



**Wolverine Tube, Inc**  
 2100 Market Street  
 Decatur, AL 35601  
 800-633-3972

**CERTIFIED INSPECTION REPORT FOR  
 EXTRUDED PRODUCTS**

F S P	OUR ORDER NUMBER 19988-7	DIE NUMBER WS10477		DATE OF SHIPMENT 3/14/2023
	CUSTOMER PO 608489- LA	ALLOY 6061	TEMPER T6	SALESMAN House
	MANIFEST NUMBER 39711	CUSTOMER PART NUMBER 19135	DESCRIPTION 4 x 1.647 x .247 AS Channel	

We hereby certify that the material covered by this report has been inspected in accordance with, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown.

Tickets:  
 201442      201443      201446

Application Specifications: ASTM B221-20

*Donna Huff*

Quality Assurance  
 Wolverine Tube Inc.

**Mechanical Properties**

Order #- Item #- Lot #	Cast Number	Alloy	Alloy Type	Test No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
19988-7-1/A/11	15330	6061	P	1	03/10/23	46.6	45.5	16%

**Chemical Limits**

	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	B	Zr	Bi	Pb	Sn	Sr	Co	Each	Total
ALLOY 6061 TYPE P																				
Minimum	0.40	0.14	0.15	0.00	0.8	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.15
Maximum	0.80	0.40	0.29	0.15	1.2	0.35	0.00	0.25	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Density:	0.098 g/cm3																			

**Chemical Composition**

Cast Number	Alloy	Type	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	B	Zr	Bi	Pb	Sn	Sr	Co	Al	Other
15330	6061	P	0.60	0.20	0.21	0.07	0.9	0.06	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	REM	0.01

Note: The cast #'s for all lot numbers ending in /12, /13, etc are the same for lot #'s ending in /11. The numbers after the slash denote a different heat treat oven load.

Country of Origin: U.S.A