SAMPLE(I) SUMMARY	,		4	Haven't ruled on s	ped	, Ct			
	and the second			LAS	ER IN	TERFER	OMETER GRAVITATIONAL WAVE	OBSERVATORY	
15 PARTS SAMPLED.		LIGO	,	ADVANCED LIGO FT	IR S	<b>AMPLE</b>	RECORD		
4"x 2.5" ALEA ON EACH	PART.	Document: Submitter:		i 1900307, -va, Date: ame: Mathew House	9/2	Haril a	ddress: Mainter eligo-la. Lo	cation: 40	
TOTAL AREA SIMPLED			TTD.	Ms X-and Baffles	,	"Sangle	- 11 cattlebille	en stainings steel	
WIGH FOR SAMPLE 1: 150 SQ	in	System(s):	TMS	1		,			
Nagarina and American	President of the Control of the Cont	sembly(ies):	TMS	Shroud baffe to	On 1-	hos	Pro on me)		
EACH ANGA SAMPLED		Bake Load:	9656	2140-01400-26-2		Pre-Bak	ce Class A	LIDGENITO	
MICE (2 PASSES WITH	1	JIRA URL:				Post Ba	16 12	URGENT?	
SAMPLE 2 ALAUS GOLH ANG	a )	Notes:	Done	on all panels in 4	"x 2	·5" Sque	ve, Air Galve,		
Higher of Hamp men than	J.		twic	ce questin same a	rea.	1	the was large ball	le over	
E1900307 - V	2		Have	or all planels in 4 ce over lin same a marked on drowing, w	here	Sample	Taken		2 passes.
			I	PARTS		1	SAMPLES		/ puosis.
	#	Part No.	SN	Description	#	Туре	Description (for holes indicate "through" or "blind")	Amount	
	1	01900260	NA	P ( Page Assy,	1	Surface	taken near edge. See drawing	Area ( 2:5 ( 2 2	:)))
				Koof fore	2	Holes		# of Holes:	
	2	D1900390	NA	TMS Shroud NOSY.	3	Surface	taken near middle See	Area (***): 4'x 2.5' (**)	
		7 1 1		Stare rand	4	Holes	drawing	# of Holes:	
	3	D1900761	NA	TMS Shround 1854.	5	Surface	taken dear edge. See	Area (***): 4 × 2.5 (×2)	
		11/20201	/ / / \	Voton Panel	6 -	Holes	drawing /	# of Holes:	
	4	11900259	7/1/1	TMS Shroud Assy.	7	Surface	taken neds edge. see	Area ( $+ \times Z \cdot 5' \times Z$ )	
		V1100251	NA	Front Ponel	8	Holes	drowing 1	# of Holes:	
	5	DIGORES	MA	TMS Show Assy.	9	Surface	taken now edge. see	Area ( ): 7 × Z.5 ( > Z)	
		191 1000		Kear Pone	10	Holes	Stawing V	# of Holes:	
						1			
					For	rm F1000003	v3	PAGE (	OF 3

PAGE 1 OF 3 FTIR RECORD E1900307-VZ SAMPLE 1

	LIGO	ADVA	NCE	ED LIGO	FTIR SAMPLE RECORD	
6	D1900391-01 NK	TMS Shroud Nisy.	11	Surface	taken between holes. See	Area (***): 4 × 2.5 (> 2)
	1)1 1903 11 11 11 11	NW VONE	12	Holes	d'agron	# of Hotes:
7	h: 6- 70	TMS Shroud Assy.	13	Surface	talk between holes. See	Area (***): 4 x 2.5" (X 2)
	D1900391-02 N/A	ALS PONE	14	Hotes	diggrom	# of Holes:
8	010 -50 44	TMS shround NSSY	15	Surface	tala @ edge. See	Area ( $4 \times 2.5 / 2$ )
	1900259 #1	SIDE PANEL	16	Holes	diagram	# of Holes:
9	nic - d to	))	17	Surface	(1)	Area ( $12$ ): $4^{\prime} \times 25^{\prime\prime} \times 2$
	D1900259 #2	d o Aca	18	Holes		# of Holes:
10	Diana	TMS Shroud Mssy.	19	Surface	taken @ Centre see	Area ( $12$ ): $4^{\prime} \times 2.5^{\prime\prime}$ ( $\times 2$ )
	11900260-02	Koof Vonel	20	Holes	diagrom	# 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 t han all p arts in a bake load, or sampling less than 5% of the area or holes requires a waiver from the Vacuum Review B oard, 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.
- 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 indicating that an FT IR 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).
- 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.

2 PAGE 2 OF 3 FIND SAMPLE REGORD E1900307-VZ SAMPLE 1

### LASER INTERFEROMETER GRAVITATIONAL WAVE OBSERVATORY

# LIGO

## ADVANCED LIGO FTIR SAMPLE RECORD

	Document:	LIGO-E		-v1	Date:						
	Submitter:		ame:				address:	i	Location:		
	Title:	FTIR:	TMS X-1	END)	BAFTE	"SAN	IPLE I"	Out - BLACK	NICICEL CONTEN STAMLES STEEL		
	System(s):										
Ass	sembly(ies):		160,019001	262							
	Bake Load:					Pre-B	ake	Class A	URGENT?		
	JIRA URL:			u Ti-		Post F	Bake	Class B	OKOENI!		
	Notes:										
			PARTS			SAMPLES					
#	Part No.			- 1	# Type	(for holes	Description indicate "through" or "bli	on h" or "blind") Amount			
1 1	016	10	TMS SHROUL	7	1	Surface		e diagram	Area (12): 4 × 25 1		
	1) 1900 8	9 MA	A FRONT PANGE		2	Holes	0		# of Holes:		
2	nic o		TMS Shrow	) As	3	Surface	Potton.	See diagram	Area (cm²)		
	11900392	10 DI	Who as co		4	Holes	1)	0	# of Holes: 4 × 2.5 /x		
3	7190039	7	11		5	Surface			Area (cm²):		
	171900192	02			6	Holes	1)		# of Holes: 4 xZ5 /x		
14   n/c ===			1)	7		Surface			Area (cm²):		
	11900 39	205	S		8	Holes	1)		# of Holes: 4 ×25 /×		
15	1190039	201	1)		9	Surface	)	414 594	Area (cm²): 4'xZ.5"/x		
	1190039	2 04			The	0 Holes			# of Holes:		

1

Form F1000003-v3

AMPLE & SUMMINEY 15 pats songled.

4"x2.5" oxa on tach pot.

Total ones sarpled millips sayle & 150 spin.

Each area sampled finia (a passo with sample 1)

E1400303-45

diagram

# LIGO

REVEAT OF SIMPLE # ]

# of Holes:

Document:	LIGO-E	1900307 -v1 Date:	9/2	27/19			
Submitter:		ame: A Herror	$\dashv$	Email ad	Idress: Mentago 190-9. Lo	cation:	
Title:		MS X-END STRAF	726		210 Kattech Phin	LICEL COATES STAINLESS S	1867.
System(s):	TMS						in the second se
embly(ies):	1115	SHROUD BAFFLE	1	70-4 h	are all on me LIGO, Old	900262	
Bake Load:	9654			Pre-Bak	e Class A	URGENT?	
JIRA URL:				Post Bal	ke Class B	ONGLIVI:	=
Notes:	Done o	over h some area		Square	Air Cake by		
	+ DICR	over In some aleg.		7	LLO loige bake	OUEN	
,	Have	nached on diarrage	she	e soul	e taken		
	P	ARTS			SAMPLES		
Part No.	SN	Description	#	Туре	Description (for holes indicate "through" or "blind")	Amount	2 passes
0190260-	1 UM	Roof Pare	1	Surface	News centre. See diag	Area (cm²): 4 x Z S	(22)
			2	Holes		# of Holes:	
0/900 260-	Z N/A	1 ) £ 4 = -	3	Surface	Neal lage See diej	Area (Car): 4/ 25//	× <sup>z</sup> )
71,100 200	- (7/1)		4	Holes		# of Holes:	
01900259	)	SIDE PANEL	5	Surface	New certe. See ding	Area (572): 7 × 25 />	)
1	/	21 DE - 1777	6	Holes		# of Holes:	
17/90025	9 2	SIVE PRIVEL	7	Surface	13.5	Area (612): 4 × 25 (×	
The lower			8	Holes		# of Holes:	
010-301	- A A I (1	SR ALS PANEL	9	Surface	Between yells and edge.	Area (cm²): 7 × 25 /×	

Holes

Form F1000003-v3

PAGE 1 OF 3

FTIR RECORD E1900307 - VZ

SAMPLE 2

## ADVANCED LIGO FTIR SAMPLE RECORD

6	0.00 20	/0	0.00	11	Surface	Between holes and edge.	Area (13): 4 × 4 5				
	D1900391-02 N/A		NG TARE	12	Holes	See diagram	# of Holes:				
7	11900258	7.	0 0 1	13	Surface	In certie See diagram	Area (3): 7 × 4 5 /× 7				
	D140-58 MA	14	(Ca) 16 m	14	Holes		# of Holes:				
8	0000000	11	Tat Parel	15	Surface	Neal Roge Se diegion	Area (cm²): + ×25 /×2				
	D1900257 N	,**	front lovel	16	Holes		# of Holes:				
9	20.21	10	RA Parel	17	Surface	New Certe See diagion	Area (1212): 7 × 25 / × 4				
	71900761-N	A	Rotlom Pare	18	Holes		# of Holes:				
10	D190390 N	A	SIDE PANEL	19	Surface	New edge See diagram	Area (***): 4×25 /×2				
	11170010 1	W/A	1/2	1/2	1/2	1/4		20	Holes		# of Holes:

### Instructions:

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  Bldg 83 room 1014800 Oak Grove drive Pasadena, California 91109-8099
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2 PAGE 2 FTM RECORD E1900307-V7 SAMPLE 2 Titlei III MS X-END BAFTES "SAMPLEZ" CONT.

BLACK MICKEL CONTED STAINLESS STEET.

			PACTS		SAmples							
1	PARTH	15/1	Desce			TYPE	Descrip		Aproust			
Control	D1900389	WA	Front Ponel	4	2		Near Centre S	e degran	4×2.5"/x			
12	1/900392	The second secon	Window Loves	3	2		Near top . Sa	e diagram	4 xz5 / (2)			
13	11900392	2	7)	4			71					
Charles Control of the Control of th	D1900 392	3	1)		5		) )					
15	171900392	14	) }				l- <i>j</i>		7)			
		Ę		-								
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