# MK III Terpenator Operating Guide

Scale Method

### Loading the material tube

- 1. Attach a 1.5" TriClamp cap to end of material tube to keep material from falling out.
- 2. Pack 1-3 unbleached coffee filters on the end of your material tube.
- 3. Pack dry plant material in your material tube. (Best packing density is 3.0 4.2 grams per cubic inch)
- 4. Pack 1-3 unbleached coffee filters on the opposite end of the material tube.
- 5. Attach screen gaskets to both ends of the material tube. KEEP GASKETS AND FLANGES FREE FROM DEBRIS
- 6. Attach material tube to Terpenator.

### **Operating the Terpenator**

- 1. Close all valves on the recovery cylinder.
- 2. Open ALL valves on extractor.
- 3. Turn on high vacuum pump and pump system down to about -29"Hg (This number changes depending on your altitude. E.g. Denver is ~ 25"Hg, San Diego is -29"Hg).
- 4. Close valves **#3, #4,** and **#1**.
- 5. Turn off vacuum pump.
- 6. Place butane storage tank on scale, tare scale to 0 pounds.
- 7. Open all valves on the recovery cylinder.
- 8. Turn on the recovery pump.
- 9. Turn on valve #4.

Notice you will start to lose weight on the scale as solvent is injected into the system when opening valve #4.

- 10. When you see liquid reach the sight glass, note the weight value on the scale as "column soak weight".
  - 1. This will tell you how much butane is currently in the system, and how much is required to flood the column. E.g. 1 pound
  - 2. If you don't have a sight glass, you can hold your hand at the top of the column to feel the chill of the butane.
- 11. When the scale reads double the column soak weight (E.g. 2 pounds) turn off valve #4 and valve #2.
- 12. Place recovery cylinder in ice bucket.
- 13. Place recovery pot/extractor in a warm water bath at 80F 120F.
- 14. Continue to pump with the recovery pump until the internal pressure is reduced to -10"Hg.
- 15. Place butane/propane storage tank on scale.
- 16. Gently open valve #2 and valve #4 till the recovery tank loses solvent equal to the column soak weight in step 9.
- 17. Close valve #4 and then valve #2 and continue to pump until the system pressure is again reduced to -10"Hg.
- 18. Repeat steps 11 through 17 for as many cycles as you choose to run. (Typically three cycles is enough.)
- 19. At the end of the last cycle, when the gauge hits -10"Hg, slowly open valve **#2** and then valve **#3** to dump the column.
- 20. Continue to pump until the system reaches -22"Hg (-19"Hg at higher altitudes)
- 21. Close valve **#5** and turn off the recovery pump.
- 22. Open valve **#1**, and turn on the high vacuum pump.
- 23. Pump the system down to -29.5"Hg and close valve #1.
- 24. Shut off the vacuum pump and allow the system to sit under hard vacuum for about 5 minutes.
- 25. Remove product from lower collection tank.

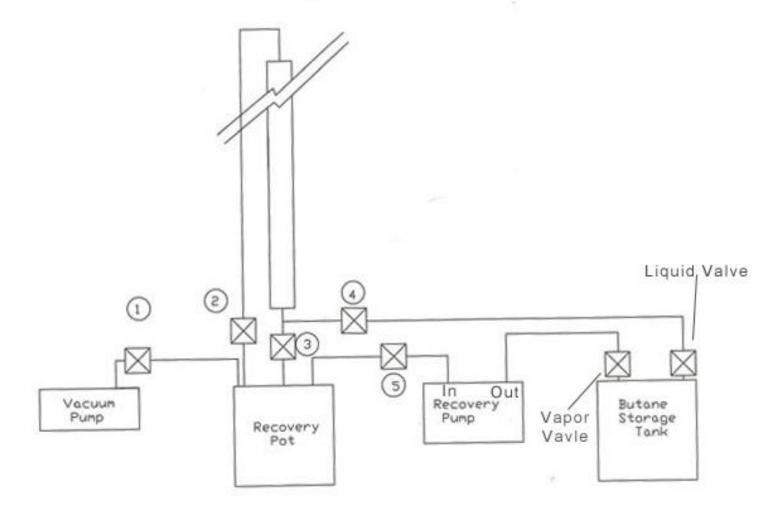
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### NOTICE:

ALWAYS OPERATE OUTSIDE IN A EXTREMELY WELL VENTILATED AREA

Terpenator Operating Schematic



Skunk Pharn Research GW/gw 10-22-12

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