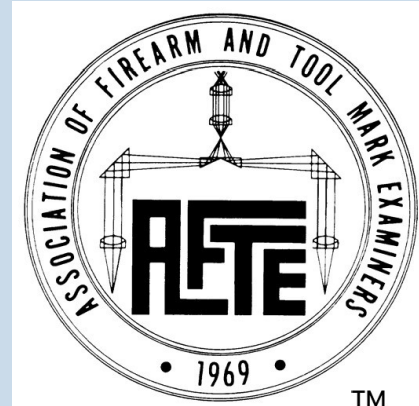


Introduction: Distance Determination

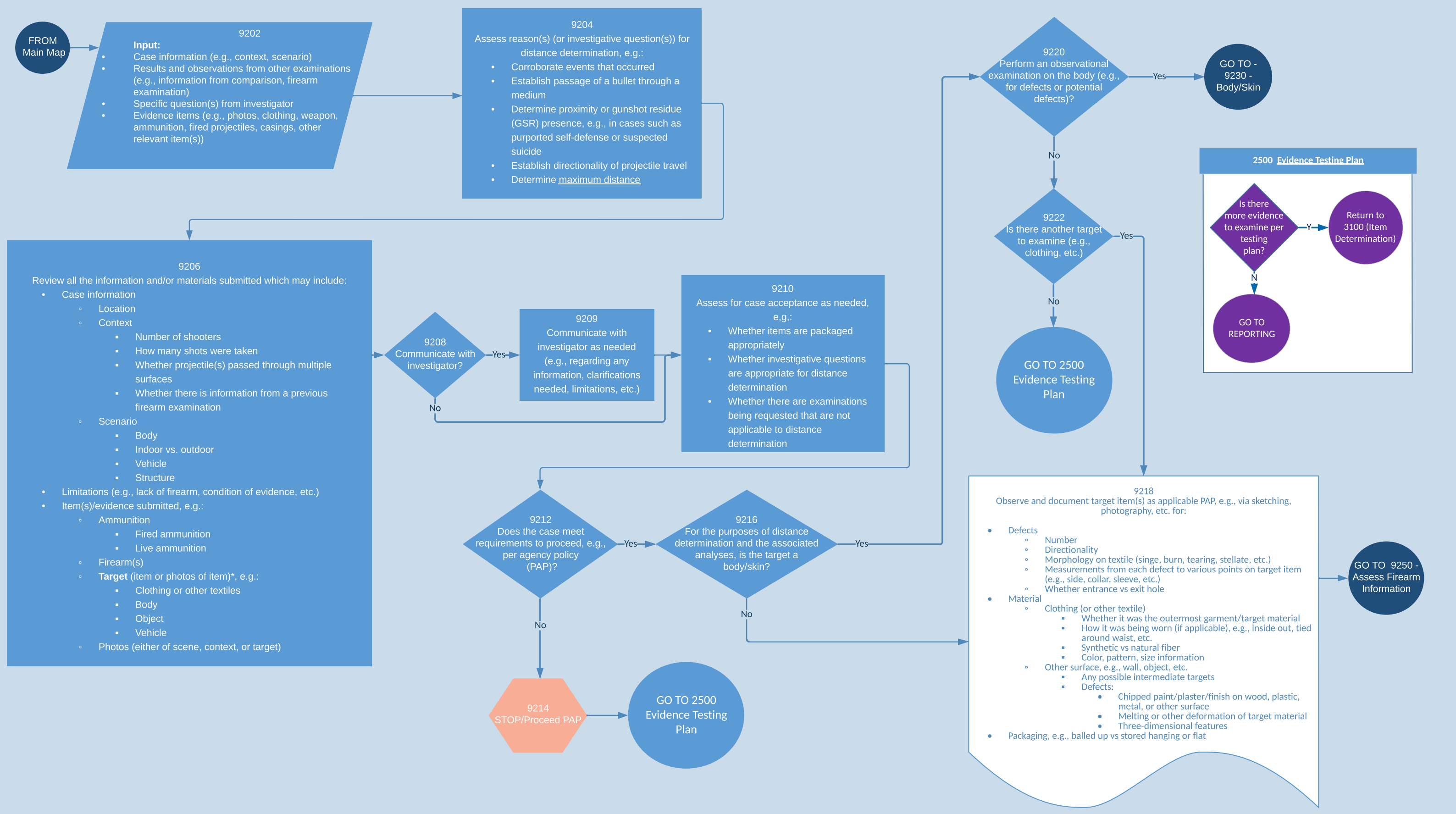
The National Institute of Standards and Technology (NIST) facilitated the development of the initial Firearms Process Map ([which can be accessed via NIST and OSAC process mapping websites](#)) through a collaboration between the NIST Forensic Science Research Program and the NIST administered Organization of Scientific Area Committees (OSAC) for Forensic Sciences (specifically OSAC's Firearms and Toolmarks Subcommittee) in partnership with the Association of Firearm and Tool Mark Examiners (AFTE).

The scope of the initial Firearms Process map was limited to core processes within the discipline of firearm and toolmark examination such as the examination of firearms and the microscopic comparison of fired ammunition components. Several topics were omitted from the map including individual characteristic databases, toolmark examination, fracture matching and distance determination.

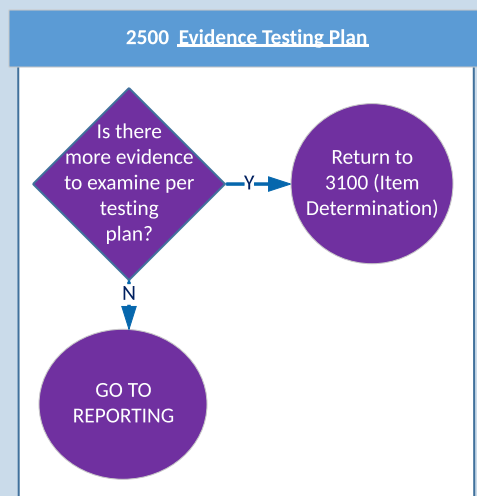
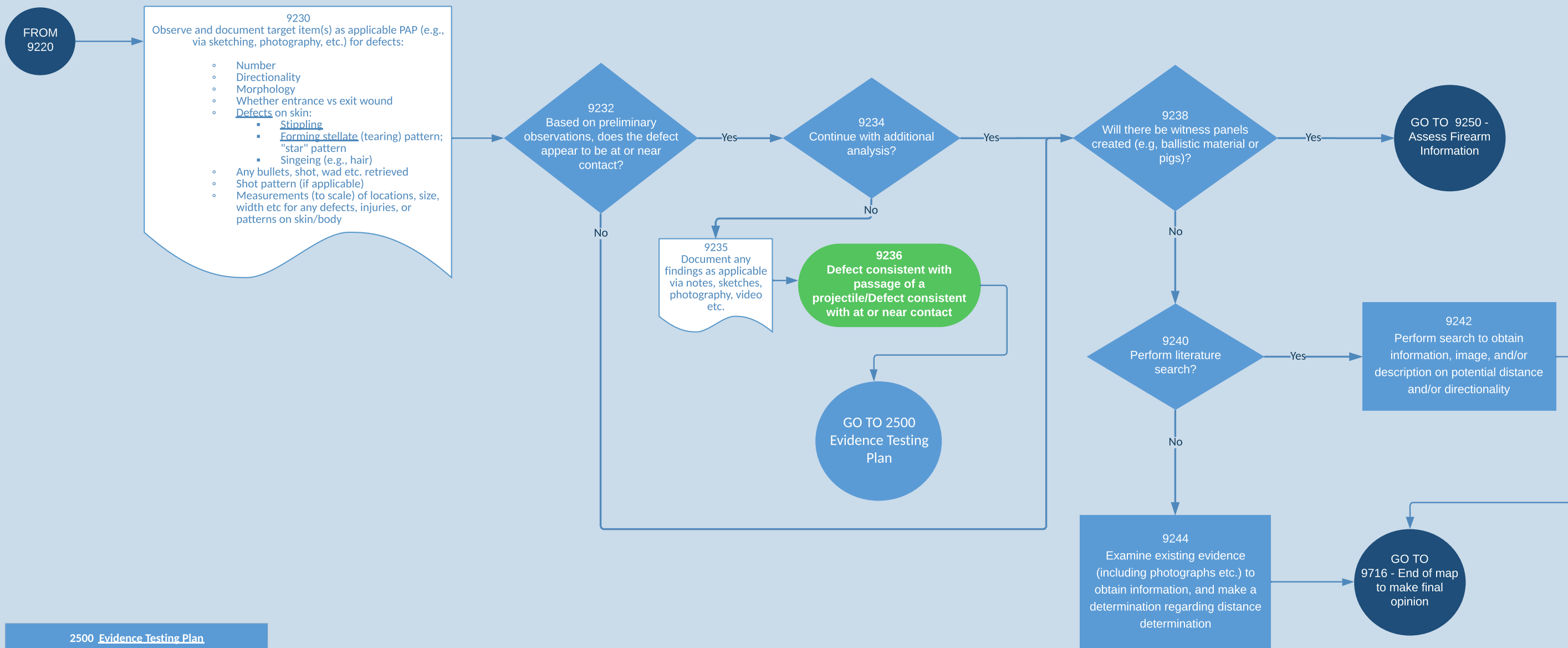
Some of these topics, however, such as this Distance Determination process map were subsequently addressed by the process mapping team through additional efforts sponsored by AFTE, and are published and referenced on the NIST process mapping Website.



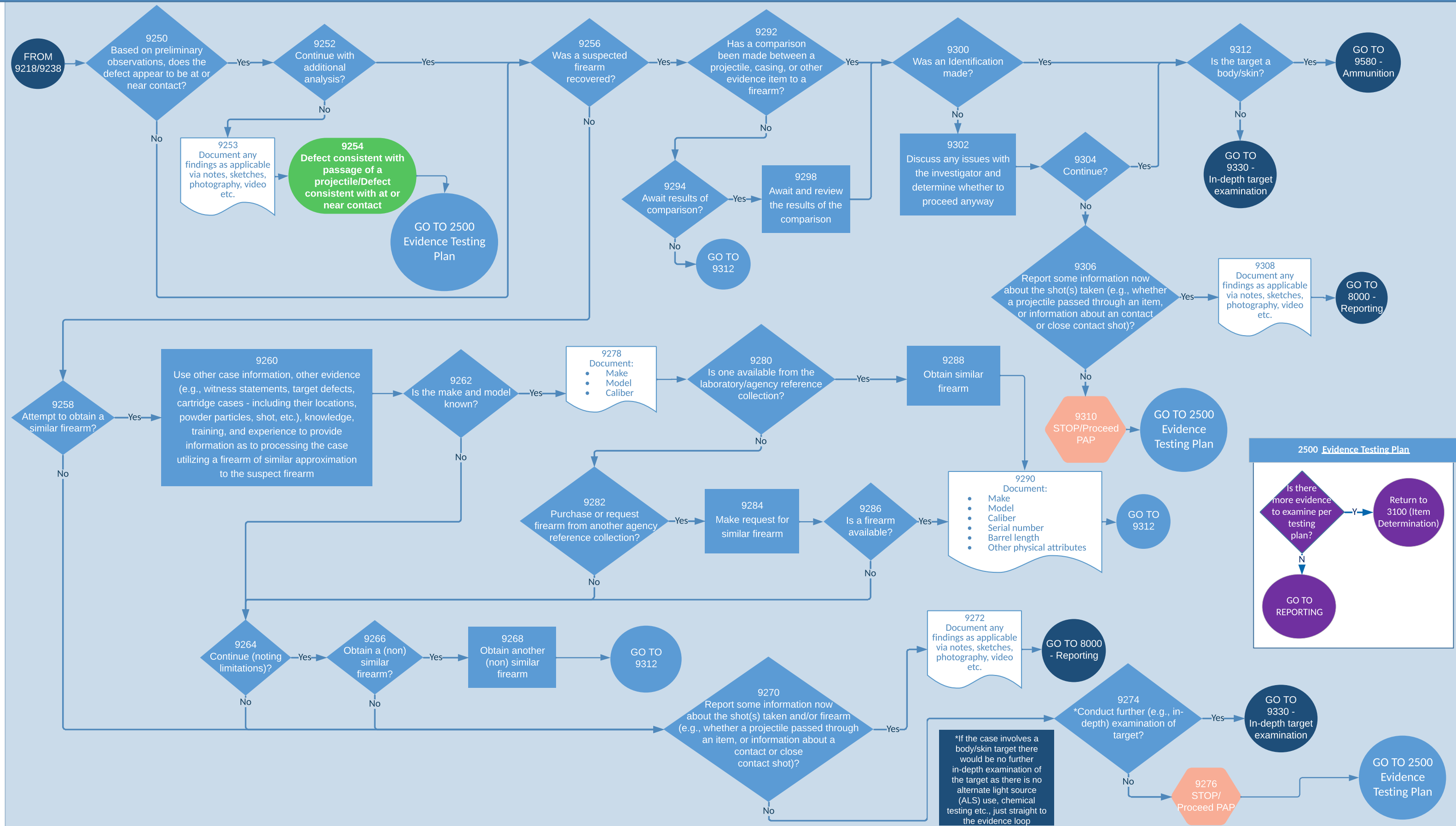
9200 - Distance Determination: Case Assessment and Preliminary Target Examination



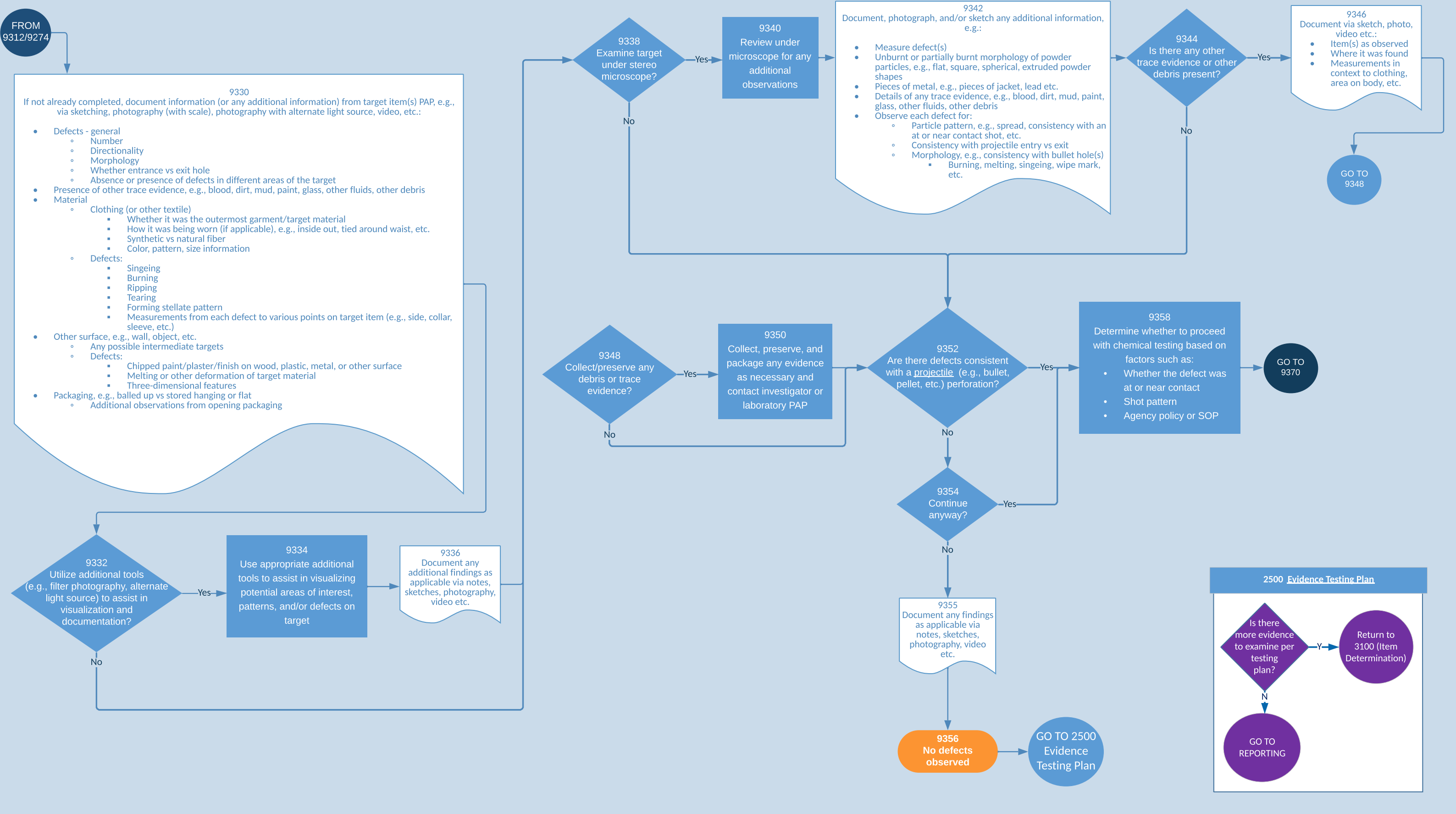
9230 - Distance Determination: Case Assessment and Target Examination - Body/Skin



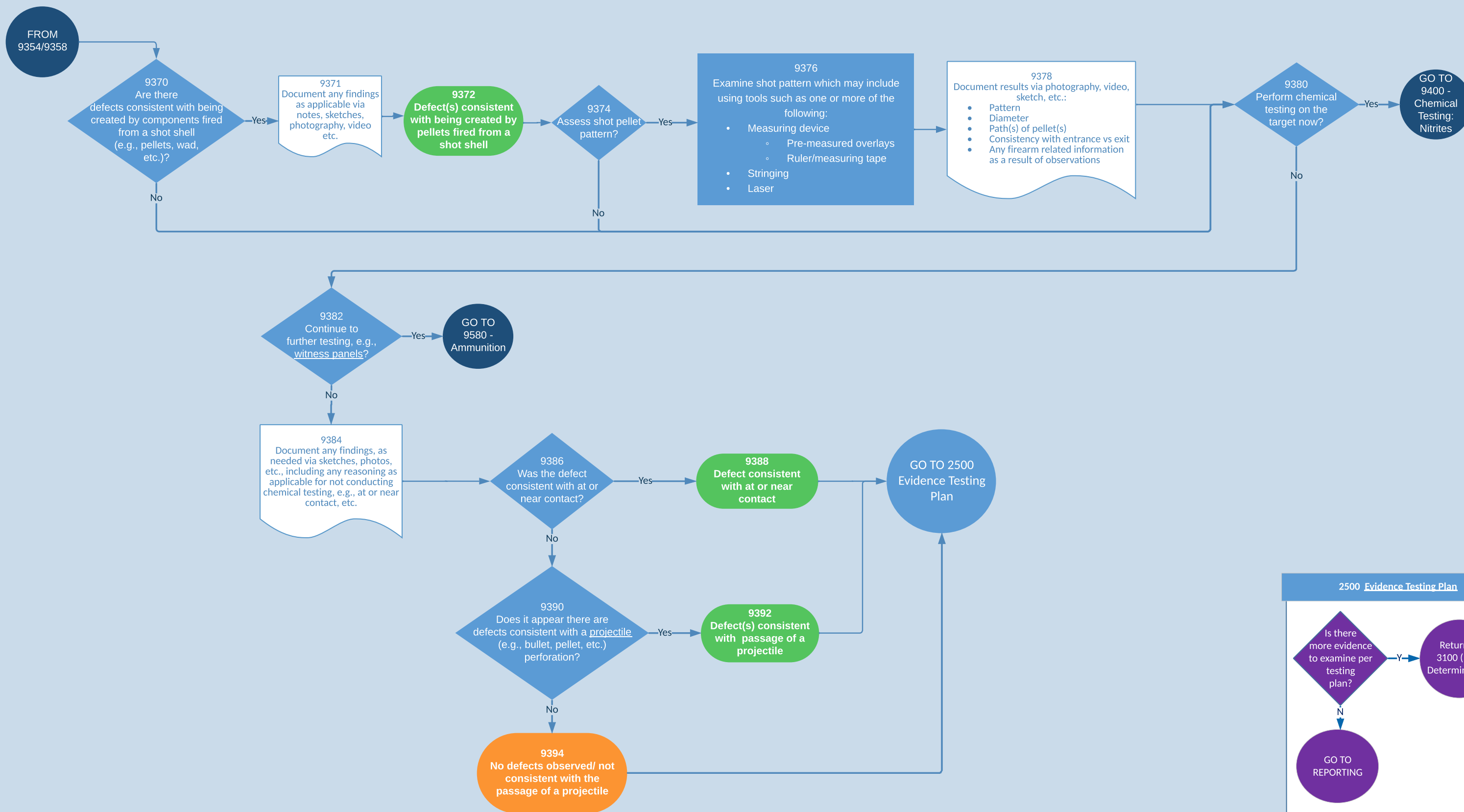
9250 - Distance Determination: Assess Firearm Related Information



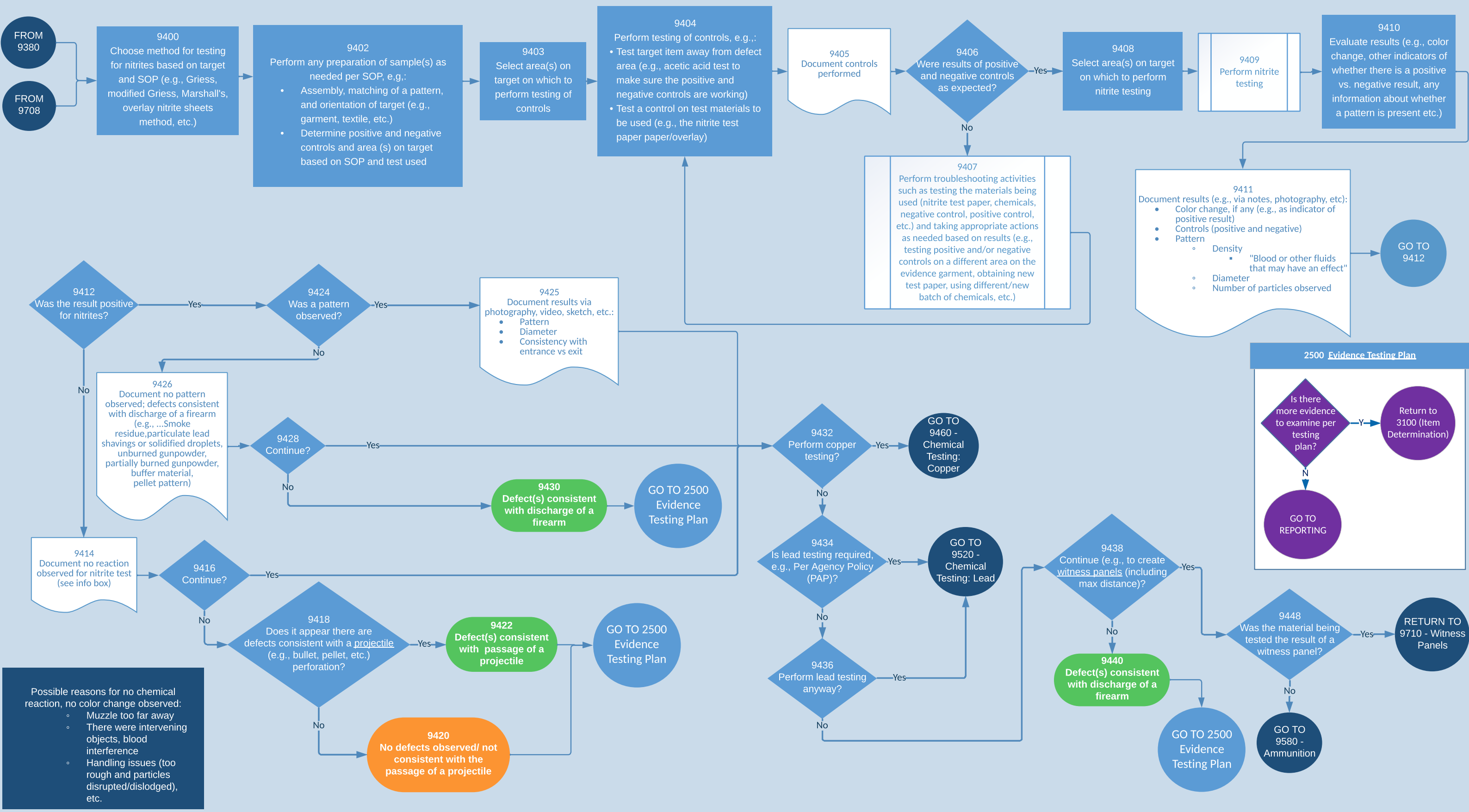
9330 - Distance Determination: In-depth Target Examination



9370 - Distance Determination: Examine for Shot Pattern



9400 - Distance Determination: Chemical Testing - Nitrites



2500 Evidence Testing Plan

Is there more evidence to examine per testing plan?

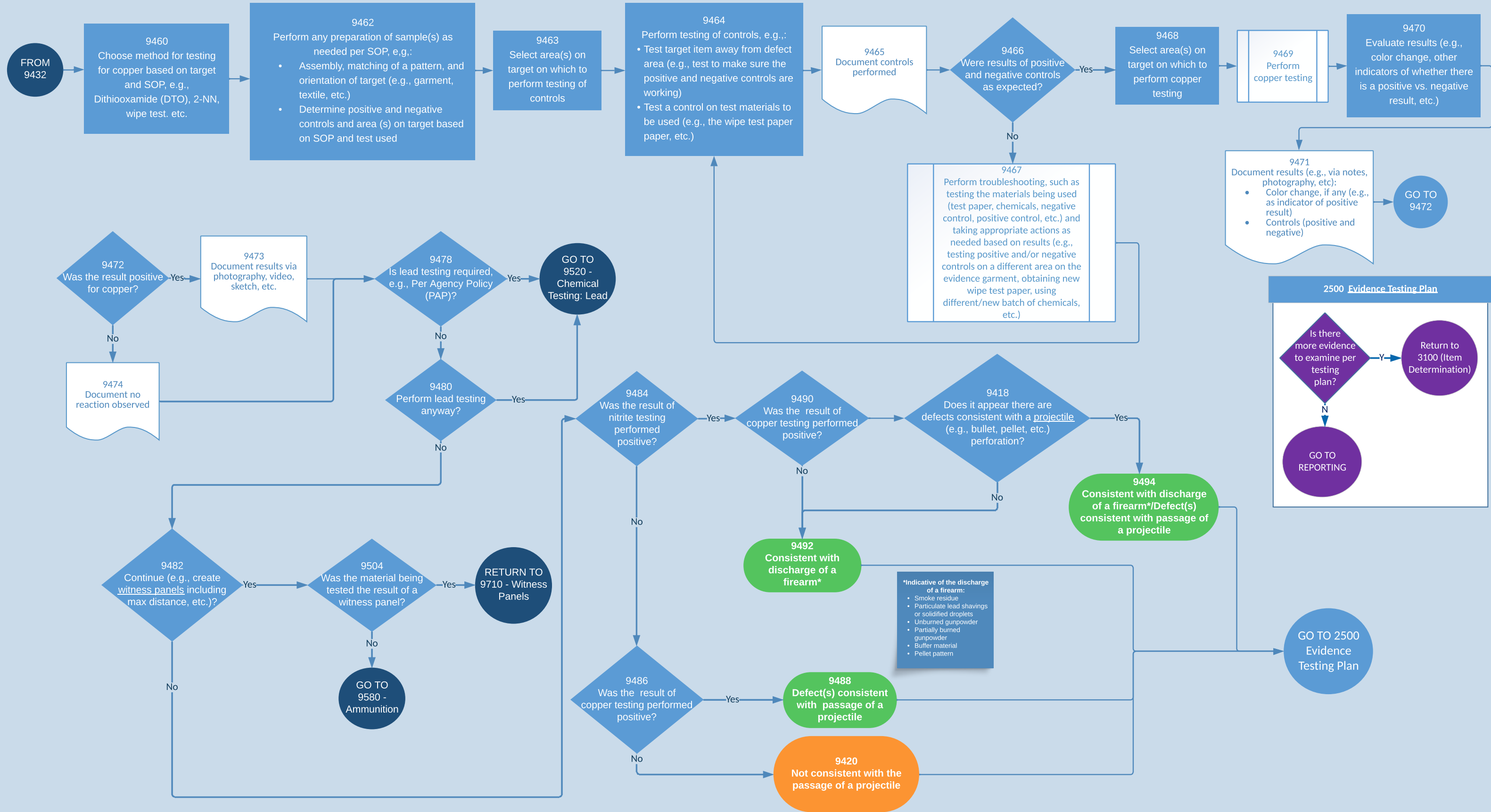
Y → Return to 3100 (Item Determination)

N → GO TO REPORTING

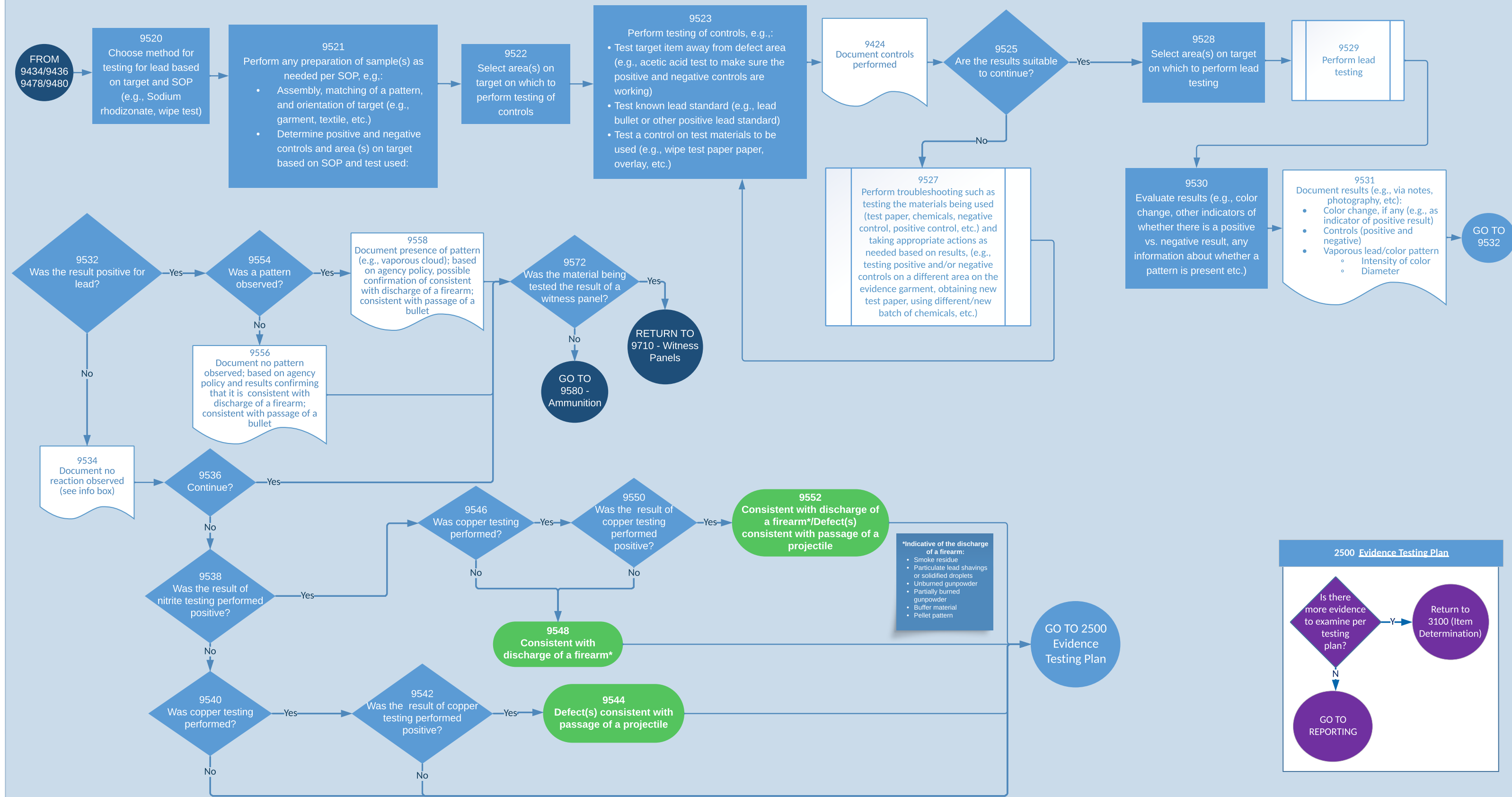
Possible reasons for no chemical reaction, no color change observed:

- Muzzle too far away
- There were intervening objects, blood interference
- Handling issues (too rough and particles disrupted/dislodged), etc.

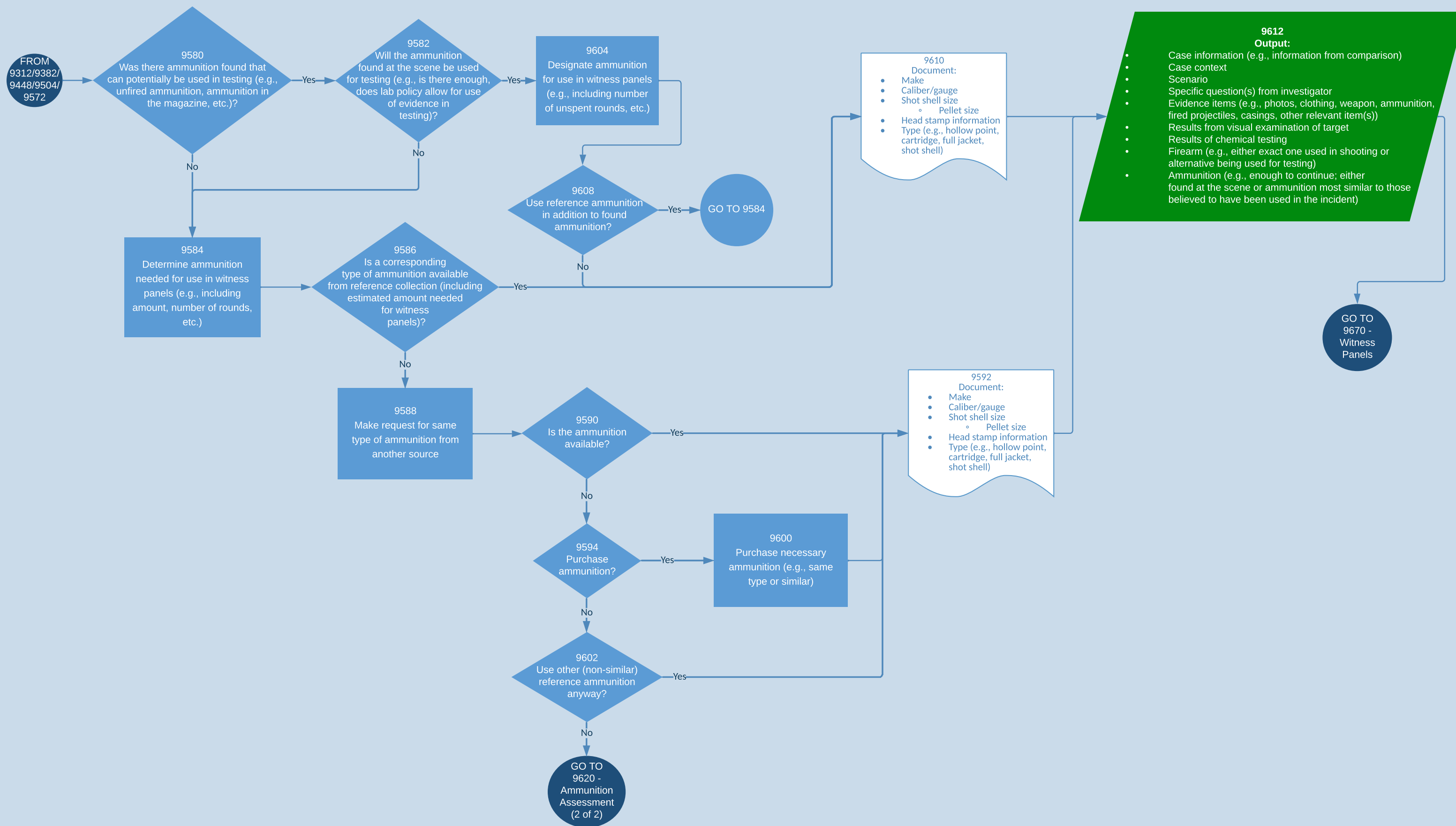
9460 - Distance Determination: Chemical Testing - Copper



9520 - Distance Determination: Chemical Testing - Lead



9580 - Distance Determination: Ammunition Assessment (1 of 2)



9670 - Distance Determination: Witness Panels

