

## HLWYM HEmails

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**From:** Randall Fedors  
**Sent:** Monday, December 17, 2007 10:29 AM  
**To:** Stuart Stothoff  
**Subject:** RE: FYI - Info on September 2007 rain event at Yucca Mountain

Happenstance maybe, but we had a tunnel entry on Sept 20, 2007, one day before the rain started. Nobody has been in the tunnel since Sept 20th.

Here's what I know:

The South Ramp Feb 2005 seepage event occurred after a wet winter > 13 inches (over 6 months) as I recollect, with an event occurring just a matter of a week or two before they noticed the dripping. But, the mine safety people did not make any observations for at least a week after the precipitation event that had just occurred. Earlier tunnel observations that winter did not register any observations of seepage. Just last month I got to see the miners log book (something we never knew existed) of weekly to monthly tunnel observations during the open period of ESF. The log book was kept for recording tunnel condition with respect to rock fragments and integrity of engineered rock support. I can go back and check dates in the log book.

--Randy

>>> Stuart Stothoff <[sstothoff@cnwra.swri.edu](mailto:sstothoff@cnwra.swri.edu)> 12/17/2007 10:16 AM >>>

Two questions:

- \* any sign of drips/wet spots?
- \* how long did it take for the South Ramp spot to become visible before?

Of course, with the ESF shut down, it would be hard for someone to find a drip...

stu

-----Original Message-----

**From:** Randall Fedors [<mailto:rwf@nrc.gov>]  
**Sent:** Saturday, December 15, 2007 10:08 AM  
**To:** Jeffrey Pohle; [stuart.stothoff@swri.org](mailto:stuart.stothoff@swri.org)  
**Subject:** Re: FYI - Info on September 2007 rain event at Yucca Mountain

FYI

>>> Jack Parrott 12/14/07 6:30 PM >>>  
Major rain event at Yucca Mountain - somewhat old information but interesting.

This past fall Yucca Mountain received the largest 24-hour rainfall event since the Project began monitoring in 1986. The rain began about

11 a.m. (daylight time) on Friday, September 21, 2007, and continued through about 5 a.m. the next day. Of the twelve rain gauge monitoring sites, Site 4 on Alice Hill in the northeast corner of Midway Valley received the highest amount with 3.43 inches. The main meteorological monitoring station (Site 1) in Midway Valley received 3.20 inches. Other stations on the Nevada Test Site also received more than three inches of rainfall on those days. The 24-hour totals were about one inch more than the previous maximum 24-hour amounts.

The rain event led to a large runoff flow that caused mud to cover the road crossing at Forty Mile Wash. While rainfall events continue to be monitored at the site, no stream gauges are presently deployed to measure stream flows in the Yucca Mountain vicinity.

More information on meteorological conditions can be found in a recently-completed summary report, TDR-MGR-MM-000002, Local Meteorology of Yucca Mountain Nevada, 1994-2006.

**Hearing Identifier:** HLW\_YuccaMountain\_Hold\_EX  
**Email Number:** 164

**Mail Envelope Properties** (Randall.Fedors@nrc.gov20071217102912)

**Subject:** RE: FYI - Info on September 2007 rain event at Yucca Mountain  
**Sent Date:** 12/17/2007 10:29:12 AM  
**Received Date:** 12/17/2007 10:29:12 AM  
**From:** Randall Fedors

**Created By:** Randall.Fedors@nrc.gov

**Recipients:**  
"Stuart Stothoff" <sstothoff@cnwra.swri.edu>  
Tracking Status: None

**Post Office:**

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	2729	12/17/2007 10:29:12 AM

**Options**  
**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**