Cone 10 Glazes

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UNIVERSITY OF TENNESSEE
CONE 10 GLAZES
MARCH, 1995

St. Johns Black	**10,000 g**	**5,000 g**
Albany / Albany Substitute	6500	3250
Neph Syenite	1000	500
Talc	1500	750
Chrome Oxide	100	50
Manganese Dioxide Powder	200	100
Cobalt Carbonate	200	100

WERDS Shino	**10,000 g**	**5,000 g**
KONA F4	1500	750
Spodumene	1200	600
EPK Kaolin	300	150
Neph Syenite	5000	2500
OM4	1700	850
Soda Ash	300	150
Bentonite	200	100

Reeves Green	**10,000 g**	**5,000 g**
Custer Feldspar	7500	3750
Whiting	1500	750
Flint	500	250
EPK Kaolin	500	250
Chrome Oxide	400	200
Bentonite	300	150

Shamo White	**10,000 g**	**5,000 g**
Calcined Kaolin	700	350
Custer Feldspar	2400	1200
Kona F4	2400	1200
Whiting	1200	600
Bentonite	200	100
Bone Ash	300	150
Dolomite	1000	500
Talc	200	100
EPK Kaolin	1600	800
Superpax	1000	500

Temmoku	**10,000 g**	**5,000 g**
Custer Feldspar	4500	2250
Whiting	1300	650
Flint	2500	1250
EPK Kaolin	1100	550
Red Iron Oxide	800	400

Green Celedon	**10,000 g**	**5,000 g**
Whiting	2000	1000
Custer Feldspar	2700	1350
EPK Kaolin	2000	1000
Flint	3300	1650
Red Iron Oxide	200	100

Molly's Blue (Reitz Base)	**10,000 g**	**5,000 g**
Custer Feldspar	4500	2250
Whiting	2000	1000
EPK Kaolin	1300	650
Cornwallstone	2200	1100
Bentonite	200	100
Cobalt Carbonate	100	50
Iron Oxide	100	50

Barton Carbon Trap	**10,000 g**	**5,000 g**
Kona F4	2000	1000
Neph Syenite	5000	2500
Flint	500	250
EPK	1500	750
Soda Ash	1000	500
Dissolve soda ash into hot water and then add to glaze		

Ohata Khaki	**10,000 g**	**5,000 g**
Custer Feldspar	4900	2450
E.P.K. Kaolin	600	300
Whiting	700	350
Talc	600	300
Flint	2200	1100
Bone Ash	1000	500
Red Iron Oxide	1000	500

Dick Evans Copper Red	**10,000 g**	**5,000 g**
Custer Feldspar	6020	3010
Gerstley Borate	824	412
Whiting	900	450
Copper Carbonate	23.2	11.6
Tin Oxide	77.4	

Binns Clear	**10,000 g**	**5,000 g**
Whiting	2100	1050
EPK Kaolin	2100	1050
Flint	3300	1650
Custer Feldspar	2500	1250

YBY	**10,000 g**	**5,000 g**
Custer Feldspar	4395	2197.5
Whiting	440	220
Georgia Kaolin	2747	1373.5
Dolomite	2418	1209
Bentonite	200	100
Rutile	440	220

Randy's Green	**10,000 g**	**5,000 g**
Flint	1600	800
OM4 Ball Clay	1000	500
Whiting	900	450
Superpax	700	350
Dolomite	600	300
Strontium Carbonate	800	400
Custer Feldspar	2100	1050
Kona F4	1800	900
Tin Oxide	400	200
Copper Carbonate	600	300
Bentonite	200	100

Reitz Purple	**10,000 g**	**5,000 g**
EPK Kaolin	2500	1250
Whiting	500	250
Dolomite	2000	1000
Cornwallstone	5000	2500
Cobalt Carbonate	50	25

Elk White	**10,000 g**	**5,000 g**
Custer Feldspar	6000	3000
Dolomite	1000	500
Gerstley Borate	1000	500
Flint	500	250
OM4 Ball Clay	1500	750
Superpax	1000	500

1234 Celedon Blue	**10,000 g**	**5,000 g**
EPK Kaolin	1000	500
Whiting	2000	1000
Flint	3000	1500
Custer Feldspar	4000	2000
Bentonite	200	100
Cobalt Carbonate	25	12.5
Red Iron Oxide	100	50

UNDER GLAZE WASHES

Frank Martin

Rust Orange

Rutile	17
Red Iron Oxide	17
Gerstley Borate	17
E.P.K.	13
Illmenite	38

Medium Teal Green

Cobalt Carbonate	20
Rutile	50
Chrome Oxide	20
Gerstley Borate	20

Gray Blue

Cobalt Carbonate	60
Manganese Dioxide	20
Gerstley Borate	20

Red / Mauve

Nepheline Syenite	55
Whiting	22
Flint	17
Tin oxide	3
Black copper oxide	2
Bentonite	2

Sally's Favorite CONE 10

Oxidation Celedon

Barium carb	6
Dolomite	3
Lith carb	2
Whiting	13
Custer	21
Petalite	21
EPK	15
Flint	18

Also add: Iron 2 - green R
Manganese 3 - green R
Copper 2 / rutile 4 -
Copper 1 / rutile 3 -
Gloss transparent

Base 8

Frit 3110	40
Lith carb	4
Barium carb	6
Flint	25
EPK	15

Also add: copper carb 1
Chrome .5
Crimson stain
Gloss transparent

Steve's Base #21

Kona F4	40
Whiting	10
Dolomite	15
Magnesium carb	10
EPK	15
Flint	10

Also add:
manganese dioxide 1 / cobalt carb .25
copper 2 / cobalt .25
copper 2
copper 2 / rutile 4
Satin Matt

#9 Wash

Iron Oxide	10
Manganese dioxide powder	60
Cobalt carb	10
EPK	20

Gun metal / slight variation in Ox or R

Ayumi's Satin Matt

Soda Ash	3.6
Dolomite	11
Whiting	5.5
Kona F4 Feldspar	36.4
EPK	18
Strontium carb	20
Flint	5.5

Also add: copper carb 1 - turquoise
Satin matt

Lorios

Custer	50
Whiting	34
EPK	16

Manganese 2 -
Copper carbonate 2 -
Nickel 1 -

Mark Issenberg's Ash Glaze recipes:
http://lookoutmountainpottery.com/

Wes Smith's favorite Copper Red Glazes. Cone 10
Soda spar encourages red orange and potash encourages red purple blue etc.

Hillary Red cone 10 R

Feldspar 2125
Flint 1330
Whiting 140
Dolomite 440
Strontium 440
Bent. 90
Tin 135
Zinc 90
Copper Carb. 20

Jeff's Red cone 9-11 R

Barium 4.36
Dolomite 8.72
Gerstley 8.72
Whiting 8.42
Zinc 7.72
Custer 41.89
Flint 26.17
Tin Ox. 2.64
Copper carb 0.51
Bent. 2.03

Splotchy Lavender cone 9-11

Calcined Zinc ox 3.88
Lithium 1.94
Strontium 1.55
Whiting 13.57
Custer 48.46
Frit 3134 4.24
Bent. 0.97
EPK 2.13
Flint 23.26
Tin ox 0.97
Copper 0.58

Have fun with'em. The Jeff's red and Lavender are fun to try color runs on.

Wes

Sally's #9 Black Wash Cone 10

Red Iron Ox	10
Manganese Diox P	60
Cobalt Carb	10
EPK	20

Frazier Celedon Cone 10R

G200 Feldspar	34
Wollastonite	27
Flint	21
Grolleg	15
Talc	3
Red Iron Oxide	½

Base 8 Cone 10 Ox

Ferro Fritt # 3110	40
Lithium Carb	4
Barium Crab	6
Flint	25
EPK	15
Copper	1 – turq
Chrome	½ - chartreuse
Crimson stain	maroon

Lorio's Cone 10 Ox/R

Custer Feldspasr	50
Whiting	34
EPK	16
Bentonite	2
Mnaganese diox	2 - purple
Copper carb	2 – turq
Nickel	1 – pink / ox

Anderson Ranch Slips

salt / soda / reduction / wood

Titanium Slip

Nepheline Syenite	31.58
OM4 Ball	63.16
Flint	5.26
Superpax	5.26
Titanium	7

Yellow Slip

Grolleg	30
Tile 6	40
Custer	30
Titanium diox	15

Flashing Slip for Bisque

Soda Ash	2
Nepheline Syenite	25
EPK	75

Flashing Slip for Greenware

Nepheline Syenite	10
Avery	80
XX Sagger	10

UT CONE 10 GIAZES

Revised Spring 2007

Ohata Khaki

Custer Feldspar	49
E.P.K. Kaolin	6
Whiting	7
Talc	6
Flint	22
Bone Ash	10
Red Iron Oxide	10
Bentonite	2.00
Epsom salts	0.25

Reitz Purple Matte

E.P.K. Kaolin	25
Whiting	5
Dolomite	20
Cornwall Stone	50
Cobalt Carbonate	.5
Bentonite	2.00

Glossy White

Custer Feldspar	35.9
E.P.K.	11.4
Flint	22.8
Whiting	19.8
Zircopax	9.5
Bentonite	2.00
Epsom salts	0.25

Oribe Green Shaner / Babs

Custer feldspar	29
Flint	30
Whiting	19.5
Talc	5.7
EPK	7.5
Strontium carbonate	4.6
Bone ash	1.5
Copper carbonate	6
Bentonite	2
Epsom salts	0.25

Shino

Nepheline Syenite	40
Kona F-4	10
Spodumene	30
Soda ash	10
Ball clay	20

Sworoff White Matt

Cornwall Stone	20
Kona F4	26
Whiting	9
Dolomite	10
Talc	6
Glomax /Calcined kaolin	15
Flint	8
Bentonite	2.00
Epsom salts	0.25

Oil Spot Black Matt

Custer feldspar	62
Whiting	5
EPK	5
Flint	16
Bentonite	3
*Spanish Red iron oxide	7
Cobalt carbonate	2
Epsom salts	0.25

FM's Revised Hensley

Colemanite	12
Kona F4	40
Whiting	9
Barium Carbonate	4
Talc	.9
E.P.K.	3.2
Flint	29
Bone Ash	1.1
Bentonite	2.00
Epsom salts	0.25

3D Yellow Matt

Nepheline Syenite	64
Dolomite	21
Zircopax	16
Ball Clay	4
Red Iron Oxide	1
Bentonite	2.00
Epsom salts	0.25

Amber Celadon Gloss

Alberta slip	31
Wollastonite	12
Custer feldspar	19
Whiting	7
Gerstley borate	3
EPK	3
Flint	13
Yellow Ocher	7
Bentonite	6

Temmoku

Custer Feldspar	50
Whiting	20
E.P.K.	10
Flint	20
Red Iron Oxide	8.5
Bentonite	2.00
Epsom salts	0.25

Davids ALBANY Substitute

Redart	72
Whiting	10
Kona F-4	8
Talc	5
EPK	5

Matt Turquoise

Revised UT Shop Turq.(Base #4)

Nepheline Syenite	45.0
Strontium carbonate	26.0
Kentucky OM #4	13.0
Silica	8.0
Copper carbonate	2.0
Rutile	3.0
Bentonite	3.0
Epsom salts	0.25

OVER AND UNDER GLAZE WASHES - Frank Martin

62. Brown

Redart	25
Red Iron Oxide	75

63. Rust Orange

Rutile	17
Red Iron Oxide	17
Gerstley Borate	17
E.P.K.	13
Illmenite	38

64. Iron Yellow

Red Iron Oxide	70
Titanium	30
Gerstley Borate	20

65. Medium Green

Cobalt Carbonate	20
Rutile	50
Chrome Oxide	20
Gerstley Borate	20

66. Gray Blue

Cobalt Carbonate	60
Manganese Dioxide	20
Gerstley Borate	20

67. China Blue

Cobalt Carbonate	8-15
Red Iron Oxide	5
Manganese Dioxide	7
Bentonite	2

68. Black

Black Iron Oxide	25
Cobalt Oxide	15
Manganese Dioxide	10
Chrome Oxide	10

PETER BEASECKER
ARROWMONT 1996 "THE GLAZED SURFACE"

PORCELAIN CLAY BODY (CONE 9-10)

6-TILE	30LBS
EPK	15
TENN. #1 BALL CLAY	5
CUSTER SPAR	27
FLINT	23
	100 LBS.
*ADD:	
BENTONITE	2%
EPSON SALTS	1/4 LB.

FLASHING SLIP

AVERY KAOLIN	75%
NEPH. SY.	25
	100

*SODA ASH: HANDFUL PER 10,000 GRAM BATCH

CONE 9-10 GLAZES

V.C. SATIN BLACK

CUSTER SPAR	20%
KONA F-4 SPAR	20
FLINT	20
DOLOMITE	15
TALC	13
OM-4 BALL CLAY	10
WHITING	2
	100
*ADD:	
RED IRON OX.	3%
COLBALT OX.	3
MANGANESE DIOXIDE	2
CHROME OX.	1

FLASHO RAMA

NEPH. SY.	80
DOLOMITE	12
KONA F-4	4
FLINT	4
	100
*ADD:	
TIN OXIDE	10% (DON'T WORRY ABOUT TIN AMOUNT)

WAXY BLACK

KONA F-4 SPAR	40%	*ADD:	COLBALT OX.	2.5%
DOLOMITE	20		CHROME OX.	2.5
EPK	20		MAGANESE DI.	2.5
FLINT	20		RED IRON OX.	2.5
	100			

Tech statement – Josh DeReese 1991

Berry Shino – wood

F-4 Feldspar	18.4
Spodumene	15.2
Soda Ash	4
Neph Sy	45
OM 4	16.4

1234 Celadon – wood

Ball mill 12 hours

EPK	10
Whiting	20
Flint	30
Custer	40
Yellow Ochre	2

Vals Satin Matt wood/Soda

Cornwall	46
Whiting	34
EPK	20
Copper Carb	4 } Blue/Black
Tin Oxide	4 }
Yellow Ochre	10
Tin Oxide	10

Linda's Yellow (Soda)

Dolomite	3.12
Whiting	10.08
Custer	19.2
EPK	8.46
Flint	19.14
Mason 6464	3.60

Robs Green (Soda)

Cornwall	63.5
Whiting	15.2
Gerstley Borate	4.3
Copper Carb	4.

Porcelain Shino (Wood)

Spodumene	30
EPK	5
Soda Ash	8
Neph Sy	39
OM 4	17

Reite Satin Matt Blue (wood)

Custer	45
Whiting	20
EPK	13
Cornwall	22
Rutile	2
Red Iron Ox	2
Cobalt Carb	.5

or Soft Light Green .2% Chrom

Rosies White Crackle (wood)

Custer	58.5
Flint	12
EPK	10
Cornwall	8
Whiting	10
Spodumene	1
Tin oxide	.5

Mick's Misfire (Soda)

Neph Sy	40
Whiting	15
Talc	10
Grolleg	15
Flint	10
Tin oxide	10
Copper Carb	1

Shell (Soda)

Neph Sy	50
Flint	10
EPK	15
Whiting	25
Rutile	4
Copper Carb *	2

4 9/10 R

49/10R

from Henry Lawrence & Ann Smith

BONE ASH

F/4----------40
Dolomite----------30
E.P.K.----------25
Bone Ash----------5
Bentonite----------2%

LAV LUSTRE SHINO

Neph.Sy.----------53
E.P.K.----------25
Silica----------10
Whiting----------2
Soda Ash----------5
Lithium Carb.----------5
Tin Oxide----------2
Bentonite----------2%

ROSENTHAL WHITE SATIN MATT

Custer----------43
Colemanite----------12
Dolomite----------7
Talc----------14
China Clay----------5
Silica----------19
Bentonite----------3%

MAMO WHITE MATT

Custer----------50
Kaolin----------25
Dolomite----------20
Whiting----------5
Bentonite----------2%

for Blue/Purple - ½% $CoCo_3$
½% Rutile

RHODES MATT

F/4----------40
Whiting----------10
Silica----------20
Talc----------20
Red Iron Oxide----------1%
Bentonite----------2%

ST. JOHN'S BLACK

	Matt	Shiny
Albany	75	65
Neph.Sy.	25	35
$CoCo_3$	5	5

O'REILLY WHITE

F/4----------5.7
Custer----------99.3
Dolomite----------16.0
Whiting----------17.6
E.P.K.----------11.3
Zinc Oxide----------7.1
Petalite----------6.6
Opax----------12.3
$BaCo_3$----------2.4
Silica----------21.7
Bentonite----------3%
for Warmer White - 2% Mang.Diox.

MARKS TEMOKU

Custer----------45
Whiting----------17
Kaolin----------11
Silica----------27
Red Iron Oxide----------10%
Bentonite----------2%

WOO YELLOW MATT

F/4----------33
$BaCo_3$----------25
Dolomite----------12
Kaolin----------7
SiO----------7
Zinc Oxide----------15
Red Iron Oxide----------3%
Bentonite----------2%

SHANER YELLOW/RED

Custer----------49
Zircopax----------23
Whiting----------20
Talc----------4
Bone Ash----------4
Red Iron Oxide----------4
Bentonite----------2%

KYLLILLI

Custer----------50
$BaCo_3$----------30
Whiting----------10
Kaolin----------10
Red Iron Oxide----------2%
Bentonite----------2%

4 3/pR

LEWIS RED

Cornwall----------30
$BaCo_3$----------49
Silica----------10
Tin Oxide----------5
$CuCo_3$----------1
Bentonite----------3%

KEATOR RED

Ball----------90
Whiting----------185
Silica----------270
Custer----------360
F/4----------50
E.P.K.----------25
Dolomite----------20
Bentonite----------3%
for Lt.Red - 1½% $CuCo_3$
for Drk.Red - 3% $CuCo_3$

MCKINNEL RED

Custer----------47
Whiting----------13
Talc----------3.5
Zinc Oxide----------4.5
Kaolin----------5.5
Silica----------15
Fritt 3110----------9
$CuCo_3$----------1%
Bentonite----------3%

ST. JOHN'S YELLOW

Custer----------640
Whiting----------32
Ball----------616
Ultrox----------960
Dolomite----------1024
Talc----------224
Silica----------320
Red Iron Oxide----------192
$BaCo_3$----------1600
Norfloat Spar----------2240
Yellow Ochre----------24
Bentonite----------2%

ERICKSON WHITE

F/4----------108
Custer----------900
Dolomite----------306
Whiting----------96
Kaolin----------50
Zinc Oxide----------90
Petalite----------126
Zircopax----------234
Bentonite----------2%

BLOOD RED

Ball----------25
Borax----------25
Fritt 3110----------40
$CuCo_3$----------10

CU. RED

Neph.Sy.----------40
Whiting----------18
Silica----------40
Borax----------12
Tin Oxide----------2%
$CuCo_3$----------½%
Bentonite----------3%

MAMO CU. RED

Neph.Sy.----------35
Whiting----------30
E.P.K.----------20
Zinc Oxide----------10
Lithium Carb.----------2
Silica----------38
Iron----------½%
$CuCo_3$----------½%
Bentonite----------3%
for Celadon - 1% R.I.O. to Base

PAPRIKA

Custer----------28
Spodumene----------19
E.P.K.----------22
Dolomite----------17
Whiting----------4
F/4----------5
Tin Oxide----------5

9/10 R

YELLOW TO GREEN

Albany----------80
Whiting----------25
E.P.K.----------20

MAC CELADON

E.P.K.----------10
Whiting----------20
Silica----------30
Custer----------40
Tin----------2%
Red Iron Oxide----------2%
Bentonite----------3%

MALLOY CELADON

Custer----------40
Whiting----------17
Kaolin----------13
Silica----------27
Red Iron Oxide----------1% to 3%
Bentonite----------3%

VAUGHNS WHITE

Custer----------100
Dolomite----------30
Whiting----------10
Zinc Oxide----------10
Petalite----------14
Zircopax----------26
Bentonite----------2%

SPODUMENE

Custer----------60
Spodumene----------40
E.P.K.----------50
Dolomite----------40
Whiting----------10
Tin Oxide----------12%
Bentonite----------2%

TEAL

Norfloat Spar----------52
$BaCo_3$----------21
Ball----------10
Whiting----------9
Zinc Oxide----------8
$CuCo_3$----------3%
Bentonite----------2%

TEMPLE WHITE

Custer----------36
Dolomite----------19
Whiting----------3
Kaolin----------22
Silica----------20
Bentonite----------2%

LORIOS ASH

Albany----------41.5
Whiting----------28.5
E.P.K.----------13.5
Wood Ash----------12.5
Yellow Ochre----------4

SHANER BUTTER

Norfloat Spar----------30
Silica----------22
Whiting----------7
Kaolin----------4
Talc----------5
Colemanite----------11
Zircopax----------12
Zinc Oxide----------4
Rutile----------5
Bentonite----------2%

REEVES GREEN

Custer----------75
Whiting----------15
Silica----------5
Kaolin----------5
Chrome----------4%
Bentonite----------3%

GUSTIN SHINO

Neph.Sy.----------45
F/4----------10.8
Spodumene----------15.2
Ball----------15
E.P.K.----------10
Soda Ash----------4
Bentonite----------2%

A 3/10 R

MAMO CELADON

Cornwall----------50
Dolomite----------6
Whiting----------10
Zinc Oxide----------2
Ball----------12
Silica----------20
Bentonite----------3%
Red Iron Oxide----------1% to 3%

SCHULMAN WHITE MATT

Neph.Sy.----------47
$BaCo_3$----------14
Talc----------15
Colemanite----------3
Ball----------15
Silica----------6
Bentonite----------2%

KORMAN YELLOW

F/4----------39.6
$BaCo_3$----------30.8
E.P.K.----------8.8
Silica----------8.8
Dolomite----------12.0
Red Iron Oxide----------6%
Bentonite----------2%

LEWIS YELLOW

F/4----------35
$BaCo_3$----------20
Dolomite----------15
Ball----------5
Silica----------10
Opax----------15
Red Iron Oxide----------2% -for Yellow
$CuCo_3$----------4% -for Blue
Bentonite----------2%

BETH CELADON

Whiting----------196
Silica----------329
E.P.K.----------200
Custer----------275
Barnard----------3%
Bentonite----------3%

TOMATO RED

F/4----------54
Silica----------29
E.P.K.----------8
Magnisium Carb.----------8
Bone Ash----------13
Red Iron Oxide----------8
Bentonite----------2%

KOREAN CELADON

Custer----------50
Whiting----------50
E.P.K.----------13
Ball----------40
Silica----------40
Yellow Ochre----------4%
Bentonite----------2%

CARMENS TURQUOISE BLUE

Neph.Sy.----------1300
$BaCo_3$----------600
Kaolin----------140
Silica----------160
Lithium Carb.----------40
$CuCo_3$----------100
Bentonite----------3%

E.A.C. SHINO

Neph.Sy.----------40
Spodumene----------30
Ball----------17
Soda Ash----------8
E.P.K.----------5
Bentonite----------2%

WADDING

Alumina Hydrate----------1 lb.
Kaolin----------2 lbs.
Fire Clay----------2 lbs.
Silica Shot----------5 lbs.

OESTRIC SLIP (LEATHER HARD)

Kaolin----------40
Ball----------30
Silica----------15
Custer----------15

A 9/10 R

* OESTRIC SLIP (BISQUE/CRACKLE)

Kaolin----------15
Ball----------15
Calcined Kaolin---------20
Custer----------20
Silica----------20
Zircopax----------5
Borax----------5

Make up each Time Fresh

SPLETH - PORCELAIN CASTING SLIP

Grollig or Tile #6------35 lbs.
Kaopaque----------15 lbs.
Ball----------10 lbs.
Silica----------30 lbs.
Pyrotrol----------20 lbs.
Custer----------10 lbs.
Sodium Silicate------218.6 grams
Water----------48 lbs.

SCHULMAN CELADON

Cornwall----------44
F/4----------18
$BaCo_3$----------4
Whiting----------36
Silica----------64
E.P.K.----------34
Bone Ash----------4
Tin Oxide----------4
Red Iron Oxide----------1½%
Bentonite----------3%

HENSLEY CLEAR GLAZE

F/4----------40
Colemanite----------12
$BaCo_3$----------4
Whiting----------8
Silica----------29
China Clay----------3
Tin Oxide----------0.8
Ash----------1.7
Fritt 3110----------1.5
Bentonite----------3%

HENSLEY VITRIOUS SLIP

Silica----------10.5
F/4----------28.5
E.P.K.----------6.0
Whiting----------7
Tin Oxide----------1.5
Barium Carb.----------7.5
Talc----------1.5
Neph.Sy.----------22.5
Ball----------15.0

OESTRIC TEMOKU

Custer----------42.16
Whiting----------15.81
Silica----------21.08
Kaolin----------12.00
Zinc Oxide----------2.03
Red Iron Oxide--------8.00
Bentonite----------2%

CUSHING "SATIN DOLL BLACK"

Albany----------65
Neph.Sy.----------15
$BaCo_3$----------10
Talc----------10
Chrome----------1%
Red Iron Oxide----------2%
Mang.Diox.----------2%

SYLVIE WHITE

F/4----------2320
Talc----------240
Whiting----------360
Ball----------120
Silica----------400
Pyrophillite----------480
Bentonite----------2%

CLARKS BLACK

F/4----------44
Whiting----------12
E.P.K.----------7
Silica----------37
Red Iron Oxide----------8
Bentonite----------3%

4 9/10 R

BOUBARIC TESHA SATURATE IRON

F/4----------20
Whiting----------16
Ball----------26
Silica----------26
Red Iron Oxide----------12
Bentonite----------2%

TAN DOLOMITE - SHANER

Dolomite----------31
Custer----------24
Cornwall----------8
Kaolin----------25
Whiting----------5
Silica----------7
Bentonite----------2%

ORANGE SLIP

Kaolin----------33
Neph.Sy.----------33
Silica----------33
Rutile----------15

SHANER RED/GOLD

Custer----------2108
Talc----------160
Kaolin----------1000
Whiting----------852
Bone Ash----------120
Red Iron Oxide----------100
Rutile----------100
Bentonite----------2%

MAMO MATT

F/4----------49
Dolomite----------19
E.P.K.----------20
Whiting----------4
Tin Oxide----------8
Bentonite----------2%

WEISER STONY WHITE

Custer----------63
Dolomite----------24
Silica----------4
Ball----------9
Bentonite----------2%

for Blue/Green - ½% $CoCo_3$
1½% Chrome

ZELLER

Custer----------89
Whiting----------9
Ball----------2
Rutile----------3
Red Iron Oxide----------2
Bentonite----------5%

TEMPLE YELLOW

Custer----------52.7
Talc----------4
China Clay----------25
Bone Ash----------2
Whiting----------21.3
Red Iron Oxide----------4.1
Bentonite----------2%

LIMESTONE

Custer----------49
Whiting----------15
Kaolin----------13
Silica----------23
Bentonite----------3%
for Celadon - 1% Red Iron Oxide

* WERTS CARBON TRAP Shino

F/4----------15
Spodumene----------12
E.P.K.----------3
Neph.Sy.----------50
Ball----------17
Soda Ash----------3
Bentonite----------2%

(This is the one Henry Uses over Crackle Slip)

ARCHIE BRAY FOUNDATION *for the* CERAMIC ARTS
2915 Country Club Avenue Helena, Montana 59601
406/443-3502

WOODFIRE WORKSHOP
JULY 7-10, 1994

CLAY

Stoneware Cone 9-10

AP Green	30
Gold Art	30
Ball Clay	15
T-6 Kaolin	20
Pot Spar	10
Fine Grog	8
Medium Grog	8

Helmar

Helmar	50
Custer	25
Flint	15
Ball	10

Yellow Banks Stoneware

Yllw Bnks 401	28
Yllw Bnks 101	20
Imco 400	28
C&C Ball	16
F-4 Spar	8

SLIP

Stick to Anything White Slip

EPK	500
Ball Clay	500
Flint	500
Cornwall	250
Neph Sy	250
Opax	50
Frit 3195	50

Black Slip

Alberta Slip	800
Ball Clay	300
Chrome	100
Cobalt Carb	50
RIO	50

Helmar Slip (orange)

Helmar Kaolin	70
Neph Sy	30
Bentonite	3

Hoag Slip (Flashing Slip)

Silica	7 lbs
Kona F-4	7 lbs
Ball Clay	7 lbs
Avery or Helmar	7 lbs
Tile 6 Kaolin	1.75 lbs
Bentonite	13 oz

Grolleg/Avery Slip

Grolleg Kaolin	100
Avery or Helmar	30
Neph Sy	15
Bentonite	3

Manganese Slip

Manganese Dioxide	100
Copper Carbonate	75
EPK	50
Ball	25

Oestreich White Slip

EPK	40
Ball	30
Flint	15
Custer	15

GLAZE

cone 9-10

Archie Bray Shino

F-4 Feldspar	18.4
Spodumene	15.2
Soda Ash	4
Neph Sy	45
Ball	16.4

1234 Celadon

EPK	10
Whiting	20
Flint	30
Custer Feldspar	40
Yellow Ochre	2

St. John's Black

Alberta Slip	85
Neph Sy	17
Cobalt Oxide	5

Val's Satin Matte

Cornwall	46
Whiting	34
EPK	20
(blue-black)	
Copper Carb	4
Tin Oxide	4
(yellow)	
Yellow Ochre	10
(white)	
Tin Oxide	6

Porcelain Shino

Spodumene	30
EPK	5
Soda Ash	8
Neph Sy	39
Ball	17

Reitz Satin Matte Blue

Custer Feldspar	45
Whiting	20
EPK	13
Cornwall	22
Rutile	2
RIO	2
Cobalt Carb	.5

Rosie's White Crackle

Custer Feldspar	58.5
Flint	12
EPK	10
Cornwall	8
Whiting	10
Spodumene	1
Tin Oxide	.5

Glick Blue

Custer Feldspar	54
Whiting	13
Barium Carb	2.5
Grolleg Kaolin	6
Flint	22.5
Zinc Oxide	2.5
Bentonite	1.5
Rutile	1
RIO	2
Cobalt Carb	.5

Marks Tenmoku

Custer Spar	45
Whiting	17
EPK	11
Flint	27
RIO	10%
Bentonite	2%

Hamada Green

Kona F-4 Spar	1561
Whiting	261
Zinc Oxide	241
Barium Carb.	631
Ball	30
Rutile	60
Copper Carb.	80
RIO	76
Bentonite	30

2570 x 2.5 = 7425

Reeves Green Decorating Glaze

Custer	75
Whiting	15
Silica	5
Kaolin	5
Chrome Oxide	4
Bentonite	3

ABF Woodfire Workshop
July 7-10, 1994

GLAZE (continued)

Cone 9-10

Shino Glaze

Kona F-4	14.58
Spodumene	12.50
EPK	2.91
Soda Ash	3.33
Neph Sy	50.00
Ball	16.66
Bentonite	2%

Killer Ash

Wollastonite	25
Neph Sy	25
Ball	25
Wood Ash	25

Nuka (White)

Custer	37.5 lbs
EPK	2.5 lbs
Ash	4.0 lbs
Flint	2.0 lbs
Neph Sy	5.0 lbs
Tin Oxide	.5 lbs

CARBON TRAP (Orange)

Soda Spar	40
Spodumene	33
Kaolin	11
Soda Ash	9
Ball Clay	5
Bentonite	2

CELADON (Green)

Feldspar	50
Ball Clay	10
Whiting	10
Dolomite	10
Flint	20
Iron	2

HONEY WHITE

Feldspar	42.8
Ball Clay	7.5
Ghirstley Borate	12
Dolomite	7.6
Talc	14.7
Flint	20
Opax	4

PETE'S BLACK

Feldspar	50
Whiting	15
Flint	22
Kaolin	11
Zinc Oxide	2
Iron	8

CERAMICS II *GLAZE TESTS 1993* A9/10R

#1 GINAS

custer	57
EPK	8
talc	24
dolomite	17
bentonite	2

#2 ALEXS

coirnwall	46
whiting	34
EPK	20
bentonite	2

#3 LINDAS

dolomite	3.12
whiting	10.1
custer	19.2
EPK	8.46
flint	19.14
bentonite	2

#4 NICKS

Neph sey	40
whiting	15
talc	10
grolleg	15
flint	10
bentonite	2

#5 ROSIES

custer	58.5
flint	12
EPK	10
cornwall	8
whiting	10
spodumene	1
bentonite	2

#6 REITZ

custer	45
whiting	20
EPK	13
cornwall	22
bentonite	2

#7 VALS

cornwall	46
whiting	34
EPK	20
bentonite	2

#8 REEVES

custer	75
whiting	15
flint	5
EPK	5
bentonite	2

#9 SHAMO

glomax	7
custer	24
kona F4	24
whiting	12
bentonite	2
bone ash	3
dolomite	10
talc	2
EPK	16

#10 TOSH

kona F4	37.4
EPK	18.7
cormwall	18.7
whiting	18.7
bentonite	2
Zinc	6.5

#11 SATIN

custer	20
Kona F4	20
whiting	2
dolomite	15
talc	13
OM4 ball	10
flint	20
bentonite	2

#12 CELEDON

EPK	10
whiting	20
flint	30
custer	40
bentonite	2

9/6R

FERG		HAGI		GILL	
custer	50	custer	31.8	whiting	19.2
EPK	24	flint	28.9	flint	32.2
dolomite	16	whiting	19.6	EPK	19.6
whiting	10	EPK	25	kona F4	27
bone Ash	8	bone Ash	1.9	bentonite	2
bentonite	2	talc	6.5		
		bentonite	2		

MAMO		BAUER CLEAR	
custer	50	cornwall	73
EPK	25	whiting	18
dolomite	20	zinc oxide	3
whiting	5	colemanite	3
bentonite	2	bentonite	2

St. Johns Black A10	10,000g	5,000g
Albany Slip	6500	3250
Neph Syenite	1000	500
Talc	1500	750
Chrome Ox	100	50
Manganese Diox Pow.	200	100
Cobalt Carb.	200	100

Woo Yellow A10	10,000 g	5,000g
Kona F4	3300	1650
Barium Carbonate	2500	1250
Dolomite	1200	600
Grolleg	700	350
Flint	800	400
Zircopax	1500	750
Yellow Ochre	500	250

Amber Celedon A10	10,000g	5,000g
Albany Slip Clay	3300	1650
Wallastonite	1300	650
EPK	300	150
Colemanite	300	150
Whiting	700	350
Flint	1300	650
Custer	2000	1000
Yellow Ochre	700	350

Oestreich Slip A10	(Mix Dry ONLY) 10,000g
Borax	500
Zircopax	500
Custer	2000
OM4	1500
Calcined Kaolin (Glomax)	2000
EPK	1500
Flint	2000

Wertz Shino A10	10,000g	5,000g
Kona F4	1500	750
Spodumene	1200	600
EPK	300	150
Neph Syenite	5000	2500
OM4	1700	850
Soda Ash	300	150
Bentonite	200	100

LP Matt A10	10,000g	5,000g
Kona F4	3000	1500
Dolomite	2000	1000
Barium Carb	1500	750
EPK	2500	1250
Flint	1000	500
Cobalt Carbonate	100	50
Granular Manganese Diox	50	25

Green Celedon A10	10,000g	5,000g
Kona F4	3880	1940
Whiting	790	395
Barium Carb	1430	715
EPK	1120	560
Flint	2770	1385
Red Iron Ox	200	100
Bentonite	200	100

Bird Matt A10	10,000g	5,000g
Neph Syenite	6360	3180
Dolomite	2110	1055
OM4	430	215
Bentonite	250	125
Tin ox	850	425

Malloy Clear A10	10,000g	5,000g
Custer	4200	2100
Flint	2700	1350
Whiting	1700	850
EPK	1300	650
Yellow Ochre	220	110

Reeves Green A10	10,000g	5,000g
Custer Spar	7500	3750
Whiting	1500	750
Flint	500	250
EPK	500	250
Chrome ox	400	200
Bentonite	300	150

Wild Purple A10	10,000g	5,000g
Custer	4630	2315
Flint	2850	1425
EPK	160	80
Dolomite	590	295
Whiting	960	480
Cobalt Carbonate	270	135
Bentonite	200	100

Cal White Slip A10		1000g	1500g
EPK	20	200	300
OM4 Ball Clay	13	130	195
Neph Syenite	27	270	405
Flint	31	310	465
Borax	5	50	75
Ultrox/Superpax PnX/ Zircopax	10	100	300
Bentonite	10 -White	100	300
Chrome Oxide	6 - Green	60	90
Iron Oxide	10 - Iron	100	150
Cobalt Carbonate	4 - Blue	40	60

Barnard Black Slip A10		1000g	2000g
Barnard Black Bird	100	1000	2000
Iron Ox	5	50	100
Cobalt Carb	4	40	80
Copper Oxide	3	30	60
Manganese diox Powder	3	30	60

NIVC A10	10,000g	5,000g
Cornwallstone	1700	850
Neph Syenite	1750	875
Whiting	500	250
Tall	800	400
Dolomite	2250	1125
EPK	2500	1250
Bone Ash	750	375
Flint	200	100
Bentonite	200	100

STONEWARE

C/9 - C/10 Glazes

Oatmeal

Potash Spar	720
Spoduene	280
Dolomite	500
Gerstley Borate	100
Kaolin	400

Zircopax 5%
Manganese Dioxide 2%

Ninas Egg Shell

Potash Spar	54
Dolomite	18
Whiting	3
Kaolin	25

Mead White

Kona F.4 Spar	400
Dolomite	100
Talc	100
Whiting	100
Flint	100
China Clay	200

Seans 18-6

Kaolin	13
Calcined Kaolin	12
Potash Feldspar	25
Neph. Syenite	12
Flint	7
Whiting	4
Gerstley Borate	2
Dolomite	25

Seans 18-6 Colors

Blue	Copper Carb.	2%
	Nickle Oxide	1%
Green	Chrome Oxide	1%
	Cobalt Carb.	1%
	Granrutile	1%
Orange	Iron Oxide	3%
	Tin Oxide	2%
	Pentoxide	1%
	Vanadium	

Chuang Celedon

Potash Spar	53.8
Flint	24.0
Kaolin	7.4
Talc	6.8
Whiting	8.0
Boneash	12.0
Iron	2%

Bathtub Celedon

EPK	100
Whiting	200
Flint	300
Custer Spar	400
Barium	50
Zinc Oxide	30
Yellow Ochre	2%

Hansen's Celedon

F-4 Spar	440
Whiting	150
Kaolin	130
Flint	280
Iron	30

Mather Celedon Glaze

Whiting	17.40
Zinc Oxide	2.27
Custer Feldspar	46.24
Kaolin	13.84
Flint	20.22
Cobalt Oxide	.25%

Honey Glaze

Barn Carb.	4.03
Colemanite	0.97
Whiting	17.45
Zinc Oxide	0.97
Albany Slip	20.16
Cornwall Stone	25.85
Custer Spar	20.59
Kaolin	1.64
Flint	8.34
Red Iron Oxide	5.37
Bentonite	1.30

Transparent Matt Glaze

Frit 3124	67
Potash Feldspar	9.3
Zinc Oxide	5
Silica (Flint)	3
Bentonite	2

Jett Red Orange

Potash Spar	960
Dolomite	660
Barium Carbonate	660
Kaolin	450
Flint	270
Rutile	45
Red Iron	135

CERAMICS

Stoneware C/9 and C/10 Reduction Glazes

Dunham Blue

Potash Feldspar	50
Whiting	14
Kaolin	8
Barium Carbonate	14
Flint	30
Copper Carbonate	.5
Rutile	50
Ironoxide	50

Shanner Glaze

E.P. Kaolin	23.1
Potash Fledspar	48.6
Whiting	19.7
Talc	3.7
Bone Ash	10.0

Toshiko Black

Dolomite	5
Whiting	6
Feldspar	67
Kaolin	5
Flint	17
Blackiron oxide	6
Cobalt Carb	2
	168

GW (2A) Base

Potash Feldspar	50
Dolomite	25
Ball Clay	20
Kaolin	5

Maijas Porcelain

Feldspar	40
Flint	30
Whiting	30
Kaolin	15
Zinc Oxide	10
Titanium	10

Loree Black (L012)

Albany Clay	85
Barium Carbonate	10
Cobalt Oxide	5

Temple White Opaque

Potash Feldspar	36
Dolomite	19.9
Whiting	29
Kaolin	22
Flint	20
	15%

Alfred #36 Yellow

Dolomite	30
Cornwall Stone	80
Whiting	20
Kaolin	50
Flint	20
Red Iron Oxide	3%
Rutile	5%
Bentonite	2%

200 C/9 Oxidation

Nepheline Syenite	34
Dolomite	13
Whiting	7
Zinc Ox	6
Flint	17
Copper Carbonate	5%

J.T. Celedon C/9 Reduction

Nepheline Syenite	168.4
Whiting	76.8
Kaolin	40
Flint	108.8
Red Iron Oxide	7.76

"O" Black C/9 Oxidation

Potash Feldspar	42
Whiting	13
Kaolin	8
Barium Carbonate	2
Cobalt Oxide	3
Red Iron Oxide	4
Flint	20
Manganese Dioxide	2
Chrome Oxide	1

CERAMICS

Stoneware C/9 and C/10 Reduction Glazes

Plum Base

Cornwall Stone	44.1
Dolemite	4.7
Zinc Oxide	1
Whiting	11.7
E.P. Kaolin	14.2
Flint	28.8
Gentonite	2.0

123 Base (tan) C/8-9 Oxidation

Potash Feldspar	40
Whiting	30
Ball Clay	10
Flint	30
Rutile	10
Bentonite	3
Vanadium Stain	2.5

Joes Purple

Cornwall	75
Whiting	20
Kaoline	5
Bentonite	11

Joes Purple Milutin Base

1 1/2 Copper
1 Tin
1/2 Silica Carbide
1/6 Cobalt

Reed Pumkin

Potash Spar	32
Dolomite	22
Barium Caronate	22
Kaolin	15
Flint	9
Iron Oxide	4 1/2
Rutile	11 1/2%

Turtle

Kona F-4	50
Kaolin	15
Whiting	20
Barium Carbonate	15
Red Iron Oxide	2%
Cobalt Oxide	1/2 %

White 18 - 6

Kaolin	13
Calcimed Kaolin	12
Potash Feldspar	25
Nephelin Syenite	12
Flint	7
Whiting	4
Colmanite	2
Dolomite	25

C-7-F Red Green

Potash Feldspar	70
Whiting	10
Kaolin	10
Colmanite	10
Flint	10
Copper Carbonate	2%
G.R. Rutile	2%

STEPHENSON CLASS GLAZES

REDUCTION BLACK

Custer Feldspar	420
Flint	210
Whiting	158
Kaolin	99
Red Iron Oxide	91
Zinc Oxide	21

WAXY YELLOW G440

Potash Feldspar	600
Whiting	184
Kaolin	259
Rutile	37
Red Iron Oxide	18

RHOADES MATT

Kona Feldspar #4	250
Ball Clay	125
Dolomite	113
Whiting	13

469 OVENTURINE

Colemanite	192.3
Red Iron Oxide	115.4
Potash Feldspar	115.4
Flint	76.9

445 OXIDATION WHITE/ORANGE

Kingman Feldspar	225
Whiting II	110
Silica	65
E.P. Kaolin	55
Rutile	30
Lithium Carb.	25

446 J. MASON'S RED (Grayed RED)

Potash Feldspar	362.5
Colemanite	54.5
Whiting	36
Flint	36
Tin Oxide	5.5
Copper Carbonate	5.5

448 RUDUCTION DARK RED

Potash Feldspar	212.5
Flint	125
Colemanite	87.5
Barium Carb.	50
Whiting	12.5
Copper Carb.	5
Tin Oxide	5
Red Iron Oxide	2.5

AC G8 BASE

Whiting	17
Magnesuim Carb.	2
Buckingham Spar	38
Georgian Kaolin	12
Flint	27
Softwood Ash	6

THERE ARE 3 DIFFERENT COLORS FOR THIS BASE:

(1) BROWN

Red Iron Oxide	8%
Rutile	2%

(2) NEBULA BLUE

Granular Rutile	4%
Copper Carbonate	1/2%
Cobalt Carbonate	1/2%

(3) GREEN

Red Iron Oxide	2%

461 KHAKI (Metallic brown-black)

Kentucky ball #4	123.5
Flint	123
Potash Feldspar	99.5
Whiting	74.5
Red Iron Oxide	73.5
Tin Oxide	6

G.371 SHANNER RED BROWN

Potash Feldspar	45.35
Kaolin	21.51
Whiting	20.91
Red Iron Oxide	7.07
Talc	3.44
Bone Ash	1.72

A 9/10 R

	base	5000g.	10,000g.
Kens Clear			
Custer	32	1600	3200
flint	24	1200	2400
whiting	24	1200	2400
zinc	4	200	400
E.P.K.	16	800	1600
Shanner Red			
E.P.K.	23	1150	2300
Custer	49	2450	4900
whiting	20	1000	2000
talc	4	200	400
bone ash	10	500	1000
Iron	4	200	400
Gina"s Matt			
custer	51	2550	5100
E.P.K.	8	400	800
Talc	24	1200	2400
Dolomite	17	850	1700
rutile	4	200	400
Shell			
Neph Sey	50	2500	5000
flint	10	500	1000
E.P.K.	15	750	1500
Whiting	25	1250	2500
ruitle	4	200	400
copper Carb	2	100	200

Δ10 GLAZES

1) PLUM RED	Δ10
CORNWALL STONE	176.4
DOLOMITE	18.4
ZINC	4.0
WHITING	47.0
BALL CLAY	56.8
FLINT	115.2
IRON	10-15%

2) TRANSPARENT	Δ10
CLINCHFIELD SPAR	171.3
DOLOMITE	64.4
KAOLIN	61.9
FLINT	96.0
Celadon : Iron ½-1%	

✓

3) PINK WHITE MATTE	Δ10
NEPH SY	92.4
DOLOMITE	36.8
ZINC	16.2
WHITING	20.0
BALL CLAY	58.4
FLINT	36.8

4) TRANSPARENT	Δ10
FLINT	134.4
WHITING	80.0
BALL CLAY	85.0
CLINCHFIELD SPAR	111.2
Celadon: Iron ½-1%	

5) SMOOTH STONY	Δ10
WHITING	20.0
DOLOMITE	73.6
TALC	75.6
CORNWALL STONE	133.4
NEPH SY	92.4
BALL CLAY	12.9
CALCINED BALL CLAY	100.0
FLINT	19.2

6) CELADON	Δ10
CLINCHFIELD	217
WHITING	62
CHINA CLAY	28
FLINT	79
IRON	2-12%

7) BINN'S REDUCTION RED	Δ10
SODA SPAR	80.
FLINT	80.
COLEMANITE	10.
WHITING	30.
ZINC OXIDE	1.
FRIT 25	30.
TIN OXIDE	3.
RED IRON	.3
COPPER CARB	1.0

Δ 10 GLAZES

1) SEIJI CELADON	Δ10
LIMESTONE GLAZE	100
IRON SILICATE	3
CHROME OXIDE	.5

✓ 2) GREY STONEY	Δ10
CUSTER SPAR	10
BARIUM CARB	3
BALL CLAY	1

3) HERB'S MATT WHITE	Δ9-10
CUSTER SPAR	45
SILICA	5
KAOLIN	25
WHITING	15
DOLOMITE	10

Black : Cobalt 1%
Tan : Mang. Diox 5%

4) SUSAN'S. YELLOW	Δ10-11
KONA F-4 SPAR	32
BARIUM CARB.	25
DOLOMITE	13
EPK	8
FLINT	7
ZIRCOPAX	15
RED IRON	2%

5) DRY MATT	Δ10
NEPH SY	56.0
BARIUM CARB	41.9
BALL CLAY	1.4
LITHIUM CARB	.7

Copper Carb 3% : Dark turquoise blue
Red Iron oxide 5% : Translucent mustard yellow
Rutile 10% : Light tan
Copper Carb 1½% } Pale Blue Green
Rutile 5% }
Copper Carb 1½% } Green
Red Iron Oxide 2% }

✓ 6) MATT	Δ10
NEPH SY	59.0
BARIUM CARB.	27.0
KAOLIN	6.2
FLINT	7.3
LITHIUM CARB	.5

Copper Carb 1% : Pink Red
✓ Cobalt Oxide ½% : Cobalt Blue
Mang Diox 4% : Muddy Violet
Rutile 5% } Vibrant Orange Brown
Red Iron Oxide 2% }
Rutile 5% } Mottled Tan and Blue
Cobalt ¼% }
✓ Cop. Carb 2% } Blue Violet
Mang Diox 2% }

Δ10 GLAZES

1) BALL MATT BLUE — Δ10

CUSTER SPAR	5/16. 1 oz
WHITING	1/4"
ZINC OXIDE	12.8"
BARIUM CARB	6/16
BALL CLAY	1/16
RUTILE	3.2"

2) MELOY BLACK — Δ10-11

DOLOMITE	18
WHITING	3
CUSTER SPAR	54
EPK	25
MASON'S BLACK STAIN	2
MANG DIOX	2
COBALT CARB	1/4%

3) MELOY STONY — Δ10

WHITING
KAOLIN
FELDSPAR
DOLOMITE
Pink: Tin 10%
Copper (Black) 1.5%
Brown: Chrome 3%
Tin 10%
Dark Brown: Tin 10%
Iron 1%

4) RAILLIER BROWN MATT — Δ10

CUSTER SPAR	3.2
ZINC OXIDE	.8
BARIUM CARB	2.1
WHITING	.9
BALL or EPK	1.0
RUTILE	2.0

5) CHUCK's BLUE — Δ10

SILICA	9.3
BALL	9.9
NEPH. SY	47.7
BARIUM CARB	36.1
COPPER CARB	3.0

6) DIMESTORE WHITE — Δ10-11

CUSTER SPAR	8
TALC	1.
EPK	1
ZIRCOPAX	1/2

7) FRED's NICE MATT — Δ10

KONA F-4 SPAR	4.
WOLLASTONITE	2.
KAOLIN	2.
MAG. ZIR. SILICATE	2.

Δ 10 GLAZES

1) SHANER's RED — Δ10-11

CUSTER SPAR	5lb	4.42oz
TALC		6.4 "
EPK	2 "	8.0 "
BONE ASH		3.2 "
WHITING	2 "	2.08 "
DARK RED IRON		6.56 "

2) SHANER'S YELLOW — Δ10-11

CUSTER SPAR	5lb	4.42oz
TALC		6.4 "
EPK	2 "	8.0 "
SODA ASH		3.2 "
WHITING	2 "	2.08 "
DARK RED IRON		6.56 "

3) POTASH SPAR — 52.8

WHITING	19.2
BARIUM CARB	19.2
KAOLIN	4.6
ZINC	3.2

4) J. MCK'S. AGATE — Δ10

KINGMAN SPAR	40
WHITING	10
BARIUM CARB.	14
CHINA CLAY	14
SILICA	22

5) J. MCK'S. FELDSPATHIC GLAZE — Δ10

WHITING	80
SILICA	134.4
EPK	81.5
KINGMAN SPAR	112.3

Iron blue: Rutile 6%
Tin 2%
Red Iron 2%

6) J. MCK'S PORCELAIN CELADON — Δ10-12

KINGMAN SPAR	112.3
WHITING	80.0
FLORIDA KAOLIN	81.5
FLINT	134.4
IRON OXIDE	1%

7) MAGNOLIA — Δ10

KINGMAN SPAR	104.3
WHITING	25.0
BARIUM CARB	4.9
ZINC OXIDE	4.
SILICA	43.17

White: Zircopax 10%
Dead White: " 15%

1) SEMI-MATTE OPAQUE	Δ10
CLINCHFIELD SPAR	40
BALL CLAY	35
DOLOMITE	15
FLINT	10

2) GW-5 SEMI-GLOSS	Δ10
CLINCHFIELD SPAR	30
DOLOMITE	25
BALL CLAY	30
FLINT	15

3) BRIGHT SHINY TRANSPARENT	Δ10
CLINCHFIELD	35
DOLOMITE	20
BALL CLAY	25
FLINT	20

4) STONEY MATT	Δ10
CLINCHFIELD	45
DOLOMITE	20
KAOLIN	10
BALL CLAY	25

5) SEMI-GLOSS OPAQUE	Δ10
CLINCHFIELD	40
DOLOMITE	20
KAOLIN	10
FLINT	30

6) TRANSPARENT	Δ10
CLINCHFIELD	27
WHITING	20
KAOLIN	30
FLINT	33

(6)

7) GRANULAR MATTE	Δ10
BARIUM CARB	20
NEPH SY	50
WHITING	10
KAOLIN	10
FLINT	10
RUTILE	5%
COPPER CARB	2%

8) GREEN	Δ10
SPAR	40
KAOLIN	5
BARIUM CARB	60
BENTONITE	4
CHROME	5.1

9) YELLOW-GREEN	Δ10
WHITING	25
FLINT	25
KAOLIN	12.5
ZINC	8.3
NEPH SY	3.3
COPPER CARB	.8
RUTILE	25

Δ 10 GLAZES

1) DRUCKMAN'S FRECKLED TAN Δ10

TALC	2 lb
WHITING	1 "
FELDSPAR	3 "
DOLOMITE	1 "
SILICA	2 "
EPK	5 "
SODA ASH 1%	2.4oz
BONE ASH 6%	13.44"
CHROME	.56"

2) FERGUSON'S YELLOW Δ10

SILICA	7.22
CUSTER SPAR	32.50
DOLOMITE	12.15
ZIRCOPAX	15.00
BARIUM CARB	25.28
KY. BALL CLAY	7.22
RED IRON	2%

3) MATTE Δ10-12

POTASH SPAR	40
WHITING	22.3
KAOLIN	21.0
SILICA	16.7
RUTILE	4.4

4) BUTTERY OPAQUE Δ10

SODA SPAR	80
WHITING	10
BALL CLAY	10
BONE ASH	2

5) SEIJI CELADON Δ10

LIMESTONE GLAZE	100
IRON SILICATE	3.
CHROME OXIDE	.5

6) SATIN OPAQUE Δ10

#56 GLAZE SPAR	125.5
COLEMANITE	36.0
DOLOMITE	22.0
TALC	44.0
KAMEC KAOLIN	15.0
FLINT	60.0
TIN	9.0

7) OPAQUE SHINY Δ10

COLEMANITE	6
#56 SPAR	20
TALC	8
CLINCHFIELD SPAR	14
WHITING	10
KAMEC KAOLIN	12
FLINT	26
DOLOMITE	4

1) SEMI-MATTE	Δ10
SPAR	66.4
WHITING	8.0
KAOLIN	25.6
RUTILE	10%

2) TOSHIKO ORANGE	Δ10
FLINT	30
WHITING	30
ZINC	10
NEPH SY	40
EPK	15
TIN	5
BENTONITE	2
RUTILE	32

3) MATTE ORANGE	Δ10
SPAR	49
WHITING	4
DOLOMITE	19
CLAY	21
TIN	8

4) SATIN MILKY	Δ10
CORNWALL STONE	110
COLEMANITE	36
DOLOMITE	23
TALC	44
BALL CLAY	13
FLINT	60

5) MILKY	Δ10
CLINCHFIELD SPAR	25
CORNWALL STONE	40
BALL CLAY	12
WHITING	13
ZINC	5
FLINT	5

6) TRANSPARENT	Δ10
CLINCHFIELD	57
NEPH SY	92
WHITING	47
BARIUM CARB	39
FLINT	141

7) TRANSPARENT	Δ10
NEPH SY	129.4
BORAX	87.9
COLEMANITE	32.1
WHITING	10.0
BALL CLAY	44.6
FLINT	126.0
TIN	8.8

· Copper Red : Copper Ox .05-1%

Δ10 GLAZES

1) COPPER RED	Δ10
ZINC OXIDE	8.1
DOLOMITE	9.2
COLEMANITE	20.6
WHITING	35.0
KINGMAN SPAR	207.2
FLINT	102.0
COPPER OXIDE	1%
TIN OXIDE	1%
RED IRON OXIDE	1%

2) J. MCK'S. AGATE	Δ10
KINGMAN SPAR	40
WHITING	10
BARIUM CARB	14
CHINA CLAY	14
SILICA	22

3) J. MCK'S. SWEDISH	Δ10
KINGMAN SPAR	156.1
WHITING	26.6
ZINC OXIDE	24.1
BARIUM CARB	63.1
KY. BALL CLAY #4	30.1
RUTILE	6.0
Red Iron Oxide	3-5%
Nickel Oxide	1-3%
Chrome Oxide	.5-1.5%
Rutile	5-10%
Cobalt	.25-.5%

4) SEMI-MATT	Δ10
SODA SPAR	128.5
TENN BALL	22.7
COLEMANITE	36.1
DOLOMITE	23.0
TALC	44.1
FLINT	59.9
Nickel	1-3%
Nickel	1/3%
Chrome	1/2%
Nickel	4%
Chrome	2/3%
Rutile	4%
Cobalt	1/8%
Rutile	8%
Rutile	2%
Iron	1%
Mang.	1%
Chrome	1/8%
Mang	1%
Chrome	1/4%
Tin	1%
Copper	.8%
Iron Oxide	20%
Remco Stain #108	2%

6) FRED'S GROWL	Δ10
KONA F-4 SPAR	40
EPK	20
TALC	20
DOLOMITE	20

Δ10 GLAZES

1) CELADON #1	Δ10 R
FLINT	44.8
WHITING	26.6
BUCKINGHAM SPAR	37.
KAOLIN	28.3
RED IRON	.5

2) CELADON #4	Δ10
KINGMAN SPAR	85
ZINC OXIDE	8
WHITING	89
FLINT	51
RED IRON	6

3) CELADON #5	Δ10
POTASH SPAR	1839
WHITING	225
KAOLIN	147
FLINT	744
RED IRON	300

4) CELADON #6	Δ10
KINGMAN SPAR	1263
FLINT	816
KAOLIN	300
WHITING	531
RED IRON	285

5) CELADON #7	Δ10
KINGMAN SPAR	72.3
WHITING	20.6
KAOLIN	9.3
FLINT	26.3
RED IRON (Blue Green)	2%
" " (Ok. Bottle Green)	6-8%

6) CELADON #9 COPPER RED	Δ10
POTASH SPAR	12.01
FLINT	17.01
WHITING	6.
KAOLIN	1.
COPPER CARB	.24
Try 1% Tin Oxide	

7) KAWAI CELADON #2	Δ10
KONA SPAR	61.3
WHITING	7.5
KAOLIN	4.9
FLINT	24.8
RED IRON	1.5

8) CELADON r6	Δ10
NEPH SY	
WHITING	
KAOLIN	
FLINT	
RED IRON	

Δ10 GLAZES

1) CELADON R81x	Δ10
KONA SPAR	84.3
WHITING	86.3
KAOLIN	95.7
FLINT	107.
RED IRON	6.5

2) CELADON r121	Δ10
POTASH SPAR	217
WHITING	62
KAOLIN	28
FLINT	79.5
RED IRON	7.5

3) BROWN CELADON	Δ10
KINGMAN SPAR	1647
WHITING	620
ZINC	81
KAOLIN	387
FLINT	828
RED IRON	350

4) NEPH SY	50.
WHITING	15
ZINC OXIDE	5
KAMEC KAOLIN	5
FLINT	25
COPPER CARB	.004
SILICON CARBIDE (1000 mesh)	.004
TIN OXIDE	.01

5) CLINCHFIELD SPAR	30.
DOLOMITE	37
WHITING	5
KAOLIN	38
FLINT	8

6) LIGHT CELADON	Δ10
NEPH SY	46.20
DOLOMITE	73.60
WHITING	10.00
BALL CLAY	125.16
FLINT	74.18

7) CLINCHFIELD SPAR	40.
FLINT	30
WHITING	30
BALL CLAY	15
ZINC	5
BORAX	5
TIN OXIDE	4
COPPER CARB	.4

8) TRANSPARENT	Δ10
FELDSPAR	43
WHITING	19
BALL CLAY	10
FLINT	28
IRON (for saturated effect)	10-15%

Δ10 GLAZES

1) KAKI	Δ10
KINGMAN SPAR	20
WHITING	15
TENN BALL	25
RED IRON OXIDE	15
SILICA	25

2) TANANOHO	Δ10
KINGMAN SPAR	23
WHITING	18
TENN BALL	25
RED IRON OXIDE	7
SILICA	25

3) DARKISH RED	Δ10
KINGMAN SPAR	20.
WHITING	25.
TENN BALL	35.
RED IRON OXIDE	1.7
SILICA	25.
RUTILE	3

4) Δ10-13	
POTASH SPAR	53.8
WHITING	19.2
BALL CLAY	19.2
KAOLIN	4.6
ZINC OXIDE	3.2

5) MATTE	Δ10-12
POTASH SPAR	40
WHITING	22.3
KAOLIN	21.0
SILICA	16.7
RUTILE	4.4

6) WAXY WHITE	Δ10
KINGMAN SPAR	41
GERSTLEY BORATE	12
DOLOMITE	7
TALC	15
KAOLIN	4.3
FLINT	20

7) (19) COPPER BLUE MATT	Δ10
SODA ASH	12.0
BARIUM CARB	46.4
BALL CLAY	35.5
FLINT	4.2
COPPER CARB	4%

8) SATIN MATT	Δ10
FELDSPAR	56.1
NEPH SY	15.4
WHITING	13.3
KAOLIN	8.6
BARIUM CARB	6.6

Δ10 GLAZES

1) GOOD MATTE	Δ10
CORNWALL STONE	200
SPAR	410
WHITING	190
BALL CLAY	40
CALCINED KAOLIN	80
ZINC OXIDE	30
RUTILE	3%
IRON	4%

2) YELLOW	Δ10
BUCKINGHAM SPAR	48
COLEMANITE	12
BARIUM CARB	20
FLINT	10
IRON OXIDE	3
KAOLIN	10

3) ASH	Δ10
SODA SPAR	40
KAOLIN	20
SODA ASH	40

1) ELEGANT CRYSTALLINE — Δ10

KONA or F-4 SPAR	—
GLAZE SPAR #56	79.93
SODA ASH	5.59
WHITING	8.95
FLINT	5.53

Lavender Matt { Mang. Diox 2%, Zinc Ox 15%, Magnesium 5%

Bright Lavender – Replace magnesium with silver crystals

Dark glossy grey – Black Nickel 2%

Violet Matt – Barium 20%

Cream to Brown – { Barium 20%, Zinc 25%

Cream Matt with Blue-green speckle – { Barium 20%, Zinc 25%, Magnesium 20%

2) CLEAR — Δ 10-12

OXFORD SPAR	50.4
CHINA CLAY	3.7
FLINT	24.9
DOLOMITE	2.6
ZINC OXIDE	1.1
WHITING	17.2

3) EMILY'S PURPLE — Δ10

POTASH SPAR	41
COLEMANITE	12
DOLOMITE	7
TALC	15
BALL CLAY	5
FLINT	20
BLACK COBALT OXIDE	1
TIN OXIDE	2
BENTONITE	2

4) GLAZE — Δ 10

NEPH SY	41.2
BARIUM CARB	32.0
BALL CLAY	6.0
FLINT	6.5
TALC	6.0
RUTILE	8.3
COPPER CARB	4%

5) GLAZE — Δ10

BARIUM	37
SODA SPAR	48
KAOLIN	7
FLINT	8
ZINC	10
BONE ASH	6
TIN	3
IRON	6

Δ 10 GLAZES

1) DHAEMER's WHITE	Δ 10
DOLOMITE	445
WHITING	36
CORNWALL STONE	1440
MAGNESIUM CARB	90

2) ROY'S MATTE #1	Δ 10
POTASH SPAR	19
SODA SPAR	13
EPK	25.5
COLEMANITE	2.5
TALC	2.5
WHITING	3.

3) VOULKOS 100	Δ 10
FLINT	138
KAOLIN	224.4
DOLOMITE	165.6
WHITING	90
NEPH SY	466.8
ZINC	24
ZIRCOPAX	47.7

4) NICKEL BLUE	Δ 10
FRIT 3191 or 3230	70
ZINC	25
BALL CLAY	5
NICKEL	2-4

5) COPPER RED	Δ 10
NEPH SY	40
FLINT	30
WHITING	30
BALL CLAY	15
ZINC	5
BORAX	5
COPPER CARB	.4
TIN	5

6) PORCELAIN GLAZE	Δ 10-12
OXFORD SPAR	50.4
CHINA CLAY	3.7
FLINT	24.9
DOLOMITE	2.6
ZINC OXIDE	1.1
WHITING	17.2

7) OLIVE GREEN	Δ 10
NEPH SY	487
WHITING	186
ZINC OXIDE	24
KAOLIN	177
FLINT	71
RED IRON OXIDE	45

Δ9-10 GLAZES

1) STONY SMOOTH MATT	Δ9-10
OXFORD SPAR	48.9
CHINA CLAY	25.1
DOLOMITE	22.4
WHITING	3.5

2) WHITE MATT	Δ9-10
POTASH SPAR	43
WHITING	18.3
FLINT	11.2
KAOLIN	22.8
ZINC OXIDE	4.7
RUTILE	3.0
TIN OXIDE	2.0

3) ZINC CRYSTAL	Δ9-10
PEMCO FRIT 283	74
ZINC OXIDE	21.5
FLINT	4.5
BENTONITE	1.0

#1 { Manq Diox 5%, Copp Carb 5, Rutile 4

#2 { Copp Carb 3%, Rutile 5

#3 { Nickel Ox 1%, Copp Carb 3

4) KAKI GLAZE	Δ9
CORNWALL STONE	43
HARDWOOD ASH	30
SILICA	10
RED IRON	17

5) CORNWALL	Δ9-10
CORNWALL	42.34
DOLOMITE	4.41
ZINC OXIDE	.09
WHITING	11.28
BALL CLAY	13.63
FLINT	27.67

6) RED CELADON	Δ9-10
CUSTER SPAR	424
WHITING	120
TALC	32
ZINC OXIDE	40
KAOLIN	48
FLINT	136
TIN OXIDE	12
COPPER CARB	8
FRIT # 3110	80

TECHNICAL STATEMENT

GLAZES, all are fired to cone 9-12 in the wood kiln.

HAGI - a light brown transparent glaze, good over crackle slip

Custer	31.8
Flint	28.9
Whiting	19.6
E.P.K.	25.0
Talc	6.5
Titanium	2.9
Bone Ash	1.9

Manganese Dioxide .5
Manganese Carbonate .5

OESTREICH CRACKLE SLIP over bisque

Borax	250
Superpax	250
Custer	1000
Ball Clay O.M.#4	750
Glomax	1000
E.P.K.	750
Flint	1000

AMBER - put on thin over crackle slip Cone 8 oxidation.

Ball Clay O.M. #4	9.14
Whiting	18.19
Flint	27.29
Custer	36.38
Red Iron Oxide	6.33

SHANER ORIBE - green

Custer Feldspar	29.3
Flint	24.0
Talc	7.4
E.P.K.	11.9
Bone Ash	1.0
Black Copper Oxide	5.2

RANDY'S GREEN

Flint	19.2
Tenn. Ball Clay	12.0
Whiting	10.0
Superpax	9.0
Dolomite	7.3
Barium Carbonate	15.0
F-4 Feldspar	21.0
Copper Carbonate	3.0
Tin	2.0

THROWING BODY
Cone 9-12 white Stoneware

Tile #6	15
E.P.K.	15
XX Sagger	7
Cedar Heights Gold Art	12
Hawthorne	11
Custer Feldspar	9
Flint	6
Grog, Medium	1
Grog, Fine	1

SALT, SODA, WOOD, WADDING

Aluminum Hydrate	1
E.P.K.	2
A.P. Green Fire Clay	2
Sand 30-40 Mesh	5

CLINE #62013 "TOPPER"

Some A 9/10 R Glazes to try
★ with Color ★

Vals Satin Matt Yellow 9/10 R

Cornwall	46
Whiting	34
Epk	20
Yellow Ochre	10

Nicks Misfire - Pinkish 9/10

Neph Sey	40
Whiting	15
Talc	10
Grolleg	15
Flint	10
Ulthox	10
Copper Carb	1

Shell - Green Grey 9/10 R

Neph Sey	50
Flint	10
Epk	15
Whiting	25
Rutile	4
Copper Carb	1

Woo Yellow 9/10 R

Kona F4	33
Strontium Carb	16
Dolomite	12
Epk	7
Flint	7
Zink Oxide	15
Red Iron Ox	3
bentonite	2

Lavender Lustre Shino 9/10 R

Neph Sey	53
Epk	25
Flint	10
Whiting	2
* Soda Ash	5
Lithium Carb	5
Ulthox	2
bentonite	2

* Mix Soda Ash into hot Water then Add Rest of Recipe

Blue Flake Ash	9/10 oz
Ash	30
Custer	30
EPK	25
Flint	5
Strontium Carb	8
Iron	1/4
Cobalt Carb	1/4

Vcme - Cream	9/10 oz
Kona F4	40
Strontium Carb	21
Lithium Carb	5
Whiting	9
Avery kaolin	15
Flint	5
Rutile	8

G-1 Base	9/10 oz
Kona F-4	70
Whiting	30
EPK	20
Ultrox	3.5
Rutile	5
Chrome	05

VCDI	9/10 oz
Neph Sey	45
Whiting	15
Talc	10
EPK	10
Flint	10
Ultrox	10

Orange Matt	9/10 oz
Custer	50.4
Neph Sey	15.5
Whiting	13.4
EPK	8.7
Strontium Carb	3.75
Red Iron Ox	4
Titanium diox	6

- Cobalt 1/4

OR

- Copper 1

OR

- Copper Carb 2
- Cobalt Carb 1/2
- Iron Ox 1

} all

Linda's Yellow 9/10

Dolomite	3.12
Whiting	10.08
Custer	19.2
EPK	8.46
Flint	19.14
Mason Stain 6464	3.60

Shaver Yellow/Red 9/10

Custer	49
Zircopax	23
Whiting	20
Tale	4
Bone Ash	4
Red Iron Ox	4
bentonite	2

Yellow/Green 9/10

Albany	80
Whiting	25
EPK	20

Copper Blue (Turq) 9/10R

Neph Sey	50
Strontium Carb	23
Flint	10
Spodumene	10
Copper Carb	4
bentonite	2

Copper Blue (Turq) 9/10

Strontium Carb	60
Nepin Sey	20
Copper	5

Naples Yellow 9/10R

Kona F4	30
EPK	30
Dolomite	20
Strontium Carb	11
Flint	10
Rutile	3

AMBER CELEDON 9/10R

Albany	33
Wollastonite	13
EPK	3
Gerstely Borate	3
Whiting	7
Flint	14
CUSTER	20
Yellow Ochre	5

Satin Matt 9/10 R

Cornwall	20
Kona F4	26
Whiting	9
Dolomite	10
Talk	6
EPK	4
Glomax	15
Flint	8
Bentonite	2

Okibe 9/10R

Custer	26.5
Flint	32.6
EPK	3.1
Talc	3.7
Whiting	16.6
Strontium Carb	8.7
Bone Ash	1.8
Black Copper Ox	4.2
Bentonite	2

Oil Spot Black 9/10 R

Custer	69
Whiting	6
EPK	5
Flint	18
Red Iron Ox	8
Cobalt Carb	2
Bentonite	3

Clear 9/10 R

Kona F4	40.2
Coerstely Borate	12.0
Strontium Carbonate	4.0
Whiting	9.0
Flint	29.0
EPK	3.2
Freitt 3110	1.5
Talc	.9
Bone Ash	1.1
Bentonite	3.0

Cotton Base A9/10

Cryolite	45
Nepheline Seynite	5
Magnesium Carb	50

+ Cobalt & Rutile – Test

Old Yellow A9/10

Nepheline Seynite	63.9
Dolomite	21.1
Zircopax	16.0
Ball Clay	4.3
Red Iron	1.0
Bentonite	2.0

Fat & Waxy Celedon A9/10

*Nepheline Seynite	78
Flint	14
Whiting	8
Red Art	12
Bentonite	2

Ox Blood Copper Red ?

Nepheline Sey	42.0
Coster	9.0
EPK	2.0
Flint	23.0
Gerstley Borate	8.0
Whiting	11.0
Black Copper Ox	.3
Tin Oxide	1.0
Bentonite	3.0

Shino A9/10

*Nepheline Seynite	48
Kona F4	12
OM4 Ball	15
EPK	18
Soda Ash	6
Red Art	3

* 400 mesh

Spodumene

Oxford Stone Spar	30
Spodumene	20
EPK	25
Dolomite	20
Whiting	5
Tin Ox	12 %

Shamo

Kaolin	20.8
Custer	18.6
Whiting	10.0
Talc	1.4
Bone Ash	3.6
Dolomite	11.4
F-4	29.4
Tin Ox	4.8

Crackle

Neph Sy	50
Manganese Carbonate	50

Rudy's Opal

Pot Spar	44.66
Whiting	14.94
Zinc Ox	8.03
Kaolin	8.27
Flint	24.10

Semi Matt

Custer	40
Whiting	20
Cornwall	20
Ball	20
Zinc Ox	7 %
Copper Ox	5
Rutile	5

Perils Of Pauline

Bar Carb	0.9
Colemanite	4.2
Dolomite	14.6
Whiting	11.1
Pot Spar	22.9
Kaolin	12.4
Flint	33.3
Tin Ox	0.6
Avacado Lime	7.0% Nickel

Crackle Satin Matt

Custer	35
Whiting	20
OM4	35
Flint	10

Volks 100

Dolomite	14.0
Whiting	7.7
Zinc ox	2.0
Neph Sy	39.8
Kaolin	20.8
Flint	11.7
Zirco	4.0

Soft Patina

Bar Carb	33.6
Dolomite	3.0
Spodumene	14.4
Pot Spar	33.0
Kaolin	10.0
Flint	6.0
Copper Carb	4.0 %

Wiser Honey

Custer	63.0
Dolomite	13.3
Flint	1.9
Ball	4.4
Whiting	3.2
Zinc Ox	3.2
Petalite	4.5
Zircopax	6.5
Rutile	3.2 %
Bent	2.0 %

Vivika's M

Colemanite	6.3
Dolomite	5.6
Neph Sy	50.9
EPK	3.9
Talc	15.0
Flint	18.3

Matt

Spar	41.4
Bar Carb	16.6
Ball	15.6
Whiting	14.7
Zinc Ox	6.3
Rutile	1.5
Colemanite	4.2

Glaze

Dolomite	15
Whiting	10
Cornwall	40
Kaolin	25
Flint	10

Meloy Soney Revised

Dolomite	17.8
Whiting	3.2
Neph Sy	16.2
Kingman	37.9
Kaolin	24.9

Cone 9/10R

GLAZES, CONES 9-12, CE

Celadon

Kingman	50.66
Whiting	6.19
Kaolin	4.05
Flint	20.50
Bar Carb	16.53
RIO	2.07

Celadon

Kingman	27.06
Whiting	19.46
Kaolin	19.81
Flint	32.70
RIO	.97

Once Fire Celadon

Custer	60
Dolomite	15
Bent 'B'	20
Neph Sy	5

Once Fire Celadon

Custer	40
Dolomite	15
Bent 'B'	20
Flint	20
Bone Ash	5
RIO	0- 1.5 %

Once Fire Celadon

Custer	45
Dolomite	7
Talc	3
Bone Ash	5
OM4	35
Kaolin	5

This Glaze is a Soft
Celadon on Porcelain

Leach Celadon

Cornwall	16.7
Kaolin	20.8
Flint	27.8
Whiting	20.8
Zinc Ox	13.9

Leach 1234

EPK	10
Whiting	20
Flint	30
Custer	40
Ochre	2 %

Mac 1234

Kaolin	10
Whiting	20
Flint	30
Custer	40
Tin Ox	2
Bent	3
RIO	2

GLAZES, CONES 9-12, SATURATE IRON

For other Saturate Iron Glazes please see the Cones 9-12 Brown and Black sec

Polses Iron Saturate 10

Flint	21.61
Ball	18.09
Whiting	12.28
Opax	4.42
Dolomite	3.53
Bar Carb	7.66
Custer	12.37
F-4	20.04
RIO	8.0 %

St. Johns Amber 10

Albany	35.87
Wollast	14.13
EPK	3.26
Colemanite	3.26
Whiting	7.61
Flint	14.13
Custer	21.74
Ochre	7.0 %

Flu Temmoku 10

Kingman	56.15
Whiting	16.04
EPK	7.24
Flint	20.57
RIO	10.3 %
Iron Chromate	1.3 %

Tesha 10

F-4	20
Whiting	16
OM4	26
Flint	26
RIO	12
Bent	2 %

Flavin Saturate Iron 10

Kingman	65
Bar Carb	8
Whiting	8
Flint	19
RIO	7.5 %

Clarks Black 10

Custer	40.7
Whiting	11.0
Kaolin	6.5
Flint	34.0
RIO	7.5

Temmoku 10

Whiting	2
Albany	80
Barnard	10
Neph Sy	8

Cone 9/10 R

GLAZES, CONES 9-12, WHITE

Yanagahara White

Talc	12.5
Whiting	16.3
Kingman	38.5
Bent	2.9
Kaolin	2.9
Flint	26.9

This is a very Matt White

Lela's Reliable Semi Transl White

Custer	50
Whiting	15
Flint	20
Kaolin	15
Spodumene	5 %

Cardew Volleyball White

Custer	43.75
Whiting	16.25
Flint	17.50
Ball	11.25
Kaolin	11.25
Zircopax	10 %

Neph Sy White

Neph Sy	44
Flint	26
EPK	20
Whiting	10

Dans White

Kingman	40
Whitng	16
Talc	16
OM4	28
Tin Ox	2.5 %

Tosh Very Matt White

F-4	37.4
EPK	18.7
Whitng	18.7
Zinc ox	6.5
Bent	18.7

St Johns White

Custer	55.6
Albany	37.8
Flint	11.1
Zirco	5.6
Bent	2.5 %

White

F-4	44.0
Kaolin	27.5
Dolomite	24.2
Whiting	4.3

Cone 9/10 R

GLAZES, CONES 9-12, WHITE

Mamo D

Custer	50
EPK	25
Dolomite	20
Whiting	5
Tin Ox.	6 %

P.P. White

Custer	40.67
Petalite	20.34
Flint	16.27
Dolomite	8.14
Kaolin	10.17
OM4	4.41
Bent	2.0 %

O'Reily White

F-4	2.85
Custer	49.65
Dolomite	8.00
Whiting	8.80
EPK	5.65
Zinc Ox	3.55
Petalite	3.30
Opax	6.15
Bar Carb	1.20
Flint	10.85
Bent	3.0 %
Manganese Dioxide	2.5 % (optional

Opaque White Liner

Dolomite	21.20
Neph Sy	63.60
Bent	2.54
Tenn. Ball	4.24
Opax-S	8.42

Doras White House

Kingman	58.07
Neph Sy	16.13
Zinc Ox	8.06
EPK	8.06
Whiting	9.68
Boric Acid	1.10 %

Basic White

Whiting	19.2
Zinc Ox	3.2
Pot Spar	53.8
Ball	19.2
EPK	4.6

Pure White For Salt

Neph Sy	85
Dolomite	15
Tin Ox	10 %
Bent	2 %

GLAZES, CONES 912, GREEN

For Other Green Glazes s
Section

Albany With Copper

Albany	40
Whiting	20
Cornwall	20
Kaolin	20
Copper Carb	1 %

Oestrick Green

Spar	25.22
Whiting	25.22
Kaolin	6.62
Ball	20.18
Flint	20.18
Ochre	2.02
RIO	0.56

Reeves Green

Custer	75
Whiting	15
Flint	5
Kaolin	5
Chromium Oxide	4

Hamada Green

Whiting	8.87
F-4	52.05
Zinc Oxide	8.04
Bar Carb	21.04
Ball	10.00
Copper Carb	0.2 %
RIO	2.5 %
Rutile	2.0 %
Bent	1.7 %

Staleys Green

Whiting	17
Custer	45
Kaolin	11
Flint	27
Bent	3 %
Barnard	5 %
Tin Oxide	3 %

Transparent Green

Albany	50
Whiting	20
Flint	10
Cornwall	20
Ochre	3 %

Cone 9/10 R

GLAZES, CONES 9-12, YELLOW

Mustard Matt

Bar Carb	12.2
Dolomite	5.6
Whiting	9.4
Neph Sy	25.7
Pot Spar	35.1
Kaolin	8.2
Flint	3.8
RIO	5.0 %

Lewis Yellow Matt

F-4	41.35
Bar Carb	29.87
Dolomite	14.36
Ball	8.51
Flint	5.91
Zircopax	8.7 %
RIO	3.5 %
Bent	2.0 %

Hagi Butter Yellow

Custer	25.26
Flint	24.78
Whiting	16.81
EPK	21.44
Talc	5.58
Titanium Dio.	2.49
Bone Ash	1.64

Howards Yellow Brown

Dolomite	31
Whiting	4
Kingman	25
Kaolin	32
Flint	7
RIO	1

Yellow

F-4	44.0
Kaolin	27.5
Dolomite	24.2
Whiting	4.3
RIO	3%

Alfred Creamy Mottled Tan

Pot Spar	13.2
Cornwall	17.2
EPK	21.5
Spodumene	12.8
Dolomite	29.8
Flint	5.5

Matt Yellow Tan Slip Glaze

Redart	54.5
Spodumene	9.1
Whiting	27.3
Kamec	9.1

GLAZES, CONES 9-12, YE

Shaner Gold (Yellow t

Zircopax	23.96
Custer	51.04
Whiting	20.83
Talc	4.17
RIO	4.0 %
Bone Ash	10.5 %

Spotted Gold

Custer	39.03
Albany	15.20
OM4	1.13
Borax	0.50
Kaolin	20.69
Whiting	23.45
RIO	1.71 %
Rutile	4.83 %

Opaque Tan

Albany	30
Neph Sy	30
Whiting	15
Flint	10
Bar Carb	5
Rutile	10

Ferguson Yellow

Custer	50.00
Kaolin	23.86
Dolomite	15.91
Whiting	10.23
Tin Ox	5.1 %
Bone Ash	4.5 %
RIO	1.1 %

Woo Yellow

F-4	39.28
Bar Carb	29.76
Dolomite	14.28
Kaolin	8.34
Flint	8.34
Zircopax	17.0 %
RIO	3.6 %

Haystack Yellow Brown

Delmonte Feldspar	42.22
Cornwall	18.89
Whiting	18.89
Ball	10.00
EPK	6.67
Zinc Ox	3.33
Rutile	4.4 %
RIO	6.7 %

GLAZES, CONES 9-12, BLACK

Vampire Black Gloss

Cornwall	25
Albany	60
Whiting	10
RIO	5

Shaner Black

Albany	80
Neph Sy	6
Bar Carb	10
Cobalt Carb	2
RIO	2

Betty's Cream Black

Albany	45.93
Neph Sy	20.41
EPK	10.20
Whiting	12.24
Cornwall	8.16
Rutile	3.06

Rhodes Black

Albany	85
Neph Sy	15
Cobalt	5 %

Binns Black

F-4	34.63
Flint	34.63
Whiting	15.15
Ball	15.59
RIO	12 %
Copper Ox	1 %
Bent	2 %

Black Brown Matt

Barnard	60
Whiting	20
Ash	20

Black Matt

Whiting	16
Custer	60
Kaolin	8
Flint	16
Cobalt Ox	1
RIO	8
Manganese Dioxide	3
Bent	2

Case 9/10/12

GLAZES, CONES 9-12, RED

Chun Purple

Keene Spar	25.9
Flint	29.4
Whiting	15.0
Kaolin	1.8
Ball	5.6
Soda Ash	7.1
Hommel 38	11.2
Bar Carb	4.0
Tin Ox	1.1 %
Copper Carb	0.5 %

Plum

Dolomite	4.4
Whiting	11.0
Zinc Ox	1.0
Cornwall	46.0
Kaolin	13.3
Flint	24.3
Bent.	2.0
RIO	11.3

Voulkous Plum Red

Cornwall	42
Colemanite	5
Zinc Ox	1
Whiting	12
Ball	13
Flint	27
RIO	10 %
Bent	3 %

Salt Iron Red for porcel

Bone Ash	16.40
Dolomite	14.41
RIO	13.93
Pot Spar	27.92
Ball	13.41
Flint	13.93

Massons Red

Pot Spar	60.38
Flint	7.55
Ball	5.66
Dolomite	9.43
Bone Ash	16.98
RIO	7.5 %

Tomato Red II(Other)

F-4	52.94
Flint	28.44
EPK	7.84
Magnesium Carbonate	7.84
Bone Ash	2.94
RIO	7.8 %
Bent	2.0 %

Cone 9/10 R

GLAZES, CONES 9-12, RED

Leach Copper Red

Kingman	55
Whiting	22
Colemanite	4
Flint	14
Tin Ox	3
Copper Carb	2

King Copper Red # 2

Keene Spar	45.07
Flint	18.58
Whiting	20.53
Kaolin	3.80
Kent Ball	11.60
Copper Stannate	2.0 %
or Tin Ox & Copper Carbonate	0.8 % 0.6 %

King Copper Red # 3

Keene Spar	53.0
Flint	17.0
Whiting	15.0
Kaolin	6.0
Talc	4.0
Zinc Ox	5.0
Tin Ox	1.0 %
Copper Carb	0.3 %

Red Flambe

Custer	38.72
EPK	13.44
Flint	24.19
Whiting	2.42
Colemanite	8.06
Dolomite	8.06
Zinc Ox	1.08
Bar Carb	4.03
Tin Ox	2.4 %
Copper Carb	0.4 %

JJ Red

Albany	60
Cornwall	25
Whiting	10
RIO	5
Bent	0.5 %

One Fire Red

Custer	60
Dolomite	15
Bent 'b'	20
Neph Sy	5
Red Copper Oxide	0.25 %
Tin Ox	1.00 %

Apply This Glaze Thickly.

GLAZES, CONES 9-12,

For more Black Glaz

Black	
Dolomite	5
Whiting	6
Custer	67
Kaolin	5
Flint	17
Cobalt Ox.	2 %
RIO	8 %

Yanagahara Black	
Kaolin	10.92
Zinc Ox	2.24
Whiting	17.37
Kingman	46.22
Flint	23.25
RIO	10.08 %
Bent	0.85 %

Cushing Black	
Albany	65
Neph Sy	10
Bar Carb	10
Talc	15
Chrome Ox	1 %
Cobalt Carb	2 %
Manganese Dioxide	2 %

Tamba Black	
Albany	60
Ash	40
RIO	5 %

St Johns Black	
Albany	68.2
Neph Sy	31.8
Cobalt Carb	4.5 %

Secrest Black	
Custer	53.0
Whiting	12.0
Bar Carb	2.5
Zinc Oxide	2.5
Flint	24.0
Kaolin	6.0
RIO	5.0 %

Voulkus Black (Mat	
Custer	42.1
Whiting	15.8
Zinc Ox	2.1
Kaolin	9.8
Flint	21.1
RIO	9.1

GLAZES, CONES 9-12, RED

Shaner Red Gold	
Custer	49
Talc	4
Kaolin	24
Whiting	20
Bone Ash	3
RIO	2.4 %
Rutile	2.4 %

Cornwall Orange	
Cornwall	83
Whiting	12
Colemanite	3
Zinc Ox	2
Rutile	5 %
RIO	5 %

Tomato Red K.C.	
Bone Ash	13
P-4	54
Flint	29
Kaolin	8
Manganese Carbonate	7
Whiting	8
RIO	8

Iron Red to Green	
Custer	41
Dolomite	12
Whiting	7
Ball	7
Flint	33
RIO	10 %

Shaner Red	
Kaolin	24.3
Custer	51.1
Whiting	20.7
Talc	3.9
RIO	4.0 %
Rutile	1.0 %
Bone Ash	10.0 %

Kings Purple	
Spar	35.5
Whiting	14.0
Borax	10.0
Flint	37.0
Tin Ox	2.0
Bent	1.0
Copper Carb	0.5

Cone 9/10R

Wiser Blue Speck

Custer	63.0
Dolomite	13.3
Flint	1.9
Ball	4.4
Whiting	3.2
Zinc Ox	3.2
Petalite	4.5
Zircopax	6.5
Bent	2.0 %
Copper Carb	3.2 %

Turquiose Matt

Neph Sy	47.6
Bar Carb	36.9
Ball	6.9
Flint	7.5
Lith Carb	1.1
Copper Carb	2.0 %

Turquiose Matt

Neph Sy	57.5
Bar Carb	26.5
Ball	6.2
Flint	7.1
Lith Carb	2.7
Copper Carb	2.7

Pearly Blue

Custer	54.0
Flint	27.3
Whiting	7.1
Rutile	7.6
Bone Ash	4.0
Black Iron Oxide	0.5 %

Blue Green

Neph Sy	60
Bar Carb	14
Flint	15
EPK	11
Titanium Dioxide	3.5 %
Cobalt Carb	0.2 - 0.5 %

Dunham Blue Brown

Kingman	42.2
Whiting	11.7
Kaolin	6.7
Bar Carb	11.7
Flint	25.2
Bent	2.5
Rutile	5.0 %
RIO	5.0 %
Copper Carb	0.5 %

Cone 9/10 R

GLAZES, CONES 9-12, BLUE

Pearly Blue

Kingman	44.06
Ball	9.83
Bone Ash	2.05
Whiting	10.25
Flint	33.81
RIO	5.12 %

Jacks Nice Blue

Custer	54
Kaolin	25
Dolomite	18
Whiting	3
Cobalt Ox.	0.5 %

Betsy Blue, Brown, Purple

Kingman	80.1
Whiting	9.8
Colemanite	4.6
Zinc Ox	5.5
Tin Ox	5.0 %
RIO	1.0
Rutile	4.0

Rutile Blue for Salt

Potash Spar	89.6
Whiting	10.4
Rutile	3 %
RIO	2

Chun ①

Buckingham feld	56
Flint	22
Whiting	13
Soft wood Ash	9
Yellow ochre	2.5

Ochre can be replaced with 2.5 % Iron ox for darker blue

glaze should be ball milled then meshed - then let settle for a few days and excess water siphoned off - glaze should be creamy

* Wood Ash used should be either pine o

GLAZES, CONES 9-12,

Brown Red Brown	
Bar Carb	7.8
Whiting	12.5
Zinc Ox	5.7
Custer	41.8
EPK	10.9
Flint	21.3
RIO	4.0 %
Copper Carb	5.3 %

Brown	
Bar Carb	17.0
Whiting	14.4
Kingman	33.7
EPK	10.4
Flint	24.5
RIO	3.9 %
Tin Ox	5.2 %

Iron Glaze	
Neph Sy	21.5
Whiting	5.7
Lith Carb	4.4
Kaolin	14.4
Flint	42.6
RIO	11.4

Kaki Persimmon	
Whiting	16.85
F-4	33.71
EPK	8.43
Flint	41.01
~~RIO~~	12.92%
Bent.	1 %

Persimmon	
Custer	71.42
Flint	14.29
Whiting	14.29
Bent	3%
RIO	2%
Rutile	3%

St Johns Amber	
Albany	35.87
Wollastonite	14.13
EPK	3.26
Colemanite	3.26
Whiting	7.61
Flint	14.13
Custer	21.74
Ochre	7 %

Cone 9/10

GLAZES, CONES 9-12, BROWN

For other brown glazes see the s
iron section.

Cream To Brown Matt	
Dolomite	33.3
Custer	33.3
OM4	33.4

Woo Blu Brown	
Whiting	18.0
Custer	42.0
Ball	13.0
Flint	27.0
RIO	4.0 %
Rutile	4.0 %
Bent	1.0 %

This Glazes works well Under Sn

Lyns Brown	
Bar Carb	8.7
Soda Ash	4.3
Albany	87.0
RIO	0.7 %

Albany Iron Kaki	
Albany	80
Bar Carb	8
Neph Sy	8
RIO	4

Hamamda red Brown(Kaki)	
Albany	65
Custer	35
Rutile	2 % (leave this out

Kaki Red Brown	
Whiting	12
F-4	25
Tenn. Ball	25
Flint	25
RIO	13

Deep Orange Brown	
Cornwall	17
Whiting	17
Zinc Ox	3
Custer	48
Ball	9
Calcined Kaolin	6
RIO	6 %
Rutile	4 %

Medium Orange Brown	
Bone Ash	2.9
Talc	3.9
Whiting	20.4
Pot Spar	49.5
Kaolin	23.3
RIO	3.9 %
Rutile	3.9 %

GLAZES, CONES 9-12, ODDS AN

Bird Matt	
Neph Sy	44.1
Dolomite	14.5
Ball	27.6
Tin Ox	6.9
Bent	6.9

This Glaze is a very nice

Grey Transparent	
Custer	33.75
Flint	27.50
Whiting	21.25
Ball	17.50
Iron Chromate	2.0 %

Zeller	
Custer	90.8
Whiting	9.2
Bent	5%
Rutile	3%
RIO	2%

Busbee Bone Ash	
F-4	40
Dolomite	30
EPK	25
Bone Ash	5

Kuch Speckled for porce	
Pot Spar	48.5
Bar Carb	27.3
Whiting	8.9
Kaolin	8.4
Flint	6.9
Titanium diox	10%
Tin Ox	6%

GLAZES, CONES 9-12, SHINO

Carbon Trap	
F-4	10.8
Spodumene	15.2
EPK	10.0
Soda Ash	4.0
Neph Sy	45.0
OM4	15.0
Bent	2.0 %

Roach Trap Shino	
Neph Sy	23.0
F-4	23.0
Spodumene	38.0
EPK	6.0
Soda Ash	10.0
Bent	2.0 %

Shino			
Kaolin	14.8	444	222
Custer	13.2	396	198
Whiting	7.1	213	106
Talc	10.0	300	150
Bone Ash	25.8	774	387
Dolomite	8.1	243	122
F-4	21.0	630	315
Tin Ox	4.0 %	120	60
Bent	1.5 %	45	22

Guston Shino	
Neph Sy	45.0
F-4	10.8
Spodumene	15.2
Ball	15.0
EPK	10.0
Soda Ash	4.0

Shino XX	
Custer	83
Whiting	9
Flint	8

Phares Carbon Trap # 136	
Custer	66.80
Ball	4.59
Soda Ash	11.01
Flint	8.26
Neph Sy	7.34
Bent	2 %

Cone 9/10R

GLAZES, CONES 9-12, SHINO

Oestrich Carbon Trap

F-4	76.02	380
Spodumene	14.62	62
Kaolin	2.44	12
Soda Ash	4.00	20
Neph Sy	1.46	7.5
Ball	1.46	7.5

Woody's Carbon Trap

Custer	75
Om4	5
Woodash	12
Flint	1
Neph Sy	8
Soda Ash	1

Shino I

Neph Sy	63.64
Om4	27.27
Soda Ash	9.09

Shino II

Neph Sy	60
Whiting	10
Flint	30

Shino III

Neph Sy	33.85
Whiting	15.40
Ball	20.90
Flint	30.85
Tin Ox	6.0 %
Bent	2.0 %

Shino

Neph Sy	75
Ball	25

Carbon Trap

Feldspar	26.04
Spodumene	22.33
EPK	5.20
Soda Ash	5.95
Neph Sy	8.93
Ball	29.76
Bent	1.79

Wertz Origonal Carbon Trap

Neph Sy	46
Spodumene	38
EPK	6
Soda Ash	10
Bent	2 %

Cone 9/10

GLAZES, CONES 9-12, GREEN

Vivika's Semi Matt Green

Colemanite	11.5
Dolomite	7.3
F-4	40.9
Ball	7.2
Talc	14.0
Flint	19.1
Nickel Ox	1.0 - 3.0 %

Dark Green Semi Matt Slip Gl

Redart	66.7
Whiting	19.0
F-4	9.5
Kamec Kaolin	4.8

Robs Green

Cornwall	69.4
Whiting	16.7
Colemanite	4.6
Bar Carb	9.3
Copper Carb	9.3 %

Oribe (Randis)

Flint	17.4
Ball	10.9
Whiting	9.5
Dolomite	6.6
Bar Carb	13.6
Custer	22.8
F-4	19.2
Copper Carb	6%
Tin Ox	4 %
Opax	7.6 %

for Blue Oribe w St. Jo

St Johns Green

Custer	55.6
Albany	27.8
Flint	11.1
Zirco	5.6
Bent	2.5%
RIO	1.6%

GLAZES, CONES 9-12, E

Shiny

Dolomite	15.4
Whiiting	5.4
Neph Sy	34.8
EPK	9.4
Flint	35.0

Matt

Dolomite	30.0
Whiting	5.0
Pot Spar	26.0
EPK	33.0
Flint	6.0

Clear Porcelain Liner

Cornwall	45.2
Dolomite	9.6
Colemanite	6.1
Whiting	9.8
EPK	19.7
Flint	9.6

Cushing Matt

Custer	26
Dolomite	31
Whiting	4
OM4	32
Flint	7

Bauer Clear

Cornwall	75
Whiting	18
Colemanite	5
Zinc Ox	2
Bent	3

Malloy Clear

Custer	44.68
Kaolin	13.83
Flint	28.72
Whitng	12.77

VTM Base

Custer	54
Kaolin	25
Whiting	3
Dolomite	18

G.W. 24

Custer	50
Dolomite	25
Ball	20
Kaolin	5

GLAZES, CONES 9-12, BASE GLAZES

Translucent 9

Spodumene	26.9
Hommel 87K	9.7
Wollast	25.1
Bar Carb	7.1
Kaolin	18.7
Flint	12.5

Limestone 10

Custer	49.0
Whiting	14.6
Kaolin	13.0
Flint	23.4
Bent	2.0 %

Reeves Limestone 9-1

Kingman	27.0
Ball	14.0
EPK	7.0
Whiting	20.5
Flint	31.5

Translucent 10

Bari Carb	13.1
Strontium Carbonate	10.4
Whiting	6.5
Pot Spar	28.8
Kaolin	10.0
Flint	31.2

Gloss 9

Bar Carb	22.3
Whiting	7.6
Zinc Ox	6.3
Pot Spar	50.4
Kaolin	4.7
Flint	8.7

Cone 9½ R

Matt 1

Dolomite	31.9
Whiting	28.7
F-4 [illegible]	26.1
Kaolin	26.1
Flint	7.2

Shaner Clear 9-1

Dolomite	5.1
Whiting	16.3
Custer	31.0
Bent	2.9
Kaolin	13.7
Flint	31.0

GLAZES, CONES 9-12, ASH

Wiser Dry Ash

Ash	37
OM4	50
Whiting	13

This Is a good Glaze for

Ash 2332

Ash	20
Custer	30
Kaolin	30
Whiting	20

This Glaze is very simi
Dry Ash and is also goo

Tashiko Ash

Ash	35
Dolomite	40
OM4	25
Bent	2 %
Rutile	5 %

Ash

Maple Ash	35
Pot Spar	35
Kaolin	15
Talc	15

Fly Ash

Bone Ash	15.81
Lepidolite	7.91
F-4	15.81
Talc	7.91
Flint	15.81
Ash	36.75

Duckworth Ash

EPK	42.85 % or 3/4
Ash	57.14

Jenson Ash

Cornwall	60
Ash	30
EPK	10
RIO	5 %

Wiser Cement Ash

Portland Cement	45
Ash	23
Ball	23
Whiting	9

Woo Ash

Washed Ash	12.5
Albany	25.0
Whiting	62.5

Cone 9/10 R

GLAZES, CONES 9-12, BASE WIT

Robins Clear

Zinc Ox	10
Neph Sy	50
Wollast	10
Colemanite	5
Flint	20
Ball	5
Yellow Brown	5% RIO
&	+4% Rutile
Black	8% Black Iron Ox
Light Yellow	2% RIO
Red	2% Copper Oxide
White	15% Zircopax

Karrash Base

Custer	46.25
Whiting	9.96
Zinc Ox	8.98
Bar Carb	23.60
OM4	11.21

2.0 % RIO
0.5 % Cobalt Ca
& +1.0 % Chromium
2.0 % Copper Ox
& +2.0 % Rutile

Porcelain Transparent

Whiting	19.60
Kingman	27.50
EPK	20.00
Flint	32.90

0.65 RIO
0.35 Manganese

Oatmeal Base Satin Matt

Custer	36
Spodumene	14
Whiting	25
Colemanite	5
EPK	20

White 5 % Zircopax
Orange 5 % RIO
& +3 % Rutile
BlueGrey 1 % Black Nicke
1 % Cobalt Carb

GLAZES, CONES 9-12, CEL

V&O's Celadon

Whiting	19.6
Flint	32.9
EPK	20.0
Custer	27.5
Barnard	2.0 %
RIO	1.5 %

Mckinnel Celadon

Flint	32.7
Whiting	19.5
Kingman	27.1
Kaolin	20.7
RIO	2.0 %

Haynes Celadon

F-4	38.9
Whiting	7.9
Bar Carb	14.3
Kaolin	11.2
Flint	27.7
RIO	0.5 - 3.0 %

Choy Blue Celadon

Spar	51.72
Kaolin	4.14
Whiting	6.33
Flint	20.93
Bar Carb	16.88
RIO	2.1 %
Tin Ox	2.7 %

Korean Celadon

Pot Spar	25.0
Whiting	25.0
Kaolin	6.5
Ball	20.0
Flint	20.0
Ochre	2.0
RIO	1.5 (optiona

Glick Celadon

Kingman	63.64
Whiting	9.09
Kaolin	9.09
Flint	9.09
Colemanite	9.09
RIO	1.0-1.5 %

Melloy Celadon

Custer	41.23
Whiting	17.52
Kaolin	13.40
Flint	27.85
RIO	1.0 - 3.0 %

Cone 10

GLAZES, CONES 9-12, ASH

Lorio's Ash

Albany	41.5
Whiting	28.5
EPK	13.5
Wood Ash	12.5
Ochre	4.0

This is a Very Runny Ash.

Torio's Ash

Albany	43.5
Whiting	29.6
EPK	13.9
Ash	13.0
Ochre	4.3 %

Green Ash

Cornwall	32.08
Ash	53.47
Albany	9.63
Bar Carb	4.82
Rutile	1.0 %
Bent	2.0 %

Alfred Ash

Neph Sy	27.3
Ash	27.3
Redart	9.1
Calcined Kaolin	13.6
Dolomite	9.1
Flint	13.6

Oestrich Ash

Albany	60.0
Ash	40.0

Hannah Fake Ash

Redart	60
Whiting	30
Bar Carb	10
Ochre	4 % (optional)

Matt Fake Ash

Albany	59
Whiting	29
Bar Carb	12
Ochre	2 %
Rutile	4 %

GLAZES, CONES 9-12 CELADO

Beths Celadon

Whiting	19.60
Flint	32.90
EPK	20.00
Custer	27.50
Barnard	3.00 %
Bent	2.00 %

Rhodes Cornwall

Cornwall	85.0
Whiting	15.0
RIO	0.5 %

Celadon

Dolomite	6
Whiting	10
Zinc Ox	2
Custer	50
Ball	12
Flint	20

Dry Green

Kawai Celadon

Kingman	61.93 — or Custer
EPK	5.08
Whiting	7.61
Flint	25.38
RIO	1.52- 4.57 %

Crabs Claw Celadon

Whiting	8
Softwood Ash	10
Custer	66
Kaolin	4
Flint	12
Ochre	1.7 %

Motown Celadon (GW-28)

Custer	56.2
Whiting	16.1
Kaolin	7.2
Flint	20.5
RIO	3.0- 8.0 %

Blue Green Celadon

F-4	27.3
Whiting	19.7
Kaolin	20.0
Flint	33.0
RIO	0.5 %

Shullmans Celadon

Cornwall	22
F-4	9
Bar Carb	2
Whiting	18
EPK	17
Flint	32
Bone Ash	2 %
Bent	3 %
RIO	5 %

Cone 9/10R

AZES, CONES 9-12, CELADON

JM4 234

Om4	10
Whiting	20
Flint	30
Custer	40

Rosenthal Leach Celadon

Custer	52.94
Flint	16.37
EPK	12.79
Cornwall	4.09
Whiting	12.79
Zinc Ox	0.51
Spodumene	0.51
Tin Ox	0.26 %
RIO	1.00 %
Bent	3.00 %

Cool Celadon Luan

Custer	72.22
Whiting	14.82
Flint	12.96
RIO	1 %

Kawai Lung Chuan

Custer	78
Whiting	6
Flint	14
RIO	2

Glick Celadon Brilliant w/ 1

F-4	63.6 bubbles
Whiting	4.5
Colemanite	9.1
Flint	13.6
Bone Ash	4.6
Zinc Ox	4.6

GLAZES, CONES 9-12, Saturate I

Grey Saturate Iron

Kingman	78
Whiting	6
Flint	14
RIO	10

GLAZES, CONES 9-12, BLACK

Meloy Black Matt

Custer Spar	62.78
Kaolin	5.81
Whiting	3.49
Dolomite	20.93
Cobalt Ox	2.33
Manganese Dioxide	2.33
Iron Chromate	2.33

Δ 10

Nick Joerling's Penland '99 glazes

Red Shino - cone 10 reduction

neph sy	41
F-4 spar	10
OM4 ball	14
EPK	18
Soda Ash*	17
Red Art	6

*mix in hot water

Alberta Glaze - cone 10 reduction
yellow matt

Alberta	44
whiting	31
EPK	25

0 **Brad Schweiger's Oribe Turquoise** - cone 10 reduction

Custer	28.53
flint	35.09
whiting	17.87
strontium	9.36
talc	3.98
EPK	3.23
bone ash	1.94
copper carb.	6.67
bentonite	2.00

Willem's White - cone 10 reduction

flint	39
custer	34
whiting	23
OM4	16
bentonite	3

Gustin Shino - cone 10 reduction

neph sy	45
spodumene	15.2
OM 4	15
Kona F4	10.8
EPK	10
soda ash	4

Whalt - cone 10 reduction
off white matt

neph sy	61
dolomite	20
zircopax	16
OM 4 ball	4
rutile	1
bentonite	4

Helix - cone 10 reduction
green

neph sy	42
silica	24
whiting	20
EPK	12
bentonite	2

Pete's Apple Celadon - cone 10 reduction

neph sy	33
flint	32
whiting	20
EPK	15
bentonite	3
yellow ochre	3

Hamada Green (brown or yellow) - cone 10

Kona F4	52
barium	21
whiting	8.7
zinc oxide	8
OM 4	1
copper carb	2.6
red iron oxide	2.5
rutile	2
bentonite	3

El Tan - cone 10 reduction

K-200	30
dolomite	30
EPK	25
wood ash	5
bentonite	10

Δ10

Oribe Green

kona f-4 spar	21.6
custer spar	25.9
dolomite	7.4
whiting	11.1
strontium carb.	12.0
ball clay	2.4
flint	19.7
add:	
zircopax	9.0
tin oxide	5.0
copper carb.	7.0

A glossy, emerald green that also works well in soda.

O'Reilly White

kona f-4 spar	3.0
custer spar	52.5
dolomite	8.5
whiting	9.5
kaolin	6.0
zinc oxide	4.0
petalite	3.5
strontium carb.	1.0
flint	12.0
add:	
bentonite	2.0
zircopax	7.0
manganese diox.	2.0

A very nice glossy white with enough depth to avoid the "toilet bowl" look.

Malcolm Davis Shino

red art clay	5.7
soda ash	16.3
ball clay	13.0
kaolin	17.0
kona f-4 spar	9.3
neph sy	38.6

Produces spectacular carbon trapping and orange flash effects. Tends to crawl, which can be controlled by calcining the Red Art and kaolin. Should be aged a week before using to dissolve the soda ash.

Laura's Blue-Black

custer spar	25.0
whiting	40.0
kaolin	25.0
flint	10.0
add:	
copper carb.	3.5
rutile	3.0

apply very thin: turns a bright blue/turquoise with black spots (crystals). Runs a lot if applied too thick.

Laura's Variation 1

kona f-4 spar	11.6
dolomite	5.8
whiting	42.6
t-6 kaolin	40.0
add:	
copper carb.	9.0

apply like Laura's Blue-Black

Cathy Brosky Gold

neph sy	60.0
calcined red art	30.0
gerstley borate	10.0

apply thick and fire to a full cone 10. Nice trailed over other glazes. A glossy, almost mirror gold there thick, cafe au lait where thin over porcelain or white slip.

Pete's Cranberry

custer spar	73.8
gerstley borate	10.2
whiting	11.1
flint	4.9
add:	
copper carb.	0.3
tin oxide	1.0

flocculate with muriatic acid or Epsom salts.

The most dependable copper red I've used. Goes a bit flambe when applied very thick or over reduced. Runs less than most copper reds.

Δ10

Silvie Granatelli's Penland 1999 glazes

Stains: Cone 9 neutral
1/3 3110 frit
1/3 EPK
1/3 Mason stain
i.e. #6600 black, #6121 saturn orange
6242 green, #36440 yellow, # 6121 hazelnut

Tile 6 flashing slip

tile 6	90
neph sy	10

defloculate with soda ash

Silvie's Clear - cone 9 neutral or reduction

Kona F4	40.7
flint	29
colemanite	12.75
whiting	8.5
barium	4.25
Grolleg	2.6
3110 frit	2
tin ox.	.85
zinc ox.	.5

Oestreich Oribe - cone 9 neutral

flint	39
custer	34
whiting	23
OM 4	16
copper carb.	9

Strontium Base - cone 9

kona F4	60
strontium	20
Grolleg	10
flint	9
lithium	1
gerstley borate	5
titanium	5
bentonite	2

yellow - vanadium yellow
tan - red iron oxide, rutile
tan/blue - yellow ochre

Leslie's Celadon - cone 9

flint	33.6
custer	27.8
EPK	20.35
whiting	20
red iron oxide	1

Black - cone 9-10

Alberta slip	75
neph sy.	17
black cobalt ox.	5
bentonite	2

Some Bright Green - cone 8-10

G200	45
strontium	25
OM 4	13
zinc ox.	10
whiting	7
copper carb.	5
red iron oxide	1.25
rutile	1

Marks Temoku - cone 10

custer	45
flint	27
whiting	17
EPK	11
red iron oxide	10
bentonite	1

Robs Green #2 - cone 10

cornwall stone	75
whiting	18
strontium	7.5
gerstley borate	5
copper carb.	10
bentonite	2

Half Bucket/Grams

UT Green Celedon

C 10

Color Green | **Surface** Gloss | Reduction | Tested

Ingredient	Amount	Batch gm
Custer Feldspar	27.00	1080
Whiting	20.00	800
EPK	20.00	800
Flint	33.00	1320
Totals	100.00	4000

Also Add:

Red Iron Oxide	2.00	80

Comments | **Unity Formula**

RO	R_2O_3	RO_2
0.122 K_2O	0.484 Al_2O_3	4.126 SiO_2
0.053 Na_2O	B_2O_3	0.004 TiO_2
0.821 CaO	0.004 Fe_2O_3	ZrO_2
0.004 MgO	P_2O_5	SnO_2
Li_2O	Sb_2O_3	MnO_2
BaO	Cr_2O_3	F
PbO	Y_2O_5	8.5:1 Si:Al
ZnO		
CuO		
CoO		
NiO		
SrO		

Glaze type:

Estimated Thermal Expansion: 68.13 $\times 10^{-7}$/°C

Date: 12/19/94

Batch Cost $1.02

Half Bucket/Grams

UT Barton Carbon Trap

C 10

Color Grey/Brown | **Surface** Gloss | Reduction | Tested

Ingredient	Amount	Batch gm
Kona F-4 Feldspar	20.00	800
Nepheline Syenite	50.00	2000
Flint	5.00	200
EPK	15.00	600
SodaAsh	10.00	400
Totals	100.00	4000

Also Add:

Comments | **Unity Formula**

RO	R_2O_3	RO_2
0.143 K_2O	0.848 Al_2O_3	3.811 SiO_2
0.795 Na_2O	B_2O_3	0.004 TiO_2
0.053 CaO	Fe_2O_3	ZrO_2
0.008 MgO	P_2O_5	SnO_2
Li_2O	Sb_2O_3	MnO_2
BaO	Cr_2O_3	F
PbO	Y_2O_5	4.5:1 Si:Al
ZnO		
CuO		
CoO		
NiO		
SrO		

Glaze type:

Estimated Thermal Expansion: 99.31 $\times 10^{-7}$/°C

Date:

Batch Cost $1.36

COMMENTS:DissolveSodaAshinhotwaterandtheraddtowetglazebatch

Half Bucket/Grams

UT St. Johns' Black

C 10

Color: Black | Surface: SatinMatt | Reduction | Tested

Ingredient	Amount	Batch gm
Albany Slip Clay	72.00	2880
Nepheline Syenite	11.00	440
Talc	17.00	680
Totals	100.00	4000

Comments

Unity Formula

RO	R_2O_3	RO_2
0.096 K_2O	0.408 Al_2O_3	3.121 SiO_2
0.083 Na_2O	B_2O_3	0.022 TiO_2
0.239 CaO	0.073 Fe_2O_3	ZrO_2
0.583 MgO	P_2O_5	SnO_2
Li_2O	Sb_2O_3	MnO_2
BaO	Cr_2O_3	F
PbO	Y_2O_5	7.6:1 Si:Al
ZnO		
CuO		
CoO		
NiO		
SrO		

Glaze type:

Also Add:

Chrome Oxide	1.00	40
Manganese Dioxide Powdered	2.00	80
Cobalt Carbonate	2.00	80

Estimated Thermal Expansion: 75.30 X10^{-7}/°C

Date: 12/19/94

Batch Cost: $12.70+Unknown

Half Bucket/Grams

UT Molly's Blue

C 10

Color: BeautifulBrown/Blue | Surface: SoftGloss | Reduction | Tested

Ingredient	Amount	Batch gm
Custer Feldspar	45.00	1800
Cornwall Stone	22.00	880
Whiting	20.00	800
EPK	13.00	520
Totals	100.00	4000

Comments

Unity Formula

RO	R_2O_3	RO_2
0.190 K_2O	0.513 Al_2O_3	2.902 SiO_2
0.118 Na_2O	B_2O_3	0.003 TiO_2
0.690 CaO	Fe_2O_3	ZrO_2
0.003 MgO	0.003 P_2O_5	SnO_2
Li_2O	Sb_2O_3	MnO_2
BaO	Cr_2O_3	F
PbO	Y_2O_5	5.7:1 Si:Al
ZnO		
CuO		
CoO		
NiO		
SrO		

Glaze type:

Also Add:

Cobalt Carbonate	1.00	40
Red Iron Oxide	1.00	40
Bentonite	2.00	80

Estimated Thermal Expansion: 83.51 X10^{-7}/°C

Date: 12/19/94

Batch Cost: $3.56

Half Bucket/Grams

UT Shamo White

C 9-10

Color White | **Surface** gloss | Reduction | Tested

Ingredient	Amount	Batch gm
Calcined Kaolin	7.00	280
Custer Feldspar	25.00	1000
Kona F-4 Feldspar	25.00	1000
Whiting	12.00	480
Bone Ash	3.00	120
Dolomite	10.00	400
Talc	2.00	80
EPK	16.00	640
Totals	100.00	4000

Also Add:

Superpax	10	400
Bentonite	2	80

Comments | **Unity Formula**

RO	R_2O_3	RO_2
0.113 K_2O	0.494 Al_2O_3	2.141 SiO_2
0.105 Na_2O	B_2O_3	0.006 TiO_2
0.586 CaO	0.003 Fe_2O_3	ZrO_2
0.196 MgO	0.028 P_2O_5	SnO_2
Li_2O	Sb_2O_3	MnO_2
BaO	Cr_2O_3	F
PbO	Y_2O_5	4.3:1 Si:Al
ZnO		
CuO		
CoO		
NiO		
SrO		

Glaze type:

Estimated Thermal Expansion: 83.14 X10^{-7}/°C

Date:

Batch Cost $2.91

Half Bucket/Grams

UT Temmoku

C 10

Color Brown/Black | **Surface** softgloss | Reduction | Tested

Ingredient	Amount	Batch gm
Custer Feldspar	48.00	1920
Whiting	13.00	520
EPK	12.00	480
Flint	27.00	1080
Totals	100.00	4000

Also Add:

Red Iron Oxide	8	320

Comments | **Unity Formula**

RO	R_2O_3	RO_2
0.249 K_2O	0.598 Al_2O_3	5.239 SiO_2
0.110 Na_2O	B_2O_3	0.005 TiO_2
0.641 CaO	Fe_2O_3	ZrO_2
MgO	P_2O_5	SnO_2
Li_2O	Sb_2O_3	MnO_2
BaO	Cr_2O_3	F
PbO	Y_2O_5	8.8:1 Si:Al
ZnO		
CuO		
CoO		
NiO		
SrO		

Glaze type:

Estimated Thermal Expansion: 70.58 X10^{-7}/°C

Date:

Batch Cost $2.68

Half Bucket/Grams

UT Werds' Shino

C 10

Color Shino | **Surface** Gloss | Reduction | Tested

Ingredient	Amount	Batch gm
Kona F-4 Feldspar	15.00	600
Spodumene	12.00	480
EPK	3.00	120
Nepheline Syenite	50.00	2000
OM-4 Ball Clay	17.00	680
Soda Ash	3.00	120
Totals	100.00	4000

Also Add:

Bentonite	4.00	160

Comments | **Unity Formula**

RO	R_2O_3	RO_2
0.174 K_2O	1.149 Al_2O_3	4.871 SiO_2
0.617 Na_2O	B_2O_3	0.015 TiO_2
0.060 CaO	0.010 Fe_2O_3	ZrO_2
0.015 MgO	P_2O_5	SnO_2
0.134 Li_2O	Sb_2O_3	MnO_2
BaO	Cr_2O_3	F
PbO	Y_2O_5	4.2:1 Si:Al
ZnO		
CuO		
CoO		
NiO		
SrO		

Glaze type:

Estimated Thermal Expansion: 85.43 $\times 10^{-7}$/°C

Date: 12/19/94

Batch Cost $1.49

Half Bucket/Grams

UT Reeves Green

C 9-10

Color Green | **Surface** Gloss | Reduction | Tested

Ingredient	Amount	Batch gm
Custer Feldspar	75.00	3000
Whiting	15.00	600
Flint	5.00	200
EPK Kaolin	5.00	200
Totals	100.00	4000

Also Add:

Chrome Oxide	4.00	160
Bentonite	3.00	120

Comments | **Unity Formula**

RO	R_2O_3	RO_2
0.295 K_2O	0.531 Al_2O_3	3.631 SiO_2
0.137 Na_2O	B_2O_3	TiO_2
0.568 CaO	0.004 Fe_2O_3	ZrO_2
MgO	P_2O_5	SnO_2
Li_2O	Sb_2O_3	MnO_2
BaO	Cr_2O_3	F
PbO	Y_2O_5	6.8:1 Si:Al
ZnO		
CuO		
CoO		
NiO		
SrO		

Glaze type:

Estimated Thermal Expansion: 84.72 $\times 10^{-7}$/°C

Date:

Batch Cost $3.12

Half Bucket/Grams

UT BINN'S CLEAR

C 10

Color clear | **Surface** shiny | Reduction | Untested

Ingredient	Amount	Batch gm
Whiting	21.00	840
EPK	21.00	840
Silica	33.00	1320
Potash Feldspar	25.00	1000
Totals	100.00	4000

Comments | Unity Formula

RO	R_2O_3	RO_2
0.111 K_2O	0.478 Al_2O_3	3.945 SiO_2
0.047 Na_2O	B_2O_3	0.004 TiO_2
0.838 CaO	0.004 Fe_2O_3	ZrO_2
0.004 MgO	P_2O_5	SnO_2
Li_2O	Sb_2O_3	MnO_2
BaO	Cr_2O_3	F
PbO	Y_2O_5	8.3:1 Si:Al
ZnO		
CuO		
CoO		
NiO		
SrO		

Glaze type:
Ca MidRoad

Also Add:

Estimated Thermal Expansion: 68.23 X10^{-7}/°C

Date:

COMMENTS:Cloudyifthick.

Batch Cost $0.96

Half Bucket/Grams

UT YBY

C 10

Color Straw Yellow | **Surface** SoftGloss | Reduction | Tested

Ingredient	Amount	Batch gm
Custer Feldspar	45.00	1800
Dolomite	24.00	960
Whiting	4.00	160
Georgia Kaolin	27.00	1080
Totals	100.00	4000

Comments | Unity Formula

RO	R_2O_3	RO_2
0.128 K_2O	0.476 Al_2O_3	1.930 SiO_2
0.059 Na_2O	B_2O_3	0.013 TiO_2
0.463 CaO	0.003 Fe_2O_3	ZrO_2
0.350 MgO	P_2O_5	SnO_2
Li_2O	Sb_2O_3	MnO_2
BaO	Cr_2O_3	F
PbO	Y_2O_5	4.1:1 Si:Al
ZnO		
CuO		
CoO		
NiO		
SrO		

Glaze type:

Also Add:

Rutile	4.00	160
Bentonite	2.00	80

Estimated Thermal Expansion: 78.12 X10^{-7}/°C

Date: 12/19/94

Batch Cost $1.67

Half Bucket/Grams

UT Randy's Green

C 9-10

Color Green | **Surface** gloss | Reduction | Tested

Ingredient	Amount	Batch gm
Flint	18.00	720
OM-4 Ball Clay	11.00	440
Whiting	10.00	400
Dolomite	7.00	280
Strontium Carbonate	9.00	360
Custer Feldspar	24.00	960
Kona F-4	21.00	840
Totals	100.00	4000

Also Add:

Superpax	7.00	280
Tin Oxide	4.00	160
Copper Carbonate	6.00	240
Bentonite	2.00	80

Comments | **Unity Formula**

RO	R_2O_3	RO_2
0.119 K_2O	0.345 Al_2O_3	2.862 SiO_2
0.110 Na_2O	B_2O_3	0.006 TiO_2
0.458 CaO	0.003 Fe_2O_3	ZrO_2
0.122 MgO	P_2O_5	SnO_2
Li_2O	Sb_2O_3	MnO_2
BaO	Cr_2O_3	F
PbO	Y_2O_5	8.3:1 Si:Al
ZnO		
CuO		
CoO		
NiO		
0.191 SrO		

Glaze type:

Estimated Thermal Expansion: 79.02 x10^{-7}/°C

Date:

Batch Cost $6.57+Unknown

Half Bucket/Grams

UT Reitz Purple

C 10

Color Purple | **Surface** gloss | Reduction | Tested

Ingredient	Amount	Batch gm
EPK	25.00	1000
Whiting	5.00	200
Dolomite	20.00	800
Cornwall Stone	50.00	2000
Totals	100.00	4000

Also Add:

Cobalt Carbonate	0.50	20

Comments | **Unity Formula**

RO	R_2O_3	RO_2
0.061 K_2O	0.483 Al_2O_3	2.346 SiO_2
0.096 Na_2O	B_2O_3	0.003 TiO_2
0.520 CaO	0.003 Fe_2O_3	ZrO_2
0.323 MgO	0.006 P_2O_5	SnO_2
Li_2O	Sb_2O_3	MnO_2
BaO	Cr_2O_3	F
PbO	Y_2O_5	4.9:1 Si:Al
ZnO		
CuO		
CoO		
NiO		
SrO		

Glaze type:

Estimated Thermal Expansion: 71.66 x10^{-7}/°C

Date:

Batch Cost $5.24

Half Bucket/Grams

UT Ohata Khaki

C 10

Color: SaturatedIronRed | Surface: gloss | Reduction | Tested

Ingredient	Amount	Batch gm
Custer Feldspar	49.00	1960
Whiting	7.00	280
Talc	6.00	240
EPK	6.00	240
Bone Ash	10.00	400
Flint	22.00	880
Totals	100.00	4000

Also Add:

Red Iron Oxide	10.00	400

Comments | Unity Formula

RO	R_2O_3	RO_2
0.177 K_2O	0.354 Al_2O_3	3.537 SiO_2
0.082 Na_2O	B_2O_3	TiO_2
0.578 CaO	Fe_2O_3	ZrO_2
0.163 MgO	0.109 P_2O_5	SnO_2
Li_2O	Sb_2O_3	MnO_2
BaO	Cr_2O_3	F
PbO	Y_2O_5	10.0:1 Si:Al
ZnO		
CuO		
CoO		
NiO		
SrO		

Glaze type:

Estimated Thermal Expansion: 79.12 X10^{-7}/°C

Date: 12/19/94

Batch Cost: $2.08

Half Bucket/Grams

UT Dick Evans Copper Red

C 9-10

Color: red | Surface: gloss | Reduction | Tested

Ingredient	Amount	Batch gm
Custer Feldspar	78.00	3120
Gerstley Borate	11.00	440
Whiting	11.00	440
Totals	100.00	4000

Also Add:

Tin Oxide	1.00	40
Copper Carbonate	0.30	12

Comments | Unity Formula

RO	R_2O_3	RO_2
0.290 K_2O	0.458 Al_2O_3	3.252 SiO_2
0.164 Na_2O	0.161 B_2O_3	TiO_2
0.545 CaO	0.003 Fe_2O_3	ZrO_2
MgO	P_2O_5	SnO_2
Li_2O	Sb_2O_3	MnO_2
BaO	Cr_2O_3	F
PbO	Y_2O_5	7.1:1 Si:Al
ZnO		
CuO		
CoO		
NiO		
SrO		

Glaze type:

Estimated Thermal Expansion: 87.51 X10^{-7}/°C

Date:

Batch Cost: $2.76

Half Bucket/Grams

UT 1234 Celedon Blue

C 10

Color: blue | Surface: gloss | Reduction | Tested

Ingredient	Amount	Batch gm
EPK	10.00	400
Whiting	20.00	800
Flint	30.00	1200
Custer Feldspar	40.00	1600
Totals	100.00	4000

Comments | Unity Formula

RO	R_2O_3	RO_2
0.162 K_2O	0.392 Al_2O_3	3.917 SiO_2
0.075 Na_2O	B_2O_3	TiO_2
0.762 CaO	Fe_2O_3	ZrO_2
MgO	P_2O_5	SnO_2
Li_2O	Sb_2O_3	MnO_2
BaO	Cr_2O_3	F
PbO	Y_2O_5	10.0:1 Si:Al
ZnO		
CuO		
CoO		
NiO		
SrO		

Glaze type:

Also Add:

Cobalt Carbonate	0.22	9
Red Iron Oxide	1.00	40
Bentonite	2.00	80

Estimated Thermal Expansion: 72.22 X10^{-7}/°C

Date:

Batch Cost $2.02

Half Bucket/Grams

UT Elk White

C 10

Color: White | Surface: Gloss | Reduction | Tested

Ingredient	Amount	Batch gm
Custer Feldspar	60.00	2400
Gerstley Borate	10.00	400
Dolomite	10.00	400
OM-4 Ball Clay	15.00	600
Flint	5.00	200
Totals	100.00	4000

Comments | Unity Formula

RO	R_2O_3	RO_2
0.258 K_2O	0.555 Al_2O_3	3.676 SiO_2
0.148 Na_2O	0.164 B_2O_3	0.008 TiO_2
0.379 CaO	0.008 Fe_2O_3	ZrO_2
0.215 MgO	P_2O_5	SnO_2
Li_2O	Sb_2O_3	MnO_2
BaO	Cr_2O_3	F
PbO	Y_2O_5	6.6:1 Si:Al
ZnO		
CuO		
CoO		
NiO		
SrO		

Glaze type:

Also Add:

Superpax	10.00	400

Estimated Thermal Expansion: 77.95 X10^{-7}/°C

Date: 12/19/94

Batch Cost $2.12

Δ10

LINDA SIKORA & MATTHEW METZ

Cone 9 - 10:

Black

Alberta Slip Clay	75
Nepheline Syenite	17
Black Cobalt Oxide	5
Bentonite	2

Tom's Green

Cornwall Stone	75
Whiting	28
Gerstley Borate	5
Flint	16
OM4 Ball	10
Dolomite	6
Zircopax	8
Barium Carb.	23
Custer	21
Kona F-4	18
Copper Carb	16
Vee Gum	1

Amber Celadon

Alberta Slip Clay	33
Wollastonite	13
EPK	3
Colemanite	3
Whiting	7
Flint	13
Custer Spar	20
Yellow Ochre	7

Terra Sig

Grolleg 4000g
H2O - Distilled 28 cups
Calgon 40g
(We will mix this in clas
if you can just have these
ingredients on hand)
Mason Black 6600

Iron Crackle

Barium Carb.	16
Whiting	7
Custer Spar	50
EPK	4
Flint	24
Red Iron Oxide	2.8

Pink Slip

EPK	25
Tile 6	25
Grolleg	15
Neph Sy	20
Flint	15
Mason 6020	8
Bentonite	3

Woo Yellow

Kona F - 4 Spar	33
Barium Carb.	25
Dolomite	12
EPK	7
Flint	7
Zircopax	15
Red Iron Oxide	3

Blue Ash

Alberta Slip Clay	50
Whiting	34
EPK	16
Wood Ash(Hard)	15
Cobalt Carbonate	0.5

Nickle Purple

Barium Carb.	400	800 ✓
Custer Spar	390	780 ✓
Zinc Oxide	150	300 ✓
EPK	50	100 ✓
Flint	50	100 ✓
Nickle Oxide	1.5	3.0 ✓
Bentonite + mix 2.0		40

Glick Blue

Custer Spar	54
Whiting	13
Strontium Carb.	2.5
Grolleg	6
Flint	22.5
Zinc Oxide	2.5
Bentonite	1.5
Rutile	1.0
Red Iron Oxide	2
Cobalt Carbonate	5

Some Bright Green

Custer	45
Whiting	7
OM4 Ball	13
Strontium Carb.	25
Zinc	10
Rutile	2
Red Iron Ox.	2.5
Copper Carb.	5

Rosies White Crackle

Custer Spar	58.5
Flint	12
EPK	10
Cornwall Stone	8
Whiting	10
Spolumene	1
Tin Oxide	0.5
Vee Gum	2

Yellow Wash

Grolleg	70
Neph Sy	30
Mason 6464	20

1/2 full hot water
Bucket 3000 grams
Jar 2000 50 dep
50 2 1050
1,350 x2
30

Δ10

RICK HAYNES SATIN WHITE

Whiting	8
Flint	30
Neph Syenite	45
Talc	7
Dolomite	10
Zircopax	6
Bentonite	2

GULDEN AMBER CELADON

Custer spar	30
Whiting	25
Flint	25
Ball clay	10
Gerstley borate	3
Yellow iron oxide	7
Bentonite	2

YELLOW SALT

Neph Syenite	63.9
Dolomite	21.1
Zircopax	16
Ball Clay	4.3
Bentonite	4
Red Iron Oxide	1

VAL'S SEVRES BLUE

Custer spar	53
EPK	6
Flint	24
Whiting	12
Barium carbonate	2.5
Zinc oxide	2.5
Cobalt Carbonate	3

OXIDATION CELADON

Barium carbonate	6.1
Dolomite	3
Lithium	2
Whiting	13.1
Custer spar	21.2
Petalite	21.2
EPK	15.2
Flint	18.2
Bentonite	2
Rutile	4
Copper carb	2

ANDY MARTIN PURPLE

Barium Carbonate	23
Gerstley borate	3.8
Strontium carbonate	13
Wollastonite	3.2
Neph syenite	27
Ball clay	9.5
Flint	20.5
Bentonite	1
Cobalt carb	.25
Manganese carb	1.5

LUCAS CHOCOLATE SATIN

Custer spar	10
Whiting	25
Ball clay	25
Red iron oxide	15
Flint	25

COPPER SALT

Neph syenite	63.9
Dolomite	21.1
Zircopax	16
Ball clay	4.3
Bentonite	4
Copper carb	4

ST. JOHN'S BLACK

Alberta slip	85
Neph syenite	15
Cobalt oxide	5

ALL 9/10 OX or VERY Light R
FIRED AT ~A

Josh DeWeese

Favorite Recipes

CLAY

Stoneware Cone 9-10

AP Green	30
Gold Art	30
Ball Clay	15
T-6 Kaolin	20
Pot Spar	10
Fine Grog	8
Medium Grog	8

Helmar

Helmar	50
Custer	25
Flint	15
Ball	10

Yellow Banks Stoneware

Yllw Bnks 401	50
Yllw Bnks 101	25
APGreen Fireclay	75
C&C Ball	50
Custer	25

SLIP

Stick to Anything White Slip

EPK	500
Ball Clay	500
Flint	500
Cornwall	250
Neph Sy	250
Opax	50
Frit 3195	50

Black Slip

Alberta Slip	800
Ball Clay	300
Chrome	100
Cobalt Carb	50
RIO	50

Shaner Helmar Slip

Helmar	51
Custer	19
Flint	20
Zircopax	5
Borax	2.5
Soda Ash	2.5

Tile 6 Slip

6-Tile	14
Grolleg	3
Silica	1
Neph Sy	2
Bentonite	.25

Grolleg/Avery Slip

Grolleg Kaolin	100
Avery or Helmar	30
Neph Sy	15
Bentonite	3

Manganese Slip

Manganese Dioxide	100
Copper Carbonate	75
EPK	50
Ball	25

Oestreich White Slip

EPK	40
Ball	30
Custer	15
Flint	15

Redart Wash

Apply thin to medium coat on bisque also nice thicker as a glaze

Redart	70
Whiting	30

GLAZE

cone 9-10

Archie Bray Shino

F-4 Feldspar	18.4
Spodumene	15.2
Soda Ash	4
Neph Sy	45
Ball	16.4

1234 Celadon

EPK	10
Whiting	20
Flint	30
Custer Feldspar	40
Yellow Ochre	2

St. John's Black

Alberta Slip	85
Neph Sy	17
Cobalt Oxide	5

Val's Satin Matte

Cornwall	46
Whiting	34
EPK	20
(blue-black)	
Copper Carb	4
Tin Oxide	4
(yellow)	
Yellow Ochre	10
(white)	
Tin Oxide	6
(blue-pink)	
Cobalt carb	.25
Chrome ox	.125
Titanium ox	6

Porcelain Shino

Spodumene	30
EPK	5
Soda Ash	8
Neph Sy	39
Ball	17

Reitz Satin Matte Blue

Custer Feldspar	45
Whiting	20
EPK	13
Cornwall	22
Rutile	2
RIO	2
Cobalt Carb	.5

Oxidation Celadon

Barium	6.1
Dolomite	3
Lithium	2
Whiting	13.1
Custer	21.2
Petalite	21.2
EPK	15.2
Flint	18.2
(green-yellow)	
RIO	2
(green)	
Rutile	4
Copper	2
(purple-blue)	
Copper	1
Cobalt	.125

Marks Tenmoku

Custer Spar	45
Whiting	17
EPK	11
Flint	27
RIO	10%
Bentonite	2%

Ipanema Green

K-200 spar	47
Whiting	23
Dolomite	14
Bone Ash	3.5
Silica	11
RIO	.5
Copper Carb	5
Bentonite	2

Linda's Yellow

Dolomite	3.12
Whiting	10.08
Custer	19.2
EPK	8.46
Flint	19.14
Mason 6464	3.6

Shino Glaze

Kona F-4	14.58
Spodumene	12.50
EPK	2.91
Soda Ash	3.33
Neph Sy	50.00
Ball	16.66
Bentonite	2%

Nuka (White)

Custer	37.5 lbs
EPK	2.5 lbs
Ash	4.0 lbs
Flint	2.0 lbs
Neph Sy	5.0 lbs
Tin Oxide	.5 lbs

Rick Haynes Satin White

Whiting	8
Flint	30
Neph Sy	45
Talc	7
Dolomite	10
Bentonite	2
Epson Salts	1 cup/10,000 gr.

Apple-Green Celadon

Neph Sy	19.2
Flint	20.4
Whiting	10.8
EPK	9
RIO	1.8
Zircopax	1.8
Bentonite	2

Rocky Flats Pottery
Patrick Houston
Wood & Salt Fired Stonewares
550 Rocky Flats Road • Cosby, Tennessee 37722
(865) 217-2839 • email: rockyflatspotter@aol.com

Cone 10 Reduction Glazes Gas, Wood & Salt

Malcolm's Shino

Nepheline Syenite	2254
Soda Spar	544
OM4	760
EPK	500
Soda Ash	950
Red Art	300
	5,308g.

Bauer Orange Slip

EPK	42
OM4	42
Superpax	10.5
Borax	5.5
	100%

White Crackle Slip

Nepheline Syenite	1150
EPK	2500
Flint	450
OM4	200
Bentonite	700
	5,000 g.

Rutile Slip

Soda Spar	40
Tile 6	40
Borax	10
Lithium Carbonate	10
	100%
Rutile	10%

P. V. Liner Glaze

Colemanite	50
Plastic Vitrox	50
Superpax	10

Black Magic Temmoku

Whiting	620
Custer Feldspar	2935
Foundry Hill Creme	360
Flint	1085
	5000g.
Tin Oxide	50
Red Iron Oxide	385

Lerio's Ash

Albany Slip Clay	2076
Whiting	1426
EPK	676
Wood Ash	626
Yellow Ochre	200
	5004g.

Neely Shino

Soda Ash	350
F-4 Soda Spar	1500
OM4	1250
Grolleg Kaolin	250
Nepheline Syenite	400
Spodumene	1250
	5000g.

Avery Slip

Avery Kaolin	4000
Nepheline Syenite	1000
Bentonite	125
	5125g.

Korean Celadon

Custer Feldspar	1300
Whiting	1300
EPK	350
OM4	1000
Flint	1050
Bentonite	50
Yellow Ocher	50
	5100g.

Frazier Celadon

G-200	1700
Wollastonite	1350
Flint	1050
Grolleg Kaolin	750
Talc	150
Red Iron Oxide	25
	5020g.

Seacrest Celadon

Custer Feldspar	2700
Whiting	600
Grolleg Kaolin	350
Barium Carbonate	100
Zinc Oxide	300
Flint	1200
Tin Oxide	50
Red Iron Oxide	50
	5350g.

PATRICK HOUSTON

Cone Ten Reduction Glaze Formulas Page Two

Torbjorn Glaze

Manganese Dioxide	50
Copper Oxide	30
Kaolin	20
Ball Clay	10

Tea Dust Black

Custer Feldspar	430
Whiting	170
OM4	130
Red Iron Oxide	100
Talc	80
Flint	270
	1180g.

Passion Purple

Flint	1250
Whiting	1000
EPK	750
Nepheline Syenite	1750
Colemanite	250
	5000g.
Cobalt Carbonate	.25%
Copper Carbonate	.5%

Staley's Red to Green

Potash Spar	50
Whiting	15
EPK	13
Dolomite	2
Flint	20
	100%
Copper Carbonate	8%
Red Iron Oxide	1%
Bentonite	2%

Jen's Celadon

F-4 Soda Spar	25
Grolleg Kaolin	25
Whiting	25
Flint	25
Spanish Red Iron Ox.	1%

Shaner Yellow

Superpax	23
Custer Feldspar	49
Whiting	20
Talc	8
	100%
Red Iron Oxide	4%
Bone Ash	4%

V. C. Black

Nepheline Syenite	500
Alberta Slip Clay	3250
Barium Carbonate	500
Talc	750
	5000g.
Chrome Oxide	4%
Manganese Oxide	2%
Cobalt Oxide	2%

Willie Helix

Nepheline Syenite	42
Flint	24
Whiting	20
EPK	12
Bentonite	2
	100%
Copper Carbonate	5%

Rob's Green

Cornwall Stone	63.5
Whiting	15.2
Gerstley Borate	4.3
Bentonite	2.0
Copper Carbonate	8.5

C. P. (Clear Porcelain)

Flint	32
Whiting	20
Custer Feldspar	33
EPK	15
	100%

Shaner Butter

Flint	1350
Custer Feldspar	1800
EPK	250
Whiting	400
Gerstley Borate	650
Zinc Oxide	250
Talc	300
	5000g.
Superpax	12%
Rutile	4.6%

Shige Black

F-4 Spar	67
Dolomite	5
Whiting	6
EPK	5
Flint	17
	100%
Red Iron Oxide	6%
Cobalt Carbonate	4%

PATRICK HOUSTON

Cone Ten Reduction Glaze Formulas Page Three

Amber Celadon

Alberta Slip	33
Wollastonite	13
Custer Feldspar	20
Gerstley Borate	3
Whiting	7
EPK	3
Flint	14
Yellow Ochre	7
	100%
Bentonite	6%

Sweet Green Celadon

EPK	10
Whiting	18
Flint	27
Custer Feldspar	24
K-200	21
	100%
Red Iron Oxide	1.4%
Chrome Stain	.12%

Limestone Celadon

Custer Feldspar	49
Whiting	15
Grolleg Kaolin	13
Flint	23
	100%
Red Iron Oxide	1%
Macoloyde	3%

Red Shino

Nepheline Syenite	41
F-4 Spar	10
OM4	14
EPK	18
Soda Ash	17
	100%
Red Art	6%

Gustin Shino

Nepheline Syenite	45
F-4 Spar	10.8
Spodumene	15.2
OM4	15
EPK	10
Soda Ash	4
	100%
Bentonite	2%

K. C. Shino Carbon Trap

F-4 Spar	9.5
OM4	18.5
Nepheline Syenite	50.5
Spodumene	17
Soda Ash	4.5
	100%

A10

METALLIC		
MnO2	81.8	0.7865
CuCO3	9.1	0.0875
Kaolin	9.1	0.0875
Seme Binde	2	0.0192
Bentonite	2	0.0192
	104	0.9999

OVERSPRAY		
CuCO3	30	0.3
MnO2	40	0.4
Ball	10	0.1
Kaolin	20	0.2
	100	1

TENMOKU 1994		
Custer	42	0.3471
Flint	27	0.2231
OM 4	17	0.1404
Whiting	18	0.1487
Iron	10	0.0826
Rutile	2	0.0165
Strontium	5	0.0413
	121	0.9997

TEMMOKU GLAZE Cone 10, Reduction.		
Whiting	1.8	0.18
Custer Feldspar	4.4	0.44
Edgar Plastic Kaolin	1	0.1
Flint	2.8	0.28
	10	1

JOKON SYNTHETIC		
EPK	13	0.1274
BaCO3	30	0.2941
Flint	14	0.1372
Custer	12	0.1176
Whiting	21	0.2058
MgCO3	4	0.0392
Bone Ash	3	0.0294
Soda Ash	2	0.0196
CuCO3	3	0.0294
	102	0.9997

<--- RECIPE WITHOUT SOLUBLES		
BaCO3	30	0.326
Flint	14	0.1521
Custer	12	0.1304
Whiting	21	0.2282
MgCO3	4	0.0434
Bone Ash	3	0.0326
Neoh Sy	5	0.0543
CuCO3	3	0.0326
	92	0.9996

JOKON		
EPK	10	0.0961
Ash (mixed Mulberry	55	0.5288
BaCO3	30	0.2884
Flint	5	0.048
CuCO3	4	0.0384
	104	0.9997

OCHRE FAKE		
Alb	60	0.5714
White	30	0.2857
Brium	10	0.0952
Ochre	5	0.0476
	105	0.9999

HANK'S ADUSTED CUSHING
Med-Thin.

Spar	30	0.2479
Dolo	35	0.2892
Whiting	5	0.0413
EPK	38	0.314
Flint	8	0.0661
Cole	5	0.0413
	121	0.9998

HANK'S ADUSTED CUSHING
NICE BROWN (+ 2% MnO2)

Spar	30	0.243
Dolo	35	0.2835
Whiting	5	0.0405
EPK	38	0.3078
Flint	8	0.0648
Cole	5	0.0405
MnO2	2.42	0.0196
	123.42	0.9997

OATMEAL/DENVER SPECKLE
Cone 10.
A stony white semi-gloss glaze, looks good thick or thin, responds well to both iron and cobalt oxide colorants. Mixes well with other glazes and doesn't tend to run. Quite consistent.

K Feldspar	5	0.4995
Dolo	2.5	0.2497
Ky Ball Clay	2	0.1998
Kaolin	0.5	0.0499
Bent	0.01	0.0009
	10.01	0.9998

SG 12 WITH RUTILE
Cone 10.
Ranges from cold grey mottled to pale blue grey. Gets pale blue when thick. Good response with both cobalt and iron colorants. Mixes well with other glazes.

K Feldspar	4.4	0.4356
Kaolin	2.3	0.2277
Dolo	2.3	0.2277
Whiting	0.5	0.0495
Bent	0.1	0.0099
Rutile	0.5	0.0495
	10.1	0.9999

Δ10

JOE'S BLACK

Ugly slick opaque brown at cone 9. Much better at cone 10. NOT matt. Cloudy blue purple where thick. Responds fantastically to straight iron wash over , but tends to crawl with iron wash over (localized crawling).

Blue matt cone 8-9.

Custer Spar	46.8	0.2465
F4 Spar	45.5	0.2397
Zn Oxide	56.2	0.2961
Whiting	7.9	0.0416
Flint	26.3	0.1385
Rutile	7.1	0.0374
	189.8	0.9998

CUSHING BLACK		
Alberta	6500	0.619
Neph Sy	1000	0.0952
BaCO3	1000	0.0952
Talc	1500	0.1428
Chrome	100	0.0095
CaCO3	200	0.019
MgO2	200	0.019
	10500	0.9997

TOSHIKO'S BLACK		
Whiting	20	0.146
Kona F4	40	0.2921
Corn Stone	20	0.146
EPK	20	0.146
Add Zn Ox	7	0.0511
Add CoCO3	5.3	0.0387
Add Mg Ox	1.1	0.008
Add Red Iron Ox	21.4	0.1563
Add Bent	2.1	0.0153
	136.9	0.9995

CUSHING

Cone 10.

A grey white mottled glaze, semi-matt. Looks good thick or thin. Responds best to iron-bearing colorants. Mixes well with other glazes, but gets runny when it overlaps iron-bearing glazes.

K Feldspar	2.6	0.178
Dolo	3.2	0.2191
Whiting	0.5	0.0342
Kaolin	3.2	0.2191
Flint	5	0.3424
Bent	0.1	0.0068
	14.6	0.9996

Δ10

OBSIDIAN GLAZE	
Cone 10, Reduction.	
Albany slip	0.91
Cobalt Ox	0.09
	1

OBSIDIAN GLAZE II	
Cone 10, Reduction.	
Whiting	0.062
Frit 3124 (Ferro)	0.187
Sheffield slip	0.636
Cobalt Ox	0.088
Bent	0.027
	1

* Sheffield slip is a product of Sheffield Pottery, PO Box 399, Sheffield, MA 01257. The II variation is slightly more matt and color response is not as good with the original Albany slip glaze.

OBSIDIAN GLAZE III

Cone 10, Reduction.

A black gloss glaze with lots of "zippety-doo-da."

Alberta slip	0.91
Cobalt Ox	0.09

OBSIDIAN		
Albany	91	0.91
CoCO3	9	0.09
	100	1

BLACK OIL SPOT NEW		
Med-Med Thick		
Neph. Syenite	40	0.4166
Whiting	13	0.1354
Albany	8	0.0833
BaCO3	2	0.0208
Flint	18	0.1875
MnO2	2	0.0208
Chrome	1	0.0104
Red Iron (cheap)	5	0.052
CoCO3	7	0.0729
	96	0.9997

BLACK OIL SPOT OLD		
Med-Med Thick		
Neph. Syenite	49	0.4135
Whiting	16	0.135
Albany	9	0.0759
BaCO3	4	0.0337
Flint	22	0.1856
MnO2	3	0.0253
Chrome	1.5	0.0126
Red Iron (cheap)	6	0.0506
CoCO3	8	0.0675
	118.5	0.9997

SPODUMENE 1995		
Dolo	22	0.22
Spodumene	20	0.2
Tin Oxide	6	0.06
Whiting	2	0.02
Custer	30	0.3
EPK	20	0.2
	100	1

SPODUMENE 1990		
Dolo	20	0.1886
Whiting	5	0.0471
Custer	30	0.283
Spod	20	0.1886
Kaolin	25	0.2358
Tin	6	0.0566
	106	0.9997

CLEAR BASE 00 For overspray.		
Custer	35	0.3465
AM Sil	30	0.297
White	10	0.099
Dolo	6	0.0594
Gerstley	6	0.0594
$BaCO_3$	4	0.0396
ZnO	3	0.0297
$StCO_3$	6	0.0594
Glaze Clay	1	0.0099
	101	0.9999

VIBIKAS		
Spar	43.6	0.315
White	2.7	0.0195
Cole	13.6	0.0982
Dolo	9.4	0.0679
Zn	1.8	0.013
Kaolin	1.8	0.013
Flint	27.1	0.1958
Tin	37	0.2673
Add 1% $CuCO_3$	1.37	0.0098
	138.37	0.9995

TEAL GLOSS		
Custer Spar	35	0.3246
AM Sil	30	0.2782
Whiting	10	0.0927
Dolo	6	0.0556
Zn Oxide	3	0.0278
$StCO_3$	6	0.0556
Gerstley	6	0.0556
Copper CO_3	6.5	0.0602
$BaCO_3$	4	0.0371
Bent	1	0.0092
Epsom	0.3	0.0027
	107.8	0.9993

TRAILER		
F4 Spar	48	0.3902
Dolo	10	0.0813
Whiting	20	0.1626
Ball Clay	3	0.0243
Cole	5	0.0406
ZnO	2	0.0162
Silica	30	0.2439
Ultrox	5	0.0406
	123	0.9997

Omit Opax for Green & Black.

TRAILER GREEN (+ 2.5 Chrome)		
F4 Spar	48	0.3824
Dolo	10	0.0796
Whiting	20	0.1593
Ball Clay	3	0.0239
Cole	5	0.0398
ZnO	2	0.0159
Silica	30	0.239
Ultrox	5	0.0398
Chrome	2.5	0.0199
	125.5	0.9996

TRAILER BEST BLUE (+ 5 Ultrox + 2 CoCO3 + 1 Chrome)		
F4 Spar	48	0.3809
Dolo	10	0.0793
Whiting	20	0.1587
Ball Clay	3	0.0238
Cole	5	0.0396
ZnO	2	0.0158
Silica	30	0.238
Ultrox	5	0.0396
CoCO3	2	0.0158
Crome	1	0.0079
	126	0.9994

TRAILER BLUE (+ 8 Remco Turquoise)		
F4 Spar	48	0.3664
Dolo	10	0.0763
Whiting	20	0.1526
Ball Clay	3	0.0229
Cole	5	0.0381
ZnO	2	0.0152
Silica	30	0.229
Ultrox	5	0.0381
Pemco Turquoise	8	0.061
	131	0.9996

TRAILER ORANGE (+ 6 Degussa Or)		
F4 Spar	48	0.372
Dolo	10	0.0775
Whiting	20	0.155
Ball Clay	3	0.0232
Cole	5	0.0387
ZnO	2	0.0155
Silica	30	0.2325
Ultrox	5	0.0387
Degussa Or	6	0.0465
	129	0.9996

TRAILER YELLOW (+ 7% Pemco Yellow)		
F4 Spar	48	0.3647
Dolo	10	0.0759
Whiting	20	0.1519
Ball Clay	3	0.0227
Cole	5	0.0379
ZnO	2	0.0151
Silica	30	0.2279
Ultrox	5	0.0379
Pemco Yellow	8.61	0.0654
	131.61	0.9994

Δ10

YODER		
White	3226	0.3101
Alb	5161	0.4962
OM 4	1613	0.155
CoCO3	200	0.0192
FeO2	200	0.0192
	10400	0.9997

HILL		
Whiting	32.26	0.3101
Alb	51.61	0.4962
Sg Ball	16.13	0.155
CoCO3	2	0.0192
Iron	2	0.0192
	104	0.9997

WOO		
Alb Slip	1	0.1052
White	2	0.2105
Ash	2	0.2105
Bal	3	0.3157
Silica	1	0.1052
Iron	0.5	0.0526
	9.5	0.9997

RHODES YELLOW		
Avery Koalin	25	0.2415
K200 Spar	48.7	0.4704
Dolo	22.31	0.2155
Whiting	3.5	0.0338
Bent	2	0.0193
Rutile	2	0.0193
	103.51	0.9998

WOO YELLOW		
Kona	30	0.3061
BaCO3	25	0.2551
Dolo	12	0.1224
EPK	7	0.0714
Silica	7	0.0714
Superpax	15	0.153
Iron	2	0.0204
	98	0.9998

HAYSTACK		
Spar	44	0.4444
White	15	0.1515
Corn stone	15	0.1515
Ball Clay	8	0.0808
Calcined Kaolin	5	0.0505
ZnO	3	0.0303
Crude Iron	5	0.0505
Rutile	4	0.0404
	99	0.9999

MOLASSES 00		
Custer	35	0.3153
AM Sil	30	0.2702
Whiting	10	0.09
Dolo	6	0.054
Gerstley	6	0.054
BaCO3	4	0.036
ZnO	3	0.027
StCO3	6	0.054
Add 9 Red Iron	9	0.081
Add 1% Rutile	1	0.009
Add 1% Bentonite	1	0.009
	111	0.9995

MORE DON ELLIS GLAZES

DON'S BLUE		
Flint	30	0.3144
Potash Feldspar	20	0.2096
Whiting	20	0.2096
Ball	20	0.2096
Add Cobalt	0.9	0.0094
Add Iron	4.5	0.0471
	95.4	0.9997

PENLAND SPODUMENE		
Potash Feldspar	28.3	0.1768
Spodumene	18.9	0.1181
Dolo	21.2	0.1325
EPK	23.6	0.1475
Whiting	3.3	0.0206
Tin Oxide	4.7	0.0293
Ultrox	60	0.375
	160	0.9998

COLEMAN PURPLE		
Custer Feldspar	150	0.3579
Silica	125	0.2983
Whiting	40	0.0954
Dolo	25	0.0596
Gerstley Borate	25	0.0596
Barium	25	0.0596
Zinc Oxide	12.5	0.0298
Tin Oxide	5	0.0119
Copper Carb	10	0.0238
Cobalt Carb	1.2	0.0028
	418.7	0.9987

COLEMAN PURPLE II		
Custer Feldspar	150	0.3584
Silica	125	0.2986
Whiting	40	0.0955
Dolo	25	0.0597
Gerstley Borate	25	0.0597
Barium	25	0.0597
Zinc Oxide	12.5	0.0298
Tin Oxide	5	0.0119
Copper Carb	10	0.0238
Cobalt	0.5	0.0011
Chrome	0.5	0.0011
	418.5	0.9993

COLEMAN PURPLE		
Custer	50	0.3586
Silica	41.6	0.2984
Whiting	13.3	0.0954
Dolo	8.3	0.0595
Gerstly	8.3	0.0595
$BaCO_3$	8.3	0.0595
ZnO	4.2	0.0301
Tin	1.7	0.0121
$CuCO_3$	3.3	0.0236
$CoCO_3$	0.4	0.0028
	139.4	0.9995

COLEMAN PURPLE VARIATION		
Custer	37	0.3711
Silica	31	0.3109
Whiting	10	0.1003
Dolo	6.2	0.0621
Gerstly	6.2	0.0621
$BaCO_3$	6.2	0.0621
ZnO	3.1	0.031
	99.7	0.9996

Δ10

CU BLUE		
Neph Sy	48	0.4571
BaCO3	38.4	0.3657
Silica	7.5	0.0714
OM4	6.1	0.058
CuCO3	4	0.038
Bent	1	0.0095
	105	0.9997

SLICK CU BLUE 1993		
Neph Sy	43.2	0.4114
BaCO3	34.5	0.3285
Silica	11.3	0.1076
OM 4	5.4	0.0514
StCO3	3.6	0.0342
Cole	1.8	0.0171
CuCO3	4	0.038
Bent	1	0.0095
	104.8	0.9977

MULTI BLUE		
Gerstley	6.69	0.0634
MgCO3	3.15	0.0298
StCO3	8.56	0.0812
White	11.42	0.1083
EPK	5.91	0.056
Custer	38.39	0.3642
Flint	25.88	0.2455
CuCO3	1.48	0.014
Rutile	3.94	0.0373
	105.42	0.9997

PLUM		
Custer	36	0.3582
EPK	15	0.1492
Cal Kaolin	10	0.0995
Dolo	18	0.1791
Whiting	4	0.0398
Flint	16	0.1592
Tin	1	0.0099
CuCO3	0.5	0.0049
	100.5	0.9998

DON ELLIS GLAZES

CLAY PODY I		
EPK	50	0.1666
Ball Clay	100	0.3333
Silica	50	0.1666
PU Clay	100	0.3333
	300	0.9998

TESSHA		
Whiting	18	0.1379
Soda Feldspar	24	0.1839
Ball	23	0.1762
Flint	29	0.2222
Bentonite	23	0.1762
Add Iron	13.5	0.1034
	130.5	0.9998

BUNNY'S BLUE ORIGINAL		
F4 Spar	48	0.4571
Dolo	10	0.0952
White	2	0.019
Ball	3	0.0285
Flint	30	0.2857
Cole	5	0.0476
ZnO	2	0.019
Rutile	4	0.038
Bent	1	0.0095
	105	0.9996

BUNNY'S BLUE GOES YELLOW (+ 2% Iron)		
F4 Spar	48	0.4481
Dolo	10	0.0933
White	2	0.0186
Ball	3	0.028
Flint	30	0.2801
Cole	5	0.0466
ZnO	2	0.0186
Rutile	4	0.0373
Bent	1	0.0093
Iron	2.1	0.0196
	107.1	0.9995

BUNNY'S BLUE + HANK 1990		
F4 Spar	48	0.4403
Dolo	10	0.0917
White	2	0.0183
Ball	3	0.0275
Flint	30	0.2752
Cole	5	0.0458
ZnO	2	0.0183
Rutile	4	0.0366
Bent	1	0.0091
Tin	3	0.0275
CuCO3	1	0.0091
	109	0.9994

BUNNY'S BLUE + HANK 1993 (+ 15% Ash)		
F4 Spar	48	0.3829
Dolo	10	0.0797
White	2	0.0159
Ball	3	0.0239
Flint	30	0.2393
Cole	5	0.0398
ZnO	2	0.0159
Rutile	4	0.0319
Bent	1	0.0079
Tin	3	0.0239
CuCO3	1	0.0079
Ash	16.35	0.1304
	125.35	0.9994

BUNNY'S BLEACHED ALBANY		
Albany	50	0.4716
White	25	0.2358
Kaolin	25	0.2358
Tin	6	0.0566
	106	0.9998

(Try with 10% Zircopax.)

ORANGE 1993 4 HOODS SPECIAL		
Custer	29	0.2843
White	23	0.2254
Silica	13	0.1274
EPK	15	0.147
Rutile	10	0.098
Cole	5	0.049
Iron	5	0.049
Bentonite	2	0.0196
	102	0.9997

ORANGE 1993 II FOR YUDEV BODY		
Custer	30	0.2941
White	23	0.2254
Silica	16	0.1568
EPK	15	0.147
Rutile	9	0.0882
Cole	2	0.0196
Iron	5	0.049
Bentonite	2	0.0196
	102	0.9997

MARDI GRAS		
Custer	37	0.3333
Silica	31	0.2792
Whiting	10	0.09
Dolo	6	0.054
BaCO3	6	0.054
Colemanite	10	0.09
Zn	3	0.027
Tin	2	0.018
CuCO3	3	0.027
TiO2	1	0.009
Glaze Clay	2	0.018
Epsom Salt	0.25	0.0022
	111.25	1.0017

ROB'S GREEN		
BaCO3	9.26	0.0833
Gerstley	4.63	0.0416
White	16.67	0.15
Corn Stone	69.44	0.6249
CuCO3	9.26	0.0833
Bent	1.85	0.0166
	111.11	0.9997

COPPER GLOSS BLUE GREEN		
Custer Spar	35	0.3301
AM Silica	30	0.283
Whiting	10	0.0943
Zinc Oxide	3	0.0283
Dolo	6	0.0566
StCO3	6	0.0566
Barium Carb	8	0.0754
Superior Glaze Clay	2	0.0188
Copper Carb	6	0.0566
	106	0.9997

COPPER GLOSS BLUE GREEN II		
Custer Spar	35	0.3294
AM Silica	30	0.2823
Whiting	10	0.0941
Zinc Oxide	3	0.0282
Dolo	6	0.0564
StCO3	6	0.0564
Barium Carb	8	0.0752
Superior Glaze Clay	2	0.0188
Copper Carb	6	0.0564
Veegum T	0.25	0.0023
	106.25	0.9995

IRON RED		
Cone 10.		
A dark brown to iron red glaze. Breaks red over surface variations. Becomes more black with cobalt, red with more iron. Somewhat runny when thick.		
K Feldspar	5	0.495
Flint	2.5	0.2475
Whiting	1.25	0.1237
Yellow Ochre	1.25	0.1237
Bent	0.1	0.0099
	10.1	0.9998

K RED COPPER GLAZE	
Cone 9-10. Will run at cone 10.	
Neph Sy	0.35
Whiting	0.16
Zinc	0.03
BaCO3	0.08
Flint	0.32
Tin Ox	0.04
CuCO3	0.02
	1

ETHYL'S RED		
For red,apply thin and use good FeO. Excellent for decorating with oxides over base (omit Iron).		
Flint	60	0.263
Whiting	6	0.0263
Kaolin	14.6	0.064
Spar	92	0.4033
Dolo	25.5	0.1117
Bone Ash	16	0.0701
Iron	14	0.0613
	228.1	0.9997

COPPER RED		
Custer	75	0.7684
Colemonite	10	0.1024
Whiting	11.3	0.1157
CuCO3	0.3	0.003
Tin	1	0.0102
	97.6	0.9997

COPPER RED (KESSLER)		
Custer	7500	0.7645
Colemonite	1000	0.1019
Whiting	1130	0.1151
CuCO3	30	0.003
Tin	100	0.0101
Bentomite	50	0.005
	9810	0.9996

IRON SATCH		
Spar	42	0.3684
Flint	27	0.2368
Ball	17	0.1491
White	18	0.1578
Red (Fe)	7	0.0614
Rutile	3	0.0263
	114	0.9998

IRON SATCH - COMM COLLEGE		
Neph Sy	30	0.2631
Custer	12	0.1052
Flint	27	0.2368
OM 4	17	0.1491
White	18	0.1578
Red (Fe)	7	0.0614
Rutile	3	0.0263
	114	0.9997

FERG'S CARBON TRAP		
F4	14.58	0.1458
Spod	12.5	0.125
EPK	2.91	0.0291
Soda Ash	3.33	0.0333
Neph Sy	50	0.5001
Ball Clay	16.66	0.1666
	99.98	0.9999

SUBSTITUTIONS
Try Albany for Soda Ash.
To make red, substitute red art for clay.
Try with 1/2 Redart for more of Celadon color.

KESSLER CARBON TRAP		
Neph Sy	75	0.75
Ball Clay	20	0.2
Soda Ash	5	0.05
	100	1

KESSLER CARBON TRAP WITH OPAQUE CRAWLS		
Neph Sy	75	0.7009
Ball Clay	20	0.1869
Soda Ash	5	0.0467
Add Tin	5	0.0467
Add Zinc	2	0.0186
	107	0.9998

CARBON TRAP GLAZE

Cone 10.

An opaque orange white glossy glaze which becomes grey black under heavy reduction. Good responseto iron-bearing colorants,unpleasant results with cobalt. Thin aplications produce the most consistent results. Thicker applications in reduction become grey black.

Soda ash	1	0.098
Soda feldspar	3.3	0.3235
Neph Sy	1.4	0.1372
Spod	2.9	0.2843
Kaolin	1	0.098
Ball Clay	0.5	0.049
Bent	0.1	0.0098
	10.2	0.9998

Δ10

GOOD PORCELAIN GLAZE

Low Alumina for Copper Red & Celadons

Custer Spar	39	0.3903
Flint	26.3	0.2632
EPK	4.3	0.043
MgCO3	3.2	0.032
BaCO	8.7	0.087
Cole	6.8	0.068
Whiting	11.6	0.1161
	99.9	0.9996

GREEN-BROWN

Add 4% Iron.

BLUE-GREEN

Add 2% Iron.

WHITE-LAVENDAR STREAKS OPALESCENT

Add 4% Rutile.

GOOD RED

Add 1% CuCO + 0.5% FeO.

BROKEN RED WITH BLUE

Add 1% CuCO + 2% Rutile.

CHUN (LIGHT)

Add 1% CuCO + 4% Bone Ash.

BLUE GRAY WHEN THIN WITH METALLIC SPECKS

Add 1% CoCO + 2% NiCO.

OPALESCENT BLUE

Add 4% Rutile + 1% CoCO.

CORNWALL CELADON

Tested, foamy, not runny.

Corn Stone	82	0.82
Whiting	14	0.14
Neph Sy	4	0.04
	100	1

CORNWALL CDN BABY BLUE

(+ 2% Iron)

Corn Stone	82	0.8039
Whiting	14	0.1372
Neph Sy	4	0.0392
Iron	2	0.0196
	102	0.9999

CLEAR CELADON

Cone 10.

A clear glossy glaze with a slight amber color. Responds well to cobalt and iron colorants. Mixes well with other glazes.

K Feldspar	3	0.2898
Flint	3	0.2898
Whiting	2	0.1932
Kaolin	2	0.1932
Bent	0.1	0.0096
Iron Ox	0.25	0.0241
	10.35	0.9997

MP CELADON
On Stoneware.

Soda F4	31.9	0.3193
Whiting	16.8	0.1681
Dolo	5.2	0.052
EPK	14.1	0.1411
Flint	31.9	0.3193
	99.9	0.9998

DK BLUE GREEN
(+ 1% $CoCO_3$ + 4% ZnO + 2% Gr Nickle)

Soda F4	31.9	0.2984
Whiting	16.8	0.1571
Dolo	5.2	0.0486
EPK	14.1	0.1318
Flint	31.9	0.2984
$CoCO_3$	0.999	0.0093
ZnO	3.996	0.0373
Green Nickle	1.998	0.0186
	106.893	0.9995

RUTILE TAN
(+ 8% 6485 Yellow) Med-Thin.

Soda F4	31.9	0.2956
Whiting	16.8	0.1556
Dolo	5.2	0.0481
EPK	14.1	0.1306
Flint	31.9	0.2956
6485 Yellow	7.992	0.074
	107.892	0.9995

DARK CELADON
(+ 4% Black Iron) (not shown- 3.5% Iron)

Soda F4	31.9	0.307
Whiting	16.8	0.1616
Dolo	5.2	0.05
EPK	14.1	0.1357
Flint	31.9	0.307
Black Iron	3.996	0.0384
	103.896	0.9997

BLUE GREEN CELADON
(+ 1% Red Iron) Med-Thick.

Soda F4	31.9	0.3161
Whiting	16.8	0.1665
Dolo	5.2	0.0515
EPK	14.1	0.1397
Flint	31.9	0.3161
Red Iron	0.999	0.0099
	100.899	0.9998

BABY BLUE
(+ 4% 6364 Turg) Med-Thin.

Soda F4	31.9	0.307
Whiting	16.8	0.1616
Dolo	5.2	0.05
EPK	14.1	0.1357
Flint	31.9	0.307
6364 Turg	3.996	0.0384
	103.896	0.9997

BLACK
(+ 5% 812 + 2% MnO_2 + 2% Co Ox)

Soda F4	31.9	0.2929
Whiting	16.8	0.1542
Dolo	5.2	0.0477
EPK	14.1	0.1294
Flint	31.9	0.2929
812	4.995	0.0458
MnO_2	1.998	0.0183
Co Oxide	1.998	0.0183
	108.891	0.9995

STAINS WITH MP CELADON BASE

All have additions of 0.8 Soda Ash and 1.2 Epsom Salt.

GOOD ON M MATT

Soda Ash	0.8	0.0078
Epsom Salt	1.2	0.0117
Iron	50	0.4901
Rutile	20	0.196
Base	30	0.2941
	102	0.9997

BLUE

Soda Ash	0.8	0.0078
Epsom Salt	1.2	0.0117
Co Oxide	25	0.245
Base	75	0.7352
	102	0.9997

VARIATION I

Soda Ash	0.8	0.0078
Epsom Salt	1.2	0.0117
Iron	70	0.6862
Base	30	0.2941
	102	0.9998

VARIATION II

Soda Ash	0.8	0.0078
Epsom Salt	1.2	0.0117
CuCO3	40	0.3921
Base	60	0.5882
	120	0.9998

VARIAITON III

Soda Ash	0.8	0.0078
Epsom Salt	1.2	0.0117
Rutile	40	0.3921
Base	60	0.5882
	120	0.9998

KSTATE CELADON

For Crazes over porcelain.

Custer	60	0.5405
White	15	0.1351
Flint	20	0.1801
ZnO	10	0.09
EPK	4	0.036
Bent	2	0.018
	111	0.9997

BLUE CELADON

Crazes.

F4	80	0.7804
Whiting	10	0.0975
Flint	10	0.0975
Red Iron	2.5	0.0243
	102.5	0.9997

MARSHMALLOW LINER Apply Med-Thin for warm color.		
Spar	33.99	0.3365
Flint	23	0.2277
Zircopax	12.52	0.1239
Colemanite	11.09	0.1098
Whiting	6.71	0.0664
Talc	5.01	0.0496
ZnO	4	0.0396
Kaolin	4.2	0.0415
	100.52	0.995

MARSHMALLOW LINER BEIGE		
Spar	33.99	0.3176
Flint	23	0.2149
Zircopax	12.52	0.117
Colemanite	11.09	0.1036
Whiting	6.71	0.0627
Talc	5.01	0.0468
ZnO	4	0.0373
Kaolin	4.2	0.0392
MnO2	4.04	0.0377
Rutile	2.02	0.0188
	106.58	0.9956

MARSHMALLOW LINER ORANGE		
Spar	33.99	0.3206
Flint	23	0.2169
Zircopax	12.52	0.1181
Colemanite	11.09	0.1046
Whiting	6.71	0.0633
Talc	5.01	0.0472
ZnO	4	0.0377
Kaolin	4.2	0.0396
Degussa Orange	5.05	0.0476
	105.57	0.9956

MARSHMALLOW LINER II (+ 2% Rutile)		
Spar	33.99	0.3314
Flint	23	0.2243
Zircopax	12.52	0.122
Colemanite	11.09	0.1081
Whiting	6.71	0.0654
Talc	5.01	0.0488
ZnO	4	0.039
Kaolin	4.2	0.0409
Rutile	2.02	0.0196
	102.54	0.9995

MARSHMALLOW LINER LT. BLUE		
Spar	33.99	0.325
Flint	23	0.2199
Zircopax	12.52	0.1197
Colemanite	11.09	0.106
Whiting	6.71	0.0641
Talc	5.01	0.0479
ZnO	4	0.0382
Kaolin	4.2	0.0401
Turg 6364	4.04	0.0386
	104.56	0.9995

MARSHMALLOW LINER TURG		
Spar	33.99	0.3282
Flint	23	0.2221
Zircopax	12.52	0.1209
Colemanite	11.09	0.107
Whiting	6.71	0.0647
Talc	5.01	0.0483
ZnO	4	0.0386
Kaolin	4.2	0.0405
Cr	2.02	0.0195
Co Oxide	1.01	0.0097
	103.55	0.9995

Δ10

CUDO WHITE - WENDY ELWELL

Cone 10.

Excells as a liner glaze - good true white with ability to allow clay iron specks to show through lightly. Great to use outside or as splash design. Resists food stains in use.

Custer Spar	4807	0.4001
EPK	1724	0.1435
Silica	2158	0.1796
Whiting	1402	0.1167
Mg Zirconium Silicat	1892	0.1574
Veegum T	30	0.0024
	12013	0.9997

WHITE LINER GLAZE

Cone 10.

A white, opaque glossy glaze. Responds well to both cobalt and iron colorants. Designed for the inside of seving vessels. Not runny and mixes well with other glazes.

Whiting	1.8	0.18
K Feldspar	3.6	0.36
Kaolin	0.9	0.09
Flint	2.7	0.27
Zircopax	0.9	0.09
Bent	0.1	0.01
	10	1

YODER SATIN WHITE LINER

Crazing.

Dolo	20	0.2
Whiting	3	0.03
Custer	35	0.35
EPK	24	0.24
Flint	18	0.18
	100	1

Δ10

RHODES WHITE

Cone 10.

This glaze is a creamy white color. Responds well to all colorants, especially cobalt. Has been prone to shivering due to its low coefficient of expansion.

Gerstley Borate	1.3	0.1287
Dolo	0.7	0.0693
Talc	1.5	0.1485
Custer Feldspar	4.5	0.4455
Ball clay	0.5	0.0495
Flint	1.5	0.1485
Bent	0.1	0.0099
	10.1	0.9999

BUTTERMILK

Cone 10.

A creamy white and fairly glossy glaze. It is somewhat translucent, and responds to colorants well. A good glaze to use with complex colorants blends.

Gerstly Borate	1.3	0.1287
Dolo	0.6	0.0594
CaCO3	0.8	0.0792
Feldspar K	2.8	0.2772
Kaolin	0.6	0.0594
Talc	1.3	0.1287
Flint	1.9	0.1881
Zircopax	0.7	0.0693
Bent	0.1	0.0099
	10.1	0.9999

BINNS WHITE

Cone 10.

A white semi-matt glaze. This is a fairly opaque glaze which will have a slight mottled color effect. A good colorant base and a very durable glaze due to its high Feldspathic content.

Whiting	2.2	0.2178
Feldspar	5.5	0.5445
Kaolin	2	0.198
Rutile	0.3	0.0297
Bent	0.1	0.0099
	10.1	0.9999

Δ10

ANDEROSN RANCH SHINO SLIP		
Cone 10-11.		
Add 3-5% bentonite for use on porcelain.		
Soda ash	0.3	0.03
Spod	1.2	0.12
Kona F4 Feldspar	0.9	0.09
Neph Sy	3.6	0.36
Edgar Plastic Kaolin	2.8	0.28
KT Ball Clay (OM4)	1.2	0.12
	10	1

WHITE SLIP - BERN		
Cone 9-10.		
EPK	800	0.1666
OM 4	800	0.1666
Neph Sy	1000	0.2083
Silica - 325 m.	1200	0.25
Bentonite	80	0.0166
20 Mule Borax	200	0.0416
Flint 3819	100	0.0208
Zircopax	620	0.1291
	4800	0.9996

NEW SHINO		
Red Art	4	0.04
Soda Ash	16	0.16
EPK	32	0.32
F4 Spar	8	0.08
Neph Sy	32	0.32
Lithium Carb	8	0.08
	100	1

KEN STATUE (SHINO)		
F4	10.9	0.1078
Spod	15.2	0.1503
Kaolin	10	0.0989
Soda Ash	4	0.0395
Neph Sy	45	0.4451
Ball Clay	15	0.1483
Bent	1	0.0098
	101.1	0.9997

WHITE CRACKLE		
Neph Sy	450	0.4891
Dolo	70	0.076
Talc	150	0.163
Kaolin China Clay	50	0.0543
Silica Flint	200	0.2173
	920	0.9997

CUDO WHITE - WENDY		
Custer Spar	4807.2	0.4001
EPK	1724	0.1435
Silica	2157.6	0.1796
Whiting	1401.6	0.1166
Veegum Tee	30	0.0024
Mg Zirconium Silicat	1892.2	0.1575
(Standard Ceramic Supply, Pittsburg, PA)		
	12012.6	0.9997

DAVID SHANER GLAZE

Cone 10.

A base for the famous haner red glaze. Ranges from grey to deep red iron with Iron Oxide addition. Very versatile and stable glaze though difficult to get the "classic" Shaner red (heavy reduction in addition to accurate measurement of the Iron Ox). Semi-matt.

Kaolin	2	0.1904
K Feldspar	4.4	0.419
Whiting	1.8	0.1714
Talc	0.4	0.038
Bone ash	0.9	0.0857
Iron Ox	0.4	0.038
Bent	0.1	0.0095
Add Iron Ox 5% for deep red.	0.5	0.0476
	10.5	0.9996

SHANER'S RED 1993		
EPK	22	0.1964
Custer	30	0.2678
Neph Sy	16.5	0.1473
Whiting	19	0.1696
Talc	6.5	0.058
Bone Ash	10.5	0.0937
Rutile	2.5	0.0223
Iron	5	0.0446
	112	0.9997

BUNNY'S SHANER'S RED		
EPK	48.6	0.2113
Custer	102.2	0.4443
Whiting	41.4	0.18
Talc	7.8	0.0339
Bone Ash	20	0.0869
Real Iron	8	0.0347
Rutile	2	0.0086
	230	0.9997

SHANER'S GOLD		
Apply med/thin.		
Zircopax	23	0.2087
Custer	49	0.4446
White	20	0.1814
Talc	4	0.0362
Bone Ash	10	0.0907
Add crude Iron	4.24	0.0384
	110.24	1

REVISED SHANER GOLD YELLOW		
Zircopax Plus	25	0.2272
Custer	45	0.409
Whiting	20	0.1818
Talc	4	0.0363
Bone Ash	10	0.0909
Iron	2.5	0.0227
Glaze Clay	3	0.0272
Veegum Tee	0.25	0.0022
	109.75	0.9973

Δ10

M MATT (LP6)		
All colors on porcelain.		
Soda Spar F4	26	0.2602
Dolo	17.4	0.1741
EPK	21.7	0.2172
BaCO3	13	0.1301
Flint	17.4	0.1741
ZnO	4.4	0.044
	99.9	0.9997

MOTTLED LIGHT CEL-MATT

Add 1 Cheap Red Iron.
Med.

MOTTLED LIGHT TAN

Add 2 MnO2.
Med.

RUTILE BLUE-TAN

Add 8 6485 Yellow stain.
Thin.

LIME

Add 2% Pem 112/119 fine screen.
Add 5% Pem 340 fine screen.

CRYSTAL RED-BLUE

Add 2 CuCO3.
Med.

POWDER BLUE-GRAY

Add 1 CoCO3.
Add 2 NiCO3.
Md.

MOTTLED DK TAN-GR

Add 3 Ochre.
Thin.

LIGHT BLUE

Add 4.5 6364 Turquoise.
Thin.

UTEP STONEY MATT		
F4	32	0.4705
Dolo	11	0.1617
White	2	0.0294
EPK	15	0.2205
Talc	6	0.0882
Tin	2	0.0294
	68	0.9997

MAMO MATT 1990		
(Add 2 Zircopax instead if necessary.)		
F4	35	0.3398
Neph Sy	15	0.1456
EPK	20	0.1941
Whiting	5	0.0485
Dolo	20	0.1941
Tin	5	0.0485
Zircopax	3	0.0291
	103	0.9997

LP MATT		
F4 Spar	30	0.3
Dolo	20	0.2
EPK	25	0.25
BaCO3	15	0.15
Flint	10	0.1
	100	1

LP MATT II 1993 (+ 2% Rulite)		
F4 Spar	30	0.2926
Dolo	20	0.1951
EPK	25	0.2439
BaCO3	15	0.1463
Flint	10	0.0975
Rulite	2.5	0.0243
	102.5	0.9997

LP MATT BEIGE		
F4 Spar	30	0.2941
Dolo	20	0.196
EPK	25	0.245
BaCO3	15	0.147
Flint	10	0.098
Add MnO2	2	0.0196
	102	0.9997

LP MATT BLUE		
F4 Spar	30	0.297
Dolo	20	0.198
EPK	25	0.2475
BaCO3	15	0.1485
Flint	10	0.099
Add CoCO3	1	0.0099
	101	0.9999

BLACK MATT GLAZE METALLIC #785 Med not dry.		
Kingman	37.4	0.3103
Georgia Kaolin	18.7	0.1551
Corn Stone	18.7	0.1551
Whiting	18.7	0.1551
Zn Oxide	6.5	0.0539
Add Fe 15%	15	0.1244
Add CuCO3 4.5%	4.5	0.0373
Add Manganese 1%	1	0.0082
	120.5	0.9994

SUBSTITUTIONS

Add Fe 20%
Add CuCO3 5%
Add Manganese 1%

37.4 Conna Feld for 37.4 Kingsman

CHROME BLUE MATT		
Custer	48	0.4705
Kaolin	25	0.245
Dolo	23	0.2254
Whiting	4	0.0392
CoCO3	1	0.0098
Crome	1	0.0098
	102	0.9997

CHROME BLUE MATT II (Omit CoCO3 & Chrome. And Add 10 Zircopax for nice matt.)		
Custer	48	0.4363
Kaolin	25	0.2272
Dolo	23	0.209
Whiting	4	0.0363
Zircopax	10	0.0909
	110	0.9997

STEVEN HILL FAKE ASH		
Alberta	50	0.4859
OM 4	18.75	0.1822
Whiting	31.25	0.3036
CoCO3	1.56	0.0151
Iron	1.33	0.0129
	102.89	0.9997

STEVEN HILL FAKE ASH II		
Alberta	50	0.4648
OM 4	18.75	0.1743
Whiting	31.25	0.2905
CoCO3	1.56	0.0145
Iron	1	0.0092
Rutile	5	0.0464
	107.56	0.9997

SHANER NON-ASH (FAKE)		
Albany	60	0.6
Whiting	30	0.3
ZnCo or ZnO	10	0.1
	100	1

(Try with rutile on a test)

SHANER NON-ASH (FAKE) BEST		
Albany	60	0.6
Whiting	30	0.3
ZnO	10	0.1
	100	1

FAKE ASH GLAZE

Cone 10.

A highly mottled and runny glaze. Must be applied very thin and watery. Thin cobalt colorant produces black with this glaze. Does not mix well with other glazes. Is intended to replicate a wood ash glaze.

Albany slip	6	0.594
Whiting	3	0.297
Zn Ox	1	0.099
Bent	0.1	0.0099
	10.1	0.9999

CUSHING OR RICH MATT

Apply thin.

Custer	36	0.36
Kaolin	22	0.22
Dolo	18	0.18
Cole	4	0.04
White	4	0.04
Flint	16	0.16
	100	1

CUSHING OR RICH MATT
GRAY BLUE

Leave out Cole.
Add Zircopax.
Add 2% Rutile

BLUE FAKE ASH 1993		
Syn Albany	60	0.5263
White	30	0.2631
BaCO3	13	0.114
EPK	10	0.0877
CoCO3	0.75	0.0065
	113.75	0.9976

FAKE ASH - DON ELLIS		
Whiting	323	0.3108
Albany	516	0.4966
Ball	160	0.1539
Add Iron	19.98	0.0192
Add Cobalt	19.98	0.0192
	1038.96	0.9997

BLEACHED FAKE ASH 10		
Albany	60	0.5309
Whiting	30	0.2654
ZnO	10	0.0884
Tin	10	0.0884
Rutile	3	0.0265
	113	0.9996

FAKE AERNI ASH		
EPK	25	0.2118
Whiting	35	0.2966
Silica	13	0.1101
Neph Sy	18	0.1525
Bone Ash	4	0.0338
Dolo	10	0.0847
MgCO3	6	0.0508
Add Rutile	6	0.0508
Add Remco GS-1	1	0.0084
	118	0.9995

FAKE WOOD FIRE SPRAY
1 part saturated solution of soda ash
1 part saturated solution of pearl ash
Mix.
Add 1 part by volume screened wood ash (80m).

Δ10

FRASCA-AERNI BASIC ASH GLAZE

Cone 10, Reduction.

Whiting	0.125
Wood ash (seived, unwashed)	0.5
Ball clay	0.125
Feldspar	0.125
Flint	0.125
	1

Recipe should be adjusted to adjust melt and fluidity and to fit clay body.

Color variations are achieved by adding oxides as such:

0.5%-2% Chrome Ox
0.5%-1% $CoCO_3$
1%-4% Cu Ox
1%-5% Red Iron Ox
2%-20% Rutile
0.5%-5% Titania

Combos of applications over and under one another create a wide spectrum of color "flashes."

A dark leathery glaze variation is used for rims and accents:

FRASCA-AERNI LEATHER VARIATION

Cone 10, Reduction.

Wood Ash Glaze	0.412
Red Iron Ox	0.392
Rutile	0.196
	1

AERNI BROWN ASH NC		
Ash	62.5	0.5681
OM 4 Ball Clay	17.5	0.159
Spar	10	0.0909
Silica	10	0.0909
Iron	7.5	0.0681
Rutile	2.5	0.0227
	110	0.9997

AERNI BROWN ASH EL PASO		
Whiting	15	0.1369
Ash	47	0.4292
OM 4	17.5	0.1598
Spar	10	0.0913
Silica	10	0.0913
Iron	7.5	0.0684
Rutile	2.5	0.0228
	109.5	0.9997

BERN BLUE ASH		
Alb	6000	0.5825
BaCO3	1000	0.097
Ash	3000	0.2912
Iron	100	0.0097
CoCO3	200	0.0194
	10300	0.9998

BERN BLUE ASH - BROWN		
Alb	6000	0.5454
BaCO3	1000	0.0909
Ash	3000	0.2727
Iron	800	0.0727
CoCO3	200	0.0181
	11000	0.9998

SODA ASH		
EPK	40	0.4
Neph Sy	20	0.2
Soda Ash	40	0.4
	100	1

SODA ASH III		
PU Clay	15	0.15
EPK	15	0.15
Neph Sy	20	0.2
Soda Ash	37	0.37
Cole	5	0.05
Flint	5	0.05
Redart	3	0.03
	100	1

SODA ASH II		
EPK	30	0.3
Neph Sy	20	0.2
Soda Ash	40	0.4
Cole	5	0.05
Flint	5	0.05
	100	1

GREEN ASH 10/97		
EPK	15	0.147
StCO3	8	0.0784
BaCO3	18	0.1764
Silica	14	0.1372
Neph. Syenite	17	0.1666
MgCO3	4	0.0392
Bone Ash	3	0.0294
CuCO3	2	0.0196
Whiting	21	0.2058
	102	0.9996

ST GREEN ASH		
StCO3	20	0.1941
#6 Tile	17	0.165
Whiting	7	0.0679
Neph. Syenite	25	0.2427
Flint	12	0.1165
Bone Ash	4	0.0388
Dolo	12	0.1165
MgCO3	3	0.0291
CuCO3	3	0.0291
	103	0.9997

ALBERT ASH - DENNY		
Alberta Slip	3000	0.6
Barium Carb	500	0.1
Ash	1500	0.3
	5000	1

********** Following glazes for use with ALBERT ASH - DENNY **********

BLUE		
Alberta Slip	3000	0.5825
Barium Carb	500	0.097
Ash	1500	0.2912
Red Iron Ox	50	0.0097
Cobalt Carb	100	0.0194
	5150	0.9998

BROWN		
Alberta Slip	3000	0.5555
Barium Carb	500	0.0925
Ash	1500	0.2777
Red Iron Ox	400	0.074
	5400	0.9997

LEATHER NC Ash Version		
Iron	39	0.4079
Rutile	20.1	0.2102
Ash	20.1	0.2102
Calcium	4.1	0.0428
OM 4	4.1	0.0428
Custer	4.1	0.0428
Flint	4.1	0.0428
	95.6	0.9995

LEATHER El Paso Ash Version		
Iron	39	0.39
Rutile	20	0.2
Ash	24.6	0.246
OM 4	6.2	0.062
Custer	5.1	0.051
Flint	5.1	0.051
	100	1

LIGHT BLUE ASH- WASHED 1997		
Washed Ash	60	0.5555
Ball Clay	15	0.1388
Neph. Syenite	12.5	0.1157
Silica	12.5	0.1157
Rutile	6	0.0555
Remco GS-1	1.5	0.0138
	107.5	0.995

BLUE ASH 1993		
Custer	40	0.404
OAK Ash	43	0.4343
Whiting	7	0.0707
Bent	3	0.0303
Iron	2	0.0202
CoCO3	2	0.0202
ZnO	2	0.0202
	99	0.9999

LT. BLUE ASH 1995 EL PASO VERSION		
OAK	60	0.5555
Ball Clay	15	0.1388
Custer	12.5	0.1157
Flint	12.5	0.1157
Rutile	6	0.0555
Remco GS 1 Blue	1.5	0.0138
	107.5	0.995

LT. BLUE ASH AERNI		
OAK	50	0.4716
Ball Clay	12.5	0.1179
Custer	12.5	0.1179
Flint	12.5	0.1179
Rutile	4	0.0377
Remco GS 1 Blue	2	0.0188
Whiting (Aerni)	12.5	0.1179
	106	0.9997

LT. BLUE ASH VERSION III		
OAK	60	0.5769
Ball Clay	15	0.1442
Neph Sy	12.5	0.1201
Flint	12.5	0.1201
Zinc	3	0.0288
GS 1	1	0.0096
	104	0.9997

LIGHT ASH N67+011 1993		
Custer	44	0.4536
OAK	30	0.3092
EPK	13	0.134
ZnO	3	0.0309
Iron	3	0.0309
Rutile	4	0.0412
	97	0.9998

YELLOW BROWN ASH 1993		
Custer	35	0.35
Iron	9	0.09
OAK Ash	56	0.56
	100	1

ASH BASE FOR COLOR NC Ash Version		
Whiting	12.5	0.125
Ash	50	0.5
OM 4	12.5	0.125
Custer	12.5	0.125
Silica	12.5	0.125
	100	1

ASH BASE FOR COLOR El Paso Ash Version		
Ash	60	0.6
OM 4	15	0.15
Custer	12.5	0.125
Silica	12.5	0.125
	100	1

********** Following glazes for use with NC ASH BASE FOR COLOR **********

COPPER GREEN (+ 2% Copper Carb)		
Whiting	12.5	0.1225
Ash	50	0.4901
OM 4	12.5	0.1225
Custer	12.5	0.1225
Silica	12.5	0.1225
Add Copper Carb	2	0.0196
	102	0.9997

COPPER-RUTILE (+ 6% Rutile + 2% Copper)		
Whiting	12.5	0.1157
Ash	50	0.4629
OM 4	12.5	0.1157
Custer	12.5	0.1157
Silica	12.5	0.1157
Add Rutile	6	0.0555
Add Copper	2	0.0185
	108	0.9997

TAN (+ 6% Rutile + 3% Iron)		
Whiting	12.5	0.1146
Ash	50	0.4587
OM 4	12.5	0.1146
Custer	12.5	0.1146
Silica	12.5	0.1146
Add Rutile	6	0.055
Add Iron	3	0.0275
	109	0.9996

1 mL → 1g
water dry mix

100 - 120 gauge screen for Potash glazes
80 gauge for these Δ10 glazes

Shino

Nepheline syenite	40
Kona F-4	10
Ball clay	20
Soda ash	10
Spodumene	30

No Bentonite

Spodumen

breaks from orange to cream

G-200 feldspar	15
Custer feldspar	15
Spodumene	20
Dolomite	20
Grolleg clay	25
Whiting	3.5
Bone ash	2.5
Tin oxide	3

Oribe

copper green

Custer feldspar	27
Flint	33
EPK	3
Talc	3
Whiting	17
Strontium carbonate	9
Bone ash	2
Black copper oxide	4
Bentonite	2

Carman's red

Opaque Copper Orange-Red

Nepheline syenite	42
Custer feldspar	9
EPK	2
Flint	22
Gerstley borate	13
Whiting	10
Black copper oxide	0.3
Tin oxide	1

(hot) * put 10,000 mL of water to start w/ 50

Blue satin

Turquoise Matt

Custer feldspar	36
Gerstley borate	4
Whiting	4
Dolomite	18
EPK	22
Flint	16
Cobalt carbonate	1
Chrome oxide	0.25
Granular manganese	0.25

Carlton Ball Mottled blue

Denim Blue Gloss

Custer feldspar	42
EPK	1
Flint	26
Whiting	3
Gerstley borate	9
Dolomite	9
Zinc oxide	2
Tin oxide	3
Rutile	5
Copper carbonate	0.5

Limestone clear

Whiting	20
Flint	33
Grolleg clay	20
Custer feldspar	28
Bentonite	2

Amber Celadon

Dark coffee color

Alberta slip	33
Wollastonite	13
Custer feldspar	20
Whiting	7
Gerstley borate	3
EPK	3
Flint	14
Yellow Ocher	7
Bentonite	6

Hannah Fake ash

love to run

Redart	60
Whiting	30
Strontium carbonate	10
Yellow ocher	4

No Bentonite

Variations –leave out ocher (optional)
Try Barium carbonate in place of Strontium carbonate

* put 2% Bentonite
.25% of Epsom Salt
in each glaze unless already noted

FM Leach Ash #2
-Custer feldspar 45.40
-Whiting 24.70
x-Kentucky OM #4 17.80
x-Flint 6.90
x-Bone ash 3.00
x-Talc 2.30

100.10
Honey Brn: Manganese dioxide 5%
Warm Straw: Red iron oxide 8%
Warm Green: Copper Oxide 3%
Cool Green: Copper carbonate 3% + Rutile 2%
Coldl Green: Rutile 3% + .25-.5% cobalt carb.

Amy's bowls

Lord's Matte Green

-Whiting 24.70
-Custer spar 54.30
x-Ball clay 21.00

100.00

x-Copper carbonate 3.00
-Rutile 2.00

* will flow more

Salt & Soda firing

Most of the glazes here are for a heavy salting approximately 12-25 lbs. of rock salt. Some of glazes have been used in a wood salt/soda kiln with less salt and they seem to be fine.

And it probably would not be a good idea if the kiln was reduced heavy at the end after salting this at least for me has caused the shiny glazes to be not as clear and sometimes become matt.

Peters barium bright

Color: Green

Barium carbonate	21.8	21.8%
Dolomite	12.7	12.7%
Custer feldspar	16.5	16.5%
Calcined china clay	6.1	6.1%
EPK	4.5	4.5%
Flint	38.4	38.4%
	100	100 %
Red iron oxide	3.7	3.7%

Variations:
9% red iron oxide for red

(Happy Camper Red) Chun red

Kona F-4	38.84	38.8%
Flint	28.12	28.1%
Gerstley borate	11.59	11.6%
Strontium carbonate	3.87	3.9%
Whiting	8.7	8.7%
EPK	3.09	3.1%
Talc	0.97	1 %
Bone ash	0.97	1 %
Frit 3110	1.45	1.4%
Tin oxide	1.45	1.4%
Copper carbonate	0.97	1 %
	100	100 %

St John's black

Albany slip	65	61.9%
Nepheline syenite	35	33.3%
Cobalt oxide	5	4.8%
	105	100 %

blue in heavy salt

ST Johns blue black

Range: c/9-10
Firing type: Salt - Soda
Glaze type: Salt glaze
Color: Blue (electric)
Surface: Gloss
Transparency: Translucent
Flow: Slight
Testing: tested good

Custer spar	48	49.5%
Flint	20	20.6%
Wollastonite	10	10.3%
Gerstley borate	4	4.1%
Ball clay	6	6.2%
Zinc oxide	2	2.1%
Red iron oxide	3	3.1%
Black cobalt oxide	2	2.1%
Bentonite	2	2.1%
	97	100 %

St. John's Cannonball Blue

Custer feldspar	50	52.6%
Wollastonite	10	10.5%
Gerstley borate	5	5.3%
Flint	20	21.1%
Ball clay	5	5.3%
Red iron oxide	4	4.2%
Cobalt oxide	1	1.1%
	95	100 %

St. John's Cannonball Blue-Green

Wollastonite	8.6	8.6%
Custer feldspar	50.9	50.9%
Whiting	2.6	2.6%
Zinc oxide	3.4	3.4%
EPK	21.6	21.6%
Ball clay	4.3	4.3%
Flint	4.3	4.3%
Gerstley borate	4.3	4.3%
	100	100 %
Red iron oxide	15.5	15.5%
Cobalt oxide	0.9	0.9%

St. John's Cannonball Iron Green

Whiting	12	11.4%
Buckingham feldspar	53	50.5%
Barium carbonate	2.5	2.4%
Zinc oxide	2.5	2.4%
fint	24	22.9%
EPK	6	5.7%
Red iron oxide	5	4.8%
	105	100 %

St. John's Cannonball Iron Yellow

Custer feldspar	42.2	42.2%
Whiting	15.9	15.9%
Zinc oxide	2.1	2.1%
EPK	12.3	12.3%
Flint	21.1	21.1%
Red iron oxide	6.4	6.4%
	100	100 %

Ferrel black Slip glaze
(for brushing)

Albany slip	65.3	66.4%
Chromium oxide	7	7.1%
Cobalt oxide	3	3.1%
Ball clay	23	23.4%
	98.3	100 %

St. John's bright Amber

Albany slip	50	33.3%
Wollastonite	20	13.3%
Calcined china clay	5	3.3%
Gerstley borate	5	3.3%
Yellow ocher	10	6.7%
Whiting	10	6.7%
Flint	20	13.3%
Custer feldspar	30	20 %
	150	100 %

Amber Celadon
Range: c/9-10
Gloss Green-Amber

Alberta slip	33	31.1%
Wollastonite	13	12.3%
Custer feldspar	20	18.9%
Whiting	7	6.6%
Gerstley borate	3	2.8%
EPK	3	2.8%
Flint	14	13.2%
Yellow Ocher	7	6.6%
Bentonite	6	5.7%
	106	100 %

Cornell s Plum

Custer feldspar	42.86	42.9%
Flint	28.57	28.6%
Whiting	14.29	14.3%
Yellow ocher	14.29	14.3%
	100	100 %

Squab Albany Yellow

Albany slip	100	61 %
Wollastonite	40	24.4%
Calcined china clay	10	6.1%
Gerstley borate	10	6.1%
Rutile	4	2.4%
	164	100 %

70/30 red Yellow to Green

Redart	70	70 %
Whiting	30	30 %
	100	100 %

Salt & Soda firing

Carman's red

(Use 3% Black copper oxide in salt)
Gloss Red Orange c/9-10

Nepheline syenite	42	41.8%
Custer feldspar	9.3	9.3%
EPK	2	2 %
Flint	22.4	22.3%
Gerstley borate	13	12.9%
Whiting	10.4	10.4%
Black copper oxide	0.3	0.3%
Tin oxide	1	1 %
	100.4	100 %

Goose Flies High

(white) for traling on bisque or once fire)

Custer feldspar	46.25	46.2%
Gerstley borate	17.22	17.2%
Ball clay	16.12	16.1%
Flint	7.51	7.5%
Dolomite	5.41	5.4%
Zircopax	7.51	7.5%
	100	100 %

Iron Green Clear (Seacrest temmoku)

Whiting	12	12.1%
Buckingham feldspar	53	53.5%
Barium carbonate	2.5	2.5%
Zinc oxide	2.5	2.5%
Flint	24	24.2%
Red iron oxide	5	5.1%
	99	100 %

K.C. Iron Yellow

Flint	33	30 %
Ball clay	7	6.4%
Whiting	7	6.4%
Dolomite	12	10.9%
Custer feldspar	41	37.3%
Red iron oxide	10	9.1%
	110	100 %

Oreilly White

Kona F-4 feldspar	2.89	2.9%
Custer feldspar	49.55	49.6%
Dolomite	7.98	8 %
Whiting	8.77	8.8%
EPK	5.68	5.7%
Zinc oxide	3.59	3.6%
Petalite	3.29	3.3%
Superpax	6.18	6.2%
Barium carbonate	1.2	1.2%
Flint	10.87	10.9%
	100	100 %

Can replace the custer w/ Cornwall-stone

Plum

Custer feldspar	31.8	31.8%
Flint	36.4	36.4%
EPK	9.1	9.1%
Whiting	13.6	13.6%
Manganese dioxide	9.1	9.1%
	100	100 %

Sky Blue satin matt

Range: c/9-10

Custer feldspar	12	12 %
Kona F-4	30	30 %
Gerstley borate	12	12 %
Talc	14	14 %
Dolomite	8	8 %
EPK	4	4 %
Flint	20	20 %
	100	100 %
Cobalt carbonate	1	1 %
Manganese dioxide	0.25	0.3%
Chrome oxide	0.25	0.3%

H57 Vanty

Range: c/9-10
Firing type: Salt - Soda
Glaze type: Engobe

Calcined china clay	15	15.8%
EPK	10	10.5%
Ball clay	15	15.8%
Nepheline syenite	25	26.3%
Flint	25	26.3%
Zircopax	5	5.3%
	95	100 %

Variations:
a.Rutile:5%
b.black Nickle 4%
c.Red iron 6%
d.Cobalt 2%
e.Copper 4%

White Engobe

Firing type: Salt - Soda

Tennessee #9	20	20 %
XX Sagger	25	25 %
Buckingham feldspar	30	30 %
	(Not available)	
Flint	25	25 %
	100	100 %

Variations:
Blue: cobalt 2%
Green: copper 2%

Body stain - dark brown (Slip)

Firing type: Salt - Soda

XX Sagger	46	46 %
A.P. Green	23	23 %
Kentucky OM #4	23	23 %
Custer feldspar	8	8 %
	100	100 %
Red iron oxide	2	2 %
Whiting	5	5 %
Iron chromate	2	2 %

Variations:
Moss green: Green underglaze 5%
Blue Black: Cobalt ox 2%, Mang.Dioxide 2%

Body stain - White slip

Firing type: Salt – Soda

Ball clay	26.73	26.7%
EPK	26.73	26.7%
Nepheline syenite	6.93	6.9%
Flint	39.6	39.6%
	100	100 %

White slip

Firing type: Salt - Soda

EPK	20	20 %
Ball clay	20	20 %
Nepheline syenite	25	25 %
Flint	30	30 %
Borax	5	5 %
	100	100 %

Blue Slip

Range: c/9-10
Firing type: Salt - Soda

EPK	25	24.3%
Ball clay	15	14.6%
Nepheline syenite	25	24.3%
Flint	25	24.3%
Borax	5	4.9%
Zircopax	5	4.9%
Cobalt oxide	2	1.9%
black stain	1	1 %
	103	100 %

Fake Avery Flashing slip #6

Range: c/8-9-10
Firing type: Salt-Soda-Wood
Color: White-to-Orange / Red in salt
Date: 10/29/98

Ocmulgee	11.2	11.2%
EPK	88.14	88.1%
Soda ash	0.66	0.7%
	100	100 %