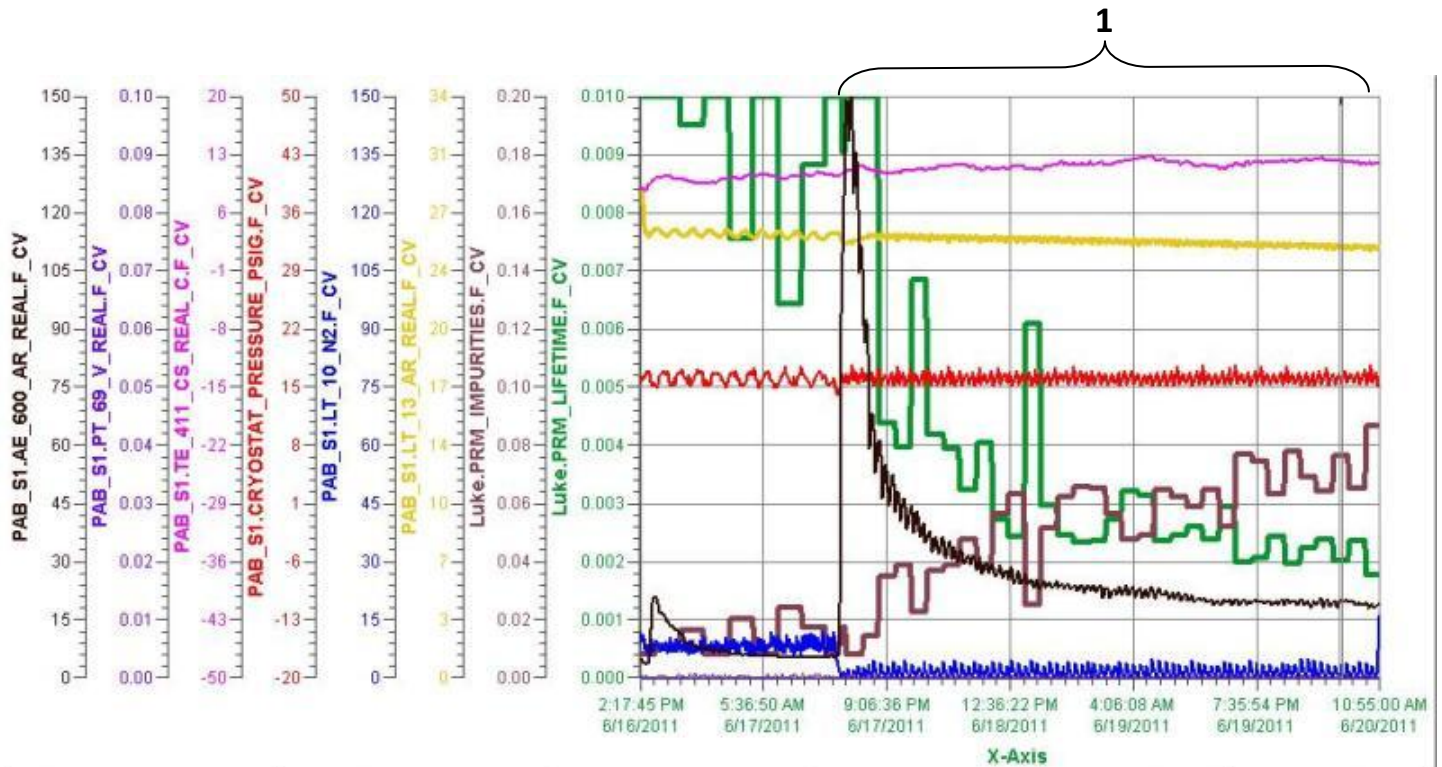


## ***PAB Materials Test System***

<b>Date of Receipt</b>	06/30/11 , logbook entry # 1816
<b>Sample Name/Description</b>	Barden Precision Bearings
<b>Sample</b>	
<b>Composition:</b>	440 SS balls and races, the cage is Teflon with 3% Moly disulfide imbedded in Teflon for lube.
<b>Picture Location:</b>	data base
<b>Weight:</b>	19.84 g
<b>Dimensions/Area:</b>	look at the pictures
<b>Source:</b>	Terry Tope
<b>Preparation:</b>	not cleaned
<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>	6/17/11 2:35 pm, 6/20/11 1:40 pm
<b>PrM run # :</b>	13051
<b>Condenser state:</b>	on
<b>Filter state:</b>	off
<b>O2 reading:</b>	x
<b>H2O reading:</b>	increased to 155 ppb in 2 h, then stabilized at 18-24 ppb
<b>Lifetime:</b>	2-3 ms
<b>Liquid Test</b>	
<b>Start Time/Date, End Time/Date :</b>	6/22/11 8:30 am, 6/23/11 10:40 am
<b>PrM run # :</b>	13114
<b>Condenser state:</b>	on
<b>Filter state/settings:</b>	off
<b>O2 reading:</b>	x
<b>H2O reading:</b>	increased from 6 ppb to 13-14 ppb
<b>Temperature:</b>	95.3 K
<b>Lifetime:</b>	6-10 ms
<b>Vapor Test</b>	
<b>Start Time/Date, End Time/Date :</b>	6/24/11 9:53 am, 6/27/11
<b>PrM run # :</b>	13150
<b>Condenser state:</b>	on
<b>Filter state/settings:</b>	off
<b>O2 reading:</b>	x
<b>H2O reading:</b>	10-15 ppb
<b>Temperature:</b>	210-215 K
<b>Lifetime:</b>	4-10 ms (fluctuating)
<b>Results/comments</b>	

# Barden Precision Bearings Test 6/17/2011 – 6/27/2011

## 1. Room temperature test.



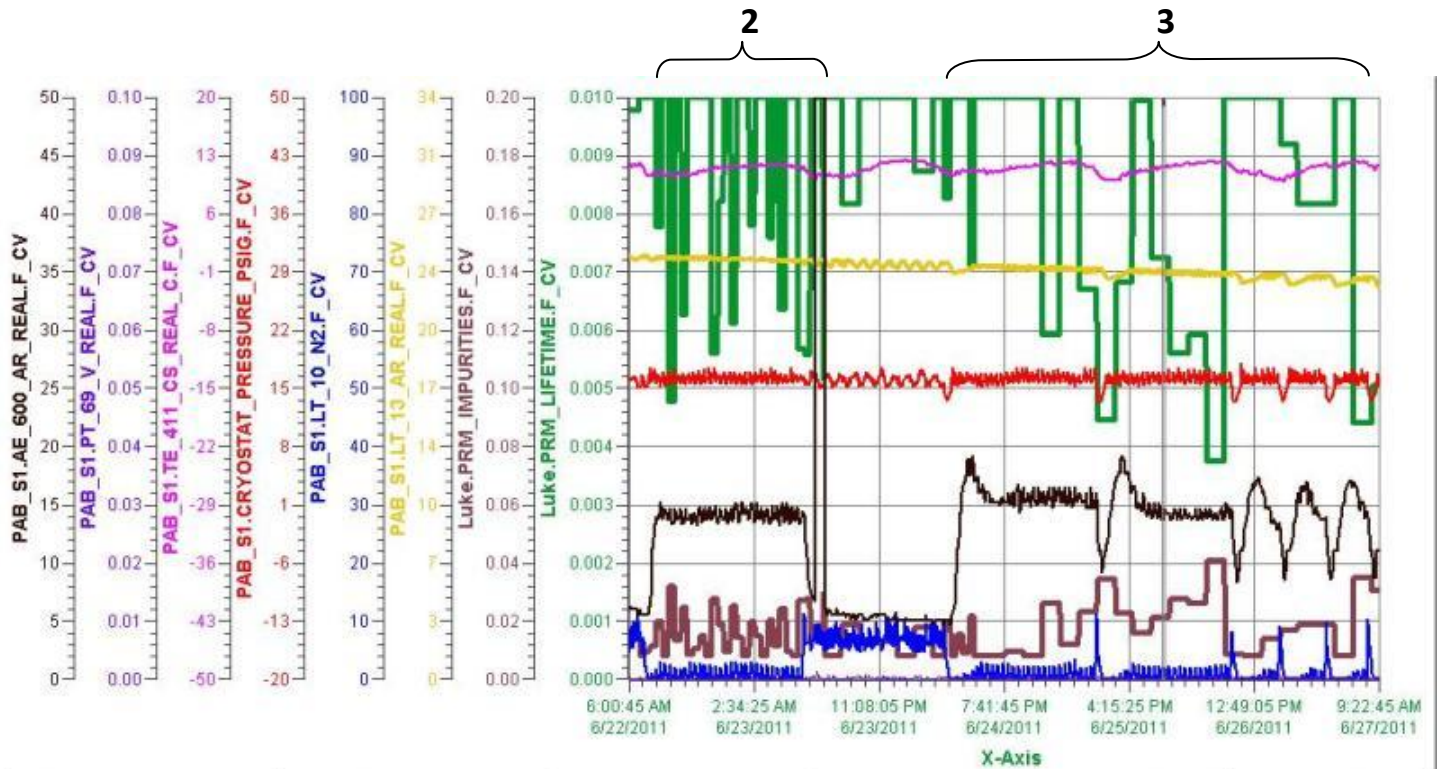
Pen Name	Description	Value	Eng Units	High Over Range	Low Over Range
— Luke.PRM_LIFETIME.F_CV	Luke.PRM_LIFETIME.F_CV	0.00198	sec	0.02000	0.00175
— Luke.PRM_IMPURITIES.F...	Luke.PRM_IMPURITIES.F_CV	0.0757	Imps	0.0857	0.0075
— PAB_S1.LT_13.AR.REAL	Luke Argon Level Probe	25.2	inches	28.6	24.9
— PAB_S1.LT_10.N2.F_CV	Luke Condenser LN2 Level Pro...	3.1	inches	15.8	-0.0
— PAB_S1.CRYOSTAT_PRE...	Luke Vapor Pressure	15.3	psig	17.6	14.0
— PAB_S1.TE_411_CS_REA...	TC on Luke top flange (F_CV)	12.1	C	12.8	8.6
— PAB_S1.PT_69.V.REALF...	Seal Monitor Vacuum	0.0003	Torr	0.0007	0.0001
— PAB_S1.AE_600.AR.REA...	Luke Halo (F_CV)	19.7	ppb	155.2	3.2

6/16/2011 2:17:45 PM



6/20/2011 10:55:00 AM

2. Liquid test.
3. Vapor test.



Pen Name	Description	Value	Eng Units	High Over Range	Low Over Range
— Luke.PRM_LIFETIME.F_CV	Luke.PRM_LIFETIME.F_CV	0.00718	sec	0.02000	0.00372
— Luke.PRM_IMPURITIES.F...	Luke.PRM_IMPURITIES.F_CV	0.0209	Imps	0.0403	0.0075
— PAB_S1.LT_13.AR_REAL	Luke Argon Level Probe	23.7	inches	24.8	22.9
— PAB_S1.LT_10.N2.F_CV	Luke Condenser LN2 Level Pro...	-0.0	inches	11.5	-0.1
— PAB_S1.CRYOSTAT_PRE...	Luke Vapor Pressure	16.7	psig	17.9	13.2
— PAB_S1.TE_411_CS_REA...	TC on Luke top flange (F_CV)	11.5	C	12.4	9.9
— PAB_S1.PT_69.V_REALF...	Seal Monitor Vacuum	0.0001	Torr	0.0013	0.0001
— PAB_S1.AE_600.AR_REA...	Luke Halo (F_CV)	13.7	ppb	1,500.0	4.6

6/22/2011 6:00:45 AM 6/27/2011 9:22:45 AM



