Lab Dept: Urine/Stool

Test Name: STONE ANALYSIS

General Information

Lab Order Codes:	SANA
Synonyms:	Calculus Analysis; Kidney Stone Analysis; Renal Calculi; Urinary Calculi
CPT Codes:	82365 – Calculus; qualitative analysis
Test Includes:	Evaluation of stone composition, quantitative report issued.

Logistics

Test Indications:	Useful for managing patients with recurrent renal calculi. The composition of urinary calculi stones may vary from a simple crystal to a complex mixture containing several different species of crystals. The composition of the nidus center may be entirely different from that of the peripheral layers. Eighty percent of patients with kidney stones have a history of recurrent stone formation. Knowledge of stone composition is necessary to guide therapy of patients with recurrent stone formation.
Lab Testing Sections:	Urine/Stool - Sendouts
Referred to:	Mayo Medical Laboratories (MML Test: KIDST)
Phone Numbers:	MIN Lab: 612-813-6280 STP Lab: 651-220-6550
Test Availability:	Daily, 24 hours
Turnaround Time:	4 – 6 days, test set up Monday – Saturday
Special Instructions:	If patients are collecting the stone at home, provide them with a stone collection kit. Contact the laboratory to obtain a collection kit.

Specimen

Specimen Type:	Urinary calculi
Container:	Urine cup

Draw Volume: Submit entire dried urinary calculi specimen

Processed Volume: Same as Draw Volume

Collection: **Hospital Collection:** As per physician order

Patient Collection At-Home Instructions:
A kit should be provided for this collection (Supply T550).
Your doctor has recommended you catch your stone by filtering your urine. Most stones are small enough to pass out of the body on their own. Each urine collection should be filtered until stone has passed. It's also important to filter your urine during your **first-morning** void, because the stone may have passed to the bladder or urinary tract during the night.

1. Use the filter provided to filter the patient's urine.
2. Check the filter for any particles that may be of stone. The stone may be very small so check carefully. The stone could look like a grain of sand or a small piece of gravel.
3. If a stone is found, place it in the clean, dry container provided.
- **Do not** tape stone to container as tape will affect testing.
- **Do not** put any liquid in the container.
- **Do not** send the filter to the laboratory.

4. Write the source, if known, on sticker of container (ie, left kidney, bladder, right ureter). Your physician may provide this information for you. Place container in bag provided.
5. Keep stone at room temperature.
6. Return the stone to your doctor's office, collection site, or wherever you were instructed to return the specimen.

Special Processing: Lab Staff:

Prepare stone by cleaning any blood or foreign material from the stone with deionized water. Place stone on a clean filter or paper towel and let dry at ambient temperature for a minimum of 24 hours, then place dry stone in a screw-capped plastic container. Send stone at ambient temperature.

- **Do not** place stone directly in a bag. If specimen is received in a bag, either transfer stone into a screw-capped, plastic container or place bag containing stone in a screw-capped, plastic container.
- **Do not** tape the specimen to anything as tape interferes with the analytical procedure.
- **Do not** send the stone in formalin.
- **Do not** send filter.
- If multiple stones are being sent and testing is wanted on each stone, place each stone in its own container. Testing must be ordered on each stone, and each test will be charged separately.

Specimen source is required on request form for processing.

Patient Preparation: See Collection

Sample Rejection:	Specimens other than renal stones

Interpretive

Reference Range:	The presence of a kidney stone is abnormal. A quantitative report will be provided after analysis.
Critical Values:	N/A
Limitations:	N/A
Methodology:	Infrared Spectrum Analysis
References:	Mayo Medical Laboratories (February 2023)
Updates:	2/21/2023: Updated reference lab test code, clarified lab processing