Appendix [A] Table of Results

Method

Isothermic cooling		
		Time (hh:mm)
T_{start}	20.5 °C	00:42
T_{low}	6 °C	19:00
T_{heat}	25 °C	00:20
Hold time	25	01:00
T end	20.5 °C	00:30

TOTAL TIME = 21 hrs 32 mins

ta = time before rapid hydrate temperature [mins] **P=Pressure before hydrate formation [bar]**

to = time before hydrate onset temperature [mins] **DP = Pressure drop from hydrate formation [bar]**

Expt Date	Chemical	C [ppm]	Duration [days]	Temp. [°C]	Vol.[ml]	Rock Speed	Rock Angle	Ball	t_o1	t_o2	t_o3	t_o4	t_o5	Av to	ta1	ta2	ta3	ta4	ta5	Av ta	DP1	DP2	DP3	DP4	DP5	Av.DP	P	Pressurizing	Comments
21.03.2011	Luvicap 55W	5000	1	5	20	20	40	Steel	215	253	257	251	328	**261**	255	256	315	251	328	**281**	27.2	25.2	24.2	23.7	26.8	**25.4**	67	Vacuum	
23.03.2011	Luvicap 55W	5000	1	5	20	10	40	Steel	273	239	191	233	245	**236**	303	272	226	268	283	**270**	-	-	-	-	-	**-**	67	30 bar degassing	Test stopped after 951min, no clear DP
18.03.2011	Luvicap 55W	5000	1	6	20	20	40	Steel	392	377	428	427	430	**411**	455	437	478	473	478	**464**	22.4	17.6	22.8	18.7	21.3	**20.6**	67	Vacuum	
28.03.2011	Luvicap 55W	5000	1	7	20	20	40	Steel	504	657	677	871	542	**650**	542	718	721	932	582	**699**	17.0	7.2	14.6	11.6	11.1	**12.3**	67	Vacuum	
29.03.2011	Luvicap 55W	5000	1	7	20	10	40	Steel	630	648	479	586	600	**589**	704	721	548	652	674	**660**	10.8	11.4	12.2	9.0	8.0	**10.3**	67	Vacuum	
02.04.2011	Luvicap 55W	5000	1	7	20	20	25	Steel	703	643	697	679	546	**654**	773	719	768	749	606	**723**	12.0	11.0	8.2	11.0	12.2	**10.9**	68	Vacuum	Test stopped before heating - gives lower DP
03.04.2011	Luvicap 55W	5000	1	7	30	20	40	Steel						**> 1132**														Vacuum	No hydrates, run for 1132 min
04.04.2011	Luvicap 55W	5000	1	7	10	20	40	Steel	197	226	141	281	208	**211**	213	238	-	294	226	**243**	-	-	-	-	-	**-**	68	Vacuum	No visable ta in cell 3
17.03.2011	Luvicap 55W	5000	1	8	20	20	40	Steel	-	893	-	854	-	**874**	-	960	-	947	-	**954**	-	11.1	-	12.1	-	**-**	68	Vacuum	Only gas hydrates in cell 2 and 4
30.03.2011	Luvicap 55W	5000	1	8	20	20	40	Steel	1037	1025	1094	1054	971	**1040**	1110	1099	-	1076	1045	**1088**	-	4.3	-	7.9	9.1	**7.1**	68	Vacuum	No rapid hydrate formation in cell 2.
24.03.2011	Luvicap 55W	5000	3	9	20	20	40	Steel	1778	1853	1549	1438	1780	**1680**	1826	1975	1699	1462	1880	**1768**	10.0	12.2	13.7	13.2	13.1	**12.4**	68	Vacuum	Test stopped after 3450mins
11.04.2011	Luvicap 55W	5000	1	7	20	20	40	Glass	550	647	574	508	453	**546**	600	691	660	561	491	**601**	7.6	8.7	8.4	10.6	6.1	**8.3**	67	Vacuum	
07.04.2011	Luvicap 55W	1000	1	7	20	20	40	Steel	-	-	-	-	-	**-**	10	7	13	7	5	**8**	17.5	14.3	16.4	9.3	19.0	**15.3**		Vacuum	to happens before 7°C is reached
08.04.2011	Luvicap 55W	10000	1	7	20	20	40	Steel	1043	1243	993	1084	877	**1048**	1163	1503	1123	1159	997	**1189**	18.3	17.1	17.9	13.6	17.6	**16.9**	67	Vacuum	
31.03.2011	Inhibex 101	5000	2	5	20	20	40	Steel	257	218	324	-	455	**314**	295	214	323	-	459	**323**	-	-	-	-	-	**-**	67	Vacuum	
12.04.2011	Inhibex 101	5000	2	7	20	20	40	Steel	-	1023	949	-	1862	**1278**	-	1030	992	-	1866	**1296**	-	66.8	68.3	-	68.3	**67.8**	69	Vacuum	Leakage in cell 4 (1.5 bar pressure drop)
05.04.2011	Inhibex 501	5000	1	7	20	20	40	Steel	-	46	94	130	181	**113**	-	51	99	134	181	**116**	-	-	-	-	-	**-**	69	Vacuum	
06.04.2011	New Luvicap EG	5000	1	7	20	20	40	Steel	40	265	53	182	24	**113**	-	280	65	192	28	**141**	-	-	-	-	-	**-**	68	Vacuum	ta in cell 1 not included in the average.