PI-82-0108

July 29, 1982

Mr. R. G. Keearns
Williams Pipe Line Company
P.O. Box 3448
Tulsa, Oklahoma 74101

Dear Mr. Keearns:

Your letter dated February 16, 1982, requested a waiver from compliance with §195.310 by using a digital pressure gauge in lieu of a dead weight tester.

Enclosed is a Pipeline Safety Regulatory Interpretation of §195.310 which states that the use of a dead weight tester is not required. Hence, a waiver from compliance with §195.310 is not required in order to use the proposed digital pressure gauge for hydrostatic testing.

Sincerely,
Melvin A. Judah
Acting Associate Director for
Pipeline Safety Regulation
Materials Transportation Bureau

Enclosure

No. 82-6

Date: July 29, 1982

DEPARTMENT OF TRANSPORTATION

RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

MATERIALS TRANSPORTATION BUREAU

PIPELINE SAFETY REGULATORY INTERPRETATION

Note: A pipeline safety regulatory interpretation applies a particular rule to a particular set of facts and circumstances, and, as such, may be relied upon only by those persons to whom the interpretation is specifically addresses.

SECTION: 195.310

SUBJECT: Use of a digital pressure gauge in lieu of a dead weight tester during hydrostatic test.

FACTS: Williams Pipe Line Company letter dated February 16, 1982, requested a waiver from compliance with §195.310 to use a digital pressure gauge instead of a dead weight tester.

INTERPRETATION: Section 195.310 does not require the use of dead weight testers during hydrostatic test. The purpose of the use of the term is to assure that substantial evidence of testing is kept and when §195.310 was adopted, dead weight testers were in common use. Comparable data from modern equipment will suffice in meeting the requirements of §195.310.

Melvin A. Judah
Acting Associate Director for
Pipeline Safety Regulation
Materials Transportation Bureau

February 16, 1982

Mr. Melvin A. Judah
Acting Associate Director
for Pipeline Safety Regulations
Materials Transportation Bureau
U.S. Department of Transportation
400 Seventh Street, S.W.
Washington, D.C. 20590

Dear Mr. Judah:

In accordance with Sub-part E of Regulations for Transportation of Liquids by Pipeline, Part 195.310, we now use the deadweight tester for measurement of pressure during hydrostatic testing. The field survey type deadweight tester, however, has presented certain problems as follows:

1. The weights are easily dropped and scored making their mass and, therefore, the accuracy of their measurements dubious.

2. We do not have the facilities to calibrate deadweights and, therefore, must trust the original manufacturer totally.

3. Determining a pressure reading with a field deadweight tester is complicated, making operator error a common problem.

Our research has turned up a pressure measuring device which we feel offers better accuracy than the field deadweight tester is actual service.

Enclosed are technical specifications of the "Gauge 1" digital pressure gauge, manufactured by Vaetrix, a division of Taylor Tools. We have tested one of these units and found it operates well within the accuracy specifications.

We therefore request a waiver to use the "Gauge 1" digital pressure gauge in place of the field deadweight tester for which deadweight testers are currently required by federal regulations.

Very truly yours,
R. G. Keearns
Manager of Environmental Affairs
and Pipe Line Safety