PROCESS BATCH SHEET (RCA clean, mod'd for oxidized wafers) **Iss 7** **Pg____of____**

ENSC Batch No.________________________Wafers Started_____________Date___________________________
Material________________Orientation______________Size_______________Thickness__________________
Resistivity________________________________Type____
Wafer Vendor________________________Vendor Batch #______________________SFU P.O.______________

Process Step #	**Process Conditions**	**Oper & Wafer** #	**Comments**
_____**A**	**RCA SC-1 Clean (Organics)** Temp = 80 +/- 5C Time = 10 minutes DI H2O 5 parts (1000mL) NH4OH, 30% 1 part (200 mL) H2O2, 50% 1 part (200 mL)* *Volumes are sufficient to cover 8 wafers in dippers in 2000 mL glass beaker, major flats up.		Hydrate wafers in DI water before placing in SC-1. Heat water for SC-1. Add NH4OH and then H2O2. Stabilize temperature. Remove wafers from water, place in SC-1, and start timing if temp in range.
_____**B**	**DI Water Rinse** > 3 minutes in running DI water		
_____**C**	**HF Dip (Native Oxide Strip)** Temp = Room temp Time = 30 seconds DI H2O **100** parts (1600 mL)* HF **1** part (16 mL) *Volumes sufficient to cover 8 wafers in dippers in a 2 L plastic beaker, major flats up.		This is the modified step. Either leave out this step completely or reduce concentration from 10:1 to 100:1 as shown.
_____**D**	**DI Water Rinse** > 3 minutes in running DI water		
_____**E**	**RCA SC-2 Clean (Metals)** Temp = 80 +/- 5C Time = 10 minutes DI H20 6 parts (1050 mL) HCl 1 part (175 mL) H2O2 1 part (175 mL)* *Volumes for 2 L glass beaker		Heat the water. Add HCl and then H2O2. Note that the addition of the HCl can raise the temperature of the solution significantly. Stabilize the temperature. Remove wafers from rinse, place in SC-2, and start timing if temp in range.
_____**F**	**DI Water Dump Rinse** > 5 min in beaker of running DI H2O. Dump H2O. Repeat twice		
_____**G**	**Spin Dry** Spin at max RPM until dry (false colours disappear). Check for water on back. Repeat spin or blow with dry N2 if needed.		