

RAPID RUN REVIEW UTILITY README

TABLE OF CONTENTS

OVERVIEW
INSTALLATION
RUNNING THE UTILITY
REVIEWING IMPACTED RUNS
APPENDIX
LEGAL STATEMENTS
DISCLAIMER

OVERVIEW

This Rapid Run Review Utility is used to search RapidHIT™ 200 and RapidHIT™ ID runs to identify runs or lanes that may have included incorrect ladder selection or allelic ladder binning and should be reviewed. The new RapidHIT 200 software v2.3.15 has been updated with a modified GFE Panel and a more stringent method for checking ladders to resolve this issue for future runs. See RapidHIT 200 v2.3.14 and v2.3.15 release notes for more details on these changes. The new RapidHIT ID software v1.3.1 also contains a more stringent method for checking ladders. See RapidHIT ID v1.3.1 release notes for more details on this change.

The Utility provides the following features:

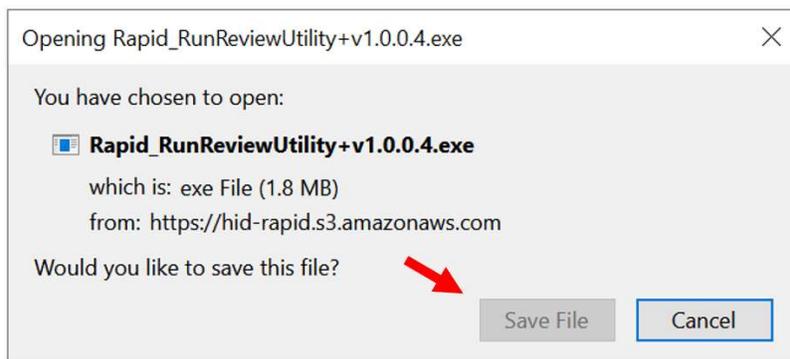
- * Easy to install having a simple one-click installer downloadable.
- * A simple means of reviewing runs by browsing to a folder to start the search.
- * List of impacted runs / lanes that we recommend be reviewed.
- * Provides an easy way to launch GeneMarker® HID to properly review the run.
- * Provides a way to print the list of impacted runs / lanes.

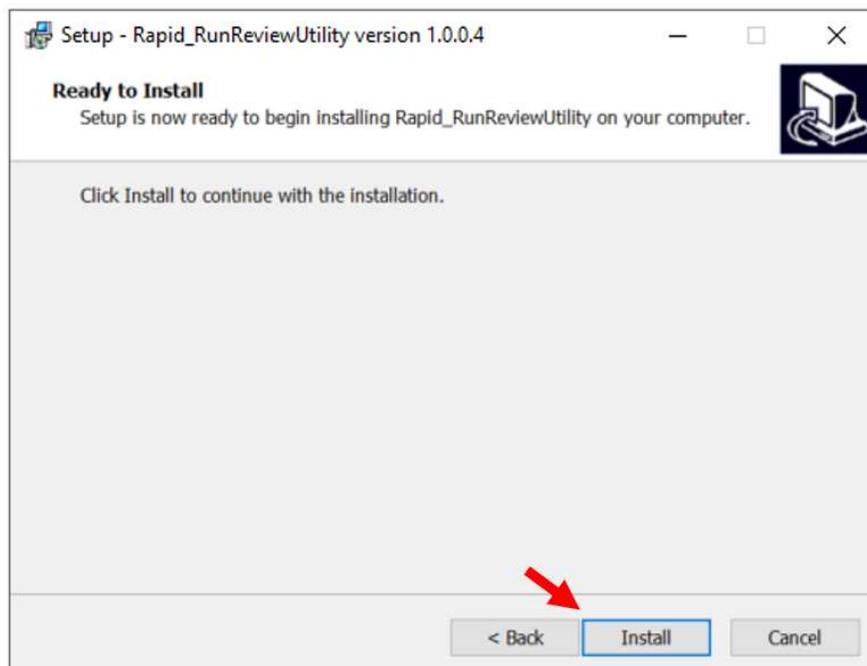
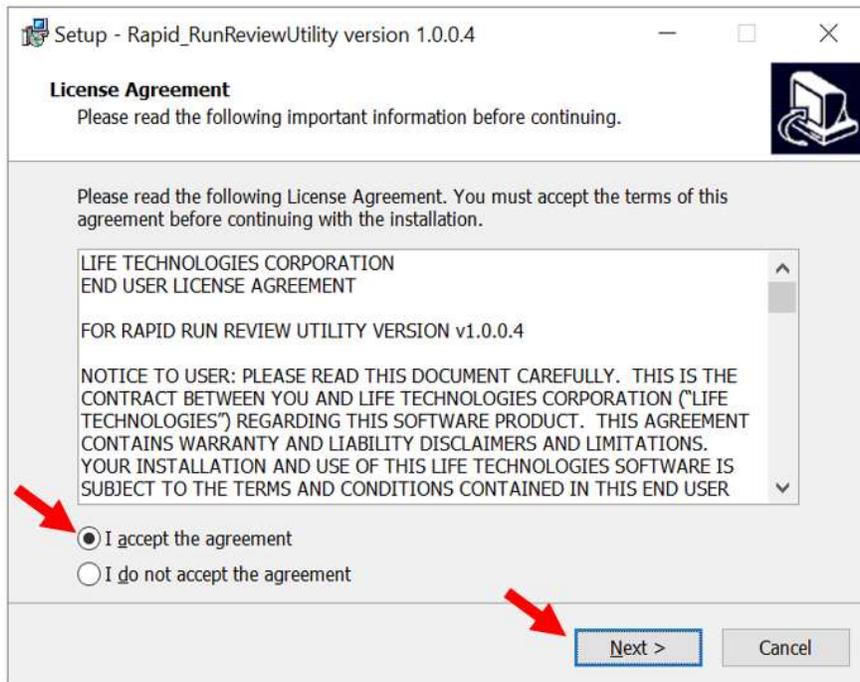
The Utility is intended to be installed on a computer / laptop where the runs are stored, not the instrument. It is recommended that the computer contain either the RapidLINK software with GeneMarker® HID or a standalone copy of GeneMarker® HID software to enable run review directly from the Utility.

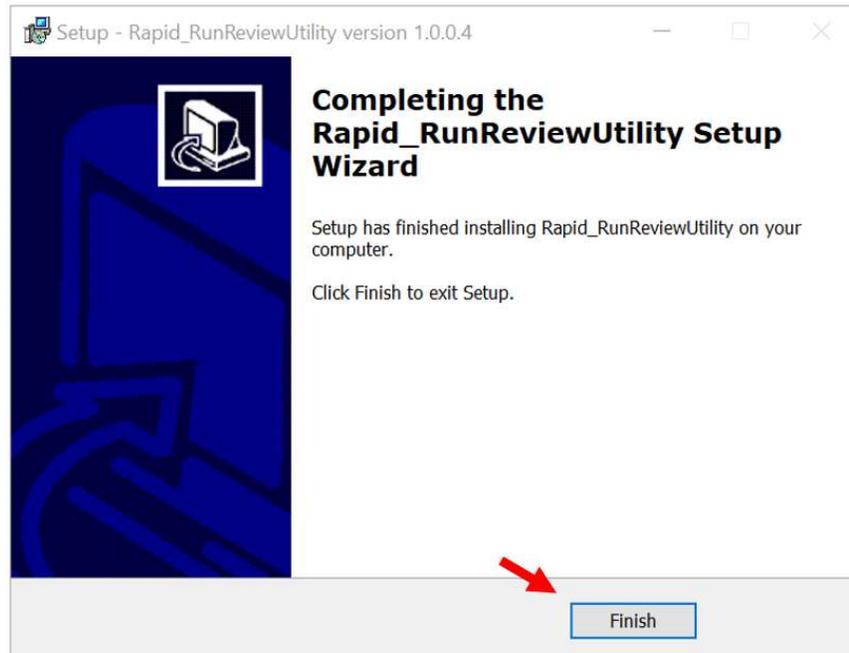
INSTALLATION

1. Download the installer and click 'Save File'.

2. Navigate to the downloaded executable file 'Rapid RunReviewUtility v1.0.0.4.exe' and launch the application.
3. Review and accept the license agreement, then click 'Next'.
4. Select 'Install' to install the application on your computer.
5. After a short period of time the installation should be complete. Click 'Finish' to complete the installation process.

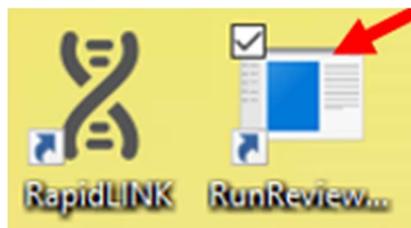


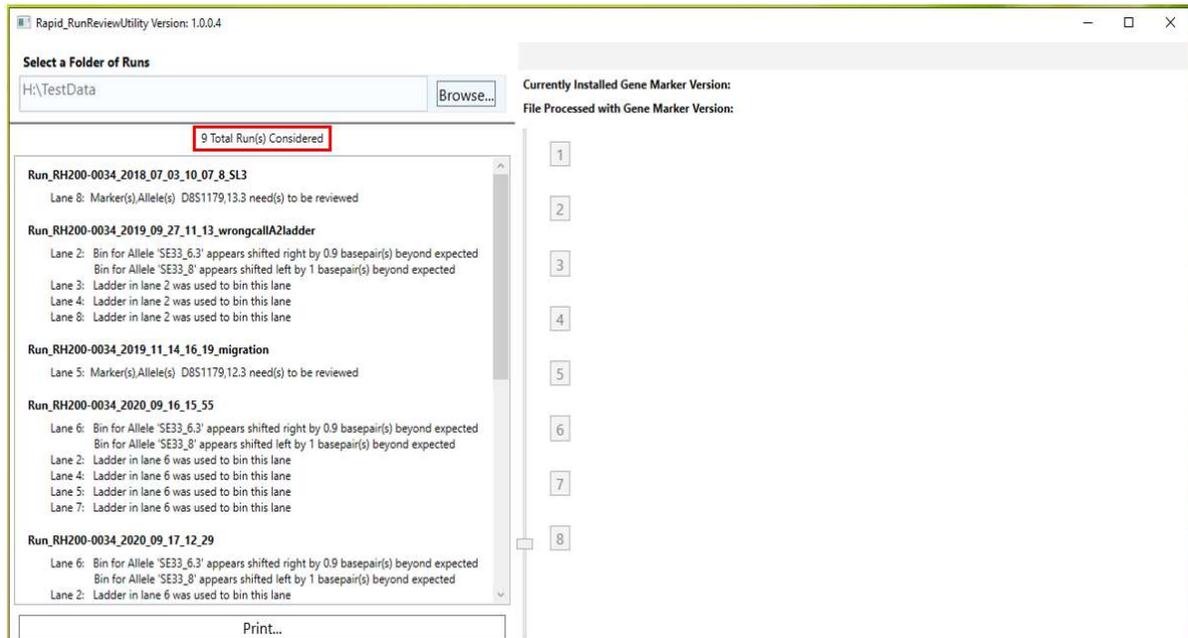
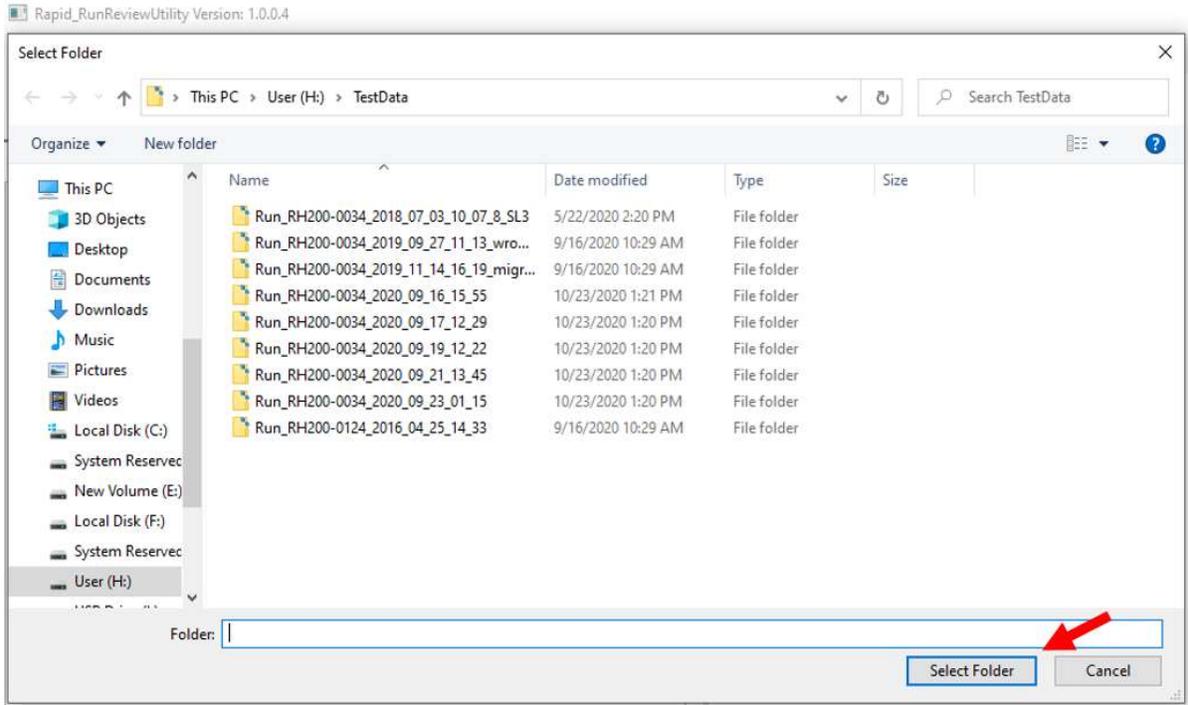




RUNNING THE UTILITY

- * Double click the desktop icon.
- * Click 'Browse...' and browse to a location containing the runs and click 'Select folder'.
- * The software will search through all folders and all subfolders starting at the top level with the selected folder.





Note: Depending on the number of runs or if the folder is remote, the search can take several minutes. Once the search is completed the number of runs considered will be displayed in the left window.

REVIEWING IMPACTED RUNS

- * Each item on the left side of the screen references a run or a lane found.
- * Only the impacted runs are displayed. A description is included referencing the reason the run was identified by the utility as being impacted.
- * Clicking on a run will display the electropherogram (preview available for RapidHIT 200 data only, RHID data must be viewed in GeneMarker® HID).
- * Clicking the run name inside the gray box in the top right of the utility will launch GeneMarker® HID. Please note that you must have the GeneMarker® HID application installed on the computer used to review the data for this button to be functional.
- * The Print button at the bottom will print the list using the default printer. The button can be used to print to a pdf file for auditing purposes.

Rapid_RunReviewUtility Version: 1.0.0.4

Select a Folder of Runs
H:\TestData [Browse...]

9 Total Run(s) Considered

Run_RH200-0034_2018_07_03_10_07_8_SL3
Lane 8: Marker(s).Allele(s) D8S1179;13.3 need(s) to be reviewed

Run_RH200-0034_2019_09_27_11_13_wrongcallA2ladder
Lane 2: Bin for Allele 'SE33_63' appears shifted right by 0.9 basepair(s) beyond expected
Bin for Allele 'SE33_8' appears shifted left by 1 basepair(s) beyond expected
Lane 3: Ladder in lane 2 was used to bin this lane
Lane 4: Ladder in lane 2 was used to bin this lane
Lane 8: Ladder in lane 2 was used to bin this lane

Run_RH200-0034_2019_11_14_16_19_migration
Lane 5: Marker(s).Allele(s) D8S1179;12.3 need(s) to be reviewed

Run_RH200-0034_2020_09_16_15_55
Lane 6: Bin for Allele 'SE33_63' appears shifted right by 0.9 basepair(s) beyond expected
Bin for Allele 'SE33_8' appears shifted left by 1 basepair(s) beyond expected
Lane 2: Ladder in lane 6 was used to bin this lane
Lane 4: Ladder in lane 6 was used to bin this lane
Lane 5: Ladder in lane 6 was used to bin this lane
Lane 7: Ladder in lane 6 was used to bin this lane

Run_RH200-0034_2020_09_17_12_29
Lane 6: Bin for Allele 'SE33_63' appears shifted right by 0.9 basepair(s) beyond expected
Bin for Allele 'SE33_8' appears shifted left by 1 basepair(s) beyond expected
Lane 2: Ladder in lane 6 was used to bin this lane

[Print...]

Run_RH200-0034_2018_07_03_10_07_8_SL3

Currently Installed Gene Marker Version: 2.9.5
File Processed with Gene Marker Version: 2.7.3

Trace_A8_8_SL3.fsa ---RefLadder:X-Ladder-Run_RH200-0109_2014_10_21_15_24-2.fsa

1 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500
D3S1358 vWA D16S539 CSF1PO TPOX
0.81 0.77 0.88 0.90 0.97

2 3,000 2,000 1,000 0

3 17 15 9 13 11 8 11

4 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500
D8S1179 D21S11 D18S51 DYS391
0.78 0.80 0.96

5 3,000 2,000 1,000 0

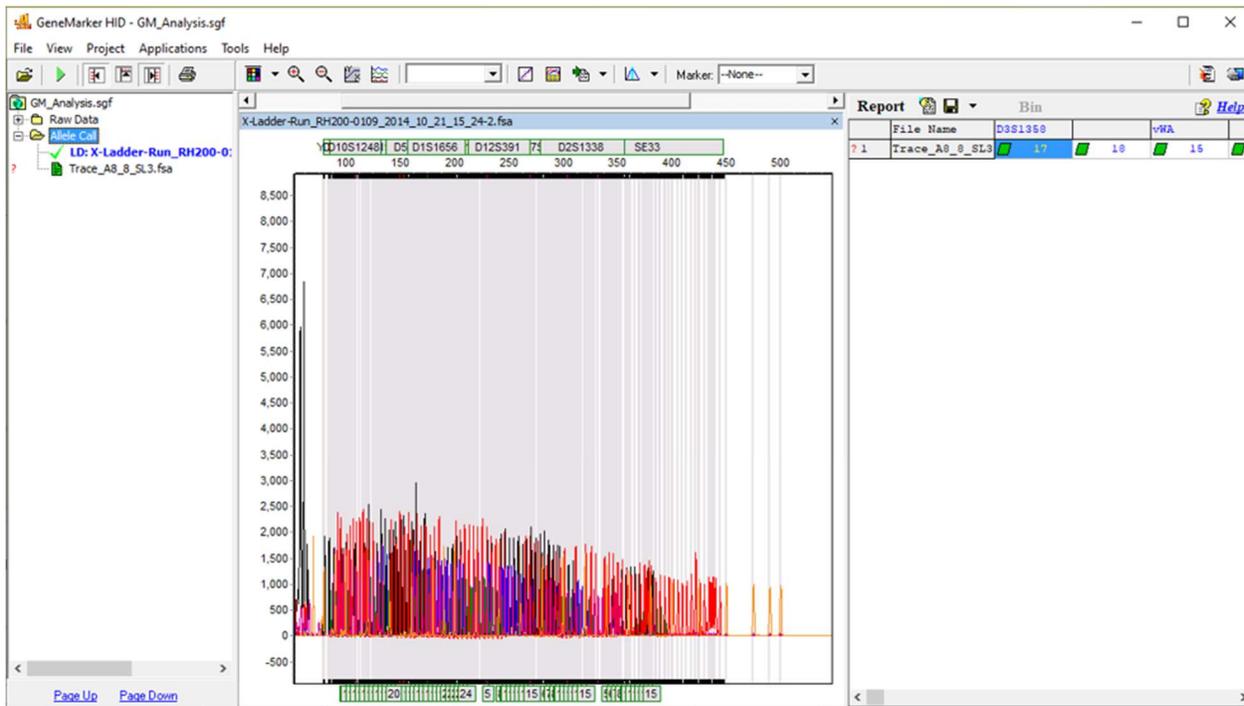
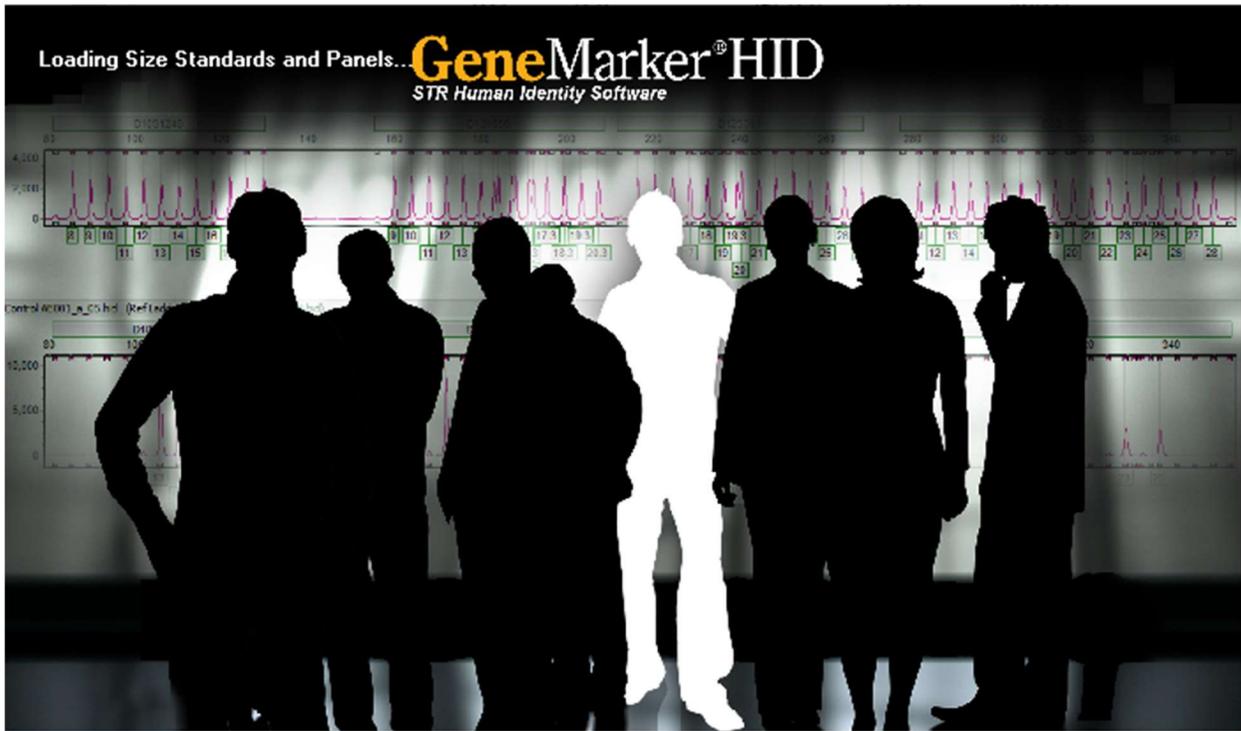
6 X 13.3 27 31 13 16

7 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420 440 460 480 500
D2S441 D19S433 TH01 FGA
0.82 0.83 0.94

8 4,000 2,000 0

14 14 8 10 21

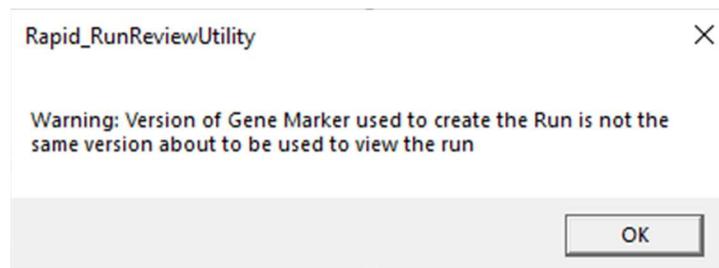
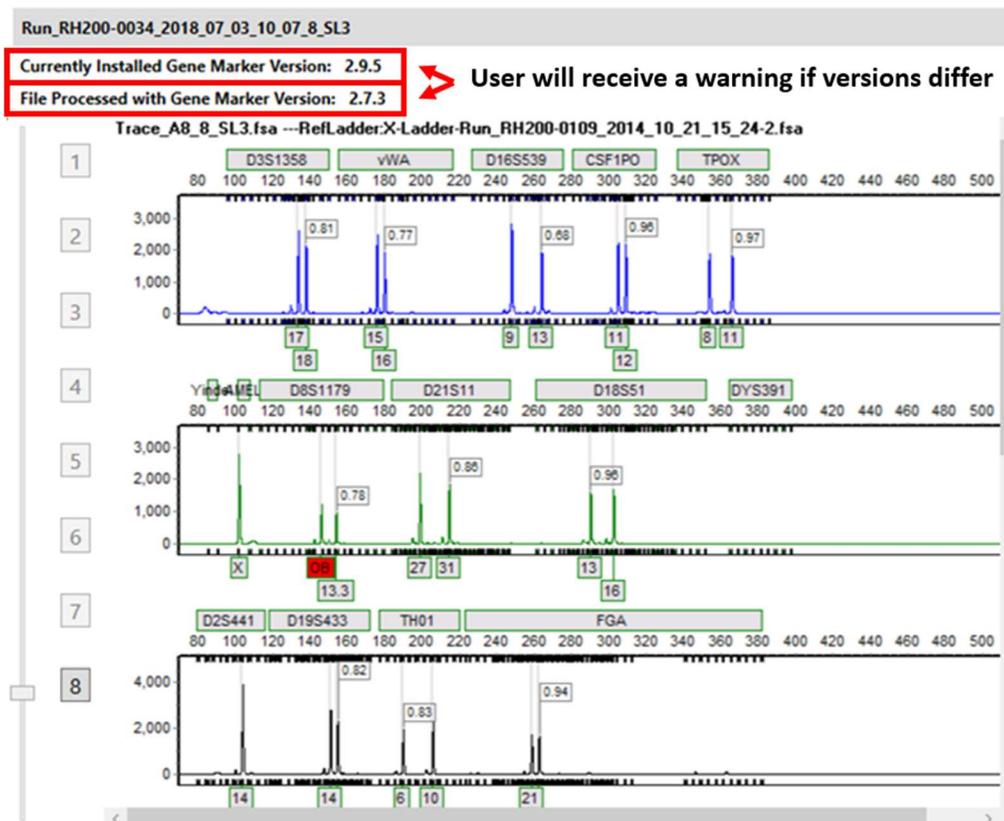
Click to launch GeneMarker® HID



APPENDIX

Note: The GeneMarker® HID version used to generate the allele calls may differ from the version used to view the run in the utility.

- * Two versions of GeneMarker® HID are displayed on the main screen. One shows the version of the software used to generate the allele calls and the other is the version used to view the run summary.
- * When invoking GeneMarker® HID, if the generating version does not match the viewing version then the user will be warned.



Note: The Rapid Run Review Utility only considers run folders that contain the following three elements:

1. 'REQUIRES ANALYST REVIEW' folder containing 'GM_Analysis_PeakTable.txt' file and associated Trace (.fsa) files
2. 'SGPanel_*.xml' file
3. 'GM_Analysis.sgf' file

If you find that the 'Total Run(s) Considered' doesn't match the number of sample runs in the folder, please check to confirm these three files/folders are present and run again.

LEGAL STATEMENTS

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