PROCESS BATCH SHEET (Phosphorus Drive-in/Wet Oxidation) **Issue 6** **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**
			Wafers must be put through a full RCA clean, per specs, immediately before this process. If necessary, use modified process to protect oxide.
_____**A**	**Prepare Furnace** Dry N2 @ 4 scfh. Ramp temp to 750/800C. Start bubbler.		
_____**B**	**Load Wafers into Boat** Use correct forceps, boat and white elephant		
_____**C**	**Push Boat into Furnace** Dry N2 @ 4 scfh. Temp = 800C. Push @ < 4"/min		
_____**D**	**Ramp Furnace Up** Dry N2 @ 4 scfh. Set operating temp		
_____**E**	**Oxidation/Drive-in** Wet N2 @ about 4 scfh, sufficient for good bubbler action. Open valve and start timing. Close valve at full time.		Desired oxide thickness = __________microns Time = _________min Temp = _________C
_____**F**	**Ramp Furnace Down** Dry N2 @ 4 scfh. Temp = 400C. Bubbler off.		
_____**G**	**Pull Boat and Unload** Pull when all zones < 800C. Max pull < 4"/min		
_____**H**	**Return Furnace to Idle** Dry N2 @ 0.5-1.0 scfh		
_____**I**	**Inspect** Visual, etc.		