

Project _____ Main canal - Hydraulic particulars from Km _____ to Km _____

Santhakovur Branch Canal (GKLI Scheme)

Sl. No.	Reach in Km		Distance in Mts	Hydraulic Particulars							Bed Level		Full Supply Level		Loss of head			Coeff. of Rugosity	Remarks
	From	To		Required Discharge (Cumecs)	Bed width in Mts	F.S.D in Mts	Surface fall	Side Slopes	Velocity (m/sec)	Designed Discharge (Cumecs)	At start(M)	At end(M)	At start(M)	At end(M)	Due to bed fall	Due to CM & CD Structures	Total		
1	0.000	1.200	1200	8.180	7.650	1.250	1 in 4000	1.50 : 1	0.693	8.251	244.958	244.643	246.208	245.893	0.300	0.015	0.315	0.0225	
2	1.200	2.058	858	8.150	7.600	1.250	1 in 4000	1.50 : 1	0.693	8.202	244.643	244.414	245.893	245.664	0.215	0.015	0.230	0.0225	
3	2.058	3.829	1771	6.960	6.400	1.250	1 in 4000	1.50 : 1	0.678	7.016	244.414	243.941	245.664	245.191	0.443	0.030	0.473	0.0225	
4	3.829	4.350	521	6.620	6.100	1.250	1 in 4000	1.50 : 1	0.674	6.721	243.941	243.781	245.191	245.031	0.130	0.030	0.160	0.0225	
												243.401		244.651		0.380	0.380		0.380m drop @ Km 4.350
5	4.350	7.800	3450	6.600	5.500	1.320	1 in 4000	1.50 : 1	0.685	6.763	243.401	242.448	244.651	243.768	0.863	0.090	0.953	0.0225	
6	7.800	8.550	750	6.400	5.000	1.320	1 in 3750	1.50 : 1	0.698	6.435	242.448	242.248	243.768	243.568	0.200	0.000	0.200	0.0225	
7	8.550	10.455	1905	5.750	4.500	1.320	1 in 3750	1.50 : 1	0.688	5.888	242.248	241.670	243.568	242.990	0.508	0.070	0.578	0.0225	
8	10.455	13.995	3540	5.390	4.200	1.310	1 in 3500	1.50 : 1	0.703	5.677	241.670	240.254	242.990	241.564	1.011	0.405	1.416	0.0225	Canal Syphon @ Km 10.400
9	13.995	14.200	205	5.390	4.000	1.310	1 in 3500	1.50 : 1	0.698	5.455	240.254	240.095	241.564	241.405	0.059	0.100	0.159	0.0225	
10	14.200	16.602	2402	3.670	3.000	1.210	1 in 3500	1.50 : 1	0.643	3.745	240.095	237.447	241.405	238.657	0.686	1.962	2.648	0.0225	1.500m drop @ Km 15.550
11	16.602	17.000	398	3.670	4.900	1.050	1 in 4800	1.50 : 1	0.545	3.704	237.447	237.364	238.657	238.414	0.083	0.000	0.083	0.0225	
12	17.000	19.615	2615	3.640	4.850	1.050	1 in 4700	1.50 : 1	0.550	3.710	237.364	236.781	238.414	237.831	0.556	0.026	0.582	0.0225	
13	19.615	19.725	110	3.530	4.700	1.050	1 in 4700	1.50 : 1	0.548	3.608	236.781	236.758	237.831	237.808	0.023	0.000	0.023	0.0225	
14	19.725	22.150	2425	3.380	4.700	1.050	1 in 4700	1.50 : 1	0.548	3.608	236.758	236.212	237.808	237.262	0.516	0.030	0.546	0.0225	
15	22.150	24.875	2725	3.380	4.610	1.050	1 in 4700	1.50 : 1	0.546	3.548	236.212	235.582	237.262	236.632	0.580	0.050	0.630	0.0225	
16	24.875	25.365	490	3.180	4.000	1.050	1 in 4400	1.50 : 1	0.554	3.243	235.582	235.451	236.632	236.501	0.111	0.020	0.131	0.0225	
17	25.365	26.175	810	2.200	4.000	0.850	1 in 4400	1.50 : 1	0.495	2.219	235.451	235.247	236.501	236.097	0.184	0.020	0.204	0.0225	
18	26.175	30.225	4050	1.920	3.570	0.840	1 in 4400	1.50 : 1	0.484	1.966	235.247	233.186	236.097	234.026	0.920	1.140	2.060	0.0225	0.400m drop @ Km 27.575 & 0.500m drop @ Km 30.125
19	30.225	31.650	1425	1.470	3.010	0.770	1 in 4200	1.50 : 1	0.463	1.484	233.186	232.737	234.026	233.507	0.339	0.110	0.449	0.0225	
20	31.650	33.410	1760	1.070	2.640	0.680	1 in 4000	1.50 : 1	0.436	1.085	232.737	224.087	233.507	224.767	0.440	8.210	8.650	0.0225	0.600m drop @ Km 32.300, 32.325, 32.350, 0.450m drop @ Km 32.675, 0.500m drop @ Km 32.700, 0.550m drop @ Km 33.105 & 0.600m drop @ Km 33.125, 33.150, 33.175, 33.200, 33.275, 33.300, 33.325, 33.350
																	20.871		
								Bed Level at	Start		244.958	FSL		246.208					
									End		224.087			224.767					
									Diff		20.871			21.441					

FSD Diff = 0.570

20.871

0.000

Check : (First FSL - Last FSL) = Total loss of head

246.208 - 224.767 = 20.871 + 1.25 - 0.68 =

21.441 = 21.441

Difference = 0.000

Superintending Engineer,
GNSS Circle, Kadapa

Project _____ Hydraulic particulars of _____ Main canal from Km _____ to Km _____

STATEMENT SHOWING THE CROSS MASONRY WORKS

Santhakovur Branch Canal (GKLI Scheme)

S.NO.	DESCRIPTION	NAME OF CROSS MASNORY WORK	CHAINAGE IN KM	EXISTING ROAD LEVEL / ROAD WIDTH	BED WIDTH	FSD	HYDRAULIC PARTICULARS OF CANAL						LOSS OF HEAD	REMARKS
							B.L		F.S.L		T..B.L			
							U/S	D/S	U/S	D/S	U/S	D/S		
1		S.L.B	0.905	246.500	7.650	1.250	244.717		245.967		246.467		0.015	
2		D.L.B	2.025	246.480	7.600	1.250	244.422		245.672		246.172		0.015	
3		S.L.B	3.430	245.720	6.400	1.250	244.041		245.291		245.791		0.030	
4		D.L.B	3.965	247.200	6.100	1.250	243.877		245.127		245.627		0.030	
5		S.L.B	5.003	245.410	5.500	1.320	243.177		244.497		244.997		0.030	
6		D.L.B	5.718	244.330	5.500	1.320	242.969		244.289		244.789		0.030	
7		S.L.B	7.100	245.740	5.500	1.320	242.623		243.943		244.443		0.000	
8		S.L.B	8.380	244.780	5.000	1.320	242.293		243.613		244.113		0.000	
9		D.L.B	10.455	244.280	4.500	1.320	241.670		242.990		243.490		0.020	
10		S.L.B	12.100	243.940	4.200	1.310	240.835		242.145		242.645		0.000	
11		D.L.B	13.465	241.670	4.200	1.310	240.405		241.715		242.215		0.020	
12		D.L.B	15.250	241.640	3.000	1.210	239.776		240.986		241.486		0.005	
13		S.L.B	17.055	237.745	4.850	1.050	237.342		238.392		238.892		0.010	
14		S.L.B	17.530	239.230	4.850	1.050	237.241		238.291		238.791		0.000	
15		S.L.B	18.255	237.970	4.850	1.050	237.087		238.137		238.637		0.000	
16		S.L.B	18.810	236.700	4.850	1.050	236.969		238.019		238.519		0.000	
17		S.L.B	21.440	242.260	4.700	1.050	236.383		237.433		237.933		0.010	
18		D.L.B	22.150	236.145	4.700	1.050	236.212		237.262		237.762		0.010	
19		S.L.B	22.470	239.625	4.610	1.050	236.134		237.184		237.684		0.010	
20		S.L.B	23.030	239.530	4.610	1.050	236.005		237.055		237.555		0.010	
21		S.L.B	24.300	238.835	4.610	1.050	235.705		236.755		237.255		0.000	
22		S.L.B	25.125	243.060	4.000	1.050	235.505		236.555		237.055		0.020	
23		S.L.B	26.215	237.035	3.570	0.840	235.218		236.058		236.558		0.020	
24		S.L.B	27.500	235.340	3.570	0.840	234.846		235.686		236.186		0.020	
25		S.L.B	29.025	235.980	3.570	0.840	234.019		234.859		235.359		0.000	
26		S.L.B	29.650	234.325	3.570	0.840	233.857		234.697		235.197		0.000	
27		S.L.B	30.165	233.425	3.570	0.840	233.200		234.040		234.540		0.020	
28		PIPE CULVERT	30.800	235.225	3.010	0.770	232.959		233.729		234.229		0.050	
29		PIPE CULVERT	32.705	229.900	2.640	0.680	229.663		230.343		230.843		0.000	
30		PIPE CULVERT	33.100	230.300	2.640	0.680	229.515		230.195		230.695		0.050	

Superintending Engineer,
GNSS Circle, Kadapa

_____ Project _____ Hydraulic particulars of _____ Main canal from Km _____ to Km _____

STATEMENT SHOWING THE CROSS DRAINAGE WORKS

Santhakovur Branch Canal (GKLI Scheme)

S.NO.	NAME OF C.D WORK	CHAINAGE IN KM	PARTICULARS OF DRAIN				PARTICULARS OF PARENT CANAL					LOSS OF HEAD IN MTS	REMARKS
			BED LEVEL IN MTS	C.A SQ. KMS	M.F.D CUMECs	O.M.F.L MTS	BED WIDTH MTS	F.S.D. MTS	B.L MTS	F.S.L MTS	T.B.L MTS		
1	OUTLET	4.700	244.610				5.500	1.320	243.313	244.633	245.133	0.000	
2	S.P	4.725	244.780				5.500	1.320	243.277	244.597	245.097	0.030	
3	U.T	5.460	243.570				5.500	1.320	243.063	244.383	244.883	0.000	
4	S.P	6.660	244.880				5.500	1.320	242.733	244.053	244.553	0.000	
5	U.T	8.975	243.350				4.500	1.320	242.135	243.455	243.955	0.000	
6	INLET	9.350	243.110				4.500	1.320	242.020	243.340	243.840	0.015	
7	INLET	9.875	244.340				4.500	1.320	241.860	243.180	243.680	0.020	
8	INLET & OUTLET	10.050	244.380				4.500	1.320	241.798	243.118	243.618	0.015	
9	CANAL SYPHON	10.850	241.150				4.200	1.310	241.237	242.547	243.047	0.320	
10	U.T	11.400	241.500				4.200	1.310	241.060	242.370	242.870	0.020	
11	U.T	11.710	241.480				4.200	1.310	240.946	242.256	242.756	0.025	
12	S.P	12.550	241.735				4.200	1.310	240.706	242.016	242.516	0.000	
13	VAGU WELL SYPHON	12.920	241.400				4.200	1.310	240.601	241.911	242.411	0.000	
14	S.P	13.185	242.660				4.200	1.310	240.505	241.815	242.315	0.020	
15	S.P	14.550	242.300				3.000	1.210	239.981	241.191	241.691	0.014	
16	S.P	15.625	239.710				3.000	1.210	238.169	239.379	239.879	0.000	
17	S.P	16.100	239.460				3.000	1.210	237.980	239.190	239.690	0.053	
18	U.T	17.425	237.405				4.850	1.050	237.263	238.313	238.813	0.000	
19	U.T	17.625	237.445				4.850	1.050	237.221	238.271	238.771	0.000	
20	U.T	17.800	238.600				4.850	1.050	237.184	238.234	238.734	0.000	
21	S.P	18.000	239.280				4.850	1.050	237.141	238.191	238.691	0.000	
22	U.T	18.790	235.785				4.850	1.050	236.973	238.023	238.523	0.000	
23	U.T	19.615	237.225				4.850	1.050	236.781	237.831	238.331	0.016	
24	INLET	19.850	237.945				4.700	1.050	236.731	237.781	238.281	0.000	
25	S.P	20.935	238.370				4.700	1.050	236.501	237.551	238.051	0.000	
26	S.P	21.500	237.920				4.700	1.050	237.420	237.920	0.100	0.000	
27	U.T	21.925	236.655				4.700	1.050	236.270	237.320	237.820	0.010	
28	U.T	23.500	235.985				4.610	1.050	235.905	236.955	237.455	0.000	
29	U.T	23.650	235.960				4.610	1.050	235.863	236.913	237.413	0.010	
30	U.T	24.000	236.100				4.610	1.050	235.778	236.828	237.328	0.010	
31	U.T	24.290	236.400				4.610	1.050	235.707	236.757	237.257	0.010	
32	U.T	26.015	235.250				4.000	0.850	235.283	236.133	236.633	0.020	
33	U.T	26.485	235.420				3.570	0.840	235.136	235.976	236.476	0.020	

34	U.T	26.800	236.960				3.570	0.840	235.065	235.905	236.405	0.000	
35	U.T	26.975	233.925				3.570	0.840	235.005	235.845	236.345	0.020	
36	U.T	27.475	233.180				3.570	0.840	234.871	235.711	236.211	0.020	
37	U.T	27.975	233.425				3.570	0.840	234.318	235.158	235.658	0.020	
38	U.T	28.375	233.055				3.570	0.840	234.207	235.047	235.547	0.020	
39	U.T	28.550	233.105				3.570	0.840	234.147	234.987	235.487	0.020	
40	U.T	28.685	234.245				3.570	0.840	234.096	234.936	235.436	0.020	
41	U.T	28.950	234.315				3.570	0.840	234.036	234.876	235.376	0.000	
42	U.T	29.340	234.100				3.570	0.840	233.927	234.767	235.267	0.020	
43	INLET	29.525	235.900				3.570	0.840	233.885	234.725	235.225	0.000	
44	U.T	29.800	233.700				3.570	0.840	233.803	234.643	235.143	0.020	
45	U.T	30.025	232.005				3.570	0.840	233.752	234.592	235.092	0.000	
46	U.T	30.140	232.000				3.570	0.840	233.226	234.066	234.566	0.000	
47	U.T	30.375	231.225				3.010	0.770	233.131	233.901	234.401	0.020	
48	U.T	30.610	230.875				3.010	0.770	233.055	233.825	234.325	0.020	
49	U.T	31.125	233.025				3.010	0.770	232.862	233.632	234.132	0.020	
50	U.T	31.775	231.500				2.640	0.680	232.686	233.366	233.866	0.020	
51	U.T	31.850	231.400				2.640	0.680	232.667	233.347	233.847	0.000	
52	INLET	31.975	235.125				2.640	0.680	232.636	233.316	233.816	0.000	
53	INLET	32.050	234.000				2.640	0.680	232.617	233.297	233.797	0.000	
54	U.T	32.565	228.680				2.640	0.680	230.668	231.348	231.848	0.020	
55	U.T	32.675	230.025				2.640	0.680	230.171	230.851	231.351	0.020	
56	TAIL CLUSTER	33.410	225.000				2.640	0.680	224.087	224.767	225.267	0.000	

Superintending Engineer,
GNSS Circle, Kadapa

_____ Project _____ Hydraulic particulars of _____ Main canal from Km _____ to Km _____

STATEMENT SHOWING THE DETAILS OF REGULATORS

Santhakovur Branch Canal (GKLI Scheme)

S.NO.	STRUCTURE	CHAINAGE IN KM	EXISTING ROAD LEVEL IN MTS	HYDRAULIC PARTICULARS OF CANAL										LOSS OF HEAD IN MTS	REMARKS
				BED WIDTH		F.S.D		B.L		F.S.L		T..B.L			
				U/S IN MTS	D/S IN MTS	U/S IN MTS	D/S IN MTS	U/S IN MTS	D/S IN MTS	U/S IN MTS	D/S IN MTS	U/S IN MTS	D/S IN MTS		
	O.T Sluice	3.250	247.125	6.500	7.650	1.700	1.250	244.660	244.958	246.360	246.208	247.110	246.708	0.152	
	on Feeder Channel														
	(at Km 0.000 on Santhakovur Branch Canal)														
	Sluice on system	16.602	239.000	3.000	4.900	1.210	1.050	237.837		239.047		239.547		0.390	

Superintending Engineer,
GNSS Circle, Kadapa

_____ Project _____ Hydraulic particulars of _____ Main canal from Km _____ to Km _____

STATEMENT SHOWING THE DETAILS OF OFF TAKES

Santhakovur Branch Canal (GKLI Scheme)

PARENT CANAL DISCHARGE =

CUMECS

BED FALL =

FSL

S.NO.	NAME OF DISTRIBUTORY	LOCATION ON MAIN CANAL	EXISTING ROAD LEVEL	DISTRIBUTORY				PARENT CANAL AT O.T POINT		DISTRIBUTORY				DES. DIS. IN CUMECS	HIGHEST FIELD LEVEL IN MTS	HEIGHT OF RECLAMATION IN MTS
				AYACUT IN ACRES	DIS. REQ. IN CUMECS	% OF DIS. TO PARENT CANAL IN M	HT. OF SIL ABOVE BED OF PARENT CANAL IN M	U/S IN MTS	D/S IN MTS	SILL LEVEL IN MTS	REAR F.S.L IN MTS	VENT SIZE IN SQ.M	F.S.D INMTS			
1	Kasunur Minor	0.125	246.310	1843.800	0.443	5.4%		246.177								
2	DP	0.900	246.500	259.500	0.062	0.8%		245.983								
3	Nandyalapalli major@2.058 of SKC	2.058	246.590	2971.000	0.713	9.3%		245.664								
4	DP	2.316	247.050	78.960	0.019	0.3%		245.599								
5	DP	3.400	245.840	131.960	0.032	0.5%		245.328								
6	Sunkesula-1 Major at 3.829 of SKC	3.829	247.460	1202.789	0.289	4.2%		245.191								
7	DP	4.300	246.070	113.840	0.027	0.4%		245.043								
8	DP	4.800	244.150	127.810	0.031	0.5%		244.578								
9	DP	5.040	245.400	97.290	0.023	0.4%		244.488								
10	DP	5.300	244.530	101.650	0.024	0.4%		244.423								
11	DP	6.076	245.250	154.440	0.037	0.6%		244.199								
12	DP	6.373	245.250	107.120	0.026	0.4%		244.125								
13	Sunkesula-2 Minor a@7.770 of SKC	7.770	244.790	242.680	0.058	0.9%		243.776								
14	DP	8.125	244.000	108.660	0.026	0.4%		243.681								
15	Duddekunta Major @ 8.550 of SKC	8.550	244.820	2580.106	0.619	9.7%		243.568								
16	DP	8.942	243.600	99.500	0.024	0.4%		243.463								
17	DP	10.000	244.400	73.660	0.018	0.3%		243.146								
18	Block: Revulakolanu-1	10.110	244.200	1264.340	0.303	5.3%		243.102								
19	DP	10.550	243.860	71.430	0.017	0.3%		242.953								
20	Bhadrapalli	14.200	243.340	7153.090	1.717	31.9%		241.405								
21	Buchupalli-1 DP on SKC	16.990	238.400	141.170	0.034	0.9%		238.416								

22	Tonduru-1	18.025	239.390	452.770	0.109	3.0%		238.186								
23	Mallela-1	19.725	238.875	620.360	0.149	4.2%		237.808								
24	Mallela-2	22.575	239.935	841.860	0.202	6.0%		237.162								
25	Thonduru-2	25.365	242.240	4068.070	0.976	30.7%		236.501								
26	Gangadevipalli Minor @ 25.975- SKC	25.975	236.000	1184.380	0.284	12.9%		236.162								
27	Udavagandla- 1minor at Km 27.925-SKC	27.925	236.250	341.850	0.082	4.3%		235.189								
28	Udavagandla - 2Minor@30.225- SKC	30.225	232.615	1531.830	0.368	20.0%		234.026								
29	Santhakovuru sub- block-@31.110 - SKC	31.110	235.315	476.640	0.114	7.8%		233.656								
30	SKC-31.650Km L/S branch	31.650	235.050	1200.000	0.288	21.3%		233.507								
31	Santhakovuru Minor @ Km 33.145-SKC	33.145	229.525	1302.806	0.313	29.3%		229.033								
32	SKC-Tail end	33.410	225.000	3143.000	0.754	100.0%		224.767								

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Superintending Engineer,
GNSS Circle, Kadapa

Project

Hydraulic particulars of

Main canal from Km

to Km

STATEMENT SHOWING THE DETAILS OF DROPS

Santhakovur Branch Canal (GKLI Scheme)

S.NO.	CHAINAGE IN KM	DESCRIPTION OF DROP	HYDRAULIC PARTICULARS OF CANAL										SOILS AT FOUNDATION LEVEL
			BED WIDTH		F.S.D		B.L		F.S.L		T.B.L		
			U/S IN MTS	D/S IN MTS	U/S IN MTS	D/S IN MTS	U/S IN MTS	D/S IN MTS	U/S IN MTS	D/S IN MTS	U/S IN MTS	D/S IN MTS	
1	4.350	0.380	6.100	5.500	1.250	1.320	243.781	243.401	245.031	244.721	245.531	245.221	
2	15.550	1.500	3.000	3.000	1.210	1.210	239.690	238.190	240.900	239.400	241.400	239.900	
3	27.575	0.400	3.570	3.570	0.840	0.840	234.829	234.429	235.669	235.269	236.169	235.769	
4	30.125	0.500	3.570	3.570	0.840	0.840	233.729	233.229	234.569	234.069	235.069	234.569	
5	32.300	0.600	2.640	2.640	0.680	0.680	232.555	231.955	233.235	232.635	233.735	233.135	
6	32.325	0.600	2.640	2.640	0.680	0.680	231.948	231.348	232.628	232.028	233.128	232.528	
7	32.350	0.600	2.640	2.640	0.680	0.680	231.342	230.742	232.022	231.422	232.522	231.922	
8	32.635	0.450	2.640	2.640	0.680	0.680	230.651	230.201	231.331	230.881	231.831	231.381	
9	32.700	0.500	2.640	2.640	0.680	0.680	230.165	229.665	230.845	230.345	231.345	230.845	
10	33.105	0.550	2.640	2.640	0.680	0.680	229.513	228.963	230.193	229.643	230.693	230.143	
11	33.125	0.600	2.640	2.640	0.680	0.680	228.958	228.358	229.638	229.038	230.138	229.538	
12	33.150	0.600	2.640	2.640	0.680	0.680	228.352	227.752	229.032	228.432	229.532	228.932	
13	33.175	0.600	2.640	2.640	0.680	0.680	227.746	227.146	228.426	227.826	228.926	228.326	
14	33.200	0.600	2.640	2.640	0.680	0.680	227.140	226.540	227.820	227.220	228.320	227.720	
15	33.275	0.600	2.640	2.640	0.680	0.680	226.521	225.921	227.201	226.601	227.701	227.101	
16	33.300	0.600	2.640	2.640	0.680	0.680	225.915	225.315	226.595	225.995	227.095	226.495	
17	33.325	0.600	2.640	2.640	0.680	0.680	225.308	224.708	225.988	225.388	226.488	225.888	
18	33.350	0.600	2.640	2.640	0.680	0.680	224.702	224.102	225.382	224.782	225.882	225.282	

Superintending Engineer,
GNSS Circle, Kadapa

Santhakovuru Canal (GKLI Scheme)**CURVE STATEMENT**

S.NO.	I.P. NO.	I.P. CHAINAGE (K.M)	DEFLECTION ANGLE (Degrees) θ	RADIUS OF CURVE (M) R	TANGENT LENGTH (M) $R \tan \theta / 2$	CURVE LENGTH (M) $\pi R \theta / 180$	APEX DISTANCE (M) $R (\sec \theta / 2 - 1)$	T P 1 CHAINAGE (KM)	T P 2 CHAINAGE (KM)	REMARKS
1	1	0.645	12.826	100	11.239	22.385	0.630	0.634	0.656	
2	2	1.548	39.224	100	35.632	68.459	6.159	1.512	1.581	
3	3	1.840	19.241	100	16.951	33.583	1.426	1.823	1.857	
4	4	2.439	3.472	100	3.031	6.059	0.046	2.436	2.442	
5	5	2.965	27.661	100	24.619	48.277	2.986	2.940	2.989	
6	6	3.586	58.935	100	56.502	102.861	14.859	3.529	3.632	
7	7	3.977	60.774	100	58.639	106.071	15.925	3.918	4.024	
8	8	4.436	10.193	100	8.919	17.791	0.397	4.427	4.445	
9	9	4.802	56.444	100	53.669	98.514	13.492	4.748	4.847	
10	10	5.549	44.720	100	41.135	78.051	8.130	5.508	5.586	
11	11	6.002	19.139	100	16.859	33.404	1.411	5.985	6.019	
12	12	6.518	15.436	100	13.552	26.940	0.914	6.504	6.531	
13	13	6.717	85.983	75	69.918	112.552	27.536	6.647	6.760	
14	14	6.950	55.917	50	26.539	48.797	6.607	6.923	6.972	
15	15	7.235	36.746	75	24.910	48.100	4.028	7.210	7.258	
16	16	7.515	79.277	100	82.840	138.364	29.856	7.432	7.571	
17	17	7.851	19.581	50	8.628	17.087	0.739	7.842	7.859	
18	18	8.250	8.015	50	3.503	6.994	0.123	8.246	8.253	
19	19	8.794	11.984	75	7.872	15.687	0.412	8.786	8.802	
20	20	9.110	9.227	75	6.052	12.078	0.244	9.104	9.116	
21	21	9.901	31.671	75	21.273	41.457	2.959	9.880	9.921	
22	22	10.646	47.466	75	32.974	62.133	6.929	10.613	10.675	
23	23	10.850	17.314	75	11.419	22.663	0.864	10.839	10.861	
24	24	11.150	17.314	75	11.419	22.663	0.864	11.139	11.161	
25	25	12.125	27.163	75	18.119	35.556	2.158	12.107	12.142	
26	26	12.500	6.250	75	4.095	8.182	0.112	12.496	12.504	
27	27	12.885	14.368	75	9.454	18.808	0.593	12.876	12.894	
28	28	13.915	33.593	75	22.638	43.972	3.342	13.892	13.936	
29	29	14.580	59.488	75	42.855	77.869	11.380	14.537	14.615	
30	30	15.050	22.294	75	14.778	29.183	1.442	15.035	15.064	
31	31	15.150	65.903	125	81.026	143.778	23.964	15.069	15.213	
32	32	15.700	72.213	100	72.939	126.036	23.774	15.627	15.753	
33	33	16.350	50.623	100	47.294	88.354	10.620	16.303	16.391	
34	34	16.845	19.546	120	20.669	40.937	1.767	16.824	16.865	

35	35	17.050	18.175	120	19.194	38.065	1.525	17.031	17.069	
36	36	18.025	28.618	50	12.753	24.973	1.601	18.012	18.037	
37	37	18.285	77.445	50	40.090	67.584	14.087	18.245	18.312	
38	38	19.305	7.746	75	5.077	10.139	0.172	19.300	19.310	
39	39	19.700	10.937	120	11.488	22.907	0.549	19.689	19.711	
40	40	20.604	30.621	120	32.852	64.133	4.416	20.571	20.635	
41	41	21.326	6.164	120	6.462	12.911	0.174	21.320	21.332	
42	42	21.400	37.578	83	28.237	54.436	4.672	21.372	21.426	
43	43	21.990	72.301	68	49.678	85.808	16.214	21.940	22.026	
44	44	22.150	77.919	75	60.646	101.996	21.452	22.089	22.191	
45	45	22.386	62.762	117	71.364	128.163	20.047	22.315	22.443	
46	46	23.605	28.790	120	30.800	60.298	3.890	23.574	23.634	
47	47	24.304	38.539	125	43.700	84.079	7.419	24.260	24.344	
48	48	24.951	29.196	120	31.253	61.148	4.003	24.920	24.981	
49	49	25.424	39.196	120	42.726	82.093	7.379	25.381	25.463	
50	50	25.985	65.653	120	77.413	137.503	22.803	25.908	26.045	
51	51	26.060	55.671	100	52.803	97.164	13.085	26.007	26.104	
52	52	26.650	32.107	100	28.775	56.037	4.058	26.621	26.677	
53	53	27.000	17.893	100	15.743	31.229	1.232	26.984	27.015	
54	54	27.451	33.200	100	29.811	57.944	4.349	27.421	27.479	
55	55	27.736	34.909	100	31.443	60.928	4.827	27.705	27.765	
56	56	28.020	65.531	100	64.360	114.372	18.921	27.956	28.070	
57	57	28.154	39.621	100	36.023	69.152	6.290	28.118	28.187	
58	58	28.326	33.117	100	29.732	57.799	4.326	28.296	28.354	
59	59	28.500	30.647	100	27.401	53.489	3.686	28.473	28.526	
60	60	28.790	30.545	100	27.305	53.311	3.661	28.763	28.816	
61	61	29.040	40.189	100	36.584	70.144	6.482	29.003	29.074	
62	62	29.144	52.156	100	48.942	91.030	11.334	29.095	29.186	
63	63	29.441	23.843	100	21.113	41.614	2.204	29.420	29.462	
64	64	29.635	24.498	100	21.710	42.756	2.329	29.613	29.656	
65	65	30.011	45.892	100	42.336	80.096	8.593	29.969	30.049	
66	66	30.812	49.282	100	45.870	86.014	10.019	30.766	30.852	
67	67	31.307	9.946	100	8.702	17.360	0.378	31.298	31.316	
68	68	31.598	16.504	100	14.503	28.805	1.046	31.583	31.612	
69	69	31.660	10.936	100	9.573	19.088	0.457	31.650	31.670	
70	70	32.050	44.411	100	40.821	77.512	8.011	32.009	32.087	
71	71	32.506	10.088	100	8.827	17.607	0.389	32.497	32.515	
72	72	32.724	10.088	100	8.827	17.607	0.389	32.715	32.733	
73	73	33.350	10.088	100	8.827	17.607	0.389	33.341	33.359	