

WERF Testing by ITA/DCWASA

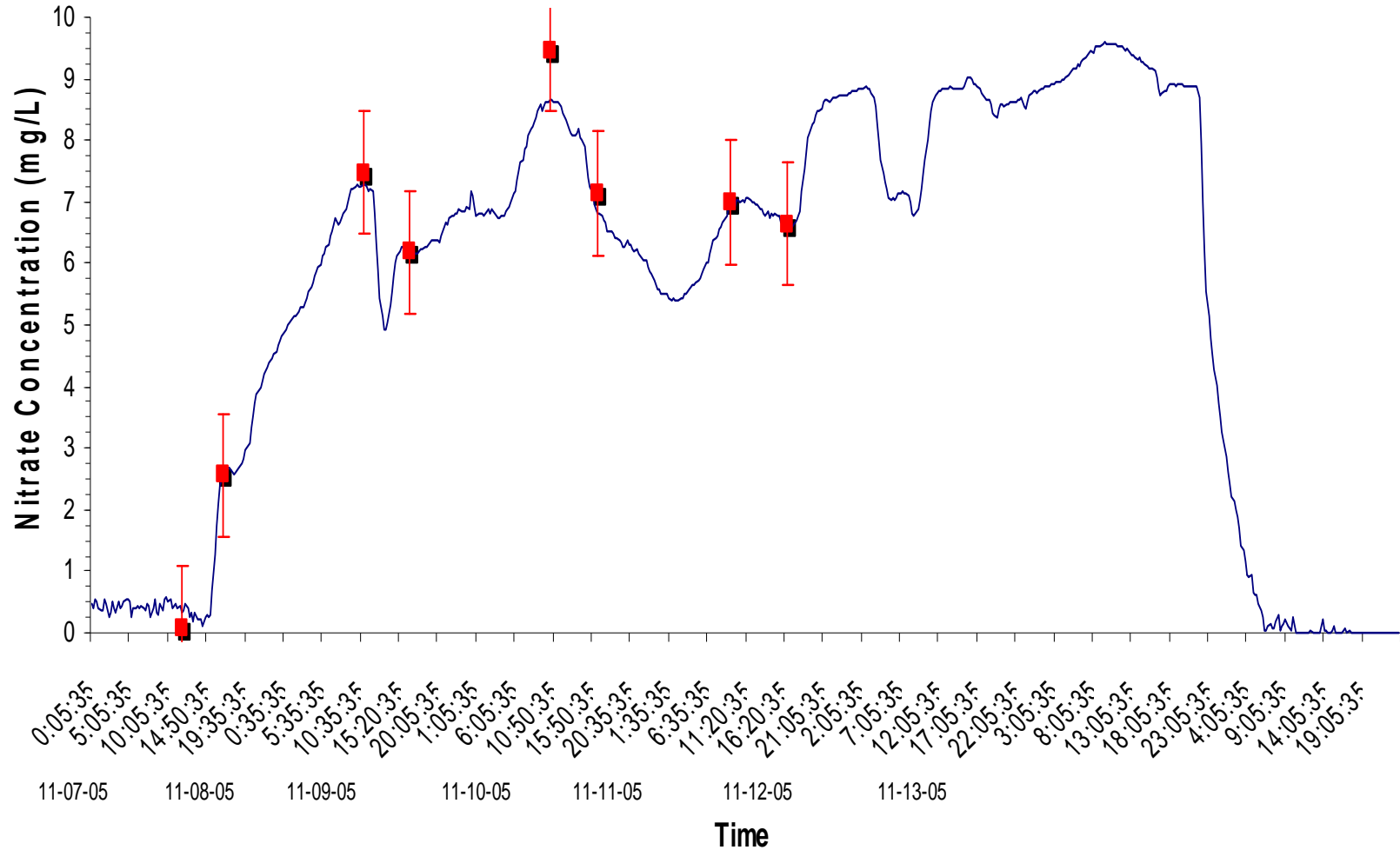
Blue Plains Advanced WWTP





**Test
Results
High NO_x**

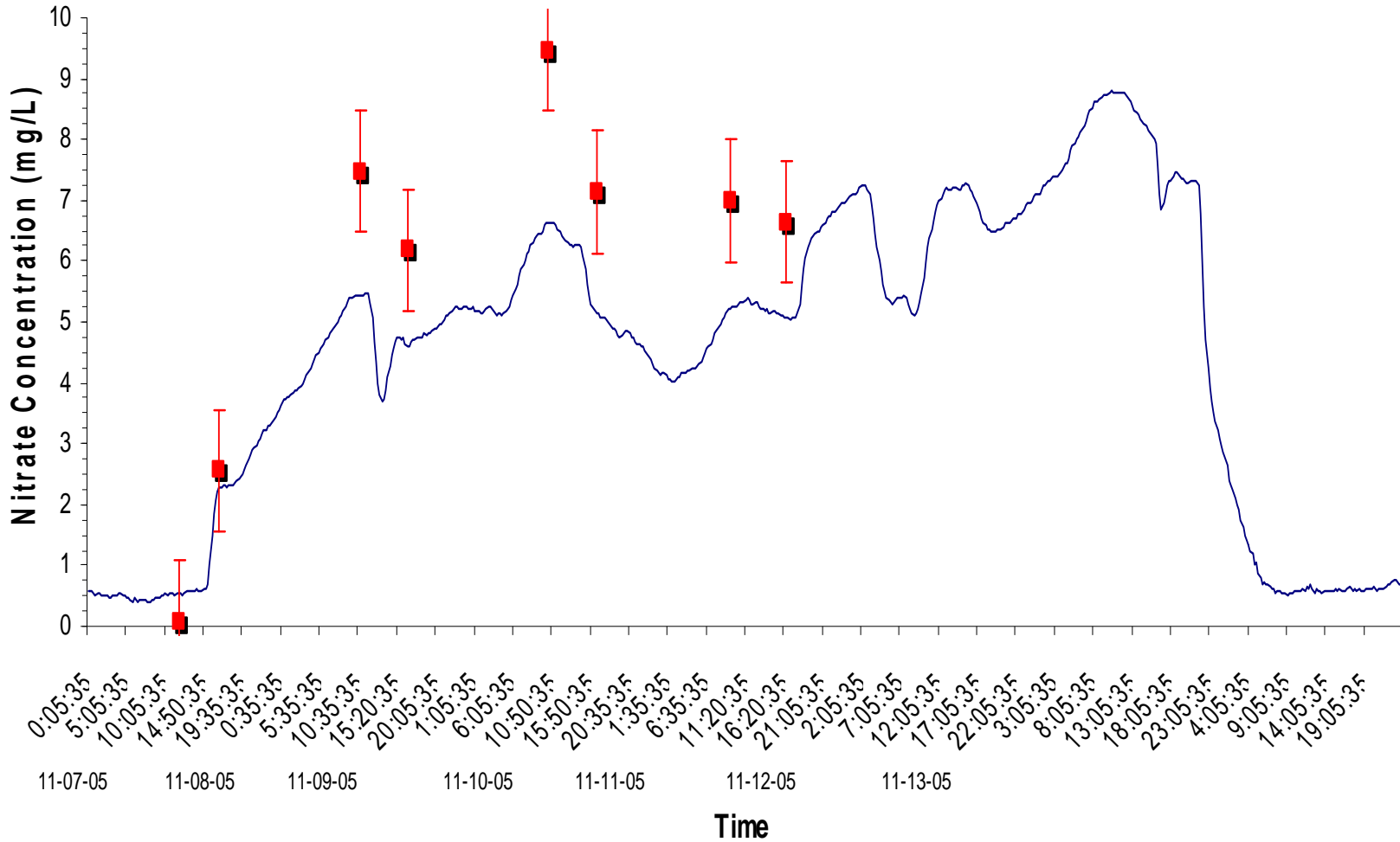
Endress + Hauser Stamosens



— Endress + Hauser Stamosens Nitrate Average (mg/L)

■ Nitrate Laboratory Conformance Measurement (mg/L)

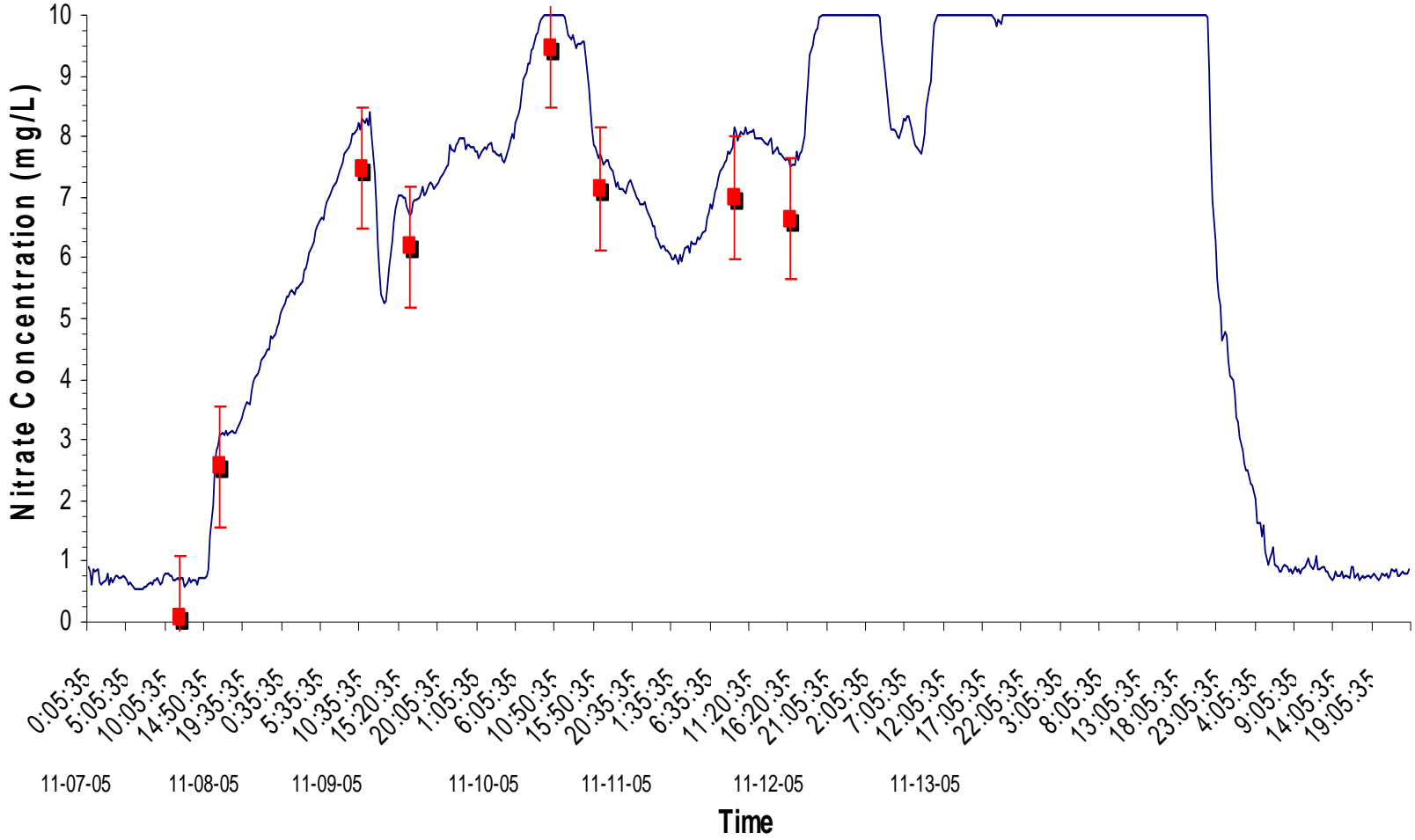
Royce S::can Messtechnik



— Royce S::can Messtechnik Nitrate Average (mg/L)

■ Nitrate Laboratory Conformance Measurement (mg/L)

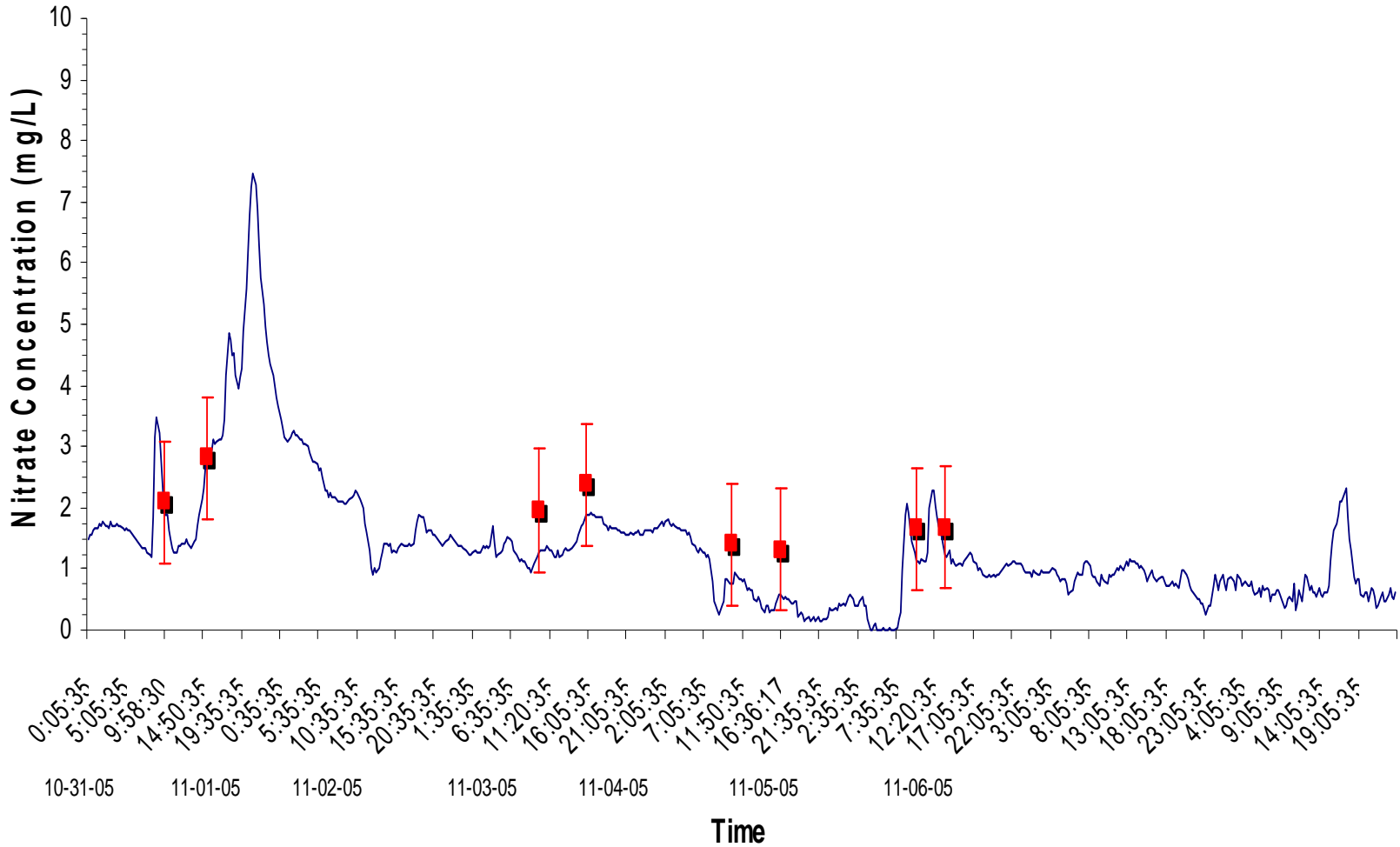
Hach Nitratx



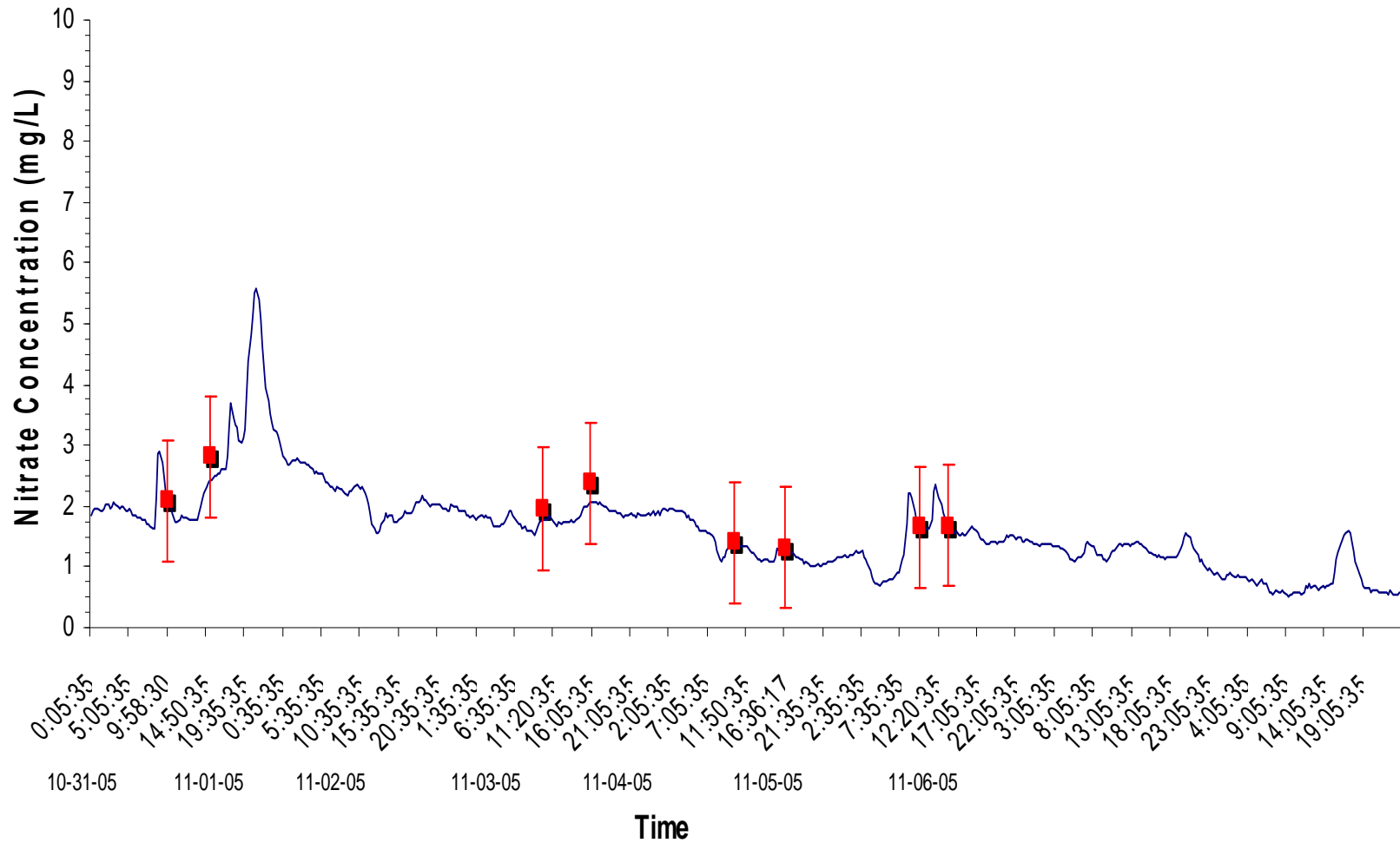


Test Results Avg NO_x

Endress + Hauser Stamosens



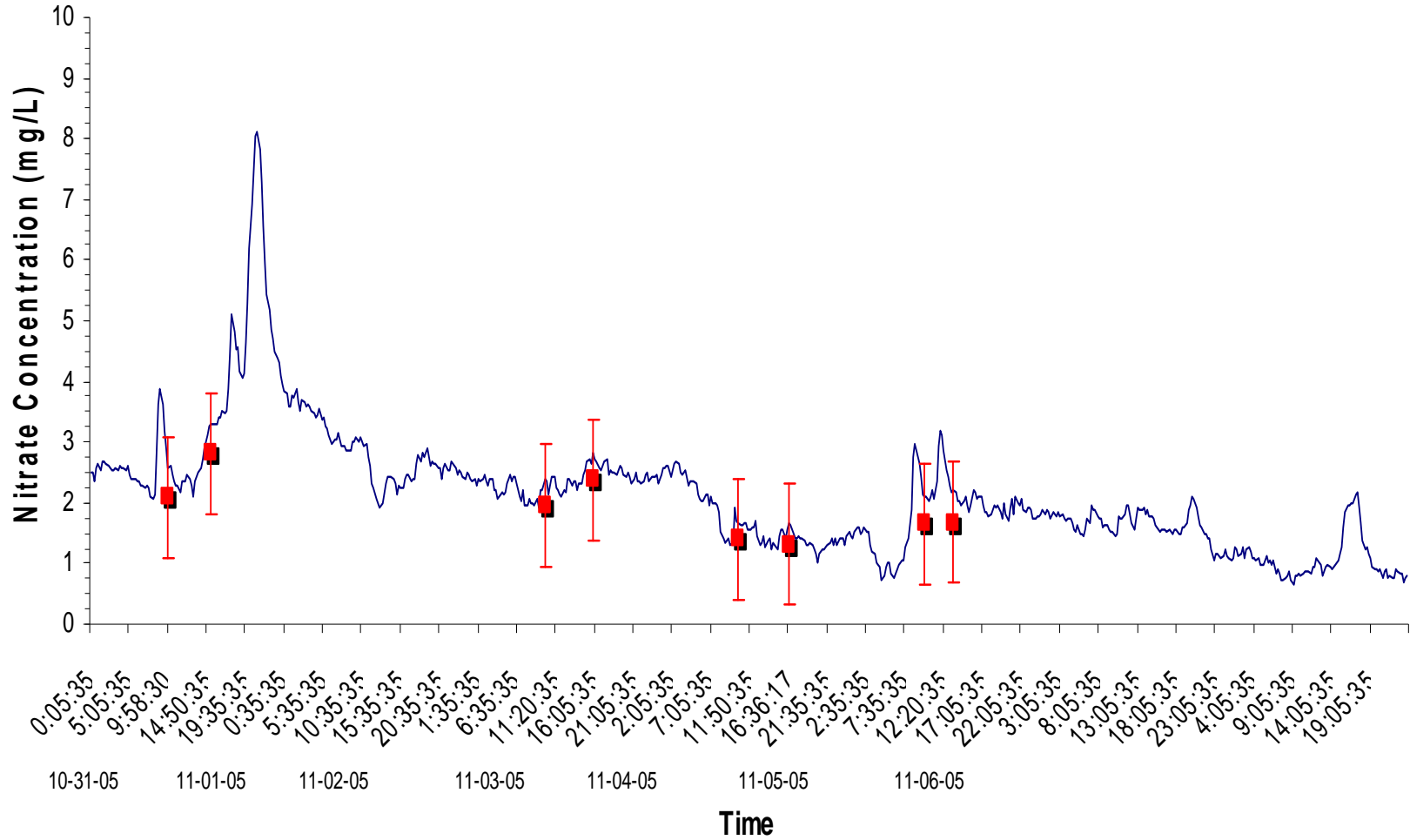
Royce S::can Messtechnik



— Royce S::can Messtechnik Nitrate Average (mg/L)

■ Nitrate Laboratory Conformance Measurement (mg/L)

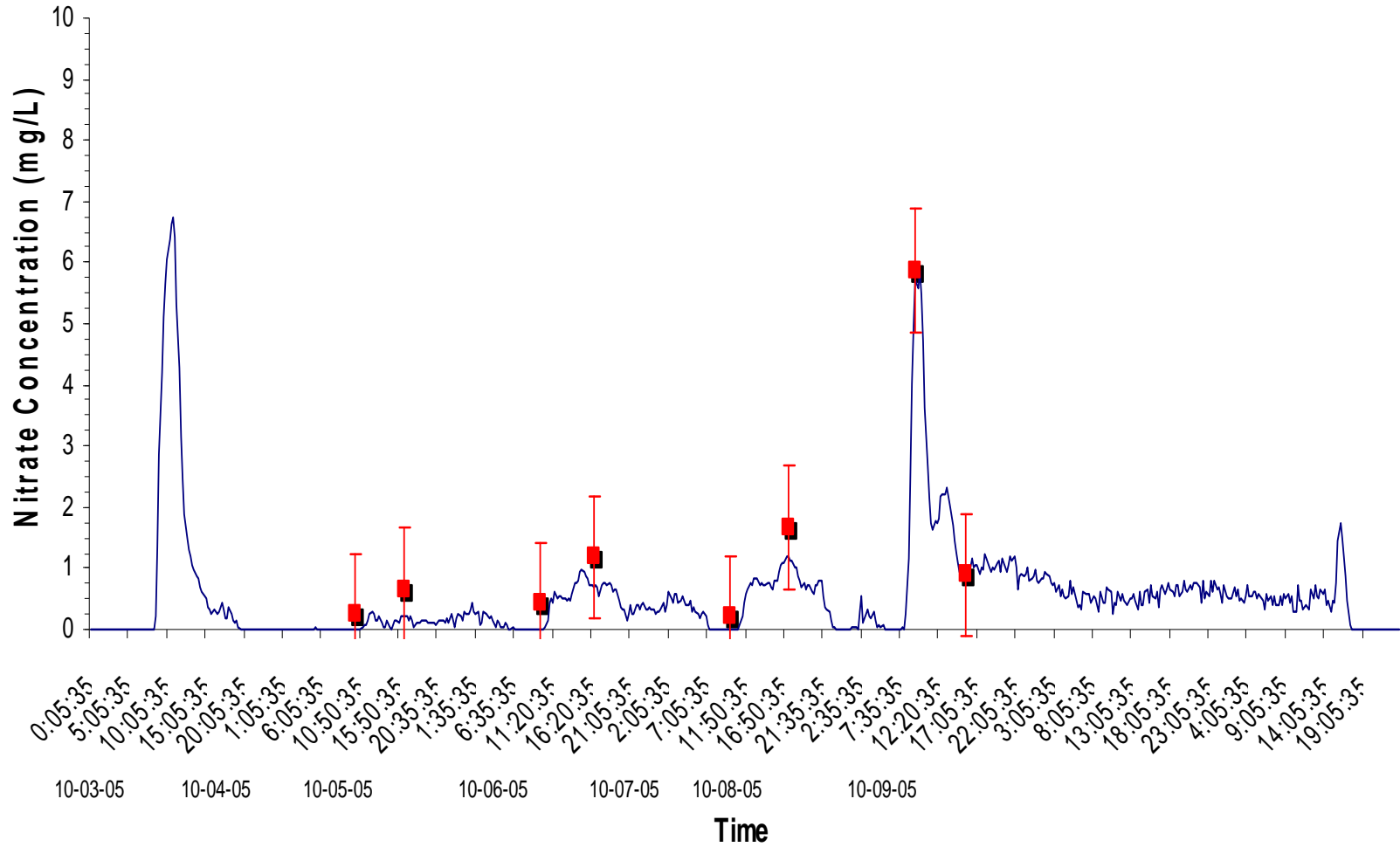
Hach Nitratex



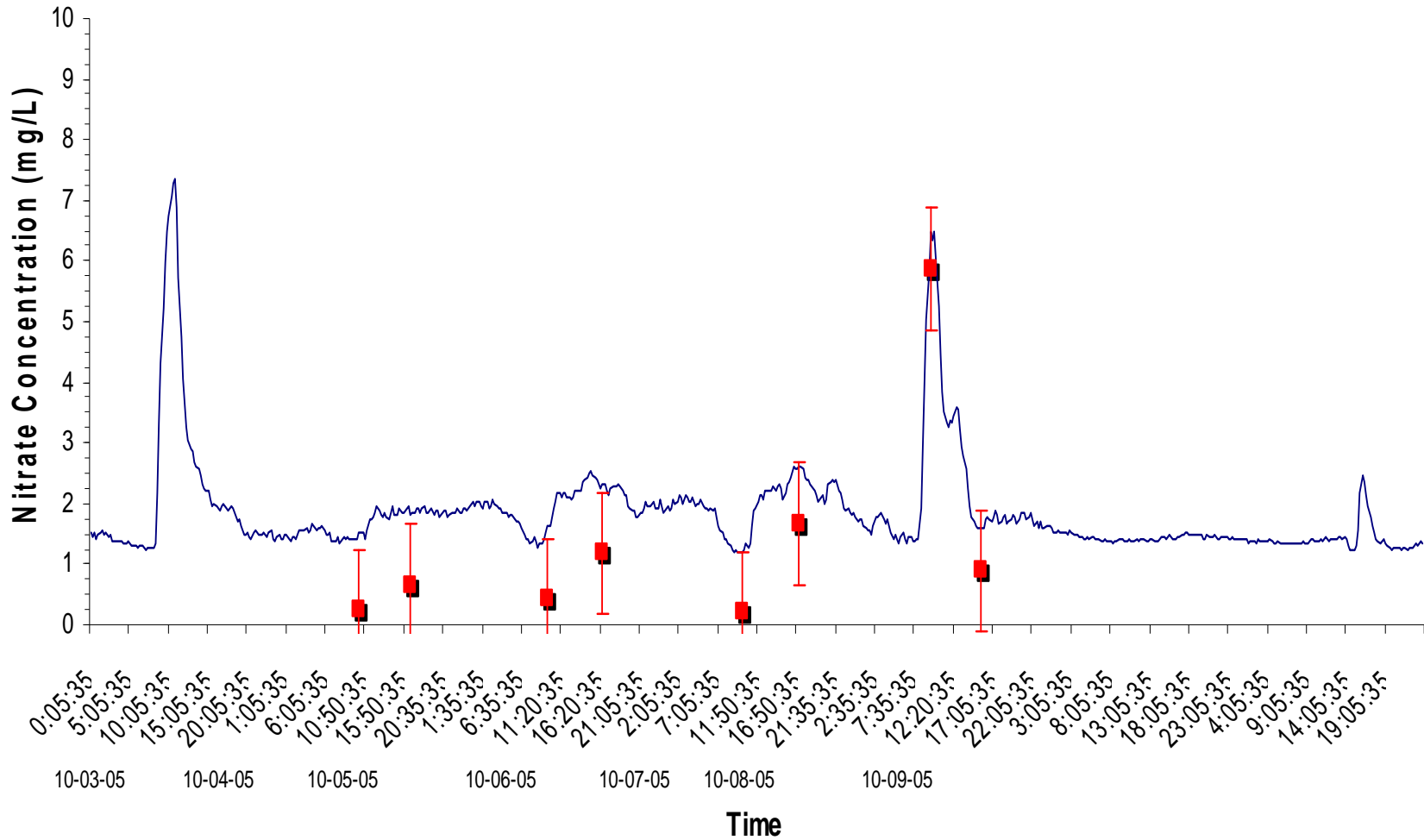


**Test
Results
Low NO_x**

Endress + Hauser Stamosens



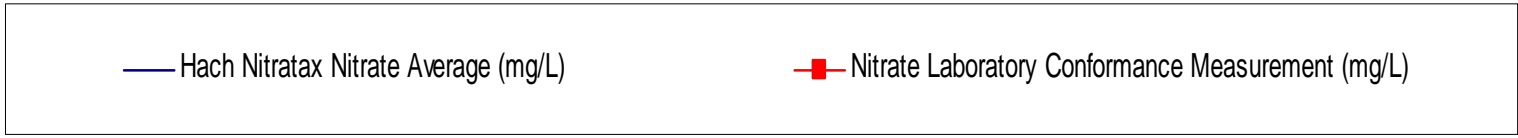
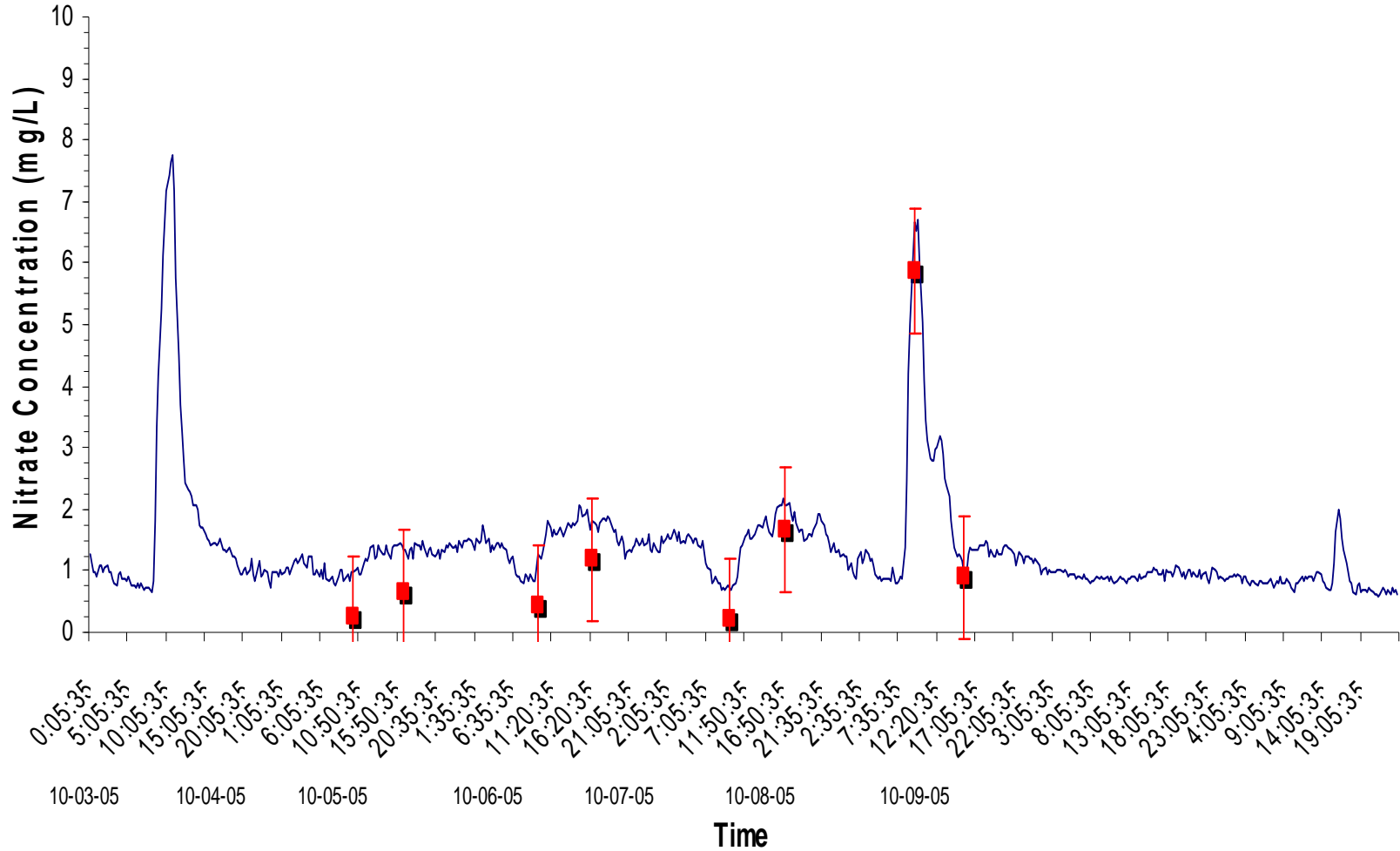
Royce S::can Messtechnik



— Royce S::can Messtechnik Nitrate Average (mg/L)

■ Nitrate Laboratory Conformance Measurement (mg/L)

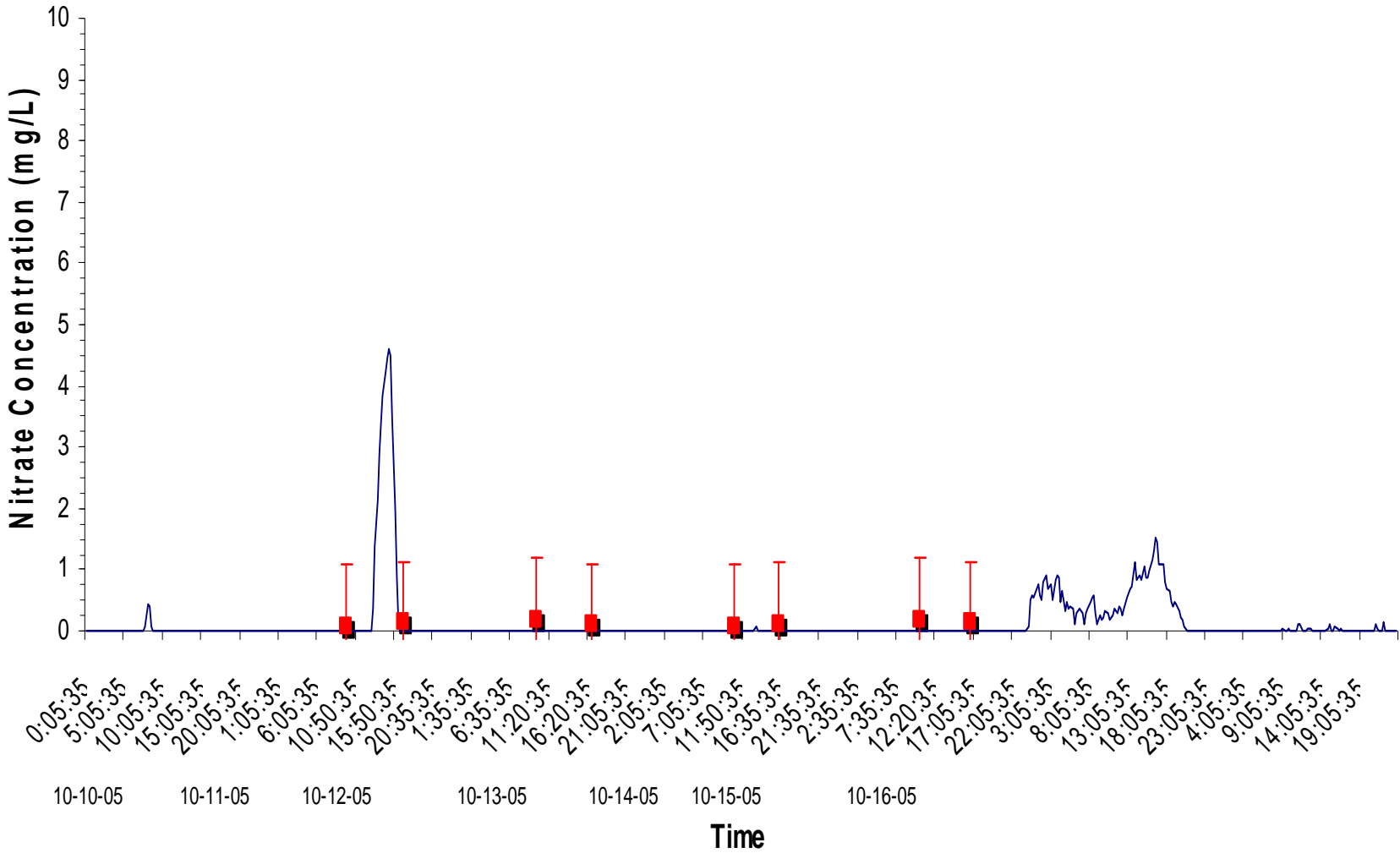
Hach Nitratax



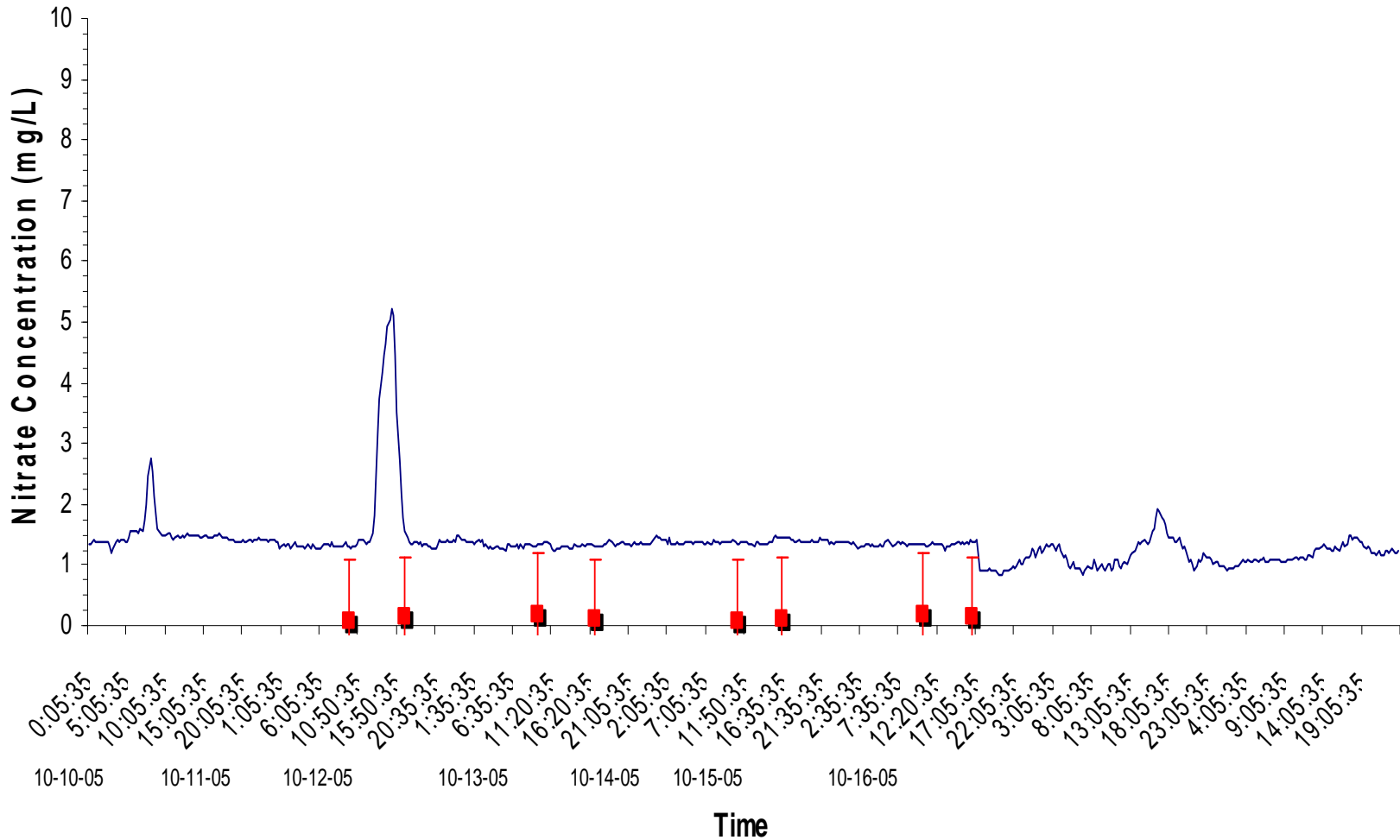


**Test
Results
V Low
NO_x**

Endress + Hauser Stamosens



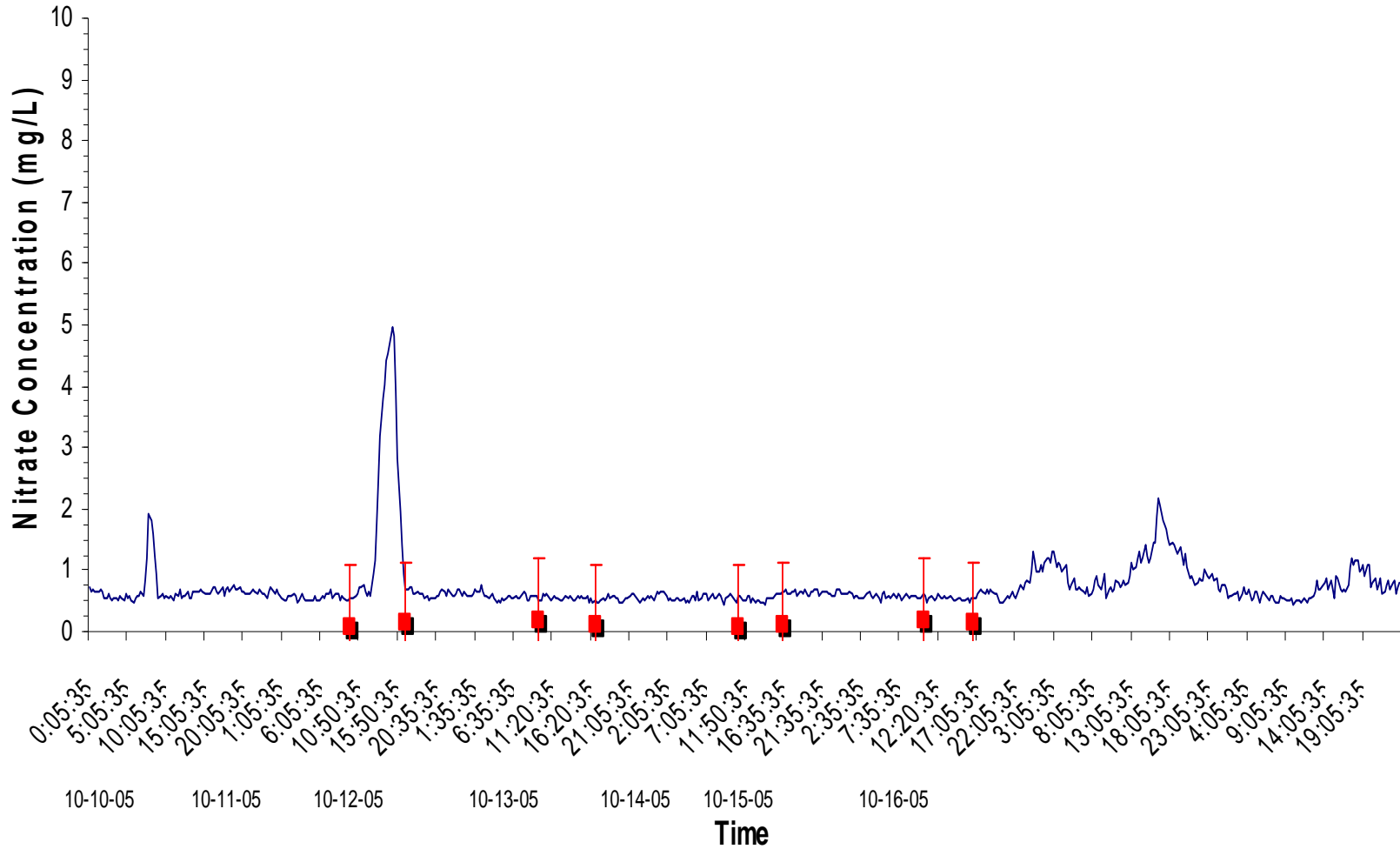
Royce S::can Messtechnik



— Royce S::can Messtechnik Nitrate Average (mg/L)

■ Nitrate Laboratory Conformance Measurement (mg/L)

Hach Nitratax



— Hach Nitratax Nitrate Average (mg/L)

■ Nitrate Laboratory Conformance Measurement (mg/L)

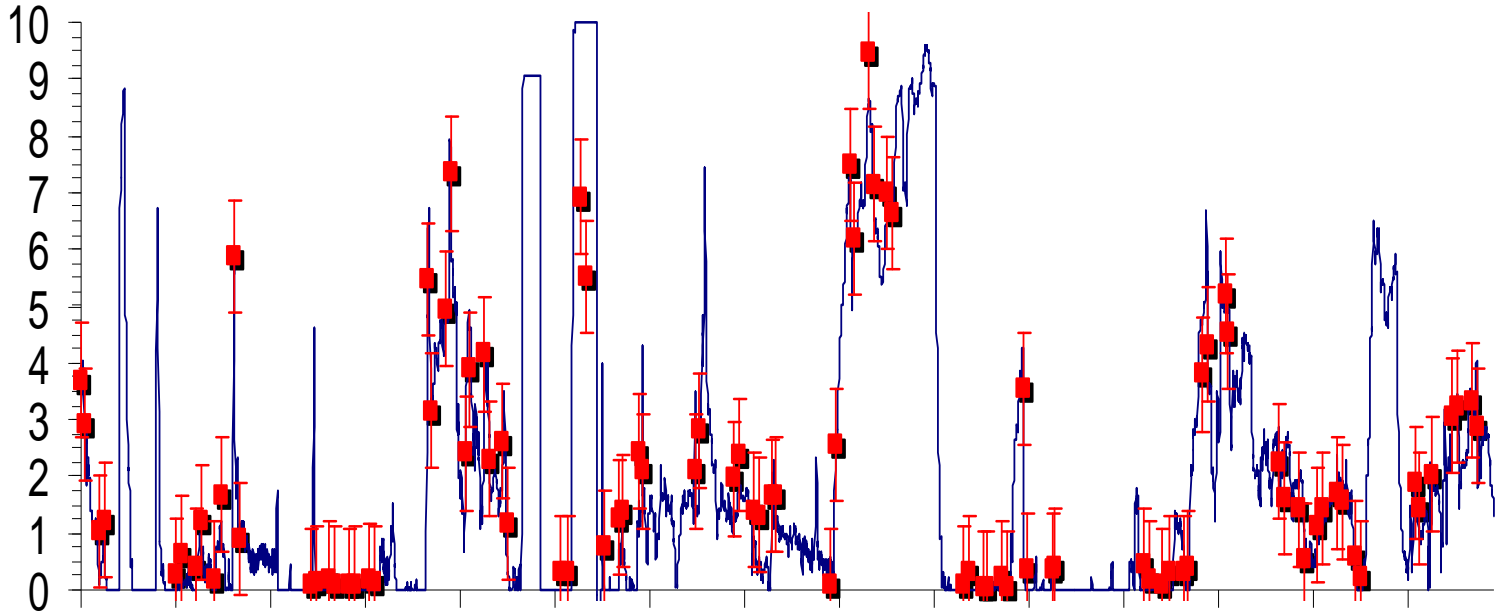


Full Range of Data

E+H

Endress + Hauser Stamosens

Nitrate Concentration (mg/L)



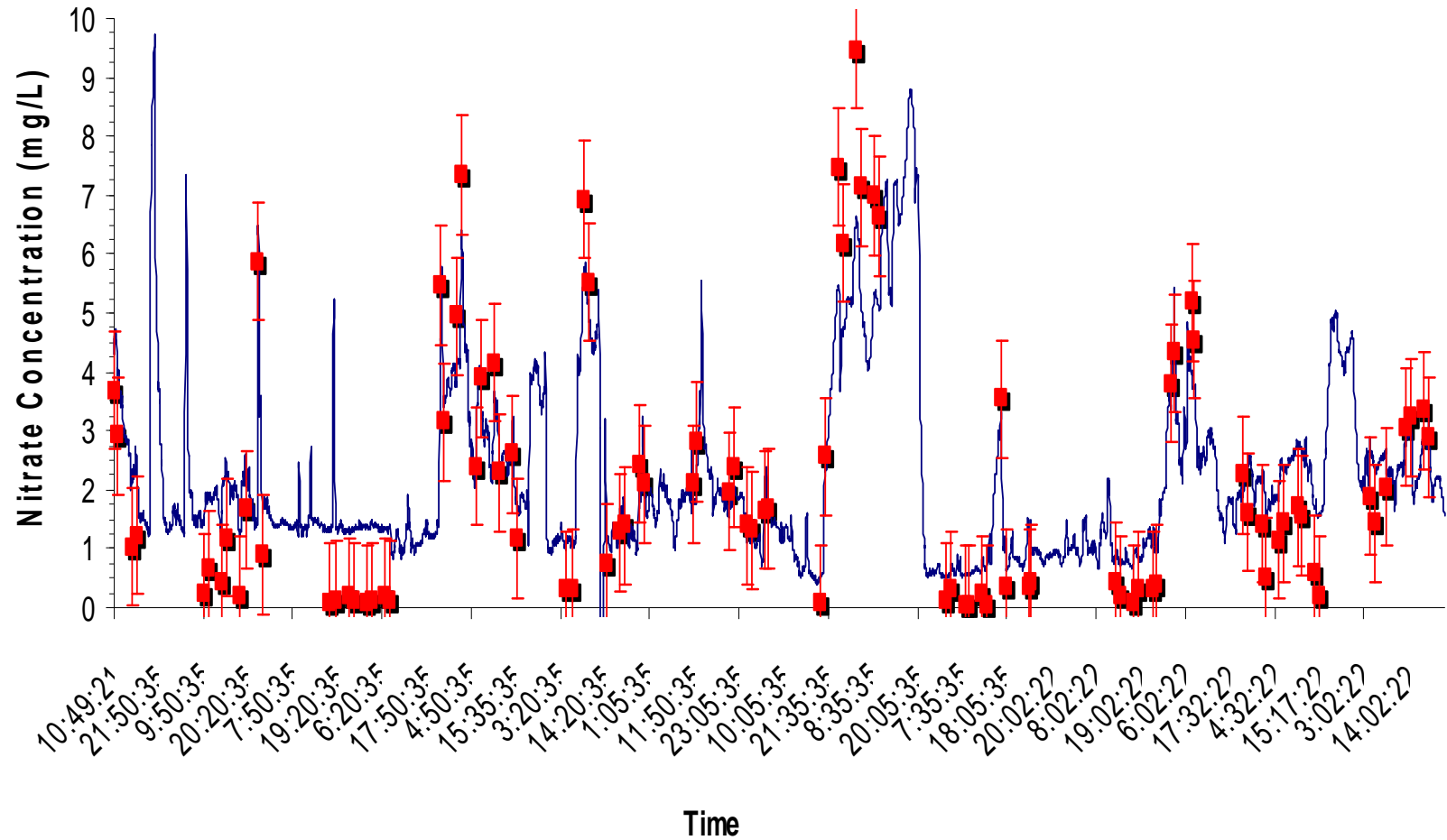
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13:40:35
13:50:35
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14:02:22

— Endress + Hauser Stamosens Nitrate Average (mg/L)
—■ Nitrate Laboratory Conformance Measurement (mg/L)

Time

Royce

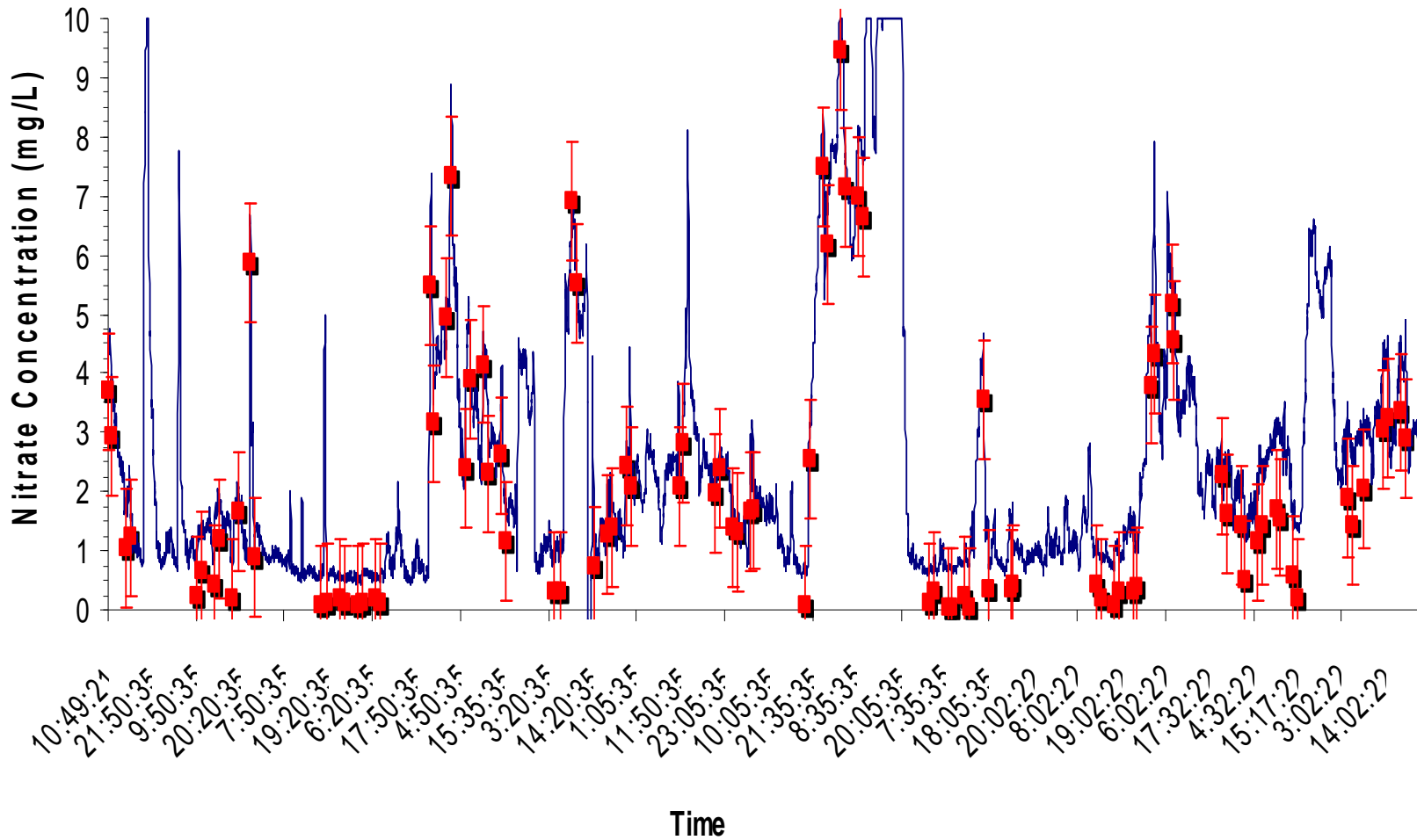
Royce Scan Messtechnik



— Royce Scan Messtechnik Nitrate Average (mg/L)
■ Nitrate Laboratory Conformance Measurement (mg/L)

Hach

Hach Nitratax



— Hach Nitratax Nitrate Average (mg/L)

■ Nitrate Laboratory Conformance Measurement (mg/L)

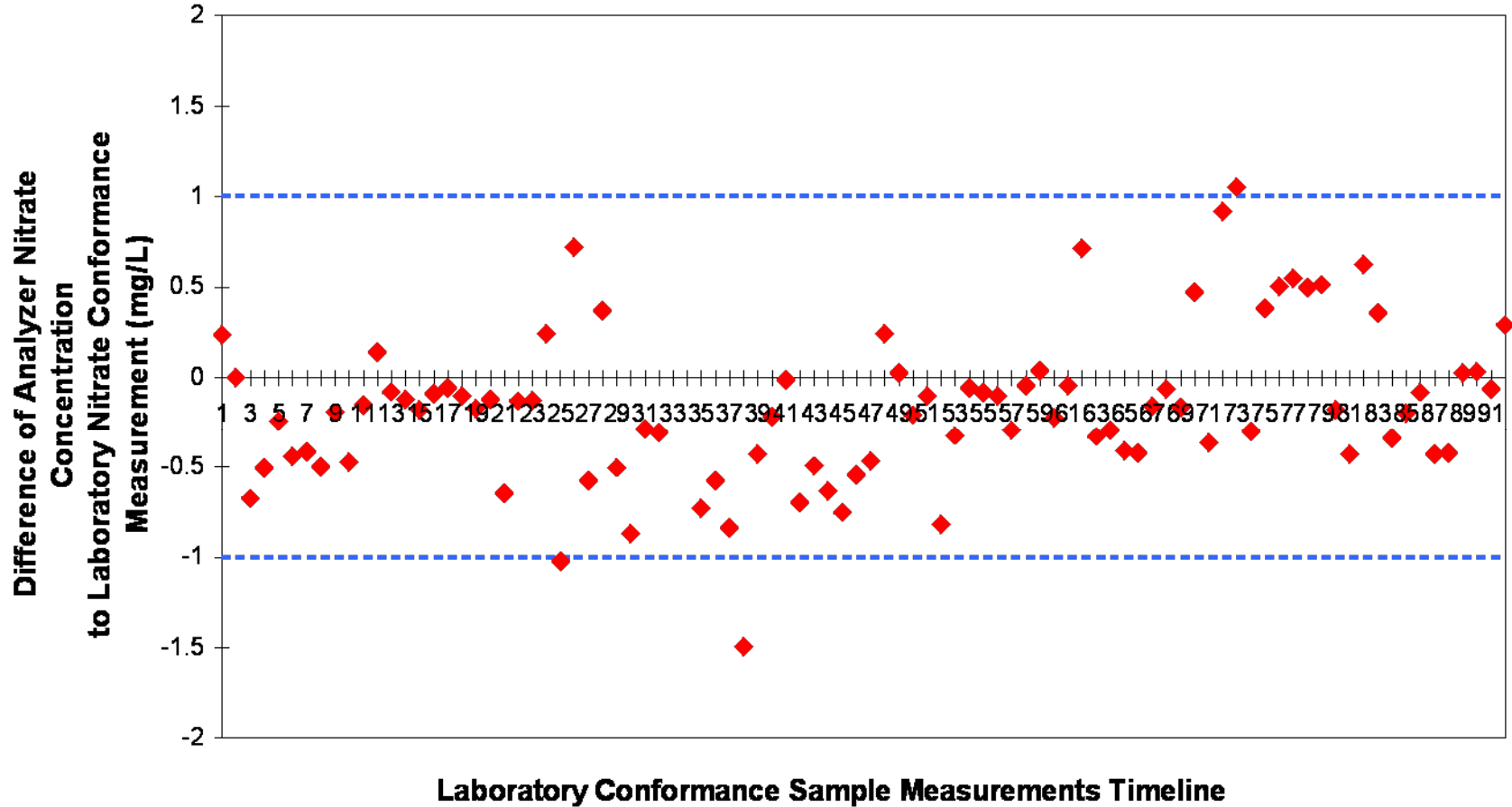


Statistical Review

Comparative Analysis

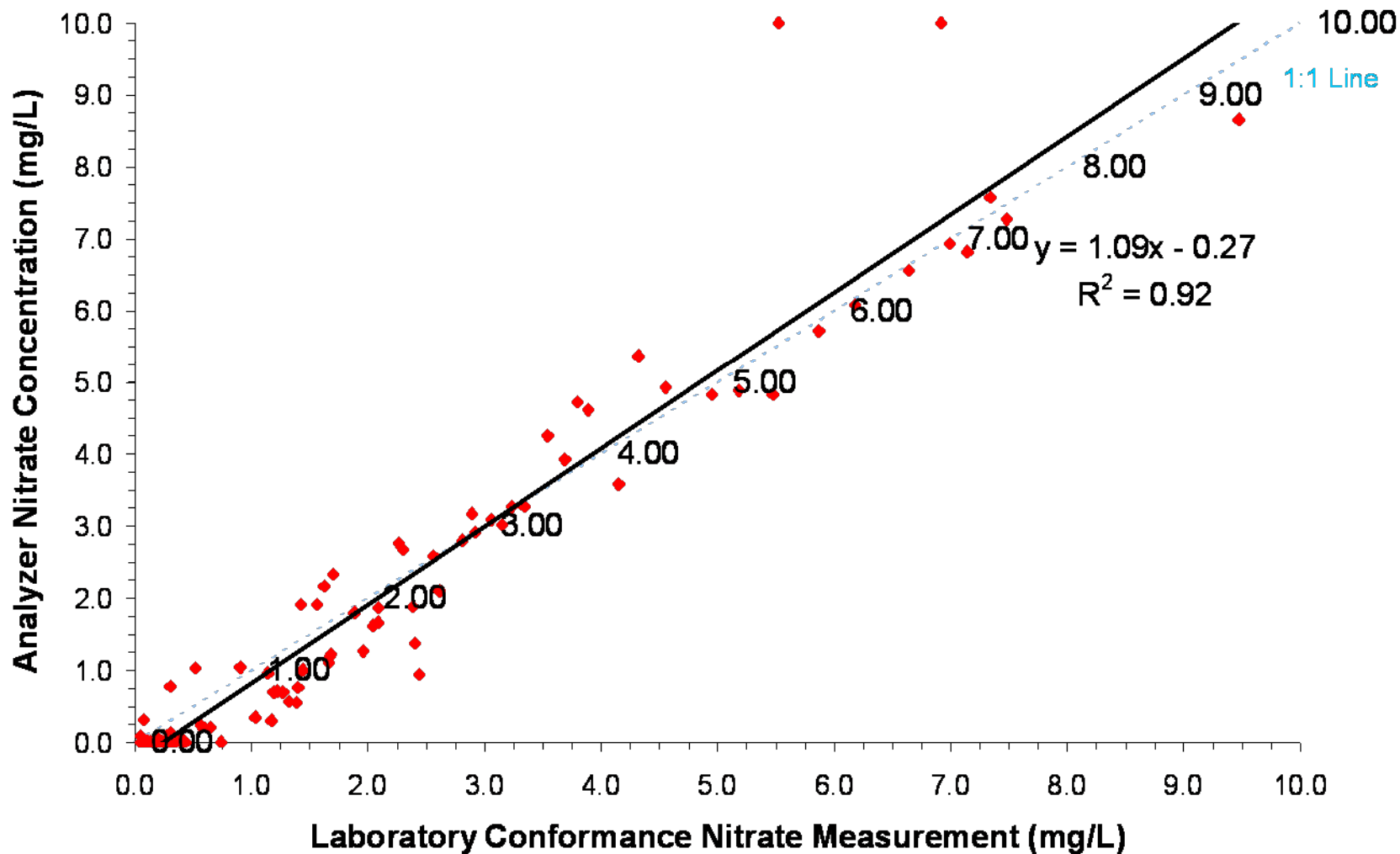
Parameter	E+H	Hach Evita	Hach Nitratax	Royce S::can	Wedgewood Stip Scan
Mean Deviation	-0.08	2.88	0.68	0.26	0.55
(R²)	0.92	0.02	0.97	0.91	0.62
Values within +/- 1.0 mg/L	95%	36%	82%	69%	54%
Number of Out-of-Compliance Events	0	4	1	4	4
Number of Recalibrations	0	0	0	3	5
Number of Maintenance Events	0	3 ⁽¹⁾	1	0	1
Support Required from Supplier during Test	No	Yes	Yes	No	Yes

Endress + Hauser Stamosens Variation from Laboratory Conformance

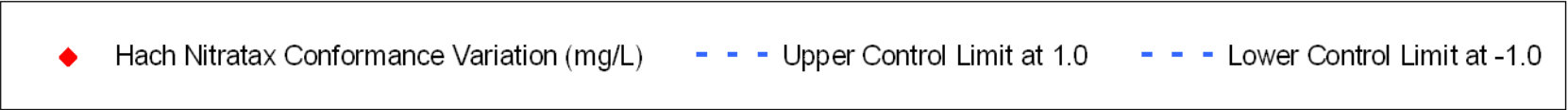
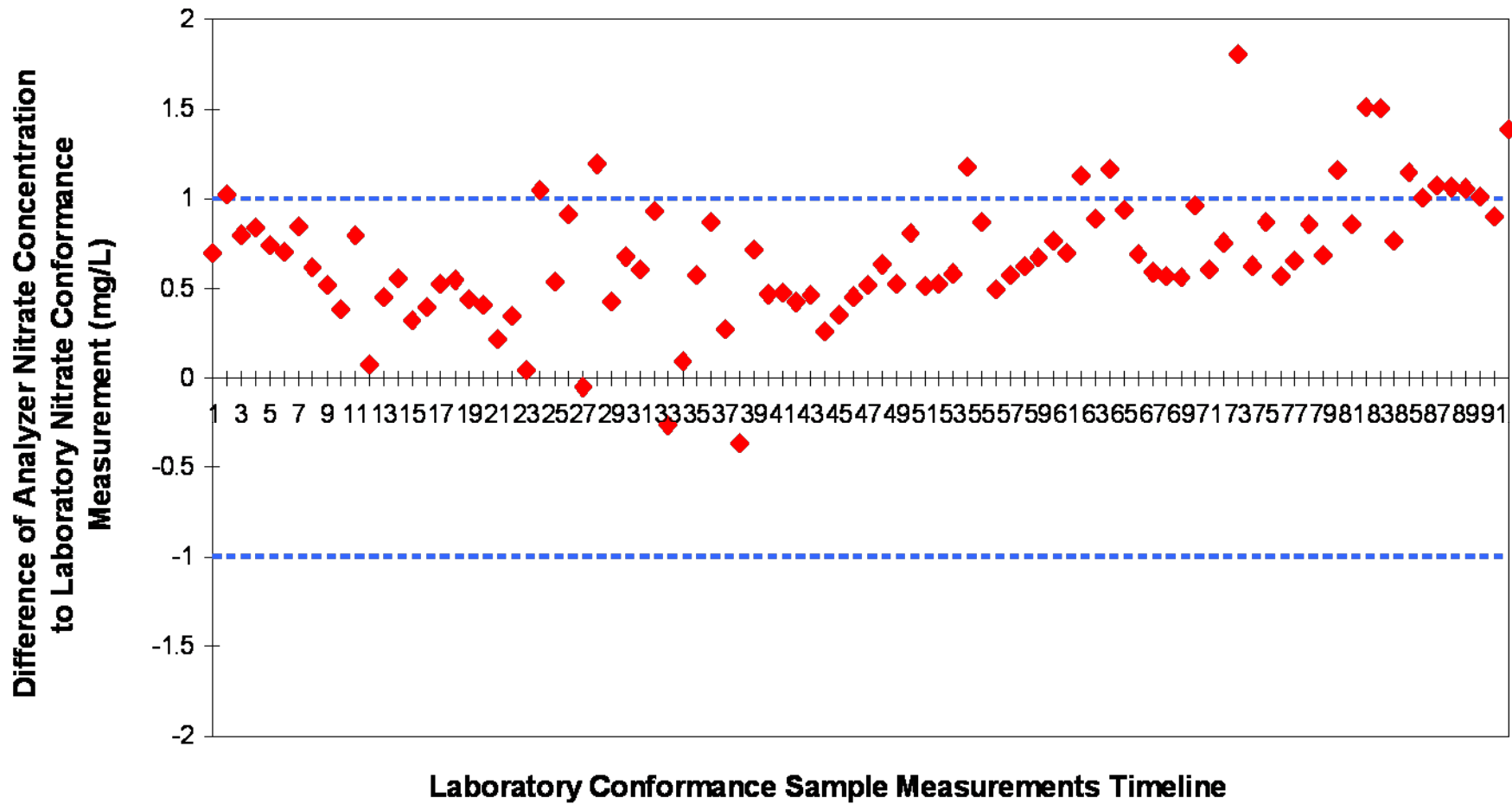


◆ Endress + Hauser Stamosens Conformance Variation (mg/L) - - - Upper Control Limit at 1.0 - - - Lower Control Limit at -1.0

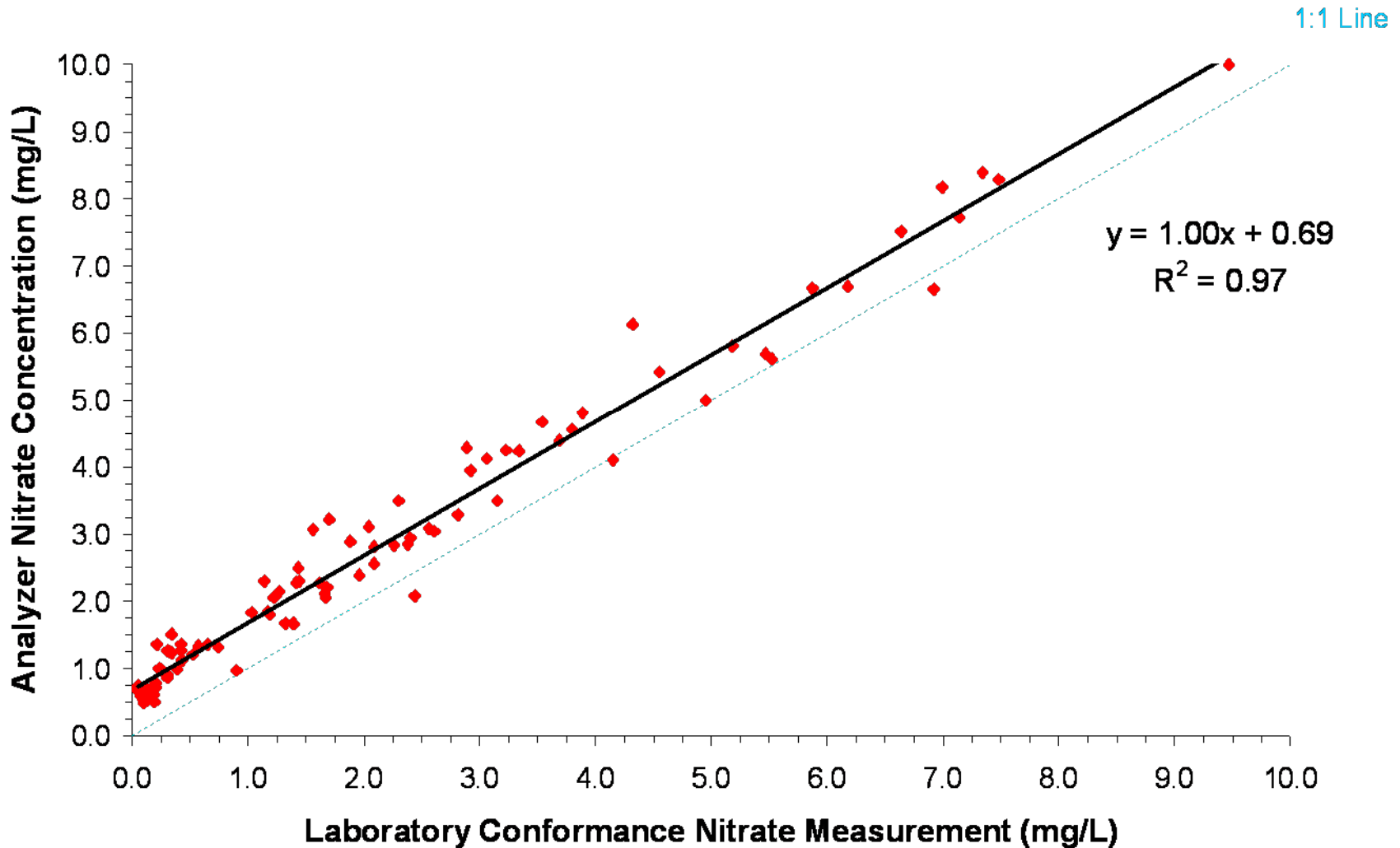
Endress + Hauser Stamosens and Laboratory Conformance Scattergraph



Hach Nitratax Variation from Laboratory Conformance

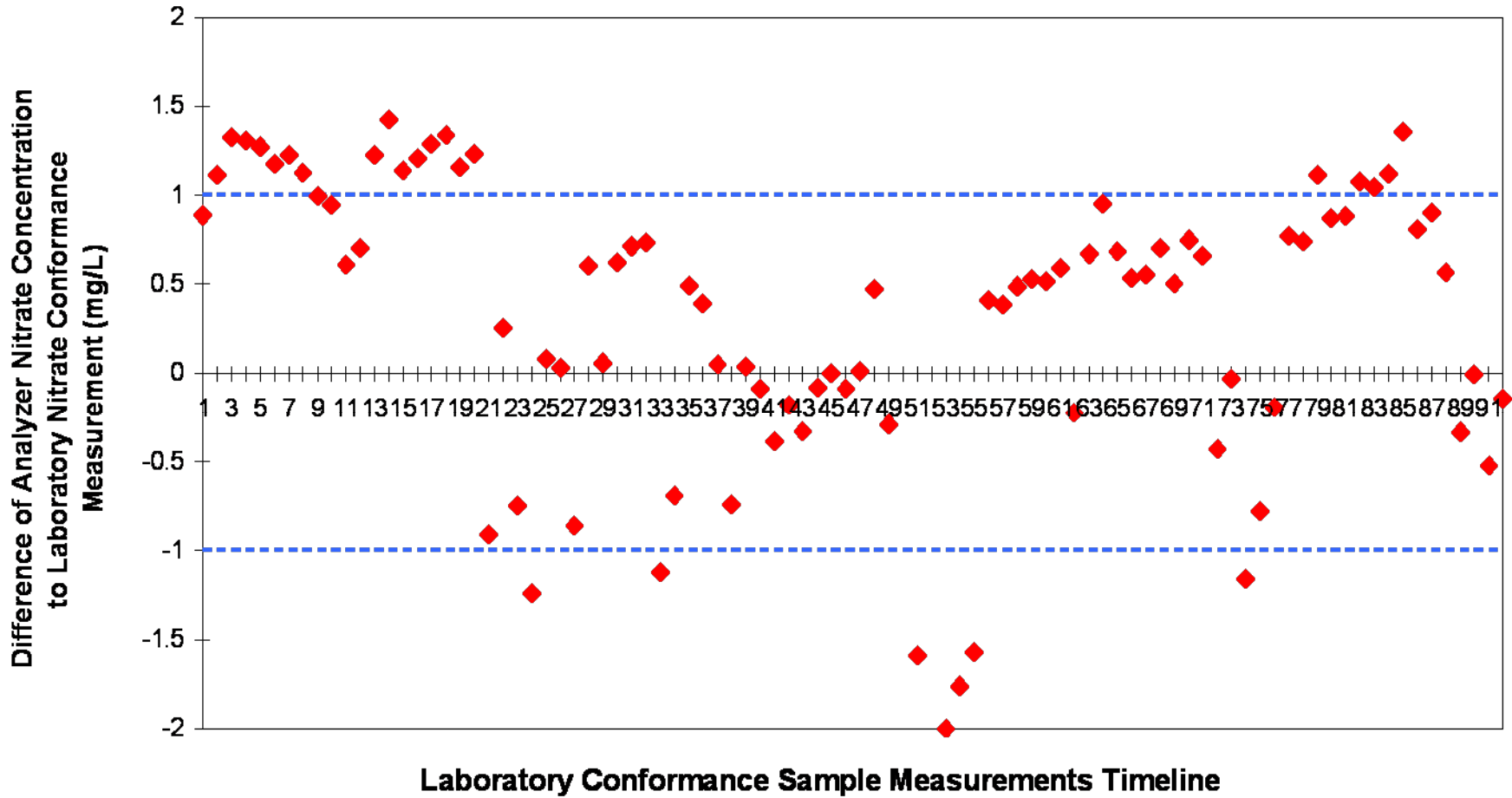


Hach Nitratex and Laboratory Conformance Scattergraph



Royce S::can Messtechnik

Variation from Laboratory Conformance



◆ Royce S::can Messtechnik Conformance Variation (mg/L) - - - Upper Control Limit at 1.0 - - - Lower Control Limit at -1.0

Royce Scan Messtechnik and Laboratory Conformance Scattergraph

