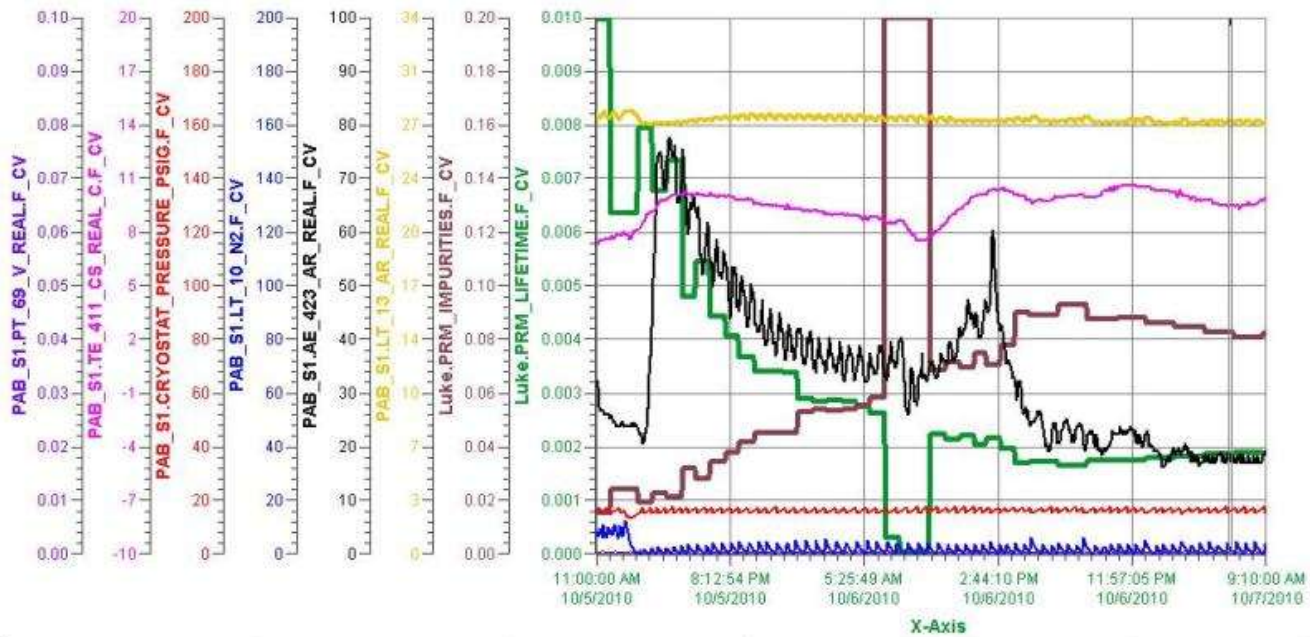


## ***PAB Materials Test System***

<b>Date of Receipt</b>	10/15/10 , logbook entry # 1396
<b>Sample Name/Description</b>	PrM feedthrough
<b>Sample</b>	
<b>Composition:</b>	stainless steel, ceramic, G10, Masterbond epoxy
<b>Picture Location:</b>	data base
<b>Weight:</b>	380 g
<b>Dimensions/Area:</b>	2.75 inches dia, 5 inches total length
<b>Source:</b>	Walter Jaskierny
<b>Preparation:</b>	baked in 160 F oven for 8 h
<b>Submerging in LAr or LH2</b>	no
<b>Time in the airlock(hrs)</b>	
<b>Purge:</b>	24 h purged from the bottle and 1 h from Luke
<b>Vacuum:</b>	
<b>Room Temperature</b>	
<b>Start Time/Date, End Time/Date</b>	
:	10/5/10 12:50 pm, 10/6/10 2 pm
<b>PrM run # :</b>	10011
<b>Condenser state:</b>	on
<b>Filter state:</b>	off
<b>O2 reading:</b>	x
<b>H2O reading:</b>	increased to 75 ppb in 2 h, stabilized in 30-40 ppb range
<b>Lifetime:</b>	2-3 ms
<b>Vapor Test</b>	
<b>Start Time/Date, End Time/Date</b>	
:	10/6/10 2 pm, 10/7/10 9:30 am
<b>PrM run # :</b>	10038
<b>Condenser state:</b>	on
<b>Filter state/settings:</b>	off
<b>O2 reading:</b>	x
<b>H2O reading:</b>	increased from 40 to 60 ppb in 10 min, then stabilized below 20 ppb
<b>Temperature:</b>	185 K
<b>Lifetime:</b>	1.7-2 ms
<b>Results/comments</b>	

# Purity Monitor Feedthrough (baked)

Plot of the room temperature test and vapor test (drop of the lifetime to zero happened when the anode voltage turned off).



Pen Name	Description	Value	Eng Units	High Over Range	Low Over Range
— Luke.PRM_LIFETIME.F_CV	Luke.PRM_LIFETIME.F_CV	0.00183	sec	0.00991	0.00002
— Luke.PRM_IMPURITIES.F...	Luke.PRM_IMPURITIES.F_CV	0.0818	imps	6.0530	0.0151
— PAB_S1.LT_13_AR_REAL...	Luke Argon Level Probe	27.5	inches	28.1	27.2
— PAB_S1.AE_423_AR_REA...	HALO H2O meter (F_CV)	16.7	ppb	77.8	16.0
— PAB_S1.LT_10_N2.F_CV	Luke Condenser LN2 Level Pro...	1.6	inches	12.1	-0.0
— PAB_S1.CRYOSTAT_PRE...	Luke Vapor Pressure	15.6	psig	17.6	12.9
— PAB_S1.TE_411_CS_REA...	TC on Luke top flange (F_CV)	9.5	C	10.6	7.3
— PAB_S1.PT_89_V_REAL.F...	Seal Monitor Vacuum	0.0001	Torr	0.0007	0.0001



