Dispersion Report

Workspace: 72341-1RiempimFSRU

Study: Riempimento FSRU-ME4

Equipment Item: 1H Sistema BOG

72341-1RiempimFSRU\Riempimento FSRU-ME4\1H Sistema BOG

Material	**GAS NATURALE**	
East	0	m
North	0	m

Scenario (User defined source) : 350mm-Q0,1

72341-1RiempimFSRU\Riempimento FSRU-ME4\1H Sistema BOG\350mm-Q0,1

Material to track	**GAS NATURALE**

Weather: Category 2/F

Wind speed [m/s]	**2**
Pasquill stability	**F stable - night with moderate clouds and light/moderate wind**
Atmospheric temperature [degC]	**25**
Relative humidity [fraction]	**0,75**
Solar radiation flux [kW/m2]	0,5
Mixing layer height [m]	100

Observer Release Data and Observer Mass Data

					Masses or mass rates		
Observer number	**Release type**	**Start time [s]**	**Start downwind distance [m]**	**Unit**	**Release**	**Rainout**	**Final**
1	Continuous	0	0	kg/s	0,1	0	0,1
2	Continuous	3600	0	kg/s	0,1	0	0,1

DNV

Time-varying Observer Dispersion Data (before along-wind-diffusion effects)

Dispersion data correspond to an averaging time of: 18,75 s

Observer number	Time [s]	Downwind distance [m]	C/Line height [m]	C/Line conc [ppm]	Effective width [m]	Effective depth [m]	C/Line vapour temperature [degC]	C/Line liquid fraction	Centroid velocity [m/s]	C/Line cloud density [kg/m3]
1	0	0	25	999.999,41	0,0233887	0,0117077	10,3696	0	250,297	0,729521
1	0,01	0,629933	25,0001	214.280,70	0,133165	0,0666507	21,5532	0	37,5319	1,08025
1	0,02	0,946814	25,0002	155.767,82	0,182724	0,0914514	22,557	0	27,5197	1,10463
1	0,03	1,19623	25,0003	128.329,66	0,220402	0,110305	23,038	0	22,9986	1,11597
1	0,04	1,4113	25,0004	111.414,48	0,252132	0,126181	23,3378	0	20,2643	1,12293
1	0,05	1,60394	25,0006	99.636,90	0,280028	0,140138	23,5481	0	18,3837	1,12776
1	0,06	1,78014	25,0008	90.837,60	0,305148	0,152706	23,7061	0	16,991	1,13136
1	0,07	1,9441	25,001	83.922,84	0,328217	0,164247	23,8307	0	15,9038	1,13418
1	0,08	2,09842	25,0012	78.297,22	0,349677	0,174982	23,9324	0	15,024	1,13648
1	0,09	2,24481	25,0014	73.602,43	0,369824	0,18506	24,0176	0	14,2929	1,13839
1	0,1	2,38461	25,0017	69.604,00	0,388881	0,194594	24,0902	0	13,6726	1,14002
1	0,11	2,51882	25,0019	66.142,41	0,407023	0,203668	24,1533	0	13,1372	1,14143
1	0,12	2,64782	25,0022	63.115,13	0,424322	0,212321	24,2085	0	12,6703	1,14266
1	0,13	2,77232	25,0024	60.436,06	0,440896	0,220611	24,2574	0	12,2581	1,14375

1	0,14	2,8929	25,0027	58.041,45	0,45684	0,228586	24,3012	0	11,8904	1,14472
1	0,15	3,00992	25,003	55.884,69	0,472216	0,236277	24,3407	0	11,5599	1,14559
1	0,16	3,12355	25,0033	53.931,47	0,48706	0,243701	24,3765	0	11,2611	1,14639
1	0,17	3,23421	25,0036	52.149,78	0,501437	0,250892	24,4092	0	10,989	1,14711
1	0,18	3,34225	25,0039	50.514,56	0,51546	0,257875	24,4392	0	10,7395	1,14777
1	0,19	3,44782	25,0042	49.007,32	0,528978	0,264666	24,467	0	10,51	1,14838
1	0,2	3,55131	25,0045	47.609,76	0,542226	0,271292	24,4927	0	10,2973	1,14895
1	0,212	3,67315	25,0049	46.057,40	0,557743	0,279052	24,5212	0	10,0615	1,14958
1	0,2264	3,81553	25,0054	44.358,78	0,57578	0,288072	24,5525	0	9,80372	1,15027
1	0,24368	3,98205	25,006	42.514,42	0,596742	0,298555	24,5866	0	9,52427	1,15101
1	0,264416	4,17589	25,0068	40.538,76	0,620974	0,310673	24,623	0	9,22542	1,15181
1	0,289299	4,4011	25,0077	38.445,78	0,648915	0,324645	24,6617	0	8,90936	1,15266
1	0,319159	4,66185	25,0089	36.257,01	0,680998	0,340688	24,7022	0	8,57943	1,15354
1	0,354991	4,96289	25,0103	33.996,14	0,71771	0,359044	24,7441	0	8,23929	1,15445
1	0,397989	5,30967	25,0122	31.688,09	0,759601	0,37999	24,7869	0	7,89273	1,15539
1	0,449587	5,70815	25,0144	29.359,69	0,807264	0,40382	24,8302	0	7,54381	1,15633
1	0,511504	6,16397	25,0173	27.041,30	0,86126	0,430816	24,8733	0	7,1971	1,15726
1	0,585805	6,68395	25,0209	24.758,11	0,922278	0,46132	24,9158	0	6,85636	1,15818
1	0,617099	6,89561	25,0224	23.921,22	0,946957	0,473657	24,9314	0	6,73164	1,15852

1	0,674966	7,27696	25,0254	22.526,28	0,991304	0,495826	24,9575	0	6,52397	1,15908
1	0,781959	7,94723	25,0312	20.369,02	1,06918	0,534751	24,9978	0	6,20337	1,15995
1	0,910351	8,71691	25,0383	18.291,01	1,1575	0,578897	25,0366	0	5,8952	1,16078
1	1,06442	9,60217	25,0472	16.308,14	1,25766	0,628958	25,0738	0	5,60176	1,16158
1	1,24931	10,6156	25,0583	14.432,57	1,37133	0,685766	25,109	0	5,32482	1,16233
1	1,47117	11,7729	25,072	12.674,99	1,50038	0,750256	25,142	0	5,06592	1,16303
1	1,7374	13,0933	25,0891	11.042,33	1,64708	0,823563	25,1727	0	4,82604	1,16369
1	2,05688	14,6018	25,11	9.536,65	1,81445	0,907186	25,2012	0	4,60544	1,16429
1	2,44026	16,3265	25,1356	8.159,62	2,00603	1,0029	25,2272	0	4,40436	1,16484
1	2,71933	17,536	25,1545	7.360,31	2,14071	1,0702	25,2424	0	4,288	1,16516
2	3600	0	25	999.999,41	0,0233887	0,0117077	10,3696	0	250,297	0,729521
2	3600,01	0,629933	25,0001	214.280,70	0,133165	0,0666507	21,5532	0	37,5319	1,08025
2	3600,02	0,946814	25,0002	155.767,82	0,182724	0,0914514	22,557	0	27,5197	1,10463
2	3600,03	1,19623	25,0003	128.329,66	0,220402	0,110305	23,038	0	22,9986	1,11597
2	3600,04	1,4113	25,0004	111.414,48	0,252132	0,126181	23,3378	0	20,2643	1,12293
2	3600,05	1,60394	25,0006	99.636,90	0,280028	0,140138	23,5481	0	18,3837	1,12776
2	3600,06	1,78014	25,0008	90.837,60	0,305148	0,152706	23,7061	0	16,991	1,13136
2	3600,07	1,9441	25,001	83.922,84	0,328217	0,164247	23,8307	0	15,9038	1,13418
2	3600,	2,09842	25,00	78.297,	0,3496	0,1749	23,9324	0	15,024	1,1364

	08		12	22	77	82				8
2	3600,09	2,24481	25,0014	73.602,43	0,369824	0,18506	24,0176	0	14,2929	1,13839
2	3600,1	2,38461	25,0017	69.604,00	0,388881	0,194594	24,0902	0	13,6726	1,14002
2	3600,11	2,51882	25,0019	66.142,41	0,407023	0,203668	24,1533	0	13,1372	1,14143
2	3600,12	2,64782	25,0022	63.115,13	0,424322	0,212321	24,2085	0	12,6703	1,14266
2	3600,13	2,77232	25,0024	60.436,06	0,440896	0,220611	24,2574	0	12,2581	1,14375
2	3600,14	2,8929	25,0027	58.041,45	0,45684	0,228586	24,3012	0	11,8904	1,14472
2	3600,15	3,00992	25,003	55.884,69	0,472216	0,236277	24,3407	0	11,5599	1,14559
2	3600,16	3,12355	25,0033	53.931,47	0,48706	0,243701	24,3765	0	11,2611	1,14639
2	3600,17	3,23421	25,0036	52.149,78	0,501437	0,250892	24,4092	0	10,989	1,14711
2	3600,18	3,34225	25,0039	50.514,56	0,5154	0,257875	24,4392	0	10,7395	1,14777
2	3600,19	3,44782	25,0042	49.007,32	0,528978	0,264666	24,467	0	10,51	1,14838
2	3600,2	3,55131	25,0045	47.609,76	0,542226	0,271292	24,4927	0	10,2973	1,14895
2	3600,21	3,67315	25,0049	46.057,40	0,557743	0,279052	24,5212	0	10,0615	1,14958
2	3600,23	3,81553	25,0054	44.358,78	0,57578	0,288072	24,5525	0	9,80372	1,15027
2	3600,24	3,98205	25,006	42.514,42	0,596742	0,298555	24,5866	0	9,52427	1,15101
2	3600,26	4,17589	25,0068	40.538,76	0,620974	0,310673	24,623	0	9,22542	1,15181
2	3600,29	4,4011	25,0077	38.445,78	0,648915	0,324645	24,6617	0	8,90936	1,15266
2	3600,32	4,66185	25,0089	36.257,01	0,680998	0,340688	24,7022	0	8,57943	1,15354
2	3600,	4,96289	25,01	33.996,	0,7177	0,3590	24,7441	0	8,2392	1,1544

	35		03	14	1	44			9	5
2	3600,4	5,30967	25,0122	31.688,09	0,759601	0,37999	24,7869	0	7,89273	1,15539
2	3600,45	5,70815	25,0144	29.359,69	0,807264	0,40382	24,8302	0	7,54381	1,15633
2	3600,51	6,16397	25,0173	27.041,30	0,86126	0,430816	24,8733	0	7,1971	1,15726
2	3600,59	6,68395	25,0209	24.758,11	0,922278	0,46132	24,9158	0	6,85636	1,15818
2	3600,62	6,89561	25,0224	23.921,22	0,946957	0,473657	24,9314	0	6,73164	1,15852
2	3600,67	7,27696	25,0254	22.526,28	0,991304	0,495826	24,9575	0	6,52397	1,15908
2	3600,78	7,94723	25,0312	20.369,02	1,06918	0,534751	24,9978	0	6,20337	1,15995
2	3600,91	8,71691	25,0383	18.291,01	1,1575	0,578897	25,0366	0	5,8952	1,16078
2	3601,06	9,60217	25,0472	16.308,14	1,25766	0,628958	25,0738	0	5,60176	1,16158
2	3601,25	10,6156	25,0583	14.432,57	1,37133	0,685766	25,109	0	5,32482	1,16233
2	3601,47	11,7729	25,072	12.674,99	1,50038	0,750256	25,142	0	5,06592	1,16303
2	3601,74	13,0933	25,0891	11.042,33	1,64708	0,823563	25,1727	0	4,82604	1,16369
2	3602,06	14,6018	25,11	9.536,65	1,81445	0,907186	25,2012	0	4,60544	1,16429
2	3602,44	16,3265	25,1356	8.159,62	2,00603	1,0029	25,2272	0	4,40436	1,16484
2	3602,72	17,536	25,1545	7.360,31	2,14071	1,0702	25,2424	0	4,288	1,16516

Weather: Category 5/D

Wind speed [m/s]	**5**
Pasquill stability	**D neutral - little sun and high wind or overcast/windy night**
Atmospheric temperature [degC]	25
Relative humidity [fraction]	0,75
Solar radiation flux [kW/m2]	0,5
Mixing layer height [m]	800

Observer Release Data and Observer Mass Data

					Masses or mass rates		
Observer number	**Release type**	**Start time [s]**	**Start downwind distance [m]**	**Unit**	**Release**	**Rainout**	**Final**
1	Continuous	0	0	kg/s	0,1	0	0,1
2	Continuous	3600	0	kg/s	0,1	0	0,1

Time-varying Observer Dispersion Data (before along-wind-diffusion effects)

Dispersion data correspond to an averaging time of: 18,75 s

Observer number	Time [s]	Downwind distance [m]	C/Line height [m]	C/Line conc [ppm]	Effective width [m]	Effective depth [m]	C/Line vapour temperature [degC]	C/Line liquid fraction	Centroid velocity [m/s]	C/Line cloud density [kg/m3]
1	0	0	25	999.999,41	0,023402	0,011701	10,3696	0	250,297	0,729521
1	0,01	0,648294	25,0001	211.796,20	0,130549	0,0652747	21,1283	0	39,4923	1,08333
1	0,02	0,984951	25,0001	152.614,92	0,178226	0,089113	22,1027	0	29,5075	1,10819

1	0,03	1,25436	25,0003	124.827,03	0,214296	0,107148	22,5702	0	24,9947	1,11976
1	0,04	1,48889	25,0004	107.733,52	0,244489	0,122244	22,8612	0	22,2719	1,12685
1	0,05	1,70061	25,0006	95.847,92	0,270919	0,13546	23,0649	0	20,4021	1,13177
1	0,06	1,89674	25,0008	86.925,28	0,29479	0,147395	23,2187	0	19,0107	1,13545
1	0,07	2,0807	25,0009	79.913,07	0,316696	0,158348	23,3401	0	17,9246	1,13834
1	0,08	2,25486	25,0012	74.214,37	0,337045	0,168523	23,4391	0	17,0467	1,14069
1	0,09	2,42113	25,0014	69.458,78	0,356145	0,178073	23,5219	0	16,3173	1,14264
1	0,1	2,58044	25,0016	65.418,71	0,37417	0,187085	23,5924	0	15,6999	1,1443
1	0,11	2,734	25,0018	61.926,05	0,391305	0,195652	23,6534	0	15,1679	1,14573
1	0,12	2,88291	25,0021	58.860,06	0,407713	0,203857	23,7071	0	14,7021	1,14699
1	0,13	3,02735	25,0023	56.147,03	0,423445	0,211722	23,7547	0	14,291	1,1481
1	0,14	3,16804	25,0026	53.720,09	0,438605	0,219302	23,7974	0	13,924	1,1491
1	0,15	3,30524	25,0028	51.534,40	0,45324	0,22662	23,8358	0	13,5941	1,14999
1	0,16	3,43918	25,0031	49.553,76	0,467396	0,233698	23,8707	0	13,2957	1,15087
1	0,17	3,57029	25,0034	47.746,15	0,481133	0,240566	23,9025	0	13,0238	1,15154
1	0,18	3,69888	25,0037	46.087,05	0,494495	0,247248	23,9318	0	12,7746	1,15222
1	0,19	3,82524	25,004	44.556,25	0,507524	0,253762	23,9588	0	12,5449	1,15285
1	0,2	3,94919	25,0043	43.141,55	0,520214	0,260107	23,9838	0	12,333	1,15343
1	0,212	4,09517	25,0046	41.576,23	0,535047	0,267523	24,0115	0	12,0988	1,15407

1	0,2264	4,26671	25,0051	39.862,57	0,552331	0,276166	24,0418	0	11,8427	1,15477
1	0,24368	4,46793	25,0056	38.006,90	0,572418	0,286209	24,0747	0	11,5658	1,15552
1	0,264416	4,70379	25,0063	36.018,90	0,595714	0,297857	24,1099	0	11,2697	1,15633
1	0,289299	4,9806	25,0071	33.910,21	0,622722	0,311361	24,1473	0	10,9561	1,15719
1	0,319159	5,30392	25,0082	31.707,29	0,653867	0,326933	24,1865	0	10,6291	1,15809
1	0,354991	5,68016	25,0094	29.438,65	0,689633	0,344817	24,2268	0	10,293	1,15902
1	0,397989	6,11657	25,011	27.134,22	0,730567	0,365284	24,2679	0	9,95221	1,15996
1	0,449587	6,62288	25,0129	24.819,40	0,777391	0,388696	24,3091	0	9,61057	1,16097
1	0,472382	6,84113	25,0138	23.921,22	0,797384	0,398692	24,3252	0	9,4782	1,16126
1	0,511504	7,20787	25,0153	22.526,73	0,830777	0,415388	24,3501	0	9,27287	1,16183
1	0,585805	7,88496	25,0183	20.278,18	0,891726	0,445863	24,3902	0	8,94232	1,16275
1	0,674966	8,66915	25,022	18.096,64	0,961372	0,480686	24,4292	0	8,62224	1,16363
1	0,781959	9,57614	25,0265	16.005,42	1,04097	0,520485	24,4667	0	8,31601	1,16448
1	0,910351	10,6285	25,032	14.019,64	1,13226	0,566128	24,5022	0	8,02575	1,16529
1	0,911115	10,6346	25,0321	14.009,18	1,13279	0,566393	24,5024	0	8,02423	1,16529
2	3600	0	25	999.999,41	0,023402	0,011701	10,3696	0	250,297	0,729521
2	3600,01	0,648294	25,0001	211.796,20	0,130549	0,0652747	21,1283	0	39,4923	1,08333
2	3600,02	0,984951	25,0001	152.614,92	0,178226	0,089113	22,1027	0	29,5075	1,10819
2	3600,	1,25436	25,00	124.82	0,2142	0,1071	22,5702	0	24,994	1,1197

	03		03	7,03	96	48			7	6
2	3600,04	1,48889	25,0004	107.733,52	0,244489	0,122244	22,8612	0	22,2719	1,12685
2	3600,05	1,70061	25,0006	95.847,92	0,270919	0,13546	23,0649	0	20,4021	1,13177
2	3600,06	1,89674	25,0008	86.925,28	0,29479	0,147395	23,2187	0	19,0107	1,13545
2	3600,07	2,0807	25,0009	79.913,07	0,316696	0,158348	23,3401	0	17,9246	1,13834
2	3600,08	2,25486	25,0012	74.214,37	0,337045	0,168523	23,4391	0	17,0467	1,14069
2	3600,09	2,42113	25,0014	69.458,78	0,356145	0,178073	23,5219	0	16,3173	1,14264
2	3600,1	2,58044	25,0016	65.418,71	0,37417	0,187085	23,5924	0	15,6999	1,14439
2	3600,11	2,734	25,0018	61.926,05	0,391305	0,195652	23,6534	0	15,1679	1,14573
2	3600,12	2,88291	25,0021	58.860,06	0,407713	0,203857	23,7071	0	14,7021	1,14699
2	3600,13	3,02735	25,0023	56.147,03	0,423445	0,211722	23,7547	0	14,291	1,1481
2	3600,14	3,16804	25,0026	53.720,09	0,438605	0,219302	23,7974	0	13,924	1,1491
2	3600,15	3,30524	25,0028	51.534,40	0,45324	0,22662	23,8358	0	13,5941	1,14999
2	3600,16	3,43918	25,0031	49.553,76	0,467396	0,233698	23,8707	0	13,2957	1,1508
2	3600,17	3,57029	25,0034	47.746,15	0,481133	0,240566	23,9025	0	13,0238	1,15154
2	3600,18	3,69888	25,0037	46.087,05	0,494495	0,247248	23,9318	0	12,7746	1,15222
2	3600,19	3,82524	25,004	44.556,25	0,507524	0,253762	23,9588	0	12,5449	1,15285
2	3600,2	3,94919	25,0043	43.141,55	0,520214	0,260107	23,9838	0	12,333	1,15343
2	3600,21	4,09517	25,0046	41.576,23	0,535047	0,267523	24,0115	0	12,0988	1,15407
2	3600,	4,26671	25,00	39.862,	0,5523	0,2761	24,0418	0	11,842	1,1547

	23		51	57	31	66			7	7
2	3600,24	4,46793	25,0056	38.006,90	0,572418	0,286209	24,0747	0	11,5658	1,15552
2	3600,26	4,70379	25,0063	36.018,90	0,595714	0,297857	24,1099	0	11,2697	1,15633
2	3600,29	4,9806	25,0071	33.910,21	0,622722	0,311361	24,1473	0	10,9561	1,15719
2	3600,32	5,30392	25,0082	31.707,29	0,653867	0,326933	24,1865	0	10,6291	1,15809
2	3600,35	5,68016	25,0094	29.438,65	0,689633	0,344817	24,2268	0	10,293	1,15902
2	3600,4	6,11657	25,011	27.134,22	0,730567	0,365284	24,2679	0	9,95221	1,15996
2	3600,45	6,62288	25,0129	24.819,40	0,777391	0,388696	24,3091	0	9,61057	1,16097
2	3600,47	6,84113	25,0138	23.921,22	0,797384	0,398692	24,3252	0	9,4782	1,16126
2	3600,51	7,20787	25,0153	22.526,73	0,830777	0,415388	24,3501	0	9,27287	1,16183
2	3600,59	7,88496	25,0183	20.278,18	0,891726	0,445863	24,3902	0	8,94232	1,16275
2	3600,67	8,66915	25,022	18.096,64	0,961372	0,480686	24,4292	0	8,62224	1,16363
2	3600,78	9,57614	25,0265	16.005,42	1,04097	0,520485	24,4667	0	8,31601	1,16448
2	3600,91	10,6285	25,032	14.019,64	1,13226	0,566128	24,5022	0	8,02575	1,16529
2	3600,91	10,6346	25,0321	14.009,18	1,13279	0,566393	24,5024	0	8,02423	1,16529