

NSLS CONTROLLED MEASURING TEST EQUIPMENT CALIBRATION LIST
QUALITY ASSURANCE -
7/29/2011

	A	B	C	D	E	F	G	H	I	K	L	M
1	GSDR/M&TE	Instruments/ Descriptions	Model #	Manufacter	Serial #	Bar #	BNL #	Location	Calibration Frequency	Responsible Custodian	Comments	Calibration Certificates from
2	CM 300	Chipmunk 22		AGS	35697	108681		VUV wall near Rm.2-144 C wing	1 yr.	Phil Marino		AGS and some in-house
3	CM 301	Chipmunk 23		AGS	35698	108682		VUV wall near Rm.2-140B C wing	1 yr.	" "		"
4	CM 302	Chipmunk 27		AGS	35702	108678		Rm.2-148 in C wing	1 yr.	" "		"
5	CM 303	Chipmunk 28		AGS	35703	108677		SDL bldg.729	1 yr.	" "		"
6	CM 304	Chipmunk 29		AGS	35704	108676		X25 atop beamline	1 yr.	" "		"
7	CM 305	Chipmunk 31		AGS	35706	108683		VUV above entry doors	1 yr.	" "		"
8	CM 306	Chipmunk 33		AGS	35708	107938		RF Blockhouse	1 yr.	" "		"
9	CM 307	Chipmunk 34		AGS	35709	107937		Comp. Rm 101-under table	1 yr.	" "	P. Marino informed still at calibration as of 1/11/2010	"
10	CM 308	Chipmunk 35		AGS	35710	107936		X-Ray Tunnel Entry	1 yr.	" "		"
11	CM 309	Chipmunk 36		AGS	35711	107935		IR-4 Platform (ring side)	1 yr.	" "		"
12	CM 310	Chipmunk 38		AGS	35713	107932		SDL bldg.729	1 yr.	" "		"
13	CM 311	Chipmunk 39		AGS	35714	107934		SDL bldg.729	1yr.	" "		"
14	CM 312	Chipmunk 40		AGS	35715	107940		U5 at beam ht. U6 side	1 yr.	" "		"
15	CM 313	Chipmunk 96		AGS	67893	67893		X21 atop beamline	1 yr.	" "		"
16	CM 314	Chipmunk 104		AGS	67901	67901		SDL bldg. 729	1 yr.	" "		"
17	CM 315	Chipmunk 0003		NSLS	3	102465		Rm.2-103 in B wing	1 yr.	" "		"
18	CM 316	Chipmunk 0009		NSLS	9	102441		Spare (storage)	1 yr.	" "		"
19	CM 317	Chipmunk 0002		NSLS	2	102443		rm. 1-150	1 yr.	" "		"

NLS CONTROLLED MEASURING TEST EQUIPMENT CALIBRATION LIST
QUALITY ASSURANCE -
7/29/2011

	A	B	C	D	E	F	G	H	I	K	L	M
1	GSDR/M&TE	Instruments/ Descriptions	Model #	Manufacter	Serial #	Bar #	BNL #	Location	Calibration Frequency	Responsible Custodian	Comments	Calibration Certificates from
20	CM 318	Chipmunk 0006		NLSLS	6	102467		Rm.2-123	1 yr.	“ “		“
21	CM 319	Chipmunk 0007		NLSLS	7	102466		Rm. 2-112	1 yr.	“ “		“
22	CM 320	Chipmunk 0016		NLSLS	16	102442		rm. 1-150	1 yr.	“ “		“
23	CM 321	Chipmunk 0020		NLSLS	20	102444		X10A by FE wall	1 yr.	“ “		“
24	CM 322	Chipmunk 0005		NLSLS	5	102459		On VUV East wall	1 yr.			“
25	CM 323	Chipmunk 0008		NLSLS	8	102455		X13 by FE Wall	1 yr.	“ “		“
26	CM 324	Chipmunk 0011		NLSLS	11	102460		X-Ray tunnel walk-over	1 yr.	“ “		“
27	CM 325	Chipmunk 0012		NLSLS	12	102453		X-13 downstream hutch	1 yr.	“ “		“
28	CM 327	Chipmunk 0004		NLSLS	4	102468		to Rudy Zantopp	1 yr.	“ “		“
29	CM 330	Chipmunk 0015		NLSLS	15	102458		X-1 atop beamline	1 yr.	“ “		“
30	CM 331	Chipmunk 0017		NLSLS	17	102464		VUV inj. Shutter	1 yr.	“ “	*Note: temp. out of service - Phil Marino informed on 6/22/09; notified again by Phil Marino on 1/11/10 still out of service.	“
31	CM 332	Chipmunk 0001		NLSLS	1	102456		X4C Hutch	1 yr.	“ “		“
32	CM 333	Chipmunk 0010		NLSLS	10	102457		X1 by Booster Wall	1 yr.	“ “		“
33	EE 800	Counter	5335A	HP	2208A02677	17647	105529	Computer Rm.	1 yr.	Charles Nielson		General Calibration, Inc.

NSLS CONTROLLED MEASURING TEST EQUIPMENT CALIBRATION LIST
QUALITY ASSURANCE -
7/29/2011

	A	B	C	D	E	F	G	H	I	K	L	M
1	GSDR/M&TE	Instruments/ Descriptions	Model #	Manufactu rer	Serial #	Bar #	BNL #	Location	Calibration Frequency	Responsible Custodian	Comments	Calibration Certificates from
34	EE 801	DVM	3458A	HP	2823A00570	58379		J. Tallent - 725B	1 yr.	" "		"
35	EE 802	Dial-a-volt	DVC 8500	Datel	61031187			Tech. Lab	1 yr.	" "		"
36	EE 803	DVM	3458A	HP	2823A11052	92548		J. Tallent - 725B	1 yr.	" "		"
37	EE 805	Freq. Counter	5385A	HP	2430A00680			X-Ray RF area	1 yr.	" "		"
38	EE 808	DVM	3458A	HP	2823A08509	81651		J. Tallent 725B	1 yr.	" "		"
39	EE 809	Dial-a-volt (Voltage Calibrator)	DVC8500	Datel	606212087	9498		Tech. Lab	1 yr.	" "		"
40	EE 810	Network Analyzer	3577A	HP	2333A10832	38101	109401	Tech. Lab -Borrelli	1 yr.	" "		"
41	EE 816	Oscilloscope	2465	Tektronix	B021528	14952	108765	Tech Lab	1 yr.	" "		"
42	EE 817	Network Analyzer	3577A	HP	2333A10837	38100	109402	Tech Lab - Borrelli	1 yr.	" "		"
43	EE 818	Dial-a-volt (Voltage Calibrator)	DVC 8500A	Datel	37331183	9497		RF Tech Shop	1 yr.	" "		"
44	EE 819	DVM (Digital Multimeter)	3458A	HP	2823A06782	101530		J. Tallent - 725B	1 yr.	Charles Nielson	new in system as of 7/23/08	"
45	EE 820	Drain Tool (grounding stick)	Drain Tool	STB Electrical Test Equip. Inc.	11143			NSLS/SDL	3 yrs.	Gloria Ramirez	new in system as of 2/24/2009	STB Electrical Test Equipment, Inc.
46	EE 821	Drain Tool (grounding stick)	Drain Tool	STB Electrical Test Equip. Inc.	11508			NSLS/SDL	3 yrs.	Gloria Ramirez	new in system as of 2/24/2009	"

NSLS CONTROLLED MEASURING TEST EQUIPMENT CALIBRATION LIST
QUALITY ASSURANCE -
7/29/2011

	A	B	C	D	E	F	G	H	I	K	L	M
1	GSDR/M&TE	Instruments/ Descriptions	Model #	Manufactu rer	Serial #	Bar #	BNL #	Location	Calibration Frequency	Responsible Custodian	Comments	Calibration Certificates from
47	EE 822	Drain Tool (grounding stick)	Drain Tool	STB Electrical Test Equip. Inc.	13108			NSLS/SDL	3 yrs.	Gloria Ramirez	new in system as of 2/24/2009	"
48	EE 823	Drain Tool (grounding stick)	Drain Tool	STB Electrical Test Equip. Inc.	15045			NSLS/SDL	3 yrs.	Gloria Ramirez	new in system as of 2/24/2009	"
49	EE 824	Drain Tool (grounding stick)	Drain Tool	STB Electrical Test Equip. Inc.	11144			NSLS/SDL	3 yrs.	Gloria Ramirez	new in system as of 2/24/2009	"
50	EE 825	Drain Tool (grounding stick)	Drain Tool	STB Electrical Test Equip. Inc.	11146			NSLS/SDL	3 yrs.	Gloria Ramirez	new in system as of 2/24/2009	"
51	EE 826	Drain Tool (grounding stick)	Drain Tool	STB Electrical Test Equip. Inc.	11147			NSLS/SDL	3 yrs.	Gloria Ramirez	new in system as of 2/24/2009	"
52	EE 827	Drain Tool (grounding stick)	Drain Tool	STB Electrical Test Equip. Inc.	11145			NSLS/SDL	3 yrs.	Gloria Ramirez	new in system as of 2/24/2009	"
53	EE 828	Drain Tool (grounding stick)	Drain Tool	STB Electrical Test Equip. Inc.	11142			NSLS/SDL	3 yrs.	Gloria Ramirez	new in system as of 2/24/2009	"

NLS CONTROLLED MEASURING TEST EQUIPMENT CALIBRATION LIST
QUALITY ASSURANCE -
7/29/2011

	A	B	C	D	E	F	G	H	I	K	L	M
1	CSDR/M&TE	Instruments/ Descriptions	Model #	Manufacturer	Serial #	Bar #	BNL #	Location	Calibration Frequency	Responsible Custodian	Comments	Calibration Certificates from
54	EE 829	Drain Tool (grounding stick)	Drain Tool	STB Electrical Test Equip. Inc.	15046			NLS/SDL	3 yrs.	Gloria Ramirez	new in system as of 2/24/2009	"
55	MB 201	Micrometer (TL)	230	Starett				Rm. 2-190 725D	3 yrs.	Tony Lenhard	MCS Calibration, Inc.	
56	MB 202	Micrometer -thin blade	122-125	Mitutoyo				Rm. 2-190 725D	3 yrs.	" "		"
57	MB 204	Micrometer, Head, metric	110-102	Mitutoyo		60788		Rm. 2-190 725D	2 yrs.	" "		"
58	MB 205	Micrometer, Digital	293-301	Mitutoyo		391174		Rm. 2-190 725D	2 yrs.	" "		"
59	MB 207	Inside Micormeter set	124, 124C	Starett				Rm. 2-190 725D	5 yrs.			"
60	MB 208	Depth Mic.	608	Brown & Sharp				Rm. 2-190 725D	5 yrs.	" "		"
61	MB 210	Depth Gauge Dial Type	527-313	Mitutoyo		918088		Rm. 2-190 725D	5 yrs.	" "		"
62	MB 211	Caliper/ Verneir	575	Brown & Sharp				Rm. 2-190 725D	3 yrs.	" "		"
63	MB 213	Caliper/Dial	505-627	Mitutoyo				Rm. 2 - 190 725D	3 yrs.	" "		"
64	MB 215	Height Gauge	520-152	Mitutoyo				Rm. 2-190 725D	2 yrs.	Tony Lenhard		"
65	MB 216	Gauge Block Set	811157	Warsaw Precision Tools				Rm. 2-190 725D	5 yrs.	" "		"
66	MB 218	Dial Bore Gauge	511-163	Mitutoyo	683074			Rm. 2-190 725D	2 yrs.	" "		"
67	MB219	Dial Bore Gauge	511-106	Mitutoyo	old # 738645; new serial # 751480?			Rm. 2-190 725D	2 yrs.	" "		"
68	MB 220	Dial Indicator	G-1253A	Girod		476241		Rm. 2-190 725D	2 yrs.			"

NLS CONTROLLED MEASURING TEST EQUIPMENT CALIBRATION LIST
QUALITY ASSURANCE -
7/29/2011

	A	B	C	D	E	F	G	H	I	K	L	M
1	GSDR/M&TE	Instruments/ Descriptions	Model #	Manufactu rer	Serial #	Bar #	BNL #	Location	Calibration Frequency	Responsible Custodian	Comments	Calibration Certificates from
69	MB 222	Dial Indicator, metric	25-161	Starett				Rm. 2-190 725D	2 yrs.	“ “		“
70	MB 224	Digital Head	543-425A	Mitutoyo				Rm. 2-190 725D	2 yrs.	“ “		“
71	ME 001	Micrometers	#1	Brown & Sharp				727	2 yrs.	Bob Scheuerer	review freq period changed by B. Scheuerer from 1 yr to 2 yrs on 4/19/2011 - informed by phone	“
72	ME 002	Micrometers	#2	Brown & Sharp				727	2 yrs.	“ “	review freq period changed by B. Scheuerer from 1 yr to 2 yrs on 4/19/2011 - informed by phone	“
73	ME 006	Micrometer – caliper	159214	Mitutoyo				726	2 yrs.	“ “		“
74	ME 011	Vernier Caliper 12”	123	Starett – Vernier				Staff Shop	2 yrs.	“ “		“
75	ME 013	Dial Indicators	25-441	Starett				727	2 yrs.	“ “		“
76	ME 014	Dial Indicators	25-441	Starett				727	2 yrs.	“ “		“
77	ME 015	Dial Indicators	25-441	Starett				727	2 yrs.	“ “		“
78	ME 019	Dial Indicator	656- 3041J	Starett				727	2 yrs.	“ “		“
79	ME 021	Survey Equip. Level	N3	Wild	557741			726	2 yrs.	“ “		in-house

Prepared By: Quality Control Coordinator
 Posted on Web By: Quality Secretary

NLS CONTROLLED MEASURING TEST EQUIPMENT CALIBRATION LIST
QUALITY ASSURANCE -
7/29/2011

	A	B	C	D	E	F	G	H	I	K	L	M
1	GSDR/M&TE	Instruments/ Descriptions	Model #	Manu facturer	Serial #	Bar #	BNL #	Location	Calibration Frequency	Responsible Custodian	Comments	Calibration Certificates from
80	ME 022	Level	N3	Wild	491132				726	2 yrs.	“ “	in-house
81	ME 024	Theodolite	ESSCO	Kern	271349				726	2 yrs.	“ “	in-house
82	ME 025	Theodolite	DKM-2A	Kern	332222				726	2 yrs.		in-house
83	ME 026	Theodolite	DKM-2AE	Kern	266367				726	2 yrs.	Bob Scheuerer	in-house
84	ME 027	Theodolite		Kern	344489				726	2 yrs.	“ “	in-house
85	ME 028	Plummet		Kern	247328				726	2 yrs.	“ “	in-house
86	ME 029	Plummet		Kern	332976				727	2 yrs.	“ “	in-house
87												in-house
88	ME 030	Intramike set - (should receive 3 calibration certificates for these)	599-281	Brown/Shar p					901	3 yrs.	“ “	item #85029; 85030; 85031; MCS Calibration, Inc.
89	ME 052	O2 Sensor	Safenet 210	Gas Tech	9935097			MER - A -Note: there are two sensors attached to this unit under serial #9935097 one is "lower" and one is "upper"	3 months - quarterly	Richard Freudenberg	Note: quarterly reports and annual reports captured here together under same #	annual reports come only in Dec. - end of year; quarterly reports come 4 times a yr. (in-house)

NSLS CONTROLLED MEASURING TEST EQUIPMENT CALIBRATION LIST
QUALITY ASSURANCE -
7/29/2011

	A	B	C	D	E	F	G	H	I	K	L	M
1	CSDR/M&TE	Instruments/ Descriptions	Model #	Manufacter	Serial #	Bar #	BNL #	Location	Calibration Frequency	Responsible Custodian	Comments	Calibration Certificates from
90	ME 053	O2 Sensor	Safenet 100	Gas Tech	O43172			West Roll-up door 725; rm. 1.1511A	3 months - quarterly	Richard Freudenberg	Note: quarterly reports and annual reports captured here together under same #	annual reports come only in Dec. - end of year; quarterly reports come 4 times a yr. (in-house)
91	MP 605	WIKA Pres. Gauge	03259-5302	WIKA Inst.	1154760 or standard serial #36633			727 Utilities Locker #1	1 yr.	Lenny Santangelo	name changed from Iaccarino to Santangelo on 1/21/2010	WIKA Instrument Corp.
92	MV 400	Leak Detector	MS-17AB	Vecco	12-17-1556			Vac. Lab 725A	Calibrated when used	Walter DeBoer		
93	MV 401	Leak Detector	MS-18AB	Vecco	12-18-1878	17911		Turbo Area	Calibrated when used	" "		
94	MV 402	Leak Detector	MS-170	Vecco	170-717E	38684		Turbo Area	Calibrated when used	" "		
95	MV 403	Leak Detector	MS-170	Vecco	170-881E			Turbo Area	Calibrated when used	" "		
96	MV 404	Leak Detector	MS-20	Vecco		37725		Turbo Area	Calibrated when used	" "		
97	MV 405	Leak Detector	MS-90	Vecco	02-1527	14280		Turbo Area	Calibrated when used	" "		
98	MV 406	Leak Detector	MS-17AM	Vecco	3232-C	383321		Turbo Area	Calibrated when used	" "		
99	MV 407	Leak Detector	120SSA	Dupont	7195			725	Calibrated when used	" "		
100	MV 408	Leak Detector	120SSA	Dupont	7173			725	Calibrated when used	" "		
101	MV 409	Leak Detector	UL 100	Leybold Heraeus		47325		Vac. Lab	Calibrated when used	" "		

NSLS CONTROLLED MEASURING TEST EQUIPMENT CALIBRATION LIST
QUALITY ASSURANCE -
7/29/2011

	A	B	C	D	E	F	G	H	I	K	L	M
1	GSDR/M&TE	Instruments/ Descriptions	Model #	Manufacter	Serial #	Bar #	BNL #	Location	Calibration Frequency	Responsible Custodian	Comments	Calibration Certificates from
102	MV 410	Leak Detector	UL 100	Leybold Heraeus	89639	665032		Vac. Lab	Calibrated when used	“ “		
103	MV 411	Sensitivity SC-4 Calibrator		Veeco	19831			Vac. Lab	1 yr.	“ “	*NOTE: MV 0414; MV 0417; MV 0418 & MV 0419 calibrated against this one # that is sent out to be calibrated	VIC Leak Detection
104	MV 414	Sensitivity Calib	SC-4	Veeco	17621			Vac. Lab	1 yr.	“ “	*NOTE: MV 0414; MV 0417; MV 0418 & MV 01419 calibrated against this one # that is sent out to be calibrated.	VIC Leak Detection
105	MV 417	Sensitivity Calib	SC4-RC	Veeco	17656			Vac. Lab	1 yr.	“ “	*NOTE: MV 0414; MV 0417; MV 0418 & MV 0419 calibrated against this one # that is sent out to be calibrated	VIC Leak Detection

NSLS CONTROLLED MEASURING TEST EQUIPMENT CALIBRATION LIST
QUALITY ASSURANCE -
7/29/2011

	A	B	C	D	E	F	G	H	I	K	L	M
1	GSDR/M&TE	Instruments/ Descriptions	Model #	Manufactu rer	Serial #	Bar #	BNL #	Location	Calibration Frequency	Responsible Custodian	Comments	Calibration Certificates from
106	MV 419	Sensitivity Calib	SC-4	Veeco	17663			Vac. Lab	1 yr.	“ “	*NOTE: MV 0414; MV 0417; MV 0418 & MV 0419 calibrated against this one # that is sent out to be calibrated.	VIC Leak Detection
107	OCE-0001	OCE Plotter/Printer		OCE'				Design Room 2nd floor NSLS	1 yr.	notify the following: Peter Gross; Chris Stelmach; Sal Pjerov - This is kept in here for keeping track of - just update to next year each time once Peter Gross or Chris Stelmach notifies you they did it for the year.	Entered new in system as of 1/30/07 - keep track of in calib. database to renew contract yearly	OCE
108	SAF-002	Shop Vacuum	829116	Minuteman	T8291160827			R. 1-124A	1 yr.	Dennis Carlson		in-house
109	SAF-003	Vacuum Cleaner	GSJ-115	Nilfisk	13027	I.D. # 3636		bldg. 725; rm. 1-124	1 yr.	Dennis Carlson		in-house
110	SAF-004	Vacuum Cleaner	-	Nilfisk	9056301020-0342-00094	I.D. # 3640		bldg. 725; rm. 1-124	1 yr.	Dennis Carlson		in-house

NSLS CONTROLLED MEASURING TEST EQUIPMENT CALIBRATION LIST
QUALITY ASSURANCE -
7/29/2011

	A	B	C	D	E	F	G	H	I	K	L	M
1	GSDR/M&TE	Instruments/ Descriptions	Model #	Manufactu rer	Serial #	Bar #	BNL #	Location	Calibration Frequency	Responsible Custodian	Comments	Calibration Certificates from
111												
112												