18:47 |  |
| Ȧrsenic, Dissolved | 6020 | 8.14 |  | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/31/i1 | 6/1/1111:50 |  |
| Arsenic, Total Recoverable | 6020 | 10.1 |  | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/31/11 | 6/1/11 18:47 |  |
| Barium, Dissolved | 6020 | 27.3 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/31/11 | 6/1/11 11:50 |  |
| Barium, Total Recoverable | 6020 | 37.5 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/31/11 | 6/1/11 18:47 |  |
| Beryllium, Dissolved | 6020 | 0.8 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/31/11 | 6/1/1111:50 |  |
| Beryllium, Total Recoverable | 6020 | 1.2 |  | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/31/11 | 6/1/11 18:47 |  |
| Cadmium, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/31/11 | 6/1/11 11:50 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/31/11 | 6/1/11 18:47 |  |
| Chromium, Dissolved | 6020 | 26.5 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/31/11 | 6/1/11 11:50 |  |
| Chromium, Total Recoverable | 6020 | 42.4 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/31/11 | 6/1/11 18:47 |  |
| Cobalt, Dissolved | 6020 | 1.9 |  | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/31/11 | 6/1/11 11:50 |  |
| Cobalt, Total Recoverable | 6020 | 2.4 |  | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/31/11 | 6/1/1118:47 |  |
| Copper, Dissolved | 6020 | 1.1 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/31/11 | 6/1/11 11:50 |  |
| Copper, Total Recoverable | 6020 | 2.1 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/31/11 | 6/1/11 18:47 |  |
| Iron, Dissolved | 6010B | 10000 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/27/11 | 6/2/11 04:27 |  |
| Iron, Total Recoverable | 6010 B | 13300 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/27/11 | 6/1/11 21:31 |  |
| Lead, Dissolved | 6020 | 7.9 |  | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/31/11 | 6/1/11 11:50 |  |
| Lead, Total Recoverable | 6020 | 14.8 |  | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/31/11 | 6/1/11 18:47 |  |
| Mercury, Dissolved | 7470A | 12 | I | $\mu \mathrm{g} / \mathrm{L}$ | 20 | 2 | 1 | 6/2/11 | 6/3/1114:50 |  |
| Mercury, Total | 7470 A | 0.28 |  | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/31/11 | 6/1/11 13:25 |  |
| Nickel, Dissolved | 6020 | 4.4 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/31/11 | 6/1/11 11:50 |  |
| Nickel, Total Recoverable | 6020 | 6.8 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/31/11 | 6/1/11 18:47 |  |
| Selenium, Dissolved | 6020 | 5.8 |  | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/31/11 | 6/1/1111:50 |  |
| Selenium, Total Recoverable | 6020 | 8.0 |  | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/31/11 | 6/1/11 18:47 |  |
| Silver, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/31/11 | 6/1/11 11:50 |  |
| Silver, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/31/11 | 6/1/11 18:47 |  |
| Sodium, Dissolved | 6010B | 26.6 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/27/11 | 6/2/11 04:27 |  |
| Sodium, Total Recoverable | 6010B | 28.5 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/27/11 | 6/1/11 21:31 |  |
| Thallium, Dissolved | 6020 | 0.2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/31/11 | 6/1/11 11:50 |  |
| Thallium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/31/11 | 6/1/11 18:47 |  |
| Vanadium, Dissolved | 6020 | 29.6 |  | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/31/11 | 6/1/11 11:50 |  |
| Vanadium, Total Recoverable | 6020 | 38.7 |  | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/31/11 | 6/1/11 18:47 |  |
| Zinc, Dissolved | 6020 | 1 | I | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/31/11 | 6/1/11 11:50 |  |
| Zinc, Total Recoverable | 6020 | 2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/31/11 | 6/1/11 18:47 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 <br> Date Collected: $5 / 23 / 11$ <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | JED SWDF | Dater |
| Dample Name: | MW-19B | Basis: NA |

## Inorganic Parameters

|  |  |  |  |  | Dilution | Date <br> Factor <br> Extracted | Date <br> Analyzed | Note |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report
\(\left.$$
\begin{array}{lll}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: J1102280 } \\
\text { Date Collected: } 5 / 23 / 11 \\
\text { Project: }\end{array}
$$ <br>

Sample Matrix: \& Water \& Date Received: 5 / 24 / 11\end{array}\right]\)| Sample Name: |
| :--- |
| Lab Code: |

## Inorganic Parameters

|  |  |  |  | DilutionDate |  | Date <br> Analyzed |
| :--- | :--- | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Note |  |  |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 <br> Project: |
| :--- | :--- | ---: |
| DED SWDF | Date Collected: <br> Date Received: <br> Dample Matrix: | Water |
| Sample Name: | MW-16B |  |
| Lab Code: | J1102280-006 | Basis: |

## Inorganic Parameters

|  |  |  |  |  | Dilution | Date <br> Dactor <br> Extracted | Date <br> Analyzed | Note |
| :--- | :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report
\(\left.$$
\begin{array}{llr}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: J1102280 } \\
\text { Date Collected: } \\
\text { Project: }\end{array}
$$ <br>
Sample Matrix: \& JED SWDF \& Water <br>

Date Received: 5 / 24 / 11345\end{array}\right]\)| Sample Name: |
| :--- |
| Lab Code: |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution <br> Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/31/11 | 6/1/11 19:08 |  |
| Arsenic, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/31/11 | 6/1/11 19:08 |  |
| Barium, Total Recoverable | 6020 | 15.3 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/31/11 | 6/1/11 19:08 |  |
| Beryllium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/31/11 | 6/1/11 19:08 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/31/11 | 6/1/11 19:08 |  |
| Chromium, Total Recoverable | 6020 | 0.9 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/31/11 | 6/1/11 19:08 |  |
| Cobalt, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/31/11 | 6/1/11 19:08 |  |
| Copper, Total Recoverable | 6020 | 7.1 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/31/11 | 6/1/11 19:08 |  |
| Iron, Total Recoverable | 6010B | 860 |  | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/27/11 | 6/1/11 22:04 |  |
| Lead, Total Recoverable | 6020 | 2.8 |  | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/31/11 | 6/1/11 19:08 |  |
| Mercury, Total | 7470A | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/31/11 | 6/1/11 13:40 |  |
| Nickel, Total Recoverable | 6020 | 21.2 |  | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/31/11 | 6/1/11 19:08 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/31/11 | 6/1/11 19:08 |  |
| Silver, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/31/11 | 6/1/11 19:08 |  |
| Sodium, Total Recoverable | 6010B | 10.8 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/27/11 | 6/1/11 22:04 |  |
| Thallium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/31/11 | 6/1/11 19:08 |  |
| Vanadium, Total Recoverable | 6020 | 1.7 | I | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/31/11 | 6/1/11 19:08 |  |
| Zinc, Total Recoverable | 6020 | 74 |  | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/31/11 | 6/1/11 19:08 |  |


| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :---: | :---: | :---: |
| Project: | JED SWDF | Date Collected: 5/23/11 1525 |
| Sample Matrix: | Water | Date Received: 5/24/11 |
| Sample Name: | EB-2 |  |
| Lab Code: | J1102280-008 | Basis: NA |

## Inorganic Parameters

|  |  |  |  | DilutionDate |  | Date <br> Analyzed |
| :--- | :--- | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 <br> Project: |
| :--- | :--- | ---: |
| Dample Matrix: JED SWDF | Date Received: NA |  |
| Sample Name: | Method Blank | Basis: NA |

## Inorganic Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution <br> Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Antimony, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/31/11 | 6/1/11 11:09 |  |
| Antimony, Total Recoverable | 6020 | 0.2 | I | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/31/11 | 6/1/11 16:41 |  |
| Arsenic, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/31/11 | 6/1/1111:09 |  |
| Arsenic, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.40 | 1 | 5/31/11 | 6/1/11 16:41 |  |
| Barium, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/31/11 | 6/1/1111:09 |  |
| Barium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$. | 2.0 | 0.3 | 1 | $5 / 31 / 11$ | 6/1/11 16:41 |  |
| Beryllium, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/31/11 | 6/1/11 11:09 |  |
| Beryllium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.2 | 1 | 5/31/11 | 6/1/11 16:41 |  |
| Cadmium, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/31/11 | 6/1/11 11:09 |  |
| Cadmium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.30 | 1 | 5/31/11 | 6/1/11 16:41 |  |
| Chromium, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/31/11 | 6/1/11 11:09 |  |
| Chromium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.3 | 1 | 5/31/11 | 6/1/11 16:41 |  |
| Cobalt, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/31/11 | 6/1/1111:09 |  |
| Cobalt, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.08 | 1 | 5/31/11 | 6/1/11 16:41 |  |
| Copper, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/31/11 | 6/1/11 11:09 |  |
| Copper, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 1.0 | 1 | 5/31/11 | 6/1/11 16:41 |  |
| Iron, Dissolved | 6010B | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/27/11 | 6/2/11 03:50 |  |
| Iron, Total Recoverable | 6010B | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 100 | 20 | 1 | 5/27/11 | 6/1/11 20:49 |  |
| Lead, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/31/11 | 6/1/11 11:09 |  |
| Lead, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.06 | 1 | 5/31/11 | 6/1/11 16:41 |  |
| Mercury, Dissolved | 7470A | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 6/2/11 | 6/3/11 14:40 |  |
| Mercury, Total | 7470A | 0.05 | I | $\mu \mathrm{g} / \mathrm{L}$ | 0.20 | 0.02 | 1 | 5/31/11 | 6/1/11 13:20 |  |
| Nickel, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/31/11 | 6/1/11 11:09 |  |
| Nickel, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 2.0 | 0.2 | 1 | 5/31/11 | 6/1/11 16:41 |  |
| Selenium, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/31/11 | 6/1/11 11:09 |  |
| Selenium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 1.0 | 1 | 5/31/11 | 6/1/11 16:41 |  |
| Silver, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/31/11 | 6/1/11 11:09 |  |
| Silver, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 0.50 | 0.07 | 1 | 5/31/11 | 6/1/11 16:41 |  |
| Sodium, Dissolved | 6010B | 0.11 | I | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/27/11 | 6/2/11 03:50 |  |
| Sodium, Total Recoverable | 6010B | 0.13 | I | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.02 | 1 | 5/27/11 | 6/1/11 20:49 |  |
| Thallium, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/31/11 | 6/1/11 11:09 |  |
| Thallium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 1.0 | 0.03 | 1 | 5/31/11 | 6/1/11 16:41 |  |
| Vanadium, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/31/11 | 6/1/11 11:09 |  |
| Vanadium, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 5.0 | 0.5 | 1 | 5/31/11 | 6/1/11 16:41 |  |
| Zinc, Dissolved | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/31/11 | 6/1/11 11:09 |  |
| Zinc, Total Recoverable | 6020 | ND | U | $\mu \mathrm{g} / \mathrm{L}$ | 10 | 1 | 1 | 5/31/11 | 6/1/11 16:41 |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 <br> Date Collected: <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | Water | Date Received: $5 / 24 / 111030$ |
| Sample Name: | MW-23A |  |
| Lab Code: | Jl102280-001 | Basis: NA |

## General Chemistry Parameters

|  |  |  |  | Dilution <br> Analyte Name | Method | Result | Q |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Units | MRL | MDL | Date <br> Analyzed |  |  |  |
| Note |  |  |  |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 <br> Date Collected: $5 / 23 / 110855$ <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | Water | Date Received: $5 / 24 / 11$ |

## General Chemistry Parameters

|  |  |  |  | Dilution <br> Date <br> Analyte Name | Method | Result $\mathbf{Q}$ | Units |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | MRL $\quad$ MDL | Date |
| :---: |
| Factor Extracted |
| Analyzed |
| Note |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 <br> Project: |
| :--- | :--- | ---: |
| Dample Matrix: JED SWDF <br> Datected: Received: $5 / 23 / 24 / 11150$ |  |  |
| Sample Name: | Water | MW-19A |

## General Chemistry Parameters

|  |  |  |  | Dilution <br> Date | Date |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Method | Result | Q | Units | MRL | MDL | Factor Extracted | Analyzed | Note |
| :--- |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 <br> Droject: |
| :--- | :--- | ---: |
| Date Collected: $5 / 23 / 111125$  <br> Date Received: $5 / 24 / 11$ |  |  |
| Sample Name: $:$ | Whater |  |
| Lab Code: | J1102280-004 | Basis: NA |

General Chemistry Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution <br> Factor <br> Extracted |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Date <br> Analyzed |  |  |  |  |  |  |  |
| Note |  |  |  |  |  |  |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 <br> Date Collected: $5 / 23 / 111415$ <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | Water SWF | Date Received: $5 / 24 / 11$ |

## General Chemistry Parameters

| Analyte Name | Method | Result $Q$ | Units | MRL | MDL | Dilution <br> Factor Extracted | Date <br> Analyzed |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |  |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 23 / 111445$ <br> Dample Matrix: |
| Water Received: <br> Sample Name: MW-16B |  |  |
| Lab Code: | J1102280-006 | Basis: NA |

## General Chemistry Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution Factor | Date Extracted | Date Analyzed | Note |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ammonia as Nitrogen | 350.1 | 0.139 |  | $\mathrm{mg} / \mathrm{L}$ | 0.010 | 0.005 | 1 | NA | 5/27/11 10:32 |  |
| Chloride | 300.0 | 4.68 |  | $\mathrm{mg} / \mathrm{L}$ | 0.50 | 0.10 | 1 | NA | 5/24/11 16:47 |  |
| Nitrate as Nitrogen | 300.0 | ND | U | $\mathrm{mg} / \mathrm{L}$ | 0.20 | 0.04 | 1 | NA | 5/24/11 16:47 |  |
| Solids, Total Dissolved | SM 2540 C | 46 |  | $\mathrm{mg} / \mathrm{L}$ | 10 | 10 | 1 | NA | 5/25/1111:26 |  |

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 <br> Date Collected: $5 / 23 / 111345$ <br> Project: |
| :--- | :--- | ---: |
| Sample Matrix: | Water | Date Received: $5 / 24 / 11$ |
| Sample Name: | MW-16C | Basis: NA |

## General Chemistry Parameters

| Analyte Name | Method | Result | Q | Units | MRL | MDL | Dilution <br> FactorDate <br> Datracted | Date <br> Analyzed |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Note |  |  |  |  |  |  |  |  |

## COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 <br> Project: |
| :--- | :--- | ---: |
| Date Collected: $5 / 23 / 111525$ <br> Sample Matrix: Water | Date Received: <br> Sample Name: | EB-2 |

## General Chemistry Parameters

| Analyte Name | Method | Result $\mathbf{Q}$ | Units | MRL | MDL | Dilution <br> Factor Extracted | Date <br> Analyzed | Note |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

\(\left.$$
\begin{array}{llr}\text { Client: } & \text { Environmental Planning Specialists } & \begin{array}{r}\text { Service Request: J1102280 } \\
\text { Droject: }\end{array}
$$ <br>
\begin{array}{ll}Date Collected: NA <br>

Dample Matrix: \& Water\end{array} \& Date Received: NA\end{array}\right]\)| Sample Name: |
| :--- |
| Lab Code: |

## General Chemistry Parameters

|  |  |  |  |  | Dilution | Date | Date <br> Analyzed | Note |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Client: | Environmental Planning Specialists |
| :--- | :--- |
| Project: | JED SWDF |
| Sample Matrix: | Water |

Service Request: J1102280

Surrogate Recovery Summary
Volatile Organic Compounds by GC/MS
Analytical Method: 8260B
Units: Percent

| Sample Name | Lab Code | Sur1 | Sur2 | Sur3 | Sur 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MW-23A | J1102280-001 | 92 | 95 | 99 | 101 |
| MW-23B | J1102280-002 | 89 | 92 | 97 | 106 |
| MW-19A | J1102280-003 | 88 | 85 | 94 | 101 |
| MW-19B | J1102280-004 | 92 | 92 | 97 | 101 |
| MW-16A | J1102280-005 | 94 | 87 | 98 | 104 |
| MW-16B | J1102280-006 | 91 | 86 | 98 | 105 |
| MW-16C | J1102280-007 | 89 | 88 | 96 | 103 |
| EB-2 | J1102280-008 | 88 | 94 | 93 | 111 |
| Trip Blank | J1102280-009 | 89 | 103 | 94 | 100 |
| Method Blank | JQ1102991-01 | 93 | 89 | 96 | 103 |
| Method Blank | JQ1103050-02 | 89 | 101 | 96 | 99 |
| Lab Control Sample | JQ1102991-02 | 97 | 87 | 103 | 99 |
| Lab Control Sample | JQ1103050-01 | 88 | 96 | 95 | 104 |

Surrogate Recovery Control Limits (\%)

| Sur1 | $=1,2$-Dichloroethane-d4 | $68-118$ |
| :--- | :--- | :--- |
| Sur2 | $=4$-Bromofluorobenzene | $78-129$ |
| Sur3 | $=$ Dibromofluoromethane | $80-114$ |
| Sur4 | $=$ Toluene-d8 | $87-118$ |

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (\#) indicate the control criteria is not applicable

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $5 / 31 / 11$ |
| Sample Matrix: | Water |  |

## Lab Control Sample Summary Volatile Organic Compounds by GC/MS

| Analytical Method: 8260 B | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| :--- | ---: |
| Basis: NA |  |

Lab Control Sample
JQ1102991-02

|  | Result | Spike <br> Amount | \% Rec | \% Rec <br> Limits |
| :--- | :---: | :---: | :---: | :---: |
| Analyte Name | 22.5 | 20.0 | 112 | $79-120$ |
| 1,1,1-Trichloroethane (TCA) | 19.8 | 20.0 | 99 | $78-120$ |
| 1,1,2,2-Tetrachloroethane | 22.3 | 20.0 | 112 | $65-137$ |
| 1,1,2-Trichloroethane | 20.1 | 20.0 | 101 | $81-121$ |
| 1,1-Dichloroethane (1,1-DCA) | 20.5 | 20.0 | 103 | $83-119$ |
| 1,1-Dichloroethene (1,1-DCE) | 20.8 | 20.0 | 104 | $79-123$ |
| 1,2,3-Trichloropropane | 21.4 | 20.0 | 107 | $71-129$ |
| 1,2-Dibromo-3-chloropropane (DBCP) | 19.4 | 20.0 | 97 | $36-143$ |
| 1,2-Dibromoethane (EDB) | 21.5 | 20.0 | 107 | $80-122$ |
| 1,2-Dichlorobenzene | 19.5 | 20.0 | 97 | $79-114$ |
| 1,2-Dichloroethane | 19.6 | 20.0 | 98 | $73-120$ |
| 1,2-Dichloropropane | 21.0 | 20.0 | 105 | $86-116$ |
| 1,4-Dichlorobenzene | 19.7 | 20.0 | 98 | $77-117$ |
| 2-Butanone (MEK) | 107 | 100 | 107 | $38-152$ |
| 2-Hexanone | 108 | 100 | 108 | $63-131$ |
| 4-Methyl-2-pentanone (MIBK) | 102 | 100 | 102 | $69-127$ |
| Acetone | 107 | 100 | 107 | $45-157$ |
| Acrylonitrile | 112 | 100 | 112 | $56-139$ |
| Benzene | 21.3 | 20.0 | 106 | $83-118$ |
| Bromochloromethane | 22.7 | 20.0 | 113 | $82-117$ |
| Bromodichloromethane | 20.7 | 20.0 | 103 | $77-120$ |
| Bromoform | 21.3 | 20.0 | 107 | $38-149$ |
| Bromomethane | 18.3 | 20.0 | 91 | $78-132$ |
| Carbon Disulfide | 114 | 100 | 114 | $74-132$ |
| Carbon Tetrachloride | 21.6 | 20.0 | 108 | $67-129$ |
| Chlorobenzene | 23.0 | 20.0 | 115 | $83-122$ |
| Chloroethane | 20.0 | 116 | $80-129$ |  |
| Chloroform | 20.5 | 20.0 | 103 | $81-118$ |
| Chloromethane | 20.5 | 20.0 | 102 | $74-127$ |
| cis-1,2-Dichloroethene | 20.0 | 103 | $80-120$ |  |
| cis-1,3-Dichloropropene | 20.0 | 106 | $71-122$ |  |
| Dibromochloromethane |  |  |  |  |

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded

| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $5 / 31 / 11$ |
| Sample Matrix: | Water |  |

## Lab Control Sample Summary Volatile Organic Compounds by GC/MS

| Analytical Method: 8260 B | Units: $\mu \mathrm{g} / \mathrm{L}$ <br> Basis: |
| :--- | :--- |
|  | Analysis Lot: 248104 |


|  | Lab Control Sample |  |  |
| :--- | :---: | :---: | :---: | :---: |
| JQ1102991-02 |  |  |  |
| Spike |  |  |  |
| Amount |  |  |  |$\quad$ \% Rec \(\left.\begin{array}{c}\% Rec <br>

Limits\end{array}\right]\)

[^32]QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: 6/2/11 |
| Sample Matrix: | Water |  |

## Lab Control Sample Summary Volatile Organic Compounds by GC/MS

| Analytical Method: 8260 B | Units: $\mu \mathrm{g} / \mathrm{L}$ <br> Basis: |
| :--- | ---: |
|  | NA |

## Lab Control Sample

JQ1103050-01

|  | $\begin{array}{c}\text { Spike } \\ \text { Amount }\end{array}$ |  |  | \% Result |
| :--- | :---: | :---: | :---: | :---: |
| Analyte Name | \% Rec |  |  |  |
| Limits |  |  |  |  |$]$

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded

## COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: 6/2/11 |
| Sample Matrix: | Water |  |

## Lab Control Sample Summary Volatile Organic Compounds by GC/MS

Analytical Method: 8260B

```
Units: \(\mu \mathrm{g} / \mathrm{L}\)
Basis: NA
Analysis Lot: 248513
```

| Lab Control Sample JQ1103050-01 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Result | Spike Amount | \% Rec | \% Rec <br> Limits |  |
| Dibromomethane | 20.4 | 20.0 | 102 | 73-125 |  |
| Ethylbenzene | 21.4 | 20.0 | 107 | 82-124 |  |
| Iodomethane | 91.6 | 100 | 92 | 78-128 |  |
| m,p-Xylenes | 39.5 | 40.0 | 99 | 82-125 |  |
| Methylene Chloride | 22.4 | 20.0 | 112 | 70-134 |  |
| o-Xylene | 20.6 | 20.0 | 103 | 82-122 |  |
| Styrene | 21.8 | 20.0 | 109 | 82-123 |  |
| Tetrachloroethene (PCE) | 21.9 | 20.0 | 110 | 77-129 |  |
| Toluene | 21.8 | 20.0 | 109 | 82-122 |  |
| trans-1,2-Dichloroethene | 20.0 | 20.0 | 100 | 81-119 |  |
| trans-1,3-Dichloropropene | 20.4 | 20.0 | 102 | 71-124 |  |
| trans-1,4-Dichloro-2-butene | 5.07 | 20.0 | 25 | 10-172 |  |
| Trichloroethene (TCE) | 19.5 | 20.0 | 97 | 81-120 | : |
| Trichlorofluoromethane | 18.1 | 20.0 | 90 | 72-127 |  |
| Vinyl Acetate | 84.4 | 100 | 84 | 50-145 |  |
| Vinyl Chloride | 21.0 | 20.0 | 105 | 72-133 |  |

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded

| Client: | Environmental Planning Specialists |
| :--- | :--- |
| Project: | JED SWDF |
| Sample Matrix: | Water |
|  |  |
|  |  |
|  |  |
|  | 1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD |


| Extraction Method: | METHOD | Units: PERCENT |
| :--- | :--- | :---: |
| Analysis Method: | 8011 | Level: Low |


| Sample Name | Lab Code | Surl |  |
| :--- | :--- | ---: | :--- |
| MW-23A | J1102280-001 | 73 | \# |
| MW-23B | J1102280-002 | 101 |  |
| MW-19A | J1102280-003 | 69 | \# |
| MW-19B | J1102280-004 | 110 |  |
| MW-16A | $J 1102280-005$ | 109 |  |
| MW-16B | J1102280-006 | 108 |  |
| MW-16C | J1102280-007 | 110 |  |
| EB-2 | J1102280-008 | 112 |  |
| Method Blank | JWG1101266-3 | 113 |  |
| Lab Control Sample | JWG1101266-1 | 106 |  |
| Duplicate Lab Control Sample | JWG1101266-2 | 108 |  |

Surrogate Recovery Control Limits (\%)
Surl $=1,1,1,2-$ Tetrachloroethane $\quad 77-150$

[^33]
## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J 1102280 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Extracted: $05 / 31 / 2011$ |
| Sample Matrix: | Water | Date Analyzed: $05 / 31 / 2011$ |

Lab Control Spike/Duplicate Lab Control Spike Summary
1,2-Dibromoethane and 1,2-Dibromo-3-chloropropane by GC-ECD

| Extraction Method: Analysis Method: | $\begin{aligned} & \text { METHOD } \\ & 8011 \end{aligned}$ |  |  |  |  |  |  | Extracti | its: <br> sis: <br> el: <br> ot: | B1101266 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | ontrol Samp <br> 1101266-1 <br> Control Spik |  |  | ab Control 1101266-2 ab Control | ample <br> pike | \%Rec |  | RPD |
| Analyte Name |  | Result | Expected | $\%$ Rec | Result | Expected | \%Rec | Limits | RPD | Limit |
| 1,2-Dibromoethane (ED |  | 0.273 | 0.250 | 109 | 0.265 | 0.250 | 106 | 70-130 | 3 | 20 |
| 1,2-Dibromo-3-chloropro | ane (DBCP | 0.245 | 0.250 | 98 | 0.246 | 0.250 | 98 | 70-130 | 0 | 20 |

Percent recoveries and relative percent differences $(\mathrm{RPD})$ are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :--- | :--- | ---: | :--- |
| Project: | JED SWDF | Date Collected: $5 / 23 / 11$ |
| Sample Matrix: | Water | Date Received: $5 / 24 / 11$ |
|  |  | Date Analyzed: $6 / 1 / 11-$ |
|  |  | $6 / 3 / 11$ |


| Sample Name: | MW-23A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | J1102280-001 | Basis: NA |


| Analyte Name | Method | Sample Result | $\begin{gathered} \text { MW-23AMS } \\ \text { Matrix Spike } \\ \text { J1102280-001MS1 } \end{gathered}$ |  |  | MW-23ADMS <br> Duplicate Matrix Spike J1102280-001DMS1 |  |  | \% Rec <br> Limits | RPD | RPD <br> Limit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Result | Spike Amount | \% Rec | Result | Spike Amount | \% Rec |  |  |  |
| Antimony, Dissolved | 6020 | ND | 51.9 | 50.0 | 104 | 51.6 | 50.0 | 103 | 75-125 | $<1$ | 20 |
| Arsenic, Dissolved | 6020 | 1.22 | 52.1 | 50.0 | 102 | 52.6 | 50.0 | 103 | 75-125 | 1 | 20 |
| Barium, Dissolved | 6020 | 8.7 | 58.7 | 50.0 | 100 | 58.5 | 50.0 | 99 | 75-125 | <1 | 20 |
| Beryllium, Dissolved | 6020 | ND | 52.5 | 50.0 | 105 | 51.5 | 50.0 | 103 | 75-125 | 2 | 20 |
| Cadmium, Dissolved | 6020 | ND | 52.1 | 50.0 | 104 | 51.9 | 50.0 | 104 | 75-125 | $<1$ | 20 |
| Chromium, Dissolved | 6020 | 2.6 | 49.0 | 50.0 | 93 | 48.8 | 50.0 | 92 | 75-125 | $<1$ | 20 |
| Cobalt, Dissolved | 6020 | 0.4 | 49.4 | 50.0 | 98 | 48.8 | 50.0 | 97 | 75-125 | 1 | 20 |
| Copper, Dissolved | 6020 | ND | 47.8 | 50.0 | 96 | 48.1 | 50.0 | 96 | 75-125 | <1 | 20 |
| Lead, Dissolved | 6020 | 0.1 | 50.7 | 50.0 | 101 | 51.3 | 50.0 | 102 | 75-125 | 1 | 20 |
| Mercury, Dissolved | 7470A | ND | 5.07 | 5.00 | 101 | 5.07 | 5.00 | 101 | 75-125 | $<1$ | 20 |
| Nickel, Dissolved | 6020 | 1.8 | 48.6 | 50.0 | 94 | 48.8 | 50.0 | 94 | 75-125 | <1 | 20 |
| Selenium, Dissolved | 6020 | ND | 36.3 | 50.0 | 73 * | 35.7 | 50.0 | 71 * | 75-125 | 2 | 20 |
| Silver, Dissolved | 6020 | ND | 48.1 | 50.0 | 96 | 47.7 | 50.0 | 95 | 75-125 | <1 | 20 |
| Thallium, Dissolved | 6020 | 0.2 | 47.3 | 50.0 | 94 | 50.2 | 50:0 | 100 | 75-125 | 6 | 20 |
| Vanadium, Dissolved | 6020 | 5.0 | 52.7 | 50.0 | 95 | 51.5 | 50.0 | 93 | 75-125 | 2 | 20 |
| Zinc, Dissolved | 6020 | 1 | 103 | 100 | 102 | 102 | 100 | 101 | 75-125 | 1 | 20 |

Results flagged with an asterisk ( ${ }^{*}$ ) indicate values outside control criteria.
Results flagged with a pound (\#) indicate the control criteria is not applicable.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

## QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 23 / 11$ |
| Sample Matrix: | Water | Date Received: $5 / 24 / 11$ |
|  |  | Date Analyzed: $6 / 1 / 11$ |


| Sample Name: | MW-16A | Units: $\mu \mathrm{g} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | $\mathrm{J} 1102280-005$ | Basis: NA |

Analytical Method: 7470A
Prep Method: Method

|  |  | MW-16AMS <br> Matrix Spike 102280-005MS2 |  |  | MW-16ADMS <br> Duplicate Matrix Spike J1102280-005DMS2 |  |  | \% Rec <br> Limits |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analyte Name | Sample Result | Result | Spike Amount | \% Rec | Result | Spike Amount | \% Rec |  | RPD | RPD <br> Limit |
| Mercury, Total | ND | 5.25 | 5.00 | 105 | 5.20 | 5.00 | 104 | 75-125 | <1 | 20 |

[^34]
## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: 6/1/11- |
| Sample Matrix: | Water | $6 / 3 / 11$ |

## Lab Control Sample Summary Inorganic Parameters

Units: $\mu \mathrm{g} / \mathrm{L}$
Basis: NA


Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

## COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $6 / 1 / 11-$ |
| Sample Matrix: | Water | $6 / 3 / 11$ |

## Lab Control Sample Summary Inorganic Parameters

Units: $\mathrm{mg} / \mathrm{L}$
Basis: NA

| Analyte Name | Method | Lab Control Sample J1102280-LCS |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Result | Spike Amount | \% Rec | \% Rec <br> Limits |
| Sodium, Dissolved | 6010B | 26.8 | 25.0 | 107 | 90-114 |
| Sodium, Total Recoverable | 6010B | 26.4 | 25.0 | 106 | 90-114 |

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 23 / 11$ |
| Sample Matrix: | Water | Date Received: $5 / 24 / 11$ |
|  |  | Date Analyzed: $5 / 27 / 11$ |

## Matrix Spike Summary <br> General Chemistry Parameters

| Sample Name: | MW-16C | Units: $\mathrm{mg} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | $\mathrm{J} 1102280-007$ | Basis: NA |

Analytical Method: 350.1


[^35]QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: $J 1102280$ |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 23 / 11$ |
| Sample Matrix: | Water | Date Received: $5 / 24 / 11$ |
|  |  | Date Analyzed: $5 / 25 / 11$ |

## Replicate Sample Summary <br> General Chemistry Parameters

| Sample Name: | MW-19B | Units: $\mathrm{mg} / \mathrm{L}$ |
| :--- | :--- | :--- |
| Lab Code: | J $1102280-004$ | Basis: NA |



[^36]QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: $J 1102280$ |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Collected: $5 / 23 / 11$ |
| Sample Matrix: | Water | Date Received: $5 / 24 / 11$ |
|  |  | Date Analyzed: $5 / 27 / 11$ |

## Replicate Sample Summary General Chemistry Parameters

| Sample Name: | MW-16C | Units: mg/L |
| :--- | :--- | :--- |
| Lab Code: | J1102280-007 | Basis: NA |


|  |  |  |  |  | MW | CDUP |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Sample | $\begin{aligned} & \text { Duplic } \\ & \text { J110288 } \end{aligned}$ | Sample <br> 007DUP2 |  | RPD |
| Analyte Name | Method | MRL | MDL | Result | Result | Average | RPD | Limit |
| Ammonia as Nitrogen | 350.1 | 0.010 | 0.005 | 0.127 | 0.127 | 0.127 | $<1$ | 20 |

QA/QC Report

| Client: | Environmental Planning Specialists | Service Request: J1102280 |
| :--- | :--- | ---: |
| Project: | JED SWDF | Date Analyzed: $5 / 24 / 11-$ |
| Sample Matrix: | Water | $5 / 27 / 11$ |

## Lab Control Sample Summary <br> General Chemistry Parameters

|  |  |  |  |  |  | Units: mg/L <br> Basis: NA |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Lab J11 | ntrol Sam 02280-LC | nple S |  |  |
| Analyte Name | Method | Result | Spike Amount | $\% \text { Rec }$ | \% Rec <br> Limits |  |
| Ammonia as Nitrogen | 350.1 | 0.988 | 1.00 | 99 | 90-110 |  |
| Chloride | 300.0 | 51.9 | 50.0 | 104 | 90-110 |  |
| Nitrate as Nitrogen | 300.0 | 4.93 | 5.00 | 99 | 90-110 |  |
| Solids, Total Dissolved | SM 2540 | 299 | 300 | 100 | 85-115 |  |


Note that pH is check and meets the required pH criterion listed in the column heading unless otherwise noted on the cooler receipt form.




[^0]:    Results flagged with an asterisk (*) indicate values outside control criteria

[^1]:    Results flagged with an asterisk (*) indicate values outside control criteria.
    Results flagged with a pound (\#) indicate the control criteria is not applicable.
    Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded

[^2]:    Results flagged with an asterisk (*) indicate values outside control criteria.
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[^3]:    Results flagged with an asterisk (*) indicate values outside control criteria.
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[^4]:    Results flagged with an asterisk (*) indicate values outside control criteria.
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[^5]:    Results flagged with an asterisk (*) indicate values outside control criteria.
    Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

[^6]:    Comments:

[^7]:    Comments:

[^8]:    Comments:

[^9]:    Results flagged with an asterisk (*) indicate values outside control criteria.
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    Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

[^10]:    Results flagged with an asterisk (*) indicate values outside control criteria.
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[^11]:    Results flagged with an asterisk (*) indicate values outside control criteria.
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    Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

[^12]:    Results flagged with an asterisk (*) indicate values outside control criteria.
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    Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

[^13]:    Results flagged with an asterisk (*) indicate values outside control criteria.
    Results flagged with a pound (\#) indicate the control criteria is not applicable.
    Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

[^14]:    Results flagged with an asterisk (*) indicate values outside control criteria.
    Results flagged with a pound (\#) indicate the control criteria is not applicable.
    Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

[^15]:    Results flagged with an asterisk (*) indicate values outside control criteria.
    Results flagged with a pound (\#) indicate the control criteria is not applicable.
    Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

[^16]:    Results flagged with an asterisk (*) indicate values outside control criteria.
    Results flagged with a pound (\#) indicate the control criteria is not applicable.
    Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

[^17]:    Results flagged with an asterisk (*) indicate values outside control criteria.
    Results flagged with a pound (\#) indicate the control criteria is not applicable.
    Percent recoveries and relative percent differences $(R P D)$ are determined by the software using values in the calculation which have not been rounded.

[^18]:    Results flagged with an asterisk (*) indicate values outside control criteria.
    Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

[^19]:    Results flagged with an asterisk (*) indicate values outside control criteria.
    Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded

[^20]:    Comments:

[^21]:    Results flagged with an asterisk (*) indicate values outside control criteria.
    Results flagged with a pound (\#) indicate the control criteria is not applicable.
    Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

[^22]:    Results flagged with an asterisk (*) indicate values outside control criteria.

[^23]:    Results flagged with an asterisk (*) indicate values outside control criteria.

[^24]:    Comments:

[^25]:    Comments:

[^26]:    Comments:

[^27]:    Comments:

[^28]:    Comments:

[^29]:    Comments:

[^30]:    Comments:

[^31]:    Comments:

[^32]:    Results flagged with an asterisk (*) indicate values outside control criteria.
    Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded

[^33]:    Results flagged with an asterisk (*) indicate values outside control criteria.
    Results flagged with a pound (\#) indicate the control criteria is not applicable.

[^34]:    Results flagged with an asterisk (*) indicate values outside control criteria.
    Results flagged with a pound (\#) indicate the control criteria is not applicable.
    Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

[^35]:    Results flagged with an asterisk (*) indicate values outside control criteria.
    Results flagged with a pound (\#) indicate the control criteria is not applicable.
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[^36]:    Results flagged with an asterisk (*) indicate values outside control criteria.
    Results flagged with a pound (\#) indicate the control criteria is not applicable.
    Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

