

**Assay Report**

**Michigan State University - Chicken Assay**

**Work to be completed by AgriPlex Genomics:**

1. Assay of 131 SNP and indel targets and sequence 6 – 50 bp regions in the 188 samples received from the Dr. Cheng’s laboratory at Michigan State University and provide genotyping calls for each target/sample as well as raw sequencing data for the sequenced regions.
2. Assay was completed using the PlexSeqTM method and analyzed using AgriPlex Genomics’ analysis software, PlexCallTM.

**Assay Results:**

1. Results of this assay are presented in the accompanying Excel spreadsheet. Genotypes on the first worksheet, QC results on the second and a list of the failed SNPs on the third.
2. Sample DNA failure rate (defined as greater than 33% SNP’s failed per sample) was 0.5% (1/188 of total samples assayed).
3. During analysis, it was noted that 30 indel markers showed a consistent number of genuine reads for the variant allele in most samples, a phenomenon that was not observed for any of the SNP markers and the rest of the indel markers. The two sets of results are presented as two different reports.

**First Report – SNPs and Indels**

1. 0/101 SNPs and indels failed to amplify a target, resulting in a 100% success rate.
2. 47/101 SNPs and indels had 0% failures.
3. 50/101 SNPs and indels had between 1% and 5% failures.
4. 4/101 SNPs and indels had above 5% failures.
5. Average failure rate of 18,887 genotypes assayed was 1.02%.

**Second Report – Remaining Indels with consistent reads in the minor allele.**

1. 0/30 indels failed to amplify a target, resulting in a 100% success rate.
2. 9/30 indels had 0% failures.
3. 18/30 indels had between 1% and 5% failures.
4. 3/30 indels had above 5% failures.
5. Average failure rate of 5,610 genotypes assayed was 1.76%.