



<u>Procedure</u>	<u>Result</u>	<u>Units</u>	<u>Ref Interval</u>	<u>Accession</u>	<u>Collected</u>	<u>Received</u>	<u>Reported/Verified</u>
Creatinine, Urine - per volume	55	mg/dL		17-258-900018	15-Sep-17 07:06:00	15-Sep-17 07:06:00	15-Sep-17 07:07:13
Beta-2-Microglobulin, Urine	15	ug/L	[0-300]	17-258-900018	15-Sep-17 07:06:00	15-Sep-17 07:06:00	15-Sep-17 07:07:13
Beta-2-Microglobulin, ratio to CRT	27	ug/g CRT	[0-300]	17-258-900018	15-Sep-17 07:06:00	15-Sep-17 07:06:00	15-Sep-17 07:07:13
pH, Urine	7.0			17-258-900018	15-Sep-17 07:06:00	15-Sep-17 07:06:00	15-Sep-17 07:07:13
Cadmium, Blood	<1.0	ug/L	[0.0-5.0]	17-258-900018	15-Sep-17 07:06:00	15-Sep-17 07:06:00	15-Sep-17 07:07:13
Cadmium, Urine - per volume	1.0	ug/L	[0.0-1.0]	17-258-900018	15-Sep-17 07:06:00	15-Sep-17 07:06:00	15-Sep-17 07:07:13
Cadmium, Urine - ratio to CRT	1.8	ug/g CRT	[0.0-3.0]	17-258-900018	15-Sep-17 07:06:00	15-Sep-17 07:06:00	15-Sep-17 07:07:13

15-Sep-17 07:06:00 Cadmium, Blood:
 INTERPRETATION INFORMATION: Cadmium, Blood

Blood cadmium levels can be used to monitor acute toxicity and in combination with cadmium urine and B-2 microglobulin is the preferred method for monitoring occupational exposure. Symptoms associated with cadmium toxicity vary based upon route of exposure and may include tubular proteinuria, fever, headache, dyspnea, chest pain, conjunctivitis, rhinitis, sore throat and cough. Ingestion of cadmium in high concentration may cause vomiting, diarrhea, salivation, cramps, and abdominal pain.

See Compliance Statement B: aruplab.com/CS

15-Sep-17 07:06:00 Cadmium, Urine - per volume:
 INTERPRETATION INFORMATION: Cadmium, Urine

Urine cadmium levels can be used to assess cadmium body burden. In chronic exposures, the kidneys are the primary target organ. Symptoms associated with cadmium toxicity vary based upon route of exposure and may include tubular proteinuria, fever, headache, dyspnea, chest pain, conjunctivitis, rhinitis, sore throat and cough. Ingestion of cadmium in high concentration may cause vomiting, diarrhea, salivation, cramps, and abdominal pain.

See Compliance Statement B: aruplab.com/CS

15-Sep-17 07:06:00 Cadmium, Urine - ratio to CRT:
 CADMIUM ACTION LEVELS BEGINNING JANUARY 1999
 (Federal Register 1999 Std. CFR, Part 1910.1027 Appendix A)

Cadmium Urine (ug/g CRT):

A	B	C
0 - 3	3.1 - 7.0	7.1 or Greater

* Abnormal, # = Corrected, C = Critical, f = Footnote, H = High, L = Low, t = Interpretive Text, @ = Reference Lab

Cadmium Blood (ug/L):

A	B	C
0 - 5	5.1 - 10.0	10.1 or Greater

B-2-Microglobulin (ug/g CRT):

A	B	C
0 - 300	301 - 750	751 or Greater*

	A	B	C
Monitor	Annual	Semiannual	Quarterly
Med Exam	Biennial	Annual	Semiannual
Reassess CD exposure in less than 2 weeks **	---	Discretionary removal	Mandatory removal

*If an employee's B2Microglobulin is above 750 ug/g CRT, in order for mandatory medical removal to be required, either the employee's CdU level must also be greater than 3 ug/g CRT or CdB level must also be greater than 5 ug/L.

**The determination of discretionary or mandatory removal is made by the examining physician consistent with the medical surveillance specifications in the Federal Register pages 42456 to 42463.

References:

1. US Department of Labor(2004).Cadmium Occupational Safety and Health Administration.3136-06R.
2. US Department of Labor(1999).Cadmium Occupational Safety and Health Standard.1910.1027.

Urine B-2 Microglobulin is an early marker of irreversible kidney damage and disease. Urine Creatinine values less than 20 mg/dL represent very dilute urines and collection should be repeated.

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