

Edl, Michele

From: Yenter, Cindy
Sent: Tuesday, May 06, 2008 2:32 PM
To: Edl, Michele
Subject: RE: Pristine Springs geothermal hydro

That's interesting. Wonder what kind of efficiency they're getting at 7 cfs? Wouldn't effective head be the same as discharge pressure X 2.31? I have no idea if there's even a pressure gage on that well but I'll look next time I'm in there.....

Today I was talking with the Pristine hatchery manager (Bryan) trying to brainstorm how to measure certain flows for those exams. I think I can get a decent estimate on one of the irrigation (land application) pump capacities by using a differential flow over a weir. For Sunnybrook, if we can't measure the waste water split into the pond (at the "culvert of death") I might be able to measure the portion going to the warm water raceways. Bryan thinks the pipe is full just above the mixing box - its also above ground. polysonic possible.

Will keep working on these. I am participating in that Pristine tour on Thursday (well, OK, I'm driving a van but Hal asked me to be there for questions) so I will look at these things again as we go by.
cindy

From: Edl, Michele
Sent: Tuesday, May 06, 2008 12:05 PM
To: Yenter, Cindy
Subject: Pristine Springs geothermal hydro

Cindy,
I got a response to my inquiry from the manufacturer of the turbine on Pristine Springs' geothermal well. According to Canyon Hydro personnel, that variable flow turbine is designed for 4.5 cfs at 411 ft of effective head.
I did not get the operation curves I had requested.
Michele

5/27/2008

Edl, Michele

From: Eric Melander [eric.melander@canyonhydro.com]
Sent: Monday, May 05, 2008 8:04 AM
To: Edl, Michele
Subject: Re: Pristine Springs Hydro

Hello Michele,

Our records indicate the turbine serial number 92360 for Pristine Springs is designed to pass 4.5 cfs at an effective head of 411 feet. The turbine is variable flow.

I do not find a record of Canyon supplying a second turbine under the name Pristine Springs.

Best regards,

Eric Melander
Canyon Hydro
360-592-5552
eric.melander@canyonhydro.com

- ---- Original Message ----

From: Edl, Michele
To: info@canyonhydro.com
Sent: Thursday, May 01, 2008 4:17 PM
Subject: Pristine Springs Hydro

Good afternoon,

I work for the Idaho Department of Water Resources and I recently visited the site of one of your turbines. Pristine Springs is in the vicinity of Twin Falls Idaho and my visit was prompted by the need to establish beneficial use of the geothermal water from that Pristine Springs well. From the information I collected from the turbine nameplate, your firm manufactured that turbine.

I am hoping that you can supply the turbine curves I need to establish a flowrate out of that unit. You should have a records of it as:

Pristine Springs Hydro
Model 1417-2 No 92360

I also know that Pristine Springs has a larger, cold water turbine in use further downstream from the artesian, geothermal turbine site above. Unfortunately, I was not able to enter that powerhouse building on the day of my site visit and I don't know yet, who manufactured that larger turbine. I have not been able to contact the owner/operator of Pristine Springs about that unit, but often enough, the same manufacturing group is given other projects from a client. From our file notes, I do know that it is a variable flow 250 HP turbine.

It would a real time saver if I could get the turbine curves for that turbine too. I realize that this second request for curves is a long shot. And if only your database knows whether you have provided one or more turbines to Pristine Springs, then I understand that I will have to provide you a model number before you can supply me with the information I need. I had to ask.

Thank you in advance.

Michele Edl

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