

i2MAP Pressure Tests & Operations						
Pressure Test Description	Date	Max. pressure (meters depth)	Max. pressure (PSI)	Number of Cycles	Failure pressure (meters depth)	Failure pressure (PSI)
Test design #1 : Solid support ring, .005" Kapton. Problems identified; dome lacked specified inner corner break.	4/30/2015	1020	1500	1	pass	
	4/30/2015	1883	2750	9	pass	
	5/4/2015	1883	2750	Soak 72 + hours (failed at unknown time during soak)	1883	2750
Test design #1 : Solid support ring, .005" Kapton. Removed "Tampoprint" ink for this test.	5/8/2015	1262	1850	15	pass	
	5/8/15 - 5/10/15	1262	1850	Soak 48 + hours	pass	
	5/11/2015	1262	1850	5	pass	
Operational experience on design #1						
dive #1	6/15/2015	300	449		pass	
dive #2	6/25/2015	300	449		pass	
dive #3	9/10/2015	300	449		pass	
Test design # 2: Dome inner corner chamfered, no tampoprint ink, dome mating surface polished, .005" Kapton replaced with .020" Kapton gasket, Titanium support ring changed to flexure. Test date 4FEB16	2/4/2016	?	?	1	1064	1563
Test design #3: Dome inner corner chamfered, dome seat polished. .020" kapton gasket under seat and urethane resin on perimeter New titanium ring to constrain dome on perimeter. O-ring seal is above matin face.	5/4/2016	1625	2400	1	pass	
	5/4/2016	1025	1500	6 cycles+ 18 hour soak	pass	

