	A	B	C	D	E	F	G	H	I	J	K
1		**Center of Pressure-Fluid Statics**									
2											
3	R1 (inner radius-m)		0.1								
4	R2 (outer radius-m)		0.2		Fully Submerged Slope		**10.65**	from fully submerged graphs (best fit line through data point			
5	R3 (moment arm-m)		0.203								
6	B (width-m)		0.075								
7	ω (N/m^3)		9786	(theoretical-based on 22.6C using Water Properties Table)							
8									**Check theoretical versus experimental ω:**		
9	**Tilt Angle**	**Hanger Mass (gm)**	**h (mm)**	**h (m)**	**h^3 (m)**	**Moment (N-m)**	**$M+\omega BR_2^2h/2$**		experimental	theoretical	% Diff
10	**0**	20	172	0.172	0.0051	0.0398	2.5646		9467	9786	3%
11		50	162	0.162	0.0043	0.0996	2.4776				
12		70	154	0.154	0.0037	0.1394	2.4000				
13		100	142	0.142	0.0029	0.1991	2.2836				
14		120	138	0.138	0.0026	0.2390	2.2647				
15		150	130	0.13	0.0022	0.2987	2.2070				
16		200	118	0.118	0.0016	0.3983	2.1304				
17		250	106	0.106	0.0012	0.4979	2.0538	partially submerged			
18		300	98	0.098	0.0009	0.5974		fully submerged			
19		350	90	0.09	0.0007	0.6970					
20		400	80	0.08	0.0005	0.7966					
21		450	70	0.07	0.0003	0.8961					
22		500	61	0.061	0.0002	0.9957					
23											
24											
25	**Tilt Angle**	**Hanger Mass (gm)**	**h (mm)**	**h (m)**	**h^3 (m)**	**Moment (N-m)**	**$M+\omega BR_2^2h/2$**				
26											
27	**20**	20	165	0.165	0.0045	0.0398	2.4619				
28		50	150	0.15	0.0034	0.0996	2.3014				
29		70	142	0.142	0.0029	0.1394	2.2238				
30		100	132	0.132	0.0023	0.1991	2.1368				
31		120	127	0.127	0.0020	0.2390	2.1032				
32		150	120	0.12	0.0017	0.2987	2.0602				
33		200	110	0.11	0.0013	0.3983	2.0130				
34		250	98	0.098	0.0009	0.4979	1.9364	partially submerged			
35		300	89	0.089	0.0007	0.5974		fully submerged			
36		350	81	0.081	0.0005	0.6970					
37		400	71	0.071	0.0004	0.7966					
38		450	62	0.062	0.0002	0.8961					
39		500	52	0.052	0.0001	0.9957					
40											