**Cover Sheet** for genome annotation of phage **Serendipitous**

**The following areas of the Serendipitous genome may need further attention:**

* **Genes 7 and 8:** These genes were closely investigated as they are the only reverse genes in a region of forward genes. Phamerator was informative as other B5 genomes also had these reverse genes. Gene 8 had terrible RBS scores, but it does have BLAST support with “final” genomes. Thus, we have left Genes 7 and 8 as auto-annotated.
* **Gene 76:** Poor BLAST results with a mix of 1:1 and 1:28. Looking carefully at the B5 genomes there was still a mix of choices. We chose that start at 61875 because it created the longest ORF and minimized the gap with gene 77.
* **Gene 92:** There are starts that would create a longer ORF and fill the gap with Gene 93 better, but we chose the start at 67406 because of the Z scores and because the other starts did not make our BLAST results better.
* **Gap between Genes 93 and 94:** There is a 121bp gap inbetween these genes. We believe the gap should remain as there was no coding potential evident nor any available ORFs between these genes.

Thank you!