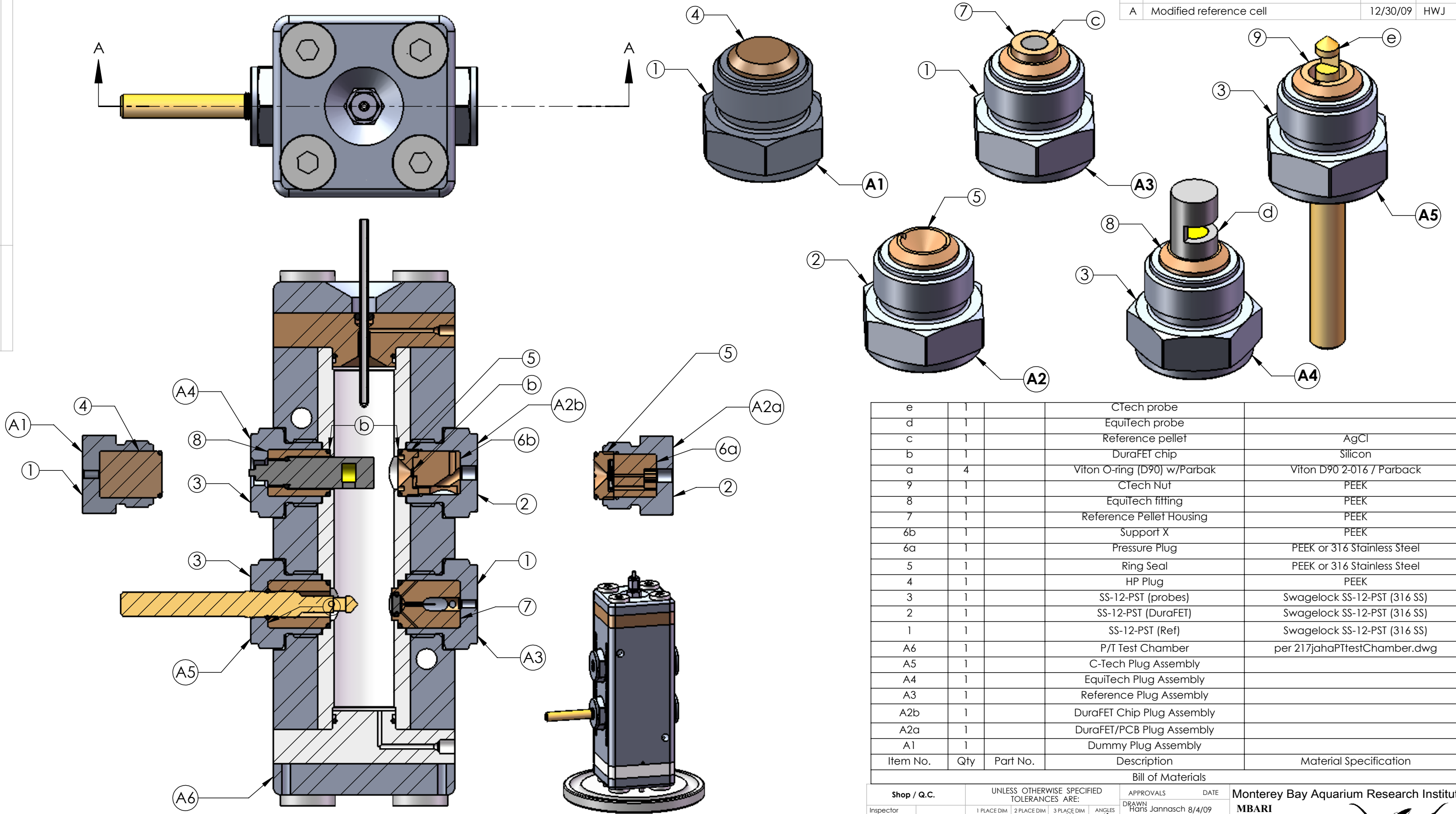


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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE		
A	Modified reference cell	12/30/09	HWJ



SECTION A-A
SCALE 1 : 1.5

ASSEMBLY

e	1		CTech probe	
d	1		EquiTech probe	
c	1		Reference pellet	AgCl
b	1		DuraFET chip	Silicon
a	4		Viton O-ring (D90) w/Parbak	Viton D90 2-016 / Parback
9	1		CTech Nut	PEEK
8	1		EquiTech fitting	PEEK
7	1		Reference Pellet Housing	PEEK
6b	1		Support X	PEEK
6a	1		Pressure Plug	PEEK or 316 Stainless Steel
5	1		Ring Seal	PEEK or 316 Stainless Steel
4	1		HP Plug	PEEK
3	1		SS-12-PST (probes)	Swagelock SS-12-PST (316 SS)
2	1		SS-12-PST (DuraFET)	Swagelock SS-12-PST (316 SS)
1	1		SS-12-PST (Ref)	Swagelock SS-12-PST (316 SS)
A6	1		P/T Test Chamber	per 217jahaPTtestChamber.dwg
A5	1		C-Tech Plug Assembly	
A4	1		EquiTech Plug Assembly	
A3	1		Reference Plug Assembly	
A2b	1		DuraFET Chip Plug Assembly	
A2a	1		DuraFET/PCB Plug Assembly	
A1	1		Dummy Plug Assembly	
Item No.	Qty	Part No.	Description	Material Specification

Bill of Materials			
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:	APPROVALS DATE
Inspector		1 PLACE DIM ±.1/16 2 PLACE DIM ±.02 3 PLACE DIM ±.005 ANGLES ±1°	DRAWN HANS JANNASCH 8/4/09
Shop Foreman		1. DIMENSIONS ARE IN INCHES	ENGINEER
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING.	CHECKED
NEXT ASSY Description	NEXT ASSY Number	3. REMOVE BURRS AND SHARP EDGES .015 MAX.	PROJECT NO. 900918
		4. MACHINED FILLET RADII .0150-.030.	PROJECT Novel Sensors
		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005	WEIGHT
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.	
Application		DO NOT SCALE DRAWING	

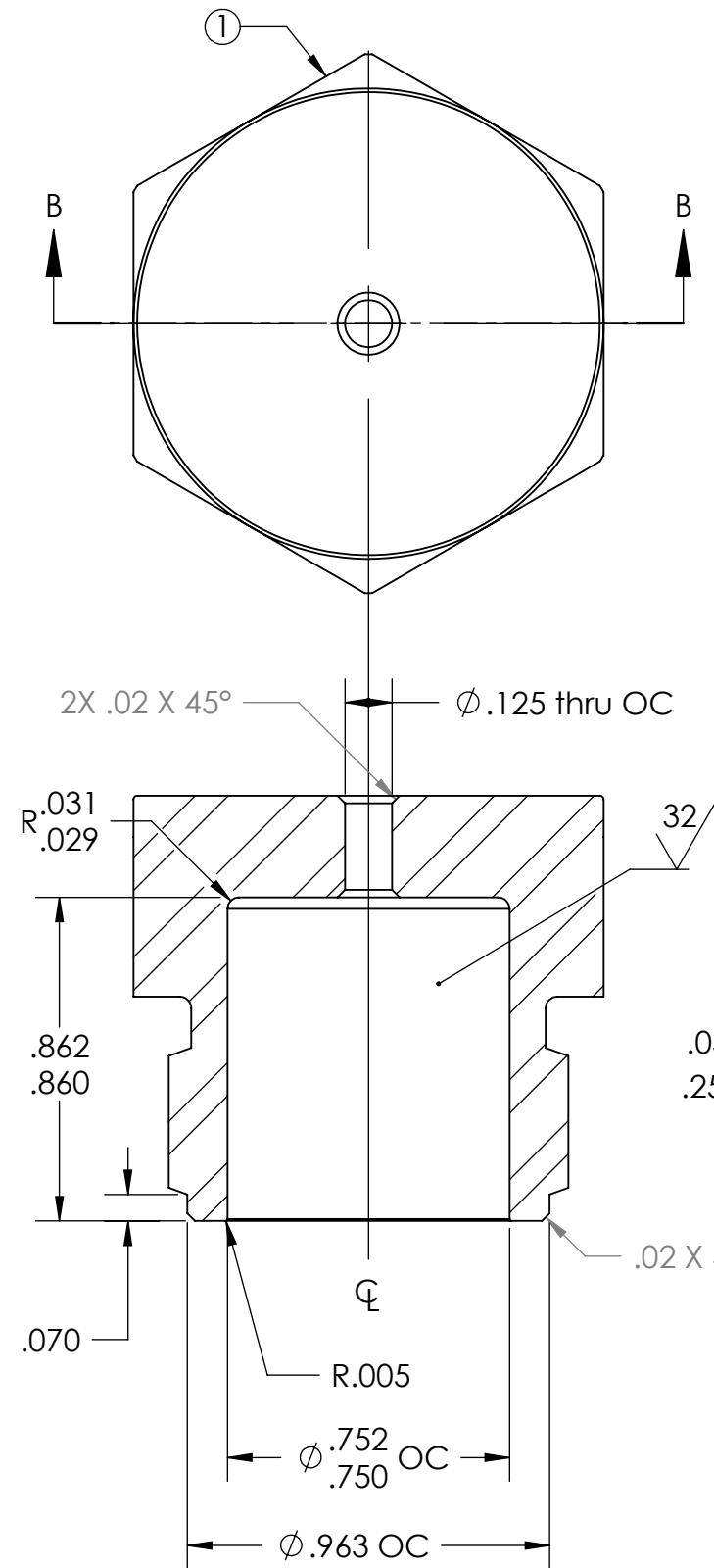
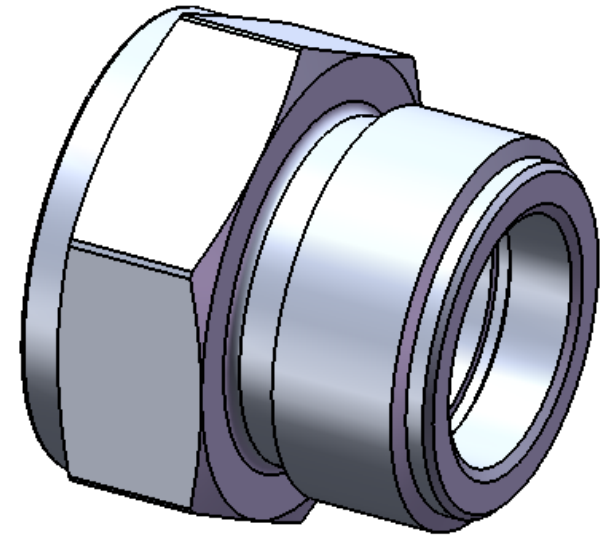
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7700 Sandholdt RD.
Moss Landing, CA 95039
PH: (831) 775-1700

P/T Test Chamber Fittings

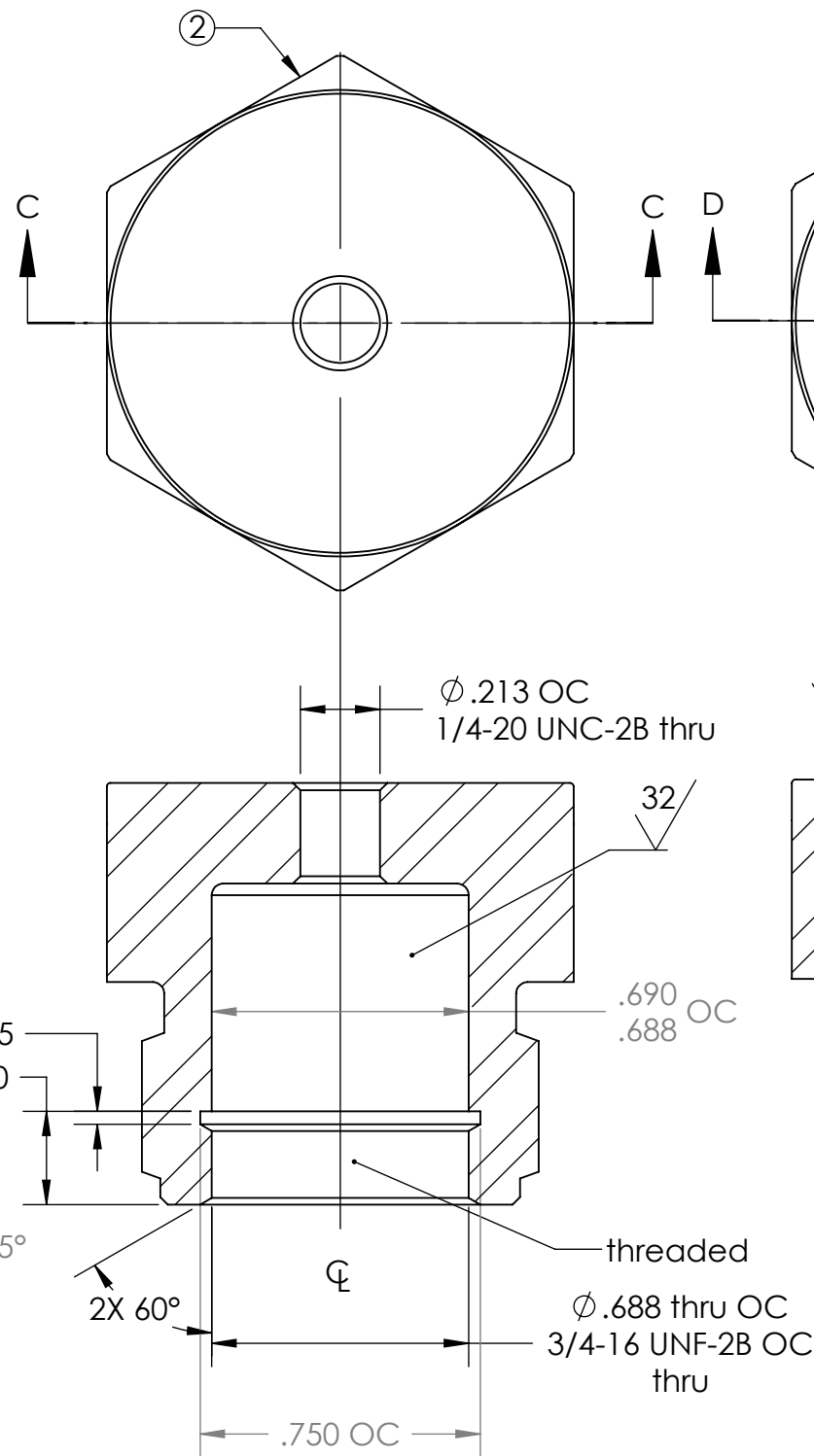
SIZE B	DWG. NO. 218jahaPTtestFittings	REV. A
SCALE 1:3	CAD FILE: Tornado/chem/SWfiles	SHEET 1 OF 5

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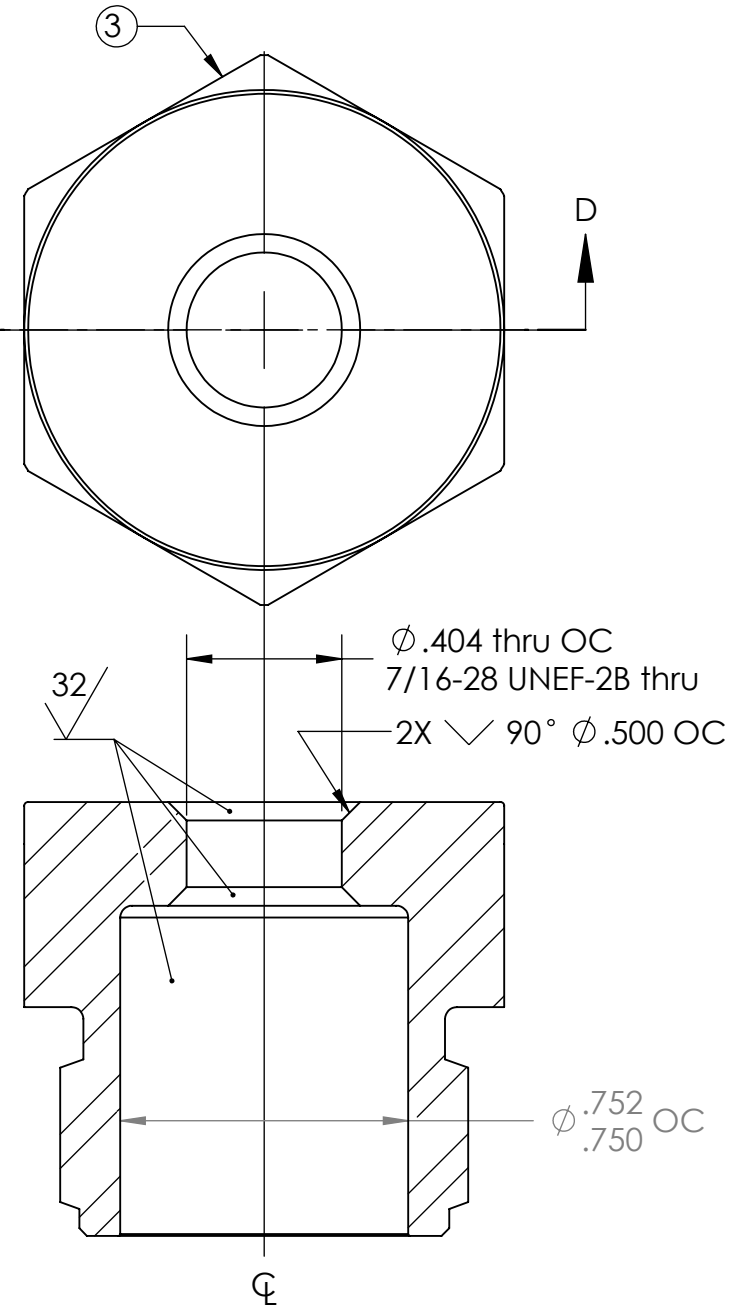
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE		
A	Modified reference cell	12/30/09	HWJ



SECTION B-B



SECTION C-C



SECTION D-D

3	1		SS-12-PST (probes)	Swagelock SS-12-PST (316 SS)
2	1		SS-12-PST (DuraFET)	Swagelock SS-12-PST (316 SS)
1	1		SS-12-PST (Ref)	Swagelock SS-12-PST (316 SS)
Item No.	Qty	Part No.	Description	Material Specification

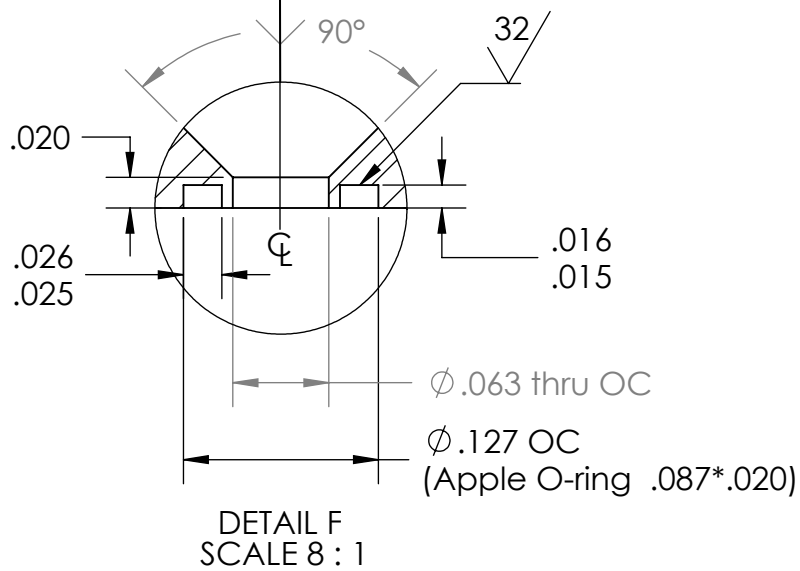
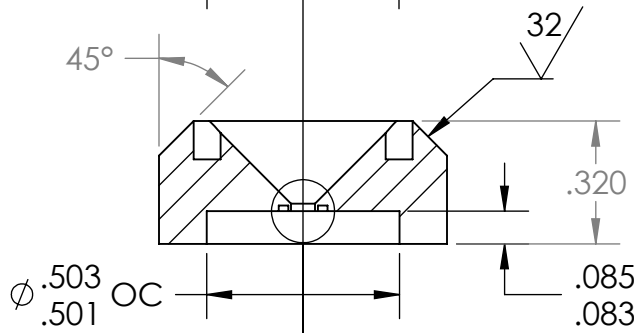
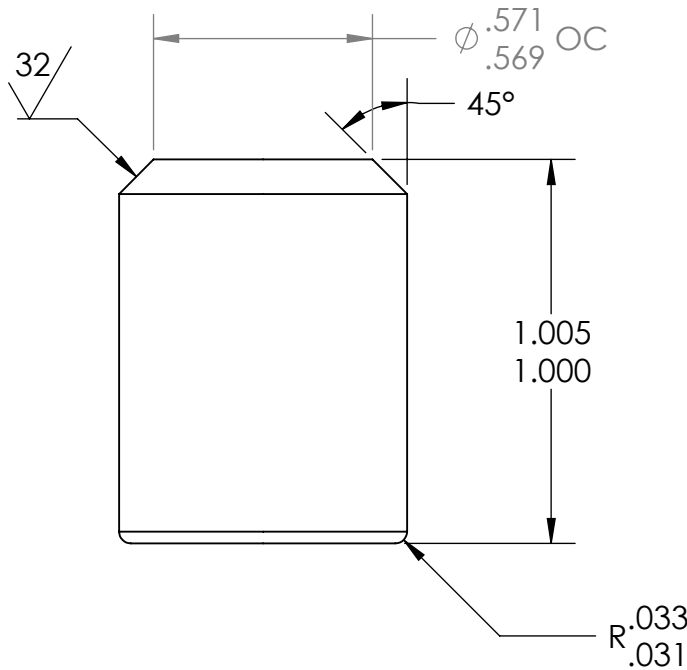
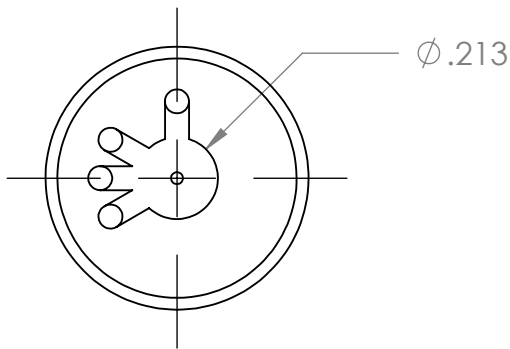
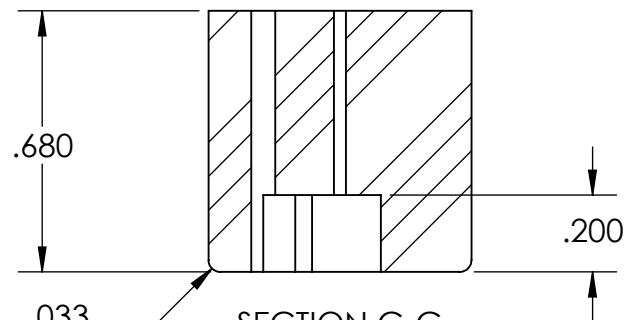
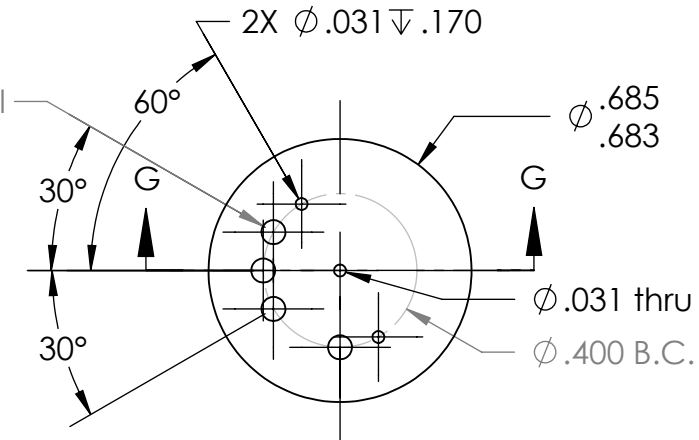
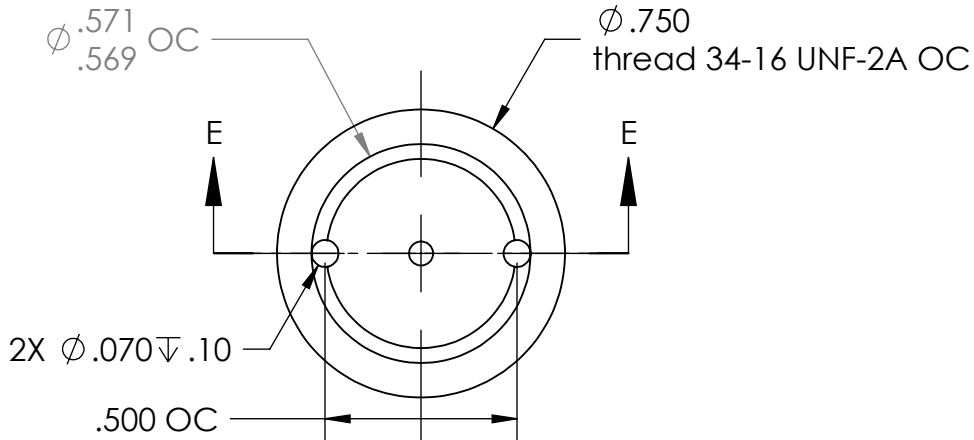
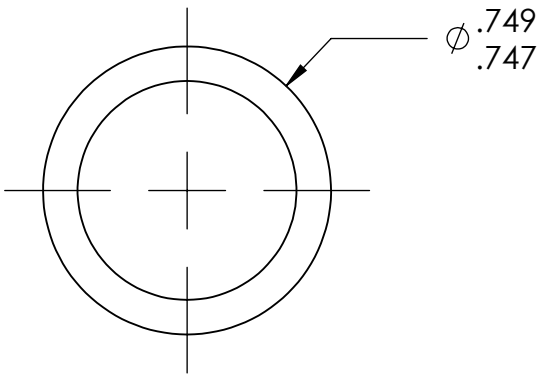
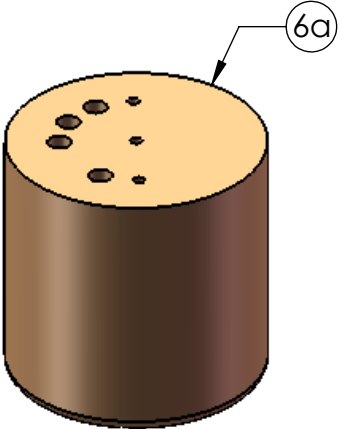
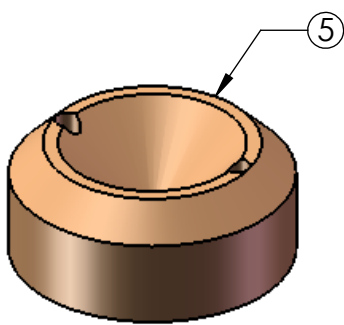
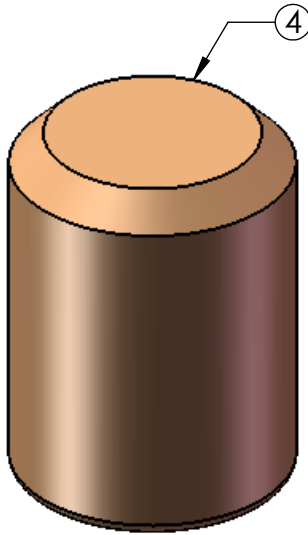
Bill of Materials

Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS	DATE	Monterey Bay Aquarium Research Institute	
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN Hans Jannasch 8/4/09	MBARI
Shop Foreman		1. DIMENSIONS ARE IN INCHES				ENGINEER	7700 Sandholdt RD.
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING.					Moss Landing, CA 95039
		3. REMOVE BURRS AND SHARP EDGES .015 MAX.				CHECKED	PH: (831) 775-1700
		4. MACHINED FILLET RADII .0150-.030.				PROJECT NO.	900918
NEXT ASSY Description	NEXT ASSY Number	5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005				PROJECT	Novel Sensors
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH, MAX .012 INCHES FOR SINGLE SURFACE.					
Application		DO NOT SCALE DRAWING		WEIGHT		SIZE B	DWG. NO. 218jahaPTtestFittings
						SCALE 1:3	CAD FILE: Tornado/chem/SWfiles
							SHEET 2 OF 5

NOTE:
All dimensions not shown are same as in Part 1.
All parts have same OD thread recess per Part 1.
Without inserts, parts should easily screw into pressure chamber ports until hex heads bottom out.

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REVISIONS			
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	INITIAL RELEASE		
A	Modified reference cell	12/30/09	HWJ



6a	1		Pressure Plug	PEEK or 316 Stainless Steel
5	1		Ring Seal	PEEK or 316 Stainless Steel
4	1		HP Plug	PEEK
Item No.	Qty	Part No.	Description	Material Specification

Bill of Materials				
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	DATE
Shop Foreman		3 PLACE DIM ±.005	ANGLES ±1°	
Engineer		1. DIMENSIONS ARE IN INCHES		
		2. DIMENSION LIMITS HELD AFTER PLATING.		
		3. REMOVE BURRS AND SHARP EDGES .015 MAX.		
		4. MACHINED FILLET RADII .0150-.030.		
		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005		
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH, MAX .012 INCHES FOR SINGLE SURFACE.		
NEXT ASSY Description	NEXT ASSY Number	PROJECT NO. 900918		
		PROJECT Novel Sensors		
Application		DO NOT SCALE DRAWING		
		WEIGHT		

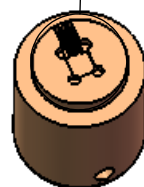
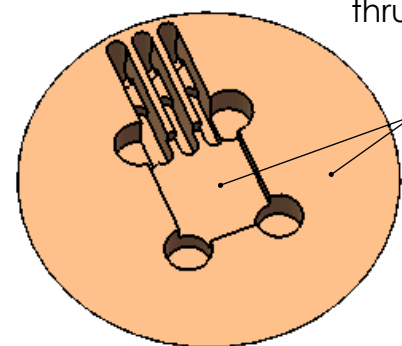
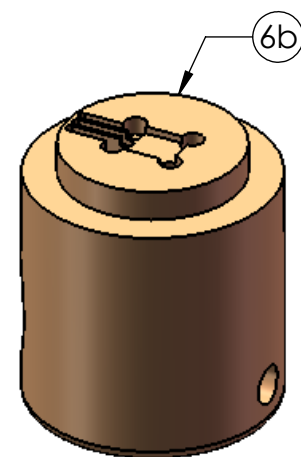
Monterey Bay Aquarium Research Institute
MBARI
7700 Sandholdt RD.
Moss Landing, CA 95039
PH: (831) 775-1700

P/T Test Chamber Fittings

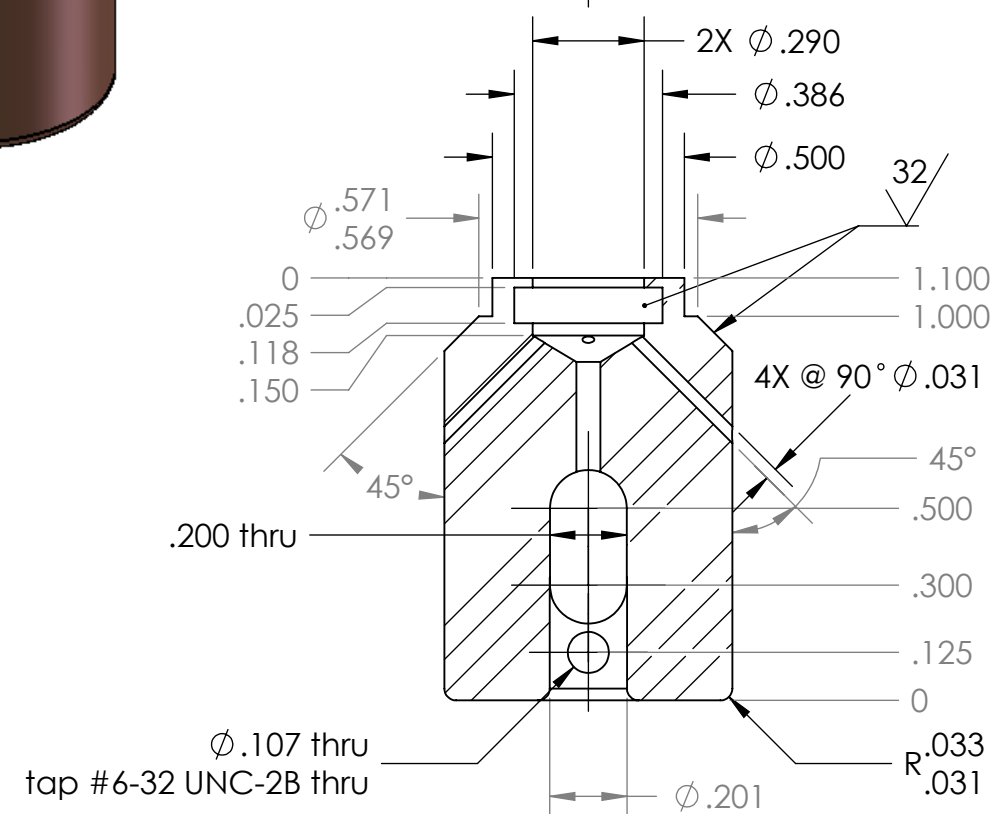
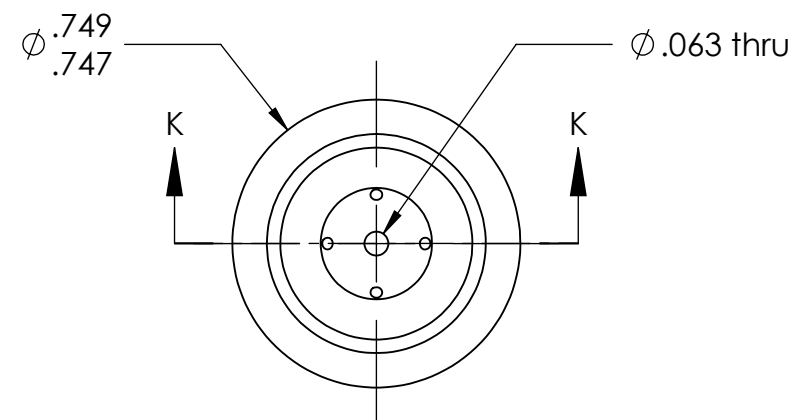
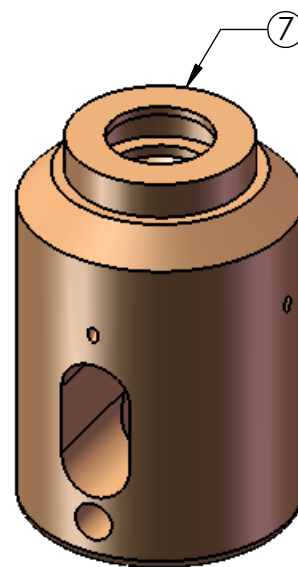
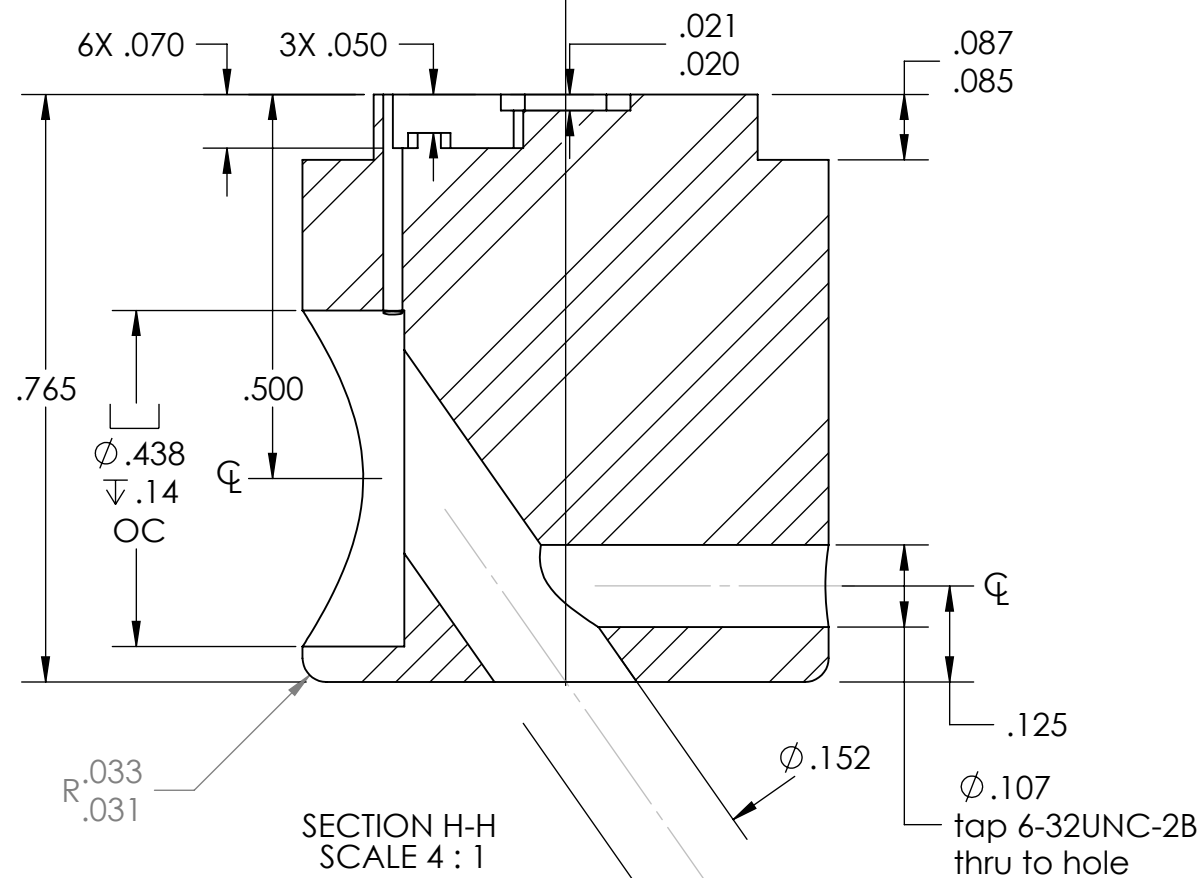
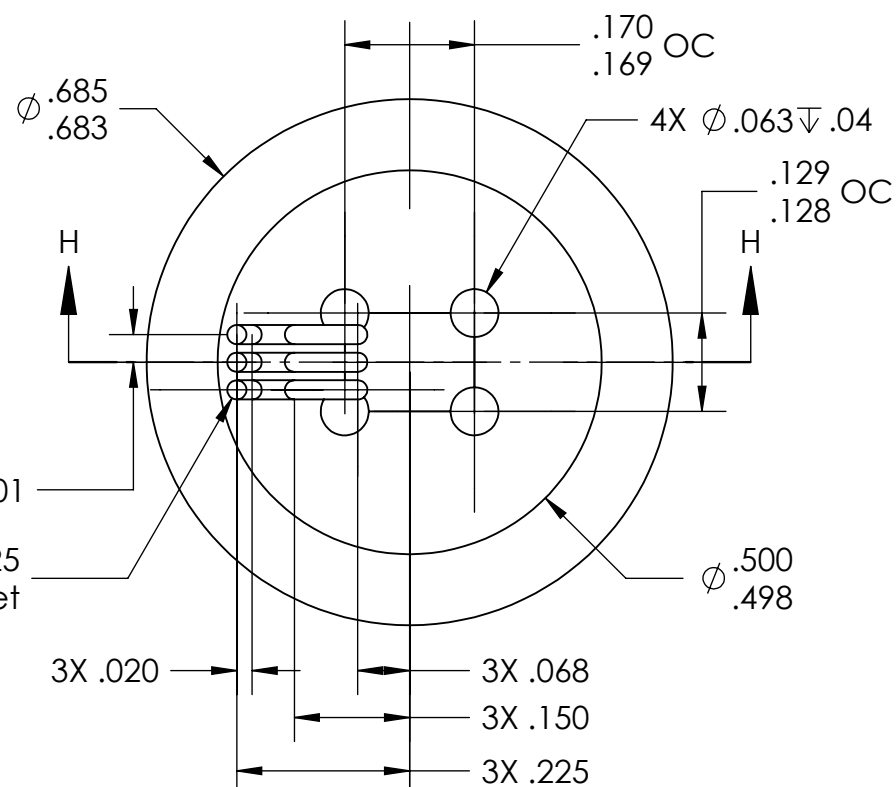
SIZE B	DWG. NO. 218jahaPTtestFittings	REV. A
SCALE 1:3	CAD FILE: Tornado/chem/SWfiles	SHEET 3 OF 5

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REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE		
A	Modified reference cell	12/30/09	HWJ

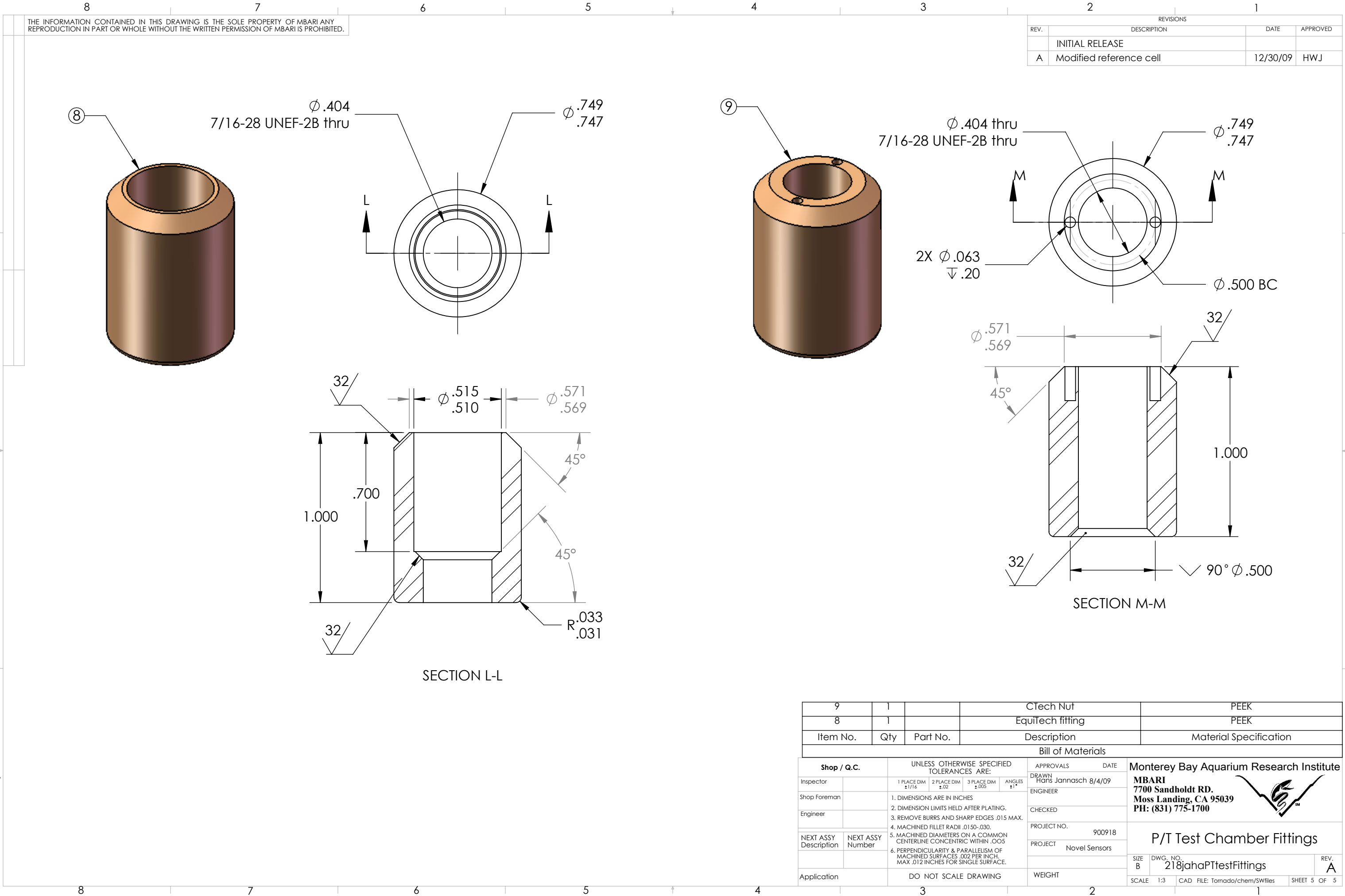


DETAIL J
SCALE 4 : 1



SECTION K-K

7	1		Reference Pellet Housing	PEEK		
6b	1		Support X	PEEK		
Item No.	Qty	Part No.	Description	Material Specification		
Bill of Materials						
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS DATE		
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	Monterey Bay Aquarium Research Institute  MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700
Shop Foreman		1. DIMENSIONS ARE IN INCHES				
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING.				
		3. REMOVE BURRS AND SHARP EDGES .015 MAX.				
		4. MACHINED FILLET RADII .0150-.030.				
NEXT ASSY Description	NEXT ASSY Number	5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005				
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.				
Application		DO NOT SCALE DRAWING				
				WEIGHT		
				APPROVALS DATE		
				DRAWN Hans Jannasch 8/4/09		
				ENGINEER		
				CHECKED		
				PROJECT NO. 900918		
				PROJECT Novel Sensors		
				SIZE B DWG. NO. 218jahaPTtestFittings REV. A		
				SCALE 1:3 CAD FILE: Tomado/chem/SWfiles SHEET 4 OF 20		



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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	INITIAL RELEASE		
A	Modified reference cell	12/30/09	HWJ

9	1		CTech Nut	PEEK
8	1		EquiTech fitting	PEEK
Item No.	Qty	Part No.	Description	Material Specification

Bill of Materials				
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	DATE
Shop Foreman		3 PLACE DIM ±.005	ANGLES ±1°	DRAWN
Engineer		1. DIMENSIONS ARE IN INCHES		Hans Jannasch 8/4/09
		2. DIMENSION LIMITS HELD AFTER PLATING.		ENGINEER
		3. REMOVE BURRS AND SHARP EDGES .015 MAX.		CHECKED
		4. MACHINED FILLET RADII .0150-.030.		PROJECT NO.
NEXT ASSY Description	NEXT ASSY Number	5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005		900918
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.		PROJECT
				Novel Sensors
Application		DO NOT SCALE DRAWING		WEIGHT

Monterey Bay Aquarium Research Institute
MBARI
7700 Sandholdt RD.
Moss Landing, CA 95039
PH: (831) 775-1700



P/T Test Chamber Fittings

SIZE B	DWG. NO. 218jahaPTtestFittings	REV. A
SCALE 1:3	CAD FILE: Tornado/chem/SWfiles	SHEET 5 OF 5