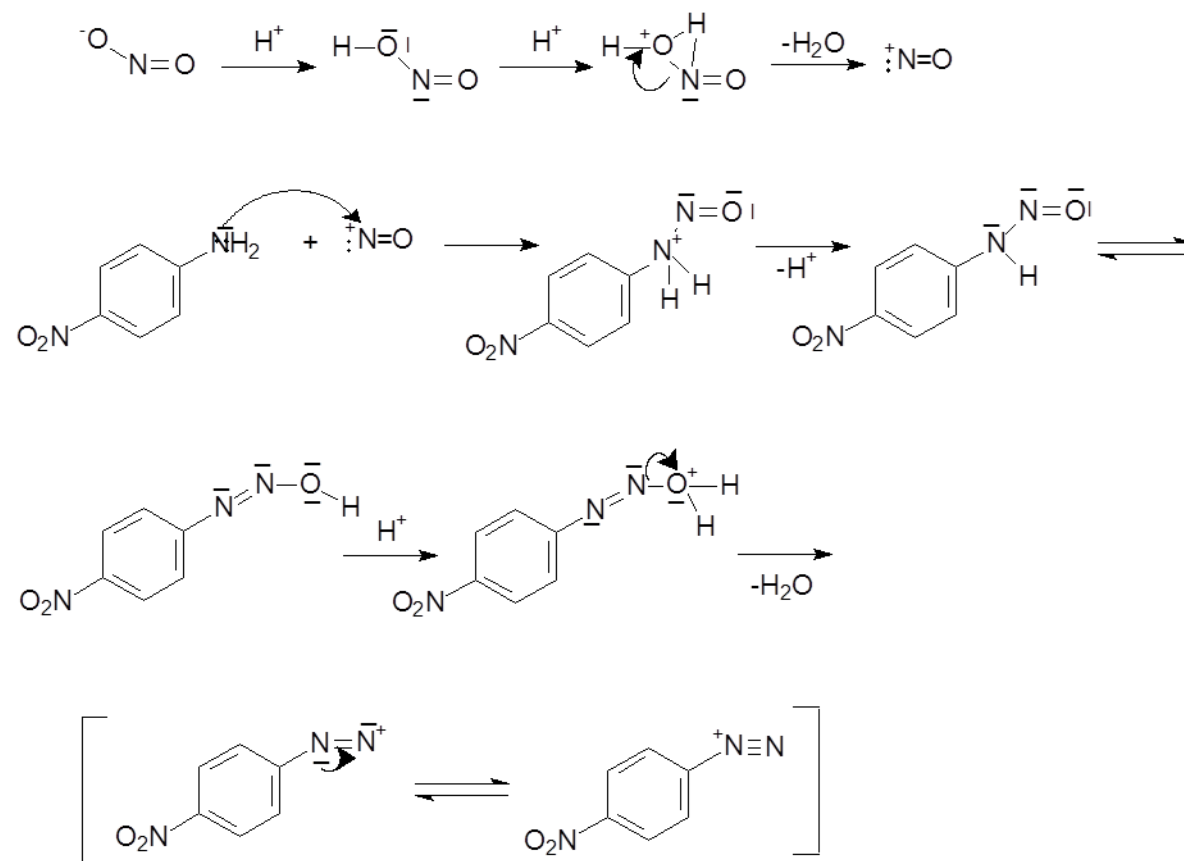


Supplementary information

Fig. S1. Mechanism of diazotisation and azo-coupling reactions.

Diazotisation reaction:



Azo-coupling:

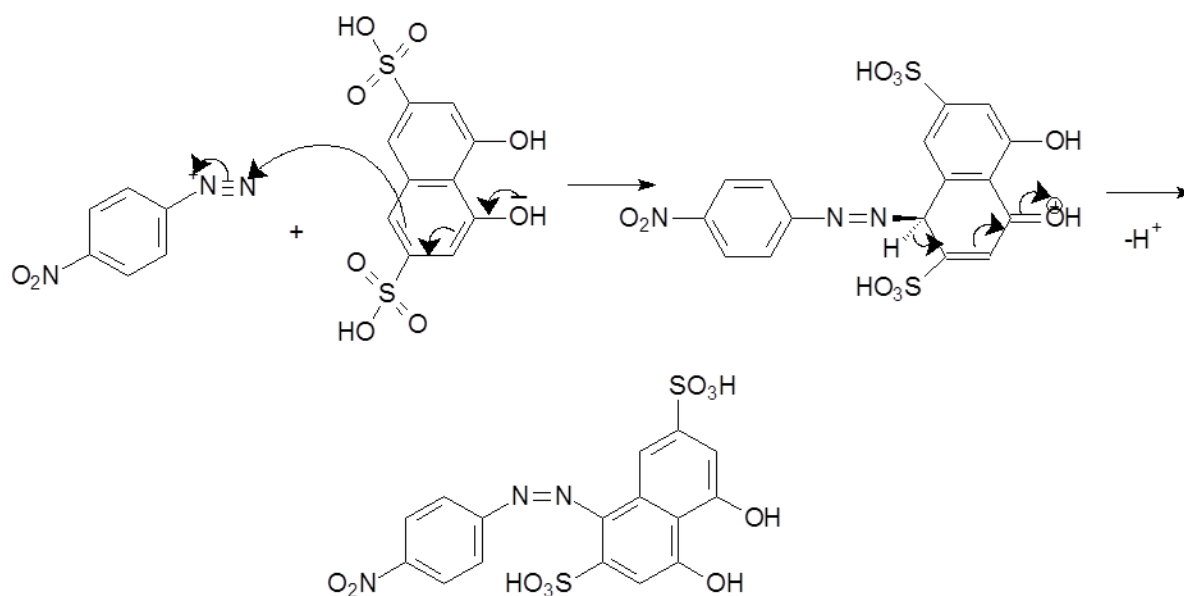


Table S1The *t*-test calculations and results

	Sample Characteristics	IC \bar{x}_1	Method \bar{x}_2	IC s_1	Method s_2	F-test	<i>s</i>	<i>t</i>	<i>match</i>
1	Borehole	3.95	1.76	0.24	1.41	0.028	0.88	3.15	+
2	10 mg/L reference standard	9.15	8.9	0.42	1.05	0.16	0.51	0.63	+
3	Effluent	11.61	12.4	0.54	1.35	0.16	0.65	1.53	+
4	Process Water	11.82	14.43	0.55	0.51	1.16	0.33	9.84	-
5	Stream	19.11	19	0.76	1.65	0.21	0.81	0.17	+
6	Drinking water	37.87	38.99	1.16	0.09	166.12	0.52	2.72	+
7	Drinking water	37.47	35.35	1.15	2.3	0.25	1.15	2.33	+
8	Aut Even Effluent	49.41	62.95	1.51	3.85	0.15	1.84	9.26	-
9	Potable water	50.92	54.8	1.56	4.4	0.12	2.09	2.35	+

$$f_1 = 2; f_2 = 8;$$

For *F*-test $P=0.95$; $F_{critical} = 4.46$

For *t*-test $P=0.99$, $f = 10$; $t_{critical} = 3.17$