# COVID-19 subject 161

2021-01-10

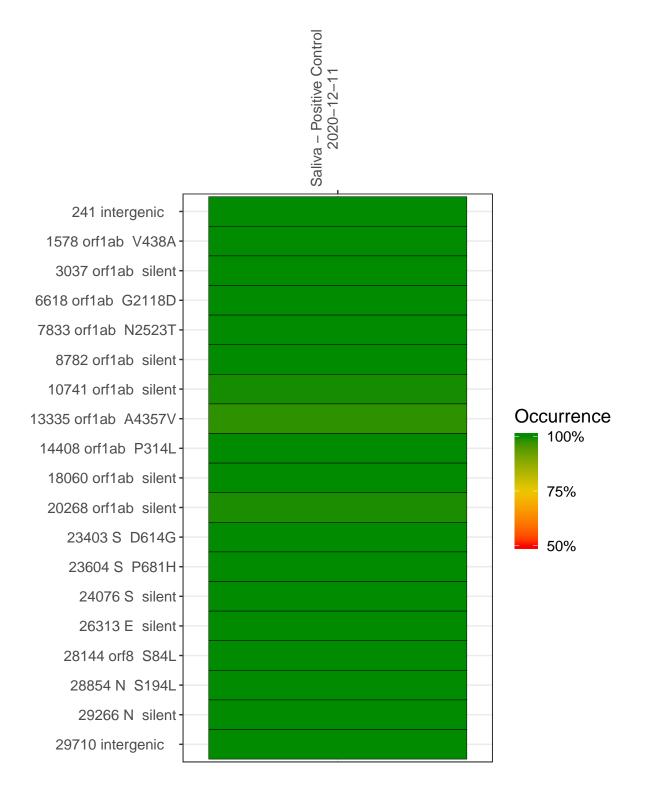
The table below provides a summary of subject samples for which sequencing data is available. The experiments column shows the number of sequencing experiments performed for each specimen. Experiment specific analyses are shown at the end of this report. The code base for this analysis can be found (here).

Table 1. Sample summary.

Experiment	Туре	Input genomes	Sample type	Sample date	Largest contig (KD)	Reference read coverage	Reference read coverage (>= 5 reads)
VSP0543-1	single experiment	NA	Saliva - Positive Control	2020-12-11	29.81	99.8%	99.3%

#### Variants shared across samples

The heat map below shows how variants (reference genome USA-WA1-2020) are shared across subject samples where the percent variance is colored. Variants are called if a variant position is covered by 5 for more reads, the alternative base is found in > 50% of read pairs and the variant yields a PHRED score > 20. Gray tiles denote positions where the variant was not the major variant or no variants were found. The relative base compositions of each experiment used to calculate tiles are shown in the following plot where the total number of position reads are shown atop of each plot.



### Saliva – Positive Control 2020–12–11

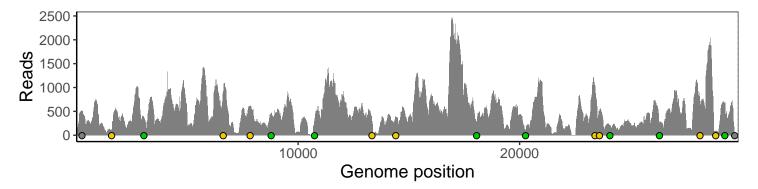
241 intergenic	493
1578 orf1ab V438A	72
3037 orf1ab silent	357
6618 orf1ab G2118D	881
7833 orf1ab N2523T	621
8782 orf1ab silent	461
10741 orf1ab silent	312
13335 orf1ab A4357V	299
14408 orf1ab P314L	369
18060 orf1ab silent	259
20268 orf1ab silent	112
23403 S D614G	1046
23604 S P681H	490
24076 S silent	186
26313 E silent	248
28144 orf8 S84L	635
28854 N S194L	93
29266 N silent	664
29710 intergenic	13
	VSP0543-1



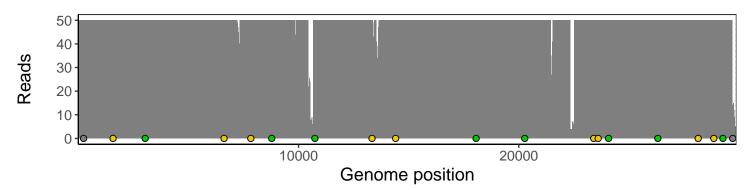
## Analyses of individual experiments and composite results.

#### $VSP0543-1 \mid 2020-12-11 \mid Saliva - Positive\ Control \mid 161 \mid genomes \mid single\ experiment$

The plot below shows the number of reads covering each nucleotide position in the reference genome. Variants are shown as colored dots along the bottom of the plot and are color coded according by variant types: gray - transgenic, green - silent, gold - missense, red - nonsense, black - indel.



Excerpt from plot above focusing on reads coverage from 0 to 50 NT.



The longest five assembled contigs are shown below colored by their edit distance to the reference genome.

