**Supplement Table S1**

*Standard deviations between measured and simulated data points*

| Figure | Addition       | St dev. % |
|--------|----------------|-----------|
| 2      | Sulfate & Nitrate | 2.65      |
| 3      | Sulfate         | 3.99      |
| 4      | Nitrate         | 4.63      |
|        | Nitrite         | 2.78      |
| 5A     | H$_2$ (68 nmol) | 6.81      |
|        | H$_2$ (34 nmol) | 14.1      |
|        | H$_2$ (13.6 nmol) | 16.6      |
| 5B     | H$_2$ (68 nmol) | 7.28      |
|        | H$_2$ (34 nmol) | 7.30      |
|        | H$_2$ (13.6 nmol) | 13.2      |