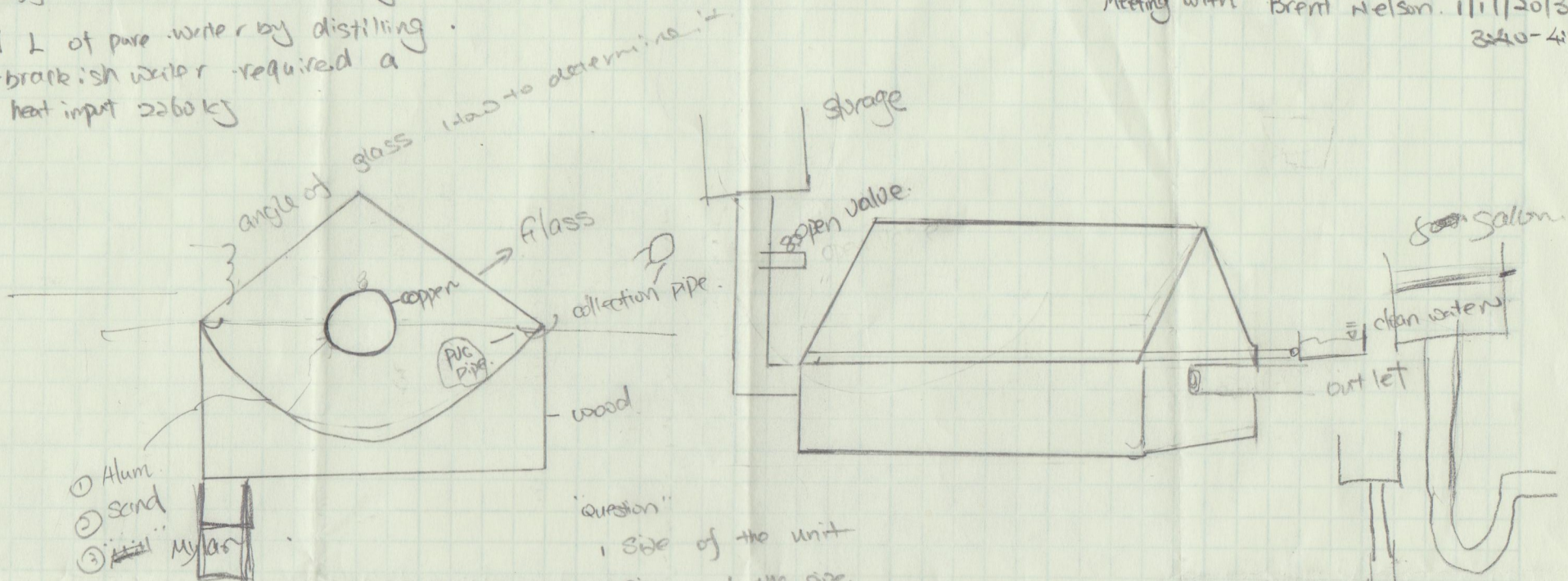


Energy required " 2260 kJ/kg.

1 L of pure water by distilling.
brackish water required a
heat input 2260 kJ

Meeting with Brent Nelson. 11/7/2013
3:40-4:00



- "maintenance"
- ① Alum.
 - ② Sand
 - ③ ~~filter~~ Mylar
- ② Removable pipe

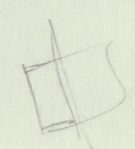
- "question"
1. Size of the unit
 2. Size of the pipe.
 3. estimate the energy input required to produce fresh water
 4. Up to 500 gallons of water.
 5. Rate of production Rate
 6. Size of population
 7. Hole on the pipe diameter

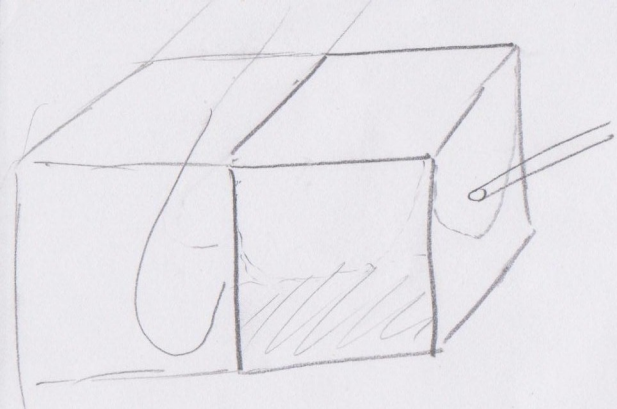
Equation of output of a solar still $Q = \frac{E \times \eta \times A}{2.3}$

↓
daily output of distilled water (L/day)

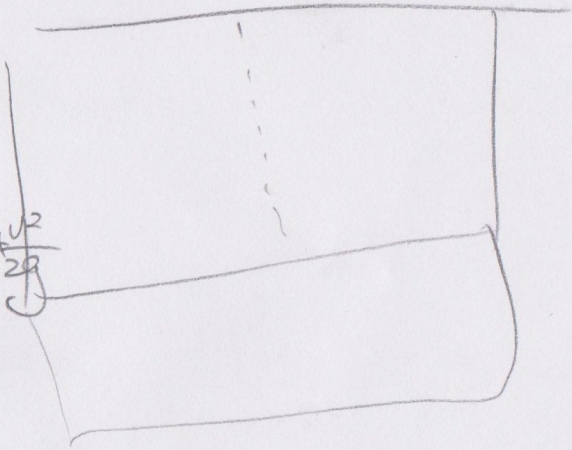
E = overall efficiency
 G = daily global solar irradiation = 18.10 MJ/m²
 A = aperture area of the still.

~~Alum.~~

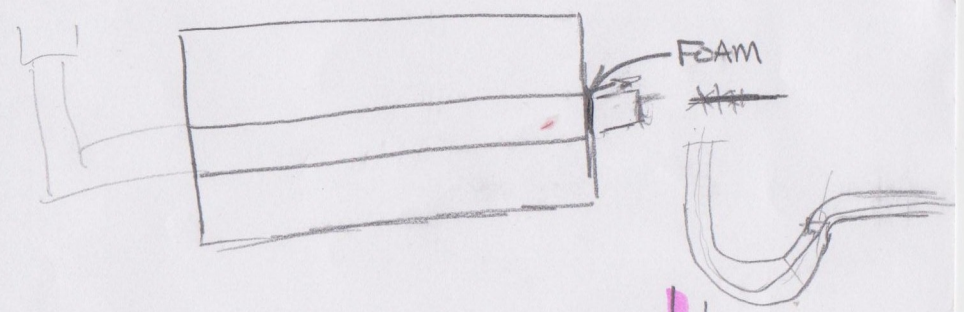
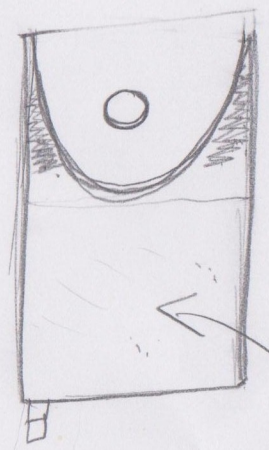




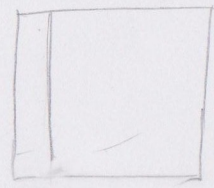
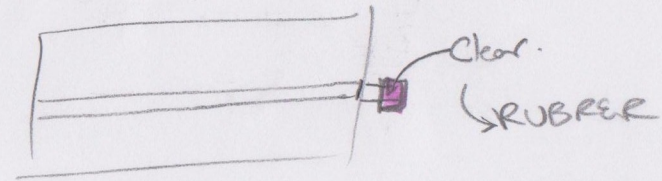
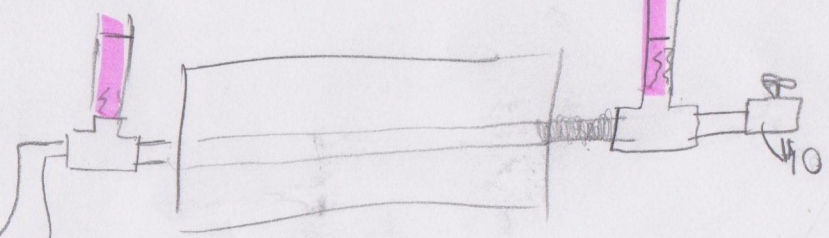
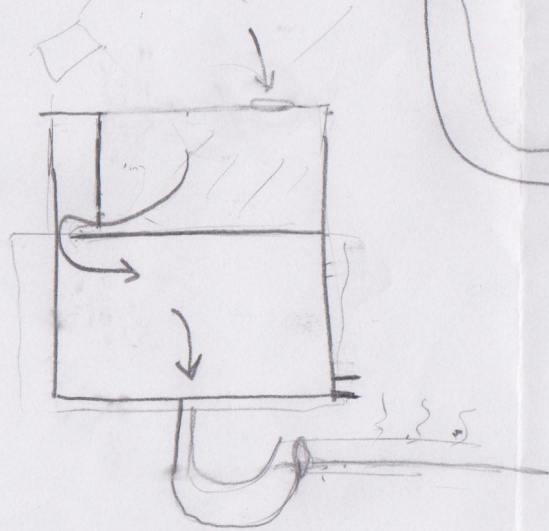
$$\frac{P_1}{\rho} + z_1 + \frac{v_1^2}{2g} = \frac{P_2}{\rho} + z_2 + \frac{v_2^2}{2g}$$



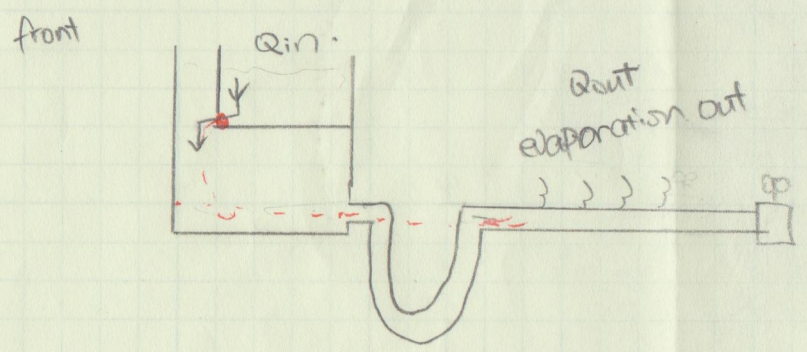
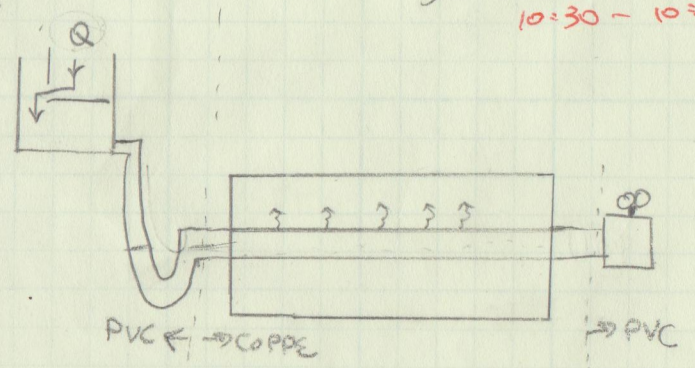
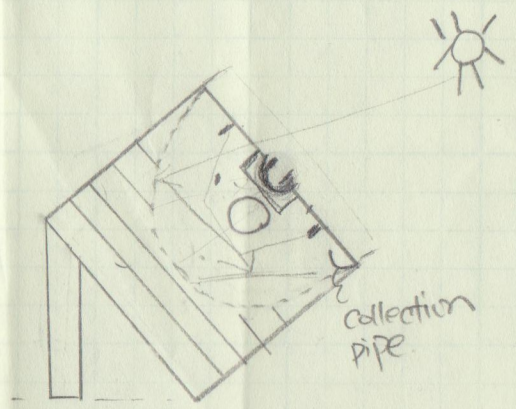
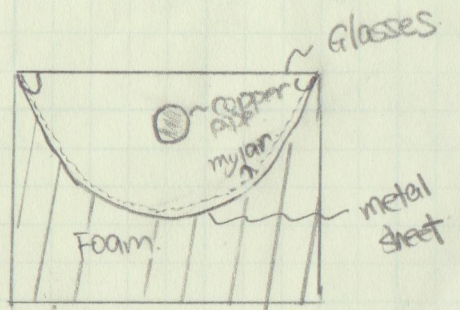
1/20/13
Team meeting
10:30



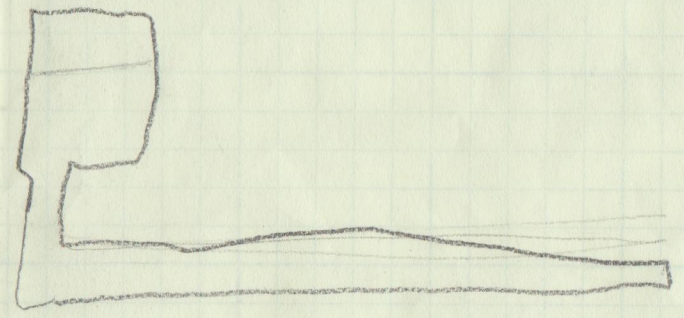
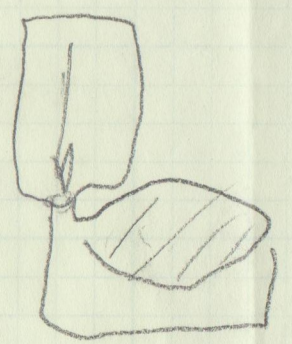
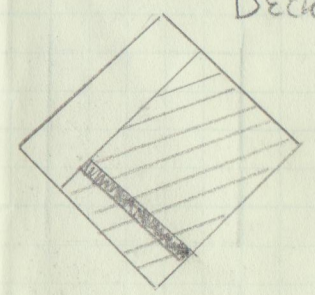
REUSE

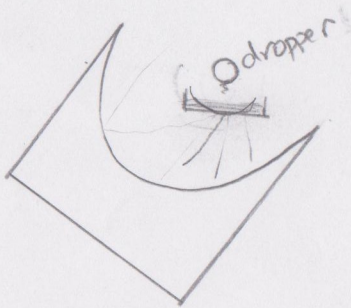
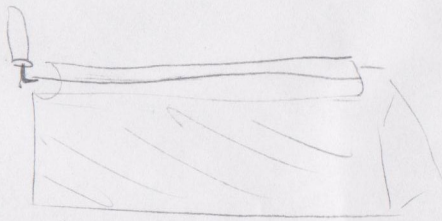
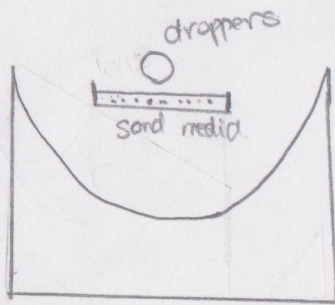


1/23/13
Dr. Decker
Hydraulic question
10:30 - 10:40



Dr. Decker ← → GOOD

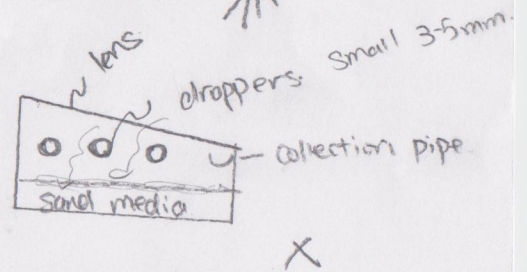




testing: xxx gal/hr dropper pipe we need.
 : depth of sand media.

1/31/2013

meeting with Dr Brent



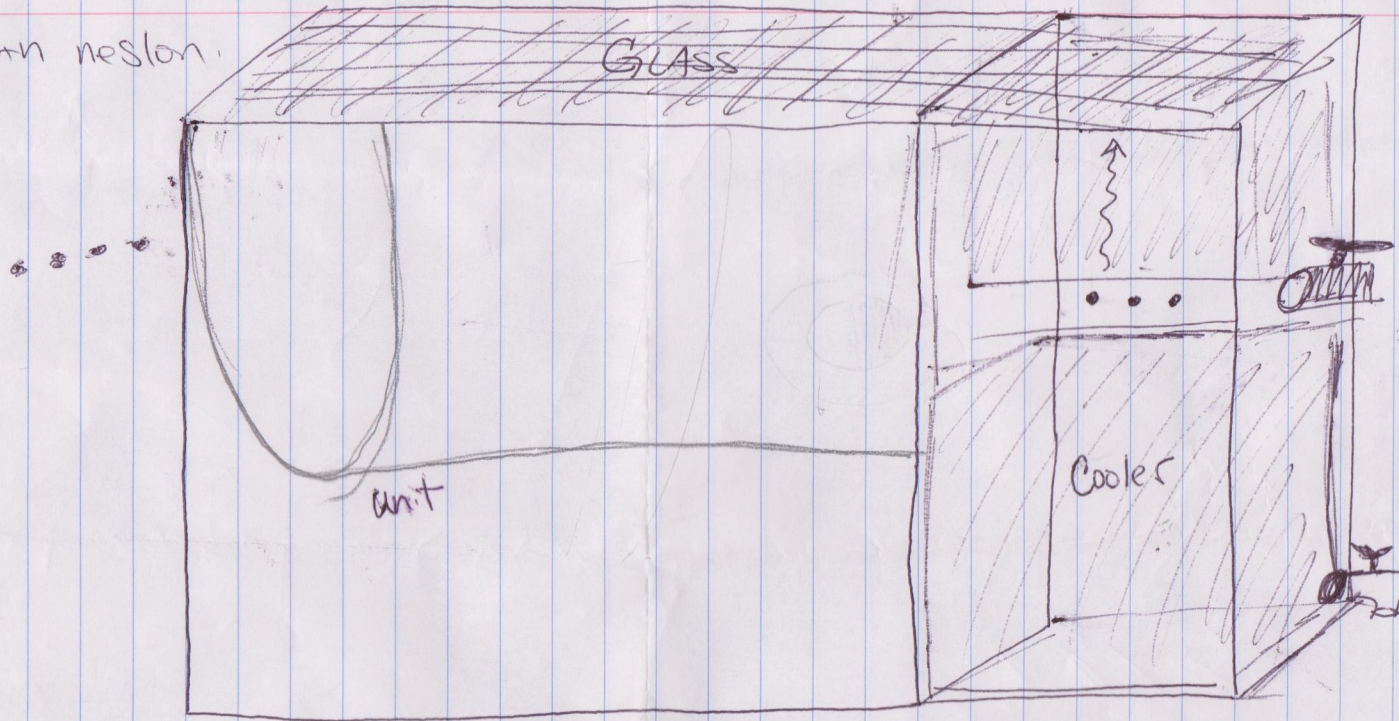
killed dish idea

Search the sand for
 good observation.

Sands are one of the most permeable soils, meaning that they have very good drainage and so when rain water lands on an unsaturated sand, the water will seep quickly into the soil and down wards. This is not unique to desert sands but happens in all sands. but in hot deserts where conditions encourage rapid evaporation, the moist top layer of the sand may dry but quickly while there is a volume of water still beneath the surface.

02/14/13

meeting with neslon.



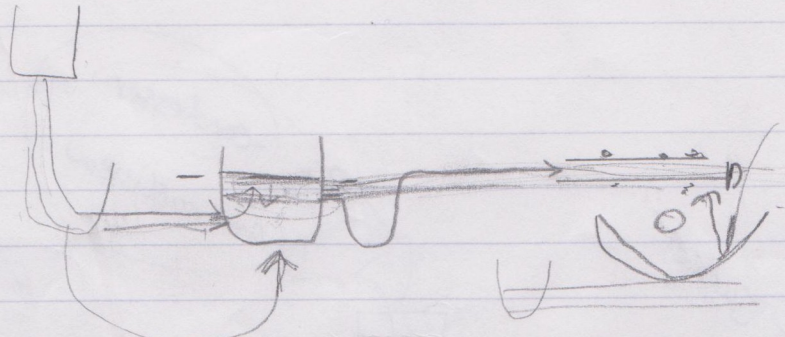
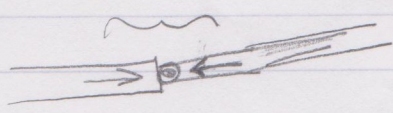
Meeting 02/02/2013

8/06/2016

- fine sand with smooth surface.
- dark color such as black or purple.

keep the parabolic trough shape.

- use metal or glass to contain the sand.
- use copper pipe for droppers.



BANING + CHAZ : UNIT BESIDES GLASS
BOW : GLASS

FRIDAY : BMSIT
SATURDAY : TEST

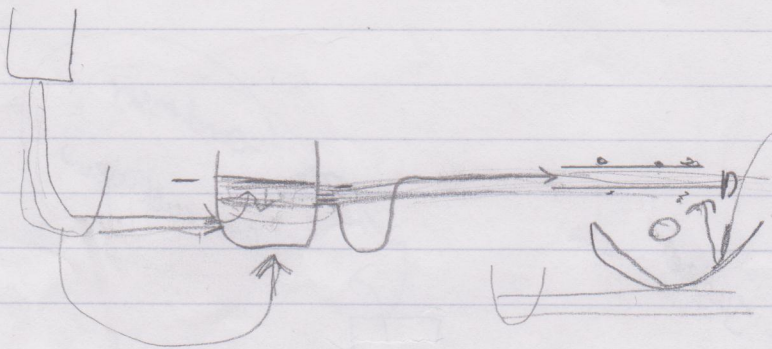
Yang: meet with low -hydraulic stuff
buy sand
search for contain for sand.

Meeting 02/02/2013

- fine sand with smooth surface.
- dark color such as black or purple.

Keep the parabolic tuft shape.

- use metal or glass to contain the sand.
- use copper pipe for droppers.



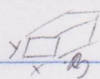
BANING + CHAZ: UNIT BESIDES GLASS
BEW: GLASS

FRIDAY: FINISH
SATURDAY: TEST

Yang: meet with low hydraulic stuff
buy sand
search for contain for sand.

Context } Sharber
Canvas }
→ Vapor out & Liquid in

Day 1 of Testing (Unit 1) - start @ 12:30 (T=37°) 2/25/13
(little wind)

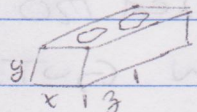
- about 20-25 min to have condensation on glass
- emptied water out
- height of Box (BRICK  to x)
- NEED TO IMPROVE
 - CLEAN GLASS (GLASS CLEANER)
 - PAINT 4th SIDE BLACK
 - Insulate the Bottom / SIDES

@ 1310 move b/c shade " "

- Bucket (leaking - Bucket vs. metal)
- 1313: Bucket trying to get it to go towards side out.

1326 Fixed bucket & filled the pipe (NO CONSTANT FLOW)

- made sure system warm (condensation glass)
- raised the angle

- height raised to 

1404: Drained pipe (water really really hot)
But not condensation

how would it be w/ glass set into the unit

1412: new water + new angle ($\frac{0}{1}$)

14:22: one drop

14:23: one drop

14:30: one drop.

14:32: one drop

14:33: new water in, old water out.

14:33: ~~one drop~~ drop.

14:37: one drop

14:38: one drop

14:43: one drop

14:46: one drop

14:50: one drop, one drop.

14:51: one drop

14:57: one drop

~~14:55~~ 5 drops

1505 - new water

↳ 5 drops in 5 min

1512 emptied H₂O (Burning - lots of steam)

- WORK ON GUTTER