

Old Orange- Δ 10

Lab 1-Pick-A-Part



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Workshop

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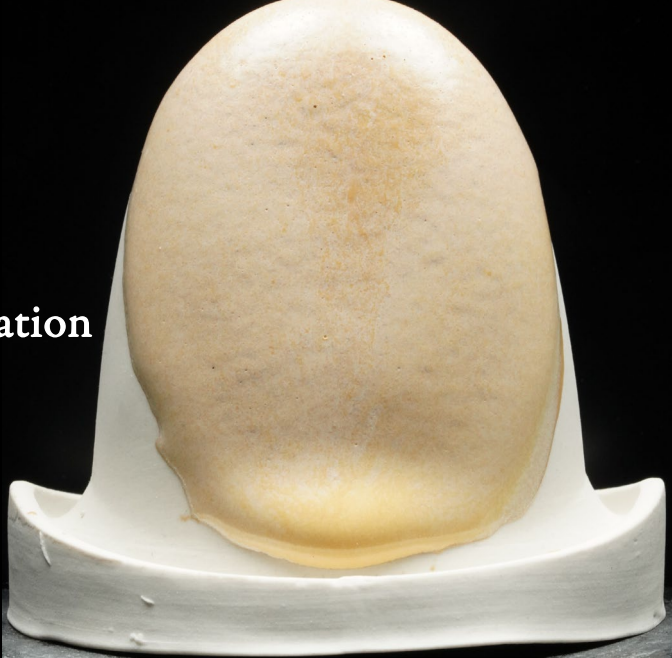
Old Orange

Original
062822-1

Neph Sy	37.51
Whiting	18.67
EPK	9.55
Flint	34.26
Light Rutile	11.11
Water	60



1-3 Second Dip



2-3 Second Dips



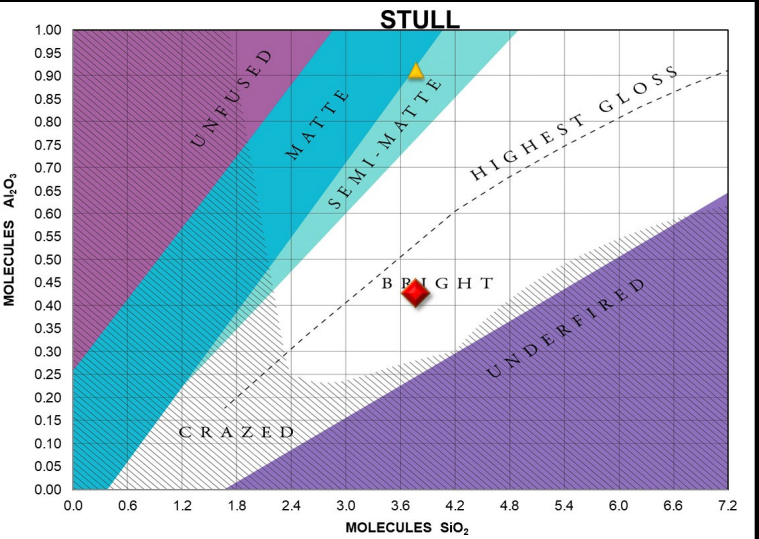
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 8.81 : 1		Alkali Metals 0.29		Alkaline Earths 0.71	
SiO ₂ 3.77	Collective "Al ₂ O ₃ " 0.43	Na ₂ O 0.23	K ₂ O 0.07	MgO 0.00	CaO 0.69
B ₂ O ₃	Al ₂ O ₃ 0.43	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 4.13 : 1		Alkali Metals 0.29		Alkaline Earths 0.71	
SiO ₂ 3.77	Collective "Al ₂ O ₃ " 0.91	Na ₂ O 0.23	K ₂ O 0.07	MgO 0.00	CaO 0.69
B ₂ O ₃	Al ₂ O ₃ 0.43	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.49	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



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Lab 1-Oxidation



062822-1

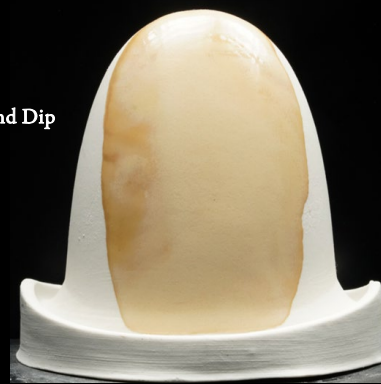


062822-2



062822-3

1-3 Second Dip



062822-4



062822-5



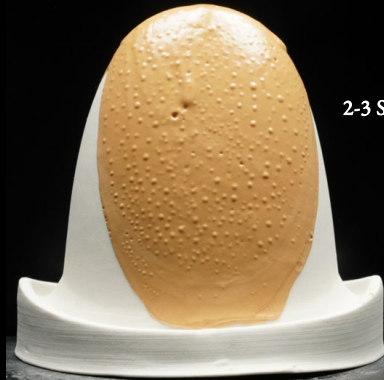
062822-6



Original



w/o Neph Sy



w/o Whiting

2-3 Second Dips



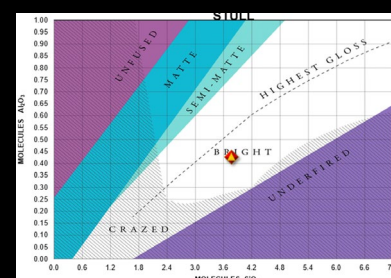
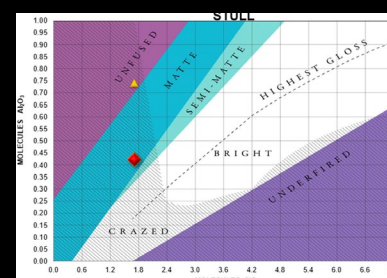
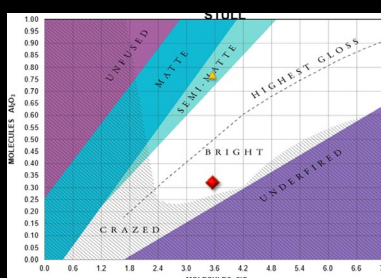
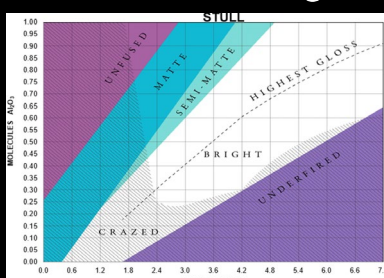
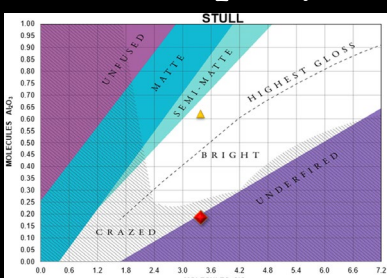
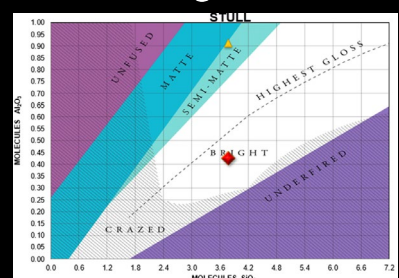
w/o Kaolin



w/o Flint



w/o Colorants



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Lab 1-Reduction



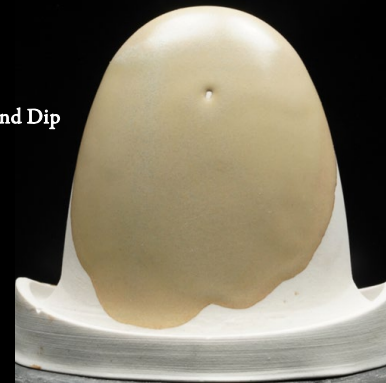
062822-1



062822-2



062822-3



062822-4



062822-5



062822-6



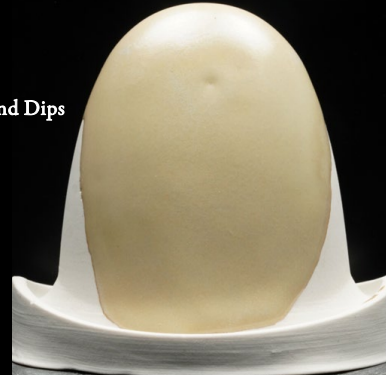
Original



w/o Neph Sy



w/o Whiting



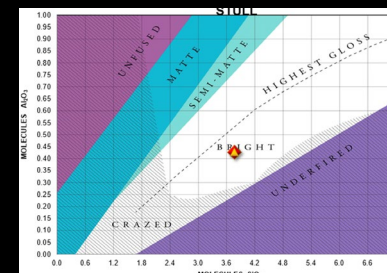
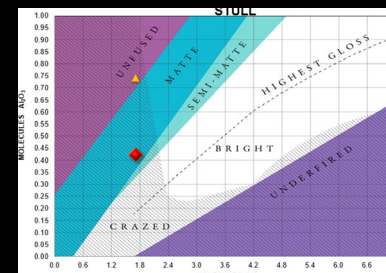
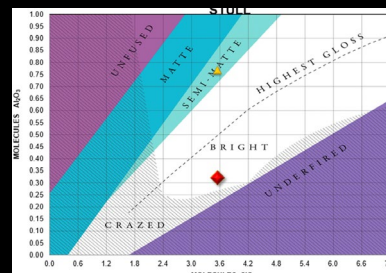
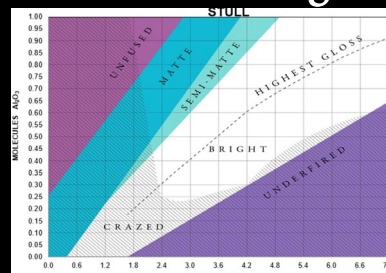
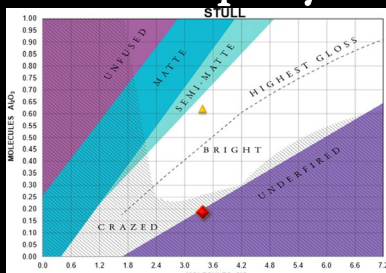
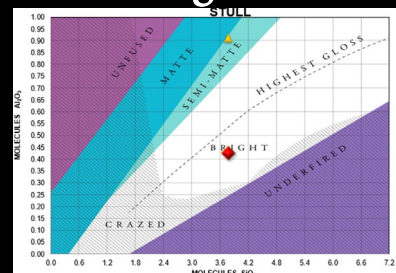
w/o Kaolin



w/o Flint



w/o Colorants



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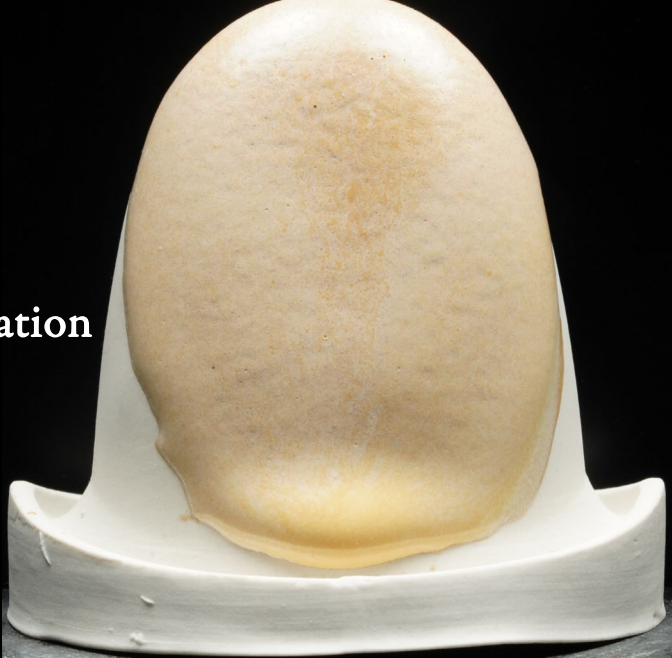
Old Orange

Original
062822-1

Neph Sy	37.51
Whiting	18.67
EPK	9.55
Flint	34.26
Light Rutile	11.11
Water	60



1-3 Second Dip



2-3 Second Dips

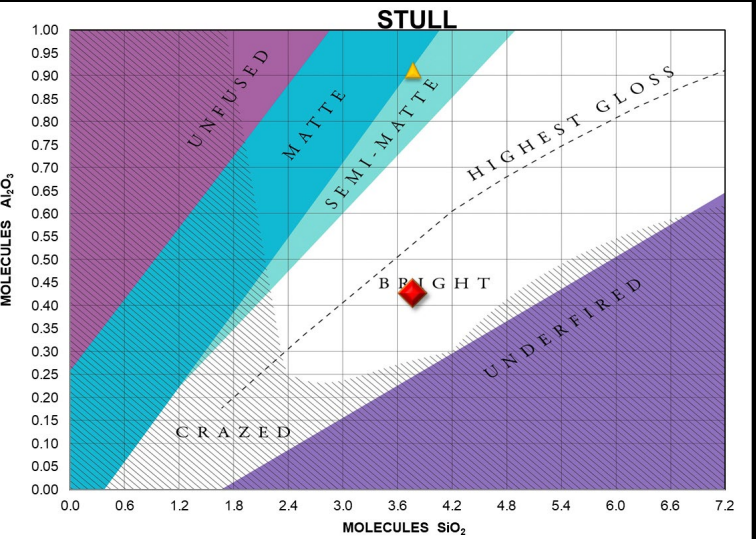


Reduction

Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 8.81 : 1		Alkali Metals 0.29		Alkaline Earths 0.71	
SiO ₂ 3.77	Collective "Al ₂ O ₃ " 0.43	Na ₂ O 0.23	K ₂ O 0.07	MgO 0.00	CaO 0.69
B ₂ O ₃	Al ₂ O ₃ 0.43	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 4.13 : 1		Alkali Metals 0.29		Alkaline Earths 0.71	
SiO ₂ 3.77	Collective "Al ₂ O ₃ " 0.91	Na ₂ O 0.23	K ₂ O 0.07	MgO 0.00	CaO 0.69
B ₂ O ₃	Al ₂ O ₃ 0.43	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.49	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Ceramic
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Old Orange

w/o Alkali Metal
062822-2

Neph Sy	
Whiting	29.87
EPK	15.29
Flint	54.83
Light Rutile	11.11
Water	60



1-3 Second Dip



2-3 Second Dips

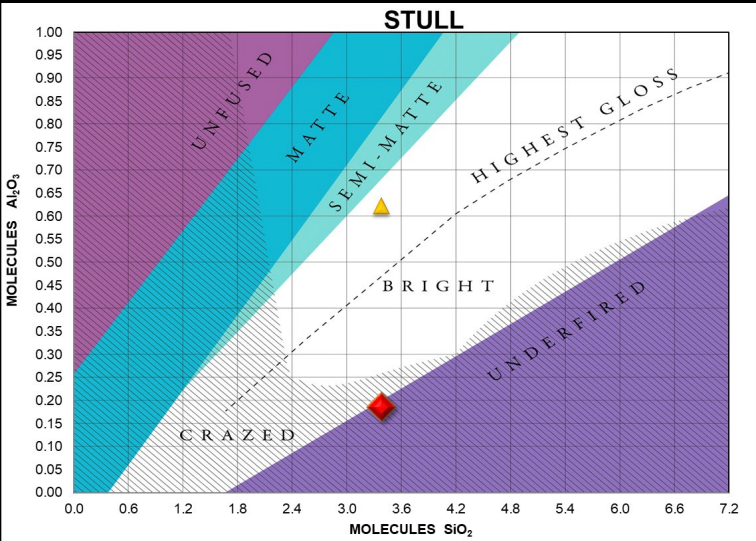


Reduction

Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 18.12 : 1		Alkali Metals 0.00		Alkaline Earths 1.00	
SiO ₂ 3.38	Collective "Al ₂ O ₃ " 0.19	Na ₂ O	K ₂ O 0.00	MgO 0.00	CaO 0.99
B ₂ O ₃	Al ₂ O ₃ 0.18	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 5.43 : 1		Alkali Metals 0.00		Alkaline Earths 1.00	
SiO ₂ 3.38	Collective "Al ₂ O ₃ " 0.62	Na ₂ O	K ₂ O 0.00	MgO 0.00	CaO 0.98
B ₂ O ₃	Al ₂ O ₃ 0.18	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.44	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Ceramic
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Old Orange

w/o Alkaline Earth
062822-3

Neph Sy	46.13
Whiting	
EPK	11.75
Flint	42.13
Light Rutile	11.11
Water	60



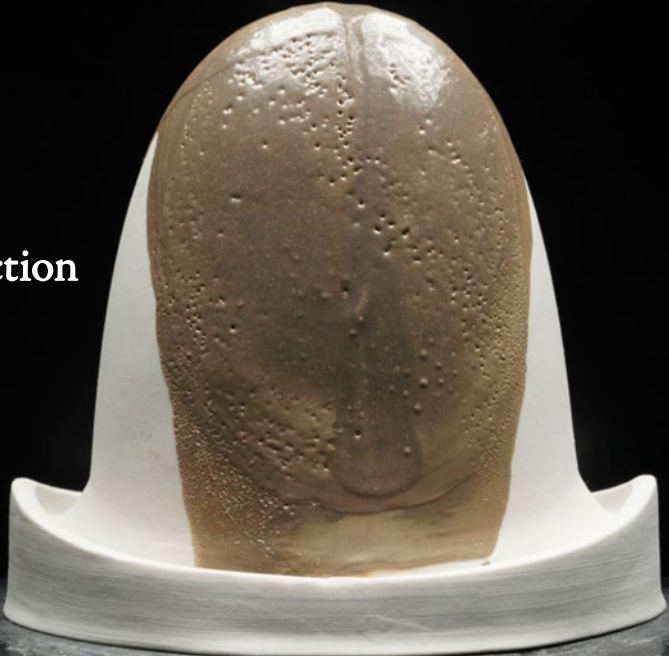
1-3 Second Dip



2-3 Second Dips



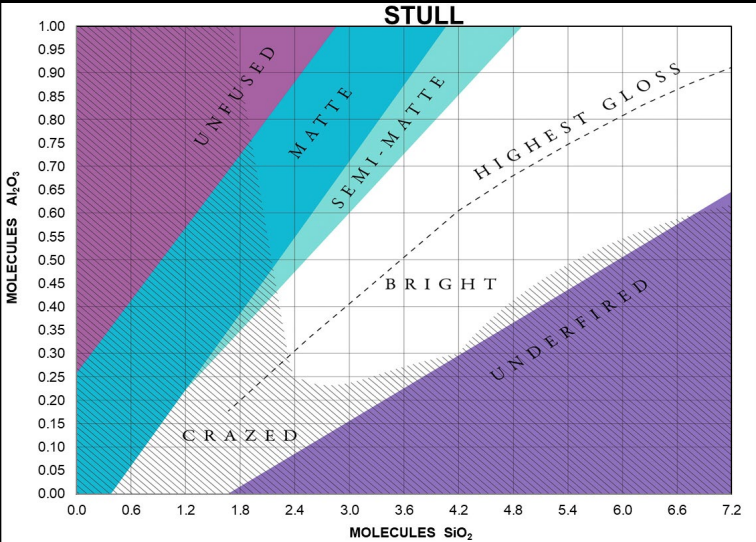
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 8.81 : 1		Alkali Metals 0.94		Alkaline Earths 0.06	
SiO ₂ 12.00	Collective "Al ₂ O ₃ " 1.36	Na ₂ O 0.73	K ₂ O 0.21	MgO 0.01	CaO 0.03
B ₂ O ₃	Al ₂ O ₃ 1.35	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.01	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 4.58 : 1		Alkali Metals 0.93		Alkaline Earths 0.07	
SiO ₂ 11.92	Collective "Al ₂ O ₃ " 2.60	Na ₂ O 0.72	K ₂ O 0.21	MgO 0.01	CaO 0.03
B ₂ O ₃	Al ₂ O ₃ 1.35	Li ₂ O	CuO	SrO	BaO
TiO ₂ 1.25	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.03
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Ceramic
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Old Orange

w/o Kaolin
062822-4

Neph Sy	41.48
Whiting	20.64
EPK	
Flint	37.88
Bentonite	2.27
Light Rutile	11.39
Water	60



1-3 Second Dip



2-3 Second Dips

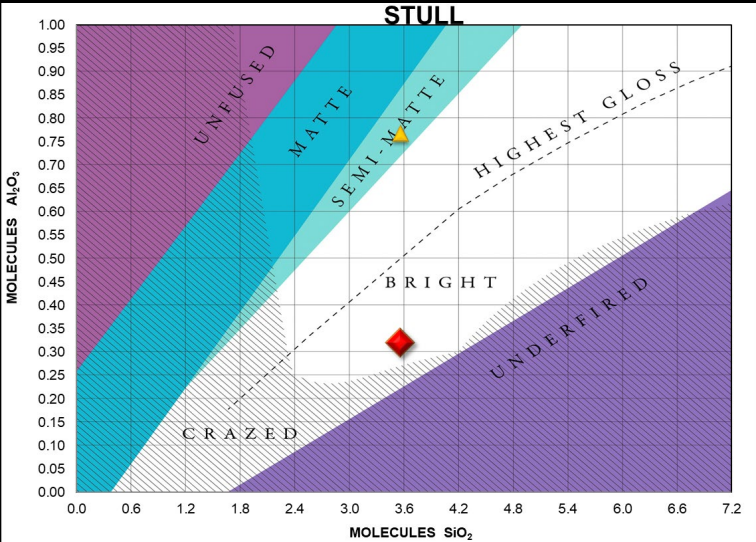


Reduction

Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 11.13 : 1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 3.56	Collective "Al ₂ O ₃ " 0.32	Na ₂ O 0.23	K ₂ O 0.06	MgO 0.01	CaO 0.69
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 0.00
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



EUMF

SiO ₂ :Al ₂ O ₃ Ratio 4.63 : 1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 3.56	Collective "Al ₂ O ₃ " 0.77	Na ₂ O 0.23	K ₂ O 0.06	MgO 0.01	CaO 0.69
B ₂ O ₃	Al ₂ O ₃ 0.32	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.45	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Ceramic
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Old Orange

w/o Silica
062822-5

Neph Sy	57.07
Whiting	28.40
EPK	14.53
Flint	
Light Rutile	11.14
Water	60



1-3 Second Dip



2-3 Second Dips

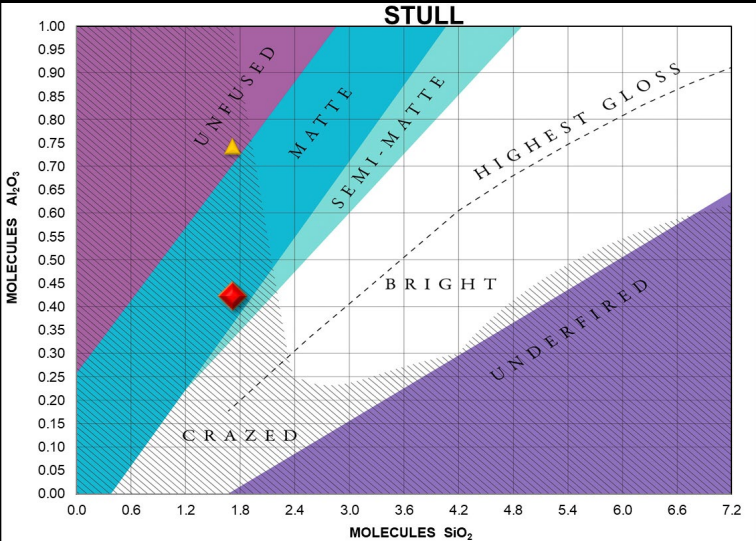


Reduction

Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 4.05 : 1		Alkali Metals 0.30		Alkaline Earths 0.70	
SiO ₂ 1.71	Collective "Al ₂ O ₃ " 0.42	Na ₂ O 0.23	K ₂ O 0.07	MgO 0.00	CaO 0.70
B ₂ O ₃	Al ₂ O ₃ 0.42	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 2.30 : 1		Alkali Metals 0.29		Alkaline Earths 0.71	
SiO ₂ 1.71	Collective "Al ₂ O ₃ " 0.74	Na ₂ O 0.23	K ₂ O 0.07	MgO 0.00	CaO 0.69
B ₂ O ₃	Al ₂ O ₃ 0.42	Li ₂ O	CuO	SrO	BaO
TiO ₂ 0.32	NiO	Bi ₂ O ₃	SnO ₂	ZnO	FeO 0.01
Cr ₂ O ₃	ZrO ₂	P ₂ O ₅		MnO ₂	CoO



Ceramic
Materials
Workshop

Old Orange

w/o Colorants
062822-6

Neph Sy	37.51
Whiting	18.67
EPK	9.55
Flint	34.26
Light Rutile	11.11
Water	60



1-3 Second Dip



2-3 Second Dips



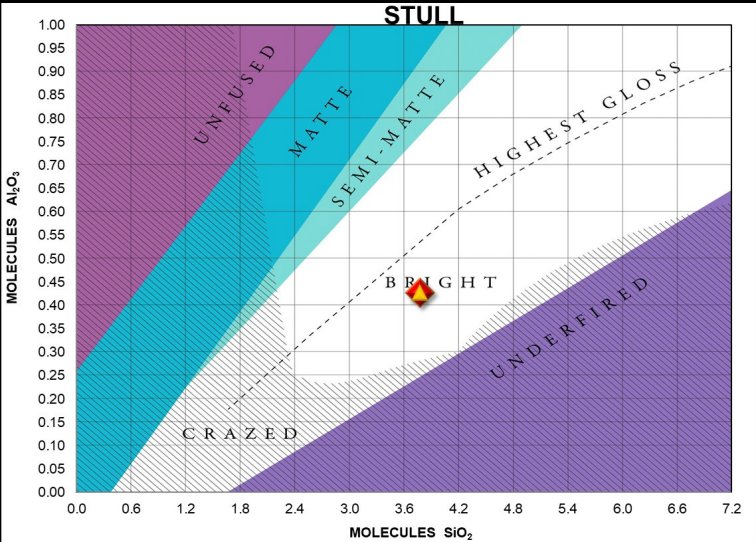
Reduction



Oxidation

UMF

SiO ₂ :Al ₂ O ₃ Ratio 8.81 : 1		Alkali Metals 0.29		Alkaline Earths 0.71	
SiO ₂ 3.77	Collective "Al ₂ O ₃ " 0.43	Na ₂ O 0.23	K ₂ O 0.07	MgO 0.00	CaO 0.69
B ₂ O ₃	Al ₂ O ₃ 0.43	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 8.81 : 1		Alkali Metals 0.29		Alkaline Earths 0.71	
SiO ₂ 3.77	Collective "Al ₂ O ₃ " 0.43	Na ₂ O 0.23	K ₂ O 0.07	MgO 0.00	CaO 0.69
B ₂ O ₃	Al ₂ O ₃ 0.43	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



Ceramic
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