	Stanton Territorial Hospital P.O. Box 10, 550 Byrne Road YELLOWKNIFE NT X1A 2N1	Document Number: TMM80700	
		Version No: 1.0	Page: 1 of 10
		Distribution: Transfusion Medicine Manual	
		Effective: 03 January, 2018 Date Reviewed: 03 January, 2018 Next Review: 03 January, 2020	
Document Name: Unit Retype Testing			
Approved By: Jennifer G. Daley Bernier, A/ Manager, Laboratory Services		Status: APPROVED	

PURPOSE:

To perform and result retype testing on Units of Red Blood Cells received from Canadian Blood Services (CBS).

POLICY:

Red Blood Cell units must have the ABO & Rh status confirmed upon receipt from CBS. The ABO and Rh status must be recorded as tested in the Laboratory Information System (LIS).

SAMPLE INFORMATION:

Type	Blood
Source	Segment removed from Red Blood Cell Unit
Volume	1 mL or less
Stability	42 days from collection date on unit
Storage Requirements	2-8°C
Criteria for rejection and follow up action	Unit does not pass Visual Inspection

REAGENTS and/or MEDIA:

- Anti-A and Anti-B (Ortho Clinical Diagnostics Murine Monoclonal Blend) Reagent
- Anti-D (RH1) IgM + IgG BioClone Reagent
- Rhesus Reagent Control BioClone Reagent
- Isotonic Saline

SUPPLIES:

- Serological Centrifuge
- Work block(s)
- Transfer pipettes

NOTE: This is a controlled document for internal use only. Any documents appearing in paper form are not controlled and should be checked against electronic version prior to use.

FILENAME: TMM80700.1UnitRetypeTestingPRO.docx   Print Date: 03/01/2018 7:25:00 PM

- Tubes (12x75mm)
- Marker
- Blue Segment Piercer or scissors

EQUIPMENT CALIBRATION AND MAINTENANCE:

- See BLB70300 - Equipment Maintenance & Alarm System Checks for Blood Bank
- See BLB70700 - Calibration of Incubators, Pipettes and Thermometers

SPECIAL SAFETY PRECAUTIONS:

- Handle all products and samples as potentially infectious.
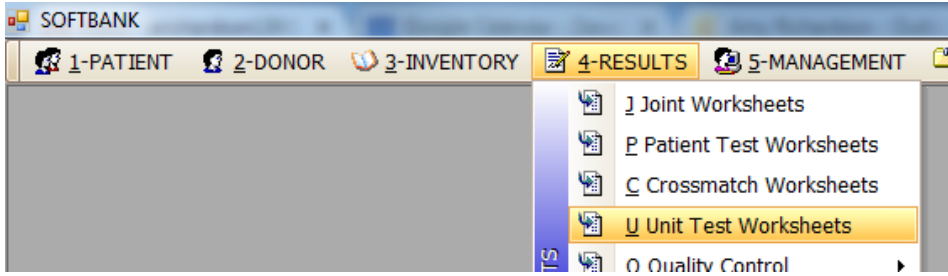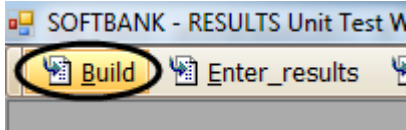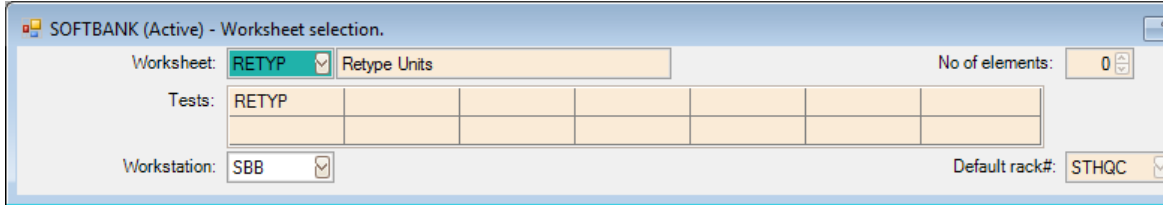- Some products may contain hazardous chemicals such as sodium azide (Anti-A, Anti-B) – must be disposed of with flushing of large amounts of water if disposed down a drain.
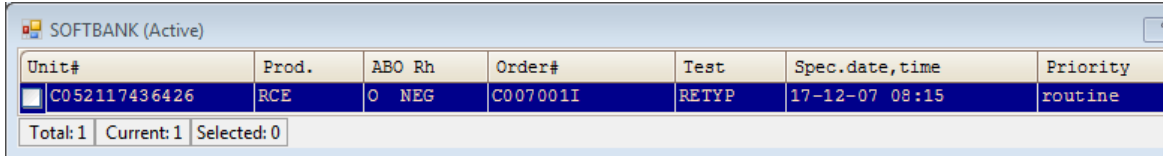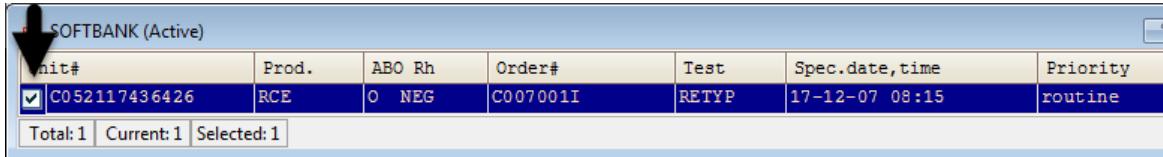
QUALITY CONTROL:

- See TMM***** – Reagent QC (to be written)

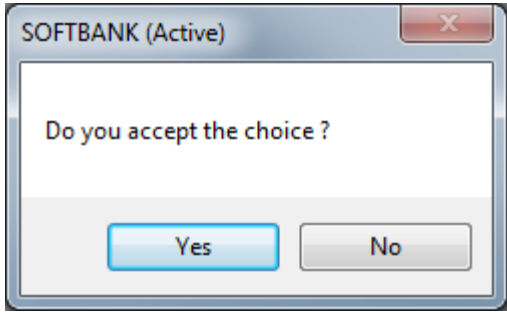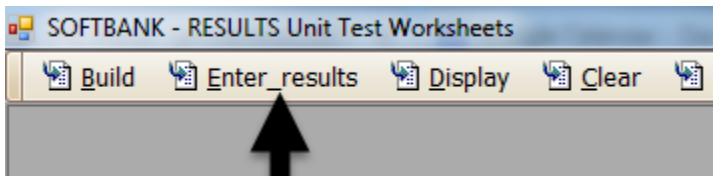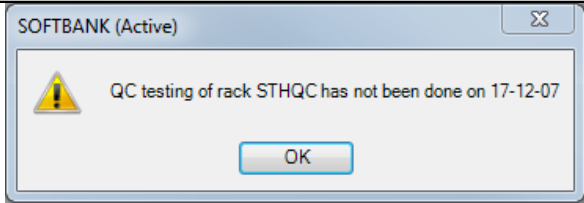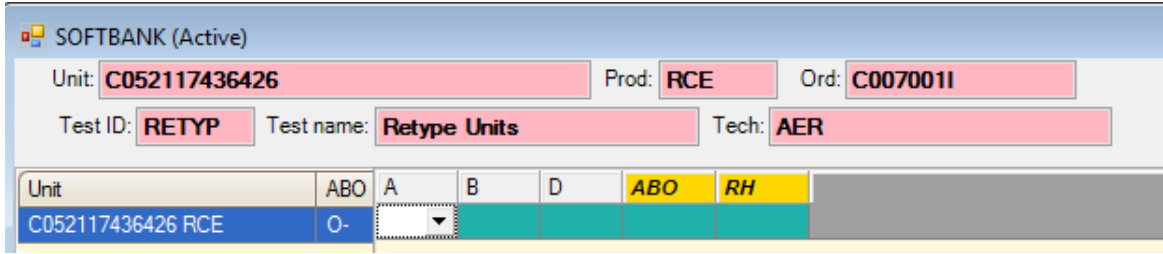## PROCEDURE INSTRUCTIONS:

Follow the steps in the table below to perform and result unit retype testing:
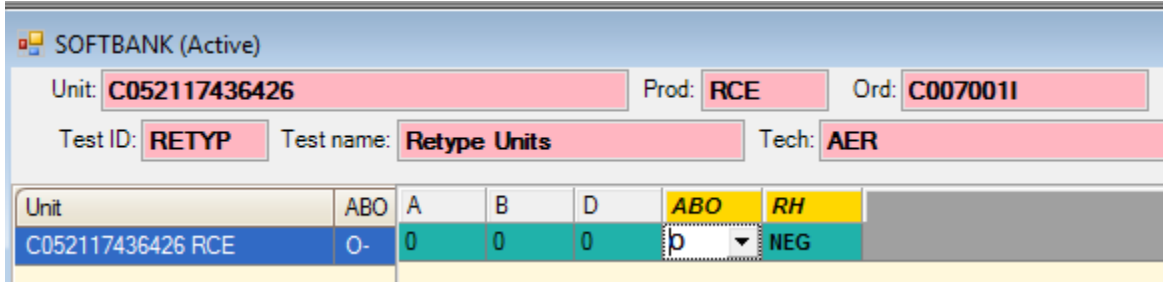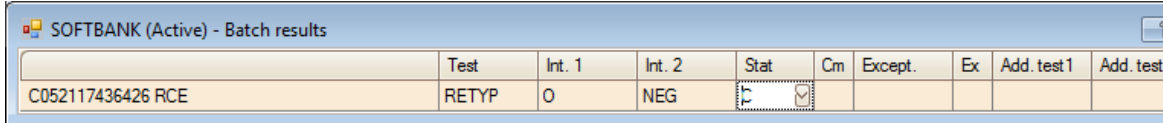
Step	Action	
1	Retype testing is ordered automatically on units that are received into the LIS	
2	**If:**	**Then:**
	Units are received using the Batch Delivery Method	Unit Retype worksheets are automatically built for test resulting – Go to Step 12 for Performing testing and Entering results

NOTE: This is a controlled document for internal use only. Any documents appearing in paper form are not controlled and should be checked against electronic version prior to use.

FILENAME: TMM80700.1UnitRetypeTestingPRO.docx	Print Date: 03/01/2018 7:25:00 PM

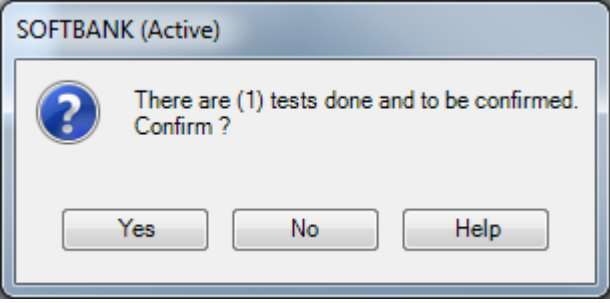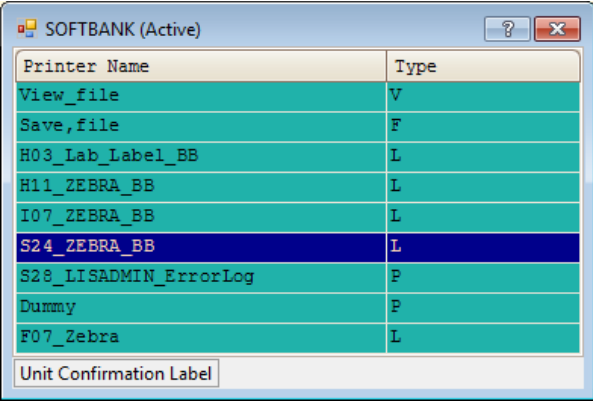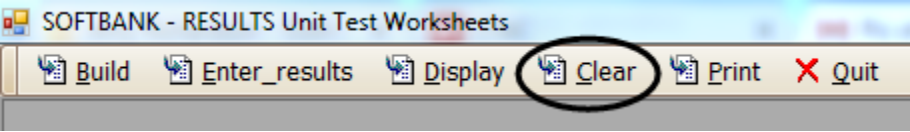|		
	Units are received using the Delivery Method	Unit Retype worksheet must be built prior to test resulting – Go to Step 3 below
3	Go to 4-Results > Unit Test Worksheets	
4	Click: Build	
5	Use drop down menu to select testing for the worksheet – Select RETYP	
6	Click: F12-Accept	
7	List of units with un-resulted Retype testing ordered will appear.	
8	Select units to retype using the F5-Mark all option or Enter to select individually A check mark will appear next to selected units	
9	Click: F12-Accept	
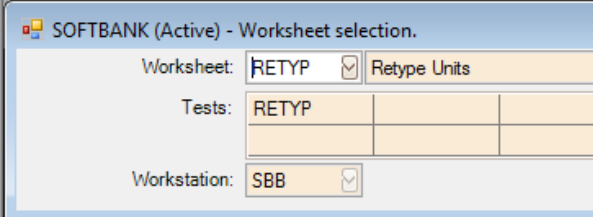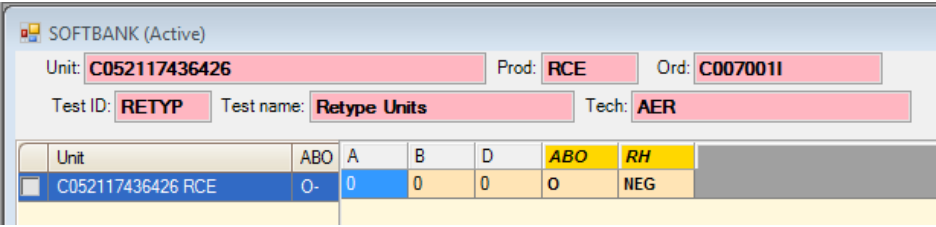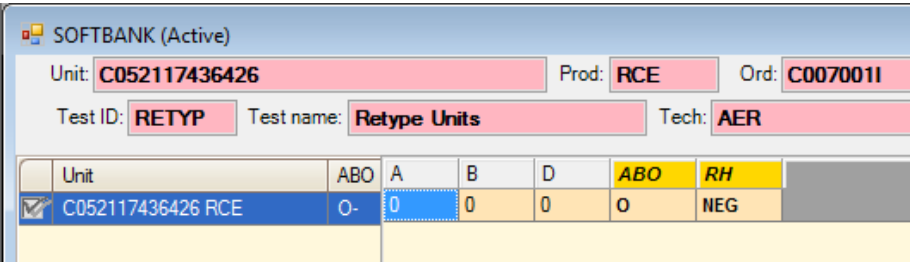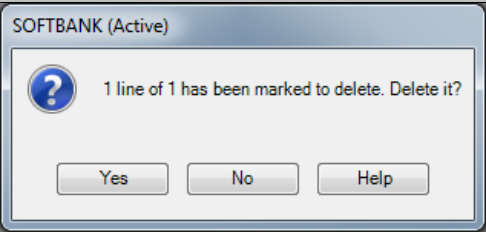
	If:	Then:
10	SOFTBANK (Active) [X] Do you accept the choice ? [Yes] [No]	Yes
11	Unit retype worksheet is now built.	
12	Go to Enter Results SOFTBANK - RESULTS Unit Test Worksheets Build Enter_results Display Clear	
13	If not already selected use the drop down menu to select RETYP in worksheet field	
14	Click F12-Accept	

	If:	Then:
15	SOFTBANK (Active) [X] ⚠ QC testing of rack STHQC has not been done on 17-12-07 [OK]	Click: Ok
16	Retype Resulting worklist will appear SOFTBANK (Active) Unit: C052117436426 Prod: RCE Ord: C007001I Test ID: RETYP Test name: Retype Units Tech: AER Unit ABO A B D ABO RH C052117436426 RCE O-	
17	Perform ABO and RH retype testing using a segment from the unit.	
18	Label all tubes per Procedure: **TMM***** – Labeling Tubes, Gel Cards and Block Set-up**	
19	Warm reagents and segment to room temperature: 15-30°C	

20	Make a 3% red cell suspension from the red cells of the segment and add to the appropriate labelled tubes • 1 drop to tube labelled A • 1 drop to tube labelled B • 1 drop to tube labelled D • 1 drop to tube labelled DC
21	Mix the tubes by gentle agitation
22	Centrifuge tubes for 15-20 seconds at 3400 ± 200 RPM (high setting on serologic centrifuge)
23	Remove tubes from centrifuge.
24	Re-suspend the cells and read tubes macroscopically. See **Procedure TMM***** - Reading and Recording Hemagglutination Reactions: Tube and Gel (to be written)** Watch for agglutination or hemolysis
25	Enter the result using drop down menu, or type in results into the appropriate testing fields. Note: There is no field to result testing for Rh Control – it is not required to be recorded for retype testing
26	ABO and Rh status will automatically populate based on results entered under the A, B and D testing result fields
27	Click: F12-Accept
28	Batch results pop up window will appear. Ensure status is C for Complete

NOTE: This is a controlled document for internal use only. Any documents appearing in paper form are not controlled and should be checked against electronic version prior to use.

FILENAME: TMM80700.1UnitRetypeTestingPRO.docx	Print Date: 03/01/2018 7:25:00 PM

29	Click: F12-Accept

	If:	**Then:**
30		• Yes – will confirm testing – and change unit status to Available in Inventory • No – test status will remain in process – unit will not be available for use
31	Option to print Unit Confirmation Label appears – Select printer to print – hit enter or doubleclick on line 	
32	Place printed unit confirmation label on tested units – or place handwritten ABO & Rh confirmation label on tested units if no confirmation label is printed – See examples in Appendix A below.	
33	Click: F12-Accept	
34	The worklist now must be Cleared – Go to Clear 	

35	If retyp work sheet is not already selected in the worksheet field – use the drop down menu or type in RETYP
36	F12-Accept
37	The worklist will appear
38	Units to be cleared from the worklist require a checkmark in the box to the left of the Unit field. To select and put a checkmark click either F3-Mark/unmark for single unit or F4-All to select all units on list
39	F12-Accept

	If:	Then:
40		Pop up will show how many lines or units will be deleted from the worklist. Click Yes to confirm deletion
41	Worksheet will be cleared of any check marked units.	

EXPECTED RESULTS:

- Unit is retyped and recorded as such in the LIS.

- Unit status will now be set to Available.

- Unit can now be used in crossmatch testing for patient transfusions.

RELATED DOCUMENTS:

- TMM80300 - Receiving Blood & Blood Products from CBS at Stanton Territorial Hospital

- TMM***** – Labeling Tubes, Gel Cards and Block Set-up (to be written)

- TMM***** – ABO Testing (to be written)

- TMM***** – Rh Testing (to be written)

- TMM***** - Visual Inspection of Blood, Blood Components and Derivatives.

- TMM80500 - Creating Unit Segments

- TMM***** - Reading and Recording Hemagglutination Reactions: Tube and Gel (to be written)

REFERENCES:

1. Canadian Society of Transfusion Medicine. (April 2017). *Standards for Hospital Transfusion Services, Version 4.*

2. Canadian Standards Association. (February 2016). *Blood and Blood Components CAN/CSA-Z902-15.*

3. SCC Soft Computer. (n.d.). *SoftBank II v25 Super User Training Manual.* SCC Soft Computer.

APPENDIX (APPENDICIES):

- Appendix A: Examples of possible unit confirmation labels

NOTE: This is a controlled document for internal use only. Any documents appearing in paper form are not controlled and should be checked against electronic version prior to use.

| FILENAME: TMM80700.1UnitRetypeTestingPRO.docx | Print Date: 03/01/2018 7:25:00 PM |
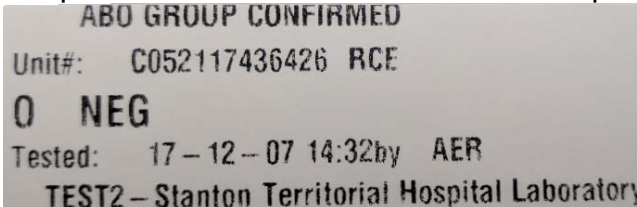
REVISION HISTORY:

REVISION	DATE	Description of Change	REQUESTED BY
1.0	03 Jan 2018	Initial Release	A. Richardson

NOTE: This is a controlled document for internal use only. Any documents appearing in paper form are not controlled and should be checked against electronic version prior to use.

FILENAME: TMM80700.1UnitRetypeTestingPRO.docx	Print Date: 03/01/2018 7:25:00 PM

Appendix A: Examples of possible unit confirmation labels

LIS printed Unit Confirmation Label Example	Handwritten Confirmation Label Example
ABO GROUP CONFIRMED Unit#: C052117436426 RCE O NEG Tested: 17 – 12 – 07 14:32by AER TEST2 – Stanton Territorial Hospital Laboratory	ABO & Rh CONFIRMED 7 Dec 17 Test Date/Tech.