

Dispersion Report

Workspace: 72452 Ottimizz-00

Study: FSRU in rigassificazione

Equipment Item: 12R Linea princip riscaldatori

72452 Ottimizz-00\FSRU in rigassificazione\12R Linea princip riscaldatori

Material	GAS NATURALE	
East	0	m
North	0	m

Scenario (Leak) : 30mm

72452 Ottimizz-00\FSRU in rigassificazione\12R Linea princip riscaldatori\30mm

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

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	0,459004	0	0,459004
2	Continuous	107,083	0	kg/s	0,459004	0	0,459004

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/Line height [m]	C/Line concentration [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/m ³]
1	0	0	12,5	999.99 9,41	0,0454 411	0,0227 46	6,73325	0	300	0,7401 38
1	0,01	0,90479 7	12,50 01	266.25 4,69	0,2107 82	0,1054 91	19,4967	0	54,870 3	1,0642 4
1	0,02	1,36497	12,50 02	196.25 6,98	0,2889 09	0,1445 81	20,9458	0	39,828 7	1,0927 9
1	0,03	1,72564	12,50 03	162.79 2,60	0,3491 34	0,1747 1	21,6563	0	32,963 2	1,1062 7
1	0,04	2,03339	12,50 05	142.09 1,09	0,4000 12	0,2001 6	22,1018	0	28,815 8	1,1145 5
1	0,05	2,30658	12,50 07	127.64 4,46	0,4448 56	0,2225 91	22,4155	0	25,965 3	1,1203 1
1	0,06	2,55544	12,50 1	116.79 1,71	0,4854 89	0,2429 14	22,6526	0	23,847 2	1,1246 2
1	0,07	2,78565	12,50 12	108.24 7,21	0,5229 16	0,2616 33	22,8402	0	22,193 4	1,128
1	0,08	3,00087	12,50 15	101.29 2,62	0,5577 85	0,2790 71	22,9935	0	20,856 2	1,1307 5
1	0,09	3,20377	12,50 18	95.486, 46	0,5905 63	0,2954 63	23,122	0	19,745 9	1,1330 4
1	0,1	3,39645	12,50 21	90.538, 97	0,6216 11	0,3109 89	23,2317	0	18,804 2	1,1349 9
1	0,11	3,58049	12,50 24	86.253, 19	0,6512 06	0,3257 88	23,327	0	17,991 5	1,1366 8
1	0,12	3,75705	12,50 27	82.492, 29	0,6795 45	0,3399 59	23,4107	0	17,280 9	1,1381 6
1	0,13	3,9268	12,50 3	79.160, 58	0,7067 48	0,3535 61	23,4851	0	16,653 2	1,1394 7

1	0,14	4,09026	12,50	76.185,	0,7329	0,3666	23,5516	0	16,094	1,1406
			34	53	11	42			2	3
1	0,15	4,24814	12,50	73.506,	0,7581	0,3792	23,6116	0	15,592	1,1416
			38	59	52	63				9
1	0,16	4,40108	12,50	71.075,	0,7825	0,3914	23,6661	0	15,137	1,1426
			41	93	8	76			4	4
1	0,17	4,54962	12,50	68.855,	0,8062	0,4033	23,7159	0	14,723	1,1435
			45	83	85	27				1
1	0,18	4,69442	12,50	66.813,	0,8293	0,4148	23,7618	0	14,342	1,1443
			49	67	73	71			5	1
1	0,19	4,83565	12,50	64.928,	0,8518	0,4261	23,8042	0	13,991	1,1450
			53	44	75	2			8	4
1	0,2	4,97332	12,50	63.183,	0,8738	0,4370	23,8435	0	13,667	1,1457
			57	67	01	81			7	3
1	0,212	5,13465	12,50	61.247,	0,8994	0,4499	23,8871	0	13,308	1,1464
			62	29	76	17			6	8
1	0,226	5,32282	12,50	59.123,	0,9294	0,4648	23,935	0	12,915	1,1473
	4		69	34	07	8			4	1
1	0,243	5,54115	12,50	56.823,	0,9641	0,4822	23,987	0	12,490	1,1482
	68		77	17	24	34			3	1
1	0,264	5,79411	12,50	54.356,	1,0043	0,5023	24,0428	0	12,035	1,1491
	416		86	12	3	32			4	7
1	0,289	6,08663	12,50	51.737,	1,0508	0,5255	24,1021	0	11,553	1,1501
	299		98	70		6			5	9
1	0,319	6,42225	12,51	49.002,	1,1041	0,5522	24,1641	0	11,051	1,1512
	159		13	28	2	14			3	6
1	0,354	6,80617	12,51	46.177,	1,1651	0,5827	24,2283	0	10,533	1,1523
	991		32	10	5	16			9	6
1	0,397	7,2452	12,51	43.285,	1,2349	0,6176	24,2941	0	10,005	1,1534
	989		56	51	6	09			5	8
1	0,449	7,74548	12,51	40.360,	1,3145	0,6574	24,3607	0	9,4725	1,1546
	587		86	84	9	05			2	2
1	0,511	8,31327	12,52	37.437,	1,4051	0,7026	24,4274	0	8,9411	1,1557
	504		24	46	3	48			1	6
1	0,585	8,95492	12,52	34.548,	1,5077	0,7539	24,4935	0	8,4173	1,1568
	805		73	50	3	18			3	8
1	0,674	9,67951	12,53	31.716,	1,624	0,8120	24,5583	0	7,9052	1,1579
	966		33	39		17			1	7

1	0,781 959	10,4934	12,54 11	28.970, 43	1,7553 2	0,8776 34	24,6213	0	7,4099 9	1,1590 4
1	0,910 351	11,4096	12,55 09	26.321, 34	1,9040 1	0,9519 24	24,6822	0	6,9335 3	1,1600 6
1	1,054 62	12,3817	12,56 24	23.921, 22	2,0625 5	1,0311 3	24,7375	0	6,5030 1	1,1609 9
1	1,064 42	12,4452	12,56 32	23.776, 32	2,0729 8	1,0363 4	24,7408	0	6,4770 6	1,1610 4
1	1,249 31	13,5871	12,57 91	21.374, 33	2,2629 6	1,1312 5	24,7963	0	6,0475 2	1,1619 7
1	1,471 17	14,8711	12,59 9	19.100, 96	2,4786 2	1,2389 9	24,8488	0	5,6422 3	1,1628 4
1	1,737 4	16,3222	12,62 39	16.961, 16	2,7240 1	1,3615 8	24,8984	0	5,2620 4	1,1636 7
1	2,056 88	17,9517	12,65 51	14.961, 24	3,0034 8	1,5011 7	24,9449	0	4,9080 5	1,1644 3
1	2,440 26	19,7764	12,69 41	13.106, 08	3,3218 9	1,6602 3	24,9882	0	4,5811 3	1,1651 4
1	2,900 31	21,8187	12,74 25	11.395, 46	3,6855 2	1,8418 6	25,0283	0	4,2812 8	1,1657 9
1	3,452 37	24,1033	12,80 24	9.828,1 1	4,1018	2,0498	25,0652	0	4,0083 2	1,1663 8
1	4,114 84	26,6663	12,87 6	8.400,6 0	4,5801 3	2,2887 3	25,099	0	3,7617 4	1,1669 2
1	4,909 81	29,5649	12,96 54	7.108,1 6	5,1325 7	2,5646 9	25,1299	0	3,5407 7	1,1674
1	5,438 31	31,4101	13,02 5	6.424,0 4	5,4896 7	2,7430 7	25,1464	0	3,4249 8	1,1676 5
2	107,0 83	0	12,5	999.99 9,41	0,0454 411	0,0227 46	6,73325	0	300	0,7401 38
2	107,0 93	0,90479 7	12,50 01	266.25 4,69	0,2107 82	0,1054 91	19,4967	0	54,870 3	1,0642 4
2	107,1 03	1,36497	12,50 02	196.25 6,98	0,2889 09	0,1445 81	20,9458	0	39,828 7	1,0927 9
2	107,1 13	1,72564	12,50 03	162.79 2,60	0,3491 34	0,1747 1	21,6563	0	32,963 2	1,1062 7
2	107,1	2,03339	12,50	142.09	0,4000	0,2001	22,1018	0	28,815	1,1145

	23		05	1,09	12	6			8	5
2	107,1 33	2,30658	12,50 07	127.64 4,46	0,4448 56	0,2225 91	22,4155	0	25,965 3	1,1203 1
2	107,1 43	2,55544	12,50 1	116.79 1,71	0,4854 89	0,2429 14	22,6526	0	23,847 2	1,1246 2
2	107,1 53	2,78565	12,50 12	108.24 7,21	0,5229 16	0,2616 33	22,8402	0	22,193 4	1,128
2	107,1 63	3,00087	12,50 15	101.29 2,62	0,5577 85	0,2790 71	22,9935	0	20,856 2	1,1307 5
2	107,1 73	3,20377	12,50 18	95.486, 46	0,5905 63	0,2954 63	23,122	0	19,745 9	1,1330 4
2	107,1 83	3,39645	12,50 21	90.538, 97	0,6216 11	0,3109 89	23,2317	0	18,804 2	1,1349 9
2	107,1 93	3,58049	12,50 24	86.253, 19	0,6512 06	0,3257 88	23,327	0	17,991 5	1,1366 8
2	107,2 03	3,75705	12,50 27	82.492, 29	0,6795 45	0,3399 59	23,4107	0	17,280 9	1,1381 6
2	107,2 13	3,9268	12,50 3	79.160, 58	0,7067 48	0,3535 61	23,4851	0	16,653 2	1,1394 7
2	107,2 23	4,09026	12,50 34	76.185, 53	0,7329 11	0,3666 42	23,5516	0	16,094 2	1,1406 3
2	107,2 33	4,24814	12,50 38	73.506, 59	0,7581 52	0,3792 63	23,6116	0	15,592 2	1,1416 9
2	107,2 43	4,40108	12,50 41	71.075, 93	0,7825 8	0,3914 76	23,6661	0	15,137 4	1,1426 4
2	107,2 53	4,54962	12,50 45	68.855, 83	0,8062 85	0,4033 27	23,7159	0	14,723 2	1,1435 1
2	107,2 63	4,69442	12,50 49	66.813, 67	0,8293 73	0,4148 71	23,7618	0	14,342 5	1,1443 1
2	107,2 73	4,83565	12,50 53	64.928, 44	0,8518 75	0,4261 2	23,8042	0	13,991 8	1,1450 4
2	107,2 83	4,97332	12,50 57	63.183, 67	0,8738 01	0,4370 81	23,8435	0	13,667 7	1,1457 3
2	107,2 95	5,13465	12,50 62	61.247, 29	0,8994 76	0,4499 17	23,8871	0	13,308 6	1,1464 8
2	107,3 1	5,32282	12,50 69	59.123, 34	0,9294 07	0,4648 8	23,935	0	12,915 4	1,1473 1
2	107,3	5,54115	12,50	56.823,	0,9641	0,4822	23,987	0	12,490	1,1482

	27		77	17	24	34			3	1
2	107,3 48	5,79411	12,50 86	54.356, 12	1,0043 3	0,5023 32	24,0428	0	12,035 4	1,1491 7
2	107,3 73	6,08663	12,50 98	51.737, 70	1,0508	0,5255 6	24,1021	0	11,553 5	1,1501 9
2	107,4 03	6,42225	12,51 13	49.002, 28	1,1041 2	0,5522 14	24,1641	0	11,051 3	1,1512 6
2	107,4 38	6,80617	12,51 32	46.177, 10	1,1651 5	0,5827 16	24,2283	0	10,533 9	1,1523 6
2	107,4 81	7,2452	12,51 56	43.285, 51	1,2349 6	0,6176 09	24,2941	0	10,005 5	1,1534 8
2	107,5 33	7,74548	12,51 86	40.360, 84	1,3145 9	0,6574 05	24,3607	0	9,4725 2	1,1546 2
2	107,5 95	8,31327	12,52 24	37.437, 46	1,4051 3	0,7026 48	24,4274	0	8,9411 1	1,1557 6
2	107,6 69	8,95492	12,52 73	34.548, 50	1,5077 3	0,7539 18	24,4935	0	8,4173 3	1,1568 8
2	107,7 58	9,67951	12,53 33	31.716, 39	1,624	0,8120 17	24,5583	0	7,9052 1	1,1579 7
2	107,8 65	10,4934	12,54 11	28.970, 43	1,7553 2	0,8776 34	24,6213	0	7,4099 9	1,1590 4
2	107,9 94	11,4096	12,55 09	26.321, 34	1,9040 1	0,9519 24	24,6822	0	6,9335 3	1,1600 6
2	108,1 38	12,3817	12,56 24	23.921, 22	2,0625 5	1,0311 3	24,7375	0	6,5030 1	1,1609 9
2	108,1 48	12,4452	12,56 32	23.776, 32	2,0729 8	1,0363 4	24,7408	0	6,4770 6	1,1610 4
2	108,3 33	13,5871	12,57 91	21.374, 33	2,2629 6	1,1312 5	24,7963	0	6,0475 2	1,1619 7
2	108,5 55	14,8711	12,59 9	19.100, 96	2,4786 2	1,2389 9	24,8488	0	5,6422 3	1,1628 4
2	108,8 21	16,3222	12,62 39	16.961, 16	2,7240 1	1,3615 8	24,8984	0	5,2620 4	1,1636 7
2	109,1 4	17,9517	12,65 51	14.961, 24	3,0034 8	1,5011 7	24,9449	0	4,9080 5	1,1644 3
2	109,5 24	19,7764	12,69 41	13.106, 08	3,3218 9	1,6602 3	24,9882	0	4,5811 3	1,1651 4
2	109,9	21,8187	12,74	11.395,	3,6855	1,8418	25,0283	0	4,2812	1,1657

	84		25	46	2	6			8	9
2	110,5 36	24,1033	12,80 24	9.828,1 1	4,1018	2,0498	25,0652	0	4,0083 2	1,1663 8
2	111,1 98	26,6663	12,87 6	8.400,6 0	4,5801 3	2,2887 3	25,099	0	3,7617 4	1,1669 2
2	111,9 93	29,5649	12,96 54	7.108,1 6	5,1325 7	2,5646 9	25,1299	0	3,5407 7	1,1674
2	112,5 22	31,4101	13,02 5	6.424,0 4	5,4896 7	2,7430 7	25,1464	0	3,4249 8	1,1676 5

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	0,459004	0	0,459004
2	Continuous	107,083	0	kg/s	0,459004	0	0,459004

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/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	12,5	999.99 9,41	0,0454 665	0,0227 333	6,73325	0	300	0,7401 38
1	0,01	0,92209 9	12,50 01	263.63 8,73	0,2083 22	0,1041 61	19,265	0	56,739 7	1,0665 5
1	0,02	1,40106	12,50 02	192.80 9,80	0,2848 2	0,1424 1	20,7009	0	41,715 2	1,0955 8
1	0,03	1,78058	12,50	158.89	0,3436	0,1718	21,4062	0	34,850	1,1093

			03	5,15	85	42			3	1
1	0,04	2,10721	12,50	137.89	0,3933	0,1966	21,8491	0	30,699	1,1177
			05	0,57	88	94			7	6
1	0,05	2,39922	12,50	123.21	0,4371	0,2185	22,1612	0	27,845	1,1236
			07	9,91	96	98			2	3
1	0,06	2,66683	12,50	112.19	0,4768	0,2384	22,3973	0	25,723	1,1280
			09	3,62	94	47			4	3
1	0,07	2,91578	12,50	103.50	0,5134	0,2567	22,5842	0	24,065	1,1314
			12	7,25	82	41			9	9
1	0,08	3,14973	12,50	96.433,	0,5475	0,2737	22,737	0	22,725	1,1343
			14	40	95	98			1	
1	0,09	3,37132	12,50	90.525,	0,5796	0,2898	22,8651	0	21,611	1,1366
			17	35	89	45			5	4
1	0,1	3,58263	12,50	85.490,	0,6101	0,3050	22,9746	0	20,666	1,1386
			2	14	13	57			8	4
1	0,11	3,78527	12,50	81.127,	0,6391	0,3195	23,0696	0	19,851	1,1403
			23	95	36	68			7	6
1	0,12	3,98041	12,50	77.299,	0,6669	0,3334	23,1532	0	19,138	1,1418
			26	54	53	77			7	8
1	0,13	4,16878	12,50	73.906,	0,6936	0,3468	23,2275	0	18,508	1,1432
			29	21	93	46			8	2
1	0,14	4,35084	12,50	70.874,	0,7194	0,3597	23,2939	0	17,947	1,1444
			32	96	45	23			5	1
1	0,15	4,52727	12,50	68.144,	0,7443	0,3721	23,3538	0	17,443	1,1454
			36	89	22	61			3	9
1	0,16	4,6987	12,50	65.667,	0,7684	0,3842	23,4082	0	16,986	1,1464
			39	86	24	12			7	6
1	0,17	4,86566	12,50	63.405,	0,7918	0,3959	23,458	0	16,570	1,1473
			43	86	35	18			7	5
1	0,18	5,0288	12,50	61.326,	0,8146	0,4073	23,5038	0	16,189	1,1481
			46	74	47	24				7
1	0,19	5,18857	12,50	59.405,	0,8369	0,4184	23,5462	0	15,836	1,1489
			5	29	31	66			8	3
1	0,2	5,34463	12,50	57.628,	0,8586	0,4293	23,5854	0	15,511	1,1496
			54	20	57	29			6	3
1	0,212	5,52793	12,50	55.657,	0,8841	0,4420	23,629	0	15,151	1,1504
			59	29	17	58			5	
1	0,226	5,74275	12,50	53.493,	0,9138	0,4569	23,6768	0	14,756	1,1512

	4		64	44	77	39			8	5
1	0,243 68	5,99286	12,50 71	51.151, 32	0,9484 51	0,4742 26	23,7287	0	14,330 5	1,1521 7
1	0,264 416	6,28384	12,50 8	48.641, 06	0,9885 68	0,4942 84	23,7843	0	13,874 4	1,1531 5
1	0,289 299	6,6219	12,50 91	45.979, 61	1,0350 4	0,5175 18	23,8434	0	13,391 9	1,1542
1	0,319 159	7,01261	12,51 04	43.197, 69	1,0886	0,5443 02	23,9052	0	12,888 8	1,1552 9
1	0,354 991	7,46237	12,51 21	40.327, 90	1,1501 4	0,5750 68	23,9691	0	12,371	1,1564 1
1	0,397 989	7,97984	12,51 42	37.398, 46	1,2207 6	0,6103 82	24,0344	0	11,843 7	1,1575 6
1	0,449 587	8,5772	12,51 68	34.433, 42	1,3019 8	0,6509 9	24,1006	0	11,311 4	1,1587 1
1	0,511 504	9,26344	12,52	31.474, 50	1,3950 3	0,6975 13	24,1668	0	10,781 6	1,1598 7
1	0,585 805	10,0476	12,52 4	28.561, 58	1,5012 7	0,7506 37	24,232	0	10,261 3	1,161
1	0,674 966	10,9433	12,52 9	25.722, 71	1,6226 2	0,8113 08	24,2957	0	9,7555 2	1,1621 1
1	0,742 683	11,5952	12,53 29	23.921, 22	1,7110 5	0,8555 23	24,3361	0	9,4352 5	1,1628 1
1	0,781 959	11,9625	12,53 52	22.988, 31	1,7610 1	0,8805 05	24,3571	0	9,2696	1,1631 7
1	0,910 351	13,1228	12,54 29	20.377, 92	1,9191	0,9595 53	24,4158	0	8,8068 8	1,1641 9
1	1,064 42	14,4492	12,55 23	17.905, 08	2,1003 4	1,0501 7	24,4714	0	8,3696 5	1,1651 5
1	1,249 31	15,9628	12,56 39	15.587, 64	2,3083 4	1,1541 7	24,5236	0	7,9609 1	1,1660 5
1	1,471 17	17,6902	12,57 81	13.437, 49	2,5476 4	1,2738 2	24,572	0	7,5826 6	1,1668 8
1	1,500 43	17,9119	12,58	13.192, 64	2,5785 2	1,2892 6	24,5775	0	7,5396 5	1,1669 8
2	107,0 83	0	12,5	999.99 9,41	0,0454 665	0,0227 333	6,73325	0	300	0,7401 38

2	107,0 93	0,92209 9	12,50 01	263.63 8,73	0,2083 22	0,1041 61	19,265	0	56,739 7	1,0665 5
2	107,1 03	1,40106	12,50 02	192.80 9,80	0,2848 2	0,1424 1	20,7009	0	41,715 2	1,0955 8
2	107,1 13	1,78058	12,50 03	158.89 5,15	0,3436 85	0,1718 42	21,4062	0	34,850 3	1,1093 1
2	107,1 23	2,10721	12,50 05	137.89 0,57	0,3933 88	0,1966 94	21,8491	0	30,699 7	1,1177 6
2	107,1 33	2,39922	12,50 07	123.21 9,91	0,4371 96	0,2185 98	22,1612	0	27,845 2	1,1236 3
2	107,1 43	2,66683	12,50 09	112.19 3,62	0,4768 94	0,2384 47	22,3973	0	25,723 4	1,1280 3
2	107,1 53	2,91578	12,50 12	103.50 7,25	0,5134 82	0,2567 41	22,5842	0	24,065 9	1,1314 9
2	107,1 63	3,14973	12,50 14	96.433, 40	0,5475 95	0,2737 98	22,737	0	22,725 1	1,1343
2	107,1 73	3,37132	12,50 17	90.525, 35	0,5796 89	0,2898 45	22,8651	0	21,611 5	1,1366 4
2	107,1 83	3,58263	12,50 2	85.490, 14	0,6101 13	0,3050 57	22,9746	0	20,666 8	1,1386 4
2	107,1 93	3,78527	12,50 23	81.127, 95	0,6391 36	0,3195 68	23,0696	0	19,851 7	1,1403 6
2	107,2 03	3,98041	12,50 26	77.299, 54	0,6669 53	0,3334 77	23,1532	0	19,138 7	1,1418 8
2	107,2 13	4,16878	12,50 29	73.906, 21	0,6936 93	0,3468 46	23,2275	0	18,508 8	1,1432 2
2	107,2 23	4,35084	12,50 32	70.874, 96	0,7194 45	0,3597 23	23,2939	0	17,947 5	1,1444 1
2	107,2 33	4,52727	12,50 36	68.144, 89	0,7443 22	0,3721 61	23,3538	0	17,443 3	1,1454 9
2	107,2 43	4,6987	12,50 39	65.667, 86	0,7684 24	0,3842 12	23,4082	0	16,986 7	1,1464 6
2	107,2 53	4,86566	12,50 43	63.405, 86	0,7918 35	0,3959 18	23,458	0	16,570 7	1,1473 5
2	107,2 63	5,0288	12,50 46	61.326, 74	0,8146 47	0,4073 24	23,5038	0	16,189 7	1,1481 7
2	107,2 73	5,18857	12,50 5	59.405, 29	0,8369 31	0,4184 66	23,5462	0	15,836 8	1,1489 3

2	107,2 83	5,34463	12,50 54	57.628, 20	0,8586 57	0,4293 29	23,5854	0	15,511 6	1,1496 3
2	107,2 95	5,52793	12,50 59	55.657, 29	0,8841 17	0,4420 58	23,629	0	15,151 5	1,1504
2	107,3 1	5,74275	12,50 64	53.493, 44	0,9138 77	0,4569 39	23,6768	0	14,756 8	1,1512 5
2	107,3 27	5,99286	12,50 71	51.151, 32	0,9484 51	0,4742 26	23,7287	0	14,330 5	1,1521 7
2	107,3 48	6,28384	12,50 8	48.641, 06	0,9885 68	0,4942 84	23,7843	0	13,874 4	1,1531 5
2	107,3 73	6,6219	12,50 91	45.979, 61	1,0350 4	0,5175 18	23,8434	0	13,391 9	1,1542
2	107,4 03	7,01261	12,51 04	43.197, 69	1,0886	0,5443 02	23,9052	0	12,888 8	1,1552 9
2	107,4 38	7,46237	12,51 21	40.327, 90	1,1501 4	0,5750 68	23,9691	0	12,371	1,1564 1
2	107,4 81	7,97984	12,51 42	37.398, 46	1,2207 6	0,6103 82	24,0344	0	11,843 7	1,1575 6
2	107,5 33	8,5772	12,51 68	34.433, 42	1,3019 8	0,6509 9	24,1006	0	11,311 4	1,1587 1
2	107,5 95	9,26344	12,52	31.474, 50	1,3950 3	0,6975 13	24,1668	0	10,781 6	1,1598 7
2	107,6 69	10,0476	12,52 4	28.561, 58	1,5012 7	0,7506 37	24,232	0	10,261 3	1,161
2	107,7 58	10,9433	12,52 9	25.722, 71	1,6226 2	0,8113 08	24,2957	0	9,7555 2	1,1621 1
2	107,8 26	11,5952	12,53 29	23.921, 22	1,7110 5	0,8555 23	24,3361	0	9,4352 5	1,1628 1
2	107,8 65	11,9625	12,53 52	22.988, 31	1,7610 1	0,8805 05	24,3571	0	9,2696	1,1631 7
2	107,9 94	13,1228	12,54 29	20.377, 92	1,9191	0,9595 53	24,4158	0	8,8068 8	1,1641 9
2	108,1 48	14,4492	12,55 23	17.905, 08	2,1003 4	1,0501 7	24,4714	0	8,3696 5	1,1651 5
2	108,3 33	15,9628	12,56 39	15.587, 64	2,3083 4	1,1541 7	24,5236	0	7,9609 1	1,1660 5
2	108,5 55	17,6902	12,57 81	13.437, 49	2,5476 4	1,2738 2	24,572	0	7,5826 6	1,1668 8



2	108,5	17,9119	12,58	13.192,	2,5785	1,2892	24,5775	0	7,5396	1,1669
	84		64	2	6				5	8

