

**advancedligo**

DCC Number: E070242-00-X

Date Prepared: 17 Oct 2007

Originator	Cognizant Engineer	Ext./Phone#	Project	Account Number
Name Janeen Romie	Name: Janeen Romie	225-686-3109	Enhanced LIGO	LIGO.ELSUQ, 5.10.3.3, NSFLIGO.FY02CA & LIGO.EHOMM, 5.10.2.2, NSFLIGO.FY02CA

Dwg/Part Number	Rev	Part Description / Material	Serial Number	Qty
D070444	A	Mono Bumper Small		<del>16</del> 11.5
D070445	A	Mono Bumper Large		16 11.5
		Both bumpers are made from quartz		JAR

Used In (next higher assembly): D070452, 3/8-16 EQ Stop Assy, D070451, 1/2-13 EQ Stop Assy

Vendor Name	PO/Contract Number
Mindrum Precision	Ordered under TeckMart

**Data Package, Receiving/Inspection Remarks:**

Inspection Required Y/N	Visual Damage Y/N	Comments	Name/ Initials	Date Comp.
Y	<del>Y/N</del>		Mike Zucker	27 Aug 07

**Process Flow:**

#	Operation	Start Date	Work Area	Instructions	Name/ Initials	Date Comp.
1	Clean		LLO	per E960022	Harry O.	10-29-07
2	Vacuum Bake		<del>LLO</del> CIT	to Bolt Taylor		

N.B.: A copy of this traveller must be submitted to the DCC each time the original is shipped with the associated part(s) and when the traveller has been completed.

#	Operation	Start Date	Work Area	Instructions	Name/ Initials	Date Comp.
3	Control Point			Review/Approve RGA scan		
4	Wrap & Tag vacuum clean parts					
5	Ship and Deliver/File paperwork			Please send to: Janeen Romie, LLO  File one copy of traveler with the DCC. <b>Note: Ship original traveler with these parts.</b>		

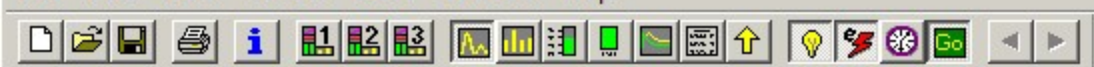
END: Go to Traveler or procedure associated with next higher assembly processing

**Special Instructions (Handling/Packaging Constraints, Remarks, etc.) or Notes:**

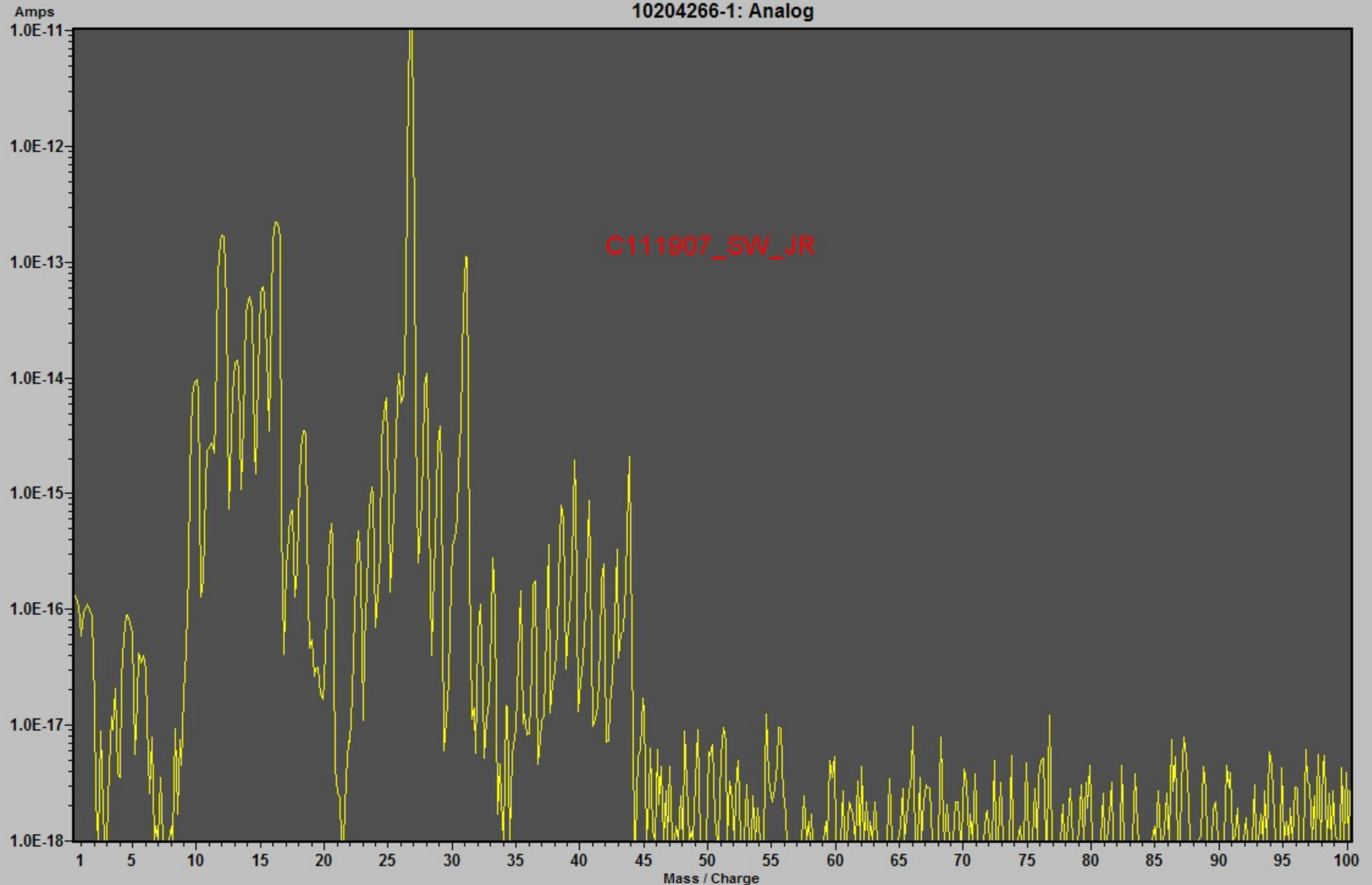
*There is no need to keep the two sizes separate.*

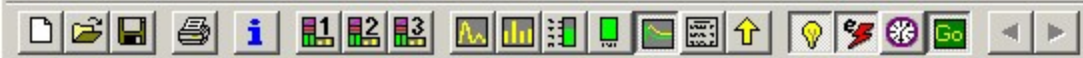
*We will separate at LLO.*

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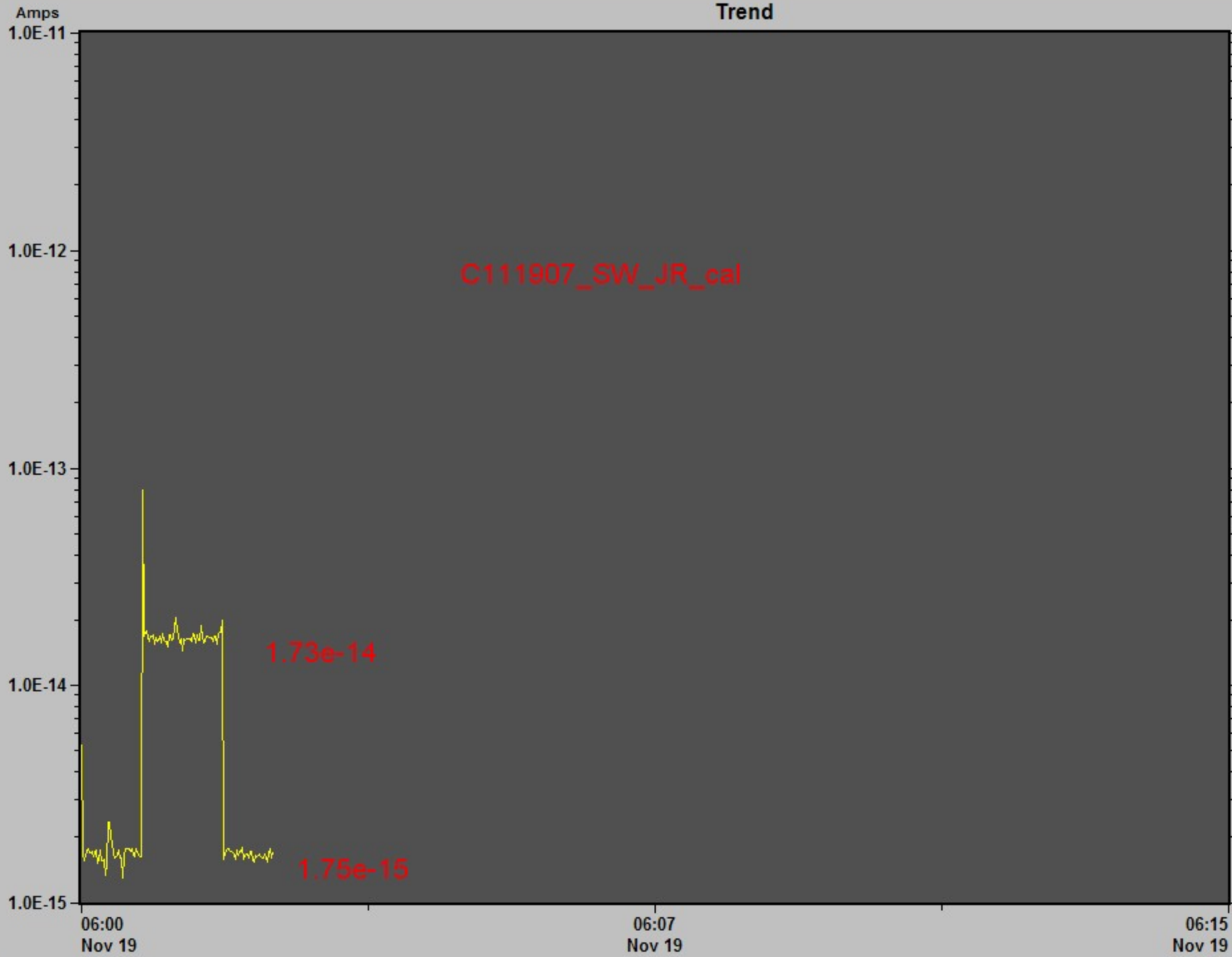


10204266-1: Analog





Trend



10204266-1: 28 1.73E-15

# Pressure Contribution from Flag Hydrocarbons

## 40M Lab RGA Scan Results

Job# C111907\_SW\_JR

Description: AL Parts-Beam Dumps-Stops  
Oven Used: C

Date: 11/19/2007

AMU 41	4.73E-16 amps	from RGA scan listing
AMU 43	3.71E-16 amps	from RGA scan listing
AMU 53	2.98E-18 amps	from RGA scan listing
AMU 55	1.21E-17 amps	from RGA scan listing
AMU 57	0.00E+00 amps	from RGA scan listing

Sum Flag H/C AMUs 8.59E-16 amps

Calib leak rate 2.36E-10 torr l/s (Argon)

AMU 40 (w/leak open) 1.73E-14 amps

AMU 40 (background) 1.75E-15 amps

Calib leak contributes 1.56E-14 amps = (w/leak open) - (background)

Flag H/C Outgassing 1.304E-11 torr l/s = (Sum Flag H/C AMUs) x (Calib leak rate)/(Calib leak contrib.)

Test item surf area 1.00E+04 cm<sup>2</sup>

Normalized outgassing 1.304E-15 torr l/s-cm<sup>2</sup> = Flag H/C Outgassing/Test item surf area

Full description: Aluminum Optic Mounts, 8 Beam dumps, 230 EQ stops, 120 1/2-13 Bronze Screws  
Mixed load with three travelers

Pre-scan bake: 120C for 48HRS