



## Quartz Tip samples with Model 850

- Several fine quartz tip samples were processed using the Model 850 Wire Saw.
- Process parameters were varied to achieve best obtainable cut.
- A table with all variable process parameter used is on the following slide.
- Some samples had multiple cuts on them the images in the following slides depict the final cut on each samples.



# Process Parameters Table

Sample #	1	2	3	3	3	3	3	4	4	5	6
Cut #	1	2	3	4	5	6	7	8	9	10	11
Wire size	.010"	.005"	.005"	.005"	.005"	.006" thk wheel	.006" thk wheel	.005"	.005"	.010"	.010"
Abrasive	8um BC	8um BC	1um Al2O3	15um Al2O3	15um Al2O3	DWH 3063	DWH 3063	8um BC	8um BC	8um SiC	8um SiC
Wax	MWH 135	MWH 135	MWH 135	MWH 135	MWH 135	MWH 135	MWH 135	MWH 070	MWH 052	MWH052	MWH135
850 speed setting	4.5	4	3.5	3.5	3.5	5	5	3.5	3.5	3.5	3.5
850 Weight (notches)	5-6	1-2	2-3	2-3	2-3	25 grams	25 grams	3-4	3-4	3-4	3-4
Comments				Broke tip during removal	Redo of cut#4	Tried 650 low speed diamond wheel. Cut at base of quartz rod not tip	Tried 650 low speed diamond wheel. Cut at base of quartz rod not tip				

Indicates decent quality cut.



Sample #1:

- Cut#1
- .010" wire
- 8um Boron Carbide
- MWH135 wax



Sample #2:

- Cut#2
- .005" wire
- 8um Boron Carbide
- MWH135 wax



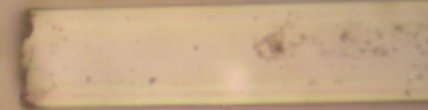
Sample #3:

- Cut#5
- .005" wire
- 15um Al<sub>2</sub>O<sub>3</sub>
- MWH135 wax



Sample #4:

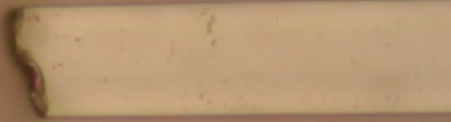
- Cut#9
- .005" wire
- 8um Boron Carbide
- MWH052 wax





Sample #5:

- Cut#10
- .010" wire
- 8um SiC
- MWH052 wax



Sample #6:

- Cut#11
- .010" wire
- 8um SiC
- MWH135 wax

