Lehigh University has investigated and annotated Mycobacteriophage Banjo. We have deleted 5 genes: gp3, gp10, gp45, gp50, gp81. All gaps have been investigated and are valid. The gap between gps10-11 has a gene product in other B1 phages but is lacking sequence homology in this region in Banjo. Additionally there are no gene products present in this region. The gap between gps64-65 is also valid, while some B1 phages call a gene in this gap, there again divergence in sequence homology and this region matches mycobacteriophage Vista, with a large gap in this region.

We have annotated gp9 as a portal protein, however numerous phamerator maps call it the capsid morphogenesis protein.

Some gene products with putative functions that should be investigated further, these functions were not called but should be considered. Gp44 has strong HHpred data that is XIS, no other B1 phages have this function called. Gp50 has strong HHpred data that is may be an exonuclease. Gp66 has strong HHpred data for Plasmid PRN1, complete sequence; plasmid COPY control protein, ribbon helix helix protein, DNA binding protein. gp 72 has strong HHpred data for an homing endonuclease. The functions were not called based on previous BLAST and phamerator data for B1 phages. We suggest these gene functions be called upon the QC team agreement.