

SAMPLE DESCRIPTION

- 1400 - 30 100% Sh: gry, sft, blkly-plty, clayey
Tr. Ss: wht, fg, mod cly fld, fair por
- 30 - 40 100% Sh: AA, some sl sndy
- 40 - 50 90% Sh: AA, less sndy
10% Coal: blk, vit
- 50 - 60 100% Sh: AA, some coaly
Tr. Ss: wht, fg, mod cly fld, fair por
- 1460 - 1500 90% Sh: gry, sft, blkly, clayey, sl swelling
10% Coal: blk, vit
- 1500 - 20 100% Sh: AA
Tr. Coal: AA
- 20 - 30 100% Sh: gry, frm, blkly-plty, sl slty, some dk gry & carb,
w/occ carb incl
- 30 - 40 100% Sh: AA, some coaly
- 40 - 50 20% Ss: wht, fg, sbrnd, mod cly fld, fair por, w/occ carb
incl
80% Sh: AA
- 50 - 70 10% Ss: clr gry, fg, sbrnd, sl cly fld, gd por
90% Sh: lt gry-gry, sft, blkly, w/occ carb incl, some dk
gry & carb
- 70 - 80 20% Ss: AA, sl-mod cly fld, fair-gd por
80% Sh: AA
- 80 - 90 30% Ss: AA
50% Sh: gry, sft, blkly, w/occ carb incl
20% Coal: blk, vit, sl shly
- 1590 - 1600 80% Sh: gry, sft, blkly, sl slty, w/occ carb incl
20% Coal: AA
- 1600 - 10 90% Sh: AA
10% Coal: AA
- 10 - 20 10% Ss: wht, fg, sbrnd, sl cly fld, gd por, w/carb incl
90% Sh: gry-lt gry, sft, blkly-plty, some sl slty
- 20 - 30 20% Ss: wht, mg, sbang, sl cly fld, frm, tite, sl feld,
sl calc
30% Sh: AA
50% Coal: blk, vit shly
- 30 - 50 70% Sh: gry, sft, blkly-plty, clayey
30% Coal: blk, vit

1650 - 60 90% Sh: gry, sft, blk
10% Coal: blk, vit, sl shly

60 - 70 30% Sh: AA
70% Coal: AA

70 - 90 80% Sh: gry, sft, plty, clayey
20% Coal: AA

1690 - 1700 20% Ss: wht, fg, sbrnd, cly fld, tite
80% Sh: AA, some sl sndy

1700 - 10 10% Ss: AA
70% Sh: AA
20% Coal: blk, vit

10 - 30 30% Ss: wht, mg, sbang, cly fld, tite, calc
60% Sh: AA
10% Coal: blk, vit

30 - 40 40% Ss: AA
40% Sh: AA
20% Coal: AA

40 - 70 100% Coal: blk, vit

70 - 80 50% Ss: wht, f-mg, sbang, mod cly fld, fair por-tite, calc,
sl feld, w/occ carb incl
40% Sh: gry, sft, blk, clayey
10% Coal: AA

80 - 90 50% Ss: AA, mg
40% Sh: AA
10% Coal: AA

1790 - 1800 30% Ss: AA, sl-mod cly fld, fair por
70% Sh: AA
Tr. Coal: AA

1800 - 10 70% Ss: wht, fg, sbrnd, cly fld (swelling), calc, sl feld,
20% Sh: AA
10% Coal: blk, vit

10 - 30 90% Ss: AA
10% Coal: AA

30 - 40 90% Ss: AA
10% Sh: gry, sft, plty, clayey

40 - 50 70% Ss: wht, fg, sbrnd, mod cly fld (swlg), tite, sl feld,
calc, w/occ carb incl
30% Sh: AA, gry-dk gry
Tr. Coal: blk, vit

50 - 70 70% Ss: wht, fg, AA, w/hvy cly fill
30% Sh: gry, sft, plty, clayey
Tr. Coal: AA

1870 - 80 40% Ss: AA
60% Sh: gry, frm, blk, slty-sndy, w/carb incl

1880 - 1900 40% Ss: AA, shly
60% Sh: AA

1900 - 30 100% Sh: gry, frm, blk, slty-sndy, calc, w/carb incl

30 - 50 100% Sh: AA, less sndy

1950 - 2000 100% Sh: gry, frm, blk, slty, calc, w/carb incl, some
dk gry and carb
Tr. Coal: blk, vit

2000 - 40 100% Sh: gry, frm, blk, slty, w/occ carb incl
Tr. Coal: AA

40 - 70 100% Sh: AA
Tr. Ss: wht, fg, sbrnd, sl cly fld, gd por

2070 - 2100 100% Sh: gry-dk gry, frm, blk, sl slty, w/occ carb incl,
sl carb, sl calc

2100 - 20 100% Sh: AA, less slty, less carb

20 - 60 100% Sh: AA, sl slty

2160 - 2200 100% Sh: AA, sl micmica, no carb incl

2200 - 30 100% Sh: AA, sl sandy
Tr. Coal: blk, vit

30 - 70 100% Sh: AA, no sand

70 - 90 100% Sh: AA, some bl gry, sft, waxy

2290 - 2320 100% Sh: gry, frm, blk-plty, slty, w/occ carb incl, some
sft and clayey, sl calc
Tr. Chert: mlky wht, cg, sbrnd

20 - 50 100% Sh: gry-brn, frm, blk, slty, w/carb incl, sl calc
Tr. Coal: blk, vit

2350 - 2410 100% Sh: AA, some bl gry-gry, sft, clayey, sl calc

10 - 40 100% Sh: gry, frm, blk, slty-sndy, sl calc

40 - 60 100% Sh: AA, w/occ carb incl
Tr. Chert: clr, cg, ang

2460 - 2500 100% Sh: AA
Tr. Coal: blk, vit

2500 - 60 100% Sh: AA, some plty and clayey

2560 - 2600 100% Sh: gry, sft, blk, swelling, w/occ carb incl,
sl calc

2600 - 40 100% Sh: gry, frm, blk, slty, sl calc

40 - 50 50% Ss: clr gry, fg, sbrnd, sl cly fld, gd-fair por, w/occ carb incl, calc
50% Sh: AA

50 - 60 70% Ss: AA
30% Sh: gry, frm, blk, slty, calc, w/occ carb incl

60 - 70 N.S.

70 - 80 20% Ss: AA
80% Sh: AA
Tr. Coal: blk, vit

80 - 90 10% Ss: AA
90% Sh: AA, some sndy

2690 - 2700 40% Ss: gry, fg, sbrnd, sl cly fld-sl shly, fair por, w/occ carb incl, calc
60% Sh: AA
Tr. Coal: AA

2700 - 10 30% Ss: wht, fg, sbrnd, cly fld, tite, w/occ carb incl, calc
70% Sh: gry, frm, blk, slty-sl sndy, sl calc, w/occ carb incl, some bl gry, sft, clayey

10 - 20 20% Ss: gry, vfn-g, sbrnd, mod cly fld, tite, w/occ carb incl, calc
80% Sh: AA

20 - 30 30% Ss: AA
70% Sh: AA

30 - 40 N.S.

40 - 50 20% Ss: gry, vfn-fn-g, sbrnd, mod cly fld, fair por, calc, w/occ carb incl
80% Sh: AA

50 - 60 10% Ss: wht, fg, sbrnd, mod-hvy cly fld, tite, w/occ carb incl, calc
90% Sh: gry, frm, blk, slty, sl calc

60 - 70 100% Sh: AA

70 - 80 10% Ss: gry, fg, sbrnd, shly, tite
90% Sh: AA

2780 - 2800 40% Ss: gry, fg, sbrnd, sl shly-sl cly fld, fair por, w/occ carb incl, calc
60% Sh: lt gry, frm, blk, slty, w/occ carb incl

2800 - 10 40% Ss: AA
60% Sh: AA, some dk gry & carb

2810 - 30 40% Ss: AA
 60% Sh: AA, less slty

30 - 40 50% Ss: AA
 50% Sh: AA

40 - 50 30% Ss: AA
 70% Sh: AA

50 - 60 70% Ss: AA
 30% Sh: AA

60 - 70 60% Ss: wht, lt gry, fg, sbrnd, msrt, uncons, sl
 cly fld, fair por, w/carb incl, calc
 40% Sh: lt-m-gry, frm, blk, slty in part, sl carb

70 - 80 60% Ss: AA
 40% Sh: AA

80 - 90 50% Ss: AA
 50% Sh: AA

2890 - 2900 40% Ss: lt-m-gry, fg, sbrnd, msrt, uncons, sl cly fld,
 fair por, w/carb incl.
 60% Sh: AA, being sl darker

2900 - 10 60% Ss: lt-m-gry, vfn-fn-g, sbrnd, msrt, uncons, sl calc,
 dirty, poor por, w/carb incl
 40% Sh: gry-grn, frm, blk, sl slty, w/carb incl

10 - 20 80% Ss: AA
 20% Sh: AA

20 - 30 40% Ss: AA
 60% Sh: AA

30 - 40 20% Ss: wht-lt gry, mg - fg, sbrnd, msrt, uncons, fri in
 part, sl calc, fair por, w/carb incl
 80% Sh: m-dk gry, frm, blk, sl slty, carb in part

40 - 50 20% Ss: AA
 80% Sh: AA

50 - 60 30% Ss: AA
 70% Sh: AA

60 - 70 30% Ss: AA
 70% Sh: AA

70 - 80 40% Ss: AA
 60% Sh: AA

80 - 90 10% Ss: AA
 90% Sh: m-dk gry, frm, blk-plty, slty in p, sl carb

2990 - 3000 50% Ss: lt-m-gry, fg, sbrnd, msrt, uncons, sl calc,
 fair por, w/carb incl
 50% Sh: AA

3000 - 10 70% Ss: AA, w/occ lse, cg, sbrnd qtz frags
30% Sh: AA

10 - 20 70% Ss: AA
30% Sh: AA

20 - 30 10% Ss: AA
90% Sh: AA

30 - 40 70% Ss: lt-dk gry, f-mg, sbrnd, msrt, uncons, calc,
fair por, w/occ carb incl
30% Sh: lt-m-gry, frm, blk, sl slty in p, carb in p,
micmica in p

40 - 50 40% Ss: AA
60% Sh: AA

50 - 60 80% Ss: AA
20% Sh: AA

60 - 70 60% Ss: AA
40% Sh: AA

70 - 80 40% Ss: AA, occ lse, cg, sbrnd, qtz frags
60% Sh: AA, being more plty

80 - 90 40% Ss: wht, lt-m-gry, fg, sbrnd, msrt, uncons, calc,
fair por, w/carb incl
60% Sh: AA

3090 - 3100 50% Ss: AA
50% Sh: AA

3100 - 10 10% Ss: AA
80% Sh: AA
10% Coal: blk, blk, hd, vit

10 - 20 10% Ss: AA
90% Sh: AA

20 - 30 100% Sh: lt-m-gry, frm, blk-plty, sl carb, micmica
in part
Tr. Coal: blk, blk, hd, vit

30 - 40 30% Ss: lt - dk gry, fg, sbrnd, msrt, uncons, sl cly fld,
calc, fair por, w/carb incl in part
70% Sh: AA

40 - 50 20% Ss: AA
80% Sh: AA

50 - 60 30% Ss: wht-lt gry, fg, sbrnd, msrt, fri in p, sl cly
fld, sl calc, fair por, w/carb i p
70% Sh: lt-m gry, gry-grn, frm, blk-plty, slty i p,
wxy i p, carb incl, micmica

60 - 70 40% Ss: AA
60% Sh: AA

3170 - 80	20% Ss: AA 80% Sh: AA
80 - 90	10% Ss: AA 90% Sh: AA
3190 - 3200	30% Ss: AA 70% Sh: AA
3200 - 10	30% Ss: AA 70% Sh: AA
10 - 20	20% Ss: buff, lt-m gry, fg, sbang-sbrnd, msrt, uncons, fri i p, calc, sl cly fld, carb incl i p 80% Sh: lt - m gry, gry-grn, frm, blkylt, carb i p
20 - 40	100% Sh: AA Tr. Coal: blk, blkylt, hd, dns, vit
40 - 50	10% Ss: AA 90% Sh: AA
50 - 60	90% Sh: lt-m gry, gry-grn, frm, blkylt, carb i p 10% Coal: blk, blkylt, hd, vit
60 - 70	10% Ss:lt gry, clr, fg, sbrnd, msrt, pred uncons, calc, fair por, w/carb incl, occ lse qtz frags 90% Sh: AA
70 - 80	10% Ss: AA 90% Sh: AA Tr. Coal: AA
80 - 90	30% Ss: AA 70% Sh: AA
3290 - 3300	90% Sh: lt-m gry, gry-grn, blkylt, slty, carb i p 10% Coal: blk, blkylt, hd, vit
3300 - 10	10% Ss: clr, lt-m gry, fg, sbrnd, msrt, uncons, calc, fair por, w/carb incl 90% Sh: AA
10 - 20	30% Ss: AA 70% Sh: AA
20 - 30	100% Sh: AA
30 - 40	40% Ss: clr-lt gry-m gry, fg, sbrnd, msrt, uncons, calc, fair por, w/carb incl i p 60% Sh: lt-m gry, gry-grn, frm, blkylt, slty, carb i p, micmica i p
40 - 50	20% Ss: AA 80% Sh: AA VPS - abnt LCM

3350 - 60 20% Ss: AA
 80% Sh: AA
 VPS - abnt LCM

60 - 70 20% Ss: AA
 80% Sh: AA
 VPS - abnt LCM

70 - 80 10% Ss: AA
 90% Sh: AA
 VPS - abnt LCM

80 - 90 10% Ss: clr, lt gry, fg, sbrnd, msrt, uncons, calc
 fair por, w/calc incl i p, sl cly fld, occ lse qtz
 90% Sh: lt-m gry, gry-grn, blk, carb i p, micmica

90 - 3400 20% Ss: AA
 80% Sh: AA

3400 - 10 100% Coal: blk, blk, hd, vit, fis i p

10 - 30 10% Ss: clr-lt gry, fg, sbrnd, msrt, uncons, calc,
 fair por, w/carb incl i p, sl cly fld
 20% Sh: AA
 70% Coal: AA

30 - 40 10% Ss: AA
 50% Sh: lt-m gry, frm, blk, carb i p, micmica
 40% Coal: blk, blk, hd, vit, fis i p

40 - 50 80% Sh: AA
 20% Coal: AA

50 - 60 30% Ss: clr, lt gry-m gry, fg, msrt, uncons, fri i p,
 calc, fair por, w/carb incl
 70% Sh: gry-grn, lt gry-m gry, frm, blk, sl carb in p,
 micmica

60 - 70 60% Ss: AA
 40% Sh: AA, w/tr. pyrite
 Tr. Coal: blk, blk, hd, vit

70 - 80 60% Ss: AA
 40% Sh: AA
 Tr. Coal: AA

80 - 90 60% Ss: clr, lt gry, fg, sbrnd, mrt, uncons, fri i p,
 calc, fair por, w/carb incl, occ lse qtz
 30% Sh: gry-grn, lt - m gry, frm, blk, carb i p, micmica
 10% Coal: blk, blk, hd, vit

90 - 3500 70% Ss: AA
 20% Sh: AA
 10% Coal: AA

3500 - 10 80% Ss: AA
 20% Sh: AA

3510 - 20 50% Ss: AA
30% Sh: AA
20% Coal: blk, blk, hd, vit

20 - 30 50% Ss: clr, lt gry - m gry, fg, msrt, uncons, fri i p,
calc, fair por, w/carb incl, occ lse qtz
50% Sh: lt-m gry, gry-grn, frm, blk, carb i p, micmica

30 - 40 70% Ss: AA
30% Sh: AA

40 - 50 40% Ss: AA
60% Sh: AA

50 - 60 30% Ss: AA
70% Sh: AA

60 - 70 30% Ss: lt gry - m gry, fg, msrt, uncons, calc, fair por
w/carb incl i p, sl cly fld
70% Sh: lt-m gry, gry-grn, frm, blk, carb i p, occ mic-
mica

70 - 80 30% Ss: AA
70% Sh: AA

80 - 90 40% Ss: AA
60% Sh: AA

90 - 3600 50% Ss: AA
40% Sh: AA
10% Coal: blk, blk, hd, vit

3600 - 10 70% Ss: clr-wht, lt gry, f-mg, sbrnd, msrt, uncons, fair
por, w/carb & qtz incl
30% Sh: AA

10 - 20 40% Ss: AA
60% Sh: lt gry-m gry, gry-grn, frm, blk, slty, carb i p
Tr. Coal: blk, blk, hd, vit, sl fis i p

20 - 30 20% Ss: AA
80% Sh: AA

30 - 40 10% Ss: AA
90% Sh: AA, w/tr. pyrite

40 - 50 30% Ss: clr-wht, lt gry, fg, msrt, uncons, fri i p,
fair por w/carb incl, occ lse cg qtz
60% Sh: lt - m gry, gry-grn, frm, blk, slty i p, carb
i p, micmica i p
10% Coal: blk, blk, hd, vit

50 - 80 30% Ss: AA
70% Sh: AA

3680 - 90 10% Ss: AA
90% Sh: AA

90 - 3700 20% Ss: AA
80% Sh: AA

3700 - 10 30% Ss: wht-lt gry, vfn-fn-g, sbrnd, msrt, uncons,
calc, fair por, w/carb & qtz incl
70% Sh: lt gry-m gry, gry-grn, frm, blk, carb i p

10 - 20 50% Ss: AA
50% Sh: AA

20 - 30 50% Ss: AA, being more finely grained
50% Sh: AA

30 - 40 60% Ss: AA
40% Sh: AA

40 - 50 60% Ss: clr-wht, lt gry-dk gry, vfn-fn-g, sbrnd, msrt,
uncons, fair por w/carb incl, cly fld i p
40% Sh: lt gry-m gry, gry-grn, frm, blk, carb i p

50 - 70 30% Ss: AA
70% Sh: AA

70 - 80 10% Ss: AA
70% Sh: AA
20% Coal: blk, blk, hd, vit

3780 - 3810 LCM

3810 - 20 70% Ss: lt gry-m gry, fg, sbrnd, msrt, uncons, calc,
poor por, being more carb
30% Sh: pred gry-grn, blk, frm, sl carb, micmica

20 - 50 60% Ss: AA
30% Sh: AA
10% Coal: blk, blk, hd, vit

50 - 60 30% Ss: wht-lt gry, fg, sbrnd, msrt, uncons, calc,
fair por, w/carb incl
60% Sh: AA
10% Coal: AA

60 - 70 30% Ss: AA
60% Sh: lt gry-m gry, gry-grn, frm, blk, sl carb i p,
micmica
10% Coal: blk, blk, hd, vit

3870 - 3900 40% Ss: AA
60% Sh: AA
VPS - abnt cedar fiber in smpl

3900 - 10 30% Ss: AA
70% Sh: AA
VPS - abnt cedar fiber in smpl

3910 - 20 10% Ss: lt gry, fg, msrt, uncons, calc, fair por w/carb
incl
90% Sh: lt gry-m gry, gry-grn, frm, blk, slty, sl carb
i p, micmica

20 - 50 40% Ss: AA
60% Sh: AA
Tr. Coal: blk, blk, hd, vit

50 - 70 N.S.

70 - 80 10% Ss: wht, f-mg, sbang, msrt, uncons, calc, fair por
w/carb incl
90% Sh: lt-dk gry, frm, blk, sl carb i p, slty

80 - 90 40% Ss: AA, lt brn i p
60% Sh: AA

3990 - 4000 40% Ss: wht-lt gry, fg, sbang, msrt, uncons, calc, poor
por. w/carb incl i p
60% Sh: m-dk gry, frm, blk, carb i p, micmica

4000 - 10 AA, w/abnt cly fill

10 - 20 30% Ss: buff-wht, fg, sbang, msrt, uncons, calc, poor
por, w/carb incl
70% Sh: AA

20 - 30 30% Ss: AA
70% Sh: gry-grn, m-dk gry, frm, blk, carb i p, micmica
i p

30 - 40 20% Ss: AA
80% Sh: AA, being more slty

40 - 50 40% Ss: AA
50% Sh: AA
10% Coal: blk, blk, hd, vit

50 - 60 30% Ss: buff-wht, lt gry, vfn-fg, msrt, m-uncons, chlky
i p, sl cly fld, poor por w/carb incl, calc
60% Sh: m-gry-dk gry, gry-grn, frm, blk, carb in part
10% Coal: AA

60 - 80 60% Ss: AA
40% Sh: AA

80 - 90 10% Ss: AA
20% Sh: AA
70% Coal: blk, blk, hd, vit

90 - 4100 30% Ss: wht-lt gry, lt-m-brn, vfn-fn-g, msrt, uncons,
abnt cly fld, calc, poor por w/carb incl
60% Sh: lt gry-m gry, gry-grn, frm, blk, slty, carb i p
10% Coal: AA

4100 - 10 30% Ss: AA
70% Sh: AA

4270 - 80 30% Ss: AA, being more cly fld
 70% Sh: AA

80 - 90 60% Ss: buff-wht-clr-brn, fg, sbang-sbrnd, msrt, unconc,
 calc, sl cly fld, occ carb incl
 30% Sh: lt gry-m gry, gry-grn, frm, blk-plty, carb, slty
 10% Coal: blk, blk, hd, vit

90 - 4300 50% Ss: AA
 50% Sh: AA

4300 - 10 30% Ss: AA
 70% Sh: AA

10 - 20 20% Ss: clr-wht, gry, vfn-fn-g, sbrnd, msrt, unconc,
 calc, sl cly fld, occ carb incl
 80% Sh: lt gry-m gry, frm, blk-plty, slty, carb

20 - 30 20% Ss: AA, occ lse, cg qtz
 70% Sh: AA
 10% Coal: blk, blk, vit

30 - 40 30% Ss: AA
 60% Sh: AA
 10% Coal: AA

40 - 50 60% Ss: clr-wht, fg, sbang-sbrnd, msrt, unconc, calc,
 w/carb incl, sl cly fld
 40% Sh: lt gry-drk gry, frm, blk-plty, slty, fiss i p,
 carb

50 - 60 50% Ss: AA, becoming more cly fld
 50% Sh: AA

60 - 70 60% Ss: AA
 30% Sh: AA
 10% Coal: blk, blk, hd, vit

70 - 80 40% Ss: clr-wht-brn, vfn-fn-g, sbrnd-sbang, msrt, unconc,
 sl calc, sl cly fld, occ carb incl
 60% Sh: gry, brn, gry-grn-blk, frm, blk-plty, slty, carb,
 micmica i p

4380 - 4400 40% Ss: AA
 60% Sh: AA

4400 - 10 80% Ss: clr-wht, m gry-dk gry, fg, sbrnd, msrt, unconc,
 sl calc, fair por w/carb incl
 20% Sh: m gry-dk gry, frm, blk-plty, slty, carb

10 - 20 70% Ss: AA
 30% Sh: AA

20 - 30 30% Ss: AA
 50% Sh: AA
 20% Coal: blk, blk, hd, vit

4430 - 40 60% Ss: clr-wht, lt gry-dk gry, fg, sbrnd, msrt,
uncons, sl calc, sl cly fld, fair por w/carb incl
40% Sh: lt gry-dk gry, blk, frm, blk-plty, slty, carb

40 - 50 30% Ss: AA
70% Sh: AA

50 - 60 50% Ss: AA
50% Sh: AA

4460 - 4590 N.S.

4590 - 4610 20% Ss: lt gry-m gry, fg, sbrnd, msrt, uncons, calc,
cly fld, occ carb incl
80% Sh: m gry-dk gry, gry-grn, frm, blk-plty, carb, vy
slty

10 - 40 20% Ss: AA
80% Sh: AA

40 - 70 40% Ss: AA
60% Sh: AA

4670 - 4700 30% Ss: gry, brn, vfn-fn-g, sbrnd, msrt, uncons, sl
calc, arg, cly fld, w/carb incl
70% Sh: m gry-dk gry, gry-grn, frm, blk-plty, carb,
slty

4700 - 30 20% Ss: AA
80% Sh: AA

30 - 60 30% Ss: m gry-dk gry, brn, fg, sbrnd, msrt, uncons,
sl calc, arg, w/carb incl
70% Sh: AA

4760 - 4820 40% Ss: AA
60% Sh: AA

4820 - 50 30% Ss: clr-wht, m gry-dk gry, fg, sbrnd, msrt, uncons,
sl calc, arg, w/carb incl i p
70% Sh: m gry-dk gry, frm, blk-plty, slty, carb

4850 - 4910 10% Ss: AA
90% Sh: AA

10 - 50 N.S.

50 - 60 100% Sh: dk gry-blk, frm, plty, coaly

60 - 80 N.S.

4980 - 5000 100% Sh: dk gry, frm, plty-blky, sl carb

5000 - 10 N.S.

5010 - 40 100% Sh: AA, few bl gry, sft, waxy, clayey
 40 - 50 100% Sh: dk gry, frm, blk-platy, sl carb, sl micmica,
 w/occ carb incl
 50 - 60 100% Sh: gry-brn, sft, platy, clayey, w/occ carb incl
 60 - 90 100% Sh: AA, dk gry-brn
 5090 - 5110 100% Sh: gry-brn, sft-frm, platy, w/occ carb incl
 5110 - 50 100% Sh: dk gry, blk, frm, platy, carb
 5150 - 5200 100% Sh: AA, platy-blky
 5200 - 30 100% Sh: gry-brn, sft-frm, blk-platy, w/carb incl i p
 30 - 60 100% Sh: AA
 5260 - 5300 100% Sh: AA, gry-grn i p
 5300 - 10 10% Ss: clr-wht, fg, sbrnd, msrt, uncons, sl calc
 90% Sh: lt-m gry, gry-grn, frm, blk-platy, slty, carb i p
 10 - 20 10% Ss: AA
 90% Sh: AA
 20 - 30 10% Ss: AA, sl cly fld
 90% Sh: AA
 Tr. Coal: blk, blk, vit
 30 - 40 N.S.
 40 - 50 100% Sh: lt - m gry, brn i p, frm-sft, blk-platy, w/occ
 carb incl
 5350 - 5400 10% Ss: clr-lt gry, fg, sbrnd, msrt, uncons, calc, sl cly
 fld, w/occ carb incl
 90% Sh: m gry-dk gry, frm, blk-platy, carb
 5400 - 10 30% Ss: AA
 70% Sh: AA, more gry-grn
 10 - 20 10% Ss: AA
 90% Sh: AA, slty
 20 - 30 20% Ss:clr-lt gry, fg, sbrnd, msrt, uncons, calc, sl
 cly fld, carb incl i p
 80% Sh: m gry-dk gry, gry-grn, frm, blk, carb
 30 - 50 40% Ss: AA
 60% Sh: AA
 50 - 60 20% Ss: clr-lt gry, vfn-fn-g, sbrnd, msrt, uncons,
 sl calc, sl cly fld, w/occ carb incl
 80% Sh: m gry-dk gry, gry-grn, frm, blk-platy, carb,
 micmica i p, slty

5460 - 70 30% Ss: AA
 70% Sh: AA

5470 - 5500 30% Ss: AA
 70% Sh: AA
 VPS - abnt LCM (cedar fiber)

5500 - 10 10% Ss: AA
 90% Sh: AA
 (abnt LCM)

10 - 40 100% Sh: m gry-dk gry, gry-grn, brn, blkyltly, bcmg
 more carb, micmica
 VPS - abnt LCM

40 - 50 N.S.

5550 - 5600 100% Sh: m gry-dk gry, gry-grn, frm, blkyltly, slty,
 carb, micmica

5600 - 10 20% Ss: lt gry, fg, sbang-sbrnd, msrt, uncons, sl calc,
 poor por, w/carb incl i p
 80% Sh: AA

10 - 30 N.S.

30 - 40 40% Ss: clr-wht, lt gry, fg, sbang-sbrnd, msrt, uncons,
 sl calc, fair por, w/occ carb incl
 60% Sh: m gry-dk gry, frm, blkyltly, carb, micmica i p

40 - 60 70% Ss: AA
 30% Sh: AA

60 - 80 30% Ss: clr-lt gry, fg, sbrnd, msrt, uncons, sl calc,
 w/carb incl
 70% Sh: m - dk gry, frm, blkyltly, slty, carb i p

80 - 90 10% Ss: AA
 90% Sh: AA
 VPS - abnt LCM

5690 - 5700 100% Sh: AA

5700 - 10 10% Ss: AA
 90% Sh: AA

10 - 50 20% Ss: AA, fair por, w/carb incl, sl cly fld
 80% Sh: m gry-dk gry, frm, blkyltly, carb, micmica

50 - 60 100% Sh: AA

60 - 80 N.S.

80 - 90 10% Ss: lt gry, fg, sbrnd, sl cly fld, w/carb incl
 90% Sh: AA, w/some gry-grn, slty

5790 - 5800 100% Sh: AA

5800 - 10 20% Ss: AA
80% Sh: AA

10 - 50 10% Ss: clr-wht, lt gry, fg, sbrnd, msrt, uncons, sl
clay fld, w/carb incl
90% Sh: m gry-dk gry, frm, blk, micmica, vy carb
VPS - abnt LCM

5850 - 5950 20% Ss: AA
80% Sh: AA
VPS - abnt LCM

5950 - 60 30% Ss: AA
70% Sh: AA

60 - 70 100% Sh: m gry-dk gry, gry-grn, frm, blk, carb

70 - 80 10% Ss: clr-lt gry, fg, sbrnd, msrt, uncons, sl clay
fld, fair por, w/carb incl
90% Sh: AA

80 - 90 100% Sh: AA

5990 - 6000 N.S.

6000 - 10 100% Sh: AA

10 - 20 30% Ss: lt gry, vfn-fn-g, sbrnd, msrt, uncons, sl clay
fld, fair por, w/carb incl
70% Sh: m gry-dk gry, blk, frm, blk, carb, micmica i p

20 - 30 10% Ss: AA
90% Sh: AA

30 - 40 N.S.

40 - 50 100% Sh: m gry-dk gry, blk, frm, blk, carb

50 - 60 10% Ss: AA
90% Sh: AA

60 - 80 N.S.

6080 - 6100 100% Sh: m gry-dk gry, blk, frm, blk-plty, carb, mic-
mica i p

6100 - 10 N.S.

10 - 20 10% Ss: wht-lt gry, vfn-fn-g, sbrnd, msrt, uncons,
sl calc, sl clay fld, w/carb incl
90% Sh: m gry-dk gry, blk, frm, blk-plty, carb, slty

20 - 40 10% Ss: AA
90% Sh: AA

40 - 50 N.S.

50 - 60 10% Ss: AA
90% Sh: AA

6160 - 6200 N.S.

6200 - 10 10% Ss: dk gry, fg, sbang, clean, good por, calc
 90% Sh: dk gry-blk, blk, frm, slty, calc

10 - 20 30% Ss: AA, clr gry-wht, sl cly fld, good por
 70% Sh: AA, gry-dk gry, scat pyrite masses

20 - 30 20% Ss: AA, some w/sl stn
 80% Sh: AA

30 - 40 40% Ss: gry, fg, sl cly fld, frm, fair por, sl glauc, calc
 60% Sh: AA

40 - 50 30% Ss: AA, gry-wht
 70% Sh: AA

50 - 60 20% Ss: gry, fg, sbang, sl shly, fair por, calc
 80% Sh: AA, vy slty, scat pyrite masses, carb

60 - 70 50% Ss: wht-gry, fg, sbang, sl cly fld, fair por, calc,
 sl glauc
 50% Sh: AA

70 - 80 50% Ss: gry, fg, sbang, clean, frm, calc, good por
 50% Sh: AA, less slty

80 - 90 10% Ss: wht-gry, fg, sbang, sl-mod cly fld, fair por,
 frm, calc
 90% Sh: gry, frm, glky, slty, sl calc, w/occ carb incl

6290 - 6300 30% Ss: wht, f-mg, sbang, sl cly fld, good por, sl
 glauc, calc
 70% Sh: AA, less slty, sl clayey

6300 - 10 10% Ss: AA
 90% Sh: gry, frm, slty, blk, sl calc

10 - 20 30% Ss: AA
 70% Sh: AA

20 - 30 30% Ss: AA, clean, good por
 70% Sh: AA, slty, trace inoceramus prisms

30 - 40 30% Ss: AA
 70% Sh: AA

40 - 50 30% Ss: AA
 70% Sh: dk gry, frm, blk, slty, carb, sl calc

6350 - 6370 TD 20% Ss: AA
 80% Sh: AA, some blk and coaly