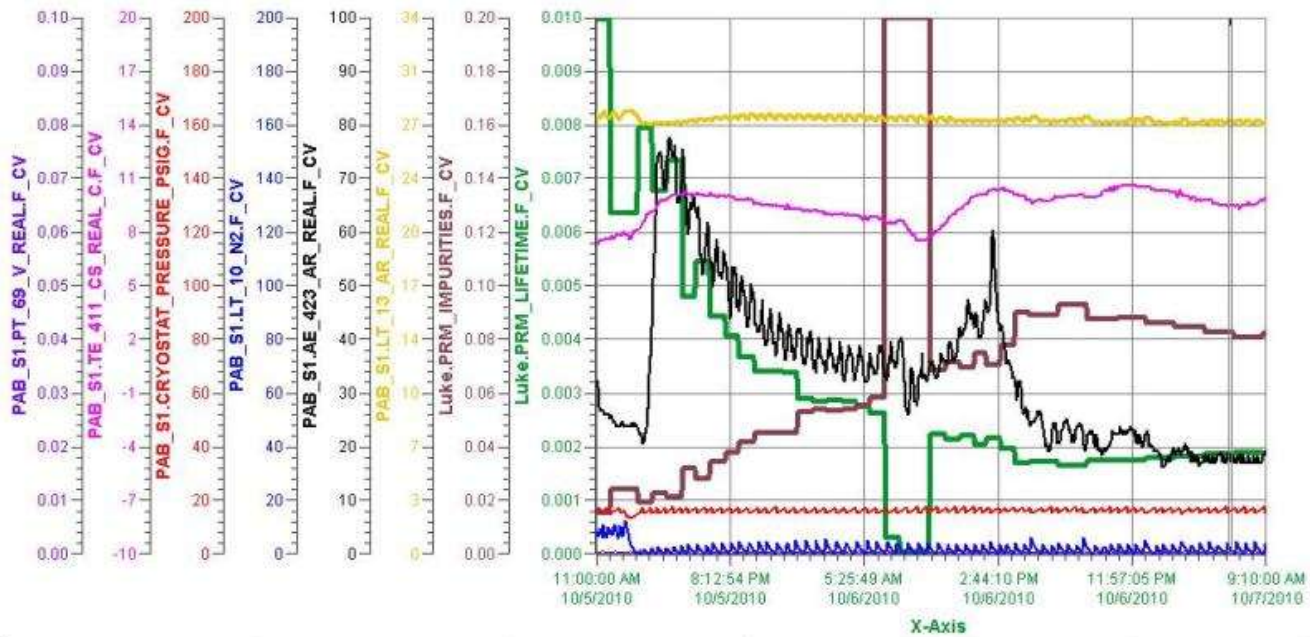


PAB Materials Test System

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

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



