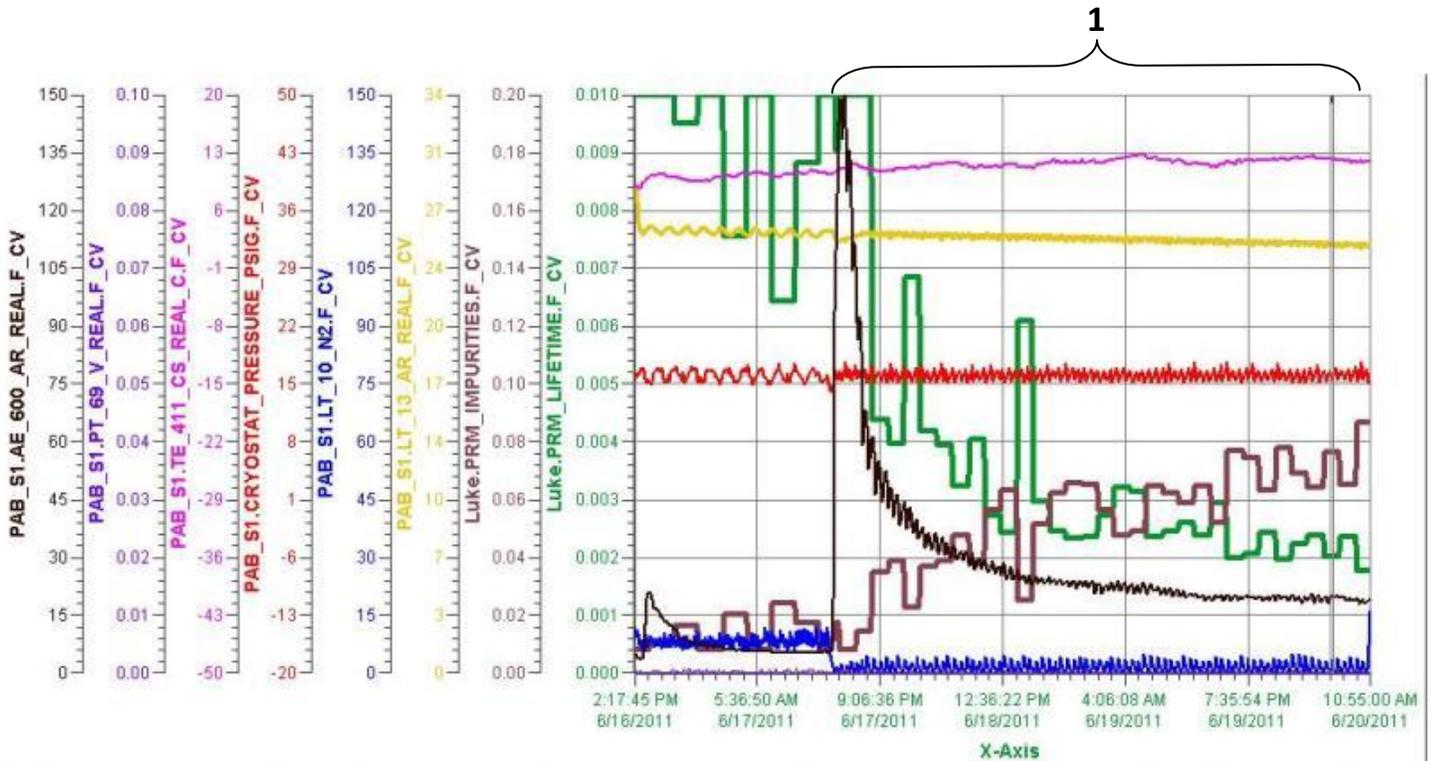


PAB Materials Test System

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

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

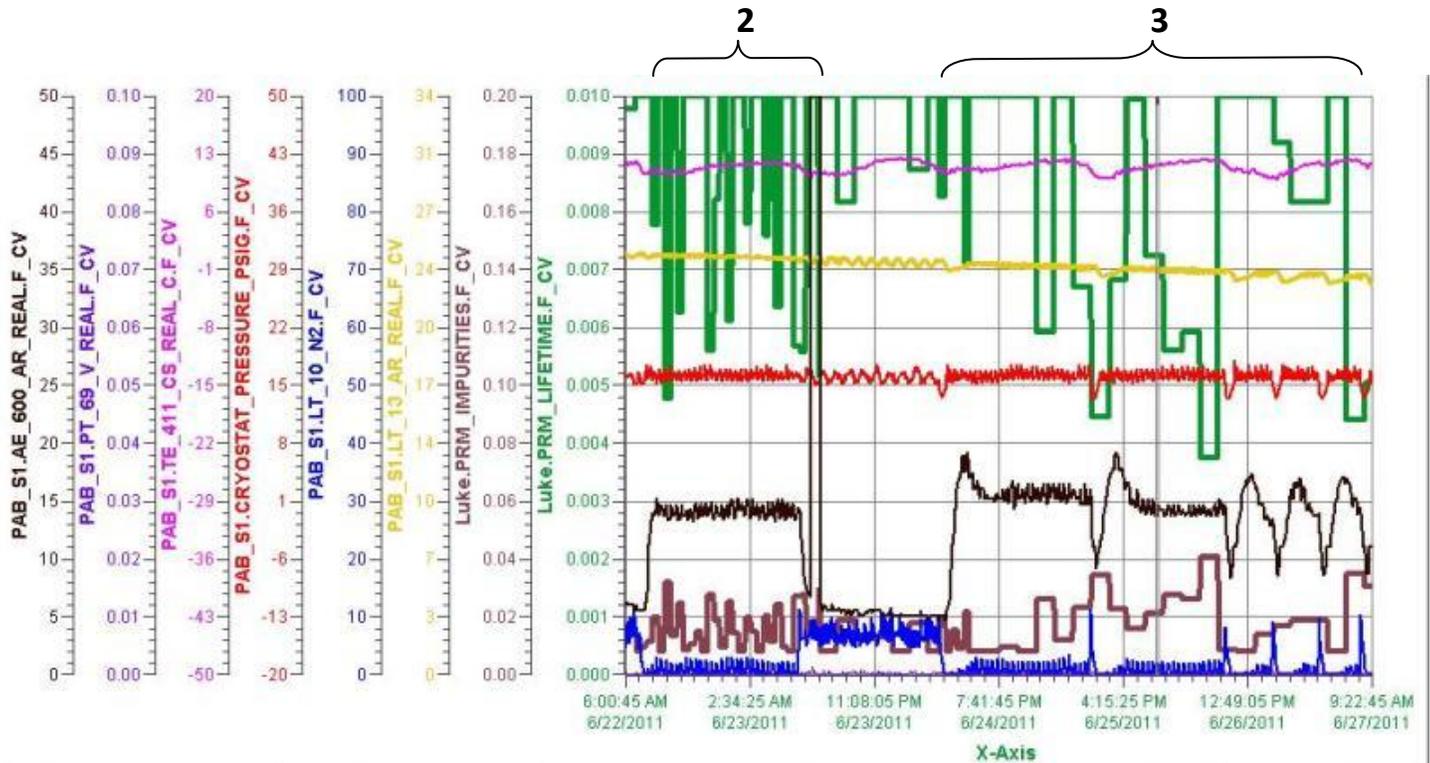
1. Room temperature test.



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_CV	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

