Cover Sheet for Annotation of Naird

We identified functions for two ORFs that are not in the currently accepted functions list:

ORF 1 Phosphomannomutase Blastp NCBI, e=2e-10, *Paenibacillus* phage Vegas gp80

This protein is found in some *Mycobacterium* species but the function had not previously been identified.

ORF 48 Replisome organizer and helicase loader/inhibitor, HHPred, e=2e-08, p=98.74, *Bacillus* phage SPP1

Interpreting the Starterator reports for ORFs 21, 26, 30, 32, 33, 34, 39, and 55 was challenging because there are only two annotated Cluster T phages (Bernal13 and RonRayGun). These ORFs are ones in which the called start did not agree in Bernal13 and RonRayGun, and annotated phams from other Clusters (if present) were not informative because the most commonly called start was not present in the Cluster T phams.

A programmed translational frame shift was called in the two ORFs (15 and 16) upstream of the tapemeasure protein. The annotation of the programmed translational frame shift in Bernal13 was used to guide our annotation.

The large 250bp gap between ORFs 56 and 57 was carefully checked for possible genes that were annotated in other Cluster T phages. No ORFs were possible in this gap in our annotation.