

Dispersion Report

Workspace: 72438-2FSRURegas-14R

Study: FSRU in rigassificazione

Equipment Item: 14R Linee BOG da serbatoi

72438-2FSRURegas-14R\FSRU in rigassificazione\14R Linee BOG da serbatoi

Material	GAS NATURALE	
East	0	m
North	0	m

Scenario (Leak) : 80mm

72438-2FSRURegas-14R\FSRU in rigassificazione\14R Linee BOG da serbatoi\80mm

Material to track	GAS NATURALE
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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

Observer number	Release type	Start time [s]	Start downwind distance [m]	Unit	Masses or mass rates		
					Release	Rainout	Final
1	Continuous	0	0	kg/s	4,64204	0	4,64204
2	Continuous	484,7	0	kg/s	4,64204	0	4,64204

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]	Down wind distance [m]	C/Li ne height [m]	C/Lin e conc [ppm]	Effect ive width [m]	Effect ive depth [m]	C/Line vapour temperature [degC]	C/Li ne liquid fraction	Centr oid velocity [m/s]	C/Lin e cloud density [kg/m ³]
1	0	0	12,5	999.99 9,37	0,1433 22	0,0717 364	20,43	0	300	0,7524 99
1	0,01	1,38534	12,50 01	404.87 5,15	0,4094 56	0,2049 03	22,8723	0	91,693 6	1,0045 9
1	0,02	2,15939	12,50 03	307.21 5,71	0,5489 23	0,2746 71	23,352	0	67,368	1,0452 1
1	0,03	2,76848	12,50 06	258.38 3,83	0,6572 37	0,3288 46	23,6021	0	55,931 6	1,0654 3
1	0,04	3,28956	12,50 09	227.42 2,08	0,7493 76	0,3749 27	23,7644	0	48,913 5	1,0782 2
1	0,05	3,75192	12,50 12	205.50 9,05	0,8308 87	0,4156 89	23,8811	0	44,051 4	1,0872 6
1	0,06	4,17237	12,50 16	188.89 5,80	0,9049 04	0,4527	23,9705	0	40,421 5	1,0941
1	0,07	4,56119	12,50 21	175.70 4,72	0,9733 2	0,4869 09	24,0422	0	37,573 3	1,0995 2
1	0,08	4,92471	12,50 25	164.89 1,29	1,0372 9	0,5188 93	24,1014	0	35,260 5	1,1039 7
1	0,09	5,26735	12,50 3	155.81 1,48	1,0976 1	0,5490 53	24,1513	0	33,333 7	1,1077
1	0,1	5,59248	12,50 36	148.04 0,42	1,1549	0,5776 92	24,1943	0	31,695 4	1,1108 9
1	0,11	5,90255	12,50 41	141.28 8,77	1,2095 9	0,6050 31	24,2319	0	30,280 1	1,1136 6
1	0,12	6,19943	12,50 47	135.35 0,75	1,2620 1	0,6312 37	24,265	0	29,041 5	1,1160 9
1	0,13	6,4846	12,50 53	130.07 5,28	1,3124 3	0,6564 4	24,2945	0	27,945 9	1,1182 5



1	0,14	6,75929	12,50	125.34	1,3610	0,6807	24,3211	0	26,967	1,1201
			59	7,32	6	51			8	9
1	0,15	7,02466	12,50	121.07	1,4081	0,7042	24,3451	0	26,087	1,1219
			65	6,18	1	71			3	4
1	0,16	7,28154	12,50	117.19	1,4537	0,7270	24,367	0	25,289	1,1235
			72	2,99	3	73			3	3
1	0,17	7,53077	12,50	113.64	1,4980	0,7492	24,3871	0	24,561	1,1249
			79	0,67	7	32			4	8
1	0,18	7,77305	12,50	110.37	1,5412	0,7708	24,4056	0	23,893	1,1263
			86	3,76	3	08			7	2
1	0,19	8,00899	12,50	107.35	1,5833	0,7918	24,4228	0	23,278	1,1275
			93	4,91	4	54			3	6
1	0,2	8,2391	12,51	104.55	1,6244	0,8124	24,4387	0	22,708	1,1287
				3,81	8	13			5	
1	0,212	8,50813	12,51	101.44	1,6726	0,8364	24,4565	0	22,077	1,1299
			09	4,49	6	94			5	7
1	0,226	8,82149	12,51	98.029,	1,7289	0,8646	24,476	0	21,386	1,1313
	4		2	41	1	07			1	7
1	0,243	9,18489	12,51	94.322,	1,7943	0,8973	24,4972	0	20,637	1,1328
	68		34	01	3	01			7	9
1	0,264	9,60495	12,51	90.341,	1,8702	0,9352	24,52	0	19,836	1,1345
	416		51	14	1	2			4	1
1	0,289	10,0882	12,51	86.120,	1,9578	0,9790	24,5443	0	18,989	1,1362
	299		72	03	7	23			4	4
1	0,319	10,6419	12,51	81.697,	2,0588	1,0294	24,5698	0	18,105	1,1380
	159		99	43	1	6				4
1	0,354	11,2739	12,52	77.117,	2,1747	1,0873	24,5963	0	17,192	1,1399
	991		33	57	2	9			4	1
1	0,397	11,9932	12,52	72.427,	2,3075	1,1537	24,6235	0	16,261	1,1418
	989		75	63	5	5			2	2
1	0,449	12,8085	12,53	67.679,	2,4593	1,2296	24,6511	0	15,321	1,1437
	587		29	38	9	2			9	6
1	0,511	13,7267	12,53	62.935,	2,6321	1,3159	24,6788	0	14,386	1,1456
	504		96	08	7	4			9	9
1	0,585	14,7559	12,54	58.244,	2,8283	1,4139	24,7063	0	13,466	1,1476
	805		82	73	2	4			1	1
1	0,674	15,9105	12,55	53.637,	3,0513	1,5253	24,7333	0	12,565	1,1494
	966		91	15	8	8				8



1	0,781 959	17,2012	12,57 3	49.151, 92	3,3048	1,6519 7	24,7597	0	11,691 2	1,1513 1
1	0,910 351	18,6391	12,59 06	44.822, 54	3,5924 7	1,7956 8	24,7852	0	10,851	1,1530 7
1	1,064 42	20,2402	12,61 31	40.668, 69	3,9195 6	1,9590 7	24,8098	0	10,048 1	1,1547 6
1	1,249 31	22,0135	12,64 16	36.717, 16	4,2909 9	2,1446 1	24,8333	0	9,2874 1	1,1563 6
1	1,471 17	23,9792	12,67 77	32.973, 99	4,7140 6	2,3559 3	24,8555	0	8,5699 5	1,1578 8
1	1,737 4	26,1755	12,72 33	29.433, 00	5,1990 3	2,5981 8	24,8766	0	7,8943 6	1,1593 1
1	2,056 88	28,6038	12,78 07	26.119, 16	5,7533	2,8750 4	24,8964	0	7,2653 8	1,1606 5
1	2,440 26	31,2886	12,85 29	23.032, 77	6,3884	3,1922 9	24,9149	0	6,6830 1	1,1619
1	2,480 65	31,5589	12,86 07	22.750, 14	6,4537	3,2249 1	24,9166	0	6,6298 8	1,1620 1
1	2,900 31	34,2019	12,94 39	20.191, 43	7,1125 9	3,5540 4	24,932	0	6,1507 4	1,1630 4
1	3,452 37	37,4137	13,05 76	17.644, 93	7,9192 4	3,957	24,9473	0	5,6781 4	1,1640 6
1	4,114 84	41,0275	13,19 84	15.363, 78	8,8183 6	4,4061 7	24,961	0	5,2597 3	1,1649 7
1	4,909 81	45,075	13,37 28	13.321, 57	9,8215	4,9073 3	24,9733	0	4,8909 5	1,1657 7
1	5,863 77	49,5978	13,58 89	11.496, 31	10,941 3	5,4667 8	24,9843	0	4,5683 7	1,1664 9
1	7,008 53	54,6774	13,85 52	9.863,4 1	12,196 7	6,0940 8	24,9942	0	4,2883 9	1,1671 1
1	8,382 23	60,4012	14,18 19	8.404,7 9	13,609 1	6,7998	25,0029	0	4,0490 3	1,1676 6
1	10,03 07	66,8836	14,58 03	7.105,0 8	15,203 6	7,5966 1	25,0107	0	3,8490 1	1,1681 4
1	12,00 88	74,2939	15,06 2	5.950,5 8	17,012 1	8,5003 4	25,0176	0	3,6872 9	1,1685 4
1	14,38 26	82,8383	15,63 86	4.931,2 5	19,069 4	9,5285 5	25,0236	0	3,5635 1	1,1688 8



1	15,51 61	86,8291	15,91 19	4.541,3 2	20,017 7	10,002 5	25,0259	0	3,5227 1	1,169
2	484,7	0	12,5	999.99 9,37	0,1433 22	0,0717 364	20,43	0	300	0,7524 99
2	484,7 1	1,38534	12,50 01	404.87 5,15	0,4094 56	0,2049 03	22,8723	0	91,693 6	1,0045 9
2	484,7 2	2,15939	12,50 03	307.21 5,71	0,5489 23	0,2746 71	23,352	0	67,368	1,0452 1
2	484,7 3	2,76848	12,50 06	258.38 3,83	0,6572 37	0,3288 46	23,6021	0	55,931 6	1,0654 3
2	484,7 4	3,28956	12,50 09	227.42 2,08	0,7493 76	0,3749 27	23,7644	0	48,913 5	1,0782 2
2	484,7 5	3,75192	12,50 12	205.50 9,05	0,8308 87	0,4156 89	23,8811	0	44,051 4	1,0872 6
2	484,7 6	4,17237	12,50 16	188.89 5,80	0,9049 04	0,4527	23,9705	0	40,421 5	1,0941
2	484,7 7	4,56119	12,50 21	175.70 4,72	0,9733 2	0,4869 09	24,0422	0	37,573 3	1,0995 2
2	484,7 8	4,92471	12,50 25	164.89 1,29	1,0372 9	0,5188 93	24,1014	0	35,260 5	1,1039 7
2	484,7 9	5,26735	12,50 3	155.81 1,48	1,0976 1	0,5490 53	24,1513	0	33,333 7	1,1077
2	484,8	5,59248	12,50 36	148.04 0,42	1,1549	0,5776 92	24,1943	0	31,695 4	1,1108 9
2	484,8 1	5,90255	12,50 41	141.28 8,77	1,2095 9	0,6050 31	24,2319	0	30,280 1	1,1136 6
2	484,8 2	6,19943	12,50 47	135.35 0,75	1,2620 1	0,6312 37	24,265	0	29,041 5	1,1160 9
2	484,8 3	6,4846	12,50 53	130.07 5,28	1,3124 3	0,6564 4	24,2945	0	27,945 9	1,1182 5
2	484,8 4	6,75929	12,50 59	125.34 7,32	1,3610 6	0,6807 51	24,3211	0	26,967 8	1,1201 9
2	484,8 5	7,02466	12,50 65	121.07 6,18	1,4081 1	0,7042 71	24,3451	0	26,087 3	1,1219 4
2	484,8 6	7,28154	12,50 72	117.19 2,99	1,4537 3	0,7270 73	24,367	0	25,289 3	1,1235 3
2	484,8	7,53077	12,50	113.64	1,4980	0,7492	24,3871	0	24,561	1,1249



	7		79	0,67	7	32			4	8
2	484,8 8	7,77305	12,50 86	110.37 3,76	1,5412 3	0,7708 08	24,4056	0	23,893 7	1,1263 2
2	484,8 9	8,00899	12,50 93	107.35 4,91	1,5833 4	0,7918 54	24,4228	0	23,278 3	1,1275 6
2	484,9	8,2391	12,51	104.55 3,81	1,6244 8	0,8124 13	24,4387	0	22,708 5	1,1287
2	484,9 12	8,50813	12,51 09	101.44 4,49	1,6726 6	0,8364 94	24,4565	0	22,077 5	1,1299 7
2	484,9 26	8,82149	12,51 2	98.029, 41	1,7289 1	0,8646 07	24,476	0	21,386 1	1,1313 7
2	484,9 44	9,18489	12,51 34	94.322, 01	1,7943 3	0,8973 01	24,4972	0	20,637 7	1,1328 9
2	484,9 64	9,60495	12,51 51	90.341, 14	1,8702 1	0,9352 2	24,52	0	19,836 4	1,1345 1
2	484,9 89	10,0882	12,51 72	86.120, 03	1,9578 7	0,9790 23	24,5443	0	18,989 4	1,1362 4
2	485,0 19	10,6419	12,51 99	81.697, 43	2,0588 1	1,0294 6	24,5698	0	18,105	1,1380 4
2	485,0 55	11,2739	12,52 33	77.117, 57	2,1747 2	1,0873 9	24,5963	0	17,192 4	1,1399 1
2	485,0 98	11,9932	12,52 75	72.427, 63	2,3075 5	1,1537 5	24,6235	0	16,261 2	1,1418 2
2	485,1 5	12,8085	12,53 29	67.679, 38	2,4593 9	1,2296 2	24,6511	0	15,321 9	1,1437 6
2	485,2 11	13,7267	12,53 96	62.935, 08	2,6321 7	1,3159 4	24,6788	0	14,386 9	1,1456 9
2	485,2 86	14,7559	12,54 82	58.244, 73	2,8283 2	1,4139 4	24,7063	0	13,466 1	1,1476 1
2	485,3 75	15,9105	12,55 91	53.637, 15	3,0513 8	1,5253 8	24,7333	0	12,565	1,1494 8
2	485,4 82	17,2012	12,57 3	49.151, 92	3,3048	1,6519 7	24,7597	0	11,691 2	1,1513 1
2	485,6 1	18,6391	12,59 06	44.822, 54	3,5924 7	1,7956 8	24,7852	0	10,851	1,1530 7
2	485,7 64	20,2402	12,61 31	40.668, 69	3,9195 6	1,9590 7	24,8098	0	10,048 1	1,1547 6
2	485,9	22,0135	12,64	36.717,	4,2909	2,1446	24,8333	0	9,2874	1,1563



	49		16	16	9	1			1	6
2	486,1 71	23,9792	12,67 77	32.973, 99	4,7140 6	2,3559 3	24,8555	0	8,5699 5	1,1578 8
2	486,4 37	26,1755	12,72 33	29.433, 00	5,1990 3	2,5981 8	24,8766	0	7,8943 6	1,1593 1
2	486,7 57	28,6038	12,78 07	26.119, 16	5,7533	2,8750 4	24,8964	0	7,2653 8	1,1606 5
2	487,1 4	31,2886	12,85 29	23.032, 77	6,3884	3,1922 9	24,9149	0	6,6830 1	1,1619
2	487,1 81	31,5589	12,86 07	22.750, 14	6,4537	3,2249 1	24,9166	0	6,6298 8	1,1620 1
2	487,6	34,2019	12,94 39	20.191, 43	7,1125 9	3,5540 4	24,932	0	6,1507 4	1,1630 4
2	488,1 52	37,4137	13,05 76	17.644, 93	7,9192 4	3,957	24,9473	0	5,6781 4	1,1640 6
2	488,8 15	41,0275	13,19 84	15.363, 78	8,8183 6	4,4061 7	24,961	0	5,2597 3	1,1649 7
2	489,6 1	45,075	13,37 28	13.321, 57	9,8215	4,9073 3	24,9733	0	4,8909 5	1,1657 7
2	490,5 64	49,5978	13,58 89	11.496, 31	10,941 3	5,4667 8	24,9843	0	4,5683 7	1,1664 9
2	491,7 09	54,6774	13,85 52	9.863,4 1	12,196 7	6,0940 8	24,9942	0	4,2883 9	1,1671 1
2	493,0 82	60,4012	14,18 19	8.404,7 9	13,609 1	6,7998	25,0029	0	4,0490 3	1,1676 6
2	494,7 31	66,8836	14,58 03	7.105,0 8	15,203 6	7,5966 1	25,0107	0	3,8490 1	1,1681 4
2	496,7 09	74,2939	15,06 2	5.950,5 8	17,012 1	8,5003 4	25,0176	0	3,6872 9	1,1685 4
2	499,0 83	82,8383	15,63 86	4.931,2 5	19,069 4	9,5285 5	25,0236	0	3,5635 1	1,1688 8
2	500,2 16	86,8291	15,91 19	4.541,3 2	20,017 7	10,002 5	25,0259	0	3,5227 1	1,169

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

Observer number	Release type	Start time [s]	Start downwind distance [m]	Unit	Masses or mass rates		
					Release	Rainout	Final
1	Continuous	0	0	kg/s	4,64204	0	4,64204
2	Continuous	484,7	0	kg/s	4,64204	0	4,64204

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]	Down wind distance [m]	C/Li ne height [m]	C/Li ne conc [ppm]	Effect ive width [m]	Effect ive depth [m]	C/Li ne vapour temperature [degC]	C/Li ne liqui d fracti on	Centr oid veloci ty [m/s]	C/Li ne cloud densi ty [kg/m3]
1	0	0	12,5	999.99 9,37	0,1433 97	0,0716 987	20,43	0	300	0,7524 99
1	0,01	1,39478	12,50 01	401.75 4,50	0,4082 19	0,2041 09	22,7935	0	93,022	1,0062 7
1	0,02	2,18155	12,50 03	302.61 4,31	0,5479 75	0,2739 88	23,263	0	68,661 6	1,0476
1	0,03	2,80331	12,50	252.92	0,6570	0,3285	23,5085	0	57,192	1,0682



			06	8,98	5	25			8	1
1	0,04	3,33584	12,50	221.43	0,7500	0,3750	23,6678	0	50,161	1,0812
			09	8,06	53	26				5
1	0,05	3,80925	12,50	199.12	0,8326	0,4163	23,7824	0	45,286	1,0904
			12	7,63	24	12				6
1	0,06	4,2417	12,50	182.15	0,9080	0,4540	23,8707	0	41,634	1,0974
			16	4,06	76	38			8	7
1	0,07	4,64185	12,50	168.68	0,9779	0,4889	23,9414	0	38,771	1,1030
			2	3,35	89	95			8	2
1	0,08	5,01635	12,50	157.63	1,0435	0,5217	23,9997	0	36,447	1,1075
			25	8,55	5	76				7
1	0,09	5,36949	12,50	148.36	1,1055	0,5527	24,049	0	34,510	1,1113
			29	6,57	3	66			8	8
1	0,1	5,70426	12,50	140.44	1,1644	0,5822	24,0914	0	32,867	1,1146
			34	1,71	6	29			1	4
1	0,11	6,02396	12,50	133.55	1,2208	0,6104	24,1284	0	31,445	1,1174
			4	0,39	9	47			9	8
1	0,12	6,33114	12,50	127.47	1,2752	0,6376	24,1612	0	30,199	1,1199
			45	3,79	7	36			1	7
1	0,13	6,6264	12,50	122.07	1,3277	0,6638	24,1904	0	29,096	1,1221
			51	4,35	1	56			1	9
1	0,14	6,91167	12,50	117.22	1,3785	0,6892	24,2167	0	28,109	1,1241
			56	5,59	3	67			6	8
1	0,15	7,18708	12,50	112.84	1,4277	0,7138	24,2405	0	27,222	1,1259
			62	9,97	8	89			5	8
1	0,16	7,45408	12,50	108.86	1,4756	0,7378	24,2622	0	26,418	1,1276
			68	8,85	8	39				1
1	0,17	7,71355	12,50	105.22	1,5223	0,7611	24,2821	0	25,683	1,1291
			75	4,19	8	91			6	1
1	0,18	7,96644	12,50	101.86	1,5680	0,7840	24,3005	0	25,009	1,1304
			81	7,56	4	21			1	8
1	0,19	8,21238	12,50	98.771,	1,6126	0,8063	24,3175	0	24,388	1,1317
			88	13	2	1			4	5
1	0,2	8,45215	12,50	95.900,	1,6562	0,8281	24,3333	0	23,814	1,1329
			94	38	4	19			3	3
1	0,212	8,73242	12,51	92.716,	1,7074	0,8537	24,3509	0	23,179	1,1342
			03	21	2	11				4
1	0,226	9,05907	12,51	89.219,	1,7673	0,8836	24,3702	0	22,483	1,1356



	4		13	71	5	76			2	7
1	0,243 68	9,43892	12,51 25	85.418, 79	1,8374	0,9187	24,3912	0	21,728 9	1,1372 2
1	0,264 416	9,87961	12,51 41	81.331, 48	1,9191 3	0,9595 67	24,4139	0	20,920 2	1,1389
1	0,289 299	10,3873	12,51 6	76.998, 71	2,0140 4	1,0070 2	24,438	0	20,065 8	1,1406 7
1	0,319 159	10,9711	12,51 84	72.456, 18	2,1241	1,0620 5	24,4633	0	19,173 1	1,1425 3
1	0,354 991	11,6382	12,52 13	67.759, 39	2,2512 6	1,1256 3	24,4895	0	18,253 3	1,1444 5
1	0,397 989	12,4	12,52 5	62.952, 41	2,3981 7	1,1990 9	24,5165	0	17,315 4	1,1464 2
1	0,449 587	13,2642	12,52 97	58.100, 28	2,5673 3	1,2836 6	24,5437	0	16,372 3	1,1484
1	0,511 504	14,2418	12,53 54	53.257, 20	2,7619 3	1,3809 6	24,571	0	15,434 5	1,1503 8
1	0,585 805	15,3501	12,54 26	48.463, 39	2,9862 9	1,4931 5	24,5981	0	14,509 8	1,1523 4
1	0,674 966	16,6078	12,55 16	43.764, 01	3,2453	1,6226 5	24,6247	0	13,606 8	1,1542 6
1	0,781 959	18,0221	12,56 27	39.220, 67	3,5434	1,7717	24,6505	0	12,737 1	1,1561 1
1	0,910 351	19,6109	12,57 65	34.869, 91	3,8868 6	1,9434 3	24,6752	0	11,907 5	1,1578 8
1	1,064 42	21,391	12,59 36	30.744, 84	4,2829 2	2,1414 6	24,6986	0	11,123 8	1,1595 7
1	1,249 31	23,3797	12,61 47	26.872, 27	4,7401 4	2,3700 7	24,7207	0	10,391	1,1611 4
1	1,471 17	25,6012	12,64 06	23.269, 26	5,2692 3	2,6346 2	24,7412	0	9,7118 4	1,1626 1
1	1,508 24	25,959	12,64 5	22.750, 14	5,3560 2	2,6780 2	24,7441	0	9,6142 2	1,1628 2
1	1,737 4	28,1002	12,67 22	19.943, 10	5,8842 2	2,9421 1	24,76	0	9,0874 1	1,1639 6
1	2,056 88	30,9162	12,71 02	16.904, 37	6,6011	3,3005 6	24,7772	0	8,5193 9	1,1652
1	2,440	34,0961	12,75	14.158,	7,4394	3,7197	24,7927	0	8,0086	1,1663



	26		57	99	3	2			7	1
1	2,900 31	37,695	12,80 95	11.708, 94	8,4231 2	4,2115 7	24,8064	0	7,5554 2	1,1673 1
1	3,452 37	41,7687	12,87 26	9.552,2 6	9,5818 3	4,7909 2	24,8183	0	7,1594 1	1,1681 8
1	4,114 84	46,4086	12,94 56	7.679,2 8	10,956 2	5,4781	24,8284	0	6,8196 5	1,1689 3
1	4,229 6	47,1907	12,95 79	7.411,7 3	11,193 5	5,5967 6	24,8299	0	6,7716 6	1,1690 4
2	484,7	0	12,5	999.99 9,37	0,1433 97	0,0716 987	20,43	0	300	0,7524 99
2	484,7 1	1,39478	12,50 01	401.75 4,50	0,4082 19	0,2041 09	22,7935	0	93,022	1,0062 7
2	484,7 2	2,18155	12,50 03	302.61 4,31	0,5479 75	0,2739 88	23,263	0	68,661 6	1,0476
2	484,7 3	2,80331	12,50 06	252.92 8,98	0,6570 5	0,3285 25	23,5085	0	57,192 8	1,0682 1
2	484,7 4	3,33584	12,50 09	221.43 8,06	0,7500 53	0,3750 26	23,6678	0	50,161	1,0812 5
2	484,7 5	3,80925	12,50 12	199.12 7,63	0,8326 24	0,4163 12	23,7824	0	45,286	1,0904 6
2	484,7 6	4,2417	12,50 16	182.15 4,06	0,9080 76	0,4540 38	23,8707	0	41,634 8	1,0974 7
2	484,7 7	4,64185	12,50 2	168.68 3,35	0,9779 89	0,4889 95	23,9414	0	38,771 8	1,1030 2
2	484,7 8	5,01635	12,50 25	157.63 8,55	1,0435 5	0,5217 76	23,9997	0	36,447	1,1075 7
2	484,7 9	5,36949	12,50 29	148.36 6,57	1,1055 3	0,5527 66	24,049	0	34,510 8	1,1113 8
2	484,8	5,70426	12,50 34	140.44 1,71	1,1644 6	0,5822 29	24,0914	0	32,867 1	1,1146 4
2	484,8 1	6,02396	12,50 4	133.55 0,39	1,2208 9	0,6104 47	24,1284	0	31,445 9	1,1174 8
2	484,8 2	6,33114	12,50 45	127.47 3,79	1,2752 7	0,6376 36	24,1612	0	30,199 1	1,1199 7
2	484,8 3	6,6264	12,50 51	122.07 4,35	1,3277 1	0,6638 56	24,1904	0	29,096 1	1,1221 9

2	484,8 4	6,91167	12,50 56	117.22 5,59	1,3785 3	0,6892 67	24,2167	0	28,109 6	1,1241 8
2	484,8 5	7,18708	12,50 62	112.84 9,97	1,4277 8	0,7138 89	24,2405	0	27,222 5	1,1259 8
2	484,8 6	7,45408	12,50 68	108.86 8,85	1,4756 8	0,7378 39	24,2622	0	26,418	1,1276 1
2	484,8 7	7,71355	12,50 75	105.22 4,19	1,5223 8	0,7611 91	24,2821	0	25,683 6	1,1291 1
2	484,8 8	7,96644	12,50 81	101.86 7,56	1,5680 4	0,7840 21	24,3005	0	25,009 1	1,1304 8
2	484,8 9	8,21238	12,50 88	98.771, 13	1,6126 2	0,8063 1	24,3175	0	24,388 4	1,1317 5
2	484,9	8,45215	12,50 94	95.900, 38	1,6562 4	0,8281 19	24,3333	0	23,814 3	1,1329 3
2	484,9 12	8,73242	12,51 03	92.716, 21	1,7074 2	0,8537 11	24,3509	0	23,179	1,1342 4
2	484,9 26	9,05907	12,51 13	89.219, 71	1,7673 5	0,8836 76	24,3702	0	22,483 2	1,1356 7
2	484,9 44	9,43892	12,51 25	85.418, 79	1,8374	0,9187	24,3912	0	21,728 9	1,1372 2
2	484,9 64	9,87961	12,51 41	81.331, 48	1,9191 3	0,9595 67	24,4139	0	20,920 2	1,1389
2	484,9 89	10,3873	12,51 6	76.998, 71	2,0140 4	1,0070 2	24,438	0	20,065 8	1,1406 7
2	485,0 19	10,9711	12,51 84	72.456, 18	2,1241	1,0620 5	24,4633	0	19,173 1	1,1425 3
2	485,0 55	11,6382	12,52 13	67.759, 39	2,2512 6	1,1256 3	24,4895	0	18,253 3	1,1444 5
2	485,0 98	12,4	12,52 5	62.952, 41	2,3981 7	1,1990 9	24,5165	0	17,315 4	1,1464 2
2	485,1 5	13,2642	12,52 97	58.100, 28	2,5673 3	1,2836 6	24,5437	0	16,372 3	1,1484
2	485,2 11	14,2418	12,53 54	53.257, 20	2,7619 3	1,3809 6	24,571	0	15,434 5	1,1503 8
2	485,2 86	15,3501	12,54 26	48.463, 39	2,9862 9	1,4931 5	24,5981	0	14,509 8	1,1523 4
2	485,3 75	16,6078	12,55 16	43.764, 01	3,2453	1,6226 5	24,6247	0	13,606 8	1,1542 6



2	485,4 82	18,0221	12,56 27	39.220, 67	3,5434	1,7717	24,6505	0	12,737 1	1,1561 1
2	485,6 1	19,6109	12,57 65	34.869, 91	3,8868 6	1,9434 3	24,6752	0	11,907 5	1,1578 8
2	485,7 64	21,391	12,59 36	30.744, 84	4,2829 2	2,1414 6	24,6986	0	11,123 8	1,1595 7
2	485,9 49	23,3797	12,61 47	26.872, 27	4,7401 4	2,3700 7	24,7207	0	10,391	1,1611 4
2	486,1 71	25,6012	12,64 06	23.269, 26	5,2692 3	2,6346 2	24,7412	0	9,7118 4	1,1626 1
2	486,2 08	25,959	12,64 5	22.750, 14	5,3560 2	2,6780 2	24,7441	0	9,6142 2	1,1628 2
2	486,4 37	28,1002	12,67 22	19.943, 10	5,8842 2	2,9421 1	24,76	0	9,0874 1	1,1639 6
2	486,7 57	30,9162	12,71 02	16.904, 37	6,6011	3,3005 6	24,7772	0	8,5193 9	1,1652
2	487,1 4	34,0961	12,75 57	14.158, 99	7,4394 3	3,7197 2	24,7927	0	8,0086 7	1,1663 1
2	487,6	37,695	12,80 95	11.708, 94	8,4231 2	4,2115 7	24,8064	0	7,5554 2	1,1673 1
2	488,1 52	41,7687	12,87 26	9.552,2 6	9,5818 3	4,7909 2	24,8183	0	7,1594 1	1,1681 8
2	488,8 15	46,4086	12,94 56	7.679,2 8	10,956 2	5,4781	24,8284	0	6,8196 5	1,1689 3
2	488,9 3	47,1907	12,95 79	7.411,7 3	11,193 5	5,5967 6	24,8299	0	6,7716 6	1,1690 4

