

Glaze Deco Stains

Will's Blue Wash cone 9/10 ox/red.

	#1	#2
Gerstly Borate.....	50
Ball Clay.....	10	10
Cobalt carb.....	20	40
RIO.....	20	40
Custer.....	10

CERAMIC STAINS*

(For preparation, see Chapter 8)

#1 Pink stain		#2 Pink stain	
50	Tin oxide	50.5	Tin oxide
25	Whiting	19.0	Whiting
18	Flint	7.5	Fluorspar
4	Borax	20.5	Flint
3	Potassium dichromate	7.5	Potassium dichromate

(Calcine to cone 8; stain is lumpy and must first be broken up in iron mortar, then ground.)

(Calcine to cone 8 and grind.)

* These stains must be finely ground to obtain the desired color.

#3 Crimson stain

22.9	Whiting
6.6	Calcium sulfate
4.4	Fluorspar
20.8	Flint
43.7	Tin oxide
1.6	Potassium dichromate

(Calcine to cone 8 and grind.)

#4 Ultramarine stain

50	Chromium oxide
12	Flint
38	Cobalt oxide (CoO, cobaltous)

(Calcine to cone 8 and grind.)

#5 Blue-green stain

41.8	Cobalt oxide (CoO)
19.2	Chromium oxide
39.0	Aluminum oxide

(Calcine to cone 8 and grind.)

#6 Orange stain

29.8	Antimony oxide
12.8	Tin oxide
14.9	Red iron oxide
42.5	Red lead

(Calcine to cone 6 and grind.)

#7 Black stain

43	Chromium oxide
43	Red iron oxide
10	Manganese dioxide
4	Cobalt oxide

(Calcine to cone 8 and grind.)

#8 Turquoise stain

56	Copper phosphate
44	Tin oxide

(Calcine to cone 6 and grind.)

#9 Red-brown stain

22	Chromium oxide
23	Red iron oxide
55	Zinc oxide

(Calcine to cone 8 and grind.)

#10 Brown stain

64.6	Zinc oxide
9.7	Chrome oxide
9.7	Red iron oxide
8.0	Red lead
8.0	Boric acid

(Calcine to cone 8 and grind.)

#11 Yellow stain

33.3	Antimony oxide
50.0	Red lead
16.7	Tin oxide

(Calcine to cone 6 and grind.)

#12 Black stain

65	Chromium oxide
35	Red iron oxide

Troy Overglaze

(Cone 10, reduction)

Cobalt Carbonate	10%
Manganese Dioxide	70
Rutile	20

Red Iron Wash

(Cone 10, reduction)

Bone Ash	10%
Nepheline Syenite	30
Red Iron Oxide	60
100%	

Orange Iron Wash

(Cone 10, reduction)

Nepheline Syenite	25%
Red Iron Oxide	50
Rutile	25
100%	

Dark Cobalt Blue Wash

(Cone 10, reduction)

Barium Carbonate	35%
Nepheline Syenite	40
Cobalt Oxide	20
Red Iron Oxide	5
100%	

Pale Cobalt Blue Wash

(Cone 10, reduction)

Barium Carbonate	35%
Nepheline Syenite	40
Cobalt Oxide	5
Manganese Dioxide	20
100%	

Red Stain

Red Iron Oxide	34%
Manganese Dioxide	22
Kaolin	22
Silica (Flint)	22
100%	

IRON PIGMENT - (OVERGLAZE)

RED ART CLAY	25
RED IRON OXIDE	75

RED OVERGLAZE

NEPHELINE SYENITE	50
CALCINED RED ART	50

BLUE PIGMENT

COBALT OXIDE	25
RED IRON OXIDE	25
MANGANESE DIOXIDE	25
DRY PORCELAIN BODY	25

E.T.

BLACK IRON FOR DECORATION

KAOLIN 2
 FLINT 1
 POT. SPAR 1
 NEPH SG. 1
 B. I. O. 4.

BLACK STAIN

CHROME 1
 MAN. DIOX. 1
 IRON. 1/2

USE WITH CARE

COPPER STAIN

COPPER CARB 4
 TIN OXIDE 1

YELLOW-GOLD

RUTILE. 1
 IRO. 1/2

COBALT STAIN

COBALT CARB 1
 MAN. DIOX 1/2
 IRON OX. 1/2

Overglaze Base (Cone 10)	
Gerstley Borate	4.0%
Talc	4.0
Whiting	15.0
Custer feldspar	36.0
EPK (Edgar Plastic Kaolin)	15.0
Silica (Flint)	26.0
	100.0%
Overglaze Base Unity Formula	
*CaO	.63
*MgO	.14
*K ₂ O	.15
*Na ₂ O	.08
B ₂ O ₃	.06
Al ₂ O ₃	.45
SiO ₂	3.89

For red, add 20% red cadmium inclusion stain; for blue, add 5% dark cobalt blue stain; for green, add 15% emerald green stain; for turquoise, add 15% vanadium-zirconium turquoise stain; for yellow, add 15% titanium yellow stain.

*oxides contributing to unity (totaling to 1)

Iron-Rutile Wash

(apply over iron-bearing glazes)

Red Iron Oxide 1 part
 Rutile (powdered) 2 parts
 Gerstley Borate 3 parts