

| Originator | Cognizant Engineer | Ext./Phone# | Project | Account Number |
|---------------|--------------------|--------------|---|----------------|
| Luke Williams | Luke Williams | 352-328-6473 | Process Traveler ELIGO LHO FI Small Parts | |

| Dwg/Part Number | Rev | Part Description / Material | Serial Number | Qty |
|-----------------|-----|---|---------------|-----|
| D070528-00-D | | ELIGO IO FI LHO FR THIN SHIM / Aluminum 6061-T6 | | 2 |
| D070529-00-D | | ELIGO IO LHO FR THICK SHIM / Aluminum 6061-T6 | | 2 |
| D070472-00-D | | ELIGO IO FI FR POSITIONING SCREW / Phosphor Bronze | | 6 |
| D070530-00-D | | ELIGO IO LHO FR DUST SHIELD / Aluminum 6061-T6 | | 1 |
| D070473-00-D | | ELIGO IO FI FR TGG CAP / Phosphor Bronze | | 1 |
| D070474-00-D | | ELIGO IO FI FR QUARTZ HOLDER / Phosphor Bronze | | 2 |
| D070467-00-D | | ELIGO IO FI FR NG TGG HOLDER / Aluminum 6061-T6 | | 1 |
| D070475-00-D | | ELIGO IO FI FR QUARTZ CAP / Aluminum 6061-T6 | | 4 |
| D070468-00-D | | ELIGO IO FI FR SLEEVE LOCK / Aluminum 6061-T6 | | 4 |
| D070531-00-D | | ELIGO IO FI HARD APERTURE INSERT / Stainless Steel | | 1 |
| D070532-00-D | | ELIGO IO FI HARD APERTURE LOCK RING / Phosphor Bronze | | 2 |
| D070533-00-D | | | | |

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.

| | |
|--|--------------------------|
|  | DCC Number: E070329-00-D |
| | Date Prepared: 11-29-07 |

| | | | |
|--|--|--|--|
| | ELIGO IO FI LHO HARD APERTURE RISER / Aluminum 6061-T6 | | |
| | FI Hard Aperture / Aluminum 6061-T6 | | |

Used In (next higher assembly): ELIGO IO LHO FI

| Vendor Name | PO/Contract Number |
|-------------|--------------------|
| UF | |

Data Package, Receiving/Inspection Remarks:

| Inspection Required Y/N | Visual Damage Y/N | Comments | Name/ Initials | Date Comp. |
|-------------------------|-------------------|----------|----------------|------------|
| N | | | | |

Process Flow:

| # | Operation | Start Date | Work Area | Instructions | Name/ Initials | Date Comp. |
|---|-------------------------------|------------|-----------|--|----------------|------------|
| 1 | Clean | | | Per E960022-B, Class A | | |
| 2 | Vacuum Bake | | | Per E960022-B, Class A, 120C for 48 hours | | |
| 3 | Control Point | | | Review/Approve RGA scan | | |
| 4 | Wrap & Tag vacuum clean parts | | | Wrap (UHV foil) and place in ameristat bags. | | |

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.

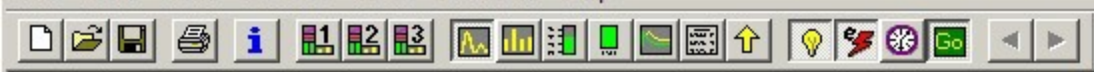
| # | Operation | Start Date | Work Area | Instructions | Name/ Initials | Date Comp. |
|---|---------------------------------|------------|-----------|---|----------------|------------|
| 5 | Ship and Deliver/File paperwork | | | Please send with OVERNIGHT shipping to: Betsy Bland LIGO Hanford Observatory 127124 North Route 10 Richland, WA 99354 File one copy of traveler with the DCC. Note: Ship original traveler with these parts. | | |

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

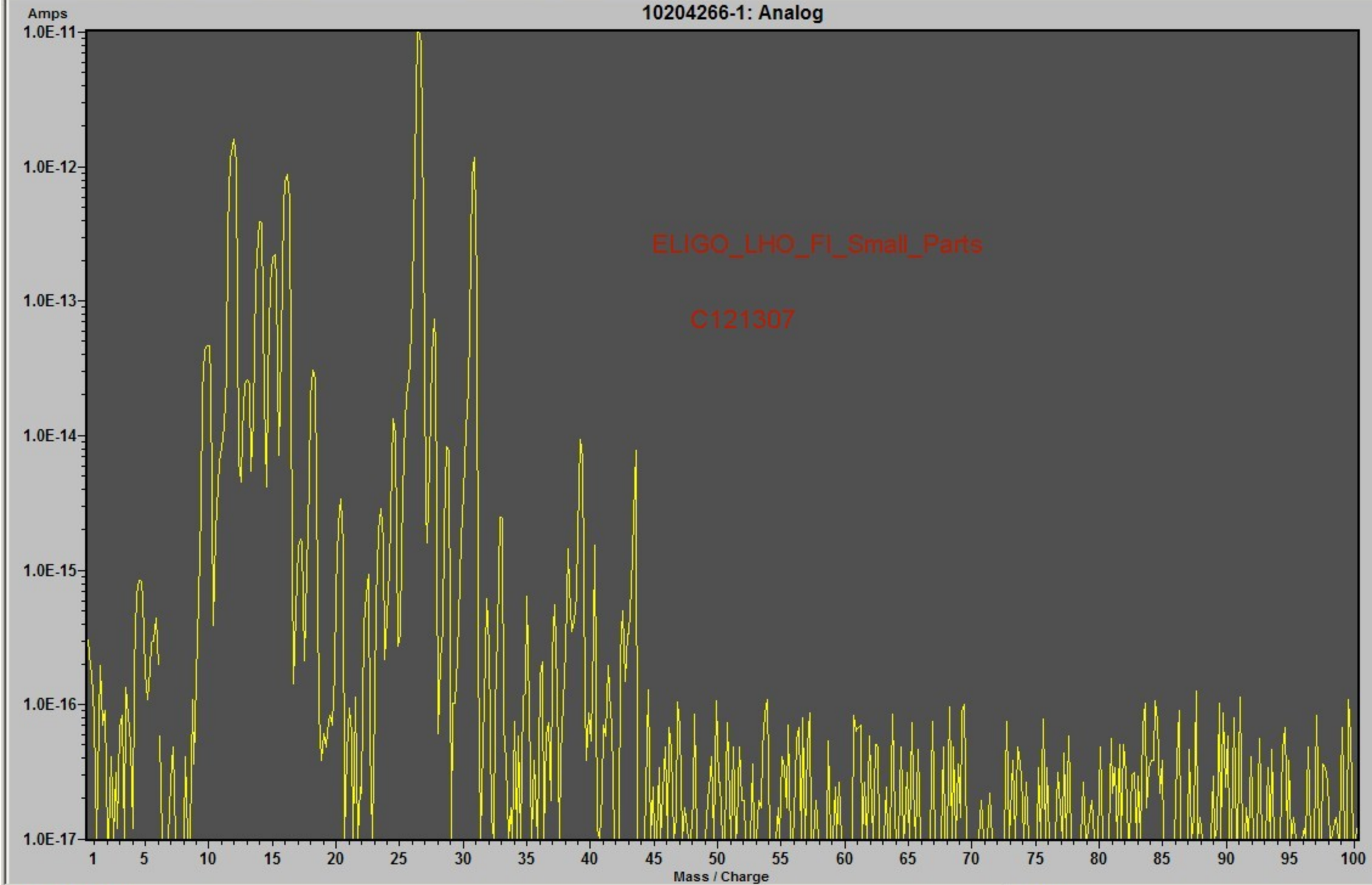
Special Instructions (Handling/Packaging Constraints, Remarks, etc.) or Notes:

Note: The dust shield and TGG holders are quite fragile. Please handle and package carefully. Please do not screw any cleaned parts together unless they are lubricated with clean methanol.

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.

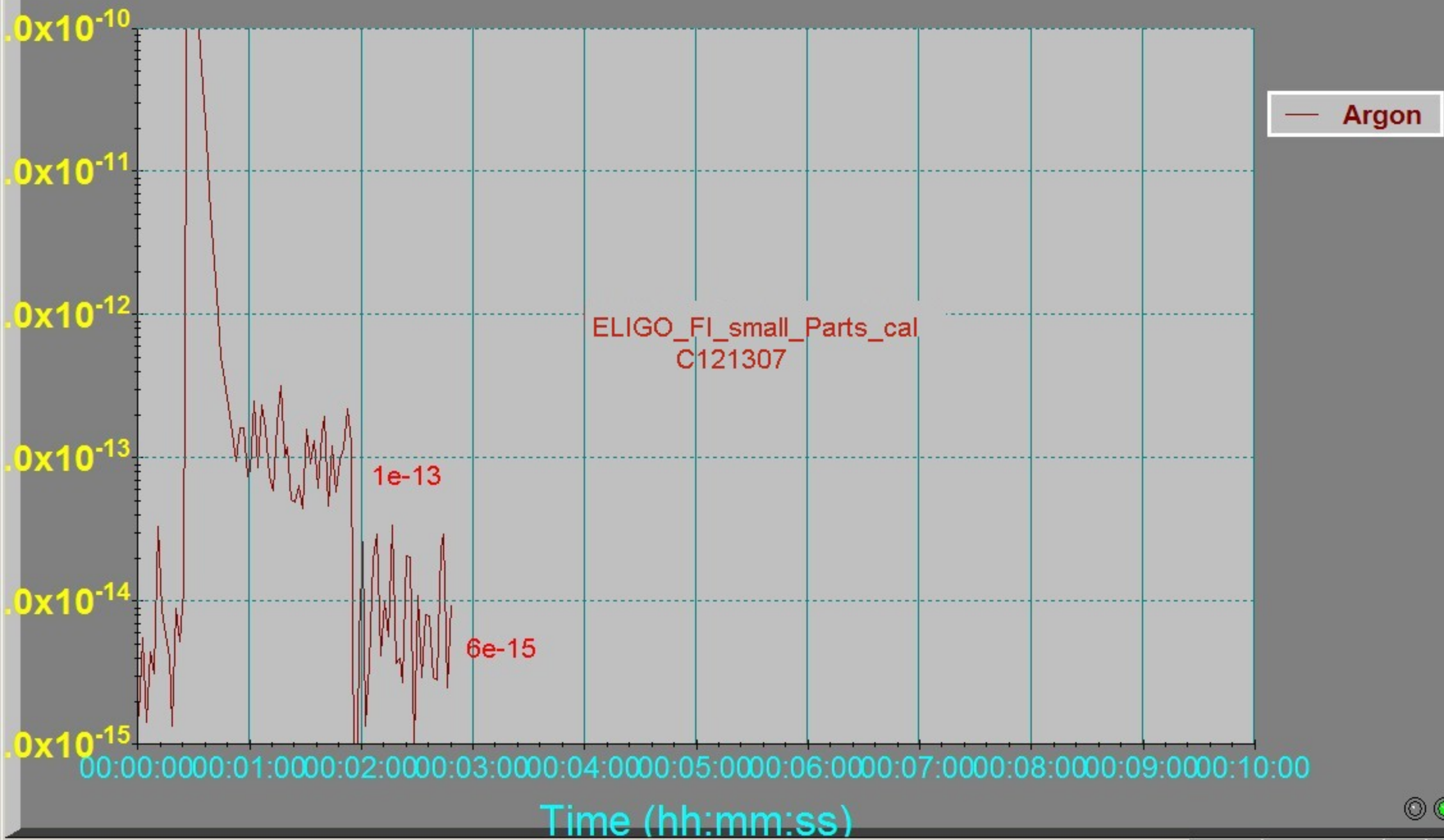


10204266-1: Analog



Amps

RGA P vs T Scan



Pressure Contribution from Flag Hydrocarbons

40M Lab RGA Scan Results

Job# C121307

Description: FI Small Parts (ELIGO)
Oven Used: C

Date: 12/13/2007

| | | |
|--------|---------------|-----------------------|
| AMU 41 | 1.80E-16 amps | from RGA scan listing |
| AMU 43 | 5.00E-16 amps | from RGA scan listing |
| AMU 53 | 4.00E-17 amps | from RGA scan listing |
| AMU 55 | 4.10E-17 amps | from RGA scan listing |
| AMU 57 | 6.20E-17 amps | from RGA scan listing |

Sum Flag H/C AMUs 8.23E-16 amps

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

AMU 40 (w/leak open) 1.00E-13 amps

AMU 40 (background) 6.00E-15 amps

Calib leak contributes 9.40E-14 amps = (w/leak open) - (background)

Flag H/C Outgassing 2.066E-12 torr l/s = (Sum Flag H/C AMUs) x (Calib leak rate)/(Calib leak contrib.)

Test item surf area 6.73E+03 cm²

Normalized outgassing 3.07E-16 torr l/s-cm² = Flag H/C Outgassing/Test item surf area

Full description: Eligo FI Small Parts (see traveler E070329

Pre-scan bake: 120C for 48Hrs.