Esskay Compuservices Pvt. Ltd.

Authorised Service Partner For ThermoFisher SCIENTIFIC Portable Analytical Instrument

CALIBRATION CERTIFICATE

THERMO SCIENTIFIC- NITON PORTABLE XRF ANALYSER

Date of Calibration	Agreed Due Date of Calibration	Date of Q. C.	Certificate No.	Page
06-11-2024	05-05-2025	06-11-2024	4403-2024	1 of 2

1	Customer Name & Address	**C.G. Metal Lab (Testing Lab)** 51 Shivam Estate Phase-II G.I.D.C. Chhatral Ta: Kalol, Dist: Gandhinagar Gujarat - 382729 India.
2	Date of Receipt	06-11-2024
3	Condition of the Instrument of Receipt	GOOD

DETAILS OF THE INSTRUMENT ON RECEIPT

Model	XL2-980	Software	8.4G	Res.	154.6
Serial No.	97423	Source	Tube	Escale	7.43

Ambient Room Temperature	$22^0C \pm 2^0C$	Calibration Modes :	General Alloys
		Calibration Validity :	05-05-2025

Calibration Procedure No. : SOP ID: 2023-01

Calibration Result : Calibration are performed with standards whose values and measurements are Traceable to the NIST (National Institute of Standards & Technology) are given on page 2

Calibrated By : Amit Kumar

Approved By :

Name : Amit Kumar Pandey

Designation : Service & Calibration Engineer

Name : Bharathi Naidu

Designation : Operations Head - Services

This is to certify that, Niton Portable XRF Analysers has been calibrated and verified with NIST traceable CRM standards. The procedure has been followed as per the factory set protocols. All the results are found within the acceptable tolerance limits. The instrument shall be used for day to day analysis of Samples.

Registered Office:

Block No. 801 & 802, Plot No. X -4/1 & X -4/2, TTC Industrial Area, Technocity, Mahape, Navi Mumbai- 400 710
Tel No. 022 2778 2881 • Website: www.esskay.in

CALIBRATION RESULT

	ELEMENTS	CERTIFIED	LOW	HIGH	MEASURED	ERR	RESULT
IARM 86C (CDA 836) 180-510	Sn	4.37	3.9	4.9	4.30	0.16	OK
	Pb	5.03	4.5	6.1	5.10	0.21	OK
	Zn	5.38	4.0	5.6	5.10	0.24	OK
	Cu	84.6	83	86	84.52	0.11	OK
	Ni	0.27	0.1	0.4	0.21	0.02	OK
IARM 44C (TSM2) 180-492	Mo	5.02	4.6	5.40	5.02	0.07	OK
	W	6.00	5.65	6.55	6.02	0.11	OK
	Co	0.24	0.17	0.31	0.21	0.12	OK
	Fe	81.45	79.45	83.45	81.51	0.22	OK
	Cr	4.04	3.81	4.45	4.02	0.11	OK
	V	1.91	1.5	2.12	1.85	0.10	OK
IARM25C (20CB3) 180-509	Nb	0.59	0.50	0.68	0.51	0.04	OK
	Mo	2.26	2.10	2.40	2.16	0.03	OK
	Cu	3.52	3.20	3.70	3.42	0.10	OK
	Ni	33.26	32.36	34.16	33.31	0.23	OK
	Fe	38.80	37.8	40.0	38.62	0.21	OK
	Mn	0.89	0.39	1.39	0.84	0.12	OK
	Cr	19.98	19.58	20.58	20.03	0.15	OK
IARM69C (Alloy X) 180-511	Mo	8.32	7.8	8.68	8.32	0.05	OK
	Nb	0.09	0.05	0.13	0.12	0.03	OK
	W	0.62	0.43	0.81	0.40	0.06	OK
	Ni	48.70	48.0	49.4	48.89	0.34	OK
	Co	1.11	0.83	1.39	1.11	0.13	OK
	Fe	18.30	18.0	18.9	18.42	0.16	OK
	Mn	0.47	0.35	0.70	0.51	0.12	OK
	Cr	21.60	21.0	22.45	21.70	0.21	OK
IARM 6D (SS321) 180-512	Mo	0.36	0.27	0.4	0.30	0.02	OK
	Nb	0.039	0.018	0.045	0.034	0.02	OK
	Cu	0.302	0.25	0.6	0.304	0.10	OK
	Ni	9.42	8.9	9.6	9.41	0.06	OK
	Fe	69.4	69.1	71	69.52	0.11	OK
	Mn	1.52	1.12	1.66	1.40	0.11	OK
	Cr	17.45	16.85	18.00	17.30	0.07	OK
	Ti	0.63	0.3	0.80	0.60	0.03	OK
IARM 95B (HS 6B) 180-502	Mo	0.83	0.75	0.99	0.78	0.02	OK
	W	3.42	3.20	3.65	3.42	0.10	OK
	Ni	2.25	1.85	2.5	2.10	0.11	OK
	Co	60.90	60.0	63.0	61.10	0.20	OK
	Fe	1.10	0.95	1.30	1.04	0.04	OK
	Mn	0.99	0.80	1.20	1.03	0.07	OK
	Cr	28.80	28.3	29.4	28.92	0.20	OK
IARM 35KN	1.25Cr 1/2Mo	Mo	0.56	0.49	0.69	0.62	0.04	OK
	1.25Cr 1/2Mo	Cu	0.13	0.09	0.18	0.22	0.04	OK
	1.25Cr 1/2Mo	Fe	Bal	-	-	97.03	0.31	OK
	1.25Cr 1/2Mo	Mn	0.47	0.44	1	0.44	0.10	OK
	1.25Cr 1/2Mo	Cr	1.17	0.82	1.25	1.30	0.06	OK

Note : *30 second analysis times for X-Ray Tube Systems
***Elements that are in BLUE BOLD should be detected.**
***Elements not in BLUE BOLD need not be detected but record if present**
***This certificate is issued in accordance with Thermo Fisher Scientific factory specifications.**
***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) or other government issued standards.**