

Appendix A

Remedial Investigation Data Summary Tables

**Former Gulf States Creosoting Site
Hattiesburg, Mississippi**

Summary of Subsurface Soil Analytical Results
 Former Gulf States Creosoting Site
 Hattiesburg, Mississippi

| Parameter | CAS Number | Standard MDL | MP&A Sample ID | | CPT/SB-01/8-10 | | CPT/SB-01/44-46 | | CPT/SB-02/9-11 | | CPT/SB-03/20-22 | | CPT/SB-04/20-22 | |
|---------------------------|------------|--------------|-------------------|----------------|---------------------|---------|-----------------|---------------------|----------------|---------|---------------------|---------|-----------------|---------|
| | | | Lab Sample Number | Date Collected | 2679073 | 3/15/97 | 2679074 | 3/15/97 | 2679075 | 3/15/97 | 2679076 | 3/15/97 | 2679077 | 3/15/97 |
| | | | Result | Notes | Sample-Specific MDL | Result | Notes | Sample-Specific MDL | Result | Notes | Sample-Specific MDL | Result | Notes | |
| TCL Volatiles | | | | | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | 0.002 | ND | | ND | | | ND | | | 0.01 | ND | | |
| Trichloroethene | 79-01-6 | 0.001 | ND | | ND | | | ND | | | 0.005 | ND | | |
| Benzene | 71-43-2 | 0.001 | ND | | ND | | | ND | | | 0.005 | 0.021 | J | |
| Toluene | 108-88-3 | 0.001 | ND | | ND | | | 0.013 | | | 0.005 | 0.34 | | |
| Chlorobenzene | 108-90-7 | 0.001 | ND | | ND | | | 0.28 | | | 0.005 | 1.3 | | |
| Xylene (total) | 1330-20-7 | 0.001 | ND | | ND | | | ND | | | 0.005 | 1.3 | | |
| Chloromethane | 74-87-3 | 0.002 | ND | | ND | | | ND | | | 0.01 | ND | | |
| Bromomethane | 74-83-9 | 0.003 | ND | | ND | | | ND | | | 0.015 | ND | | |
| Vinyl Chloride | 75-01-4 | 0.002 | ND | | ND | | | ND | | | 0.01 | ND | | |
| Chloroethane | 75-00-3 | 0.003 | ND | | ND | | | ND | | | 0.015 | ND | | |
| Methylene Chloride | 75-09-2 | 0.002 | ND | | ND | | | ND | | | 0.01 | ND | | |
| 1,1-Dichloroethane | 75-34-3 | 0.001 | ND | | ND | | | ND | | | 0.005 | ND | | |
| Chloroform | 67-66-3 | 0.001 | ND | | ND | | | ND | | | 0.005 | ND | | |
| 1,2-Dichloroethane | 107-06-2 | 0.002 | ND | | ND | | | ND | | | 0.005 | ND | | |
| 1,1,1-Trichloroethane | 71-55-6 | 0.001 | ND | | ND | | | ND | | | 0.005 | ND | | |
| Carbon Tetrachloride | 56-23-5 | 0.001 | ND | | ND | | | ND | | | 0.005 | ND | | |
| Bromodichloromethane | 75-27-4 | 0.002 | ND | | ND | | | ND | | | 0.01 | ND | | |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 0.001 | ND | | ND | | | ND | | | 0.005 | ND | | |
| 1,2-Dichloropropane | 78-87-5 | 0.003 | ND | | ND | | | ND | | | 0.005 | ND | | |
| trans-1,3-Dichloropropene | 10061-02-6 | 0.001 | ND | | ND | | | ND | | | 0.015 | ND | | |
| Dibromochloromethane | 124-48-1 | 0.001 | ND | | ND | | | ND | | | 0.005 | ND | | |
| 1,1,2-Trichloroethane | 79-00-5 | 0.002 | ND | | ND | | | ND | | | 0.005 | ND | | |
| cis-1,3-Dichloropropene | 10061-01-5 | 0.001 | ND | | ND | | | ND | | | 0.005 | ND | | |
| Bromoform | 75-25-2 | 0.001 | ND | | ND | | | ND | | | 0.01 | ND | | |
| Tetrachloroethene | 127-18-4 | 0.001 | ND | | ND | | | ND | | | 0.005 | ND | | |
| Ethylbenzene | 100-41-4 | 0.001 | ND | | ND | | | ND | | | 0.005 | ND | | |
| Acetone | 67-64-1 | 0.007 | 0.059 | J | 0.035 | | | 0.046 | | | 0.005 | 0.25 | | |
| Carbon Disulfide | 75-15-0 | 0.003 | ND | | ND | | | 0.009 | | | 0.035 | 0.099 | J | |
| 2-Butanone | 78-93-3 | 0.007 | ND | | ND | | | ND | | | 0.015 | ND | | |
| Vinyl Acetate | 108-05-4 | 0.003 | ND | | ND | | | ND | | | 0.035 | ND | | |
| 2-Hexanone | 591-78-6 | 0.003 | ND | | ND | | | ND | | | 0.015 | ND | | |
| 4-Methyl-2-pentanone | 108-10-1 | 0.003 | ND | | ND | | | ND | | | 0.015 | ND | | |
| Styrene | 100-42-5 | 0.001 | ND | | ND | | | ND | | | 0.005 | 0.24 | | |
| trans-1,2-Dichloroethene | 156-60-5 | 0.002 | ND | | ND | | | ND | | | 0.01 | ND | | |
| cis-1,2-Dichloroethene | 156-59-2 | 0.002 | ND | | ND | | | ND | | | 0.01 | ND | | |

Notes

Analytical methods: SW-846 8240B for volatiles;
 SW-846 8270B for semivolatiles.
 All results are reported on an "as received" basis in mg/kg.
 Last two numbers of MP&A Sample ID indicate sample depth interval.
 (a) Sample GEO/SB-29/6-8 is a blind duplicate of sample GEO/SB-05/409.
 J - Estimated value; in cases of ND, indicates MDL is estimated.
 R - Unusable result; analyte may or may not be present in the sample.

4-1
 Summary of Subsurface Soil Analytical Results
 Former Gulf States Creosoting Site
 Hattiesburg, Mississippi

| Parameter | CAS Number | Standard MDL | CPT/SB-01/8-10 | | CPT/SB-01/44-46 | | CPT/SB-02/9-11 | | CPT/SB-03/20-22 | | CPT/SB-04/20-22 | |
|------------------------------|------------|--------------|-------------------|----------------|-----------------|-------|---------------------|--------|-----------------|---------------------|-----------------|-------|
| | | | Lab Sample Number | Date Collected | Result | Notes | Sample-Specific MDL | Result | Notes | Sample-Specific MDL | Result | Notes |
| TCL Semivolatiles | | | | | | | | | | | | |
| phenol | 108-95-2 | 0.033 | ND | | ND | | | ND | | ND | | 53 |
| 2-chlorophenol | 95-57-8 | 0.033 | ND | | ND | | | ND | | ND | | ND |
| 1,4-dichlorobenzene | 106-46-7 | 0.033 | ND | | ND | | | ND | | ND | | ND |
| N-nitrosodi-n-propylamine | 621-64-7 | 0.067 | ND | | ND | | | ND | | ND | | ND |
| 1,2,4-trichlorobenzene | 120-82-1 | 0.033 | ND | | ND | | | ND | | ND | | ND |
| 4-chloro-3-methylphenol | 59-50-7 | 0.067 | ND | | ND | | | ND | | ND | | ND |
| acensaphthene | 83-32-9 | 0.033 | ND | | ND | | | 26 | | ND | | 73 |
| 4-nitrophenol | 100-02-7 | 0.17 | ND | | ND | | | ND | | ND | | ND |
| 2,4-dinitrotoluene | 121-14-2 | 0.067 | ND | | ND | | | ND | | ND | | ND |
| pentachlorophenol | 87-86-5 | 0.17 | ND | | ND | | | ND | | ND | | ND |
| pyrene | 129-00-0 | 0.067 | ND | | ND | | | 24 | | ND | | 62 |
| 2-nitrophenol | 88-75-5 | 0.067 | ND | | ND | | | ND | | ND | | ND |
| 2,4-dimethylphenol | 105-67-9 | 0.067 | ND | | ND | | | ND | | ND | | 20 |
| 2,4-dichlorophenol | 120-83-2 | 0.033 | ND | | ND | | | ND | | ND | | ND |
| 2,4,6-trichlorophenol | 88-06-2 | 0.067 | ND | | ND | | | ND | | ND | | ND |
| 2,4-dinitrophenol | 51-28-5 | 0.17 | ND | | ND | | | ND | | ND | | ND |
| bis (2-chloroethyl) ether | 111-44-4 | 0.067 | ND | | ND | | | ND | | ND | | ND |
| 1,3-dichlorobenzene | 541-73-1 | 0.033 | ND | | ND | | | ND | | ND | | ND |
| 1,2-dichlorobenzene | 95-50-1 | 0.033 | ND | | ND | | | ND | | ND | | ND |
| hexachloroethane | 67-72-1 | 0.067 | ND | | ND | | | ND | | ND | | ND |
| nitrobenzene | 98-95-3 | 0.033 | ND | | ND | | | ND | | ND | | ND |
| isophorone | 78-59-1 | 0.067 | ND | | ND | | | ND | | ND | | ND |
| bis (2-chloroethoxy) methane | 111-91-1 | 0.033 | ND | | ND | | | ND | | ND | | ND |
| naphthalene | 91-20-3 | 0.033 | ND | | ND | | | 180 | | ND | | 340 |
| hexachlorobutadiene | 87-68-3 | 0.067 | ND | | ND | | | ND | | ND | | ND |
| hexachlorocyclopentadiene | 77-47-4 | 0.17 | ND | | ND | | | ND | | ND | | ND |
| 2-chloronaphthalene | 91-58-7 | 0.033 | ND | | ND | | | ND | | ND | | ND |
| acensaphthylene | 208-96-8 | 0.033 | ND | | ND | | | 0.84 | | ND | | 3.7 |
| dimethyl phthalate | 131-11-3 | 0.033 | ND | | ND | | | ND | | ND | | ND |
| fluorene | 86-73-7 | 0.033 | ND | | ND | | | ND | | ND | | ND |
| 4-chlorophenyl phenyl ether | 7005-72-3 | 0.067 | ND | | ND | | | 47 | | ND | | 90 |
| diethyl phthalate | 84-66-2 | 0.067 | ND | | ND | | | ND | | ND | | ND |
| N-nitrosodiphenylamine | 86-30-6 | 0.067 | ND | | ND | | | ND | | ND | | ND |
| 4-bromophenyl phenyl ether | 101-55-3 | 0.1 | ND | | ND | | | ND | | ND | | ND |
| hexachlorobenzene | 118-74-1 | 0.1 | ND | | ND | | | ND | | ND | | ND |

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 Former Gulf States Creosoting Site
 Hattiesburg, Mississippi

| Parameter | CAS Number | Standard MDL | MP&A Sample ID | | CPT/01/8-10 | | CPT/01/44-46 | | CPT/02/9-11 | | CPT/03/20-22 | | CPT/04/20-22 | |
|-------------------------------|------------|--------------|-------------------|----------------|-------------|-------|---------------------|--------|-------------|---------------------|--------------|-------|---------------------|--------|
| | | | Lab Sample Number | Date Collected | Result | Notes | Sample-Specific MDL | Result | Notes | Sample-Specific MDL | Result | Notes | Sample-Specific MDL | Result |
| phenanthrene | 85-01-8 | 0.033 | ND | | ND | | ND | | 110 | | ND | | 190 | |
| anthracene | 120-12-7 | 0.033 | ND | | ND | | 18 | | 0.17 | | ND | | 0.17 | |
| di-n-butyl phthalate | 84-74-2 | 0.033 | ND | | ND | | 56 | | 0.17 | | ND | | 0.17 | |
| fluoranthene | 206-44-0 | 0.033 | ND | | ND | | ND | | 0.33 | | ND | | 0.33 | |
| butyl benzyl phthalate | 85-68-7 | 0.067 | ND | | ND | | 9.5 | | 0.17 | | ND | | 0.17 | |
| benzo (a) anthracene | 56-55-3 | 0.033 | ND | | ND | | 8.5 | | 0.17 | | ND | | 0.17 | |
| chrysene | 218-01-9 | 0.033 | ND | | ND | | ND | | 0.67 | | ND | | 0.67 | |
| 3,3'-dichlorobenzidine | 91-94-1 | 0.13 | ND | | ND | | ND | | 0.33 | | ND | | 0.33 | |
| bis (2-ethylhexyl) phthalate | 117-81-7 | 0.067 | ND | | ND | | ND | | 0.33 | | ND | | 0.33 | |
| di-n-octyl phthalate | 117-84-0 | 0.067 | ND | | ND | | 5.1 | | 0.33 | | ND | | 0.33 | |
| benzo (b) fluoranthene | 205-99-2 | 0.067 | ND | | ND | | 1.9 | | 0.67 | | ND | | 0.67 | |
| benzo (k) fluoranthene | 207-08-9 | 0.13 | ND | | ND | | 3.5 | | 0.33 | | ND | | 0.33 | |
| benzo (a) pyrene | 50-32-8 | 0.067 | ND | | ND | | 1.2 | | 0.33 | | ND | | 0.33 | |
| indeno (1,2,3-cd) pyrene | 193-39-5 | 0.067 | ND | | ND | | ND | | 0.33 | | ND | | 0.33 | |
| dibenz (a,h) anthracene | 53-70-3 | 0.067 | ND | | ND | | 0.99 | | 0.33 | | ND | | 0.33 | |
| benzo (ghi) perylene | 191-24-2 | 0.067 | ND | | ND | | ND | | 0.33 | | ND | | 0.33 | |
| 2-methylphenol | 95-48-7 | 0.067 | ND | | ND | | ND | | 0.5 | | ND | | 0.5 | |
| 2,2'-oxybis (1-chloropropane) | 108-60-1 | 0.1 | ND | | ND | | ND | | 0.5 | | ND | | 0.5 | |
| 4-methylphenol | 106-44-5 | 0.1 | ND | | ND | | ND | | 0.5 | | ND | | 0.5 | |
| 4-chloroaniline | 106-47-8 | 0.1 | ND | | ND | | 79 | | 1.7 | | ND | | 3.3 | |
| 2-methylnaphthalene | 91-57-6 | 0.033 | ND | | ND | | ND | | 0.33 | | ND | | 0.33 | |
| 2,4,5-trichlorophenol | 95-95-4 | 0.067 | ND | | ND | | ND | | 0.33 | | ND | | 0.33 | |
| 2-nitroaniline | 88-74-4 | 0.067 | ND | | ND | | ND | | 0.33 | | ND | | 0.33 | |
| 3-nitroaniline | 99-09-2 | 0.067 | ND | | ND | | 26 | | 0.33 | | ND | | 0.33 | |
| dibenzofuran | 132-64-9 | 0.033 | ND | | ND | | ND | | 0.17 | | ND | | 1.7 | |
| 2,6-dinitrotoluene | 606-20-2 | 0.067 | ND | | ND | | ND | | 0.33 | | ND | | 0.33 | |
| 4-nitroaniline | 100-01-6 | 0.1 | ND | | ND | | ND | | 0.5 | | ND | | 0.5 | |
| 4,6-dinitro-2-methylphenol | 534-52-1 | 0.17 | ND | | ND | | ND | | 0.83 | | ND | | 0.83 | |
| carbazole | 86-74-8 | 0.033 | ND | | ND | | 11 | | 0.17 | | ND | | 0.17 | |

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Summary of Subsurface Soil Analytical Results
Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | Standard MDL | MP&A Sample ID | | CPT/SB-04/29-31 | | CPT/SB-05/10.5-12.5 | | CPT/SB-06/6-10 | | CPT/SB-06/36-38 | | CPT/SB-07/14-16 | |
|---------------------------|------------|--------------|-------------------|----------------|---------------------|--------|---------------------|---------------------|----------------|-------|---------------------|--------|-----------------|---------------------|
| | | | Lab Sample Number | Date Collected | Sample-Specific MDL | Result | Notes | Sample-Specific MDL | Result | Notes | Sample-Specific MDL | Result | Notes | Sample-Specific MDL |
| TCL Volatiles | | | | | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | 0.002 | 0.01 | ND | | 0.01 | ND | | ND | | ND | | ND | |
| Trichloroethene | 79-01-6 | 0.001 | 0.005 | ND | | 0.005 | ND | | ND | | ND | | ND | |
| Benzene | 71-43-2 | 0.001 | 0.005 | 0.006 | J | 0.005 | 0.007 | J | ND | | ND | | 0.005 | J |
| Toluene | 108-88-3 | 0.001 | 0.005 | 0.063 | | 0.005 | 0.14 | | ND | | ND | | 0.015 | |
| Chlorobenzene | 108-90-7 | 0.001 | 0.005 | ND | | 0.005 | ND | | ND | | ND | | ND | |
| Xylene (total) | 1330-20-7 | 0.001 | 0.005 | 0.35 | | 0.005 | 0.78 | | ND | | ND | | 0.075 | |
| Chloromethane | 74-87-3 | 0.002 | 0.01 | ND | | 0.01 | ND | | ND | | ND | | ND | |
| Bromomethane | 74-83-9 | 0.003 | 0.015 | ND | | 0.015 | ND | | ND | | ND | | ND | |
| Vinyl Chloride | 75-01-4 | 0.002 | 0.01 | ND | | 0.01 | ND | | ND | | ND | | ND | |
| Chloroethane | 75-00-3 | 0.003 | 0.015 | ND | | 0.015 | ND | | ND | | ND | | ND | |
| Methylene Chloride | 75-09-2 | 0.002 | 0.01 | ND | | 0.01 | ND | | ND | | ND | | ND | |
| 1,1-Dichloroethane | 75-34-3 | 0.001 | 0.005 | ND | | 0.005 | ND | | ND | | ND | | ND | |
| Chloroform | 67-66-3 | 0.001 | 0.005 | ND | | 0.005 | ND | | ND | | ND | | ND | |
| 1,2-Dichloroethane | 107-06-2 | 0.002 | 0.01 | ND | | 0.01 | ND | | ND | | ND | | ND | |
| 1,1,1-Trichloroethane | 71-55-6 | 0.001 | 0.005 | ND | | 0.005 | ND | | ND | | ND | | ND | |
| Carbon Tetrachloride | 56-23-5 | 0.001 | 0.005 | ND | | 0.005 | ND | | ND | | ND | | ND | |
| Bromodichloromethane | 75-27-4 | 0.002 | 0.01 | ND | | 0.01 | ND | | ND | | ND | | ND | |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 0.001 | 0.005 | ND | | 0.005 | ND | | ND | | ND | | ND | |
| 1,2-Dichloropropane | 78-87-5 | 0.003 | 0.015 | ND | | 0.015 | ND | | ND | | ND | | ND | |
| trans-1,3-Dichloropropene | 10061-02-6 | 0.001 | 0.005 | ND | | 0.005 | ND | | ND | | ND | | ND | |
| Dibromochloromethane | 124-48-1 | 0.001 | 0.005 | ND | | 0.005 | ND | | ND | | ND | | ND | |
| 1,1,2-Trichloroethane | 79-00-5 | 0.002 | 0.01 | ND | | 0.01 | ND | | ND | | ND | | ND | |
| cis-1,3-Dichloropropene | 10061-01-5 | 0.001 | 0.005 | ND | | 0.005 | ND | | ND | | ND | | ND | |
| Bromoform | 75-25-2 | 0.001 | 0.005 | ND | | 0.005 | ND | | ND | | ND | | ND | |
| Tetrachloroethene | 127-18-4 | 0.001 | 0.005 | ND | | 0.005 | ND | | ND | | ND | | ND | |
| Ethylbenzene | 100-41-4 | 0.001 | 0.005 | 0.06 | | 0.005 | 0.12 | | ND | | ND | | ND | |
| Acetone | 67-64-1 | 0.007 | 0.035 | 0.068 | J | 0.035 | 0.1 | J | 0.01 | | 1.5 | | 0.042 | J |
| Carbon Disulfide | 75-15-0 | 0.003 | 0.015 | ND | | 0.015 | ND | | ND | | ND | | ND | |
| 2-Butanone | 78-93-3 | 0.007 | 0.035 | ND | | 0.035 | ND | | ND | | ND | | ND | |
| Vinyl Acetate | 108-05-4 | 0.003 | 0.015 | ND | | 0.015 | ND | | ND | | ND | | ND | |
| 2-Hexanone | 591-78-6 | 0.003 | 0.015 | ND | | 0.015 | ND | | ND | | ND | | ND | |
| 4-Methyl-2-pentanone | 108-10-1 | 0.003 | 0.015 | ND | | 0.015 | ND | | ND | | ND | | ND | |
| Styrene | 100-42-5 | 0.001 | 0.005 | 0.071 | | 0.005 | 0.1 | | ND | | ND | | ND | |
| trans-1,2-Dichloroethene | 156-60-5 | 0.002 | 0.01 | ND | | 0.01 | ND | | ND | | ND | | ND | |
| cis-1,2-Dichloroethene | 156-59-2 | 0.002 | 0.01 | ND | | 0.01 | ND | | ND | | ND | | ND | |

Notes
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(a) Sample GEO/SB-29/6-8 is a blind duplicate of sample
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J - Estimated value; in cases of ND, indicates MDL is estimated.
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| Parameter | CAS Number | Standard MDL | MP&A Sample ID | | CPT/04/29-31 | | CPT/05/10.5-12.5 | | CPT/06/06-10 | | CPT/06/06-38 | | CPT/07/14-16 | |
|------------------------------|------------|--------------|-------------------|----------------|---------------------|--------|------------------|---------------------|--------------|-------|---------------------|--------|--------------|---------------------|
| | | | Lab Sample Number | Date Collected | Sample-Specific MDL | Result | Notes | Sample-Specific MDL | Result | Notes | Sample-Specific MDL | Result | Notes | Sample-Specific MDL |
| TCL Semivolatiles | | | | | | | | | | | | | | |
| phenol | 108-95-2 | 0.033 | 1.7 | 46 | | 0.67 | ND | | | | | | | ND |
| 2-chlorophenol | 95-57-8 | 0.033 | 0.17 | ND | | 0.67 | ND | | | | | | | ND |
| 1,4-dichlorobenzene | 106-46-7 | 0.033 | 0.17 | ND | | 0.67 | ND | | | | | | | ND |
| N-nitrosodi-n-propylamine | 621-64-7 | 0.067 | 0.33 | ND | | 1.3 | ND | | | | | | | ND |
| 1,2,4-trichlorobenzene | 120-82-1 | 0.033 | 0.17 | ND | | 0.67 | ND | | | | | | | ND |
| 4-chloro-3-methylphenol | 59-50-7 | 0.067 | 0.33 | ND | | 1.3 | ND | | | | | | | ND |
| acenaphthene | 83-32-9 | 0.033 | 1.7 | 51 | | 6.7 | 290 | | | | | | | 9.6 |
| 4-nitrophenol | 100-02-7 | 0.17 | 0.83 | ND | | 3.3 | ND | | | | | | | ND |
| 2,4-dinitrotoluene | 121-14-2 | 0.067 | 0.33 | ND | | 1.3 | ND | | | | | | | ND |
| pentaachlorophenol | 87-86-5 | 0.17 | 0.83 | ND | | 3.3 | ND | | | | | | | ND |
| pyrene | 129-00-0 | 0.067 | 0.33 | 26 | | 13 | 250 | | | | | | | 3.9 |
| 2-nitrophenol | 88-75-5 | 0.067 | 0.33 | ND | | 1.3 | ND | | | | | | | ND |
| 2,4-dimethylphenol | 105-67-9 | 0.067 | 0.33 | 17 | | 0.67 | ND | | | | | | | ND |
| 2,4-dichlorophenol | 120-83-2 | 0.033 | 0.17 | ND | | 0.67 | ND | | | | | | | ND |
| 2,4,6-trichlorophenol | 88-06-2 | 0.067 | 0.33 | ND | | 1.3 | ND | | | | | | | ND |
| 2,4-dinitrophenol | 51-28-5 | 0.17 | 0.83 | ND | | 3.3 | ND | | | | | | | ND |
| bis (2-chloroethyl) ether | 111-44-4 | 0.067 | 0.33 | ND | | 0.67 | ND | | | | | | | ND |
| 1,3-dichlorobenzene | 541-73-1 | 0.033 | 0.17 | ND | | 0.67 | ND | | | | | | | ND |
| 1,2-dichlorobenzene | 95-50-1 | 0.033 | 0.17 | ND | | 0.67 | ND | | | | | | | ND |
| hexachloroethane | 67-72-1 | 0.067 | 0.33 | ND | | 1.3 | ND | | | | | | | ND |
| nitrobenzene | 98-95-3 | 0.033 | 0.17 | ND | | 0.67 | ND | | | | | | | ND |
| isophorone | 78-59-1 | 0.067 | 0.33 | ND | | 1.3 | ND | | | | | | | ND |
| bis (2-chloroethoxy) methane | 111-91-1 | 0.033 | 0.17 | ND | | 0.67 | ND | | | | | | | ND |
| naphthalene | 91-20-3 | 0.033 | 1.7 | 200 | | 6.7 | 910 | | | | | | | 36 |
| hexachlorobutadiene | 87-68-3 | 0.067 | 0.33 | ND | | 1.3 | ND | | | | | | | ND |
| hexachlorocyclopentadiene | 77-47-4 | 0.17 | 0.83 | ND | | 3.3 | ND | | | | | | | ND |
| 2-chloronaphthalene | 91-58-7 | 0.033 | 0.17 | ND | | 0.67 | ND | | | | | | | ND |
| acenaphthylene | 208-96-8 | 0.033 | 0.17 | ND | | 0.67 | 10 | | | | | | | 0.31 |
| dimethyl phthalate | 131-11-3 | 0.033 | 0.17 | ND | | 0.67 | ND | | | | | | | ND |
| fluorene | 86-73-7 | 0.033 | 1.7 | 64 | | 6.7 | 330 | | | | | | | 8.5 |
| 4-chlorophenyl phenyl ether | 7005-72-3 | 0.067 | 0.33 | ND | | 1.3 | ND | | | | | | | ND |
| diethyl phthalate | 84-66-2 | 0.067 | 0.33 | ND | | 1.3 | ND | | | | | | | ND |
| N-nitrosodiphenylamine | 86-30-6 | 0.067 | 0.33 | ND | | 1.3 | ND | | | | | | | ND |
| 4-bromophenyl phenyl ether | 101-55-3 | 0.1 | 0.5 | ND | | 2 | ND | | | | | | | ND |
| hexachlorobenzene | 118-74-1 | 0.1 | 0.5 | ND | | 2 | ND | | | | | | | ND |

Notes
Analytical methods: SW-846 8240B for volatiles;
SW-846 8270B for semivolatiles.
All results are reported on an "as received" basis in mg/kg.
Last two numbers of MP&A Sample ID indicate sample depth interval.
(a) Sample GEO/05/409 is a blind duplicate of sample GEO/05/409.
J - Estimated value; in cases of ND, indicates MDL is estimated.
R - Unusable result; analyte may or may not be present in the sample.

Summary of Subsurface Soil Analytical Results

Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | Standard MDL | CPT/SB-04/29-31 Lab Sample Number Date Collected | CPT/SB-05/10.5-12.5 2679079 3/15/97 | CPT/SB-06/6-10 2679080 3/17/97 | CPT/SB-06/36-38 2679084 3/17/97 | CPT/SB-07/14-16 2679083 3/17/97 |
|-------------------------------|------------|--------------|--|---|--------------------------------------|---------------------------------------|---------------------------------------|
| | | MDL | Result Sample-Specific MDL | Result Sample-Specific MDL | Result Sample-Specific MDL | Result Sample-Specific MDL | Result Sample-Specific MDL |
| phenanthrene | 85-01-8 | 0.033 | 130 | 710 | ND | 0.16 | 20 |
| anthracene | 120-12-7 | 0.033 | 20 | 98 | ND | ND | 4.8 |
| di-n-butyl phthalate | 84-74-2 | 0.033 | ND | ND | ND | ND | ND |
| fluoranthene | 206-44-0 | 0.033 | 71 | 430 | ND | 0.094 | 8.2 |
| butyl benzyl phthalate | 85-68-7 | 0.067 | ND | ND | ND | ND | ND |
| benzo (a) anthracene | 56-55-3 | 0.033 | 12 | 69 | ND | ND | 1.3 |
| chrysene | 218-01-9 | 0.033 | 10 | 62 | ND | ND | 1.3 |
| 3,3-dichlorobenzidine | 91-94-1 | 0.13 | ND | ND | ND | ND | ND |
| bis (2-ethylhexyl) phthalate | 117-81-7 | 0.067 | ND | ND | ND | ND | ND |
| di-n-octyl phthalate | 117-84-0 | 0.067 | ND | ND | ND | ND | ND |
| benzo (b) fluoranthene | 205-99-2 | 0.067 | 6.6 | 38 | ND | ND | 0.89 |
| benzo (k) fluoranthene | 207-08-9 | 0.13 | 2.7 | 13 | ND | ND | 0.33 |
| benzo (a) pyrene | 50-32-8 | 0.067 | 4.9 | 26 | ND | ND | 0.69 |
| indeno (1,2,3-cd) pyrene | 193-39-5 | 0.067 | 2 | 8.5 | ND | ND | 0.38 |
| dibenz (a,h) anthracene | 53-70-3 | 0.067 | 0.58 | 2.5 | ND | ND | 0.09 |
| benzo (ghi) perylene | 191-24-2 | 0.067 | 1.5 | 6.5 | ND | ND | 0.28 |
| 2-methylphenol | 95-48-7 | 0.067 | 17 | ND | ND | ND | ND |
| 2,2'-oxybis (1-chloropropane) | 108-60-1 | 0.1 | 5 | 2 | ND | ND | ND |
| 4-methylphenol | 106-44-5 | 0.1 | 71 | ND | ND | ND | ND |
| 4-chloroaniline | 106-47-8 | 0.1 | 77 | 440 | ND | ND | 15 |
| 2-methylnaphthalene | 91-57-6 | 0.033 | ND | ND | ND | ND | ND |
| 2,4,5-trichlorophenol | 95-95-4 | 0.067 | ND | ND | ND | ND | ND |
| 2-nitroaniline | 88-74-4 | 0.067 | ND | ND | ND | ND | ND |
| 3-nitroaniline | 99-09-2 | 0.067 | ND | ND | ND | ND | ND |
| di-benzofuran | 132-64-9 | 0.033 | 48 | 270 | ND | 0.037 | 9.7 |
| 2,6-dinitrotoluene | 606-20-2 | 0.067 | ND | ND | ND | ND | ND |
| 4-nitroaniline | 100-01-6 | 0.1 | ND | ND | ND | ND | ND |
| 4,6-dinitro-2-methylphenol | 534-52-1 | 0.17 | ND | ND | ND | ND | ND |
| carbazole | 86-74-8 | 0.033 | 11 | 69 | ND | ND | 0.97 |

Notes
 Analytical methods: SW-846 8240B for volatiles;
 SW-846 8270B for semivolatiles.
 All results are reported on an "as received" basis in mg/kg.
 Last two numbers of MP&A Sample ID indicate sample depth interval.
 (a) Sample GEO/SB-29/6-8 is a blind duplicate of sample GEO/SB-05/409.
 J - Estimated value; in cases of ND, indicates MDL is estimated.
 R - Unusable result; analyte may or may not be present in the sample.

4-1
Summary of Subsurface Soil Analytical Results

Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | Standard MDL | GEO/SB-01/10-12 | | GEO/SB-02/10-12 | | GEO/SB-03/8-9.3 | | GEO/SB-04/10-12 | | GEO/SB-05/4-9 | |
|---------------------------|------------|--------------|-------------------|----------------|-----------------|---------|-----------------|---------|-----------------|---------|---------------|---------|
| | | | Lab Sample Number | Date Collected | 2680801 | 2680802 | 2680803 | 2680804 | 2680805 | 2680805 | 3/18/97 | 3/18/97 |
| TCL Volatiles | | | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | 0.002 | ND | ND | ND | ND | ND | ND | ND | ND | 0.01 | ND |
| Trichloroethene | 79-01-6 | 0.001 | ND | ND | ND | ND | ND | ND | ND | ND | 0.005 | ND |
| Benzene | 71-43-2 | 0.001 | ND | ND | ND | ND | ND | ND | ND | ND | 0.005 | ND |
| Toluene | 108-88-3 | 0.001 | ND | ND | ND | ND | ND | ND | ND | ND | 0.005 | 0.05 |
| Chlorobenzene | 108-90-7 | 0.001 | ND | ND | ND | ND | ND | ND | ND | ND | 0.005 | ND |
| Xylene (total) | 1330-20-7 | 0.001 | ND | ND | ND | ND | ND | ND | ND | ND | 0.005 | 1.2 |
| Chloromethane | 74-87-3 | 0.002 | ND | ND | ND | ND | ND | ND | ND | ND | 0.01 | ND |
| Bromomethane | 74-83-9 | 0.003 | ND | ND | ND | ND | ND | ND | ND | ND | 0.015 | ND |
| Vinyl Chloride | 75-01-4 | 0.002 | ND | ND | ND | ND | ND | ND | ND | ND | 0.01 | ND |
| Chloroethane | 75-00-3 | 0.003 | ND | ND | ND | ND | ND | ND | ND | ND | 0.015 | ND |
| Methylene Chloride | 75-09-2 | 0.002 | ND | ND | ND | ND | ND | ND | ND | ND | 0.01 | ND |
| 1,1-Dichloroethane | 75-34-3 | 0.001 | ND | ND | ND | ND | ND | ND | ND | ND | 0.005 | ND |
| Chloroform | 67-66-3 | 0.001 | ND | ND | ND | ND | ND | ND | ND | ND | 0.005 | ND |
| 1,2-Dichloroethane | 107-06-2 | 0.002 | ND | ND | ND | ND | ND | ND | ND | ND | 0.01 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | 0.001 | ND | ND | ND | ND | ND | ND | ND | ND | 0.005 | ND |
| Carbon Tetrachloride | 56-23-5 | 0.001 | ND | ND | ND | ND | ND | ND | ND | ND | 0.005 | ND |
| Bromodichloromethane | 75-27-4 | 0.002 | ND | ND | ND | ND | ND | ND | ND | ND | 0.01 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 0.001 | ND | ND | ND | ND | ND | ND | ND | ND | 0.005 | ND |
| 1,2-Dichloropropane | 78-87-5 | 0.003 | ND | ND | ND | ND | ND | ND | ND | ND | 0.015 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | 0.001 | ND | ND | ND | ND | ND | ND | ND | ND | 0.005 | ND |
| Dibromochloromethane | 124-48-1 | 0.001 | ND | ND | ND | ND | ND | ND | ND | ND | 0.005 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | 0.002 | ND | ND | ND | ND | ND | ND | ND | ND | 0.01 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | 0.001 | ND | ND | ND | ND | ND | ND | ND | ND | 0.005 | ND |
| Bromoform | 75-25-2 | 0.001 | ND | ND | ND | ND | ND | ND | ND | ND | 0.005 | ND |
| Tetrachloroethene | 127-18-4 | 0.001 | ND | ND | ND | ND | ND | ND | ND | ND | 0.005 | ND |
| Ethylbenzene | 67-64-1 | 0.001 | ND | ND | ND | ND | ND | ND | ND | ND | 0.035 | 0.23 |
| Carbon Disulfide | 100-41-4 | 0.007 | ND | ND | ND | ND | ND | ND | ND | ND | 0.073 | J |
| 2-Butanone | 75-15-0 | 0.003 | ND | ND | ND | ND | ND | ND | ND | ND | 0.015 | ND |
| Vinyl Acetate | 78-93-3 | 0.007 | ND | ND | ND | ND | ND | ND | ND | ND | 0.035 | ND |
| 2-Hexanone | 108-05-4 | 0.003 | ND | ND | ND | ND | ND | ND | ND | ND | 0.015 | ND |
| 4-Methyl-2-pentanone | 591-78-6 | 0.003 | ND | ND | ND | ND | ND | ND | ND | ND | 0.015 | ND |
| Styrene | 108-10-1 | 0.003 | ND | ND | ND | ND | ND | ND | ND | ND | 0.015 | ND |
| trans-1,2-Dichloroethene | 100-42-5 | 0.001 | ND | ND | ND | ND | ND | ND | ND | ND | 0.005 | ND |
| cis-1,2-Dichloroethene | 156-60-5 | 0.002 | ND | ND | ND | ND | ND | ND | ND | ND | 0.01 | ND |
| | 156-59-2 | 0.002 | ND | ND | ND | ND | ND | ND | ND | ND | 0.01 | ND |

Notes

Analytical methods: SW-846 8240B for volatiles;
SW-846 8270B for semivolatiles.
All results are reported on an "as received" basis in mg/kg.
Last two numbers of MP&A Sample ID indicate sample depth interval.
(a) Sample GEO/SB-29/6-8 is a blind duplicate of sample GEO/SB-05/4/09.
J - Estimated value; in cases of ND, indicates MDL is estimated.
R - Unusable result; analyte may or may not be present in the sample.

4-1
Summary of Subsurface Soil Analytical Results

Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | Standard MDL | GEO/SB-01/10-12 | | GEO/SB-02/10-12 | | GEO/SB-03/8-9-3 | | GEO/SB-04/10-12 | | GEO/SB-05/4-9 | |
|------------------------------|------------|--------------|---|-----------------|---|-----------------|---|-----------------|---|-----------------|---|-----------------|
| | | | MP&A Sample ID Lab Sample Number Date Collected | Result Notes | MP&A Sample ID Lab Sample Number Date Collected | Result Notes | MP&A Sample ID Lab Sample Number Date Collected | Result Notes | MP&A Sample ID Lab Sample Number Date Collected | Result Notes | MP&A Sample ID Lab Sample Number Date Collected | Result Notes |
| TCL Semivolatiles | | | | | | | | | | | | |
| phenol | 108-95-2 | 0.033 | ND | | ND | | ND | | ND | | ND | |
| 2-chlorophenol | 95-37-8 | 0.033 | ND | | ND | | ND | | ND | | ND | |
| 1,4-dichlorobenzene | 106-46-7 | 0.033 | ND | | ND | | ND | | ND | | ND | |
| N-nitrosodi-n-propylamine | 621-64-7 | 0.067 | ND | | ND | | ND | | ND | | ND | |
| 1,2,4-trichlorobenzene | 120-82-1 | 0.033 | ND | | ND | | ND | | ND | | ND | |
| 4-chloro-3-methylphenol | 59-50-7 | 0.067 | ND | | ND | | ND | | ND | | ND | |
| acenaphthene | 83-32-9 | 0.033 | ND | | ND | | ND | | ND | | ND | |
| 4-nitrophenol | 100-02-7 | 0.17 | ND | | ND | | ND | | ND | | ND | |
| 2,4-dinitrotoluene | 121-14-2 | 0.067 | ND | | ND | | ND | | ND | | ND | |
| pentachlorophenol | 87-86-5 | 0.17 | ND | | ND | | ND | | ND | | ND | |
| pyrene | 129-00-0 | 0.067 | ND | | ND | | ND | | ND | | ND | |
| 2-nitrophenol | 88-75-5 | 0.067 | ND | | ND | | ND | | ND | | ND | |
| 2,4-dimethylphenol | 105-67-9 | 0.067 | ND | | ND | | ND | | ND | | ND | |
| 2,4-dichlorophenol | 120-83-2 | 0.033 | ND | | ND | | ND | | ND | | ND | |
| 2,4,6-trichlorophenol | 88-06-2 | 0.067 | ND | | ND | | ND | | ND | | ND | |
| 2,4-dinitrophenol | 51-28-5 | 0.17 | ND | | ND | | ND | | ND | | ND | |
| bis (2-chloroethyl) ether | 111-44-4 | 0.067 | ND | | ND | | ND | | ND | | ND | |
| 1,3-dichlorobenzene | 541-73-1 | 0.033 | ND | | ND | | ND | | ND | | ND | |
| 1,2-dichlorobenzene | 95-50-1 | 0.033 | ND | | ND | | ND | | ND | | ND | |
| hexachloroethane | 67-72-1 | 0.067 | ND | | ND | | ND | | ND | | ND | |
| nitrobenzene | 98-95-3 | 0.033 | ND | | ND | | ND | | ND | | ND | |
| isophorone | 78-59-1 | 0.067 | ND | | ND | | ND | | ND | | ND | |
| bis (2-chloroethoxy) methane | 111-91-1 | 0.033 | ND | | ND | | ND | | ND | | ND | |
| naphthalene | 91-20-3 | 0.033 | 0.098 | J | ND | | 0.2 | J | ND | | ND | |
| hexachlorobutadiene | 87-68-3 | 0.067 | ND | | ND | | ND | | ND | | ND | |
| hexachlorocyclopentadiene | 77-47-4 | 0.17 | ND | | ND | | ND | | ND | | ND | |
| 2-chloronaphthalene | 91-58-7 | 0.033 | ND | | ND | | ND | | ND | | ND | |
| acenaphthylene | 208-96-8 | 0.033 | ND | | ND | | ND | | ND | | ND | |
| dimethyl phthalate | 131-11-3 | 0.033 | ND | | ND | | ND | | ND | | ND | |
| fluorene | 86-73-7 | 0.033 | ND | | ND | | ND | | ND | | ND | |
| 4-chlorophenyl phenyl ether | 7005-72-3 | 0.067 | ND | | ND | | ND | | ND | | ND | |
| diethyl phthalate | 84-66-2 | 0.067 | ND | | ND | | ND | | ND | | ND | |
| N-nitrosodiphenylamine | 86-30-6 | 0.067 | ND | | ND | | ND | | ND | | ND | |
| 4-bromophenyl phenyl ether | 101-55-3 | 0.1 | ND | | ND | | ND | | ND | | ND | |
| hexachlorobenzene | 118-74-1 | 0.1 | ND | | ND | | ND | | ND | | ND | |

Notes
 Analytical methods: SW-846 8240B for volatiles;
 SW-846 8270B for semivolatiles.
 All results are reported on an "as received" basis in mg/kg.
 Last two numbers of MP&A Sample ID indicate sample depth interval.
 (a) Sample GEO/SB-29/6-8 is a blind duplicate of sample GEO/SB-05/409.
 J - Estimated value; in cases of ND, indicates MDL is estimated.
 R - Unusable result; analyte may or may not be present in the sample.

Summary of Subsurface Soil Analytical Results

Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | Standard MDL | MP&A Sample ID | | GEO/SB-01/10-12 | | GEO/SB-02/10-12 | | GEO/SB-03/8-9-3 | | GEO/SB-04/10-12 | | GEO/SB-05/4-9 | |
|-------------------------------|------------|--------------|-------------------|----------------|-----------------|---------|-----------------|---------|-----------------|---------|-----------------|---------|---------------|---------|
| | | | Lab Sample Number | Date Collected | 2680801 | 2680802 | 2680803 | 2680804 | 2680805 | 2680805 | 2680805 | 2680805 | 2680805 | 2680805 |
| phenanthrene | 85-01-8 | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 360 |
| anthracene | 120-12-7 | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 98 |
| di-n-butyl phthalate | 84-74-2 | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| fluoranthene | 206-44-0 | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 220 |
| butyl benzyl phthalate | 83-68-7 | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| benzo (a) anthracene | 56-55-3 | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 52 |
| chrysene | 218-01-9 | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 48 |
| 3,3-dichlorobenzidine | 91-94-1 | 0.13 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| bis (2-ethylhexyl) phthalate | 117-81-7 | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| di-n-octyl phthalate | 117-84-0 | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| benzo (b) fluoranthene | 205-99-2 | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 36 |
| benzo (k) fluoranthene | 207-08-9 | 0.13 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 14 |
| benzo (a) pyrene | 50-32-8 | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 24 |
| indeno (1,2,3-cd) pyrene | 193-39-5 | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 9.6 |
| dibenz (a,h) anthracene | 53-70-3 | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 2.7 |
| benzo (ghi) perylene | 191-24-2 | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 6.4 |
| 2-methylphenol | 95-48-7 | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.67 |
| 2,2'-oxybis (1-chloropropane) | 108-60-1 | 0.1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1 |
| 4-methylphenol | 106-44-5 | 0.1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1 |
| 4-chloroaniline | 106-47-8 | 0.1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1 |
| 2-methylnaphthalene | 91-57-6 | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 220 |
| 2,4,5-trichlorophenol | 95-95-4 | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-nitroaniline | 88-74-4 | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 3-nitroaniline | 99-09-2 | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| di-benzofuran | 132-64-9 | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1.30 |
| 2,6-dinitrotoluene | 606-20-2 | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-nitroaniline | 100-01-6 | 0.1 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1 |
| 4,6-dinitro-2-methylphenol | 534-52-1 | 0.17 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1.7 |
| carbazole | 86-74-8 | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 52 |

Notes

Analytical methods: SW-846 8240B for volatiles;
SW-846 8270B for semivolatiles.All results are reported on an "as received" basis in mg/kg.
Last two numbers of MP&A Sample ID indicate sample depth interval.
(a) Sample GEO/SB-29/6-8 is a blind duplicate of sample
GEO/SB-05/4/09.J - Estimated value; in cases of ND, indicates MDL is estimated.
R - Unusable result; analyte may or may not be present in the sample.

4-1
Summary of Subsurface Soil Analytical Results
Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | Standard MDL | GEO/SB-29/6-8 (a) | | GEO/SB-05A/17-19 | | GEO/SB-06/10-12 | | GEO/SB-07/5-7 | |
|---------------------------|------------|--------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|
| | | | Lab Sample Number | Date Collected | Lab Sample Number | Date Collected | Lab Sample Number | Date Collected | Lab Sample Number | Date Collected |
| TCL Volatiles | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | 0.002 | ND | | ND | | 0.01 | ND | 0.01 | ND |
| Trichloroethene | 79-01-6 | 0.001 | ND | | ND | | 0.005 | ND | 0.005 | ND |
| Benzene | 71-43-2 | 0.001 | 0.002 | J | 0.002 | | 0.005 | 0.008 | 0.005 | ND |
| Toluene | 108-88-3 | 0.001 | ND | | ND | | 0.005 | 0.095 | 0.005 | 0.014 |
| Chlorobenzene | 108-90-7 | 0.001 | ND | | ND | | 0.005 | ND | 0.005 | ND |
| Xylene (total) | 1330-20-7 | 0.001 | 1.2 | J | 0.001 | | 0.005 | 1.7 | 0.005 | 0.49 |
| Chloromethane | 74-87-3 | 0.002 | ND | | ND | | 0.01 | ND | 0.01 | ND |
| Bromomethane | 74-83-9 | 0.003 | ND | | ND | | 0.015 | ND | 0.015 | ND |
| Vinyl Chloride | 75-01-4 | 0.002 | ND | | ND | | 0.01 | ND | 0.01 | ND |
| Chloroethane | 75-00-3 | 0.003 | ND | | ND | | 0.015 | ND | 0.015 | ND |
| Methylene Chloride | 75-09-2 | 0.002 | ND | | ND | | 0.01 | ND | 0.01 | ND |
| 1,1-Dichloroethane | 75-34-3 | 0.001 | ND | | ND | | 0.005 | ND | 0.005 | ND |
| Chloroform | 67-66-3 | 0.001 | ND | | ND | | 0.005 | ND | 0.005 | ND |
| 1,2-Dichloroethane | 107-06-2 | 0.002 | ND | | ND | | 0.01 | ND | 0.01 | ND |
| 1,1,1-Trichloroethane | 71-55-6 | 0.001 | ND | | ND | | 0.005 | ND | 0.005 | ND |
| Carbon Tetrachloride | 56-23-5 | 0.001 | ND | | ND | | 0.005 | ND | 0.005 | ND |
| Bromodichloromethane | 75-27-4 | 0.002 | ND | | ND | | 0.01 | ND | 0.01 | ND |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 0.001 | ND | | ND | | 0.005 | ND | 0.005 | ND |
| 1,2-Dichloropropane | 78-87-5 | 0.003 | ND | | ND | | 0.015 | ND | 0.015 | ND |
| trans-1,3-Dichloropropene | 10061-02-6 | 0.001 | ND | | ND | | 0.005 | ND | 0.005 | ND |
| Dibromochloromethane | 124-48-1 | 0.001 | ND | | ND | | 0.005 | ND | 0.005 | ND |
| 1,1,2-Trichloroethane | 79-00-5 | 0.002 | ND | | ND | | 0.01 | ND | 0.01 | ND |
| cis-1,3-Dichloropropene | 10061-01-5 | 0.001 | ND | | ND | | 0.005 | ND | 0.005 | ND |
| Bromoform | 75-25-2 | 0.001 | ND | | ND | | 0.005 | ND | 0.005 | ND |
| Tetrachloroethene | 127-18-4 | 0.001 | ND | | ND | | 0.005 | ND | 0.005 | ND |
| Ethylbenzene | 100-41-4 | 0.001 | 0.21 | | ND | | 0.005 | 0.44 | 0.005 | 0.068 |
| Acetone | 67-64-1 | 0.007 | 0.053 | J | ND | | 0.035 | 0.044 | 0.035 | ND |
| Carbon Disulfide | 75-15-0 | 0.003 | ND | | ND | | 0.015 | ND | 0.015 | ND |
| 2-Butanone | 78-93-3 | 0.007 | ND | | ND | | 0.035 | ND | 0.035 | ND |
| Vinyl Acetate | 108-05-4 | 0.003 | ND | | ND | | 0.015 | ND | 0.015 | ND |
| 2-Hexanone | 591-78-6 | 0.003 | ND | | ND | | 0.015 | ND | 0.015 | ND |
| 4-Methyl-2-pentanone | 108-10-1 | 0.003 | ND | | ND | | 0.015 | ND | 0.015 | ND |
| Styrene | 100-42-5 | 0.001 | ND | | ND | | 0.005 | ND | 0.005 | ND |
| trans-1,2-Dichloroethene | 156-60-5 | 0.002 | ND | | ND | | 0.01 | ND | 0.01 | ND |
| cis-1,2-Dichloroethene | 156-59-2 | 0.002 | ND | | ND | | 0.01 | ND | 0.01 | ND |

Notes
Analytical methods: SW-846 8240B for volatiles;
SW-846 8270B for semivolatiles.
All results are reported on an "as received" basis in mg/kg.
Last two numbers of MP&A Sample ID indicate sample depth interval.
(a) Sample GEO/SB-29/6-8 is a blind duplicate of sample GEO/SB-03/409.
J - Estimated value; in cases of ND, indicates MDL is estimated.
R - Unusable result; analyte may or may not be present in the sample.

4-1
Summary of Subsurface Soil Analytical Results
Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | Standard MDL | GEO/SB-29/6-8 (a) | | GEO/SB-05A/17-19 | | GEO/SB-06/10-12 | | GEO/SB-07/5-7 | |
|------------------------------|------------|--------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|
| | | | Lab Sample Number | Date Collected | Lab Sample Number | Date Collected | Lab Sample Number | Date Collected | Lab Sample Number | Date Collected |
| TCL Semivolatiles | | | | | | | | | | |
| phenol | 108-95-2 | 0.033 | ND | | ND | | ND | | ND | |
| 2-chlorophenol | 95-57-8 | 0.033 | ND | | ND | | ND | | ND | |
| 1,4-dichlorobenzene | 106-46-7 | 0.033 | ND | | ND | | ND | | ND | |
| N-nitrosodi-n-propylamine | 621-64-7 | 0.067 | ND | | ND | | ND | | ND | |
| 1,2,4-trichlorobenzene | 120-82-1 | 0.033 | ND | | ND | | ND | | ND | |
| 4-chloro-3-methylphenol | 59-50-7 | 0.067 | ND | | ND | | ND | | ND | |
| acenaphthene | 83-32-9 | 0.033 | 1.7 | | 130 | | 1.7 | | 200 | |
| 4-nitrophenol | 100-02-7 | 0.17 | 0.83 | | ND | | 0.83 | | ND | |
| 2,4-dinitrotoluene | 121-14-2 | 0.067 | 0.33 | | ND | | 0.33 | | ND | |
| pentachlorophenol | 87-86-5 | 0.17 | 0.83 | | ND | | 0.83 | | ND | |
| pyrene | 129-00-0 | 0.067 | 3.3 | | 140 | | 3.3 | | 230 | |
| 2-nitrophenol | 88-75-5 | 0.067 | 0.33 | | ND | | 0.33 | | ND | |
| 2,4-dimethylphenol | 105-67-9 | 0.067 | 0.33 | | 1 | | 0.33 | | 1.3 | |
| 2,4-dichlorophenol | 120-83-2 | 0.033 | 0.17 | | ND | | 0.17 | | ND | |
| 2,4,6-trichlorophenol | 88-06-2 | 0.067 | 0.33 | | ND | | 0.33 | | ND | |
| 2,4-dinitrophenol | 51-28-5 | 0.17 | 0.83 | | ND | | 0.83 | | ND | |
| bis (2-chloroethyl) ether | 111-44-4 | 0.067 | 0.33 | | ND | | 0.33 | | ND | |
| 1,3-dichlorobenzene | 541-73-1 | 0.033 | 0.17 | | ND | | 0.17 | | ND | |
| 1,2-dichlorobenzene | 95-50-1 | 0.033 | 0.17 | | ND | | 0.17 | | ND | |
| hexachloroethane | 67-72-1 | 0.067 | 0.33 | | ND | | 0.33 | | ND | |
| nitrobenzene | 98-95-3 | 0.033 | 0.17 | | ND | | 0.17 | | ND | |
| isophorone | 78-59-1 | 0.067 | 0.33 | | ND | | 0.33 | | ND | |
| bis (2-chloroethoxy) methane | 111-91-1 | 0.033 | 0.17 | | ND | | 0.17 | | ND | |
| naphthalene | 91-20-3 | 0.033 | 3.3 | | 380 | | 3.3 | | 420 | |
| hexachlorobutadiene | 87-68-3 | 0.067 | 0.33 | | ND | | 0.33 | | ND | |
| hexachlorocyclopentadiene | 77-47-4 | 0.17 | 0.83 | | ND | | 0.83 | | ND | |
| 2-chloronaphthalene | 91-58-7 | 0.033 | 0.17 | | ND | | 0.17 | | ND | |
| acenaphthylene | 208-96-8 | 0.033 | 0.17 | | 5.5 | | 0.17 | | 7.7 | |
| dimethyl phthalate | 131-11-3 | 0.033 | 0.17 | | ND | | 0.17 | | ND | |
| fluorene | 86-73-7 | 0.033 | 1.7 | | 140 | | 1.7 | | 160 | |
| 4-chlorophenyl phenyl ether | 7005-72-3 | 0.067 | 0.33 | | ND | | 0.33 | | ND | |
| diethyl phthalate | 84-66-2 | 0.067 | 0.33 | | ND | | 0.33 | | ND | |
| N-nitrosodiphenylamine | 86-30-6 | 0.067 | 0.33 | | ND | | 0.33 | | ND | |
| 4-bromophenyl phenyl ether | 101-55-3 | 0.1 | 0.5 | | ND | | 0.5 | | ND | |
| hexachlorobenzene | 118-74-1 | 0.1 | 0.5 | | ND | | 0.5 | | ND | |

Notes
Analytical methods: SW-846 8240B for volatiles;
SW-846 8270B for semivolatiles.
All results are reported on an "as received" basis in mg/kg.
Last two numbers of MP&A Sample ID indicate sample depth interval.
(a) Sample GEO/SB-29/6-8 is a blind duplicate of sample
GEO/SB-05/409.
J - Estimated value; in cases of ND, indicates MDL is estimated.
R - Unusable result; analyte may or may not be present in the sample.

Summary of Subsurface Soil Analytical Results
Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | Standard MDL | GEO/SB-29/6-8 (a) | | GEO/SB-05A/17-19 | | GEO/SB-06/10-12 | | GEO/SB-07/5-7 | |
|-------------------------------|------------|--------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|
| | | | Lab Sample Number | Date Collected | Lab Sample Number | Date Collected | Lab Sample Number | Date Collected | Lab Sample Number | Date Collected |
| phenanthrene | 85-01-8 | 0.033 | 350 | 0.21 | J | 370 | 510 | 4.2 | 510 | |
| anthracene | 120-12-7 | 0.033 | 78 | 0.13 | J | 55 | 120 | 4.2 | 120 | |
| di-n-butyl phthalate | 84-74-2 | 0.033 | ND | ND | | ND | ND | 0.17 | ND | |
| fluoranthene | 206-44-0 | 0.033 | 180 | 0.16 | J | 170 | 250 | 4.2 | 250 | |
| butyl benzyl phthalate | 85-68-7 | 0.067 | ND | ND | | ND | ND | 0.33 | ND | |
| benzo (a) anthracene | 56-55-3 | 0.033 | 44 | 0.043 | J | 40 | 61 | 4.2 | 61 | |
| chrysene | 218-01-9 | 0.033 | 41 | ND | | 33 | 52 | 4.2 | 52 | |
| 3,3'-dichlorobenzidine | 91-94-1 | 0.13 | ND | ND | | ND | ND | 0.67 | ND | |
| bis (2-ethylhexyl) phthalate | 117-81-7 | 0.067 | ND | ND | | ND | ND | 0.33 | ND | |
| di-n-octyl phthalate | 117-84-0 | 0.067 | ND | ND | | ND | ND | 0.33 | ND | |
| benzo (b) fluoranthene | 205-99-2 | 0.067 | 25 | ND | | 18 | 33 | 8.3 | 33 | |
| benzo (k) fluoranthene | 207-08-9 | 0.13 | 8.7 | ND | | 6.7 | 11 | 0.67 | 11 | |
| benzo (a) pyrene | 50-32-8 | 0.067 | 17 | ND | | 13 | 22 | 0.33 | 22 | |
| indeno (1,2,3-cd) pyrene | 193-39-5 | 0.067 | 6.3 | ND | | 4.1 | 8.7 | 0.33 | 8.7 | |
| dibenz (a,h) anthracene | 53-70-3 | 0.067 | 1.8 | ND | | 1.4 | 3.4 | 0.33 | 3.4 | |
| benzo (ghi) perylene | 191-24-2 | 0.067 | 4.8 | ND | | 2.4 | 6.4 | 0.33 | 6.4 | |
| 2-methylphenol | 95-48-7 | 0.067 | ND | ND | | ND | ND | 0.33 | ND | |
| 2,2'-oxybis (1-chloropropane) | 108-60-1 | 0.1 | ND | ND | | ND | ND | 0.5 | ND | |
| 4-methylphenol | 106-44-5 | 0.1 | ND | ND | | ND | ND | 0.5 | ND | |
| 4-chloroaniline | 106-47-8 | 0.1 | ND | ND | | ND | ND | 0.5 | ND | |
| 2-methylnaphthalene | 91-57-6 | 0.033 | 180 | ND | | 190 | 230 | 4.2 | 230 | |
| 2,4,5-trichlorophenol | 93-95-4 | 0.067 | ND | ND | | ND | ND | 0.33 | ND | |
| 2-nitroaniline | 88-74-4 | 0.067 | ND | ND | | ND | ND | 0.33 | ND | |
| 3-nitroaniline | 99-09-2 | 0.067 | ND | ND | | ND | ND | 0.33 | ND | |
| dibenzofuran | 132-64-9 | 0.033 | 120 | ND | | 130 | 180 | 4.2 | 180 | |
| 2,6-dinitrotoluene | 606-20-2 | 0.067 | ND | ND | | ND | ND | 0.33 | ND | |
| 4-nitroaniline | 100-01-6 | 0.1 | ND | ND | | ND | ND | 0.5 | ND | |
| 4,6-dinitro-2-methylphenol | 534-52-1 | 0.17 | ND | ND | | ND | ND | 0.83 | ND | |
| carbazole | 86-74-8 | 0.033 | 48 | 0.056 | J | 38 | 27 | 4.2 | 27 | |

Notes
Analytical methods: SW-846 8240B for volatiles;
SW-846 8270B for semivolatiles.
All results are reported on an "as received" basis in mg/kg.
Last two numbers of MP&A Sample ID indicate sample depth interval.
(a) Sample GEO/SB-29/6-8 is a blind duplicate of sample
GEO/SB-05/409.
J - Estimated value; in cases of ND, indicates MDL is estimated.
R - Unusable result; analyte may or may not be present in the sample.

Summary of Subsurface Soil Analytical Results
 Former Gulf States Creosoting Site
 Hattiesburg, Mississippi

MP&A Sample ID GEO/SB-05/4-9
 Lab Sample Number 2680805
 Date Collected 3/18/97

| Parameter | CAS Number | Sample-Specific MDL | Result | Notes |
|------------------------|------------|---------------------|--------|-------|
| Pesticides/PCBs | | | | |
| Gamma BHC - Lindane | 58-89-9 | 0.0006 | ND | |
| Heptachlor | 76-44-8 | 0.001 | 0.01 | |
| Aldrin | 309-00-2 | 0.001 | ND | |
| DDT | 50-29-3 | 0.003 | ND | |
| Dieldrin | 60-57-1 | 0.002 | ND | |
| Endrin | 72-20-8 | 0.002 | ND | |
| Methoxychlor | 72-43-5 | 0.008 | ND | |
| Alpha BHC | 319-84-6 | 0.0004 | ND | |
| Beta BHC | 319-85-7 | 0.001 | ND | |
| Delta BHC | 319-86-8 | 0.0006 | ND | |
| Heptachlor Epoxide | 1024-57-3 | 0.0006 | ND | |
| DDE | 72-55-9 | 0.003 | ND | |
| DDD | 72-54-8 | 0.001 | ND | |
| Toxaphene | 8001-35-2 | 0.1 | ND | |
| Endosulfan I | 959-98-8 | 0.001 | 0.004 | J |
| Endosulfan II | 33213-65-9 | 0.004 | ND | |
| Endosulfan Sulfate | 1031-07-8 | 0.003 | ND | |
| Endrin Aldehyde | 7421-93-4 | 0.006 | ND | |
| PCB-1016 | 12674-11-2 | 0.03 | ND | |
| PCB-1221 | 11104-28-2 | 0.05 | ND | |
| PCB-1232 | 11141-16-5 | 0.03 | ND | |
| PCB-1242 | 53469-21-9 | 0.01 | ND | |
| PCB-1248 | 12672-29-6 | 0.04 | ND | |
| PCB-1254 | 11097-69-1 | 0.1 | ND | |
| PCB-1260 | 11096-82-5 | 0.2 | ND | |
| Endrin Ketone | 53494-70-5 | 0.005 | ND | |
| Alpha Chlordane | 5103-71-9 | 0.001 | ND | |
| Gamma Chlordane | 5103-74-2 | 0.0002 | ND | |

Notes
 Analytical methods: SW-846 8081.
 All results are reported on an "as received" basis in mg/kg.
 J - Estimated value.

Summary of DNAPL Analytical Results
Former Gulf States Creosoting Site
Hattiesburg, Mississippi

MW-1
2677693
3/13/97

MW-2
2677694
3/13/97

MP&A Sample ID
Lab Sample Number
Date Collected

| Parameter | CAS Number | Method Detection Limit | Result | Notes | Method Detection Limit | Result | Notes |
|---------------------------|------------|------------------------|--------|-------|------------------------|--------|-------|
| TCL Volatiles | 75-35-4 | 13 | ND | J | 13 | ND | J |
| 1,1-Dichloroethene | 79-01-6 | 6.3 | ND | J | 6.3 | ND | J |
| Trichloroethene | 71-43-2 | 6.3 | 36 | J | 6.3 | 92 | J |
| Benzene | 108-88-3 | 6.3 | 190 | J | 6.3 | 350 | J |
| Toluene | 108-90-7 | 6.3 | ND | J | 6.3 | ND | J |
| Xylene (total) | 1330-20-7 | 6.3 | 1000 | J | 6.3 | 1100 | J |
| Chloromethane | 74-87-3 | 13 | ND | J | 13 | ND | J |
| Bromomethane | 74-83-9 | 19 | ND | J | 19 | ND | J |
| Vinyl Chloride | 75-01-4 | 13 | ND | J | 13 | ND | J |
| Chloroethane | 75-00-3 | 19 | ND | J | 19 | ND | J |
| Methylene Chloride | 75-09-2 | 13 | ND | J | 13 | ND | J |
| 1,1-Dichloroethane | 75-34-3 | 6.3 | ND | J | 6.3 | ND | J |
| Chloroform | 67-66-3 | 6.3 | ND | J | 6.3 | ND | J |
| 1,2-Dichloroethane | 107-06-2 | 13 | ND | J | 13 | ND | J |
| 1,1,1-Trichloroethane | 71-55-6 | 6.3 | ND | J | 6.3 | ND | J |
| Carbon Tetrachloride | 56-23-5 | 6.3 | ND | J | 6.3 | ND | J |
| Bromodichloromethane | 75-27-4 | 13 | ND | J | 13 | ND | J |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 6.3 | ND | J | 6.3 | ND | J |
| 1,2-Dichloropropane | 78-87-5 | 19 | ND | J | 19 | ND | J |
| trans-1,3-Dichloropropene | 10061-02-6 | 6.3 | ND | J | 6.3 | ND | J |
| Dibromochloromethane | 124-48-1 | 6.3 | ND | J | 6.3 | ND | J |
| 1,1,2-Trichloroethane | 79-00-5 | 13 | ND | J | 13 | ND | J |
| cis-1,3-Dichloropropene | 10061-01-5 | 6.3 | ND | J | 6.3 | ND | J |
| Bromoform | 75-25-2 | 6.3 | ND | J | 6.3 | ND | J |
| Tetrachloroethene | 127-18-4 | 6.3 | ND | J | 6.3 | ND | J |
| Ethylbenzene | 100-41-4 | 44 | 180 | J | 44 | 230 | J |
| Acetone | 67-64-1 | 44 | ND | J | 44 | ND | J |
| Carbon Disulfide | 75-15-0 | 19 | ND | J | 19 | ND | J |
| 2-Butanone | 78-93-3 | 44 | ND | J | 44 | ND | J |
| Vinyl Acetate | 108-05-4 | 19 | ND | J | 19 | ND | J |
| 2-Hexanone | 591-78-6 | 19 | ND | J | 19 | ND | J |
| 4-Methyl-2-pentanone | 108-10-1 | 19 | ND | J | 19 | ND | J |
| Styrene | 100-42-5 | 6.3 | 120 | J | 6.3 | 240 | J |
| trans-1,2-Dichloroethene | 156-60-5 | 13 | ND | J | 13 | ND | J |
| cis-1,2-Dichloroethene | 156-59-2 | 13 | ND | J | 13 | ND | J |

Notes
Analytical methods: Volatiles by SW-846 8240B;
Semivolatiles by SW-846 8270B.
All results are reported on an "as received" basis in mg/l except moisture content, which is expressed as a percentage.
J - Estimated value; in cases of ND, indicates MDL is estimated.
R - Unusable result; analyte may or may not be present in the sample.

4-3
 Summary of DNAPL Analytical Results
 Former Gulf States Creosoting Site
 Hattiesburg, Mississippi

| Parameter | CAS Number | Method Detection | | Method Detection | | Result | Notes |
|------------------------------|------------|------------------|--------|------------------|--------|--------|-------|
| | | Limit | Result | Limit | Result | | |
| TCL Semivolatiles | | | | | | | |
| phenol | 108-95-2 | 5 | ND | 10 | 130 | J | |
| 2-chlorophenol | 95-57-8 | 5 | ND | 5 | ND | J | |
| 1,4-dichlorobenzene | 106-46-7 | 5 | ND | 5 | ND | J | |
| N-nitrosodi-n-propylamine | 621-64-7 | 10 | ND | 10 | ND | J | |
| 1,2,4-trichlorobenzene | 120-82-1 | 5 | ND | 5 | ND | J | |
| 4-chloro-3-methylphenol | 59-50-7 | 10 | ND | 10 | ND | J | |
| acenaphthene | 83-32-9 | 400 | 18000 | 800 | 17000 | J | |
| 4-nitrophenol | 100-02-7 | 25 | ND | 25 | ND | J | |
| 2,4-dinitrotoluene | 121-14-2 | 10 | ND | 10 | ND | J | |
| pentachlorophenol | 87-86-5 | 25 | ND | 25 | ND | J | |
| pyrene | 129-00-0 | 800 | 15000 | 1600 | 14000 | J | |
| 2-nitrophenol | 88-75-5 | 10 | ND | 10 | ND | J | |
| 2,4-dimethylphenol | 105-67-9 | 20 | 140 | 20 | 2900 | J | |
| 2,4-dichlorophenol | 120-83-2 | 5 | ND | 5 | ND | J | |
| 2,4,6-trichlorophenol | 88-06-2 | 10 | ND | 10 | ND | J | |
| 2,4-dinitrophenol | 51-28-5 | 25 | ND | 25 | ND | J | |
| bis (2-chloroethyl) ether | 111-44-4 | 10 | ND | 10 | ND | J | |
| 1,3-dichlorobenzene | 541-73-1 | 5 | ND | 5 | ND | J | |
| 1,2-dichlorobenzene | 95-50-1 | 5 | ND | 5 | ND | J | |
| hexachloroethane | 67-72-1 | 10 | ND | 10 | ND | J | |
| nitrobenzene | 98-95-3 | 5 | ND | 5 | ND | J | |
| isophorone | 78-59-1 | 10 | ND | 10 | ND | J | |
| bis (2-chloroethoxy) methane | 111-91-1 | 5 | ND | 5 | ND | J | |
| naphthalene | 91-20-3 | 400 | 62000 | 800 | 96000 | J | |
| hexachlorobutadiene | 87-68-3 | 10 | ND | 10 | ND | J | |
| hexachlorocyclopentadiene | 77-47-4 | 25 | ND | 25 | ND | J | |
| 2-chloronaphthalene | 91-58-7 | 5 | ND | 5 | 1100 | J | |
| acenaphthylene | 208-96-8 | 10 | 720 | 10 | 1100 | J | |
| dimethyl phthalate | 131-11-3 | 5 | ND | 5 | ND | J | |
| fluorene | 86-73-7 | 400 | 18000 | 800 | 18000 | J | |
| 4-chlorophenyl phenyl ether | 7005-72-3 | 10 | ND | 10 | ND | J | |
| diethyl phthalate | 84-66-2 | 10 | ND | 10 | ND | J | |
| N-nitrosodiphenylamine | 86-30-6 | 10 | ND | 10 | ND | J | |
| 4-bromophenyl phenyl ether | 101-55-3 | 15 | ND | 15 | ND | J | |
| hexachlorobenzene | 118-74-1 | 15 | ND | 15 | ND | J | |

MW-1
 2677693
 3/13/97

MW-2
 2677694
 3/13/97

Notes
 Analytical methods: Volatiles by SW-846 8240B;
 Semivolatiles by SW-846 8270B.
 All results are reported on an "as received" basis in mg/l except
 moisture content, which is expressed as a percentage.
 J - Estimated value; in cases of ND, indicates MDL is estimated.
 R - Unusable result; analyte may or may not be present in the sample.

4-3
 Summary of DNAPL Analytical Results
 Former Gulf States Creosoting Site
 Hattiesburg, Mississippi

MW-2
 2677694
 3/13/97

MW-1
 2677693
 3/13/97

MP&A Sample ID
 Lab Sample Number
 Date Collected

| Parameter | CAS Number | Method Detection | | Method Detection | | Result | Notes |
|-------------------------------|------------|------------------|-------|------------------|-------|--------|-------|
| | | Limit | Notes | Limit | Notes | | |
| phenanthrene | 85-01-8 | 400 | J | 800 | J | 47000 | J |
| anthracene | 120-12-7 | 400 | J | 800 | J | 6500 | J |
| di-n-butyl phthalate | 84-74-2 | 5 | J | 5 | J | ND | J |
| fluoranthene | 206-44-0 | 400 | J | 800 | J | 19000 | J |
| butyl benzyl phthalate | 85-68-7 | 10 | J | 10 | J | ND | J |
| benzo (a) anthracene | 56-53-3 | 400 | J | 800 | J | 3900 | J |
| chrysene | 218-01-9 | 400 | J | 800 | J | 3100 | J |
| 3,3'-dichlorobenzidine | 91-94-1 | 20 | J | 20 | J | ND | J |
| bis (2-ethylhexyl) phthalate | 117-81-7 | 10 | J | 10 | J | ND | J |
| di-n-octyl phthalate | 117-84-0 | 10 | J | 10 | J | ND | J |
| benzo (b) fluoranthene | 205-99-2 | 800 | J | 1600 | J | 1800 | J |
| benzo (k) fluoranthene | 207-08-9 | 40 | J | 40 | J | 850 | J |
| benzo (a) pyrene | 50-32-8 | 800 | J | 20 | J | 1800 | J |
| indeno (1,2,3-cd) pyrene | 193-39-5 | 20 | J | 20 | J | 740 | J |
| dibenz (a,h) anthracene | 53-70-3 | 20 | J | 20 | J | 210 | J |
| benzo (ghi) perylene | 191-24-2 | 20 | J | 20 | J | 530 | J |
| 2-methylphenol | 95-48-7 | 10 | J | 20 | J | 400 | J |
| 2,2'-oxybis (1-chloropropane) | 108-60-1 | 15 | J | 15 | J | ND | J |
| 4-methylphenol | 106-44-5 | 15 | J | 30 | J | 810 | J |
| 4-chloroaniline | 106-47-8 | 15 | J | 15 | J | ND | J |
| 2-methylnaphthalene | 91-57-6 | 400 | J | 800 | J | 27000 | J |
| 2,4,5-trichlorophenol | 95-95-4 | 10 | J | 10 | J | ND | J |
| 2-nitroaniline | 88-74-4 | 10 | J | 10 | J | ND | J |
| 3-nitroaniline | 99-09-2 | 10 | J | 10 | J | ND | J |
| dibenzofuran | 132-64-9 | 400 | J | 800 | J | 15000 | J |
| 2,6-dinitrotoluene | 606-20-2 | 10 | J | 10 | J | ND | J |
| 4-nitroaniline | 100-01-6 | 15 | J | 15 | J | ND | J |
| 4,6-dinitro-2-methylphenol | 534-52-1 | 25 | R | 25 | R | ND | R |
| carbazole | 86-74-8 | 400 | J | 800 | J | 3000 | J |
| Moisture Content | | 0.08 | | 0.08 | | 48.8 | |
| | | | | | | 45.7 | |

Notes
 Analytical methods: Volatiles by SW-846 8240B;
 Semivolatiles by SW-846 8270B.
 All results are reported on an "as received" basis in mg/l except
 moisture content, which is expressed as a percentage.
 J - Estimated value; in cases of ND, indicates MDL is estimated.
 R - Unusable result; analyte may or may not be present in the sample.

4-4
Summary of Ground Water Analytical Results
Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | Method Detection Limit | MP & A Sample ID Lab Sample Number Date Collected | MW-03 2677529 3/12/97 | MW-04 2677530 3/12/97 | MW-04 dup (a) 2677531 3/12/97 | MW-05 2677535 3/12/97 | MW-01 2677536 3/12/97 | Result | Notes | Result | Notes | Result | Notes | Result | Notes |
|---------------------------|------------|------------------------|---|-----------------------------|-----------------------------|-------------------------------------|-----------------------------|-----------------------------|--------|-------|--------|-------|--------|-------|--------|-------|
| Volatiles | | | | | | | | | | | | | | | | |
| 2-Butanone | 78-93-3 | 0.003 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| Bromomethane | 74-83-9 | 0.003 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| Chloromethane | 74-87-3 | 0.002 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| Vinyl Chloride | 75-01-4 | 0.003 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| Chloroethane | 75-00-3 | 0.002 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| Methylene Chloride | 75-09-2 | 0.006 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| Acetone | 67-64-1 | 0.003 | | 0.023 | 0.027 | NA | ND | 0.037 | 0.006 | | | | | | | |
| Carbon Disulfide | 75-15-0 | 0.001 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | 0.002 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| 1,1-Dichloroethane | 75-34-3 | 0.001 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| Chloroform | 67-66-3 | 0.002 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| 1,2-Dichloroethane | 107-06-2 | 0.001 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | 0.001 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| Carbon Tetrachloride | 56-23-5 | 0.002 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| Vinyl Acetate | 108-05-4 | 0.001 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| Bromodichloromethane | 75-27-4 | 0.001 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| 1,2-Dichloropropane | 78-87-5 | 0.001 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| trans-1,3-Dichloropropene | 10061-02-6 | 0.001 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| Trichloroethene | 79-01-6 | 0.002 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| Dibromochloromethane | 124-48-1 | 0.002 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| 1,1,2-Trichloroethane | 79-00-5 | 0.001 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| Benzene | 71-43-2 | 0.001 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| cis-1,3-Dichloropropene | 10061-01-5 | 0.001 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| Bromoform | 75-25-2 | 0.001 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| 2-Hexanone | 591-78-6 | 0.007 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| 4-Methyl-2-pentanone | 108-10-1 | 0.001 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| Tetrachloroethene | 127-18-4 | 0.002 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 0.002 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| Toluene | 108-88-3 | 0.001 | | ND | ND | NA | ND | ND | ND | | | | | | | |
| Chlorobenzene | 108-90-7 | 0.001 | | ND | ND | NA | ND | ND | ND | | | | | | | |

Notes
Analytical methods: Volatiles by SW-846 8240B;
Semi-volatiles by SW-846 8270B; Pesticides PCBs by SW-846 8081;
Inorganics by appropriate SW-846 methods
All results are reported in mg/l.
(a) Sample MW-04 dup is a laboratory duplicate of sample MW-04 and was analyzed for metals only.
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4-4
Summary of Ground Water Analytical Results
Former Gulf States Crocoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | Method Detection Limit | MP&A Sample ID Lab Sample Number Date Collected | MW-03 2677529 3/12/97 | MW-04 2677530 3/12/97 | MW-04 dup (a) 2677531 3/12/97 | MW-05 2677535 3/12/97 | MW-01 2677536 3/12/97 | Result | Notes | Result | Notes | Result | Notes | Result | Notes |
|--------------------------|------------|------------------------|---|-----------------------|-----------------------|-------------------------------|-----------------------|-----------------------|--------|-------|----------|-------|---------|-------|--------|-------|
| Ethylbenzene | 100-41-4 | 0.002 | | ND | ND | NA | ND | ND | 9.03 | | 47.8 | R | 9.03 | | | R |
| Styrene | 100-42-5 | 0.001 | | ND | ND | NA | ND | ND | 0.27 | | ND | | ND | | | |
| Xylene (total) | 1330-20-7 | 0.001 | | ND | ND | NA | ND | ND | 0.0017 | J | 0.61 | J | 0.0017 | J | | J |
| trans-1,2-Dichloroethene | 156-60-5 | 0.002 | | ND | ND | NA | ND | ND | 12.7 | J | 19.2 | J | ND | J | | J |
| cis-1,2-Dichloroethene | 156-59-2 | 0.002 | | ND | ND | NA | ND | ND | 0.042 | J | 0.071 | J | 0.042 | J | | J |
| Metals | | | | | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | 0.057 | | 11.1 | 16.6 | 19.8 | 47.8 | 9.03 | | | | | | | | |
| Antimony | 7440-36-0 | 0.015 | | ND | ND | ND | ND | ND | | R | ND | R | ND | | | |
| Barium | 7440-39-3 | 0.0022 | | 0.25 | 0.49 | 0.51 | 0.61 | 0.27 | | | | | | | | |
| Beryllium | 7440-41-7 | 0.0013 | | 0.0043 | 0.0042 | 0.0022 | 0.0071 | 0.0017 | | J | 0.0071 | J | 0.0017 | J | | J |
| Cadmium | 7440-43-9 | 0.0027 | | ND | ND | ND | ND | ND | | | | | ND | | | |
| Calcium | 7440-70-2 | 0.03 | | 17.7 | 42.6 | 42.9 | 19.2 | 12.7 | | J | 19.2 | J | 12.7 | J | | J |
| Chromium | 7440-47-3 | 0.0043 | | 0.028 | 0.0185 | 0.0217 | 0.071 | 0.042 | | J | 0.071 | J | 0.042 | J | | J |
| Chromium | 7440-47-3 | 0.0055 | | 0.0132 | 0.0156 | 0.0177 | 0.0403 | 0.0121 | | J | 0.0403 | J | 0.0121 | J | | J |
| Cobalt | 7440-48-4 | 0.0038 | | ND | ND | 0.0217 | 0.047 | ND | | | 0.047 | | ND | | | |
| Copper | 7440-50-8 | 0.0059 | | 26.3 | 21.9 | 27.1 | 79.3 | 13.2 | | J | 79.3 | J | 13.2 | J | | J |
| Iron | 7439-89-6 | 0.0059 | | 26.3 | 21.9 | 27.1 | 79.3 | 13.2 | | J | 79.3 | J | 13.2 | J | | J |
| Magnesium | 7439-95-4 | 0.024 | | 4.67 | 20.6 | 21.5 | 10.3 | 4.18 | | J | 10.3 | J | 4.18 | J | | J |
| Manganese | 7439-96-5 | 0.0029 | | 0.5 | 1.22 | 1.26 | 1.09 | 0.343 | | J | 1.09 | J | 0.343 | J | | J |
| Manganese | 7439-96-5 | 0.0054 | | 0.0163 | 0.0305 | 0.035 | 0.0407 | 0.0124 | | J | 0.0407 | J | 0.0124 | J | | J |
| Nickel | 7440-02-0 | 0.015 | | 2.92 | 5.67 | 6.1 | 5.64 | 2.21 | | J | 5.64 | J | 2.21 | J | | J |
| Potassium | 7440-09-7 | 0.0036 | | ND | ND | ND | ND | ND | | | ND | | ND | | | |
| Silver | 7440-22-4 | 0.007 | | 19.5 | 53.4 | 59.4 | 15.5 | 2.1 | | | 15.5 | | 2.1 | | | |
| Sodium | 7440-23-5 | 0.2 | | 0.047 | 0.048 | 0.054 | 0.109 | 0.051 | | | 0.109 | | 0.051 | | | |
| Vanadium | 7440-62-2 | 0.007 | | 0.047 | 0.048 | 0.054 | 0.109 | 0.051 | | | 0.109 | | 0.051 | | | |
| Zinc | 7440-66-6 | 0.012 | | ND | ND | ND | 0.135 | 0.075 | | | 0.135 | | 0.075 | | | |
| Thallium TR | 7440-28-0 | 0.0045 | | ND | ND | ND | ND | ND | | | ND | | ND | | | |
| Arsenic TR | 7440-38-2 | 0.0027 | | 0.067 | 0.012 | 0.014 | 0.057 | 0.047 | | | 0.057 | | 0.047 | | | |
| Selenium TR | 7782-49-2 | 0.0027 | | ND | ND | ND | ND | ND | | | ND | | ND | | | |
| Lead TR | 7439-92-1 | 0.002 | | 0.0207 | 0.0262 | 0.0301 | 0.0669 | 0.0044 | | | 0.0669 | | 0.0044 | | | J |
| Mercury | 7439-97-6 | 0.000043 | | ND | ND | 0.000093 | ND | 0.00023 | | | 0.000093 | J | 0.00023 | | | |

Notes

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Summary of Ground Water Analytical Results

Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | Method Detection Limit | MW-03 2677529 3/12/97 | MW-04 2677530 3/12/97 | MW-04 dup (a) 2677531 3/12/97 | MW-05 2677535 3/12/97 | MW-01 2677536 3/12/97 | Result | Notes |
|---------------------|------------|------------------------|-----------------------------|-----------------------------|-------------------------------------|-----------------------------|-----------------------------|--------|-------|
| Pesticides/PCBs | | | | | | | | | |
| Endrin Ketone | 53494-70-5 | 0.000004 | ND | ND | NA | ND | ND | J | J |
| Alpha Chlordane | 5103-71-9 | 0.000001 | ND | ND | NA | ND | ND | J | J |
| Gamma Chlordane | 5103-74-2 | 0.000001 | ND | ND | NA | ND | ND | J | J |
| Alpha BHC | 319-84-6 | 0.000001 | ND | ND | NA | ND | ND | J | J |
| Beta BHC | 319-85-7 | 0.000001 | ND | ND | NA | ND | ND | J | J |
| Gamma BHC - Lindane | 58-89-9 | 0.000001 | ND | ND | NA | 0.000002 | 0.000002 | J | J |
| Delta BHC | 319-86-8 | 0.000003 | ND | ND | NA | ND | ND | J | J |
| Heptachlor | 76-44-8 | 0.000002 | ND | ND | NA | ND | ND | J | J |
| Aldrin | 309-00-2 | 0.000006 | ND | ND | NA | ND | ND | J | J |
| Heptachlor Epoxide | 1024-57-3 | 0.000001 | ND | ND | NA | 0.000002 | 0.000002 | J | J |
| DDDE | 72-55-9 | 0.000001 | ND | ND | NA | ND | ND | J | J |
| DDD | 72-54-8 | 0.000005 | ND | ND | NA | ND | ND | J | J |
| DDT | 50-29-3 | 0.000009 | ND | ND | NA | ND | ND | J | J |
| Dieldrin | 60-57-1 | 0.000001 | ND | ND | NA | ND | ND | J | J |
| Endrin | 72-20-8 | 0.000007 | ND | ND | NA | ND | ND | J | J |
| Toxaphene | 8001-35-2 | 0.0004 | ND | ND | NA | ND | ND | J | J |
| Endosulfan II | 33213-65-9 | 0.000005 | ND | ND | NA | ND | ND | J | J |
| Endosulfan I | 959-98-8 | 0.000002 | ND | ND | NA | ND | ND | J | J |
| Endosulfan Sulfate | 1031-07-8 | 0.000003 | ND | ND | NA | ND | ND | J | J |
| Endrin Aldehyde | 7421-93-4 | 0.000005 | ND | ND | NA | ND | ND | J | J |
| PCB-1016 | 12674-11-2 | 0.000004 | ND | ND | NA | ND | ND | J | J |
| PCB-1221 | 11104-28-2 | 0.0001 | ND | ND | NA | ND | ND | J | J |
| PCB-1232 | 11141-16-5 | 0.00005 | ND | ND | NA | ND | ND | J | J |
| PCB-1242 | 53469-21-9 | 0.0001 | ND | ND | NA | ND | ND | J | J |
| PCB-1248 | 12672-29-6 | 0.00004 | ND | ND | NA | ND | ND | J | J |
| PCB-1254 | 11097-69-1 | 0.0001 | ND | ND | NA | ND | ND | J | J |
| PCB-1260 | 11096-82-5 | 0.00004 | ND | ND | NA | ND | ND | J | J |
| Methoxychlor | 72-43-5 | 0.00002 | ND | ND | NA | ND | ND | J | J |

Notes

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4-4
Summary of Ground Water Analytical Results

Former Gulf States Creosoting Site
Hattiesburg, Mississippi

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|------------------------------|------------|------------------------|---|-----------------------------|-----------------------------|-------------------------------------|-----------------------------|-----------------------------|--------|-------|--------|-------|--------|-------|--------|-------|
| Semivolatiles | | | | | | | | | | | | | | | | |
| acenaphthene | 83-32-9 | 0.001 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| acenaphthylene | 208-96-8 | 0.001 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| anthracene | 120-12-7 | 0.001 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| benzo (a) anthracene | 56-55-3 | 0.001 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| benzo (b) fluoranthene | 205-99-2 | 0.002 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| benzo (k) fluoranthene | 207-08-9 | 0.002 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| benzo (ghi) perylene | 191-24-2 | 0.002 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| benzo (a) pyrene | 50-32-8 | 0.002 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| bis (2-chloroethoxy) methane | 111-91-1 | 0.001 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| bis (2-chloroethyl) ether | 111-44-4 | 0.001 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| bis (2-ethylhexyl) phthalate | 117-81-7 | 0.002 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| 4-bromophenyl phenyl ether | 101-55-3 | 0.002 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| butyl benzyl phthalate | 85-68-7 | 0.002 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| 4-chloroaniline | 106-47-8 | 0.002 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| 4-chloro-3-methylphenol | 59-50-7 | 0.002 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| 2-chlorophenol | 91-58-7 | 0.001 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| 2-chlorophenyl phenyl ether | 95-57-8 | 0.001 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| 4-chlorophenyl phenyl ether | 7005-72-3 | 0.002 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| chrysene | 218-01-9 | 0.001 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| dibenzofuran | 132-64-9 | 0.001 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| di-n-butyl phthalate | 84-74-2 | 0.001 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| dibenz (a,b) anthracene | 53-70-3 | 0.002 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| 1,2-dichlorobenzene | 95-50-1 | 0.001 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| 1,3-dichlorobenzene | 541-75-1 | 0.001 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| 1,4-dichlorobenzene | 106-46-7 | 0.001 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| 3,3'-dichlorobenzidine | 91-94-1 | 0.002 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| 2,4-dichlorophenol | 120-83-2 | 0.002 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| dichyl phthalate | 84-66-2 | 0.002 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| 2,4-dimethylphenol | 105-67-9 | 0.001 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| dimethyl phthalate | 131-11-3 | 0.003 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| 2,4-dinitrophenol | 51-28-5 | 0.005 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| 2,4-dinitrotoluene | 121-14-2 | 0.002 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |
| 2,6-dinitrotoluene | 606-20-2 | 0.001 | | ND | ND | NA | ND | ND | ND | | ND | | ND | | ND | |

Notes

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 Summary of Ground Water Analytical Results

Former Gulf States Creosoting Site
 Hattiesburg, Mississippi

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|------------------------------|------------|------------------------|-----------------------------|-----------------------------|-------------------------------------|-----------------------------|-----------------------------|-------|
| di-n-octyl phthalate | 117-84-0 | 0.002 | ND | ND | NA | ND | ND | |
| fluoranthene | 206-44-0 | 0.001 | ND | ND | NA | ND | ND | |
| fluorene | 86-73-7 | 0.001 | ND | ND | NA | ND | ND | |
| hexachlorobenzene | 118-74-1 | 0.001 | ND | ND | NA | ND | ND | |
| hexachlorobutadiene | 87-68-3 | 0.001 | ND | ND | NA | ND | ND | |
| hexachlorocyclopentadiene | 77-47-4 | 0.003 | ND | ND | NA | ND | ND | |
| hexachloroethane | 67-72-1 | 0.002 | ND | ND | NA | ND | ND | |
| indeno (1,2,3-cd) pyrene | 193-39-5 | 0.002 | ND | NA | NA | ND | ND | |
| isophorone | 78-59-1 | 0.001 | ND | ND | NA | ND | ND | |
| 2-methylnaphthalene | 91-57-6 | 0.001 | ND | ND | NA | ND | ND | |
| naphthalene | 91-20-3 | 0.001 | ND | ND | NA | ND | ND | |
| 2-nitroaniline | 88-74-4 | 0.001 | ND | ND | NA | ND | ND | |
| 3-nitroaniline | 99-09-2 | 0.001 | ND | ND | NA | ND | ND | |
| 4-nitroaniline | 100-01-6 | 0.002 | ND | ND | NA | ND | ND | |
| nitrobenzene | 98-95-3 | 0.001 | ND | ND | NA | ND | ND | |
| 2-nitrophenol | 88-75-5 | 0.002 | ND | ND | NA | ND | ND | |
| 4-nitrophenol | 100-02-7 | 0.005 | ND | ND | NA | ND | ND | |
| N-nitrosodiphenylamine | 86-30-6 | 0.002 | ND | ND | NA | ND | ND | |
| N-nitrosodi-n-propylamine | 621-64-7 | 0.001 | ND | ND | NA | ND | ND | |
| pentachlorophenol | 87-86-5 | 0.001 | ND | ND | NA | ND | ND | |
| phenanthrene | 85-01-8 | 0.001 | 0.002 | ND | NA | ND | ND | J |
| phenol | 108-95-2 | 0.001 | ND | ND | NA | ND | ND | |
| pyrene | 129-00-0 | 0.001 | ND | ND | NA | ND | ND | |
| 1,2,4-trichlorobenzene | 120-82-1 | 0.001 | ND | ND | NA | ND | 0.003 | J |
| 2,4,5-trichlorophenol | 95-95-4 | 0.001 | ND | ND | NA | ND | ND | |
| 2,4,6-trichlorophenol | 88-06-2 | 0.001 | ND | ND | NA | ND | ND | |
| 2-methylphenol | 95-48-7 | 0.002 | ND | ND | NA | ND | ND | |
| 2,2'oxybis (1-chloropropane) | 108-60-1 | 0.002 | ND | ND | NA | ND | ND | |
| 4-methylphenol | 106-44-5 | 0.002 | ND | ND | NA | ND | ND | |
| 4,6-dinitro-2-methylphenol | 534-52-1 | 0.005 | ND | R | NA | ND | ND | R |
| carbazole | 86-74-8 | 0.001 | ND | ND | NA | ND | ND | |
| Total cyanide | 57-12-5 | 0.000004 | ND | ND | ND | ND | ND | |

Notes

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Summary of Ground Water Analytical Results

Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | MP & A Sample ID Lab Sample Number Date Collected | Method Detection Limit | Sample Specific MDL | Result | Notes | Sample Specific MDL | Result | Notes |
|---------------------------|------------|---|---------------------------|---------------------------|--------|-------|---------------------------|--------|-------|
| Volatiles | | | | | | | | | |
| 2-Butanone | 78-93-3 | MW-3 2677537 3/12/97 | 0.003 | 0.06 | ND | | 0.06 | ND | |
| Bromomethane | 74-83-9 | MW-23 (b) 2677538 3/12/97 | 0.003 | 0.06 | ND | | 0.06 | ND | |
| Chloromethane | 74-87-3 | | 0.003 | 0.06 | ND | | 0.06 | ND | |
| Vinyl Chloride | 75-01-4 | | 0.002 | 0.04 | ND | | 0.04 | ND | |
| Chloroethane | 75-00-3 | | 0.003 | 0.06 | ND | | 0.06 | ND | |
| Methylene Chloride | 75-09-2 | | 0.002 | 0.04 | ND | | 0.04 | ND | |
| Acetone | 67-64-1 | | 0.006 | 0.12 | ND | | 0.12 | ND | |
| Carbon Disulfide | 75-15-0 | | 0.003 | 0.06 | ND | | 0.06 | ND | |
| 1,1-Dichloroethene | 75-35-4 | | 0.001 | 0.02 | ND | | 0.02 | ND | |
| 1,1-Dichloroethane | 75-34-3 | | 0.002 | 0.04 | ND | | 0.04 | ND | |
| Chloroform | 67-66-3 | | 0.001 | 0.02 | ND | | 0.02 | ND | |
| 1,2-Dichloroethane | 107-06-2 | | 0.002 | 0.04 | ND | | 0.04 | ND | |
| 1,1,1-Trichloroethane | 71-55-6 | | 0.001 | 0.02 | ND | | 0.02 | ND | |
| Carbon Tetrachloride | 56-23-5 | | 0.001 | 0.02 | ND | | 0.02 | ND | |
| Vinyl Acetate | 108-05-4 | | 0.002 | 0.04 | ND | R | 0.04 | ND | R |
| Bromodichloromethane | 75-27-4 | | 0.001 | 0.02 | ND | | 0.02 | ND | |
| 1,2-Dichloropropane | 78-87-5 | | 0.001 | 0.02 | ND | | 0.02 | ND | |
| trans-1,3-Dichloropropene | 10061-02-6 | | 0.001 | 0.02 | ND | | 0.02 | ND | |
| Trichloroethene | 79-01-6 | | 0.001 | 0.02 | ND | | 0.02 | ND | |
| Dibromochloromethane | 124-48-1 | | 0.002 | 0.04 | ND | | 0.04 | ND | |
| 1,1,2-Trichloroethane | 79-00-5 | | 0.002 | 0.04 | ND | | 0.04 | ND | |
| Benzene | 71-43-2 | | 0.001 | 0.02 | 0.81 | | 0.02 | 0.79 | |
| cis-1,3-Dichloropropene | 10061-01-5 | | 0.001 | 0.02 | ND | | 0.02 | ND | |
| Bromoform | 75-25-2 | | 0.001 | 0.02 | ND | | 0.02 | ND | |
| 2-Hexanone | 591-78-6 | | 0.007 | 0.14 | ND | | 0.14 | ND | |
| 4-Methyl-2-pentanone | 108-10-1 | | 0.005 | 0.1 | ND | | 0.1 | ND | |
| Tetrachloroethene | 127-18-4 | | 0.001 | 0.02 | ND | | 0.02 | ND | |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | | 0.002 | 0.04 | ND | | 0.04 | ND | |
| Toluene | 108-88-3 | | 0.002 | 0.04 | 0.44 | | 0.04 | 0.43 | |
| Chlorobenzene | 108-90-7 | | 0.001 | 0.02 | ND | | 0.02 | ND | |

Notes

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Semi-volatiles by SW-846 8270B; Pesticides PCBs by SW-846 8081;
- Inorganics by appropriate SW-846 methods
- All results are reported in mg/l.
- (a) Sample MW-04 dup is a laboratory duplicate of sample MW-04 and was analyzed for metals only.
- (b) Sample MW-23 is a blind duplicate of sample MW-03.
- J - Estimated value; in cases of ND, indicates MDL is estimated.
- R - Unusable result; analyte may or may not be present in the sample.

Page 4-4
Summary of Ground Water Analytical Results
Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | Method Detection Limit | MP&A Sample ID | | MW-3 | | MW-23 (b) | | MW-4 | |
|--------------------------|------------|------------------------|---------------------|----------------|-------------------|----------------|-------------------|----------------|-------------------|----------------|
| | | | Lab Sample Number | Date Collected | Lab Sample Number | Date Collected | Lab Sample Number | Date Collected | Lab Sample Number | Date Collected |
| | | | Sample Specific MDL | Notes | Result | Notes | Result | Notes | Result | Notes |
| Ethylbenzene | 100-41-4 | 0.002 | 0.04 | J | 0.062 | J | 0.06 | J | ND | |
| Styrene | 100-42-5 | 0.001 | 0.02 | J | 0.085 | J | 0.077 | J | ND | |
| Xylene (total) | 1330-20-7 | 0.001 | 0.02 | | 0.38 | | 0.37 | | ND | |
| trans-1,2-Dichloroethene | 156-60-3 | 0.002 | 0.04 | | ND | | ND | | ND | |
| cis-1,2-Dichloroethene | 156-59-2 | 0.002 | 0.04 | | ND | | ND | | ND | |
| Metals | | | | | | | | | | |
| Aluminum | 7429-90-5 | 0.057 | | J | 7.32 | J | 14.8 | J | 1.77 | |
| Antimony | 7440-36-0 | 0.015 | | R | ND | | ND | R | ND | |
| Barium | 7440-39-3 | 0.0022 | | J | 0.11 | J | 0.16 | J | 0.0917 | J |
| Beryllium | 7440-41-7 | 0.0013 | | J | 0.0037 | J | 0.0026 | J | ND | |
| Cadmium | 7440-43-9 | 0.0027 | | | ND | | ND | | ND | |
| Calcium | 7440-70-2 | 0.03 | | J | 2.84 | J | 3.67 | J | 5.85 | J |
| Chromium | 7440-47-3 | 0.0043 | | J | 0.0197 | J | 0.038 | J | ND | |
| Cobalt | 7440-48-4 | 0.0055 | | J | ND | | 0.0086 | J | ND | |
| Copper | 7440-50-8 | 0.0038 | | J | ND | | ND | J | ND | |
| Iron | 7439-89-6 | 0.0059 | | J | 9.84 | J | 15.3 | J | 2.3 | J |
| Magnesium | 7439-95-4 | 0.024 | | J | 1.8 | J | 2.39 | J | 1.93 | J |
| Manganese | 7439-96-5 | 0.0029 | | J | 0.061 | J | 0.088 | J | 0.128 | J |
| Nickel | 7440-02-0 | 0.0054 | | J | 0.0068 | J | 0.0112 | J | ND | |
| Potassium | 7440-09-7 | 0.15 | | J | 1.15 | J | 1.59 | J | 1.73 | J |
| Silver | 7440-22-4 | 0.0036 | | | ND | | ND | | ND | |
| Sodium | 7440-23-5 | 0.2 | | J | 13.7 | J | 14.2 | J | 7.18 | |
| Vanadium | 7440-62-2 | 0.007 | | J | 0.035 | J | 0.063 | J | ND | |
| Zinc | 7440-66-6 | 0.012 | | | ND | | 0.093 | J | ND | |
| Thallium TR | 7440-28-0 | 0.0045 | | | ND | | ND | | 0.011 | J |
| Arsenic TR | 7440-38-2 | 0.0027 | | | 0.068 | | 0.07 | | 0.025 | |
| Selenium TR | 7782-49-2 | 0.0027 | | | ND | | ND | | ND | |
| Lead TR | 7439-92-1 | 0.002 | | J | ND | | 0.0225 | J | ND | |
| Mercury | 7439-97-6 | 0.000043 | | J | ND | | 0.00026 | J | ND | |

Notes
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Site 4-4
 Summary of Ground Water Analytical Results
 Former Gulf States Creosoting Site
 Hattiesburg, Mississippi

| Parameter | CAS Number | Method Detection Limit | MP&A Sample ID Lab Sample Number Date Collected | Sample Specific MDL | Result | Notes | Sample Specific MDL | Result | Notes | Result | Notes |
|---------------------|------------|------------------------|---|---------------------|---------|-------|---------------------|----------|-------|--------|-------|
| Pesticides/PCBs | | | | | | | | | | | |
| Endrin Ketone | 53494-70-5 | 0.000004 | MW-3 2677537 3/12/97 | 0.000005 | ND | J | | ND | J | ND | |
| Alpha Chlordane | 5103-71-9 | 0.000001 | | | ND | J | | ND | J | ND | |
| Gamma Chlordane | 5103-74-2 | 0.000001 | | 0.000002 | ND | J | | ND | J | ND | |
| Alpha BHC | 319-84-6 | 0.000001 | | 0.000003 | ND | J | | ND | J | ND | |
| Beta BHC | 319-85-7 | 0.000001 | | | ND | J | | ND | J | ND | |
| Gamma BHC - Lindane | 58-89-9 | 0.000001 | | | ND | J | | ND | J | ND | |
| Delta BHC | 319-86-8 | 0.000003 | | 0.000004 | ND | J | | ND | J | ND | |
| Heptachlor | 76-44-8 | 0.000002 | | | ND | J | | ND | J | ND | |
| Aldrin | 309-00-2 | 0.000006 | | 0.000008 | ND | J | | ND | J | ND | |
| Heptachlor Epoxide | 1024-57-3 | 0.000001 | | | ND | J | | ND | J | ND | |
| DDE | 72-55-9 | 0.000001 | | 0.000003 | ND | J | | 0.00002 | J | ND | |
| DDD | 72-54-8 | 0.000005 | | 0.000006 | ND | J | | ND | J | ND | |
| DDT | 50-29-3 | 0.000009 | | 0.00001 | ND | J | | 0.00001 | J | ND | |
| Dieldrin | 60-57-1 | 0.000001 | | | ND | J | 0.00002 | ND | J | ND | |
| Endrin | 72-20-8 | 0.000007 | | 0.00009 | 0.00004 | J | | ND | J | ND | |
| Toxaphene | 8001-35-2 | 0.0004 | | 0.0003 | ND | J | | ND | J | ND | |
| Endosulfan II | 33213-65-9 | 0.000005 | | 0.000006 | ND | J | | 0.000009 | J | ND | |
| Endosulfan I | 959-98-8 | 0.000002 | | 0.000003 | ND | J | | ND | J | ND | |
| Endosulfan Sulfate | 1031-07-8 | 0.000003 | | 0.000004 | ND | J | | 0.000024 | J | ND | |
| Endrin Aldehyde | 7421-93-4 | 0.000005 | | 0.000006 | ND | J | | 0.000024 | J | ND | |
| PCB-1016 | 12674-11-2 | 0.00004 | | 0.00005 | ND | J | | ND | J | ND | |
| PCB-1221 | 11104-28-2 | 0.0001 | | 0.0008 | ND | J | 0.0006 | ND | J | ND | |
| PCB-1232 | 11141-16-5 | 0.00005 | | 0.00006 | ND | J | | ND | J | ND | |
| PCB-1242 | 53469-21-9 | 0.0001 | | | ND | J | | ND | J | ND | |
| PCB-1248 | 12672-29-6 | 0.00004 | | 0.00005 | ND | J | | ND | J | ND | |
| PCB-1254 | 11097-69-1 | 0.0001 | | 0.0002 | ND | J | | ND | J | ND | |
| PCB-1260 | 11096-82-5 | 0.00004 | | 0.00005 | ND | J | | ND | J | ND | |
| Methoxychlor | 72-43-5 | 0.00002 | | | ND | J | | ND | J | ND | |

Notes
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Page 4-4
 Summary of Ground Water Analytical Results
 Former Gulf States Creosoting Site
 Hattiesburg, Mississippi

| Parameter | CAS Number | Method Detection Limit | MP&A Sample ID Lab Sample Number Date Collected | MW-3 2677537 3/12/97 | MW-23 (b) 2677538 3/12/97 | MW-4 2677539 3/12/97 |
|------------------------------|------------|------------------------|---|----------------------|---------------------------|----------------------|
| | | | | Result | Result | Result |
| | | | | Notes | Notes | Notes |
| | | | | Sample Specific MDL | Sample Specific MDL | Sample Specific MDL |
| Semivolatiles | | | | | | |
| acenaphthene | 83-32-9 | 0.001 | | 0.3 | 0.31 | ND |
| acenaphthylene | 208-96-8 | 0.001 | | 0.019 | 0.02 | ND |
| anthracene | 120-12-7 | 0.001 | | 0.02 | 0.017 | ND |
| benzo (a) anthracene | 56-55-3 | 0.001 | | 0.007 | 0.004 | ND |
| benzo (b) fluoranthene | 205-99-2 | 0.002 | | 0.005 | 0.003 | ND |
| benzo (k) fluoranthene | 207-08-9 | 0.002 | | ND | ND | ND |
| benzo (ghi) perylene | 191-24-2 | 0.002 | | ND | ND | ND |
| benzo (a) pyrene | 50-32-8 | 0.002 | | 0.003 | ND | ND |
| bis (2-chloroethoxy) methane | 111-91-1 | 0.001 | | ND | ND | ND |
| bis (2-chloroethyl) ether | 111-44-4 | 0.001 | | ND | ND | ND |
| bis (2-ethylhexyl) phthalate | 117-81-7 | 0.002 | | ND | 0.004 | 0.019 |
| 4-bromophenyl phenyl ether | 101-55-3 | 0.002 | | 0.007 | 0.004 | ND |
| butyl benzyl phthalate | 85-68-7 | 0.002 | | ND | ND | ND |
| 4-chloroaniline | 106-47-8 | 0.002 | | ND | ND | ND |
| 4-chloro-3-methylphenol | 59-50-7 | 0.002 | | ND | ND | ND |
| 2-chloronaphthalene | 91-58-7 | 0.001 | | ND | ND | ND |
| 2-chlorophenol | 95-57-8 | 0.001 | | ND | ND | ND |
| 4-chlorophenyl phenyl ether | 7005-72-3 | 0.002 | | ND | ND | ND |
| chrysene | 218-01-9 | 0.001 | | 0.007 | 0.004 | 0.004 |
| dibenzofuran | 132-64-9 | 0.001 | | 0.15 | 0.15 | 0.004 |
| di-n-butyl phthalate | 84-74-2 | 0.001 | | ND | ND | ND |
| di-benz (a,h) anthracene | 53-70-3 | 0.002 | | ND | ND | ND |
| 1,2-dichlorobenzene | 95-50-1 | 0.001 | | ND | ND | ND |
| 1,3-dichlorobenzene | 541-73-1 | 0.001 | | ND | ND | ND |
| 1,4-dichlorobenzene | 106-46-7 | 0.001 | | ND | ND | ND |
| 3,3'-dichlorobenzidine | 91-94-1 | 0.002 | | ND | ND | ND |
| 2,4-dichlorophenol | 120-83-2 | 0.002 | | ND | ND | ND |
| diethyl phthalate | 84-66-2 | 0.002 | | ND | ND | ND |
| 2,4-dimethylphenol | 105-67-9 | 0.001 | | 4.5 | 5.2 | ND |
| dimethyl phthalate | 131-11-3 | 0.003 | | ND | ND | ND |
| 2,4-dinitrophenol | 51-28-5 | 0.005 | | ND | ND | ND |
| 2,4-dinitrotoluene | 121-14-2 | 0.002 | | ND | ND | ND |
| 2,6-dinitrotoluene | 606-20-2 | 0.001 | | ND | ND | ND |

Notes
 Analytical methods: Volatiles by SW-846 8240B;
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 J - Estimated value; in cases of ND, indicates MDL is estimated.
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Summary of Ground Water Analytical Results

Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | Method Detection Limit | MP&A Sample ID Lab Sample Number Date Collected | Sample Specific MDL | Result | Notes | Sample Specific MDL | Result | Notes |
|------------------------------|------------|------------------------|---|---------------------|--------|-------|---------------------|--------|-------|
| di-n-octyl phthalate | 117-84-0 | 0.002 | MW-3 2677537 3/12/97 | | ND | | | ND | |
| fluoranthene | 206-44-0 | 0.001 | | | 0.034 | | | ND | |
| fluorene | 86-73-7 | 0.001 | | | 0.14 | | | 0.02 | |
| hexachlorobenzene | 118-74-1 | 0.001 | | | ND | J | | 0.14 | |
| hexachlorobutadiene | 87-68-3 | 0.001 | | | ND | | | ND | |
| hexachlorocyclopentadiene | 77-47-4 | 0.003 | | | ND | | | ND | |
| hexachloroethane | 67-72-1 | 0.002 | | | ND | | | ND | |
| indeno (1,2,3-cd) pyrene | 193-39-5 | 0.002 | | | ND | | | ND | |
| isophorone | 78-59-1 | 0.001 | | | ND | J | | ND | |
| 2-methylnaphthalene | 91-57-6 | 0.001 | | | 1.1 | J | | 0.99 | |
| naphthalene | 91-20-3 | 0.001 | | | 5.8 | J | | 1.1 | |
| 2-nitroaniline | 88-74-4 | 0.001 | | | ND | | | ND | |
| 3-nitroaniline | 99-09-2 | 0.001 | | | ND | | | ND | |
| 4-nitroaniline | 100-01-6 | 0.002 | | | ND | J | | ND | |
| nitrobenzene | 98-95-3 | 0.001 | | | ND | J | | ND | |
| 2-nitrophenol | 88-73-5 | 0.002 | | | ND | | | ND | |
| 4-nitrophenol | 100-02-7 | 0.005 | | | ND | | | ND | |
| N-nitrosodiphenylamine | 86-30-6 | 0.002 | | | ND | | | ND | |
| N-nitrosodi-n-propylamine | 621-64-7 | 0.002 | | | ND | | | ND | |
| pentachlorophenol | 87-86-5 | 0.001 | | | ND | | | ND | |
| phenanthrene | 85-01-8 | 0.001 | | | 0.13 | | | 0.12 | |
| phenol | 108-95-2 | 0.001 | | | 0.32 | J | | 0.36 | |
| pyrene | 129-00-0 | 0.001 | | | 0.023 | | | 0.014 | |
| 1,2,4-trichlorobenzene | 120-82-1 | 0.001 | | | ND | J | | ND | |
| 2,4,5-trichlorophenol | 95-95-4 | 0.001 | | | ND | | | ND | |
| 2,4,6-trichlorophenol | 88-06-2 | 0.001 | | | ND | | | ND | |
| 2-methylphenol | 95-48-7 | 0.002 | | | 1.3 | | | 1.2 | |
| 2,2 oxybis (1-chloropropane) | 108-60-1 | 0.002 | | | ND | | | ND | |
| 4-methylphenol | 106-44-5 | 0.002 | | | 1.8 | | | 2 | |
| 4,6-dinitro-2-methylphenol | 534-52-1 | 0.005 | | | ND | R | | ND | R |
| carbazole | 86-74-8 | 0.001 | | | 0.38 | J | | 0.39 | |
| Total cyanide | 57-12-5 | 0.000004 | | | ND | | | ND | |

Notes

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Summary of Surface Soil Analytical Results

Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | MP&A Sample ID Lab Sample Number Date Collected | Method Detection Limit | SS-11 2677435 3/13/97 | SS-6 2677436 3/13/97 | SS-8 2677439 3/13/97 | SS-9 2677440 3/13/97 | SS-4 2677441 3/13/97 | SS-10 2677442 3/13/97 | SS-7 2677443 3/13/97 | Result | Notes | Result | Notes | Result | Notes | Result | Notes | Result | Notes | | |
|------------------------------|------------|---|------------------------------|-----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------------------|----------------------------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|----|--|
| TCL Semivolatiles | | | | | | | | | | | | | | | | | | | | | | |
| phenol | 108-95-2 | | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| 2-chlorophenol | 95-57-8 | | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| 1,4-dichlorobenzene | 106-46-7 | | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| N-nitrosodi-n-propylamine | 621-64-7 | | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| 1,2,4-trichlorobenzene | 120-82-1 | | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| 4-chloro-3-methylphenol | 59-50-7 | | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| acenaphthene | 83-32-9 | | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| 4-nitrophenol | 100-02-7 | | 0.17 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| 2,4-dinitrotoluene | 121-14-2 | | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| pentachlorophenol | 87-86-5 | | 0.17 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| pyrene | 129-00-0 | | 0.067 | J | ND | 1.1 | 0.4 | 0.54 | 3.5 | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| 2-nitrophenol | 88-75-5 | | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| 2,4-dimethylphenol | 105-67-9 | | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| 2,4-dichlorophenol | 120-83-2 | | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| 2,4,6-trichlorophenol | 88-06-2 | | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| 2,4-dinitrophenol | 51-28-5 | | 0.17 | J | ND | J | J | J | J | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| bis (2-chloroethyl) ether | 111-44-4 | | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| 1,3-dichlorobenzene | 541-73-1 | | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| 1,2-dichlorobenzene | 95-50-1 | | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| hexachloroethane | 67-72-1 | | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| nitrobenzene | 98-95-3 | | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| isophorone | 78-59-1 | | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| bis (2-chloroethoxy) methane | 111-91-1 | | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| naphthalene | 91-20-3 | | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| hexachlorobutadiene | 87-68-3 | | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| hexachlorocyclopentadiene | 77-47-4 | | 0.17 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| 2-chloronaphthalene | 91-58-7 | | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| acenaphthylene | 208-96-8 | | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| dimethyl phthalate | 131-11-3 | | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| fluorene | 86-73-7 | | 0.033 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| 4-chlorophenyl phenyl ether | 7005-72-3 | | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| diethyl phthalate | 84-66-2 | | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| N-nitrosodiphenylamine | 86-30-6 | | 0.067 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| 4-bromophenyl phenyl ether | 101-55-3 | | 0.1 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| hexachlorobenzene | 118-74-1 | | 0.1 | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| phenanthrene | 85-01-8 | | 0.033 | ND | ND | 0.063 | J | 0.068 | J | ND | ND | | ND | | ND | | ND | | ND | | ND | |
| anthracene | 120-12-7 | | 0.033 | ND | ND | 0.11 | J | 0.06 | J | ND | ND | | ND | | ND | | ND | | ND | | ND | |

Notes
Analytical method: SW-846 8270B
All results are reported on an "as received" basis in mg/kg.
All samples were collected from 0 - 12" depth interval.
(a) Sample SS-27 is a blind duplicate of sample SS-7.
J - Estimated value; in cases of ND, indicates MDL is estimated.
R - Unusable result; analyte may or may not be present in the sample.

Summary of Surface Soil Analytical Results
Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | MP&A Sample ID Lab Sample Number Date Collected | SS-11 2677435 3/13/97 | SS-6 2677436 3/13/97 | SS-8 2677439 3/13/97 | SS-9 2677440 3/13/97 | SS-4 2677441 3/13/97 | SS-10 2677442 3/13/97 | SS-7 2677443 3/13/97 | Method | |
|-------------------------------|------------|---|-----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------------------|----------------------------|--------------------|--------|
| | | | | | | | | | | Detection Limit | Result |
| di-n-butyl phthalate | 84-74-2 | | ND | ND | ND | ND | 0.049 | 0.11 | 0.046 | J | J |
| fluoranthene | 206-44-0 | | 0.12 | ND | 0.95 | 0.26 | 0.3 | 3.1 | ND | J | J |
| butyl benzyl phthalate | 85-68-7 | | ND | ND | ND | ND | ND | ND | ND | J | J |
| benzo (a) anthracene | 56-55-3 | | 0.067 | ND | 0.64 | 0.22 | 0.27 | 2.3 | ND | J | J |
| chrysene | 218-01-9 | | 0.11 | ND | 0.85 | 0.21 | 0.36 | 3.4 | ND | J | J |
| 3,3'-dichlorobenzidine | 91-94-1 | | ND | ND | ND | ND | ND | ND | ND | J | J |
| bis (2-ethylhexyl) phthalate | 117-81-7 | | ND | ND | ND | ND | ND | ND | ND | J | J |
| di-n-octyl phthalate | 117-84-0 | | ND | ND | ND | ND | ND | ND | ND | J | J |
| benzo (b) fluoranthene | 205-99-2 | | 0.18 | ND | 1.4 | 0.7 | 0.93 | 5.2 | ND | J | J |
| benzo (k) fluoranthene | 207-08-9 | | ND | ND | 0.53 | 0.25 | 0.34 | 2.3 | ND | J | J |
| benzo (a) pyrene | 50-32-8 | | 0.084 | ND | 0.65 | 0.33 | 0.21 | 2.4 | ND | J | J |
| indeno (1,2,3-cd) pyrene | 193-39-5 | | ND | ND | 0.54 | 0.23 | 0.3 | 2.1 | ND | J | J |
| dibenz (a,h) anthracene | 53-70-3 | | ND | ND | 0.15 | ND | 0.072 | 0.64 | ND | J | J |
| benzo (ghi) perylene | 191-24-2 | | ND | ND | 0.42 | 0.17 | 0.2 | 1.8 | ND | J | J |
| 2-methylphenol | 95-48-7 | | ND | ND | ND | ND | ND | ND | ND | J | J |
| 2,2'-oxybis (1-chloropropane) | 108-60-1 | | ND | ND | ND | ND | ND | ND | ND | J | J |
| 4-methylphenol | 106-44-5 | | ND | ND | ND | ND | ND | ND | ND | J | J |
| 4-chloroaniline | 106-47-8 | | ND | ND | ND | ND | ND | ND | ND | J | J |
| 2-methylnaphthalene | 91-57-6 | | ND | ND | ND | ND | ND | 0.16 | ND | J | J |
| 2,4,5-trichlorophenol | 95-95-4 | | ND | ND | ND | ND | ND | ND | ND | J | J |
| 2-nitroaniline | 88-74-4 | | ND | ND | ND | ND | ND | ND | ND | J | J |
| 3-nitroaniline | 99-09-2 | | ND | ND | ND | ND | ND | ND | ND | J | J |
| dibenzofuran | 132-64-9 | | ND | ND | ND | ND | ND | 0.098 | ND | J | J |
| 2,6-dinitrotoluene | 606-20-2 | | ND | ND | ND | ND | ND | ND | ND | J | J |
| 4-nitroaniline | 100-01-6 | | ND | ND | ND | ND | ND | ND | ND | J | J |
| 4,6-dinitro-2-methylphenol | 534-52-1 | | ND | ND | ND | ND | ND | ND | ND | J | J |
| carbazole | 86-74-8 | | ND | ND | 0.043 | ND | ND | 0.26 | ND | J | J |

Notes
Analytical method: SW-846 8270B
All results are reported on an "as received" basis in mg/kg.
All samples were collected from 0 - 12" depth interval.
(a) Sample SS-27 is a blind duplicate of sample SS-7.
J - Estimated value; in cases of ND, indicates MDL is estimated.
R - Unusable result; analyte may or may not be present in the sample.

Summary of Surface Soil Analytical Results
Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | Method Detection Limit | MP & A Sample ID Lab Sample Number Date Collected | SS-27 (a) 2677446 3/13/97 | SS-5 2677444 3/13/97 | SS-12 2677445 3/13/97 | SS-3 2677447 3/13/97 | SS-1 2678197 3/14/97 | SS-15 2678198 3/14/97 | SS-14 2678199 3/14/97 | Result | Notes | Result | Notes | Result | Notes | Result | Notes | | |
|------------------------------|------------|------------------------|---|---------------------------|----------------------|-----------------------|----------------------|----------------------|-----------------------|-----------------------|--------|-------|---------|-------|---------|-------|---------|-------|---------|--|
| TCL Semivolatiles | | | | | | | | | | | | | | | | | | | | |
| phenol | 108-95-2 | 0.033 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| 2-chlorophenol | 95-57-8 | 0.033 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| 1,4-dichlorobenzene | 106-46-7 | 0.033 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| N-nitrosodi-n-propylamine | 621-64-7 | 0.067 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| 1,2,4-trichlorobenzene | 120-82-1 | 0.033 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| 4-chloro-3-methylphenol | 59-50-7 | 0.067 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| acenaphthene | 83-32-9 | 0.033 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| 4-nitrophenol | 100-02-7 | 0.17 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| 2,4-dinitrotoluene | 121-14-2 | 0.067 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| pentachlorophenol | 87-86-5 | 0.17 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| pyrene | 129-00-0 | 0.067 | | ND | 0.098 J | 0.48 | 0.64 | 0.83 | 0.12 | 0.12 | | | 0.83 | | 0.12 | | 0.12 | | 0.12 | |
| 2-nitrophenol | 88-75-5 | 0.067 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| 2,4-dimethylphenol | 105-67-9 | 0.067 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| 2,4-dichlorophenol | 120-83-2 | 0.033 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| 2,4,6-trichlorophenol | 88-06-2 | 0.067 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| 2,4-dinitrophenol | 51-28-5 | 0.17 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| bis (2-chloroethyl) ether | 111-44-4 | 0.067 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| 1,3-dichlorobenzene | 541-73-1 | 0.033 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| 1,2-dichlorobenzene | 95-50-1 | 0.033 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| hexachlorocyclopentadiene | 67-72-1 | 0.067 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| nitrobenzene | 98-95-3 | 0.033 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| isophorone | 78-59-1 | 0.067 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| bis (2-chloroethoxy) methane | 111-91-1 | 0.033 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| naphthalene | 91-20-3 | 0.033 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| hexachlorobutadiene | 87-68-3 | 0.067 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| hexachlorocyclopentadiene | 77-47-4 | 0.17 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| 2-chloronaphthalene | 91-58-7 | 0.033 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| acenaphthylene | 208-96-8 | 0.033 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| dimethyl phthalate | 131-11-3 | 0.033 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| fluorene | 86-73-7 | 0.033 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| 4-chlorophenyl phenyl ether | 7005-72-3 | 0.067 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| diethyl phthalate | 84-66-2 | 0.067 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| N-nitrosodiphenylamine | 86-30-6 | 0.067 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| 4-bromophenyl phenyl ether | 101-55-3 | 0.1 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| hexachlorobenzene | 118-74-1 | 0.1 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |
| phenanthrene | 85-01-8 | 0.033 | | ND | ND | 0.087 J | 0.091 J | 0.067 J | 0.091 J | 0.041 J | | | 0.067 J | | 0.067 J | | 0.067 J | | 0.067 J | |
| anthracene | 120-12-7 | 0.033 | | ND | ND | ND | ND | ND | ND | ND | ND | | ND | | ND | | ND | | ND | |

Notes
Analytical method: SW-846 8270B
All results are reported on an "as received" basis in mg/kg.
All samples were collected from 0 - 12" depth interval.
(a) Sample SS-27 is a blind duplicate of sample SS-7.
J - Estimated value; in cases of ND, indicates MDL is estimated.
R - Unusable result; analyte may or may not be present in the sample.

Summary of Surface Soil Analytical Results
Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | MP & A Sample ID Lab Sample Number Date Collected | SS-27 (a) 2677446 3/13/97 | SS-5 2677444 3/13/97 | SS-12 2677445 3/13/97 | SS-3 2677447 3/13/97 | SS-1 2678197 3/14/97 | SS-15 2678198 3/14/97 | SS-14 2678199 3/14/97 | Result | Notes | Result | Notes | Result | Notes | Result | Notes | Result | Notes | |
|-------------------------------|------------|---|---------------------------------|----------------------------|-----------------------------|----------------------------|----------------------------|-----------------------------|-----------------------------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--|
| di-n-butyl phthalate | 84-74-2 | | 0.044 | J | 0.055 | J | 0.051 | J | 0.038 | J | 0.04 | J | 0.042 | J | | | | | | |
| fluoranthene | 206-44-0 | | ND | | 0.072 | J | 0.42 | | 0.48 | | 0.12 | J | ND | | | | | | | |
| butyl benzyl phthalate | 85-68-7 | | ND | | ND | | ND | | ND | | ND | | ND | | | | | | | |
| benzo (a) anthracene | 56-55-3 | | ND | | 0.044 | J | 0.4 | | 0.54 | | 0.056 | J | ND | | | | | | | |
| chrysene | 218-01-9 | | ND | | 0.078 | J | 0.62 | | 0.93 | | 0.11 | J | ND | | | | | | | |
| 3,3'-dichlorobenzidine | 91-94-1 | | ND | | ND | | ND | | ND | | ND | | ND | | | | | | | |
| bis (2-ethylhexyl) phthalate | 117-81-7 | | ND | | ND | | ND | | ND | | ND | | ND | | | | | | | |
| di-n-octyl phthalate | 117-84-0 | | ND | | ND | | ND | | ND | | ND | | ND | | | | | | | |
| benzo (b) fluoranthene | 205-99-2 | | ND | | 0.13 | J | 1.2 | | 2.2 | | 0.19 | J | ND | | | | | | | |
| benzo (k) fluoranthene | 207-08-9 | | ND | | ND | | 0.43 | | 0.65 | | ND | | ND | | | | | | | |
| benzo (a) pyrene | 50-32-8 | | ND | | ND | | 0.21 | | 0.41 | | ND | | ND | | | | | | | |
| indeno (1,2,3-cd) pyrene | 193-39-5 | | ND | | ND | | 0.25 | | 0.46 | | 0.086 | J | ND | | | | | | | |
| dibenz (a,h) anthracene | 53-70-3 | | ND | | ND | | 0.14 | | 0.16 | | ND | | ND | | | | | | | |
| benzo (ghi) perylene | 191-24-2 | | ND | | ND | | 0.2 | | 0.24 | | 0.08 | J | ND | | | | | | | |
| 2-methylphenol | 95-48-7 | | ND | | ND | | ND | | ND | | ND | | ND | | | | | | | |
| 2,2'-oxybis (1-chloropropane) | 108-60-1 | | ND | | ND | | ND | | ND | | ND | | ND | | | | | | | |
| 4-methylphenol | 106-44-5 | | ND | | ND | | ND | | ND | | ND | | ND | | | | | | | |
| 4-chloroaniline | 106-47-8 | | ND | | ND | | ND | | ND | | ND | | ND | | | | | | | |
| 2-methylnaphthalene | 91-57-6 | | ND | | ND | | ND | | ND | | ND | | ND | | | | | | | |
| 2,4,5-trichlorophenol | 95-95-4 | | ND | | ND | | ND | | ND | | ND | | ND | | | | | | | |
| 2-nitroaniline | 88-74-4 | | ND | | ND | | ND | | ND | | ND | | ND | | | | | | | |
| 3-nitroaniline | 99-09-2 | | ND | | ND | | ND | | ND | | ND | | ND | | | | | | | |
| dibenzofuran | 132-64-9 | | ND | | ND | | ND | | ND | | ND | | ND | | | | | | | |
| 2,6-dinitrotoluene | 606-20-2 | | ND | | ND | | ND | | ND | | ND | | ND | | | | | | | |
| 4-nitroaniline | 100-01-6 | | ND | | ND | | ND | | ND | | ND | | ND | | | | | | | |
| 4,6-dinitro-2-methylphenol | 534-52-1 | | ND | | ND | | ND | | ND | | ND | | ND | | | | | | | |
| carbazole | 86-74-8 | | ND | | ND | | ND | | ND | | ND | | ND | | | | | | | |

Notes

Analytical method: SW-846 8270B
All results are reported on an "as received" basis in mg/kg.
All samples were collected from 0 - 12" depth interval.
(a) Sample SS-27 is a blind duplicate of sample SS-7.
J - Estimated value; in cases of ND, indicates MDL is estimated.
R - Unusable result; analyte may or may not be present in the sample.

Summary of Surface Soil Analytical Results

Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | MP & A Sample ID Lab Sample Number Date Collected | Method Detection Limit | SS-13 | | SS-2 | | SS-17 | | SS-16 | |
|------------------------------|------------|---|------------------------------|--------|-------|--------|-------|--------|-------|--------|-------|
| | | | | Result | Notes | Result | Notes | Result | Notes | Result | Notes |
| TCL Semivolatiles | | | | | | | | | | | |
| phenol | 108-95-2 | | 0.033 | ND | | ND | | ND | | ND | |
| 2-chlorophenol | 95-57-8 | | 0.033 | ND | | ND | | ND | | ND | |
| 1,4-dichlorobenzene | 106-46-7 | | 0.033 | ND | | ND | | ND | | ND | |
| N-nitrosodi-n-propylamine | 621-64-7 | | 0.067 | ND | | ND | | ND | | ND | |
| 1,2,4-trichlorobenzene | 120-82-1 | | 0.033 | ND | | ND | | ND | | ND | |
| 4-chloro-3-methylphenol | 59-50-7 | | 0.067 | ND | | ND | | ND | | ND | |
| acenaphthene | 83-32-9 | | 0.033 | 0.047 | J | ND | | ND | | ND | |
| 4-nitrophenol | 100-02-7 | | 0.17 | ND | | ND | | ND | | ND | |
| 2,4-dinitrotoluene | 121-14-2 | | 0.067 | ND | | ND | | ND | | ND | |
| pentachlorophenol | 87-86-5 | | 0.17 | ND | | ND | | ND | | ND | |
| pyrene | 129-00-0 | | 1.8 | 2.4 | | 0.2 | J | 1 | | 0.95 | |
| 2-nitrophenol | 88-75-5 | | 0.067 | ND | | ND | | ND | | ND | |
| 2,4-dimethylphenol | 105-67-9 | | 0.067 | ND | | ND | | ND | | ND | |
| 2,4-dichlorophenol | 120-83-2 | | 0.033 | ND | | ND | | ND | | ND | |
| 2,4,6-trichlorophenol | 88-06-2 | | 0.067 | ND | | ND | | ND | | ND | |
| 2,4-dinitrophenol | 51-28-5 | | 0.17 | ND | | ND | | ND | | ND | |
| bis (2-chloroethyl) ether | 111-44-4 | | 0.067 | ND | | ND | | ND | | ND | |
| 1,3-dichlorobenzene | 541-73-1 | | 0.033 | ND | | ND | | ND | | ND | |
| 1,2-dichlorobenzene | 95-50-1 | | 0.033 | ND | | ND | | ND | | ND | |
| hexachloroethane | 67-72-1 | | 0.067 | ND | | ND | | ND | | ND | |
| nitrobenzene | 98-95-3 | | 0.033 | ND | | ND | | ND | | ND | |
| isophorone | 78-59-1 | | 0.067 | ND | | ND | | ND | | ND | |
| bis (2-chloroethoxy) methane | 111-91-1 | | 0.033 | ND | | ND | | ND | | ND | |
| naphthalene | 91-20-3 | | 0.033 | 0.047 | J | ND | | ND | | 0.16 | J |
| hexachlorobutadiene | 87-68-3 | | 0.067 | ND | | ND | | ND | | ND | |
| hexachlorocyclopentadiene | 77-47-4 | | 0.17 | ND | | ND | | ND | | ND | |
| 2-chloronaphthalene | 91-58-7 | | 0.033 | ND | | ND | | ND | | ND | |
| acenaphthylene | 208-96-8 | | 0.033 | 0.088 | J | ND | | ND | | 0.17 | J |
| dimethyl phthalate | 131-11-3 | | 0.033 | ND | | ND | | ND | | ND | |
| fluorene | 86-73-7 | | 0.033 | ND | | ND | | ND | | ND | |
| 4-chlorophenyl phenyl ether | 7005-72-3 | | 0.067 | 0.088 | J | ND | | ND | | ND | |
| diethyl phthalate | 84-66-2 | | 0.067 | ND | | ND | | ND | | ND | |
| N-nitrosodiphenylamine | 86-30-6 | | 0.067 | 0.082 | J | ND | | ND | | ND | |
| 4-bromophenyl phenyl ether | 101-55-3 | | 0.1 | ND | | ND | | ND | | ND | |
| hexachlorobenzene | 118-74-1 | | 0.1 | ND | | ND | | ND | | ND | |
| phenanthrene | 85-01-8 | | 0.033 | 0.17 | J | 1.3 | J | 0.037 | J | 0.25 | J |
| anthracene | 120-12-7 | | 0.033 | 0.12 | J | 0.22 | J | 0.12 | J | 0.17 | J |

Notes

Analytical method: SW-846 8270B

All results are reported on an "as received" basis in mg/kg.

All samples were collected from 0 - 12" depth interval.

(a) Sample SS-27 is a blind duplicate of sample SS-7.

J - Estimated value; in cases of ND, indicates MDL is estimated.

R - Unusable result; analyte may or may not be present in the sample.

Page 4-5
Summary of Surface Soil Analytical Results
Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Parameter | CAS Number | MP&A Sample ID Lab Sample Number Date Collected | SS-13 2678200 3/14/97 | SS-18 2678201 3/14/97 | SS-2 2678202 3/14/97 | SS-17 2678203 3/14/97 | SS-16 2678204 3/14/97 | Method | |
|-------------------------------|------------|---|-----------------------------|-----------------------------|----------------------------|-----------------------------|-----------------------------|--------------------|-------|
| | | | | | | | | Detection Limit | Notes |
| di-n-butyl phthalate | 84-74-2 | | 0.036 | J | 0.059 | 0.099 | 0.11 | J | J |
| fluoranthene | 206-44-0 | | 1.4 | | 0.066 | 0.68 | 0.78 | | |
| butyl benzyl phthalate | 85-68-7 | | ND | | ND | ND | ND | | |
| benzo (a) anthracene | 56-55-3 | | 1.1 | | 0.041 | 0.54 | 0.49 | | |
| chrysene | 218-01-9 | | 1.7 | | 0.062 | 0.8 | 0.87 | | |
| 3,3'-dichlorobenzidine | 91-94-1 | | ND | | ND | ND | ND | | |
| bis (2-ethylhexyl) phthalate | 117-81-7 | | ND | J | ND | ND | ND | | |
| di-n-octyl phthalate | 117-84-0 | | ND | | ND | ND | ND | | |
| benzo (b) fluoranthene | 205-99-2 | | 3.9 | | 0.11 | 1.2 | 1.4 | | |
| benzo (k) fluoranthene | 207-08-9 | | 1.2 | | ND | 0.47 | 0.49 | | |
| benzo (a) pyrene | 50-32-8 | | 1.4 | | 0.22 | 0.56 | 0.71 | | |
| indeno (1,2,3-cd) pyrene | 193-39-5 | | 0.95 | | 0.096 | 0.47 | 0.6 | | J |
| dibenz (a,h) anthracene | 53-70-3 | | 0.28 | J | ND | 0.14 | 0.16 | | |
| benzo (ghi) perylene | 191-24-2 | | 0.7 | | 0.74 | 0.68 | 1.2 | | |
| 2-methylphenol | 95-48-7 | | ND | | ND | ND | ND | | |
| 2,2'-oxybis (1-chloropropane) | 108-60-1 | | ND | | ND | ND | ND | | |
| 4-methylphenol | 106-44-5 | | ND | | ND | ND | ND | | |
| 4-chloroaniline | 106-47-8 | | ND | | ND | ND | ND | | |
| 2-methylnaphthalene | 91-57-6 | | ND | | ND | ND | 0.23 | | J |
| 2,4,5-trichlorophenol | 95-95-4 | | ND | | ND | ND | ND | | |
| 2-nitroaniline | 88-74-4 | | ND | | ND | ND | ND | | |
| 3-nitroaniline | 99-09-2 | | ND | | ND | ND | ND | | |
| dibenzofuran | 132-64-9 | | ND | | ND | 0.036 | 0.093 | | J |
| 2,6-dinitrotoluene | 606-20-2 | | ND | | ND | ND | ND | | |
| 4-nitroaniline | 100-01-6 | | ND | | ND | ND | ND | | |
| 4,6-dinitro-2-methylphenol | 534-52-1 | | ND | | ND | ND | ND | | |
| carbazole | 86-74-8 | | 0.061 | J | ND | 0.046 | 0.11 | | J |

Notes
Analytical method: SW-846 8270B
All results are reported on an "as received" basis in mg/kg.
All samples were collected from 0 - 12" depth interval.
(a) Sample SS-27 is a blind duplicate of sample SS-7.
J - Estimated value; in cases of ND, indicates MDL is estimated.
R - Unusable result; analyte may or may not be present in the sample.

TABLE 4-1
SOIL SAMPLE DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION

Gulf Coast Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Registry Number | Units | Sample Identifier | | | | | | | | | | | | | | | |
|--|---------------------|-------|-------------------|-------|--------------------------------|-------|-------------|-------|-------------|-------|---------------------------------|---|--------------------|---|-------------|--|-------------|--|
| | | | (2-3) | (5-6) | (5-6) Duplicate ^(a) | (2-3) | (5-6) | (0-1) | (2-3) | (5-6) | | | | | | | | |
| TCL Semivolatile Organics ^(b) | | | | | | | | | | | | | | | | | | |
| 1,2-dichlorobenzene | 120-128-1 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| 1,2-dichlorobenzene | 95-50-1 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| 1,3-dichlorobenzene | 541-72-1 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| 1,4-dichlorobenzene | 106-46-7 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| 2,2'-oxybis (1-chlorophenyl) | 108-60-1 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| 2,4-dinitrophenol | 95-95-4 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| 2,4,6-trichlorophenol | 88-06-2 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| 2,4-dichlorophenol | 120-83-2 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| 2,4-dinitrophenol | 109-67-9 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| 2,4-dinitrophenol | 51-28-5 | mg/kg | ND (0.21) | U | ND (0.22) | U | ND (0.22) | U | ND (0.22) | U | ND (0.23) | U | ND (0.22) | U | | | | |
| 2,4-dinitrophenol | 121-14-2 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| 2,6-dinitrophenol | 606-20-2 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| 2-chlorophenol | 91-98-7 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| 2-chlorophenol | 95-57-8 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| 2-methylphenol | 91-57-6 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| 2-methylphenol | 95-48-7 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| 2-pyroualine | 88-74-4 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| 2-nitrophenol | 88-75-5 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| 3,3-dichlorobenzidine | 91-94-1 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| 3- and 4-methylphenol | 106-44-5 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| 3-nitroaniline | 59-09-2 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| 4,6-dinitro-2-methylphenol | 54-58-1 | mg/kg | ND (0.18) | U | ND (0.19) | U | ND (0.19) | U | ND (0.19) | U | ND (0.2) | U | ND (0.19) | U | | | | |
| 4-bromophenyl phenyl ether | 101-55-3 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| 4-chloro-3-methylphenol | 59-50-7 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| 4-chlorophenyl phenyl ether | 106-47-8 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| 4-chlorophenyl phenyl ether | 7005-72-3 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| 4-nitroaniline | 100-01-6 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| 4-nitrophenol | 100-02-7 | mg/kg | ND (0.18) | U | ND (0.19) | U | ND (0.19) | U | ND (0.18) | U | ND (0.2) | U | ND (0.19) | U | | | | |
| acetanaphthene | 83-32-9 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| acetanaphthylene | 208-96-8 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| anthracene | 120-12-7 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| benzo (a) anthracene | 56-55-3 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| benzo (a) pyrene | 50-32-8 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| benzo (b) fluoranthene | 205-99-2 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| benzo (ghi) perylene | 191-24-2 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| benzo (k) fluoranthene | 207-08-9 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| bis (2-chloroethoxy) methane | 111-91-1 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| bis (2-chloroethyl) ether | 111-44-4 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| bis (2-ethylhexyl) phthalate | 117-81-7 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | 0.37 (0.076) J (d) | | | | | |
| butyl benzyl phthalate | 85-68-7 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| carbazole | 86-74-8 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| chrysene | 218-01-9 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| di-n-butyl phthalate | 84-74-2 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| di-n-octyl phthalate | 117-84-0 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| dibenz (ah) anthracene | 53-70-3 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| dibenzofuran | 152-64-9 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| diethyl phthalate | 84-66-2 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| dimehyl phthalate | 131-11-3 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| fluorene | 206-64-9 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| fluorene | 86-73-7 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| hexachlorobenzene | 118-74-1 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| hexachlorobutadiene | 87-68-3 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| hexachlorocyclopentadiene | 77-47-4 | mg/kg | ND (0.18) | U | ND (0.19) | U | ND (0.19) | U | ND (0.18) | U | ND (0.2) | U | ND (0.19) | U | | | | |
| hexachloroethane | 57-72-1 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| indeno (1,2,3-cd) pyrene | 193-39-5 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| isochlorone | 78-59-1 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| N-nitrosodi-n-propylamine | 621-64-7 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| N-nitrosodiphenylamine | 86-30-6 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| naphthalene | 91-20-3 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| nitrobenzene | 98-95-3 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| perchlorophenol | 87-86-5 | mg/kg | ND (0.18) | U | ND (0.19) | U | ND (0.19) | U | ND (0.18) | U | ND (0.2) | U | ND (0.19) | U | | | | |
| phenanthrene | 85-01-8 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| phenol | 108-95-2 | mg/kg | ND (0.073) | U | ND (0.075) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) | U | ND (0.076) | U | | | | |
| pyrene | 129-00-0 | mg/kg | ND (0.037) | U | ND (0.037) | U | ND (0.038) | U | ND (0.038) | U | ND (0.039) | U | ND (0.038) | U | | | | |
| Other Parameters | | | | | | | | | | | Moisture Content ^(c) | | | | | | | |
| N.A. | | | wt. % | | 9.02 (0.1) | | 10.8 (0.08) | | 11.9 (0.08) | | 11.7 (0.08) | | 12.8 (0.08) | | 14.8 (0.08) | | 12.5 (0.08) | |

NOTES:

ND denotes "Not Detected" at method detection limit shown in parentheses.
(a) Listed on chain-of-custody documentation as sample GEO-347-3.
(b) Target Compound List (TCL) base neutral/acid-extractable organic compounds by EPA SW-846 method 8270, reported as dry-weight concentrations.

(c) EPA method 160.3 (Methods for Chemical Analysis of Water and Wastes, March 1983).
(d) Low concentrations of this common laboratory contaminant warrant caution if this value is used as basis for environmental risk assessment or other decision-making process.

U qualifier denotes not detected.
J qualifier denotes quantification is estimated due to limitations identified during the data validation quality assurance review.

UJ qualifier denotes that the compound was not detected, but the quantitation limit may or may not be higher than the value shown in parentheses due to a bias identified during the data validation quality assurance review.

TABLE 4-1
(Continued)

SOIL SAMPLE DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION

Gulf Coast Crocoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Registry Number | Units | Sample Identifier | | | (a) | | | |
|---|---------------------|-------|-------------------|------------------|------------------|-------------|---------------------|-------------|-------------|
| | | | GEO-16 (2' - 3') | GEO-16 (5' - 6') | GEO-17 (5' - 6') | | (5' - 6') Duplicate | | |
| <i>TCL Semivolatile Organics</i> ^(b) | | | | | | | | | |
| 1,2,4-trichlorobenzene | 120-82-1 | mg/kg | ND (0.038) | U | ND (0.038) | U | ND (0.038) | U | |
| 1,2-dichlorobenzene | 95-50-1 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| 1,3-dichlorobenzene | 541-73-1 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| 1,4-dichlorobenzene | 106-46-7 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| 2,2-dichloropropane | 108-60-1 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| 2,4,5-trichlorophenol | 95-95-4 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| 2,4,6-trichlorophenol | 88-06-2 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| 2,4-dichlorophenol | 120-83-2 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| 2,4-dimethylphenol | 105-67-9 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| 2,4-dinitrophenol | 51-28-5 | mg/kg | ND (0.22) | UJ | ND (0.23) | UJ | ND (0.22) | UJ | |
| 2,4-dinitrotoluene | 121-14-2 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| 2,6-dinitrotoluene | 606-20-2 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| 2-chloronaphthalene | 91-58-7 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| 2-chlorophenol | 95-57-8 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| 2-methylnaphthalene | 91-57-6 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| 2-methylphenol | 95-48-7 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| 2-nitroaniline | 88-74-4 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| 2-nitrophenol | 88-75-5 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| 3,3-dichlorobenzidine | 91-94-1 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| 3- and 4-methylphenol | 106-44-5 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| 3-nitroaniline | 99-09-2 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| 4,6-dinitro-2-methylphenol | 534-52-1 | mg/kg | ND (0.19) | UJ | ND (0.2) | UJ | ND (0.19) | UJ | |
| 4-bromophenyl phenyl ether | 101-55-3 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| 4-chloro-3-methylphenol | 59-50-7 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| 4-chloroaniline | 106-47-8 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| 4-chlorophenyl phenyl ether | 700-572-3 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| 4-nitroaniline | 100-01-6 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| 4-nitrophenol | 100-02-7 | mg/kg | ND (0.19) | U | ND (0.2) | U | ND (0.19) | U | |
| acenaphthene | 83-32-9 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| acenaphthylene | 208-96-8 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| anthracene | 120-12-7 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| benzo (a) anthracene | 56-55-3 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| benzo (a) pyrene | 50-32-8 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| benzo (b) fluoranthene | 205-99-2 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| benzo (ghi) perylene | 191-24-2 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| benzo (k) fluoranthene | 207-08-9 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| bis (2-chloroethoxy) methane | 111-91-1 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| bis (2-chloroethyl) ether | 111-44-4 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| bis (2-ethylhexyl) phthalate | 117-81-7 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| butyl benzyl phthalate | 85-68-7 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| carbazole | 86-74-8 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| chrysene | 218-01-9 | mg/kg | ND (0.038) | UJ | ND (0.04) | UJ | ND (0.037) | UJ | |
| di-n-butyl phthalate | 84-74-2 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| di-n-octyl phthalate | 117-84-0 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| dibenz (a,h) anthracene | 53-70-3 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| dibenzofuran | 132-64-9 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| diethyl phthalate | 84-66-2 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| dimethyl phthalate | 131-11-3 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| fluoranthene | 206-44-0 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| fluorene | 86-73-7 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| hexachlorobenzene | 118-74-1 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| hexachlorobutadiene | 87-68-3 | mg/kg | ND (0.076) | U | ND (0.079) | U | ND (0.075) | U | |
| hexachlorocyclopentadiene | 77-47-4 | mg/kg | ND (0.19) | U | ND (0.2) | U | ND (0.19) | U | |
| hexachloroethane | 67-72-1 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| indeno (1,2,3-cd) pyrene | 193-39-5 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| isophorone | 78-59-1 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| N-nitrosodipropylamine | 621-64-7 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| N-nitrosodiphenylamine | 86-30-6 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| naphthalene | 91-20-3 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| nitrobenzene | 98-95-3 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| pentachlorophenol | 87-86-5 | mg/kg | ND (0.19) | U | ND (0.2) | U | ND (0.19) | U | |
| phenanthrene | 85-01-8 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| phenol | 108-95-2 | mg/kg | ND (0.076) | U | ND (0.079) | U | 0.096 (0.075) | J | |
| pyrene | 129-00-0 | mg/kg | ND (0.038) | U | ND (0.04) | U | ND (0.037) | U | |
| <i>Other Parameters</i> | | | | | | | | | |
| Moisture Content ^(c) | | | N.A. | wt % | 12.3 (0.08) | 15.7 (0.08) | 11.0 (0.08) | 13.2 (0.08) | 11.6 (0.08) |

NOTES:

ND denotes "Not Detected" at method detection limit shown in parentheses.

(a) Listed on chain-of-custody documentation as sample GEO-34/5-6.

(b) Target Compound List (TCL) base neutral/acid-extractable organic compounds by EPA SW-846 method 8270, reported as dry-weight concentrations.

(c) EPA method 160.3 (*Methods for Chemical Analysis of Water and Wastes*, March 1983).

U qualifier denotes not detected.

J qualifier denotes quantitation is estimated due to limitations identified during the data validation quality assurance review.

UJ qualifier denotes that the compound was not detected, but the quantitation limit may or may not be higher than the value shown in parentheses due to a bias identified during the data validation quality assurance review.

R qualifier denotes unusable result identified during data validation quality assurance review; compound may or may not be present in the sample.

TABLE 4-1
(Continued)

SOIL SAMPLE DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION

Gulf Coast Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Registry Number | Units | GEO-18 | | GEO-19 | |
|---|---------------------|-------|-------------|-------------|---------------|-------------|
| | | | (2 - 3) | (5 - 6) | (0 - 1) | (2 - 3) |
| <i>TCL Semivolatile Organics</i> ^(a) | | | | | | |
| 1,2,4-trichlorobenzene | 120-82-1 | mg/kg | ND (0.038) | U | ND (0.037) | U |
| 1,2-dichlorobenzene | 95-50-1 | mg/kg | ND (0.038) | U | ND (0.037) | U |
| 1,3-dichlorobenzene | 541-73-1 | mg/kg | ND (0.038) | U | ND (0.037) | U |
| 1,4-dichlorobenzene | 106-46-7 | mg/kg | ND (0.038) | U | ND (0.037) | U |
| 2,2'-oxybis(1-chloropropane) | 108-60-1 | mg/kg | ND (0.038) | U | ND (0.037) | U |
| 2,4,5-trichlorophenol | 95-95-4 | mg/kg | ND (0.076) | U | ND (0.074) | U |
| 2,4,6-trichlorophenol | 88-06-2 | mg/kg | ND (0.076) | U | ND (0.074) | U |
| 2,4-dichlorophenol | 120-83-2 | mg/kg | ND (0.076) | U | ND (0.074) | U |
| 2,4-dimethylphenol | 105-67-9 | mg/kg | ND (0.076) | U | 0.25 (0.074) | J |
| 2,4-dinitrophenol | 51-28-5 | mg/kg | ND (0.22) | UJ | ND (0.22) | U |
| 2,4-dinitrotoluene | 121-14-2 | mg/kg | ND (0.076) | U | ND (0.074) | U |
| 2,6-dinitrotoluene | 606-20-2 | mg/kg | ND (0.038) | U | ND (0.037) | U |
| 2-chloronaphthalene | 91-58-7 | mg/kg | ND (0.038) | U | ND (0.037) | U |
| 2-chlorophenol | 95-57-8 | mg/kg | ND (0.038) | U | ND (0.037) | U |
| 2-methylnaphthalene | 91-57-6 | mg/kg | ND (0.038) | U | 0.53 (0.037) | J |
| 2-methylphenol | 95-48-7 | mg/kg | ND (0.038) | U | 0.073 (0.037) | J |
| 2-nitroaniline | 88-74-4 | mg/kg | ND (0.038) | U | ND (0.037) | U |
| 2-nitrophenol | 88-75-5 | mg/kg | ND (0.076) | U | ND (0.074) | U |
| 3,3'-dichlorobenzidine | 91-94-1 | mg/kg | ND (0.076) | U | ND (0.074) | U |
| 3- and 4-methylphenol | 106-44-5 | mg/kg | ND (0.076) | U | 0.21 (0.074) | J |
| 3-nitroaniline | 99-09-2 | mg/kg | ND (0.076) | U | ND (0.074) | U |
| 4,6-dinitro-2-methylphenol | 534-52-1 | mg/kg | ND (0.19) | UJ | ND (0.18) | U |
| 4-bromophenyl phenyl ether | 101-55-3 | mg/kg | ND (0.076) | U | ND (0.074) | U |
| 4-chloro-3-methylphenol | 59-50-7 | mg/kg | ND (0.076) | U | ND (0.074) | U |
| 4-chloroaniline | 106-47-8 | mg/kg | ND (0.038) | U | ND (0.037) | U |
| 4-chlorophenyl phenyl ether | 7005-72-3 | mg/kg | ND (0.038) | U | ND (0.037) | U |
| 4-nitroaniline | 100-01-6 | mg/kg | ND (0.076) | U | ND (0.074) | U |
| 4-nitrophenol | 100-02-7 | mg/kg | ND (0.19) | U | ND (0.18) | U |
| acenaphthene | 83-32-9 | mg/kg | ND (0.038) | U | 1 (0.037) | J |
| acenaphthylene | 208-96-8 | mg/kg | ND (0.038) | U | 0.69 (0.037) | J |
| anthracene | 120-12-7 | mg/kg | ND (0.038) | U | 1.6 (0.037) | J |
| benzo (a) anthracene | 56-55-3 | mg/kg | ND (0.038) | U | 25 (0.37) | J |
| benzo (a) pyrene | 50-32-8 | mg/kg | ND (0.038) | U | 63 (1.1) | J |
| benzo (b) fluoranthene | 205-99-2 | mg/kg | ND (0.038) | U | 56 (0.37) | J |
| benzo (ghi) perylene | 191-24-2 | mg/kg | ND (0.038) | U | 93 (1.1) | J |
| benzo (k) fluoranthene | 207-08-9 | mg/kg | ND (0.038) | U | 24 (0.37) | J |
| bis (2-chloroethoxy) methane | 111-91-1 | mg/kg | ND (0.076) | U | 32 (0.37) | J |
| bis (2-ethylhexyl) ether | 111-44-4 | mg/kg | ND (0.038) | U | ND (0.074) | U |
| butyl benzyl phthalate | 117-81-7 | mg/kg | ND (0.076) | U | ND (0.074) | U |
| carbazole | 86-74-8 | mg/kg | ND (0.038) | UJ | 0.4 (0.037) | J |
| chrysene | 218-01-9 | mg/kg | ND (0.038) | UJ | 3.3 (0.037) | J |
| di-n-butyl phthalate | 84-74-2 | mg/kg | ND (0.076) | U | ND (0.074) | U |
| di-n-octyl phthalate | 117-84-0 | mg/kg | ND (0.076) | U | ND (0.074) | U |
| dibenz (a,h) anthracene | 53-70-3 | mg/kg | ND (0.038) | U | ND (0.037) | U |
| dibenzofuran | 132-64-9 | mg/kg | ND (0.038) | U | 8.4 (0.37) | J |
| diethyl phthalate | 84-66-2 | mg/kg | ND (0.076) | U | 0.75 (0.037) | J |
| dimethyl phthalate | 131-11-3 | mg/kg | ND (0.076) | U | ND (0.074) | U |
| fluoranthene | 206-44-0 | mg/kg | ND (0.038) | U | ND (0.074) | U |
| fluorene | 86-73-7 | mg/kg | ND (0.038) | U | 110 (1.1) | J |
| hexachlorobenzene | 118-74-1 | mg/kg | ND (0.038) | U | 1.4 (0.037) | J |
| hexachlorobutadiene | 87-68-3 | mg/kg | ND (0.076) | U | ND (0.037) | U |
| hexachlorocyclopentadiene | 77-47-4 | mg/kg | ND (0.19) | U | ND (0.18) | U |
| hexachloroethane | 67-72-1 | mg/kg | ND (0.038) | U | ND (0.037) | U |
| indeno (1,2,3-cd) pyrene | 193-39-5 | mg/kg | ND (0.038) | U | 1.3 (0.037) | J |
| isophorone | 78-59-1 | mg/kg | ND (0.038) | U | ND (0.037) | U |
| N-nitrosodi-n-propylamine | 621-64-7 | mg/kg | ND (0.038) | U | ND (0.037) | U |
| N-nitrosodiphenylamine | 86-30-6 | mg/kg | ND (0.038) | U | ND (0.037) | U |
| naphthalene | 91-20-3 | mg/kg | ND (0.038) | U | 0.77 (0.037) | J |
| nitrobenzene | 98-95-3 | mg/kg | ND (0.038) | U | ND (0.037) | U |
| pentachlorophenol | 87-86-5 | mg/kg | ND (0.19) | U | ND (0.18) | U |
| phenanthrene | 85-01-8 | mg/kg | ND (0.038) | U | 7.7 (0.37) | J |
| phenol | 108-95-2 | mg/kg | ND (0.076) | J | ND (0.074) | U |
| pyrene | 129-00-0 | mg/kg | ND (0.038) | U | 140 (1.1) | J |
| <i>Other Parameters</i> | | | | | | |
| Moisture Content ^(b) | N.A. | wt. % | 11.8 (0.08) | 9.64 (0.08) | 8.97 (0.08) | 11.3 (0.08) |

NOTES:

ND denotes "Not Detected" at method detection limit shown in parentheses.

(a) Target Compound List (TCL) base neutral/acid-extractable organic compounds by EPA SW-846 method 8270, reported as dry-weight concentrations.

(b) EPA method 160.3 (Methods for Chemical Analysis of Water and Wastes, March 1983).

U qualifier denotes not detected.

J qualifier denotes quantitation is estimated due to limitations identified during the data validation quality assurance review.

UJ qualifier denotes that the compound was not detected, but the quantitation limit may or may not be higher than the value shown in parentheses due to a bias identified during the data validation quality assurance review.

TABLE 4-1
(Continued)
SOIL SAMPLE DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION

Gulf Coast Crenshaw Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Registry Number | Units | Sample Identifier | | | | | | | | | | |
|--|---------------------|-------|-------------------|-------------|--------------|-------------|-------------|-------------|-------------|---------------|-------------|--------------|---------------|
| | | | (0-1) | (2-3) | (5-6) | (9-10) | (0-1) | (2-3) | | | | | |
| VCL Semivolatile Organics ^(a) | | | | | | | | | | | | | |
| 1,2,4-trichlorobenzene | 120-82-1 | mg/kg | ND (0.2) | ND (0.04) | U | ND (0.19) | ND (0.037) | U | ND (2.6) | ND (0.038) | U | ND (0.04) | U |
| 1,2-dichlorobenzene | 95-50-1 | mg/kg | ND (0.2) | ND (0.04) | U | ND (0.19) | ND (0.037) | U | ND (5) | ND (0.038) | U | ND (0.04) | U |
| 1,3-dichlorobenzene | 541-73-1 | mg/kg | ND (0.2) | ND (0.04) | U | ND (0.19) | ND (0.037) | U | ND (5) | ND (0.038) | U | ND (0.04) | U |
| 1,4-dichlorobenzene | 106-46-7 | mg/kg | ND (0.2) | ND (0.04) | U | ND (0.19) | ND (0.037) | U | ND (5) | ND (0.038) | U | ND (0.04) | U |
| 2,4-dichlorophenoxy | 108-60-1 | mg/kg | ND (0.2) | ND (0.04) | U | ND (0.19) | ND (0.037) | U | ND (5) | ND (0.038) | U | ND (0.04) | U |
| 2,4,5-trichlorophenoxy | 95-95-4 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | ND (0.077) | U | ND (0.08) | U |
| 2,4,6-trichlorophenol | 88-06-2 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | ND (0.077) | U | ND (0.08) | U |
| 2,4-dichlorophenol | 120-83-2 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | ND (0.077) | U | ND (0.08) | U |
| 2,4-dinitrophenol | 105-67-9 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | 0.079 (0.077) | J | 0.22 (0.08) | J |
| 2,4-dinitrophenol | 51-28-5 | mg/kg | ND (1.2) | ND (0.23) | U | ND (1.1) | ND (0.22) | U | ND (29) | ND (0.22) | U | ND (0.23) | U |
| 2,4-dinitrophenol | 121-14-2 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | ND (0.077) | U | ND (0.08) | U |
| 2,6-dinitrophenol | 606-20-2 | mg/kg | ND (0.2) | ND (0.04) | U | ND (0.19) | ND (0.037) | U | ND (5) | ND (0.038) | U | ND (0.04) | U |
| 2-chlorophenol | 91-58-7 | mg/kg | ND (0.2) | ND (0.04) | U | ND (0.19) | ND (0.037) | U | ND (5) | ND (0.038) | U | ND (0.04) | U |
| 2-chlorophenol | 95-57-8 | mg/kg | ND (0.2) | ND (0.04) | U | ND (0.19) | ND (0.037) | U | ND (5) | ND (0.038) | U | ND (0.04) | U |
| 2-methylphenol | 91-57-6 | mg/kg | 0.27 (0.2) | J | ND (0.04) | U | 1.20 (1.9) | J | 63 (1.9) | 280 (5) | J | 1500 (26) | J |
| 2-methylphenol | 95-48-7 | mg/kg | ND (0.2) | ND (0.04) | U | ND (0.19) | ND (0.037) | U | ND (5) | ND (0.038) | U | 0.44 (0.04) | J |
| 2-nitrophenol | 88-74-1 | mg/kg | ND (0.2) | ND (0.04) | U | ND (0.19) | ND (0.037) | U | ND (5) | ND (0.038) | U | 0.051 (0.04) | J |
| 2-nitrophenol | 88-75-5 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | ND (0.077) | U | ND (0.08) | U |
| 3,4-dichlorobenzidine | 91-94-1 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | ND (0.077) | U | ND (0.08) | U |
| 3- and 4-methylphenol | 106-44-5 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | ND (0.077) | U | ND (0.08) | U |
| 3-nitrophenol | 99-09-2 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | ND (0.077) | U | ND (0.08) | U |
| 3,6-dichloro-2-nitrophenol | 534-50-1 | mg/kg | ND (1) | ND (0.2) | U | ND (0.95) | ND (0.19) | U | ND (25) | ND (0.19) | U | ND (0.2) | U |
| 4-bromophenyl phenyl ether | 101-55-3 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | ND (0.077) | U | ND (0.08) | U |
| 4-chloro-3-methylphenol | 59-50-7 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | ND (0.077) | U | ND (0.08) | U |
| 4-chlorophenol | 106-47-8 | mg/kg | ND (0.2) | ND (0.04) | U | ND (0.19) | ND (0.037) | U | ND (5) | ND (0.038) | U | ND (0.04) | U |
| 4-chlorophenyl phenyl ether | 700572-3 | mg/kg | ND (0.2) | ND (0.04) | U | ND (0.19) | ND (0.037) | U | ND (5) | ND (0.038) | U | ND (0.04) | U |
| 4-nitroaniline | 100-01-6 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | ND (0.077) | U | ND (0.08) | U |
| 4-nitrophenol | 100-02-7 | mg/kg | ND (1) | ND (0.2) | U | ND (0.95) | ND (0.19) | U | ND (25) | ND (0.19) | U | ND (0.2) | U |
| acetophenone | 83-32-9 | mg/kg | ND (0.2) | ND (0.04) | U | 100 (1.9) | J | 190 (5) | 1200 (26) | J | 0.2 (0.08) | J | 0.47 (0.04) |
| acetophenone | 208-96-8 | mg/kg | 1.6 (0.2) | J | ND (0.04) | U | 2.9 (0.19) | J | 47 (5) | J | 50 (2.6) | J | ND (0.04) |
| anthracene | 120-12-7 | mg/kg | 2.1 (0.2) | J | ND (0.04) | U | 43 (1.9) | J | 760 (9.9) | J | 1800 (26) | J | 0.39 (0.04) |
| benzo (a) anthracene | 56-55-3 | mg/kg | 3.2 (0.2) | J | 0.04 (0.04) | J | 30 (0.19) | J | 15 (1.9) | J | 280 (5) | J | 0.16 (0.038) |
| benzo (a) pyrene | 50-32-8 | mg/kg | 3.2 (0.2) | J | 0.079 (0.04) | J | 11 (0.19) | J | 52 (1.9) | J | 190 (2.6) | J | 0.079 (0.038) |
| benzo (b) fluoranthene | 205-99-2 | mg/kg | 5.6 (0.2) | J | 0.067 (0.04) | J | 17 (0.19) | J | 78 (1.9) | J | 270 (2.6) | J | 0.11 (0.04) |
| benzo (ghi) perylene | 191-24-2 | mg/kg | 2.7 (0.2) | J | 0.045 (0.04) | J | 2.5 (0.19) | J | 1.5 (0.37) | J | 90 (5) | J | ND (0.04) |
| benzo (k) fluoranthene | 207-08-9 | mg/kg | 1.8 (0.2) | J | ND (0.04) | U | 6 (0.19) | J | 3.7 (0.37) | J | 160 (5) | J | 0.051 (0.04) |
| bis (2-chlorophenoxy) methane | 131-91-1 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | ND (0.077) | U | ND (0.08) | U |
| bis (2-chlorophenoxy) ether | 131-44-4 | mg/kg | ND (0.2) | ND (0.04) | U | ND (0.19) | ND (0.037) | U | ND (5) | ND (0.038) | U | ND (0.04) | U |
| butyl benzyl phthalate | 85-68-7 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | ND (0.077) | U | ND (0.08) | U |
| butyl benzyl phthalate | 86-74-8 | mg/kg | 0.6 (0.2) | J | ND (0.04) | U | 24 (0.19) | J | 9.5 (1.9) | J | 60 (26) | J | 0.21 (0.08) |
| butyl benzyl phthalate | 218-01-9 | mg/kg | 3.7 (0.2) | J | 0.05 (0.04) | J | 23 (0.19) | J | 12 (1.9) | J | 410 (2.6) | J | 0.14 (0.038) |
| di-n-butyl phthalate | 84-74-2 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | ND (0.077) | U | ND (0.08) | U |
| di-n-octyl phthalate | 117-84-0 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | ND (0.077) | U | ND (0.08) | U |
| dibenz (a,h) anthracene | 53-70-3 | mg/kg | 0.76 (0.2) | J | ND (0.04) | U | 0.76 (0.19) | J | 0.5 (0.37) | J | 34 (5) | J | 22 (2.6) |
| dibenz (a,h) anthracene | 132-64-9 | mg/kg | 0.34 (0.2) | J | ND (0.04) | U | 0.92 (1.9) | J | 46 (1.9) | J | 1100 (26) | J | 0.24 (0.08) |
| diethyl phthalate | 84-66-2 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | ND (0.077) | U | ND (0.08) | U |
| dimethyl phthalate | 131-11-3 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | ND (0.077) | U | ND (0.08) | U |
| fluorene | 206-44-0 | mg/kg | 5.7 (0.2) | J | 0.098 (0.04) | J | 1.50 (1.9) | J | 78 (1.9) | J | 2000 (26) | J | 1.1 (0.04) |
| fluorene | 86-73-7 | mg/kg | ND (0.2) | ND (0.04) | U | 110 (1.9) | J | 54 (1.9) | 260 (5) | J | 1500 (26) | J | 0.35 (0.038) |
| hexachlorobenzene | 118-74-1 | mg/kg | ND (0.2) | ND (0.04) | U | ND (0.19) | ND (0.037) | U | ND (5) | ND (0.038) | U | ND (0.04) | U |
| hexachlorocyclopentadiene | 87-68-3 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | ND (0.077) | U | ND (0.08) | U |
| hexachlorocyclopentadiene | 77-47-4 | mg/kg | ND (1) | ND (0.2) | U | ND (0.95) | ND (0.19) | U | ND (25) | ND (0.19) | U | ND (0.2) | U |
| hexachlorocyclopentadiene | 6772-1 | mg/kg | ND (0.2) | ND (0.04) | U | ND (0.19) | ND (0.037) | U | ND (5) | ND (0.038) | U | ND (0.04) | U |
| indena (1,2,3-cd) pyrene | 193-39-5 | mg/kg | 2.9 (0.2) | J | 0.057 (0.04) | J | 3.5 (0.19) | J | 2 (0.37) | J | 81 (2.6) | J | 0.047 (0.04) |
| isophthalic acid | 78-59-1 | mg/kg | ND (0.2) | ND (0.04) | U | ND (0.19) | ND (0.037) | U | ND (5) | ND (0.038) | U | ND (0.04) | U |
| N-nitrosodiphenylamine | 93-83-7 | mg/kg | ND (0.2) | ND (0.04) | U | ND (0.19) | ND (0.037) | U | ND (5) | ND (0.038) | U | ND (0.04) | U |
| N-nitrosodiphenylamine | 86-30-6 | mg/kg | ND (0.2) | ND (0.04) | U | ND (0.19) | ND (0.037) | U | ND (5) | ND (0.038) | U | ND (0.04) | U |
| naphthalene | 91-20-3 | mg/kg | 0.68 (0.2) | J | ND (0.04) | U | 240 (1.9) | J | 150 (1.9) | J | 3500 (26) | J | 0.15 (0.038) |
| nitrobenzene | 98-95-3 | mg/kg | ND (0.2) | ND (0.04) | U | ND (0.19) | ND (0.037) | U | ND (5) | ND (0.038) | U | ND (0.04) | U |
| pentachlorophenol | 87-86-5 | mg/kg | ND (1) | ND (0.2) | U | ND (0.95) | ND (0.19) | U | ND (25) | ND (0.19) | U | ND (0.2) | U |
| phenanthrene | 85-01-8 | mg/kg | 1.7 (0.2) | J | ND (0.04) | U | 300 (1.9) | J | 170 (1.9) | J | 4000 (26) | J | 1.4 (0.038) |
| phenol | 108-95-2 | mg/kg | ND (0.41) | ND (0.079) | U | ND (0.38) | ND (0.077) | U | ND (9.9) | ND (0.077) | U | ND (0.08) | U |
| pyrene | 129-00-0 | mg/kg | 5.3 (0.2) | J | 0.091 (0.04) | J | 93 (1.9) | J | 44 (1.9) | J | 1300 (26) | J | 0.45 (0.038) |
| pyrene | 129-00-0 | mg/kg | 5.3 (0.2) | J | 0.091 (0.04) | J | 93 (1.9) | J | 44 (1.9) | J | 1300 (26) | J | 0.45 (0.038) |
| Other Parameters | | | | | | | | | | | | | |
| Moisture Content ^(b) | N.A. | wt. % | 18.1 (0.08) | 16.0 (0.06) | 12.7 (0.06) | 11.1 (0.06) | 16.0 (0.08) | 13.2 (0.08) | 35.1 (0.08) | 16.4 (0.08) | 16.4 (0.08) | 16.4 (0.08) | 16.4 (0.08) |

NOTES:
 ND denotes "Not Detected" at method detection limit shown in parentheses.
 (a) Target Compound List (TCL) base neutral/acid-extractable organic compounds by EPA SW-846 method 8270, reported as dry-weight concentrations.
 (b) EPA method 160.3 (Methods for Chemical Analysis of Water and Wastes, March 1983).
 U qualifier denotes not detected.
 J qualifier denotes quantification is estimated due to limitations identified during the data validation quality assurance review.
 UJ identifier denotes the data validation quality assurance review.

TABLE 4-1
(Continued)

SOIL SAMPLE DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION

Gulf Coast Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Registry Number | Units | Sample Identifier | | | | | | | | | | | |
|---|---------------------|-------|-------------------|-------|-------------|-------|---------------|-------|---------------|-------|--------------|-------|-------------|---|
| | | | (0-1) | (2-3) | (5-6) | (0-1) | (2-3) | (5-6) | | | | | | |
| <i>TCL Semivolatile Organics</i> ^(a) | | | | | | | | | | | | | | |
| 1,2,4-trichlorobenzene | 120-82-1 | mg/kg | ND (0.04) | U | ND (0.04) | U | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| 1,2-dichlorobenzene | 95-50-1 | mg/kg | ND (0.034) | U | ND (0.04) | U | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| 1,3-dichlorobenzene | 541-73-1 | mg/kg | ND (0.034) | U | ND (0.04) | U | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| 1,4-dichlorobenzene | 106-46-7 | mg/kg | ND (0.034) | U | ND (0.04) | U | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| 2,2-oxybis (1-chloropropane) | 108-60-1 | mg/kg | ND (0.034) | U | ND (0.04) | U | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| 2,4,6-trichlorophenol | 95-95-4 | mg/kg | ND (0.069) | U | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| 2,4,6-trichlorophenol | 88-06-2 | mg/kg | ND (0.069) | U | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| 2,4-dichlorophenol | 120-83-2 | mg/kg | ND (0.069) | U | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| 2,4-dimethylphenol | 105-67-9 | mg/kg | ND (0.069) | U | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| 2,4-dinitrophenol | 51-28-5 | mg/kg | ND (0.2) | U | ND (0.24) | U | ND (0.23) | U | ND (0.21) | U | ND (0.23) | U | ND (0.23) | U |
| 2,4-dinitrotoluene | 121-14-2 | mg/kg | ND (0.069) | U | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| 2,6-dinitrotoluene | 606-20-2 | mg/kg | ND (0.034) | U | ND (0.04) | U | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| 2-chloronaphthalene | 91-58-7 | mg/kg | ND (0.034) | U | ND (0.04) | U | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| 2-chlorophenol | 95-57-8 | mg/kg | ND (0.034) | U | ND (0.04) | U | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| 2-methylnaphthalene | 91-57-6 | mg/kg | 0.036 (0.034) | J | 1.1 (0.04) | U | ND (0.039) | U | 0.074 (0.036) | J | ND (0.04) | U | ND (0.04) | U |
| 2-methylphenol | 95-48-7 | mg/kg | ND (0.034) | U | ND (0.04) | U | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| 2-nitroaniline | 88-71-4 | mg/kg | ND (0.034) | U | ND (0.04) | U | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| 2-nitrophenol | 88-73-5 | mg/kg | ND (0.069) | U | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| 3,3'-dichlorobenzidine | 91-94-1 | mg/kg | ND (0.069) | U | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| 3- and 4-methylphenol | 106-44-5 | mg/kg | ND (0.069) | U | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| 3-nitroaniline | 99-09-2 | mg/kg | ND (0.069) | U | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| 4,6-dinitro-2-methylphenol | 534-32-1 | mg/kg | ND (0.17) | U | ND (0.2) | U | ND (0.2) | U | ND (0.18) | U | ND (0.2) | U | ND (0.2) | U |
| 4-bromophenyl phenyl ether | 101-55-3 | mg/kg | ND (0.069) | U | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| 4-chloro-3-methylphenol | 59-50-7 | mg/kg | ND (0.069) | U | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| 4-chlorophenyl | 106-47-8 | mg/kg | ND (0.034) | U | ND (0.04) | U | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| 4-chlorophenyl phenyl ether | 7005-72-3 | mg/kg | ND (0.034) | U | ND (0.04) | U | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| 4-nitroaniline | 100-01-6 | mg/kg | ND (0.069) | U | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| 4-nitrophenol | 100-02-7 | mg/kg | ND (0.17) | U | ND (0.2) | U | ND (0.2) | U | ND (0.18) | U | ND (0.2) | U | ND (0.2) | U |
| acetanaphthene | 83-32-9 | mg/kg | ND (0.034) | U | 0.35 (0.04) | J | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| acetophenylene | 206-96-8 | mg/kg | 0.098 (0.034) | J | 2 (0.04) | J | ND (0.039) | U | 0.11 (0.036) | J | ND (0.04) | U | ND (0.04) | U |
| anthracene | 120-12-7 | mg/kg | 0.21 (0.034) | J | 3.4 (0.04) | J | 0.078 (0.039) | J | 0.11 (0.036) | J | 0.15 (0.04) | J | ND (0.04) | U |
| benzo (a) anthracene | 56-55-3 | mg/kg | 0.39 (0.034) | J | 4.5 (0.04) | J | ND (0.039) | U | 0.35 (0.036) | J | 0.084 (0.04) | J | ND (0.04) | U |
| benzo (a) pyrene | 50-32-8 | mg/kg | 0.39 (0.034) | J | 6.1 (0.2) | J | 0.048 (0.039) | J | 0.37 (0.036) | J | 0.073 (0.04) | J | ND (0.04) | U |
| benzo (b) fluoranthene | 205-99-2 | mg/kg | 0.72 (0.034) | J | 16 (0.2) | (c) | 0.076 (0.039) | J | 0.82 (0.036) | (c) | 0.15 (0.04) | J (c) | ND (0.04) | U |
| benzo (ghi) perylene | 191-24-2 | mg/kg | 0.28 (0.034) | J | 3.8 (0.04) | J | 0.045 (0.039) | J | 0.32 (0.036) | J | 0.055 (0.04) | J | ND (0.04) | U |
| benzo (k) fluoranthene | 207-08-9 | mg/kg | 0.21 (0.034) | J | ND (0.04) | U (c) | ND (0.039) | U | ND (0.036) | U (c) | ND (0.04) | U (c) | ND (0.04) | U |
| bis (2-chloroethoxy) methane | 111-91-1 | mg/kg | ND (0.069) | U | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| bis (2-nitrooxy) ether | 111-44-4 | mg/kg | ND (0.034) | U | ND (0.04) | U | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| bis (2-ethylhexyl) phthalate | 117-81-7 | mg/kg | 0.65 (0.069) | (d) | ND (0.082) | U | ND (0.078) | U | 0.11 (0.072) | J (d) | ND (0.08) | U | ND (0.08) | U |
| butyl benzyl phthalate | 85-68-7 | mg/kg | 0.15 (0.069) | J (d) | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| carbazole | 86-74-8 | mg/kg | 0.096 (0.034) | J | 0.39 (0.04) | J | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| chrysene | 218-01-9 | mg/kg | 0.44 (0.034) | J | 6.9 (0.2) | J | 0.049 (0.039) | J | 0.44 (0.036) | J | 0.092 (0.04) | J | ND (0.04) | U |
| di-n-butyl phthalate | 84-74-2 | mg/kg | ND (0.069) | U | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| di-n-octyl phthalate | 117-84-0 | mg/kg | ND (0.069) | U | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| dibenz (a,h) anthracene | 53-70-3 | mg/kg | 0.084 (0.034) | J | 1.5 (0.04) | J | ND (0.039) | U | 0.096 (0.036) | J | ND (0.04) | U | ND (0.04) | U |
| dibenzofuran | 132-64-9 | mg/kg | 0.037 (0.034) | J | 1.1 (0.04) | J | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| diethyl phthalate | 84-66-2 | mg/kg | ND (0.069) | U | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| dimethyl phthalate | 131-11-3 | mg/kg | ND (0.069) | U | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| fluoranthene | 206-44-0 | mg/kg | 0.71 (0.034) | J | 5.6 (0.2) | J | 0.065 (0.039) | J | 0.51 (0.036) | J | 0.2 (0.04) | J | ND (0.04) | U |
| fluorene | 86-73-7 | mg/kg | 0.038 (0.034) | J | 0.66 (0.04) | J | 0.042 (0.039) | J | ND (0.036) | U | 0.054 (0.04) | J | ND (0.04) | U |
| hexachlorobenzene | 118-74-1 | mg/kg | ND (0.034) | U | ND (0.04) | U | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| hexachlorobutadiene | 87-68-3 | mg/kg | ND (0.069) | U | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| hexachlorocyclopentadiene | 77-47-4 | mg/kg | ND (0.17) | U | ND (0.2) | U | ND (0.2) | U | ND (0.18) | U | ND (0.2) | U | ND (0.2) | U |
| hexachlorocyclohexane | 67-72-1 | mg/kg | ND (0.034) | U | ND (0.04) | U | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| indeno (1,2,3-cd) pyrene | 193-39-5 | mg/kg | 0.3 (0.034) | J | 5.3 (0.04) | J | 0.056 (0.039) | J | 0.35 (0.036) | J | 0.057 (0.04) | J | ND (0.04) | U |
| isophorone | 78-59-1 | mg/kg | ND (0.034) | U | ND (0.04) | U | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| N-nitrosodipropylamine | 621-64-7 | mg/kg | ND (0.034) | U | ND (0.04) | U | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| N-nitrosodiphenylamine | 86-30-6 | mg/kg | ND (0.034) | U | ND (0.04) | U | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| naphthalene | 91-20-3 | mg/kg | 0.095 (0.034) | J | 3.7 (0.04) | J | ND (0.039) | U | 0.086 (0.036) | J | ND (0.04) | U | ND (0.04) | U |
| nitrobenzene | 98-95-3 | mg/kg | ND (0.034) | U | ND (0.04) | U | ND (0.039) | U | ND (0.036) | U | ND (0.04) | U | ND (0.04) | U |
| nonachlorophenol | 87-86-5 | mg/kg | ND (0.17) | U | ND (0.2) | U | ND (0.2) | U | ND (0.18) | U | ND (0.2) | U | ND (0.2) | U |
| phenanthrene | 85-01-8 | mg/kg | 0.39 (0.034) | J | 2.5 (0.04) | J | 0.064 (0.039) | J | 0.18 (0.036) | J | 0.27 (0.04) | J | ND (0.04) | U |
| phenol | 108-95-2 | mg/kg | ND (0.069) | U | ND (0.082) | U | ND (0.078) | U | ND (0.072) | U | ND (0.08) | U | ND (0.08) | U |
| pyrene | 129-00-0 | mg/kg | 0.61 (0.034) | J | 8.4 (0.2) | J | 0.092 (0.039) | J | 0.5 (0.036) | J | 0.16 (0.04) | J | ND (0.04) | U |
| <i>Other Parameters</i> | | | | | | | | | | | | | | |
| Moisture Content ^(b) | N/A | wt. % | 3.35 (0.08) | | 18.3 (0.08) | | 15 (0.08) | | 7.36 (0.08) | | 16.5 (0.08) | | 17.1 (0.08) | |

NOTES:
 ND denotes "Not Detected" at method detection limit shown in parentheses.
 (a) Target Compound List (TCL) base neutral/acid-extractable organic compounds by EPA SW-846 method 8270, reported as dry-weight concentrations.
 (b) EPA method 1603 (Methods for Chemical Analysis of Water and Wastes, March 1983).
 (c) Laboratory was unable to resolve distinct chromatographic peaks for Benzo(k)fluoranthene (B(k)F) and Benzo(k)fluoranthene (B(k)F). Therefore, reported B(k)F result for this sample is the sum total concentration of both isomers.
 (d) Low concentrations of this common laboratory contaminant warrant caution if this value is used as basis for environmental risk assessment or other decision-making process.
 U qualifier denotes not detected.
 J qualifier denotes quantitation is estimated due to limitations identified during the data validation quality assurance review.
 UJ qualifier denotes that the compound was not detected, but the quantitation limit may or may not be higher than the value shown in parentheses due to a bias identified during the data validation quality assurance review.

TABLE 4-1
(Continued)
SOIL SAMPLE DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION

Gulf Coast Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Registry Number | Units | Sample Identifier | | | | | | |
|--------------------------------------|---------------------|-------|-------------------|-------------|-------------|-------------|-------------|-------------|------------|
| | | | (0' - 1') | (2' - 3') | (5' - 6') | (0' - 1') | (2' - 3') | (5' - 6') | |
| <i>TCL Semivolatile Organics (a)</i> | | | | | | | | | |
| 1,2,4-trichlorobenzene | 120-82-1 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| 1,2-dichlorobenzene | 95-50-1 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| 1,4-dichlorobenzene | 541-73-1 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| 1,4-dichlorobenzene | 106-46-7 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| 2,2'-oxybis(1-chloropropane) | 108-60-1 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| 2,4,5-trichlorophenol | 95-95-4 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| 2,4,6-trichlorophenol | 88-06-2 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| 2,4-dichlorophenol | 120-83-2 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| 2,4-dimethylphenol | 105-67-9 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| 2,4-dinitrophenol | 51-28-5 | mg/kg | ND (0.22) | U | ND (0.22) | U | ND (0.22) | U | ND (0.23) |
| 2,4-dinitrotoluene | 121-14-2 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| 2,6-dinitrotoluene | 606-20-2 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| 2-chloronaphthalene | 91-58-7 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| 2-chlorophenol | 95-57-8 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| 2-methylnaphthalene | 91-57-6 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| 2-methylphenol | 95-48-7 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| 2-nitroaniline | 88-74-4 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| 2-nitrophenol | 88-75-5 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| 3,3'-dichlorobenzidine | 91-94-1 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| 3- and 4-methylphenol | 106-44-5 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| 3-nitroaniline | 99-09-2 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| 4,6-dinitro-2-methylphenol | 53-4-52-1 | mg/kg | ND (0.19) | U | ND (0.19) | U | ND (0.19) | U | ND (0.19) |
| 4-bromophenyl phenyl ether | 101-55-3 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| 4-chloro-3-methylphenol | 59-50-7 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| 4-chlorophenyl phenyl ether | 106-47-8 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| 4-chlorophenyl phenyl ether | 7005-72-3 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| 4-nitroaniline | 100-01-6 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| 4-nitrophenol | 100-02-7 | mg/kg | ND (0.19) | U | ND (0.19) | U | ND (0.19) | U | ND (0.19) |
| acenaphthene | 83-32-9 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| acenaphthylene | 208-96-8 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| anthracene | 120-12-7 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| benzo (a) anthracene | 56-55-3 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| benzo (a) pyrene | 50-32-8 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| benzo (b) fluoranthene | 205-99-2 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| benzo (ghi) perylene | 191-24-2 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| benzo (k) fluoranthene | 207-08-9 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| bis (2-chloroethoxy) methane | 111-91-1 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| bis (2-chloroethyl) ether | 111-44-4 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| bis (2-ethylhexyl) phthalate | 117-81-7 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| butyl benzyl phthalate | 85-68-7 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| carbazole | 86-74-8 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| chrysene | 218-01-9 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| di-n-butyl phthalate | 84-74-2 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| di-n-octyl phthalate | 117-84-0 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| dibenz (a,h) anthracene | 53-70-3 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| dibenzofuran | 132-64-9 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| diethyl phthalate | 84-66-2 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| dimethyl phthalate | 131-11-3 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| fluoranthene | 206-44-0 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| fluorene | 86-73-7 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| hexachlorobenzene | 118-74-1 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| hexachlorobutadiene | 87-68-3 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| hexachlorocyclopentadiene | 77-47-4 | mg/kg | ND (0.19) | U | ND (0.19) | U | ND (0.19) | U | ND (0.19) |
| hexachloroethane | 67-72-1 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| indeno (1,2,3-cd) pyrene | 193-39-5 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| isophorone | 78-59-1 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| N-nitrosodi-n-propylamine | 621-64-7 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| N-nitrosodiphenylamine | 86-30-6 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| naphthalene | 91-20-3 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| nitrobenzene | 98-95-3 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| penta-chlorophenol | 87-86-5 | mg/kg | ND (0.19) | U | ND (0.19) | U | ND (0.19) | U | ND (0.19) |
| phenanthrene | 85-01-8 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| phenol | 108-95-2 | mg/kg | ND (0.077) | U | ND (0.075) | U | ND (0.076) | U | ND (0.078) |
| pyrene | 129-00-0 | mg/kg | ND (0.038) | U | ND (0.037) | U | ND (0.038) | U | ND (0.039) |
| <i>Other Parameters</i> | | | | | | | | | |
| Moisture Content ^(b) | N.A. | wt. % | 13.0 (0.08) | 12.9 (0.08) | 11.0 (0.08) | 12.8 (0.08) | 12.1 (0.08) | 14.4 (0.08) | |

NOTES:

ND denotes "Not Detected" at method detection limit shown in parentheses.

(a) Target Compound List (TCL) base neutral/acid-extractable organic compounds by EPA SW-846 method 8270; reported as dry-weight concentrations.

(b) EPA method 160.3 (*Methods for Chemical Analysis of Water and Wastes*, March 1983).

(c) Laboratory was unable to resolve distinct chromatographic peaks for Benzo(b)fluoranthene (B(b)F) and Benzo(k)fluoranthene (B(k)F). Therefore, reported B(b)F result for this sample is the sum total concentration of both isomers.

U qualifier denotes not detected.

J qualifier denotes quantitation is estimated due to limitations identified during the data validation quality assurance review.

UJ qualifier denotes that the compound was not detected, but the quantitation limit may or may not be higher than the value shown in parentheses due to a bias identified during the data validation quality assurance review.

TABLE 4-1
(Continued)
SOIL SAMPLE DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION
Gulf Coast Crossing Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Registry Number | Units | Sample Identifier | | | | | | | | | | | |
|--------------------------------------|---------------------|-------|-------------------|-------------|---------------|-------------|-------------|-------------|-------------|------------|------------|---------|----------|---|
| | | | (0-1) | (2-3) | (5-6) | (0-1) | (2-3) | (5-6) | | | | | | |
| <i>TCL Semivolatile Organics</i> (b) | | | | | | | | | | | | | | |
| 1,2,4-trichlorobenzene | 120-82-1 | mg/kg | ND (0.039) | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.037) | U | ND (36) | U | |
| 1,2-dichlorobenzene | 95-50-1 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| 1,3-dichlorobenzene | 541-73-1 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| 1,4-dichlorobenzene | 106-46-7 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| 2,2'-oxybis (1-chloropropane) | 108-90-1 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| 2,4,5-trichlorophenol | 95-95-4 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| 2,4,6-trichlorophenol | 88-06-2 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| 2,4-dichlorophenol | 120-83-2 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| 2,4-dimethylphenol | 105-67-9 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| 2,4-dinitrophenol | 51-28-5 | mg/kg | ND (0.23) | U | ND (0.23) | U | ND (0.21) | U | ND (0.21) | U | ND (0.21) | U | ND (210) | U |
| 2,4-dinitrotoluene | 121-14-2 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| 2,6-dinitrotoluene | 606-20-2 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| 2-chloronaphthalene | 91-58-7 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| 2-chlorophenol | 95-57-8 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| 2-methylnaphthalene | 91-57-6 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| 2-methylphenol | 95-48-7 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| 2-nitroaniline | 88-74-4 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| 2-nitrophenol | 88-75-5 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| 3,3'-dichlorobenzidine | 91-94-1 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| 3- and 4-methylphenol | 106-44-5 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| 3-nitroaniline | 99-09-2 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| 4,6-dinitro-2-nitrophenol | 534-52-1 | mg/kg | ND (0.19) | U | ND (0.2) | U | ND (0.18) | U | ND (0.18) | U | ND (0.18) | U | ND (180) | U |
| 4-bromophenyl phenyl ether | 101-55-3 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| 4-chloro-3-methylphenol | 59-50-7 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| 4-chloroaniline | 106-47-8 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| 4-chlorophenyl phenyl ether | 7005-72-3 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| 4-nitroaniline | 100-01-6 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| 4-nitrophenol | 100-02-7 | mg/kg | ND (0.19) | U | ND (0.2) | U | ND (0.18) | U | ND (0.18) | U | ND (0.18) | U | ND (180) | U |
| acenaaphthene | 83-32-9 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| acenaaphthylene | 208-96-8 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| anthracene | 120-12-7 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| benzo (a) anthracene | 56-55-3 | mg/kg | ND (0.039) | U | 0.04 (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| benzo (b) pyrene | 50-32-8 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| benzo (k) fluoranthene | 205-99-2 | mg/kg | ND (0.039) | U | 0.054 (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| benzo (ghi) perylene | 191-24-2 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| benzo (h) fluoranthene | 207-08-9 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| bis (2-chloroethoxy) methane | 111-91-1 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| bis (2-chloroethyl) ether | 111-44-4 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| bis (2-ethylhexyl) phthalate | 117-81-7 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| butyl benzyl phthalate | 85-68-7 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| carbazole | 86-74-8 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| styrene | 2180-1-9 | mg/kg | ND (0.039) | U | 0.04 (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| di-n-butyl phthalate | 84-74-2 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| di-n-octyl phthalate | 117-84-0 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| dibenz (a,h) anthracene | 31-70-3 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| dibenzofuran | 132-64-9 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| diethyl phthalate | 84-66-2 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| dimethyl phthalate | 131-11-3 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| fluoranthene | 206-44-0 | mg/kg | ND (0.039) | U | 0.072 (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| fluorene | 86-73-7 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| hexachlorobenzene | 118-74-1 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| hexachlorobutadiene | 87-68-3 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| hexachlorocyclopentadiene | 77-47-4 | mg/kg | ND (0.19) | U | ND (0.2) | U | ND (0.18) | U | ND (0.18) | U | ND (0.18) | U | ND (180) | U |
| hexachloroethane | 67-72-1 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| indeno (1,2,3-cd) pyrene | 193-39-5 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| isophorone | 78-59-1 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| N-nitrosodiphenylamine | 621-64-7 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| N-nitrosodiphenylamine | 86-30-6 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| naphthalene | 91-20-3 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| nitrobenzene | 98-95-3 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| nitrochlorophenol | 87-86-5 | mg/kg | ND (0.19) | U | ND (0.2) | U | ND (0.18) | U | ND (0.18) | U | ND (0.18) | U | ND (180) | U |
| phenanthrene | 85-01-8 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| phenol | 108-95-2 | mg/kg | ND (0.078) | U | ND (0.078) | U | ND (0.073) | U | ND (0.072) | U | ND (0.073) | U | ND (73) | U |
| pyrene | 129-00-0 | mg/kg | ND (0.039) | U | 0.085 (0.039) | U | ND (0.037) | U | ND (0.036) | U | ND (0.037) | U | ND (36) | U |
| <i>Other Parameters</i> | | | | | | | | | | | | | | |
| Moisture Content (%) | N/A | wt % | 14.1 (0.08) | 15.4 (0.08) | 14.3 (0.08) | 8.79 (0.08) | 7.70 (0.08) | 8.92 (0.08) | 8.39 (0.08) | | | | | |

NOTES:

ND denotes "Not Detected" at method detection limit shown in parentheses.
(a) Listed on chain-of-custody documentation as sample GEO-06/5-6.
(b) Target Compound List (TCL) base neutral/acid-extractable organic compounds by EPA SW-846 method 8270, reported as dry-weight concentrations.
(c) EPA method 160.3 (Methods for Chemical Analysis of Water and Wastes, March 1983).
U qualifier denotes not detected.
J qualifier denotes quantitation is estimated due to limitations identified during the data validation quality assurance review.
UJ qualifier denotes that the compound was not detected, but the quantitation limit may or may not be higher than the value shown in parentheses due to a bias identified during the data validation quality assurance review.

TABLE 4-1
(Continued)

SOIL SAMPLE DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION

Gulf Coast Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Registry Number | Units | Sample Identifier | | | | | |
|--|---------------------|-------|-------------------|----------------|----------------|---------------|---------------|--------------|
| | | | (0'-1') | (2'-3') | (5'-6') | (0'-1') | (2'-3') | (5'-6') |
| GEO-28 | | | | | | | | |
| GEO-29 | | | | | | | | |
| (0'-1') Duplicate ^{a)} | | | | | | | | |
| TCL Semivolatile Organics ^(b) | | | | | | | | |
| 1,2,4-trichlorobenzene | 120-82-1 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | ND (0.19) | ND (0.18) U | ND (0.039) U |
| 1,2-dichlorobenzene | 95-50-1 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | ND (0.19) | ND (0.18) U | ND (0.039) U |
| 1,3-dichlorobenzene | 541-73-1 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | ND (0.19) | ND (0.18) U | ND (0.039) U |
| 1,4-dichlorobenzene | 106-46-7 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | ND (0.19) | ND (0.18) U | ND (0.039) U |
| 2,2'-oxybis (1-chloropropane) | 108-60-1 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | ND (0.19) | ND (0.18) U | ND (0.039) U |
| 2,4,5-trichlorophenol | 95-95-4 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| 2,4,6-trichlorophenol | 88-06-2 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| 2,4-dichlorophenol | 120-83-2 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| 2,4-dimethylphenol | 105-67-9 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| 2,4-dinitrophenol | 51-28-5 | mg/kg | ND (0.22) U | ND (0.24) U | ND (0.23) U | ND (1.1) | ND (1.1) U | ND (0.23) U |
| 2,4-dinitrotoluene | 121-14-2 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| 2,6-dinitrotoluene | 606-20-2 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | ND (0.19) | ND (0.18) U | ND (0.039) U |
| 2-chloronaphthalene | 91-58-7 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | ND (0.19) | ND (0.18) U | ND (0.039) U |
| 2-chlorophenol | 95-57-8 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | ND (0.19) | ND (0.18) U | ND (0.039) U |
| 2-methylnaphthalene | 91-57-6 | mg/kg | 0.051 (0.038) J | ND (0.04) U | ND (0.039) U | 0.26 (0.19) J | 0.71 (0.18) J | ND (0.039) U |
| 2-methylphenol | 95-48-7 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | ND (0.19) | ND (0.18) U | ND (0.039) U |
| 2-nitroaniline | 88-74-4 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | ND (0.19) | ND (0.18) U | ND (0.039) U |
| 2-nitrophenol | 88-75-5 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| 3,3'-dichlorobenzidine | 91-94-1 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| 3- and 4-methylphenol | 106-44-5 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| 3-nitroaniline | 99-09-2 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| 4,6-dinitro-2-methylphenol | 534-52-1 | mg/kg | ND (0.19) U | ND (0.2) U | ND (0.2) U | ND (0.95) | ND (0.92) U | ND (0.19) U |
| 4-bromophenyl phenyl ether | 101-55-3 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| 4-chloro-3-methylphenol | 59-50-7 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| 4-chloroaniline | 106-47-8 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | ND (0.19) | ND (0.18) U | ND (0.039) U |
| 4-chlorophenyl phenyl ether | 7005-72-3 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | ND (0.19) | ND (0.18) U | ND (0.039) U |
| 4-nitroaniline | 100-01-6 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| 4-nitrophenol | 100-02-7 | mg/kg | ND (0.19) U | ND (0.2) U | ND (0.2) U | ND (0.95) | ND (0.92) U | ND (0.19) U |
| acenaphthene | 83-32-9 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | ND (0.19) | ND (0.18) U | ND (0.039) U |
| acenaphthylene | 208-96-8 | mg/kg | 0.12 (0.038) J | ND (0.04) U | ND (0.039) U | 1.2 (0.19) J | 0.39 (0.18) J | ND (0.039) U |
| anthracene | 120-12-7 | mg/kg | 0.13 (0.038) J | ND (0.04) U | ND (0.039) U | 2.5 (0.19) J | 0.48 (0.18) J | ND (0.039) U |
| benzo (a) anthracene | 56-55-3 | mg/kg | 0.79 (0.038) | ND (0.04) U | ND (0.039) U | 4.1 (0.19) | 0.61 (0.18) J | ND (0.039) U |
| benzo (a) pyrene | 50-32-8 | mg/kg | 1.1 (0.038) | ND (0.04) U | ND (0.039) U | 3.5 (0.19) | 0.75 (0.18) J | ND (0.039) U |
| benzo (b) fluoranthene | 205-99-2 | mg/kg | 1.9 (0.038) | ND (0.04) U | ND (0.039) U | 8.6 (0.19) J | 1.4 (0.18) J | ND (0.039) U |
| benzo (ghi) perylene | 191-24-2 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | 1.4 (0.19) J | 0.57 (0.18) J | ND (0.039) U |
| benzo (k) fluoranthene | 207-08-9 | mg/kg | 0.67 (0.038) | ND (0.04) U | ND (0.039) U | 3.2 (0.19) | 0.44 (0.18) J | ND (0.039) U |
| bis (2-chloroethoxy) methane | 111-91-1 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| bis (2-chloroethyl) ether | 111-44-4 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | ND (0.19) | ND (0.18) U | ND (0.039) U |
| bis (2-ethylhexyl) phthalate | 117-81-7 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| butyl benzyl phthalate | 85-68-7 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| carbazole | 86-74-8 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | 0.88 (0.19) J | ND (0.18) U | ND (0.039) U |
| chrysene | 218-01-9 | mg/kg | 1.1 (0.038) | ND (0.04) U | ND (0.039) U | 6.7 (0.19) J | 0.9 (0.18) J | ND (0.039) U |
| di-n-butyl phthalate | 84-74-2 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| di-n-octyl phthalate | 117-84-0 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| dibenz (a,h) anthracene | 53-70-3 | mg/kg | 0.2 (0.038) J | ND (0.04) U | ND (0.039) U | 0.6 (0.19) J | 0.23 (0.18) J | ND (0.039) U |
| dibenzofuran | 132-64-9 | mg/kg | 0.039 (0.038) J | ND (0.04) U | ND (0.039) U | 0.25 (0.19) J | ND (0.18) U | ND (0.039) U |
| diethyl phthalate | 84-66-2 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| dimethyl phthalate | 131-11-3 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| fluoranthene | 206-44-0 | mg/kg | 1 (0.038) | ND (0.04) U | ND (0.039) U | 12 (0.19) J | 0.89 (0.18) J | ND (0.039) U |
| fluorene | 86-73-7 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | 0.48 (0.19) J | ND (0.18) U | ND (0.039) U |
| hexachlorobenzene | 118-74-1 | mg/kg | ND (0.038) R | ND (0.04) R | ND (0.039) R | ND (0.19) R | ND (0.18) R | ND (0.039) R |
| hexachlorobutadiene | 87-68-3 | mg/kg | ND (0.077) U | ND (0.081) U | ND (0.078) U | ND (0.38) | ND (0.37) U | ND (0.078) U |
| hexachlorocyclopentadiene | 77-47-4 | mg/kg | ND (0.19) U | ND (0.2) U | ND (0.2) U | ND (0.95) | ND (0.92) U | ND (0.19) U |
| hexachloroethane | 67-72-1 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | ND (0.19) | ND (0.18) U | ND (0.039) U |
| indeno (1,2,3-cd) pyrene | 193-39-5 | mg/kg | 0.73 (0.038) | ND (0.04) U | ND (0.039) U | 2.1 (0.19) | 0.69 (0.18) J | ND (0.039) U |
| isophorone | 78-59-1 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | ND (0.19) | ND (0.18) U | ND (0.039) U |
| N-nitrosodipropylamine | 621-64-7 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | ND (0.19) | ND (0.18) U | ND (0.039) U |
| N-nitrosodiphenylamine | 86-30-6 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | ND (0.19) | ND (0.18) U | ND (0.039) U |
| naphthalene | 91-20-3 | mg/kg | 0.075 (0.038) J | ND (0.04) U | ND (0.039) U | 0.35 (0.19) J | 0.34 (0.18) J | ND (0.039) U |
| nitrobenzene | 98-95-3 | mg/kg | ND (0.038) U | ND (0.04) U | ND (0.039) U | ND (0.19) | ND (0.18) U | ND (0.039) U |
| pentachlorophenol | 87-86-5 | mg/kg | ND (0.19) U | ND (0.2) U | ND (0.2) U | ND (0.95) | ND (0.92) U | ND (0.19) U |
| phenanthrene | 85-01-8 | mg/kg | 0.18 (0.038) J | ND (0.04) U | ND (0.039) U | 2.8 (0.19) J | 0.42 (0.18) J | ND (0.039) U |
| phenol | 108-95-2 | mg/kg | ND (0.077) U | 0.15 (0.081) J | 0.23 (0.078) J | ND (0.38) | 0.38 (0.37) J | ND (0.078) J |
| pyrene | 129-00-0 | mg/kg | 1.5 (0.038) | ND (0.04) U | ND (0.039) U | 9.8 (0.19) | 0.91 (0.18) J | ND (0.039) U |
| Other Parameters | | | | | | | | |
| Moisture Content ^(c) | N.A. | wt % | 13.3 (0.08) | 17.3 (0.08) | 14.8 (0.08) | 12.3 (0.08) | 8.93 (0.08) | 14.1 (0.08) |

Other Parameters

Moisture Content^(c)

N.A.

wt %

13.3 (0.08)

17.3 (0.08)

14.8 (0.08)

12.3 (0.08)

8.93 (0.08)

14.1 (0.08)

NOTES:

ND denotes "Not Detected" at method detection limit shown in parentheses.

(a) Listed on chain-of-custody documentation as sample GEO-34/0-1.

(b) Target Compound List (TCL) base neutral/acid-extractable organic compounds by EPA SW-846 method 8270, reported as dry-weight concentrations.

(c) EPA method 160.3 (Methods for Chemical Analysis of Water and Wastes, March 1983).

U qualifier denotes not detected.

J qualifier denotes quantitation is estimated due to limitations identified during the data validation quality assurance review.

UJ qualifier denotes that the compound was not detected, but the quantitation limit may or may not be higher than the value shown in parentheses due to a bias identified during the data validation quality assurance review.

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ND (0.039) U

TABLE 4-1
(Continued)

SOIL SAMPLE DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION

Gulf Coast Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Registry Number | Units | Sample Identifier | | | | | | | | | | | |
|--|---------------------|-------|-------------------|---------|-------------|-------------|--------------|---------|--------------|---|--------------|-------------|--|--|
| | | | (0'-1') | (2'-3') | (5'-6') | (0'-1') | (2'-3') | (5'-6') | | | | | | |
| TCL Semivolatile Organics^(a) | | | | | | | | | | | | | | |
| 1,2,4-trichlorobenzene | 120-82-1 | mg/kg | ND (0.039) | U | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| 1,2-dichlorobenzene | 95-50-1 | mg/kg | ND (0.039) | U | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| 1,3-dichlorobenzene | 541-73-1 | mg/kg | ND (0.039) | U | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| 1,4-dichlorobenzene | 106-46-7 | mg/kg | ND (0.039) | U | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| 2,2'-oxybis (1-chloropropane) | 108-60-1 | mg/kg | ND (0.039) | U | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| 2,4,5-trichlorophenol | 95-95-4 | mg/kg | ND (0.077) | U | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| 2,4,6-trichlorophenol | 88-06-2 | mg/kg | ND (0.077) | U | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| 2,4-dichlorophenol | 120-83-2 | mg/kg | ND (0.077) | U | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| 2,4-dimethylphenol | 105-67-9 | mg/kg | 0.11 (0.077) | J | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| 2,4-dinitrophenol | 51-28-5 | mg/kg | ND (0.23) | U | ND (0.24) | U | ND (0.22) | U | ND (0.22) | U | ND (0.22) | U | | |
| 2,4-dinitrotoluene | 121-14-2 | mg/kg | ND (0.077) | U | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| 2,6-dinitrotoluene | 606-20-2 | mg/kg | ND (0.039) | U | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| 2-chloronaphthalene | 91-58-7 | mg/kg | ND (0.039) | U | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| 2-chlorophenol | 95-57-8 | mg/kg | ND (0.039) | U | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| 2-methylnaphthalene | 91-57-6 | mg/kg | 0.3 (0.039) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| 2-methylphenol | 95-48-7 | mg/kg | 0.042 (0.039) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| 2-nitroaniline | 88-74-4 | mg/kg | ND (0.039) | U | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| 2-nitrophenol | 88-75-5 | mg/kg | ND (0.077) | U | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| 3,3'-dichlorobenzidine | 91-94-1 | mg/kg | ND (0.077) | U | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| 3- and 4-methylphenol | 106-44-5 | mg/kg | 0.14 (0.077) | J | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| 3-nitroaniline | 99-09-2 | mg/kg | ND (0.077) | U | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| 4,6-dinitro-2-methylphenol | 534-52-1 | mg/kg | ND (0.19) | U | ND (0.21) | U | ND (0.19) | U | ND (0.19) | U | ND (0.19) | U | | |
| 4-bromophenyl phenyl ether | 101-55-3 | mg/kg | ND (0.077) | U | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| 4-chloro-3-methylphenol | 59-50-7 | mg/kg | ND (0.077) | U | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| 4-chloroaniline | 106-47-8 | mg/kg | ND (0.039) | U | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| 4-chlorophenyl phenyl ether | 7005-72-3 | mg/kg | ND (0.039) | U | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| 4-nitroaniline | 100-01-6 | mg/kg | ND (0.077) | U | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| 4-nitrophenol | 100-02-7 | mg/kg | ND (0.19) | U | ND (0.21) | U | ND (0.19) | U | ND (0.19) | U | ND (0.19) | U | | |
| acenaphthene | 83-32-9 | mg/kg | 0.16 (0.039) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| acenaphthylene | 208-96-8 | mg/kg | 2.4 (0.039) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| anthracene | 120-12-7 | mg/kg | 4.1 (0.039) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| benzo (a) anthracene | 56-55-3 | mg/kg | 11 (0.39) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| benzo (a) pyrene | 50-32-8 | mg/kg | 8 (0.39) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| benzo (b) fluoranthene | 205-99-2 | mg/kg | 17 (0.39) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| benzo (ghi) perylene | 191-24-2 | mg/kg | 3.7 (0.039) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| benzo (k) fluoranthene | 207-08-9 | mg/kg | 6.1 (0.039) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| bis (2-chloroethoxy) methane | 111-91-1 | mg/kg | ND (0.077) | U | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| bis (2-chloroethyl) ether | 111-44-4 | mg/kg | ND (0.039) | U | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| bis (2-ethylhexyl) phthalate | 117-81-7 | mg/kg | ND (0.077) | U | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| butyl benzyl phthalate | 85-68-7 | mg/kg | ND (0.077) | U | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| carbazole | 86-74-8 | mg/kg | 1.7 (0.039) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| chrysene | 218-01-9 | mg/kg | 15 (0.39) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| di-n-butyl phthalate | 84-74-2 | mg/kg | ND (0.077) | U | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| di-n-octyl phthalate | 117-84-0 | mg/kg | ND (0.077) | U | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| dibenz (ah) anthracene | 53-70-3 | mg/kg | 1.5 (0.039) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| dibenzofuran | 132-64-9 | mg/kg | 0.34 (0.039) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| diethyl phthalate | 84-66-2 | mg/kg | ND (0.077) | U | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| dimethyl phthalate | 131-11-3 | mg/kg | ND (0.077) | U | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| fluoranthene | 206-44-0 | mg/kg | 23 (0.39) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| fluorene | 86-73-7 | mg/kg | 0.47 (0.039) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| hexachlorobenzene | 118-74-1 | mg/kg | ND (0.039) | R | ND (0.041) | R | ND (0.039) | R | ND (0.038) | R | ND (0.038) | U | | |
| hexachlorobutadiene | 87-68-3 | mg/kg | ND (0.077) | U | ND (0.082) | U | ND (0.077) | U | ND (0.076) | U | ND (0.076) | U | | |
| hexachlorocyclopentadiene | 77-47-4 | mg/kg | ND (0.19) | U | ND (0.21) | U | ND (0.19) | U | ND (0.19) | U | ND (0.19) | U | | |
| hexachloroethane | 67-72-1 | mg/kg | ND (0.039) | U | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| indeno (1,2,3-cd) pyrene | 193-39-5 | mg/kg | 5.6 (0.039) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| isophorone | 78-59-1 | mg/kg | ND (0.039) | U | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| N-nitrosodi-n-propylamine | 621-64-7 | mg/kg | ND (0.039) | U | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| N-nitrosodiphenylamine | 86-30-6 | mg/kg | ND (0.039) | U | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| naphthalene | 91-20-3 | mg/kg | 0.69 (0.039) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| nitrobenzene | 98-95-3 | mg/kg | ND (0.039) | U | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| pentachlorobenzene | 87-86-5 | mg/kg | ND (0.49) | U | ND (0.21) | U | ND (0.49) | U | ND (0.19) | U | ND (0.19) | U | | |
| phenanthrene | 85-01-8 | mg/kg | 2.7 (0.039) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| phenol | 108-95-2 | mg/kg | 0.24 (0.077) | J | 0.1 (0.082) | J | 0.15 (0.077) | J | 0.19 (0.076) | J | 0.14 (0.076) | J | | |
| pyrene | 129-00-0 | mg/kg | 19 (0.39) | J | ND (0.041) | U | ND (0.039) | U | ND (0.038) | U | ND (0.038) | U | | |
| Other Parameters | | | N.A. | | | 13.5 (0.08) | | | 12.3 (0.08) | | | 12.6 (0.08) | | |
| Moisture Content^(b) | | | N.A. | | | 19 (0.08) | | | 12.3 (0.08) | | | 11.3 (0.08) | | |

NOTES:

ND denotes "Not Detected" at the method detection limit shown in parentheses.

(a) Target Compound List (TCL) base neutral/acid-extractable organic compounds by EPA SW-846 method 8270, reported as dry-weight concentrations.

(b) EPA method 160.3 (Methods for Chemical Analysis of Water and Wastes, March 1983).

U qualifier denotes not detected.

J qualifier denotes quantitation is estimated due to limitations identified during the data validation quality assurance review.

UJ qualifier denotes that the compound was not detected, but the quantitation limit may or may not be higher than the value shown in parentheses due to a bias identified during the data validation quality assurance review.

R qualifier denotes unusable result identified during data validation quality assurance review; compound may or may not be present in the sample.

TABLE 4-1
(Continued)

SOIL SAMPLE DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION

Gulf Coast Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Registry Number | Units | Sample Identifier | | | | | | | | | |
|--|---------------------|-------|-------------------|---------|--------------|----------------------------------|------------|---------|--------------|---|-------------|---|
| | | | (0'-1') | (2'-3') | (5'-6') | (0'-1') Duplicate ^(b) | (2'-3') | (5'-6') | | | | |
| <i>TCL Semivolatile Organics^(b)</i> | | | | | | | | | | | | |
| 1,2,4-trichlorobenzene | 120-82-1 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.038) | U | ND (0.039) | U | ND (0.041) | U |
| 1,2-dichlorobenzene | 95-50-1 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| 1,3-dichlorobenzene | 541-73-1 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| 1,4-dichlorobenzene | 106-46-7 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| 2,2-oxybis(1-chloropropane) | 108-60-1 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| 2,4,5-trichlorophenol | 95-95-4 | mg/kg | ND (0.078) | U | ND (0.077) | U | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| 2,4,6-trichlorophenol | 88-06-2 | mg/kg | ND (0.078) | U | ND (0.077) | U | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| 2,4-dichlorophenol | 120-83-2 | mg/kg | ND (0.078) | U | ND (0.077) | U | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| 2,4-dimethylphenol | 105-67-9 | mg/kg | ND (0.078) | U | ND (0.077) | U | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| 2,4-dinitrophenol | 51-28-5 | mg/kg | ND (0.23) | U | ND (0.23) | U | ND (2.2) | U | ND (0.23) | U | ND (0.24) | U |
| 2,4-dinitrotoluene | 121-14-2 | mg/kg | ND (0.078) | U | ND (0.077) | U | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| 2,6-dinitrotoluene | 606-20-2 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| 2-chloronaphthalene | 91-58-7 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| 2-chlorophenol | 95-57-8 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| 2-methylnaphthalene | 91-57-6 | mg/kg | ND (0.039) | U | ND (0.039) | U | 11 (0.38) | U | 0.88 (0.039) | U | ND (0.041) | U |
| 2-methylphenol | 95-48-7 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| 2-nitroaniline | 88-74-4 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| 2-nitrophenol | 88-75-5 | mg/kg | ND (0.078) | U | ND (0.077) | U | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| 3,3-dichlorobenzidine | 91-94-1 | mg/kg | ND (0.078) | U | ND (0.077) | U | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| 3- and 4-methylphenol | 106-44-5 | mg/kg | ND (0.078) | U | ND (0.077) | U | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| 3-nitroaniline | 99-09-2 | mg/kg | ND (0.078) | U | ND (0.077) | U | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| 4,6-dinitro-2-methylphenol | 534-52-1 | mg/kg | ND (0.19) | U | ND (0.19) | U | ND (1.9) | U | ND (0.19) | U | ND (0.21) | U |
| 4-bromophenyl phenyl ether | 101-55-3 | mg/kg | ND (0.078) | U | ND (0.077) | U | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| 4-chloro-3-methylphenol | 59-50-7 | mg/kg | ND (0.078) | U | ND (0.077) | U | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| 4-chlorophenyl phenyl ether | 1005-72-3 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| 4-nitroaniline | 100-01-6 | mg/kg | ND (0.078) | U | ND (0.077) | U | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| 4-nitrophenol | 100-02-7 | mg/kg | ND (0.19) | U | ND (0.19) | U | ND (1.9) | U | ND (0.19) | U | ND (0.21) | U |
| acenaphthene | 83-32-9 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| acenaphthylene | 208-96-8 | mg/kg | 0.048 (0.039) | J | ND (0.039) | U | 66 (7.5) | J | 41 (3) | J | 1.7 (0.039) | U |
| anthracene | 120-12-7 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| benzo (a) anthracene | 56-55-3 | mg/kg | 0.25 (0.039) | J | ND (0.039) | U | 94 (7.5) | U | 58 (3) | U | 8.5 (0.79) | U |
| benzo (a) pyrene | 50-32-8 | mg/kg | 0.31 (0.039) | J | ND (0.039) | U | 160 (7.5) | U | 67 (3) | U | 11 (0.79) | U |
| benzo (b) fluoranthene | 205-99-2 | mg/kg | 0.76 (0.039) | J | ND (0.039) | U | 64 (7.5) | J | 41 (3) | U | 5.2 (0.039) | U |
| benzo (ghi) perylene | 191-24-2 | mg/kg | 0.23 (0.039) | J | ND (0.039) | U | 97 (7.5) | U | 62 (3) | U | 8.6 (0.79) | U |
| benzo (k) fluoranthene | 207-08-9 | mg/kg | 0.46 (0.039) | J | ND (0.039) | U | 30 (0.38) | U | 21 (3) | J | 2.4 (0.039) | U |
| bis (2-chloroethoxy) methane | 111-91-1 | mg/kg | ND (0.078) | U | ND (0.077) | U | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| bis (2-chloroethyl) ether | 111-44-4 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| bis (2-ethylhexyl) phthalate | 117-81-7 | mg/kg | ND (0.078) | U | 0.15 (0.077) | J (d) | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| butyl benzyl phthalate | 85-68-7 | mg/kg | ND (0.078) | U | ND (0.077) | U | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| carbazole | 86-74-8 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| chrysene | 218-01-9 | mg/kg | 0.37 (0.039) | J | ND (0.039) | U | 100 (7.5) | U | 65 (3) | U | 9.6 (0.79) | U |
| di-n-butyl phthalate | 84-74-2 | mg/kg | ND (0.078) | U | ND (0.077) | U | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| di-n-octyl phthalate | 117-84-0 | mg/kg | ND (0.078) | U | ND (0.077) | U | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| dibenz (ah) anthracene | 53-70-3 | mg/kg | 0.063 (0.039) | J | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| dibenzofuran | 132-64-9 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| diethyl phthalate | 84-66-2 | mg/kg | ND (0.078) | U | ND (0.077) | U | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| dimethyl phthalate | 131-11-3 | mg/kg | ND (0.078) | U | ND (0.077) | U | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| fluoranthene | 206-44-0 | mg/kg | 0.13 (0.039) | J | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| hexachlorobenzene | 86-73-7 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| hexachlorobutadiene | 118-74-1 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| hexachlorocyclopentadiene | 87-68-3 | mg/kg | ND (0.078) | U | ND (0.077) | U | ND (0.75) | U | ND (0.079) | U | ND (0.083) | U |
| hexachlorocyclopentadiene | 77-47-4 | mg/kg | ND (0.19) | U | ND (0.19) | U | ND (1.9) | U | ND (0.19) | U | ND (0.21) | U |
| hexachlorocyclohexane | 67-72-1 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| indeno (1,2,3-cd) pyrene | 193-39-5 | mg/kg | 0.26 (0.039) | J | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| isophorone | 78-59-1 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| N-nitrosodipropylamine | 521-64-7 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| N-nitrosodiphenylamine | 86-30-6 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| naphthalene | 91-20-3 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| nitrobenzene | 98-95-3 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| peulachlorophenol | 87-86-5 | mg/kg | ND (0.19) | U | ND (0.19) | U | ND (1.9) | U | ND (0.19) | U | ND (0.21) | U |
| phenanthrene | 83-01-8 | mg/kg | ND (0.039) | U | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |
| phenol | 108-96-2 | mg/kg | 0.14 (0.078) | J | 0.12 (0.077) | J | 300 (7.5) | J | 190 (3) | U | 29 (0.79) | U |
| pyrene | 129-00-0 | mg/kg | 0.25 (0.039) | J | ND (0.039) | U | ND (0.38) | U | ND (0.039) | U | ND (0.041) | U |

Other Parameters

| Moisture Content ^(c) | N.A. | wt. % | 14.1 (0.08) | 13.9 (0.08) | 15.0 (0.08) | 11.4 (0.08) | 12.4 (0.08) | 15.1 (0.08) | 19.3 (0.08) |
|---------------------------------|------|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|---------------------------------|------|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|

NOTES:

ND denotes "Not Detected" at the method detection limit shown in parentheses.

(a) Listed on chain-of-custody documentation as sample GEO-02/0'-2'.

(b) Target Compound List (TCL) base neutral/acid-extractable organic compounds by EPA SW-846 method 8270, reported as dry-weight concentrations.

(c) EPA method 160.3 (Methods for Chemical Analysis of Water and Wastes, March 1983).

U qualifier denotes not detected.

J qualifier denotes quantitation is estimated due to limitations identified during the data validation quality assurance review.

UJ qualifier denotes that the compound was not detected, but the quantitation limit may or may not be higher than the value shown in parentheses due to a bias identified during the data validation quality assurance review.

TABLE 4-2

VOLATILE ORGANIC COMPOUND DATA SUMMARY
GROUND WATER SCREENING SAMPLES
PHASE II REMEDIAL INVESTIGATION

Gulf Coast Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Registry Number | Units | Sample Identifier | | | | |
|---|---------------------|-------|-------------------|-----------------|--------------|-----------------|--------------|
| | | | GEO-16-GW | GEO-17-GW | GEO-18-GW | GEO-19-GW | GEO-20-GW |
| <i>TCL Volatile Organics</i> ^(b) | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | mg/L | ND (0.001) U | ND (0.050) U | ND (0.001) U | ND (0.005) U | ND (0.001) U |
| 1,1,2-Tetrachloroethane | 79-34-5 | mg/L | ND (0.002) U | ND (0.100) U | ND (0.002) U | ND (0.010) U | ND (0.002) U |
| 1,1,2-Trichloroethane | 79-00-5 | mg/L | ND (0.002) U | ND (0.100) U | ND (0.002) U | ND (0.010) U | ND (0.002) U |
| 1,1-Dichloroethane | 75-34-3 | mg/L | ND (0.002) U | ND (0.100) U | ND (0.002) U | ND (0.010) U | ND (0.002) U |
| 1,1-Dichloroethene | 75-35-4 | mg/L | ND (0.001) U | ND (0.050) U | ND (0.001) U | ND (0.005) U | ND (0.001) U |
| 1,2-Dichloroethane | 107-06-2 | mg/L | ND (0.002) U | ND (0.100) U | ND (0.002) U | ND (0.010) U | ND (0.002) U |
| 1,2-Dichloropropane | 78-87-5 | mg/L | ND (0.001) U | ND (0.050) U | ND (0.001) U | ND (0.005) U | ND (0.001) U |
| 2-Butanone | 78-93-3 | mg/L | ND (0.003) U | ND (0.150) U | ND (0.003) U | ND (0.015) U | ND (0.003) U |
| 2-Hexanone | 591-78-6 | mg/L | ND (0.007) U | ND (0.350) U | ND (0.007) U | ND (0.035) U | ND (0.007) U |
| 4-Methyl-2-pentanone | 108-10-1 | mg/L | ND (0.005) U | ND (0.250) U | ND (0.005) U | ND (0.025) U | ND (0.005) U |
| Acetone | 67-64-1 | mg/L | ND (0.006) U | ND (0.300) U | ND (0.006) U | ND (0.030) U | ND (0.006) U |
| Benzene | 71-43-2 | mg/L | ND (0.001) U | ND (0.050) U | ND (0.001) U | ND (0.005) U | ND (0.001) U |
| Bromodichloromethane | 75-27-4 | mg/L | ND (0.001) U | ND (0.050) U | ND (0.001) U | ND (0.005) U | ND (0.001) U |
| Bromoform | 75-25-2 | mg/L | ND (0.001) U | ND (0.050) U | ND (0.001) U | ND (0.005) U | ND (0.001) U |
| Bromomethane | 74-83-9 | mg/L | ND (0.003) U | ND (0.150) U | ND (0.003) U | ND (0.015) U | ND (0.003) U |
| Carbon Disulfide | 75-15-0 | mg/L | ND (0.003) U | ND (0.150) U | ND (0.003) U | ND (0.015) U | ND (0.003) U |
| Carbon Tetrachloride | 56-23-5 | mg/L | ND (0.001) U | ND (0.050) U | ND (0.001) U | ND (0.005) U | ND (0.001) U |
| Chlorobenzene | 108-90-7 | mg/L | ND (0.001) U | ND (0.050) U | ND (0.001) U | ND (0.005) U | ND (0.001) U |
| Chloroethane | 75-00-3 | mg/L | ND (0.003) U | ND (0.150) U | ND (0.003) U | ND (0.015) U | ND (0.003) U |
| Chloroform | 67-66-3 | mg/L | ND (0.001) U | ND (0.050) U | ND (0.001) U | ND (0.005) U | ND (0.001) U |
| Chloromethane | 74-87-3 | mg/L | ND (0.003) U | ND (0.150) U | ND (0.003) U | ND (0.015) U | ND (0.003) U |
| cis-1,2-Dichloroethene | 156-59-2 | mg/L | ND (0.002) U | ND (0.100) U | ND (0.002) U | ND (0.010) U | ND (0.002) U |
| cis-1,3-Dichloropropene | 10061-01-5 | mg/L | ND (0.001) U | ND (0.050) U | ND (0.001) U | ND (0.005) U | ND (0.001) U |
| Dibromochloromethane | 124-48-1 | mg/L | ND (0.002) U | ND (0.100) U | ND (0.002) U | ND (0.010) U | ND (0.002) U |
| Ethylbenzene | 100-41-4 | mg/L | ND (0.002) U | ND (0.100) U | ND (0.002) U | ND (0.010) U | ND (0.002) U |
| Methylene Chloride | 75-09-2 | mg/L | ND (0.002) U | ND (0.100) U | ND (0.002) U | ND (0.010) U | ND (0.002) U |
| Styrene | 100-42-5 | mg/L | ND (0.001) U | ND (0.050) U | ND (0.001) U | ND (0.005) U | ND (0.001) U |
| Tetrachloroethene | 127-18-4 | mg/L | ND (0.001) U | ND (0.050) U | ND (0.001) U | ND (0.005) U | ND (0.001) U |
| Toluene | 108-88-3 | mg/L | ND (0.002) U | ND (0.100) U | ND (0.002) U | ND (0.010) U | ND (0.002) U |
| trans-1,2-Dichloroethene | 156-60-5 | mg/L | ND (0.002) U | ND (0.100) U | ND (0.002) U | ND (0.010) U | ND (0.002) U |
| trans-1,3-Dichloropropene | 10061-02-6 | mg/L | ND (0.001) U | ND (0.050) U | ND (0.001) U | ND (0.005) U | ND (0.001) U |
| Trichloroethene | 79-01-6 | mg/L | ND (0.001) U | ND (0.050) U | ND (0.001) U | ND (0.005) U | ND (0.001) U |
| Vinyl Chloride | 75-01-4 | mg/L | ND (0.001) U | ND (0.100) U | ND (0.001) U | ND (0.010) U | ND (0.001) U |
| Xylene (Total) | 1330-20-7 | mg/L | ND (0.001) U | 0.082 (0.050) J | ND (0.001) U | 0.027 (0.005) J | ND (0.001) U |

NOTES:

ND denotes "Not Detected" at method detection limit shown in parentheses.

(a) Listed on chain-of-custody documentation as sample GEO-21-GW.

(b) Target Compound List (TCL) volatile organic compounds by EPA SW-846 method 8260.

U qualifier denotes not detected.

J qualifier denotes quantitation is estimated due to limitations identified during data validation quality assurance review.

TABLE 4-2
(Continued)

VOLATILE ORGANIC COMPOUND DATA SUMMARY
GROUND WATER MONITORING SAMPLES
PHASE II REMEDIAL INVESTIGATION

Gulf Coast Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Registry Number | Units | Sample Identifier | | | | | |
|---|---------------------|-------|-------------------|-------|------------|-------|----------------------------------|---|
| | | | MW-10 | MW-11 | MW-12 | MW-13 | MW-13 (Duplicate) ^(b) | |
| <i>TCL Volatile Organics</i> ^(c) | | | | | | | | |
| 1,1,1-Trichloroethane | 71-55-6 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 1,1,2-Trichloroethane | 79-00-5 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 1,1-Dichloroethane | 75-34-3 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 1,1-Dichloroethene | 75-35-4 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 1,2-Dichloroethane | 107-06-2 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 1,2-Dichloropropane | 78-87-5 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 2-Butanone | 78-93-3 | mg/L | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U |
| 2-Hexanone | 591-78-6 | mg/L | ND (0.007) | U | ND (0.007) | U | ND (0.007) | U |
| 4-Methyl-2-pentanone | 108-10-1 | mg/L | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U |
| Acetone | 67-64-1 | mg/L | ND (0.006) | R | ND (0.006) | R | ND (0.006) | R |
| Benzene | 71-43-2 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| Bromodichloromethane | 75-27-4 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| Bromoform | 75-25-2 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| Bromomethane | 74-83-9 | mg/L | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U |
| Carbon Disulfide | 75-15-0 | mg/L | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U |
| Carbon Tetrachloride | 56-23-5 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| Chlorobenzene | 108-90-7 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| Chloroethane | 75-00-3 | mg/L | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U |
| Chloroform | 67-66-3 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| Chloromethane | 74-87-5 | mg/L | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U |
| cis-1,2-Dichloroethene | 156-59-0 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| cis-1,3-Dichloropropene | 10061-01-5 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| Dibromochloromethane | 124-48-1 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| Ethylbenzene | 100-41-4 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| Methylene Chloride | 75-09-2 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| Styrene | 100-42-5 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| Tetrachloroethene | 127-18-4 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| Toluene | 108-88-3 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| trans-1,2-Dichloroethene | 156-60-5 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| trans-1,3-Dichloropropene | 10061-02-6 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| Trichloroethene | 79-01-6 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| Vinyl Chloride | 75-01-4 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| Xylene (Total) | 1330-20-7 | mg/L | ND (0.001) | U | ND (0.001) | J | 0.004 (0.001) | U |

NOTES:

ND denotes "Not Detected" at method detection limit shown in parentheses.

(a) Listed on chain-of-custody documentation as sample MW-19.

(b) Listed on chain-of-custody documentation as sample MW-23.

(c) Target Compound List (TCL) volatile organic compounds (VOCs) by EPA SW-846 method 8260.

U qualifier denotes not detected.

J qualifier denotes quantitation is estimated due to limitations identified during data validation quality assurance review.

R qualifier denotes unusable result identified during data validation quality assurance review; analyte may or may not be present in the sample.

TABLE 4-2
(Continued)

SEMI-VOLATILE ORGANIC COMPOUND DATA SUMMARY
GROUND WATER MONITORING SAMPLES
PHASE II REMEDIAL INVESTIGATION

Gulf Coast Crosswing Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Registry Number | Units | Sample Identifier | | | | | | | | | |
|--------------------------------------|---------------------|-------|-------------------|-------|------------|-------|------------|-------|---------------|---|---------------|---|
| | | | MW-01 | MW-03 | MW-04 | MW-05 | MW-06 | MW-07 | MW-08 | | | |
| <i>TCL Semivolatile Organics (a)</i> | | | | | | | | | | | | |
| 1,2,4-trichlorobenzene | 120-82-1 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 1,2-dichlorobenzene | 95-50-1 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 1,3-dichlorobenzene | 541-73-1 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 1,4-dichlorobenzene | 106-46-7 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 2,2-dimethyl-1,3-dioxopropane | 109-60-1 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 2,4,5-trichlorophenol | 95-95-4 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 2,4,6-trichlorophenol | 88-06-2 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 2,4-dichlorophenol | 120-83-2 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 2,4-dimethylphenol | 105-67-9 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | 0.048 (0.001) | U | ND (0.001) | U |
| 2,4-dinitrophenol | 51-28-5 | mg/L | ND (0.015) | U | ND (0.015) | U | ND (0.015) | U | ND (0.015) | U | ND (0.015) | U |
| 2,4-dinitrotoluene | 121-14-2 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 2,6-dinitrotoluene | 606-20-2 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 2-chlorophthalate | 91-58-7 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 2-chlorophenol | 95-57-8 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 2-methylnaphthalene | 91-57-6 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | 0.033 (0.001) | U | ND (0.001) | U |
| 2-methylphenol | 95-48-7 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | 0.035 (0.001) | U | ND (0.001) | U |
| 2-nitroaniline | 88-74-1 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 2-nitrophenol | 88-75-5 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 3,3-dichlorobenzidine | 91-94-1 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 3-nitroaniline | 99-09-2 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 4,5-dinitro-2-methylphenol | 534-52-1 | mg/L | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U |
| 4-isopropylphenylphenyl ether | 101-53-3 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 4-chloro-3-methylphenol | 59-50-7 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 4-methylaniline | 106-47-8 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 4-chlorophenylphenyl ether | 7005-72-3 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 4-methylphenol | 106-44-5 | mg/L | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U | 0.069 (0.003) | U | ND (0.003) | U |
| 4-nitroaniline | 100-01-6 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 4-nitrophenol | 100-02-7 | mg/L | ND (0.010) | U | ND (0.010) | U | ND (0.010) | U | ND (0.010) | U | ND (0.010) | U |
| acetylnaphthalene | 85-31-9 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | 0.023 (0.001) | U | ND (0.001) | U |
| acetylnaphthylene | 208-96-8 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| anthracene | 120-12-7 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | 0.001 (0.001) | U | ND (0.001) | U |
| benz(a)anthracene | 56-55-3 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| benz(b)pyrene | 50-32-6 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| benz(k)fluoranthene | 205-99-2 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| benz(g,h)perylene | 191-24-2 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| benz(e)fluoranthene | 207-08-9 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| bis(2-chloroethyl)methane | 111-91-1 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| bis(2-chloroethyl)ether | 111-44-4 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| bis(2-ethylhexyl)phthalate | 117-81-7 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | 0.064 (0.002) | U |
| butylbenzylphthalate | 85-68-7 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| carbazole | 86-74-8 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | 0.025 (0.001) | U | ND (0.001) | U |
| chrysene | 218-01-9 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| di-n-butylphthalate | 84-74-2 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| di-n-octylphthalate | 117-84-0 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| dibenz(a,h)anthracene | 55-70-3 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| dibenzofuran | 132-64-9 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | 0.043 (0.001) | U | ND (0.001) | U |
| diethylphthalate | 84-66-2 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| dimethylphthalate | 131-11-3 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| fluoranthene | 206-44-0 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| fluorene | 86-73-7 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | 0.019 (0.001) | U | ND (0.001) | U |
| hexachlorobenzene | 118-74-1 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| hexachlorobutadiene | 87-68-3 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| hexachlorocyclopentadiene | 77-07-4 | mg/L | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U |
| hexachlorocyclohexane | 67-72-1 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| indeno(1,2,3-cd)pyrene | 193-39-5 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| isophorone | 78-55-1 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| N-nitroso-p-propylamine | 621-64-7 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| N-nitrosodiphenylamine | 96-30-6 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| naphthalene | 91-20-3 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | 0.8 (0.010) | U | ND (0.001) | U |
| nitrobenzene | 98-95-3 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| pentachlorophenol | 87-86-5 | mg/L | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U |
| phenanthrene | 85-01-3 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | 0.013 (0.001) | U | ND (0.001) | U |
| phenol | 108-95-2 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | 0.008 (0.001) | U | ND (0.001) | U |
| pyrene | 129-00-0 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |

NOTES:

ND denotes "Not Detected" at method detection limit shown in parentheses.

(a) Target Compound List (TCL) base neutral/acid-extractable organic compounds by EPA SW-846 method 8270.

(b) Low concentrations of this common laboratory contaminant warrant caution if this value is used as basis for environmental risk assessment or other decision-making process.

U qualifier denotes not detected.

J qualifier denotes quantitation is estimated due to limitations identified during data validation quality assurance review.

TABLE 4-2
(Continued)

SEMI-VOLATILE ORGANIC COMPOUND DATA SUMMARY
GROUND WATER MONITORING SAMPLES
PHASE II REMEDIAL INVESTIGATION

Gulf Coast Crocoating Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Registry Number | Units | Sample Identifier | | | | | | | | | | | | | |
|---|---------------------|-------|-------------------|-------|---------------|-------|------------|----------------------------------|------------|---|---------------|---|------------|---|------------|---|
| | | | MW-09 | MW-10 | MW-11 | MW-12 | MW-13 | MW-13 (Duplicate) ^(b) | | | | | | | | |
| <i>TCL Semivolatile Organics</i> ^(c) | | | | | | | | | | | | | | | | |
| 1,2,4-trichlorobenzene | 120-82-1 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 1,2-dichlorobenzene | 95-50-2 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 1,3-dichlorobenzene | 541-73-1 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 1,4-dichlorobenzene | 106-46-7 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 2,2-bis(4-chlorophenyl)propane | 106-60-1 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 2,4,5-trichlorophenol | 95-95-4 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 2,4,6-trichlorophenol | 88-06-2 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 2,4-dichlorophenol | 120-83-2 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 2,4-dimethylphenol | 105-67-9 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | 0.01 (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 2,4-dinitrophenol | 51-28-5 | mg/L | ND (0.015) | U | ND (0.015) | U | ND (0.015) | U | ND (0.015) | U | ND (0.015) | U | ND (0.015) | U | ND (0.015) | U |
| 2,4-dinitrotoluene | 121-14-2 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 2,6-dinitrotoluene | 606-20-2 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 2-chloronaphthalene | 91-59-7 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 2-chlorophenol | 95-57-8 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 2-methylnaphthalene | 91-57-6 | mg/L | 0.43 (0.020) | U | 0.5 (0.030) | U | ND (0.001) | U | ND (0.001) | U | 0.004 (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 2-methylphenol | 95-48-7 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 2-nitroaniline | 88-74-4 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 2-nitrophenol | 88-75-5 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 3,3'-dichlorobenzidine | 91-94-1 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 3-nitroaniline | 99-09-2 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 4,6-dinitro-2-methylphenol | 534-52-1 | mg/L | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U |
| 4-bromophenylphenylether | 101-55-3 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 4-chloro-3-methylphenol | 59-50-7 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 4-chloroaniline | 106-47-8 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 4-chlorophenylphenylether | 7006-72-3 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 4-methylphenol | 106-44-5 | mg/L | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U |
| 4-nitroaniline | 100-01-6 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| 4-nitrophenol | 100-02-7 | mg/L | ND (0.010) | U | ND (0.010) | U | ND (0.010) | U | ND (0.010) | U | ND (0.010) | U | ND (0.010) | U | ND (0.010) | U |
| acenaphthene | 83-32-9 | mg/L | 0.19 (0.020) | J | 0.21 (0.030) | J | ND (0.001) | U | ND (0.001) | U | 0.003 (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| acenaphthylene | 208-96-8 | mg/L | 0.007 (0.001) | J | 0.008 (0.001) | J | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| anthracene | 120-12-7 | mg/L | 0.005 (0.001) | J | 0.005 (0.001) | J | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| benzo(a)anthracene | 56-55-3 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| benzo(b)pyrene | 50-32-8 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| benzo(k)fluoranthene | 205-99-2 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| benzo(g)herylene | 191-24-2 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| benzo(k)fluoranthene | 207-08-9 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| bis(2-chloroethoxy)methane | 131-91-4 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| bis(2-chloroethyl)ether | 131-44-4 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| bis(2-ethylhexyl)phthalate | 117-81-7 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| butylbenzylphthalate | 85-68-7 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| carbazole | 86-74-8 | mg/L | 0.11 (0.001) | U | 0.12 (0.001) | U | ND (0.001) | U | ND (0.001) | U | 0.004 (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| chrysene | 218-01-9 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| di-n-butylphthalate | 84-74-2 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| di-n-octylphthalate | 117-84-0 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| di-benz(a,b)anthracene | 53-70-3 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| dibenzofuran | 152-84-9 | mg/L | 0.12 (0.001) | U | 0.14 (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| diethylphthalate | 84-66-2 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| dimethylphthalate | 131-11-3 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| fluorene | 206-44-0 | mg/L | 0.007 (0.001) | J | 0.007 (0.001) | J | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| fluorene | 86-73-7 | mg/L | 0.093 (0.001) | J | 0.1 (0.001) | J | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| hexachlorobenzene | 118-74-1 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| hexachlorobutadiene | 87-68-3 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U |
| hexachlorocyclopentadiene | 77-47-4 | mg/L | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U |
| hexachlorocyclohexane | 67-72-1 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| indeno(1,2,3-cd)pyrene | 193-39-5 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| isophorone | 78-59-1 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 1,2,3,4,6,7,8-heptachlorodibenz-p-dioxin | 122-84-1 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| 1,2,3,4,6,7,8-heptachlorodibenz-p-dioxin | 86-10-5 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| naphthalene | 91-20-3 | mg/L | 2.1 (0.020) | U | 2.4 (0.030) | U | ND (0.001) | U | ND (0.001) | U | 0.072 (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| nitrobenzene | 98-95-3 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| pentachlorophenol | 87-86-5 | mg/L | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U |
| perfluorobenzene | 85-01-8 | mg/L | 0.052 (0.001) | U | 0.058 (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| phenol | 108-95-2 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |
| pyrene | 129-00-0 | mg/L | 0.004 (0.001) | J | 0.004 (0.001) | J | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U |

NOTES:

ND denotes "Not Detected" at method detection limit shown in parentheses.

(a) Listed on chain-of-custody documentation as sample MW-19.

(b) Listed on chain-of-custody documentation as sample MW-23.

(c) Target Compound List (TCL) base neutral/acid-extractable organic compounds by EPA SW-846 method 8270.

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TABLE 4-2
(Continued)

PAH COMPOUND DATA SUMMARY
GROUND WATER MONITORING SAMPLES
PHASE II REMEDIAL INVESTIGATION

Gulf Coast Crocoring Siz
Hattiesburg, Mississippi

| Analytical Parameter | CAS Registry Number | Units | Sample Identifier | | | | | | |
|--------------------------|---------------------|-------|-----------------------|-----------------------|----------------------|-----------------------|----------------------|----------------------|-----------------|
| | | | MW-01 | MW-03 | MW-04 | MW-05 | MW-06 | MW-07 | MW-08 |
| PAH Compounds (a) | | | | | | | | | |
| Acenaphthene | 83-32-9 | mg/L | ND (0.000780) U | ND (0.000780) U | ND (0.00079) U | ND (0.000800) U | 0.026 (0.00081) J | ND (0.00083) U | ND (0.00081) U |
| Acenaphthylene | 208-96-8 | mg/L | ND (0.000780) U | ND (0.000780) U | ND (0.00079) U | ND (0.000800) U | 0.026 (0.00081) J | ND (0.00083) U | ND (0.00081) U |
| Anthracene | 120-12-7 | mg/L | ND (0.000030) U | 0.000178 (0.000030) J | 0.00031 (0.000030) U | ND (0.000031) U | 0.00075 (0.000031) J | ND (0.000032) U | ND (0.000031) U |
| Benzo(a)anthracene | 56-55-3 | mg/L | ND (0.000018) U | 0.00131 (0.000017) U | ND (0.000018) U | 0.000018 (0.000018) J | ND (0.000018) U | ND (0.000019) U | ND (0.000018) U |
| Benzo(a)pyrene | 50-32-8 | mg/L | ND (0.000021) U | ND (0.000021) U | ND (0.000022) U | 0.000032 (0.000022) J | ND (0.000022) U | ND (0.000023) U | ND (0.000022) U |
| Benzo(b)fluoranthene | 205-99-3 | mg/L | ND (0.000034) U | ND (0.000034) U | ND (0.000034) U | 0.000047 (0.000033) J | ND (0.000035) U | ND (0.000036) U | ND (0.000036) U |
| Benzo(g,h,i)perylene | 191-24-2 | mg/L | ND (0.000097) U | ND (0.000096) U | ND (0.000097) U | ND (0.000099) U | ND (0.000100) U | ND (0.000100) U | ND (0.000100) U |
| Benzo(k)fluoranthene | 207-08-9 | mg/L | ND (0.000036) U | ND (0.000026) U | ND (0.000027) U | ND (0.000027) U | ND (0.000027) U | ND (0.000028) U | ND (0.000027) U |
| Chrysene | 218-01-9 | mg/L | 0.000067 (0.000058) J | 0.00059 (0.000057) U | 0.00063 (0.000058) J | ND (0.000059) U | ND (0.000060) U | ND (0.000061) U | ND (0.000060) U |
| Dibenz(a,h)anthracene | 53-70-3 | mg/L | ND (0.000046) U | ND (0.000046) U | ND (0.000046) U | ND (0.000046) U | ND (0.000046) U | ND (0.000046) U | ND (0.000046) U |
| Fluoranthene | 206-44-0 | mg/L | ND (0.000020) U | 0.00038 (0.000019) U | ND (0.000020) U | 0.000074 (0.000020) J | 0.00052 (0.000020) J | ND (0.000021) U | ND (0.000020) U |
| Fluorene | 86-73-7 | mg/L | ND (0.000170) U | 0.00099 (0.000160) U | ND (0.00017) U | ND (0.000170) U | 0.0155 (0.0034) J | ND (0.000180) U | ND (0.00017) U |
| Indeno(1,2,3-cd)pyrene | 195-39-5 | mg/L | ND (0.000063) U | ND (0.000063) U | ND (0.000063) U | ND (0.000064) U | ND (0.000065) U | ND (0.000066) U | ND (0.000066) U |
| Naphthalene | 91-20-3 | mg/L | ND (0.000780) U | ND (0.000780) U | ND (0.00079) U | ND (0.000800) U | 0.680 (0.016) J | ND (0.00083) U | ND (0.00081) U |
| Phenanthrene | 85-01-8 | mg/L | ND (0.000045) U | 0.00214 (0.000045) U | ND (0.000045) U | ND (0.000046) U | 0.00928 (0.000047) J | ND (0.000046) U | ND (0.000047) U |
| Pyrene | 129-00-0 | mg/L | 0.00329 (0.000180) J | ND (0.000170) U | 10.4 (0.00018) J (b) | ND (0.000180) U | ND (0.000180) U | 0.00142 (0.000190) J | ND (0.000180) U |

NOTES:

ND denotes "Not Detected" as method detection limit shown in parentheses.
(a) Polynuclear Aromatic Hydrocarbons (PAHs) by EPA SW-846 method 8310.
(b) Corrected value resulting from data validation quality assurance review.
U qualifier denotes not detected.

J qualifier denotes that the compound was not detected, but the quantitation limit may or may not be higher than the value shown in parentheses due to a bias identified during the data validation quality assurance review.

TABLE 4-3
(Continued)

PAH COMPOUND DATA SUMMARY
GROUND WATER MONITORING SAMPLES
PHASE II REMEDIAL INVESTIGATION

Gulf Coast Creosoting Site
Huntsburg, Mississippi

| Analytical Parameter | CAS Registry Number | Units | Sample Identifier | | | | | | | | | | | |
|------------------------------|---------------------|-------|---------------------|----------------------------------|-------------------|--------------|--------------|---------------------|----------------------------------|---------------|--------------|--------------|--------------|--------------|
| | | | MW-09 | MW-09 (Duplicate) ^(a) | MW-ID | MW-11 | MW-12 | MW-13 | MW-13 (Duplicate) ^(b) | | | | | |
| PAH Compounds ^(c) | | | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | mg/L | 0.230 (0.000600) | 0.220 (0.000800) | ND (0.000820) | U (0.000800) | U (0.000800) | 0.0033 (0.000820) | J (0.000820) | ND (0.000800) | U (0.000800) | U (0.000800) | U (0.000800) | U (0.000800) |
| Acenaphthylene | 208-96-8 | mg/L | 0.197 (0.000800) | 0.191 (0.000800) | ND (0.000820) | U (0.000800) | U (0.000800) | 0.0036 (0.000820) | J (0.000820) | ND (0.000800) | U (0.000800) | U (0.000800) | U (0.000800) | U (0.000800) |
| Anthracene | 120-12-7 | mg/L | 0.00417 (0.000031) | 0.00390 (0.000031) | ND (0.000032) | U (0.000031) | U (0.000031) | 0.00042 (0.000032) | J (0.000032) | ND (0.000031) | U (0.000031) | U (0.000031) | U (0.000031) | U (0.000031) |
| Benzo(a)anthracene | 56-55-3 | mg/L | ND (0.000018) | 0.000186 (0.000018) | ND (0.000018) | U (0.000018) | U (0.000018) | ND (0.000019) | U (0.000019) | ND (0.000018) | U (0.000018) | U (0.000018) | U (0.000018) | U (0.000018) |
| Benzo(a)pyrene | 50-32-8 | mg/L | ND (0.000022) | 0.000038 (0.000022) | ND (0.000022) | U (0.000022) | U (0.000022) | 0.000024 (0.000022) | J (0.000022) | ND (0.000023) | U (0.000023) | U (0.000023) | U (0.000023) | U (0.000023) |
| Benzo(b)fluoranthene | 205-99-2 | mg/L | 0.000041 (0.000035) | 0.000035 (0.000035) | ND (0.000036) | U (0.000035) | U (0.000035) | ND (0.000036) | U (0.000036) | ND (0.000035) | U (0.000035) | U (0.000035) | U (0.000035) | U (0.000035) |
| Benzo(k)fluoranthene | 191-24-2 | mg/L | ND (0.000099) | ND (0.000099) | ND (0.000100) | U (0.000100) | U (0.000100) | ND (0.000098) | U (0.000098) | ND (0.000100) | U (0.000100) | U (0.000100) | U (0.000100) | U (0.000100) |
| Benzo(e)fluoranthene | 207-08-9 | mg/L | 0.000037 (0.000027) | 0.000027 (0.000027) | ND (0.000028) | U (0.000028) | U (0.000028) | ND (0.000027) | U (0.000027) | ND (0.000028) | U (0.000028) | U (0.000028) | U (0.000028) | U (0.000028) |
| Chrysene | 218-01-9 | mg/L | 0.000224 (0.000059) | 0.000128 (0.000059) | ND (0.000061) | U (0.000061) | U (0.000061) | ND (0.000059) | J (0.000059) | ND (0.000061) | U (0.000061) | U (0.000061) | U (0.000061) | U (0.000061) |
| Dibenz(a,h)anthracene | 53-70-3 | mg/L | ND (0.000047) | ND (0.000047) | ND (0.000048) | U (0.000048) | U (0.000048) | ND (0.000047) | U (0.000047) | ND (0.000048) | U (0.000048) | U (0.000048) | U (0.000048) | U (0.000048) |
| Fluoranthene | 206-44-0 | mg/L | 0.00632 (0.000020) | 0.00493 (0.000020) | ND (0.000020) | U (0.000020) | U (0.000020) | ND (0.000019) | U (0.000019) | ND (0.000020) | U (0.000020) | U (0.000020) | U (0.000020) | U (0.000020) |
| Fluorene | 86-71-7 | mg/L | 0.093 (0.008500) | 0.078 (0.008500) | ND (0.000170) | U (0.000170) | U (0.000170) | ND (0.000170) | U (0.000170) | ND (0.000170) | U (0.000170) | U (0.000170) | U (0.000170) | U (0.000170) |
| Indeno(1,2,3-cd)pyrene | 155-35-3 | mg/L | ND (0.000064) | ND (0.000064) | ND (0.000066) | U (0.000066) | U (0.000066) | ND (0.000064) | U (0.000064) | ND (0.000066) | U (0.000066) | U (0.000066) | U (0.000066) | U (0.000066) |
| Naphthalene | 91-20-3 | mg/L | 2.200 (0.040000) | 1.810 (0.040000) | ND (0.000820) | U (0.000820) | U (0.000820) | ND (0.000800) | U (0.000800) | ND (0.000820) | U (0.000820) | U (0.000820) | U (0.000820) | U (0.000820) |
| Phenanthrene | 83-01-8 | mg/L | 0.050 (0.002300) | 0.041 (0.002300) | ND (0.000047) | U (0.000047) | U (0.000047) | ND (0.000046) | U (0.000046) | ND (0.000047) | U (0.000047) | U (0.000047) | U (0.000047) | U (0.000047) |
| Pyrene | 129-00-0 | mg/L | 0.00515 (0.000180) | 0.00395 (0.000180) | 0.0184 (0.000180) | U (0.000180) | U (0.000180) | 0.0040 (0.000180) | 0.00277 (0.000190) | ND (0.000180) | U (0.000180) | U (0.000180) | U (0.000180) | U (0.000180) |

NOTES:

ND denotes "Not Detected" at method detection limit shown in parentheses.

(a) Listed on chain-of-custody documentation as sample MW-19.

(b) Listed on chain-of-custody documentation as sample MW-23.

(c) Polynuclear Aromatic Hydrocarbons (PAHs) by EPA SW-846 method 8310.

U qualifier denotes not detected.

J qualifier denotes quantitation is estimated due to limitations identified during data validation quality assurance review.

UJ qualifier denotes that the compound was not detected, but the quantitation limit may or may not be higher than the value shown in parentheses due to a bias identified during the data validation quality assurance review.

TABLE 4-3
SURFACE WATER SAMPLE DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION

Gulf Coast Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Registry Number | Units | Sample Identifier | | | | | | |
|---------------------------------------|---------------------|-------|-------------------|---------|------------|------------|------------|------------|--|
| | | | SW-02 | SW-03 | SW-04 | SW-06 | SW-07 | | |
| TCCL Semivolatile Organics (a) | | | | | | | | | |
| 1,2-dichlorobenzene | 120-92-1 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| 1,2-dichloropropane | 95-50-1 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| 1,3-dichlorobenzene | 541-73-1 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| 1,4-dichlorobenzene | 106-46-7 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| 2,2-bis(1-chlorophenyl)propane | 106-60-1 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | |
| 2,4,5-trichlorophenol | 94-95-4 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | |
| 2,4,6-trichlorophenol | 88-06-2 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | |
| 2,4-dichlorophenol | 120-83-2 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| 2,4-dimethylphenol | 105-67-9 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| 2,4-dinitrophenol | 51-28-5 | mg/L | ND (0.016) | U | ND (0.016) | U | ND (0.015) | U | |
| 2,4-dinitrotoluene | 121-14-2 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| 2,6-dinitrotoluene | 606-20-2 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | |
| 2-chloronaphthalene | 91-58-7 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| 2-chlorophenol | 95-57-8 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| 2-methylnaphthalene | 91-57-6 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| 2-methylphenol | 95-48-7 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| 2-nitroaniline | 88-74-4 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | |
| 2-nitrophenol | 88-75-5 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| 3,3-dichlorobenzidine | 91-94-1 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | |
| 3-nitroaniline | 99-09-2 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | |
| 4,6-dinitro-2-methylphenol | 534-52-1 | mg/L | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U | |
| 4-bromophenyl phenyl ether | 101-55-3 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | |
| 4-chloro-3-methylphenol | 59-50-7 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| 4-chloroaniline | 106-47-8 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| 4-chlorophenyl phenyl ether | 7005-72-3 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| 4-methylphenol | 106-44-5 | mg/L | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U | |
| 4-nitroaniline | 100-01-6 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | |
| 4-nitrophenol | 100-02-7 | mg/L | ND (0.01) | U | ND (0.01) | U | ND (0.01) | U | |
| acridaphenone | 85-32-9 | mg/L | 0.014 | (0.001) | 0.009 | (0.001) | J | ND (0.001) | |
| acridaphenone | 208-96-8 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| acridaphenone | 120-12-7 | mg/L | 0.013 | (0.001) | ND (0.001) | U | ND (0.001) | U | |
| anthracene | 56-55-3 | mg/L | 0.005 | (0.001) | J | ND (0.001) | U | ND (0.001) | |
| benzo (a) anthracene | 50-32-8 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| benzo (b) fluoranthene | 205-99-2 | mg/L | 0.012 | (0.001) | 0.009 | (0.001) | J | ND (0.001) | |
| benzo (ghi) perylene | 191-24-2 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| benzo (k) fluoranthene | 207-08-9 | mg/L | 0.002 | (0.001) | J | ND (0.001) | U | ND (0.001) | |
| bis (2-chloroethoxy) methane | 111-91-1 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| bis (2-chloroethyl) ether | 111-44-4 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| bis (2-ethylhexyl) phthalate | 117-81-7 | mg/L | 0.003 | (0.002) | J (b) | ND (0.002) | U | ND (0.002) | |
| butyl benzyl phthalate | 85-68-7 | mg/L | 0.003 | (0.002) | U* | ND (0.002) | U | ND (0.002) | |
| carbazole | 86-74-8 | mg/L | 0.01 | (0.001) | J | ND (0.001) | U | ND (0.001) | |
| chrysene | 218-01-9 | mg/L | 0.006 | (0.001) | J | ND (0.001) | U | ND (0.001) | |
| di-n-butyl phthalate | 84-74-2 | mg/L | 0.009 | (0.002) | U* | ND (0.002) | U | ND (0.002) | |
| di-n-octyl phthalate | 117-84-0 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| dibenz (a,h) anthracene | 53-70-3 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| dibenzofuran | 132-64-9 | mg/L | 0.011 | (0.001) | U | ND (0.001) | U | ND (0.001) | |
| dibutyl phthalate | 84-66-2 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | |
| dimethyl phthalate | 131-11-3 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | |
| fluoranthene | 206-44-0 | mg/L | 0.039 | (0.001) | 0.013 | (0.001) | 0.012 | (0.001) | |
| fluorene | 86-73-7 | mg/L | 0.012 | (0.001) | 0.011 | (0.001) | 0.011 | (0.001) | |
| hexachlorobenzene | 118-74-1 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | |
| hexachlorobutadiene | 87-68-3 | mg/L | ND (0.002) | U | ND (0.002) | U | ND (0.002) | U | |
| hexachlorocyclopentadiene | 77-47-4 | mg/L | ND (0.005) | U | ND (0.005) | U | ND (0.005) | U | |
| hexachlorocyclohexane | 57-72-1 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| indeno (1,2,3-cd) pyrene | 193-39-5 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| isophthalene | 78-59-1 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| N-nitrosodipropylamine | 621-64-7 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| N-nitrosodiphenylamine | 86-30-6 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| naphthalene | 91-20-3 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| nitrobenzene | 98-95-3 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| parachlorophenol | 87-86-5 | mg/L | ND (0.003) | U | ND (0.003) | U | ND (0.003) | U | |
| picaquatone | 85-01-8 | mg/L | 0.017 | (0.001) | 0.017 | (0.001) | 0.017 | (0.001) | |
| phenol | 108-95-2 | mg/L | ND (0.001) | U | ND (0.001) | U | ND (0.001) | U | |
| pyrene | 129-00-0 | mg/L | 0.021 | (0.001) | 0.021 | (0.001) | 0.021 | (0.001) | |

NOTES:

- (a) Target Compound List (TCL) base neutral/acid-extractable organic compounds by EPA SW-846 method 8270.
- (b) Low concentrations of this common laboratory contaminant warrant caution if this value is used as basis for environmental risk assessment or other decision-making process.
- ND denotes "Not Detected" at method detection limit shown in parentheses.
- U qualifier denotes not detected.
- J qualifier denotes quantitation is estimated due to limitations identified during data validation quality assurance review.
- U* qualifier denotes that compound should be considered "not-detected" since it was detected in a corresponding field, trip, and/or laboratory blank sample at a similar concentration.

TABLE 4-4

SEDIMENT SAMPLE DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION

Gulf Coast Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Registry Number | Units | Sample Identifier | | | | | | | |
|--------------------------------------|---------------------|-------|-------------------|-------|---------------|-------|---------------|-------|------------|---|
| | | | SD-01 | SD-02 | SD-03 | SD-04 | SD-05 | SD-06 | | |
| TCL Semivolatile Organics (a) | | | | | | | | | | |
| 1,2-dichlorobenzene | 120-82-1 | mg/kg | ND (0.039) | U | ND (0.043) | U | ND (0.042) | U | ND (0.039) | U |
| 1,2-dichlorobenzene | 95-50-1 | mg/kg | ND (0.039) | U | ND (0.043) | U | ND (0.042) | U | ND (0.039) | U |
| 1,3-dichlorobenzene | 541-73-1 | mg/kg | ND (0.039) | U | ND (0.043) | U | ND (0.042) | U | ND (0.039) | U |
| 1,4-dichlorobenzene | 106-46-7 | mg/kg | ND (0.039) | U | ND (0.043) | U | ND (0.042) | U | ND (0.039) | U |
| 2,3-dioxibis(1-chloropropyl) ether | 106-61-1 | mg/kg | ND (0.039) | U | ND (0.043) | U | ND (0.042) | U | ND (0.039) | U |
| 2,3,5-trichlorophenol | 95-95-4 | mg/kg | ND (0.039) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| 2,4,6-trichlorophenol | 88-06-2 | mg/kg | ND (0.079) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| 2,4-dichlorophenol | 120-83-2 | mg/kg | ND (0.079) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| 2,4-dinitrophenol | 105-67-9 | mg/kg | ND (0.079) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| 2,4-dinitrophenol | 51-28-5 | mg/kg | ND (0.230) | U | ND (0.25) | U | ND (0.23) | U | ND (0.23) | U |
| 2,4-dinitrotoluene | 121-14-2 | mg/kg | ND (0.079) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| 2,6-dinitrotoluene | 606-20-2 | mg/kg | ND (0.039) | U | ND (0.043) | U | ND (0.042) | U | ND (0.039) | U |
| 2-chlorophthalene | 91-58-7 | mg/kg | ND (0.039) | U | ND (0.043) | U | ND (0.042) | U | ND (0.039) | U |
| 2-chlorophthalene | 95-57-8 | mg/kg | ND (0.039) | U | ND (0.043) | U | ND (0.042) | U | ND (0.039) | U |
| 2-methylnaphthalene | 91-57-6 | mg/kg | ND (0.039) | U | 0.44 (0.043) | U | 0.091 (0.042) | J | ND (0.039) | U |
| 2-methylphenol | 95-48-7 | mg/kg | ND (0.039) | U | ND (0.043) | U | ND (0.042) | U | ND (0.039) | U |
| 2-nitrophenol | 88-74-4 | mg/kg | ND (0.039) | U | ND (0.043) | U | ND (0.042) | U | ND (0.039) | U |
| 2-nitrophenol | 88-75-5 | mg/kg | ND (0.079) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| 3,3'-dichlorobenzidine | 91-94-1 | mg/kg | ND (0.079) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| 3- and 4-methylphenol | 106-44-5 | mg/kg | ND (0.079) | U | 0.093 (0.085) | J | 0.11 (0.084) | J | ND (0.078) | U |
| 3-nitrophenol | 99-09-2 | mg/kg | ND (0.079) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| 4,6-dinitro-2-methylphenol | 534-52-1 | mg/kg | ND (0.200) | U | ND (0.21) | U | ND (0.21) | U | ND (0.19) | U |
| 4-bromophenyl phenyl ether | 101-55-3 | mg/kg | ND (0.079) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| 4-chloro-3-methylphenol | 59-30-7 | mg/kg | ND (0.079) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| 4-chlorophthalene | 106-47-8 | mg/kg | ND (0.039) | U | ND (0.043) | U | ND (0.042) | U | ND (0.039) | U |
| 4-chlorophenyl phenyl ether | 7005-72-3 | mg/kg | ND (0.039) | U | ND (0.043) | U | ND (0.042) | U | ND (0.039) | U |
| 4-nitrophenol | 100-01-6 | mg/kg | ND (0.079) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| 4-nitrophenol | 100-02-7 | mg/kg | ND (0.200) | U | ND (0.21) | U | ND (0.21) | U | ND (0.19) | U |
| acenaphthene | 85-32-9 | mg/kg | ND (0.039) | U | 0.89 (0.043) | J | 0.17 (0.042) | J | ND (0.039) | U |
| acenaphthylene | 208-96-8 | mg/kg | ND (0.039) | U | 8.9 (0.85) | J | 6.8 (0.4) | J | ND (0.039) | U |
| anthracene | 120-12-7 | mg/kg | ND (0.039) | U | 5.5 (0.85) | J | 3.3 (0.4) | J | ND (0.039) | U |
| benzo (a) anthracene | 56-55-3 | mg/kg | 0.062 (0.039) | J | 330 (25) | J | 100 (20) | J | ND (0.039) | U |
| benzo (b) pyrene | 50-82-8 | mg/kg | 0.056 (0.039) | J | 130 (25) | J | 33 (0.4) | J | ND (0.039) | U |
| benzo (k) fluoranthene | 205-99-2 | mg/kg | 0.120 (0.039) | J | 180 (25) | J | 46 (0.4) | J | ND (0.039) | U |
| benzo (ghi) perylene | 191-24-2 | mg/kg | 0.046 (0.039) | J | 36 (0.51) | J | 9.5 (0.4) | J | ND (0.039) | U |
| benzo (k) fluoranthene | 207-08-9 | mg/kg | ND (0.039) | U | 64 (0.51) | J | 18 (0.4) | J | ND (0.039) | U |
| bis (2-chloroethoxy) methane | 111-91-1 | mg/kg | ND (0.079) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| bis (2-chloroethyl) ether | 111-44-4 | mg/kg | ND (0.039) | U | ND (0.043) | U | ND (0.042) | U | ND (0.039) | U |
| bis (2-ethylhexyl) phthalate | 117-81-7 | mg/kg | 0.082 (0.079) | U* | 0.25 (0.085) | U* | 0.15 (0.084) | U* | ND (0.078) | U |
| butyl benzyl phthalate | 85-68-7 | mg/kg | ND (0.079) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| carbazole | 86-74-8 | mg/kg | ND (0.039) | U | 0.97 (0.043) | J | 0.22 (0.042) | J | ND (0.039) | U |
| chrysene | 218-01-9 | mg/kg | 0.077 (0.039) | J | 42 (0.85) | J | 1.3 (0.042) | J | ND (0.039) | U |
| di-n-butyl phthalate | 84-74-2 | mg/kg | ND (0.079) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| di-n-octyl phthalate | 117-84-0 | mg/kg | ND (0.079) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| dibenz (a,h) anthracene | 53-78-3 | mg/kg | ND (0.039) | U | 9.6 (0.85) | J | 0.15 (0.042) | J | ND (0.039) | U |
| dibenzofuran | 132-64-9 | mg/kg | ND (0.039) | U | 0.48 (0.043) | J | 0.1 (0.042) | J | ND (0.039) | U |
| diethyl phthalate | 84-66-2 | mg/kg | ND (0.079) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| dimethyl phthalate | 131-11-3 | mg/kg | ND (0.079) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| fluoranthene | 206-44-0 | mg/kg | 0.069 (0.039) | J | 160 (25) | J | 2 (0.042) | J | ND (0.039) | U |
| fluorene | 86-73-7 | mg/kg | ND (0.039) | U | 1 (0.043) | J | 0.18 (0.042) | J | ND (0.039) | U |
| hexachlorobutadiene | 118-74-1 | mg/kg | ND (0.039) | U | ND (0.043) | U | ND (0.042) | U | ND (0.039) | U |
| hexachlorobutadiene | 87-68-3 | mg/kg | ND (0.079) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| hexachlorocyclopentadiene | 77-47-4 | mg/kg | ND (0.200) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| hexachloroethane | 67-72-1 | mg/kg | ND (0.039) | U | ND (0.21) | U | ND (0.21) | U | ND (0.19) | U |
| indeno (1,2,3-cd) pyrene | 193-39-5 | mg/kg | 0.049 (0.039) | J | 39 (0.85) | J | 0.54 (0.042) | J | ND (0.039) | U |
| isophorone | 78-59-1 | mg/kg | ND (0.039) | U | ND (0.043) | U | ND (0.042) | U | ND (0.039) | U |
| N-nitrosodi-n-propylamine | 621-64-7 | mg/kg | ND (0.039) | U | ND (0.043) | U | ND (0.042) | U | ND (0.039) | U |
| N-nitrosodiphenylamine | 86-30-6 | mg/kg | ND (0.039) | U | ND (0.043) | U | ND (0.042) | U | ND (0.039) | U |
| naphthalene | 91-20-3 | mg/kg | ND (0.039) | U | 1.6 (0.043) | U | 0.16 (0.042) | J | ND (0.039) | U |
| nitrobenzene | 98-95-3 | mg/kg | ND (0.039) | U | ND (0.043) | U | ND (0.042) | U | ND (0.039) | U |
| pentachlorophenol | 87-86-5 | mg/kg | ND (0.200) | U | ND (0.21) | U | ND (0.21) | U | ND (0.19) | U |
| phenanthrene | 85-01-8 | mg/kg | ND (0.039) | U | 3.6 (0.043) | J | 0.66 (0.042) | J | ND (0.039) | U |
| phenol | 108-95-2 | mg/kg | ND (0.079) | U | ND (0.085) | U | ND (0.084) | U | ND (0.078) | U |
| pyrene | 129-00-0 | mg/kg | 0.110 (0.039) | J | 32 (0.85) | J | 1.6 (0.042) | J | ND (0.039) | U |

Other Parameters

Moisture Content (b) N.A. wt. % 15.1 (0.08) 34.2 (0.08) 21.9 (0.08) 16.4 (0.08) 20.5 (0.08) 14.3 (0.08)

NOTES:

ND denotes "Not Detected" at method detection limit shown in parentheses.

(a) Target Compound List (TCL) base neutral/acid-extractable organic compounds by EPA SW-846 method 8270, reported as dry-weight concentrations.

(b) EPA method 160.3 (Methods for Chemical Analysis of Water and Wastes, March 1983).

(c) Low concentrations of this common laboratory contaminant warrant caution if this value is used as basis for environmental risk assessment or other decision-making process.

U qualifier denotes not detected.

J qualifier denotes that compound should be considered "not-detected" since it was detected in a corresponding field, trip, and/or laboratory blank sample at a similar concentration.

U* qualifier denotes that compound should be considered "not-detected" since it was detected in a corresponding field, trip, and/or laboratory blank sample at a similar concentration.

TABLE 4-4
(Continued)

SEDIMENT SAMPLE DATA SUMMARY
PHASE II REMEDIAL INVESTIGATION

Gulf Coast Crocoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Registry Number | Units | Sample Identifier | | | | | SD-11 | |
|--|---------------------|-------|-------------------|----------------|-----------------|----------------------------|-----------------|--------------|--|
| | | | SD-07 | SD-08 | SD-09 | (Duplicate) ^(a) | SD-10 | | |
| TCL Semivolatile Organics^(b) | | | | | | | | | |
| 1,2,4-trichlorobenzene | 120-82-1 | mg/kg | ND (0.041) U | ND (0.04) U | ND (0.037) U | ND (0.039) UJ | ND (0.04) U | ND (0.045) U | |
| 1,2-dichlorobenzene | 95-50-1 | mg/kg | ND (0.041) U | ND (0.04) U | ND (0.037) U | ND (0.039) UJ | ND (0.04) U | ND (0.045) U | |
| 1,3-dichlorobenzene | 541-73-1 | mg/kg | ND (0.041) U | ND (0.04) U | ND (0.037) U | ND (0.039) UJ | ND (0.04) U | ND (0.045) U | |
| 1,4-dichlorobenzene | 106-46-7 | mg/kg | ND (0.041) U | ND (0.04) U | ND (0.037) U | ND (0.039) UJ | ND (0.04) U | ND (0.045) U | |
| 2,2-oxybis (1-chloropropane) | 106-60-1 | mg/kg | ND (0.041) U | ND (0.04) U | ND (0.037) U | ND (0.039) UJ | ND (0.04) U | ND (0.045) U | |
| 2,4,5-trichlorophenol | 95-85-4 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| 2,4,6-trichlorophenol | 88-06-2 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| 2,4-dichlorophenol | 120-83-2 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| 2,4-dimethylphenol | 105-67-9 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| 2,4-dinitrophenol | 51-28-5 | mg/kg | ND (0.24) U | ND (0.23) U | ND (0.22) U | ND (0.23) U | ND (0.23) U | ND (0.26) U | |
| 2,4-dinitrotoluene | 121-14-2 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| 2,6-dinitrotoluene | 606-20-2 | mg/kg | ND (0.041) U | ND (0.04) U | ND (0.037) U | ND (0.039) UJ | ND (0.04) U | ND (0.045) U | |
| 2-chlorophthalene | 91-58-7 | mg/kg | ND (0.041) U | ND (0.04) U | ND (0.037) U | ND (0.039) UJ | ND (0.04) U | ND (0.045) U | |
| 2-chlorophenol | 95-57-8 | mg/kg | ND (0.041) U | ND (0.04) U | ND (0.037) U | ND (0.039) UJ | ND (0.04) U | ND (0.045) U | |
| 2-methylphenol | 91-57-6 | mg/kg | 0.51 (0.041) U | 0.074 (0.04) J | 0.044 (0.037) J | 0.055 (0.039) J | 0.055 (0.039) J | ND (0.045) U | |
| 2-nitroaniline | 88-74-4 | mg/kg | ND (0.041) U | ND (0.04) U | ND (0.037) U | ND (0.039) UJ | ND (0.04) U | ND (0.045) U | |
| 2-nitrophenol | 95-48-7 | mg/kg | ND (0.041) U | ND (0.04) U | ND (0.037) U | ND (0.039) UJ | ND (0.04) U | ND (0.045) U | |
| 2-nitrotoluene | 88-74-4 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| 3,3'-dichlorobenzidine | 91-94-1 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| 3- and 4-methylphenol | 106-44-5 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| 3-nitroaniline | 99-09-2 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| 4,6-dinitro-2-methylphenol | 534-52-1 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| 4-bromophenyl phenyl ether | 101-55-3 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| 4-chloro-3-methylphenol | 59-50-7 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| 4-chloroaniline | 106-47-8 | mg/kg | ND (0.041) U | ND (0.04) U | ND (0.037) U | ND (0.039) UJ | ND (0.04) U | ND (0.045) U | |
| 4-chlorophenyl phenyl ether | 7005-72-3 | mg/kg | ND (0.041) U | ND (0.04) U | ND (0.037) U | ND (0.039) UJ | ND (0.04) U | ND (0.045) U | |
| 4-nitroaniline | 100-01-6 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| 4-nitrophenol | 100-02-7 | mg/kg | ND (0.2) U | ND (0.2) U | ND (0.19) U | ND (0.19) UJ | ND (0.2) U | ND (0.23) U | |
| acetylphenol | 83-32-9 | mg/kg | 0.45 (0.041) U | 0.18 (0.04) J | 0.37 (0.037) J | 0.24 (0.039) J | 0.24 (0.039) J | ND (0.045) U | |
| acetylphenylene | 208-96-8 | mg/kg | 0.078 (0.041) J | ND (0.04) J | ND (0.037) J | 0.057 (0.039) J | 0.054 (0.04) J | ND (0.045) U | |
| anthracene | 120-12-7 | mg/kg | 0.46 (0.041) U | 0.26 (0.04) J | 0.12 (0.037) J | 0.87 (0.039) J | 0.87 (0.039) J | ND (0.045) U | |
| benzo (a) anthracene | 56-55-3 | mg/kg | 0.59 (0.041) U | 0.18 (0.04) J | 0.24 (0.037) J | 0.37 (0.039) J | 0.37 (0.039) J | ND (0.045) U | |
| benzo (a) pyrene | 50-33-8 | mg/kg | 0.39 (0.041) J | 0.12 (0.04) J | 0.11 (0.037) J | 0.23 (0.039) J | 0.23 (0.039) J | ND (0.045) U | |
| benzo (b) fluoranthene | 205-99-2 | mg/kg | 0.58 (0.041) J | 0.17 (0.04) J | 0.17 (0.037) J | 0.34 (0.039) J | 0.34 (0.039) J | ND (0.045) U | |
| benzo (ghi) perylene | 191-24-2 | mg/kg | 0.18 (0.041) J | 0.065 (0.04) J | 0.042 (0.037) J | 0.098 (0.039) J | 0.098 (0.039) J | ND (0.045) U | |
| benzo (k) fluoranthene | 207-08-9 | mg/kg | 0.19 (0.041) J | 0.064 (0.04) J | 0.05 (0.037) J | 0.13 (0.039) J | 0.13 (0.039) J | ND (0.045) U | |
| bis (2-chloroethoxy)methane | 111-91-1 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| bis (2-chloroethyl) ether | 111-44-4 | mg/kg | ND (0.041) U | ND (0.04) U | ND (0.037) U | ND (0.039) UJ | ND (0.04) U | ND (0.045) U | |
| bis (2-ethylhexyl) phthalate | 117-81-7 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| butyl benzyl phthalate | 85-68-7 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | 0.39 (0.08) U* | ND (0.091) U | |
| carbazole | 86-74-8 | mg/kg | 0.57 (0.041) U | 0.16 (0.04) J | ND (0.037) U | 0.081 (0.039) J | ND (0.08) U | ND (0.045) U | |
| chrysene | 218-01-9 | mg/kg | 0.53 (0.041) U | 0.18 (0.04) J | 0.21 (0.037) J | 0.61 (0.039) J | 0.61 (0.039) J | ND (0.045) U | |
| di-n-butyl phthalate | 84-74-2 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| di-n-octyl phthalate | 117-84-0 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| dibenz (a,h) anthracene | 53-70-3 | mg/kg | 0.062 (0.041) J | ND (0.04) J | ND (0.037) J | 0.18 (0.039) J | 0.18 (0.039) J | ND (0.045) U | |
| dibenzofuran | 132-64-9 | mg/kg | 0.41 (0.041) U | 0.15 (0.04) J | 0.21 (0.037) J | 0.18 (0.039) J | 0.18 (0.039) J | ND (0.045) U | |
| diethyl phthalate | 84-66-2 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| dimethyl phthalate | 131-11-3 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| fluoranthene | 206-44-0 | mg/kg | 1.7 (0.041) U | 0.68 (0.04) J | 0.87 (0.037) J | 1.1 (0.039) J | 1.1 (0.039) J | ND (0.045) U | |
| fluorene | 86-73-7 | mg/kg | 0.62 (0.041) U | 0.23 (0.04) J | 0.34 (0.037) J | 0.3 (0.039) J | 0.3 (0.039) J | ND (0.045) U | |
| hexachlorobenzene | 118-74-1 | mg/kg | ND (0.041) U | ND (0.04) J | ND (0.037) J | ND (0.039) J | ND (0.04) U | ND (0.045) U | |
| hexachlorobutadiene | 87-68-3 | mg/kg | ND (0.081) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| hexachlorocyclopentadiene | 77-47-4 | mg/kg | ND (0.2) U | ND (0.2) U | ND (0.19) U | ND (0.19) UJ | ND (0.2) U | ND (0.23) U | |
| hexachloroethane | 67-72-1 | mg/kg | ND (0.041) U | ND (0.04) U | ND (0.037) U | ND (0.039) UJ | ND (0.04) U | ND (0.045) U | |
| indeno (1,2,3-cd) pyrene | 193-39-5 | mg/kg | 0.22 (0.041) J | 0.069 (0.04) J | 0.051 (0.037) J | 0.12 (0.039) J | 0.12 (0.039) J | ND (0.045) U | |
| isophorone | 78-59-1 | mg/kg | ND (0.041) U | ND (0.04) U | ND (0.037) U | ND (0.039) UJ | ND (0.04) U | ND (0.045) U | |
| N-nitrosodi-n-propylamine | 621-64-7 | mg/kg | ND (0.041) U | ND (0.04) U | ND (0.037) U | ND (0.039) UJ | ND (0.04) U | ND (0.045) U | |
| N-nitrosodiphenylamine | 86-30-6 | mg/kg | ND (0.041) U | ND (0.04) U | ND (0.037) U | ND (0.039) UJ | ND (0.04) U | ND (0.045) U | |
| naphthalene | 91-20-3 | mg/kg | 1.1 (0.041) U | 0.18 (0.04) J | 0.18 (0.037) J | 0.24 (0.039) J | 0.24 (0.039) J | ND (0.045) U | |
| nitrobenzene | 98-95-3 | mg/kg | ND (0.041) U | ND (0.04) U | ND (0.037) U | ND (0.039) UJ | ND (0.04) U | ND (0.045) U | |
| pentachlorophenol | 87-86-5 | mg/kg | ND (0.2) U | ND (0.2) U | ND (0.19) U | ND (0.19) UJ | ND (0.2) U | ND (0.23) U | |
| phenanthrene | 85-01-8 | mg/kg | 1.7 (0.041) U | 0.72 (0.04) J | 0.5 (0.037) U | 0.89 (0.039) J | 0.89 (0.039) J | ND (0.045) U | |
| phenol | 108-95-2 | mg/kg | ND (0.000) U | ND (0.08) U | ND (0.075) U | ND (0.078) UJ | ND (0.08) U | ND (0.091) U | |
| pyrene | 129-00-0 | mg/kg | 1.4 (0.041) V | 0.48 (0.04) J | 0.72 (0.037) U | 0.75 (0.039) J | 0.079 (0.04) J | ND (0.045) U | |
| Other Parameters | | | | | | | | | |
| Moisture Content ^(c) | N.A. | wt. % | 18.1 (0.08) | 16.7 (0.08) | 10.6 (0.08) | 14.0 (0.08) | 16.6 (0.08) | 26.5 (0.08) | |

NOTES:

ND denotes "Not Detected" at method detection limit shown in parentheses.

(a) Listed on chain-of-custody documentation as sample SD-12.

(b) Target Compound List (TCL) base neutral/acid-extractable organic compounds by EPA SW-846 method 8270, reported as dry-weight concentrations.

(c) EPA method 160.3 (Methods for Chemical Analysis of Water and Wastes, March 1983).

U qualifier denotes not detected.

J qualifier denotes quantitation is estimated due to limitations identified during data validation quality assurance review.

U* qualifier denotes that compound should be considered "not-detected" since it was detected in a corresponding field, trip, and/or laboratory blank sample at a similar concentration.

UJ qualifier denotes that the compound was not detected, but the quantitation limit may or may not be higher than the value shown in parentheses due to a bias identified during the data validation quality assurance review.

Table 4-1

Summary of Soil Analytical Results
Fill AreaGulf States Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | GEO-4377-8' | GEO-44/5-6' | GEO-45/7-8' |
|--|------------|-------|--------------|-------------|-------------|
| Polycyclic Aromatic Hydrocarbons (PAHs) | | | | | |
| Naphthalene | 91-20-3 | mg/kg | ND (0.028) | ND (0.3) | ND (0.31) |
| Acenaphthylene | 208-96-8 | mg/kg | ND (0.028) | ND (0.3) | ND (0.31) |
| Acenaphthene | 83-32-9 | mg/kg | ND (0.028) | ND (0.3) | ND (0.31) |
| Fluorene | 86-73-7 | mg/kg | ND (0.0026) | 0.029 | ND (0.028) |
| Phenanthrene | 85-01-8 | mg/kg | ND (0.0011) | U* | ND (0.011) |
| Anthracene | 120-12-7 | mg/kg | ND (0.00053) | U* | ND (0.0057) |
| Fluoranthene | 206-44-0 | mg/kg | ND (0.00053) | U* | ND (0.0057) |
| Pyrene | 129-00-0 | mg/kg | ND (0.0026) | U* | ND (0.028) |
| Benz(a)anthracene | 56-55-3 | mg/kg | ND (0.00026) | U* | ND (0.0028) |
| Chrysene | 218-01-9 | mg/kg | ND (0.0011) | U* | ND (0.011) |
| Benzo(b)fluoranthene | 205-99-2 | mg/kg | 0.00076 | J | 0.0031 |
| Benzo(k)fluoranthene | 207-08-9 | mg/kg | 0.00051 | J | 0.0026 |
| Benzo(a)pyrene | 50-32-8 | mg/kg | 0.00169 | J | 0.0066 |
| Dibenz(a,h)anthracene | 53-70-3 | mg/kg | ND (0.00053) | 0.0188 | ND (0.0057) |
| Benzo(g,h,i)perylene | 191-24-2 | mg/kg | 0.0018 | J | ND (0.017) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | mg/kg | 0.0014 | J | ND (0.011) |
| Other Parameters | | | | | |
| Moisture | | % | 5.06% | 9.6% | 11.7% |

Notes:

ND denotes "not detected" at reporting limit shown in parentheses.

Values shown are dry-weight concentrations.

J data validation qualifier denotes estimated value.

B data validation qualifier denotes constituent was detected in corresponding laboratory blank.

U* data validation qualifier denotes originally reported positive result that should be considered "not detected" due to trace-level presence of the analyte in associated laboratory method blanks and/or rinsate blanks.

Table 4-2

Summary of Soil Analytical Results
Process AreaGulf States Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | GEO-46/0-1' | GEO-46/2-3' | GEO-46/5-6' |
|--|------------|-------|-------------|-------------|-------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | |
| Naphthalene | 91-20-3 | mg/kg | ND (12.0) | ND (0.15) | ND (0.15) |
| Acenaphthylene | 208-96-8 | mg/kg | ND (12.0) | ND (0.15) | ND (0.15) |
| Acenaphthene | 83-32-9 | mg/kg | ND (12.0) | ND (0.15) | ND (0.15) |
| Fluorene | 86-73-7 | mg/kg | 1.50 J | ND (0.014) | ND (0.014) |
| Phenanthrene | 85-01-8 | mg/kg | 8.20 | 0.041 J | 0.0061 J |
| Anthracene | 120-12-7 | mg/kg | 24.0 | 0.130 | ND (0.0029) |
| Fluoranthene | 206-44-0 | mg/kg | 37.0 | 0.190 | 0.045 |
| Pyrene | 129-00-0 | mg/kg | 54.0 | 0.250 | 0.056 J |
| Benz(a)anthracene | 56-55-3 | mg/kg | 20.0 | 0.094 | 0.032 |
| Chrysene | 218-01-9 | mg/kg | 20.0 | 0.100 | 0.033 J |
| Benzo(b)fluoranthene | 205-99-2 | mg/kg | 21.0 | 0.096 | 0.053 |
| Benzo(k)fluoranthene | 207-08-9 | mg/kg | 11.0 | 0.052 | 0.026 |
| Benzo(a)pyrene | 50-32-8 | mg/kg | 16.0 | 0.083 | 0.045 |
| Dibenz(a,h)anthracene | 53-70-3 | mg/kg | 2.30 | 0.011 J | 0.0069 J |
| Benzo(g,h,i)perylene | 191-24-2 | mg/kg | 7.80 | 0.035 J | 0.030 J |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | mg/kg | 9.70 | 0.046 J | 0.034 J |
| <i>Other Parameters</i> | | | | | |
| Moisture | | % | 8.46% | 10.80% | 12.80% |

Notes:

ND denotes "not detected" at reporting limit shown in parentheses.

Values shown are dry-weight concentrations.

J data validation qualifier denotes estimated value.

B data validation qualifier denotes constituent was detected in corresponding laboratory blank.

U* data validation qualifier denotes originally reported positive result that should be considered "not detected" due to trace-level presence of the analyte in associated laboratory method blanks and/or rinsate blanks.

Table 4-2
(Continued)

Summary of Soil Analytical Results
Process Area

Gulf States Crossing Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | GEO-47/0-1' | GEO-47/2-3' | GEO-47/5-6' | GEO-47/7-8' |
|--|------------|-------|-------------|-------------|--------------|-------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | |
| Naphthalene | 91-20-3 | mg/kg | ND (2.8) | ND (0.14) | 190 | 12.00 J |
| Acenaphthylene | 208-96-8 | mg/kg | ND (2.8) | ND (0.14) | ND (3.40) U* | ND (3.2) |
| Acenaphthene | 83-32-9 | mg/kg | ND (2.8) | ND (0.14) | 45.0 | 8.80 J |
| Fluorene | 86-73-7 | mg/kg | ND (0.26) | ND (0.013) | 43.0 | 9.70 |
| Phenanthrene | 85-01-8 | mg/kg | 0.31 J | 0.0053 J | 110 | 31.00 |
| Anthracene | 120-12-7 | mg/kg | ND (0.053) | ND (0.0026) | 6.6 | 1.90 |
| Fluoranthene | 206-44-0 | mg/kg | 2.80 | 0.01 J | 65.0 | 16.00 |
| Pyrene | 129-00-0 | mg/kg | 5.10 | 0.016 J | 69.0 | 16.00 |
| Benz(a)anthracene | 56-55-3 | mg/kg | 2.10 | 0.0049 J | 15.0 | 3.40 |
| Chrysene | 218-01-9 | mg/kg | 2.70 | ND (0.0051) | 14.0 | 2.00 |
| Benzo(b)fluoranthene | 205-99-2 | mg/kg | 3.50 | 0.011 | 8.90 | 1.40 |
| Benzo(k)fluoranthene | 207-08-9 | mg/kg | 1.80 | 0.0056 J | 4.80 | 0.78 |
| Benzo(a)pyrene | 50-32-8 | mg/kg | 3.00 | 0.011 J | 9.60 | 1.50 |
| Dibenz(a,h)anthracene | 53-70-3 | mg/kg | 0.48 J | ND (0.0026) | 1.40 | 0.25 J |
| Benzo(g,h,i)perylene | 191-24-2 | mg/kg | 1.60 J | 0.0089 J | 3.30 | 0.39 J |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | mg/kg | 2.00 | 0.009 J | 4.90 | 0.65 J |
| <i>Other Parameters</i> | | | | | | |
| Moisture | | % | 5.17% | 2.67% | 20.9% | 15.4% |

Notes:

ND denotes "not detected" at reporting limit shown in parentheses.

Values shown are dry-weight concentrations.

J data validation qualifier denotes estimated value.

B data validation qualifier denotes constituent was detected in corresponding laboratory blank.

U* data validation qualifier denotes originally reported positive result that should be considered "not detected" due to trace-level presence of the analyte in associated laboratory method blanks and/or rinsate blanks.

Table 4-2
(Continued)

Summary of Soil Analytical Results
Process Area

Gulf States Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | GEO-48/0-1' | GEO-48/2-3' | GEO-48/5-6' | GEO-59/0-1' | GEO-59/2-3' | GEO-59/5-6' |
|--|------------|-------|-------------|-------------|--------------|-------------|---------------|---------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | | | |
| Naphthalene | 91-20-3 | mg/kg | 2,200 J | 80 | 0.17 J | 4.8 J | ND (0.16) | ND (0.16) |
| Acenaphthylene | 208-96-8 | mg/kg | ND (1500) | ND (3.4) U* | ND (0.16) U* | ND (2.4) | ND (0.16) | ND (0.16) U* |
| Acenaphthene | 83-32-9 | mg/kg | ND (1500) | 36 | ND (0.16) | ND (2.4) | ND (0.16) | ND (0.16) |
| Fluorene | 86-73-7 | mg/kg | 1,800 | 43 | 0.16 J | 0.95 J | 0.026 J | ND (0.015) |
| Phenanthrene | 85-01-8 | mg/kg | 6,400 | 130 | 0.6 | 10 | 0.12 | 0.054 J |
| Anthracene | 120-12-7 | mg/kg | 3,000 | 8.4 | 0.12 | ND (0.044) | ND (0.003) U* | ND (0.003) U* |
| Fluoranthene | 206-44-0 | mg/kg | 4,600 | 64 | 0.22 | 15 | 0.13 | 0.049 |
| Pyrene | 129-00-0 | mg/kg | 4,400 | 61 | 0.2 | 16 | 0.13 J | 0.081 J |
| Benz(a)anthracene | 56-55-3 | mg/kg | 930 | 12 | 0.022 | 5.8 | 0.042 | 0.026 |
| Chrysene | 218-01-9 | mg/kg | 690 | 20 | 0.0099 J | 4.8 | 0.037 J | 0.057 J |
| Benzo(b)fluoranthene | 205-99-2 | mg/kg | 530 | 5.2 | 0.014 | 5.7 | 0.071 | 0.087 J |
| Benzo(k)fluoranthene | 207-08-9 | mg/kg | 290 | 3.0 | 0.0075 J | 2.8 | 0.032 | 0.038 J |
| Benzo(a)pyrene | 50-32-8 | mg/kg | 500 | 6.1 | 0.017 J | 6.1 | 0.072 | 0.1 J |
| Dibenz(a,h)anthracene | 53-70-3 | mg/kg | 64 J | 0.85 | 0.0038 J | 0.94 | 0.011 J | 0.021 J |
| Benzo(g,h,i)perylene | 191-24-2 | mg/kg | 130 J | 1.4 J | 0.013 J | 3.7 | 0.036 J | 0.087 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | mg/kg | 250 J | 2.6 | ND (0.006) | 4.6 | 0.051 J | 0.095 |
| <i>Other Parameters</i> | | | | | | | | |
| Moisture | | % | 29.7% | 20.6% | 17.2% | 8.55% | 16.7% | 16.0% |

Notes:

ND denotes "not detected" at reporting limit shown in parentheses.

Values shown are dry-weight concentrations.

J data validation qualifier denotes estimated value.

B data validation qualifier denotes constituent was detected in corresponding laboratory blank.

U* data validation qualifier denotes originally reported positive result that should be considered "not detected" due to trace-level

presence of the analyte in associated laboratory method blanks and/or tinplate blanks.

Table 4-2
(Continued)

Summary of Soil Analytical Results
Process Area

Gulf States Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | GEO-600-1' | GEO-600-1' Duplicate ^(a) | GEO-602-3' | GEO-605-6' |
|--|------------|-------|------------|-------------------------------------|--------------|---------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | |
| Naphthalene | 91-20-3 | mg/kg | ND (0.56) | ND (0.56) | ND (0.029) | ND (0.032) |
| Acenaphthylene | 208-96-8 | mg/kg | ND (0.56) | ND (0.56) | ND (0.029) | U* |
| Acenaphthene | 83-32-9 | mg/kg | ND (0.56) | ND (0.56) | ND (0.029) | ND (0.032) |
| Fluorene | 86-73-7 | mg/kg | ND (0.052) | ND (0.052) | 0.0036 | J ND (0.0029) |
| Phenanthrene | 85-01-8 | mg/kg | 0.15 | J 0.14 | 0.012 | 0.0068 |
| Anthracene | 120-12-7 | mg/kg | ND (0.01) | ND (0.01) | ND (0.00054) | ND (0.00058) |
| Fluoranthene | 206-44-0 | mg/kg | 0.42 | 0.34 | 0.016 | 0.013 |
| Pyrene | 129-00-0 | mg/kg | 0.58 | 0.47 | 0.020 | 0.016 |
| Benz(a)anthracene | 56-55-3 | mg/kg | 0.26 | 0.18 | 0.0091 | 0.0068 |
| Chrysene | 218-01-9 | mg/kg | 0.27 | 0.16 | 0.0024 | J 0.0052 |
| Benzo(b)fluoranthene | 205-99-2 | mg/kg | 0.44 | 0.3 | 0.013 | 0.009 |
| Benzo(k)fluoranthene | 207-08-9 | mg/kg | 0.21 | 0.14 | 0.0062 | 0.0047 |
| Benzo(a)pyrene | 50-32-8 | mg/kg | 0.37 | 0.25 | 0.010 | 0.0083 |
| Dibenz(a,b)anthracene | 53-70-3 | mg/kg | 0.066 | J 0.05 | 0.0017 | J 0.0019 |
| Benzo(g,h,i)perylene | 191-24-2 | mg/kg | 0.26 | J 0.19 | 0.0074 | J 0.0067 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | mg/kg | 0.29 | 0.19 | J 0.0083 | J 0.0078 |
| <i>Other Parameters</i> | | | | | | |
| Moisture | | % | 4.32% | 4.33% | 8.09% | 14.5% |

Notes:

(a) Identified as sample "GEO-607-8" on sample custody documentation.

Values shown are dry-weight concentrations.

ND denotes "not detected" at reporting limit shown in parentheses.

J data validation qualifier denotes estimated value.

B data validation qualifier denotes constituent was detected in corresponding laboratory blank.

U* data validation qualifier denotes originally reported positive result that should be considered "not detected" due to trace-level presence of the analyte in associated laboratory method blanks and/or rinseate blanks.

Table 4-3

Summary of Ground Water Screening Analytical Results
Fill Area

Gulf States Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | GEO-42/GW | GEO-54/GW | GEO-57/GW | GEO-58/GW |
|--|------------|-------|------------|------------|-------------|-------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | |
| Naphthalene | 91-20-3 | µg/L | 7220 | 1130 | ND (0.78) | ND (0.78) |
| Acenaphthylene | 208-96-8 | µg/L | 144 | ND (0.86) | ND (0.78) | ND (0.78) |
| Acenaphthene | 83-32-9 | µg/L | 170 | 19 | ND (0.78) | 2.2 J |
| Fluorene | 86-73-7 | µg/L | 75.8 | 7.7 | ND (0.17) | 1.0 |
| Phenanthrene | 85-01-8 | µg/L | 37.2 | 3.25 | ND (0.068) | 0.108 J |
| Anthracene | 120-12-7 | µg/L | 4.9 | ND (0.032) | U* | ND (0.029) |
| Fluoranthene | 206-44-0 | µg/L | 0.88 J | 0.068 J | ND (0.029) | ND (0.029) |
| Pyrene | 129-00-0 | µg/L | ND (1.6) | ND (0.18) | ND (0.17) | ND (0.17) |
| Benz(a)anthracene | 56-55-3 | µg/L | ND (0.19) | ND (0.021) | ND (0.02) | ND (0.02) |
| Chrysene | 218-01-9 | µg/L | ND (0.57) | U* | ND (0.059) | ND (0.059) |
| Benzo(b)fluoranthene | 205-99-2 | µg/L | ND (0.36) | ND (0.041) | ND (0.037) | ND (0.037) |
| Benzo(k)fluoranthene | 207-08-9 | µg/L | ND (0.095) | ND (0.011) | ND (0.0098) | ND (0.0098) |
| Benzo(a)pyrene | 50-32-8 | µg/L | ND (0.19) | ND (0.021) | ND (0.02) | ND (0.02) |
| Dibenz(a,h)anthracene | 53-70-3 | µg/L | ND (0.28) | ND (0.032) | ND (0.029) | ND (0.029) |
| Benzo(g,h,i)perylene | 191-24-2 | µg/L | ND (0.95) | ND (0.11) | ND (0.098) | ND (0.098) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | µg/L | ND (0.64) | ND (0.072) | ND (0.065) | ND (0.066) |

Notes:

ND denotes "not detected" at reporting limit shown in parentheses.

J data validation qualifier denotes estimated value.

B data validation qualifier denotes constituent was detected in corresponding laboratory blank.

U* data validation qualifier denotes originally reported positive result that should be considered "not detected" due to trace-level presence of the analyte in associated laboratory method blanks and/or rinsate blanks.

Table 4-4

Summary of Ground Water Analytical Results
Monitoring WellsGulf States Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | MW-1R | MW-1R Duplicate ^(a) | MW-2R | MW-4 | MW-4 Duplicate ^(b) |
|--|------------|-------|------------|--------------------------------|-----------|------------|-------------------------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | | |
| Naphthalene | 91-20-3 | µg/L | 150 | 149 | 11600 | 105 | 101 |
| Acenaphthylene | 208-96-8 | µg/L | 10.5 | 10.8 | 270 | ND (0.82) | ND (0.76) |
| Acenaphthene | 83-32-9 | µg/L | 22 | 22 | 300 | ND (0.82) | ND (0.76) |
| Fluorene | 86-73-7 | µg/L | 20.3 | 19.6 | 182 | 0.23 J | 0.23 J |
| Phenanthrene | 85-01-8 | µg/L | 38.2 | 37.1 | 278 | 0.66 | 0.62 |
| Anthracene | 120-12-7 | µg/L | 19.0 | 18.4 | 51.6 | ND (0.031) | ND (0.029) |
| Fluoranthene | 206-44-0 | µg/L | 25.9 | 26.2 | 46.5 | ND (0.031) | ND (0.029) |
| Pyrene | 129-00-0 | µg/L | 16.1 | 16.1 | 36 | ND (0.17) | ND (0.16) |
| Benz(a)anthracene | 56-55-3 | µg/L | 0.934 | 0.939 | 4.7 | ND (0.020) | ND (0.019) |
| Chrysene | 218-01-9 | µg/L | 0.54 | 0.53 | ND (1.1) | ND (0.061) | ND (0.057) |
| Benzo(b)fluoranthene | 205-99-2 | µg/L | 0.115 | 0.114 | 1.3 | ND (0.039) | ND (0.036) |
| Benzo(k)fluoranthene | 207-08-9 | µg/L | 0.069 | 0.062 | 0.79 J | ND (0.010) | ND (0.0095) |
| Benzo(a)pyrene | 50-32-8 | µg/L | 0.103 | 0.087 | 1.5 | ND (0.020) | ND (0.019) |
| Dibenz(a,h)anthracene | 53-70-3 | µg/L | ND (0.029) | ND (0.029) | ND (0.57) | ND (0.031) | ND (0.029) |
| Benzo(g,h,i)perylene | 191-24-2 | µg/L | ND (0.097) | ND (0.097) | ND (1.9) | ND (0.10) | ND (0.095) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | µg/L | ND (0.065) | ND (0.065) | ND (1.3) | ND (0.068) | ND (0.064) |

Notes:

(a) Identified as sample "MW-3R" on sample custody documentation.

(b) Identified as sample "MW-41" on sample custody documentation.

ND denotes "not detected" at reporting limit shown in parentheses.

J data validation qualifier denotes estimated value.

B data validation qualifier denotes constituent was detected in corresponding laboratory blank.

U* data validation qualifier denotes originally reported positive result that should be considered "not detected" due to trace-level presence of the analyte in associated laboratory method blanks and/or rinsate blanks.

Table 4-4
(Continued)

Summary of Ground Water Analytical Results
Monitoring Wells

Gulf States Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | MW-01 | MW-03 | MW-04 | MW-05 |
|--|------------|-------|-------------|---------------|-------------|-------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | |
| Naphthalene | 91-20-3 | µg/L | ND (0.77) | ND (0.76) | ND (0.76) | ND (0.78) |
| Acenaphthylene | 208-96-8 | µg/L | ND (0.77) | ND (0.76) | ND (0.76) | ND (0.78) |
| Acenaphthene | 83-32-9 | µg/L | ND (0.77) | ND (0.76) | ND (0.76) | ND (0.78) |
| Fluorene | 86-73-7 | µg/L | ND (0.16) | 0.88 | ND (0.16) | ND (0.17) |
| Phenanthrene | 85-01-8 | µg/L | ND (0.067) | 1.59 | ND (0.066) | ND (0.068) |
| Anthracene | 120-12-7 | µg/L | ND (0.029) | U* | ND (0.028) | ND (0.029) |
| Fluoranthene | 206-44-0 | µg/L | ND (0.029) | 0.38 | ND (0.028) | ND (0.029) |
| Pyrene | 129-00-0 | µg/L | ND (0.16) | 0.17 | ND (0.16) | ND (0.17) |
| Benz(a)anthracene | 56-55-3 | µg/L | ND (0.019) | 0.391 | ND (0.019) | ND (0.019) |
| Chrysene | 218-01-9 | µg/L | ND (0.057) | ND (0.057) U* | ND (0.057) | ND (0.058) |
| Benzo(b)fluoranthene | 205-99-2 | µg/L | ND (0.036) | ND (0.036) | ND (0.036) | ND (0.037) |
| Benzo(k)fluoranthene | 207-08-9 | µg/L | ND (0.0096) | ND (0.0096) | ND (0.0095) | ND (0.0097) |
| Benzo(a)pyrene | 50-32-8 | µg/L | ND (0.019) | ND (0.019) | ND (0.019) | ND (0.019) |
| Dibenz(a,h)anthracene | 53-70-3 | µg/L | ND (0.029) | ND (0.029) | ND (0.028) | ND (0.029) |
| Benzo(g,h,i)perylene | 191-24-2 | µg/L | ND (0.096) | ND (0.096) | ND (0.095) | ND (0.097) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | µg/L | ND (0.064) | ND (0.064) | ND (0.064) | ND (0.065) |

Notes:

ND denotes "not detected" at reporting limit shown in parentheses.

J data validation qualifier denotes estimated value.

B data validation qualifier denotes constituent was detected in corresponding laboratory blank.

U* data validation qualifier denotes originally reported positive result that should be considered "not detected" due to trace-level presence of the analyte in associated laboratory method blanks and/or rinsate blanks.

Table 4-4
(Continued)

Summary of Ground Water Analytical Results
Monitoring Wells

Gulf States Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | MW-06 | MW-07 | MW-08 | MW-09 |
|--|------------|-------|-----------|-------------|-------------|-------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | |
| Naphthalene | 91-20-3 | µg/L | 9950 | ND (0.77) | ND (0.78) | 2390 |
| Acenaphthylene | 208-96-8 | µg/L | 350 | ND (0.77) | ND (0.78) | 200 |
| Acenaphthene | 83-32-9 | µg/L | 220 | ND (0.77) | ND (0.78) | 280 |
| Fluorene | 86-73-7 | µg/L | 138 | ND (0.16) | ND (0.16) | 147 |
| Phenanthrene | 85-01-8 | µg/L | 105 | ND (0.067) | ND (0.068) | 109 |
| Anthracene | 120-12-7 | µg/L | 13.1 | ND (0.029) | ND (0.029) | 18.0 |
| Fluoranthene | 206-44-0 | µg/L | 3.19 | ND (0.029) | ND (0.029) | 10.1 |
| Pyrene | 129-00-0 | µg/L | ND (3.3) | ND (0.16) | ND (0.16) | 5.3 J |
| Benz(a)anthracene | 56-55-3 | µg/L | ND (0.39) | ND (0.019) | ND (0.019) | ND (0.40) |
| Chrysene | 218-01-9 | µg/L | ND (1.2) | ND (0.058) | ND (0.058) | ND (1.2) U* |
| Benzo(b)fluoranthene | 205-99-2 | µg/L | ND (0.74) | ND (0.037) | ND (0.037) | ND (0.75) |
| Benzo(k)fluoranthene | 207-08-9 | µg/L | ND (0.19) | ND (0.0096) | ND (0.0097) | ND (0.20) |
| Benzo(a)pyrene | 50-32-8 | µg/L | ND (0.39) | ND (0.019) | ND (0.019) | ND (0.40) |
| Dibenz(a,h)anthracene | 53-70-3 | µg/L | ND (0.58) | ND (0.029) | ND (0.029) | ND (0.59) |
| Benzo(g,h,i)perylene | 191-24-2 | µg/L | ND (1.9) | ND (0.096) | ND (0.097) | ND (2.0) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | µg/L | ND (1.3) | ND (0.064) | ND (0.065) | ND (1.3) |

Notes:

ND denotes "not detected" at reporting limit shown in parentheses.

J data validation qualifier denotes estimated value.

B data validation qualifier denotes constituent was detected in corresponding laboratory blank.

U* data validation qualifier denotes originally reported positive result that should be considered "not detected" due to trace-level

presence of the analyte in associated laboratory method blanks and/or rinsate blanks.

Table 4-4
(Continued)

Summary of Ground Water Analytical Results
Monitoring Wells

Gulf States Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | MW-10 | MW-11 | MW-12 | MW-13 |
|--|------------|-------|-------------|-------------|-------------|-------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | |
| Naphthalene | 91-20-3 | µg/L | ND (0.79) | ND (0.77) | 3460 | ND (0.77) |
| Acenaphthylene | 208-96-8 | µg/L | ND (0.79) | ND (0.77) | 180 | ND (0.77) |
| Acenaphthene | 83-32-9 | µg/L | ND (0.79) | ND (0.77) | 67 | ND (0.77) |
| Fluorene | 86-73-7 | µg/L | ND (0.17) | ND (0.16) | 36.2 | ND (0.16) |
| Phenanthrene | 85-01-8 | µg/L | ND (0.069) | ND (0.067) | 22.7 | ND (0.067) |
| Anthracene | 120-12-7 | µg/L | ND (0.029) | ND (0.029) | 3.06 | ND (0.029) |
| Fluoranthene | 206-44-0 | µg/L | ND (0.029) | ND (0.029) | 0.45 | ND (0.029) |
| Pyrene | 129-00-0 | µg/L | ND (0.17) | ND (0.16) | 0.23 | ND (0.16) |
| Benz(a)anthracene | 56-55-3 | µg/L | ND (0.020) | ND (0.019) | ND (0.019) | ND (0.019) |
| Chrysene | 218-01-9 | µg/L | ND (0.059) | U* | ND (0.058) | U* |
| Benzo(b)fluoranthene | 205-99-2 | µg/L | ND (0.037) | ND (0.037) | ND (0.037) | ND (0.037) |
| Benzo(k)fluoranthene | 207-08-9 | µg/L | ND (0.0098) | ND (0.0096) | ND (0.0097) | ND (0.0096) |
| Benzo(a)pyrene | 50-32-8 | µg/L | ND (0.020) | ND (0.019) | ND (0.019) | ND (0.019) |
| Dibenz(a,h)anthracene | 53-70-3 | µg/L | ND (0.029) | ND (0.029) | ND (0.029) | ND (0.029) |
| Benzo(g,h,i)perylene | 191-24-2 | µg/L | ND (0.098) | ND (0.096) | ND (0.097) | ND (0.096) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | µg/L | ND (0.066) | ND (0.064) | ND (0.065) | ND (0.065) |

Notes:

ND denotes "not detected" at reporting limit shown in parentheses.

J data validation qualifier denotes estimated value.

B data validation qualifier denotes constituent was detected in corresponding laboratory blank.

U* data validation qualifier denotes originally reported positive result that should be considered "not detected" due to trace-level presence of the analyte in associated laboratory method blanks and/or rinsate blanks.

Table 4-5

Summary of Ground Water Screening Analytical Results
Offsite Area

Gulf States Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | GEO-34/GW | GEO-35/GW | GEO-36/GW | GEO-37/GW |
|--|------------|-------|-------------|------------|------------|-------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | |
| Naphthalene | 91-20-3 | µg/L | ND (0.77) | ND (0.83) | 403 | 1.23 J |
| Acenaphthylene | 208-96-8 | µg/L | ND (0.77) | ND (0.83) | 50.4 J | 5.64 J |
| Acenaphthene | 83-32-9 | µg/L | ND (0.77) | ND (0.83) | 190 | ND (0.77) |
| Fluorene | 86-73-7 | µg/L | ND (0.16) | ND (0.18) | 178 | 0.33 J |
| Phenanthrene | 85-01-8 | µg/L | ND (0.067) | ND (0.072) | 200 | 0.35 |
| Anthracene | 120-12-7 | µg/L | ND (0.029) | ND (0.031) | 38.3 | ND (0.029) |
| Fluoranthene | 206-44-0 | µg/L | ND (0.029) | ND (0.031) | 30.8 | 0.49 |
| Pyrene | 129-00-0 | µg/L | ND (0.16) | ND (0.18) | 23.8 | 0.57 J |
| Benz(a)anthracene | 56-55-3 | µg/L | ND (0.019) | ND (0.021) | 0.94 | ND (0.019) |
| Chrysene | 218-01-9 | µg/L | ND (0.057) | ND (0.062) | ND (0.58) | U* |
| Benzo(b)fluoranthene | 205-99-2 | µg/L | ND (0.036) | ND (0.039) | ND (0.37) | ND (0.037) |
| Benzo(k)fluoranthene | 207-08-9 | µg/L | ND (0.0096) | ND (0.01) | ND (0.096) | ND (0.0096) |
| Benzo(a)pyrene | 50-32-8 | µg/L | ND (0.019) | ND (0.021) | ND (0.19) | ND (0.019) |
| Dibenz(a,h)anthracene | 53-70-3 | µg/L | ND (0.029) | ND (0.031) | ND (0.29) | ND (0.029) |
| Benzo(g,h,i)perylene | 191-24-2 | µg/L | ND (0.096) | ND (0.10) | ND (1.0) | ND (0.096) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | µg/L | ND (0.064) | ND (0.069) | ND (0.64) | ND (0.064) |

Notes:

ND denotes "not detected" at reporting limit shown in parentheses.

J data validation qualifier denotes estimated value.

B data validation qualifier denotes constituent was detected in corresponding laboratory blank.

U* data validation qualifier denotes originally reported positive result that should be considered "not detected" due to trace-level presence of the analyte in associated laboratory method blanks and/or rinsate blanks.

Table 4-5
(Continued)

Summary of Ground Water Screening Analytical Results
Offsite Area

Gulf States Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | GEO-38/GW | GEO-38/GW duplicate ^(a) | GEO-39/GW | GEO-40/GW |
|--|------------|-------|-------------|------------------------------------|-----------|---------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | |
| Naphthalene | 91-20-3 | µg/L | ND (0.77) | 7.61 | J | ND (0.77) |
| Acenaphthylene | 208-96-8 | µg/L | ND (0.77) | ND (0.77) | U* | U* |
| Acenaphthene | 83-32-9 | µg/L | ND (0.77) | 3.9 | J | ND (0.77) |
| Fluorene | 86-73-7 | µg/L | ND (0.16) | 3.57 | J | ND (0.16) |
| Phenanthrene | 85-01-8 | µg/L | ND (0.067) | 4.83 | J | ND (0.067) |
| Anthracene | 120-12-7 | µg/L | ND (0.029) | ND (0.029) | U* | ND (0.029) U* |
| Fluoranthene | 206-44-0 | µg/L | ND (0.029) | 0.69 | J | 0.076 J |
| Pyrene | 129-00-0 | µg/L | ND (0.16) | 0.46 | J | ND (0.16) |
| Benz(a)anthracene | 56-55-3 | µg/L | ND (0.019) | ND (0.019) | | ND (0.019) |
| Chrysene | 218-01-9 | µg/L | ND (0.057) | ND (0.058) | U* | ND (0.058) |
| Benzo(b)fluoranthene | 205-99-2 | µg/L | ND (0.036) | ND (0.037) | | ND (0.037) |
| Benzo(k)fluoranthene | 207-08-9 | µg/L | ND (0.0096) | ND (0.0096) | | 0.0097 J |
| Benzo(a)pyrene | 50-32-8 | µg/L | ND (0.019) | ND (0.019) | | ND (0.019) |
| Dibenz(a,h)anthracene | 53-70-3 | µg/L | ND (0.029) | ND (0.029) | | ND (0.029) |
| Benzo(g,h,i)perylene | 191-24-2 | µg/L | ND (0.096) | ND (0.096) | | ND (0.096) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | µg/L | ND (0.064) | ND (0.064) | | ND (0.064) |

Notes:

- (a) Identified as sample "GEO-59/GW" on sample custody documentation.
- ND denotes "not detected" at reporting limit shown in parentheses.
- J data validation qualifier denotes estimated value.
- B data validation qualifier denotes constituent was detected in corresponding laboratory blank.
- U* data validation qualifier denotes originally reported positive result that should be considered "not detected" due to trace-level presence of the analyte in associated laboratory method blanks and/or rinsate blanks.

Table 4-5
(Continued)

Summary of Ground Water Screening Analytical Results
Offsite Area

Gulf States Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | GEO-41/GW | GEO-49/GW | GEO-50/GW | GEO-51/GW |
|--|------------|-------|--------------|------------|-------------|-------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | |
| Naphthalene | 91-20-3 | µg/L | ND (0.80) | ND (0.84) | 3.14 J | ND (0.77) |
| Acenaphthylene | 208-96-8 | µg/L | ND (0.80) | ND (0.84) | ND (0.77) | ND (0.77) |
| Acenaphthene | 83-32-9 | µg/L | ND (0.80) | ND (0.84) | ND (0.77) | ND (0.77) |
| Fluorene | 86-73-7 | µg/L | ND (0.17) | ND (0.18) | ND (0.16) | ND (0.16) |
| Phenanthrene | 85-01-8 | µg/L | ND (0.070) | 0.37 | ND (0.067) | ND (0.068) |
| Anthracene | 120-12-7 | µg/L | ND (0.03) U* | ND (0.032) | ND (0.029) | ND (0.029) |
| Fluoranthene | 206-44-0 | µg/L | 0.048 J | 0.22 | ND (0.029) | ND (0.029) |
| Pyrene | 129-00-0 | µg/L | ND (0.17) | 0.38 J | ND (0.16) | ND (0.16) |
| Benz(a)anthracene | 56-55-3 | µg/L | 0.032 J | 0.076 J | ND (0.019) | ND (0.019) |
| Chrysene | 218-01-9 | µg/L | ND (0.060) | ND (0.063) | ND (0.058) | ND (0.058) |
| Benzo(b)fluoranthene | 205-99-2 | µg/L | 0.111 | 0.050 J | ND (0.037) | ND (0.037) |
| Benzo(k)fluoranthene | 207-08-9 | µg/L | 0.05 J | 0.030 J | ND (0.0096) | ND (0.0096) |
| Benzo(a)pyrene | 50-32-8 | µg/L | 0.089 | 0.056 J | ND (0.019) | ND (0.019) |
| Dibenz(a,h)anthracene | 53-70-3 | µg/L | ND (0.030) | ND (0.032) | ND (0.029) | ND (0.029) |
| Benzo(g,h,i)perylene | 191-24-2 | µg/L | ND (0.10) | ND (0.11) | ND (0.096) | ND (0.096) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | µg/L | 0.080 J | ND (0.071) | ND (0.064) | ND (0.065) |

Notes:

ND denotes "not detected" at reporting limit shown in parentheses.

J data validation qualifier denotes estimated value.

B data validation qualifier denotes constituent was detected in corresponding laboratory blank.

U* data validation qualifier denotes originally reported positive result that should be considered "not detected" due to trace-level presence of the analyte in associated laboratory method blanks and/or rinsate blanks.

Table 4-5
(Continued)

Summary of Ground Water Screening Analytical Results
Offsite Area

| Analytical Parameter | CAS Number | Units | Gulf States Creosoting Site Hattiesburg, Mississippi | | | |
|--|------------|-------|---|------------|------------|------------------------------------|
| | | | GEO-52/GW | GEO-53/GW | GEO-56/GW | GEO-56/GW Duplicate ^(a) |
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | |
| Naphthalene | 91-20-3 | µg/L | 55.2 | 10.8 | ND (0.85) | ND (0.79) |
| Acenaphthylene | 208-96-8 | µg/L | ND (0.78) | ND (0.80) | ND (0.85) | ND (0.79) |
| Acenaphthene | 83-32-9 | µg/L | 1.0 | ND (0.80) | ND (0.85) | ND (0.79) |
| Fluorene | 86-73-7 | µg/L | 0.44 | ND (0.17) | ND (0.18) | ND (0.17) |
| Phenanthrene | 85-01-8 | µg/L | 0.198 | ND (0.070) | ND (0.075) | ND (0.069) |
| Anthracene | 120-12-7 | µg/L | ND (0.029) | U* | ND (0.032) | ND (0.030) |
| Fluoranthene | 206-44-0 | µg/L | ND (0.029) | 0.044 | ND (0.032) | ND (0.030) |
| Pyrene | 129-00-0 | µg/L | ND (0.17) | ND (0.17) | ND (0.18) | ND (0.17) |
| Benz(a)anthracene | 56-55-3 | µg/L | ND (0.020) | ND (0.020) | ND (0.021) | ND (0.020) |
| Chrysene | 218-01-9 | µg/L | ND (0.059) | ND (0.060) | ND (0.064) | ND (0.059) |
| Benzo(b)fluoranthene | 205-99-2 | µg/L | ND (0.037) | ND (0.038) | ND -0.04 | ND (0.038) |
| Benzo(k)fluoranthene | 207-08-9 | µg/L | ND (0.0098) | ND (0.010) | ND (0.011) | ND (0.0099) |
| Benzo(a)pyrene | 50-32-8 | µg/L | ND (0.020) | ND (0.020) | ND (0.021) | ND (0.020) |
| Dibenz(a,h)anthracene | 53-70-3 | µg/L | ND (0.029) | ND (0.030) | ND (0.032) | ND (0.030) |
| Benzo(g,h,i)perylene | 191-24-2 | µg/L | ND (0.098) | ND (0.10) | ND (0.11) | ND (0.099) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | µg/L | ND (0.066) | ND (0.067) | ND (0.071) | ND (0.066) |

Notes:

(a) Identified as sample "GEO-33/GW" on sample custody documentation.

ND denotes "not detected" at reporting limit shown in parentheses.

J data validation qualifier denotes estimated value.

B data validation qualifier denotes constituent was detected in corresponding laboratory blank.

U* data validation qualifier denotes originally reported positive result that should be considered "not detected" due to trace-level presence of the analyte in associated laboratory method blanks and/or rinsate blanks.

Table 4-7

Summary of Sediment Analytical Results
Northeast Drainage Ditch

Gulf States Crossing Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | SD-12 | SD-12 Duplicate ^(a) | SD-13 | SD-14 | SD-15 | SD-16 | SD-17 |
|--|------------|-------|----------|--------------------------------|-----------|--------------|--------------|-----------|---------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | | | | |
| Naphthalene | 91-20-3 | mg/kg | ND (180) | ND (190) | ND (1.80) | ND (2.90) | ND (3.50) | ND (3.30) | ND (3.50) |
| Acenaphthylene | 208-96-8 | mg/kg | ND (180) | ND (190) | ND (1.80) | ND (2.90) | ND (3.50) | ND (3.30) | ND (3.50) |
| Acenaphthene | 83-32-9 | mg/kg | 320 J | 370 J | ND (1.80) | 3.90 J | ND (3.50) | ND (3.30) | ND (3.50) |
| Fluorene | 86-73-7 | mg/kg | 580 | 710 | 0.78 J | 0.65 J | ND (0.32) | 2.80 J | ND (0.33) |
| Phenanthrene | 85-01-8 | mg/kg | 1820 | 2110 | 2.27 | ND (0.11) U* | ND (0.13) U* | 4.50 | ND (0.13) U* |
| Anthracene | 120-12-7 | mg/kg | 1110 | 1490 | 3.47 | 9.91 | 1.48 | 23.9 | ND (0.065) U* |
| Fluoranthene | 206-44-0 | mg/kg | 922 | 1030 | 6.52 | 22.9 | 1.22 | 12.0 | 0.92 |
| Pyrene | 129-00-0 | mg/kg | 900 | 970 | 8.4 | 30.8 | 2.77 J | 12.9 | 2.28 J |
| Benz(a)anthracene | 56-55-3 | mg/kg | 168 | 184 | 2.91 | 11.8 | 1.02 | 3.61 | 0.94 |
| Chrysene | 218-01-9 | mg/kg | 129 | 134 | 2.97 | 19.6 | ND (0.13) U* | 3.0 | ND (0.13) U* |
| Benzo(b)fluoranthene | 205-99-2 | mg/kg | 60.0 | 67.0 | 4.17 | 14.2 | 2.88 | 3.03 | 2.50 |
| Benzo(k)fluoranthene | 207-08-9 | mg/kg | 35.0 | 39.0 | 2.08 | 7.85 | 1.39 | 1.60 | 1.26 |
| Benzo(a)pyrene | 50-32-8 | mg/kg | 69.0 | 73.0 | 3.27 | 12.2 | 2.42 | 2.80 | 2.26 |
| Dibenz(a,h)anthracene | 53-70-3 | mg/kg | 6.50 J | 11.6 J | 0.48 | 1.61 | 0.374 J | 0.384 J | 0.365 J |
| Benzo(g,h,i)perylene | 191-24-2 | mg/kg | 14.0 J | 15.0 J | 2.00 | 4.40 | 1.38 J | 1.05 J | 1.21 J |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | mg/kg | 28.1 J | 30.3 J | 2.53 | 7.30 | 2.00 | 1.60 | 1.60 |
| <i>Other Parameters</i> | | | | | | | | | |
| Moisture | | % | 26.5% | 29.9% | 24.7% | 8.39% | 21.8% | 18.5% | 23.1% |

Notes:

(a) Identified as sample "SD-99" on sample custody documentation.

ND denotes "not detected" at reporting limit shown in parentheses.

Values shown are dry-weight concentrations.

J data validation qualifier denotes estimated value.

B data validation qualifier denotes constituent was detected in corresponding laboratory blank.

U* data validation qualifier denotes originally reported positive result that should be considered "not detected" due to trace-level presence of the analyte in associated laboratory method blanks and/or rinseate blanks.

Table 3-1

Summary of Soil Analytical Results

Gulf States Crossing Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | GEO-61/0-1' | GEO-61/2-3' | GEO-61/5-6' | GEO-62/0-1' | GEO-62/2-3' | GEO-62/5-6' |
|--|------------|-------|-------------|--------------|--------------|-------------|-------------|--------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | | | |
| Naphthalene | 91-20-3 | mg/kg | ND (0.31) | ND (0.032) | ND (0.31) | ND (0.16) | ND (0.033) | ND (0.032) |
| Acenaphthylene | 208-96-8 | mg/kg | ND (0.31) | ND (0.032) | ND (0.31) | ND (0.16) | ND (0.033) | ND (0.032) |
| Acenaphthene | 83-32-9 | mg/kg | ND (0.31) | ND (0.032) | ND (0.31) | ND (0.16) | ND (0.033) | ND (0.032) |
| Fluorene | 86-73-7 | mg/kg | ND (0.029) | ND (0.0029) | ND (0.029) | ND (0.015) | ND (0.003) | ND (0.003) |
| Phenanthrene | 85-01-8 | mg/kg | 0.019 | 0.0028 | J | 0.014 | J | ND (0.0012) |
| Anthracene | 120-12-7 | mg/kg | 0.0075 | 0.0014 | J | 0.0061 | J | ND (0.00059) |
| Fluoranthene | 206-44-0 | mg/kg | 0.05 | 0.0011 | J | 0.021 | J | ND (0.00059) |
| Pyrene | 129-00-0 | mg/kg | 0.075 | 0.0031 | J | 0.04 | J | ND (0.003) |
| Benzo(a)anthracene | 56-55-3 | mg/kg | 0.021 | ND (0.00029) | ND (0.00029) | 0.01 | J | ND (0.0003) |
| Chrysene | 218-01-9 | mg/kg | 0.024 | ND (0.0012) | ND (0.0012) | 0.025 | J | ND (0.0012) |
| Benzo(b)fluoranthene | 205-99-2 | mg/kg | 0.045 | ND (0.00024) | ND (0.00023) | 0.016 | J | ND (0.00024) |
| Benzo(k)fluoranthene | 207-08-9 | mg/kg | 0.021 | 0.00026 | J | 0.008 | J | ND (0.00024) |
| Benzo(a)pyrene | 50-32-8 | mg/kg | 0.029 | ND (0.00029) | ND (0.00029) | 0.012 | J | ND (0.0003) |
| Dibenz(a,h)anthracene | 53-70-3 | mg/kg | 0.0086 | ND (0.00059) | ND (0.00058) | ND (0.003) | J | ND (0.00059) |
| Benzo(g,h,i)perylene | 191-24-2 | mg/kg | 0.034 | ND (0.0018) | ND (0.0017) | 0.0098 | J | ND (0.0018) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | mg/kg | 0.032 | ND (0.0012) | ND (0.0012) | 0.0077 | J | ND (0.0012) |
| <i>Other Parameters</i> | | | | | | | | |
| Moisture | | % | 13.5% | 15.2% | 13.7% | 17.9% | 17.7% | 15.6% |

Notes:

ND denotes "not detected" at reporting limit shown in parentheses.

Values shown are dry-weight concentrations.

J data validation qualifier denotes estimated value.

Table 3-1
(Continued)

Summary of Soil Analytical Results

Gulf States Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | GEO-62/6-7' | GEO-63/2-3' | GEO-63/5-6' | GEO-64/0-1' | GEO-64/2-3' | GEO-64/5-6' |
|--|------------|-------|--------------|--------------|--------------|-------------|-------------|-------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | | | |
| Naphthalene | 91-20-3 | mg/kg | ND (0.032) | ND (0.033) | ND (0.033) | 0.18 J | 0.76 J | ND (0.160) |
| Acenaphthylene | 208-96-8 | mg/kg | ND (0.032) | ND (0.033) | ND (0.033) | ND (0.150) | ND (0.310) | ND (0.160) |
| Acenaphthene | 83-32-9 | mg/kg | ND (0.032) | ND (0.033) | ND (0.033) | ND (0.150) | ND (0.310) | ND (0.160) |
| Fluorene | 86-73-7 | mg/kg | ND (0.003) | ND (0.003) | ND (0.0031) | 0.077 J | 0.15 J | 0.019 J |
| Phenanthrene | 85-01-8 | mg/kg | ND (0.0012) | ND (0.0012) | 0.0016 J | 0.23 | 1.1 | 0.078 |
| Anthracene | 120-12-7 | mg/kg | ND (0.0006) | ND (0.0006) | ND (0.00062) | 0.027 J | 0.27 | 0.017 J |
| Fluoranthene | 206-44-0 | mg/kg | ND (0.0006) | ND (0.0006) | ND (0.00062) | 0.1 | 1.5 | 0.055 |
| Pyrene | 129-00-0 | mg/kg | ND (0.003) | 0.0042 J | 0.0038 J | 0.085 J | 1.5 | 0.057 J |
| Benzo(a)anthracene | 56-55-3 | mg/kg | ND (0.0003) | ND (0.0003) | ND (0.00031) | 0.03 | 0.67 | 0.014 J |
| Chrysene | 218-01-9 | mg/kg | ND (0.0012) | ND (0.0012) | ND (0.0012) | 0.053 J | 0.6 | 0.022 J |
| Benzo(b)fluoranthene | 205-99-2 | mg/kg | ND (0.00024) | ND (0.00024) | ND (0.00025) | 0.019 | 0.59 | 0.013 |
| Benzo(k)fluoranthene | 207-08-9 | mg/kg | ND (0.00024) | 0.00046 J | ND (0.00025) | 0.012 | 0.31 | 0.0063 |
| Benzo(a)pyrene | 50-32-8 | mg/kg | ND (0.0003) | ND (0.0003) | ND (0.00031) | 0.027 | 0.7 | 0.011 J |
| Dibenz(a,h)anthracene | 53-70-3 | mg/kg | ND (0.0006) | ND (0.0006) | ND (0.00062) | 0.011 J | 0.11 | 0.0031 J |
| Benzo(g,h,i)perylene | 191-24-2 | mg/kg | ND (0.0018) | ND (0.0018) | ND (0.0018) | 0.02 J | 0.42 | 0.018 J |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | mg/kg | ND (0.0012) | ND (0.0012) | ND (0.0012) | 0.016 J | 0.49 | 0.013 J |
| <i>Other Parameters</i> | | | | | | | | |
| Moisture | | % | 16.8% | 17.2% | 18.7% | 12.0% | 13.6% | 17.1% |

Notes:

ND denotes "not detected" at reporting limit shown in parentheses.

Values shown are dry-weight concentrations.

J data validation qualifier denotes estimated value.

Table 3-1
(Continued)

Summary of Soil Analytical Results

Gulf States Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | GEO-65/0-1' | GEO-65/2-3' | GEO-65/5-6' | GEO-67/2.5-3.5' | GEO-67/8-9' |
|--|------------|-------|-------------|-------------|--------------|-----------------|-------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | | |
| Naphthalene | 91-20-3 | mg/kg | 0.19 J | 0.49 | ND (0.033) | 160 | 0.37 |
| Acenaphthylene | 208-96-8 | mg/kg | ND (0.170) | 0.047 | ND (0.033) | 53 | 0.067 J |
| Acenaphthene | 83-32-9 | mg/kg | ND (0.170) | 0.36 | ND (0.033) | 32 | ND (0.033) |
| Fluorene | 86-73-7 | mg/kg | 0.08 J | 0.41 | ND (0.003) | 31 | 0.041 |
| Phenanthrene | 85-01-8 | mg/kg | 0.27 | 1.7 | 0.0094 J | 310 | 0.27 |
| Anthracene | 120-12-7 | mg/kg | 0.034 | 0.26 | 0.0011 J | 23 | 0.014 |
| Fluoranthene | 206-44-0 | mg/kg | 0.15 | 0.93 | 0.0051 J | 150 | 0.12 |
| Pyrene | 129-00-0 | mg/kg | 0.14 J | 0.69 | 0.0093 J | 110 | 0.11 |
| Benzo(a)anthracene | 56-55-3 | mg/kg | 0.033 | 0.16 | 0.0016 J | 29 | 0.029 |
| Chrysene | 218-01-9 | mg/kg | 0.029 J | 0.12 | 0.0042 J | 21 | 0.033 J |
| Benzo(b)fluoranthene | 205-99-2 | mg/kg | 0.014 | 0.069 | 0.00086 J | 14 | 0.051 |
| Benzo(k)fluoranthene | 207-08-9 | mg/kg | 0.0089 J | 0.04 | 0.00084 J | 7.8 | 0.025 |
| Benzo(a)pyrene | 50-32-8 | mg/kg | 0.017 J | 0.079 | 0.0012 J | 12 | 0.044 |
| Dibenz(a,h)anthracene | 53-70-3 | mg/kg | 0.0041 J | 0.011 | ND (0.00061) | 1.4 | 0.0049 J |
| Benzo(g,h,i)perylene | 191-24-2 | mg/kg | ND (0.0094) | 0.021 | ND (0.0018) | 5.3 | 0.025 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | mg/kg | 0.012 J | 0.031 | 0.0019 J | 6.7 | 0.029 |
| <i>Other Parameters</i> | | | | | | | |
| Moisture | | % | 20.1% | 22.4% | 17.7% | 15.7% | 18.4% |

Notes:

ND denotes "not detected" at reporting limit shown in parentheses.

Values shown are dry-weight concentrations.

J data validation qualifier denotes estimated value.

Table 3-1
(Continued)

Summary of Soil Analytical Results

Gulf States Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | GEO-68/4.5-5.5' | GEO-68/8-9' | GEO-69/4.5-5.5' | GEO-69/7-8' | GEO-69/7-8' Duplicate | GEO-70/4-8' |
|--|------------|-------|-----------------|-------------|-----------------|-------------|-----------------------|-------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | | | |
| Naphthalene | 91-20-3 | mg/kg | 0.63 | J | 1700 | 45 | J | 1200 |
| Acenaphthylene | 208-96-8 | mg/kg | 0.29 | J | ND (130) | ND (6.5) | ND (16) | ND (140) |
| Acenaphthene | 83-32-9 | mg/kg | 0.046 | J | 700 | 16 | J | 550 |
| Fluorene | 86-73-7 | mg/kg | 0.12 | 0.048 | 720 | 17 | 19 | 530 |
| Phenanthrene | 85-01-8 | mg/kg | 0.64 | 0.17 | 1900 | 55 | 58 | 1300 |
| Anthracene | 120-12-7 | mg/kg | 0.033 | 0.0093 | 640 | 11 | 12 | 270 |
| Fluoranthene | 206-44-0 | mg/kg | 0.43 | 0.034 | 1000 | 25 | 28 | 570 |
| Pyrene | 129-00-0 | mg/kg | 0.21 | 0.029 | 950 | 22 | 27 | 490 |
| Benzo(a)anthracene | 56-55-3 | mg/kg | 0.051 | 0.0054 | 220 | 5.2 | 5.9 | 110 |
| Chrysene | 218-01-9 | mg/kg | 0.053 | 0.0065 | 180 | 4.6 | 3.8 | 84 |
| Benzo(b)fluoranthene | 205-99-2 | mg/kg | 0.023 | 0.0086 | 95 | 1.8 | 2.1 | 35 |
| Benzo(k)fluoranthene | 207-08-9 | mg/kg | 0.013 | 0.0041 | 56 | 1.1 | 1.3 | 21 |
| Benzo(a)pyrene | 50-32-8 | mg/kg | 0.016 | 0.0067 | 100 | 2 | 2.3 | 38 |
| Dibenz(a,h)anthracene | 53-70-3 | mg/kg | 0.0015 | J | 14 | 0.19 | J | ND (0.30) |
| Benzo(g,h,i)perylene | 191-24-2 | mg/kg | 0.0051 | J | 24 | ND (0.36) | ND (0.89) | 8.4 |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | mg/kg | 0.0074 | J | 43 | 0.35 | J | ND (5.2) |
| <i>Other Parameters</i> | | | | | | | | |
| Moisture | | % | 24.4% | 18.9% | 18.1% | 16.9% | 16.0% | 22.5% |

Notes:

ND denotes "not detected" at reporting limit shown in parentheses.

Values shown are dry-weight concentrations.

J data validation qualifier denotes estimated value.

Table 3-2

Summary of Ground Water Analytical Results

Gulf States Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | GEO-66/GW | | GEO-68A/GW |
|--|------------|-------|------------|---|-------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | |
| Naphthalene | 91-20-3 | ug/l | 1.16 | J | ND (0.76) |
| Acenaphthylene | 208-96-8 | ug/l | ND (0.76) | | ND (0.76) |
| Acenaphthene | 83-32-9 | ug/l | 3.1 | J | ND (0.76) |
| Fluorene | 86-73-7 | ug/l | 1.3 | | ND (0.16) |
| Phenanthrene | 85-01-8 | ug/l | 1.52 | | ND (0.066) |
| Anthracene | 120-12-7 | ug/l | 0.32 | | ND (0.028) |
| Fluoranthene | 206-44-0 | ug/l | 1.25 | | ND (0.028) |
| Pyrene | 129-00-0 | ug/l | 1.03 | | ND (0.16) |
| Benzo(a)anthracene | 56-55-3 | ug/l | 0.091 | | ND (0.019) |
| Chrysene | 218-01-9 | ug/l | 0.091 | J | ND (0.057) |
| Benzo(b)fluoranthene | 205-99-2 | ug/l | 0.088 | | ND (0.036) |
| Benzo(k)fluoranthene | 207-08-9 | ug/l | 0.0474 | J | ND (0.0095) |
| Benzo(a)pyrene | 50-32-8 | ug/l | 0.103 | | ND (0.019) |
| Dibenz(a,h)anthracene | 53-70-3 | ug/l | ND (0.029) | | ND (0.028) |
| Benzo(g,h,i)perylene | 191-24-2 | ug/l | ND (0.095) | | ND (0.095) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | ug/l | 0.068 | J | ND (0.064) |

Notes:

ND denotes "not detected" at reporting limit shown in parentheses.

Values shown are dry-weight concentrations.

J data validation qualifier denotes estimated value.

Table 1

Summary of July 2001 Soil Analytical Results

Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | Tier 1 TRG (unrestricted use) | GEO-61A/8-10' | GEO-61A/12-14' | GEO-61A/16-18' |
|--|------------|-------|----------------------------------|---------------|----------------|----------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | |
| Naphthalene | 91-20-3 | mg/kg | 194 | ND (0.300) | ND (0.300) | ND (0.300) |
| Acenaphthylene | 208-96-8 | mg/kg | 4,690 | ND (0.300) | ND (0.300) | ND (0.300) |
| Acenaphthene | 83-32-9 | mg/kg | 4,690 | ND (0.300) | ND (0.300) | ND (0.300) |
| Fluorene | 86-73-7 | mg/kg | 3,130 | ND (0.030) | ND (0.030) | ND (0.030) |
| Phenanthrene | 85-01-8 | mg/kg | 2,350 | ND (0.012) | ND (0.013) | ND (0.014) |
| Anthracene | 120-12-7 | mg/kg | 23,500 | ND (0.0057) | ND (0.006) | ND (0.0062) |
| Fluoranthene | 206-44-0 | mg/kg | 3,130 | ND (0.0057) | ND (0.006) | ND (0.0062) |
| Pyrene | 129-00-0 | mg/kg | 2,350 | ND (0.030) | ND (0.030) | ND (0.030) |
| Benz(a)anthracene | 56-55-3 | mg/kg | 0.875 | ND (0.003) | ND (0.004) | ND (0.004) |
| Chrysene | 218-01-9 | mg/kg | 87.5 | ND (0.012) | ND (0.013) | ND (0.014) |
| Benzo(b)fluoranthene | 205-99-2 | mg/kg | 0.875 | ND (0.0023) | ND (0.0024) | ND (0.0025) |
| Benzo(k)fluoranthene | 207-08-9 | mg/kg | 8.75 | ND (0.0023) | ND (0.0024) | ND (0.0025) |
| Benzo(a)pyrene | 50-32-8 | mg/kg | 0.0875 | ND (0.003) | ND (0.004) | ND (0.004) |
| Dibenz(a,h)anthracene | 53-70-3 | mg/kg | 0.0875 | ND (0.006) | ND (0.006) | ND (0.006) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | mg/kg | 0.875 | ND (0.012) | ND (0.013) | ND (0.014) |
| Benzo(g,h,i)perylene | 191-24-2 | mg/kg | 2,350 | ND (0.018) | ND (0.019) | ND (0.020) |
| <i>Other Parameters</i> | | | | | | |
| Moisture | | % | | 11.8% | 16.9% | 19.2% |

Notes:

ND denotes constituent not detected at laboratory limit of quantitation shown in parentheses.

Values shown are dry-weight concentrations.

Table 1

Summary of July 2001 Soil Analytical Results

Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | Tier 1 TRG (unrestricted use) | GEO-63A/8-10' | GEO-63A/12-14' | GEO-63A/16-18' |
|--|------------|-------|----------------------------------|---------------|----------------|----------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | |
| Naphthalene | 91-20-3 | mg/kg | 194 | ND (0.300) | ND (0.300) | ND (0.300) |
| Acenaphthylene | 208-96-8 | mg/kg | 4,690 | ND (0.300) | ND (0.300) | ND (0.300) |
| Acenaphthene | 83-32-9 | mg/kg | 4,690 | ND (0.300) | ND (0.300) | ND (0.300) |
| Fluorene | 86-73-7 | mg/kg | 3,130 | ND (0.030) | ND (0.030) | ND (0.030) |
| Phenanthrene | 85-01-8 | mg/kg | 2,350 | ND (0.013) | ND (0.013) | ND (0.013) |
| Anthracene | 120-12-7 | mg/kg | 23,500 | 0.010 | ND (0.0059) | ND (0.006) |
| Fluoranthene | 206-44-0 | mg/kg | 3,130 | ND (0.006) | ND (0.0059) | ND (0.006) |
| Pyrene | 129-00-0 | mg/kg | 2,350 | ND (0.030) | ND (0.030) | ND (0.030) |
| Benz(a)anthracene | 56-55-3 | mg/kg | 0.875 | ND (0.004) | ND (0.004) | ND (0.004) |
| Chrysene | 218-01-9 | mg/kg | 87.5 | ND (0.013) | ND (0.013) | ND (0.013) |
| Benzo(b)fluoranthene | 205-99-2 | mg/kg | 0.875 | ND (0.0024) | ND (0.0024) | ND (0.0024) |
| Benzo(k)fluoranthene | 207-08-9 | mg/kg | 8.75 | ND (0.0024) | ND (0.0024) | ND (0.0024) |
| Benzo(a)pyrene | 50-32-8 | mg/kg | 0.0875 | ND (0.004) | ND (0.004) | ND (0.004) |
| Dibenz(a,h)anthracene | 53-70-3 | mg/kg | 0.0875 | ND (0.006) | ND (0.006) | ND (0.006) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | mg/kg | 0.875 | ND (0.013) | ND (0.013) | ND (0.013) |
| Benzo(g,h,i)perylene | 191-24-2 | mg/kg | 2,350 | ND (0.019) | ND (0.019) | ND (0.019) |
| <i>Other Parameters</i> | | | | | | |
| Moisture | | % | | 17.2% | 15.1% | 16.4% |

Notes:

ND denotes constituent not detected at laboratory limit of quantitation shown in parentheses.

Values shown are dry-weight concentrations.

Table 1

Summary of July 2001 Soil Analytical Results

Former Gulf States Creosoting Site
Hattiesburg, Mississippi

| Analytical Parameter | CAS Number | Units | Tier 1 TRG (unrestricted use) | GEO-86/8-10' | GEO-86/12-14' | GEO-86/16-18' |
|--|------------|-------|----------------------------------|--------------|---------------|---------------|
| <i>Polycyclic Aromatic Hydrocarbons (PAHs)</i> | | | | | | |
| Naphthalene | 91-20-3 | mg/kg | 194 | ND (0.300) | ND (0.300) | ND (0.300) |
| Acenaphthylene | 208-96-8 | mg/kg | 4,690 | ND (0.300) | ND (0.300) | ND (0.300) |
| Acenaphthene | 83-32-9 | mg/kg | 4,690 | ND (0.300) | ND (0.300) | ND (0.300) |
| Fluorene | 86-73-7 | mg/kg | 3,130 | ND (0.030) | ND (0.030) | ND (0.030) |
| Phenanthrene | 85-01-8 | mg/kg | 2,350 | ND (0.013) | ND (0.013) | ND (0.013) |
| Anthracene | 120-12-7 | mg/kg | 23,500 | ND (0.00059) | ND (0.00058) | ND (0.00059) |
| Fluoranthene | 206-44-0 | mg/kg | 3,130 | ND (0.00059) | ND (0.00058) | ND (0.00059) |
| Pyrene | 129-00-0 | mg/kg | 2,350 | ND (0.030) | ND (0.030) | ND (0.030) |
| Benz(a)anthracene | 56-55-3 | mg/kg | 0.875 | ND (0.004) | ND (0.004) | ND (0.004) |
| Chrysene | 218-01-9 | mg/kg | 87.5 | ND (0.013) | ND (0.013) | ND (0.013) |
| Benzo(b)fluoranthene | 205-99-2 | mg/kg | 0.875 | ND (0.0024) | ND (0.0023) | ND (0.0023) |
| Benzo(k)fluoranthene | 207-08-9 | mg/kg | 8.75 | ND (0.0024) | ND (0.0023) | ND (0.0023) |
| Benzo(a)pyrene | 50-32-8 | mg/kg | 0.0875 | ND (0.004) | ND (0.004) | ND (0.004) |
| Dibenz(a,h)anthracene | 53-70-3 | mg/kg | 0.0875 | ND (0.006) | ND (0.006) | ND (0.006) |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | mg/kg | 0.875 | ND (0.013) | ND (0.013) | ND (0.013) |
| Benzo(g,h,i)perylene | 191-24-2 | mg/kg | 2,350 | ND (0.019) | ND (0.019) | ND (0.019) |
| <i>Other Parameters</i> | | | | | | |
| Moisture | | % | | 14.9% | 14.5% | 14.8% |

Notes:

ND denotes constituent not detected at laboratory limit of quantitation shown in parentheses.

Values shown are dry-weight concentrations.