Distinguishing missing sequence using alignments and the sequences of the contigs.

Alignment blocks

human sequence H   **j**   **k**

other sequence   S   a   b

Sequences of S in contigs

Case 1: Single contig, deletion relative to H

     Cntg 1:   a b   Human aligns to S in j,k? NO

Case 2: Separate contigs, bounded by a and b   Human aligns to S in j,k? Unknown

     Cntg 1:   a

     Cntg 2:   b

Case 3: a or b is internal   Human aligns to S in j,k? NO

     Cntg 1:   a

     Cntg 2:   b

Case 4: Poor or missing sequence

     Cntg 1:   a NNNNNNNb   Human aligns to S in j,k? Unknown