From:	"Dave Levy" <dlevy@telesto-inc.com></dlevy@telesto-inc.com>		
То:	"Michalak, Paul" <pxm2@nrc.gov></pxm2@nrc.gov>		
Date:	1/10/06 12:46PM		
Subject:	Gas Hills Model Results _ 40-0299		

Paul:

Attached are the results for the Southwest Flow Regime, concentration of Pb-210 versus distance between the POC and POE at various times. To generate these plots, I simply modified the PUNCH_FREQUENCY statement in the model. These runs are for the fast flow rate (0.28 ft/day), where 1,022 shifts corresponds to 1,00 years. Therefore, I modified the PUNCH_FREQUENCY to 20 (approx 20 yrs), 51 (approx 50 yrs), 204 (200 yrs), 408 (400 yrs), and 817 (800 yrs) for the different runs.

I think what these results show is that there is some desorption of Pb-210 in conjunction with transport, such that we get a peak which both increases in concentration and shifts with distance over time. Please give a call if you have any questions, or let me know how we should proceed at this point. Thanks.

Dave

David B. Levy, Ph.D. Senior Geochemist/ Soil Scientist

Telesto Solutions, Inc. 1601 Prospect Parkway, Suite C Fort Collins, CO 80525

Voice: (970) 484-7705 FAX: (970) 484-7789 c:\temp\GW}00001.TMP

Page 1

Mail Envelope Properties (43C3F2EE.4AC : 7 : 58540)

Subject:	Gas Hills Model Results
Creation Date:	1/10/06 12:46PM
From:	"Dave Levy" <dlevy@telesto-inc.com></dlevy@telesto-inc.com>

Created By:

DLevy@telesto-inc.com

No

Standard

Recipients

nrc.gov TWGWPO01.HQGWDO01 PXM2 (Paul Michalak)

Post Office

TWGWPO01.HQGWDO01

Route nrc.gov

Files	Size 1044
MESSAGE	
TEXT.htm	1880
SWFR_1_10_06.pdf	29881
Mime.822	45913

Options	
Expiration Date:	None
Priority:	Standard
Reply Requested:	No
Return Notification:	None

Concealed Subject: Security: **Date & Time** 01/10/06 12:46PM

Figure 1: Predicted 1000-Year Lead-210 Concentrations Between the Southwestern Flow Regime POC and POE Using the Proposed Revised ACL of 189 pCi/L.

