



LASER INTERFEROMETER GRAVITATIONAL WAVE OBSERVATORY

ADVANCED LIGO FTIR SAMPLE RECORD

Document:	LIGO-E	-v1	Date:	
Submitter:	Name:		Email address:	
Title:	FTIR:			
System(s):				
Assembly(ies):				
Bake Load:			Pre-Bake	Class A
JIRA URL:			Post Bake	Class B
Notes:				

PARTS				SAMPLES			
#	Part No.	SN	Description	#	Type	Description <i>(for holes indicate "through" or "blind")</i>	Amount
1				1	Surface		Area (cm <sup>2</sup> ):
				2	Holes		# of Holes:
2				3	Surface		Area (cm <sup>2</sup> ):
				4	Holes		# of Holes:
3				5	Surface		Area (cm <sup>2</sup> ):
				6	Holes		# of Holes:
4				7	Surface		Area (cm <sup>2</sup> ):
				8	Holes		# of Holes:
5				9	Surface		Area (cm <sup>2</sup> ):
				10	Holes		# of Holes:

ADVANCED LIGO FTIR SAMPLE RECORD

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:

- 1) 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.*)
- 2) Read the instructions on how to take FTIR samples, given in document LIGO-[E0900479](#). Make sure that the sample bottles are tightly sealed!
- 3) Reserve a Document Number (E-type) from the LIGO Document Control Center (DCC): <https://dcc.ligo.org/cgi-bin/private/DocDB/ReserveHome>
- 4) Complete the form above.
- 5) File this completed form in the DCC under the reserved number as revision 1, i.e. -v1.
- 6) If off-site ship a printed copy of this completed form and the FTIR Samples (properly packaged) to Calum Torrie at Caltech. Follow ALL procedures laid out in LIGO-T1700469: Documentation associated with shipping "dangerous goods" in excepted quantities.
- 7) Once at Caltech Calum will review (for need and priority) and then forward a printed copy of this completed form and the FTIR Samples (properly packaged) to:  
Attn: Jerami Mennella, Jet Propulsion Laboratory  
Bldg 83 room 1014800 Oak Grove drive Pasadena, California 91109-8099
- 8) Calum will then send an email to [Jerami.Mennella@jpl.nasa.gov](mailto:Jerami.Mennella@jpl.nasa.gov) indicating that an FTIR sample package is in route and indicate whether testing results are urgent or not.
- 9) 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).
- 10) 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.