



Exceeding Expectations

Inspection Report Abbreviations

Upon receipt of an inspection report, ever wonder what do all the abbreviations stand for and their significance? Why can't there be one number reported as the bottom line quantity which is contractually agreed upon.

In the "solids" commodity world, when a truckload of televisions are delivered, the bill of lading, (the amount loaded), matches up directly to what is being delivered at all points. 500 TV's loaded... 250 delivered at point one, 100 at point two, 150 delivered at point three. Simple!

It isn't the same in the "liquid" commodities market due to many factors that affect the final quantity before it is commercially agreed upon.

Past TECHTALK issues have explained roof corrections, trim and list correction, etc... which play a role in quantity determination. This issue will concentrate on only the following abbreviations listed on final inspection reports, what they mean and their significance in the determination of the quantity loaded or discharged.

- T.O.V.
- G.O.V.
- G.S.V.
- N.S.V.
- T.C.V.
- FW
- S&W

T.O.V. – Total Observed Volume

This is everything in a tank or vessel compartment at the observed temperature. This volume includes the product, free water (FW) and sediment and water (S&W).

G.O.V. – Gross Observed Volume

This is the TOV above, (everything in the tank) minus the free water, again at the observed temperature.

If you would like to be removed from our distribution list or you require information on a certain subject, please let us know via return email. Also, please be advised individual / group AmSpec laboratory / operational tours can be arranged upon request.

Please visit us on our website...www.amspecllc.com or contact us at (800) 286-2208

*Remember the "O" as in observed – not corrected-these are observed volumes regardless of temperature.

G.S.V. – Gross Standard Volume

The GSV represents the Gross Observed Volume corrected to a standard temperature. In the United States this is 60 degrees F.

N.S.V. – Net Standard Volume

The NSV is the GSV (above) minus the sediment and Water – again corrected to a standard temperature.

* Remember the "S" means standard – this indicates the volumes have all been corrected or "standardized".

T.C.V. – Total Calculated Volume

This is the GSV with the free water added back in. It is therefore all of the product (including S&W) corrected to a standard temperature with any free water added back in.

TCV is primarily a loss control tool as it looks at the complete picture of the cargo on board a vessel.

FW – Free Water

It is necessary to determine the amount of free water, if any, before and after each product movement into or out of a tank in order that the appropriate corrections can be made. This will always be in the form of a deduction. The amount of the deduction is determined by converting the free water level gauge to a volume through the use of the tank's / compartment's capacity table. Please reference past TECHTALK Issue No 010 for more detailed description of how free water is determined.

S&W – Sediment & Water

The API Committee regarding Petroleum measurement prefers this abbreviation to the older BS&W (bottom sediment and water)

Sediment is the matter that settles to the bottom of a liquid; also called tank bottoms.

Sediment and Water refers to material coexisting with, yet foreign to, petroleum liquid and requiring a separate measurement. This foreign material includes emulsified or suspended water and sediment. The quantity of suspended material present is determined by laboratory testing of a sample of the petroleum liquid.

If your company or department would like to take part in our "Lunch & Learn" series where AmSpec will come to your office and explain topics relative to the industry or schedule a lab tour, please contact Tom Fusco..., cell (908) 242-7599 or via email tfusco@amspecllc.com

If you would like to be removed from our distribution list or you require information on a certain subject, please let us know via return email. Also, please be advised individual / group AmSpec laboratory / operational tours can be arranged upon request.

Please visit us on our website...www.amspecllc.com or contact us at (800) 286-2208