



Perryman company

213 Vandale Drive Houston, PA 15342 USA

phone: 724-746-9390 fax: 724-746-9392

Certified Test Report

Customer:

Heat No: **PVD7846**
Melting Source: **Perryman Company, USA**
Work Order No: **157181**

Date: **6/9/2021**

Quantity: **300** Lbs

Customer Order No: **PTG63851**

Product: **Ti 6Al-4V ELI .1555/.1565" Dia. CG Bar X 12' R/L**

Specification: **ASTM F136-13, AMS 4930L, AMS T-9047A, MIL-T-9047G Comp Ti6Al-4VELI Cond A AM 2 Chg Not 1, ASTM B348 gr 23 Rev 19, AMS 6932C, ISO 5832-3 (2016), EN 10204 3.1 (2004), AS6279B**

Condition: **Annealed 1300 F - 2 Hours**

Chemistry	Wt %	ASTM E 1447:	Post processing Hydrogen Determination	H: .0008
Metallographic Examination:		ASTM E407:	Microstructure - Equiax alpha-beta	ASTM E 407: Surface Contamination - No alpha case 500x
Etchant: PER1 & PER2			Macrostructure - Acceptable per AMS 2643F Etchant PER 6	
Mechanical Properties			ETTC2/ISO 20160:Photo Micrograph	Transverse: A1
ASTM E8/EN 2002-001:2005E		Tensile	.2% Yield	Reduction
Condition		Strength	Elongation	of Area
As Shipped		ksi	%	%
		152.7	21	41
		152.9	21	41

Perryman has complied with all producer requirements of AS6279

Eddy current inspection - Passed

DFAR compliant to sections 252.225.7002,252.225.7008, and 252.225.7009.

This is to certify that all test results conform to the specifications listed above and that all tests required were performed by Perryman Company.

The material did not come in contact with Mercury or radioactive contamination at Perryman.

Attached is a copy of the Ingot Chemistry. All testing performed at room temperature unless otherwise noted.

The test results relate only to the lots tested and are contained in the records of Perryman Company. The Certified Test Report cannot be reproduced except in full, without written approval. Made in USA.


Zachary S. Dragan
Laboratory Manager

6/9/2021



Materials Testing Laboratory

6/15/21



Perryman company
 625 Technology Dr., Coal Center, PA 15423
 phone: 724-746-9390 fax: 724-746-9392


SHIP TO

Perryman Company
 213 Vandale Drive
 Houston, PA 15342

CERTIFICATE OF TEST
For TITANIUM INGOT

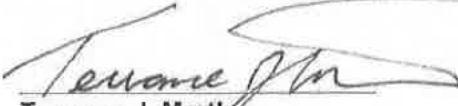
WORK ORDER
043094

HEAT NUMBER
PVD7846

	QUANTITY	PCS										
	12490 Lbs	1										
DESCRIPTION FORM: Ingot, Grade: Ti6Al4V Eli, Size: 30												
SPECIFICATION CAPABILITY P-104 Rev 3												
Chemistry (WT%) Top												
O	N	C	Fe	Al	V	Si	Cu	Pd	Y	H	B	Ru
.12	.007	.013	.18	6.42	4.04	.016	<.008	<.002	<.002	.0004	<.002	<.003
Chemistry (WT%) Bottom												
O	N	C	Fe	Al	V	Si	Cu	Pd	Y	H	B	Ru
.13	.008	.012	.17	6.42	4.03	.014	<.008	<.002	<.002	.0003	<.002	<.003
Comments												
<p>Melting Process: EBCHR-VAR</p> <p>Calculated Beta Transus T/B: 1810F/1815F</p> <p>Calculated Beta Transus T/B C: 988C/991C</p> <p>Residual Elements, each < .05% Residual Elements, total < .20% Balance Titanium. Melted in the United States of America. The material is free of radioactive and mercury contamination. Oxygen/Nitrogen tested in accordance with ASTM E1409. Carbon tested in accordance with ASTM E1941. Hydrogen tested in accordance with ASTM E1447. B tested in accordance with ASTM E2994. Metallics Tested By XRF in accordance with ASTM E539.</p> <p style="text-align: center;">Elements not required by specification are included in Others(each) and Others(Total)</p>												
<p>6/15/21</p>  Materials Testing Laboratory												

This material conforms to the chemistry and quality system requirements of the specifications and/or Purchase Order referenced. The results relate only to the lot tested and the results are contained in the records of Perryman Company.

The certificate of test cannot be reproduced except in full without the written approval of the laboratory, and the recording of false, fictitious, or fraudulent statements or entries on this document may be punished as a felony under federal law.


Terrance J. Marth
 Laboratory Supervisor