

Certificate of Calibration

Unit s/n: 57854 Model: XL3t 950 Software: 8.4G
 Date of Q.C.: 10.9.2018 Inspector: TP
 Resolution: 179.91 Escal: 7.26 Source: Tube Detector: _____
151.84 7.29

Filter 1 for 20 seconds; Filter 2 for 60 seconds

Units configured with Am-241 source (15mCi or 30mCi) or tube

		Certified	Low	High	%	Err	OK	
Pure Al		Al	99.9	99	100	99.99	0.249	OK
Pure Si		Si	99.9	99	100	99.995	0.353	OK
Pure Mg		Mg	99.9	99	100	99.875	0.08	OK
		Fe	0.04	0	0.04	0.035	0.005	OK
Pure Fe		Fe	99.9	99	100	99.964	0.217	OK
Pure Ti		Ti	99.9	99	100	99.956	0.312	OK
Pure Cu		Cu	99.9	99	100	99.974	0.16	OK
IARM 178B	Ti 6-6-2	Sn	1.99	1.75	2.25	1.983	0.02	OK
		Cu	0.51	0.41	0.61	0.529	0.017	OK
		Fe	0.56	0.42	0.64	0.606	0.03	OK
		V	5.57	5.27	5.87	5.662	0.112	OK
		Ti	bal	-	-	85.646	0.317	
		Al	5.57	5.15	6.09	5.546	0.334	OK
IARM 113A	AA 4032**	Cu	0.94	0.78	1.08	0.993	0.014	OK
		Ni	0.97	0.85	1.15	1.028	0.016	OK
		Fe	0.47	0.37	0.57	0.505	0.015	OK
		Al	bal	-	-	83.994	0.142	
		Si	11.38	10.7	12.0	11.948	0.114	OK
		Mg	1.18	0	2	1.087	0.225	OK
IARM 107A	AA 5083**	Fe	0.38	0.18	0.58	0.376	0.013	OK
		Mn	0.789	0.639	0.939	0.767	0.023	OK
		Cr	0.14	0.00	0.21	0.138	0.015	OK
		Al	bal	-	-	93.527	0.21	
		Mg	4.75	3.75	5.75	4.599	0.217	OK
IARM 81B	CDA 642	Cu	bal	-	-	91.216	0.232	
		Fe	0.047	0	0.127	0.047	0.006	OK
		Si	1.80	1.44	2.24	1.812	0.044	OK
		Al	6.70	6	7.4	6.693	0.228	OK
32X PB11	batch E	Sb	0.502	0.102	0.902	0.505	0.014	OK
		Sn	3.75	3.45	4.05	3.917	0.032	OK
		Pb	0.90	0.6	1.2	0.96	0.025	OK
		Zn	1.43	1.13	1.73	1.45	0.029	OK
		Cu	bal	-	-	90.902	0.181	
		Ni	0.768	0.518	1.018	0.755	0.02	OK
		Mn	0.111	0	0.411	0.113	0.011	OK
		Fe	0.75	0.45	0.95	0.726	0.017	OK
		Si	0.099	0	0.449	0	0.035	OK
		P	0.799	0.399	1.199	0.514	0.014	OK
IARM 18B	Nitronic 60	Mo	0.31	0.21	0.41	0.307	0.005	OK
		Cu	0.362	0.212	0.512	0.399	0.023	OK
		Ni	8.50	8.2	8.8	8.414	0.088	OK
		Co	0.124	0	0.304	0.179	0.062	OK
		Mn	8.58	8.28	8.88	8.429	0.079	OK
		Fe	bal	-	-	62.144	0.21	
		Cr	16.37	16.07	16.67	16.151	0.062	OK
		Si	3.67	3.17	4.17	3.798	0.076	OK
MBH T1/1	T1/1	Fe	bal	90.00	95.00	94.256	0.163	OK
		Mn	0.14	0.08	0.30	0.128	0.017	OK
		Si	5.29	4.90	5.70	5.395	0.065	OK
IARM 177B	Ti 6-2-4-2	Sn	1.95	1.85	2.05	1.967	0.021	OK
		Mo	1.93	1.73	2.13	1.932	0.017	OK
		Zr	3.97	3.87	4.07	3.969	0.032	OK
		Ti	bal	-	-	86.048	0.294	
		Al	6.04	5.54	6.54	5.928	0.314	OK
		Si	0.083	0	0.124	0	0.081	OK

Elements that are in BLUE BOLD should be detected

Elements not in BLUE BOLD need not be detected but record if present

**** Sample contains < 0.05% of the following elements and do not need to be traced: Mn, Cr, Zn, Ti, V, Sn, Pb, Bi**

This certificate is issued with Thermo Scientific Factory factory specification.

The measurements were found to be within specification limits at the time of manufacture and calibration.

Standards are traceable to National Institute of Standards & Technology (NIST) standards.