

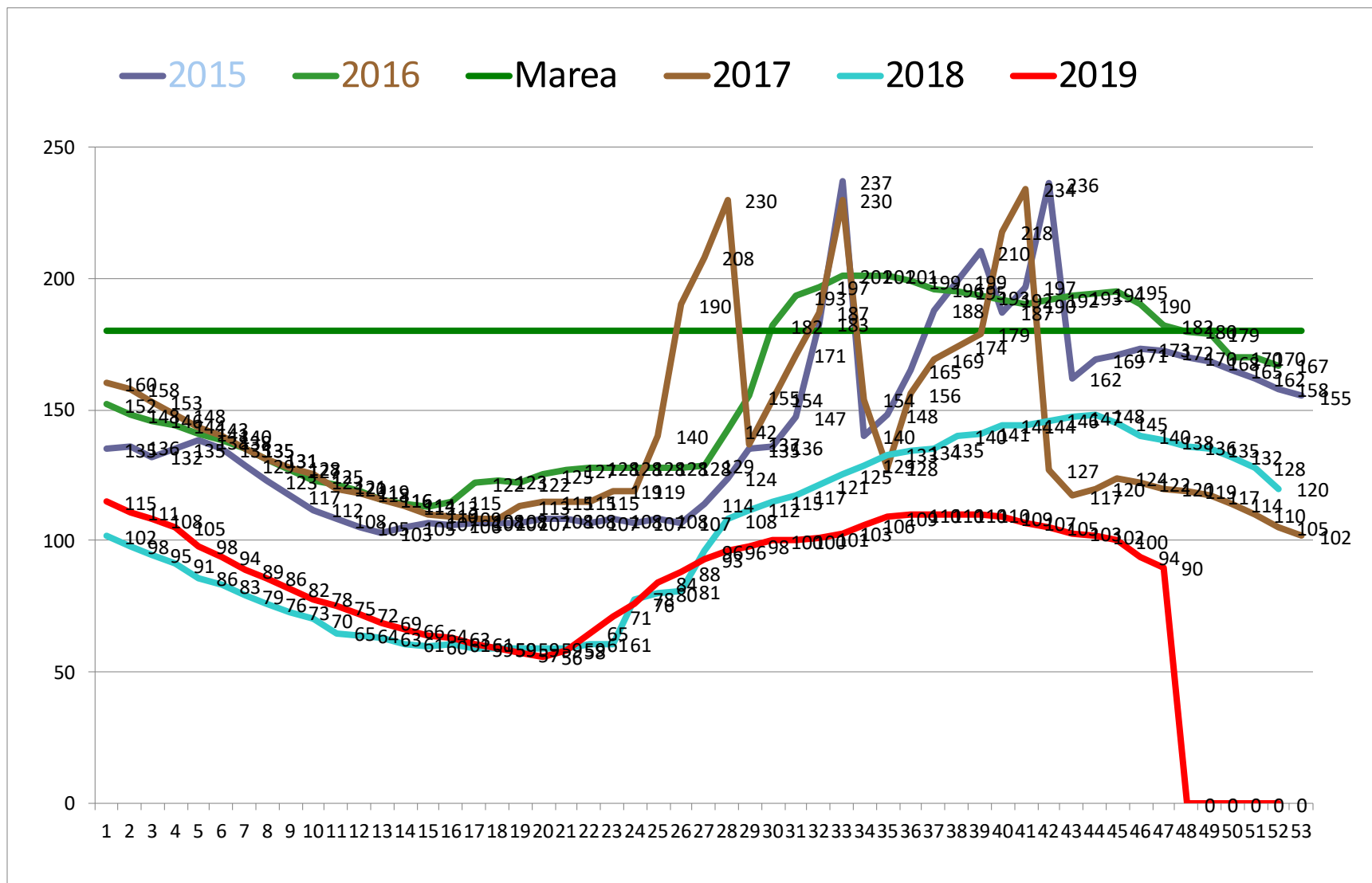


# 28ª Asamblea Informativa

## Unión Comunal Lago Vichuquén

27 de noviembre, 2019

# Nivel del agua del lago



# Situaciones en evolución

- Situaciones de tierra
  - Plan regulador PRC y PRI
  - Desarrollos inmobiliarios
  - Uso y concesiones de playas
  - Incendios
- Situaciones de agua
  - Contaminación por PTAS: crisis sanitaria
  - Crisis hídrica: déficit de lluvia y cota
  - Crisis ecológica: Torca y estero Llico

# Situaciones en evolución

- Situaciones administrativas
  - Recaudación lenta de 2019º
  - Situación país
  - Paz social
    - Integración comunitaria, proyectos
    - Regularización: sello verde, concepciones, JJVV y UC
    - Empatía

# Regla del metro

- Evaporación (5 meses) 1 metro
- Mínima lluvia para reponer 1 metro
- Exceso de lluvia permite aperturas
- Cada apertura pierde 1 metro
- Este año el lago se secó 40 cm
- Tasa reposición negativa: aculeo, peñuelas

# Coliformes 2015

[illegible]

# Coliformes 2016

|                      | ene-16 | feb-16 | mar-16 | abr-16 | may-16 | jun-16 | jul-16 | ago-16 | sept-16 | oct-16 | nov-16 | dic-16 |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|
| Estero PTAS          | 28     | 7      | 170    | 130    | 1300   | 295    | 3500   | 350    | 2300    | 220    | 195    | 1300   |
| Estero las conchas   | 29     | 17     | 285    | 110    | 540    | 540    | 700    | 104    | 540     | 170    | 240    | 79     |
| Torca                | 240    | 104    | 790    | 4900   | 350    | 310    | 1300   | 13     | 49      | 220    | 79     | 46     |
| Pta barco            | 2      | 2      | 2      | 8      | 5      | 230    | 2      | 7      | 5       | 2400   | 2300   | 3500   |
| Peninsula            | 2      | 2      | 2      | 23     | 7      | 7      | 5      | 2      | 23      | 5      | 11     | 2      |
| Paula                | 2      | 2      | 13     | 2      | 23     | 7      | 5      | 11     | 5       | 8      | 4      | 5      |
| Aquelarre            | 2      | 2      | 4      | 5      | 8      | 2      | 13     | 13     | 8       | 7      | 2      | 5      |
| Totorilla            | 5      | 2      | 2      | 2      | 33     | 11     | 4      | 79     | 1600    | 17     | 6      | 2      |
| Esero vichuquén      | 540    | 170    | 130    | 3300   | 540    | 2300   | 920    | 920    | 2300    | 1600   | 1700   | 3300   |
| Estero las cardillas | 2300   | 1300   | 3300   | 13000  | 540    | 1300   | 330    | 1600   | 54000   | 35000  | 2300   | 11000  |

# Coliformes 2017

|                      | ene-17 | feb-17 | mar-17 | abr-17 | may-17 | jun-17 | jul-17 | ago-17 | sept-17 | oct-17 | nov-17 | dic-17 |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|
| Estero PTAS          | 130    | 3300   | 3300   | 1600   | 410000 | 73000  | 170    | 90     | 1260    | 1300   | 280    | 220    |
| Estero las conchas   | 70     | 70     | 33     | 540    | 1300   | 540    | 700    | 350    | 350     | 3500   | 1700   | 920    |
| Torca                | 13     | 920    | 79     | 31     | 23     | 220    | 1300   | 140    | 2       | 2400   | 1300   | 220    |
| Pta barco            | 1600   | 35000  | 2      | 2      | 11     | 170    | 1700   | 920    | 70      | 11     | 170    | 540    |
| Peninsula            | 2      | 2      | 5      | 2      | 4      | 5      | 23     | 11     | 2       | 23     | 13     | 5      |
| Paula                | 5      | 2      | 4      | 13     | 5      | 3      | 2      | 5      | 9       | 5      | 33     | 8      |
| Aquelarre            | 2      | 23     | 23     | 2      | 11     | 23     | 23     | 7      | 49      | 13     | 13     | 2      |
| Totorilla            | 17     | 16     | 240    | 5      | 11     | 23     | 17     | 46     | 70      | 8      | 13     | 2      |
| Esero vichuquén      |        |        |        |        | 2300   | 1600   | 2300   | 540    | 1600    | 3300   | 92000  | 130    |
| Estero las cardillas | 3300   | 1600   | 13000  | 2300   | 92000  | 3300   | 1300   | 730    | 920     | 920    | 3300   | 540    |



# Coliformes 2018

|                      | feb-18 | mar-18 | abr-18 | may-18 | jun-18 | jul-18 | ago-18 | sept-18 | oct-18 | nov-18 | dic-18 |
|----------------------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|
| Estero PTAS          | 13     | 140    | 70     | 500    | 27000  | 900    | 19000  | 8000    | 11000  | 22000  | 11000  |
| Estero las conchas   | 130    | 4900   | 300    | 900    | 220    | 700    | 900    | 400     | 300    | 500    | 300    |
| Torca                | 900    | 500    | 300    | 1600   | 1600   | 1600   | 2      | 140     | 240    | 500    | 1600   |
| Pta barco            | 2      | 2      | 170    | 8      | 2      | 17     | 140    | 2       | 140    | 1700   | 49     |
| Peninsula            | 2      | 4      | 30     | 2      | 2      | 49     | 2      | 2       | 8      | 2      | 13     |
| Paula                | 2      | 2      | 17     | 2      | 2      | 30     | 4      | 2       | 7      | 2      | 7      |
| Aquelarre            | 2      | 4      | 30     | 2      | 2      | 70     | 13     | 8       | 13     | 7      | 2      |
| Totorilla            | 4      | 2      | 27     | 2      | 2      | 49     | 7      | 49      | 8      | 4      | 4      |
| Esero vichuquén      | 23     | 280    | 900    | 2      | 160000 | 500    | 240    | 800     | 900    | 2300   | 2200   |
| Estero las cardillas | 30     | 240    | 1600   | 80     | 300000 | 500    | 700    | 2300    | 300    | 8000   | 1000   |

# Coliformes 2019

|                      | ene-19 | feb-19 | mar-19 | abr-19 | may-19 | jun-19 | jul-19 | ago-19 | sept-19 | oct-19 | nov-19 | dic-19 |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|
| Estero PTAS          | 4900   | 500    | 300    | 23000  | 65000  | 24000  | 45000  | 3000   | 170000  | 50000  |        |        |
| Estero las conchas   | 130    | 30     | 30     | 230    | 800    | 900    | 350    | 1700   | 130     | 110    |        |        |
| Torca                | 6400   | 2400   | 500    | 1700   | 2200   | 80     | 790    | 2400   | 300     | 4900   |        |        |
| Pta barco            | 4      | 11     | 6      | 4      | 13     | 110    | 1600   | 30     | 49      | 240    |        |        |
| Peninsula            | 7      | 2      | 11     | 4      | 2      | 7      | 33     | 2      | 2       | 2      |        |        |
| Paula                | 7      | 13     | 2      | 9      | 2      | 9      | 8      | 2      | 2       | 2      |        |        |
| Aquelarre            | 4      | 2      | 4      | 4      | 4      | 30     | 27     | 4      | 6       | 8      |        |        |
| Totorilla            | 4      | 2      | 700    | 4      | 4      | 25     | 22     | 2      | 2       | 4      |        |        |
| Esero vichuquén      | 2400   | 3000   | 2600   | 1300   | 500    | 2300   | 920    | 30     | 170     | 300    |        |        |
| Estero las cardillas | 2400   | 3000   | 220    | 2300   | 260    | 8000   | 295    | 110    | 900     | 300    |        |        |

# Resumen coliformes 2015-2019

|                      | Nº muestras | malas 143              | % malas |  | malas USA | % malas |
|----------------------|-------------|------------------------|---------|--|-----------|---------|
| Estero PTAS          | 51          | 30                     | 59%     |  | 31        | 61%     |
| Estero las conchas   | 51          | 5                      | 10%     |  | 20        | 39%     |
| Torca                | 51          | 18                     | 35%     |  | 22        | 43%     |
| Pta barco            | 51          | 8                      | 16%     |  | 9         | 18%     |
| Peninsula            | 50          | 0                      | 0%      |  | 0         | 0%      |
| Paula                | 51          | 0                      | 0%      |  | 0         | 0%      |
| Aquelarre            | 50          | 0                      | 0%      |  | 0         | 0%      |
| Totorilla            | 50          | 1                      | 2%      |  | 2         | 4%      |
| Esero vichuquén      | 45          | 21                     | 47%     |  | 33        | 73%     |
| Estero las cardillas | 46          | 28                     | 61%     |  | 35        | 76%     |
|                      |             |                        |         |  |           |         |
|                      |             | 111                    |         |  | 152       |         |
|                      |             | emergencias sanitarias |         |  |           |         |

# Concesiones: convenio UC

- Felipe Lagos Medina
- [felipe.lagos74@gmail.com](mailto:felipe.lagos74@gmail.com)
- Celular +569 6207 8485
- Martín de Zamora 6471, Of 705, Las Condes
- Fono/fax: (56 2)8955770

# Cuota 2019

- 26% de recaudación actual
- Habrá que ponerse las pilas!

# Pago de cuota

- Unión Comunal Lago Vichuquén
- Rut: 65.114.159-1
- Banco Santander
- Cuenta Corriente N°73413532
- Mail: [recaudacionucvichuquen@gmail.com](mailto:recaudacionucvichuquen@gmail.com)
- Indicando nombre, sector del lago y metros de orilla de playa

# Cuota 2019-2020-2021

- |                      |            |
|----------------------|------------|
| – Sin frente al agua | \$ 150.000 |
| – Menos de 20m       | \$ 200.000 |
| – Entre 20 y 50m     | \$ 300.000 |
| – Entre 50 y 80m     | \$ 450.000 |
| – Mas de 80m         | \$ 600.000 |
- convenio de pago PAC con el Banco Santander para cuotas y saldos
  - [recaudacionucvichuquen@gmail.com](mailto:recaudacionucvichuquen@gmail.com)

Muchas gracias

Miércoles 25 de Marzo, 2020

Cuenta 2015-2019

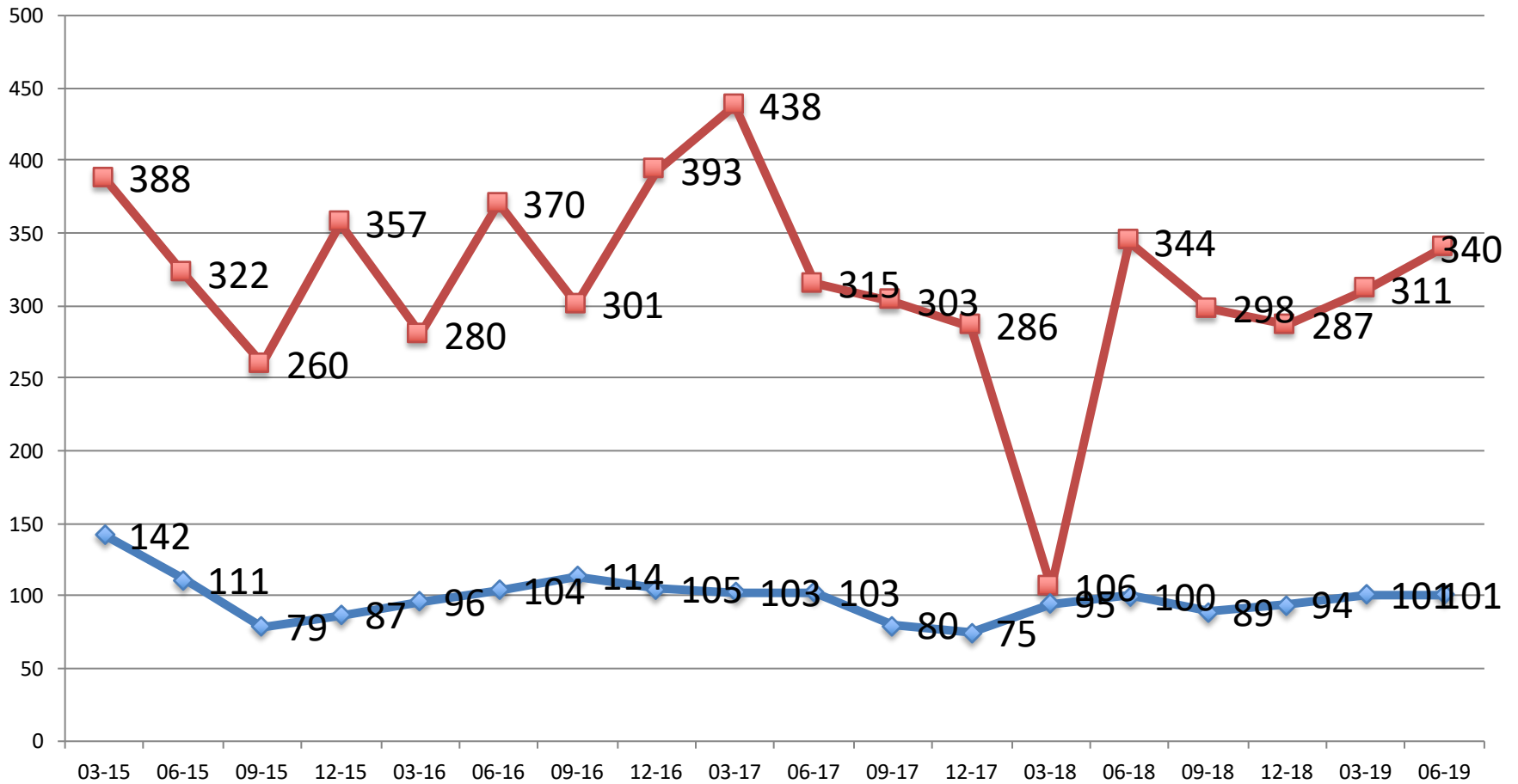


# Calidad del agua

- Gráficos

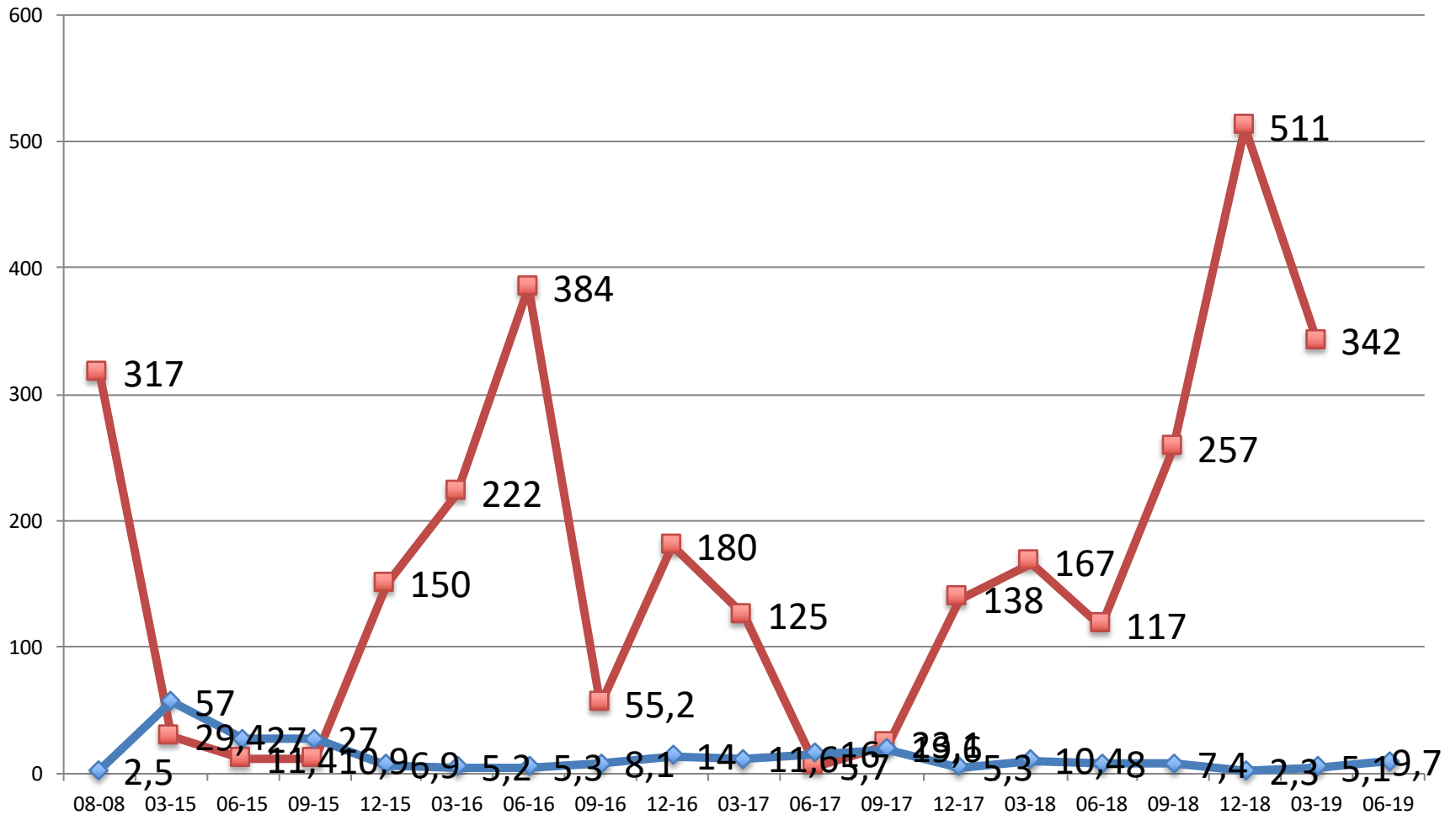
# Lago - Torca

Alcalinidad <75 >150  
mg CaCo<sub>3</sub>/L



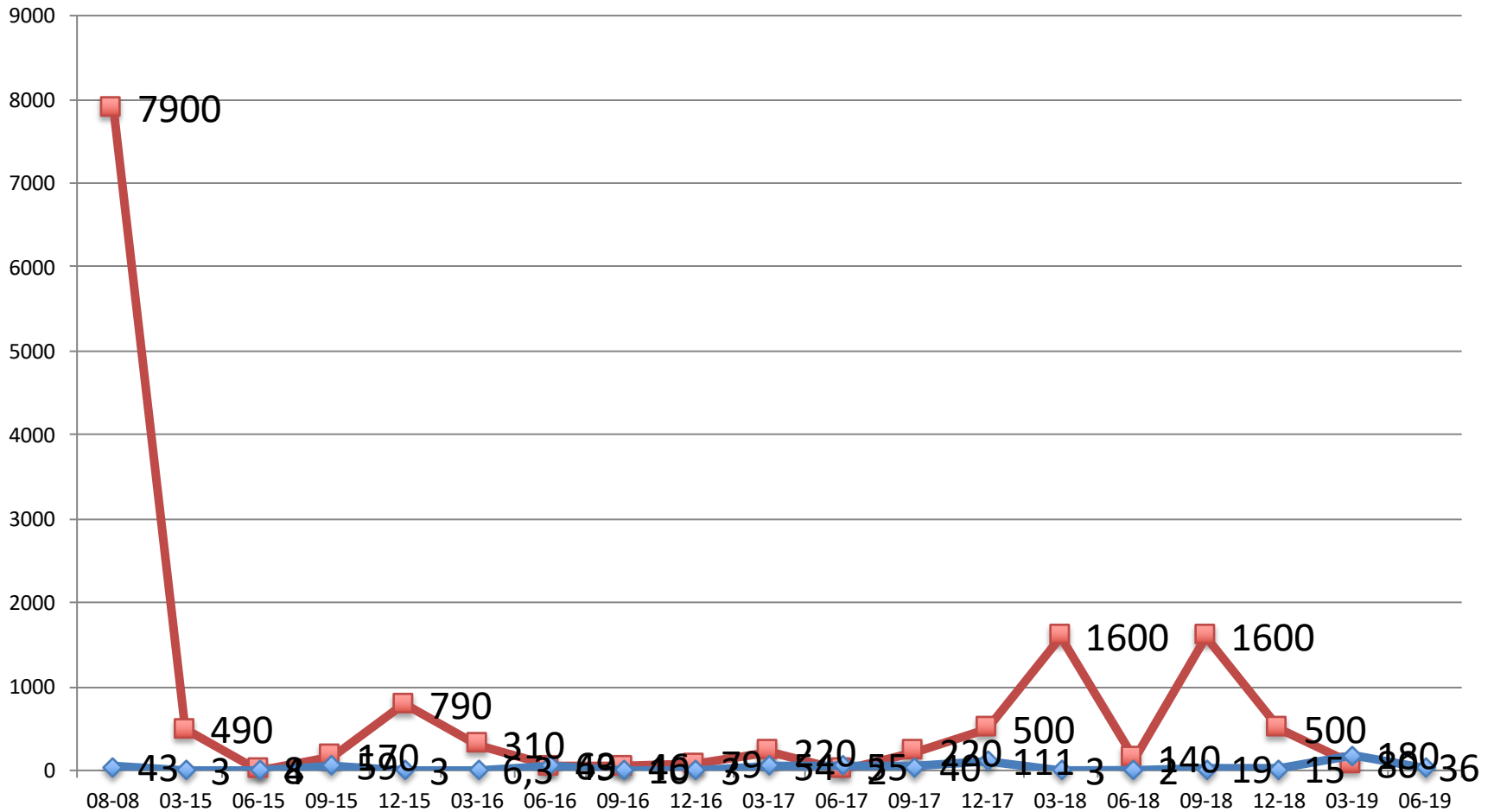
# Lago - Torca

Clorofila a <2 ug/L



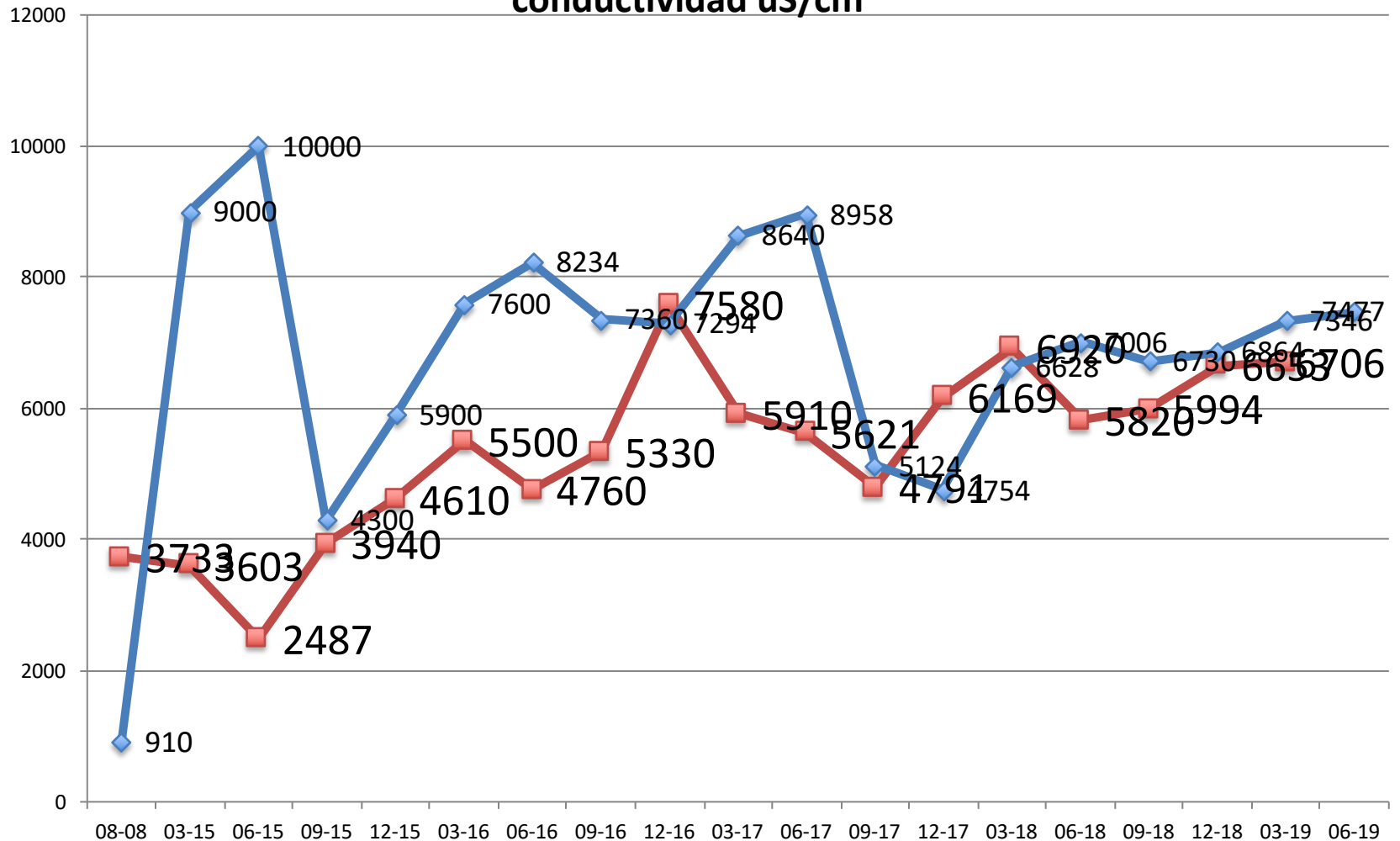
# Lago - Torca

Coliformes Fecales <400 (USA)  
NMP/100mL



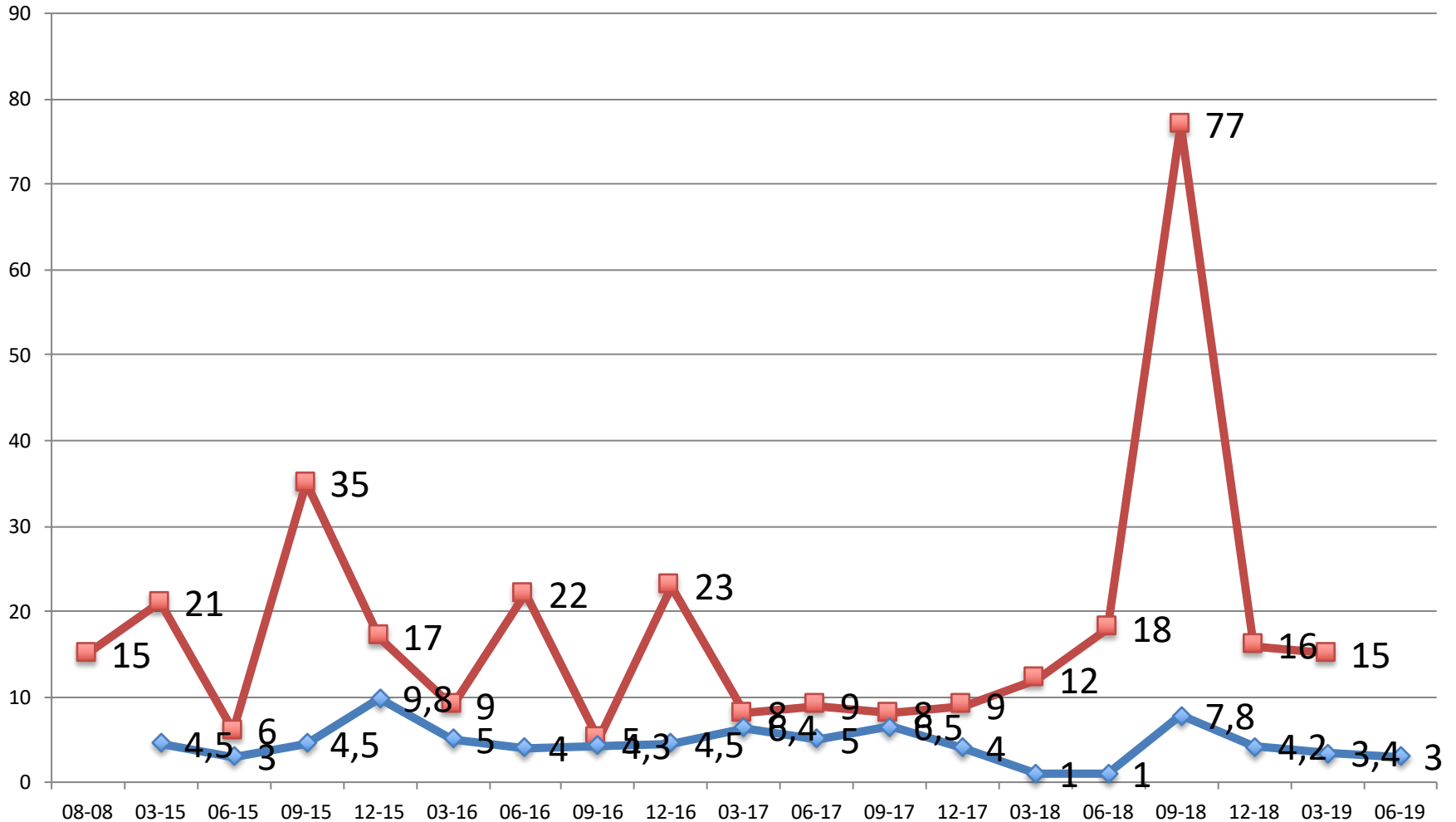
# Lago - Torca

Salinidad  
conductividad uS/cm



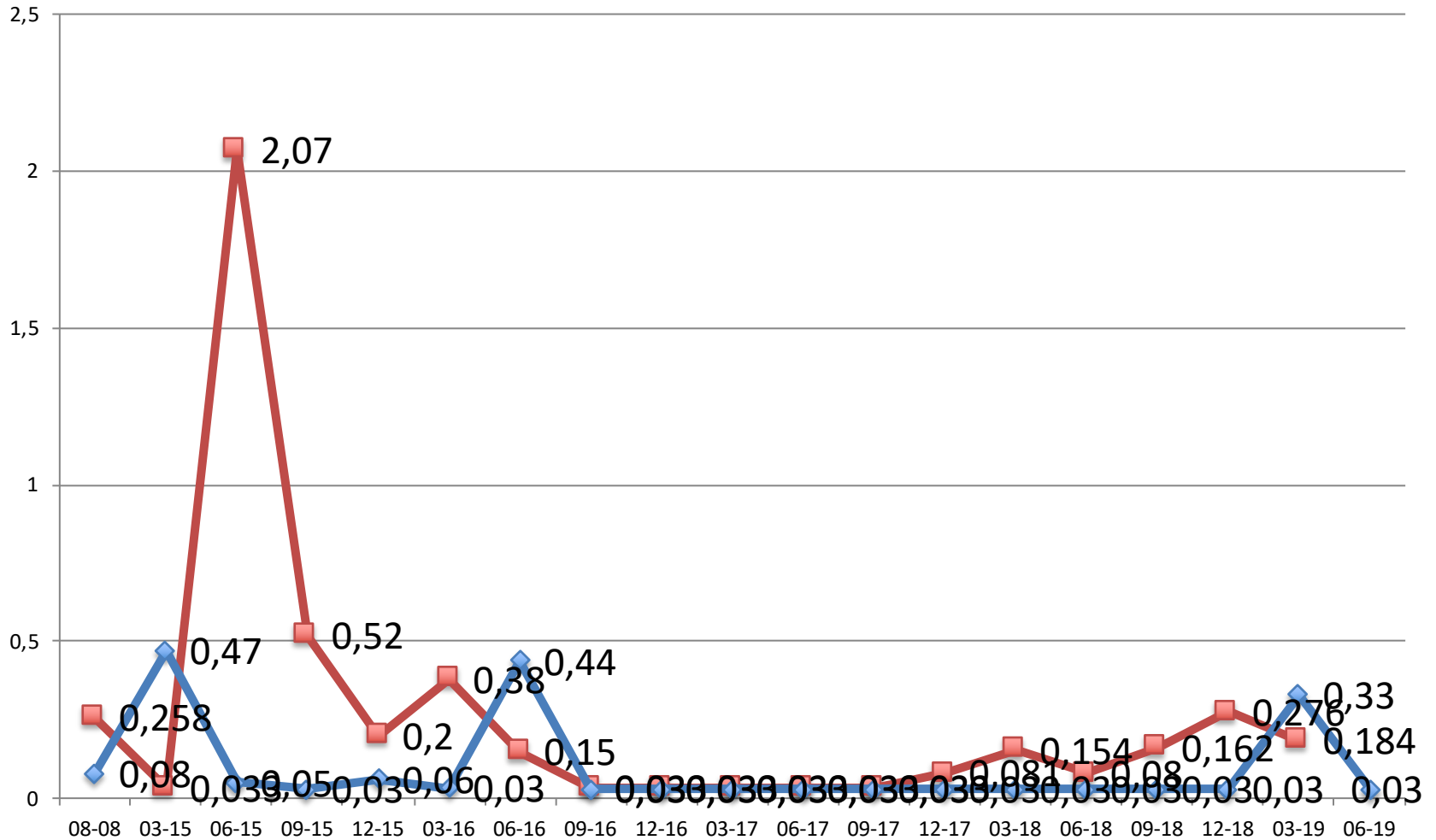
# Lago - Torca

**Demanda Biológica Oxígeno <5 mg/L**



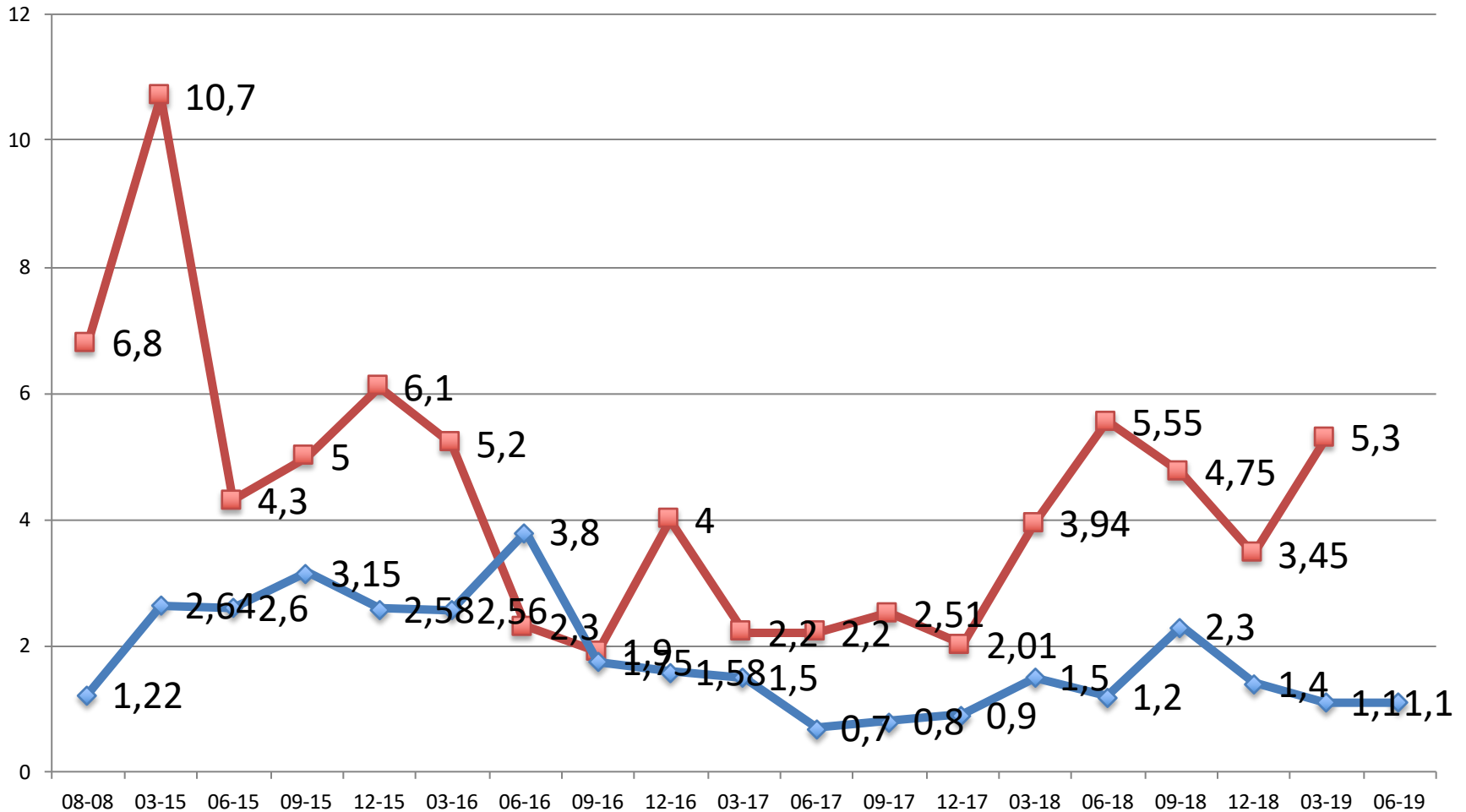
# Lago - Torca

Fósforo <0,05 mg/L



# Lago - Torca

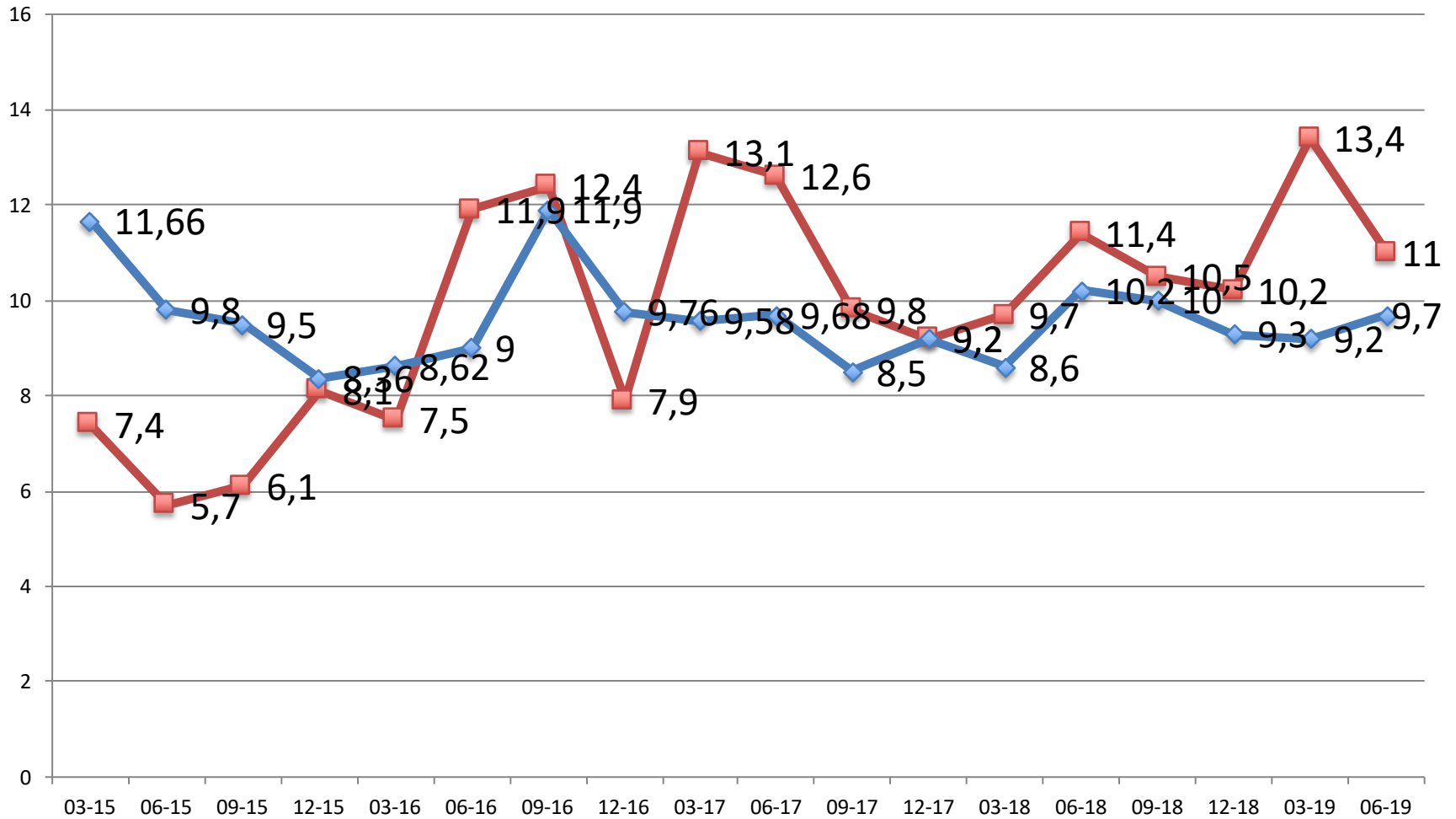
Nitrógeno Total <5 mg/L





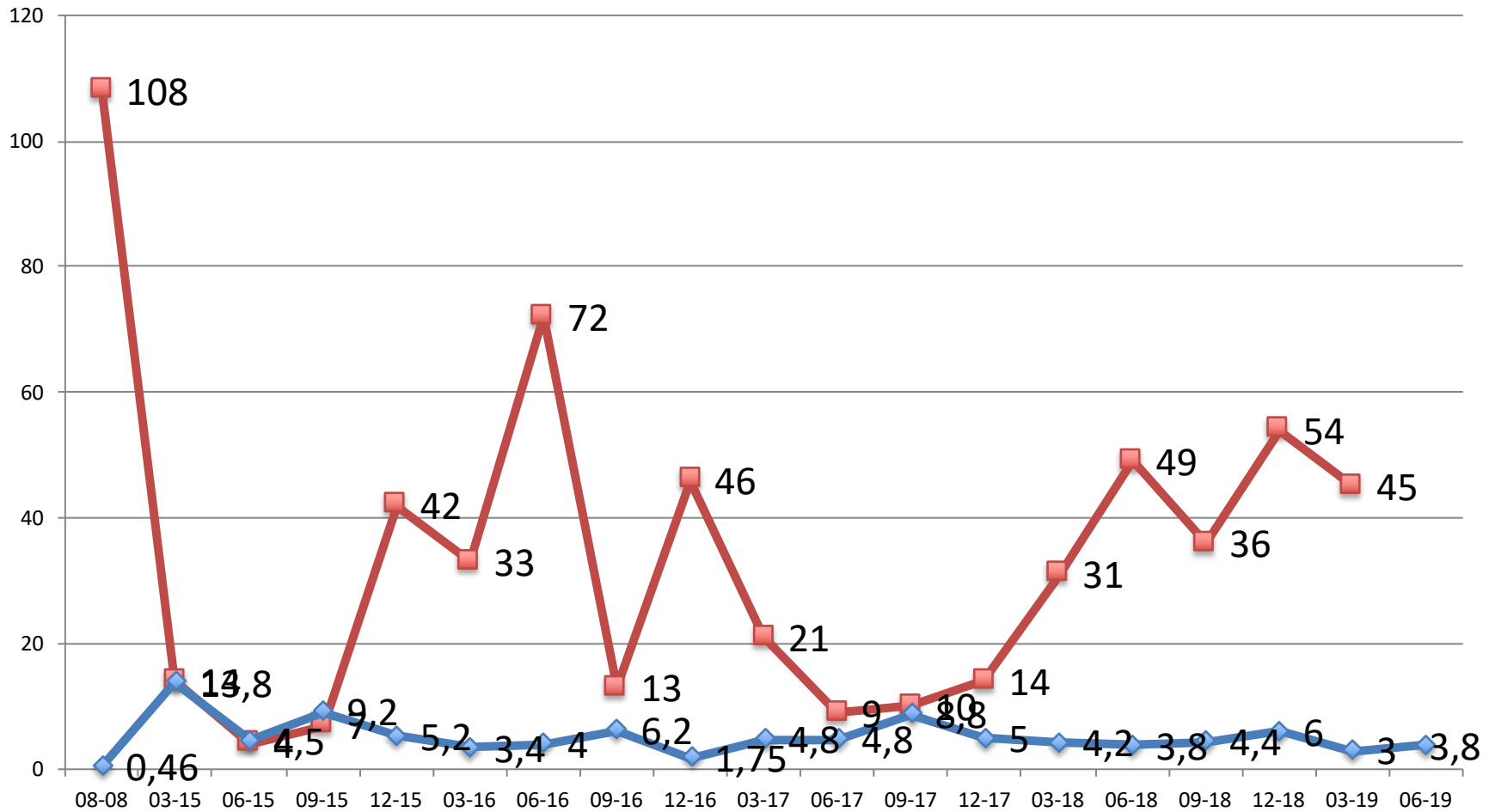
# Lago - Torca

O2 Disuelto >5 mg/L



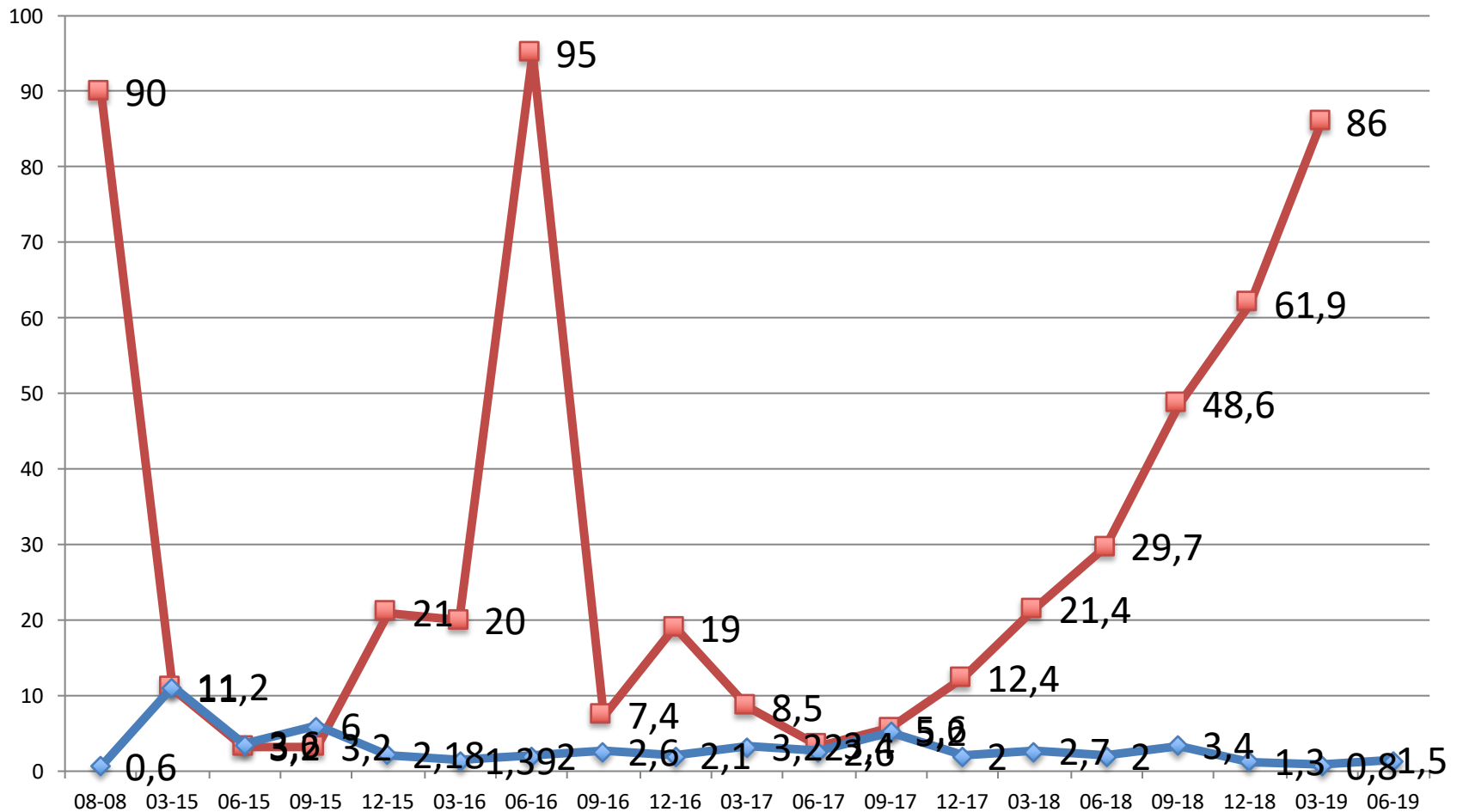
# Lago - Torca

Sólidos Suspendidos <5 mg/L



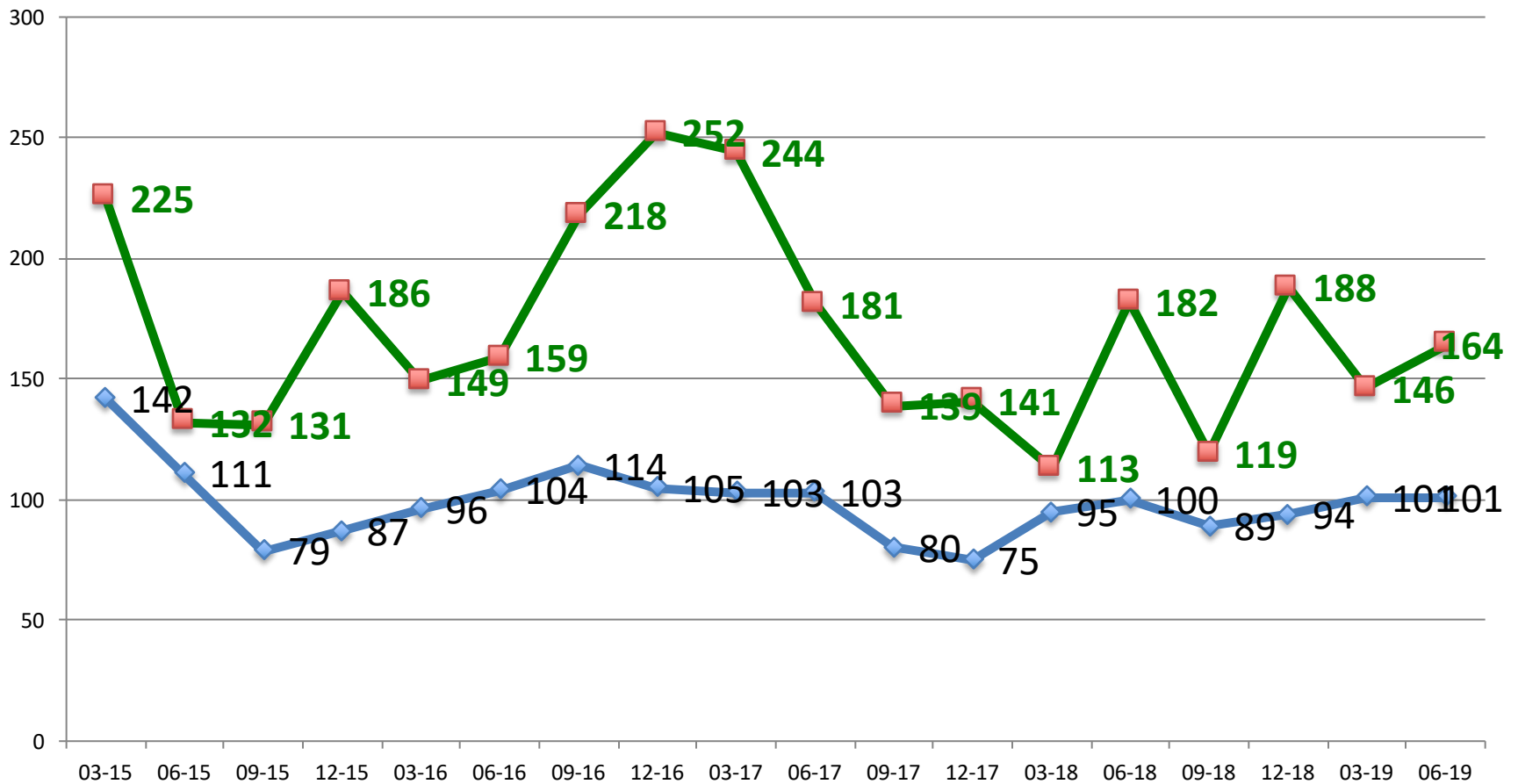
# Lago - Torca

Turbiedad <5 mg/L



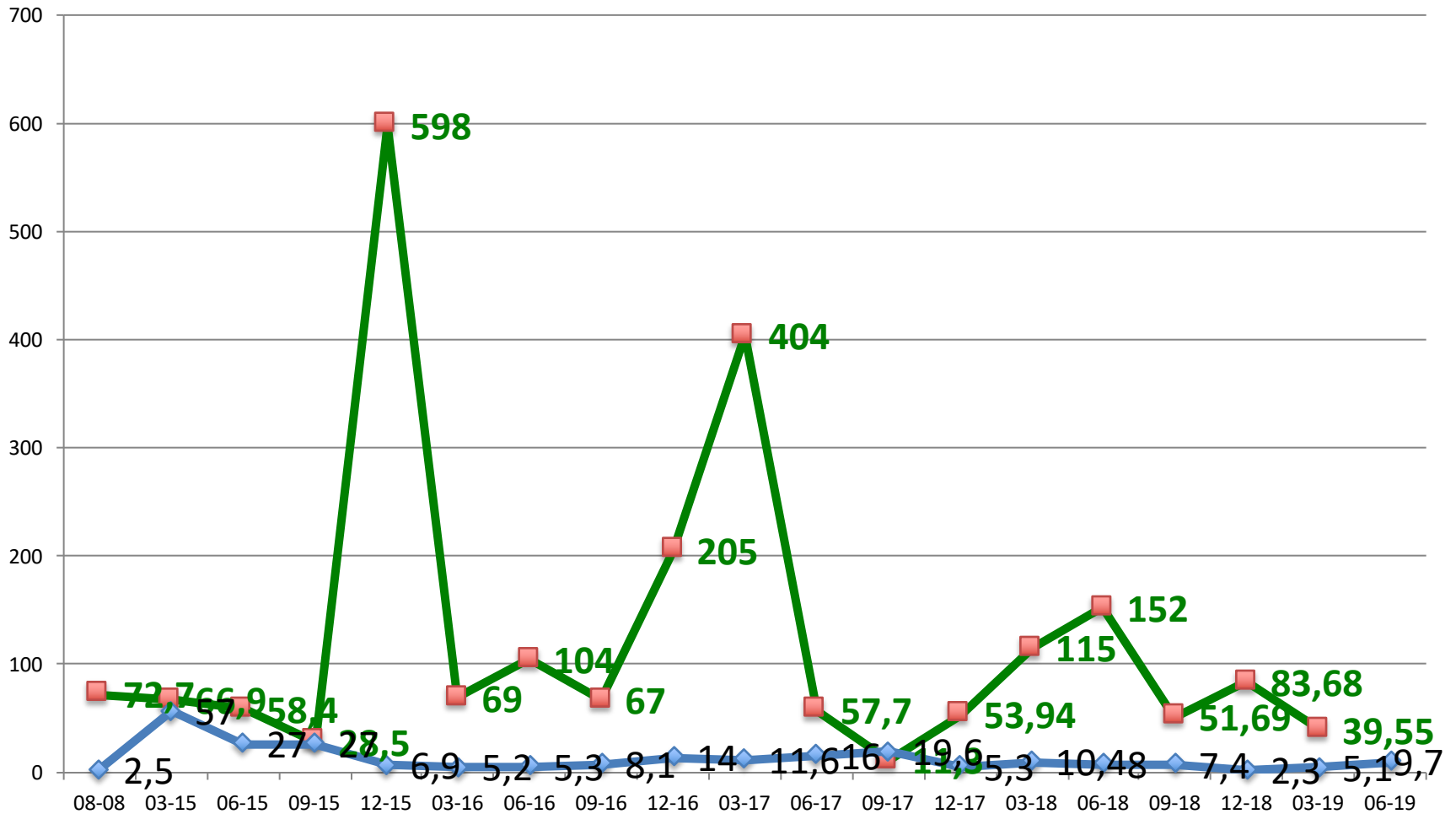
# Lago - Estero

Alcalinidad <75 >150  
mg CaCo<sub>3</sub>/L



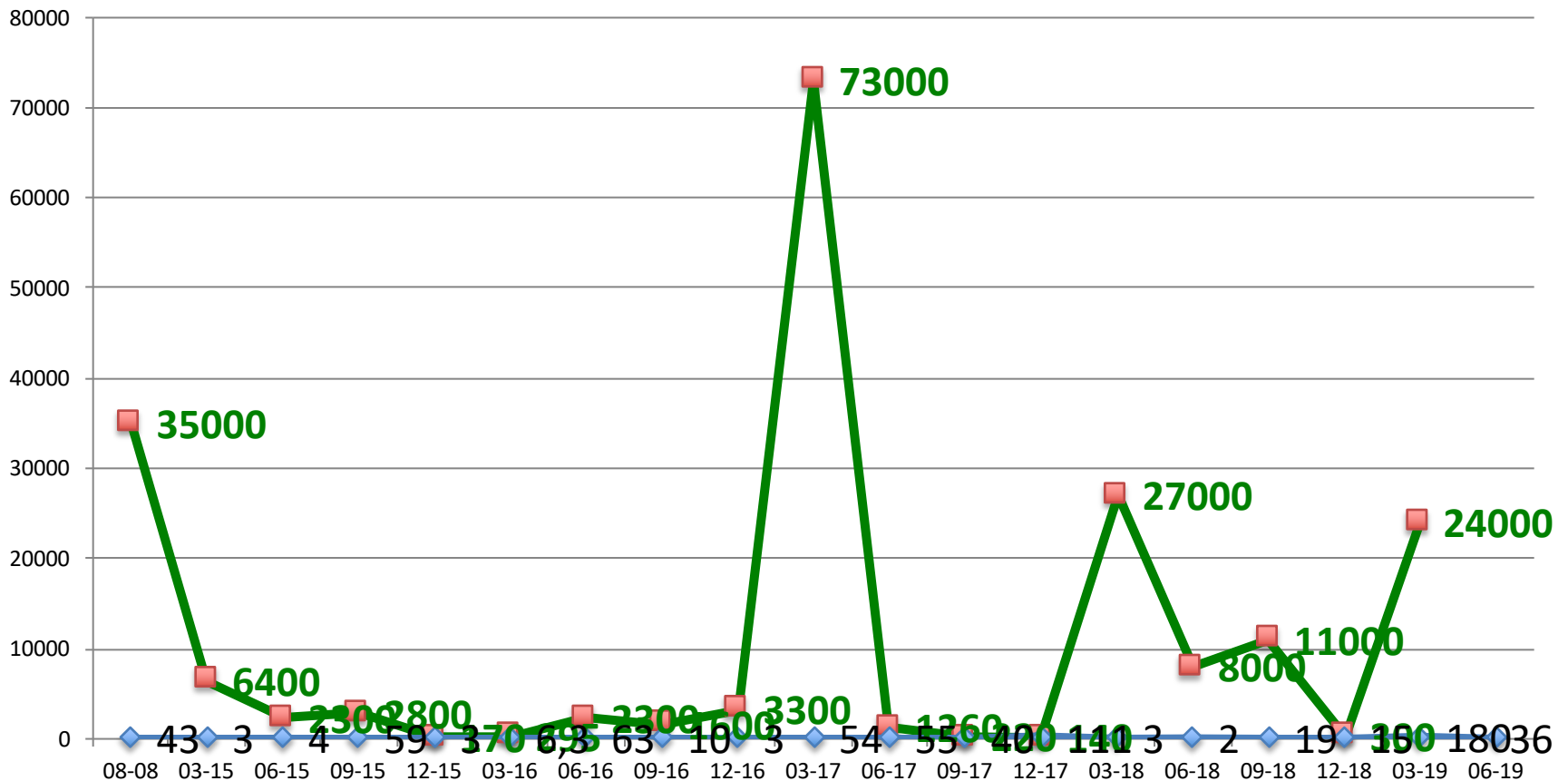
# Lago - Estero

Clorofila a <2 ug/L



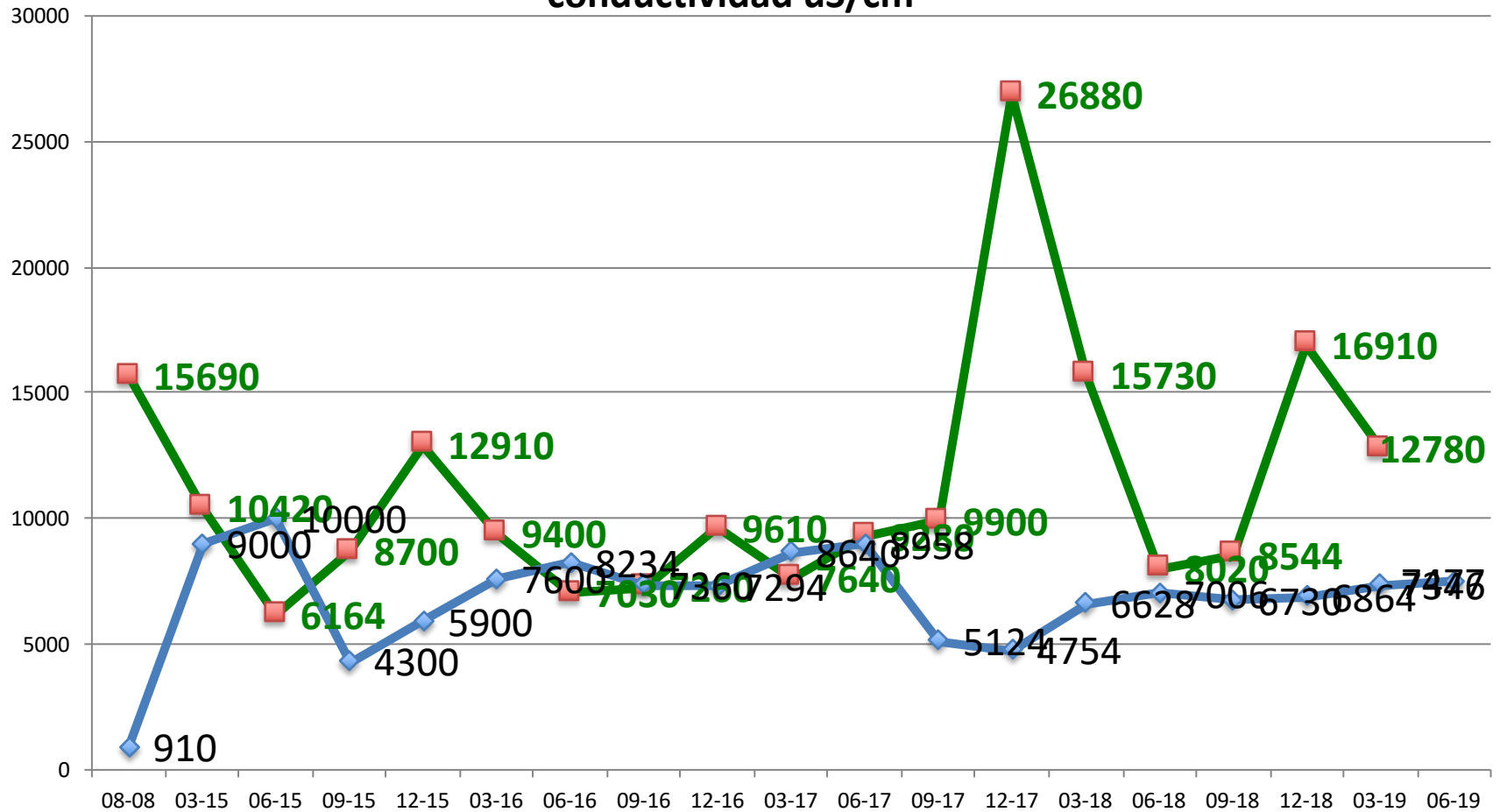
# Lago - Estero

Coliformes Fecales <400 (USA)  
NMP/100mL



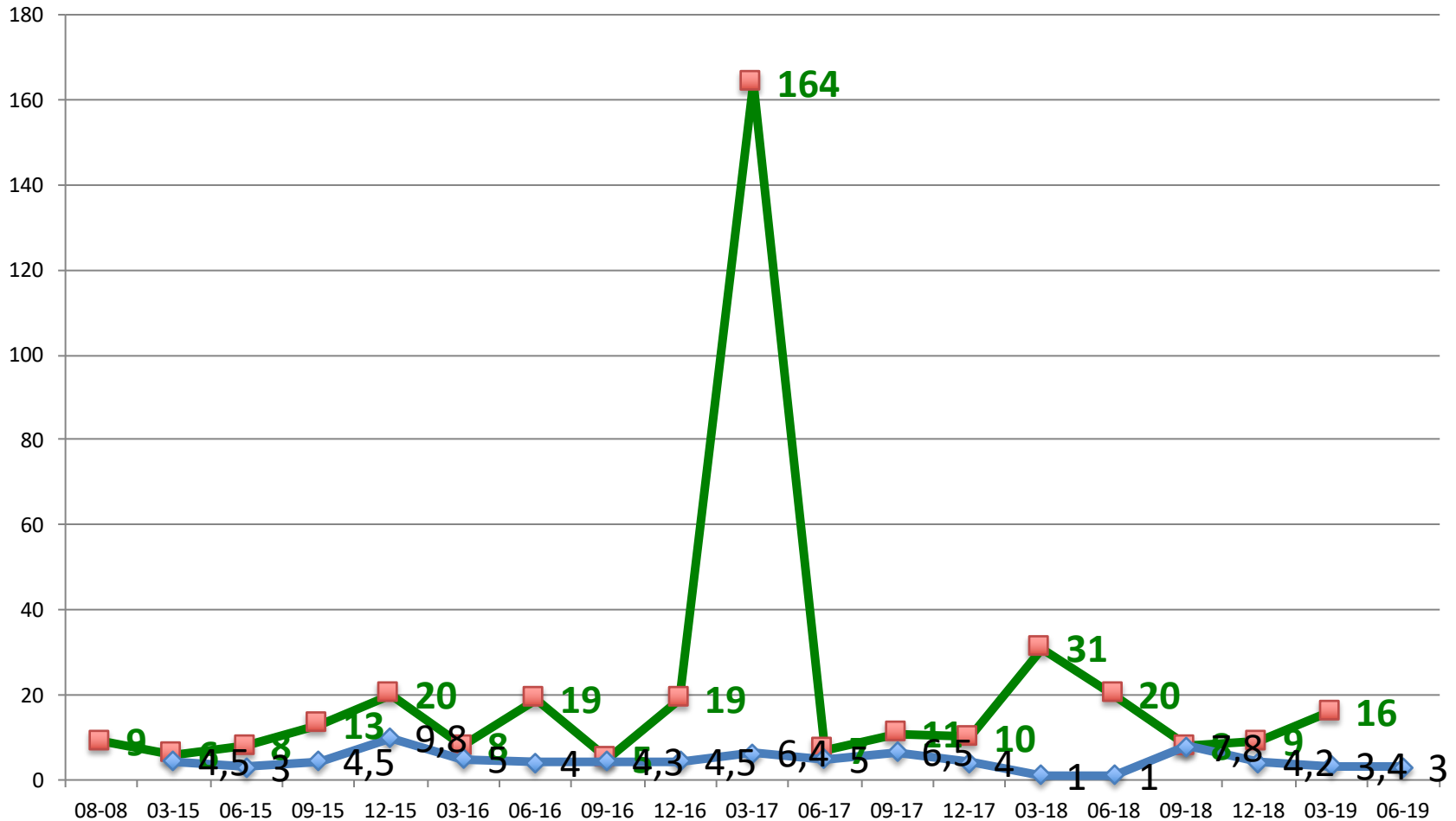
# Lago - Estero

Salinidad  
conductividad uS/cm



# Lago - Estero

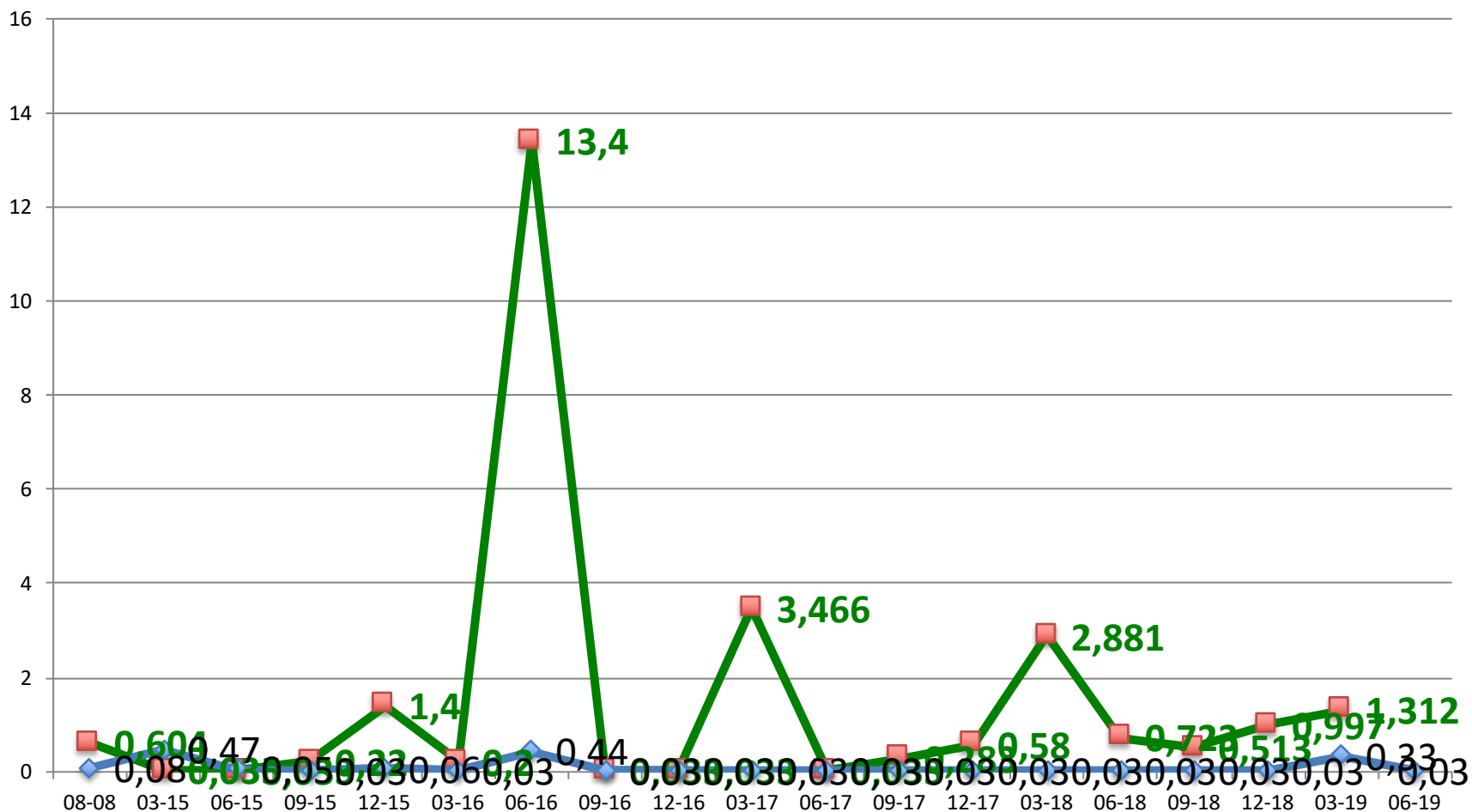
**Demanda Biológica Oxígeno <5 mg/L**





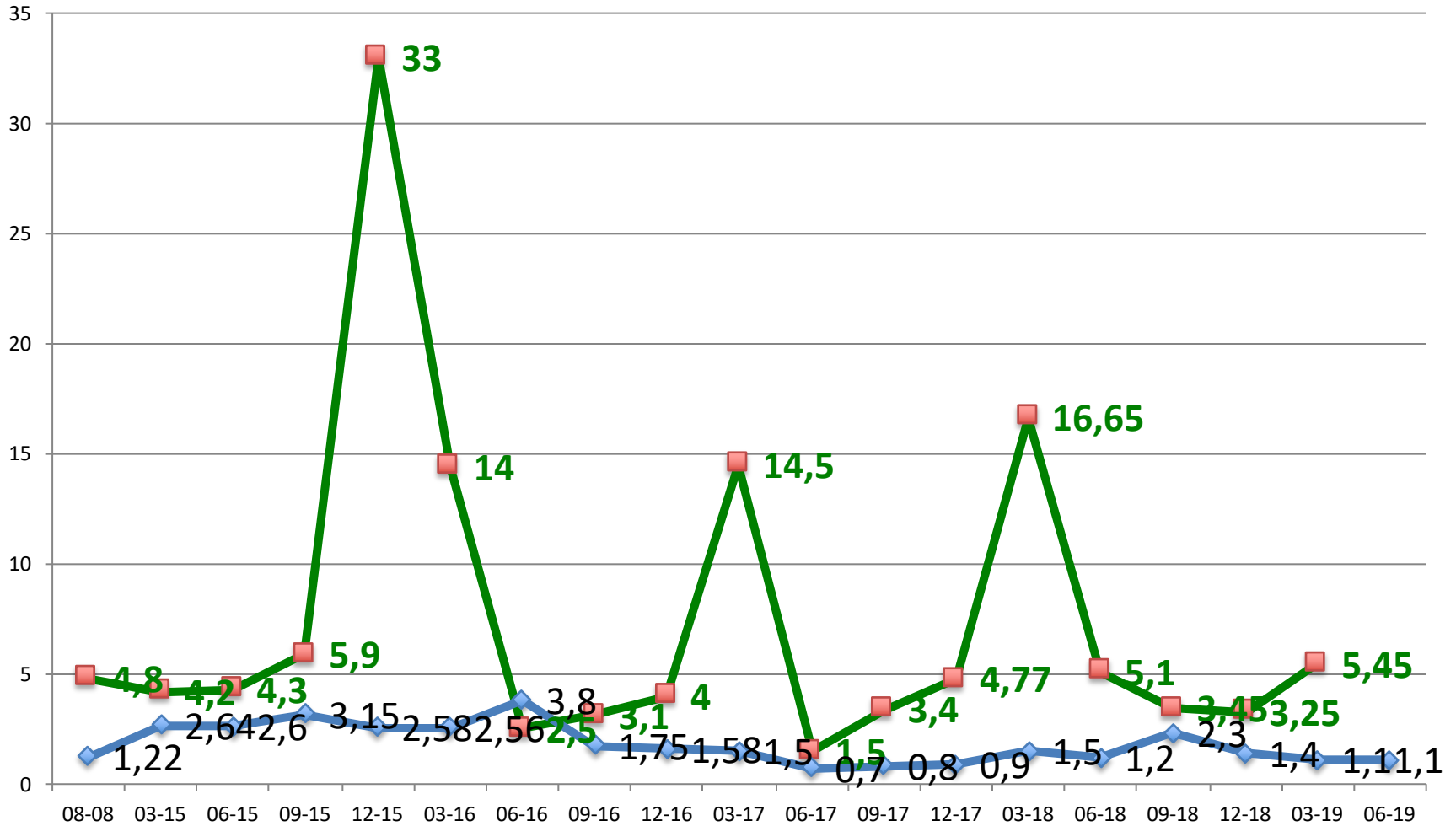
# Lago - Estero

Fósforo <0,05 mg/L



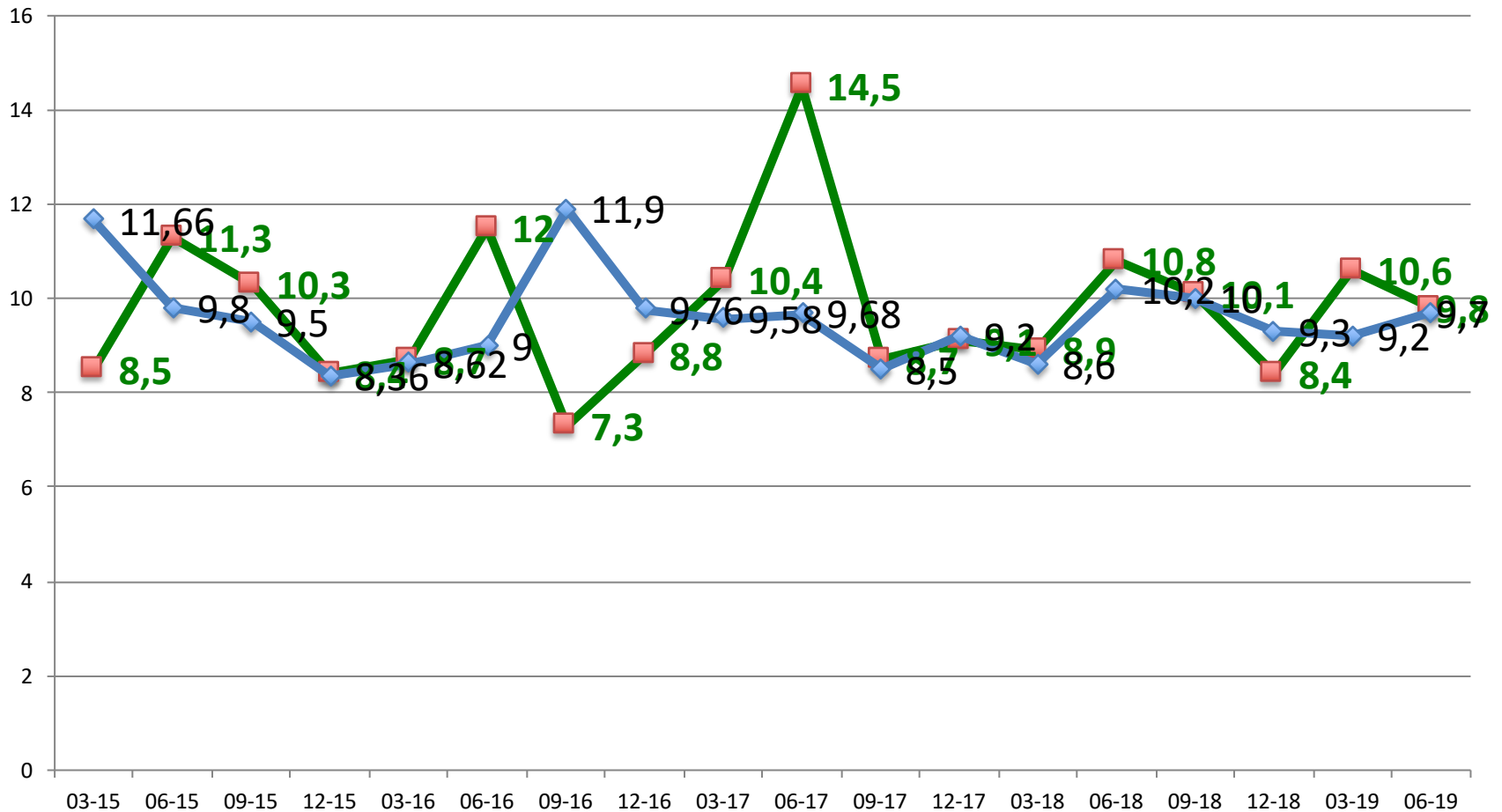
# Lago - Estero

Nitrógeno Total <5 mg/L



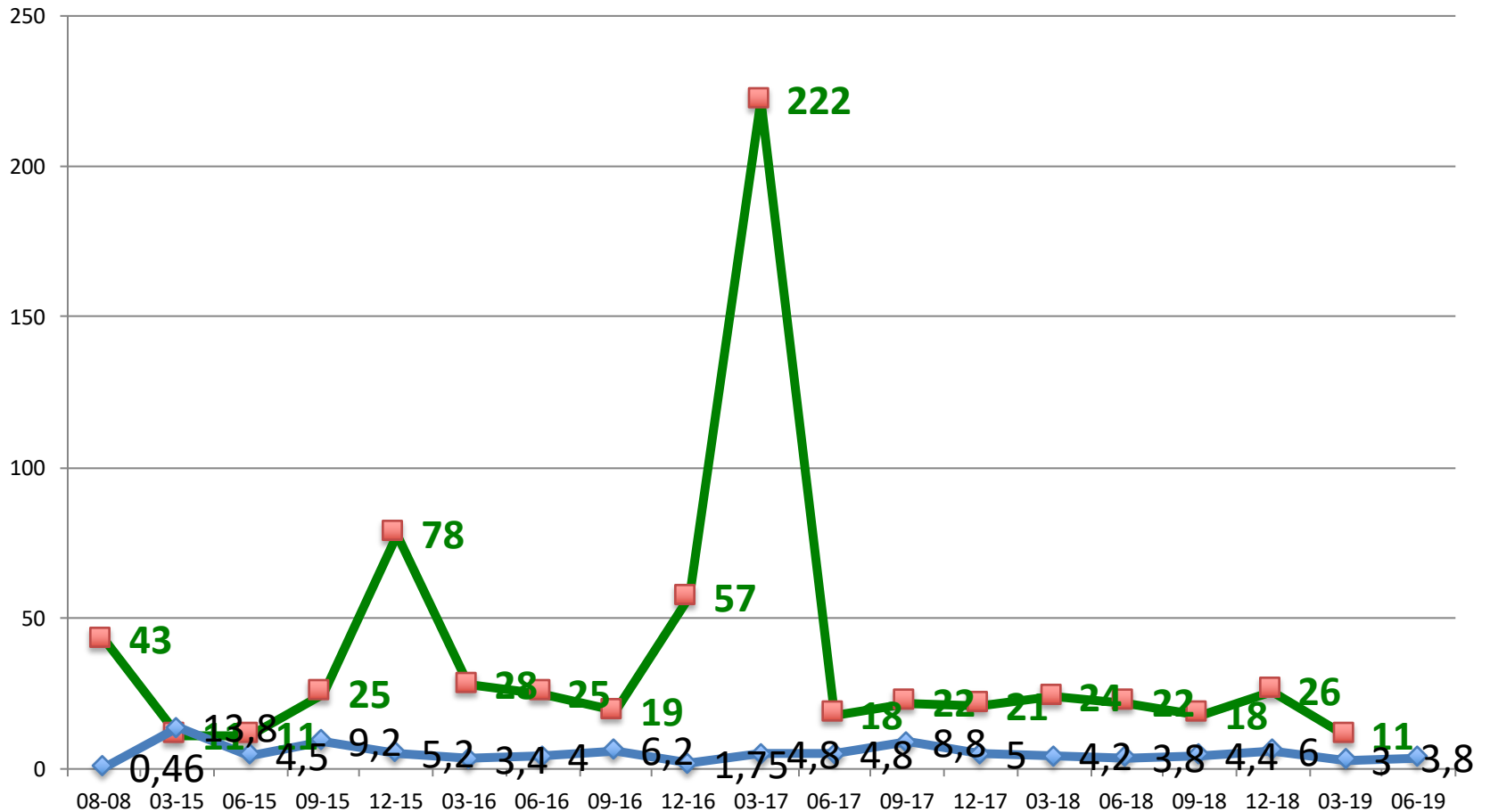
# Lago - Estero

O2 Disuelto >5 mg/L



# Lago - Estero

Solidos Suspendidos <5 mg/L



# Lago - Estero

Turbiedad <5 mg/L

