

Purple Rain- Δ 10

Lab 2-Flux Capacity



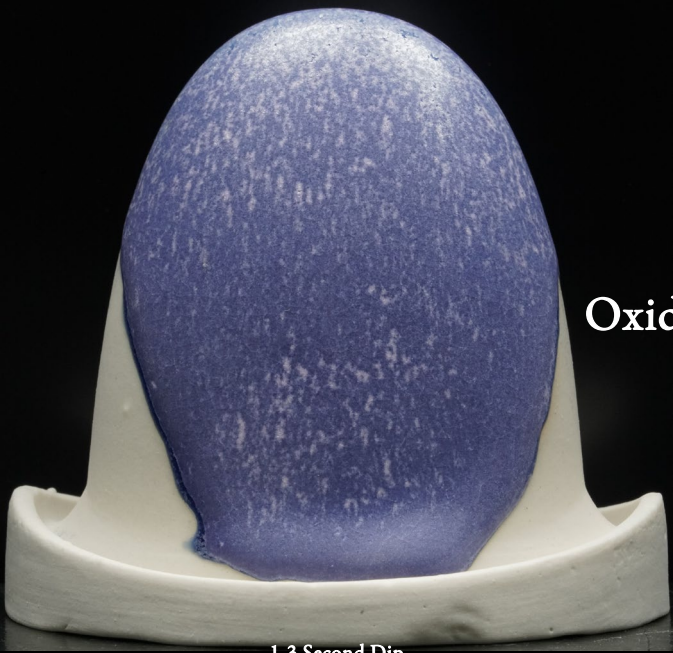
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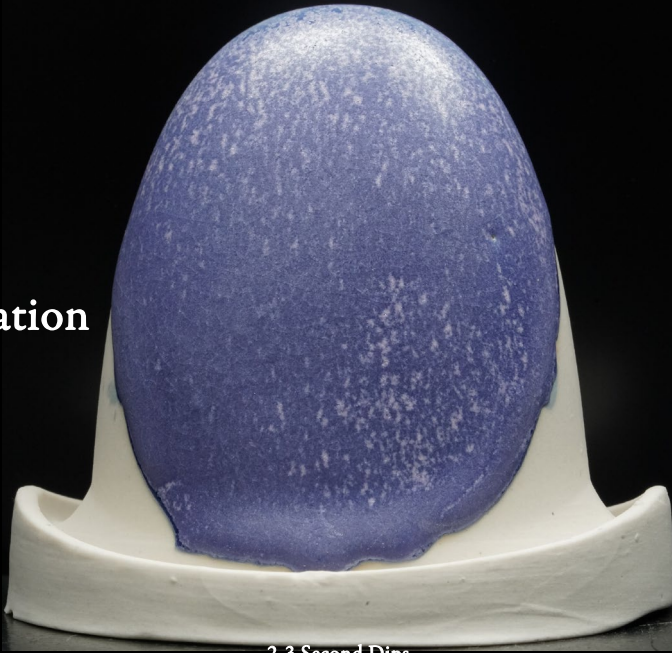
Purple Rain

Original
062722-1

Neph Sy	40.93
Dolomite	30.27
EPK	5.04
Flint	23.76
Cobalt Carbonate	1
Water	60



1-3 Second Dip



2-3 Second Dips

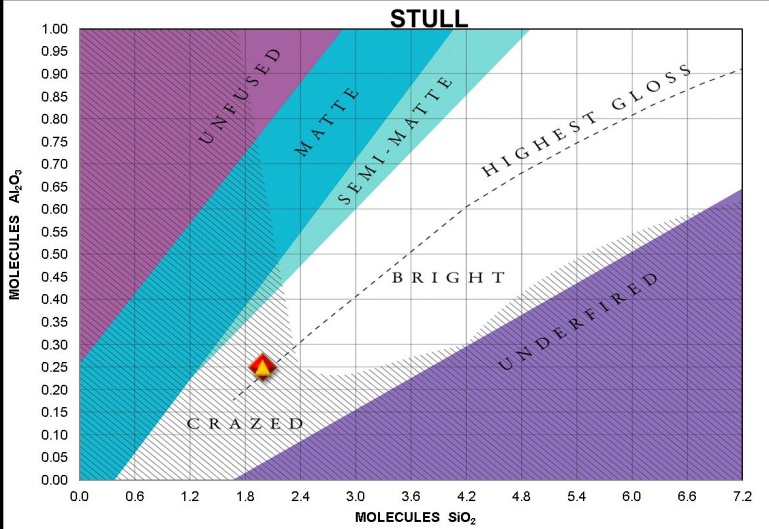


Reduction

Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 7.93 :1		Alkali Metals 0.21		Alkaline Earths 0.79	
SiO ₂ 2.03	Collective "Al ₂ O ₃ " 0.26	Na ₂ O 0.16	K ₂ O 0.05	MgO 0.39	CaO 0.40
B ₂ O ₃	Al ₂ O ₃ 0.26	Li ₂ O	CuO	SrO	BaO
TiO ₂	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 7.93 :1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 1.99	Collective "Al ₂ O ₃ " 0.25	Na ₂ O 0.16	K ₂ O 0.05	MgO 0.38	CaO 0.39
B ₂ O ₃	Al ₂ O ₃ 0.25	Li ₂ O	CuO	SrO	BaO
TiO ₂	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



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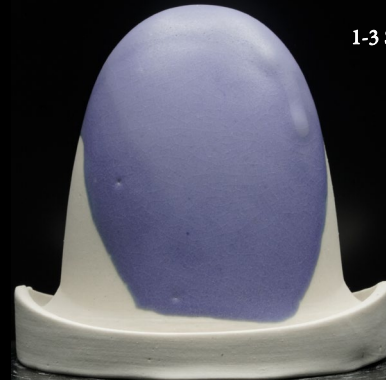
Lab 2-Alakli Metal-Oxidation



062622-1

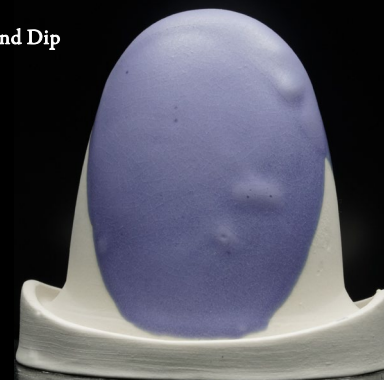


062622-7



062622-8

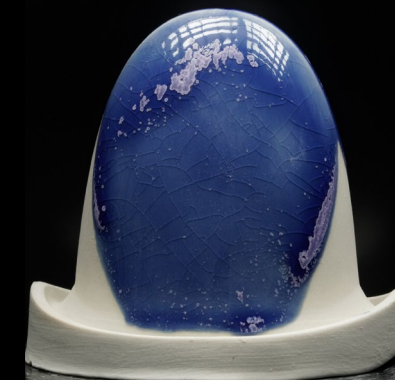
1-3 Second Dip



062622-9



062622-10



062622-11



Original (NS)



w/Mahavir



w/Custer

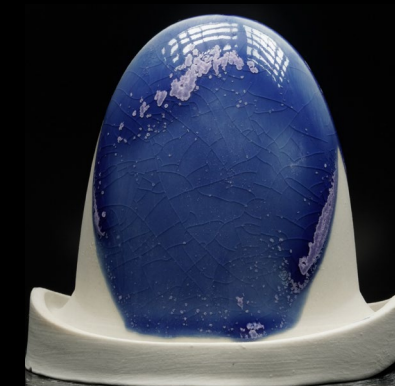
2-3 Second Dips



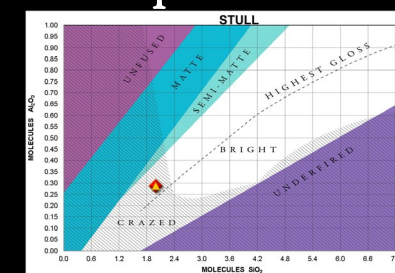
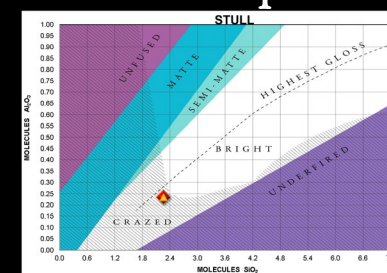
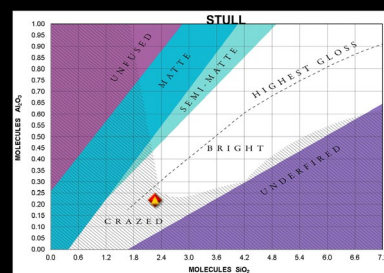
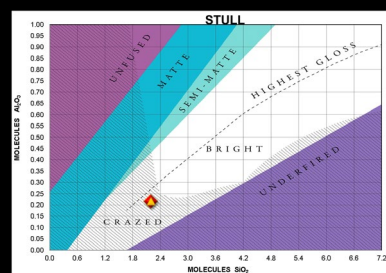
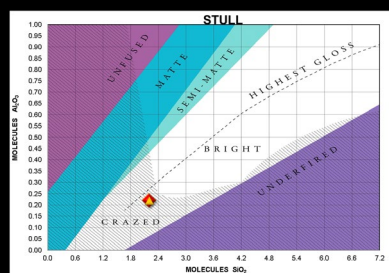
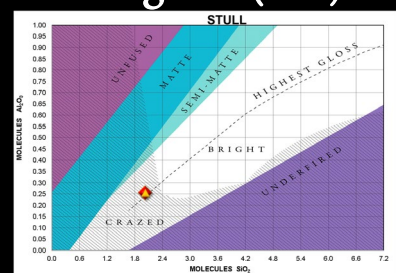
w/G200EU



w/Minspar



w/Spodumene



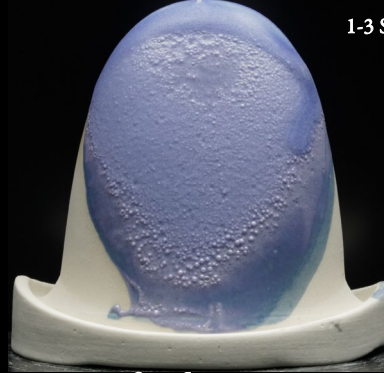
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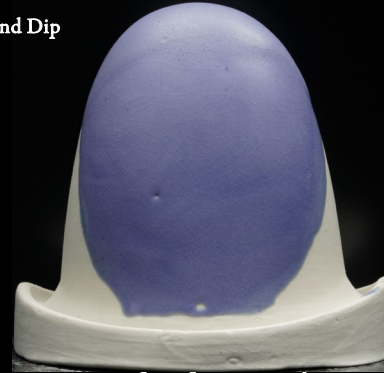
Lab 2-Alakli Metal-Oxidation



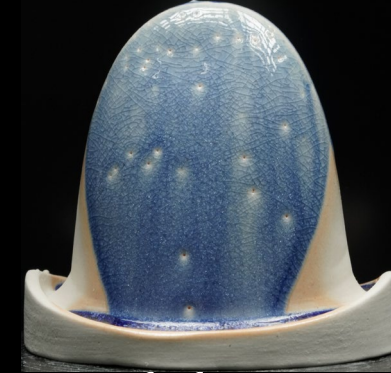
062622-1



062622-13



062622-14



062622-15

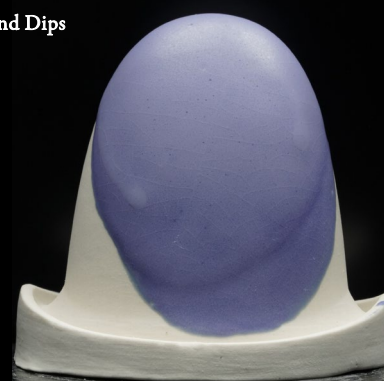
1-3 Second Dip



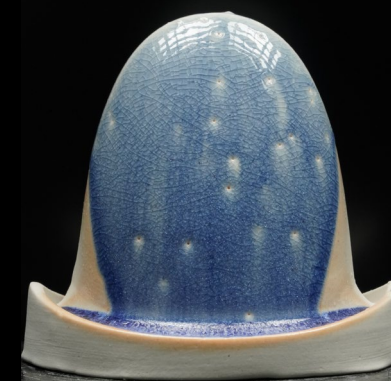
Original (NS)



w/Frit 3110

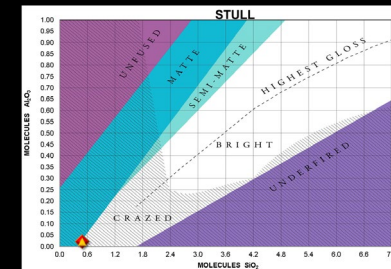
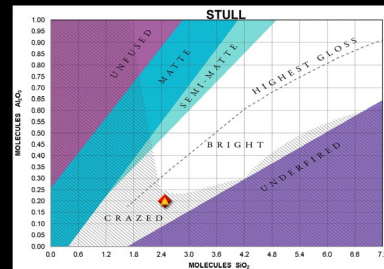
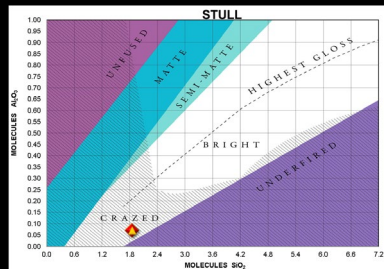
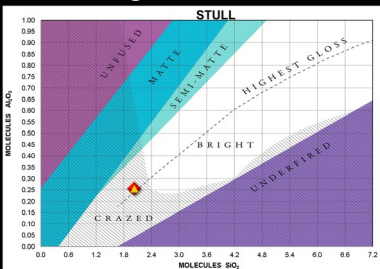


w/Cornwall



w/Lithium Carbonate

2-3 Second Dips



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Lab 2-Alakli Metal-Reduction



062622-1



062622-7



062622-8



062622-9



062622-10



062622-11

1-3 Second Dip

2-3 Second Dips



Original (NS)



w/Mahavir



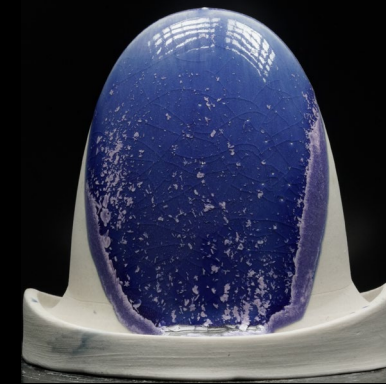
w/Custer



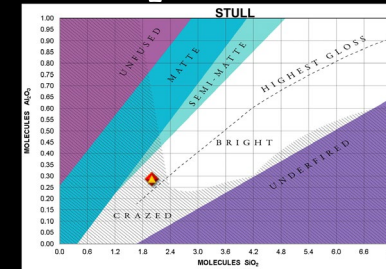
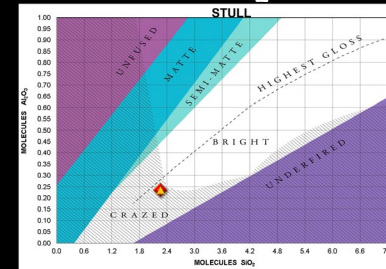
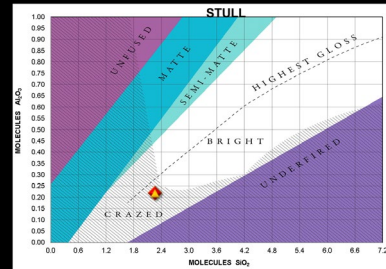
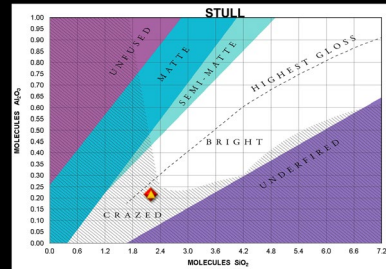
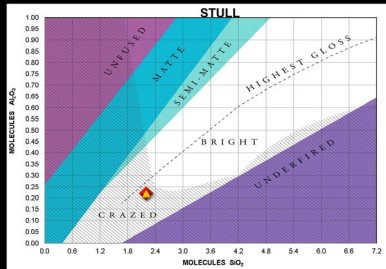
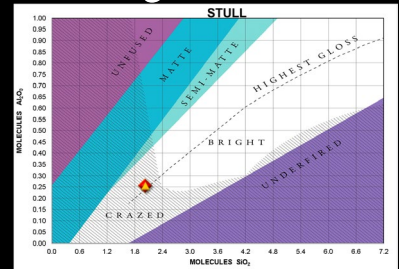
w/G200EU



w/Minspar



w/Spodumene



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Lab 2-Alakli Metal-Reduction



062622-1



062622-13



062622-14



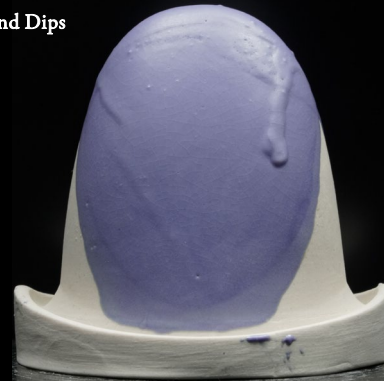
062622-15



Original (NS)



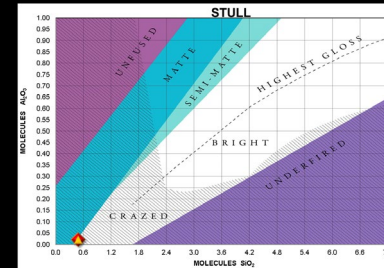
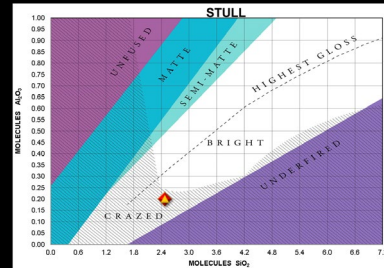
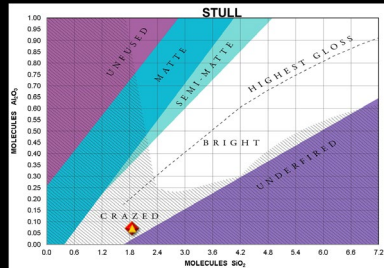
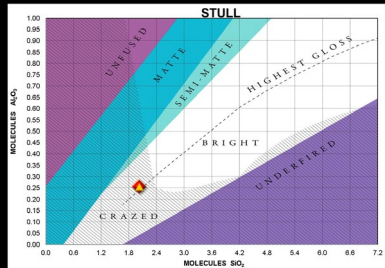
w/Frit 3110



w/Cornwall



w/Lithium Carbonate



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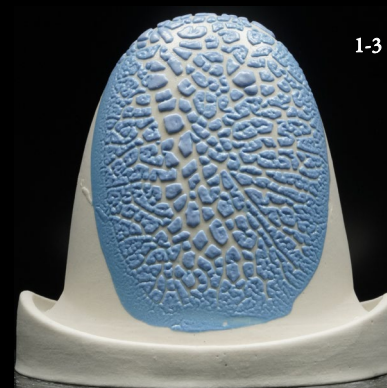
Lab 2-Alakline Earth-Oxidation



062722-1

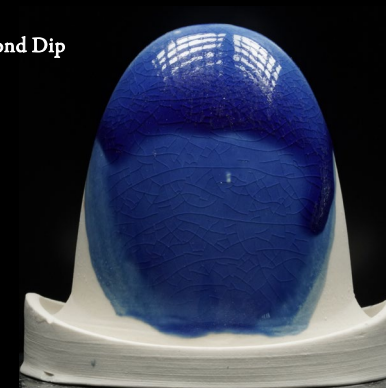


062722-16



062722-17

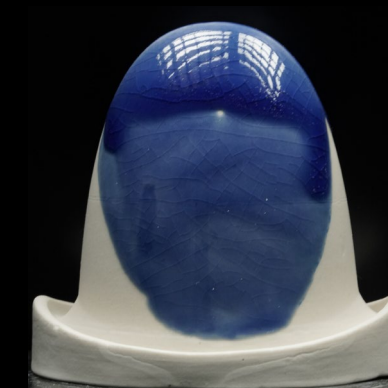
1-3 Second Dip



062722-18



062722-19



062722-20



Original (D)

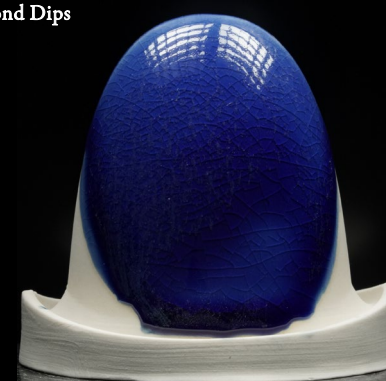


w/Talc

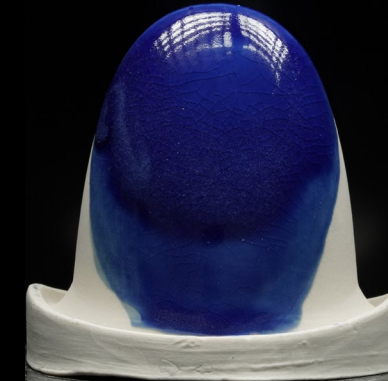


w/Mag Carb

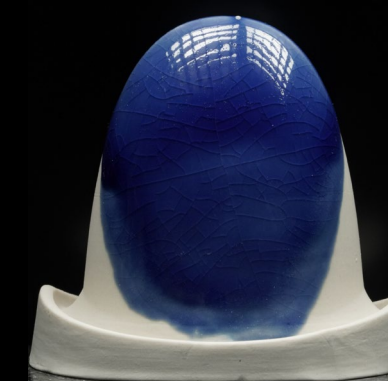
2-3 Second Dips



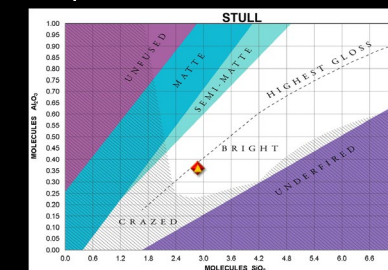
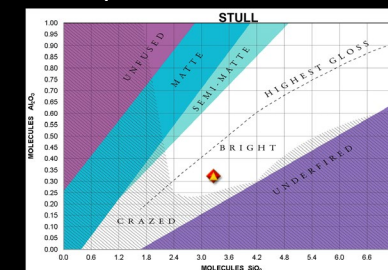
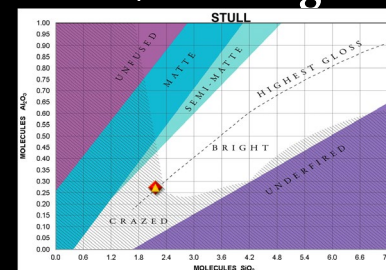
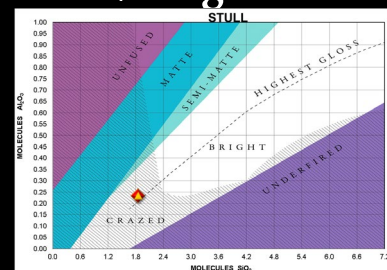
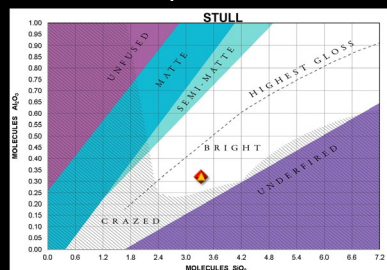
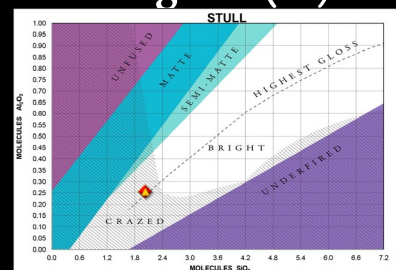
w/Whiting



w/Wollastonite



w/Strontium Carb



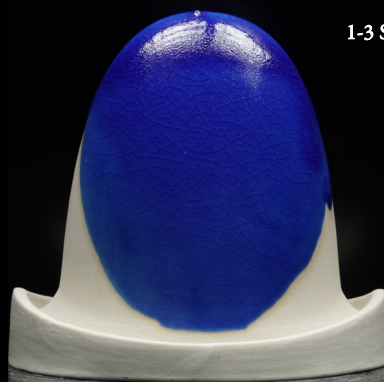
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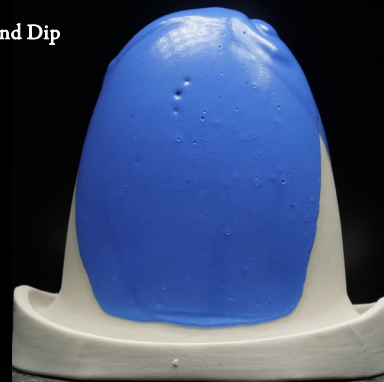
Lab 2-Alakline Earth-Oxidation



062722-1



062722-21



062722-22



062722-23



Original (D)



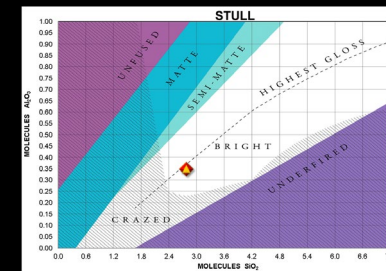
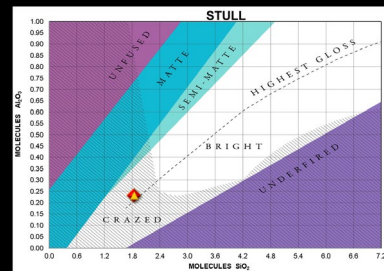
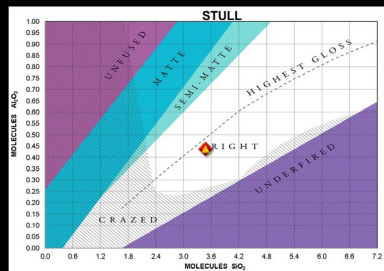
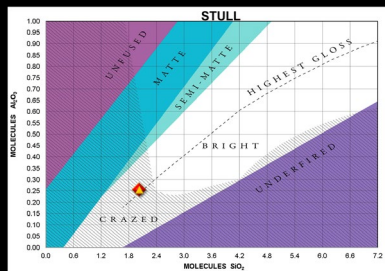
w/Barium Carb



w/Zinc Oxide



w/Bone Ash



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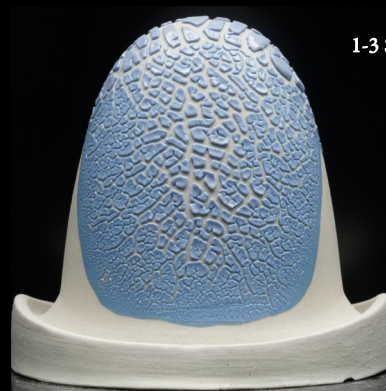
Lab 2-Alakline Earth-Reduction



062722-1

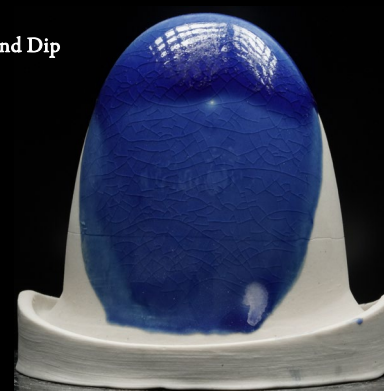


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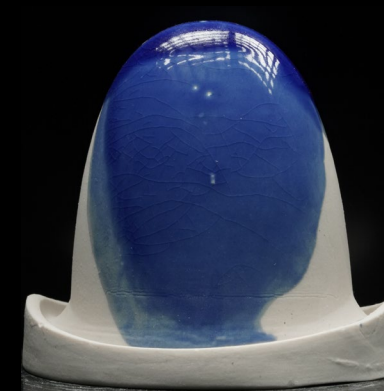
062722-17

1-3 Second Dip

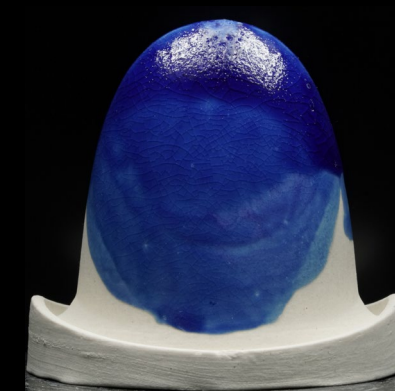


062722-18

2-3 Second Dips



062722-19



062722-20



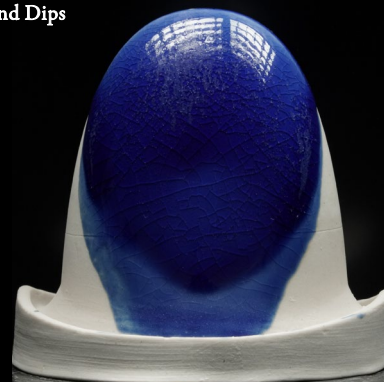
Original (D)



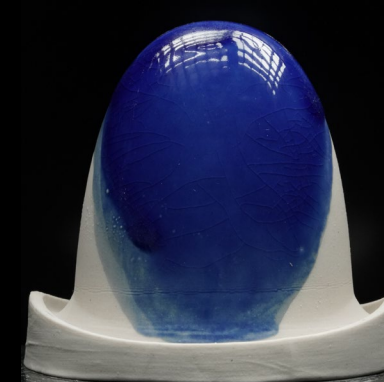
w/Talc



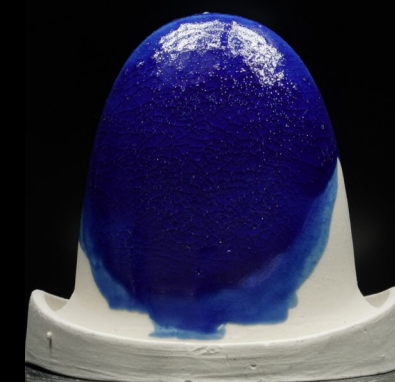
w/Mag Carb



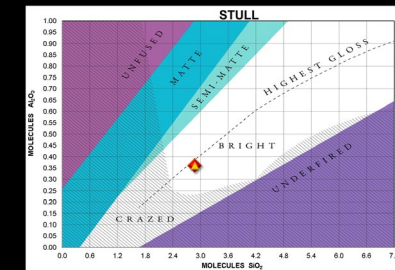
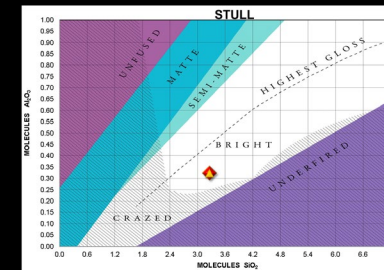
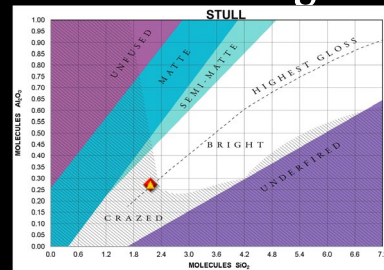
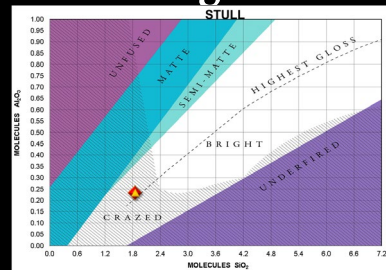
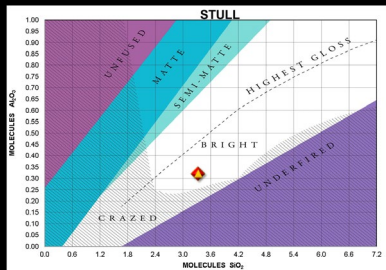
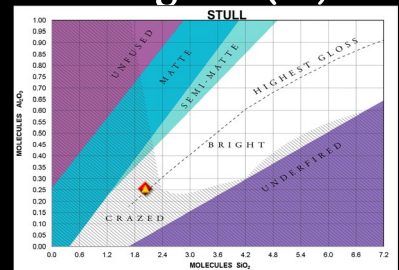
w/Whiting



w/Wollastonite



w/Strontium Carb



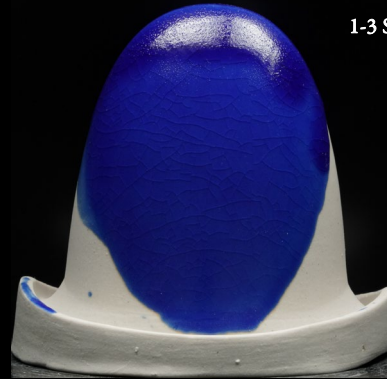
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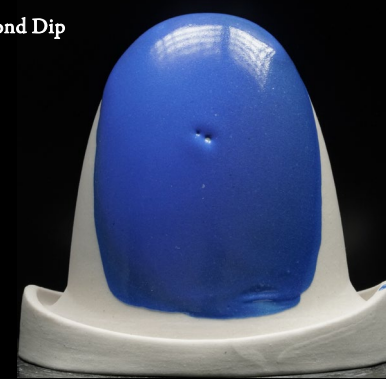
Lab 2-Alakline Earth-Reduction



062722-1



062722-21



062722-22

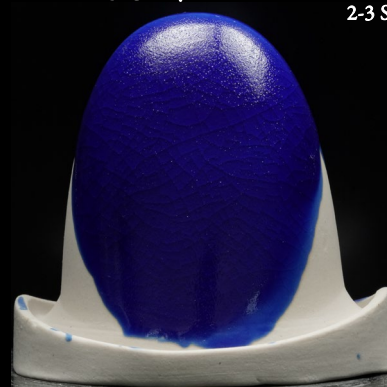


062722-23

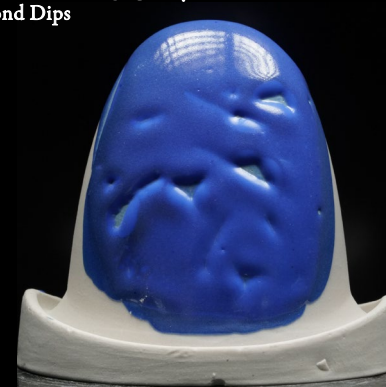
1-3 Second Dip



Original (D)



w/Barium Carb

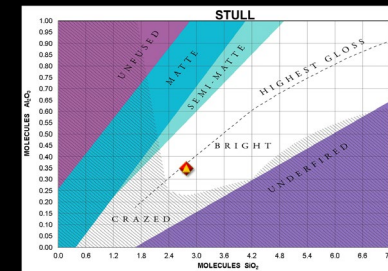
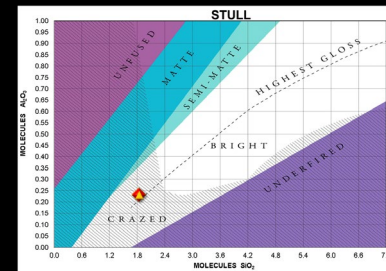
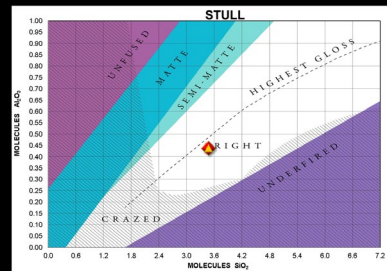
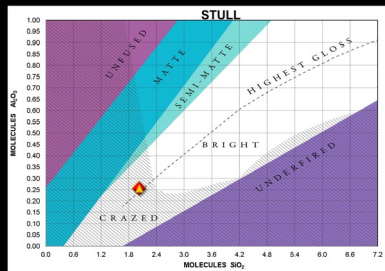


w/Zinc Oxide



w/Bone Ash

2-3 Second Dips



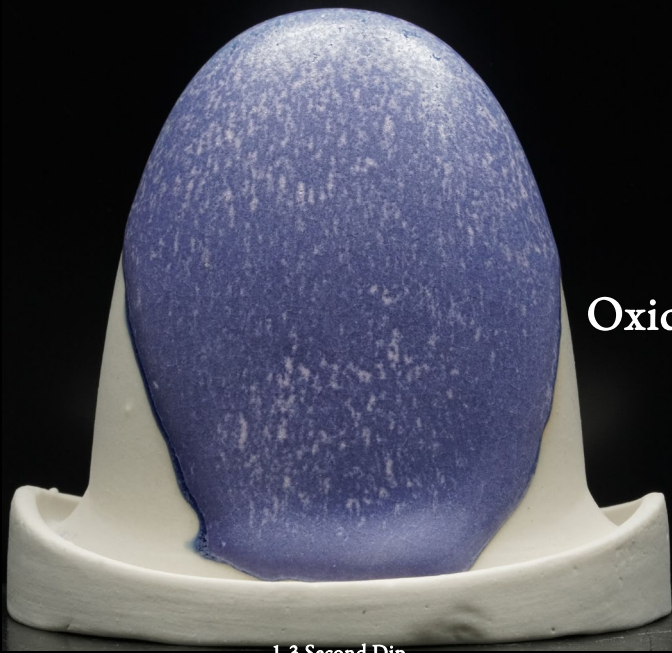
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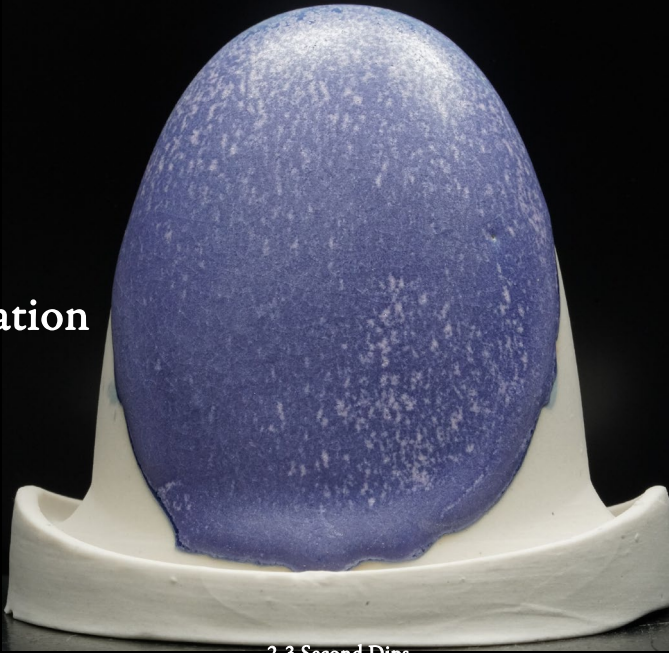
Purple Rain

Original
062722-1

Neph Sy	40.93
Dolomite	30.27
EPK	5.04
Flint	23.76
Cobalt Carbonate	1
Water	60



1-3 Second Dip



2-3 Second Dips

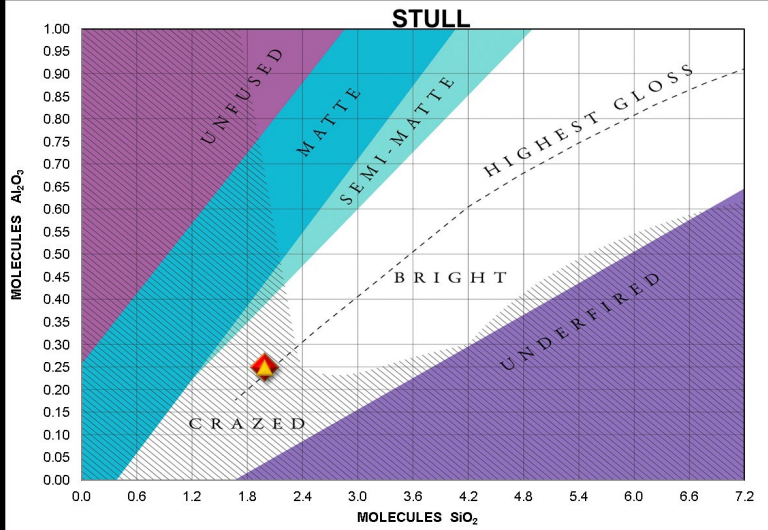


Oxidation

Reduction

UMF

SiO ₂ :Al ₂ O ₃ Ratio 7.93 :1		Alkali Metals 0.21		Alkaline Earths 0.79	
SiO ₂ 2.03	Collective "Al ₂ O ₃ " 0.26	Na ₂ O 0.16	K ₂ O 0.05	MgO 0.39	CaO 0.40
B ₂ O ₃	Al ₂ O ₃ 0.26	Li ₂ O	CuO	SrO	BaO
TiO ₂	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 7.93 :1		Alkali Metals 0.20		Alkaline Earths 0.80	
SiO ₂ 1.99	Collective "Al ₂ O ₃ " 0.25	Na ₂ O 0.16	K ₂ O 0.05	MgO 0.38	CaO 0.39
B ₂ O ₃	Al ₂ O ₃ 0.25	Li ₂ O	CuO	SrO	BaO
TiO ₂	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



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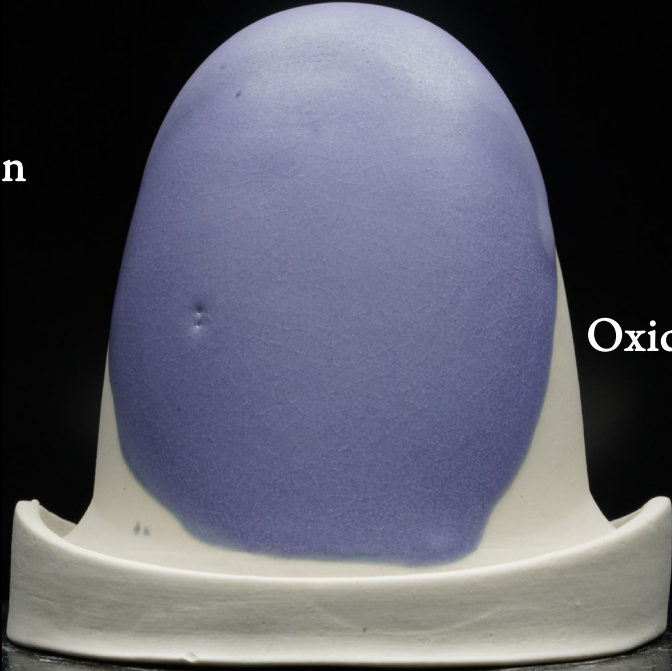
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Purple Rain

Weight Substitution
Mahavir Feldspar

062722-7

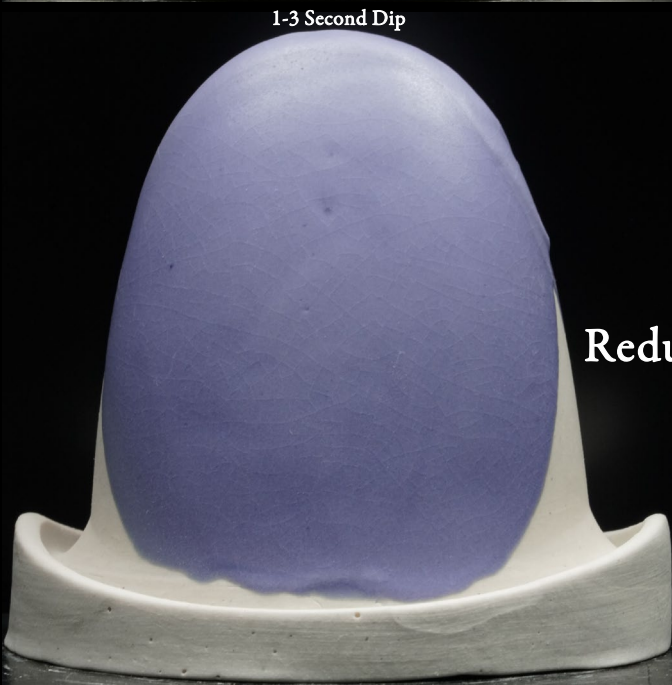
Mahavir	40.93
Dolomite	30.27
EPK	5.04
Flint	23.76
Cobalt Carbonate	1
Water	60



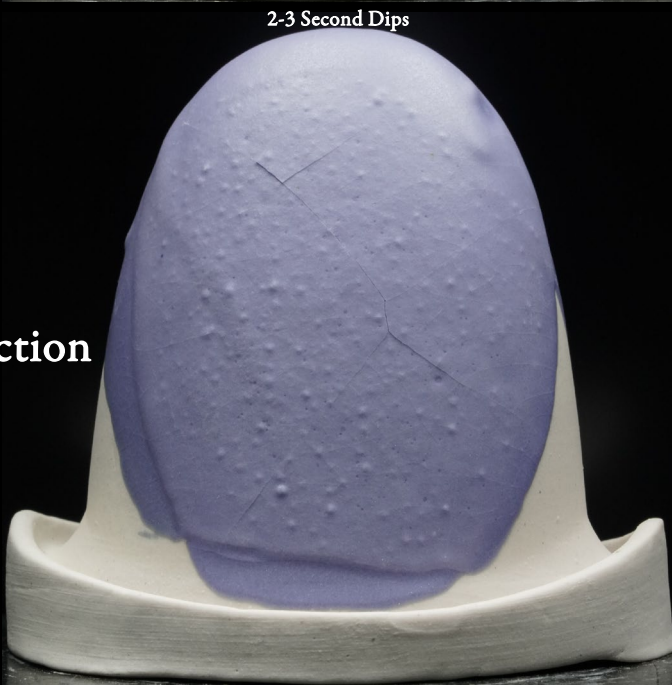
Oxidation



2-3 Second Dips

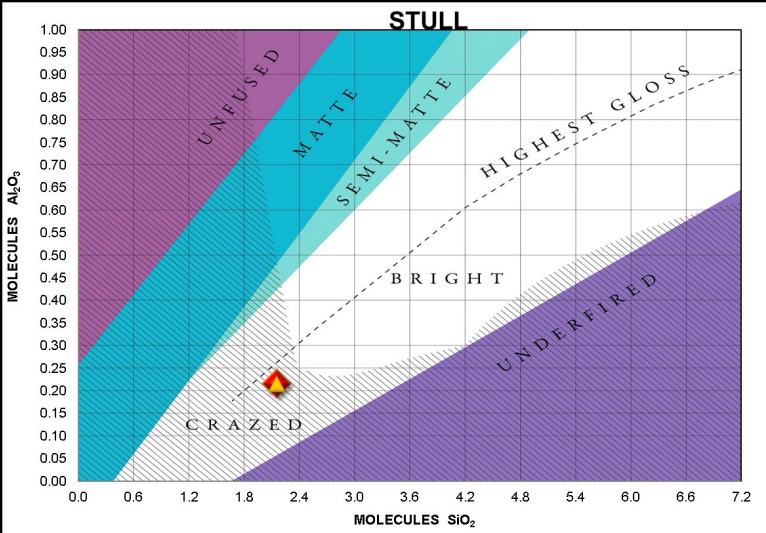


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 9.95 :1		Alkali Metals 0.17		Alkaline Earths 0.83	
SiO ₂ 2.20	Collective "Al ₂ O ₃ " 0.22	Na ₂ O 0.05	K ₂ O 0.12	MgO 0.41	CaO 0.41
B ₂ O ₃	Al ₂ O ₃ 0.22	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



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 9.95 :1		Alkali Metals 0.17		Alkaline Earths 0.83	
SiO ₂ 2.16	Collective "Al ₂ O ₃ " 0.22	Na ₂ O 0.05	K ₂ O 0.12	MgO 0.40	CaO 0.40
B ₂ O ₃	Al ₂ O ₃ 0.22	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

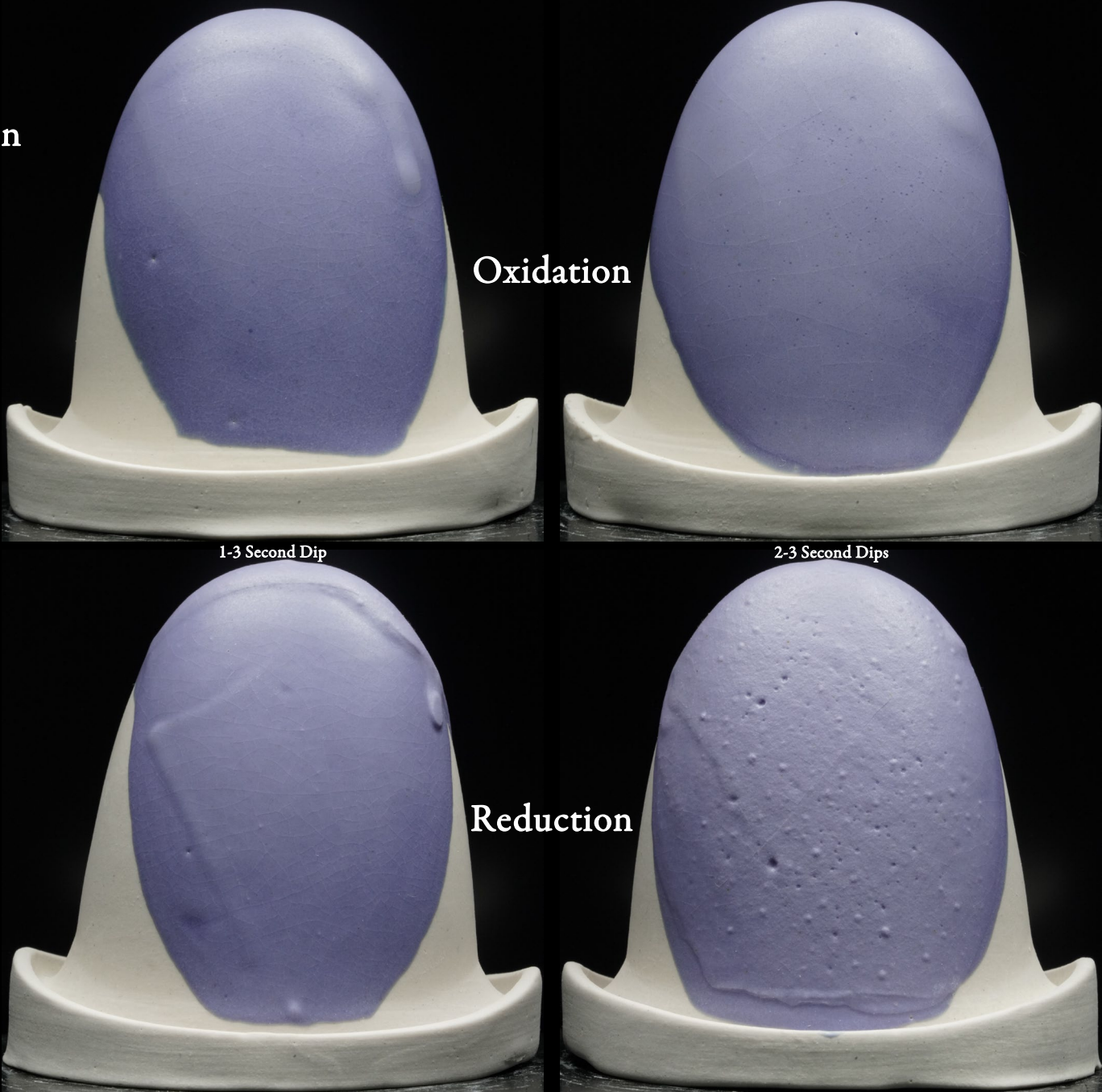


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Purple Rain

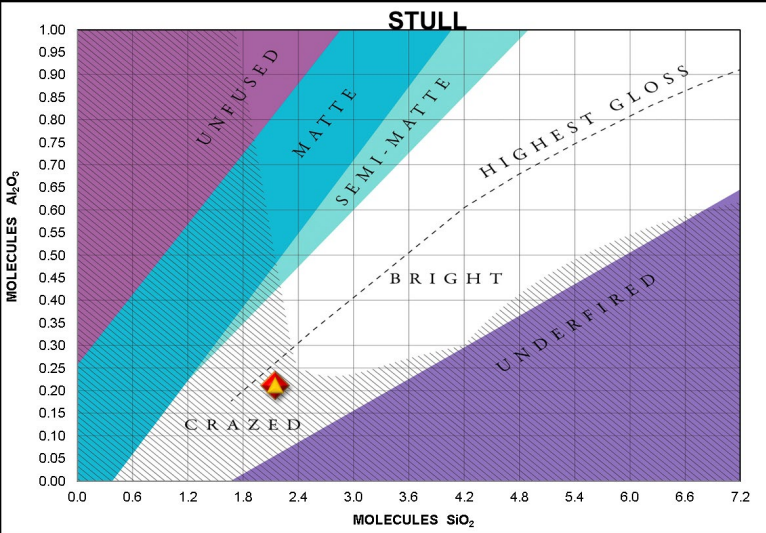
Weight Substitution
Custer Feldspar
062722-8

Custer	40.93
Dolomite	30.27
EPK	5.04
Flint	23.76
Cobalt Carbonate	1
Water	100



UMF

SiO ₂ :Al ₂ O ₃ Ratio 10.07 : 1		Alkali Metals 0.18		Alkaline Earths 0.82	
SiO ₂ 2.20	Collective "Al ₂ O ₃ " 0.22	Na ₂ O 0.07	K ₂ O 0.11	MgO 0.40	CaO 0.41
B ₂ O ₃	Al ₂ O ₃ 0.22	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



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 10.07 : 1		Alkali Metals 0.18		Alkaline Earths 0.82	
SiO ₂ 2.15	Collective "Al ₂ O ₃ " 0.21	Na ₂ O 0.07	K ₂ O 0.11	MgO 0.40	CaO 0.40
B ₂ O ₃	Al ₂ O ₃ 0.21	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

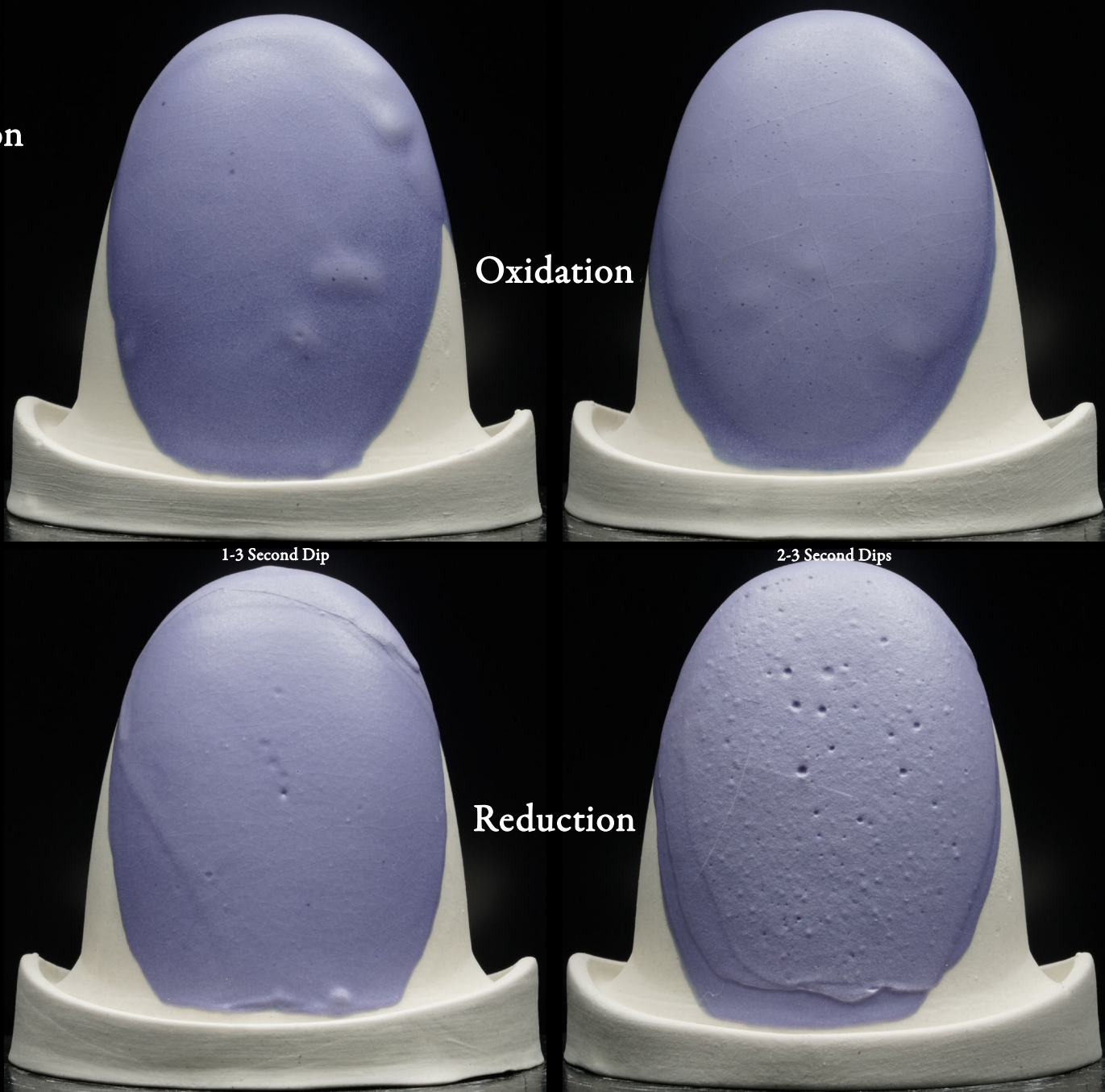


Ceramic
Materials
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Purple Rain

Weight Substitution
G200 EU Feldspar
062722-9

G200 EU	40.93
Dolomite	30.27
EPK	5.04
Flint	23.76
Cobalt Carbonate	1
Water	60



Oxidation

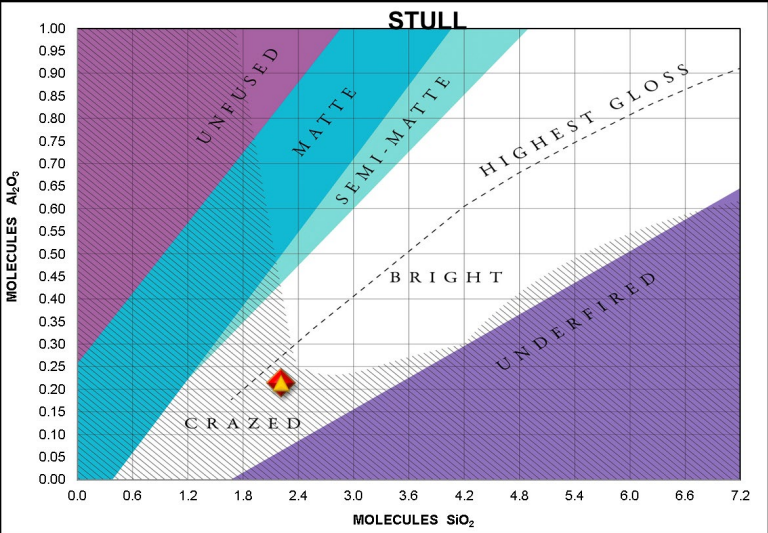
1-3 Second Dip

2-3 Second Dips

Reduction

UMF

SiO ₂ :Al ₂ O ₃ Ratio 10.31 : 1		Alkali Metals 0.16		Alkaline Earths 0.84	
SiO ₂ 2.26	Collective "Al ₂ O ₃ " 0.22	Na ₂ O 0.03	K ₂ O 0.12	MgO 0.42	CaO 0.42
B ₂ O ₃	Al ₂ O ₃ 0.22	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 10.31 : 1		Alkali Metals 0.15		Alkaline Earths 0.85	
SiO ₂ 2.22	Collective "Al ₂ O ₃ " 0.21	Na ₂ O 0.03	K ₂ O 0.12	MgO 0.41	CaO 0.41
B ₂ O ₃	Al ₂ O ₃ 0.21	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

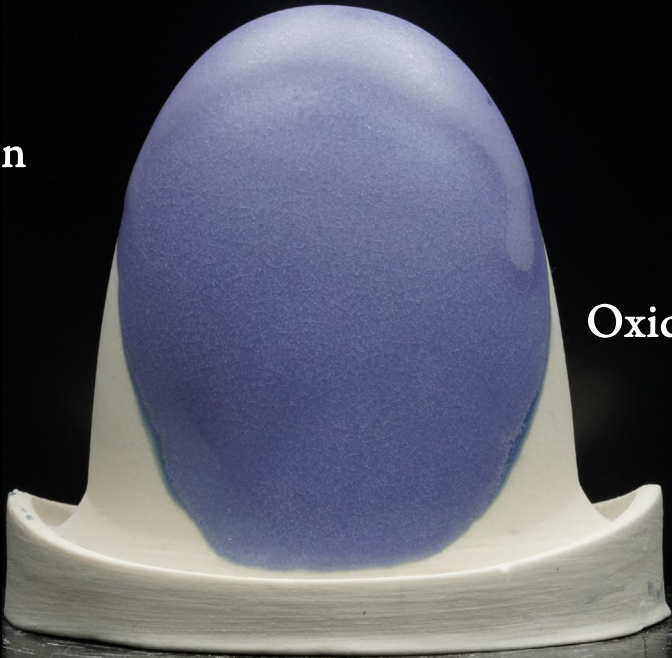


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Purple Rain

Weight Substitution
Minspar Feldspar
062722-10

Minspar	40.93
Dolomite	30.27
EPK	5.04
Flint	23.76
Cobalt Carbonate	1
Water	60



Oxidation

1-3 Second Dip



2-3 Second Dips



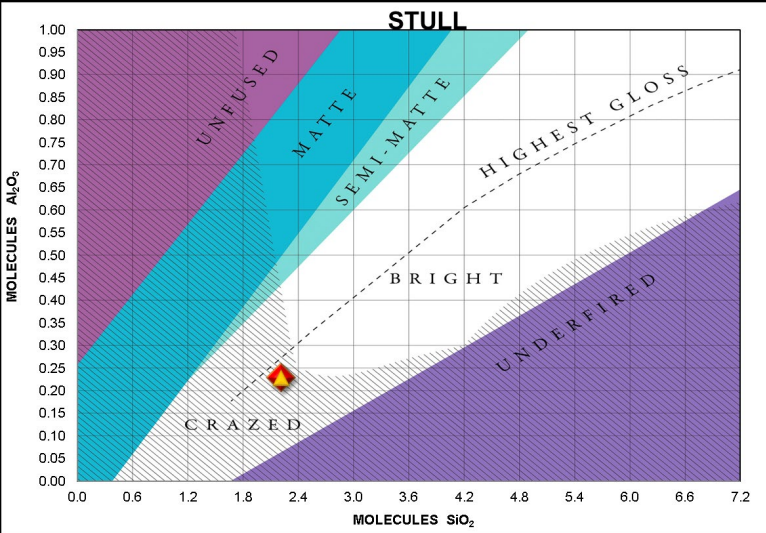
Reduction



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UMF

SiO ₂ :Al ₂ O ₃ Ratio 9.62 :1		Alkali Metals 0.15		Alkaline Earths 0.85	
SiO ₂ 2.26	Collective "Al ₂ O ₃ " 0.23	Na ₂ O 0.10	K ₂ O 0.04	MgO 0.41	CaO 0.44
B ₂ O ₃	Al ₂ O ₃ 0.23	Li ₂ O	CuO	SrO 0.00	BaO 0.00
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



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 9.62 :1		Alkali Metals 0.14		Alkaline Earths 0.86	
SiO ₂ 2.21	Collective "Al ₂ O ₃ " 0.23	Na ₂ O 0.10	K ₂ O 0.04	MgO 0.40	CaO 0.43
B ₂ O ₃	Al ₂ O ₃ 0.23	Li ₂ O	CuO	SrO 0.00	BaO 0.00
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

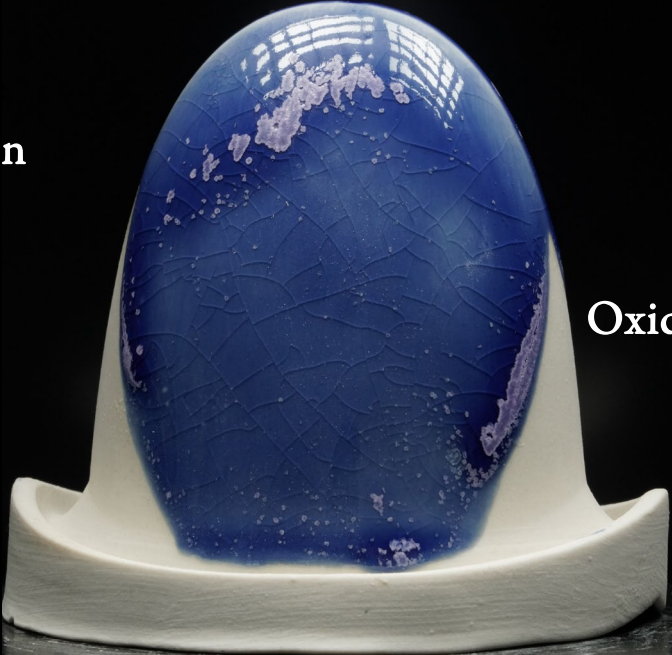


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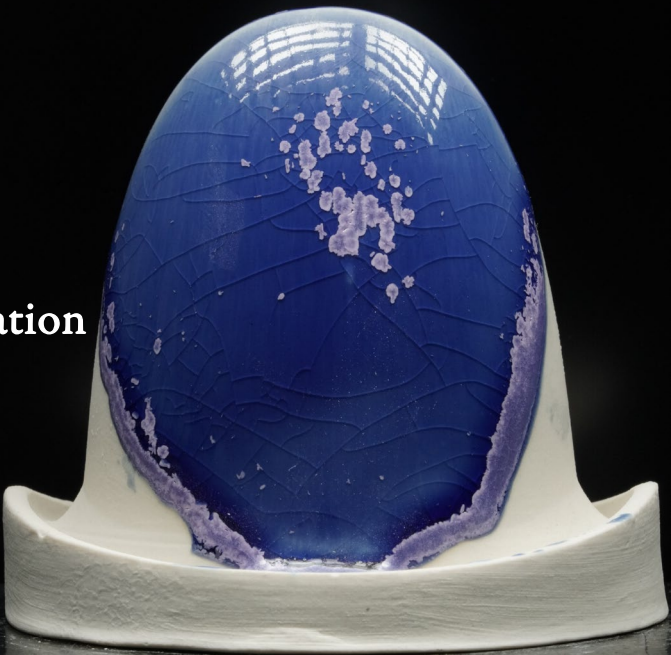
Weight Substitution
Spodumene
062722-11

Spodumene	40.93
Dolomite	30.27
EPK	5.04
Flint	23.76
Cobalt Carbonate	1
Water	60



Oxidation

1-3 Second Dip



2-3 Second Dips

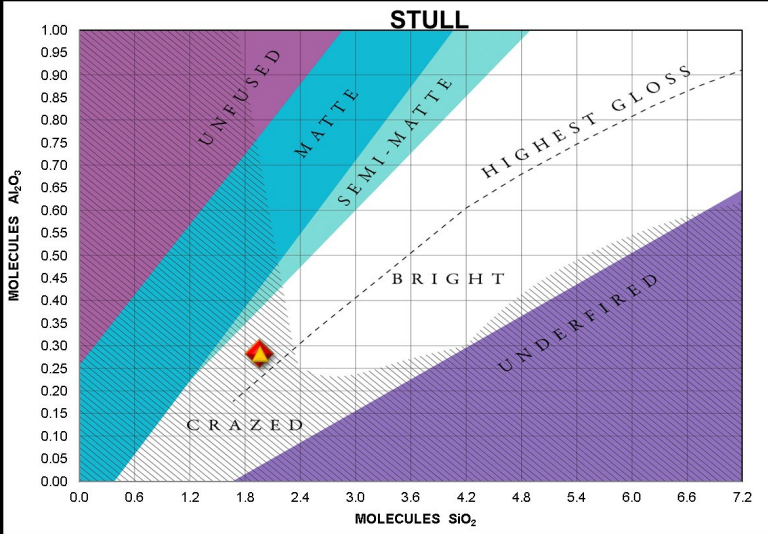


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 6.93 :1		Alkali Metals 0.24		Alkaline Earths 0.76	
SiO ₂ 2.00	Collective "Al ₂ O ₃ " 0.29	Na ₂ O 0.00	K ₂ O 0.00	MgO 0.38	CaO 0.38
B ₂ O ₃	Al ₂ O ₃ 0.29	Li ₂ O 0.24	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



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 6.93 :1		Alkali Metals 0.24		Alkaline Earths 0.76	
SiO ₂ 1.96	Collective "Al ₂ O ₃ " 0.28	Na ₂ O 0.00	K ₂ O 0.00	MgO 0.37	CaO 0.37
B ₂ O ₃	Al ₂ O ₃ 0.28	Li ₂ O 0.24	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



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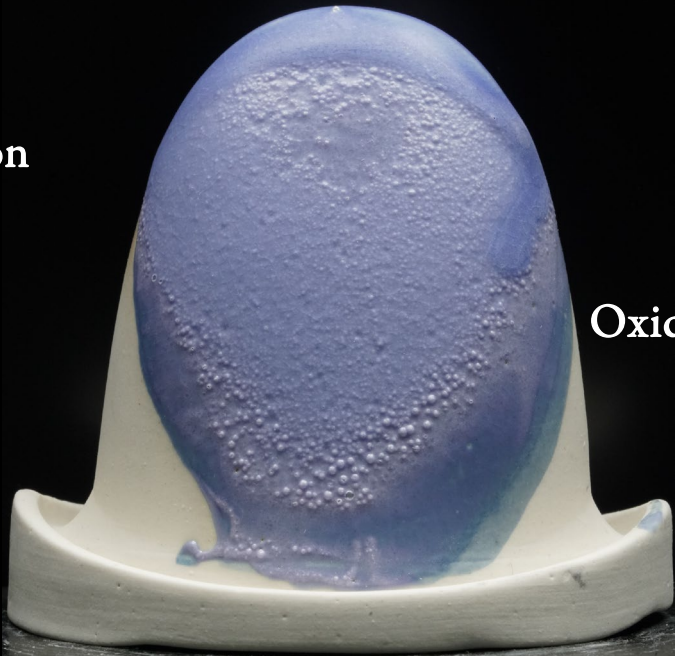
Purple Rain

Weight Substitution

Frit 3110

062722-13

Frit 3110	40.93
Dolomite	30.27
EPK	5.04
Flint	23.76
Cobalt Carbonate	1
Water	60



1-3 Second Dip



2-3 Second Dips



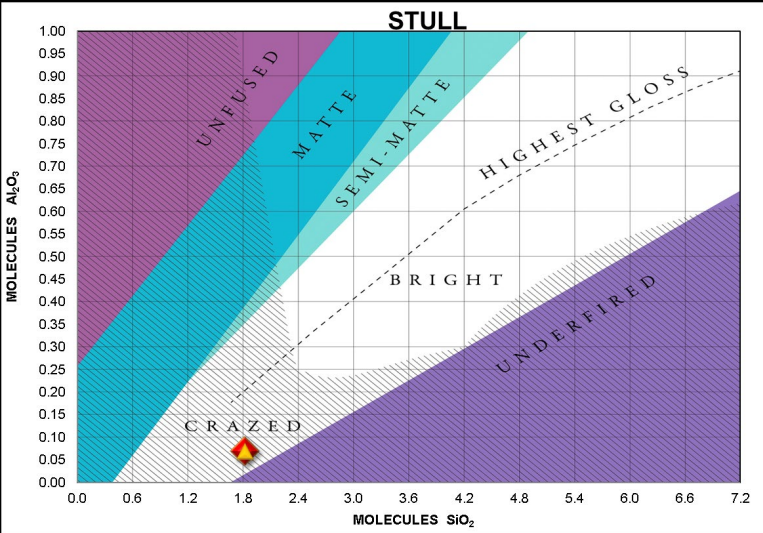
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 26.06 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.85	Collective "Al ₂ O ₃ " 0.07	Na ₂ O 0.21	K ₂ O 0.02	MgO 0.34	CaO 0.43
B ₂ O ₃ 0.03	Al ₂ O ₃ 0.07	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



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 26.06 :1		Alkali Metals 0.23		Alkaline Earths 0.77	
SiO ₂ 1.82	Collective "Al ₂ O ₃ " 0.07	Na ₂ O 0.21	K ₂ O 0.02	MgO 0.33	CaO 0.42
B ₂ O ₃ 0.03	Al ₂ O ₃ 0.07	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

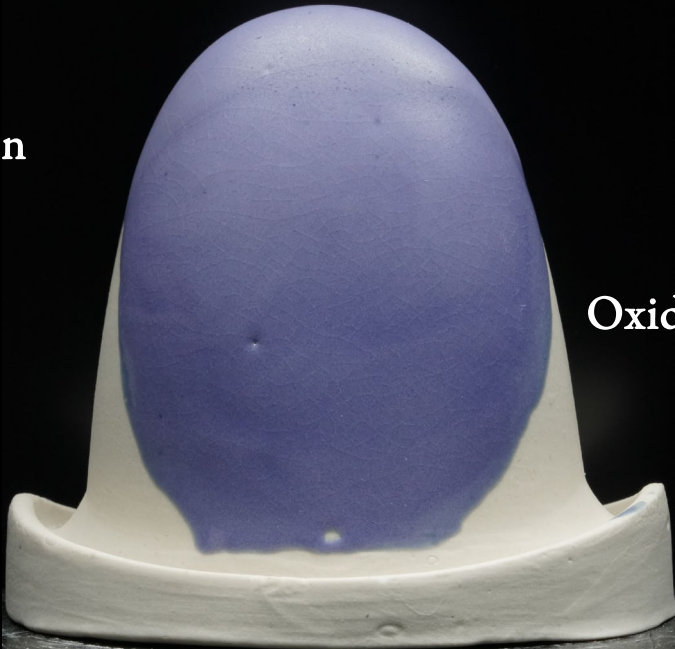


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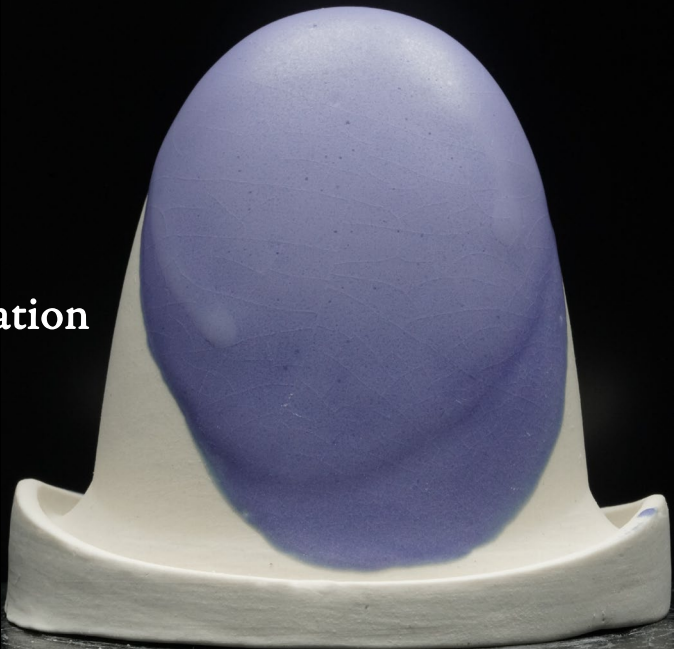
Purple Rain

Weight Substitution
Cornwall
062722-14

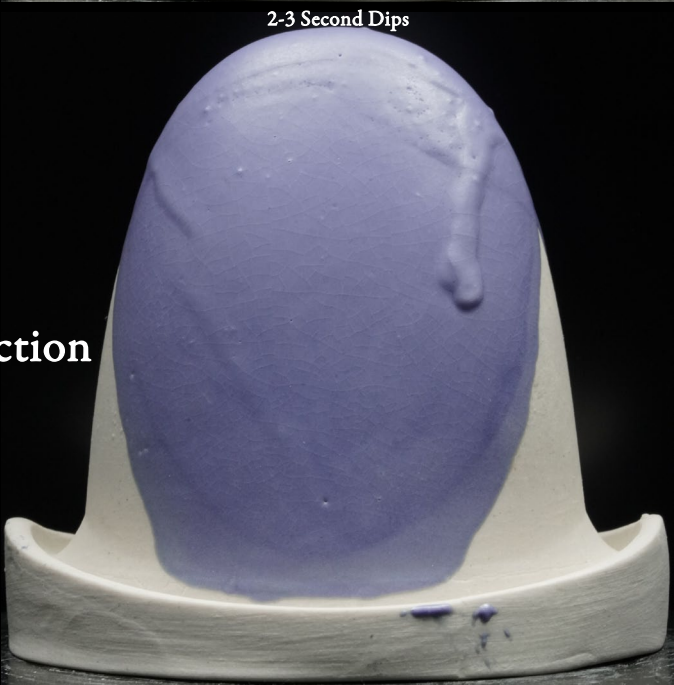
Cornwall	40.93
Dolomite	30.27
EPK	5.04
Flint	23.76
Cobalt Carbonate	1
Water	60



1-3 Second Dip



2-3 Second Dips

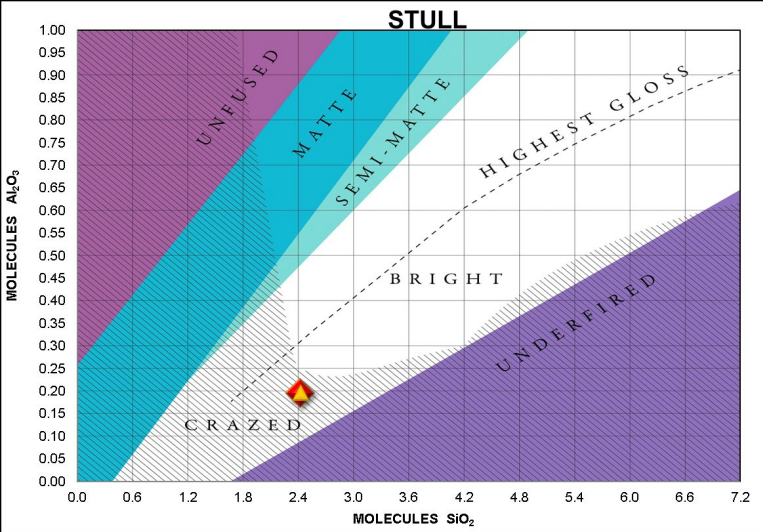


Reduction

Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 12.30 :1		Alkali Metals 0.09		Alkaline Earths 0.91	
SiO ₂ 2.48	Collective "Al ₂ O ₃ " 0.20	Na ₂ O 0.05	K ₂ O 0.04	MgO 0.44	CaO 0.46
B ₂ O ₃	Al ₂ O ₃ 0.20	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 12.30 :1		Alkali Metals 0.09		Alkaline Earths 0.91	
SiO ₂ 2.42	Collective "Al ₂ O ₃ " 0.20	Na ₂ O 0.05	K ₂ O 0.04	MgO 0.43	CaO 0.45
B ₂ O ₃	Al ₂ O ₃ 0.20	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.02

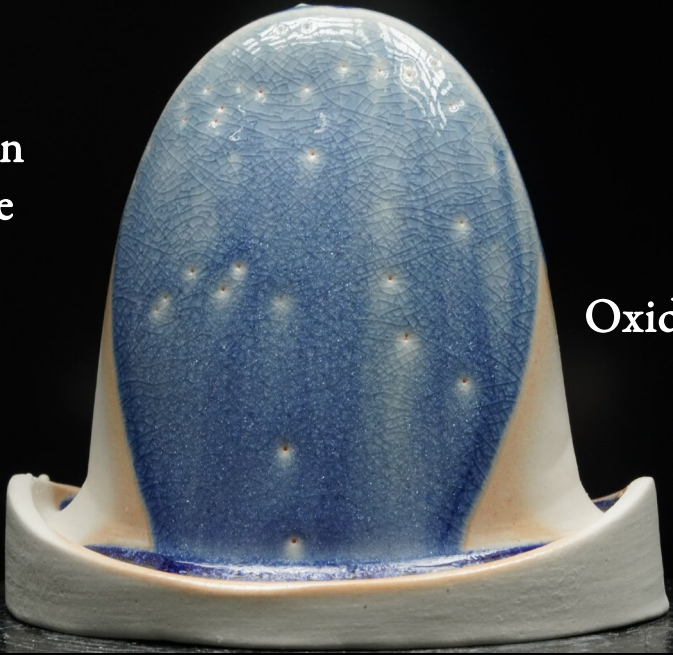


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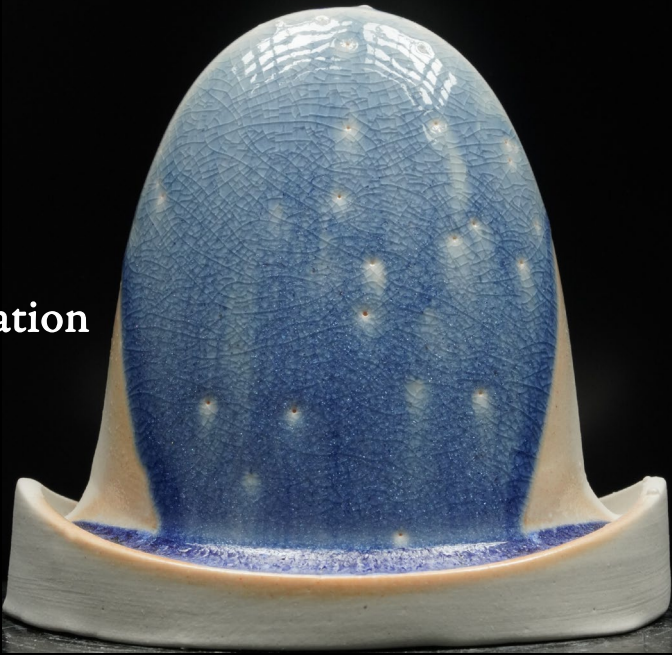
Purple Rain

Weight Substitution
Lithium Carbonite
062722-15

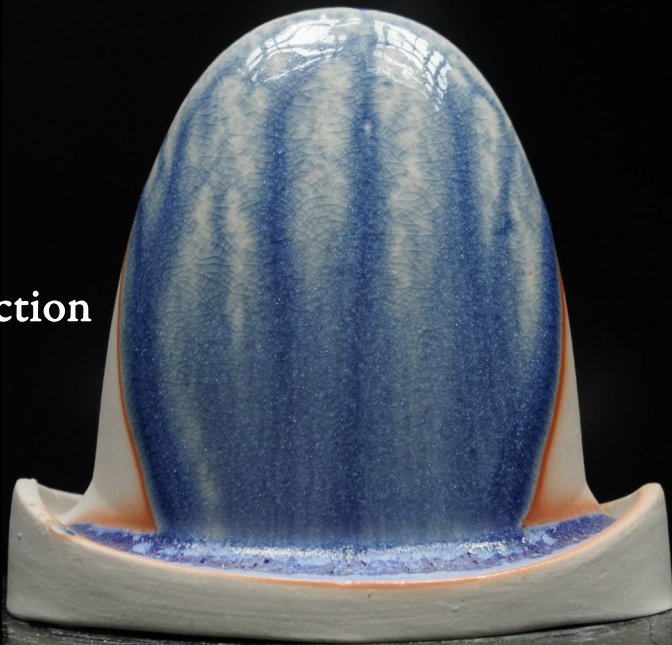
Lithium Carb	40.93
Dolomite	30.27
EPK	5.04
Flint	23.76
Cobalt Carbonate	1
Water	60



Oxidation

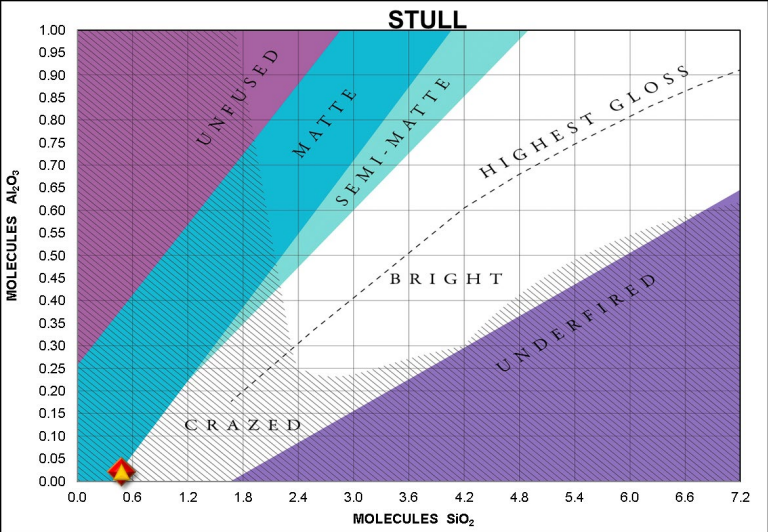


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 22.72 :1		Alkali Metals 0.63		Alkaline Earths 0.37	
SiO ₂ 0.49	Collective "Al ₂ O ₃ " 0.02	Na ₂ O	K ₂ O 0.00	MgO 0.19	CaO 0.19
B ₂ O ₃	Al ₂ O ₃ 0.02	Li ₂ O 0.63	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



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 22.72 :1		Alkali Metals 0.62		Alkaline Earths 0.38	
SiO ₂ 0.48	Collective "Al ₂ O ₃ " 0.02	Na ₂ O	K ₂ O 0.00	MgO 0.18	CaO 0.18
B ₂ O ₃	Al ₂ O ₃ 0.02	Li ₂ O 0.62	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 0.01



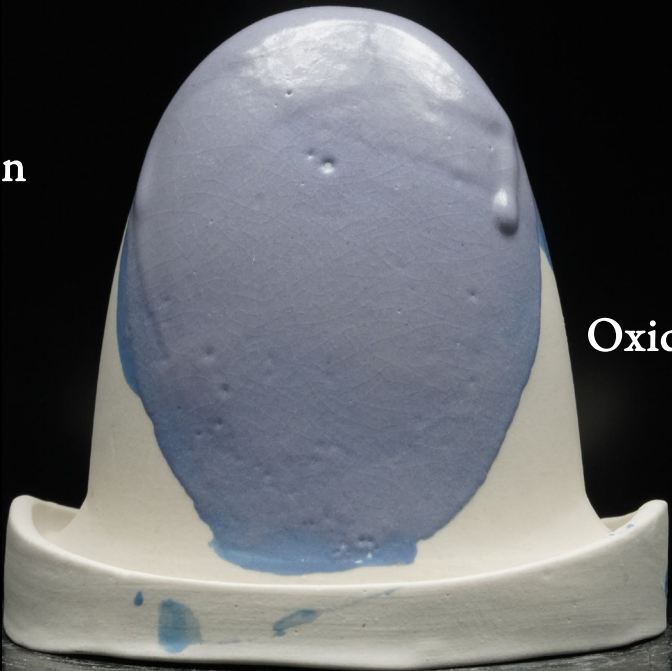
Ceramic
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Purple Rain

Weight Substitution
Talc

062722-16

Neph Sy	40.93
Talc	30.27
EPK	5.04
Flint	23.76
Cobalt Carbonate	1.02
Water	60



1-3 Second Dip



2-3 Second Dips

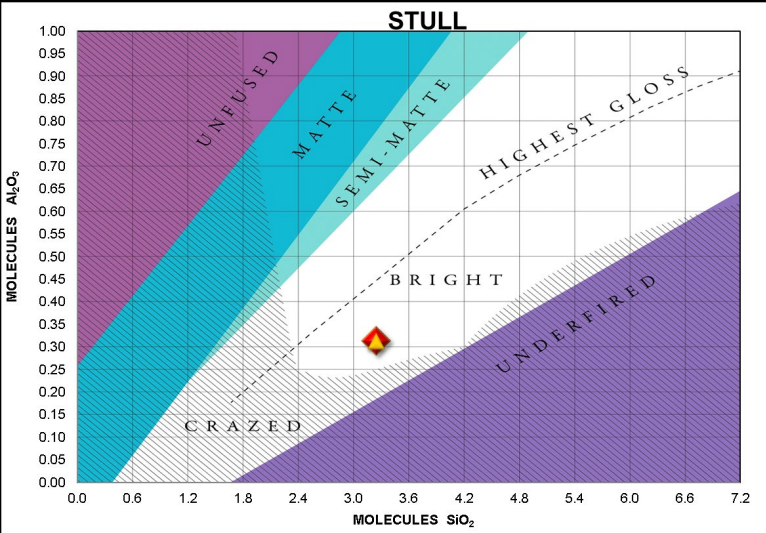


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 10.33 :1		Alkali Metals 0.26		Alkaline Earths 0.74	
SiO ₂ 3.33	Collective "Al ₂ O ₃ " 0.32	Na ₂ O 0.20	K ₂ O 0.06	MgO 0.66	CaO 0.06
B ₂ O ₃	Al ₂ O ₃ 0.32	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.02
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 10.33 :1		Alkali Metals 0.26		Alkaline Earths 0.74	
SiO ₂ 3.25	Collective "Al ₂ O ₃ " 0.31	Na ₂ O 0.20	K ₂ O 0.06	MgO 0.64	CaO 0.06
B ₂ O ₃	Al ₂ O ₃ 0.31	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.02
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.02

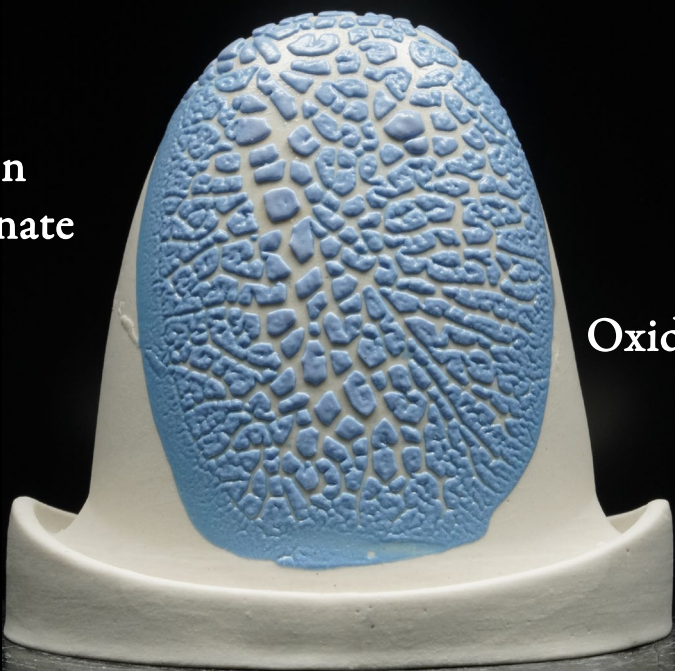


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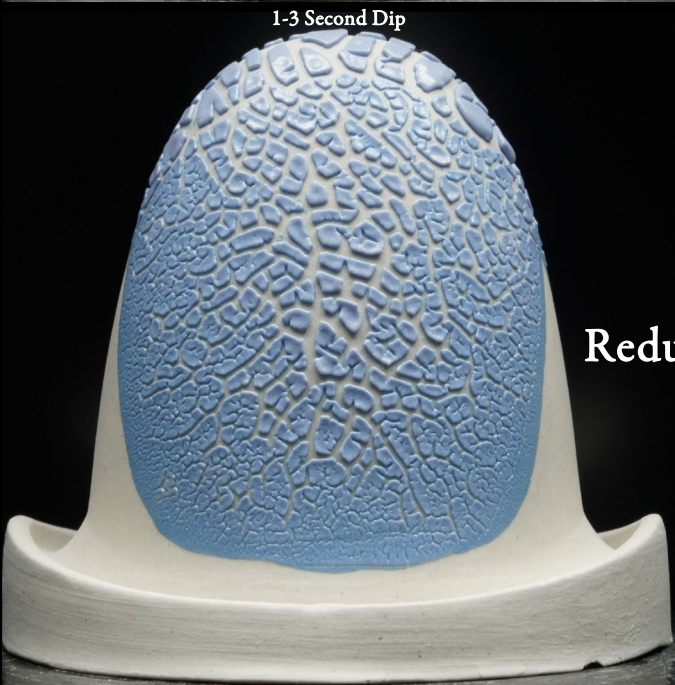
Purple Rain

Weight Substitution
Magnesium Carbonate
062722-17

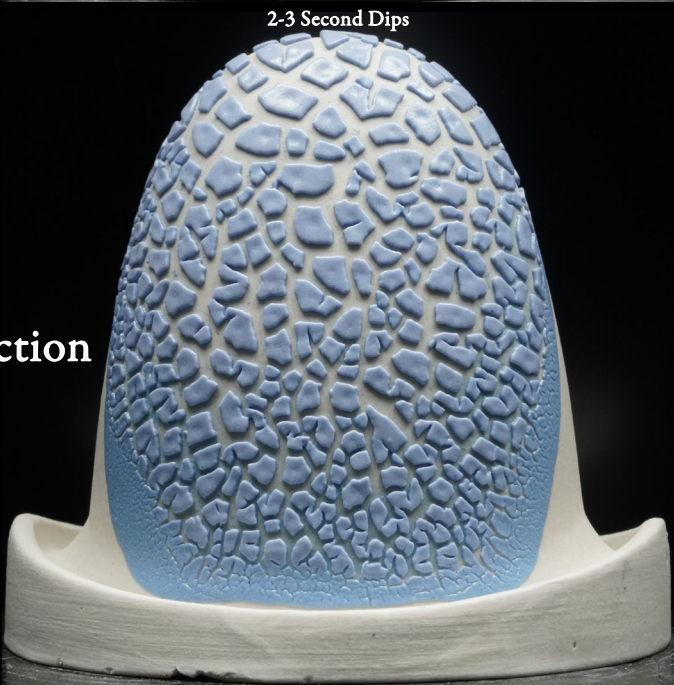
Neph Sy	40.93
Mag Carb	30.27
EPK	5.04
Flint	23.76
Cobalt Carbonate	1.02
Water	180



Oxidation

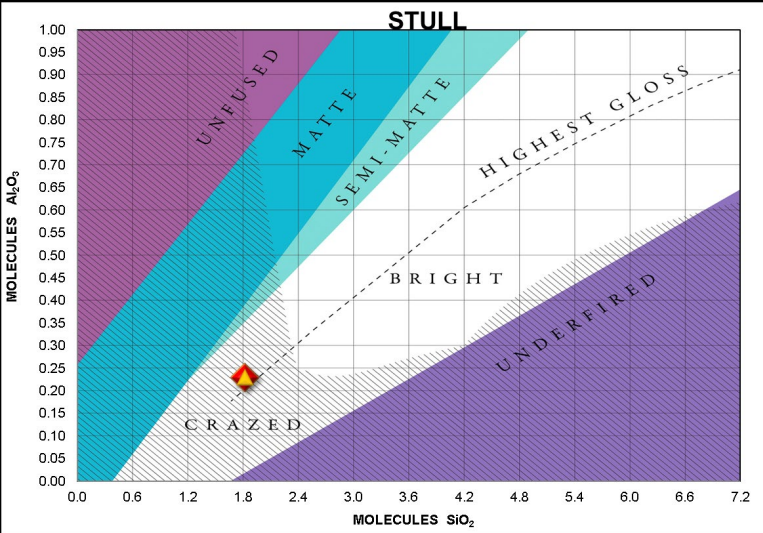


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 7.90 :1		Alkali Metals 0.19		Alkaline Earths 0.81	
SiO ₂ 1.86	Collective "Al ₂ O ₃ " 0.23	Na ₂ O 0.15	K ₂ O 0.04	MgO 0.80	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.23	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



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 7.90 :1		Alkali Metals 0.19		Alkaline Earths 0.81	
SiO ₂ 1.82	Collective "Al ₂ O ₃ " 0.23	Na ₂ O 0.15	K ₂ O 0.04	MgO 0.79	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.23	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

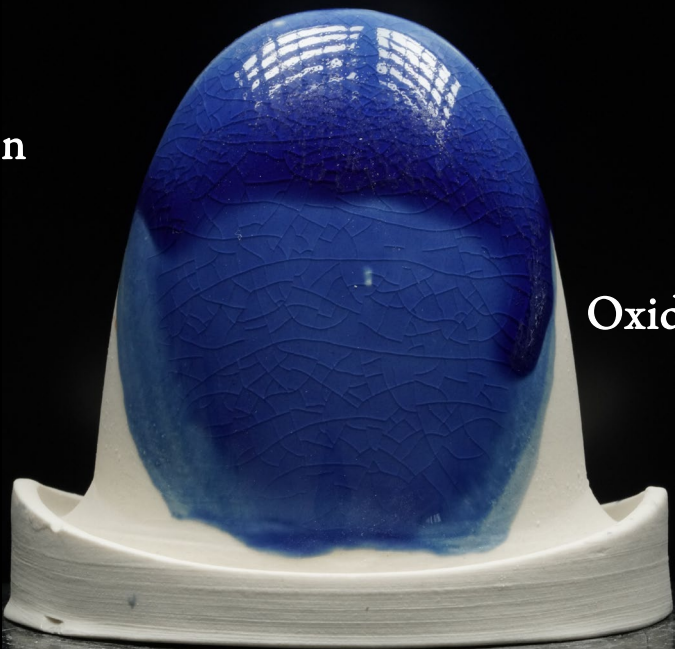


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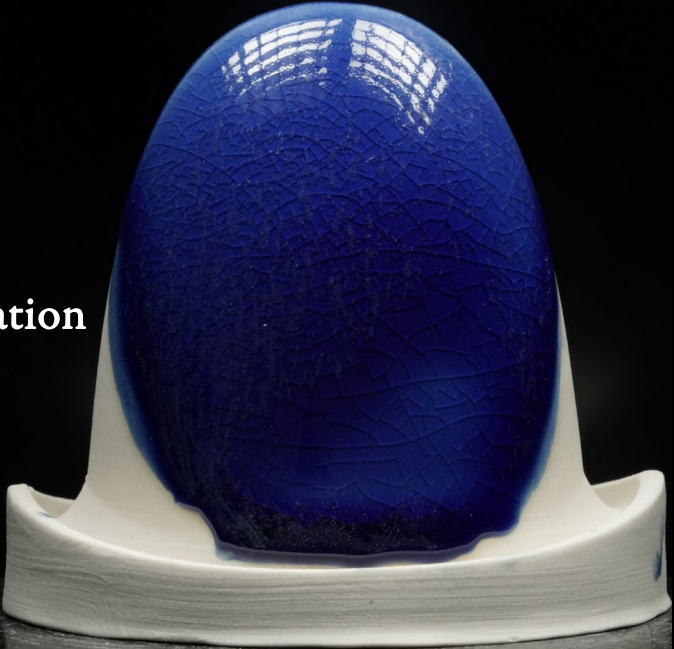
Purple Rain

Weight Substitution
Whiting
062722-18

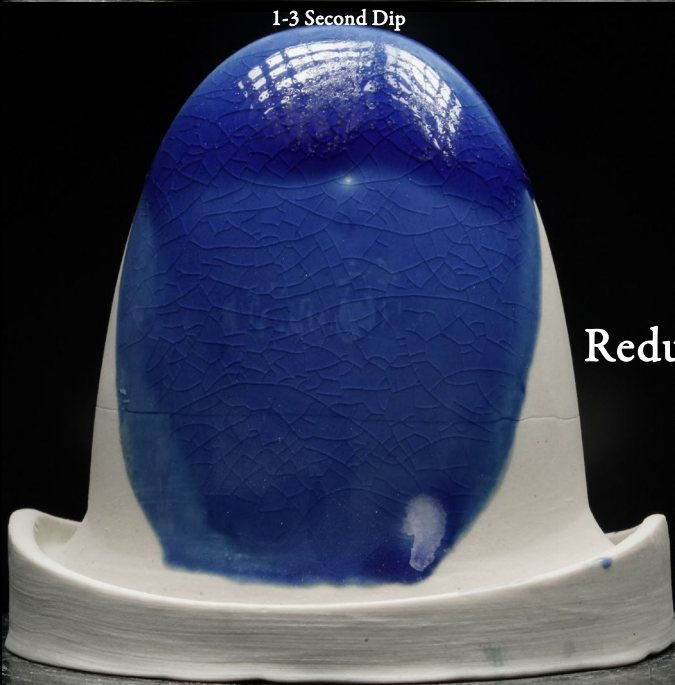
Neph Sy	40.93
Whiting	30.27
EPK	5.04
Flint	23.76
Cobalt Carbonate	1.02
Water	60



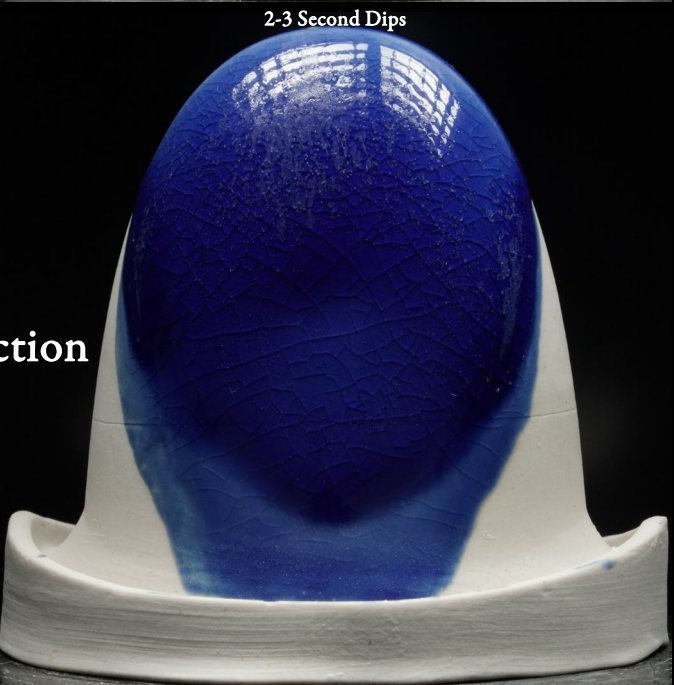
Oxidation



2-3 Second Dips



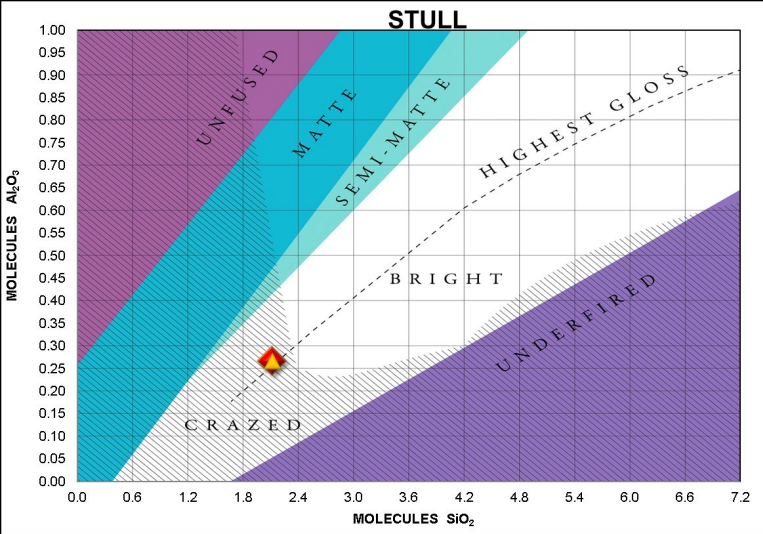
Reduction



1-3 Second Dip

UMF

SiO ₂ :Al ₂ O ₃ Ratio 7.92 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.16	Collective "Al ₂ O ₃ " 0.27	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.77
B ₂ O ₃	Al ₂ O ₃ 0.27	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



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 7.92 :1		Alkali Metals 0.22		Alkaline Earths 0.78	
SiO ₂ 2.12	Collective "Al ₂ O ₃ " 0.27	Na ₂ O 0.17	K ₂ O 0.05	MgO 0.00	CaO 0.76
B ₂ O ₃	Al ₂ O ₃ 0.27	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

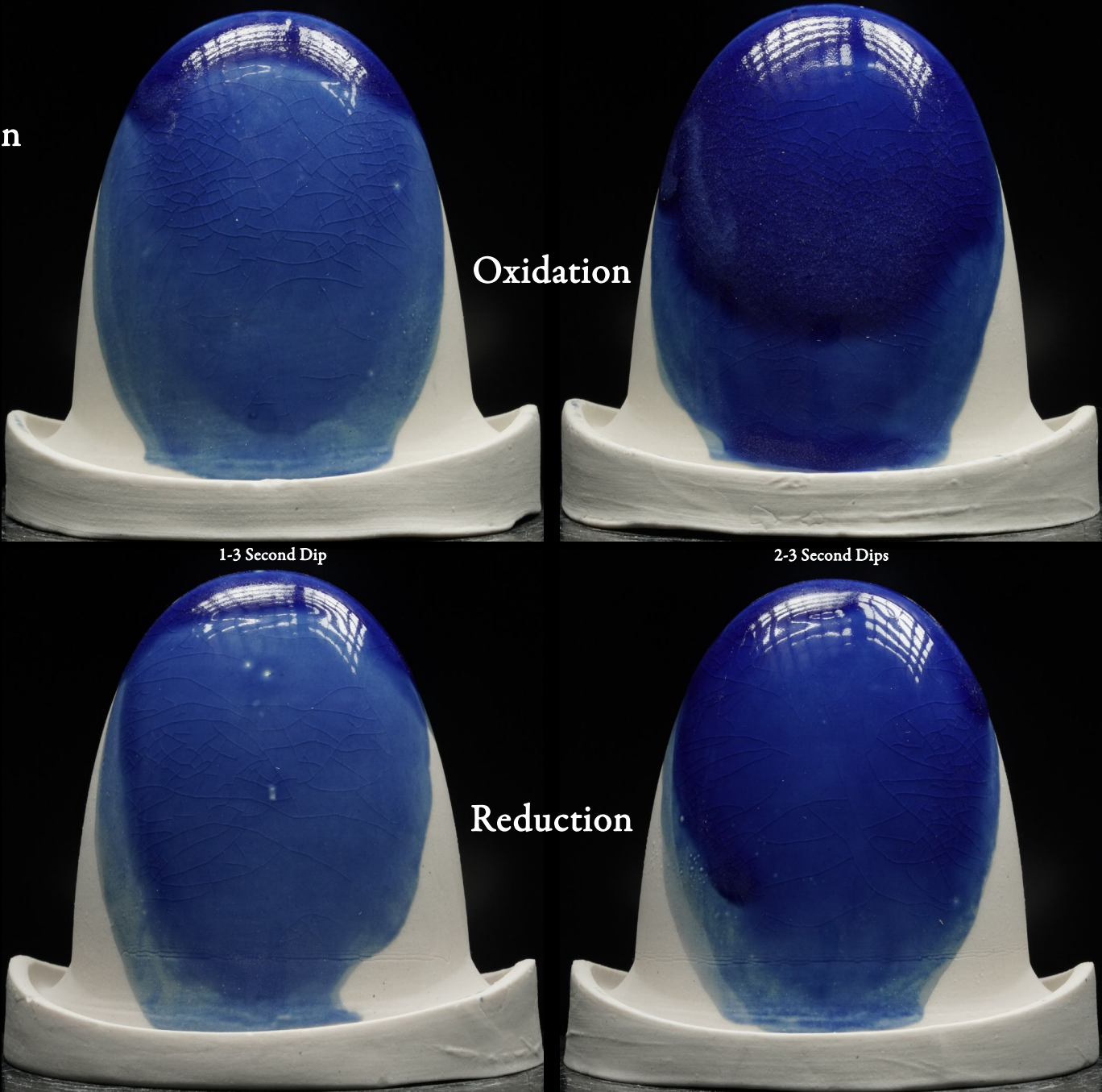


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Purple Rain

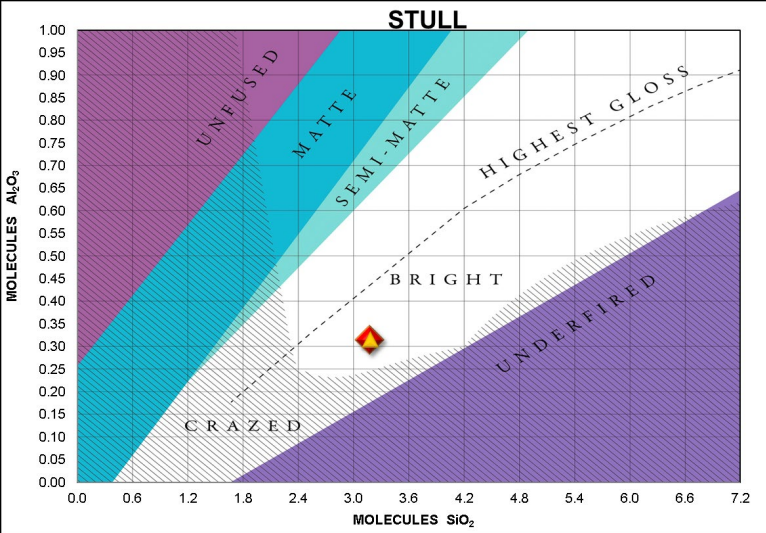
Weight Substitution
Wollastonite
062722-19

Neph Sy	40.93
Wollastonite	30.27
EPK	5.04
Flint	23.76
Cobalt Carbonate	1.02
Water	60



UMF

SiO ₂ :Al ₂ O ₃ Ratio 10.05 : 1		Alkali Metals 0.26		Alkaline Earths 0.74	
SiO ₂ 3.26	Collective "Al ₂ O ₃ " 0.32	Na ₂ O 0.20	K ₂ O 0.06	MgO 0.03	CaO 0.70
B ₂ O ₃	Al ₂ O ₃ 0.32	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 10.05 : 1		Alkali Metals 0.25		Alkaline Earths 0.75	
SiO ₂ 3.18	Collective "Al ₂ O ₃ " 0.32	Na ₂ O 0.20	K ₂ O 0.06	MgO 0.03	CaO 0.68
B ₂ O ₃	Al ₂ O ₃ 0.31	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.02

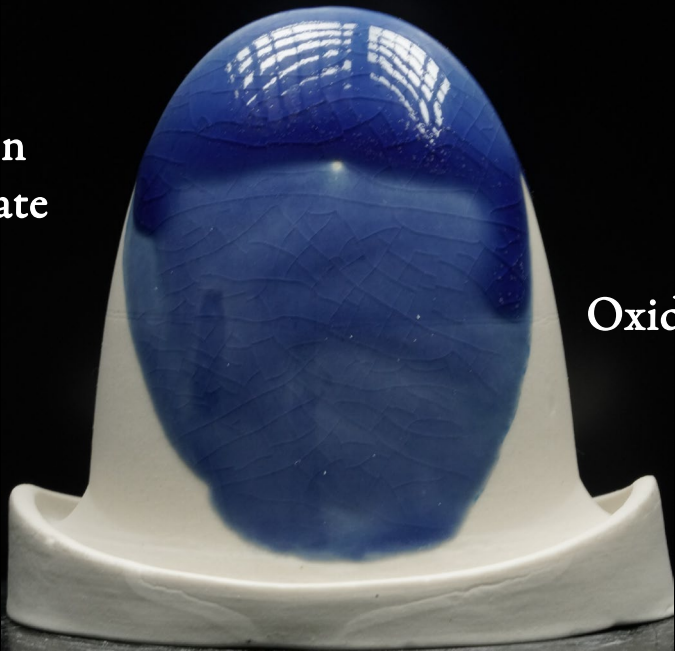


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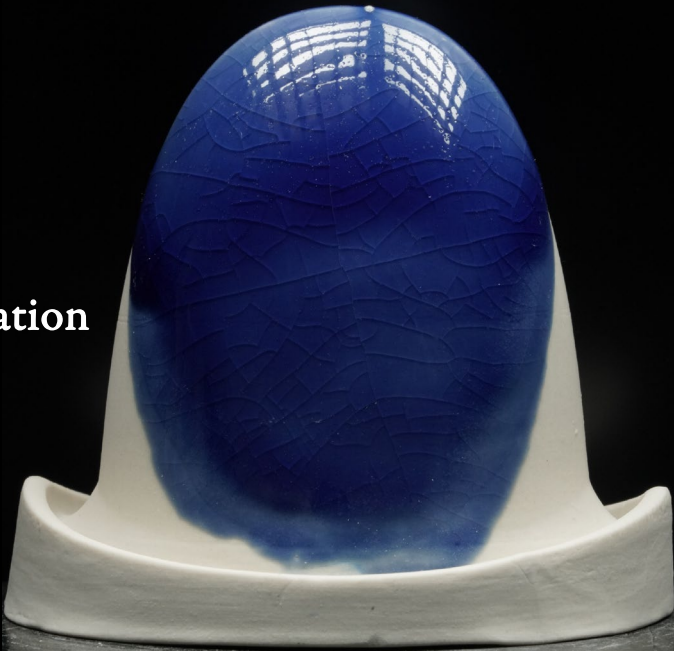
Purple Rain

Weight Substitution
Strontium Carbonate
062722-20

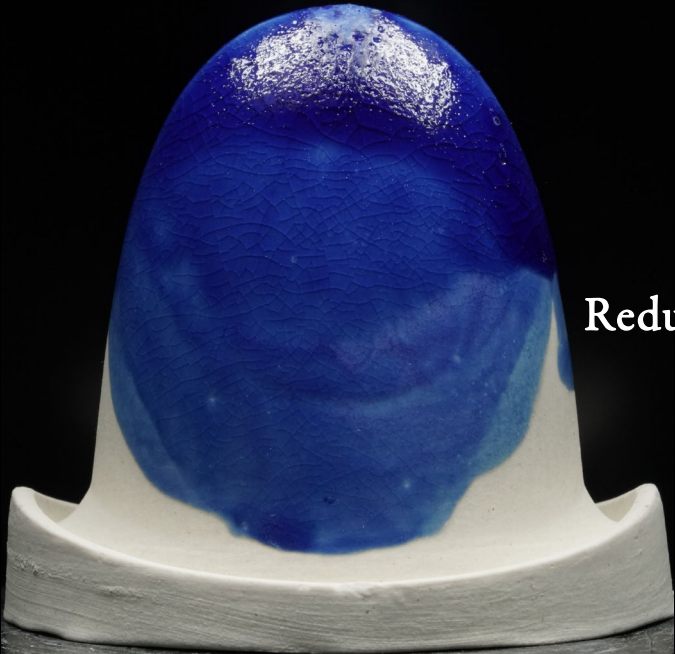
Neph Sy	40.93
Strontium Carb	30.27
EPK	5.04
Flint	23.76
Cobalt Carbonate	1.02
Water	60



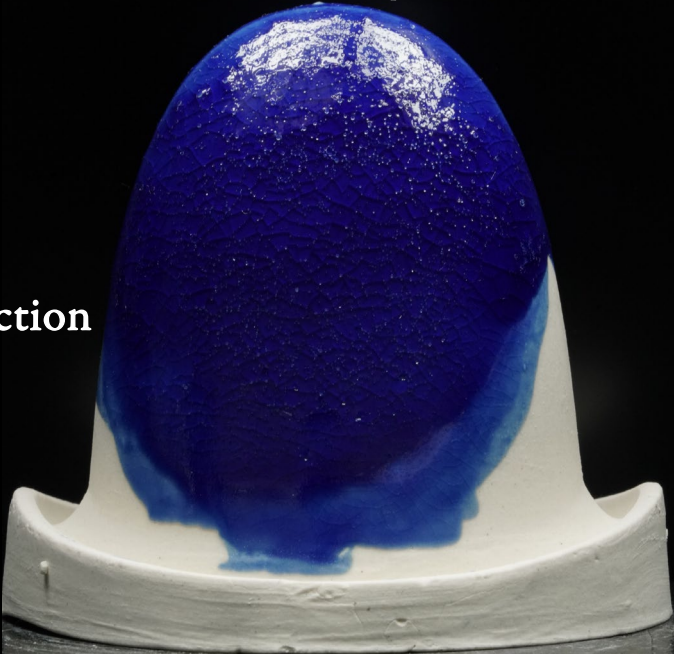
Oxidation



2-3 Second Dips



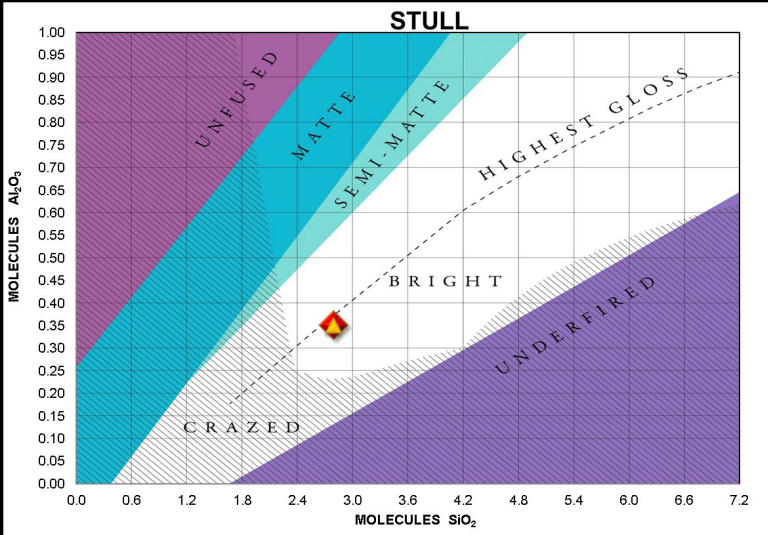
Reduction



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UMF

SiO ₂ :Al ₂ O ₃ Ratio 7.93 :1		Alkali Metals 0.29		Alkaline Earths 0.71	
SiO ₂ 2.87	Collective "Al ₂ O ₃ " 0.36	Na ₂ O 0.23	K ₂ O 0.07	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.36	Li ₂ O	CuO	SrO 0.69	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



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 7.93 :1		Alkali Metals 0.29		Alkaline Earths 0.71	
SiO ₂ 2.79	Collective "Al ₂ O ₃ " 0.35	Na ₂ O 0.22	K ₂ O 0.06	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.35	Li ₂ O	CuO	SrO 0.67	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 0.03

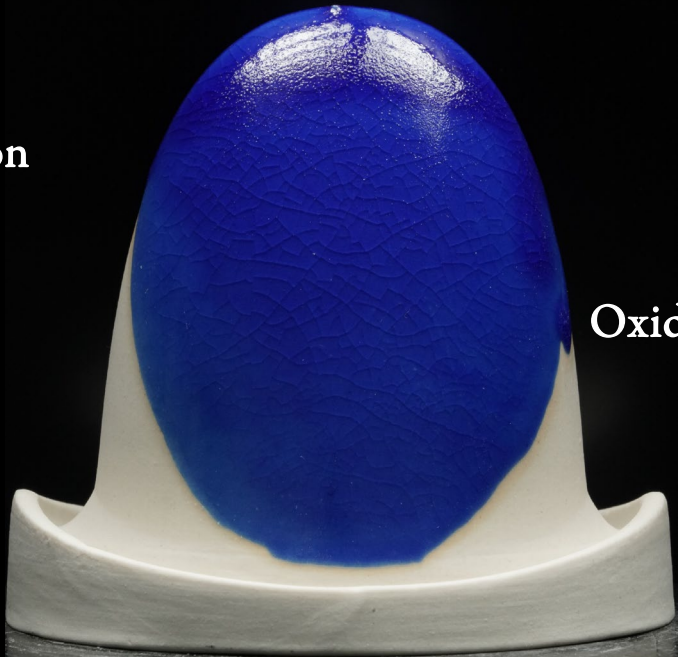


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Purple Rain

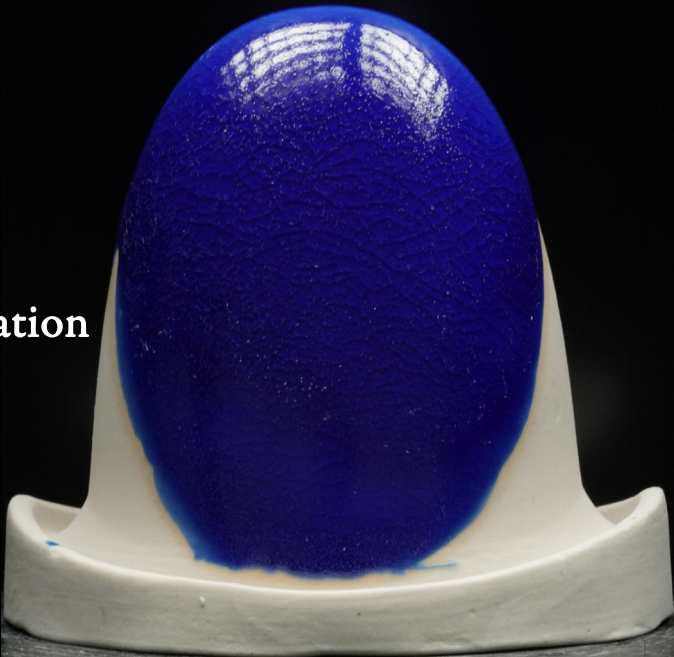
Weight Substitution
Barium Carbonate
062722-21

Neph Sy	40.93
Barium Carb	30.27
EPK	5.04
Flint	23.76
Cobalt Carbonate	1.02
Water	60



Oxidation

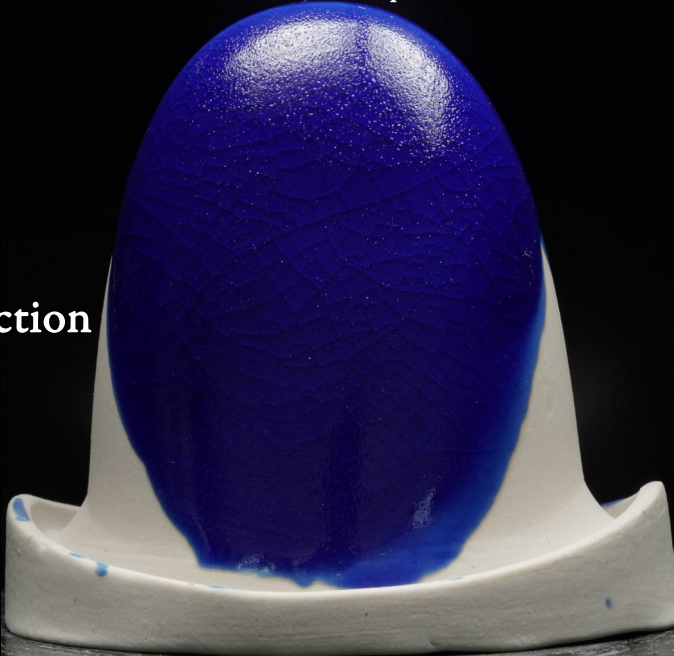
1-3 Second Dip



2-3 Second Dips

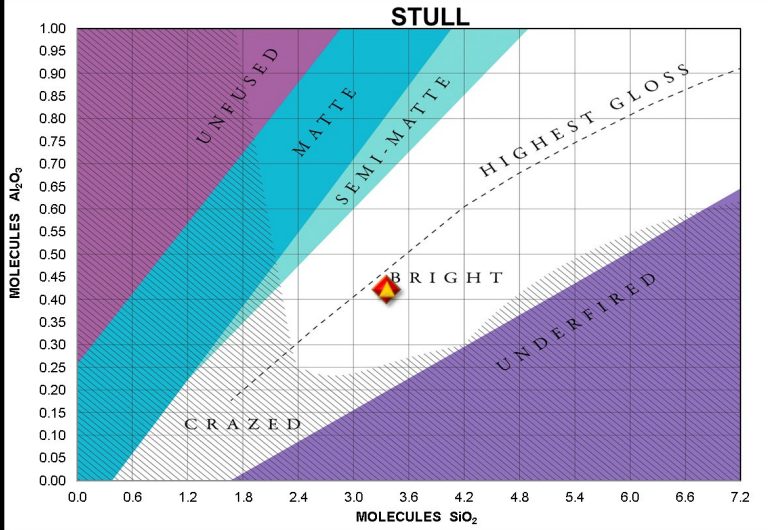


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 7.93 :1		Alkali Metals 0.36		Alkaline Earths 0.64	
SiO ₂ 3.48	Collective "Al ₂ O ₃ " 0.44	Na ₂ O 0.28	K ₂ O 0.08	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.44	Li ₂ O	CuO	SrO	BaO 0.63
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 7.93 :1		Alkali Metals 0.34		Alkaline Earths 0.66	
SiO ₂ 3.36	Collective "Al ₂ O ₃ " 0.42	Na ₂ O 0.27	K ₂ O 0.08	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.42	Li ₂ O	CuO	SrO	BaO 0.60
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.03

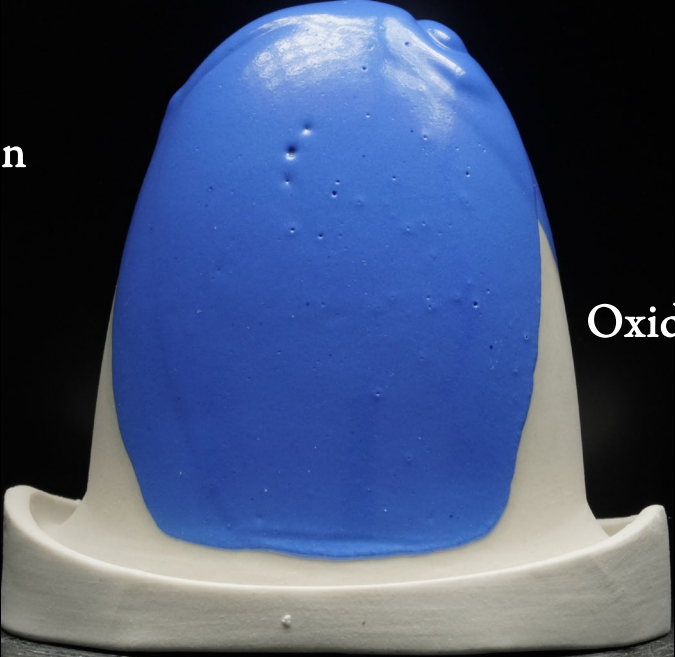


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Weight Substitution
Zinc Oxide
062722-22

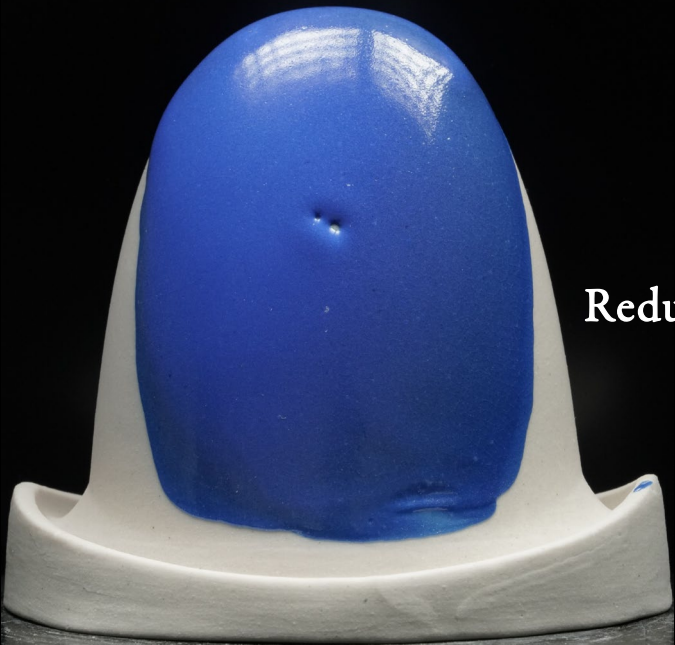
Neph Sy	40.93
Zinc Ox	30.27
EPK	5.04
Flint	23.76
Cobalt Carbonate	1.02
Water	60



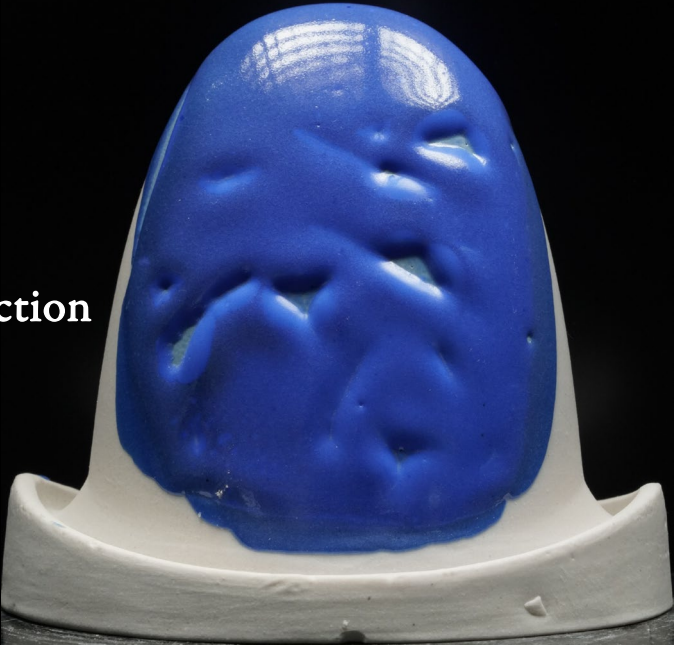
1-3 Second Dip



2-3 Second Dips

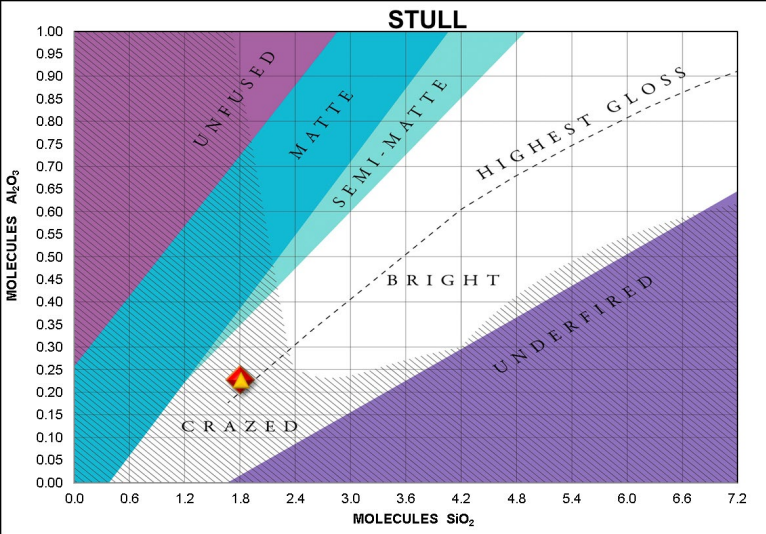


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 7.93 :1		Alkali Metals 0.19		Alkaline Earths 0.81	
SiO ₂ 1.84	Collective "Al ₂ O ₃ " 0.23	Na ₂ O 0.15	K ₂ O 0.04	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.23	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.80	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 7.93 :1		Alkali Metals 0.18		Alkaline Earths 0.82	
SiO ₂ 1.81	Collective "Al ₂ O ₃ " 0.23	Na ₂ O 0.14	K ₂ O 0.04	MgO 0.00	CaO 0.01
B ₂ O ₃	Al ₂ O ₃ 0.23	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO 0.79	FeO 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO 0.02

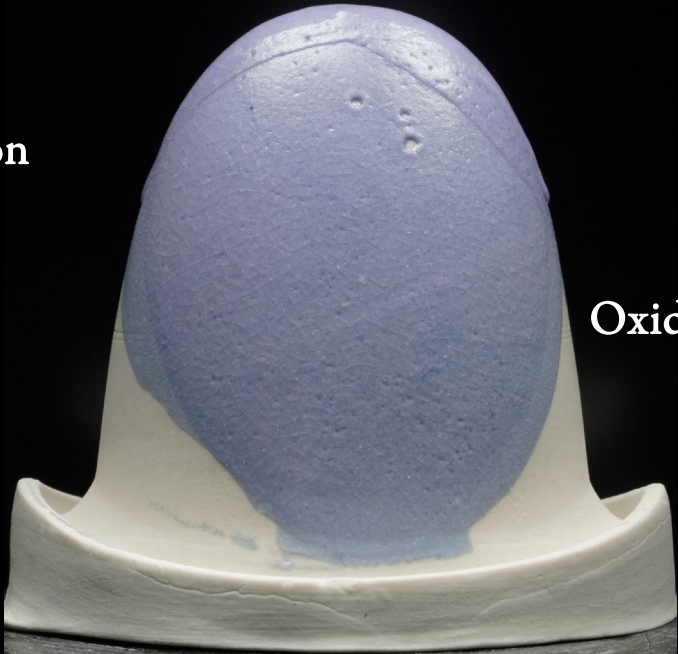


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Weight Substitution
Bone Ash
062722-23

Neph Sy	40.93
Bone Ash	30.27
EPK	5.04
Flint	23.76
Cobalt Carbonate	1.02
Water	80



1-3 Second Dip



2-3 Second Dips

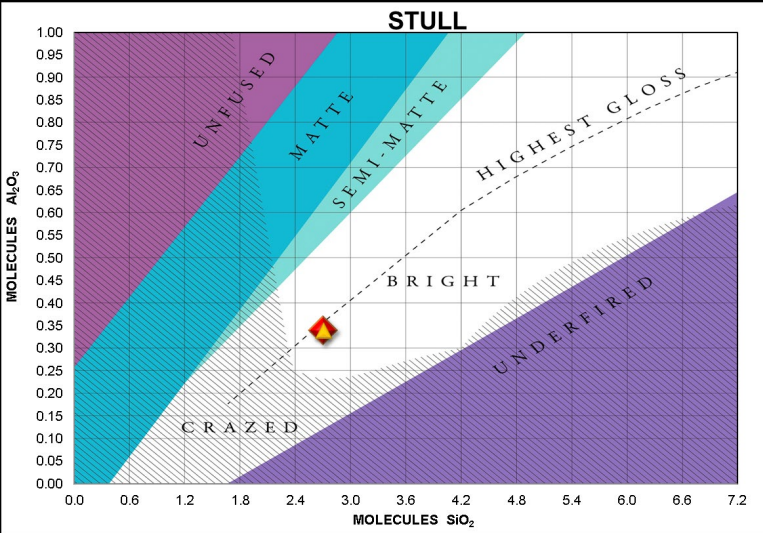


Reduction



UMF

SiO ₂ :Al ₂ O ₃ Ratio 7.94 :1		Alkali Metals 0.28		Alkaline Earths 0.72	
SiO ₂ 2.78	Collective "Al ₂ O ₃ " 0.35	Na ₂ O 0.22	K ₂ O 0.06	MgO 0.00	CaO 0.71
B ₂ O ₃	Al ₂ O ₃ 0.35	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅ 0.39		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 7.94 :1		Alkali Metals 0.28		Alkaline Earths 0.72	
SiO ₂ 2.70	Collective "Al ₂ O ₃ " 0.34	Na ₂ O 0.22	K ₂ O 0.06	MgO 0.00	CaO 0.69
B ₂ O ₃	Al ₂ O ₃ 0.34	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.00	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅ 0.38		MnO ₂	CoO 0.03



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