

**MATERIALS CONTROL  
LABORATORY MANUAL**

**Section:** App. 56  
**Issued:** 12/15/69  
**Revision #:** AC  
**Revised Date:** 11/07/22  
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encompasses both Pratt & Whitney Canada (PW North) and Pratt & Whitney US (PW South).

- 3.2 **Semi-quantitative Spectrographic Analysis** The Determination of a material's chemistry to detect the presence of the alloying elements to a degree by which a positive identification can be made as to the alloy type, as well as the ability to distinguish between similar alloys.
- 3.3 **Quantitative Spectrographic Analysis** P&W defines quantitative spectrographic



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### 3.4 Wet Chemical Analysis

of metallic component to identify alloys. This is not process solution analysis.

### 3.5 Optical Emission Spectroscopy (OES)

OES is defined as testing which utilizes actively Coupled Plasma), DCP (Direct Current Plasma) and DR (Direct

## 4. PROCEDURE:

4.1 The commercial laboratories listed in [Table I](#) have been reviewed by Pratt & Whitney-

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**TABLE I**

**TYPE OF TESTING**  
(See **TABLE II**)

**COMMERCIAL LABORATORIES**





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**TABLE I**

**COMMERCIAL LABORATORIES**



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<b>TABLE I</b>			
		<b>TYPE OF TESTING</b> (See <a href="#">TABLE II</a> of TEST CODES)	

**COMMERCIAL LABORATORIES**

**SMC**

**Approved  
Testing**

**Limited**





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<b>TABLE I</b>		
		<b>TYPE OF TESTING</b> (See <a href="#">TABLE II</a> of TEST CODES)

**COMMERCIAL LABORATORIES**

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<b>TABLE II</b>	
<b>Specific Test Codes</b>	<b>Testing Description</b> <b>Yellow highlighted fields require proficiency testing per MCLM F23</b>
1	Tensile, Room Temperature
2	Tensile, Elevated Temperature
3	Stress Rupture
4	Creep Rupture
5	Hardness (all hardness not covered by HIM Code 1)
6	Impact
7	Metallographic Examination - Not covered by another suffix (See Note





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Notes:

1. P&W defines semi-quantitative spectrographic analysis as "The Determination of a material's chemistry to detect the presence of the alloying elements to a

