From: Terlip, Danny Danny.Terlip@nrel.gov Subject: RE: HSP Info request, NREL H2 incident

Date: April 26, 2019 at 17:22

To: Larry Moulthrop h2@Imdesk.com

Hi Larry,

Yes, we have restarted the compressor. We added a pressure switch to the discharge line and hardwired the output to the STOP signal.

I do not have any knowledge of actions Hydropac has taken.

dt

From: Larry Moulthrop < h2@Imdesk.com>
Sent: Friday, April 26, 2019 3:15 PM

To: Terlip, Danny < <u>Danny.Terlip@nrel.gov</u>>

Subject: Re: HSP Info request, NREL H2 incident

Hi Danny,

We discussed this event at the HSP annual meeting, and appreciated very much the information you provided. I have been asked by the HSP to follow up.

Have you restarted the compressor with the new GP50 transducer installed?

To your knowledge, has Hydropak issued any warning to their installed base regarding possible H2 installations with 400 series PTs, or any other quality incident corrective actions?

Thanks for your help.

Cheers

Larry Moulthrop, H2@LMDesk.com +1.860.490.1020

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On Apr 1, 2019, at 17:08, Terlip, Danny < <u>Danny Terlip@nrel.gov</u>> wrote:

Ha, I asked the same question. Hydropac specified Nitronic 50, though I cannot find data on GP:50's website stating which it is. I've sent a query in last week and haven't heard back. I will update you when I hear.

From: Larry Moulthrop <<u>h2@Imdesk.com</u>> Sent: Monday, April 1, 2019 2:54 PM

To: Terlip, Danny < Danny.Terlip@nrel.gov>

Subject: Re: HSP Info request, NREL H2 incident

Hi Danny, sorry, is it Nitronic 50 or Nitronic 60 wetted components in the new PT?

Larry Moulthrop, H2@LMDesk.com +1.860.490.1020

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On Apr 1, 2019, at 12:17 PM, Terlip, Danny Danny.Terlip@nrel.gov> wrote:

Hi Larry,

They've sent replacements (Nitronic 50 and 316 wetted parts). We are in the final stages of paperwork and hopefully have the compressor back up this week.

Thanks, Danny

From: Larry Moulthrop <<u>h2@Imdesk.com</u>>
Sent: Monday, April 1, 2019 9:04 AM
To: Terlip, Danny <<u>Danny.Terlip@nrel.gov</u>>

Subject: Re: HSP Info request, NREL H2 incident

Hi Danny

I am discussing the compressor PT fail with the HSP on Wednesday. Did the supplier replace the PT and is the compressor back up?

Cheers, Larry Moulthrop, <u>H2@LMDesk.com</u>

On Feb 15, 2019, at 14:19, Terlip, Danny < <u>Danny.Terlip@nrel.gov</u>> wrote:

Hi Larry,

The compressor company will be providing a replacement, but we have not received it yet. They did indicate that they review their projects in the works and made some changes based on this incident.

Danny

From: Larry Moulthrop <<u>h2@lmdesk.com</u>>
Sent: Friday, February 15, 2019 1:07 PM
To: Terlip, Danny <<u>Danny.Terlip@nrel.gov</u>>

Subject: Re: HSP Info request, NREL H2 incident

Thanks Danny, this helps me lots with cut and paste onto the H2Tools site.

Curious - Has the compressor supplier provided a compatible replacement PT and has the compressor returned to service? Has the supplier provided any evidence that they have improved their quality control?

Larry Moulthrop, H2@LMDesk.com +1.860.490.1020

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On Feb 15, 2019, at 2:59 PM, Terlip, Danny <Danny.Terlip@nrel.gov> wrote:

Hi Larry,

Please find the word document attached. I'm still unable to use H2Tools.

Danny

From: Barilo, Nick < Nick.Barilo@pnnl.gov>

Sent: Monday, February 11, 2019 4:47

PM

To: Terlip, Danny

<<u>Danny.Terlip@nrel.gov</u>>

Cc: Larry Moulthrop < h2@Imdesk.com>
Subject: Re: HSP Info request, NREL

H2 incident

Thanks Danny. Is it possible for you to share the information in Word format? Sometimes cutting and pasting from a PDF doesn't go well. Larry can then enter the information into the H2Tools form.

From: "Terlip, Danny" < Danny.Terlip@nrel.gov>

Date: Monday, February 11, 2019 at

3:13 PM

To: Lawrence Moulthrop

<<u>h2@Imdesk.com</u>>

Cc: Barilo Nick

< Nick. Barilo@pnnl.gov>

Subject: RE: HSP Info request, NREL

H2 incident

Hi Larry,

I've been trying, in vain to submit via the <u>H2Tools.org</u> site, but am still experiencing roadblocks. I've attached NREL's report with names redacted. We are currently performing a CT scan in an attempt to find the exact failure mechanism and intend to send the pressure transducer back to the manufacturer for FMA.

Looking forward to working with you, Danny

From: Larry Moulthrop h2@Imdesk.com>

Sent: Monday, February 11, 2019 4:10

PM

To: Terlip, Danny

<Danny.Terlip@nrel.gov>

Cc: Barilo Nick < Nick.Barilo@pnnl.gov > Subject: HSP Info request, NREL H2

incident

Hi Danny, I am working with Nick Barilo to compose a Lesson Learned submittal for the subject incident. Per L-L protocol, this note will be written without attribution as to the site or any sources. Please forward relevant information to me?

Larry Moulthrop, H2@LMDesk.com +1.860.490.1020

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<H2Tools Report 15jan19.docx>