



# GC/MS Aromatics Report

**Well: 021/19-03**

**Field: Mallard**

**Country: United Kingdom**



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# GC/MS aromatics data report

## FPC\_62111

### Sample information

|             |                |                                  |                   |
|-------------|----------------|----------------------------------|-------------------|
| Sample ID   | FPC_62111      | Depth (ft)                       | 12730.0 - 12816.0 |
| Sample type | Oil            | Formation                        | -                 |
| Country     | United Kingdom | Age                              | -                 |
| Basin       | Central Trough | Reservoir                        | -                 |
| Prospect    | NORTH SEA      | Sample date                      | -                 |
| Block       | 021/19         | Sample origin                    | UNKN              |
| Field       | Mallard        | Operator                         | VENTURE           |
| Well name   | 021/19-03      | Int. std. D10-Phenanthrene (ppm) | 90                |
| Well code   | FPCW_2738      |                                  |                   |
| Latitude    | 57.417732      |                                  |                   |
| Longitude   | 0.774753       |                                  |                   |

# Peak Data Table

## FPC\_62111

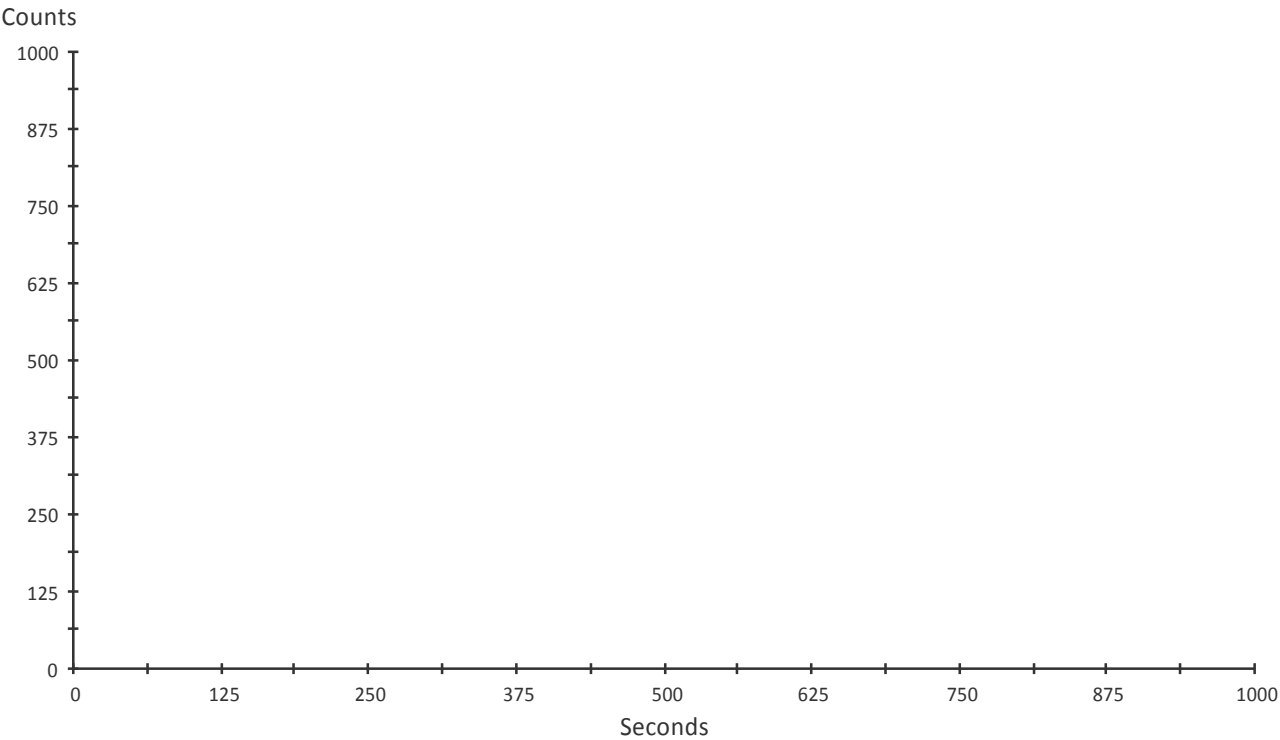
| Peak name                        | Ion    | Area      |
|----------------------------------|--------|-----------|
| 2,3,6_TMB_C15arylisprenoid       | 134.10 | -         |
| 2,3,6_TMB_C16arylisprenoid       | 134.10 | -         |
| 2,3,6_TMB_C17arylisprenoid       | 134.10 | -         |
| 2,3,6_TMB_C18arylisprenoid       | 134.10 | -         |
| 2,3,6_TMB_C19arylisprenoid       | 134.10 | -         |
| 2,3,6_TMB_C20arylisprenoid       | 134.10 | -         |
| 2,3,6_TMB_C21arylisprenoid       | 134.10 | -         |
| 2,3,6_TMB_C22Barylisprenoid      | 134.10 | -         |
| 2,3,6_TMB_C23arylisprenoid       | 134.10 | -         |
| 2-methylnaphthalene              | 142.10 | 714457.81 |
| 1-methylnaphthalene              | 142.10 | 825528.75 |
| 2,6-dimethylnaphthalene          | 156.10 | 312382.06 |
| 2,7-dimethylnaphthalene          | 156.10 | 236089.78 |
| 1,3+1,7-dimethylnaphthalene      | 156.10 | 715468.94 |
| 1,6-dimethylnaphthalene          | 156.10 | 630767.50 |
| 1,5-dimethylnaphthalene          | 156.10 | 178276.11 |
| 2,3-dimethylnaphthalene          | 156.10 | 280644.97 |
| 1,2-dimethylnaphthalene          | 156.10 | 63894.64  |
| 1,3,7-trimethylnaphthalene       | 170.10 | 253890.22 |
| 1,3,6-trimethylnaphthalene       | 170.10 | 383964.62 |
| 1,3,5+1,4,6-trimethylnaphthalene | 170.10 | 332981.72 |
| 2,3,6-trimethylnaphthalene       | 170.10 | 203918.31 |
| 1,2,7-trimethylnaphthalene       | 170.10 | 38021.62  |
| 1,6,7-trimethylnaphthalene       | 170.10 | 228576.62 |
| 1,2,6-trimethylnaphthalene       | 170.10 | 9877.32   |
| 1,2,4-trimethylnaphthalene       | 170.10 | 15556.46  |
| 1,2,5-trimethylnaphthalene       | 170.10 | 51877.62  |
| Phenanthrene                     | 178.10 | 365930.16 |
| 1,3,5,7-tetramethylnaphthalene   | 184.10 | 79081.40  |
| 1,3,6,7-tetramethylnaphthalene   | 184.10 | 99796.46  |
| 1,2,4,7-tetramethylnaphthalene   | 184.10 | 45338.41  |
| 1,2,5,7-tetramethylnaphthalene   | 184.10 | 24286.54  |
| 2,3,6,7-tetramethylnaphthalene   | 184.10 | 19816.92  |
| 1,2,6,7-tetramethylnaphthalene   | 184.10 | 6020.14   |
| 1,2,5,6-tetramethylnaphthalene   | 184.10 | 12662.06  |
| Dibenzothiophene                 | 184.10 | 158607.30 |
| D10-Phenanthrene (Intern. Std.)  | 188.10 | 85138.91  |
| 3-methylphenanthrene             | 192.10 | 168336.66 |
| 2-methylphenanthrene             | 192.10 | 200682.72 |
| 9-methylphenanthrene             | 192.10 | 421740.91 |
| 1-methylphenanthrene             | 192.10 | 312874.66 |
| Cadalene                         | 198.00 | 9930.03   |
| 4-methyldibenzothiophene         | 198.10 | 451519.31 |
| 3+2-methyldibenzothiophene       | 198.10 | 160589.50 |
| 1-methyldibenzothiophene         | 198.10 | 72558.55  |
| 4,5-dimethylphenanthrene         | 206.20 | 5841.06   |
| 2,6+3,6-dimethylphenanthrene     | 206.20 | 51213.29  |
| 3,5-dimethylphenanthrene         | 206.20 | 56376.91  |
| 2,7-dimethylphenanthrene         | 206.20 | 35122.96  |
| 3,9-dimethylphenanthrene         | 206.20 | 408341.38 |
| 1,6+2,5+2,9-dimethylphenanthrene | 206.20 | 205657.14 |
| 1,7-dimethylphenanthrene         | 206.20 | 136728.88 |
| 1,9+4,9-dimethylphenanthrene     | 206.20 | 150852.31 |
| 1,8-dimethylphenanthrene         | 206.20 | 57323.27  |
| 1,2-dimethylphenanthrene         | 206.20 | 12024.59  |

| Peak name              | Ion    | Area    |
|------------------------|--------|---------|
| TA_C20                 | 231.20 | 9004.74 |
| TA_C21                 | 231.20 | 8663.96 |
| TA_C22_20S             | 231.20 | -       |
| TA_C22_20R             | 231.20 | -       |
| TA_C26_20S             | 231.20 | -       |
| TA_C26_20R_C27_20S     | 231.20 | -       |
| TA_C28_20S_A+B         | 231.20 | -       |
| TA_C27_20R             | 231.20 | -       |
| TA_C29_20S_A           | 231.20 | -       |
| TA_C29_20S_B           | 231.20 | -       |
| TA_C28_20R             | 231.20 | -       |
| MA_C21_A               | 253.20 | 4150.43 |
| MA_C21_B               | 253.20 | 2763.70 |
| MA_C22_A               | 253.20 | 5021.38 |
| MA_C22_B               | 253.20 | 3405.12 |
| MA_C27_I_20S           | 253.20 | 1218.27 |
| MA_C27_V_20S           | 253.20 | 1419.53 |
| MA_C27_I_20R_C27_V_20R | 253.20 | 1250.02 |
| MA_C27_II_20S          | 253.20 | 909.24  |
| MA_C28_I_20S           | 253.20 | 1406.10 |
| MA_C28_V_20S           | 253.20 | 769.19  |
| MA_C27_II_20R          | 253.20 | 1180.46 |
| MA_C28_II_20S          | 253.20 | 595.17  |
| MA_C28_I_20R_C28_V_20R | 253.20 | 930.75  |
| MA_C29_I_20S_C29_V_20S | 253.20 | 1154.69 |
| MA_C29_II_20S          | 253.20 | 2525.99 |
| MA_C28_II_20R          | 253.20 | 1500.49 |
| MA_C29_I_20R_C29_V_20R | 253.20 | 1218.24 |

|        |                   |             |          |               |                    |
|--------|-------------------|-------------|----------|---------------|--------------------|
| Sample | FPC_62111         | Sample type | Oil      | Analysis      | GC-MSD in SIM mode |
| Depth  | 12730.0-12816.0ft | Fraction    | Aromatic | Analysis date | 25-AUG-2011        |

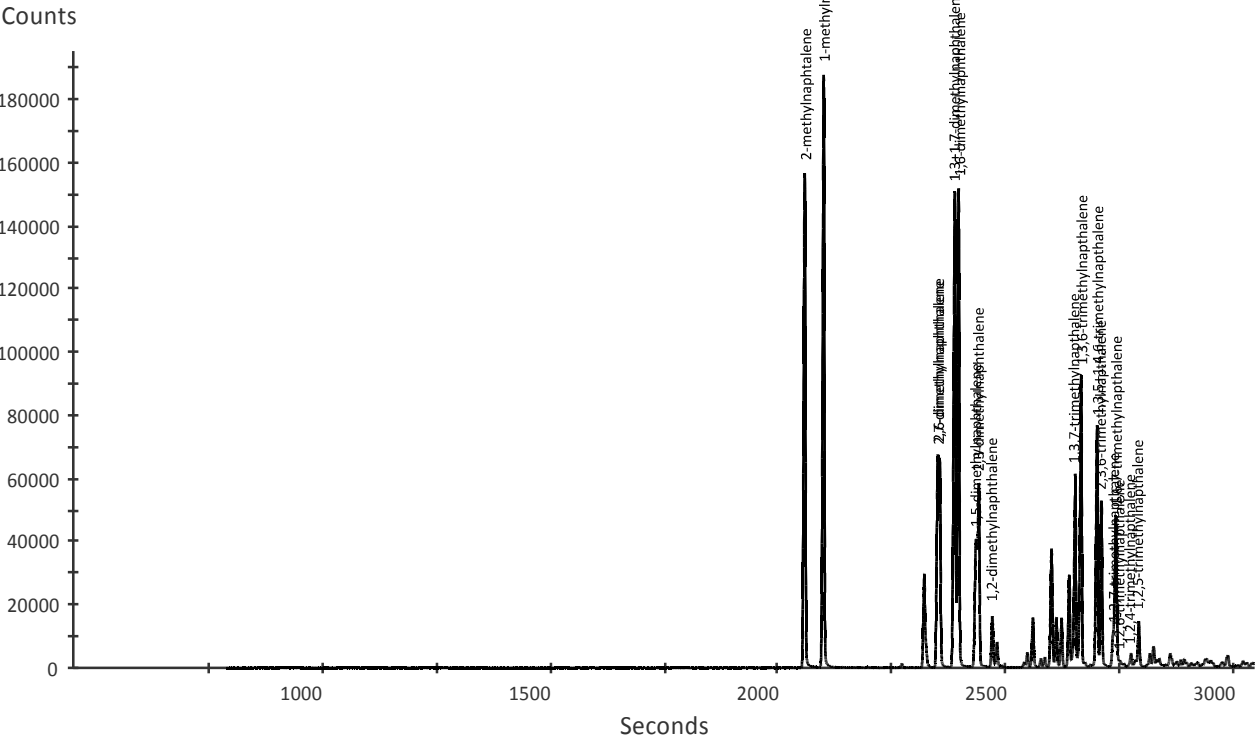
| m/z   | signal intensity |
|-------|------------------|
| 134.1 | 1,000            |

Alkyl-trimethylbenzenes



| m/z               | signal intensity |
|-------------------|------------------|
| 142.1+156.1+170.1 | 195,336.96       |

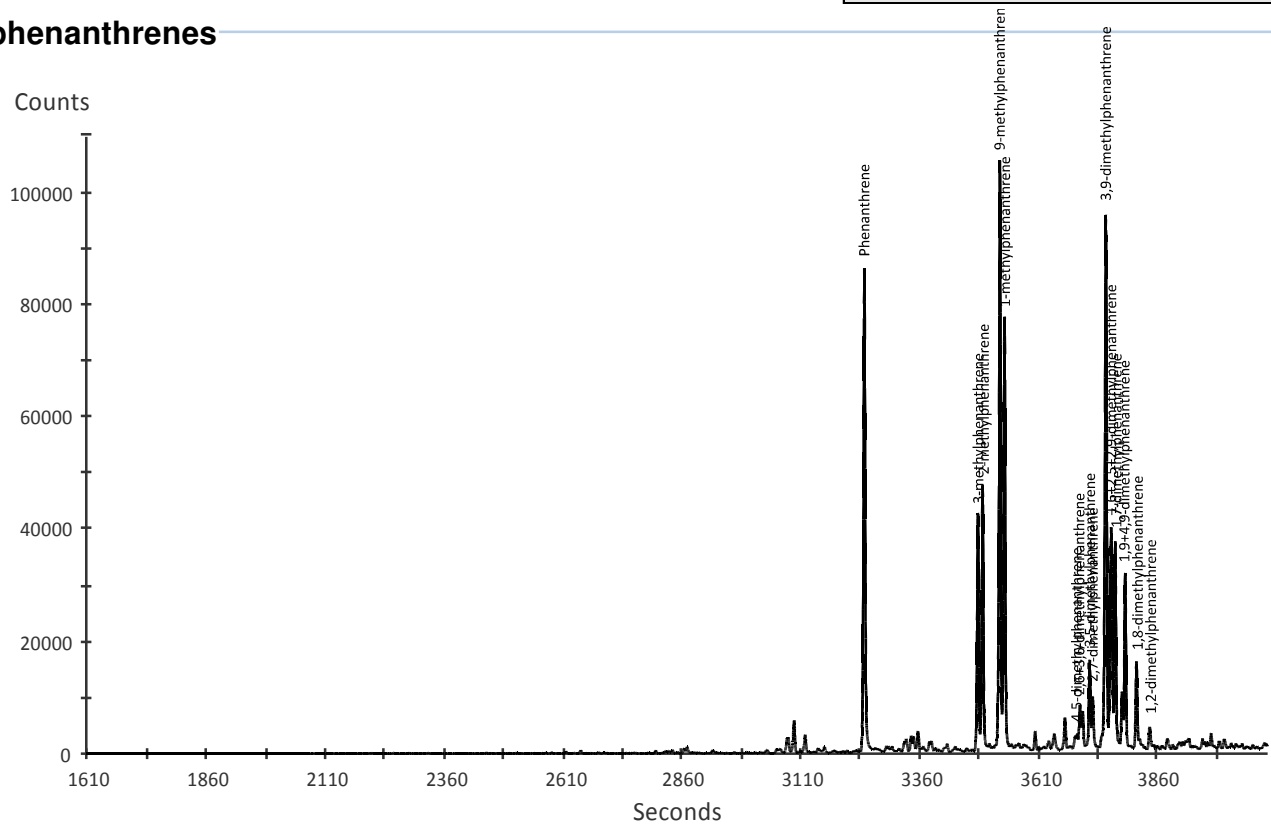
Methylnaphthalenes



|        |                   |             |          |               |                    |
|--------|-------------------|-------------|----------|---------------|--------------------|
| Sample | FPC_62111         | Sample type | Oil      | Analysis      | GC-MSD in SIM mode |
| Depth  | 12730.0-12816.0ft | Fraction    | Aromatic | Analysis date | 25-AUG-2011        |

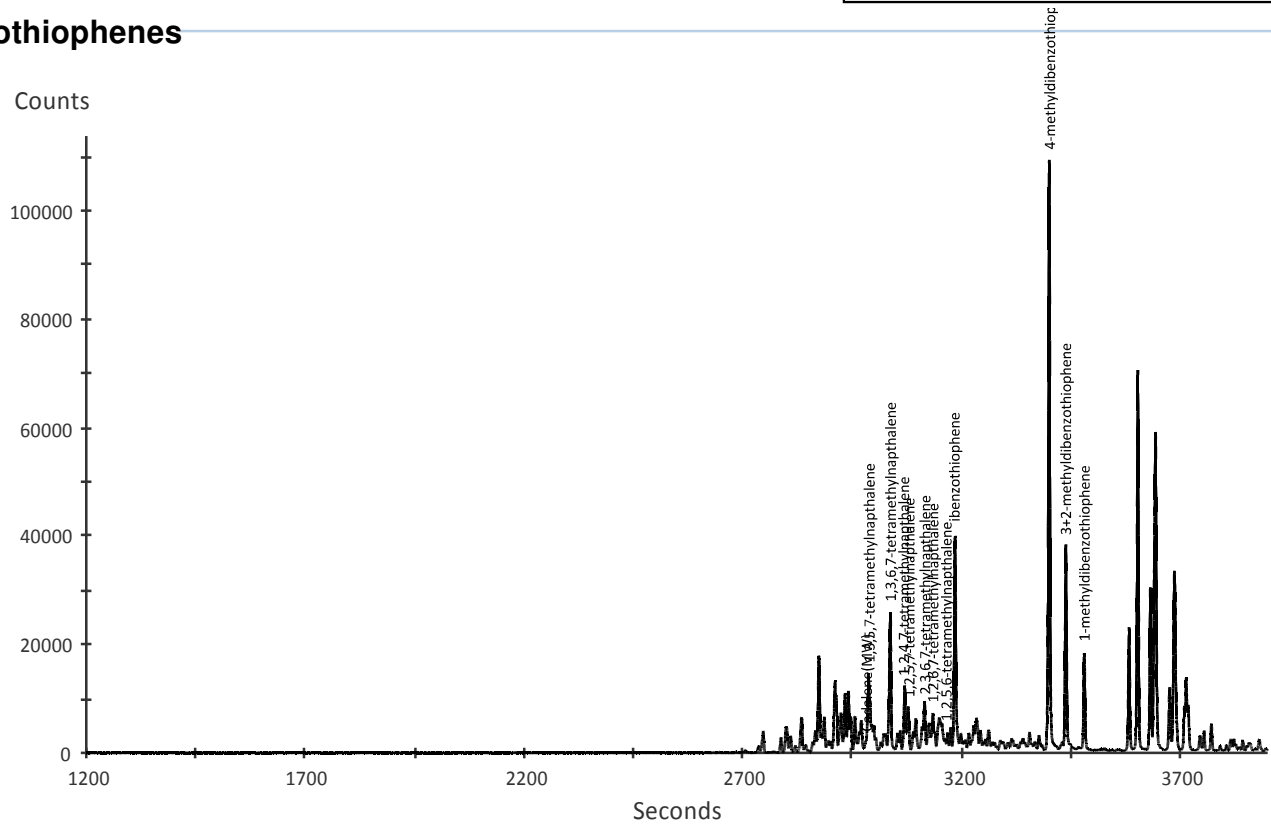
| m/z               | signal intensity |
|-------------------|------------------|
| 178.1+192.1+206.1 | 109,737.68       |

Methylphenanthrenes



| m/z               | signal intensity |
|-------------------|------------------|
| 184.0+198.1+212.1 | 113,767.68       |

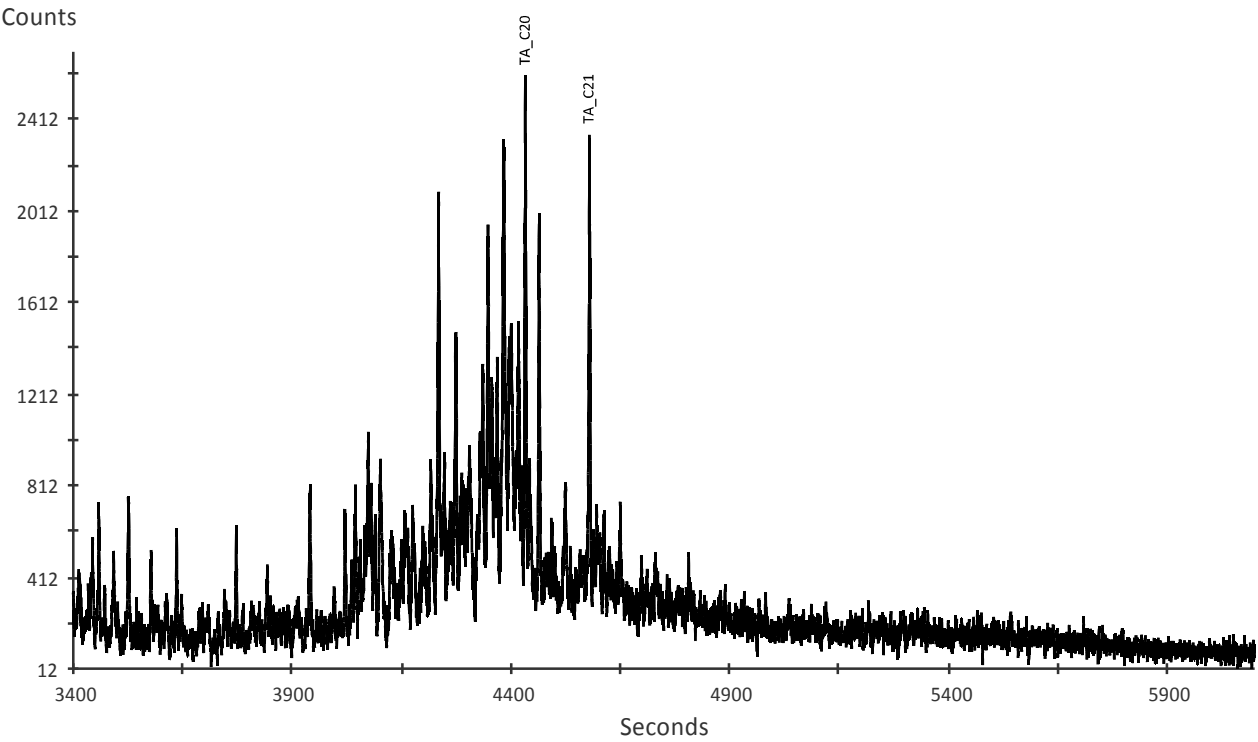
Dibenzothiophenes



|        |                   |             |          |               |                    |
|--------|-------------------|-------------|----------|---------------|--------------------|
| Sample | FPC_62111         | Sample type | Oil      | Analysis      | GC-MSD in SIM mode |
| Depth  | 12730.0-12816.0ft | Fraction    | Aromatic | Analysis date | 25-AUG-2011        |

| m/z   | signal intensity |
|-------|------------------|
| 231.1 | 2,705.6          |

### Triaromatic steroids



| m/z   | signal intensity |
|-------|------------------|
| 253.2 | 1,555.84         |

### Monoaromatic steroids

