

Big Red- Δ 6

Lab 5b-Color Wheel 2-Individual

Big Red

Original

070822-1

G200 EU	23.37
Whiting	27.11
EPK	11.17
Flint	12.73
3134	25.62
Chrome Oxide	0.10
Tin Oxide	8.00
Water	60



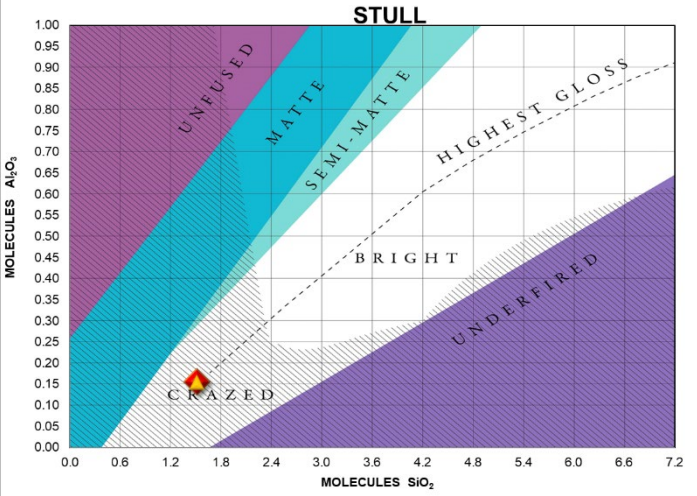
Oxidation



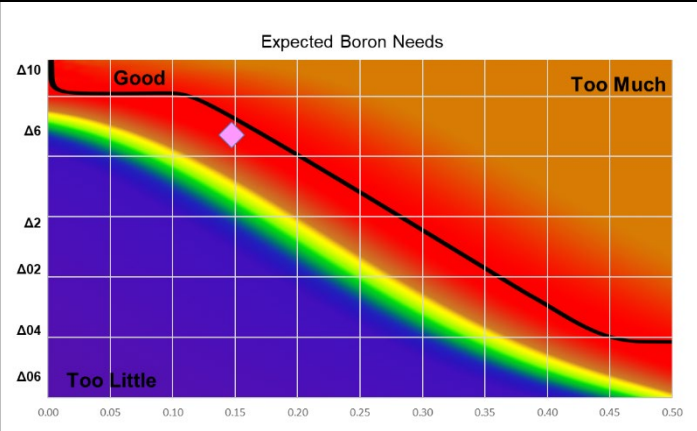
Reduction



SiO ₂ :Al ₂ O ₃ Ratio 9.75 : 1		Alkali Metals 0.17		Alkaline Earths 0.83	
SiO ₂ 1.69	Collective "Al ₂ O ₃ " 0.17	Na ₂ O 0.11	K ₂ O 0.06	MgO 0.00	CaO 0.82
B ₂ O ₃ 0.16	Al ₂ O ₃ 0.17	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



SiO ₂ :Al ₂ O ₃ Ratio 9.75 : 1		Alkali Metals 0.26		Alkaline Earths 0.74	
SiO ₂ 1.52	Collective "Al ₂ O ₃ " 0.16	Na ₂ O 0.10	K ₂ O 0.05	MgO 0.00	CaO 0.74
B ₂ O ₃ 0.15	Al ₂ O ₃ 0.15	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂ 0.10	ZnO	FeO 0.00
Cr ₂ O ₃ 0.00	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Ceramic
Materials
Workshop

Big Red

G200 EU	22.91
Whiting	26.58
EPK	10.95
Flint	12.48
3134	25.11
Cobalt Carbonate	0.98
Chrome Oxide	0.98
Water	60



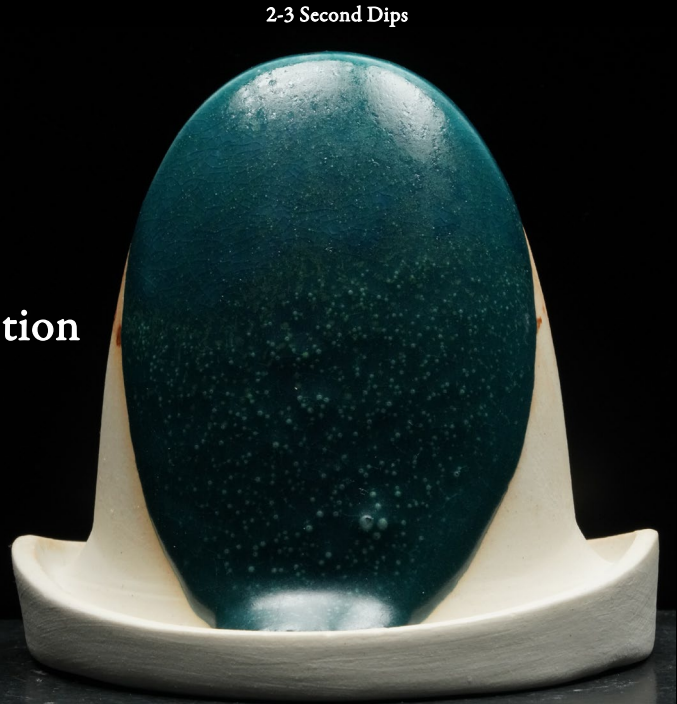
Oxidation



2-3 Second Dips

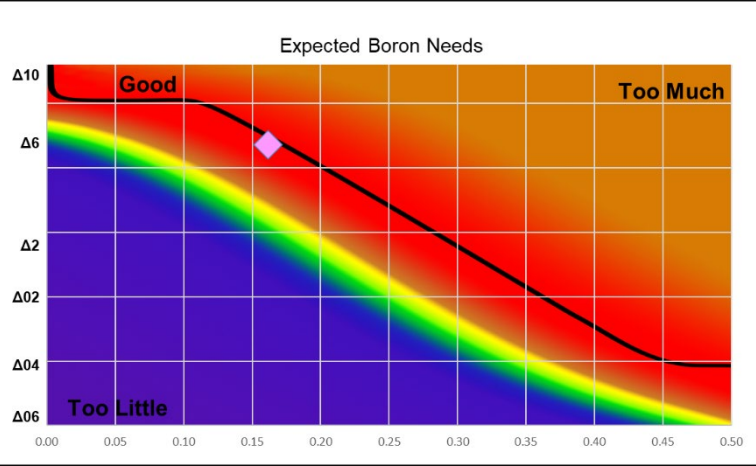
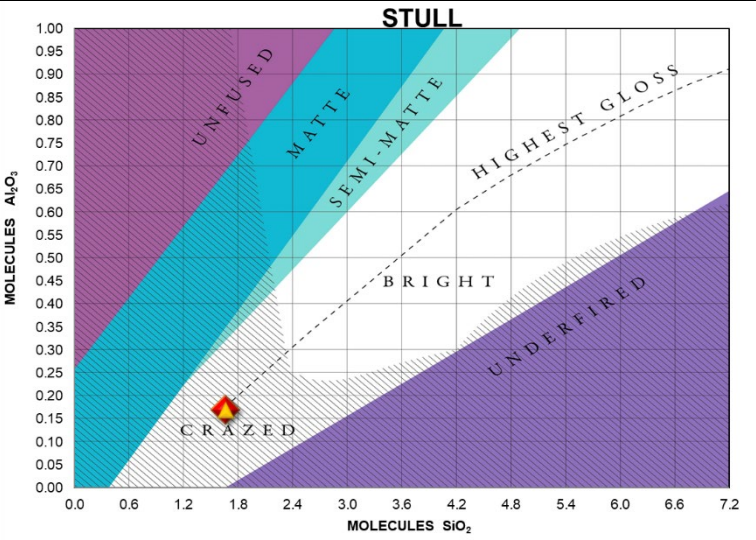


1-3 Second Dip



Reduction

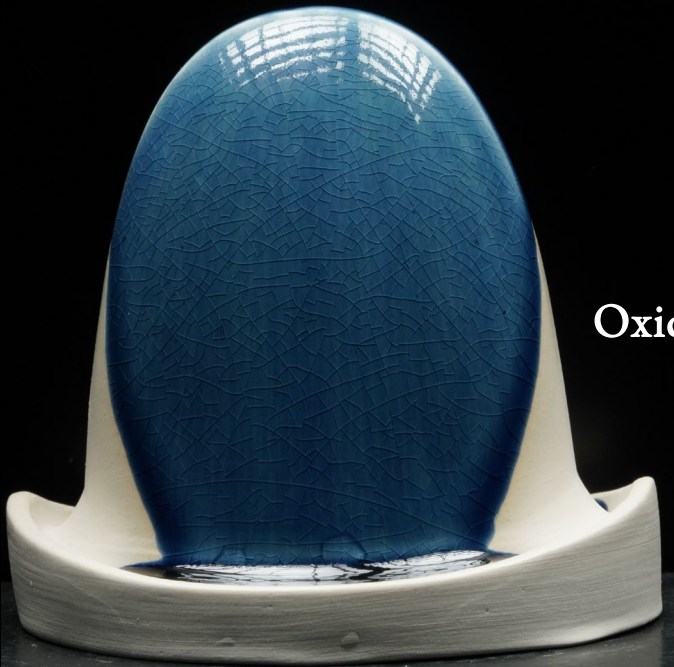
SiO ₂ :Al ₂ O ₃ Ratio 9.75 : 1		Alkali Metals 0.17		Alkaline Earths 0.83	
SiO ₂ 1.66	Collective "Al ₂ O ₃ " 0.17	Na ₂ O 0.11	K ₂ O 0.06	MgO 0.00	CaO 0.81
B ₂ O ₃ 0.16	Al ₂ O ₃ 0.17	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃ 0.01	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.02



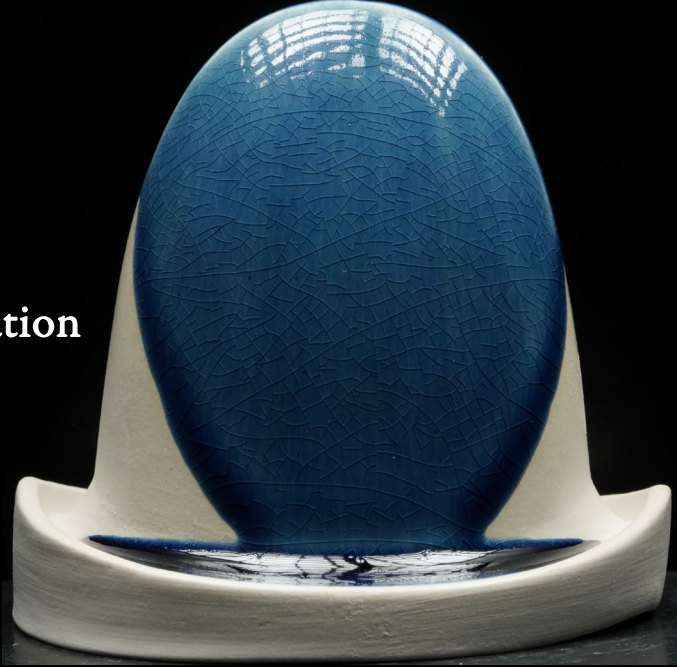
Ceramic
Materials
Workshop

Big Red

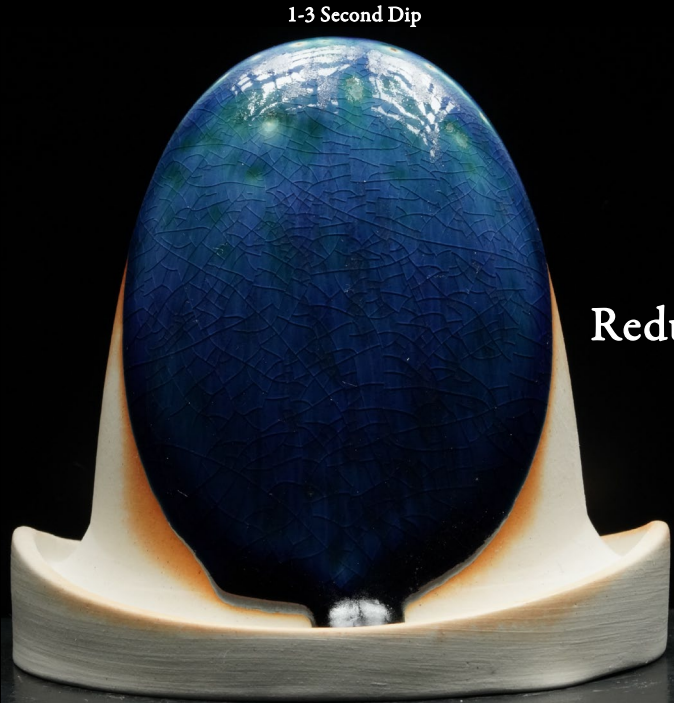
G200 EU	22.47
Whiting	26.07
EPK	10.74
Flint	12.24
3134	24.63
Cobalt Carbonate	0.96
Copper Carbonate	2.88
Water	60



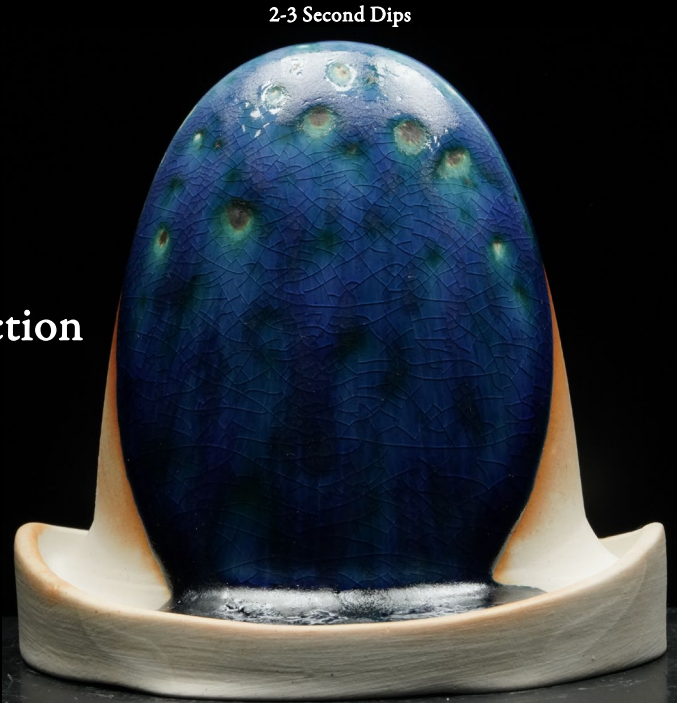
Oxidation



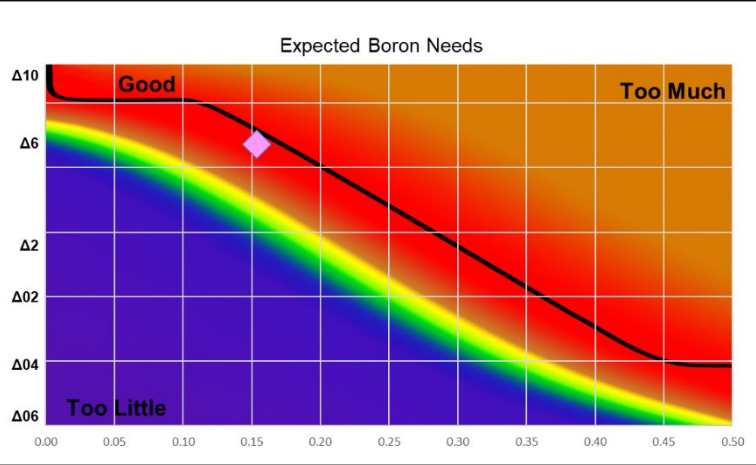
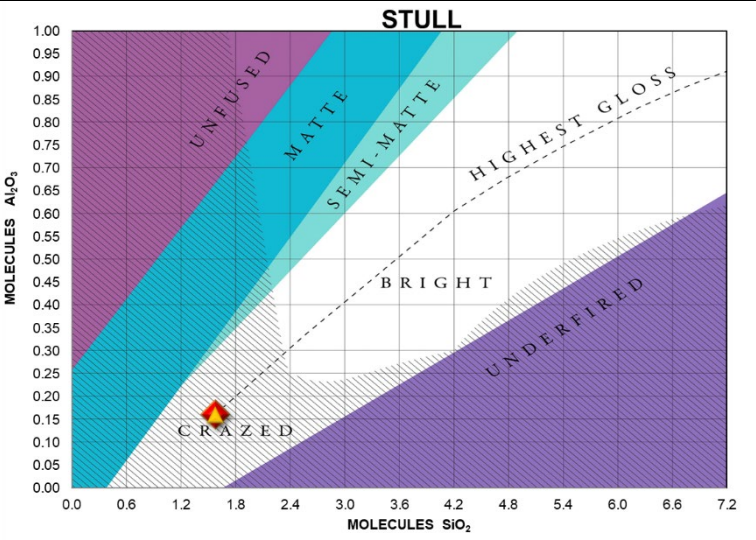
2-3 Second Dips



Reduction



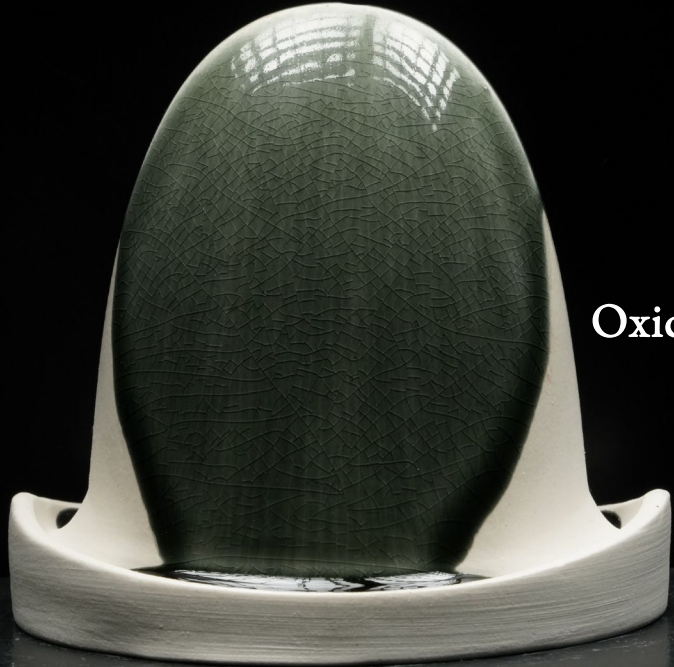
SiO ₂ :Al ₂ O ₃ Ratio 9.75 :1		Alkali Metals 0.21		Alkaline Earths 0.79	
SiO ₂ 1.58	Collective "Al ₂ O ₃ " 0.16	Na ₂ O 0.10	K ₂ O 0.06	MgO 0.00	CaO 0.77
B ₂ O ₃ 0.15	Al ₂ O ₃ 0.16	Li ₂ O	CuO 0.05	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.02



Ceramic
Materials
Workshop

Big Red

G200 EU	21.84
Whiting	25.34
EPK	10.44
Flint	11.90
3134	23.94
Cobalt Carbonate	0.93
Red Iron Oxide	5.61
Water	60



1-3 Second Dip



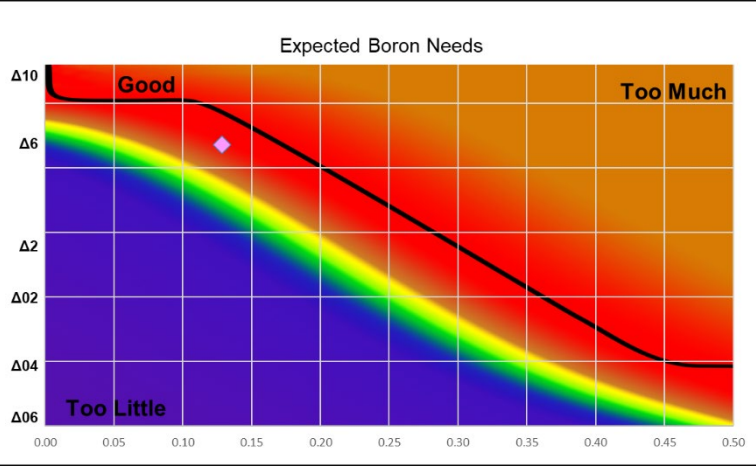
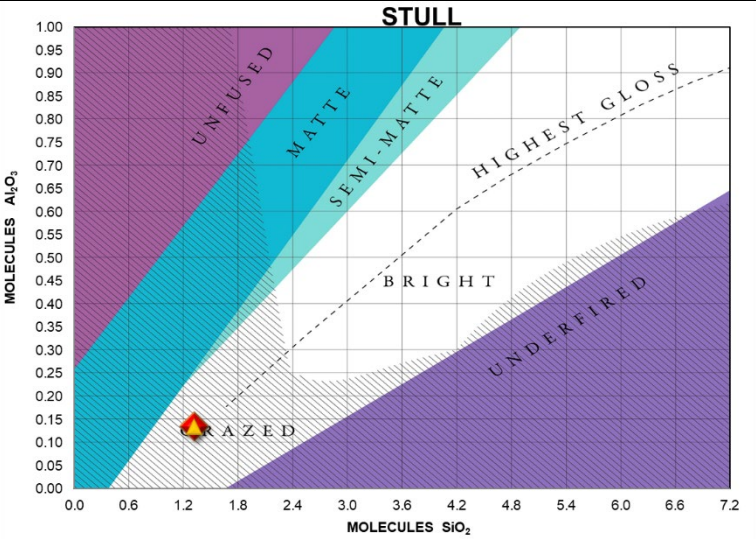
2-3 Second Dips



Reduction



SiO ₂ :Al ₂ O ₃ Ratio 9.75 :1		Alkali Metals 0.13		Alkaline Earths 0.87	
SiO ₂ 1.32	Collective "Al ₂ O ₃ " 0.14	Na ₂ O 0.09	K ₂ O 0.05	MgO 0.00	CaO 0.64
B ₂ O ₃ 0.13	Al ₂ O ₃ 0.13	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.21
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.01



Ceramic
Materials
Workshop

Big Red

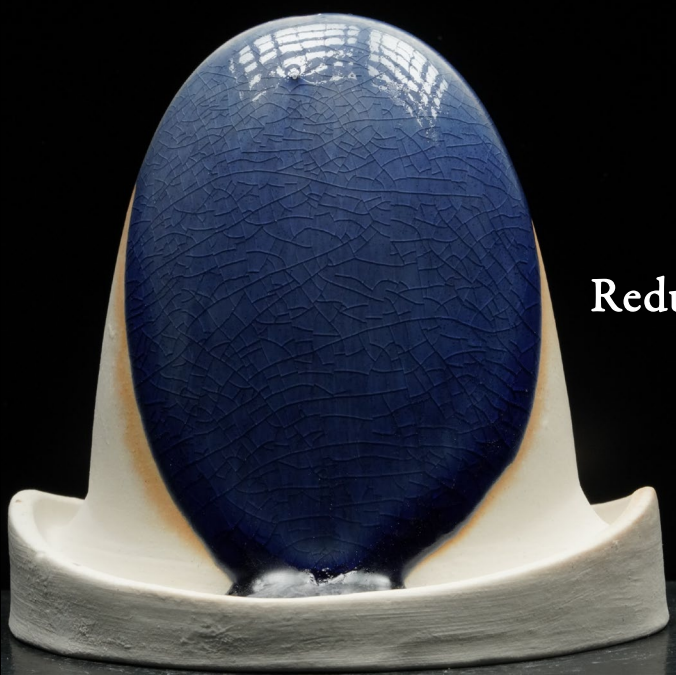
G200 EU	22.47
Whiting	26.07
EPK	10.74
Flint	12.24
3134	24.63
Cobalt Carbonate	0.96
Manganese Dioxide	2.88
Water	60



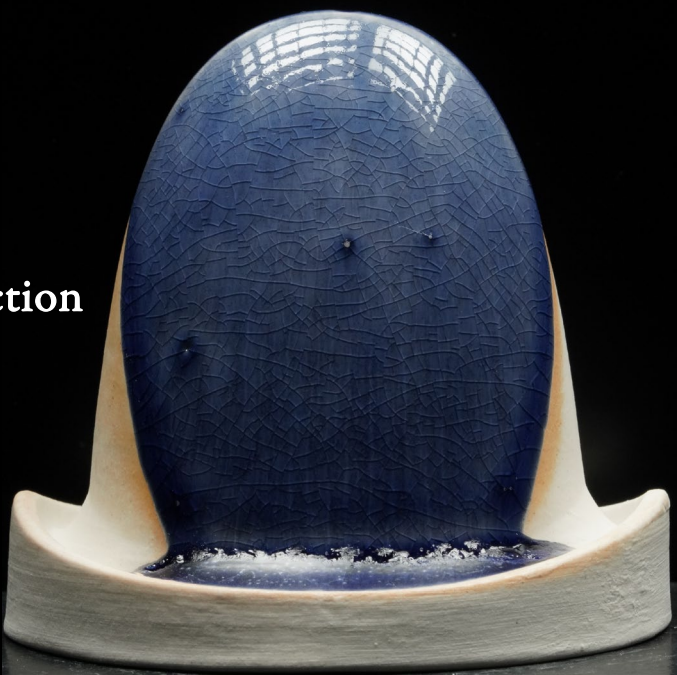
1-3 Second Dip



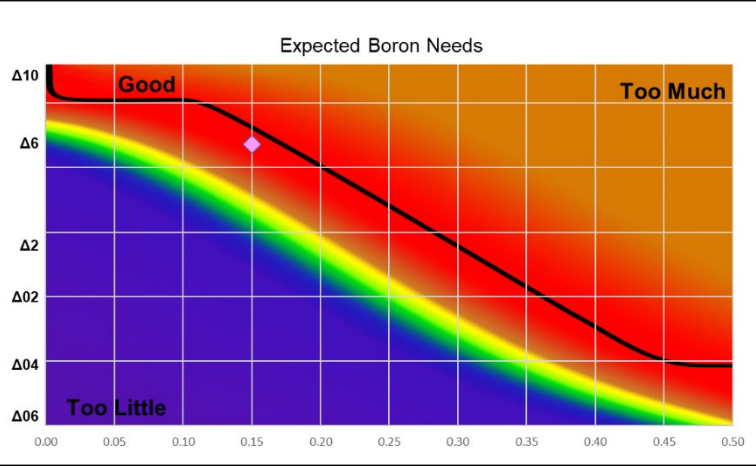
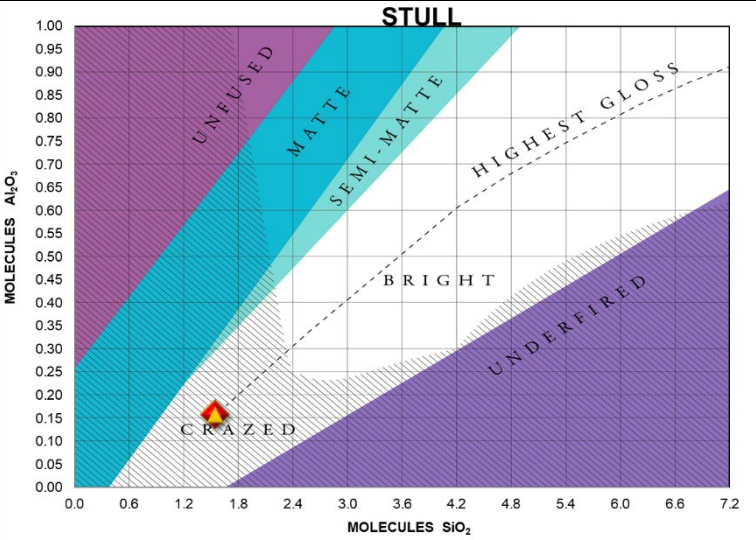
2-3 Second Dips



Reduction



SiO ₂ :Al ₂ O ₃ Ratio 9.75 :1		Alkali Metals 0.16		Alkaline Earths 0.84	
SiO ₂ 1.55	Collective "Al ₂ O ₃ " 0.16	Na ₂ O 0.10	K ₂ O 0.06	MgO 0.00	CaO 0.75
B ₂ O ₃ 0.15	Al ₂ O ₃ 0.16	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂ 0.07	CoO 0.02



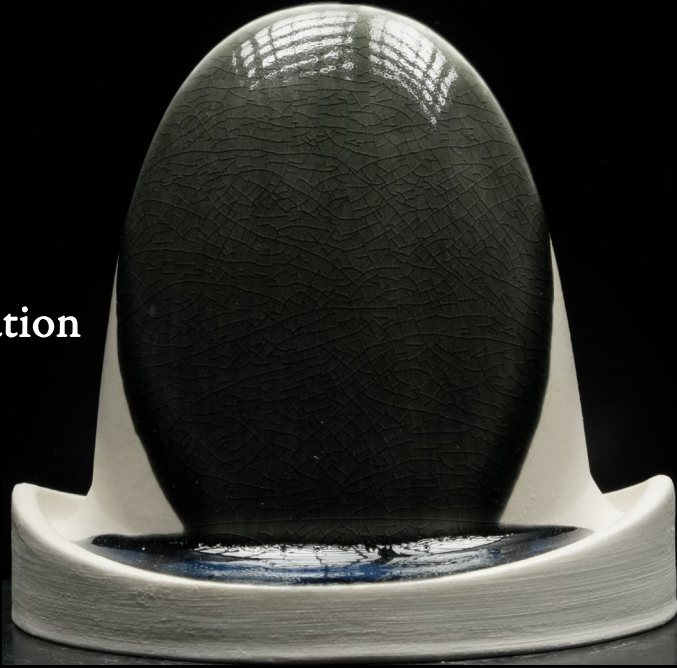
Ceramic
Materials
Workshop

Big Red

G200 EU	22.58
Whiting	26.20
EPK	10.79
Flint	12.30
3134	24.75
Cobalt Carbonate	0.97
Nickel Carb (Green)	2.42
Water	60



1-3 Second Dip



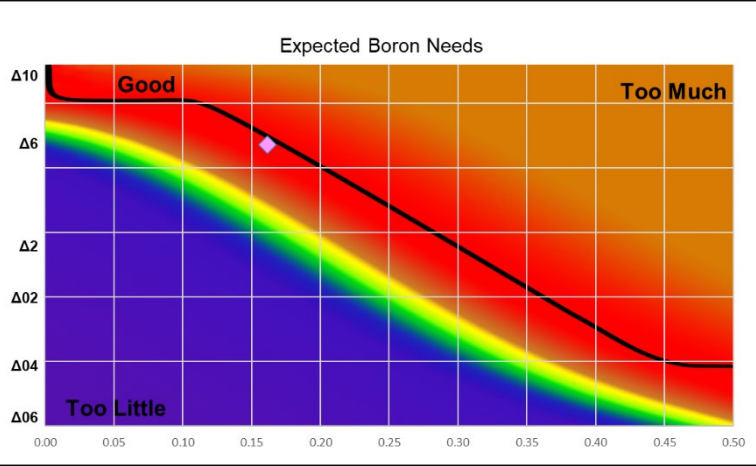
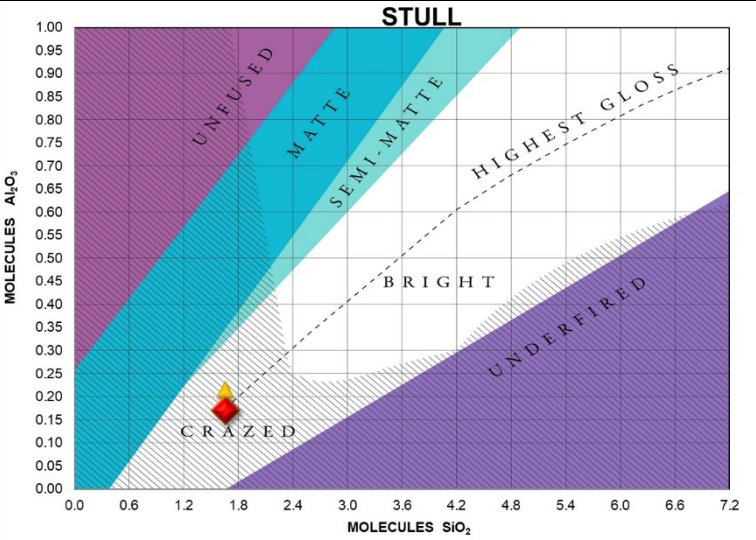
2-3 Second Dips



Oxidation

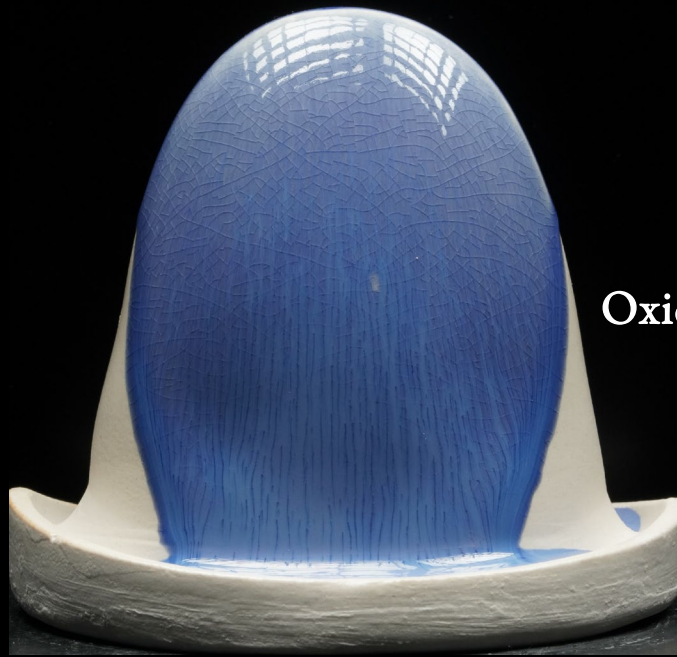
Reduction

SiO ₂ :Al ₂ O ₃ Ratio 7.69 :1		Alkali Metals 0.17		Alkaline Earths 0.83	
SiO ₂ 1.66	Collective "Al ₂ O ₃ " 0.22	Na ₂ O 0.11	K ₂ O 0.06	MgO 0.00	CaO 0.81
B ₂ O ₃ 0.16	Al ₂ O ₃ 0.17	Li ₂ O 0.00	CuO 0.00	SrO 0.00	BaO 0.00
TiO ₂ 0.00	NiO 0.05	Bi ₂ O ₃ 0.00	SnO ₂ 0.00	ZnO 0.00	FeO 0.00
Cr ₂ O ₃ 0.00	ZrO ₂ 0.00	P ₂ O ₅ 0.00		MnO ₂ 0.00	CoO 0.02

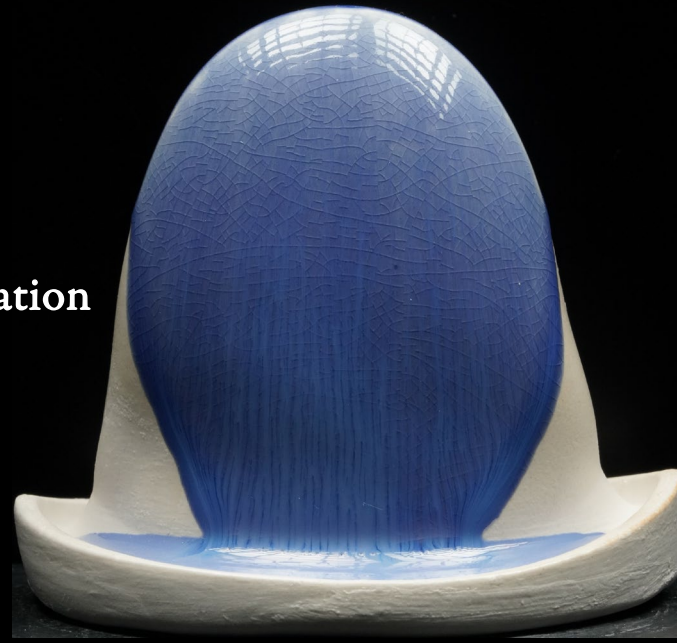


Big Red

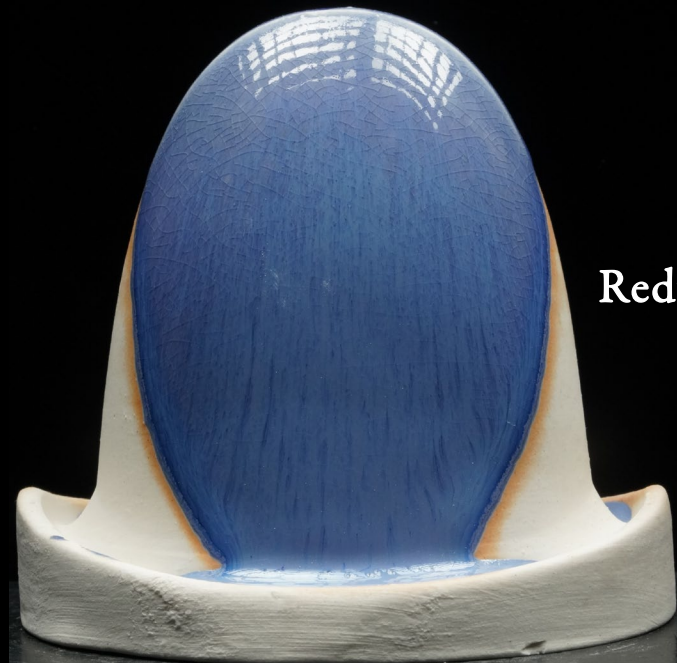
G200 EU	21.84
Whiting	25.34
EPK	10.44
Flint	11.90
3134	23.94
Cobalt Carbonate	0.93
Titanium Dioxide	5.61
Water	60



1-3 Second Dip



2-3 Second Dips

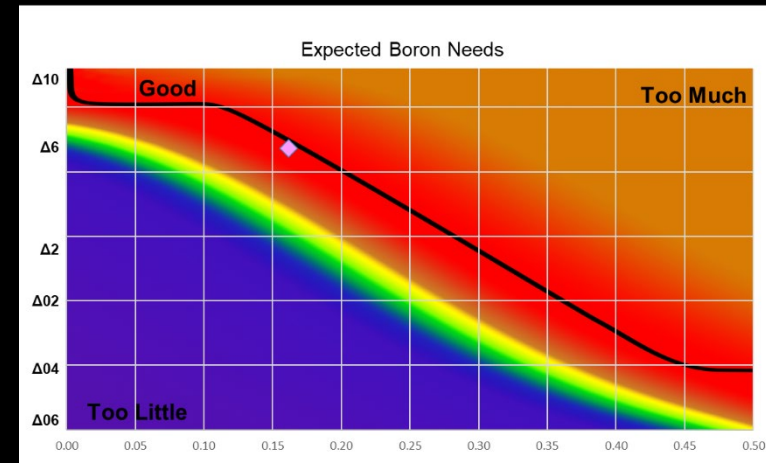
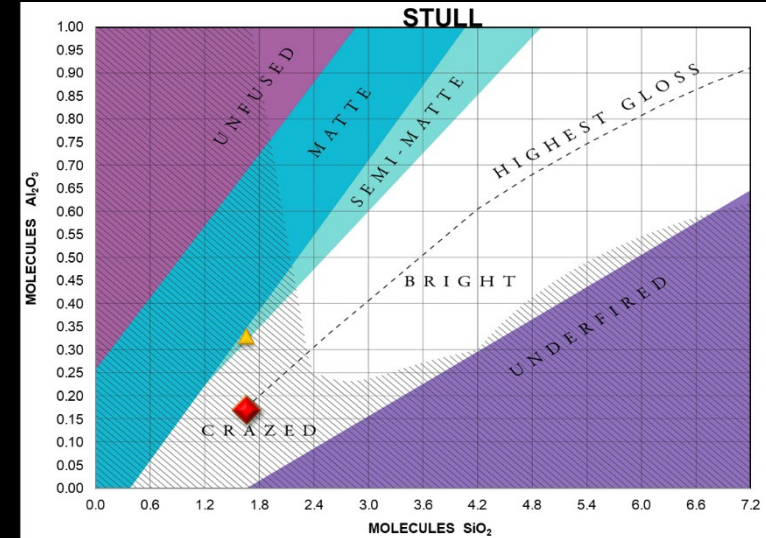


Reduction



Oxidation

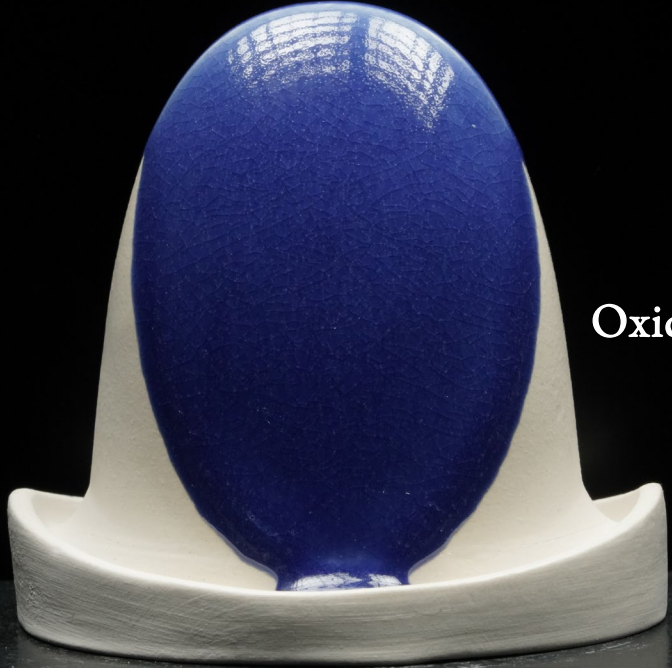
SiO ₂ :Al ₂ O ₃ Ratio 5.03 :1		Alkali Metals 0.17		Alkaline Earths 0.83	
SiO ₂ 1.66	Collective "Al ₂ O ₃ " 0.33	Na ₂ O 0.11	K ₂ O 0.06	MgO 0.00	CaO 0.81
B ₂ O ₃ 0.16	Al ₂ O ₃ 0.17	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.16	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.02



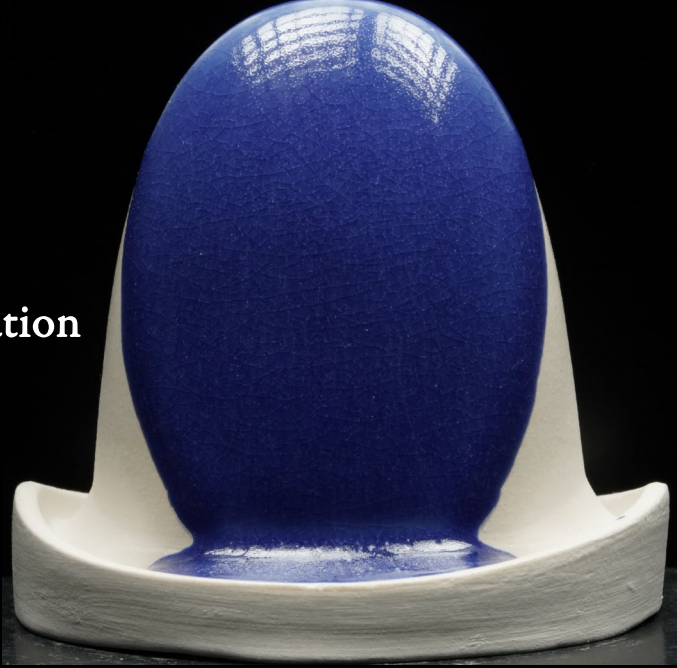
Ceramic
Materials
Workshop

Big Red

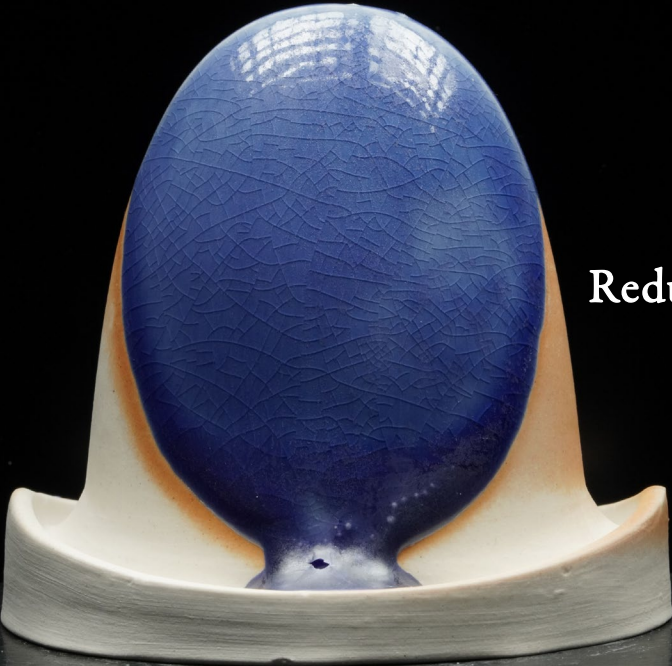
G200 EU	22.05
Whiting	25.58
EPK	10.54
Flint	12.01
3134	24.17
Cobalt Carbonate	0.94
Tin Oxide	4.72
Water	60



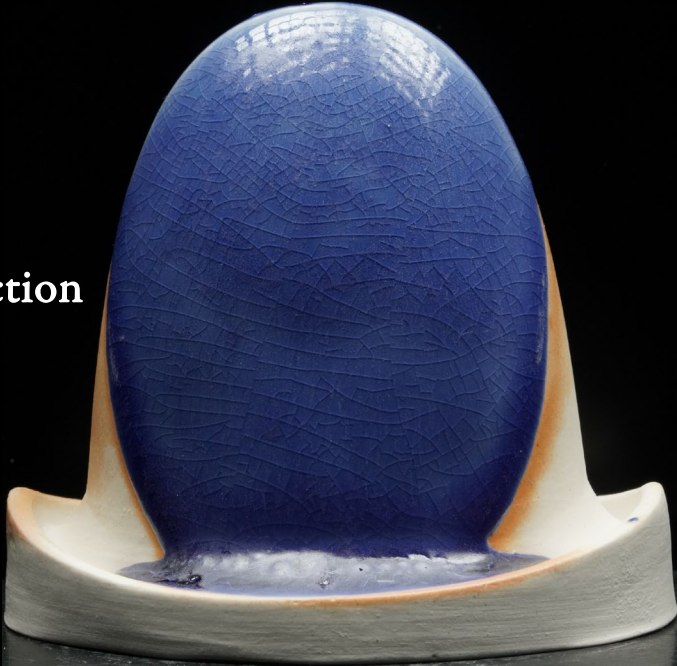
1-3 Second Dip



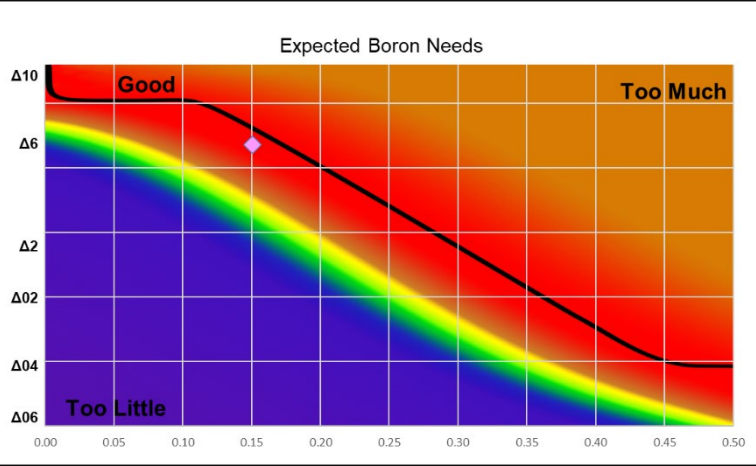
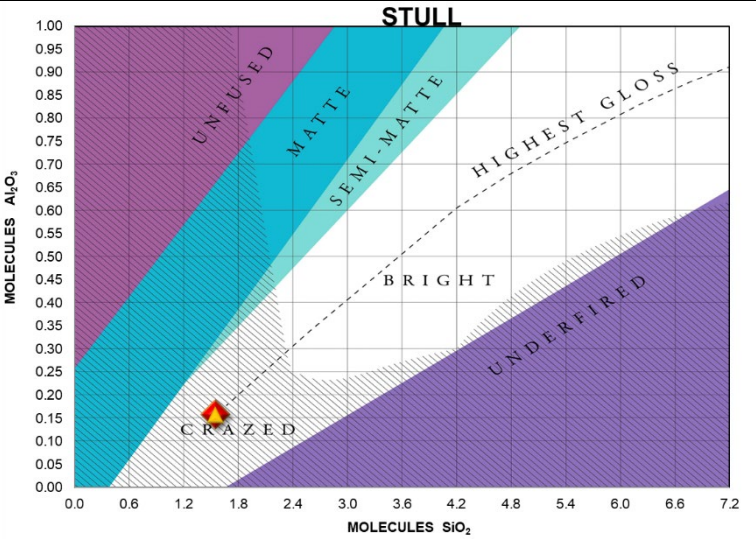
2-3 Second Dips



Reduction



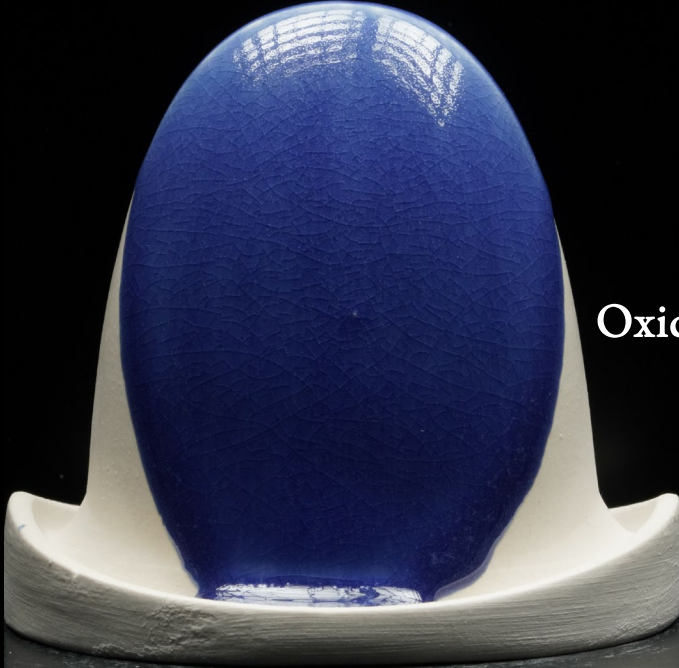
SiO ₂ :Al ₂ O ₃ Ratio 9.75 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 1.55	Collective "Al ₂ O ₃ " 0.16	Na ₂ O 0.10	K ₂ O 0.06	MgO 0.00	CaO 0.75
B ₂ O ₃ 0.15	Al ₂ O ₃ 0.16	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂ 0.07	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.02



Ceramic
Materials
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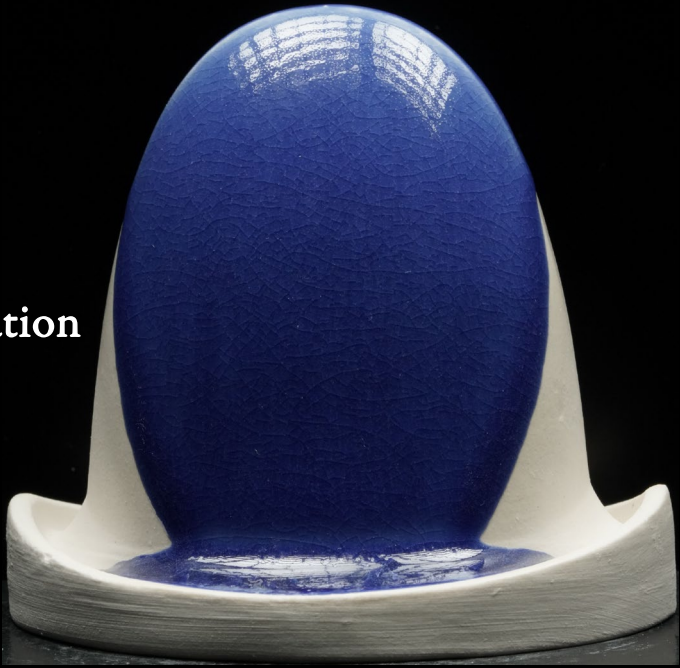
Big Red

G200 EU	21.05
Whiting	24.43
EPK	10.06
Flint	11.47
3134	23.08
Cobalt Carbonate	0.90
Ultrox (Zircopax)	9.01
Water	60

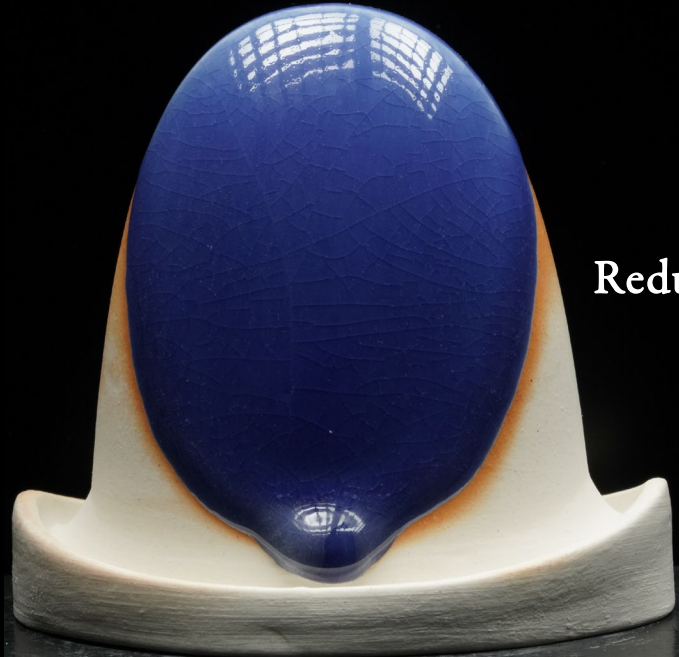


Oxidation

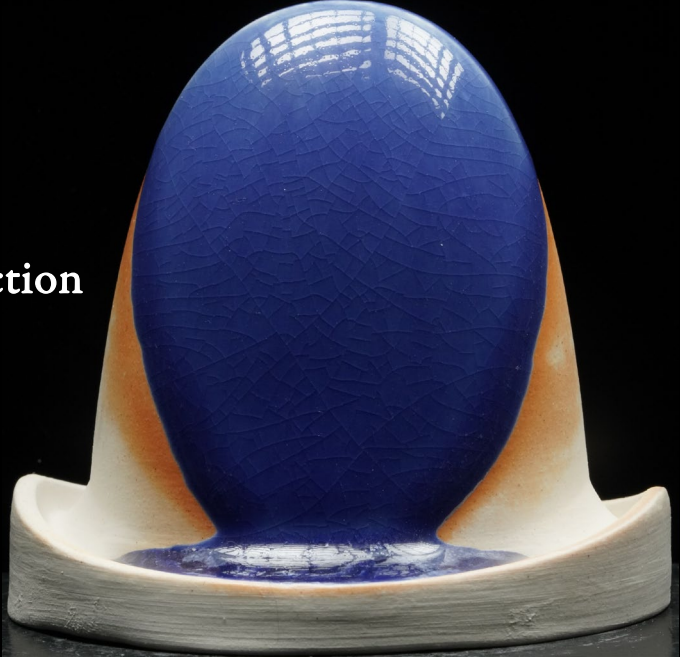
1-3 Second Dip



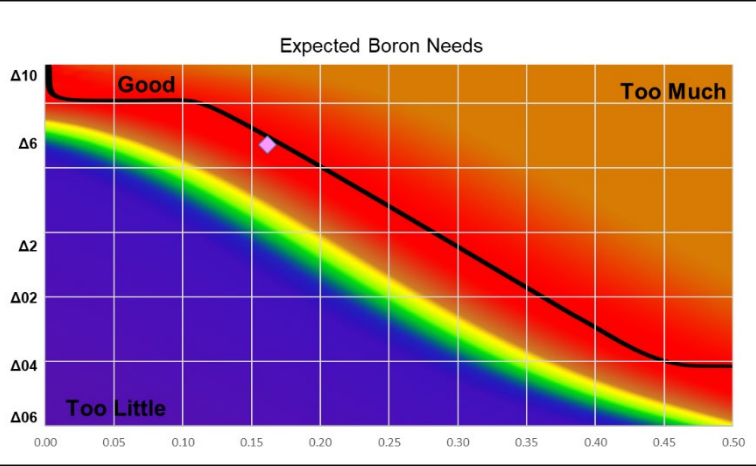
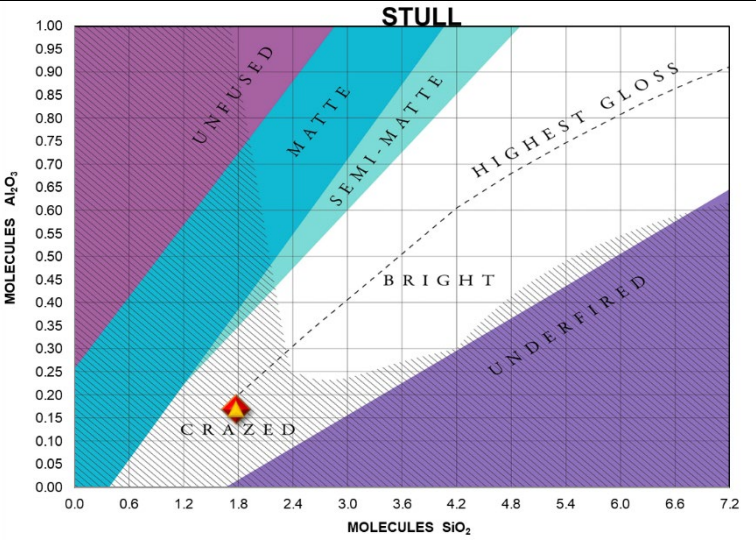
2-3 Second Dips



Reduction



SiO ₂ :Al ₂ O ₃ Ratio 10.44 : 1		Alkali Metals 0.17		Alkaline Earths 0.83	
SiO ₂ 1.78	Collective "Al ₂ O ₃ " 0.17	Na ₂ O 0.11	K ₂ O 0.06	MgO 0.00	CaO 0.81
B ₂ O ₃ 0.16	Al ₂ O ₃ 0.17	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.02



Ceramic
Materials
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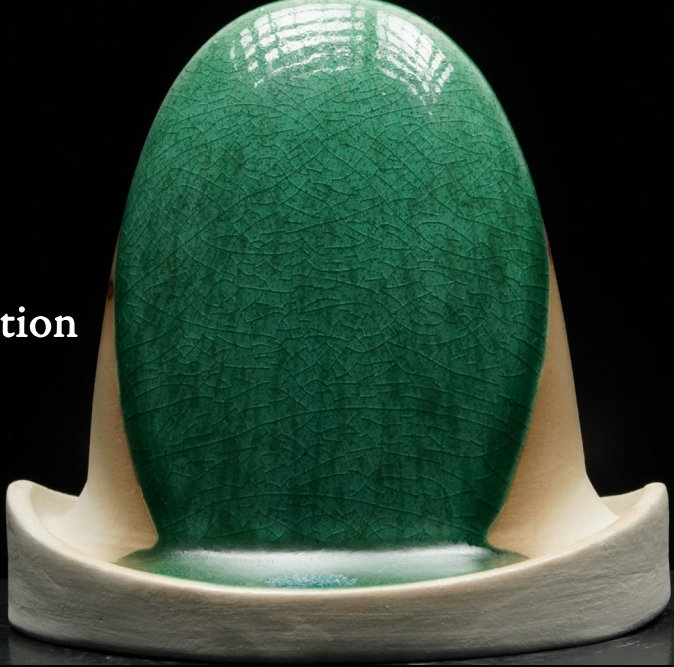
Big Red

G200 EU	22.47
Whiting	26.07
EPK	10.74
Flint	12.24
3134	24.63
Chrome Oxide	0.96
Copper Carbonate	2.88
Water	60



Oxidation

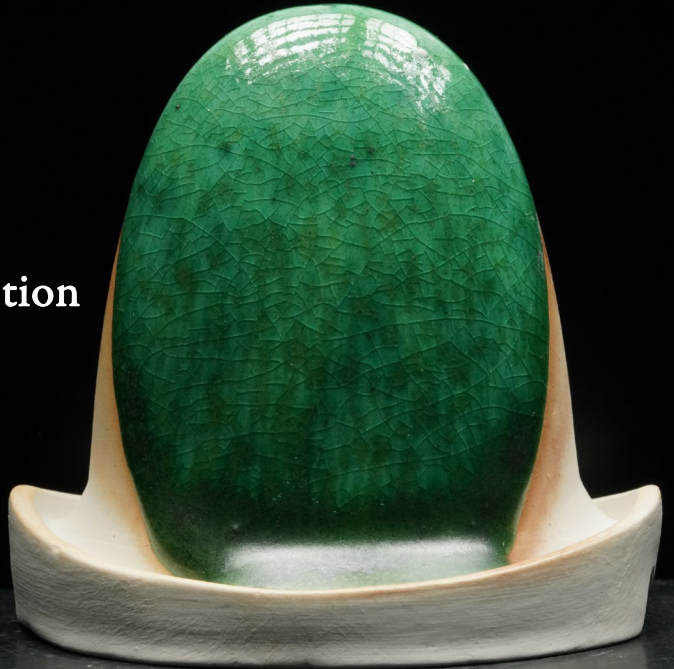
1-3 Second Dip



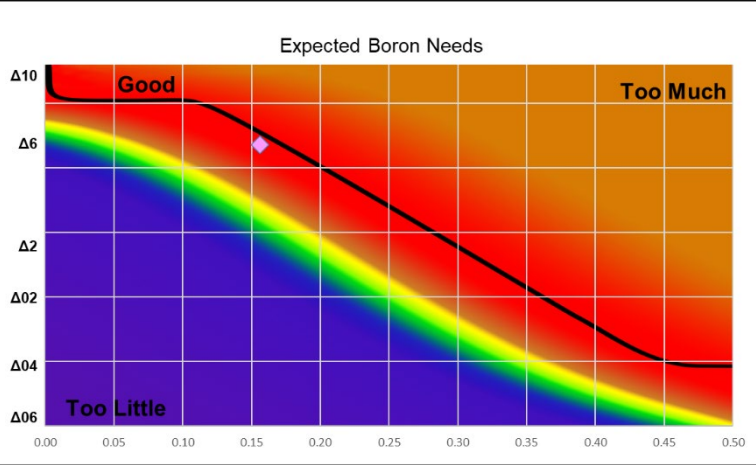
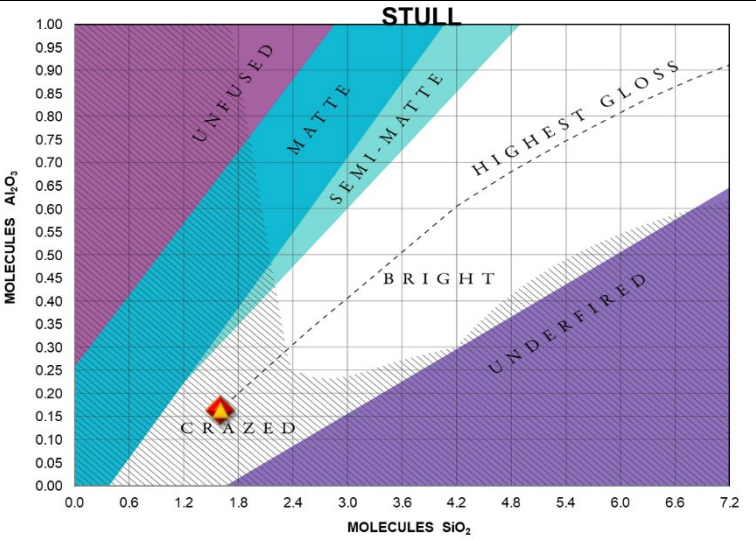
2-3 Second Dips



Reduction



SiO ₂ :Al ₂ O ₃ Ratio 9.75 : 1		Alkali Metals 0.21		Alkaline Earths 0.79	
SiO ₂ 1.61	Collective "Al ₂ O ₃ " 0.16	Na ₂ O 0.11	K ₂ O 0.06	MgO 0.00	CaO 0.78
B ₂ O ₃ 0.16	Al ₂ O ₃ 0.16	Li ₂ O 0.05	CuO 0.05	SrO 0.00	BaO 0.00
TiO ₂ 0.00	NiO 0.00	Bi ₂ O ₃ 0.00	SnO ₂ 0.00	ZnO 0.00	FeO 0.00
Cr ₂ O ₃ 0.01	ZrO ₂ 0.00	P ₂ O ₅ 0.00		MnO ₂ 0.00	CoO 0.00



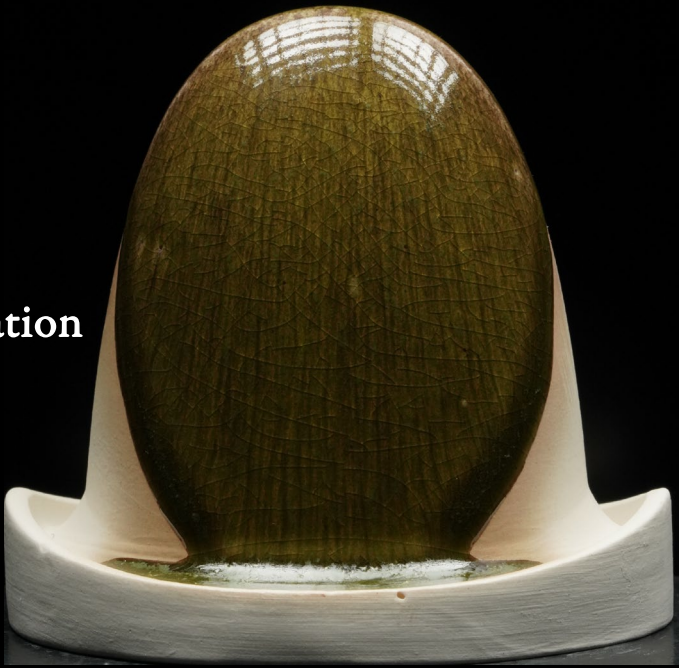
Ceramic
Materials
Workshop

Big Red

G200 EU	21.84
Whiting	25.34
EPK	10.44
Flint	11.90
3134	23.94
Chrome Oxide	0.93
Red Iron Oxide	5.61
Water	65



1-3 Second Dip



2-3 Second Dips

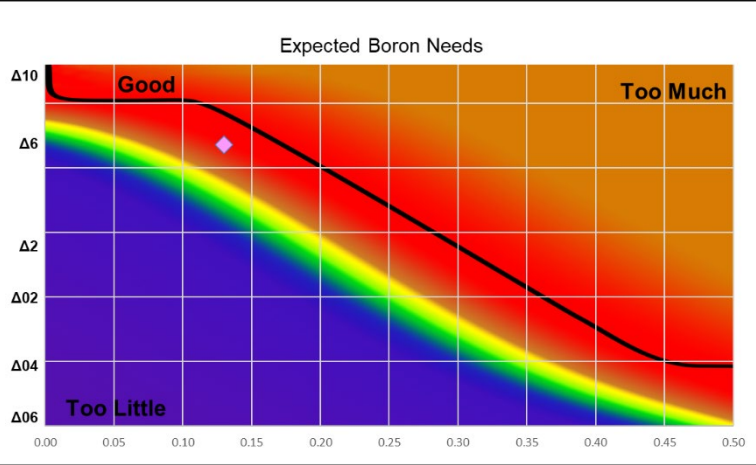
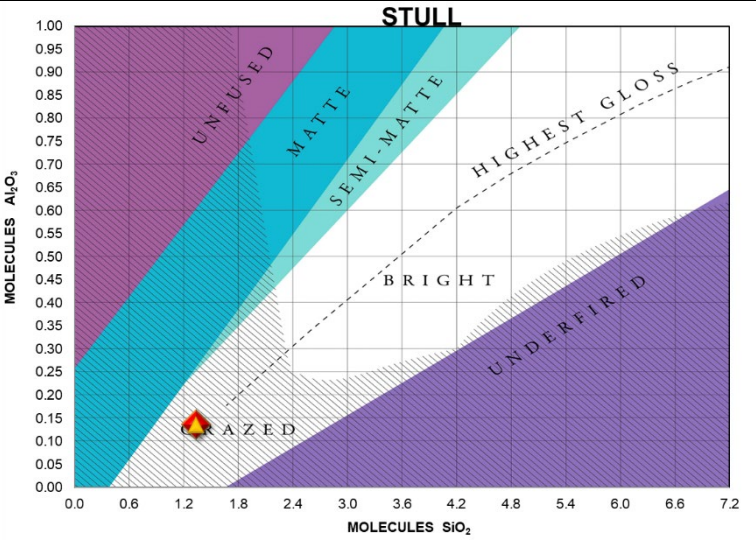
Oxidation



Reduction



SiO ₂ :Al ₂ O ₃ Ratio 9.75 :1		Alkali Metals 0.14		Alkaline Earths 0.86	
SiO ₂ 1.34	Collective "Al ₂ O ₃ " 0.14	Na ₂ O 0.09	K ₂ O 0.05	MgO 0.00	CaO 0.65
B ₂ O ₃ 0.13	Al ₂ O ₃ 0.14	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.21
Cr ₂ O ₃ 0.01	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



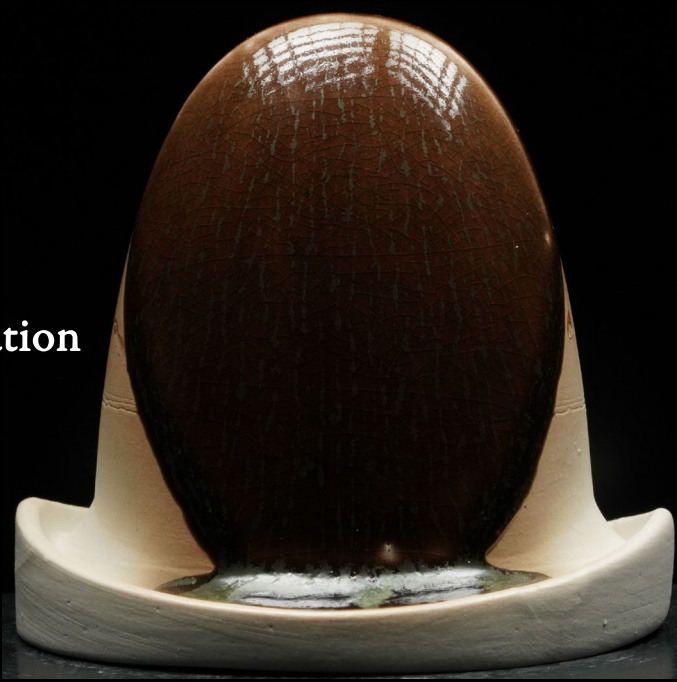
Ceramic
Materials
Workshop

Big Red

G200 EU	22.47
Whiting	26.07
EPK	10.74
Flint	12.24
3134	24.63
Chrome Oxide	0.96
Manganese Dioxide	2.88
Water	65



1-3 Second Dip



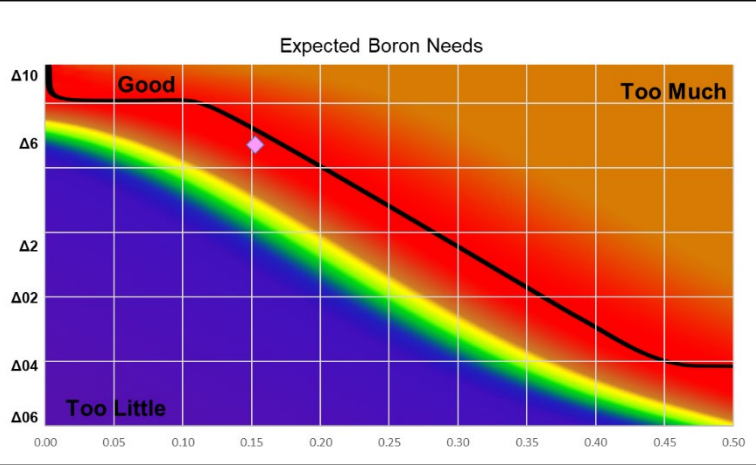
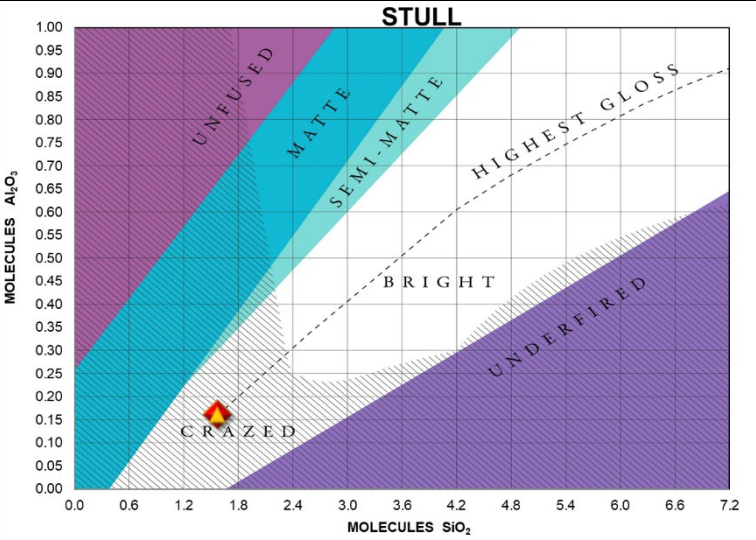
2-3 Second Dips



Reduction



SiO ₂ :Al ₂ O ₃ Ratio 9.75 : 1		Alkali Metals 0.16		Alkaline Earths 0.84	
SiO ₂ 1.57	Collective "Al ₂ O ₃ " 0.16	Na ₂ O 0.10	K ₂ O 0.06	MgO 0.00	CaO 0.76
B ₂ O ₃ 0.15	Al ₂ O ₃ 0.16	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃ 0.01	ZrO ₂	P ₂ O ₅		MnO ₂ 0.07	CoO



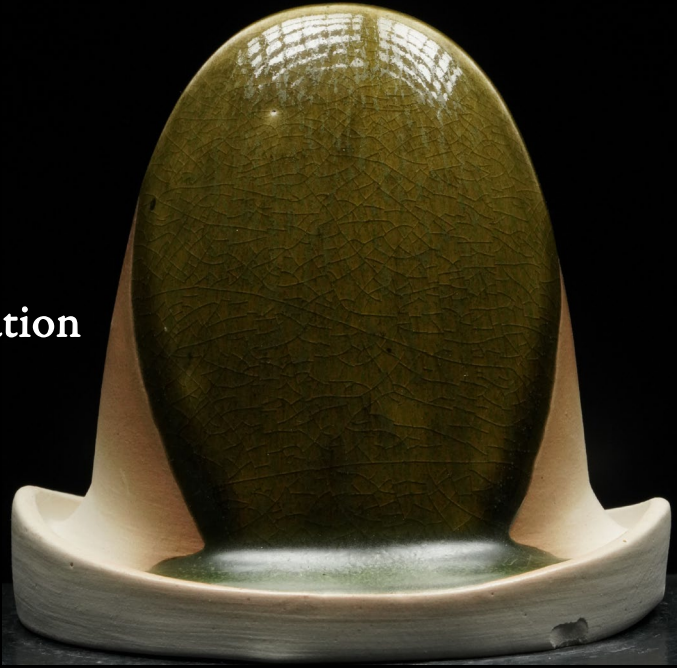
Ceramic
Materials
Workshop

Big Red

G200 EU	22.58
Whiting	26.20
EPK	10.79
Flint	12.30
3134	24.75
Chrome Oxide	0.97
Nickel Carb (Green)	2.42
Water	60



1-3 Second Dip



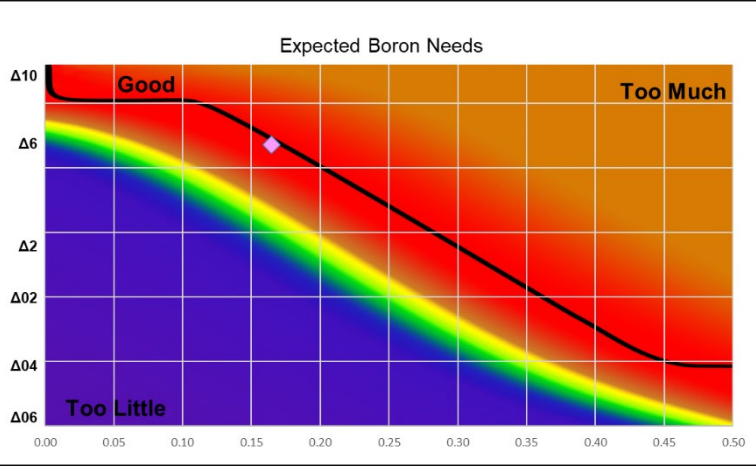
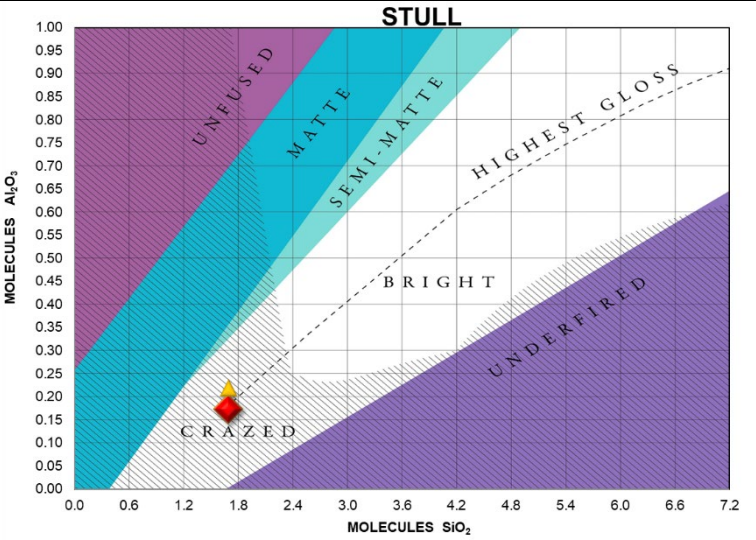
2-3 Second Dips



Reduction



SiO ₂ :Al ₂ O ₃ Ratio 7.69 : 1		Alkali Metals 0.17		Alkaline Earths 0.83	
SiO ₂ 1.69	Collective "Al ₂ O ₃ " 0.22	Na ₂ O 0.11	K ₂ O 0.06	MgO 0.00	CaO 0.82
B ₂ O ₃ 0.16	Al ₂ O ₃ 0.17	Li ₂ O 0.00	CuO 0.00	SrO 0.00	BaO 0.00
TiO ₂ 0.00	NiO 0.05	Bi ₂ O ₃ 0.00	SnO ₂ 0.00	ZnO 0.00	FeO 0.00
Cr ₂ O ₃ 0.01	ZrO ₂ 0.00	P ₂ O ₅ 0.00		MnO ₂ 0.00	CoO 0.00



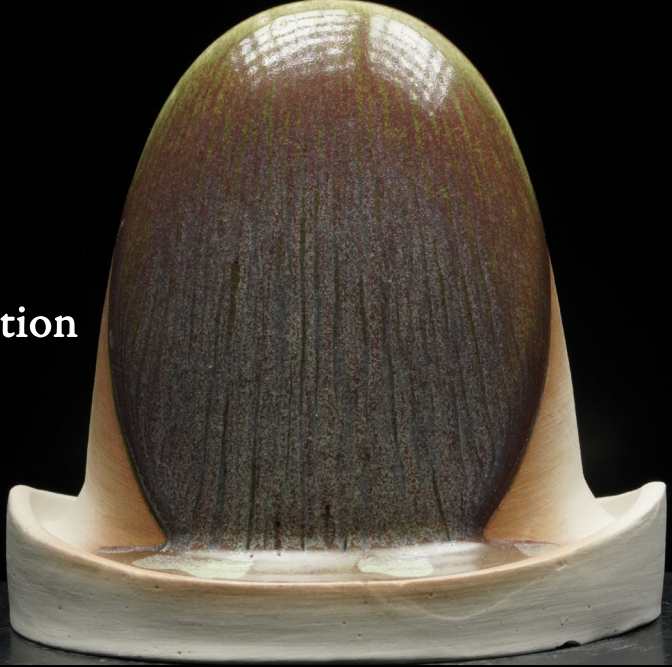
Ceramic
Materials
Workshop

Big Red

G200 EU	21.84
Whiting	25.34
EPK	10.44
Flint	11.90
3134	23.94
Chrome Oxide	0.93
Titanium Dioxide	5.61
Water	60



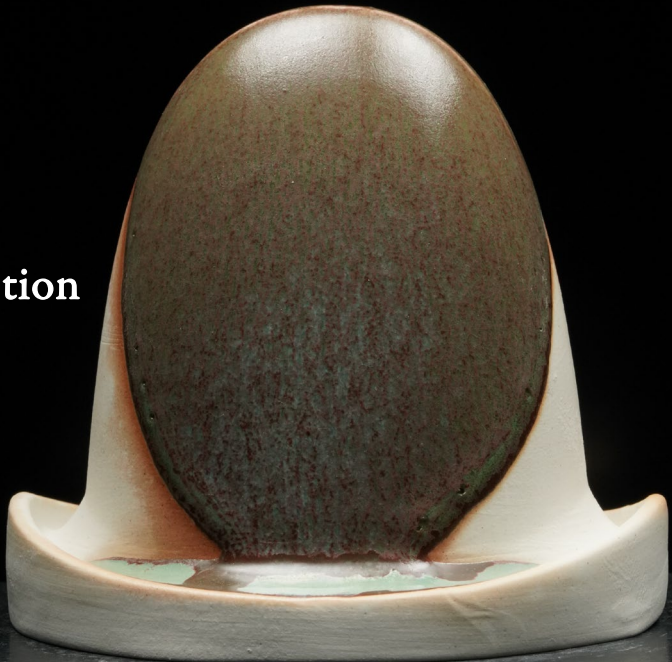
1-3 Second Dip



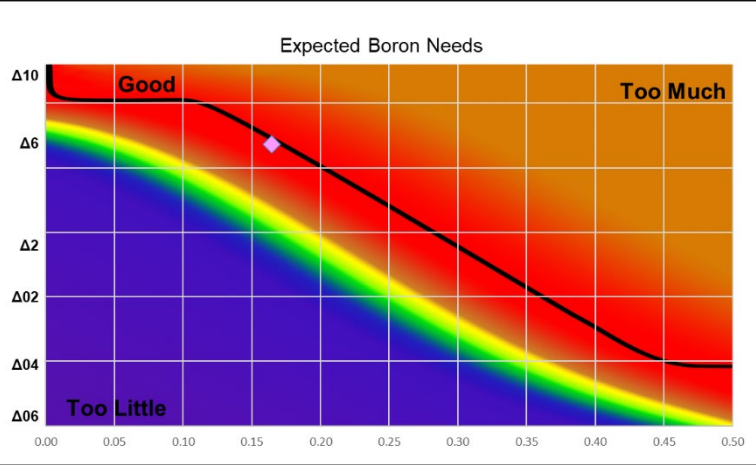
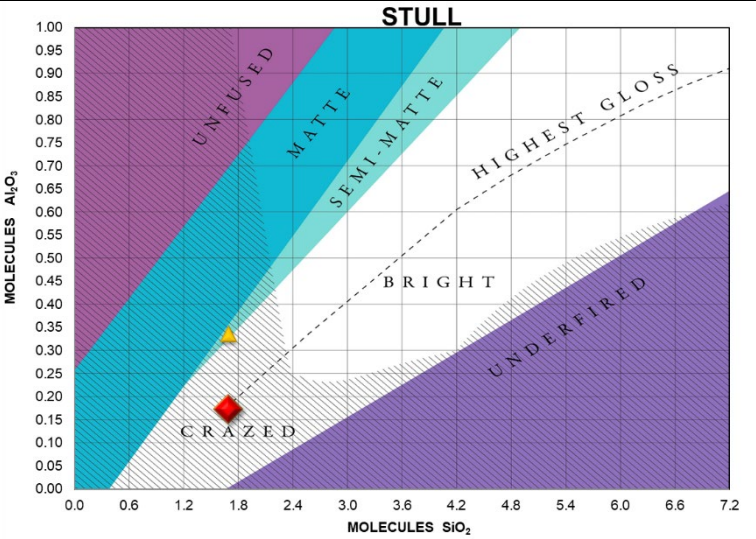
2-3 Second Dips



Reduction



SiO ₂ :Al ₂ O ₃ Ratio 5.03 : 1		Alkali Metals 0.17		Alkaline Earths 0.83	
SiO ₂ 1.69	Collective "Al ₂ O ₃ " 0.34	Na ₂ O 0.11	K ₂ O 0.06	MgO 0.00	CaO 0.82
B ₂ O ₃ 0.16	Al ₂ O ₃ 0.17	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.16		Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃ 0.01	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Ceramic
Materials
Workshop

Big Red

G200 EU	22.05
Whiting	25.58
EPK	10.54
Flint	12.01
3134	24.17
Chrome Oxide	0.94
Tin Oxide	4.72
Water	60



1-3 Second Dip



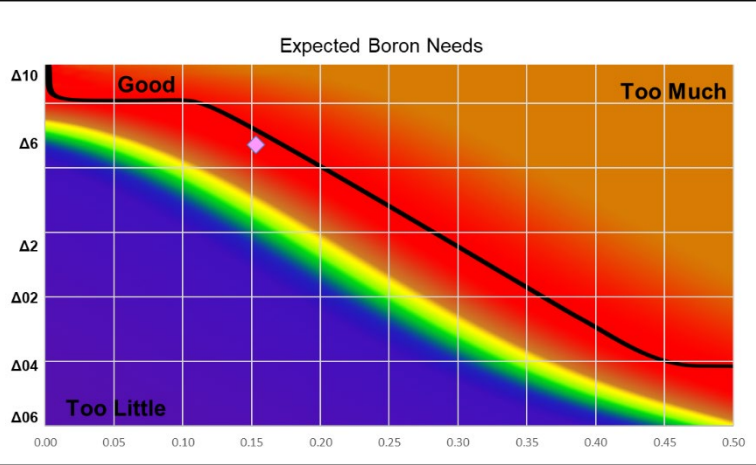
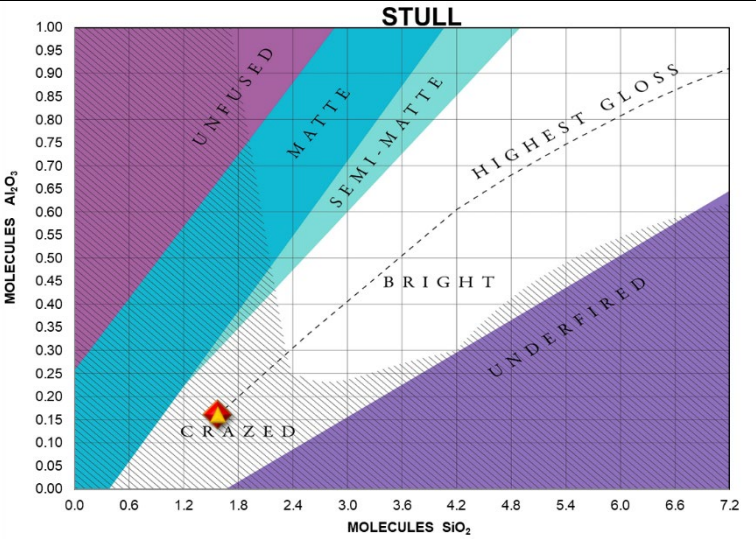
2-3 Second Dips



Reduction



SiO ₂ :Al ₂ O ₃ Ratio 9.75 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.58	Collective "Al ₂ O ₃ " 0.16	Na ₂ O 0.10	K ₂ O 0.06	MgO 0.00	CaO 0.77
B ₂ O ₃ 0.15	Al ₂ O ₃ 0.16	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂ 0.07	ZnO	FeO 0.00
Cr ₂ O ₃ 0.01	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Ceramic
Materials
Workshop

Big Red

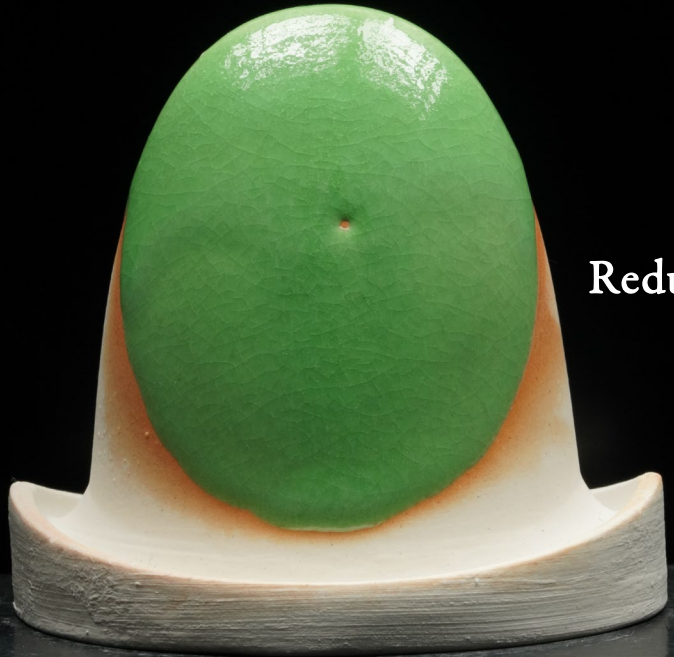
G200 EU	21.05
Whiting	24.43
EPK	10.06
Flint	11.47
3134	23.08
Chrome Oxide	0.90
Ultrox (Zircopax)	9.01
Water	65



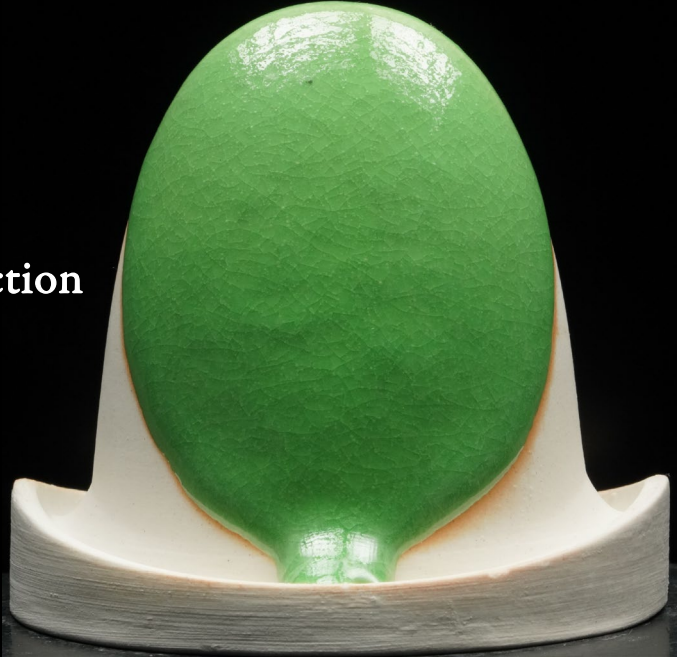
1-3 Second Dip



2-3 Second Dips

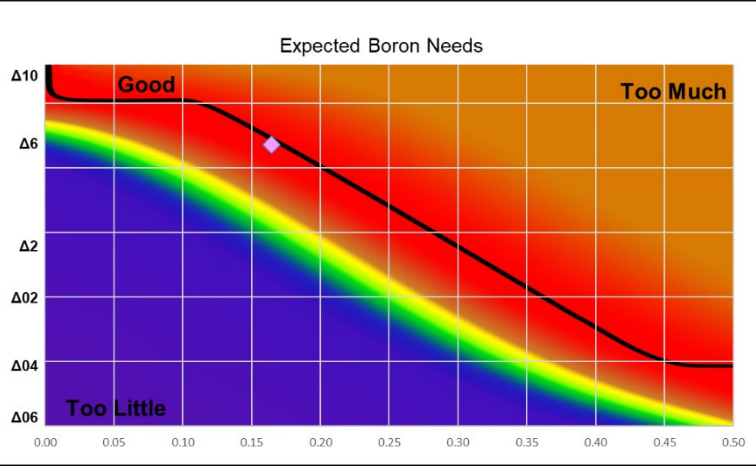
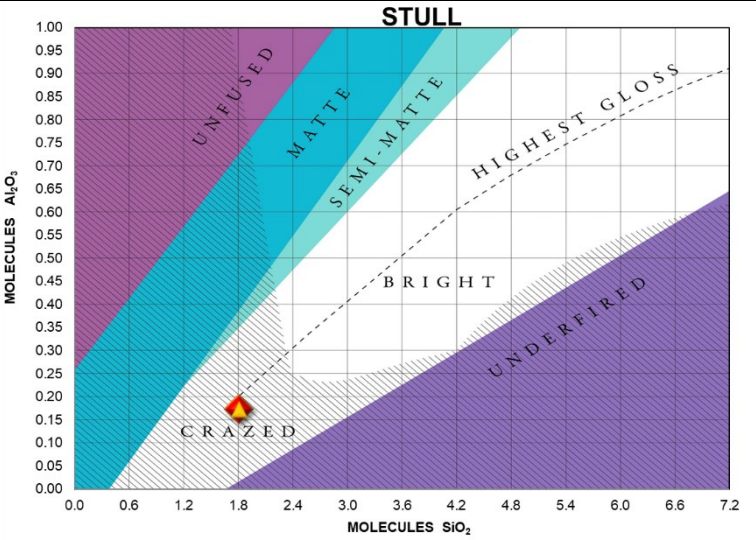


Reduction



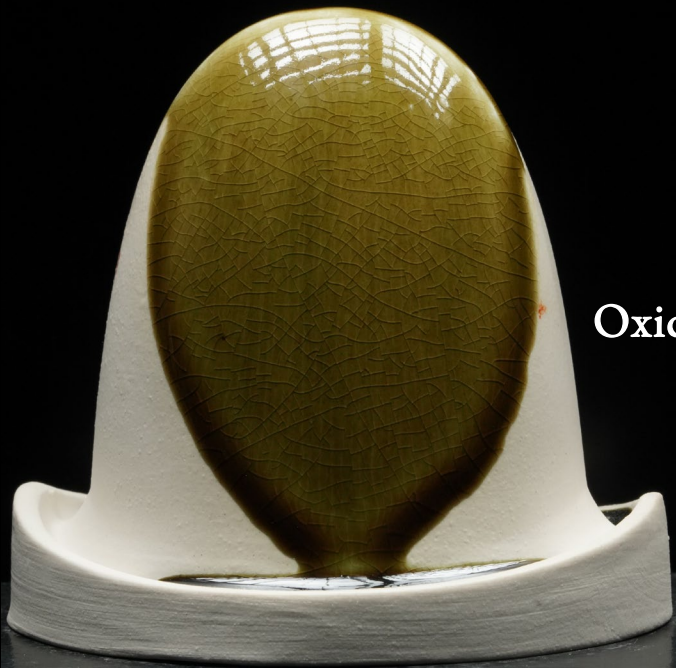
Oxidation

SiO ₂ :Al ₂ O ₃ Ratio 10.44 : 1		Alkali Metals 0.17		Alkaline Earths 0.83	
SiO ₂ 1.81	Collective "Al ₂ O ₃ " 0.17	Na ₂ O 0.11	K ₂ O 0.06	MgO 0.00	CaO 0.82
B ₂ O ₃ 0.16	Al ₂ O ₃ 0.17	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃ 0.01	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

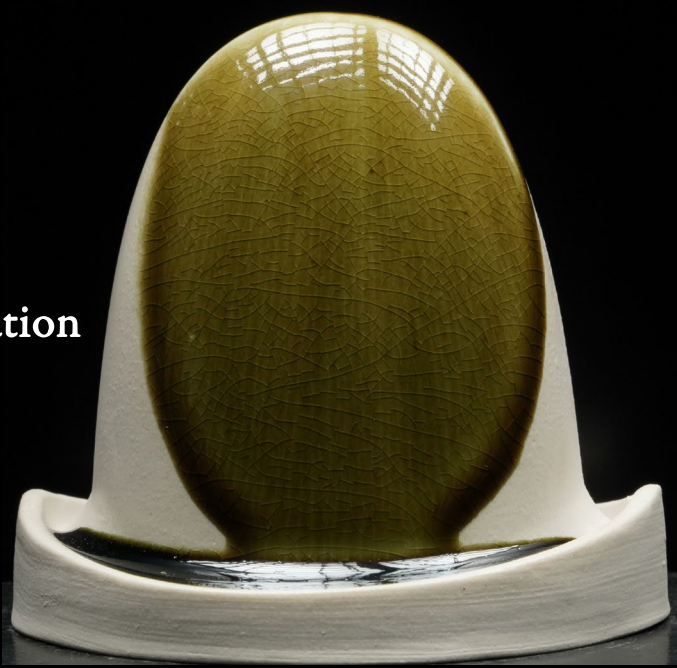


Big Red

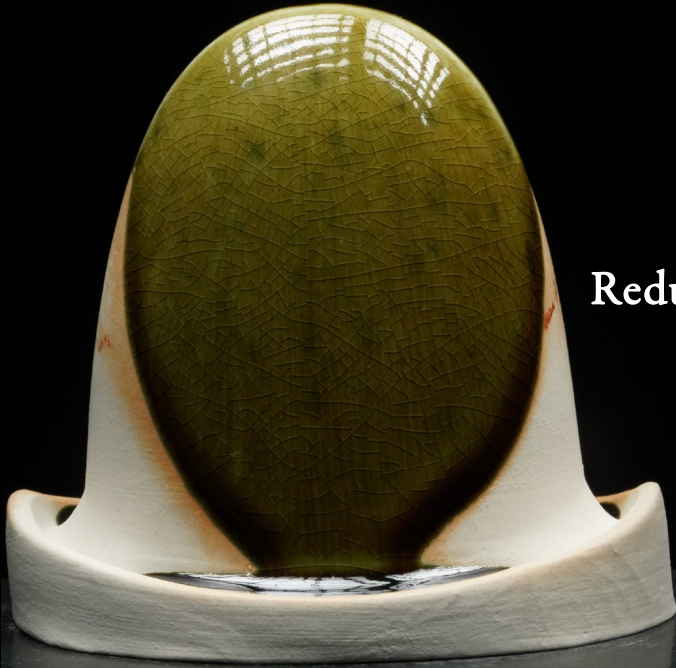
G200 EU	21.44
Whiting	24.87
EPK	10.25
Flint	11.68
3134	23.50
Copper Carbonate	2.75
Red Iron Oxide	5.50
Water	60



1-3 Second Dip



2-3 Second Dips

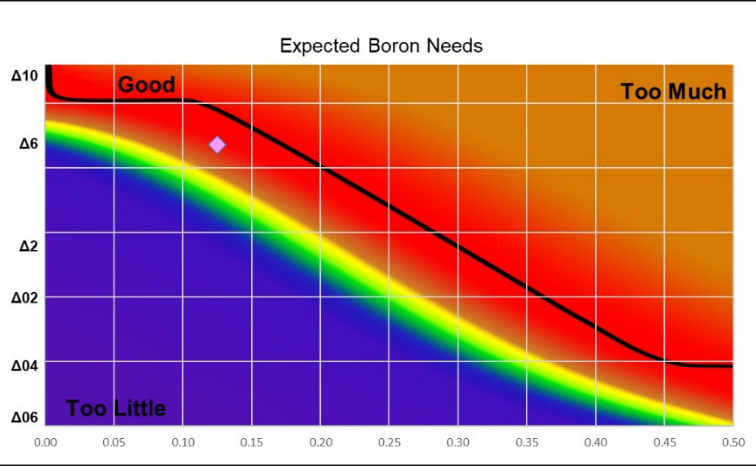
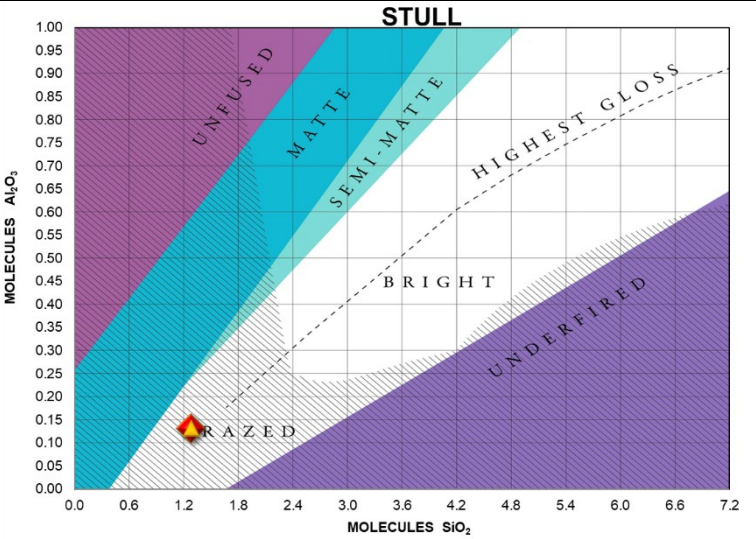


Reduction



Oxidation

SiO ₂ :Al ₂ O ₃ Ratio 9.75 : 1		Alkali Metals 0.17		Alkaline Earths 0.83	
SiO ₂ 1.28	Collective "Al ₂ O ₃ " 0.13	Na ₂ O 0.08	K ₂ O 0.05	MgO 0.00	CaO 0.62
B ₂ O ₃ 0.12	Al ₂ O ₃ 0.13	Li ₂ O	CuO 0.04	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.20
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



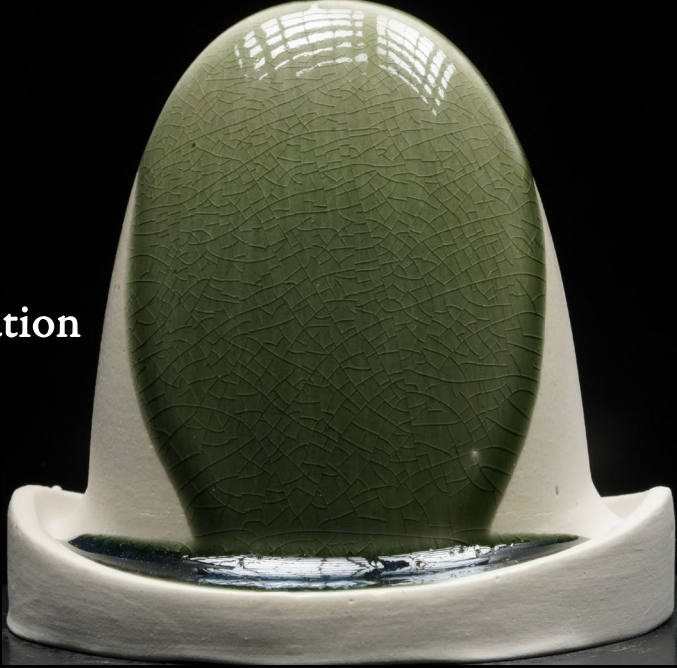
Ceramic
Materials
Workshop

Big Red

G200 EU	22.05
Whiting	25.58
EPK	10.54
Flint	12.01
3134	24.17
Copper Carbonate	2.83
Manganese Dioxide	2.83
Water	60



1-3 Second Dip



2-3 Second Dips

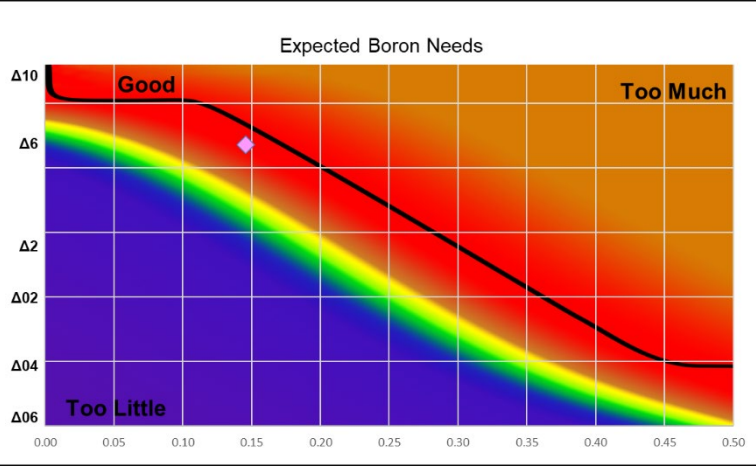
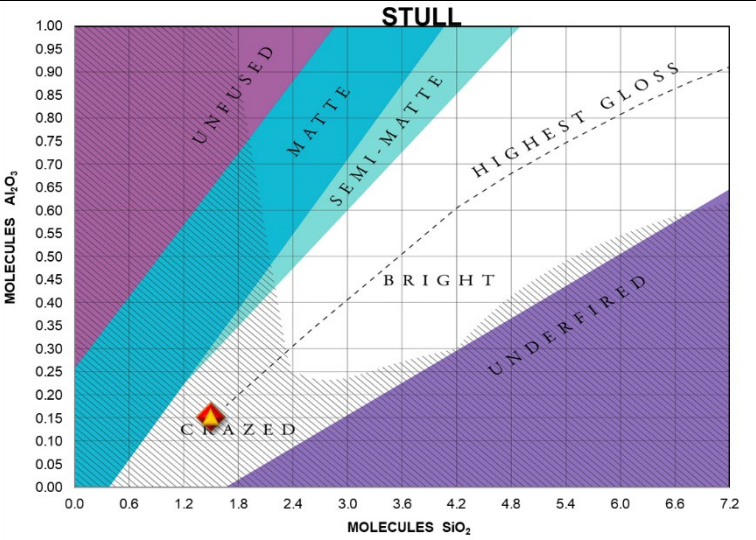


Reduction



Oxidation

SiO ₂ :Al ₂ O ₃ Ratio 9.75 :1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 1.50	Collective "Al ₂ O ₃ " 0.15	Na ₂ O 0.10	K ₂ O 0.05	MgO 0.00	CaO 0.73
B ₂ O ₃ 0.15	Al ₂ O ₃ 0.15	Li ₂ O 0.05	CuO 0.05	SrO 0.00	BaO 0.00
TiO ₂ 0.00	NiO 0.00	Bi ₂ O ₃ 0.00	SnO ₂ 0.00	ZnO 0.00	FeO 0.00
Cr ₂ O ₃ 0.00	ZrO ₂ 0.00	P ₂ O ₅ 0.00		MnO ₂ 0.07	CoO 0.00



Ceramic
Materials
Workshop

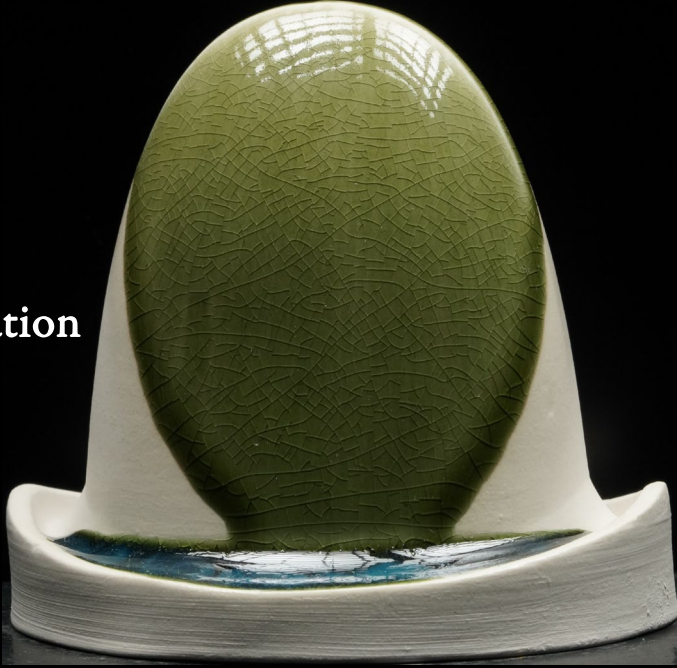
Big Red

G200 EU	22.15
Whiting	25.70
EPK	10.59
Flint	12.07
3134	24.28
Copper Carbonate	2.84
Nickel Carb (Green)	2.37
Water	60



Oxidation

1-3 Second Dip



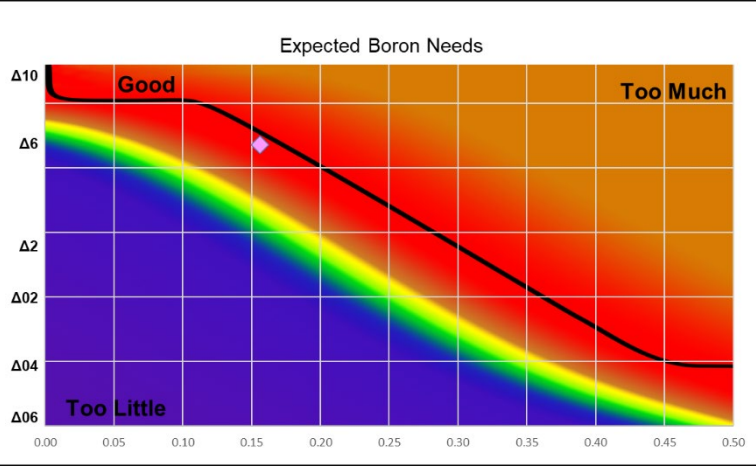
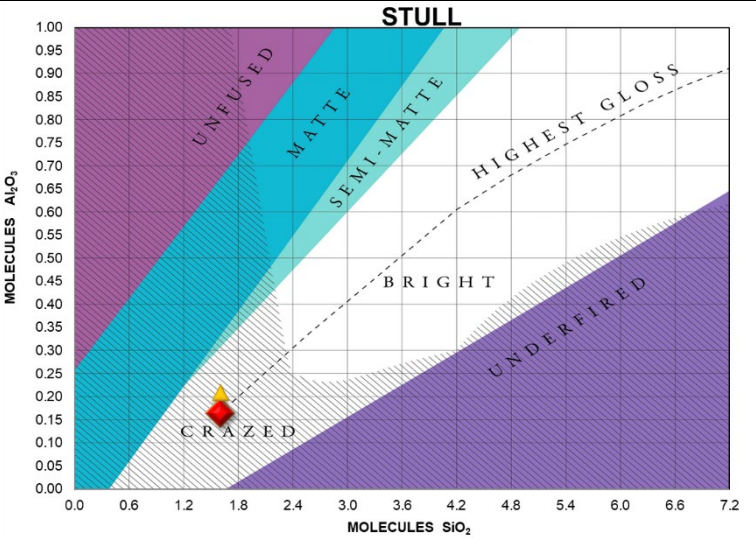
2-3 Second Dips



Reduction

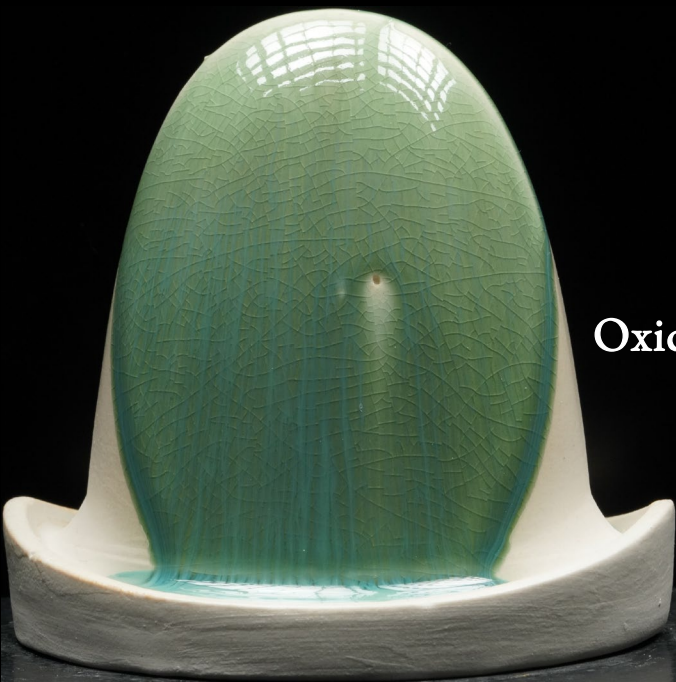


SiO ₂ :Al ₂ O ₃ Ratio 7.69 : 1		Alkali Metals 0.21		Alkaline Earths 0.79	
SiO ₂ 1.61	Collective "Al ₂ O ₃ " 0.21	Na ₂ O 0.11	K ₂ O 0.06	MgO 0.00	CaO 0.78
B ₂ O ₃ 0.16	Al ₂ O ₃ 0.16	Li ₂ O 0.05	CuO 0.05	SrO 0.00	BaO 0.00
TiO ₂ 0.00	NiO 0.04	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO

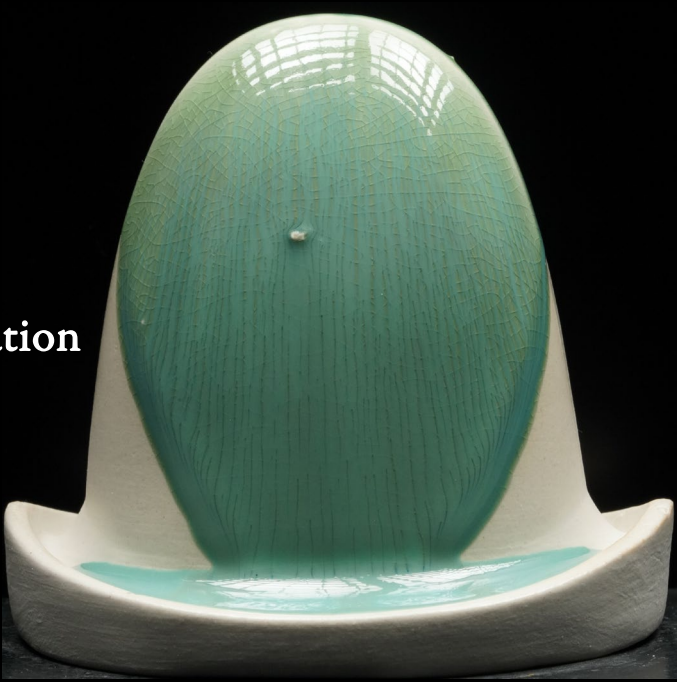


Big Red

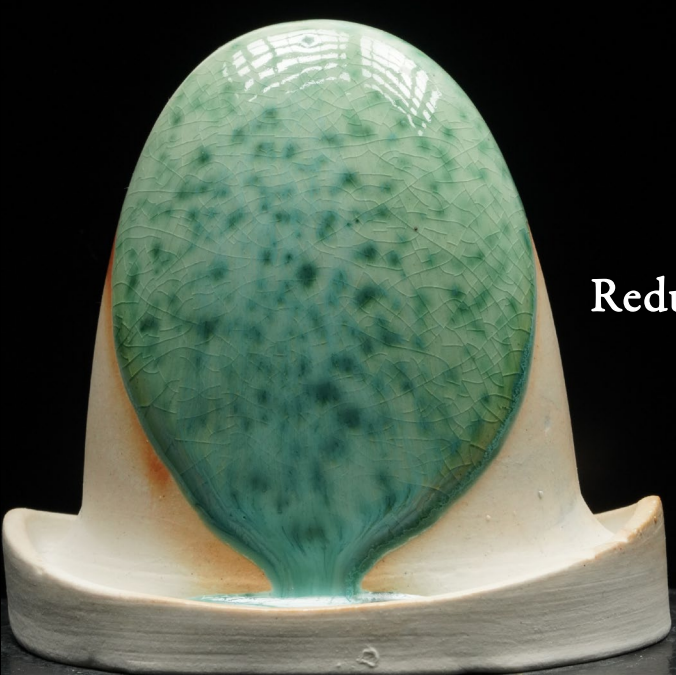
G200 EU	21.44
Whiting	24.87
EPK	10.25
Flint	11.68
3134	23.50
Copper Carbonate	2.75
Titanium Dioxide	5.50
Water	65



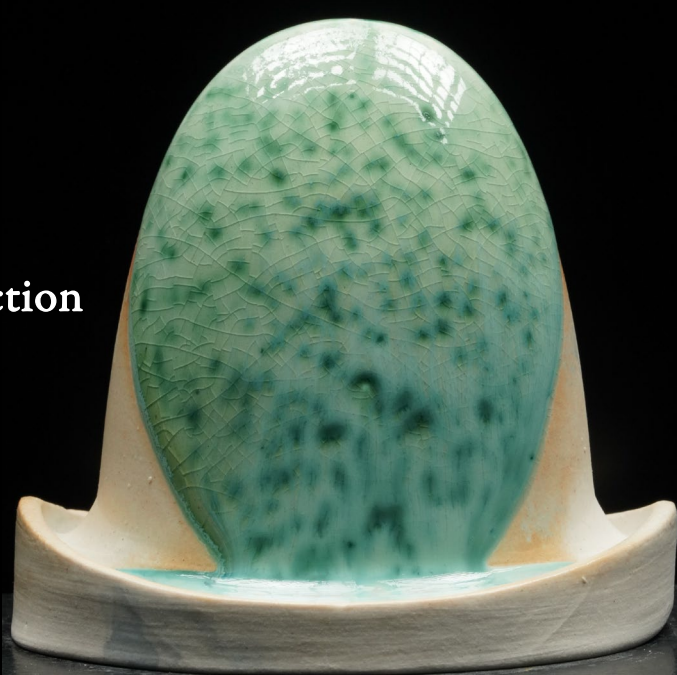
1-3 Second Dip



2-3 Second Dips

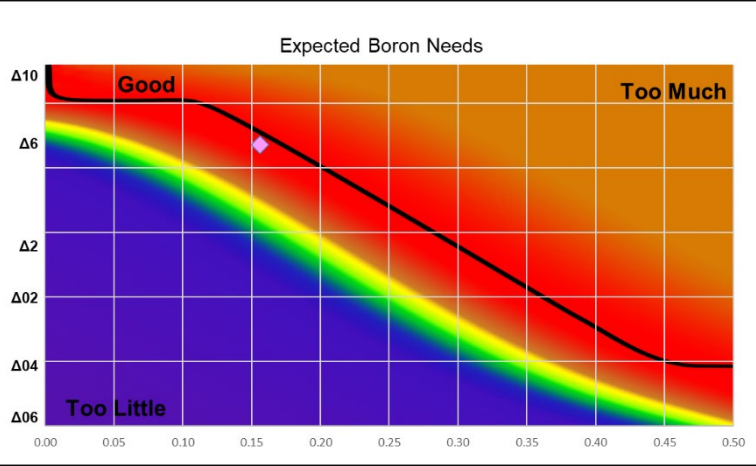
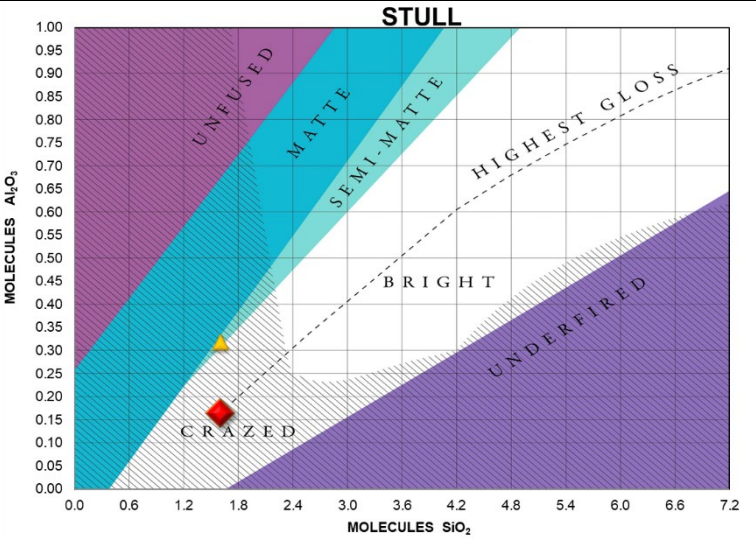


Reduction



Oxidation

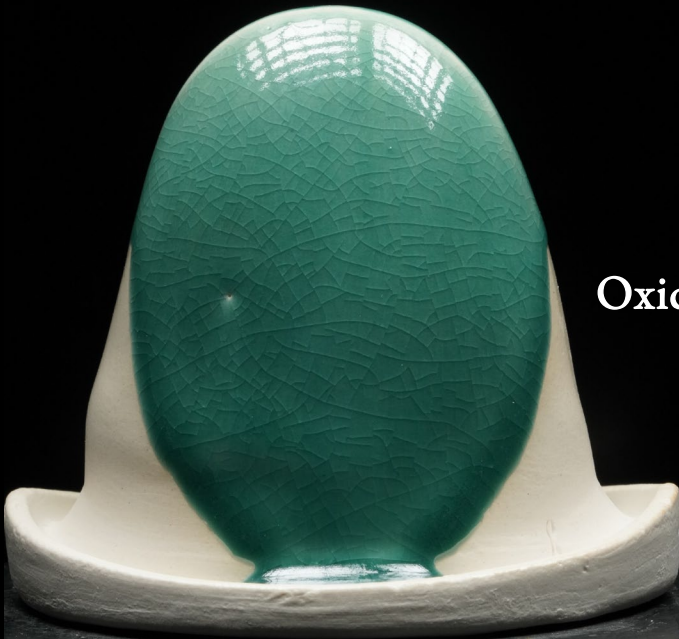
SiO ₂ :Al ₂ O ₃ Ratio 5.03 : 1		Alkali Metals 0.21		Alkaline Earths 0.79	
SiO ₂ 1.61	Collective "Al ₂ O ₃ " 0.32	Na ₂ O 0.11	K ₂ O 0.06	MgO 0.00	CaO 0.78
B ₂ O ₃ 0.16	Al ₂ O ₃ 0.16	Li ₂ O 0.00	CuO 0.05	SrO 0.00	BaO 0.00
TiO ₂ 0.16	NiO 0.00	Bi ₂ O ₃ 0.00	SnO ₂ 0.00	ZnO 0.00	FeO 0.00
Cr ₂ O ₃ 0.00	ZrO ₂ 0.00	P ₂ O ₅ 0.00		MnO ₂ 0.00	CoO 0.00



Ceramic
Materials
Workshop

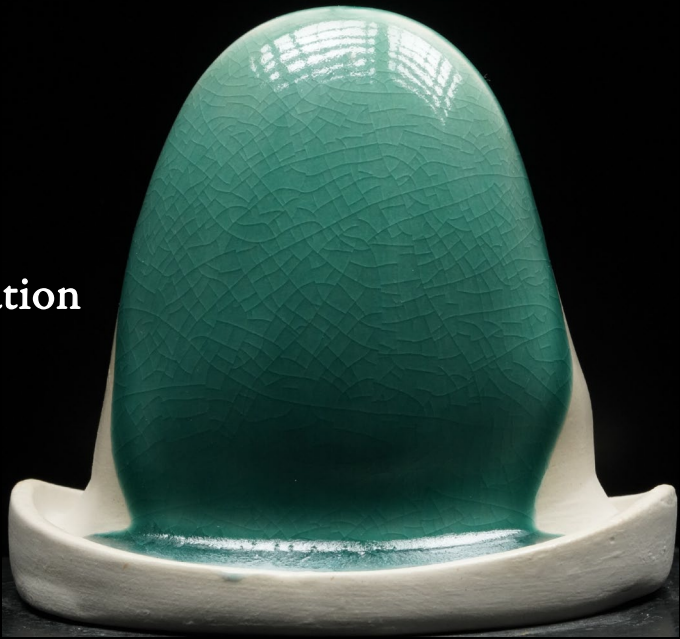
Big Red

G200 EU	21.64
Whiting	25.11
EPK	10.34
Flint	11.79
3134	23.72
Copper Carbonate	2.78
Tin Oxide	4.63
Water	60

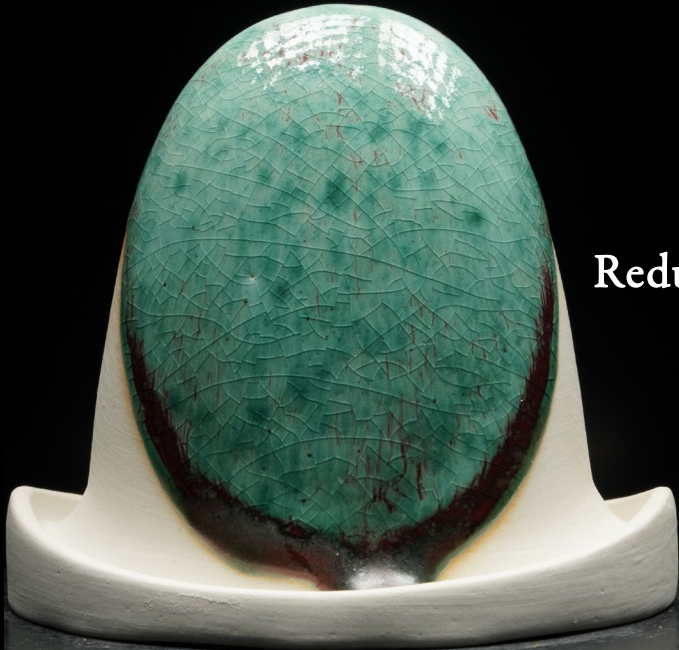


Oxidation

1-3 Second Dip



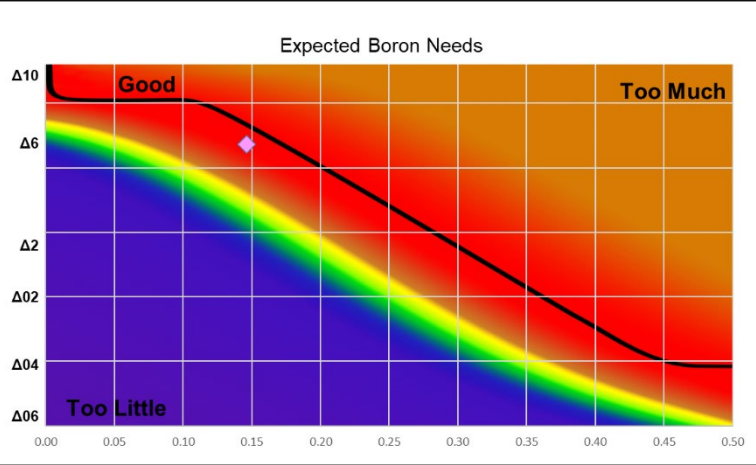
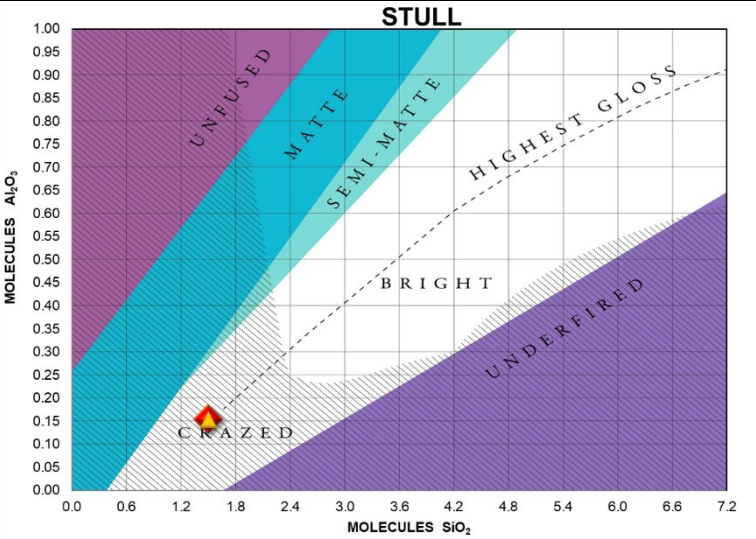
2-3 Second Dips



Reduction



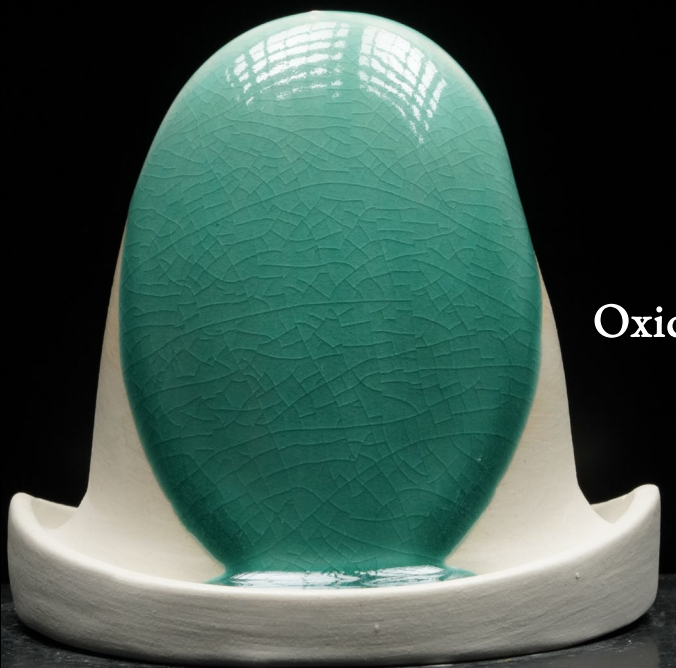
SiO ₂ :Al ₂ O ₃ Ratio 9.75 :1		Alkali Metals 0.27		Alkaline Earths 0.73	
SiO ₂ 1.50	Collective "Al ₂ O ₃ " 0.15	Na ₂ O 0.10	K ₂ O 0.05	MgO 0.00	CaO 0.73
B ₂ O ₃ 0.15	Al ₂ O ₃ 0.15	Li ₂ O 0.05	CuO 0.05	SrO 0.00	BaO 0.00
TiO ₂ 0.00	NiO 0.00	Bi ₂ O ₃ 0.00	SnO ₂ 0.06	ZnO 0.00	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



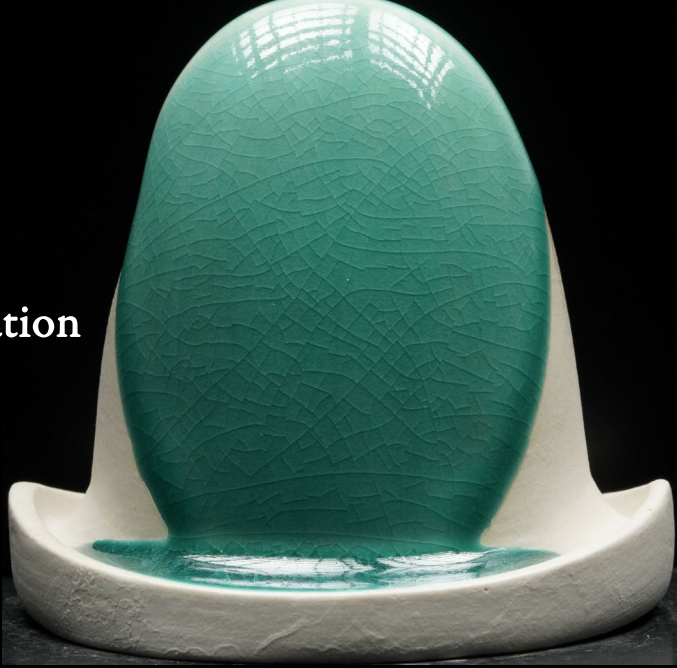
Ceramic
Materials
Workshop

Big Red

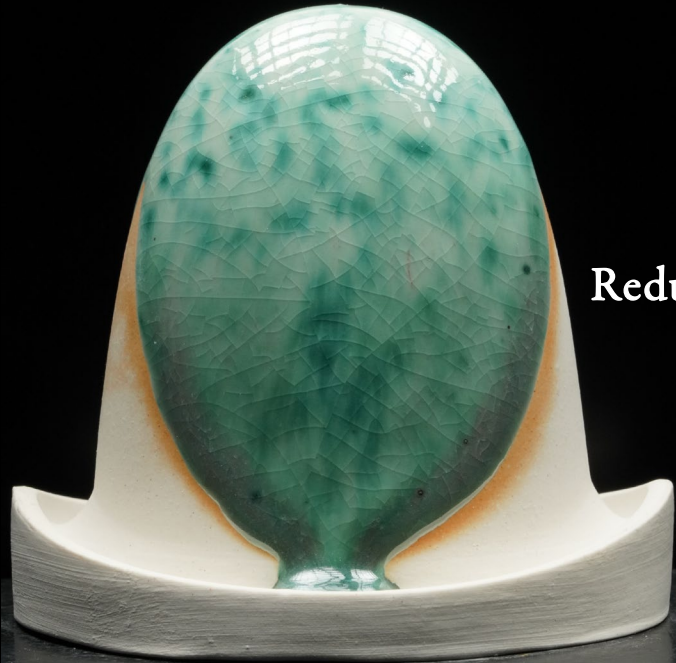
G200 EU	20.68
Whiting	23.99
EPK	9.88
Flint	11.27
3134	22.67
Copper Carbonate	2.65
Ultrox (Zircopax)	8.85
Water	60



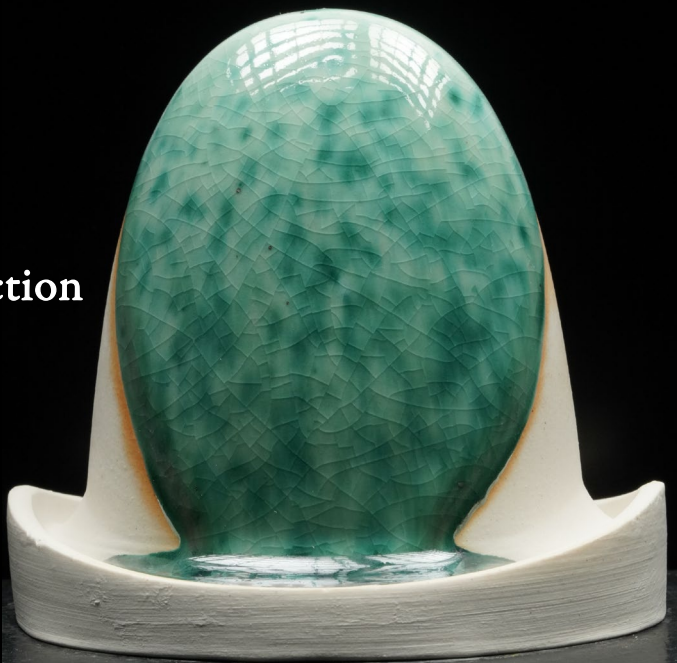
Oxidation



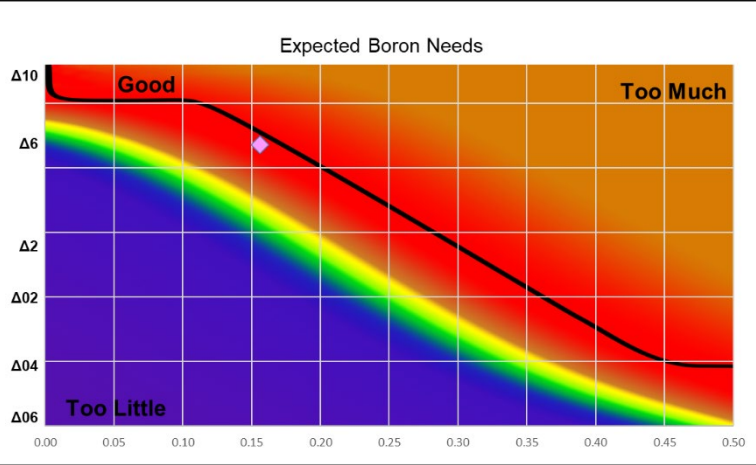
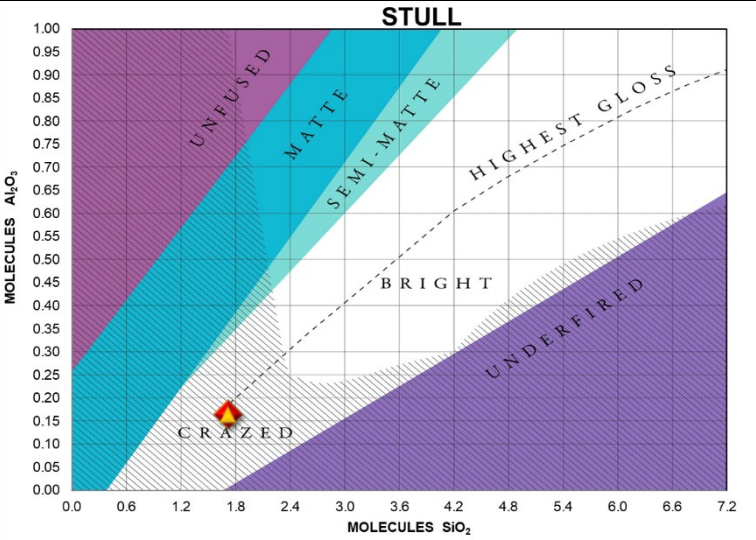
2-3 Second Dips



Reduction



SiO ₂ :Al ₂ O ₃ Ratio 10.44 : 1		Alkali Metals 0.21		Alkaline Earths 0.79	
SiO ₂ 1.72	Collective "Al ₂ O ₃ " 0.16	Na ₂ O 0.11	K ₂ O 0.06	MgO 0.00	CaO 0.78
B ₂ O ₃ 0.16	Al ₂ O ₃ 0.16	Li ₂ O	CuO 0.05	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Ceramic
Materials
Workshop

Big Red

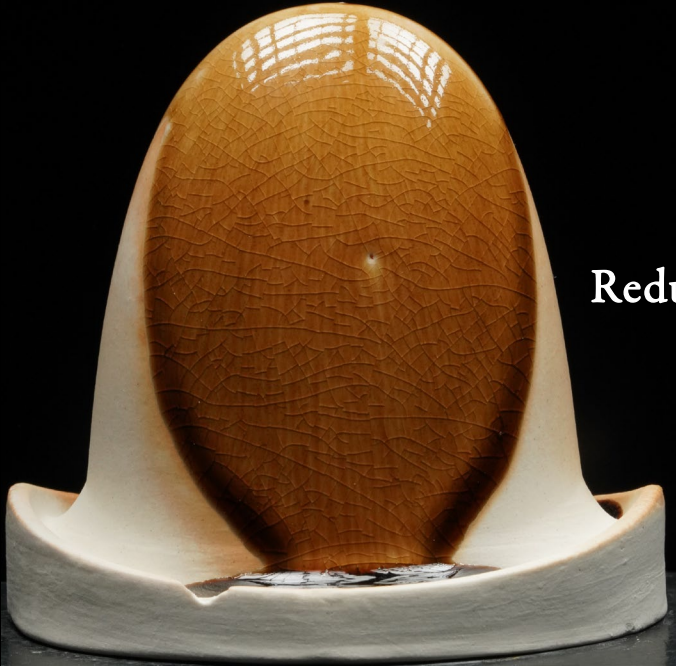
G200 EU	21.44
Whiting	24.87
EPK	10.25
Flint	11.68
3134	23.50
Red Iron Oxide	5.50
Manganese Dioxide	2.75
Water	60



1-3 Second Dip



2-3 Second Dips

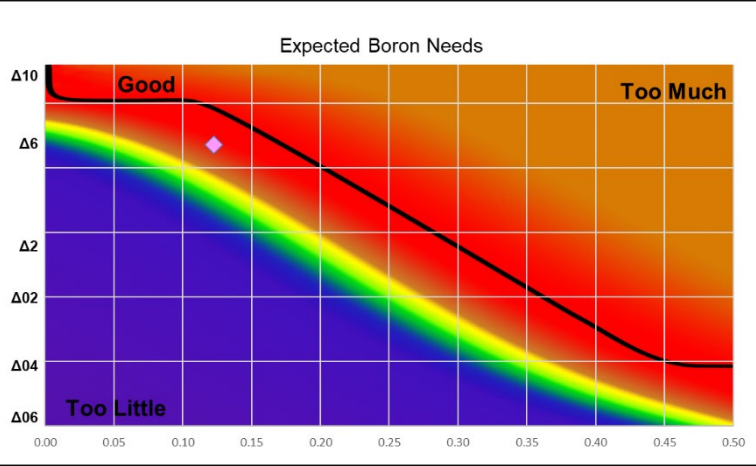
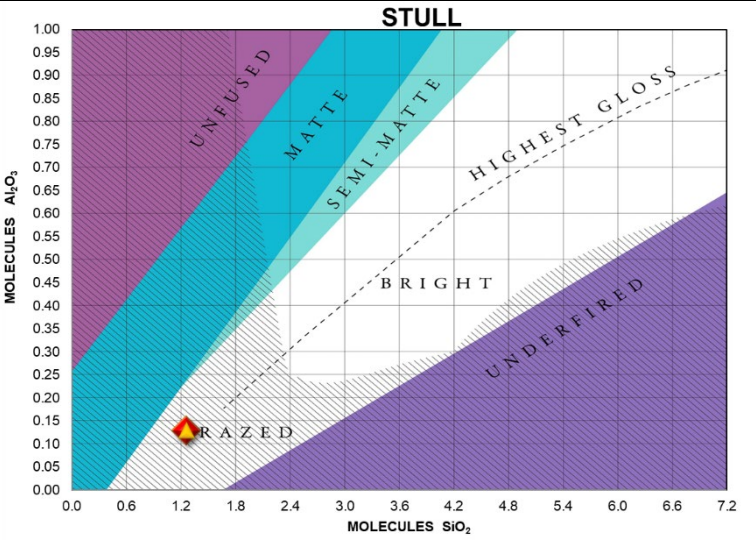


Reduction



Oxidation

SiO ₂ :Al ₂ O ₃ Ratio 9.75 :1		Alkali Metals 0.13		Alkaline Earths 0.87	
SiO ₂ 1.26	Collective "Al ₂ O ₃ " 0.13	Na ₂ O 0.08	K ₂ O 0.05	MgO 0.00	CaO 0.61
B ₂ O ₃ 0.12	Al ₂ O ₃ 0.13	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.20
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂ 0.06	CoO



Ceramic
Materials
Workshop

Big Red

G200 EU	21.54
Whiting	24.99
EPK	10.29
Flint	11.74
3134	23.61
Red Iron Oxide	5.53
Nickel Carb (Green)	2.30
Water	60



1-3 Second Dip



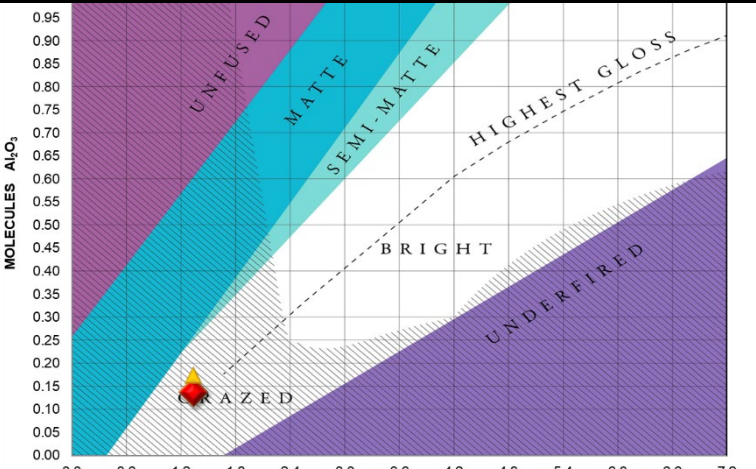
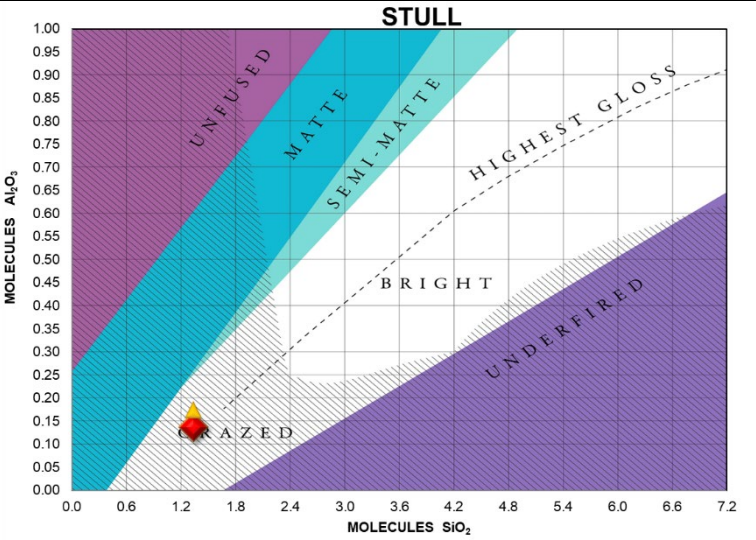
2-3 Second Dips



Reduction



SiO ₂ :Al ₂ O ₃ Ratio 7.69 : 1		Alkali Metals 0.14		Alkaline Earths 0.86	
SiO ₂ 1.34	Collective "Al ₂ O ₃ " 0.17	Na ₂ O 0.09	K ₂ O 0.05	MgO 0.00	CaO 0.65
B ₂ O ₃ 0.13	Al ₂ O ₃ 0.14	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO 0.04	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.21
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Ceramic
Materials
Workshop

Big Red

G200 EU	20.87
Whiting	24.21
EPK	9.97
Flint	11.37
3134	22.87
Red Iron Oxide	5.36
Titanium Dioxide	5.36
Water	65



1-3 Second Dip



2-3 Second Dips

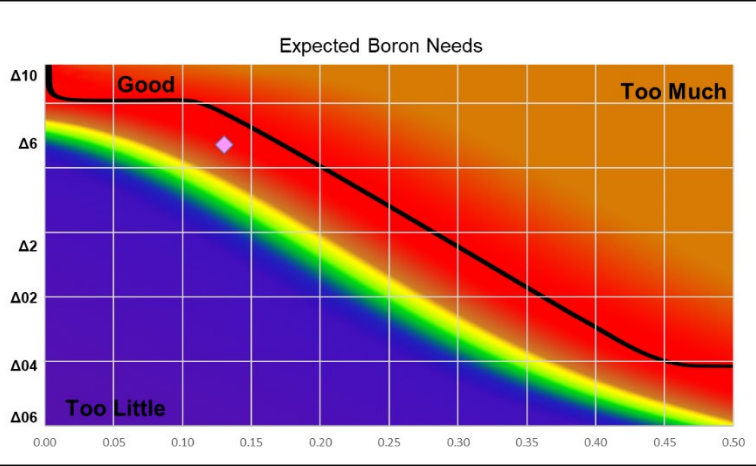
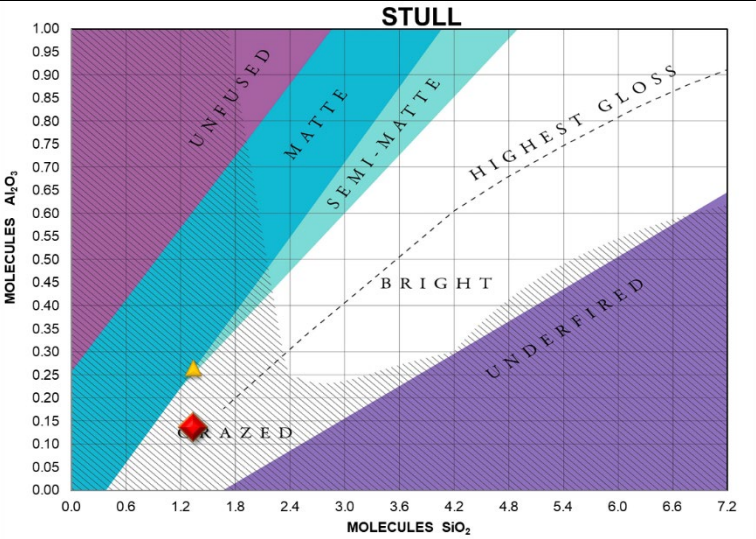


Reduction



Reduction

SiO ₂ :Al ₂ O ₃ Ratio 5.03 : 1		Alkali Metals 0.14		Alkaline Earths 0.86	
SiO ₂ 1.34	Collective "Al ₂ O ₃ " 0.27	Na ₂ O 0.09	K ₂ O 0.05	MgO 0.00	CaO 0.65
B ₂ O ₃ 0.13	Al ₂ O ₃ 0.14	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.13	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.21
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Ceramic
Materials
Workshop

Big Red

G200 EU	21.05
Whiting	24.43
EPK	10.06
Flint	11.47
3134	23.08
Red Iron Oxide	5.41
Tin Oxide	4.50
Water	65



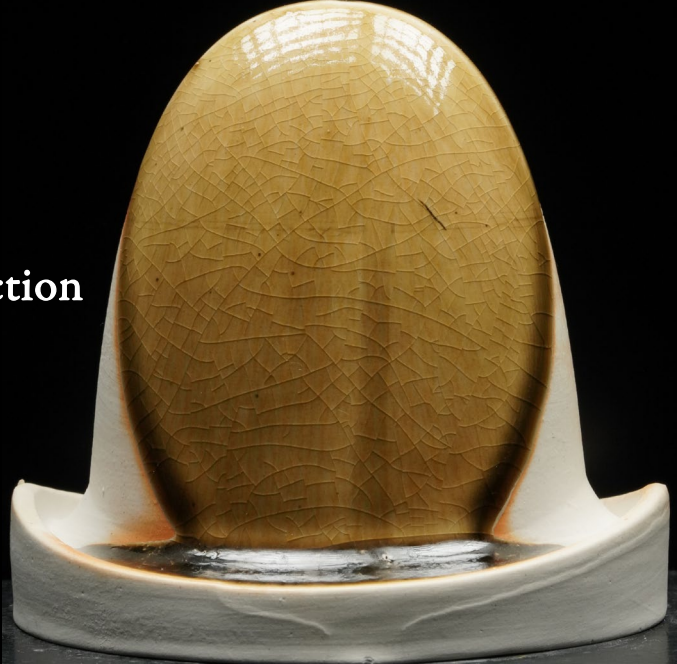
1-3 Second Dip



2-3 Second Dips

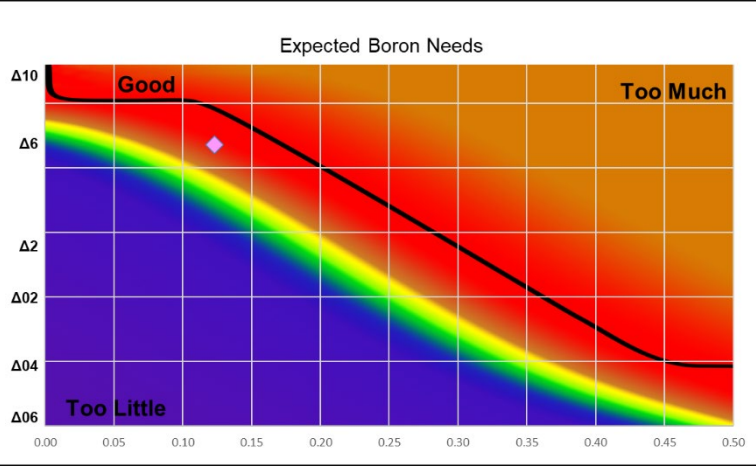
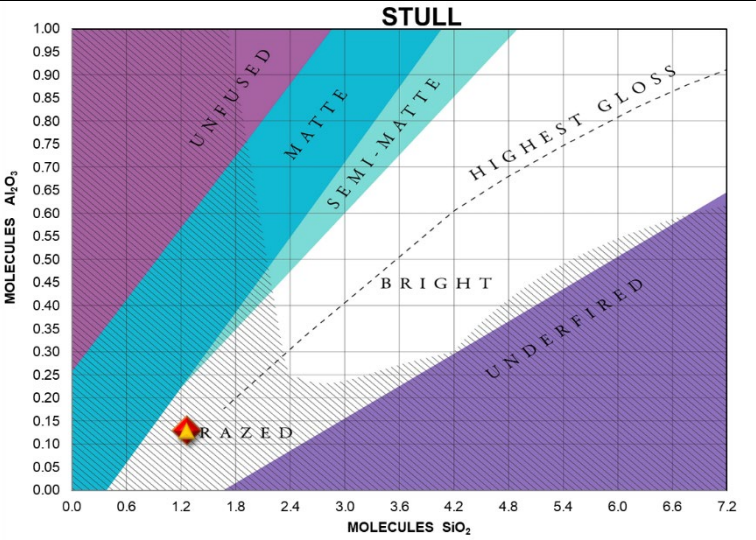


Reduction



Oxidation

SiO ₂ :Al ₂ O ₃ Ratio 9.75 :1		Alkali Metals 0.18		Alkaline Earths 0.82	
SiO ₂ 1.27	Collective "Al ₂ O ₃ " 0.13	Na ₂ O 0.08	K ₂ O 0.05	MgO 0.00	CaO 0.61
B ₂ O ₃ 0.12	Al ₂ O ₃ 0.13	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂ 0.05	ZnO	FeO 0.20
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



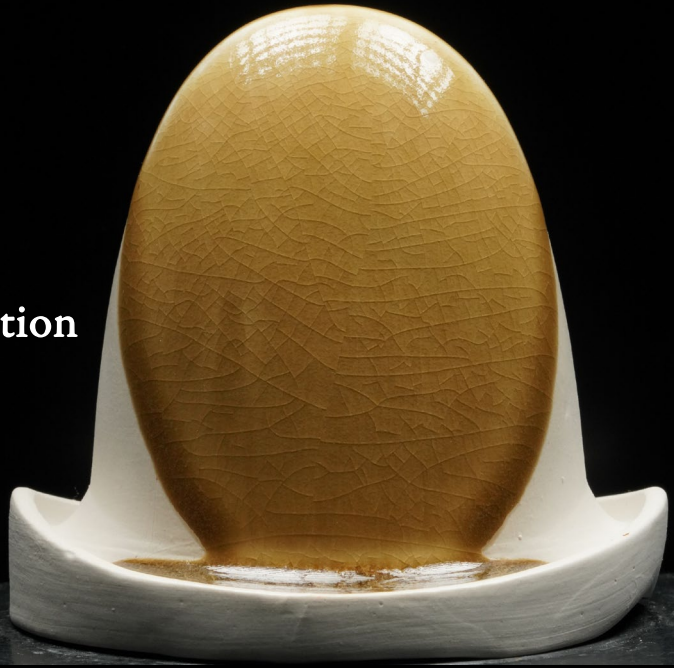
Ceramic
Materials
Workshop

Big Red

G200 EU	20.15
Whiting	23.37
EPK	9.63
Flint	10.98
3134	22.08
Red Iron Oxide	5.17
Zircopax	8.62
Water	65



1-3 Second Dip



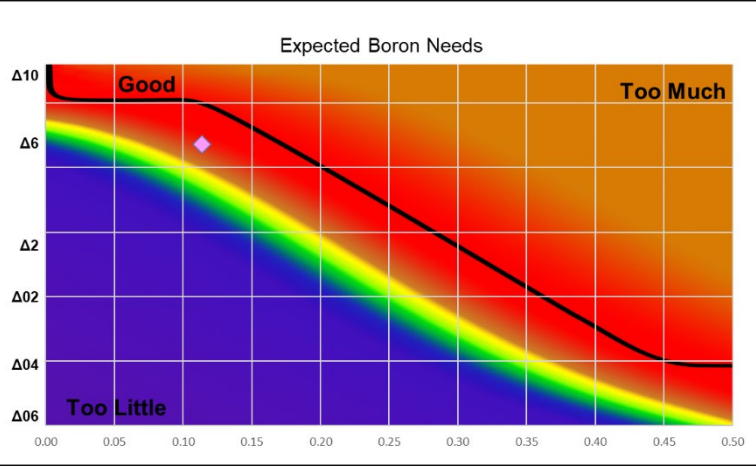
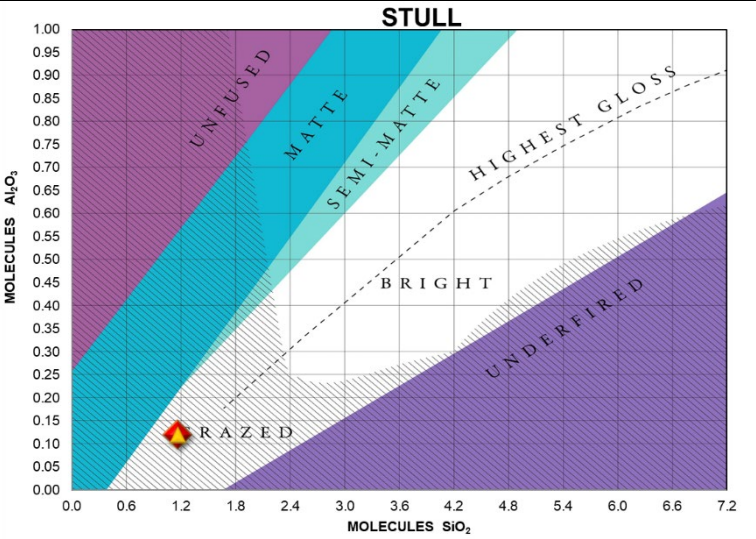
2-3 Second Dips



Reduction



SiO ₂ :Al ₂ O ₃ Ratio 9.75 : 1		Alkali Metals 0.12		Alkaline Earths 0.88	
SiO ₂ 1.17	Collective "Al ₂ O ₃ " 0.12	Na ₂ O 0.08	K ₂ O 0.04	MgO 0.00	CaO 0.57
B ₂ O ₃ 0.11	Al ₂ O ₃ 0.12	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.19
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.13



Ceramic
Materials
Workshop

Big Red

G200 EU	22.15
Whiting	25.70
EPK	10.59
Flint	12.07
3134	24.28
Manganese Dioxide	2.84
Nickel Carb (Green)	2.37
Water	60



1-3 Second Dip



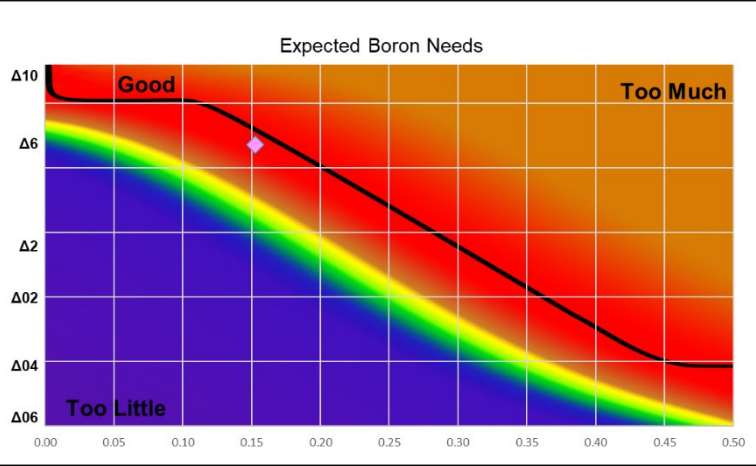
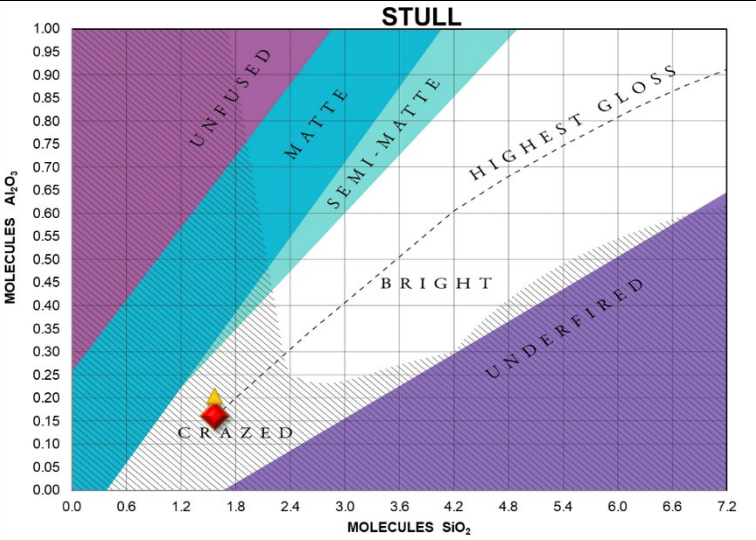
2-3 Second Dips



Reduction



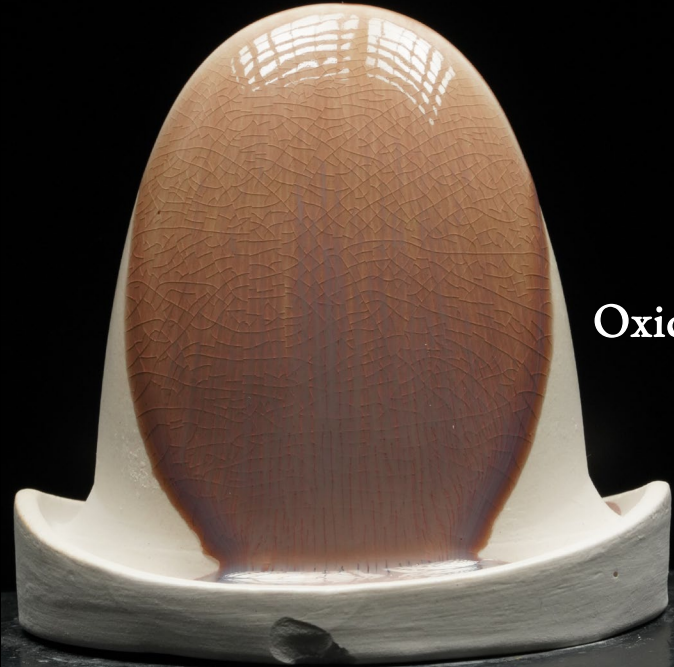
SiO ₂ :Al ₂ O ₃ Ratio 7.69 : 1		Alkali Metals 0.16		Alkaline Earths 0.84	
SiO ₂ 1.57	Collective "Al ₂ O ₃ " 0.20	Na ₂ O 0.10	K ₂ O 0.06	MgO 0.00	CaO 0.76
B ₂ O ₃ 0.15	Al ₂ O ₃ 0.16	Li ₂ O 0.00	CuO 0.00	SrO 0.00	BaO 0.00
TiO ₂ 0.00	NiO 0.04	Bi ₂ O ₃ 0.00	SnO ₂ 0.00	ZnO 0.00	FeO 0.00
Cr ₂ O ₃ 0.00	ZrO ₂ 0.00	P ₂ O ₅ 0.00		MnO ₂ 0.07	CoO 0.00



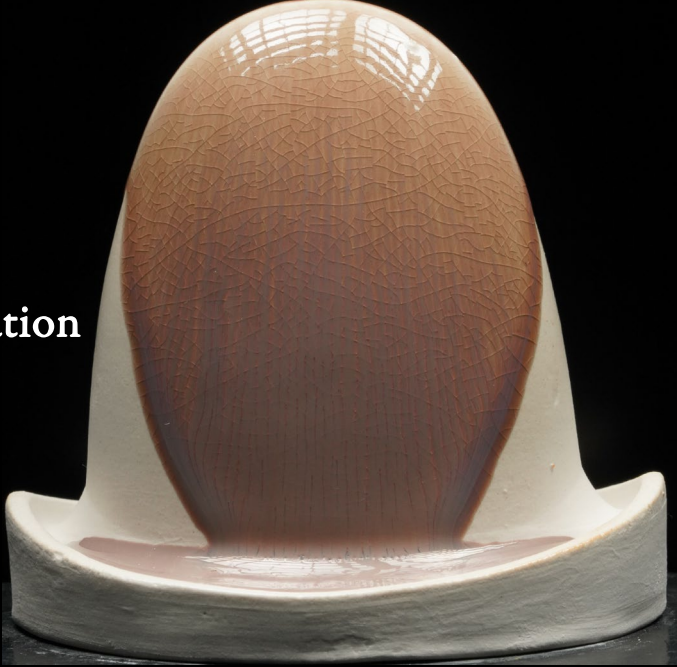
Ceramic
Materials
Workshop

Big Red

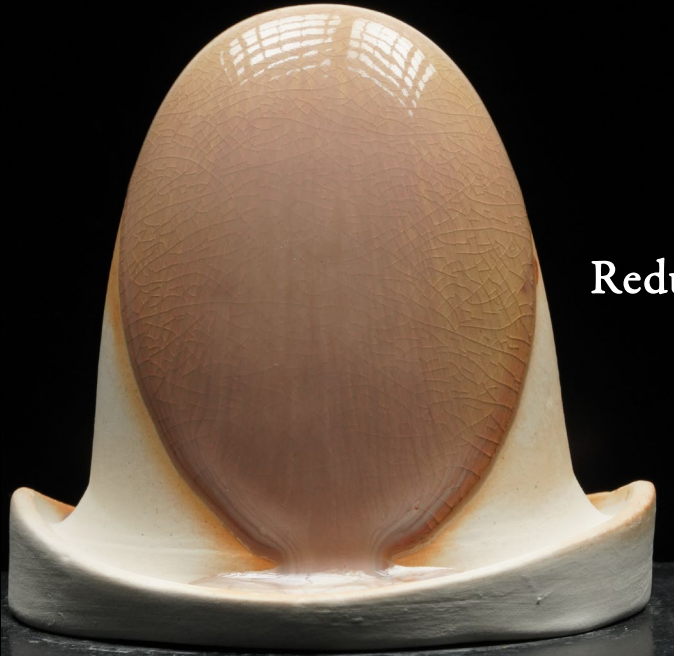
G200 EU	21.44
Whiting	24.87
EPK	10.25
Flint	11.68
3134	23.50
Manganese Dioxide	2.75
Titanium Dioxide	5.50
Water	65



1-3 Second Dip



2-3 Second Dips

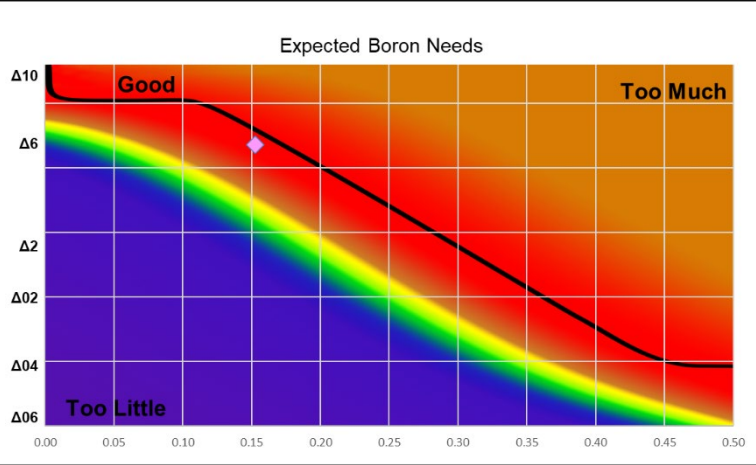
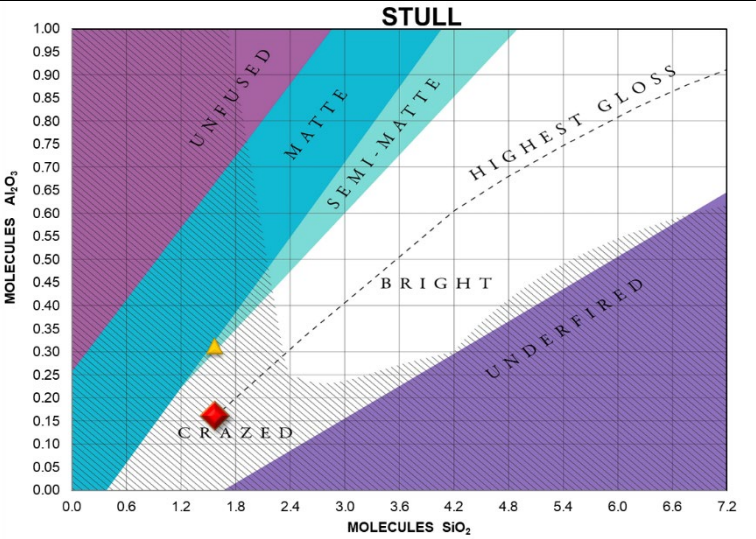


Reduction



Oxidation

SiO ₂ :Al ₂ O ₃ Ratio 5.03 : 1		Alkali Metals 0.16		Alkaline Earths 0.84	
SiO ₂ 1.57	Collective "Al ₂ O ₃ " 0.31	Na ₂ O 0.10	K ₂ O 0.06	MgO 0.00	CaO 0.76
B ₂ O ₃ 0.15	Al ₂ O ₃ 0.16	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.15	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂ 0.07	CoO



Ceramic
Materials
Workshop

Big Red

G200 EU	21.64
Whiting	25.11
EPK	10.34
Flint	11.79
3134	23.72
Manganese Dioxide	2.78
Tin Oxide	4.63
Water	65



1-3 Second Dip



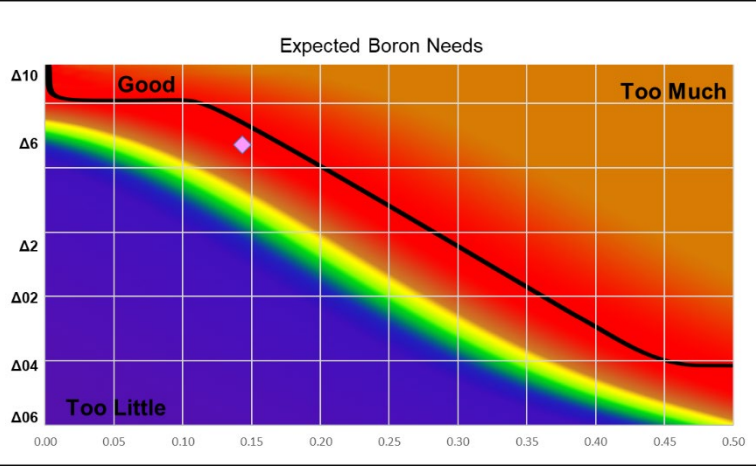
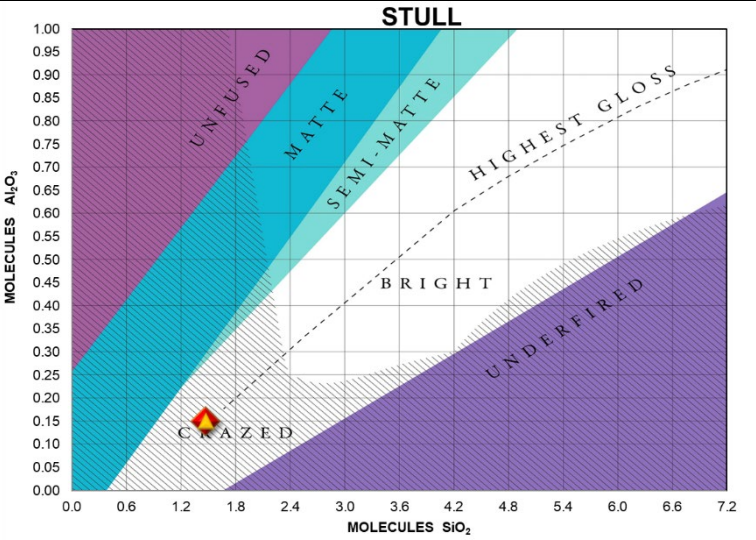
2-3 Second Dips



Reduction



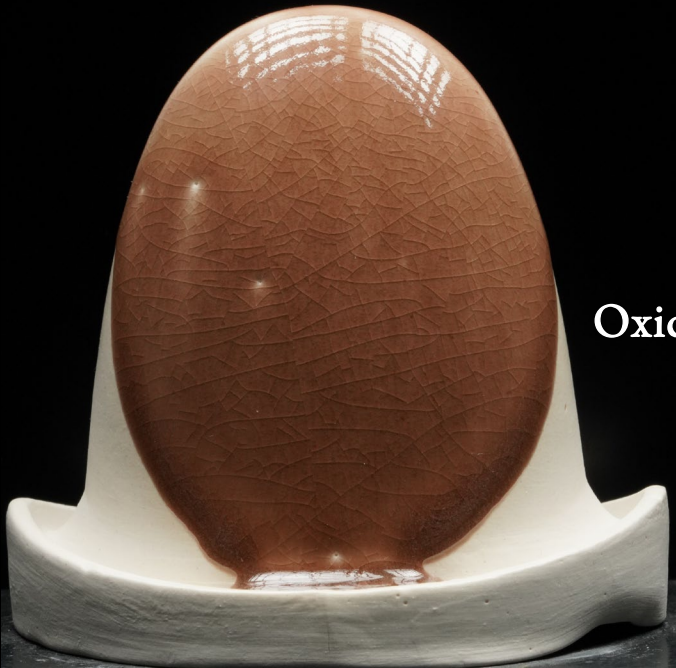
SiO ₂ :Al ₂ O ₃ Ratio 9.75 : 1		Alkali Metals 0.21		Alkaline Earths 0.79	
SiO ₂ 1.47	Collective "Al ₂ O ₃ " 0.15	Na ₂ O 0.10	K ₂ O 0.05	MgO 0.00	CaO 0.71
B ₂ O ₃ 0.14	Al ₂ O ₃ 0.15	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂ 0.06	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂ 0.07	CoO



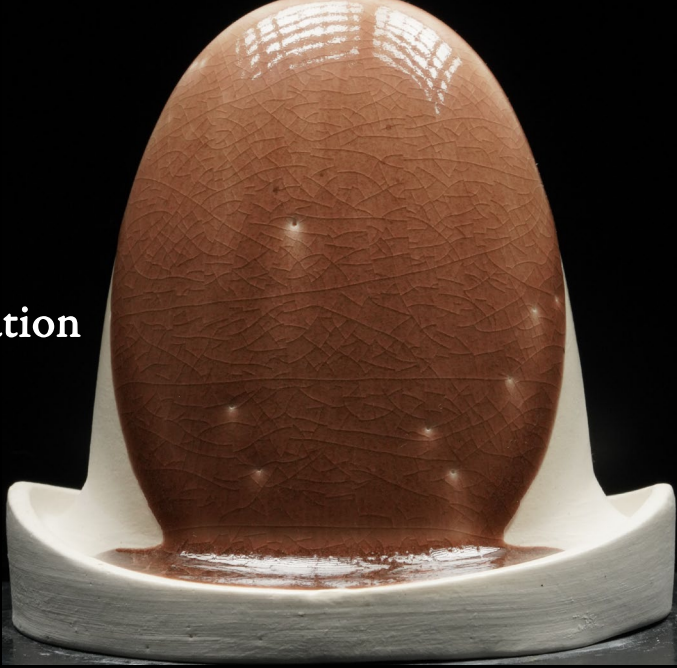
Ceramic
Materials
Workshop

Big Red

G200 EU	20.68
Whiting	23.99
EPK	9.88
Flint	11.27
3134	22.67
Manganese Dioxide	2.65
Ultrox (Zircopax)	8.85
Water	65



1-3 Second Dip



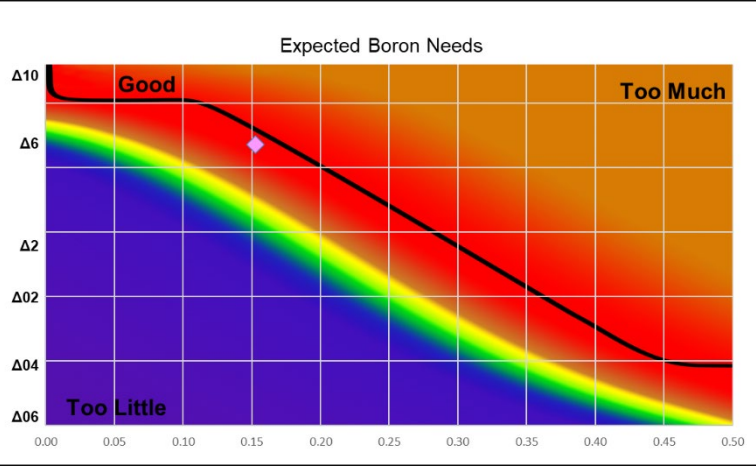
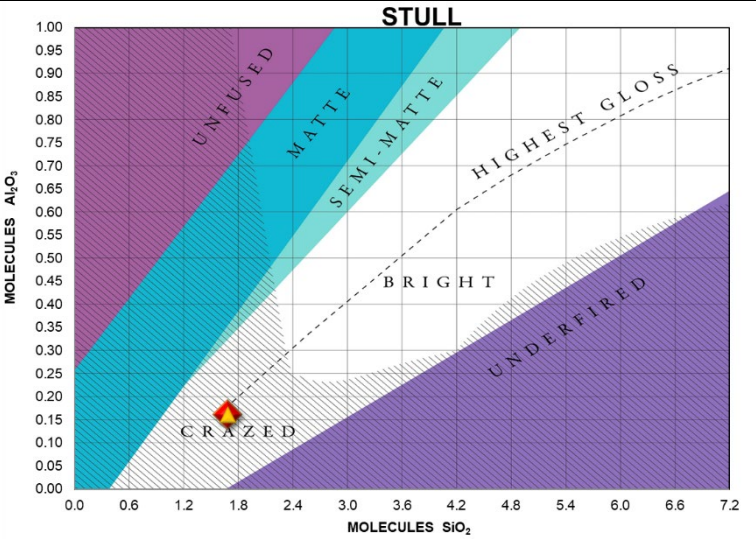
2-3 Second Dips



Reduction



SiO ₂ :Al ₂ O ₃ Ratio 10.44 : 1		Alkali Metals 0.16		Alkaline Earths 0.84	
SiO ₂ 1.68	Collective "Al ₂ O ₃ " 0.16	Na ₂ O 0.10	K ₂ O 0.06	MgO 0.00	CaO 0.76
B ₂ O ₃ 0.15	Al ₂ O ₃ 0.16	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂ 0.07	CoO



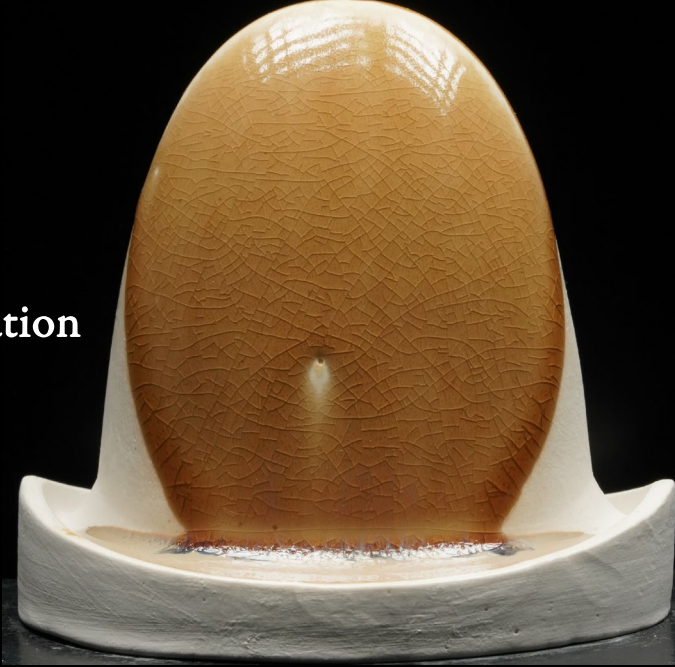
Ceramic
Materials
Workshop

Big Red

G200 EU	21.54
Whiting	24.99
EPK	10.29
Flint	11.74
3134	23.61
Nickel Carb (Green)	2.30
Titanium Dioxide	5.53
Water	60



1-3 Second Dip



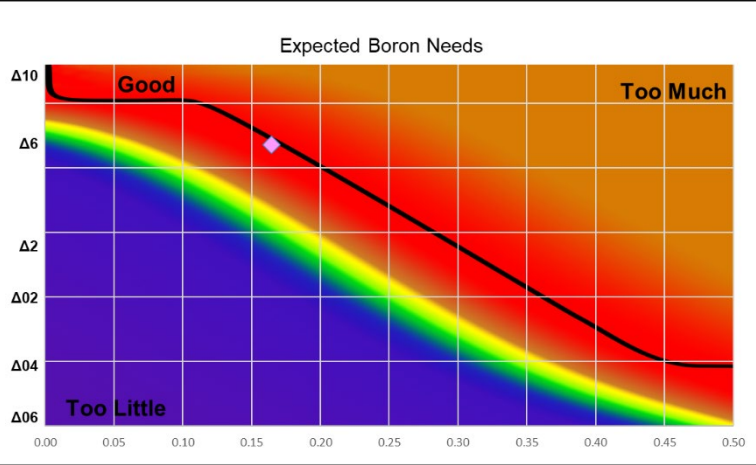
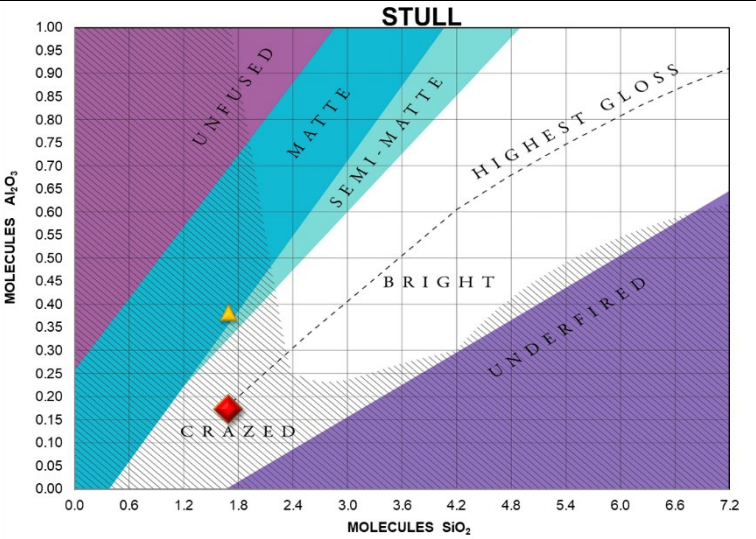
2-3 Second Dips



Reduction



SiO ₂ :Al ₂ O ₃ Ratio 4.42 : 1		Alkali Metals 0.17		Alkaline Earths 0.83	
SiO ₂ 1.69	Collective "Al ₂ O ₃ " 0.38	Na ₂ O 0.11	K ₂ O 0.06	MgO 0.00	CaO 0.82
B ₂ O ₃ 0.16	Al ₂ O ₃ 0.17	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.16	NiO 0.05	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



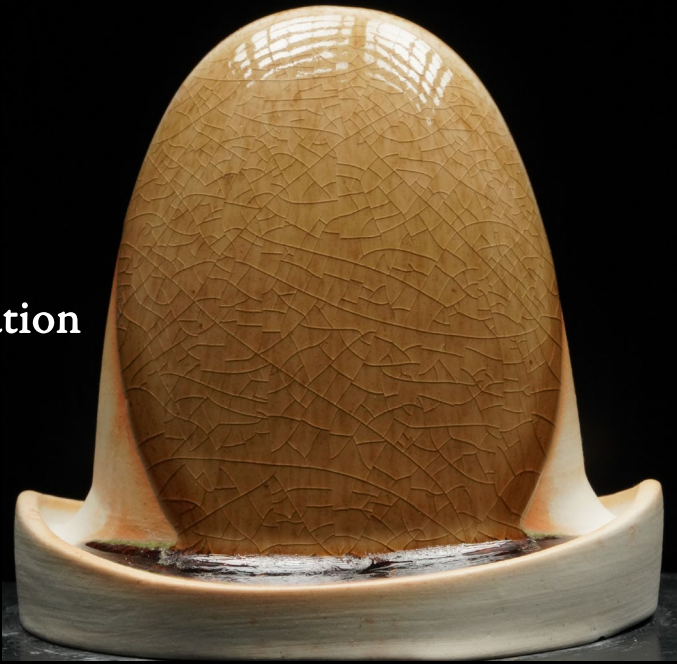
Ceramic
Materials
Workshop

Big Red

G200 EU	21.74
Whiting	25.22
EPK	10.39
Flint	11.84
3134	23.83
Nickel Carb (Green)	2.33
Tin Oxide	4.65
Water	60



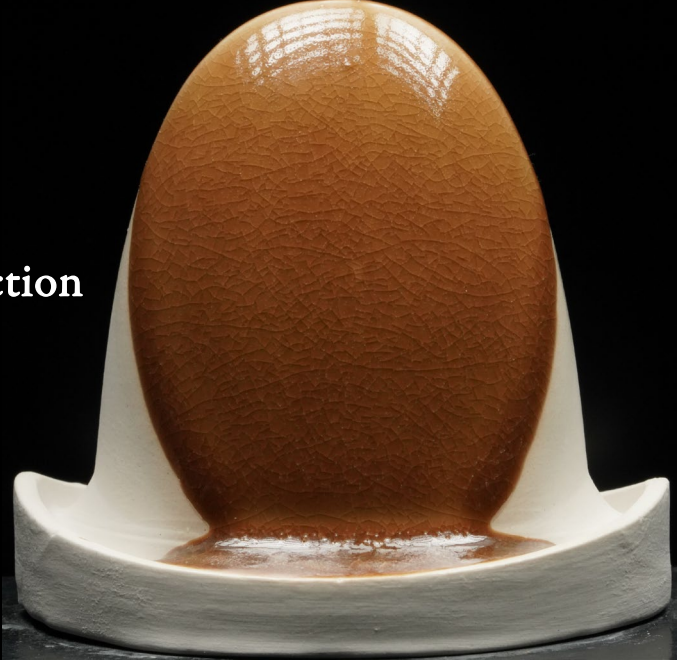
1-3 Second Dip



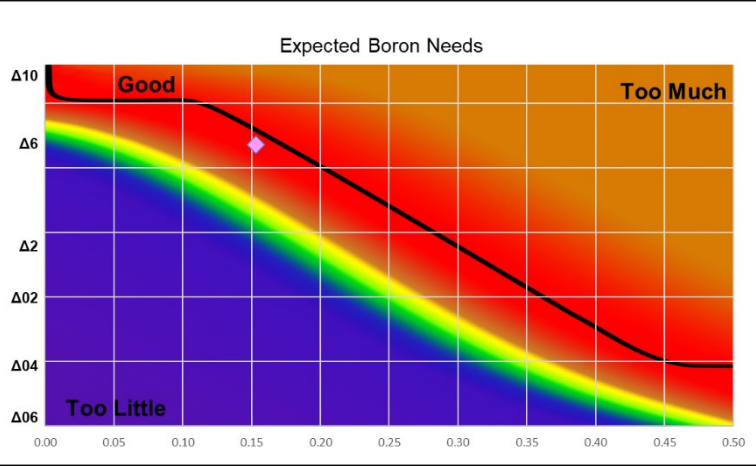
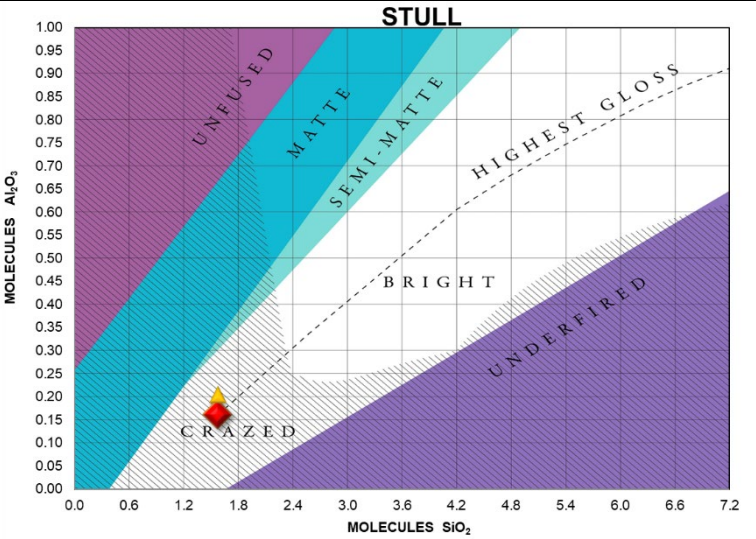
2-3 Second Dips



Reduction



SiO ₂ :Al ₂ O ₃ Ratio 7.69 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.58	Collective "Al ₂ O ₃ " 0.20	Na ₂ O 0.10	K ₂ O 0.06	MgO 0.00	CaO 0.77
B ₂ O ₃ 0.15	Al ₂ O ₃ 0.16	Li ₂ O 0.00	CuO 0.00	SrO 0.00	BaO 0.00
TiO ₂ 0.00	NiO 0.04	Bi ₂ O ₃ 0.00	SnO ₂ 0.07	ZnO 0.00	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



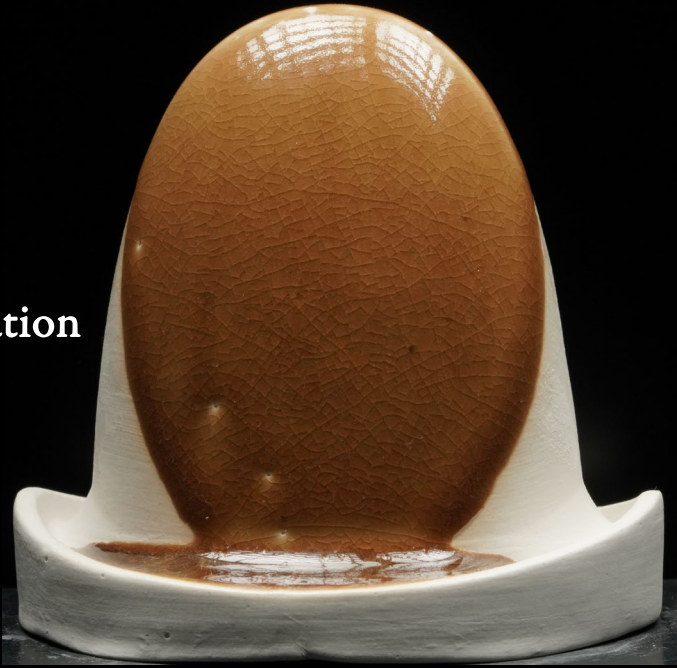
Ceramic
Materials
Workshop

Big Red

G200 EU	20.77
Whiting	24.10
EPK	9.93
Flint	11.32
3134	22.77
Nickel Carb (Green)	2.22
Ultrox (Zircopax)	8.89
Water	60



1-3 Second Dip



2-3 Second Dips

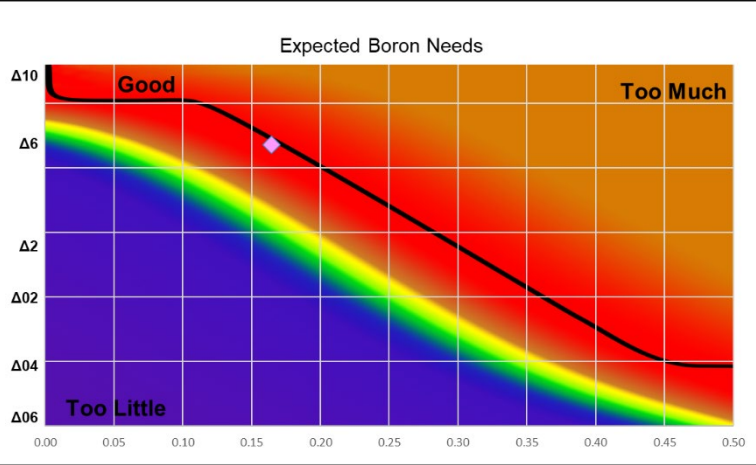
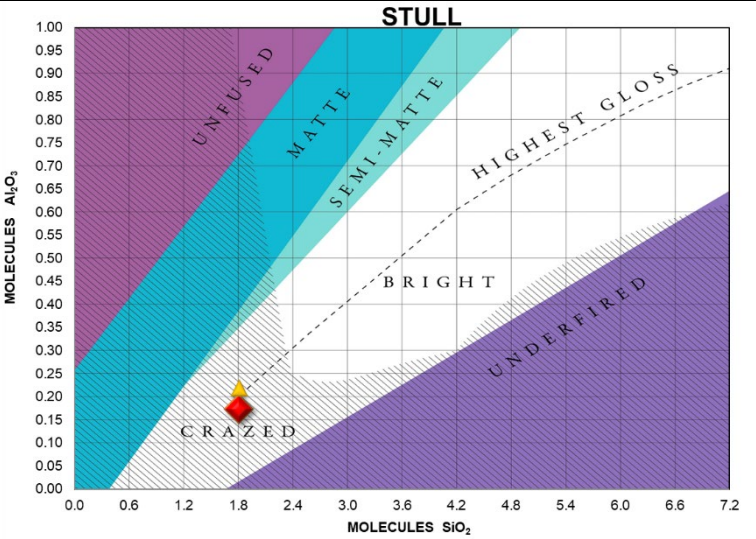


Reduction



Oxidation

SiO ₂ :Al ₂ O ₃ Ratio 8.24 : 1		Alkali Metals 0.17		Alkaline Earths 0.83	
SiO ₂ 1.81	Collective "Al ₂ O ₃ " 0.22	Na ₂ O 0.11	K ₂ O 0.06	MgO 0.00	CaO 0.82
B ₂ O ₃ 0.16	Al ₂ O ₃ 0.17	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO 0.05	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Ceramic
Materials
Workshop

Big Red

G200 EU	21.05
Whiting	24.43
EPK	10.06
Flint	11.47
3134	23.08
Titanium Dioxide	5.41
Tin Oxide	4.50
Water	60



1-3 Second Dip



2-3 Second Dips

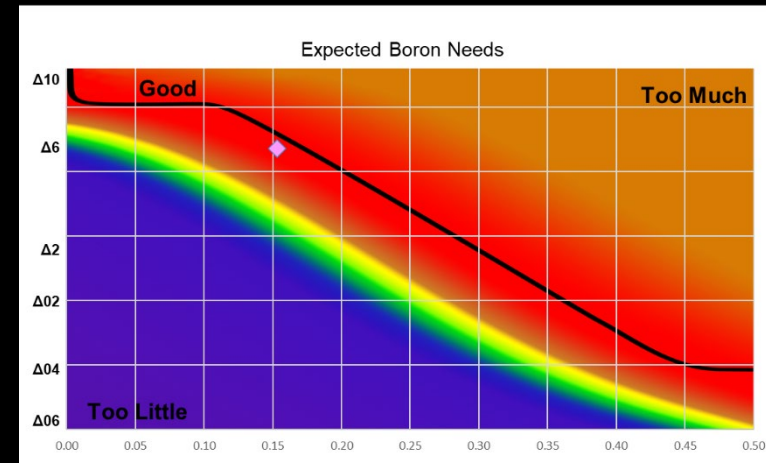
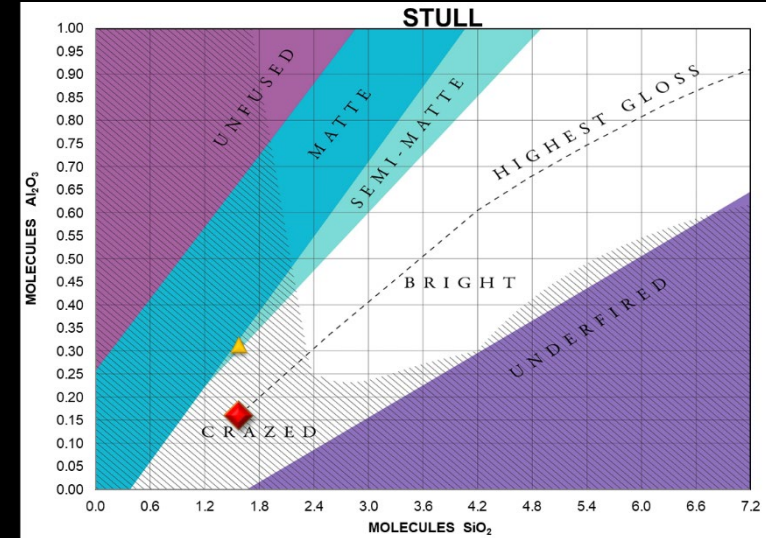
Oxidation



Reduction



SiO ₂ :Al ₂ O ₃ Ratio 5.03 : 1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.58	Collective "Al ₂ O ₃ " 0.31	Na ₂ O 0.10	K ₂ O 0.06	MgO 0.00	CaO 0.77
B ₂ O ₃ 0.15	Al ₂ O ₃ 0.16	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.15	NiO	Bi ₂ O ₃	SnO ₂ 0.07	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Ceramic
Materials
Workshop

Big Red

G200 EU	20.15
Whiting	23.37
EPK	9.63
Flint	10.98
3134	22.08
Titanium Dioxide	5.17
Ultrox (Zircopax)	8.62
Water	65



1-3 Second Dip



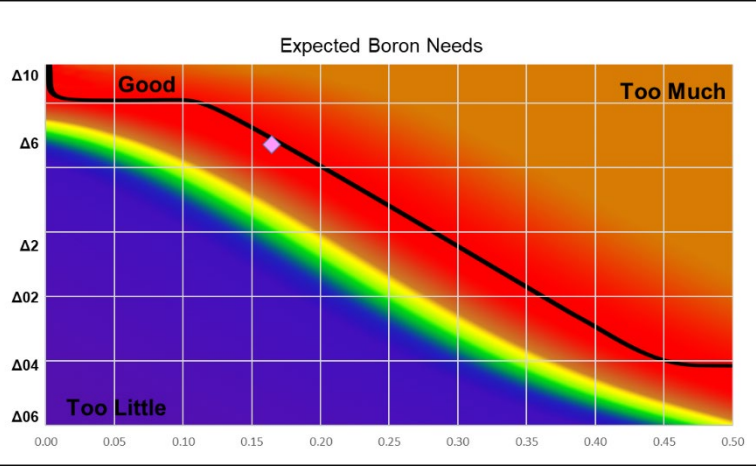
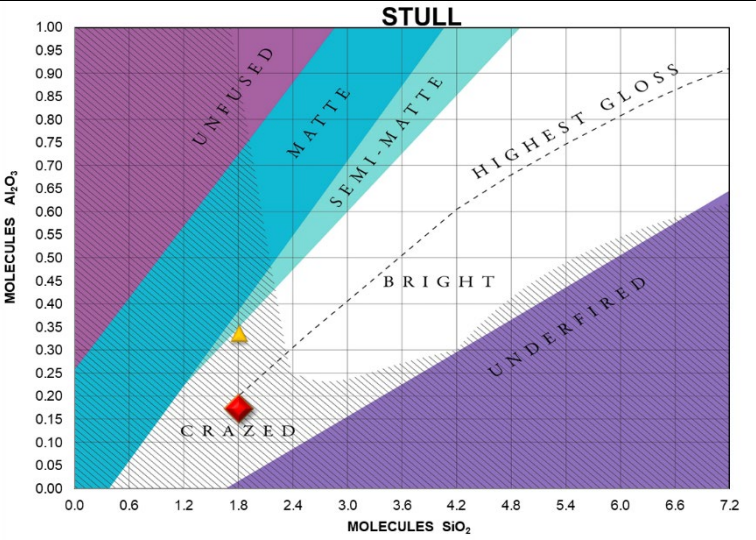
2-3 Second Dips



Oxidation

Reduction

SiO ₂ :Al ₂ O ₃ Ratio 5.38 : 1		Alkali Metals 0.17		Alkaline Earths 0.83	
SiO ₂ 1.81	Collective "Al ₂ O ₃ " 0.34	Na ₂ O 0.11	K ₂ O 0.06	MgO 0.00	CaO 0.82
B ₂ O ₃ 0.16	Al ₂ O ₃ 0.17	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.16	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Big Red

G200 EU	20.32
Whiting	23.58
EPK	9.71
Flint	11.07
3134	22.28
Tin Oxide	4.35
Ultrox (Zircopax)	8.70
Water	65



1-3 Second Dip



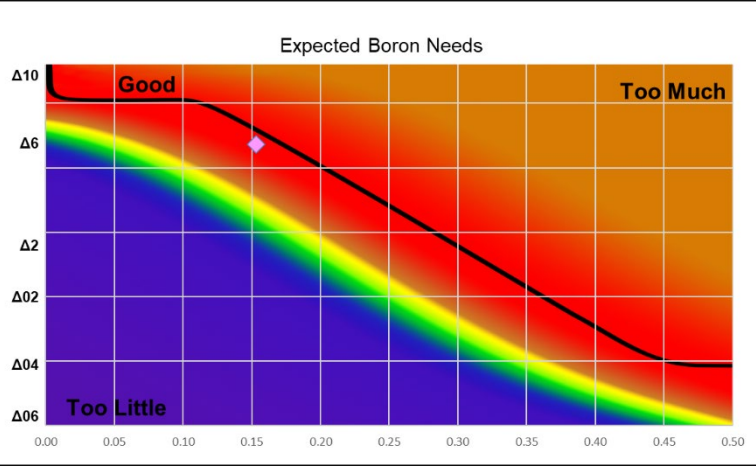
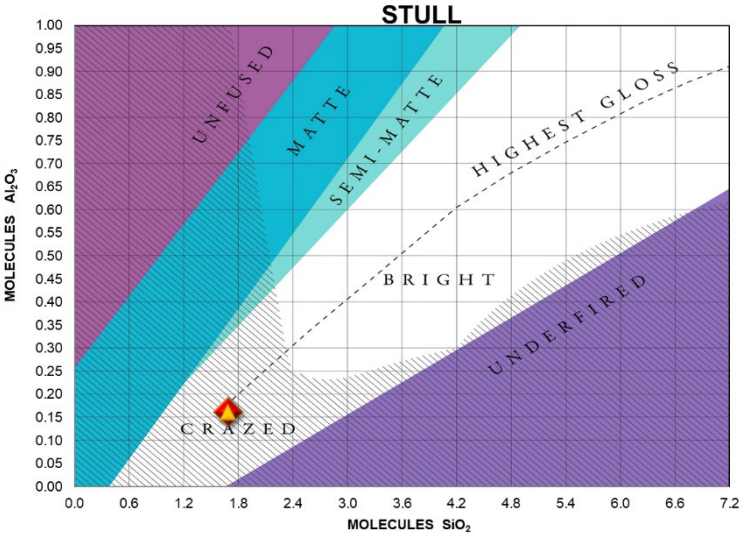
2-3 Second Dips



Reduction



SiO ₂ :Al ₂ O ₃ Ratio 10.44 : 1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.69	Collective "Al ₂ O ₃ " 0.16	Na ₂ O 0.10	K ₂ O 0.06	MgO 0.00	CaO 0.77
B ₂ O ₃ 0.15	Al ₂ O ₃ 0.16	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂ 0.07	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Ceramic
Materials
Workshop