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

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

😊 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 AI2O3
• 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