

Printing Input Parameters.....

parameters	unit	values
Basin Area	sq mile	5.0
Avg_GL	feet-PWD	3.5
Highest Water Level ,RS	feet-PWD	10.5
Lowest Water Level,RS	feet-PWD	-6.5
Moonsoon Lowest Water Level	feet-PWD	-5.4
Embankment Crest Level	feet-PWD	19.0
Embankment Top Width	feet-PWD	14.0
C/S Slope (1:N)	nan	2.0
R/S Slope	nan	3.0
Invert Level	feet-PWD	-5.0
Discharge/sq mile	cfs/sqmile	27.702
No Vent	nan	3.0
Vent Width	feet	5.0
Vent Height	feet	6.0
Pier_width	inch	15.0
Abutment_width	inch	18.0
flare_Angle_min	degree	8.0
flare_Angle_max	degree	20.0
glacis_drop_min	feet	3.0
glacis_drop_max	feet	20.0
Barrel Length	feet	24.0
cutoff_depth_min	min	6.0

cutoff_depth_max	max	19.68
Laycey's Silt Factor	nan	0.4
maximum head difference	feet	6.0
Allowable Exit Gradient	nan	0.143
minimum_floor_thickness	feet	1.5
Top_slab_thickness	inch	12.0
unit weight of fill soil	pcf	120.0
friction Angle of fill soil	degree	30.0
surchrge height	feet	6.0

Printing Stilling Basin Calculation in FPS unit.....

Q	FAngle	g_drop	Bc	q	dc	vc	B1	q1	d1	v1	B2	q2	d2	v2	Fr1	LJ	Eff	Del_E	Del_E(%)
1107.17	8.0	3.0	20.5	54.008	4.491	12.026	23.03	48.076	2.179	22.061	32.573	33.991	7.1	4.788	2.634	33.951	80.2	1.925	19.8
1107.17	8.0	4.0	20.5	54.008	4.491	12.026	23.873	46.378	1.95	23.788	34.367	32.216	7.36	4.377	3.002	37.334	74.3	2.76	25.7
1107.17	8.0	5.0	20.5	54.008	4.491	12.026	24.716	44.795	1.768	25.337	35.947	30.8	7.559	4.075	3.358	39.956	69.0	3.633	31.0
1107.17	8.0	6.0	20.5	54.008	4.491	12.026	25.559	43.318	1.619	26.758	37.381	29.619	7.714	3.84	3.706	42.056	64.4	4.533	35.6
1107.17	8.0	7.0	20.5	54.008	4.491	12.026	26.403	41.934	1.493	28.08	38.707	28.604	7.838	3.649	4.049	43.777	60.3	5.454	39.7
1107.17	8.0	8.0	20.5	54.008	4.491	12.026	27.246	40.636	1.386	29.322	39.953	27.712	7.938	3.491	4.389	45.208	56.6	6.392	43.4
1107.17	8.0	9.0	20.5	54.008	4.491	12.026	28.089	39.416	1.292	30.499	41.135	26.915	8.019	3.356	4.728	46.414	53.3	7.342	46.7
1107.17	8.0	10.0	20.5	54.008	4.491	12.026	28.932	38.268	1.21	31.621	42.267	26.195	8.085	3.24	5.066	47.439	50.4	8.303	49.6
1107.17	8.0	11.0	20.5	54.008	4.491	12.026	29.776	37.184	1.137	32.696	43.357	25.536	8.14	3.137	5.403	48.317	47.7	9.273	52.3
1107.17	8.0	12.0	20.5	54.008	4.491	12.026	30.619	36.16	1.072	33.728	44.412	24.929	8.184	3.046	5.741	49.072	45.3	10.25	54.7
1107.17	8.0	13.0	20.5	54.008	4.491	12.026	31.462	35.191	1.013	34.724	45.439	24.366	8.22	2.964	6.079	49.725	43.1	11.232	56.9
1107.17	8.0	14.0	20.5	54.008	4.491	12.026	32.305	34.272	0.96	35.687	46.442	23.84	8.249	2.89	6.418	50.292	41.1	12.22	58.9
1107.17	8.0	15.0	20.5	54.008	4.491	12.026	33.149	33.4	0.912	36.621	47.423	23.347	8.272	2.822	6.758	50.784	39.2	13.211	60.8
1107.17	8.0	16.0	20.5	54.008	4.491	12.026	33.992	32.572	0.868	37.528	48.387	22.882	8.29	2.76	7.099	51.213	37.5	14.207	62.5
1107.17	8.0	17.0	20.5	54.008	4.491	12.026	34.835	31.783	0.827	38.41	49.335	22.442	8.304	2.703	7.441	51.588	35.9	15.205	64.1
1107.17	8.0	18.0	20.5	54.008	4.491	12.026	35.678	31.032	0.79	39.27	50.27	22.024	8.314	2.649	7.785	51.914	34.5	16.206	65.5
1107.17	8.0	19.0	20.5	54.008	4.491	12.026	36.522	30.316	0.756	40.109	51.194	21.627	8.321	2.599	8.13	52.198	33.1	17.21	66.9
1107.17	8.0	20.0	20.5	54.008	4.491	12.026	37.365	29.631	0.724	40.929	52.106	21.248	8.325	2.552	8.477	52.446	31.9	18.215	68.1
1107.17	9.0	3.0	20.5	54.008	4.491	12.026	23.351	47.415	2.144	22.112	34.114	32.455	7.069	4.592	2.661	33.977	79.8	1.969	20.2
1107.17	9.0	4.0	20.5	54.008	4.491	12.026	24.301	45.56	1.911	23.841	36.11	30.661	7.314	4.192	3.039	37.277	73.7	2.821	26.3
1107.17	9.0	5.0	20.5	54.008	4.491	12.026	25.252	43.846	1.727	25.39	37.862	29.242	7.497	3.901	3.405	39.811	68.4	3.709	31.6
1107.17	9.0	6.0	20.5	54.008	4.491	12.026	26.202	42.256	1.576	26.809	39.449	28.066	7.637	3.675	3.763	41.821	63.7	4.624	36.3

1107.17	9.0	7.0	20.5	54.008	4.491	12.026	27.152	40.777	1.45	28.13	40.916	27.059	7.747	3.493	4.117	43.452	59.5	5.56	40.5
1107.17	9.0	8.0	20.5	54.008	4.491	12.026	28.102	39.398	1.341	29.371	42.292	26.179	7.834	3.342	4.469	44.796	55.8	6.51	44.2
1107.17	9.0	9.0	20.5	54.008	4.491	12.026	29.053	38.109	1.248	30.547	43.598	25.395	7.902	3.214	4.82	45.918	52.5	7.473	47.5
1107.17	9.0	10.0	20.5	54.008	4.491	12.026	30.003	36.902	1.165	31.667	44.847	24.688	7.957	3.103	5.17	46.861	49.5	8.446	50.5
1107.17	9.0	11.0	20.5	54.008	4.491	12.026	30.953	35.769	1.093	32.74	46.051	24.042	8.0	3.005	5.52	47.66	46.9	9.426	53.1
1107.17	9.0	12.0	20.5	54.008	4.491	12.026	31.904	34.704	1.028	33.771	47.217	23.449	8.034	2.919	5.871	48.341	44.4	10.413	55.6
1107.17	9.0	13.0	20.5	54.008	4.491	12.026	32.854	33.7	0.969	34.765	48.351	22.899	8.06	2.841	6.223	48.922	42.2	11.406	57.8
1107.17	9.0	14.0	20.5	54.008	4.491	12.026	33.804	32.752	0.917	35.727	49.459	22.386	8.079	2.771	6.576	49.421	40.2	12.402	59.8
1107.17	9.0	15.0	20.5	54.008	4.491	12.026	34.755	31.857	0.869	36.659	50.545	21.905	8.093	2.706	6.93	49.848	38.3	13.403	61.7
1107.17	9.0	16.0	20.5	54.008	4.491	12.026	35.705	31.009	0.825	37.564	51.612	21.452	8.103	2.647	7.286	50.216	36.6	14.406	63.4
1107.17	9.0	17.0	20.5	54.008	4.491	12.026	36.655	30.205	0.786	38.445	52.662	21.024	8.109	2.593	7.644	50.531	35.1	15.412	64.9
1107.17	9.0	18.0	20.5	54.008	4.491	12.026	37.606	29.442	0.749	39.304	53.698	20.619	8.112	2.542	8.003	50.801	33.6	16.421	66.4
1107.17	9.0	19.0	20.5	54.008	4.491	12.026	38.556	28.716	0.715	40.142	54.721	20.233	8.111	2.494	8.364	51.033	32.3	17.431	67.7
1107.17	9.0	20.0	20.5	54.008	4.491	12.026	39.506	28.025	0.684	40.961	55.734	19.865	8.109	2.45	8.727	51.23	31.0	18.442	69.0
1107.17	10.0	3.0	20.5	54.008	4.491	12.026	23.674	46.768	2.11	22.162	35.663	31.045	7.037	4.411	2.688	33.997	79.3	2.014	20.7
1107.17	10.0	4.0	20.5	54.008	4.491	12.026	24.732	44.767	1.874	23.891	37.856	29.247	7.267	4.025	3.076	37.214	73.2	2.88	26.8
1107.17	10.0	5.0	20.5	54.008	4.491	12.026	25.79	42.931	1.688	25.439	39.776	27.835	7.435	3.744	3.451	39.661	67.8	3.784	32.2
1107.17	10.0	6.0	20.5	54.008	4.491	12.026	26.848	41.239	1.535	26.858	41.512	26.671	7.562	3.527	3.82	41.583	63.0	4.713	37.0
1107.17	10.0	7.0	20.5	54.008	4.491	12.026	27.906	39.675	1.408	28.177	43.115	25.679	7.659	3.353	4.185	43.129	58.8	5.661	41.2
1107.17	10.0	8.0	20.5	54.008	4.491	12.026	28.964	38.226	1.299	29.417	44.618	24.814	7.733	3.209	4.548	44.39	55.0	6.624	45.0
1107.17	10.0	9.0	20.5	54.008	4.491	12.026	30.022	36.879	1.206	30.591	46.043	24.046	7.79	3.087	4.91	45.431	51.7	7.599	48.3
1107.17	10.0	10.0	20.5	54.008	4.491	12.026	31.08	35.624	1.123	31.71	47.407	23.355	7.833	2.981	5.272	46.299	48.7	8.582	51.3
1107.17	10.0	11.0	20.5	54.008	4.491	12.026	32.138	34.451	1.051	32.781	48.721	22.725	7.866	2.889	5.635	47.025	46.0	9.573	54.0
1107.17	10.0	12.0	20.5	54.008	4.491	12.026	33.196	33.353	0.986	33.81	49.995	22.146	7.89	2.807	5.999	47.637	43.6	10.569	56.4

1107.17	10.0	13.0	20.5	54.008	4.491	12.026	34.254	32.323	0.929	34.803	51.235	21.61	7.907	2.733	6.364	48.153	41.4	11.57	58.6
1107.17	10.0	14.0	20.5	54.008	4.491	12.026	35.311	31.354	0.877	35.763	52.447	21.11	7.919	2.666	6.731	48.589	39.4	12.575	60.6
1107.17	10.0	15.0	20.5	54.008	4.491	12.026	36.369	30.442	0.83	36.694	53.635	20.643	7.925	2.605	7.099	48.958	37.5	13.583	62.5
1107.17	10.0	16.0	20.5	54.008	4.491	12.026	37.427	29.582	0.787	37.598	54.803	20.203	7.927	2.548	7.47	49.27	35.8	14.593	64.2
1107.17	10.0	17.0	20.5	54.008	4.491	12.026	38.485	28.769	0.748	38.477	55.953	19.787	7.926	2.496	7.842	49.533	34.3	15.606	65.7
1107.17	10.0	18.0	20.5	54.008	4.491	12.026	39.543	27.999	0.712	39.334	57.089	19.394	7.922	2.448	8.216	49.754	32.8	16.62	67.2
1107.17	10.0	19.0	20.5	54.008	4.491	12.026	40.601	27.269	0.679	40.171	58.212	19.02	7.916	2.403	8.592	49.938	31.5	17.636	68.5
1107.17	10.0	20.0	20.5	54.008	4.491	12.026	41.659	26.577	0.648	40.989	59.324	18.663	7.908	2.36	8.971	50.09	30.2	18.653	69.8
1107.17	11.0	3.0	20.5	54.008	4.491	12.026	23.999	46.134	2.077	22.21	37.221	29.746	7.006	4.246	2.716	34.011	78.9	2.057	21.1
1107.17	11.0	4.0	20.5	54.008	4.491	12.026	25.165	43.996	1.838	23.939	39.606	27.955	7.221	3.871	3.112	37.146	72.6	2.939	27.4
1107.17	11.0	5.0	20.5	54.008	4.491	12.026	26.331	42.048	1.65	25.487	41.69	26.557	7.375	3.601	3.497	39.507	67.1	3.857	32.9
1107.17	11.0	6.0	20.5	54.008	4.491	12.026	27.498	40.264	1.497	26.905	43.571	25.411	7.489	3.393	3.876	41.345	62.3	4.799	37.7
1107.17	11.0	7.0	20.5	54.008	4.491	12.026	28.664	38.626	1.369	28.222	45.306	24.438	7.573	3.227	4.251	42.808	58.1	5.76	41.9
1107.17	11.0	8.0	20.5	54.008	4.491	12.026	29.83	37.116	1.26	29.46	46.932	23.591	7.635	3.09	4.625	43.99	54.3	6.735	45.7
1107.17	11.0	9.0	20.5	54.008	4.491	12.026	30.997	35.719	1.166	30.632	48.474	22.841	7.681	2.974	4.999	44.956	50.9	7.72	49.1
1107.17	11.0	10.0	20.5	54.008	4.491	12.026	32.163	34.424	1.084	31.749	49.949	22.166	7.715	2.873	5.373	45.751	47.9	8.713	52.1
1107.17	11.0	11.0	20.5	54.008	4.491	12.026	33.329	33.219	1.012	32.819	51.372	21.552	7.738	2.785	5.749	46.41	45.2	9.712	54.8
1107.17	11.0	12.0	20.5	54.008	4.491	12.026	34.495	32.096	0.948	33.846	52.751	20.989	7.754	2.707	6.125	46.958	42.8	10.717	57.2
1107.17	11.0	13.0	20.5	54.008	4.491	12.026	35.662	31.047	0.891	34.837	54.094	20.467	7.763	2.637	6.503	47.414	40.6	11.726	59.4
1107.17	11.0	14.0	20.5	54.008	4.491	12.026	36.828	30.063	0.84	35.796	55.408	19.982	7.767	2.573	6.883	47.794	38.6	12.738	61.4
1107.17	11.0	15.0	20.5	54.008	4.491	12.026	37.994	29.141	0.793	36.725	56.697	19.528	7.766	2.515	7.266	48.11	36.7	13.752	63.3
1107.17	11.0	16.0	20.5	54.008	4.491	12.026	39.161	28.273	0.751	37.628	57.966	19.101	7.762	2.461	7.65	48.372	35.0	14.769	65.0
1107.17	11.0	17.0	20.5	54.008	4.491	12.026	40.327	27.455	0.713	38.506	59.216	18.697	7.755	2.411	8.036	48.587	33.5	15.787	66.5
1107.17	11.0	18.0	20.5	54.008	4.491	12.026	41.493	26.683	0.678	39.362	60.451	18.315	7.745	2.365	8.425	48.764	32.1	16.807	67.9

1107.17	11.0	19.0	20.5	54.008	4.491	12.026	42.659	25.954	0.646	40.198	61.672	17.953	7.734	2.321	8.816	48.906	30.7	17.828	69.3
1107.17	11.0	20.0	20.5	54.008	4.491	12.026	43.826	25.263	0.616	41.014	62.882	17.607	7.72	2.281	9.209	49.019	29.5	18.85	70.5
1107.17	12.0	3.0	20.5	54.008	4.491	12.026	24.326	45.514	2.045	22.256	38.788	28.544	6.975	4.092	2.743	34.019	78.4	2.1	21.6
1107.17	12.0	4.0	20.5	54.008	4.491	12.026	25.601	43.247	1.803	23.986	41.361	26.768	7.176	3.73	3.148	37.072	72.1	2.997	27.9
1107.17	12.0	5.0	20.5	54.008	4.491	12.026	26.877	41.195	1.613	25.533	43.605	25.391	7.316	3.471	3.542	39.35	66.5	3.928	33.5
1107.17	12.0	6.0	20.5	54.008	4.491	12.026	28.152	39.328	1.459	26.949	45.626	24.266	7.417	3.272	3.931	41.105	61.7	4.883	38.3
1107.17	12.0	7.0	20.5	54.008	4.491	12.026	29.427	37.624	1.331	28.265	47.49	23.314	7.489	3.113	4.317	42.489	57.4	5.856	42.6
1107.17	12.0	8.0	20.5	54.008	4.491	12.026	30.703	36.061	1.222	29.501	49.236	22.487	7.541	2.982	4.702	43.596	53.6	6.841	46.4
1107.17	12.0	9.0	20.5	54.008	4.491	12.026	31.978	34.623	1.129	30.672	50.891	21.756	7.577	2.871	5.087	44.49	50.2	7.836	49.8
1107.17	12.0	10.0	20.5	54.008	4.491	12.026	33.253	33.295	1.047	31.787	52.476	21.098	7.601	2.776	5.473	45.219	47.2	8.838	52.8
1107.17	12.0	11.0	20.5	54.008	4.491	12.026	34.529	32.065	0.976	32.854	54.005	20.501	7.616	2.692	5.861	45.815	44.5	9.846	55.5
1107.17	12.0	12.0	20.5	54.008	4.491	12.026	35.804	30.923	0.913	33.88	55.488	19.953	7.623	2.617	6.25	46.303	42.1	10.858	57.9
1107.17	12.0	13.0	20.5	54.008	4.491	12.026	37.079	29.859	0.856	34.87	56.934	19.447	7.625	2.55	6.641	46.704	39.8	11.874	60.2
1107.17	12.0	14.0	20.5	54.008	4.491	12.026	38.355	28.867	0.806	35.827	58.349	18.975	7.622	2.49	7.034	47.032	37.8	12.892	62.2
1107.17	12.0	15.0	20.5	54.008	4.491	12.026	39.63	27.938	0.76	36.754	59.738	18.534	7.615	2.434	7.429	47.3	36.0	13.913	64.0
1107.17	12.0	16.0	20.5	54.008	4.491	12.026	40.905	27.067	0.719	37.656	61.105	18.119	7.605	2.382	7.827	47.516	34.3	14.935	65.7
1107.17	12.0	17.0	20.5	54.008	4.491	12.026	42.181	26.248	0.681	38.533	62.454	17.728	7.593	2.335	8.227	47.689	32.8	15.958	67.2
1107.17	12.0	18.0	20.5	54.008	4.491	12.026	43.456	25.478	0.647	39.388	63.788	17.357	7.578	2.29	8.63	47.826	31.3	16.983	68.7
1107.17	12.0	19.0	20.5	54.008	4.491	12.026	44.731	24.752	0.615	40.222	65.108	17.005	7.562	2.249	9.036	47.931	30.0	18.008	70.0
1107.17	12.0	20.0	20.5	54.008	4.491	12.026	46.007	24.065	0.586	41.038	66.416	16.67	7.544	2.21	9.444	48.009	28.8	19.034	71.2
1107.17	13.0	3.0	20.5	54.008	4.491	12.026	24.656	44.905	2.014	22.302	40.364	27.429	6.944	3.95	2.77	34.021	78.0	2.143	22.0
1107.17	13.0	4.0	20.5	54.008	4.491	12.026	26.041	42.517	1.769	24.031	43.122	25.675	7.131	3.601	3.184	36.994	71.6	3.054	28.4
1107.17	13.0	5.0	20.5	54.008	4.491	12.026	27.426	40.369	1.578	25.577	45.521	24.322	7.258	3.351	3.588	39.189	65.9	3.998	34.1
1107.17	13.0	6.0	20.5	54.008	4.491	12.026	28.811	38.428	1.424	26.992	47.68	23.221	7.346	3.161	3.987	40.865	61.0	4.966	39.0

1107.17	13.0	7.0	20.5	54.008	4.491	12.026	30.196	36.666	1.295	28.306	49.669	22.291	7.407	3.009	4.383	42.173	56.7	5.949	43.3
1107.17	13.0	8.0	20.5	54.008	4.491	12.026	31.582	35.057	1.187	29.54	51.532	21.485	7.449	2.884	4.779	43.207	52.9	6.944	47.1
1107.17	13.0	9.0	20.5	54.008	4.491	12.026	32.967	33.584	1.094	30.709	53.299	20.773	7.475	2.779	5.175	44.034	49.5	7.948	50.5
1107.17	13.0	10.0	20.5	54.008	4.491	12.026	34.352	32.23	1.013	31.822	54.992	20.134	7.491	2.688	5.572	44.7	46.5	8.958	53.5
1107.17	13.0	11.0	20.5	54.008	4.491	12.026	35.737	30.981	0.942	32.887	56.625	19.553	7.498	2.608	5.971	45.237	43.8	9.974	56.2
1107.17	13.0	12.0	20.5	54.008	4.491	12.026	37.123	29.825	0.879	33.912	58.21	19.02	7.498	2.537	6.372	45.67	41.3	10.993	58.7
1107.17	13.0	13.0	20.5	54.008	4.491	12.026	38.508	28.752	0.824	34.9	59.757	18.528	7.493	2.473	6.776	46.02	39.1	12.015	60.9
1107.17	13.0	14.0	20.5	54.008	4.491	12.026	39.893	27.754	0.774	35.855	61.272	18.07	7.484	2.414	7.182	46.301	37.1	13.039	62.9
1107.17	13.0	15.0	20.5	54.008	4.491	12.026	41.278	26.822	0.729	36.782	62.76	17.641	7.472	2.361	7.59	46.524	35.3	14.065	64.7
1107.17	13.0	16.0	20.5	54.008	4.491	12.026	42.663	25.951	0.689	37.681	64.226	17.239	7.457	2.312	8.002	46.699	33.6	15.092	66.4
1107.17	13.0	17.0	20.5	54.008	4.491	12.026	44.049	25.135	0.652	38.557	65.674	16.859	7.439	2.266	8.416	46.834	32.1	16.12	67.9
1107.17	13.0	18.0	20.5	54.008	4.491	12.026	45.434	24.369	0.618	39.411	67.105	16.499	7.421	2.223	8.832	46.935	30.7	17.149	69.3
1107.17	13.0	19.0	20.5	54.008	4.491	12.026	46.819	23.648	0.588	40.244	68.524	16.157	7.4	2.183	9.252	47.007	29.4	18.178	70.6
1107.17	13.0	20.0	20.5	54.008	4.491	12.026	48.204	22.968	0.559	41.059	69.931	15.832	7.379	2.146	9.674	47.054	28.2	19.207	71.8
1107.17	14.0	3.0	20.5	54.008	4.491	12.026	24.988	44.308	1.983	22.346	41.952	26.392	6.913	3.818	2.797	34.019	77.6	2.186	22.4
1107.17	14.0	4.0	20.5	54.008	4.491	12.026	26.484	41.806	1.736	24.075	44.89	24.664	7.086	3.481	3.22	36.911	71.0	3.11	29.0
1107.17	14.0	5.0	20.5	54.008	4.491	12.026	27.98	39.57	1.545	25.62	47.44	23.338	7.2	3.241	3.633	39.026	65.3	4.067	34.7
1107.17	14.0	6.0	20.5	54.008	4.491	12.026	29.476	37.562	1.39	27.033	49.733	22.262	7.277	3.059	4.041	40.625	60.4	5.046	39.6
1107.17	14.0	7.0	20.5	54.008	4.491	12.026	30.972	35.748	1.261	28.345	51.845	21.356	7.328	2.914	4.448	41.858	56.0	6.04	44.0
1107.17	14.0	8.0	20.5	54.008	4.491	12.026	32.468	34.101	1.153	29.577	53.822	20.571	7.359	2.795	4.854	42.824	52.2	7.044	47.8
1107.17	14.0	9.0	20.5	54.008	4.491	12.026	33.964	32.599	1.06	30.743	55.699	19.878	7.377	2.694	5.261	43.587	48.8	8.056	51.2
1107.17	14.0	10.0	20.5	54.008	4.491	12.026	35.46	31.223	0.98	31.855	57.497	19.256	7.385	2.607	5.67	44.193	45.8	9.074	54.2
1107.17	14.0	11.0	20.5	54.008	4.491	12.026	36.956	29.959	0.91	32.919	59.233	18.692	7.385	2.531	6.081	44.675	43.1	10.096	56.9
1107.17	14.0	12.0	20.5	54.008	4.491	12.026	38.452	28.794	0.848	33.941	60.92	18.174	7.379	2.463	6.494	45.058	40.6	11.122	59.4

1107.17	14.0	13.0	20.5	54.008	4.491	12.026	39.948	27.716	0.794	34.928	62.567	17.696	7.368	2.402	6.91	45.361	38.4	12.149	61.6
1107.17	14.0	14.0	20.5	54.008	4.491	12.026	41.444	26.715	0.745	35.882	64.181	17.251	7.353	2.346	7.328	45.598	36.4	13.179	63.6
1107.17	14.0	15.0	20.5	54.008	4.491	12.026	42.94	25.784	0.701	36.807	65.768	16.834	7.335	2.295	7.75	45.78	34.6	14.209	65.4
1107.17	14.0	16.0	20.5	54.008	4.491	12.026	44.435	24.916	0.661	37.705	67.333	16.443	7.316	2.248	8.174	45.918	33.0	15.241	67.0
1107.17	14.0	17.0	20.5	54.008	4.491	12.026	45.931	24.105	0.625	38.58	68.879	16.074	7.294	2.204	8.601	46.018	31.4	16.273	68.6
1107.17	14.0	18.0	20.5	54.008	4.491	12.026	47.427	23.345	0.592	39.432	70.409	15.725	7.271	2.163	9.031	46.087	30.0	17.305	70.0
1107.17	14.0	19.0	20.5	54.008	4.491	12.026	48.923	22.631	0.562	40.265	71.926	15.393	7.247	2.124	9.465	46.129	28.7	18.338	71.3
1107.17	14.0	20.0	20.5	54.008	4.491	12.026	50.419	21.959	0.535	41.078	73.431	15.078	7.223	2.088	9.901	46.148	27.6	19.371	72.4
1107.17	15.0	3.0	20.5	54.008	4.491	12.026	25.323	43.722	1.953	22.389	43.55	25.423	6.882	3.694	2.823	34.012	77.1	2.228	22.9
1107.17	15.0	4.0	20.5	54.008	4.491	12.026	26.931	41.112	1.705	24.118	46.665	23.726	7.041	3.369	3.255	36.824	70.5	3.166	29.5
1107.17	15.0	5.0	20.5	54.008	4.491	12.026	28.538	38.796	1.512	25.661	49.364	22.429	7.144	3.14	3.678	38.86	64.8	4.135	35.2
1107.17	15.0	6.0	20.5	54.008	4.491	12.026	30.146	36.727	1.357	27.072	51.788	21.379	7.209	2.965	4.096	40.383	59.8	5.124	40.2
1107.17	15.0	7.0	20.5	54.008	4.491	12.026	31.754	34.867	1.229	28.382	54.019	20.496	7.25	2.827	4.513	41.547	55.4	6.128	44.6
1107.17	15.0	8.0	20.5	54.008	4.491	12.026	33.362	33.187	1.121	29.612	56.109	19.733	7.272	2.713	4.929	42.447	51.5	7.141	48.5
1107.17	15.0	9.0	20.5	54.008	4.491	12.026	34.969	31.661	1.029	30.776	58.093	19.059	7.282	2.617	5.347	43.149	48.1	8.161	51.9
1107.17	15.0	10.0	20.5	54.008	4.491	12.026	36.577	30.27	0.949	31.886	59.995	18.454	7.283	2.534	5.767	43.699	45.1	9.186	54.9
1107.17	15.0	11.0	20.5	54.008	4.491	12.026	38.185	28.995	0.88	32.948	61.834	17.906	7.276	2.461	6.189	44.13	42.4	10.214	57.6
1107.17	15.0	12.0	20.5	54.008	4.491	12.026	39.792	27.824	0.819	33.969	63.621	17.403	7.263	2.396	6.614	44.465	40.0	11.246	60.0
1107.17	15.0	13.0	20.5	54.008	4.491	12.026	41.4	26.743	0.765	34.954	65.367	16.938	7.247	2.337	7.042	44.724	37.8	12.278	62.2
1107.17	15.0	14.0	20.5	54.008	4.491	12.026	43.008	25.744	0.717	35.906	67.081	16.505	7.227	2.284	7.473	44.92	35.8	13.313	64.2
1107.17	15.0	15.0	20.5	54.008	4.491	12.026	44.615	24.816	0.674	36.83	68.766	16.101	7.205	2.235	7.907	45.066	34.0	14.347	66.0
1107.17	15.0	16.0	20.5	54.008	4.491	12.026	46.223	23.953	0.635	37.727	70.429	15.72	7.181	2.189	8.344	45.17	32.3	15.383	67.7
1107.17	15.0	17.0	20.5	54.008	4.491	12.026	47.831	23.148	0.6	38.601	72.074	15.362	7.156	2.147	8.784	45.238	30.8	16.418	69.2
1107.17	15.0	18.0	20.5	54.008	4.491	12.026	49.439	22.395	0.568	39.452	73.703	15.022	7.13	2.107	9.228	45.277	29.4	17.454	70.6

1107.17	15.0	19.0	20.5	54.008	4.491	12.026	51.046	21.69	0.538	40.284	75.318	14.7	7.102	2.07	9.675	45.292	28.2	18.489	71.8
1107.17	15.0	20.0	20.5	54.008	4.491	12.026	52.654	21.027	0.512	41.096	76.923	14.393	7.075	2.034	10.125	45.286	27.0	19.525	73.0
1107.17	16.0	3.0	20.5	54.008	4.491	12.026	25.661	43.145	1.923	22.432	45.16	24.517	6.851	3.579	2.85	34.0	76.7	2.27	23.3
1107.17	16.0	4.0	20.5	54.008	4.491	12.026	27.382	40.434	1.674	24.159	48.448	22.853	6.997	3.266	3.291	36.733	70.0	3.221	30.0
1107.17	16.0	5.0	20.5	54.008	4.491	12.026	29.102	38.044	1.48	25.7	51.292	21.586	7.088	3.045	3.723	38.692	64.2	4.201	35.8
1107.17	16.0	6.0	20.5	54.008	4.491	12.026	30.823	35.921	1.325	27.109	53.844	20.563	7.143	2.879	4.15	40.142	59.2	5.201	40.8
1107.17	16.0	7.0	20.5	54.008	4.491	12.026	32.543	34.022	1.197	28.417	56.193	19.703	7.174	2.747	4.577	41.237	54.8	6.214	45.2
1107.17	16.0	8.0	20.5	54.008	4.491	12.026	34.264	32.313	1.09	29.645	58.393	18.961	7.188	2.638	5.004	42.075	50.9	7.235	49.1
1107.17	16.0	9.0	20.5	54.008	4.491	12.026	35.984	30.768	0.999	30.808	60.484	18.305	7.19	2.546	5.433	42.72	47.5	8.262	52.5
1107.17	16.0	10.0	20.5	54.008	4.491	12.026	37.705	29.364	0.92	31.915	62.489	17.718	7.183	2.467	5.864	43.217	44.5	9.294	55.5
1107.17	16.0	11.0	20.5	54.008	4.491	12.026	39.425	28.083	0.852	32.976	64.429	17.185	7.17	2.397	6.297	43.599	41.8	10.328	58.2
1107.17	16.0	12.0	20.5	54.008	4.491	12.026	41.146	26.909	0.792	33.995	66.316	16.695	7.152	2.334	6.734	43.89	39.3	11.365	60.7
1107.17	16.0	13.0	20.5	54.008	4.491	12.026	42.866	25.829	0.738	34.978	68.162	16.243	7.131	2.278	7.173	44.108	37.2	12.402	62.8
1107.17	16.0	14.0	20.5	54.008	4.491	12.026	44.587	24.832	0.691	35.93	69.973	15.823	7.107	2.226	7.616	44.267	35.2	13.44	64.8
1107.17	16.0	15.0	20.5	54.008	4.491	12.026	46.307	23.909	0.649	36.852	71.758	15.429	7.08	2.179	8.063	44.379	33.4	14.479	66.6
1107.17	16.0	16.0	20.5	54.008	4.491	12.026	48.028	23.053	0.611	37.748	73.52	15.06	7.053	2.135	8.512	44.451	31.7	15.518	68.3
1107.17	16.0	17.0	20.5	54.008	4.491	12.026	49.748	22.256	0.576	38.62	75.263	14.711	7.024	2.094	8.966	44.49	30.2	16.557	69.8
1107.17	16.0	18.0	20.5	54.008	4.491	12.026	51.469	21.512	0.545	39.471	76.991	14.381	6.995	2.056	9.422	44.503	28.9	17.595	71.1
1107.17	16.0	19.0	20.5	54.008	4.491	12.026	53.189	20.816	0.517	40.301	78.705	14.067	6.965	2.02	9.882	44.493	27.6	18.633	72.4
1107.17	16.0	20.0	20.5	54.008	4.491	12.026	54.909	20.164	0.49	41.113	80.409	13.769	6.935	1.986	10.346	44.465	26.4	19.671	73.6
1107.17	17.0	3.0	20.5	54.008	4.491	12.026	26.003	42.578	1.895	22.473	46.783	23.666	6.82	3.47	2.877	33.984	76.3	2.312	23.7
1107.17	17.0	4.0	20.5	54.008	4.491	12.026	27.838	39.773	1.644	24.199	50.241	22.037	6.954	3.169	3.326	36.639	69.5	3.275	30.5
1107.17	17.0	5.0	20.5	54.008	4.491	12.026	29.672	37.314	1.45	25.739	53.227	20.801	7.033	2.958	3.767	38.522	63.6	4.267	36.4
1107.17	17.0	6.0	20.5	54.008	4.491	12.026	31.506	35.141	1.295	27.145	55.904	19.805	7.077	2.798	4.204	39.901	58.6	5.277	41.4

1107.17	17.0	7.0	20.5	54.008	4.491	12.026	33.341	33.208	1.167	28.451	58.368	18.969	7.099	2.672	4.641	40.93	54.2	6.298	45.8
1107.17	17.0	8.0	20.5	54.008	4.491	12.026	35.175	31.476	1.061	29.677	60.678	18.247	7.105	2.568	5.078	41.708	50.3	7.327	49.7
1107.17	17.0	9.0	20.5	54.008	4.491	12.026	37.009	29.916	0.97	30.838	62.873	17.61	7.1	2.48	5.518	42.298	46.9	8.361	53.1
1107.17	17.0	10.0	20.5	54.008	4.491	12.026	38.844	28.503	0.892	31.943	64.981	17.039	7.087	2.404	5.959	42.745	43.8	9.398	56.2
1107.17	17.0	11.0	20.5	54.008	4.491	12.026	40.678	27.218	0.825	33.002	67.021	16.52	7.068	2.337	6.404	43.081	41.1	10.438	58.9
1107.17	17.0	12.0	20.5	54.008	4.491	12.026	42.513	26.043	0.766	34.02	69.008	16.044	7.045	2.277	6.852	43.331	38.7	11.479	61.3
1107.17	17.0	13.0	20.5	54.008	4.491	12.026	44.347	24.966	0.713	35.002	70.952	15.604	7.019	2.223	7.303	43.511	36.6	12.521	63.4
1107.17	17.0	14.0	20.5	54.008	4.491	12.026	46.181	23.974	0.667	35.951	72.863	15.195	6.991	2.174	7.758	43.636	34.6	13.563	65.4
1107.17	17.0	15.0	20.5	54.008	4.491	12.026	48.016	23.059	0.625	36.872	74.746	14.812	6.961	2.128	8.217	43.716	32.8	14.605	67.2
1107.17	17.0	16.0	20.5	54.008	4.491	12.026	49.85	22.21	0.588	37.767	76.607	14.453	6.93	2.086	8.679	43.759	31.2	15.647	68.8
1107.17	17.0	17.0	20.5	54.008	4.491	12.026	51.685	21.422	0.554	38.639	78.45	14.113	6.898	2.046	9.145	43.772	29.7	16.689	70.3
1107.17	17.0	18.0	20.5	54.008	4.491	12.026	53.519	20.688	0.524	39.488	80.277	13.792	6.866	2.009	9.614	43.761	28.3	17.73	71.7
1107.17	17.0	19.0	20.5	54.008	4.491	12.026	55.353	20.002	0.496	40.317	82.092	13.487	6.834	1.974	10.087	43.729	27.1	18.77	72.9
1107.17	17.0	20.0	20.5	54.008	4.491	12.026	57.188	19.36	0.471	41.128	83.896	13.197	6.801	1.94	10.564	43.68	25.9	19.81	74.1
1107.17	18.0	3.0	20.5	54.008	4.491	12.026	26.349	42.02	1.866	22.513	48.42	22.866	6.789	3.368	2.904	33.964	75.8	2.353	24.2
1107.17	18.0	4.0	20.5	54.008	4.491	12.026	28.298	39.125	1.614	24.238	52.044	21.274	6.91	3.079	3.362	36.541	69.0	3.329	31.0
1107.17	18.0	5.0	20.5	54.008	4.491	12.026	30.248	36.604	1.42	25.776	55.169	20.069	6.978	2.876	3.812	38.35	63.1	4.331	36.9
1107.17	18.0	6.0	20.5	54.008	4.491	12.026	32.197	34.387	1.265	27.18	57.969	19.099	7.013	2.723	4.258	39.659	58.0	5.35	42.0
1107.17	18.0	7.0	20.5	54.008	4.491	12.026	34.147	32.424	1.138	28.484	60.547	18.286	7.026	2.603	4.705	40.626	53.6	6.38	46.4
1107.17	18.0	8.0	20.5	54.008	4.491	12.026	36.096	30.673	1.032	29.708	62.964	17.584	7.025	2.503	5.152	41.346	49.7	7.416	50.3
1107.17	18.0	9.0	20.5	54.008	4.491	12.026	38.046	29.101	0.943	30.866	65.263	16.965	7.013	2.419	5.602	41.883	46.3	8.456	53.7
1107.17	18.0	10.0	20.5	54.008	4.491	12.026	39.995	27.683	0.866	31.97	67.472	16.409	6.994	2.346	6.055	42.283	43.2	9.5	56.8
1107.17	18.0	11.0	20.5	54.008	4.491	12.026	41.945	26.396	0.799	33.027	69.613	15.905	6.97	2.282	6.51	42.577	40.6	10.544	59.4
1107.17	18.0	12.0	20.5	54.008	4.491	12.026	43.894	25.224	0.741	34.043	71.699	15.442	6.942	2.224	6.97	42.787	38.1	11.59	61.9

1107.17	18.0	13.0	20.5	54.008	4.491	12.026	45.844	24.151	0.69	35.023	73.743	15.014	6.912	2.172	7.433	42.932	36.0	12.635	64.0
1107.17	18.0	14.0	20.5	54.008	4.491	12.026	47.793	23.166	0.644	35.972	75.753	14.616	6.88	2.124	7.899	43.025	34.0	13.681	66.0
1107.17	18.0	15.0	20.5	54.008	4.491	12.026	49.743	22.258	0.603	36.892	77.735	14.243	6.846	2.08	8.37	43.076	32.3	14.726	67.7
1107.17	18.0	16.0	20.5	54.008	4.491	12.026	51.692	21.419	0.567	37.785	79.696	13.892	6.812	2.039	8.844	43.093	30.6	15.771	69.4
1107.17	18.0	17.0	20.5	54.008	4.491	12.026	53.642	20.64	0.534	38.656	81.638	13.562	6.778	2.001	9.323	43.082	29.2	16.815	70.8
1107.17	18.0	18.0	20.5	54.008	4.491	12.026	55.591	19.916	0.504	39.504	83.566	13.249	6.743	1.965	9.805	43.048	27.8	17.858	72.2
1107.17	18.0	19.0	20.5	54.008	4.491	12.026	57.541	19.242	0.477	40.333	85.481	12.952	6.708	1.931	10.291	42.996	26.6	18.901	73.4
1107.17	18.0	20.0	20.5	54.008	4.491	12.026	59.49	18.611	0.452	41.143	87.387	12.67	6.674	1.898	10.78	42.928	25.4	19.942	74.6
1107.17	19.0	3.0	20.5	54.008	4.491	12.026	26.698	41.47	1.839	22.553	50.071	22.112	6.758	3.272	2.931	33.94	75.4	2.394	24.6
1107.17	19.0	4.0	20.5	54.008	4.491	12.026	28.764	38.492	1.586	24.276	53.858	20.557	6.867	2.994	3.397	36.44	68.5	3.382	31.5
1107.17	19.0	5.0	20.5	54.008	4.491	12.026	30.83	35.912	1.391	25.812	57.119	19.383	6.924	2.799	3.856	38.175	62.6	4.395	37.4
1107.17	19.0	6.0	20.5	54.008	4.491	12.026	32.896	33.657	1.237	27.214	60.041	18.44	6.95	2.653	4.312	39.418	57.4	5.423	42.6
1107.17	19.0	7.0	20.5	54.008	4.491	12.026	34.962	31.668	1.111	28.515	62.731	17.65	6.955	2.538	4.768	40.323	53.0	6.46	47.0
1107.17	19.0	8.0	20.5	54.008	4.491	12.026	37.028	29.901	1.006	29.737	65.254	16.967	6.946	2.443	5.226	40.988	49.1	7.503	50.9
1107.17	19.0	9.0	20.5	54.008	4.491	12.026	39.094	28.321	0.917	30.893	67.656	16.365	6.928	2.362	5.686	41.476	45.7	8.549	54.3
1107.17	19.0	10.0	20.5	54.008	4.491	12.026	41.16	26.899	0.841	31.995	69.967	15.824	6.903	2.292	6.149	41.831	42.7	9.598	57.3
1107.17	19.0	11.0	20.5	54.008	4.491	12.026	43.226	25.614	0.775	33.05	72.207	15.333	6.874	2.231	6.616	42.084	40.0	10.647	60.0
1107.17	19.0	12.0	20.5	54.008	4.491	12.026	45.292	24.445	0.718	34.065	74.393	14.883	6.842	2.175	7.087	42.258	37.6	11.696	62.4
1107.17	19.0	13.0	20.5	54.008	4.491	12.026	47.358	23.379	0.667	35.044	76.536	14.466	6.808	2.125	7.561	42.371	35.4	12.746	64.6
1107.17	19.0	14.0	20.5	54.008	4.491	12.026	49.424	22.402	0.622	35.991	78.646	14.078	6.772	2.079	8.039	42.434	33.5	13.795	66.5
1107.17	19.0	15.0	20.5	54.008	4.491	12.026	51.489	21.503	0.583	36.91	80.728	13.715	6.736	2.036	8.522	42.458	31.7	14.843	68.3
1107.17	19.0	16.0	20.5	54.008	4.491	12.026	53.555	20.673	0.547	37.802	82.789	13.373	6.699	1.996	9.008	42.45	30.1	15.89	69.9
1107.17	19.0	17.0	20.5	54.008	4.491	12.026	55.621	19.906	0.515	38.672	84.832	13.051	6.662	1.959	9.499	42.417	28.7	16.936	71.3
1107.17	19.0	18.0	20.5	54.008	4.491	12.026	57.687	19.193	0.486	39.519	86.861	12.747	6.625	1.924	9.993	42.363	27.3	17.981	72.7

1107.17	19.0	19.0	20.5	54.008	4.491	12.026	59.753	18.529	0.459	40.347	88.878	12.457	6.589	1.891	10.492	42.292	26.1	19.025	73.9
1107.17	19.0	20.0	20.5	54.008	4.491	12.026	61.819	17.91	0.435	41.156	90.886	12.182	6.552	1.859	10.995	42.207	24.9	20.068	75.1
1107.17	20.0	3.0	20.5	54.008	4.491	12.026	27.051	40.928	1.812	22.591	51.737	21.4	6.726	3.182	2.958	33.911	75.0	2.435	25.0
1107.17	20.0	4.0	20.5	54.008	4.491	12.026	29.235	37.871	1.558	24.313	55.685	19.883	6.824	2.914	3.433	36.335	68.0	3.435	32.0
1107.17	20.0	5.0	20.5	54.008	4.491	12.026	31.419	35.239	1.363	25.846	59.08	18.74	6.871	2.728	3.901	37.999	62.0	4.458	38.0
1107.17	20.0	6.0	20.5	54.008	4.491	12.026	33.603	32.949	1.209	27.246	62.121	17.823	6.887	2.588	4.366	39.177	56.9	5.494	43.1
1107.17	20.0	7.0	20.5	54.008	4.491	12.026	35.787	30.938	1.084	28.545	64.921	17.054	6.884	2.477	4.832	40.023	52.4	6.539	47.6
1107.17	20.0	8.0	20.5	54.008	4.491	12.026	37.971	29.159	0.98	29.765	67.55	16.39	6.869	2.386	5.3	40.634	48.5	7.588	51.5
1107.17	20.0	9.0	20.5	54.008	4.491	12.026	40.154	27.573	0.892	30.919	70.054	15.804	6.845	2.309	5.77	41.075	45.1	8.64	54.9
1107.17	20.0	10.0	20.5	54.008	4.491	12.026	42.338	26.151	0.817	32.019	72.466	15.279	6.815	2.242	6.244	41.387	42.1	9.693	57.9
1107.17	20.0	11.0	20.5	54.008	4.491	12.026	44.522	24.868	0.752	33.073	74.806	14.801	6.781	2.183	6.721	41.602	39.4	10.747	60.6
1107.17	20.0	12.0	20.5	54.008	4.491	12.026	46.706	23.705	0.695	34.086	77.092	14.362	6.745	2.129	7.203	41.743	37.0	11.8	63.0
1107.17	20.0	13.0	20.5	54.008	4.491	12.026	48.89	22.646	0.646	35.064	79.335	13.956	6.707	2.081	7.689	41.824	34.9	12.852	65.1
1107.17	20.0	14.0	20.5	54.008	4.491	12.026	51.073	21.678	0.602	36.009	81.545	13.577	6.669	2.036	8.179	41.86	32.9	13.904	67.1
1107.17	20.0	15.0	20.5	54.008	4.491	12.026	53.257	20.789	0.563	36.927	83.728	13.223	6.629	1.995	8.673	41.859	31.2	14.955	68.8
1107.17	20.0	16.0	20.5	54.008	4.491	12.026	55.441	19.97	0.528	37.818	85.89	12.891	6.59	1.956	9.171	41.828	29.6	16.004	70.4
1107.17	20.0	17.0	20.5	54.008	4.491	12.026	57.625	19.213	0.497	38.687	88.034	12.577	6.551	1.92	9.674	41.774	28.2	17.052	71.8
1107.17	20.0	18.0	20.5	54.008	4.491	12.026	59.809	18.512	0.468	39.533	90.165	12.279	6.512	1.886	10.181	41.702	26.8	18.099	73.2
1107.17	20.0	19.0	20.5	54.008	4.491	12.026	61.993	17.86	0.443	40.36	92.285	11.997	6.474	1.853	10.692	41.614	25.6	19.145	74.4
1107.17	20.0	20.0	20.5	54.008	4.491	12.026	64.176	17.252	0.419	41.169	94.396	11.729	6.436	1.823	11.207	41.514	24.5	20.189	75.5

Printing Stilling Basin Calculation in MKS unit.....

Q	FAngle	g_drop	Bc	q	dc	vc	B1	q1	d1	v1	B2	q2	d2	v2	Fr1	LJ	Eff	Del_E	Del_E(%)
31.36	8.0	0.91	6.25	5.02	1.37	3.67	7.02	4.47	0.66	6.73	9.93	3.16	2.16	1.46	2.634	11.0	80.2	0.59	19.8
31.36	8.0	1.22	6.25	5.02	1.37	3.67	7.28	4.31	0.59	7.25	10.48	2.99	2.24	1.33	3.002	12.0	74.3	0.84	25.7
31.36	8.0	1.52	6.25	5.02	1.37	3.67	7.54	4.16	0.54	7.72	10.96	2.86	2.3	1.24	3.358	13.0	69.0	1.11	31.0
31.36	8.0	1.83	6.25	5.02	1.37	3.67	7.79	4.03	0.49	8.16	11.4	2.75	2.35	1.17	3.706	13.0	64.4	1.38	35.6
31.36	8.0	2.13	6.25	5.02	1.37	3.67	8.05	3.9	0.46	8.56	11.8	2.66	2.39	1.11	4.049	14.0	60.3	1.66	39.7
31.36	8.0	2.44	6.25	5.02	1.37	3.67	8.31	3.78	0.42	8.94	12.18	2.58	2.42	1.06	4.389	14.0	56.6	1.95	43.4
31.36	8.0	2.74	6.25	5.02	1.37	3.67	8.56	3.66	0.39	9.3	12.54	2.5	2.44	1.02	4.728	15.0	53.3	2.24	46.7
31.36	8.0	3.05	6.25	5.02	1.37	3.67	8.82	3.56	0.37	9.64	12.89	2.43	2.46	0.99	5.066	15.0	50.4	2.53	49.6
31.36	8.0	3.35	6.25	5.02	1.37	3.67	9.08	3.46	0.35	9.97	13.22	2.37	2.48	0.96	5.403	15.0	47.7	2.83	52.3
31.36	8.0	3.66	6.25	5.02	1.37	3.67	9.34	3.36	0.33	10.28	13.54	2.32	2.5	0.93	5.741	15.0	45.3	3.12	54.7
31.36	8.0	3.96	6.25	5.02	1.37	3.67	9.59	3.27	0.31	10.59	13.85	2.26	2.51	0.9	6.079	16.0	43.1	3.42	56.9
31.36	8.0	4.27	6.25	5.02	1.37	3.67	9.85	3.19	0.29	10.88	14.16	2.22	2.51	0.88	6.418	16.0	41.1	3.73	58.9
31.36	8.0	4.57	6.25	5.02	1.37	3.67	10.11	3.1	0.28	11.16	14.46	2.17	2.52	0.86	6.758	16.0	39.2	4.03	60.8
31.36	8.0	4.88	6.25	5.02	1.37	3.67	10.36	3.03	0.26	11.44	14.75	2.13	2.53	0.84	7.099	16.0	37.5	4.33	62.5
31.36	8.0	5.18	6.25	5.02	1.37	3.67	10.62	2.95	0.25	11.71	15.04	2.09	2.53	0.82	7.441	16.0	35.9	4.64	64.1
31.36	8.0	5.49	6.25	5.02	1.37	3.67	10.88	2.88	0.24	11.97	15.33	2.05	2.53	0.81	7.785	16.0	34.5	4.94	65.5
31.36	8.0	5.79	6.25	5.02	1.37	3.67	11.13	2.82	0.23	12.23	15.61	2.01	2.54	0.79	8.13	16.0	33.1	5.25	66.9
31.36	8.0	6.1	6.25	5.02	1.37	3.67	11.39	2.75	0.22	12.48	15.89	1.97	2.54	0.78	8.477	16.0	31.9	5.55	68.1
31.36	9.0	0.91	6.25	5.02	1.37	3.67	7.12	4.41	0.65	6.74	10.4	3.02	2.16	1.4	2.661	11.0	79.8	0.6	20.2
31.36	9.0	1.22	6.25	5.02	1.37	3.67	7.41	4.23	0.58	7.27	11.01	2.85	2.23	1.28	3.039	12.0	73.7	0.86	26.3
31.36	9.0	1.52	6.25	5.02	1.37	3.67	7.7	4.07	0.53	7.74	11.54	2.72	2.29	1.19	3.405	13.0	68.4	1.13	31.6
31.36	9.0	1.83	6.25	5.02	1.37	3.67	7.99	3.93	0.48	8.17	12.03	2.61	2.33	1.12	3.763	13.0	63.7	1.41	36.3

31.36	9.0	2.13	6.25	5.02	1.37	3.67	8.28	3.79	0.44	8.58	12.47	2.51	2.36	1.06	4.117	14.0	59.5	1.7	40.5
31.36	9.0	2.44	6.25	5.02	1.37	3.67	8.57	3.66	0.41	8.95	12.89	2.43	2.39	1.02	4.469	14.0	55.8	1.98	44.2
31.36	9.0	2.74	6.25	5.02	1.37	3.67	8.86	3.54	0.38	9.31	13.29	2.36	2.41	0.98	4.82	14.0	52.5	2.28	47.5
31.36	9.0	3.05	6.25	5.02	1.37	3.67	9.15	3.43	0.36	9.65	13.67	2.29	2.43	0.95	5.17	15.0	49.5	2.58	50.5
31.36	9.0	3.35	6.25	5.02	1.37	3.67	9.44	3.32	0.33	9.98	14.04	2.23	2.44	0.92	5.52	15.0	46.9	2.87	53.1
31.36	9.0	3.66	6.25	5.02	1.37	3.67	9.73	3.23	0.31	10.3	14.4	2.18	2.45	0.89	5.871	15.0	44.4	3.17	55.6
31.36	9.0	3.96	6.25	5.02	1.37	3.67	10.02	3.13	0.3	10.6	14.74	2.13	2.46	0.87	6.223	15.0	42.2	3.48	57.8
31.36	9.0	4.27	6.25	5.02	1.37	3.67	10.31	3.04	0.28	10.89	15.08	2.08	2.46	0.84	6.576	16.0	40.2	3.78	59.8
31.36	9.0	4.57	6.25	5.02	1.37	3.67	10.6	2.96	0.26	11.18	15.41	2.04	2.47	0.82	6.93	16.0	38.3	4.09	61.7
31.36	9.0	4.88	6.25	5.02	1.37	3.67	10.89	2.88	0.25	11.45	15.74	1.99	2.47	0.81	7.286	16.0	36.6	4.39	63.4
31.36	9.0	5.18	6.25	5.02	1.37	3.67	11.18	2.81	0.24	11.72	16.06	1.95	2.47	0.79	7.644	16.0	35.1	4.7	64.9
31.36	9.0	5.49	6.25	5.02	1.37	3.67	11.47	2.74	0.23	11.98	16.37	1.92	2.47	0.78	8.003	16.0	33.6	5.01	66.4
31.36	9.0	5.79	6.25	5.02	1.37	3.67	11.75	2.67	0.22	12.24	16.68	1.88	2.47	0.76	8.364	16.0	32.3	5.31	67.7
31.36	9.0	6.1	6.25	5.02	1.37	3.67	12.04	2.6	0.21	12.49	16.99	1.85	2.47	0.75	8.727	16.0	31.0	5.62	69.0
31.36	10.0	0.91	6.25	5.02	1.37	3.67	7.22	4.35	0.64	6.76	10.87	2.89	2.15	1.34	2.688	11.0	79.3	0.61	20.7
31.36	10.0	1.22	6.25	5.02	1.37	3.67	7.54	4.16	0.57	7.28	11.54	2.72	2.22	1.23	3.076	12.0	73.2	0.88	26.8
31.36	10.0	1.52	6.25	5.02	1.37	3.67	7.86	3.99	0.51	7.76	12.13	2.59	2.27	1.14	3.451	13.0	67.8	1.15	32.2
31.36	10.0	1.83	6.25	5.02	1.37	3.67	8.19	3.83	0.47	8.19	12.66	2.48	2.31	1.08	3.82	13.0	63.0	1.44	37.0
31.36	10.0	2.13	6.25	5.02	1.37	3.67	8.51	3.69	0.43	8.59	13.14	2.39	2.34	1.02	4.185	14.0	58.8	1.73	41.2
31.36	10.0	2.44	6.25	5.02	1.37	3.67	8.83	3.55	0.4	8.97	13.6	2.31	2.36	0.98	4.548	14.0	55.0	2.02	45.0
31.36	10.0	2.74	6.25	5.02	1.37	3.67	9.15	3.43	0.37	9.33	14.04	2.23	2.38	0.94	4.91	14.0	51.7	2.32	48.3
31.36	10.0	3.05	6.25	5.02	1.37	3.67	9.48	3.31	0.34	9.67	14.45	2.17	2.39	0.91	5.272	15.0	48.7	2.62	51.3
31.36	10.0	3.35	6.25	5.02	1.37	3.67	9.8	3.2	0.32	9.99	14.85	2.11	2.4	0.88	5.635	15.0	46.0	2.92	54.0
31.36	10.0	3.66	6.25	5.02	1.37	3.67	10.12	3.1	0.3	10.31	15.24	2.06	2.41	0.86	5.999	15.0	43.6	3.22	56.4

31.36	10.0	3.96	6.25	5.02	1.37	3.67	10.44	3.0	0.28	10.61	15.62	2.01	2.41	0.83	6.364	15.0	41.4	3.53	58.6
31.36	10.0	4.27	6.25	5.02	1.37	3.67	10.77	2.91	0.27	10.9	15.99	1.96	2.41	0.81	6.731	15.0	39.4	3.83	60.6
31.36	10.0	4.57	6.25	5.02	1.37	3.67	11.09	2.83	0.25	11.19	16.35	1.92	2.42	0.79	7.099	15.0	37.5	4.14	62.5
31.36	10.0	4.88	6.25	5.02	1.37	3.67	11.41	2.75	0.24	11.46	16.71	1.88	2.42	0.78	7.47	16.0	35.8	4.45	64.2
31.36	10.0	5.18	6.25	5.02	1.37	3.67	11.73	2.67	0.23	11.73	17.06	1.84	2.42	0.76	7.842	16.0	34.3	4.76	65.7
31.36	10.0	5.49	6.25	5.02	1.37	3.67	12.06	2.6	0.22	11.99	17.41	1.8	2.42	0.75	8.216	16.0	32.8	5.07	67.2
31.36	10.0	5.79	6.25	5.02	1.37	3.67	12.38	2.53	0.21	12.25	17.75	1.77	2.41	0.73	8.592	16.0	31.5	5.38	68.5
31.36	10.0	6.1	6.25	5.02	1.37	3.67	12.7	2.47	0.2	12.5	18.09	1.73	2.41	0.72	8.971	16.0	30.2	5.69	69.8
31.36	11.0	0.91	6.25	5.02	1.37	3.67	7.32	4.29	0.63	6.77	11.35	2.76	2.14	1.29	2.716	11.0	78.9	0.63	21.1
31.36	11.0	1.22	6.25	5.02	1.37	3.67	7.67	4.09	0.56	7.3	12.08	2.6	2.2	1.18	3.112	12.0	72.6	0.9	27.4
31.36	11.0	1.52	6.25	5.02	1.37	3.67	8.03	3.91	0.5	7.77	12.71	2.47	2.25	1.1	3.497	13.0	67.1	1.18	32.9
31.36	11.0	1.83	6.25	5.02	1.37	3.67	8.38	3.74	0.46	8.2	13.28	2.36	2.28	1.03	3.876	13.0	62.3	1.46	37.7
31.36	11.0	2.13	6.25	5.02	1.37	3.67	8.74	3.59	0.42	8.6	13.81	2.27	2.31	0.98	4.251	14.0	58.1	1.76	41.9
31.36	11.0	2.44	6.25	5.02	1.37	3.67	9.09	3.45	0.38	8.98	14.31	2.19	2.33	0.94	4.625	14.0	54.3	2.05	45.7
31.36	11.0	2.74	6.25	5.02	1.37	3.67	9.45	3.32	0.36	9.34	14.78	2.12	2.34	0.91	4.999	14.0	50.9	2.35	49.1
31.36	11.0	3.05	6.25	5.02	1.37	3.67	9.81	3.2	0.33	9.68	15.23	2.06	2.35	0.88	5.373	14.0	47.9	2.66	52.1
31.36	11.0	3.35	6.25	5.02	1.37	3.67	10.16	3.09	0.31	10.01	15.66	2.0	2.36	0.85	5.749	15.0	45.2	2.96	54.8
31.36	11.0	3.66	6.25	5.02	1.37	3.67	10.52	2.98	0.29	10.32	16.08	1.95	2.36	0.83	6.125	15.0	42.8	3.27	57.2
31.36	11.0	3.96	6.25	5.02	1.37	3.67	10.87	2.89	0.27	10.62	16.49	1.9	2.37	0.8	6.503	15.0	40.6	3.58	59.4
31.36	11.0	4.27	6.25	5.02	1.37	3.67	11.23	2.79	0.26	10.91	16.89	1.86	2.37	0.78	6.883	15.0	38.6	3.88	61.4
31.36	11.0	4.57	6.25	5.02	1.37	3.67	11.58	2.71	0.24	11.2	17.29	1.81	2.37	0.77	7.266	15.0	36.7	4.19	63.3
31.36	11.0	4.88	6.25	5.02	1.37	3.67	11.94	2.63	0.23	11.47	17.67	1.78	2.37	0.75	7.65	15.0	35.0	4.5	65.0
31.36	11.0	5.18	6.25	5.02	1.37	3.67	12.29	2.55	0.22	11.74	18.05	1.74	2.36	0.74	8.036	15.0	33.5	4.81	66.5
31.36	11.0	5.49	6.25	5.02	1.37	3.67	12.65	2.48	0.21	12.0	18.43	1.7	2.36	0.72	8.425	15.0	32.1	5.12	67.9

31.36	11.0	5.79	6.25	5.02	1.37	3.67	13.01	2.41	0.2	12.26	18.8	1.67	2.36	0.71	8.816	15.0	30.7	5.44	69.3
31.36	11.0	6.1	6.25	5.02	1.37	3.67	13.36	2.35	0.19	12.5	19.17	1.64	2.35	0.7	9.209	15.0	29.5	5.75	70.5
31.36	12.0	0.91	6.25	5.02	1.37	3.67	7.42	4.23	0.62	6.79	11.83	2.65	2.13	1.25	2.743	11.0	78.4	0.64	21.6
31.36	12.0	1.22	6.25	5.02	1.37	3.67	7.81	4.02	0.55	7.31	12.61	2.49	2.19	1.14	3.148	12.0	72.1	0.91	27.9
31.36	12.0	1.52	6.25	5.02	1.37	3.67	8.19	3.83	0.49	7.78	13.29	2.36	2.23	1.06	3.542	12.0	66.5	1.2	33.5
31.36	12.0	1.83	6.25	5.02	1.37	3.67	8.58	3.66	0.44	8.22	13.91	2.26	2.26	1.0	3.931	13.0	61.7	1.49	38.3
31.36	12.0	2.13	6.25	5.02	1.37	3.67	8.97	3.5	0.41	8.62	14.48	2.17	2.28	0.95	4.317	13.0	57.4	1.79	42.6
31.36	12.0	2.44	6.25	5.02	1.37	3.67	9.36	3.35	0.37	8.99	15.01	2.09	2.3	0.91	4.702	14.0	53.6	2.09	46.4
31.36	12.0	2.74	6.25	5.02	1.37	3.67	9.75	3.22	0.34	9.35	15.52	2.02	2.31	0.88	5.087	14.0	50.2	2.39	49.8
31.36	12.0	3.05	6.25	5.02	1.37	3.67	10.14	3.09	0.32	9.69	16.0	1.96	2.32	0.85	5.473	14.0	47.2	2.69	52.8
31.36	12.0	3.35	6.25	5.02	1.37	3.67	10.53	2.98	0.3	10.02	16.46	1.91	2.32	0.82	5.861	14.0	44.5	3.0	55.5
31.36	12.0	3.66	6.25	5.02	1.37	3.67	10.92	2.87	0.28	10.33	16.92	1.85	2.32	0.8	6.25	15.0	42.1	3.31	57.9
31.36	12.0	3.96	6.25	5.02	1.37	3.67	11.3	2.78	0.26	10.63	17.36	1.81	2.32	0.78	6.641	15.0	39.8	3.62	60.2
31.36	12.0	4.27	6.25	5.02	1.37	3.67	11.69	2.68	0.25	10.92	17.79	1.76	2.32	0.76	7.034	15.0	37.8	3.93	62.2
31.36	12.0	4.57	6.25	5.02	1.37	3.67	12.08	2.6	0.23	11.21	18.21	1.72	2.32	0.74	7.429	15.0	36.0	4.24	64.0
31.36	12.0	4.88	6.25	5.02	1.37	3.67	12.47	2.52	0.22	11.48	18.63	1.68	2.32	0.73	7.827	15.0	34.3	4.55	65.7
31.36	12.0	5.18	6.25	5.02	1.37	3.67	12.86	2.44	0.21	11.75	19.04	1.65	2.31	0.71	8.227	15.0	32.8	4.87	67.2
31.36	12.0	5.49	6.25	5.02	1.37	3.67	13.25	2.37	0.2	12.01	19.45	1.61	2.31	0.7	8.63	15.0	31.3	5.18	68.7
31.36	12.0	5.79	6.25	5.02	1.37	3.67	13.64	2.3	0.19	12.26	19.85	1.58	2.31	0.69	9.036	15.0	30.0	5.49	70.0
31.36	12.0	6.1	6.25	5.02	1.37	3.67	14.03	2.24	0.18	12.51	20.25	1.55	2.3	0.67	9.444	15.0	28.8	5.8	71.2
31.36	13.0	0.91	6.25	5.02	1.37	3.67	7.52	4.17	0.61	6.8	12.31	2.55	2.12	1.2	2.77	11.0	78.0	0.65	22.0
31.36	13.0	1.22	6.25	5.02	1.37	3.67	7.94	3.95	0.54	7.33	13.15	2.39	2.17	1.1	3.184	12.0	71.6	0.93	28.4
31.36	13.0	1.52	6.25	5.02	1.37	3.67	8.36	3.75	0.48	7.8	13.88	2.26	2.21	1.02	3.588	12.0	65.9	1.22	34.1
31.36	13.0	1.83	6.25	5.02	1.37	3.67	8.78	3.57	0.43	8.23	14.54	2.16	2.24	0.96	3.987	13.0	61.0	1.51	39.0

31.36	13.0	2.13	6.25	5.02	1.37	3.67	9.21	3.41	0.39	8.63	15.14	2.07	2.26	0.92	4.383	13.0	56.7	1.81	43.3
31.36	13.0	2.44	6.25	5.02	1.37	3.67	9.63	3.26	0.36	9.01	15.71	2.0	2.27	0.88	4.779	14.0	52.9	2.12	47.1
31.36	13.0	2.74	6.25	5.02	1.37	3.67	10.05	3.12	0.33	9.36	16.25	1.93	2.28	0.85	5.175	14.0	49.5	2.42	50.5
31.36	13.0	3.05	6.25	5.02	1.37	3.67	10.47	3.0	0.31	9.7	16.77	1.87	2.28	0.82	5.572	14.0	46.5	2.73	53.5
31.36	13.0	3.35	6.25	5.02	1.37	3.67	10.9	2.88	0.29	10.03	17.26	1.82	2.29	0.8	5.971	14.0	43.8	3.04	56.2
31.36	13.0	3.66	6.25	5.02	1.37	3.67	11.32	2.77	0.27	10.34	17.75	1.77	2.29	0.77	6.372	14.0	41.3	3.35	58.7
31.36	13.0	3.96	6.25	5.02	1.37	3.67	11.74	2.67	0.25	10.64	18.22	1.72	2.28	0.75	6.776	15.0	39.1	3.66	60.9
31.36	13.0	4.27	6.25	5.02	1.37	3.67	12.16	2.58	0.24	10.93	18.68	1.68	2.28	0.74	7.182	15.0	37.1	3.98	62.9
31.36	13.0	4.57	6.25	5.02	1.37	3.67	12.58	2.49	0.22	11.21	19.13	1.64	2.28	0.72	7.59	15.0	35.3	4.29	64.7
31.36	13.0	4.88	6.25	5.02	1.37	3.67	13.01	2.41	0.21	11.49	19.58	1.6	2.27	0.7	8.002	15.0	33.6	4.6	66.4
31.36	13.0	5.18	6.25	5.02	1.37	3.67	13.43	2.34	0.2	11.76	20.02	1.57	2.27	0.69	8.416	15.0	32.1	4.91	67.9
31.36	13.0	5.49	6.25	5.02	1.37	3.67	13.85	2.26	0.19	12.02	20.46	1.53	2.26	0.68	8.832	15.0	30.7	5.23	69.3
31.36	13.0	5.79	6.25	5.02	1.37	3.67	14.27	2.2	0.18	12.27	20.89	1.5	2.26	0.67	9.252	15.0	29.4	5.54	70.6
31.36	13.0	6.1	6.25	5.02	1.37	3.67	14.7	2.13	0.17	12.52	21.32	1.47	2.25	0.65	9.674	15.0	28.2	5.86	71.8
31.36	14.0	0.91	6.25	5.02	1.37	3.67	7.62	4.12	0.6	6.81	12.79	2.45	2.11	1.16	2.797	11.0	77.6	0.67	22.4
31.36	14.0	1.22	6.25	5.02	1.37	3.67	8.07	3.89	0.53	7.34	13.69	2.29	2.16	1.06	3.22	12.0	71.0	0.95	29.0
31.36	14.0	1.52	6.25	5.02	1.37	3.67	8.53	3.68	0.47	7.81	14.46	2.17	2.2	0.99	3.633	12.0	65.3	1.24	34.7
31.36	14.0	1.83	6.25	5.02	1.37	3.67	8.99	3.49	0.42	8.24	15.16	2.07	2.22	0.93	4.041	13.0	60.4	1.54	39.6
31.36	14.0	2.13	6.25	5.02	1.37	3.67	9.44	3.32	0.38	8.64	15.81	1.98	2.23	0.89	4.448	13.0	56.0	1.84	44.0
31.36	14.0	2.44	6.25	5.02	1.37	3.67	9.9	3.17	0.35	9.02	16.41	1.91	2.24	0.85	4.854	14.0	52.2	2.15	47.8
31.36	14.0	2.74	6.25	5.02	1.37	3.67	10.35	3.03	0.32	9.37	16.98	1.85	2.25	0.82	5.261	14.0	48.8	2.46	51.2
31.36	14.0	3.05	6.25	5.02	1.37	3.67	10.81	2.9	0.3	9.71	17.53	1.79	2.25	0.79	5.67	14.0	45.8	2.77	54.2
31.36	14.0	3.35	6.25	5.02	1.37	3.67	11.27	2.78	0.28	10.04	18.06	1.74	2.25	0.77	6.081	14.0	43.1	3.08	56.9
31.36	14.0	3.66	6.25	5.02	1.37	3.67	11.72	2.68	0.26	10.35	18.57	1.69	2.25	0.75	6.494	14.0	40.6	3.39	59.4

31.36	14.0	3.96	6.25	5.02	1.37	3.67	12.18	2.58	0.24	10.65	19.08	1.64	2.25	0.73	6.91	14.0	38.4	3.7	61.6
31.36	14.0	4.27	6.25	5.02	1.37	3.67	12.64	2.48	0.23	10.94	19.57	1.6	2.24	0.72	7.328	14.0	36.4	4.02	63.6
31.36	14.0	4.57	6.25	5.02	1.37	3.67	13.09	2.4	0.21	11.22	20.05	1.56	2.24	0.7	7.75	14.0	34.6	4.33	65.4
31.36	14.0	4.88	6.25	5.02	1.37	3.67	13.55	2.32	0.2	11.5	20.53	1.53	2.23	0.69	8.174	14.0	33.0	4.65	67.0
31.36	14.0	5.18	6.25	5.02	1.37	3.67	14.0	2.24	0.19	11.76	21.0	1.49	2.22	0.67	8.601	15.0	31.4	4.96	68.6
31.36	14.0	5.49	6.25	5.02	1.37	3.67	14.46	2.17	0.18	12.02	21.47	1.46	2.22	0.66	9.031	15.0	30.0	5.28	70.0
31.36	14.0	5.79	6.25	5.02	1.37	3.67	14.92	2.1	0.17	12.28	21.93	1.43	2.21	0.65	9.465	15.0	28.7	5.59	71.3
31.36	14.0	6.1	6.25	5.02	1.37	3.67	15.37	2.04	0.16	12.52	22.39	1.4	2.2	0.64	9.901	15.0	27.6	5.91	72.4
31.36	15.0	0.91	6.25	5.02	1.37	3.67	7.72	4.06	0.6	6.83	13.28	2.36	2.1	1.13	2.823	11.0	77.1	0.68	22.9
31.36	15.0	1.22	6.25	5.02	1.37	3.67	8.21	3.82	0.52	7.35	14.23	2.21	2.15	1.03	3.255	12.0	70.5	0.97	29.5
31.36	15.0	1.52	6.25	5.02	1.37	3.67	8.7	3.61	0.46	7.82	15.05	2.08	2.18	0.96	3.678	12.0	64.8	1.26	35.2
31.36	15.0	1.83	6.25	5.02	1.37	3.67	9.19	3.41	0.41	8.25	15.79	1.99	2.2	0.9	4.096	13.0	59.8	1.56	40.2
31.36	15.0	2.13	6.25	5.02	1.37	3.67	9.68	3.24	0.37	8.65	16.47	1.9	2.21	0.86	4.513	13.0	55.4	1.87	44.6
31.36	15.0	2.44	6.25	5.02	1.37	3.67	10.17	3.08	0.34	9.03	17.11	1.83	2.22	0.83	4.929	13.0	51.5	2.18	48.5
31.36	15.0	2.74	6.25	5.02	1.37	3.67	10.66	2.94	0.31	9.38	17.71	1.77	2.22	0.8	5.347	14.0	48.1	2.49	51.9
31.36	15.0	3.05	6.25	5.02	1.37	3.67	11.15	2.81	0.29	9.72	18.29	1.72	2.22	0.77	5.767	14.0	45.1	2.8	54.9
31.36	15.0	3.35	6.25	5.02	1.37	3.67	11.64	2.69	0.27	10.05	18.85	1.66	2.22	0.75	6.189	14.0	42.4	3.11	57.6
31.36	15.0	3.66	6.25	5.02	1.37	3.67	12.13	2.59	0.25	10.36	19.4	1.62	2.21	0.73	6.614	14.0	40.0	3.43	60.0
31.36	15.0	3.96	6.25	5.02	1.37	3.67	12.62	2.49	0.23	10.66	19.93	1.57	2.21	0.71	7.042	14.0	37.8	3.74	62.2
31.36	15.0	4.27	6.25	5.02	1.37	3.67	13.11	2.39	0.22	10.95	20.45	1.53	2.2	0.7	7.473	14.0	35.8	4.06	64.2
31.36	15.0	4.57	6.25	5.02	1.37	3.67	13.6	2.31	0.21	11.23	20.97	1.5	2.2	0.68	7.907	14.0	34.0	4.37	66.0
31.36	15.0	4.88	6.25	5.02	1.37	3.67	14.09	2.23	0.19	11.5	21.47	1.46	2.19	0.67	8.344	14.0	32.3	4.69	67.7
31.36	15.0	5.18	6.25	5.02	1.37	3.67	14.58	2.15	0.18	11.77	21.97	1.43	2.18	0.65	8.784	14.0	30.8	5.01	69.2
31.36	15.0	5.49	6.25	5.02	1.37	3.67	15.07	2.08	0.17	12.03	22.47	1.4	2.17	0.64	9.228	14.0	29.4	5.32	70.6

31.36	15.0	5.79	6.25	5.02	1.37	3.67	15.56	2.02	0.16	12.28	22.96	1.37	2.17	0.63	9.675	14.0	28.2	5.64	71.8
31.36	15.0	6.1	6.25	5.02	1.37	3.67	16.05	1.95	0.16	12.53	23.45	1.34	2.16	0.62	10.125	14.0	27.0	5.95	73.0
31.36	16.0	0.91	6.25	5.02	1.37	3.67	7.82	4.01	0.59	6.84	13.77	2.28	2.09	1.09	2.85	11.0	76.7	0.69	23.3
31.36	16.0	1.22	6.25	5.02	1.37	3.67	8.35	3.76	0.51	7.37	14.77	2.12	2.13	1.0	3.291	12.0	70.0	0.98	30.0
31.36	16.0	1.52	6.25	5.02	1.37	3.67	8.87	3.54	0.45	7.84	15.64	2.01	2.16	0.93	3.723	12.0	64.2	1.28	35.8
31.36	16.0	1.83	6.25	5.02	1.37	3.67	9.4	3.34	0.4	8.26	16.42	1.91	2.18	0.88	4.15	13.0	59.2	1.59	40.8
31.36	16.0	2.13	6.25	5.02	1.37	3.67	9.92	3.16	0.36	8.66	17.13	1.83	2.19	0.84	4.577	13.0	54.8	1.89	45.2
31.36	16.0	2.44	6.25	5.02	1.37	3.67	10.45	3.0	0.33	9.04	17.8	1.76	2.19	0.8	5.004	13.0	50.9	2.21	49.1
31.36	16.0	2.74	6.25	5.02	1.37	3.67	10.97	2.86	0.3	9.39	18.44	1.7	2.19	0.78	5.433	14.0	47.5	2.52	52.5
31.36	16.0	3.05	6.25	5.02	1.37	3.67	11.5	2.73	0.28	9.73	19.05	1.65	2.19	0.75	5.864	14.0	44.5	2.83	55.5
31.36	16.0	3.35	6.25	5.02	1.37	3.67	12.02	2.61	0.26	10.05	19.64	1.6	2.19	0.73	6.297	14.0	41.8	3.15	58.2
31.36	16.0	3.66	6.25	5.02	1.37	3.67	12.54	2.5	0.24	10.36	20.22	1.55	2.18	0.71	6.734	14.0	39.3	3.46	60.7
31.36	16.0	3.96	6.25	5.02	1.37	3.67	13.07	2.4	0.22	10.66	20.78	1.51	2.17	0.69	7.173	14.0	37.2	3.78	62.8
31.36	16.0	4.27	6.25	5.02	1.37	3.67	13.59	2.31	0.21	10.95	21.33	1.47	2.17	0.68	7.616	14.0	35.2	4.1	64.8
31.36	16.0	4.57	6.25	5.02	1.37	3.67	14.12	2.22	0.2	11.24	21.88	1.43	2.16	0.66	8.063	14.0	33.4	4.41	66.6
31.36	16.0	4.88	6.25	5.02	1.37	3.67	14.64	2.14	0.19	11.51	22.41	1.4	2.15	0.65	8.512	14.0	31.7	4.73	68.3
31.36	16.0	5.18	6.25	5.02	1.37	3.67	15.17	2.07	0.18	11.77	22.95	1.37	2.14	0.64	8.966	14.0	30.2	5.05	69.8
31.36	16.0	5.49	6.25	5.02	1.37	3.67	15.69	2.0	0.17	12.03	23.47	1.34	2.13	0.63	9.422	14.0	28.9	5.36	71.1
31.36	16.0	5.79	6.25	5.02	1.37	3.67	16.22	1.93	0.16	12.29	24.0	1.31	2.12	0.62	9.882	14.0	27.6	5.68	72.4
31.36	16.0	6.1	6.25	5.02	1.37	3.67	16.74	1.87	0.15	12.53	24.51	1.28	2.11	0.61	10.346	14.0	26.4	6.0	73.6
31.36	17.0	0.91	6.25	5.02	1.37	3.67	7.93	3.96	0.58	6.85	14.26	2.2	2.08	1.06	2.877	11.0	76.3	0.7	23.7
31.36	17.0	1.22	6.25	5.02	1.37	3.67	8.49	3.7	0.5	7.38	15.32	2.05	2.12	0.97	3.326	12.0	69.5	1.0	30.5
31.36	17.0	1.52	6.25	5.02	1.37	3.67	9.05	3.47	0.44	7.85	16.23	1.93	2.14	0.9	3.767	12.0	63.6	1.3	36.4
31.36	17.0	1.83	6.25	5.02	1.37	3.67	9.61	3.27	0.39	8.28	17.04	1.84	2.16	0.85	4.204	13.0	58.6	1.61	41.4

31.36	17.0	2.13	6.25	5.02	1.37	3.67	10.16	3.09	0.36	8.67	17.8	1.76	2.16	0.81	4.641	13.0	54.2	1.92	45.8
31.36	17.0	2.44	6.25	5.02	1.37	3.67	10.72	2.93	0.32	9.05	18.5	1.7	2.17	0.78	5.078	13.0	50.3	2.23	49.7
31.36	17.0	2.74	6.25	5.02	1.37	3.67	11.28	2.78	0.3	9.4	19.17	1.64	2.16	0.76	5.518	13.0	46.9	2.55	53.1
31.36	17.0	3.05	6.25	5.02	1.37	3.67	11.84	2.65	0.27	9.74	19.81	1.58	2.16	0.73	5.959	14.0	43.8	2.87	56.2
31.36	17.0	3.35	6.25	5.02	1.37	3.67	12.4	2.53	0.25	10.06	20.43	1.54	2.15	0.71	6.404	14.0	41.1	3.18	58.9
31.36	17.0	3.66	6.25	5.02	1.37	3.67	12.96	2.42	0.23	10.37	21.04	1.49	2.15	0.69	6.852	14.0	38.7	3.5	61.3
31.36	17.0	3.96	6.25	5.02	1.37	3.67	13.52	2.32	0.22	10.67	21.63	1.45	2.14	0.68	7.303	14.0	36.6	3.82	63.4
31.36	17.0	4.27	6.25	5.02	1.37	3.67	14.08	2.23	0.2	10.96	22.21	1.41	2.13	0.66	7.758	14.0	34.6	4.14	65.4
31.36	17.0	4.57	6.25	5.02	1.37	3.67	14.64	2.14	0.19	11.24	22.79	1.38	2.12	0.65	8.217	14.0	32.8	4.45	67.2
31.36	17.0	4.88	6.25	5.02	1.37	3.67	15.2	2.06	0.18	11.51	23.36	1.34	2.11	0.64	8.679	14.0	31.2	4.77	68.8
31.36	17.0	5.18	6.25	5.02	1.37	3.67	15.76	1.99	0.17	11.78	23.92	1.31	2.1	0.62	9.145	14.0	29.7	5.09	70.3
31.36	17.0	5.49	6.25	5.02	1.37	3.67	16.32	1.92	0.16	12.04	24.47	1.28	2.09	0.61	9.614	14.0	28.3	5.41	71.7
31.36	17.0	5.79	6.25	5.02	1.37	3.67	16.88	1.86	0.15	12.29	25.03	1.25	2.08	0.6	10.087	14.0	27.1	5.72	72.9
31.36	17.0	6.1	6.25	5.02	1.37	3.67	17.44	1.8	0.14	12.54	25.58	1.23	2.07	0.59	10.564	14.0	25.9	6.04	74.1
31.36	18.0	0.91	6.25	5.02	1.37	3.67	8.03	3.91	0.57	6.86	14.76	2.13	2.07	1.03	2.904	11.0	75.8	0.72	24.2
31.36	18.0	1.22	6.25	5.02	1.37	3.67	8.63	3.64	0.49	7.39	15.87	1.98	2.11	0.94	3.362	12.0	69.0	1.01	31.0
31.36	18.0	1.52	6.25	5.02	1.37	3.67	9.22	3.4	0.43	7.86	16.82	1.87	2.13	0.88	3.812	12.0	63.1	1.32	36.9
31.36	18.0	1.83	6.25	5.02	1.37	3.67	9.82	3.2	0.39	8.29	17.67	1.78	2.14	0.83	4.258	13.0	58.0	1.63	42.0
31.36	18.0	2.13	6.25	5.02	1.37	3.67	10.41	3.01	0.35	8.68	18.46	1.7	2.14	0.79	4.705	13.0	53.6	1.95	46.4
31.36	18.0	2.44	6.25	5.02	1.37	3.67	11.0	2.85	0.31	9.06	19.2	1.63	2.14	0.76	5.152	13.0	49.7	2.26	50.3
31.36	18.0	2.74	6.25	5.02	1.37	3.67	11.6	2.7	0.29	9.41	19.9	1.58	2.14	0.74	5.602	13.0	46.3	2.58	53.7
31.36	18.0	3.05	6.25	5.02	1.37	3.67	12.19	2.57	0.26	9.75	20.57	1.52	2.13	0.72	6.055	13.0	43.2	2.9	56.8
31.36	18.0	3.35	6.25	5.02	1.37	3.67	12.79	2.45	0.24	10.07	21.22	1.48	2.12	0.7	6.51	13.0	40.6	3.21	59.4
31.36	18.0	3.66	6.25	5.02	1.37	3.67	13.38	2.34	0.23	10.38	21.86	1.44	2.12	0.68	6.97	14.0	38.1	3.53	61.9

31.36	18.0	3.96	6.25	5.02	1.37	3.67	13.98	2.24	0.21	10.68	22.48	1.4	2.11	0.66	7.433	14.0	36.0	3.85	64.0
31.36	18.0	4.27	6.25	5.02	1.37	3.67	14.57	2.15	0.2	10.97	23.1	1.36	2.1	0.65	7.899	14.0	34.0	4.17	66.0
31.36	18.0	4.57	6.25	5.02	1.37	3.67	15.17	2.07	0.18	11.25	23.7	1.32	2.09	0.63	8.37	14.0	32.3	4.49	67.7
31.36	18.0	4.88	6.25	5.02	1.37	3.67	15.76	1.99	0.17	11.52	24.3	1.29	2.08	0.62	8.844	14.0	30.6	4.81	69.4
31.36	18.0	5.18	6.25	5.02	1.37	3.67	16.35	1.92	0.16	11.79	24.89	1.26	2.07	0.61	9.323	14.0	29.2	5.13	70.8
31.36	18.0	5.49	6.25	5.02	1.37	3.67	16.95	1.85	0.15	12.04	25.48	1.23	2.06	0.6	9.805	14.0	27.8	5.44	72.2
31.36	18.0	5.79	6.25	5.02	1.37	3.67	17.54	1.79	0.15	12.3	26.06	1.2	2.05	0.59	10.291	14.0	26.6	5.76	73.4
31.36	18.0	6.1	6.25	5.02	1.37	3.67	18.14	1.73	0.14	12.54	26.64	1.18	2.03	0.58	10.78	14.0	25.4	6.08	74.6
31.36	19.0	0.91	6.25	5.02	1.37	3.67	8.14	3.85	0.56	6.88	15.27	2.06	2.06	1.0	2.931	11.0	75.4	0.73	24.6
31.36	19.0	1.22	6.25	5.02	1.37	3.67	8.77	3.58	0.48	7.4	16.42	1.91	2.09	0.91	3.397	12.0	68.5	1.03	31.5
31.36	19.0	1.52	6.25	5.02	1.37	3.67	9.4	3.34	0.42	7.87	17.41	1.8	2.11	0.85	3.856	12.0	62.6	1.34	37.4
31.36	19.0	1.83	6.25	5.02	1.37	3.67	10.03	3.13	0.38	8.3	18.31	1.71	2.12	0.81	4.312	13.0	57.4	1.65	42.6
31.36	19.0	2.13	6.25	5.02	1.37	3.67	10.66	2.94	0.34	8.69	19.13	1.64	2.12	0.77	4.768	13.0	53.0	1.97	47.0
31.36	19.0	2.44	6.25	5.02	1.37	3.67	11.29	2.78	0.31	9.07	19.89	1.58	2.12	0.74	5.226	13.0	49.1	2.29	50.9
31.36	19.0	2.74	6.25	5.02	1.37	3.67	11.92	2.63	0.28	9.42	20.63	1.52	2.11	0.72	5.686	13.0	45.7	2.61	54.3
31.36	19.0	3.05	6.25	5.02	1.37	3.67	12.55	2.5	0.26	9.75	21.33	1.47	2.1	0.7	6.149	13.0	42.7	2.93	57.3
31.36	19.0	3.35	6.25	5.02	1.37	3.67	13.18	2.38	0.24	10.08	22.01	1.42	2.1	0.68	6.616	13.0	40.0	3.25	60.0
31.36	19.0	3.66	6.25	5.02	1.37	3.67	13.81	2.27	0.22	10.39	22.68	1.38	2.09	0.66	7.087	13.0	37.6	3.57	62.4
31.36	19.0	3.96	6.25	5.02	1.37	3.67	14.44	2.17	0.2	10.68	23.33	1.34	2.08	0.65	7.561	13.0	35.4	3.89	64.6
31.36	19.0	4.27	6.25	5.02	1.37	3.67	15.07	2.08	0.19	10.97	23.98	1.31	2.06	0.63	8.039	13.0	33.5	4.21	66.5
31.36	19.0	4.57	6.25	5.02	1.37	3.67	15.7	2.0	0.18	11.25	24.61	1.27	2.05	0.62	8.522	13.0	31.7	4.53	68.3
31.36	19.0	4.88	6.25	5.02	1.37	3.67	16.33	1.92	0.17	11.52	25.24	1.24	2.04	0.61	9.008	13.0	30.1	4.84	69.9
31.36	19.0	5.18	6.25	5.02	1.37	3.67	16.96	1.85	0.16	11.79	25.86	1.21	2.03	0.6	9.499	13.0	28.7	5.16	71.3
31.36	19.0	5.49	6.25	5.02	1.37	3.67	17.59	1.78	0.15	12.05	26.48	1.18	2.02	0.59	9.993	13.0	27.3	5.48	72.7

31.36	19.0	5.79	6.25	5.02	1.37	3.67	18.22	1.72	0.14	12.3	27.1	1.16	2.01	0.58	10.492	13.0	26.1	5.8	73.9
31.36	19.0	6.1	6.25	5.02	1.37	3.67	18.85	1.66	0.13	12.55	27.71	1.13	2.0	0.57	10.995	13.0	24.9	6.12	75.1
31.36	20.0	0.91	6.25	5.02	1.37	3.67	8.25	3.8	0.55	6.89	15.77	1.99	2.05	0.97	2.958	11.0	75.0	0.74	25.0
31.36	20.0	1.22	6.25	5.02	1.37	3.67	8.91	3.52	0.48	7.41	16.98	1.85	2.08	0.89	3.433	12.0	68.0	1.05	32.0
31.36	20.0	1.52	6.25	5.02	1.37	3.67	9.58	3.28	0.42	7.88	18.01	1.74	2.09	0.83	3.901	12.0	62.0	1.36	38.0
31.36	20.0	1.83	6.25	5.02	1.37	3.67	10.24	3.06	0.37	8.31	18.94	1.66	2.1	0.79	4.366	12.0	56.9	1.68	43.1
31.36	20.0	2.13	6.25	5.02	1.37	3.67	10.91	2.88	0.33	8.7	19.79	1.58	2.1	0.76	4.832	13.0	52.4	1.99	47.6
31.36	20.0	2.44	6.25	5.02	1.37	3.67	11.58	2.71	0.3	9.07	20.59	1.52	2.09	0.73	5.3	13.0	48.5	2.31	51.5
31.36	20.0	2.74	6.25	5.02	1.37	3.67	12.24	2.56	0.27	9.43	21.36	1.47	2.09	0.7	5.77	13.0	45.1	2.63	54.9
31.36	20.0	3.05	6.25	5.02	1.37	3.67	12.91	2.43	0.25	9.76	22.09	1.42	2.08	0.68	6.244	13.0	42.1	2.96	57.9
31.36	20.0	3.35	6.25	5.02	1.37	3.67	13.57	2.31	0.23	10.08	22.81	1.38	2.07	0.67	6.721	13.0	39.4	3.28	60.6
31.36	20.0	3.66	6.25	5.02	1.37	3.67	14.24	2.2	0.21	10.39	23.5	1.33	2.06	0.65	7.203	13.0	37.0	3.6	63.0
31.36	20.0	3.96	6.25	5.02	1.37	3.67	14.91	2.1	0.2	10.69	24.19	1.3	2.04	0.63	7.689	13.0	34.9	3.92	65.1
31.36	20.0	4.27	6.25	5.02	1.37	3.67	15.57	2.01	0.18	10.98	24.86	1.26	2.03	0.62	8.179	13.0	32.9	4.24	67.1
31.36	20.0	4.57	6.25	5.02	1.37	3.67	16.24	1.93	0.17	11.26	25.53	1.23	2.02	0.61	8.673	13.0	31.2	4.56	68.8
31.36	20.0	4.88	6.25	5.02	1.37	3.67	16.9	1.86	0.16	11.53	26.19	1.2	2.01	0.6	9.171	13.0	29.6	4.88	70.4
31.36	20.0	5.18	6.25	5.02	1.37	3.67	17.57	1.79	0.15	11.79	26.84	1.17	2.0	0.59	9.674	13.0	28.2	5.2	71.8
31.36	20.0	5.49	6.25	5.02	1.37	3.67	18.23	1.72	0.14	12.05	27.49	1.14	1.99	0.57	10.181	13.0	26.8	5.52	73.2
31.36	20.0	5.79	6.25	5.02	1.37	3.67	18.9	1.66	0.14	12.3	28.14	1.11	1.97	0.56	10.692	13.0	25.6	5.84	74.4
31.36	20.0	6.1	6.25	5.02	1.37	3.67	19.57	1.6	0.13	12.55	28.78	1.09	1.96	0.56	11.207	13.0	24.5	6.16	75.5

Printing Basin Selection Data.....

Parmeter Name	Unit	Values
Discharge/ft	cfs/ft	54.008
Flare Angle	Degree	8.0
Glasis_Drop	Feet	13.0
Exit Velocity	Feet/sec	2.96
Fr1		6.08
Jump_Length	Feet	49.72
Energy Loss(%)	%	56.9
Floor Length	Feet	212.0
Point_1	Feet	0.0
Point_2	Feet	94.0
Point_3	Feet	118.0
Point_4	Feet	212.0

Printing Seepage Calculation Data.....

locations	uncorrected	mc_corr	t_corr	corrected
Phi_E	26.99	-0.9542685777098892	0.63	27.32
Phi_C1	73.01	0.9542685777098892	0.63	74.59

Printing thickness calcualtion data.....

location	p(%)	p(feet)	th_min(feet)
1.0	74.59	4.48	0.0
2.0	53.63	3.22	0.0
3.0	48.28	2.9	2.07
4.0	27.32	1.64	1.17

Printing Input Data for Load Calculations.....

Parameter Name	Unit	Parameter Value	Detail Name
VW	feet	5.0	Vent Inner Span/width
VH	feet	6.0	Vent Height
NV	nos	3.0	No of Vents
Tt	inch	12.0	Top Slab thicjness
Ts	inch	18.0	Abutmet Thicknes
Tb	inch	25.0	Bottom Slab Thicknes
Tp	inch	15.0	Pier Thicknes
gamma_s	pcf	120.0	Soil Fill Unit Wieght
phi	degree	30.0	friction angle of back fill soil
H	feet	6.0	Height of srcharge above pier
MPF	unitless	1.2	Multiple Presnce Factor
IM	unitless	1.3	Impact factor for Dynamic Loading
INVERT_LEVEL	ft-pwd	-5.0	Invert Level of Regulator
EMBANKMENT_CREST_LEVEL	ft-pwd	19.0	Emnakment Crest Level
h_prime	ft	3.0	Additional Surcharge load above Embankemt

Printing Barrel Load.....

Notations	LoadName	LoadUnits	LoadType	Load_Value_Maximum	Load_Value_Minimum
TSL	Load on Top Slab	klf	UDL	-2.228	-2.228
BSL	Load on Bottom Slab	klf	UDL	2.47	2.47
SWL+	Load on Left Side Wall	klf	Trapizoidal	1.26	1.7125
SWL(-)	Load on Right Side Wall	klf	Trapizoidal	-1.26	-1.7125