From: JT Vaughn <jvaughn@industrialheat.co>
Sent: Monday, December 02, 2013 6:05 PM
To: dewey.weaver
Subject: Re: Fwd: Interesting data

Not sure, as I was not present during the key time period. B/c of the continuous input water (float valve activated), the steam temperature tends to stay about 99C (so, it typically never appears more or less 'energetic'(hot/dry), though volume does increase/decrease based on input/reactor temp). B/c the water level is so full in the tank on a continuous basis (ie, it's always over the reactor), you never really get super-heated steam. The experiment I'm running right now, however, does have super-heated steam b/c the water level is constantly dropping and less and less of the reactor is submerged (current steam temp is 130C and rising).

On Mon, Dec 2, 2013 at 5:58 PM, dewey.weaver <dewey.weaver@deeprv.com> wrote:
JT - did your steam output during the Wed afternoon experiment appear to be more voluminous / energetic?

---- On Mon, 02 Dec 2013 16:47:04 -0600 **JT Vaughn<jvaughn@industrialheat.co>** wrote ----

> Please keep strictly confidential. I wanted to share this with you guys b/c it may contradict my statement earlier today about not having seen excess heat in tests with the 'Pig' device (Lynne: the Pig is an insulated device which contains an E-Cat HT reactor inserted in a sealed water tank with a steam pipe).
>
> Further data analysis and replication required, but I wanted to share this with you guys on a preliminary basis.
>
> JT
>
> ---------- Forwarded message ----------
> From: **JT Vaughn** <jvaughn@industrialheat.co>
> Date: Mon, Dec 2, 2013 at 1:59 PM
> Subject: Interesting data
> To: Tom Darden <tdarden@industrialheat.co>
> Cc: T Barker Dameron <tdameron@industrialheat.co>
>
> Tom: see the attached spreadsheet. There are three tabs of data from the three tests I ran last week with the Pig. The third tab titled, '11.27.13 PM test' is the pertinent set of data. If you review that data, you will see a reported COP of 1.302.
>
> That was the short test I ran on Wednesday, prior to leaving around 4PM to go to Norwood. I didn't really believe the data, so I didn't want to send it to you until I had TBD review my calculations. He has briefly reviewed my calculations (but he has not examined the raw data) and thinks the calculations are correct.
>
> I feel pretty confident in the water measurement, and even if I am off by a quarter of a liter (which I am positive is not the case), the COP is still above 1.0 (1.042 to be exact), which is more than the ~ 0.94 - 0.97 range I have been seeing.
>
> I have attached thermocouple and input power data from this test for TBD. Core 11-2.

After today's test, which is different (testing it without adding water to refill it while operating), I plan to try to replicate the same results by conducting the exact same test (duration and input power).

JT

--
JT Vaughn
Industrial Heat
919-649-5299
jvaughn@industrialheat.co

--
JT Vaughn
Industrial Heat
919-649-5299
jvaughn@industrialheat.co

--
JT Vaughn
Industrial Heat
919-649-5299
jvaughn@industrialheat.co

From: JT Vaughn <jvaughn@industrialheat.co>
Sent: Tuesday, July 16, 2013 9:45 AM
To: Tom Darden
Subject: Re: Industrial Heat Investor Update: July 2013

Tom: any thoughts on this? Happy to edit and/or delete/add sections. I tried to make it more or less comprehensive without getting in the weeds too much. I mentioned the 1.3X COP test, but if you feel we should phrase that in a better way, let me know. Also, you may not want to be as detailed as I was on personnel issues, but I thought doing so shows a lot of momentum.

On Tue, Jul 16, 2013 at 12:35 AM, JT Vaughn <jvaughn@industrialheat.co> wrote:
In-case the last one didn't show-up well on iPhone (mine did not come through properly).

--

Industrial Heat Update
July 2013

I wanted to provide a brief update on how things are going with our new initiative, which is focused on commercializing Andrea Rossi's so-called low energy nuclear reaction ("LENR") technology. (For what it's worth, we agree with Mark Gibbs at Forbes who recently wrote about the need to relabel LENR technologies; he proposed "Anomalous Energy Systems").

As background, last October we entered into an agreement with Dr. Rossi to fund the construction of a large-scale energy plant using his anomalous energy technology. We tested our plant at the end of April and beginning of May, for four days. During the tests, we operated 37 different reactors for periods ranging from 24 hours to a few hours, and the results were good--our engineer and the independent engineer operating the tests reported that the machines produced far more energy than they required to operate (nearly 11 times as much in some instances, versus our test requirement of 6 times, during the 24 hour test).

In mid-May, following our successful test, we made a payment to Dr. Rossi to acquire the intellectual property associated with his anomalous energy technology. Around the same time, scientists from Sweden and Italy published a report detailing two independent tests they conducted of Dr. Rossi's technology.

Their report concluded, 'Even by the most conservative assumptions as to the errors in the measurements, the result is still one order of magnitude greater than conventional energy sources.' The report is available online at http://arxiv.org/abs/1305.3913. As you will deduce from the report, this technology is important because it generates clean energy (no emissions, no radioactive material) from minute quantities of readily available raw materials (primarily hydrogen and nickel) and it could theoretically power our entire economy.

Through the remainder of May and June we met numerous times (in Italy and the US) with Dr. Rossi and his electrical engineer, Fulvio Fabiani, to transfer all of the know how necessary to construct, fuel and operate the reactor. The intellectual property transfer has been a methodical undertaking. This is because we have been very intentional about protecting trade secrets and other intellectual property. Moreover, Dr.

Rossi developed and refined his knowledge of the reaction over many years and likely thousands of experiments--it is difficult to transmute all of this knowledge in only a few short weeks.

The first test of our knowledge retention involved us taking apart a reactor originally built by Dr. Rossi, re-building it ourselves and fueling it with our own charge. Unfortunately, the re-built reactor with our charge appeared to generate only about 1.3X its input energy. In addition to a poorly mixed and/or poorly distributed charge, another reason for this low multiple may be that we only ran the reactor for 1.5 hours, as opposed to 24 hours in our prior test in Italy. At any rate, we perceive we still have some work to do with regard to the IP transfer.

In addition to transferring IP, we have also begun staffing up: we will retain Dr. Rossi as Chief Scientist and we have also hired Fulvio Fabiani to assist with electronics and controls; in addition, we have hired T. Barker Dameron, a trusted associate of mine who is also a Professional Engineer and part-time inventor, to help design, build and test prototypes; Bill Moscrip, a mechanical engineer and respected inventor, is helping with CAD drawings, thermodynamic modelling and identifying and developing further intellectual property; Steve Browne, who was previously the Manager of Radiation Safety at Troxler, is helping with radiation testing, assessment and regulatory compliance.

We are working with Dewey Weaver and Paul Morris of Deep River Ventures to identify, develop and protect intellectual property. Thus far, we have filed three provisional patents and have captured an additional five disclosures which will likely turn into patent applications.

We are working with two local machine shops to rapidly build different components of new prototypes, the first of which has been built. We hope to test the performance of this new reactor design in the coming weeks, so look for an update on this front in August. We do not anticipate that it will initially perform better than prior models, but we hope the new design will at least make it easier to calculate the energy input and output.

We have secured office space in Research Triangle Park, NC as well as an R&D testing facility in close proximity to the office.

We have hired APCO Worldwide to help with communications and public relations.

We registered a Netherlands-based IP holding company. We are working with legal counsel to establish a global corporate structure which will position us to work with partners to expeditiously enter both the US and China markets. We believe this is important for a multitude of reasons, including environmental concerns: the US and China far outstrip the rest of the world in carbon dioxide emissions.

We are working to raise significant additional capital to ramp up commercialization efforts. The primary institutional investment fund we have engaged is interested but cannot close until at least September. In the interim, we are focused on: 1) demonstrating our ability to construct, fuel and operate the reactor independent of Dr. Rossi; 2) identifying and protecting intellectual property; 3) putting in-place a thoughtful international corporate structure; 4) identifying and recruiting key personnel; 5) setting-up office and R&D facilities; and 6) improving the reactor's design, controls and performance.

I hope this information is useful and I apologize for the lengthy update. Future updates will be much shorter and likely in bullet point format. However, I wanted to be more thorough with this initial update.

Please do not hesitate to call me at 919 522 4095 (m) anytime; or to email with any questions.

--
JT Vaughn

Industrial Heat
919-649-5299
jvaughn@industrialheat.co

--

JT Vaughn
Industrial Heat
919-649-5299
jvaughn@industrialheat.co