Cover Sheet for OwlsT2W; Montana Tech

The 56515 bp genome of Cluster F1 mycobacteriophage OwlsT2W was annotated by four undergraduate students and TA Jessica Andriolo (Gregory) during the spring semester of 2015. One hundred four protein coding genes were predicted by the class. Below, in 5’ to 3’ order are some notable changes from the auto-annotation.

* Original auto-annotated gene call 11 was deleted in favor of extending current gene 11.
* Original genes 14 and 15 are identified as G/T (now genes 13 and 14). Please check that these were entered correctly in the DNA master file.
* Original auto-annotation gene 15 start was extended 5’
* Original auto-annotated gene call 30 was deleted.
* Original auto-annotated gene call 35 was deleted.
* Reverse frame Gene 39 was added and original auto-annotated forward genes 41, 42, 43 were deleted.
* Original auto-annotated reverse frame gene call 49 was deleted.
* Original gene 71, now gene 66 had shorter (more 3’) start called. We chose earlier start.
* Original auto-annotate reverse frame gene call 77 was deleted.
* The original auto-annotated forward gene call 78 was deleted and a gene in different frame was called and removed a notable gap. This is new gene call 72.
* Gene 84 was added and not present on the original auto-annotation. We shortened original gene 89 (now gene 85) to accommodate gene 84.
* A small orf is present between (currently named) genes 94 and 95 but we did not select this to be a gene.
* Original auto-annotation gene 103 was deleted to extend original auto-annotated gene 104 longer in the 5’ end. It is now gene 99.
* Original auto-annotation genes 106 and 107 overlapped. We chose 107 to be the correct gene, and it is now gene 101.

Respectfully submitted,

The 2015 Montana Tech Mycobacteriophage Genome Annotation Corps