Adulterant Survey Algorithm

Urine specimen is tested for:
- Suspect specimen substitution
- Suspect diluted specimen
- Suspect specimen adulteration
- Invalid specimen
- Normal; No additional comment

Creatinine (Cr) and specific gravity (SG)

Cr: <2.0 mg/dL
AND
SG: ≤1.001 or ≥1.020

Cr: ≥2.0 mg/dL
AND
SG: <1.001

Cr: ≥2.0 to <20.0 mg/dL
AND
SG: >1.001 to <1.003

pH

pH: <3.0
pH: ≥3.0 to <4.5
pH: ≥4.5 to 9.0

Oxidant

Nitrite

POSITIVE
NEGATIVE

POSITIVE
NEGATIVE

* Drug of abuse tests performed in the Toxicology Laboratory are used to monitor compliance with treatment programs and should be utilized in a clinical setting where test results can be used definitively to make a diagnosis. Specimen adulteration can have a significant, potentially damaging, effect on treatment decisions. For this reason, the Toxicology Laboratory utilizes a multistep process to evaluate specimens for adulteration.

* The specimen adulteration evaluation involves the following tests: creatinine, specific gravity, pH, and oxidants. When 1 or more of these results are outside the normal reference value, an adulterant comment is added to the final report that identifies the specific adulterant found.