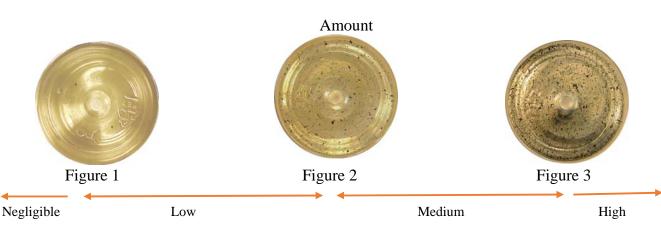


Hasting Deering Laboratory Services Update

Visual Inspection: each oil sample being processed at our laboratory receives a visual inspection to allow some recording of physical characteristics that may be deemed abnormal. The way this process is conducted and recorded is about to change to allow a more transparent reporting process.

There are four characteristics that are reported:

1. Amount2. Metallic Debris3. Contamination4. Opacity



Amount Cod	es:	
Negligible	(N)	less material than Figure 1
Low	(L)	contamination between Figure 1 and Figure 2
Medium	(M)	contamination between Figure 2 and Figure 3
High	(H)	more material than Figure 3

Metallic Debris Codes:

None	(-)	no metallic material detected by eye
Magnetic	(M)	material that can be attracted to a magnet
Non-Mag.	(N)	metal not attracted by a magnet
Combination	n (C)	both magnetic and non-magnetic metal present

Contamination Codes:

None	(-)	no abnormal contamination detected (excludes metallic debris)
Water	(W)	water identified by eye
Foreign Mat.	(F)	material other than metal or water detected

Opacity Codes:

1 2		
Normal	(-)	normal for oil type, may be coloured in relation to oil type
Black	(B)	typical of used diesel engine oil
Dark	(D)	dark brown appearance may be from contamination, oxidation,
		thermal stressing, varnish or micro-dieseling

