



# SURFACE VEHICLE RECOMMENDED PRACTICE

J1227™

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Assessing Cleanliness of Hydraulic Fluid Power Components and Systems

## RATIONALE

This document was revised to update Table 1 and associated references throughout the document.

## FOREWORD

There is an increasing awareness that the reliability, productivity, and economy of use of hydraulic systems is directly related to the cleanliness level achieved. In addition, there is strong evidence that start up failures of both new and overhauled systems are often contaminant-caused catastrophic failures. Contaminant built in to each component making up a hydraulic system, and contaminant generated in assembling the components and systems, are significant contributors to these failures.

This SAE Recommended Practice is intended as a guide toward standard practice but may be subject to frequent change to keep pace with experience and technical advances, and this should be kept in mind when considering its use.

### 1. SCOPE

To describe laboratory methods for determining and reporting the contaminant level of the wetted portion of hydraulic fluid power components, parts, subsystems and systems, and of fill fluids. For each type of item, it provides a method of obtaining the liquid sample and the contamination level thereof. It also includes procedures for establishing a sampling plan and guidelines for establishing levels of acceptance, but does not set those levels.

#### 1.1 Purpose

To provide a basis for measuring and reporting cleanliness levels so that built-in contamination and premature failures of hydraulic systems can be minimized.

### 2. REFERENCES

#### 2.1 Applicable Documents

The following publications form a part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue of SAE publications shall apply.

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