



Milind Diwan <milind.diwan@gmail.com>

Re: my p5 talk

3 messages

Kevin Lesko <ktlesko@lbl.gov>**Wed, Feb 20, 2008 at 3:00 AM**

To: "Bonnie T. Fleming" <BONNIE.FLEMING@yale.edu>, Gina Rameika <rameika@fnal.gov>, Diwan Milind <diwan@bnl.gov>, Young-Kee Kim <ykkim@fnal.gov>

Cc: Lesko Kevin <ktlesko@lbl.gov>, Kotcher Jonathan <jkotcher@nsf.gov>

Hi Bonnie

thanks for the talk,

I wonder what the statements on slide 20 are meant to convey:

4850 ft location

- Davis cavern too small – other locations possible
- dedicated ventilation shaft: re-habilitated or redrilled
- effective mass for proton decay physics: near total mass

The davis cavern is too small - too small for what? too small for an R&D program next year for LAr?

dedicated ventilation shaft - perhaps you should read the Homestake CDR before indicating this? Nowhere in the Homestake proposal is there a suggestion of re-drilling a ventilation shaft, I understand this may be a necessity for SOUDAN, but that is not the case for Homestake. In addition, In fact the use of re-drilling is confusing to me, do you really mean to drill again? There was a shaft opened, filled and needing to be opened again?

There are various typos on the pages including the institutions and collaborators names on page 21. might want to look to that before presenting to P-5.

Kevin

On Feb 19, 2008, at 8:56 PM, Bonnie T. Fleming wrote:

Hi Kevin,

You can find the latest version of my talk attached. A few things will still change but I think it has the info you need. I'm on the road tomorrow but you can reach me on my cell if you need to: 203.747.9217.

Thanks, Bonnie

Kevin T. Lesko

Institute for Nuclear and Particle Astrophysics Tel: (510) 486-7731

Lawrence Berkeley National Laboratory FAX: (510) 486-6738

1 Cyclotron Road, MS 50R5008

Berkeley, CA 94720-8158, USA

KTLesko@lbl.gov<http://ktlesko.lbl.gov>

Bonnie T. Fleming <BONNIE.FLEMING@yale.edu>**Wed, Feb 20, 2008 at 8:54 AM**

To: Kevin Lesko <ktlesko@lbl.gov>

Cc: Gina Rameika <rameika@fnal.gov>, Diwan Milind <diwan@bnl.gov>, Young-Kee Kim <ykkim@fnal.gov>, Kotcher Jonathan <jkotcher@nsf.gov>

Hi Kevin,

The Davis cavern is too small for a 5kton or larger detector -- that's the focus of this part of the talk. I will be more clear and state what it can hold -- <1.5ktons

For safety considerations for a large LAr detector, I state several slides earlier that a dedicated ventilation shaft is needed for any underground mine operation. My understanding from Chris Laughton was that there are some shafts no longer in use at Homestake which could be re-habilitated instead of having to drill a new shaft for this purposed. I will simply state that a dedicated ventilation shaft would be needed.

Thanks, Bonnie

[Quoted text hidden]

Kevin Lesko <KTLesko@lbl.gov>**Wed, Feb 20, 2008 at 10:55 AM**

To: "Bonnie T. Fleming" <BONNIE.FLEMING@yale.edu>

Cc: Kevin Lesko <KTLesko@lbl.gov>, Gina Rameika <rameika@fnal.gov>, Diwan Milind <diwan@bnl.gov>, Young-Kee Kim <ykkim@fnal.gov>, Kotcher Jonathan <jkotcher@nsf.gov>

Bonnie,
thanks that helps.

If it helps, in the mining trades they usually use terms like "sink a shaft" or "raise-bore a shaft" rather than drill a shaft.

You are correct there are multiple shafts already existing in Homestake including Oro Hondo and #5 shafts, both of which are planned for use exclusively for ventilation. So the need to ventilate a large cryogenic detector is a serious one and needs careful attention. We are extremely fortunate in Homestake to have existing shafts for that purpose without having to rehabilitate or "drill" them. I wish you had come to me for information on Homestake, it would have saved you the trouble of correcting these problems in your slides. I could even have provided you with the ventilation plans, flow rates and capacities of the ventilation system if you had asked.

thanks,
Kevin

On Feb 20, 2008, at 5:54 AM, Bonnie T. Fleming wrote:

Hi Kevin,

The Davis cavern is too small for a 5kton or larger detector -- that's the focus of this part of the talk. I will be more clear and state what it can hold -- <1.5ktons

For safety considerations for a large LAr detector, I state several slides earlier that a dedicated ventilation shaft is needed for any underground mine operation. My understanding from Chris Laughton was that there are some shafts no longer in use at Homestake which could be re-habilitated instead of having to drill a new shaft for this purposed. I will simply state that a

dedicated ventilation shaft would be needed.

Thanks, Bonnie

Kevin T. Lesko
Institute for Nuclear and Particle Astrophysics Tel: (510) 486-7731
Lawrence Berkeley National Laboratory FAX: (510) 486-6738
1 Cyclotron Road, MS 50R5008 <http://ktlesko.lbl.gov>
Berkeley, CA 94720-8158, USA
