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|---------------------------------------------------------------------------------|------------------------------------------------|----------------------------------------------------|-----------------|------------------------|
|  | <b>Confederación Hidrográfica del Guadiana</b> | <b>Gestión de laboratorios</b>                     | <b>Informes</b> | <b>Report: R030412</b> |
|                                                                                 | <b>Fecha: 02-02-2016</b>                       | <b>Resultados de análisis por punto de control</b> |                 | <b>Página: 1</b>       |

|                                         |                                                               |                                                            |
|-----------------------------------------|---------------------------------------------------------------|------------------------------------------------------------|
| <b>Código:</b> GN00000046               | <b>Nombre del punto:</b> RIO CHANZA - R. Chanza - E.A. Aroche | <b>Cauce:</b> RIO CHANZA                                   |
| <b>Código de la masa de agua:</b> 13348 | <b>Nombre de la masa de agua:</b> RIVERA DEL CHANZA I         |                                                            |
| <b>Localidad:</b> Aroche                | <b>Provincia:</b> Huelva                                      | <b>UTM X:</b> 681036 <b>UTM Y:</b> 4204050 <b>Huso:</b> 29 |

|                                          |       | ENERO<br>13-01-2015 | FEBRERO<br>10-02-2015 | MARZO<br>10-03-2015 | ABRIL<br>13-04-2015 | MAYO<br>05-05-2015 | JUNIO<br>08-06-2015 | JULIO<br>14-07-2015 | AGOSTO<br>04-08-2015 | SEPTIEMBRE<br>08-09-2015 | OCTUBRE<br>19-10-2015 | NOVIEMBRE<br>10-11-2015 | DICIEMBRE<br>15-12-2015 |
|------------------------------------------|-------|---------------------|-----------------------|---------------------|---------------------|--------------------|---------------------|---------------------|----------------------|--------------------------|-----------------------|-------------------------|-------------------------|
| % Oxígeno (in situ)                      | % SAT | 120,4               | 91,4                  | 101,4               | 98,5                | 87,2               | ---                 | ---                 | ---                  | ---                      | 90,5                  | 98,1                    | 106,7                   |
| Cloro residual total (in situ)           | mg/L  | ---                 | ---                   | ---                 | ---                 | ---                | ---                 | ---                 | ---                  | ---                      | ---                   | ---                     | ---                     |
| Color aparente (in situ)                 | ----- | ---                 | ---                   | ---                 | ---                 | ---                | ---                 | ---                 | ---                  | ---                      | ---                   | ---                     | ---                     |
| Conductividad a 20 °C (in situ)          | µS/cm | 442                 | 425                   | 480                 | 381                 | 509                | ---                 | ---                 | ---                  | ---                      | 334                   | 491                     | 544                     |
| Nitritos (in situ)                       | mg/L  | ---                 | ---                   | ---                 | ---                 | ---                | ---                 | ---                 | ---                  | ---                      | ---                   | ---                     | ---                     |
| Olor (in situ)                           | ----- | ---                 | ---                   | ---                 | ---                 | ---                | ---                 | ---                 | ---                  | ---                      | ---                   | ---                     | ---                     |
| Oxígeno disuelto (in situ)               | mg/L  | 13,2                | 10,8                  | 11,0                | 9                   | 8,5                | ---                 | ---                 | ---                  | ---                      | 8                     | 9,2                     | 11,1                    |
| pH (in situ)                             | pH    | 8,2                 | 7,4                   | 7,6                 | 7,5                 | 7,5                | ---                 | ---                 | ---                  | ---                      | 7,4                   | 7,7                     | 7,9                     |
| Temperatura del agua "in situ" (in situ) | °C    | 7,7                 | 6,3                   | 11,0                | 17,8                | 15                 | ---                 | ---                 | ---                  | ---                      | 17,1                  | 16,2                    | 12,6                    |
| Alcalinidad total                        | mg/L  | 176,9               | 160,6                 | 187,3               | 164,6               | 190,4              | ---                 | ---                 | ---                  | ---                      | 99,0                  | 186,0                   | 215,2                   |
| Aluminio                                 | mg/L  | < 0,1000            | < 0,1000              | < 0,1000            | < 0,1000            | < 0,1000           | ---                 | ---                 | ---                  | ---                      | 0,1429                | < 0,1000                | < 0,1000                |
| Amonio total                             | mg/L  | < 0,05              | < 0,05                | < 0,05              | < 0,05              | < 0,05             | ---                 | ---                 | ---                  | ---                      | < 0,05                | < 0,05                  | < 0,05                  |
| Arsénico                                 | µg/L  | < 1,000             | < 1,000               | < 1,000             | < 1,000             | 1,038              | ---                 | ---                 | ---                  | ---                      | 1,239                 | 1,222                   | < 1,000                 |
| Aspecto                                  | ----- | 1                   | 1                     | 1                   | 1                   | 1                  | ---                 | ---                 | ---                  | ---                      | 2                     | 1                       | 1                       |
| Bario                                    | mg/L  | < 0,0500            | < 0,0500              | < 0,0500            | < 0,0500            | < 0,0500           | ---                 | ---                 | ---                  | ---                      | < 0,0500              | < 0,0500                | < 0,0500                |
| Bicarbonatos                             | mg/L  | 165,5               | 160,6                 | 187,3               | 164,6               | 190,4              | ---                 | ---                 | ---                  | ---                      | 99,0                  | 186,0                   | 215,2                   |
| Boro                                     | mg/L  | < 0,1000            | < 0,1000              | < 0,1000            | < 0,1000            | < 0,1000           | ---                 | ---                 | ---                  | ---                      | < 0,1000              | < 0,1000                | < 0,1000                |
| Cadmio                                   | µg/L  | < 0,100             | < 0,100               | < 0,100             | < 0,100             | < 0,100            | ---                 | ---                 | ---                  | ---                      | < 0,100               | < 0,100                 | < 0,100                 |
| Calcio                                   | mg/L  | 49,5400             | 39,1000               | 49,9800             | 39,5300             | 52,1700            | ---                 | ---                 | ---                  | ---                      | 31,6300               | 54,3200                 | 58,3600                 |
| Carbonatos                               | mg/L  | 11,4                | < 0,1                 | < 0,1               | < 0,1               | < 0,1              | ---                 | ---                 | ---                  | ---                      | < 0,1                 | < 0,1                   | < 0,1                   |
| Cianuro Total                            | mg/L  | < 0,010             | < 0,010               | < 0,010             | < 0,010             | < 0,010            | ---                 | ---                 | ---                  | ---                      | < 0,010               | < 0,010                 | < 0,010                 |
| Cinc                                     | mg/L  | < 0,1000            | < 0,1000              | < 0,1000            | < 0,1000            | < 0,1000           | ---                 | ---                 | ---                  | ---                      | < 0,1000              | < 0,1000                | < 0,1000                |
| Cloruros                                 | mg/L  | 26,9                | 23,8                  | 33,4                | 19,2                | 24,7               | ---                 | ---                 | ---                  | ---                      | 26,3                  | 29,6                    | 40,0                    |
| Cobalto                                  | mg/L  | < 0,0500            | < 0,0500              | < 0,0500            | < 0,0500            | < 0,0500           | ---                 | ---                 | ---                  | ---                      | < 0,0500              | < 0,0500                | < 0,0500                |
| Cobre                                    | mg/L  | < 0,1000            | < 0,1000              | < 0,1000            | < 0,1000            | < 0,1000           | ---                 | ---                 | ---                  | ---                      | < 0,1000              | < 0,1000                | < 0,1000                |
| Color                                    | mg/L  | < 5,0               | < 5,0                 | 5,3                 | 6,1                 | 5,4                | ---                 | ---                 | ---                  | ---                      | 40,0                  | 8,3                     | 5,8                     |
| Conductividad a 20 °C                    | µS/cm | 425                 | 393                   | 455                 | 364                 | 422                | ---                 | ---                 | ---                  | ---                      | 313                   | 455                     | 496                     |

|                                                                                 |                                                |                                                    |                 |                        |
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|                                                                                 | <b>Fecha: 02-02-2016</b>                       | <b>Resultados de análisis por punto de control</b> |                 | <b>Página: 2</b>       |

|                                         |                                                               |                                                            |
|-----------------------------------------|---------------------------------------------------------------|------------------------------------------------------------|
| <b>Código:</b> GN00000046               | <b>Nombre del punto:</b> RIO CHANZA - R. Chanza - E.A. Aroche | <b>Cauce:</b> RIO CHANZA                                   |
| <b>Código de la masa de agua:</b> 13348 | <b>Nombre de la masa de agua:</b> RIVERA DEL CHANZA I         |                                                            |
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|---------------------------------------|---------|---------------------|-----------------------|---------------------|---------------------|--------------------|---------------------|---------------------|----------------------|--------------------------|-----------------------|-------------------------|-------------------------|
| Cromo                                 | µg/L    | < 5,000             | < 5,000               | < 5,000             | < 5,000             | < 5,000            | ---                 | ---                 | ---                  | ---                      | < 5,000               | < 5,000                 | < 5,000                 |
| D.B.O. 5d                             | mg/L    | 2,7                 | 5,4                   | 2,1                 | 0,7                 | 0,8                | ---                 | ---                 | ---                  | ---                      | 1,9                   | 1,5                     | 1,2                     |
| D.Q.O. 10min (Índice de Permanganato) | mg/L    | 1,2                 | 1,6                   | 1,6                 | < 1,0               | 1,3                | ---                 | ---                 | ---                  | ---                      | 9,0                   | 2,2                     | 2,2                     |
| Dureza total                          | mg/L    | 193,7               | 155,5                 | 201,3               | 157,4               | 205,1              | ---                 | ---                 | ---                  | ---                      | 130,5                 | 213,2                   | 229,4                   |
| Estaño                                | mg/L    | < 0,1000            | < 0,1000              | < 0,1000            | < 0,1000            | < 0,1000           | ---                 | ---                 | ---                  | ---                      | < 0,1000              | < 0,1000                | < 0,1000                |
| Estroncio                             | mg/L    | < 0,5000            | < 0,5000              | < 0,5000            | < 0,5000            | < 0,5000           | ---                 | ---                 | ---                  | ---                      | < 0,5000              | < 0,5000                | < 0,5000                |
| Fenoles                               | mg/L    | < 0,050             | < 0,050               | < 0,050             | < 0,050             | < 0,050            | ---                 | ---                 | ---                  | ---                      | < 0,050               | < 0,050                 | < 0,050                 |
| Fluoruros                             | mg/L    | 0,15                | 0,14                  | 0,14                | 0,15                | 0,18               | ---                 | ---                 | ---                  | ---                      | 0,13                  | 0,18                    | 0,17                    |
| Fosfatos                              | mg/L    | 0,11                | 0,09                  | 0,28                | 0,49                | 0,30               | ---                 | ---                 | ---                  | ---                      | 0,40                  | 0,36                    | 0,27                    |
| Fósforo total                         | mg/L    | < 0,1000            | < 0,1000              | 0,1240              | < 0,1000            | 0,1079             | ---                 | ---                 | ---                  | ---                      | 0,1480                | 0,1476                  | 0,1250                  |
| Hidróxidos                            | mg/L    | < 0,1               | < 0,1                 | < 0,1               | < 0,1               | < 0,1              | ---                 | ---                 | ---                  | ---                      | < 0,1                 | < 0,1                   | < 0,1                   |
| Hierro                                | mg/L    | < 0,1000            | < 0,1000              | 0,1815              | < 0,1000            | < 0,1000           | ---                 | ---                 | ---                  | ---                      | 0,3116                | < 0,1000                | < 0,1000                |
| Magnesio                              | mg/L    | 16,9500             | 14,0200               | 18,5300             | 14,2200             | 18,1200            | ---                 | ---                 | ---                  | ---                      | 12,4900               | 18,7800                 | 20,2600                 |
| Manganeso                             | mg/L    | < 0,1000            | < 0,1000              | < 0,1000            | < 0,1000            | < 0,1000           | ---                 | ---                 | ---                  | ---                      | < 0,1000              | < 0,1000                | < 0,1000                |
| Mercurio                              | mg/L    | < 0,000050          | < 0,000050            | < 0,000050          | < 0,000050          | < 0,000050         | ---                 | ---                 | ---                  | ---                      | < 0,000050            | < 0,000050              | < 0,000050              |
| Níquel                                | mg/L    | < 0,0500            | < 0,0500              | < 0,0500            | < 0,0500            | < 0,0500           | ---                 | ---                 | ---                  | ---                      | < 0,0500              | < 0,0500                | < 0,0500                |
| Nitratos                              | mg/L    | 5,3                 | 5,1                   | 3,0                 | 4,6                 | 3,7                | ---                 | ---                 | ---                  | ---                      | 7,5                   | 7,1                     | 5,6                     |
| Oxígeno disuelto                      | mg/L    | 14,2                | 10,0                  | 11,4                | 9,7                 | 8,8                | ---                 | ---                 | ---                  | ---                      | 8,5                   | 9,6                     | 10,1                    |
| pH                                    | pH      | 8,4                 | 8,0                   | 8,1                 | 8,2                 | 8,1                | ---                 | ---                 | ---                  | ---                      | 7,8                   | 8,1                     | 8,0                     |
| Plomo                                 | µg/L    | < 1,000             | < 1,000               | < 1,000             | < 1,000             | < 1,000            | ---                 | ---                 | ---                  | ---                      | < 1,000               | < 1,000                 | < 1,000                 |
| Potasio                               | mg/L    | 1,8070              | 1,5800                | 2,0190              | 1,9850              | 1,9740             | ---                 | ---                 | ---                  | ---                      | 3,2390                | 2,8170                  | 2,6690                  |
| Recuento de Coliformes totales        | UFC/100 | 250                 | 480                   | 2900                | 2400                | 15000              | ---                 | ---                 | ---                  | ---                      | 61000                 | ---                     | ---                     |
| Selenio                               | µg/L    | < 2,000             | < 2,000               | < 2,000             | < 2,000             | < 2,000            | ---                 | ---                 | ---                  | ---                      | 1,011                 | 1,124                   | < 1,000                 |
| Sílice                                | mg/L    | 22,9100             | 22,9400               | 18,6600             | 28,1700             | 28,6200            | ---                 | ---                 | ---                  | ---                      | 20,3100               | 30,6500                 | 19,0200                 |
| Sodio                                 | mg/L    | 23,0100             | 19,0100               | 24,6000             | 16,8400             | 22,0000            | ---                 | ---                 | ---                  | ---                      | 16,5800               | 24,8100                 | 29,0700                 |
| Sólidos en Suspensión                 | mg/L    | < 10                | < 10                  | < 10                | < 10                | < 10               | ---                 | ---                 | ---                  | ---                      | 19                    | < 10                    | < 10                    |
| Sulfatos                              | mg/L    | 22,4                | 20,3                  | 22,7                | 19,1                | 23,1               | ---                 | ---                 | ---                  | ---                      | 26,7                  | 30,3                    | 32,0                    |