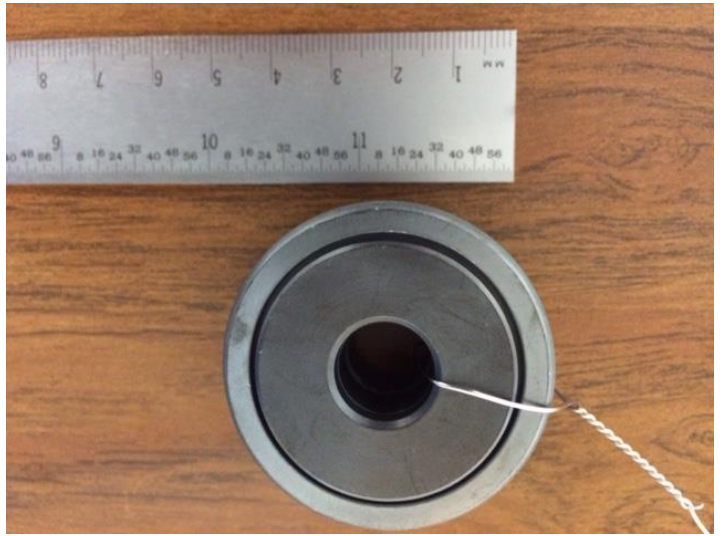


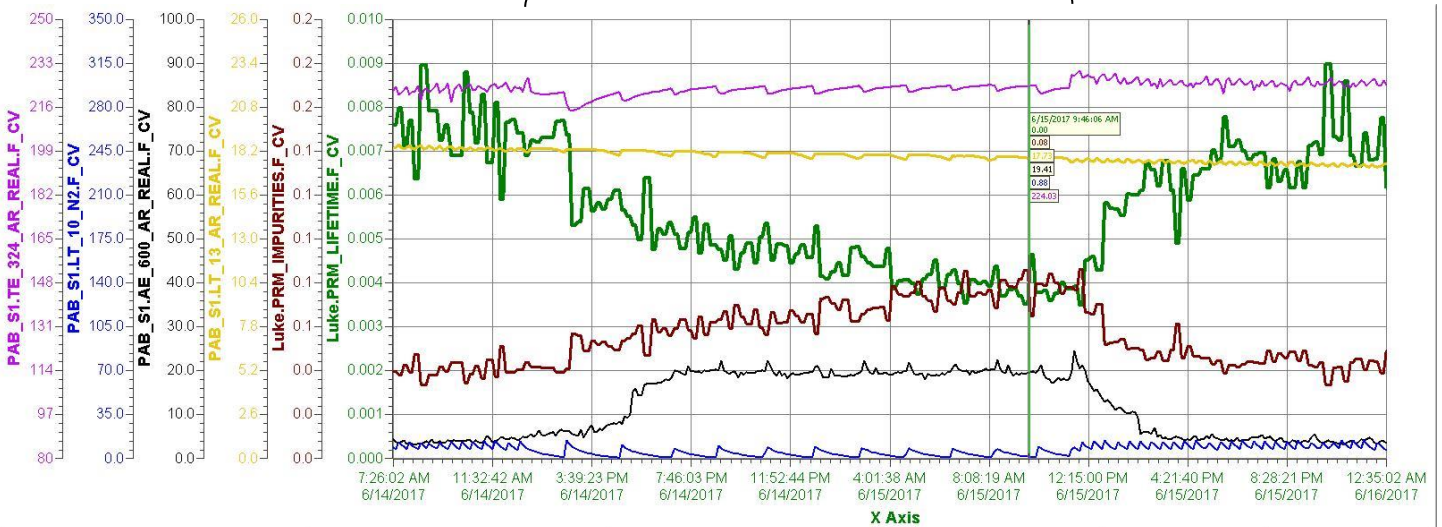
## Steel Roller Bearing Test

6/13/2017 – 6/21/2017

<b>PAB Materials Test System</b>	
<b>Date of Receipt</b>	6/21/17 , logbook entry # 6067
<b>Sample Name/Description</b>	PSL 010 Steel Roller Bearing for TPC trolley Tungsten disulfide coated
<b>Sample</b>	
<b>Composition:</b>	steel, WS2 coated
<b>Picture Location:</b>	data base
<b>Weight:</b>	265.4 g
<b>Dimensions/Area:</b>	~ 43 mm outer dia, 13 mm inner dia, 27 mm thickness
<b>Source:</b>	Jonathan Heise
<b>Preparation:</b>	ultrasonically clean in a series of 3 solvent 10 min baths: AZE, acetone, ethanol
<b>Submerging in LN2</b>	
<b>Time in the airlock(hrs)</b>	
<b>Vacuum:</b>	20 min
<b>Purge</b>	25 hours with gas Argon from Luke
<b>VaporTest</b>	
<b>Start Time/Date, End Time/Date :</b>	6/14/2017 1:00 pm, 6/15/2017 11:25 am
<b>PrM run # :</b>	x
<b>Condenser state:</b>	on
<b>Filter state/settings:</b>	off
<b>H2O reading:</b>	~20 ppb
<b>Temperature:</b>	220-224 K
<b>Liquid Level</b>	17.8 inches
<b>Lifetime:</b>	~4 ms
<b>Room Temperature Test</b>	
<b>Start Time/Date, End Time/Date :</b>	6/20/2017 3:46 am, 6/21/2017 2:43 pm
<b>PrM run # :</b>	x
<b>Condenser state:</b>	on
<b>Filter state/settings:</b>	off
<b>H2O reading:</b>	20-25 ppb
<b>Temperature:</b>	warm
<b>Liquid Level</b>	25 inches
<b>Lifetime:</b>	2.6-3 ms

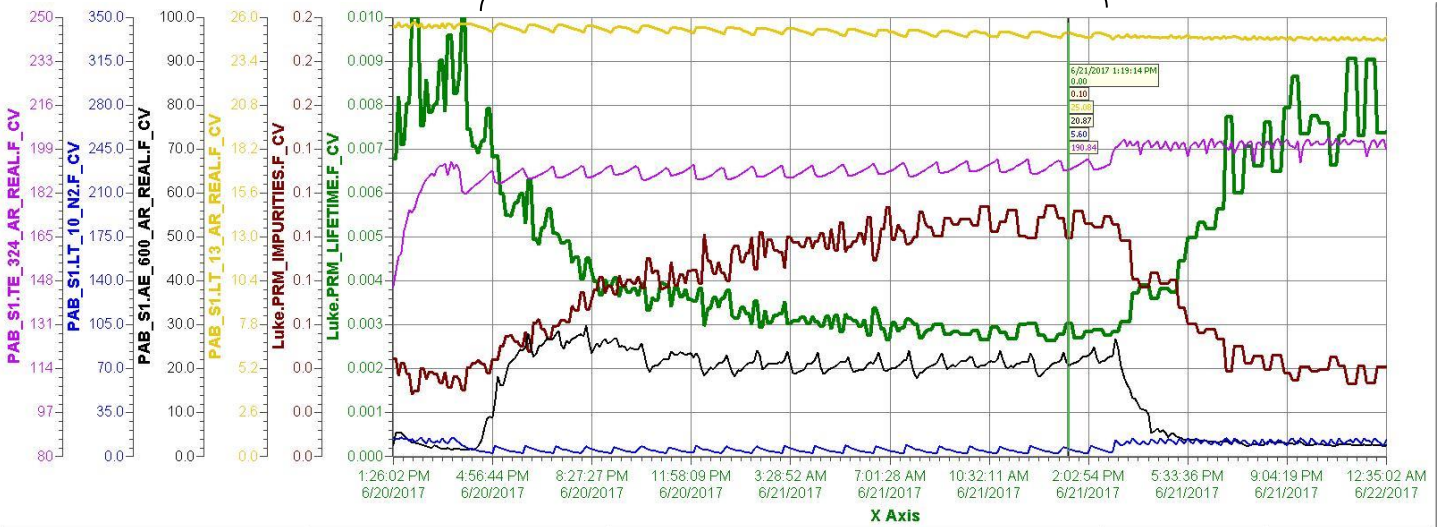


## Vapor Temperature Test



Pen Name	Description	Value	Eng Units	High Over Range	Low Over Range
Luke_PRM_LIFETIME.F_CV	Luke PRM_LIFETIME.F_CV	0.0039	sec	0.0090	0.0035
Luke_PRM_IMPURITIES.F_CV	Luke PRM_IMPURITIES.F_CV	0.1	Imps	0.1	0.0
PAB_S1LT_13_AR_REAL.F_CV	Luke Argon Level Probe	17.7	inches	19.5	17.2
PAB_S1AE_600_AR_REAL.F_CV	Luke Halo (F_CV)	19.4	ppb	24.4	3.0
PAB_S1LT_10_N2.F_CV	Luke Condenser LN2 Level Probe (F_CV)	0.9	inches	14.3	0.2
PAB_S1TE_324_AR_REAL.F_CV	Luke material elevator RTD (F_CV)	224	K	230	215

## 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	0.0039	sec	0.0107	0.0035
Luke_PRM_IMPURITIES.F_CV	Luke PRM_IMPURITIES.F_CV	0.1	Imps	0.1	0.0
PAB_S1LT_13_AR_REAL.F_CV	Luke Argon Level Probe	23.1	inches	25.7	24.6
PAB_S1AE_600_AR_REAL.F_CV	Luke Halo (F_CV)	20.9	ppb	29.8	1.4
PAB_S1LT_10_N2.F_CV	Luke Condenser LN2 Level Probe (F_CV)	5.6	inches	14.5	1.8
PAB_S1TE_324_AR_REAL.F_CV	Luke material elevator RTD (F_CV)	191	K	203	148

Lifetime – green pen

Impurities – brown pen

Liquid level – yellow pen

Water – black pen

Temperature – magenta pen

