

# MINNESOTA UROLITH CENTER \* University of Minnesota

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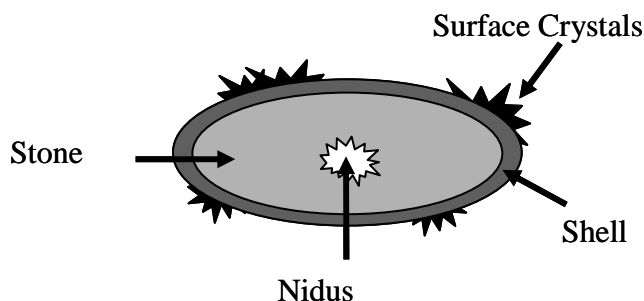
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## How to Interpret Results-Minnesota Urolith Center

The quantitative analysis report displays the possible minerals types on the left side of the report. Across the top of the report, nidus, stone, shell, and surface columns are listed. The mineral analysis of the sample is listed as approximate percentages of mineral(s) found in the layers of the sample. Additional descriptions may be found in the **comments** section at the bottom of the report.

Uroliths that are composed of a homogeneous population of minerals throughout will have results reported in the "stone" column. Reports will show percentages in different columns if the urolith contains differing minerals in various layers of the urolith.



### Cross-section of urolith Representation of separate areas that may be present

**\*\*All of these areas may or may not be present in all uroliths\*\***

| Area of stone                           | Description  | Significance  |
|---|--|---|
| <b>Nidus</b>                            | Area of obvious initiation of urolith growth, which is not necessarily the geometric center of the sample.         | In general, the mineral type(s) in the "nidus" layer should be the primary focus of preventative measures because the nidus is the area of stone initiation. Preventing a nidus of foreign material such as suture, plant, etc. is also important to prevent stone recurrence.                            |
| <b>Stone</b>                            | The major body of the urolith.   | The "stone" layer comprises the largest bulk of the sample. If no nidus layer is listed (or the nidus is similar in composition to the stone layer), this should be the focus of preventative measures.   |
| <b>Shell</b>                            | A complete outer concentric lamination of the urolith  | Shell and/or surface layers represent the most recent activity in the urolith formation process. Often, shell and surface layers that are significantly different from the composition of the stone layer reflect changes in diet, medication, or the patient's medical condition.                        |
| <b>Surface Crystals</b>                 | An incomplete outer lamination of the urolith  | See "Shell" significance above.   |
| <b>Bands or deposits</b>                | Complete bands, incomplete bands, and/or focal deposits may be present within or between any layer of the specimen | These areas may reflect changes in diet, medication, or the patient's medical condition at various times during urolith formation   |
| <b>Hollow cylindrical central areas</b> | Areas devoid of crystalline or matrix material   | In most cases, these hollow areas are the "cast" that remains after suture material has dissolved. The knotted or linear hollow areas are caused by suture that has been inadvertently placed in the bladder lumen, or by suture that has dehisced from the bladder wall and moved into the bladder lumen |

Please contact us if you have any questions regarding interpretation of your urolith analysis report.