Running a CHEF Gel (*S. cerevisiae* full genome spread)

1) Acquire gel casting tray and comb.

2) Slide gel platform into the casting stand/tray.

3) Place comb so it leaves a 2 mm space between the bottom of teeth and the casting tray.

4) Place the comb in the far positioning slot.

5) Pour 100ml agarose in the gel tray, let gel (1.0% agarose, 0.5X TBE) polymerize 30 minutes.

Alternate/Preferred 4 & 5) Place DNA agarose plugs on the comb teeth, place comb in the positioning slot and poured agarose gel (1.0% agarose, 0.5X TBE) around it. Let gel polymerize 30 minutes.

6) Remove comb by rocking so as not to pull the gel off the platform.

7) Place DNA agarose plugs in the wells. (If applicable).

8) Take polymerized gel and 2 liters 0.5X TBE to CHEF gel apparatus (Briggs 2__).

9) Place CHEF gel in the frame. Add 2 liters of buffer to the unit.

10) Connect tubing from the cooling unit to the rig, turn on circulation pump and set pump to 70.

11) Turn on the cooling unit and set to 14 C.

12) Turn on power unit. On block 1 -Set voltage to 5.5 V/cm, set run time to 24 hours, set initial switch time to 60 seconds and second switch time to 120 seconds. Press start, return in 24 hours.

Running a CHEF Gel (*S. cerevisiae* full genome spread) (continued)

SHUT DOWN

1) Turn off power supply.

2) Turn off cooling unit.

3) Attach drain hose and drain buffer (to include tubing) and discard.

4) Refill chamber with 1.5L to 2L ddH_2O and circulate.

5) Drain ddH_2O (to include tubing) and discard. Turn off pump and disconnect tubing from gel rig.