

Table (1) Regional concentration of polycyclic aromatic hydrocarbons (ng/g)dry weight in soil of west Qurna -2 oil field during summer season 2015.

| PAHs compounds | Station1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----------------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Naphthalene | 0.014 | 0.014 | 0.018 | 0.013 | 0.042 | 0.051 | 0.012 | 0.011 | 0.019 | 0.019 |
| Acenaphthylene | 0.018 | 0.032 | 0.045 | 0.051 | 0.040 | 0.064 | 0.075 | 0.111 | 0.090 | 0.213 |
| Acenaphene | 0.028 | 0.055 | 0.057 | 0.020 | 0.055 | 0.025 | 0.042 | 0.03 | 0.045 | 0.127 |
| Fluorene | 0.052 | 0.114 | 0.087 | 0.179 | 0.230 | 0.088 | 0.191 | 0.171 | 0.202 | 0.293 |
| Phenanthrene | 0.038 | 0.053 | 0.051 | 0.088 | 0.124 | 0.066 | 0.085 | 0.094 | 0.106 | 0.486 |
| Anthracene | 0.006 | 0.086 | 0.014 | 0.110 | 0.057 | 0.050 | 0.080 | 0.014 | 0.08 | 0.232 |
| Fluoranthene | 0.021 | 0.04 | 0.036 | 0.063 | 0.083 | 0.057 | 0.072 | 0.076 | 0.106 | 0.127 |
| Pyrene | 0.064 | 0.196 | 0.229 | 0.043 | 0.141 | 0.095 | 0.256 | 0.092 | 0.288 | 0.480 |
| Benzo(a)anthracene | 0.054 | 0.059 | 0.063 | 0.065 | 0.11 | 0.049 | 0.066 | 0.096 | 0.094 | 0.105 |
| Chrysene | 0.003 | 0.005 | 0.017 | 0.01 | 0.037 | 0.048 | 0.024 | 0.066 | 0.037 | 0.015 |
| Benzo(b)fluoranthene | 0.005 | 0.014 | 0.008 | 0.036 | 0.013 | 0.014 | 0.011 | 0.015 | 0.021 | 0.013 |
| Benzo(k)fluoranthene | 0.008 | 0.010 | 0.016 | 0.018 | 0.028 | 0.019 | 0.021 | 0.032 | 0.038 | 0.051 |
| Benzo(a)pyrene | 0.022 | 0.031 | 0.054 | 0.049 | 0.144 | 0.187 | 0.116 | 0.239 | 0.103 | 0.087 |
| Carbazole | 0.018 | 0.049 | 0.059 | 0.048 | 0.088 | 0.112 | 0.249 | 0.145 | 0.216 | 0.098 |
| Indo(1,2,3-cd)pyrene | 0.003 | 0.007 | 0.008 | 0.013 | 0.025 | 0.061 | 0.024 | 0.075 | 0.052 | 0.012 |
| Dibenzo anthracene | 0.020 | 0.021 | 0.037 | 0.031 | 0.043 | 0.053 | 0.035 | 0.080 | 0.052 | 0.040 |
| Benzo(g,h,i)perylene | 0.004 | 0.021 | 0.02 | 0.015 | 0.026 | 0.057 | 0.02 | 0.170 | 0.023 | 0.040 |
| Total | 0.378 | 0.807 | 0.819 | 0.852 | 1.286 | 1.096 | 1.379 | 1.517 | 1.572 | 2.438 |
| Fluoranthene/Pyrene | 0.328 | 0.204 | 0.157 | 1.465 | 0.588 | 0.6 | 0.281 | 0.826 | 0.368 | 0.264 |
| Phen/Ant | 6.333 | 0.616 | 3.642 | 0.8 | 2.175 | 1.32 | 1.062 | 6.714 | 1.325 | 2.094 |
| LMW/HMW | 0.880 | 0.953 | 0.602 | 1.597 | 0.963 | 0.576 | 0.677 | 0.501 | 0.701 | 1.590 |
| Ant/(Ant+Phen) | 0.136 | 0.618 | 0.215 | 0.555 | 0.314 | 0.431 | 0.484 | 0.129 | 0.430 | 0.323 |
| BaA/(BaA+Chry) | 0.947 | 0.921 | 0.787 | 0.866 | 0.748 | 0.505 | 0.733 | 0.592 | 0.717 | 0.875 |
| InP/(InP+BghiP) | 0.428 | 0.25 | 0.285 | 0.464 | 0.490 | 0.516 | 0.545 | 0.306 | 0.693 | 0.230 |