

Bin Ullage Check

For all Ullage and TDS profiles, the Contracting Officer's Representative (COR) will periodically check the reported bin ullage using a bin ullage tape measure. The Contractor shall have available a bin ullage tape that is a clearly readable weighted tape, marked in tenths of a foot, capable of measuring throughout the full range of bin depth. The weight for this tape shall be between 2 and 3 pounds and whenever possible a 6-inch diameter disk. The COR will review the bin ullage data to insure that the system is operating within acceptable accuracy (± 0.1 foot), directing the contractor to re-calibrate or repair system components as necessary.

Purpose: To verify accuracy of bin ullage sensors.

Material Required:

- 1) SCIF spreadsheet
- 2) Weighted tape, marked at intervals to a tenth of a foot.

Procedure:

With the scow light and with just enough material so that the ullage sensors have a uniform fore and aft surface to provide a consistent measurement, and manual soundings can be taken relative to the bin datum (zero ullage) in the vicinity of the sensor. Three soundings are taken forward and aft; port, starboard and centerline. On some scows, this is not possible, and either port and starboard or centerline soundings will be taken. At each location, the weighted tape shall be lowered until the weight touches the fluid surface and the distance noted. The DQM system values should be read from the display (vendor specific). The measured ullage values and DQM system-measured ullage values are recorded into the spread sheet and the difference between measurements calculated.

Then the bin is filled with dredge material or water to a level high enough to provide a single, continuous, horizontal fluid plane and the above measurement procedures are repeated

During the check, the scow should be in relatively calm waters to minimize wave induced measurement errors. Difference between manually and system-measured values should not exceed ± 0.1 foot.

Ullage Re-Test

Version 1.0

Light (Residual/almost empty) ULLAGE-LEVEL CHECK

	Manually Measured				SI Ullage	
	Port	Stbd	Center	Average (ft)	Instrument	Difference (ft)
Fwd				0		0
Aft				0		0

LOADED (Full) ULLAGE-LEVEL CHECK

	Manually Measured				SI Ullage	
	Port	Stbd	Center	Average (ft)	Instrument	Difference (ft)
Fwd				0		0
Aft				0		0