piece 1, NC_000913, xylA_xylF+, config: linear, direction: +, begin: 3728759, end: 3729173

```
     *3728760  *        *3728770  *        *3728780  *        *3728790  *        *3728800  *        *3728810  *        *3728820  *        *3728830  *
5' gcgatcgagctggtcaaaataggcttgcatattgaactccataatcaggtaatgccgcggtgatggatgatgtcgtaata 3'
 -  ala - ile - glu - leu - val - lys - ile - gly - leu - his - ile - glu - leu - his - asn - gln - val - met - pro - arg - val - met - asp - asp - val - val - ile -
 -   -   arg - ser - ser - trp - ser - lys -  ●  -   -   -   -  -fMet - asn - ser - ile - ile - arg - val - met - pro - arg -  ●  -  -fMet - met - ser -  ●
     -   asp - arg - ala - gly - gln - asn - arg - leu - ala - tyr -  ●   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -
... ------------------------------------------------------] NC_000913.xylA                                                    ir xylA_xylF+
```

sd

... p10

{ - - - - - - - - - - - - - - - - - - } sd-(15)-ir 3728822 Gap 6.0 bits
| - - - - - - - - - - - - - - - - - - | sd-ir 3728822 xylA_xylF+ total 8.6 bits

p35   2.1 bits

{ - } p35-(25)-p10 3728836 Gap 4.0 bits
| - | p35-p10 3728836 total 4.4 bits

```
     *3728840  *        *3728850  *        *3728860  *        *3728870  *        *3728880  *        *3728890  *        *3728900  *        *3728910  *        *3728920
5' ttgggcactccctttcagttgctcaattagtttatttcacactgctattgagataattcacaagtgtgcgctcgctcgcaa 3'
 -  leu - gly - thr - pro - phe - gln - leu - leu - asn - tyr - val - ile - ser - his - cys - tyr -  ●   -   -   -   -   -   -  -fMet - cys - ala - arg - ser - gln -
 -   -   -   -   -   -   -   -   -  -fMet - leu - phe - his - thr - ala - ile - glu - ile - ile - his - lys - cys - ala - leu - ala - arg - lys -
 -   -   -   -   -   -   -   -   -  -fMet - arg -  ●   -   -   -   -   -  -fMet - arg - ser - leu - ala - lys -
```

p35   2.7 bits   [###> orf 23 codons   ... sd

... p10   6.3 bits   p10   4.3 bits

{ - } p35-(22)-p10 3728892 Gap 2.3 bits
| - | p35-p10 3728892 total 4.7 bits

```
              *        *3728930  *        *3728940  *        *3728950  *        *3728960  *        *3728970  *        *3728980  *        *3728990  *        *3729000
5' aataaaatggaatgatgaaactgggtaattcctcgaagagaaaaatgcaataagtacaattgcgcaacaaaagtaagatct 3'
 -  asn - lys - met - glu -  ●   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -
 -  ile - lys - trp - asn - asp - glu - thr - gly -  ●   -   -   -   -   -   -   -   -   -   -   -   -  ●  -   -   -   -
 -   -   -  -fMet - met - lys - leu - gly - asn - ser - ser - lys - arg - lys - met - gln -  ●   -   -  -fMet - arg - asn - lys - ser - lys - ile - ser -
... sd                          sd                         [###> orf 13 codons
                                                    ir xylA_xylF+                              ir xylA_xylF+
```

{ - - - - } sd-(5)-ir 3728935 Gap 5.4 bits   { - - - - } sd-(7)-ir 3728965 Gap 3.7 bits
| - - - - | sd-ir 3728935 xylA_xylF+ total 10.5 bits | - - - - | sd-ir 3728965 xylA_xylF+ total 9.8 bits

```
              *        *3729010  *        *3729020  *        *3729030  *        *3729040  *        *3729050  *        *3729060  *        *3729070  *        *3729080
5' cggtcataaatcaagaaataaaccaaaaatcgtaatcgaaagataaaaatctgtaattgtttttcccctttagttgctaa 3'
 -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -   -
 -  val - ile - asn - gln - glu - ile - asn - gln - lys - ser -  ●   -   -   -   -   -   -   -  -fMet - phe - ser - pro - val -  ●  -  -fMet - leu - lys -
```

p35   4.8 bits   ... p10

{ - } p35-(23)-p10 3729082 Gap 1.4 b
| - | p35-p10 3729082 total 7.2 bits

... p10

{ - } ... p35-(24)-p10 3729083 Gap
| - | ... p35-p10 3729083 total 4.3

```
         *      *3729090  *      *3729100  *      *3729110  *      *3729120  *      *3729130  *      *3729140  *      *3729150  *      *3729160
5' aaattggttacgtttatcgcggtgattgttacttattaaactgtcctctaactacagaaggccctacaccatgaaaataa 3'
   -     -fMet - val - thr - phe - ile - ala - val - ile - val - thr - tyr - ●  -  -   -   -   -   -   -   -   -   -   -   -   -   ●  -   -   ●  -
   -     -     -     -     -     -     -     -     -fMet - leu - leu - ile - lys - thr - val - leu - ●  -   -   -   -   -   -   -   -   -   -   -   -
         - ile - gly - tyr - val - tyr - arg - gly - asp - cys - tyr - leu - leu - lys - leu - ser - ser - asn - tyr - arg - arg - pro - tyr - thr - met - lys - ile - lys -
```

... p10 3.8 bits   p35 3.3 bits   p10 3.3 bits   sd   [------------------ ... NC_000913.xylF

{---} p35-(24)-p10 3729120 Gap 2.4 bits

                                                                                                ... ir

|---| p35-p10 3729120 total 4.2 bits   {-------------------} sd-(10)-ir 3729154 Gap 2.7 bits

... p10 1.9 bits |-------------------| sd-ir 3729154 xylA_xylF+ total 10.4 bits

... } p35-(24)-p10 3729083 Gap 2.4 bits
... | p35-p10 3729083 total 4.3 bits

```
         *      *3729170
5' agaacattct 3'
   -    -    -    -
         -asn - ile -
```

... -------------------- ... NC_000913.xylF

... ir xylA_xylF+