FLENSE MODEL 2

Lab Report #3

Date: 8/15/2022

Test Conductor: Vincent Sadowski and Jack Charles

Location: Behind the apartment building

Time: Start – 11:35 AM **Finish** – 1:35 PM

Amount of Water: 32 oz. of water

Objective(s): Measure the water boil time and test Flense Model #2 again.

Product(s): Fresnel Lens #3 – Stainless steel regular size bowl – Wired copper coil in twist 25" – Water 32 oz. – TDS Tool – Pen – Notepad – Time watch

Water Temperature Test: Before – 24.90^{*C} = 76.82 ^{*F} **After** – 65.0^{*0C} = 149.00^{*F}

Report Detail:

- Before test, the amount of water use was measured – 32oz. of water was added in the bowl. Also, for this test, the test run was a little bit longer – rather than 1 hr. test, it was run for 2 hrs.. At the beginning, the center bowl where the focal point shines through the water created small bubbles and began to rise up as the water and the silver bowl quickly got warm. At 11:50 AM, the sound of the sizzling water can be heard from a far safe distance (14 ft. away). At 11:55 AM, smoke from the water began to appear, but only at the center location. At 12:05 PM, lots of small bubbles are formed and settled inside the water as the surface water level and outside the silver bowl continued to get hotter to the point that it is hot to touch. The sizzling sound can still be heard from the same afar distance. When the bowl is in motion, the sizzling sound stops, but when the bowl is back on the ground – 1 second, the sizzling sound can be heard again. At 12:35 PM, after an hour of the test, no new reaction has happened. At 1PM, the smoke became more present and the sizzling sound can still be heard. For the remainder of the time before 2-hour test is up, no new result occurred, only the sizzling sound and the smoke can still be heard

and seen. Overall, it's concluded that the longer the water boils, the longer the smoke continues to produce and the sizzling sound can be heard. heat energy that the Flense Model #3 produces is not enough to boil the water, even when testing for a long time – 2hrs... However, when the water heats up for a long time, the smoke continues to produce large amount over time. With this new knowledge, it's not clear whether the hypothesis is true.

NEW DISCOVERY – The longer the test runs, the longer the smoke continues to produce until the Fresnel lens energy is no longer aligned with the water.

1. **The smoke in the water will continue to be present so long as the Fresnel lens focal point (energy) is aligned with the water.**

Conclusion:

- Overall, it's concluded that the longer the water boils, the longer the smoke continues to produce and the sizzling sound can be heard. heat energy that the Flense Model #3 produces is not enough to boil the water, even when testing for a longer period of time – 2hrs. However, when the water heats up for a long time, the smoke continues to produce large amount over time. With this new knowledge, it's not clear whether the hypothesis is true.

Problem(s):

- The heat energy that the Flense Model #3 produces is not enough to boil the water, even when testing for a longer time – 2hrs. Once it reaches at the highest energy peak, the energy stays constant so long as the sun produces the same amount of energy and the sun is aligned with the Flense Model #3. Also, there is an actual limit amount of heat energy that the Flense Model #3 can produce so long as the sun produces more energy, the more energy capture from the sun's heat.

Next Step:

- We will use the same testing method from the last test. However, for this next step; **the main focus will be how long will Flense Model #3 boil the water and produce constant smoke** as we slowly begin to gear towards the focus on testing on transferring the smoke from point A (Hot Bowl) to Point B (Cool Empty Bowl).