



# ADVANCED LIGO FTIR SAMPLE RECORD

LASER INTERFEROMETER GRAVITATIONAL WAVE OBSERVATORY

Document:	LIGO-E 1800073	-v1	Date:	21 MARCH 2018
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Title:	FTIR:	LL0 Bonded PLATE ASSEMBLY	Location:	LL0
System(s):	VAC			
Assembly(ies):	D1700050 (cat a guess)			
Bake Load:	8986			
JIRA URL:				
Notes:	Part sampled by Stephen A and Matthew Heintze @ LL0. This part will be assembled under the thinking assumption that it will pass. 4 samples taken to look at confat area and general area			
		<input type="checkbox"/> Pre-Bake <input checked="" type="checkbox"/> Post Bake		<input checked="" type="checkbox"/> Class A <input type="checkbox"/> Class B
				URGENT?

  

PARTS					SAMPLES				
#	Part No.	SN	Description	#	Type	Description (for holes indicate "through" or "blind")	Amount	Area (cm <sup>2</sup> ):	# of Holes:
1	D1700072	1	taken on confat inner and outer surface	2	Surface	~ 30 inches		bottle labelled "Bo Si"	
2	D1700072	1	taken on confat threaded holes	2	Holes	Blind threaded holes			bottle labelled "Bo Si"
3	D1700072	1	general surface of bonded plate	5	Surface	sampled 5 of 40 holes			bottle labelled "Bo Hc"
4	D1700072	1	various through holes of bonded plate	6	Holes	sampled an area			bottle labelled "Bo Si"
5				9	Surface	~ 12 inches x 6 inches			
				10	Holes	through holes			bottle labelled "Bo Hc"
						sampled 5 of 20 holes			

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6			11	Surface	Area (cm <sup>2</sup> ):
			12	Holes	# of Holes:
7			13	Surface	Area (cm <sup>2</sup> ):
			14	Holes	# of Holes:
8			15	Surface	Area (cm <sup>2</sup> ):
			16	Holes	# of Holes:
9			17	Surface	Area (cm <sup>2</sup> ):
			18	Holes	# of Holes:
10			19	Surface	Area (cm <sup>2</sup> ):
			20	Holes	# of Holes:

## Instructions:

- All parts must be sampled. The sampling must be at least 5% of the total area and at least 5% of the total number of holes. Surface samples and hole samples are to be separate. Sampling fewer than all parts in a bake load, or sampling less than 5% of the area or holes requires a waiver from the Vacuum Review Board, or a LIGO Vacuum Review Team member (see the Advanced LIGO [VRB wiki](#) for member list). (Sampling requirements are defined in section 5.1 of [E0900480-v2](#).)
- Read the instructions on how to take FTIR samples, given in document LIGO-[E0900479-v1](#). Make sure that the sample bottles are tightly sealed!
- Reserve a Document Number (E-type) from the LIGO Document Control Center (DCC): <https://dcc.ligo.org/cgi-bin/private/DocDB/ReserveHome>
- Complete the form above.
- File this completed form in the DCC under the reserved number as revision 1, i.e. -v1.
- Ship a printed copy of this completed form and the FTIR Samples (properly packaged) to:  
Attn: Jerami Mennella  
Jet Propulsion Laboratory  
Bldg 83 room 101  
4800 Oak Grove drive  
Pasadena, California 91109-8099
- Send an email notification to [Jerami.Mennella@jpl.nasa.gov](mailto:Jerami.Mennella@jpl.nasa.gov) indicating that an FTIR sample package is in route to him and indicate whether testing results are needed urgently or not.
- JPL should put the LIGO document number of this sample form into the header of their FTIR analysis report and email this report to the submitter (email given in form), [Bob Taylor](#), [Dennis Coyne](#) (CIT), [John Worden](#) (LHO) and [Brian O'Reilly](#) (LLO). (These last three individuals are Vacuum Review Team members.)
- The completed FTIR analysis report from JPL is to be reviewed and approved by the Vacuum Review Team member at the submitter's location. The Vacuum Review Team member makes any desired notations on the report and then files the report (\*.pdf) into the DCC as version -v2 of the document number of this completed sample record form. This DCC record should also be associated with the event "FTIR Testing". If approved, the VRT member also indicates electronic approval on the -v2 DCC record. The VRT member also informs the submitter via email whether the FTIR sampled load is approved or rejected.