

DILUTE SPECIMENS

A dilute specimen is a specimen with creatinine and specific gravity values that are lower than expected for human urine.

A dilute specimen does not indicate that the donor tampered with the specimen. Most dilute specimens probably occur as the result of hydration- the donor drinking large quantities of fluids prior to the collection- rather than the external addition of water to a specimen after it has been provided.

Some factors that influence a dilute specimen:

1. Kidney function.
2. Something they may be taking that would cause them to expel lots of water.
3. Illnesses, which cause a person to expel lots of water:

For example:

Diabetes
Diabetes Insipidus
Congestive heart failure

EMPLOYER RESPONSES TO "DILUTE"

Non-D.O.T.

Dilute Positive:	Treat this as a positive test.
Dilute, Creatinine ≥ 2 or <5 : strongly suggested.	Cancelled: Observed recollection
Dilute Negative, Creatinine ≥ 5 or <20 :	Depends on company policy. They can treat this as a negative, or require another collection (not observed).

D.O.T. (See 40.197 below)

Dilute Positive:	Treat this as a positive test.
Dilute, Creatinine ≥ 2 or <5 : required.	Cancelled: Observed recollection
Dilute Negative, Creatinine ≥ 5 or <20 :	Non-observed recollection optional.

On May 28, 2003, the Department of Transportation changed the range of dilute specimens to be:

Creatinine 2.0 to 5.0 mgm/dL and Specific Gravity less than 1.003

DOT REGULATIONS

§ 40.197 What happens when an employer receives a report of a dilute specimen?

(a) As the employer, if the MRO informs you that a positive drug test was dilute, you simply treat the test as a verified positive test. You must not direct the employee to take another test based on the fact that the specimen was dilute.

(b) As an employer, if the MRO informs you that a negative test was dilute, take the following action:

(1) If the MRO directs you to conduct a recollection under direct observation (i.e., because the creatinine concentration of the specimen was equal to or greater than 2mg/dL, but less than or equal to 5 mg/dL (see §40.155(c)), you must do so immediately.

(2) Otherwise (i.e., if the creatinine concentration of the dilute specimen is greater than 5 mg/dL), you may, but are not required to, direct the employee to take another test immediately.

(i) Such recollections must not be collected under direct observation, unless there is another basis for use of direct observation (see §40.67 (b) and (c)).

(ii) You must treat all employees the same for this purpose. For example, you must not retest some employees and not others. You may, however, establish different policies for different types of tests (e.g., conduct retests in pre-employment situations, but not in random test situations). You must inform your employees in advance of your decisions on these matters.

(c) The following provisions apply to all tests you direct an employee to take under paragraph (b) of this section:

(1) You must ensure that the employee is given the minimum possible advance notice that he or she must go to the collection site;

(2) You must treat the result of the test you directed the employee to take under paragraph (b) of this section—and not a prior test—as the test result of record, on which you rely for purposes of this part;

(3) If the result of the test you directed the employee to take under paragraph (b) of this section is also negative and dilute, you are not permitted to make the employee take an additional test because the result was dilute. Provided, however, that if the MRO directs you to conduct a recollection under direct observation under paragraph (b)(1) of this section, you must immediately do so.

(4) If the employee declines to take a test you directed him or her to take under paragraph (b) of this section, the employee has refused the test for purposes of this part and DOT agency regulations.

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