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|  | <b>Confederación Hidrográfica del Guadiana</b> | <b>Gestión de laboratorios</b>                     | <b>Informes</b> | <b>Report: R030412</b> |
|                                                                                 | <b>Fecha: 30-01-2017</b>                       | <b>Resultados de análisis por punto de control</b> |                 | <b>Página: 1</b>       |

|                                         |                                                                                       |                                                            |
|-----------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------|
| <b>Código:</b> GN00000047               | <b>Nombre del punto:</b> RIO COBICA - R. Cobica - Pte. Ctra. Puebla de Guzmán-Paymogo | <b>Cauce:</b> RIO COBICA                                   |
| <b>Código de la masa de agua:</b> 13352 | <b>Nombre de la masa de agua:</b> RIVERA COBICA                                       |                                                            |
| <b>Localidad:</b> Puebla de Guzmán      | <b>Provincia:</b> Huelva                                                              | <b>UTM X:</b> 653313 <b>UTM Y:</b> 4167776 <b>Huso:</b> 29 |

|                                          |       | ENERO<br>13-01-2016 | FEBRERO<br>02-02-2016 | MARZO<br>08-03-2016 | ABRIL<br>12-04-2016 | MAYO<br>10-05-2016 | JUNIO<br>07-06-2016 | JULIO<br>12-07-2016 | AGOSTO<br>03-08-2016 | SEPTIEMBRE<br>13-09-2016 | OCTUBRE | NOVIEMBRE<br>16-11-2016 | DICIEMBRE<br>21-12-2016 |
|------------------------------------------|-------|---------------------|-----------------------|---------------------|---------------------|--------------------|---------------------|---------------------|----------------------|--------------------------|---------|-------------------------|-------------------------|
| % Oxígeno (in situ)                      | % SAT | 94,4                | 96,4                  | 97,5                | 93,5                | 94                 | 80,2                | ---                 | ---                  | ---                      | ---     | ---                     | ---                     |
| Cloro residual total (in situ)           | mg/L  | ---                 | ---                   | ---                 | ---                 | ---                | ---                 | ---                 | ---                  | ---                      | ---     | ---                     | ---                     |
| Color aparente (in situ)                 | ----- | ---                 | ---                   | ---                 | ---                 | ---                | ---                 | ---                 | ---                  | ---                      | ---     | ---                     | ---                     |
| Conductividad a 20 °C (in situ)          | µS/cm | 647                 | 1088                  | 1772                | 1788                | 384                | 1009                | ---                 | ---                  | ---                      | ---     | ---                     | 609                     |
| Nitritos (in situ)                       | mg/L  | ---                 | ---                   | ---                 | ---                 | ---                | ---                 | ---                 | ---                  | ---                      | ---     | ---                     | ---                     |
| Olor (in situ)                           | ----- | ---                 | ---                   | ---                 | ---                 | ---                | ---                 | ---                 | ---                  | ---                      | ---     | ---                     | ---                     |
| Oxígeno disuelto (in situ)               | mg/L  | 10,1                | 10,1                  | 9,8                 | 9                   | 8,9                | 6,7                 | ---                 | ---                  | ---                      | ---     | ---                     | ---                     |
| pH (in situ)                             | pH    | 3,1                 | 2,9                   | 2,5                 | 2,5                 | 6,1                | 2,3                 | ---                 | ---                  | ---                      | ---     | ---                     | 3                       |
| Temperatura del agua "in situ" (in situ) | °C    | 12,1                | 12,1                  | 12,9                | 14,3                | 16,2               | 22,8                | ---                 | ---                  | ---                      | ---     | ---                     | 9                       |
| Alcalinidad total                        | mg/L  | -70,8               | -149,2                | -428,2              | -334,6              | -8,2               | -21,9               | ---                 | ---                  | ---                      | ---     | ---                     | -66,2                   |
| Aluminio                                 | mg/L  | 2,7780              | 6,0960                | 13,9600             | 13,9700             | 1,2350             | 4,5930              | ---                 | ---                  | ---                      | ---     | ---                     | 2,6060                  |
| Amonio total                             | mg/L  | 0,12                | 0,17                  | 0,27                | 2,09                | 0,10               | 0,64                | ---                 | ---                  | ---                      | ---     | ---                     | 0,31                    |
| Arsénico                                 | µg/L  | 2,089               | 1,756                 | 40,480              | 10,240              | 3,909              | ---                 | ---                 | ---                  | ---                      | ---     | ---                     | 11,470                  |
| Aspecto                                  | ----- | 1                   | 1                     | 1                   | 1                   | 2                  | 1                   | ---                 | ---                  | ---                      | ---     | ---                     | 1                       |
| Bario                                    | mg/L  | < 0,0500            | < 0,0500              | < 0,0500            | < 0,0500            | < 0,0500           | < 0,0500            | ---                 | ---                  | ---                      | ---     | ---                     | < 0,0500                |
| Bicarbonatos                             | mg/L  | < 0,1               | < 0,1                 | < 0,1               | < 0,1               | < 0,1              | < 0,1               | ---                 | ---                  | ---                      | ---     | ---                     | < 10,0                  |
| Boro                                     | mg/L  | < 0,1000            | < 0,1000              | < 0,1000            | < 0,1000            | < 0,1000           | < 0,1000            | ---                 | ---                  | ---                      | ---     | ---                     | < 0,1000                |
| Cadmio                                   | µg/L  | 3,087               | 4,847                 | 11,148              | 9,116               | 1,683              | ---                 | ---                 | ---                  | ---                      | ---     | ---                     | 2,700                   |
| Calcio                                   | mg/L  | 20,1100             | 27,6200               | 35,8900             | 35,0700             | 18,8300            | 28,9000             | ---                 | ---                  | ---                      | ---     | ---                     | 18,8200                 |
| Carbonatos                               | mg/L  | < 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                 |
| Cinc                                     | mg/L  | 0,9492              | 1,5130                | 3,2610              | 2,9700              | 0,4720             | 1,4100              | ---                 | ---                  | ---                      | ---     | ---                     | 0,8092                  |
| Cloruros                                 | mg/L  | 43,4                | 54,5                  | 64,4                | 57,5                | 34,0               | 46,0                | ---                 | ---                  | ---                      | ---     | ---                     | 35,6                    |
| Cobalto                                  | mg/L  | < 0,0500            | < 0,0500              | < 0,0500            | < 0,0500            | < 0,0500           | < 0,0500            | ---                 | ---                  | ---                      | ---     | ---                     | < 0,0500                |
| Cobre                                    | µg/L  | ---                 | ---                   | ---                 | ---                 | ---                | ---                 | ---                 | ---                  | ---                      | ---     | ---                     | 425,800                 |
| Cobre                                    | mg/L  | 0,4582              | 0,7205                | 1,6170              | 1,5220              | 0,2717             | 0,7439              | ---                 | ---                  | ---                      | ---     | ---                     | ---                     |
| Color                                    | mg/L  | 27,6                | 161,0                 | 832,5               | 462,0               | 9,5                | 7,8                 | ---                 | ---                  | ---                      | ---     | ---                     | 25,7                    |

|                                                                                 |                                                |                                                    |                 |                        |
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|                                                                                 | <b>Fecha: 30-01-2017</b>                       | <b>Resultados de análisis por punto de control</b> |                 | <b>Página: 2</b>       |

|                                         |                                                                                       |                                                            |
|-----------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------|
| <b>Código:</b> GN00000047               | <b>Nombre del punto:</b> RIO COBICA - R. Cobica - Pte. Ctra. Puebla de Guzmán-Paymogo | <b>Cauce:</b> RIO COBICA                                   |
| <b>Código de la masa de agua:</b> 13352 | <b>Nombre de la masa de agua:</b> RIVERA COBICA                                       |                                                            |
| <b>Localidad:</b> Puebla de Guzmán      | <b>Provincia:</b> Huelva                                                              | <b>UTM X:</b> 653313 <b>UTM Y:</b> 4167776 <b>Huso:</b> 29 |

|                                       |       | ENERO<br>13-01-2016 | FEBRERO<br>02-02-2016 | MARZO<br>08-03-2016 | ABRIL<br>12-04-2016 | MAYO<br>10-05-2016 | JUNIO<br>07-06-2016 | JULIO<br>12-07-2016 | AGOSTO<br>03-08-2016 | SEPTIEMBRE<br>13-09-2016 | OCTUBRE | NOVIEMBRE<br>16-11-2016 | DICIEMBRE<br>21-12-2016 |
|---------------------------------------|-------|---------------------|-----------------------|---------------------|---------------------|--------------------|---------------------|---------------------|----------------------|--------------------------|---------|-------------------------|-------------------------|
| Conductividad a 20 °C                 | µS/cm | 540                 | 907                   | 1534                | 1515                | 341                | 822                 | ---                 | ---                  | ---                      | ---     | ---                     | 543                     |
| Cromo                                 | µg/L  | < 5,000             | < 5,000               | < 5,000             | < 5,000             | < 5,000            | ---                 | ---                 | ---                  | ---                      | ---     | ---                     | < 5,000                 |
| D.B.O. 5d                             | mg/L  | 1,3                 | 1,7                   | 0,9                 | 1,2                 | 0,8                | 1,0                 | ---                 | ---                  | ---                      | ---     | ---                     | 4,3                     |
| D.Q.O. 10min (Índice de Permanganato) | mg/L  | 3,5                 | 1,4                   | 1,9                 | 1,7                 | 7,3                | 2,3                 | ---                 | ---                  | ---                      | ---     | ---                     | 10,1                    |
| Dureza total                          | mg/L  | 111,2               | 155,6                 | 207,1               | 201,0               | 102,5              | 154,2               | ---                 | ---                  | ---                      | ---     | ---                     | 96,9                    |
| Estaño                                | mg/L  | < 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                |
| Fenoles                               | mg/L  | < 0,050             | < 0,050               | < 0,050             | < 0,050             | < 0,050            | < 0,050             | ---                 | ---                  | ---                      | ---     | ---                     | < 0,050                 |
| Fluoruros                             | mg/L  | 0,14                | 0,16                  | 0,12                | 0,12                | 0,13               | 0,22                | ---                 | ---                  | ---                      | ---     | ---                     | 0,16                    |
| Fosfatos                              | mg/L  | < 0,05              | < 0,05                | < 0,05              | 0,17                | < 0,05             | < 0,05              | ---                 | ---                  | ---                      | ---     | ---                     | < 0,05                  |
| Fósforo total                         | mg/L  | < 0,1000            | < 0,1000              | < 0,1000            | < 0,1000            | < 0,1000           | < 0,1000            | ---                 | ---                  | ---                      | ---     | ---                     | < 0,1000                |
| Hidróxidos                            | mg/L  | < 0,1               | < 0,1                 | < 0,1               | < 0,1               | < 0,1              | < 0,1               | ---                 | ---                  | ---                      | ---     | ---                     | < 0,1                   |
| Hierro                                | mg/L  | 11,2050             | 18,8350               | 88,5100             | 55,1800             | 5,5300             | 1,6520              | ---                 | ---                  | ---                      | ---     | ---                     | 21,9300                 |
| Magnesio                              | mg/L  | 14,7900             | 21,0100               | 28,4900             | 27,5100             | 13,4500            | 19,8900             | ---                 | ---                  | ---                      | ---     | ---                     | 12,1000                 |
| Manganeso                             | mg/L  | 1,0130              | 1,7700                | 4,0270              | 3,6770              | 0,5203             | 1,4040              | ---                 | ---                  | ---                      | ---     | ---                     | 0,7789                  |
| Mercurio                              | mg/L  | < 0,000050          | < 0,000050            | < 0,000050          | < 0,000050          | < 0,000050         | < 0,000050          | ---                 | ---                  | ---                      | ---     | ---                     | < 0,000050              |
| Níquel                                | µg/L  | ---                 | ---                   | ---                 | ---                 | ---                | ---                 | ---                 | ---                  | ---                      | ---     | ---                     | 112,100                 |
| Níquel                                | mg/L  | < 0,0500            | < 0,0500              | < 0,0500            | < 0,0500            | < 0,0500           | < 0,0500            | ---                 | ---                  | ---                      | ---     | ---                     | ---                     |
| Nitratos                              | mg/L  | 2,6                 | < 1,0                 | ---                 | ---                 | 1,5                | 1,1                 | ---                 | ---                  | ---                      | ---     | ---                     | 8,4                     |
| Oxígeno disuelto                      | mg/L  | 9,8                 | 10,7                  | 10,0                | 9,8                 | 8,8                | 6,5                 | ---                 | ---                  | ---                      | ---     | ---                     | 11,0                    |
| pH                                    | pH    | 3,5                 | 3,2                   | 2,9                 | 2,8                 | 5,9                | 3,3                 | ---                 | ---                  | ---                      | ---     | ---                     | 3,8                     |
| Plomo                                 | µg/L  | 6,153               | 5,776                 | 7,663               | 5,798               | 4,945              | ---                 | ---                 | ---                  | ---                      | ---     | ---                     | 7,675                   |
| Potasio                               | mg/L  | 2,4460              | 1,9910                | 1,9790              | 4,1090              | 2,8820             | 3,7940              | ---                 | ---                  | ---                      | ---     | ---                     | 2,5040                  |
| Selenio                               | µg/L  | 1,166               | 4,290                 | 1,002               | < 1,000             | 1,016              | ---                 | ---                 | ---                  | ---                      | ---     | ---                     | < 1,000                 |
| Sílice                                | mg/L  | 10,9800             | 12,9900               | 20,2700             | 21,7800             | 9,0200             | 27,7800             | ---                 | ---                  | ---                      | ---     | ---                     | 11,9900                 |
| Sodio                                 | mg/L  | 28,6700             | 35,5500               | 39,0800             | 39,5700             | 26,5200            | 37,0800             | ---                 | ---                  | ---                      | ---     | ---                     | 26,6500                 |
| Sólidos en Suspensión                 | mg/L  | < 10                | < 10                  | < 10                | < 10                | 24                 | < 10                | ---                 | ---                  | ---                      | ---     | ---                     | 17                      |
| Sulfatos                              | mg/L  | 167,0               | 306,7                 | 688,7               | 579,4               | 94,0               | 277,8               | ---                 | ---                  | ---                      | ---     | ---                     | 175,9                   |