

CAMECA STANDARD (TRUE VIEW)

	A	B	C	D	E	F	← G	H
1	CL-SCAP 133 DOLOMITE 227	A-408 262 SiO ₂ (rose)	CL-APATITE 15 CAF ₂ 71	CA ₂ P ₂ O ₇ 10 BASO ₄ 252	ZN-CA-P ZRSiO ₄ 11	RB-AL-SI 139 MGAL ₂ O ₄ 129	KVANITE 321 <u>SC-THORT</u>	AMELIA 248 ZRO ₂ 298
2	AN-100 60 SiO ₂ (Herkimer)	AN-90 61 TiO ₂ 25	AN-80 62 U ₂ O ₃ 5	AN-70 63 CR ₂ O ₃ 26	AN-60 64 FE ₃ O ₄ 77	AN-50 65 COO 55	AN-30 67 NiO 3	AN-10 69 ZNO 56
3	DIOPSIDE 123 AL ₂ O ₃ 74	GA-ANOR 317 MGO 30	GE-ANOR 314 HFSiO ₄ ORNL	ANORTHOCLE 20 THSiO ₄ ORNL	PARCELS 326 ZRO ₂ ORNL	POLLUCITE 52 CEO ₂ ORNL	0.1 SR-AN 316 UO ₂ ORNL	ASBESTOS 258 THO ₂ ORNL
4	ENSTATITE 122 C	EN AL-5 124 200	EN AL-10 125 TI 33	EN AL-20 126 U 35	KAN AUGITE EJ CR 27	<u>AS</u> MN 37	DI85-JD15 127 FE 31	ARENAL HBD EJ CO 312
5	P-140 325 NI 36	<u>BI</u> CU 32	SAN CARLOS EJ ZN 34	SUSIMAKI 274 GE 90	MN-HORT 271 ZR 78	ALL-BLUE NB 38	FAYALITE ORNL MO 88	KAN HBD EJ RU AMD
6	2034 13 RH AMD	706 14 PD AMD	MB5 263 AG 95	GS-2 101 TA AMD	GS-3 157 W AMD	GS-4 158 RE AMD	A-128 261 <u>SB</u>	96189 EJ IR
7	ZNS 267 PT 108	CUFES ₂ 18 RU 93	FES ₂ 17 PB 92	FES (Can. Dia) CAWO ₄	PYROPE 110 FE+SI (Horse Cr)	87375 EJ JADEITE 269	110752 EJ <u>BAAL₂Si₂O₈</u> SYN	GORE GAR. 165 <u>FORSTERITE</u> SYN
8	V-GLASS 318 <u>ZNS</u>	W-GLASS 319 <u>SB₂S₃</u>	X-GLASS 320 <u>AG₂S</u>	REE-1 39 <u>Bl₂S₃</u>	REE-2 40 <u>AS₂S₃</u>	REE-3 41 <u>CUS</u>	REE-4 42 <u>DIOPSIDE</u> JI	YAG ANDRADITE

UNDERLINED SAMPLES - ONLY IN STANDARDS #3 AND #4.

A-1 DOLO natural dolomite
SCAP natural scapolite
B-1 SIO2 rose quartz
A408 natural apatite
C-1 CLAP synthetic Cl-apatite
CAF2 synthetic fluorite
D-1 CA2P synthetic phosphate
BASO natural barite
E-1 ZRSI synthetic zircon
ZNPH Zn phosphate (not a standard)
F-1 SPIN synthetic spinel
RBAS synthetic Rb Al-silicate - use only for locating peak
G-1 KYAN natural kyanite
SCTH synthetic Sc-thortvetite
H-1 AMEL natural albite
BADD natural baddeleyite

A-2 ANOR anorthite glass
HERK very pure natural quartz
B-2 AN90 plagioclase glass
TIO2 synthetic rutile
C-2 AN80 plagioclase glass
V2O3 synthetic oxide
D-2 AN70 plagioclase glass
CR2O synthetic oxide
E-2 AN60 plagioclase glass
MAGN synthetic magnetite
F-2 AN50 plagioclase glass
COO synthetic oxide
G-2 AN30 plagioclase glass
NIO synthetic oxide
H-2 AN10 plagioclase glass
ZNO synthetic oxide

A-3 DIOP diopside glass
AL2O synthetic corundum
B-3 GAAN gallium feldspar glass
MGO synthetic oxide
C-3 GEAN germanium feldspar glass
HFSI synthetic hafnium
D-3 ANCL natural anorthoclase
THSI synthetic thorite
E-3 PARA natural paracelsian
ZRO2 synthetic oxide
F-3 POLL natural pollucite
CEO2 synthetic oxide
G-3 SRAN synthetic glass
UO2 synthetic oxide
H-3 ASBE natural microcline
THO2 synthetic oxide

A-4 ENST synthetic glass
C metal
B-4 SI metal
EN5 synthetic glass
C-4 EN10 synthetic glass
TI metal
D-4 EN20 synthetic glass
V metal
E-4 KANA natural augite
CR metal
F-4 AS metal

	MN	metal
G-4	DI85	synthetic glass
	FE	metal
H-4	AREH	natural hornblende
	CO	metal

A-5	P140	natural olivine
	NI	metal
B-5	BI	metal
	CU	metal
C-5	SANC	natural olivine
	ZN	metal
D-5	SUSI	natural olivine
	GE	metal
E-5	MNHO	natural olivine
	ZR	metal
F-5	NB	metal
	ALL	Allende forsterite
G-5	MO	metal
	FAYA	synthetic fayalite
H-5	KANH	natural hornblende
	RU	metal

A-6	2034	natural chromite
	RH	metal
B-6	706	natural chromite
	PD	metal
C-6	MB5	natural chromite
	AG	metal
D-6	GS2	natural chromite
	TA	metal
E-6	GS3	natural chromite
	W	metal
F-6	GS4	natural chromite
	RE	metal
G-6	A128	natural ilmenite
	SB	metal
H-6	9618	natural ilmenite
	IR	metal

A-7	ZNS	synthetic
	PT	metal
B-7	CUSF	natural sulfide
	AU	metal
C-7	FS2	natural pyrite
	PB	metal
D-7	SCHE	natural scheelite (Use CL for beam location)
	FES	natural troilite
E-7	PYRO	pyrope glass
	FESI	natural si bearing metal
F-7	JADE	natural jadeite
	8737	natural garnet
G-7	1107	natural garnet
	BASI	synthetic feldspar
H-7	GORE	natural garnet
	FORS	synthetic forsterite

A-8	VGLA	synthetic glass
	ZNS	synthetic sphlarite
B-8	WGLA	synthetic glass
	SB2S	synthetic
C-8	XGLA	synthetic glass

	AG2S	synthetic
D-8	REE1	synthetic glass
	BI2S	synthetic
E-8	REE2	synthetic glass
	AS2S	synthetic
F-8	REE3	synthetic glass
	CUS	synthetic
G-8	REE4	synthetic glass
	DIJI	synthetic diopside
H-8	YAG	synthetic garnet
	ANDR	natural andradite (not a standard)

A-1	DOLO	6	Ca	.2175	Mg	.1313	Mn	.0001	Fe	.0006	C	.1293	O	.5212
	SCAP	13	Si	.2435	Al	.1259	Ti	.0001	Fe	.0016	Mg	.0011	Ca	.0795
			K	.0072	C	.0058	Cl	.0185	S	.0032	F	.0011	O	.4616
B-1	SIO2	2	Si	.4675	O	.5325								
	A408	14	P	.1806	Ca	.3908	Mg	.0007	Na	.0004	Fe	.0005	K	.0001
			Sr	.0007	Ce	.0014	Y	.0008	C	.0002	F	.0338	U	.0007
C-1	CLAP	4	Ca	.3848	P	.1784	Cl	.0681	O	.3687				
	CAF2	2	Ca	.6784	F	.3216								
D-1	CA2P	3	Ca	.3155	P	.2438	O	.4407						
	BASO	3	Ba	.5884	S	.1374	O	.2742						
E-1	ZRSI	4	Zr	.4974	Si	.1531	Yb	.0005	O	.3490				
	ZNPH													
F-1	SPIN	3	Mg	.1709	Al	.3793	O	.4498						
	RBAS	4	Rb	.3230	Al	.1019	Si	.2123	O	.3628				
G-1	KYAN	3	Al	.3330	Si	.1733	O	.4937						
	SCTH	3	Sc	.3484	Si	.2177	O	.4339						
H-1	AMEL	6	Si	.3212	Al	.1028	Ca	.0001	Na	.0866	K	.0012	O	.4881
	BADD	3	Zr	.7255	Hf	.0170	O	.2575						

A-2	ANOR	4	Ca	.1441	Al	.1939	Si	.2019	O	.4601				
	HERK	2	Si	.4675	O	.5325								
B-2	AN90	5	Ca	.1304	Na	.0083	Al	.1853	Si	.2133	O	.4627		
	TIO2	2	Ti	.5994	O	.4006								
C-2	AN80	5	Ca	.1166	Na	.0167	Al	.1766	Si	.2247	O	.4654		
	V2O3	2	V	.6798	O	.3202								
D-2	AN70	5	Ca	.1026	Na	.0252	Al	.1677	Si	.2363	O	.4681		
	CR2O	2	Cr	.6842	O	.3158								
E-2	AN60	5	Ca	.0885	Na	.0338	Al	.1588	Si	.2480	O	.4709		
	MAGN	2	Fe	.7236	O	.2764								
F-2	AN50	5	Ca	.0742	Na	.0425	Al	.1498	Si	.2599	O	.4737		
	COO	2	Co	.7865	O	.2135								
G-2	AN30	5	Ca	.0450	Na	.0603	Al	.1313	Si	.2840	O	.4794		
	NIO	2	Ni	.7858	O	.2142								
H-2	AN10	5	Ca	.0152	Na	.0784	Al	.1125	Si	.3088	O	.4851		
	ZNO	2	Zn	.8034	O	.1966								

A-3	DIOP	4	Mg	.1123	Ca	.1851	Si	.2594	O	.4432				
	AL2O	2	Al	.5293	O	.4707								
B-3	GAAN	5	Ga	.1376	Ca	.1319	Al	.1244	Si	.1849	O	.4212		
	MGO	2	Mg	.6031	O	.3959								
C-3	GEAN	5	Ca	.1418	Al	.1909	Si	.1888	Ge	.0257	O	.4528		
	HFSI	3	Hf	.6596	Si	.1039	O	.2365						
D-3	ANCL	7	Si	.3088	Al	.1081	Ca	.0056	Sr	.0038	Na	.0611	K	.0290
	THSI	3	Th	.7159	Si	.0867	O	.1975						
E-3	PARA	4	Si	.1543	Al	.1437	Ba	.3451	O	.3481				
	ZRO2	3	Zr	.7403	O	.2597								
F-3	POLL	6	Si	.2188	Al	.0831	Na	.0139	Rb	.0060	Cs	.3056	O	.3673
	CEO2	2	Ce	.8141	O	.1859								
G-3	SRAN	5	Sr	.0310	Ca	.1275	Al	.1907	Si	.1985	O	.4523		
	UO2	2	U	.8815	O	.1185								
H-3	ASBE	6	Si	.3024	Al	.0973	K	.1376	Ca	.0002	Na	.0014	O	.4611
	THO2	2	Th	.8788	O	.1212								

A-4	ENST	3	Mg	.2421	Si	.2798	O	.4781						
	C													
B-4	EN5	4	Mg	.2300	Al	.0265	Si	.2658	O	.4777				
	SI													
C-4	EN10	4	Mg	.2179	Al	.0529	Si	.2518	O	.4774				

Has Y2O3

*ZRO2

TI
 D-4 EN20 4 Mg .1937 Al .1059 Si .2239 O .4765
 V
 E-4 KANA 9 Si .2372 Al .0411 Fe .0526 Mg .1004 Ca .1131 Na .0094 Ti .0044
 Mn .0010 O .4436
 CR
 F-4 AS
 MN
 G-4 DI85 6 Mg .0955 Ca .1574 Na .0171 Al .0200 Si .2622 O .4478
 FE
 H-4 AREH 11 Si .1938 Al .0818 Fe .0892 Mg .0859 Ca .0826 Na .0142 K .0017
 Ti .0084 Mn .0012 H .0013 O .4362
 CO

A-5 P140 6 Mg .3068 Si .1926 Mn .0009 Fe .0576 Ni .0030 O .4390
 NI
 B-5 BI
 CU
 C-5 SANC 5 Si .1908 Fe .0742 Mg .2981 Mn .0011 O .4350
 ZN
 D-5 SUSI 6 Si .1652 Mg .1543 Mn .0041 Fe .2992 Ca .0002 O .3767
 GE
 E-5 MNHO 6 Si .1564 Mg .1026 Mn .0397 Ca .0014 Fe .3439 O .3568
 ZR
 F-5 NB
 ALL (Allende forsterite - not a standard)
 G-5 FAYA 3 Fe .5481 Si .1378 O .3141
 MO
 H-5 KANH 10 Si .1887 Al ~~.0789~~ ^{.0788} Fe .0849 Mg .0772 Na ~~.0192~~ ^{.0193} K ~~.0176~~ ^{.0176} Ti .0283
 Mn ~~.0697~~ H ~~.0010~~ O ~~.4306~~ ^{.4305} Ca .0736
 RU .0007 .0011

A-6 2034 5 Cr .2271 Al .1840 Fe .1147 Mg .1055 O .3687
 RH
 B-6 706 5 Cr .3635 Al .0695 Fe .1355 Mg .0938 O .3377
 PD
 C-6 MB5 11 Cr .1724 Al .0508 Mg .0428 Mn .0025 Ca .0002 Ti .0120 Si .0005
 V .0008 Ni .0012 Fe .4062 O .3106
 AG
 D-6 GS2 6 Si .0035 Al .0318 Fe .0990 Mg .0911 Cr .4434 O .3312
 TA
 E-6 GS3 8 Si .0020 Al .1016 Ti .0034 Fe .2078 Mg .0694 H .0004 Cr .2689
 O .3455
 W
 F-6 GS4 9 Si .0008 Al .0071 Ti .0046 Fe .1521 Mg .0621 Mn .0015 Ni .0009
 Cr .3045 O .4651
 RE
 G-6 A128 6 Ti .2973 Mn .0066 Mg .0066 Al .0002 Fe .3687 O .3187
 SB .3673 .2782 .0375 .3151
 → H-6 9618 5 Fe ~~.3617~~ Mg .0019 Ti ~~.2740~~ Mn ~~.0369~~ O ~~.3123~~
 IR

A-7 ZNS 2 Zn .6709 S .3291
 PT
 B-7 CUSF 3 Fe .3043 Cu .3463 S .3493
 AU
 C-7 FS2 2 Fe .4655 S .5345
 PB

D-7	FES	2	Fe	.6355	S	.3645													
	SCHE	3	Ca	.1392	W	.6385	O	.2222											
E-7	PYRO	4	Mg	.1810	Al	.1339	Si	.2089	O	.4762									
	FESI	5	Fe	.9370	Ni	.0380	Co	.0029	P	.0005	Si	.0250							
F-7	JADE	11	Si	.2776	Al	.1367	Ti	.0002	Mg	.0007	Ca	.0009	Na	.0994	Fe	.0031			
			K	.0002	H	.0004	Cr	.0001	O	.4773									
	8737	8	Si	.1845	Al	.1179	Fe	.1264	Mg	.0395	Ca	.1028	Ti	.0023	Mn	.0046			
			O	.4239															
G-7	1107	8	Si	.1878	Al	.1202	Fe	.0879	Mg	.0432	Ca	.1295	Ti	.0021	Mn	.0015			
			O	.4299															
	BASI	4	Ba	.3658	Al	.1438	Si	.1495	O	.3409									
H-7	GORE	8	Si	.1845	Ti	.0005	Al	.1205	Fe	.1690	Mn	.0039	Mg	.0524	Ca	.0528			
			O	.4164															
	FORS	3	Mg	.3456	Si	.1995	O	.4549											

A-8	VGLA	12	Si	.2697	Al	.0942	Mg	.0531	Ca	.0452	B	.0137	K	.0069	Ti	.0048			
			Cr	.0052	Ce	.0067	Hf	.0067	Fe	.0055	O	.4885							
B-8	WGLA	14	Si	.2660	Al	.0928	Mg	.0524	Ca	.0445	B	.0135	Cs	.0067	V	.0044			
			Mn	.0050	Cu	.0054	Co	.0057	Ba	.0070	La	.0067	Th	.0069	O	.4796			
	SB2S	2	Sb	.7172	S	.2828													
C-8	XGLA	14	Si	.2660	Ca	.0446	Al	.0929	B	.0135	Mg	.0525	Rb	.0046	Zr	.0058			
			Sr	.0066	Y	.0062	Pb	.0070	Zn	.0063	U	.0067	Ni	.0056	O	.4780			
	AG2S	2	Ag	.8708	S	.1292													
D-8	REE1	8	Al	.1615	Si	.1260	Ca	.1798	Eu	.0380	Gd	.0387	Tb	.0378	Tm	.0381			
			O	.3801															
	BI2S	2	Bi	.8132	S	.1868													
E-8	REE2	8	Al	.1621	Si	.1265	Ca	.1805	Nd	.0365	Sm	.0367	Yb	.0374	Lu	.0375			
			O	.3828															
	AS2S	2	As	.6095	S	.3905													
F-8	REE3	8	Al	.1626	Si	.1269	Ca	.1810	Y	.0321	La	.0365	Ce	.0342	Pr	.0379			
			O	.3888															
	CUS	2	Cu	.6646	S	.3354													
G-8	REE4	7	Al	.1698	Si	.1325	Ca	.1890	Dy	.0380	Ho	.0385	Er	.0381	O	.3941			
	DIJI	4	Mg	.1122	Si	.2594	Ca	.1851	O	.4433									
H-8	YAG	3	Al	.2273	Y	.4493	O	.3234											
	ANDR	6	Mg	.0018	Al	.0058	Si	.1645	Ca	.2402	Fe	.2087	O	.3795					
