The Core Genotyping Facility has instituted standardized QC processes for review of sample requirements prior to the start of genotyping work (Pre-genotyping QC) and review of data quality at the conclusion of the project (Post-genotyping QC). Samples that fail to be included in the genotyping process and samples that fail to produce reliable data will have a failure reason assigned. These reasons may be rolled up into a report status description for ease of final data reporting and data delivery. Below is a tabular view of these failure reasons along with additional details. Please forward any questions to Belynda Hicks, QC/QA Manager at hicksbel@mail.nih.gov.

Priority	Failure Reason	Report Status
1	Not Received	Not Received
2	Previously Genotyped	Not Required
3	PI Exclude	PI Request
4	Fail CGF QC	Fail CGF QC
5	Contaminated	Sample Contamination
6	Fail Yield	Insufficient DNA
7	Fail Concentration	Insufficient DNA
8	Duplicate Discordance	QC Failure
9	Profiling Discordance	QC Failure
10	Gender Discordance	QC Failure
11	Matched Pair Failure	Not Required
12	Redundant nonQC	Not Required
13	Redundant QC	Not Required
14	Partial Plate	Partial Plate
15	Sample Performance	Sample Performance
16	Assay Performance	Assay Performance
17	Other	

Priority: If sample fails for multiple reasons (i.e. sample has low concentration and also is redundant) priority determines which reason will be reported; all exclusion reasons will be recorded internally.

Failure Reason: Single reason why sample did not produce genotype data; typically a detailed reason for internal tracking.

Report Status: Higher level failure reason for final QC report; details on specifics may be included in a sample.def or a more detailed QC discussion. Investigators can expect to see the following status reasons for failed samples in their sample.def report. Failure reason of "other" will require generation of notes on QC summary report.

Assay Performance: SNP failed validation or produced low completion rate across entire sample set

Fail CGF QC: Sample failed initial CGF qualification requirements (50 ul @ 25 ng/ul)

Insufficient DNA: Sample failed qualification for this project; this failure reason is platform dependant and project specific

Not Received: Sample vial present in electronic manifest but not received at CGF

Not Required: Sample not required for study completion; possible reasons include genotyping already completed in another project (as samples are added to projects by receipts as opposed to individual samples), sample is redundant and not required for QC purposes, or sample is part of a matched pair where the partner sample has failed to qualify. PIs will be notified of these exclusions and may review prior to start of genotyping.

Partial Plate: Sample excluded due to physical limitation of assay setup

PI Request: Sample excluded at PI's request

QC Failure: Sample excluded due to discordance issues noted during pre or post genotyping QC. Details of these discordances may be available via the QC reports.

Sample Contamination: Sample excluded due to presence of multiple DNA species observed in profiling assay

Sample Performance: Poor performance of sample during genotyping process not due to a systemic assay issue.