Permit No.	Date	DIN
1812	**February 4, 2011**	**12848**

RECEIVED
February 3, 2011
Solid Waste Section
Asheville Regional Office

S&ME

JOB NO. 1356-08-122

SHEET NO. 1 / 10

DATE 1/28/2011

JOB NAME Duke Energy - Marshall Steam Station Industrial Landfill No. 1

COMPUTED BY WMH

SUBJECT Leachate Force Main

CHECKED BY CR

APPROVED DOCUMENT
Division of Waste Management
Solid Waste Section
Date **March 7, 2011** By **LY Frost**

COMPUTATIONS BY:

Signature [signature] Date 1-28-2011

Name William Harrison, E.I.

Title Staff Professional

ASSUMPTIONS AND PROCEDURES CHECKED BY:

Signature [signature] Date 1/28/11

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COMPUTATIONS CHECKED BY:

Signature [signature] Date 1.28.11

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Title Project Engineer

SENIOR REVIEWED BY:

Signature [signature] Date 1-28-11

Name Jason Reeves, P.E.

Title Senior Project Engineer

REVIEW NOTES / COMMENTS: Revised January 28, 2011 to include modified pump on/off values as well as include provisions for modeling the effect of a pressure break valve and include the case where Cells 1 and 2 will be operational at the same time.

OBJECTIVE:

Evaluate the leachate force main for anticipated average daily leachate generation conditions and the anticipated leachate generation from the 25-year leachate generation condition. Check that the pumps are sufficiently sized to convey anticipated flow from the 25-year leachate generation condition such that, in each sump, head on the liner system is drawn down to less than 1 foot within 72 hours in accordance with NC Solid Waste Regulations.

METHOD:

The US Environmental Protection Agency's EPANET version 2.0 software was used to model the leachate force main for various pumping conditions.

CALCULATIONS:

1. Describe leachate force main configuration

The proposed landfill will consist of thirteen doubly-lined cells to be constructed in five phases. Phase 1 will consist of cells 1 through 4; Phase 2 will consist of cells 5 and 6; Phase 3 will consist of cells 7 and 8; Phase 4 will consist of cells 9 and 10; and Phase 5 will consist of cells 11 through 13. Leachate from Cells 1, 2, 5, 7, 9, and 11 will be routed clockwise along the eastern side of the landfill; and leachate from Cells 3, 4, 6, 8, 10, 12, and 13 will be routed counterclockwise along the western side of the landfill, ultimately discharging into an active ash basin to the south of the proposed landfill. The generalized landfill phasing and force main layout are shown in Figure 1.

Leachate will be removed from the landfill cells via a leachate collection system (LCS) and a leak detection system (LDS). The LCS will be located on top of the primary geomembrane and will include a low-flow pump for typical leachate generation conditions and a high-flow pump to be activated during storm events. The LDS will be located between the primary and secondary geomembranes and will include a low-flow pump.

Flow from the pumps will be conveyed through pump discharge lines to a leachate manifold. The pump discharge lines will consist of HDPE pipe, 4 inches in diameter for the high flow pump and 2 inches in diameter for the low flow pump. The leachate manifold will consist of HDPE pipe 6 inches in diameter. Head losses from pipe fittings were assumed to be insignificant compared to the major losses through the pipe; therefore minor losses were not modeled.

2. Describe sequencing of landfilling operations

The sequencing of landfilling operations will influence the amount and peak rates of leachate generated. Each cell was evaluated for four cases, Cases 1 through 4, representing stages in the landfill life cycle. Case 1 consists of the newly constructed cell before waste placement; Case 2 consists of the cell with 10 feet of ash waste placed; Case 3 consists of a cell with 80 feet of ash waste placed; and Case 4 consists of a fully filled cell which has been capped with a geosynthetic cover system. The assumed landfilling sequence is presented below in Table 1. Note that Sequence 2A represents the scenario where both Cells 1 and 2 are open at the same time.

TABLE 1: LANDFILL CONSTRUCTION SEQUENCING

Sequence	Phase	Cells in Case 1 (no waste)	Cells in Case 2 (10 feet of waste)	Cells in Case 3 (80 feet of waste)	Cells in Case 4 (closed cell)
1	1	1			
2	1	2	1		
2A	1	1,2			
3	1	3		1, 2	
4	1	4	3	1, 2	
5	2	5		1, 2, 3, 4	
6	2	6	5	1, 2, 3, 4	
7	3	7		5, 6	1, 2, 3, 4
8	3	8	7	5, 6	1, 2, 3, 4
9	4	9		5, 6, 7, 8	1, 2, 3, 4
10	4	10	9	7, 8	1, 2, 3, 4, 5, 6
11	5	11		7, 8, 9, 10	1, 2, 3, 4, 5, 6
12	5	12	11	9, 10	1, 2, 3, 4, 5, 6, 7, 8
13	5	13		9, 10, 11, 12	1, 2, 3, 4, 5, 6, 7, 8
14	5		13	11, 12	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
15	5			11, 12, 13	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
16	5				1, 2, 3, 4, 5, 6, 7, 8, 9,

3. Estimate leachate generation rates

For each sequence, the leachate pumps and forcemains will be modeled for average leachate generation conditions and the 25-year leachate generation condition over a period of 72 hours. Leachate generation rates were estimated using HELP software and PondPack software.

HELP software was used to calculate peak and average leachate generation rates for LDS Cases 1 through 4 and for LCS Cases 2 through 4 over a 25-year period as described in Reference 3. The peak leachate generation rate was assumed to correspond with the 25-year leachate generation condition. Runoff was assumed to infiltrate through the waste mass at a constant rate, therefore the leachate generation was assumed to be constant for each time increment in the analysis.

Because the LCS open cell condition (case 1) is expected to behave more like a small watershed, PondPack storm water modeling software (Reference 1) was used to calculate a runoff distribution for the 25-year storm event (5.82 inches of rainfall over 24 hours). The runoff distribution for each cell is described in Reference 1 as a table of hydrograph ordinates with respect to time. A curve number of 98 was used for the open cells in sequences modeled except for sequence 2A, which represents 2 cells open at the same time, where a curve number of 82 was used to account for the likely presence of vegetated cover. Leachate generation rates for the 25-year leachate generation condition for case 1 are summarized in Table 2 below.

TABLE 2: LEACHATE GENERATION RATES FOR THE 25-YEAR CONDITION

Case	Description	25-Year Leachate Generation in the LCS System (gpad)	25-Year Leachate Generation in the LDS System (gpad)
1	Open Landfill (no waste)	runoff distribution (see Reference 1)	291.4
2	10 feet of waste	1,103.3	279.4
3	80 feet of waste	828.0	237.1
4	Closed Cell	0.0	0.1

HELP leachate modeling software was used to calculate average daily leachate generation in the LCS and LDS systems over a 25-year period as described in Reference 3. Runoff was assumed to infiltrate through the waste mass at a constant rate; therefore, the leachate generation was assumed to be constant for each time increment in the analysis. The average daily leachate generation rates were used during the EPANET analyses for the average daily condition and are summarized in Table 3 below.

TABLE 3: LEACHATE GENERATION RATES FOR THE AVERAGE DAILY CONDITION

Case	Description	Average Daily Flow in the LCS System (gpad)	Average Daily Flow in the LDS System (gpad)
1	Open Landfill (no waste)	1,177.6	44.12
2	10 feet of waste	277.6	124.41
3	80 feet of waste	110.9	68.11
4	Closed Cell	0.0	0.01

The estimated leachate generation rates for each cell for the 25-year leachate generation condition and average daily conditions are summarized in Tables 4 and 5 below.

S&ME

JOB NO.	1356-08-122
SHEET NO.	6 / 10
DATE	1/28/2011
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JOB NAME Duke Energy - Marshall Steam Station Industrial Landfill No. 1

SUBJECT Leachate Force Main

TABLE 4: CELL AREAS AND LEACHATE GENERATION RATES - LCS SYSTEM

Cell	Area (acres)	25 Year Leachate Generation Condition							
		LCS				LDS			
		Case 1 no waste (gpm)	Case 2 10 ft of waste (gpm)	Case 3 80 ft of waste (gpm)	Case 4 closed cell (gpm)	Case 1 no waste (gpm)	Case 2 10 ft of waste (gpm)	Case 3 80 ft of waste (gpm)	Case 4 closed cell (gpm)
1	9.90	PondPack	7.6	5.7	0.0	2.0	1.9	1.6	0.0
2	9.65	PondPack	7.4	5.5	0.0	2.0	1.9	1.6	0.0
3	7.21	PondPack	5.5	4.1	0.0	1.5	1.4	1.2	0.0
4	9.13	PondPack	7.0	5.2	0.0	1.8	1.8	1.5	0.0
5	8.71	PondPack	6.7	5.0	0.0	1.8	1.7	1.4	0.0
6	9.04	PondPack	6.9	5.2	0.0	1.8	1.8	1.5	0.0
7	8.19	PondPack	6.3	4.7	0.0	1.7	1.6	1.3	0.0
8	8.45	PondPack	6.5	4.9	0.0	1.7	1.6	1.4	0.0
9	7.35	PondPack	5.6	4.2	0.0	1.5	1.4	1.2	0.0
10	7.23	PondPack	5.5	4.2	0.0	1.5	1.4	1.2	0.0
11	6.68	PondPack	5.1	3.8	0.0	1.4	1.3	1.1	0.0
12	6.66	PondPack	5.1	3.8	0.0	1.3	1.3	1.1	0.0
13	5.17	PondPack	4.0	3.0	0.0	1.0	1.0	0.9	0.0

TABLE 5: CELL AREAS AND LEACHATE GENERATION RATES - LCS SYSTEM

Cell	Area (acres)	Average Daily Flow							
		LCS				LDS			
		Case 1 no waste (gpm)	Case 2 10 ft of waste (gpm)	Case 3 80 ft of waste (gpm)	Case 4 closed cell (gpm)	Case 1 no waste (gpm)	Case 2 10 ft of waste (gpm)	Case 3 80 ft of waste (gpm)	Case 4 closed cell (gpm)
1	9.90	8.1	1.9	0.8	0.0	0.3	0.9	0.5	0.0
2	9.65	7.9	1.9	0.7	0.0	0.3	0.8	0.5	0.0
3	7.21	5.9	1.4	0.6	0.0	0.2	0.6	0.3	0.0
4	9.13	7.5	1.8	0.7	0.0	0.3	0.8	0.4	0.0
5	8.71	7.1	1.7	0.7	0.0	0.3	0.8	0.4	0.0
6	9.04	7.4	1.7	0.7	0.0	0.3	0.8	0.4	0.0
7	8.19	6.7	1.6	0.6	0.0	0.3	0.7	0.4	0.0
8	8.45	6.9	1.6	0.7	0.0	0.3	0.7	0.4	0.0
9	7.35	6.0	1.4	0.6	0.0	0.2	0.6	0.3	0.0
10	7.23	5.9	1.4	0.6	0.0	0.2	0.6	0.3	0.0
11	6.68	5.5	1.3	0.5	0.0	0.2	0.6	0.3	0.0
12	6.66	5.4	1.3	0.5	0.0	0.2	0.6	0.3	0.0
13	5.17	4.2	1.0	0.4	0.0	0.2	0.4	0.2	0.0

4. Estimate cell and sump stage-storage relationships

Using the details and cell contours as shown in the construction drawings, the average area method was used to generate a stage-storage relationship for the typical LCS and LDS sump and for each cell. The cumulative storage volume was calculated using equation 1:

$$total\ storage\ volume = volume_{n-1} + \frac{Area_n + Area_{n-1}}{2}\left(Elevation_n - Elevation_{n-1}\right) \qquad \text{(Equation 1)}$$

An average porosity of 0.3 was assumed for fill in the sump, cover soil, and ash waste fill. Case 1 assumes newly constructed, open cell conditions; thus the total cell storage volume was used during Case 1 analyses. Cases 2 through 4 assume cell conditions during landfill operations, thus the total cell storage volume was multiplied by 0.3 for analyses of Cases 2 through 4. The stage storage relationships for each cell by Case are shown in Attachment 1.

5. Define pumps and pump controls

Each cell will include an LCS sump and an LDS sump. A low-flow pump will be installed in the LDS sump, and a low-flow and a high-flow pump will be installed in the LCS sump. The low-flow pumps will consist of a GunnCo Sidesloper pump Model P2K-40-2 with a pump curve as shown in Reference 2. The low-flow pumps will be controlled by a liquid level transducer that will turn the pump on when the head in the sump reaches 2.0 feet and off when the head reaches 1.0 foot.

The high-flow pumps will consist of a GunnCo Sidesloper pump Model 385-S75-1 with a pump curve as shown in Reference 2. The high-flow pumps will be controlled by a liquid level transducer that will turn the pump on when the head in the sump reaches 3.8 feet and off when the head in the sump reaches 2.3 feet.

6. Model the 25-year, 24-hour storm event

The EPANET 2 program was used to model the proposed leachate force main configuration for each Sequence over a 72-hour period, assuming 25-year leachate generation condition begins at hour 0. A force main layout schematic and EPANET 2 inputs used during analysis are presented in Attachment 2. During the simulation, node pressures, pipe flow velocities, and head within the sumps were recorded for comparison with NC Solid Waste Regulations.

Graphs of head within the sumps from the 25-year leachate generation condition are shown in Attachment 3. The head within each LDS sump increases at a linear rate until two feet of head is reached, at which point the low-flow pump is activated and the head is lowered to one foot. The head within each LCS sump has an irregular shape due to non-linear cell volumes, non-linear leachate supply curves, and pumping conditions. Drawdown from the 25-year leachate generation condition is presented in Table 6 below.

TABLE 6: DRAWDOWN SUMMARY FOR THE 25 YEAR LEACHATE GENERATION CONDITION						
Cell	Critical Sequence	Sump Elevation (feet)	Berm Elevation (feet)	Maximum Water Surface Elevation (feet)	Freeboard (feet)	Drawdown Time to One Foot of Head (hours)
1	1(2A)*	846.5	857	855.7(855.3)*	1.3(1.7)*	51(67)*
2	2(2A)*	847.5	858	856.2(855.7)*	1.8(2.3)*	50(63)*
3	3	853.5	862	859.4	2.60	40
4	4	849.5	858	856.3	1.70	51
5	5	837.5	848	846.2	1.80	47
6	6	837.5	846	845.5	0.50	50
7	7	835.5	848	843.5	4.50	45
8	8	833.5	842	841.7	0.30	46
9	9	831.5	842	839.4	2.60	41
10	10	831.5	840	839.1	0.90	41
11	11	829.5	840	837.4	2.60	37
12	12	829.5	838	837.2	0.80	38
13	13	815.5	832	821.1	10.90	33

*For Cells 1 and 2, Sequence 2A yielded the longest estimated drawdown times.

Flow velocities in the 6-inch diameter force mains range from approximately 0.7 to 8 ft/s. Pressures range from approximately 20 to -50 psi at node locations. Pressure break valves should be located to eliminate negative pressure head in the system and prevent siphoning of the sumps. Sequence 2A accounts for the effect of a pressure break valve during pumping in that the force main outlet height for the model in Sequence 2A is increased to that of the Cell 2 riser pipe, thereby eliminating negative pressures. This has the effect of increasing drawdown times. Additionally, high flow pumps in both Cells 1 and 2 run simultaneously in Sequence 2A, which results in a decreased flow per high flow pump when compared to modeled sequences in which only 1 high flow pump runs at a time.

7. Model daily flow conditions

The EPANET 2 program was used to model the proposed leachate force main configuration for each Sequence assuming average leachate generation rates. During the simulation, the high-flow pumps were not activated.

CONCLUSIONS:

For the 25-year leachate generation condition, the proposed pumps will reduce the head on the liner to 1 foot within the 72 hours allotted by North Carolina Solid Waste Regulations without overtopping the cell. Also, the proposed pumps are appropriate for calculated daily leachate flow rates because the high-flow pumps are not activated for this condition.

It was previously noted that the negative pressures develop in the sequences, and that pressure break valves should be located to eliminate negative pressures. A vacuum break valve has been added to the force main on the eastern perimeter of the landfill. It was also noted that the sequences assume only 1 cell operating in the open case at a time. Sequence 2A was added to the force main analyses to both model the effect of a pressure break valve, and to include the case of Cells 1 and 2 being open at the same time. Table 6 demonstrates that the drawdown time for both Cells 1 and 2 in Sequence 2A is less than 72 hours and that the cells do not overtop.

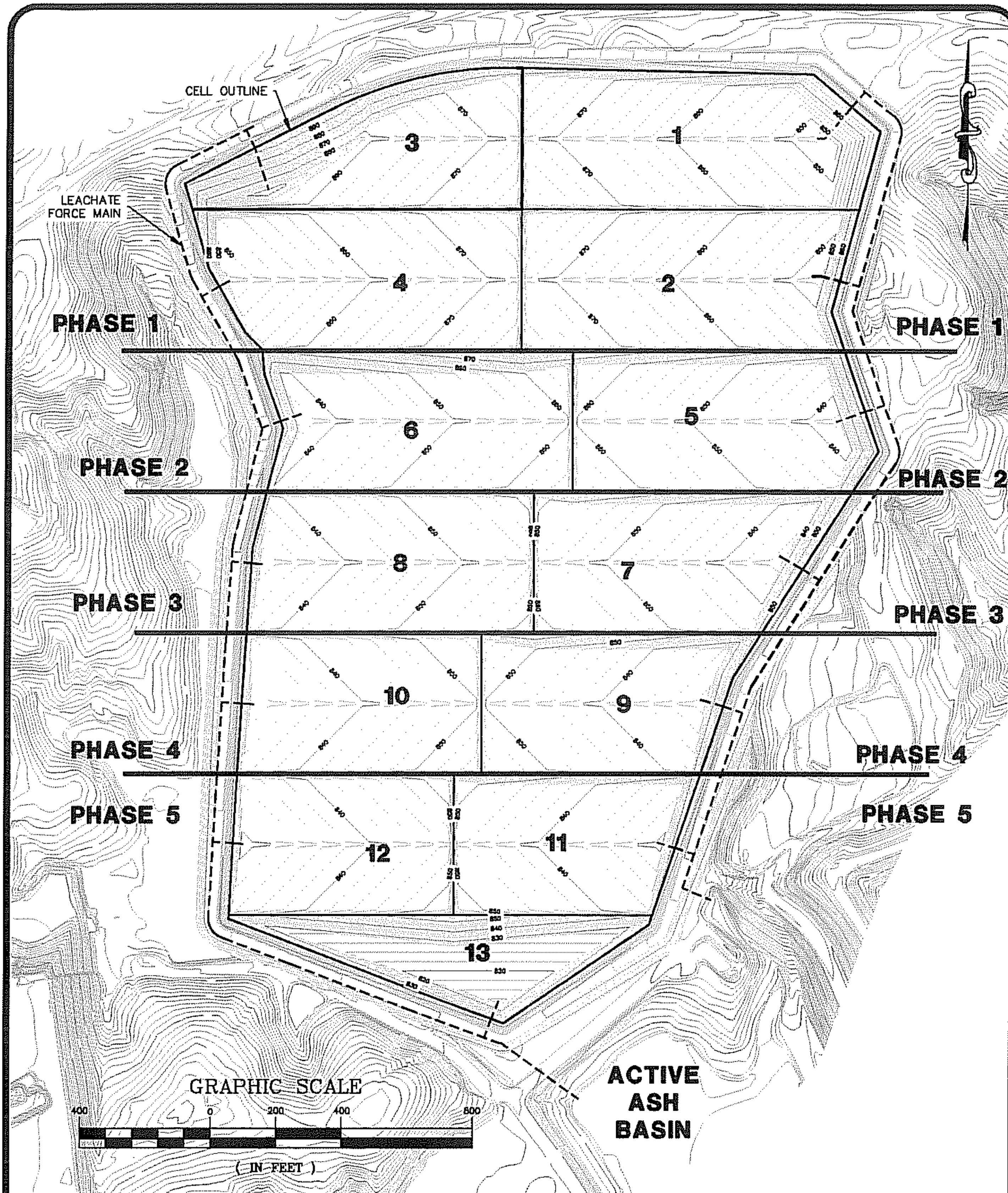
		JOB NO.	1356-08-122
		SHEET NO.	10 / 10
		DATE	1/28/2011
JOB NAME	Duke Energy - Marshall Steam Station Industrial Landfill No. 1	COMPUTED BY	WMH
SUBJECT	Leachate Force Main	CHECKED BY	CR

REFERENCES:

1. PondPack: Urban Hydrology & Detention Pond Modeling Software, vs 10.00.027.00, by Haestad Methods.
2. "Sidesloper Pump Engineering Catalog". GunnCo, 2004.
3. Calculation. "Leachate Generation and Impingement Rates". S&ME, 2009.

ATTACHMENTS:

1. Stage Storage Relationships
2. Force Main Schematic and EPANET 2 Inputs
3. Head Within Sumps for 25-year, 24-hour Storm



SCALE: 1" = 400'	S&ME 9751 SOUTHERN PINE BLVD. CHARLOTTE, N.C. 28273 (704) 523-4726	**LEACHATE FORCE MAIN** **LANDFILL LAYOUT** MSSILF NO. 1 TERRELL, NC	FIGURE NO. **1**
DATE: 11/24/09			
DRAWN BY: CHR			
PROJECT NO: 1356-08-122	ENGINEERING LICENSE NO: F-0176		

REFERENCE 1

PondPack: Urban Hydrology & Detention Pond Modeling Software, vs 10.00.027.00, by Haestad Methods.

========================
JOB TITLE
========================

Project Date: 6/23/2009
Project Engineer: CRuhl
Project Title: Marshall Industrial Landfill No. 1
Project Comments:
Leachate Force Main Calculation

Table of Contents

******************* RUNOFF HYDROGRAPHS *******************

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration = 24.0000 hrs Rain Depth = 5.8200 in
Rain Dir = S:\1356\PPack\Marshall\ForceMain\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\1356\PPack\Marshall\ForceMain\
HYG File - ID = - CELL 1 25
Tc = .1000 hrs
Drainage Area = 9.900 acres Runoff CN= 98
Calc.Increment= .01333 hrs Out.Incr.= .2500 hrs
HYG Volume = 4.666 ac-ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .2500 hrs
Time on left represents time for first value in each row.

Time hrs					
.5000	.00	.00	.08	.16	.23
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3.0000	.51	.54	.57	.60	.63
4.2500	.67	.71	.74	.78	.82
5.5000	.85	.89	.92	.96	.99
6.7500	1.03	1.06	1.10	1.13	1.16
8.0000	1.20	1.30	1.45	1.59	1.74
9.2500	1.79	1.79	1.95	2.19	2.49
10.5000	2.85	3.34	3.93	5.04	6.48
11.7500	30.77	60.47	9.65	6.06	4.54
13.0000	3.77	3.26	2.85	2.53	2.24
14.2500	2.08	1.98	1.88	1.77	1.67
15.5000	1.57	1.47	1.36	1.31	1.27
16.7500	1.24	1.20	1.16	1.13	1.09
18.0000	1.05	1.02	.98	.95	.91
19.2500	.87	.84	.80	.76	.75
20.5000	.74	.74	.73	.72	.71
21.7500	.71	.70	.69	.68	.68
23.0000	.67	.66	.66	.65	.64
24.2500	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration = 24.0000 hrs   Rain Depth = 5.8200 in
Rain Dir = S:\1356\PPack\Marshall\ForceMain\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\1356\PPack\Marshall\ForceMain\
HYG File - ID = - CELL 10 25
Tc = .1000 hrs
Drainage Area = 7.230 acres   Runoff CN= 98
Calc.Increment= .01333 hrs   Out.Incr.= .2500 hrs
HYG Volume = 3.407 ac-ft

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Time on left represents time for first value in each row.

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3.0000	.37	.39	.42	.44	.46
4.2500	.49	.52	.54	.57	.60
5.5000	.62	.65	.68	.70	.73
6.7500	.75	.78	.80	.83	.85
8.0000	.87	.95	1.06	1.16	1.27
9.2500	1.31	1.31	1.43	1.60	1.82
10.5000	2.08	2.44	2.87	3.68	4.73
11.7500	22.47	44.16	7.04	4.43	3.31
13.0000	2.75	2.38	2.08	1.85	1.63
14.2500	1.52	1.44	1.37	1.29	1.22
15.5000	1.15	1.07	1.00	.96	.93
16.7500	.90	.88	.85	.82	.80
18.0000	.77	.74	.72	.69	.66
19.2500	.64	.61	.59	.56	.55
20.5000	.54	.54	.53	.53	.52
21.7500	.52	.51	.50	.50	.49
23.0000	.49	.48	.48	.47	.47
24.2500	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration = 24.0000 hrs Rain Depth = 5.8200 in
Rain Dir = S:\1356\PPack\Marshall\ForceMain\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\1356\PPack\Marshall\ForceMain\
HYG File - ID = - CELL 11 25
Tc = .1000 hrs
Drainage Area = 6.680 acres Runoff CN= 98
Calc.Increment= .01333 hrs Out.Incr.= .2500 hrs
HYG Volume = 3.148 ac-ft

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Output Time increment = .2500 hrs
Time on left represents time for first value in each row.

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3.0000	.34	.36	.39	.41	.43
4.2500	.45	.48	.50	.53	.55
5.5000	.58	.60	.62	.65	.67
6.7500	.69	.72	.74	.76	.78
8.0000	.81	.88	.98	1.07	1.17
9.2500	1.21	1.21	1.32	1.48	1.68
10.5000	1.92	2.25	2.65	3.40	4.37
11.7500	20.76	40.80	6.51	4.09	3.06
13.0000	2.54	2.20	1.92	1.71	1.51
14.2500	1.40	1.33	1.27	1.19	1.13
15.5000	1.06	.99	.92	.88	.86
16.7500	.84	.81	.79	.76	.74
18.0000	.71	.69	.66	.64	.61
19.2500	.59	.57	.54	.52	.51
20.5000	.50	.50	.49	.49	.48
21.7500	.48	.47	.47	.46	.46
23.0000	.45	.45	.44	.44	.43
24.2500	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration   = 24.0000 hrs   Rain Depth = 5.8200 in
Rain Dir   = S:\1356\PPack\Marshall\ForceMain\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir   = S:\1356\PPack\Marshall\ForceMain\
HYG File - ID = - CELL 12 25
Tc   = .1000 hrs
Drainage Area = 6.660 acres Runoff CN= 98
Calc.Increment= .01333 hrs   Out.Incr.= .2500 hrs
HYG Volume   = 3.139 ac-ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .2500 hrs
Time on left represents time for first value in each row.

Time hrs					
.5000	.00	.00	.06	.11	.15
1.7500	.19	.23	.26	.29	.32
3.0000	.34	.36	.39	.41	.42
4.2500	.45	.47	.50	.52	.55
5.5000	.57	.60	.62	.65	.67
6.7500	.69	.72	.74	.76	.78
8.0000	.80	.88	.97	1.07	1.17
9.2500	1.20	1.21	1.31	1.47	1.68
10.5000	1.91	2.25	2.64	3.39	4.76
11.7500	29.70	40.68	6.49	4.08	3.05
13.0000	2.54	2.20	1.92	1.70	1.50
14.2500	1.40	1.33	1.26	1.19	1.12
15.5000	1.06	.99	.92	.88	.86
16.7500	.83	.81	.78	.76	.74
18.0000	.71	.69	.66	.64	.61
19.2500	.59	.56	.54	.51	.50
20.5000	.50	.49	.49	.48	.48
21.7500	.48	.47	.46	.46	.46
23.0000	.45	.45	.44	.44	.43
24.2500	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration = 24.0000 hrs Rain Depth = 5.8200 in
Rain Dir = S:\1356\PPack\Marshall\ForceMain\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\1356\PPack\Marshall\ForceMain\
HYG File - ID = - CELL 13 25
Tc = .1000 hrs
Drainage Area = 5.170 acres Runoff CN= 98
Calc.Increment= .01333 hrs Out.Incr.= .2500 hrs
HYG Volume = 2.437 ac-ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .2500 hrs
Time on left represents time for first value in each row.

Time hrs					
.5000	.00	.00	.04	.08	.12
1.7500	.15	.18	.20	.23	.25
3.0000	.26	.28	.30	.32	.33
4.2500	.35	.37	.39	.41	.43
5.5000	.45	.46	.48	.50	.52
6.7500	.54	.56	.57	.59	.61
8.0000	.62	.68	.76	.83	.91
9.2500	.93	.94	1.02	1.14	1.30
10.5000	1.49	1.75	2.05	2.63	3.38
11.7500	16.07	31.58	5.04	3.17	2.37
13.0000	1.97	1.70	1.49	1.32	1.17
14.2500	1.08	1.03	.98	.92	.87
15.5000	.82	.77	.71	.68	.67
16.7500	.65	.63	.61	.59	.57
18.0000	.55	.53	.51	.49	.48
19.2500	.46	.44	.42	.40	.39
20.5000	.39	.38	.38	.38	.37
21.7500	.37	.36	.36	.36	.35
23.0000	.35	.35	.34	.34	.33
24.2500	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration = 24.0000 hrs Rain Depth = 5.8200 in
Rain Dir = S:\1356\PPack\Marshall\ForceMain\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\1356\PPack\Marshall\ForceMain\
HYG File - ID = - CELL 2 25
Tc = .1000 hrs
Drainage Area = 9.650 acres Runoff CN= 98
Calc.Increment= .01333 hrs Out.Incr.= .2500 hrs
HYG Volume = 4.548 ac-ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .2500 hrs
Time on left represents time for first value in each row.

Time hrs					
.5000	.00	.00	.08	.16	.22
1.7500	.28	.33	.38	.42	.46
3.0000	.49	.53	.56	.59	.61
4.2500	.65	.69	.72	.76	.80
5.5000	.83	.87	.90	.94	.97
6.7500	1.00	1.04	1.07	1.10	1.13
8.0000	1.17	1.27	1.41	1.55	1.70
9.2500	1.74	1.75	1.90	2.13	2.43
10.5000	2.77	3.26	3.83	4.91	6.32
11.7500	29.99	58.94	9.40	5.91	4.42
13.0000	3.67	3.18	2.78	2.47	2.18
14.2500	2.02	1.93	1.83	1.73	1.63
15.5000	1.53	1.43	1.33	1.28	1.24
16.7500	1.21	1.17	1.13	1.10	1.07
18.0000	1.03	.99	.96	.92	.89
19.2500	.85	.82	.78	.75	.73
20.5000	.72	.72	.71	.70	.70
21.7500	.69	.68	.67	.67	.66
23.0000	.65	.65	.64	.63	.62
24.2500	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration = 24.0000 hrs Rain Depth = 5.8200 in
Rain Dir = S:\1356\PPack\Marshall\ForceMain\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\1356\PPack\Marshall\ForceMain\
HYG File - ID = - CELL 3 25
Tc = .1000 hrs
Drainage Area = 7.210 acres Runoff CN= 98
Calc.Increment= .01333 hrs Out.Incr.= .2500 hrs
HYG Volume = 3.398 ac-ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .2500 hrs
Time on left represents time for first value in each row.

Time hrs					
.5000	.00	.00	.06	.12	.17
1.7500	.21	.25	.28	.31	.34
3.0000	.37	.39	.42	.44	.46
4.2500	.49	.51	.54	.57	.59
5.5000	.62	.65	.67	.70	.72
6.7500	.75	.77	.80	.82	.85
8.0000	.87	.95	1.06	1.16	1.27
9.2500	1.30	1.31	1.42	1.59	1.81
10.5000	2.07	2.43	2.86	3.67	4.72
11.7500	22.41	44.04	7.02	4.42	3.30
13.0000	2.75	2.38	2.08	1.84	1.63
14.2500	1.51	1.44	1.37	1.29	1.22
15.5000	1.14	1.07	.99	.95	.93
16.7500	.90	.87	.85	.82	.80
18.0000	.77	.74	.72	.69	.66
19.2500	.64	.61	.58	.56	.55
20.5000	.54	.54	.53	.52	.52
21.7500	.51	.51	.50	.50	.49
23.0000	.49	.48	.48	.47	.47
24.2500	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration = 24.0000 hrs Rain Depth = 5.8200 in
Rain Dir = S:\1356\PPack\Marshall\ForceMain\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\1356\PPack\Marshall\ForceMain\
HYG File - ID = - CELL 4 25
Tc = .1000 hrs
Drainage Area = 9.130 acres Runoff CN= 98
Calc.Increment= .01333 hrs Out.Incr.= .2500 hrs
HYG Volume = 4.303 ac-ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .2500 hrs
Time on left represents time for first value in each row.

Time hrs					
.5000	.00	.00	.08	.15	.21
1.7500	.26	.31	.36	.40	.43
3.0000	.47	.50	.53	.56	.58
4.2500	.61	.65	.68	.72	.75
5.5000	.79	.82	.85	.88	.92
6.7500	.95	.98	1.01	1.04	1.07
8.0000	1.10	1.20	1.34	1.47	1.60
9.2500	1.65	1.66	1.80	2.02	2.30
10.5000	2.62	3.08	3.62	4.65	5.97
11.7500	28.38	55.77	8.90	5.59	4.18
13.0000	3.48	3.01	2.63	2.33	2.06
14.2500	1.92	1.82	1.73	1.63	1.54
15.5000	1.45	1.36	1.26	1.21	1.17
16.7500	1.14	1.11	1.07	1.04	1.01
18.0000	.97	.94	.91	.87	.84
19.2500	.81	.77	.74	.71	.69
20.5000	.69	.68	.67	.66	.66
21.7500	.65	.64	.64	.63	.62
23.0000	.62	.61	.60	.60	.59
24.2500	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration = 24.0000 hrs Rain Depth = 5.8200 in
Rain Dir = S:\1356\PPack\Marshall\ForceMain\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\1356\PPack\Marshall\ForceMain\
HYG File - ID = - CELL 5 25
Tc = .1000 hrs
Drainage Area = 8.710 acres Runoff CN= 98
Calc.Increment= .01333 hrs Out.Incr.= .2500 hrs
HYG Volume = 4.105 ac-ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .2500 hrs
Time on left represents time for first value in each row.

Time hrs					
.5000	.00	.00	.07	.14	.20
1.7500	.25	.30	.34	.38	.41
3.0000	.45	.48	.51	.53	.55
4.2500	.59	.62	.65	.69	.72
5.5000	.75	.78	.81	.84	.87
6.7500	.90	.94	.96	.99	1.02
8.0000	1.05	1.15	1.27	1.40	1.53
9.2500	1.57	1.58	1.72	1.92	2.19
10.5000	2.50	2.94	3.46	4.44	5.70
11.7500	27.07	53.20	8.49	5.53	3.99
13.0000	3.32	2.87	2.51	2.23	1.97
14.2500	1.83	1.74	1.65	1.56	1.47
15.5000	1.38	1.29	1.20	1.15	1.12
16.7500	1.09	1.06	1.02	.99	.96
18.0000	.93	.90	.87	.83	.80
19.2500	.77	.74	.71	.67	.66
20.5000	.65	.65	.64	.63	.63
21.7500	.62	.61	.61	.60	.60
23.0000	.59	.58	.58	.57	.56
24.2500	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration = 24.0000 hrs Rain Depth = 5.8200 in
Rain Dir = S:\1356\PPack\Marshall\ForceMain\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\1356\PPack\Marshall\ForceMain\
HYG File - ID = - CELL 6 25
Tc = .1000 hrs
Drainage Area = 9.040 acres Runoff CN= 98
Calc.Increment= .01333 hrs Out.Incr.= .2500 hrs
HYG Volume = 4.261 ac-ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .2500 hrs
Time on left represents time for first value in each row.

Time hrs					
.5000	.00	.00	.08	.15	.21
1.7500	.26	.31	.35	.39	.43
3.0000	.46	.49	.52	.55	.58
4.2500	.61	.64	.68	.71	.75
5.5000	.78	.81	.84	.88	.91
6.7500	.94	.97	1.00	1.03	1.06
8.0000	1.09	1.19	1.32	1.45	1.59
9.2500	1.63	1.64	1.78	2.00	2.28
10.5000	2.60	3.05	3.59	4.60	5.92
11.7500	28.10	55.22	8.81	5.54	4.14
13.0000	3.44	2.98	2.60	2.31	2.04
14.2500	1.90	1.80	1.71	1.62	1.53
15.5000	1.43	1.34	1.25	1.20	1.16
16.7500	1.13	1.10	1.06	1.03	1.00
18.0000	.96	.93	.90	.87	.83
19.2500	.80	.77	.73	.70	.68
20.5000	.68	.67	.66	.66	.65
21.7500	.65	.64	.63	.63	.62
23.0000	.61	.60	.60	.59	.58
24.2500	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration   = 24.0000 hrs   Rain Depth = 5.8200 in
Rain Dir   = S:\1356\PPack\Marshall\ForceMain\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir   = S:\1356\PPack\Marshall\ForceMain\
HYG File - ID = - CELL 7 25
Tc   = .1000 hrs
Drainage Area = 8.190 acres Runoff CN= 98
Calc.Increment= .01333 hrs   Out.Incr.= .2500 hrs
HYG Volume   = 3.860 ac-ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .2500 hrs
Time on left represents time for first value in each row.

Time hrs					
.5000	.00	.00	.07	.13	.19
1.7500	.24	.28	.32	.36	.39
3.0000	.42	.45	.48	.50	.52
4.2500	.55	.58	.61	.65	.68
5.5000	.71	.74	.76	.79	.82
6.7500	.85	.88	.91	.93	.96
8.0000	.99	1.08	1.20	1.32	1.44
9.2500	1.48	1.48	1.62	1.81	2.06
10.5000	2.35	2.76	3.25	4.17	5.36
11.7500	25.45	50.03	7.96	5.02	3.75
13.0000	3.12	2.70	2.36	2.09	1.85
14.2500	1.72	1.63	1.55	1.46	1.38
15.5000	1.30	1.22	1.13	1.08	1.05
16.7500	1.02	.99	.96	.93	.90
18.0000	.87	.84	.81	.78	.75
19.2500	.72	.69	.66	.63	.62
20.5000	.61	.61	.60	.60	.59
21.7500	.58	.58	.57	.57	.56
23.0000	.55	.55	.54	.54	.53
24.2500	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration   = 24.0000 hrs   Rain Depth = 5.8200 in
Rain Dir   = S:\1356\PPack\Marshall\ForceMain\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir   = S:\1356\PPack\Marshall\ForceMain\
HYG File - ID = - CELL 8 25
Tc   = .1000 hrs
Drainage Area = 8.450 acres   Runoff CN= 98
Calc.Increment= .01333 hrs   Out.Incr.= .2500 hrs
HYG Volume   = 3.982 ac-ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .2500 hrs
Time on left represents time for first value in each row.

Time hrs					
.5000	.00	.00	.07	.14	.19
1.7500	.24	.29	.33	.37	.40
3.0000	.43	.46	.49	.52	.54
4.2500	.57	.60	.63	.67	.70
5.5000	.73	.76	.79	.82	.85
6.7500	.88	.91	.94	.96	.99
8.0000	1.02	1.11	1.24	1.36	1.48
9.2500	1.53	1.53	1.67	1.87	2.13
10.5000	2.13	2.85	3.35	4.30	5.53
11.7500	26.26	51.61	8.23	5.17	3.67
13.0000	3.22	2.79	2.43	2.16	1.91
14.2500	1.77	1.69	1.60	1.51	1.43
15.5000	1.34	1.25	1.16	1.12	1.09
16.7500	1.06	1.02	.99	.96	.93
18.0000	.90	.87	.84	.81	.78
19.2500	.75	.72	.69	.65	.64
20.5000	.63	.63	.62	.61	.61
21.7500	.60	.60	.59	.58	.58
23.0000	.57	.57	.56	.55	.55
24.2500	.00	.00			

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration = 24.0000 hrs Rain Depth = 5.8200 in
Rain Dir = S:\1356\PPack\Marshall\ForceMain\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\1356\PPack\Marshall\ForceMain\
HYG File - ID = - CELL 9 25
Tc = .1000 hrs
Drainage Area = 7.350 acres Runoff CN= 98
Calc.Increment= .01333 hrs Out.Incr.= .2500 hrs
HYG Volume = 3.464 ac-ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .2500 hrs
Time on left represents time for first value in each row.

Time hrs					
.5000	.00	.00	.06	.12	.17
1.7500	.21	.25	.29	.32	.35
3.0000	.38	.40	.43	.45	.47
4.2500	.49	.52	.55	.58	.61
5.5000	.63	.66	.69	.71	.74
6.7500	.76	.79	.81	.84	.86
8.0000	.89	.97	1.08	1.18	1.29
9.2500	1.33	1.33	1.45	1.62	1.85
10.5000	2.11	2.48	2.92	3.74	4.81
11.7500	22.84	44.90	7.16	4.50	3.37
13.0000	2.80	2.42	2.12	1.88	1.66
14.2500	1.54	1.47	1.39	1.31	1.24
15.5000	1.17	1.09	1.01	.97	.95
16.7500	.92	.89	.86	.84	.81
18.0000	.78	.76	.73	.70	.68
19.2500	.65	.62	.60	.57	.56
20.5000	.55	.55	.54	.53	.53
21.7500	.52	.52	.51	.51	.50
23.0000	.50	.49	.49	.48	.47
24.2500	.00	.00			

Index of Starting Page Numbers for ID Names

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration = 24.0000 hrs Rain Depth = 5.8200 in
Rain Dir = S:\1356\PPack\Marshall\ForceMain\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\1356\PPack\Marshall\ForceMain\
HYG File - ID = ForceMai.HYG - CELL 1 (2 CELLS) 25
Tc = .1000 hrs
Drainage Area = 9.900 acres Runoff CN= 82
Calc.Increment= .01333 hrs Out.Incr.= .2500 hrs
HYG Volume = 3.217 ac-ft

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .2500 hrs
Time on left represents time for first value in each row.

Time hrs					
5.7500	.00	.02	.04	.07	.10
7.0000	.12	.15	.18	.21	.25
8.2500	.30	.36	.44	.52	.58
9.5000	.62	.72	.86	1.04	1.27
10.7500	1.58	1.99	2.72	3.75	20.53
12.0000	49.35	8.27	5.26	3.96	3.31
13.2500	2.87	2.52	2.24	1.98	1.85
14.5000	1.76	1.67	1.58	1.50	1.41
15.7500	1.32	1.23	1.18	1.15	1.12
17.0000	1.08	1.05	1.02	.99	.96
18.2500	.92	.89	.86	.83	.79
19.5000	.76	.73	.70	.68	.68
20.7500	.67	.66	.66	.65	.65
22.0000	.64	.63	.63	.62	.61
23.2500	.61	.60	.59	.58	.00
24.5000	.00				

SCS UNIT HYDROGRAPH METHOD

STORM EVENT: 25 year storm
Duration = 24.0000 hrs   Rain Depth = 5.8200 in
Rain Dir = S:\1356\PPack\Marshall\ForceMain\
Rain File -ID = - TypeII 24hr
Unit Hyd Type = Default Curvilinear
HYG Dir = S:\1356\PPack\Marshall\ForceMain\
HYG File - ID = ForceMai.HYG - CELL 2 (2 CELLS) 25
Tc = .1000 hrs
Drainage Area = 9.650 acres Runoff CN= 82
Calc.Increment= .01333 hrs   Out.Incr.= .2500 hrs
HYG Volume = 3.137 ac-ft

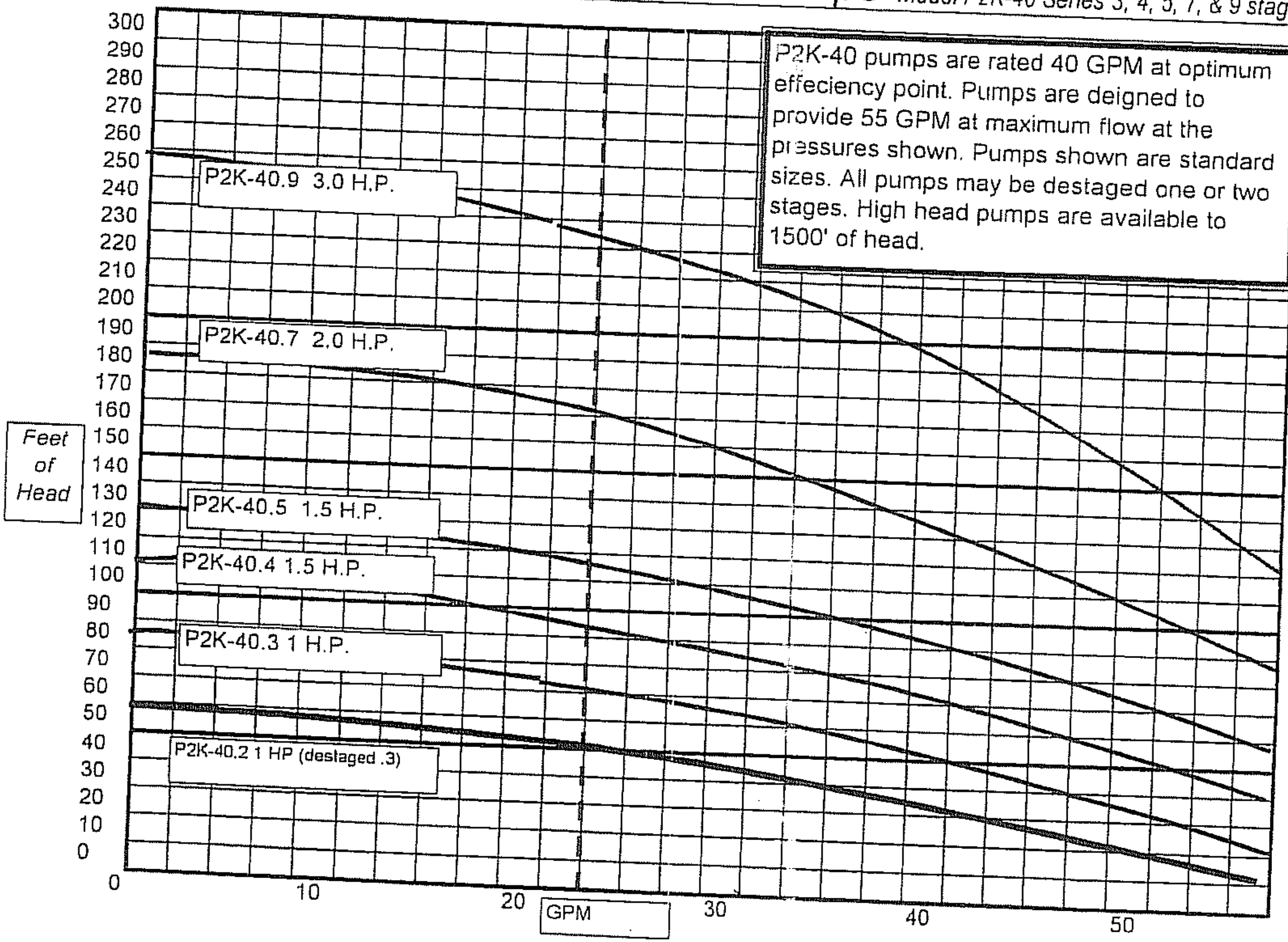
HYDROGRAPH ORDINATES (cfs)
Output Time increment = .2500 hrs
Time on left represents time for first value in each row.

Time hrs					
5.7500	.00	.02	.04	.07	.09
7.0000	.12	.15	.18	.21	.24
8.2500	.29	.35	.42	.51	.56
9.5000	.61	.70	.84	1.02	1.24
10.7500	1.54	1.94	2.65	3.66	20.01
12.0000	48.18	8.07	5.13	3.86	3.22
13.2500	2.80	2.45	2.18	1.93	1.80
14.5000	1.72	1.63	1.54	1.46	1.37
15.7500	1.29	1.20	1.15	1.12	1.09
17.0000	1.06	1.03	1.00	.96	.93
18.2500	.90	.87	.84	.81	.77
19.5000	.74	.71	.68	.67	.66
20.7500	.65	.65	.64	.64	.63
22.0000	.62	.62	.61	.60	.60
23.2500	.59	.59	.58	.57	.00
24.5000	.00				

REFERENCE 2

"Sidesloper Pump Engineering Catalog". GunnCo, 2004.

GunnCo *Sidesloper*™ Pumps *Model P2K-40 Series 3, 4, 5, 7, & 9 stage pumps*



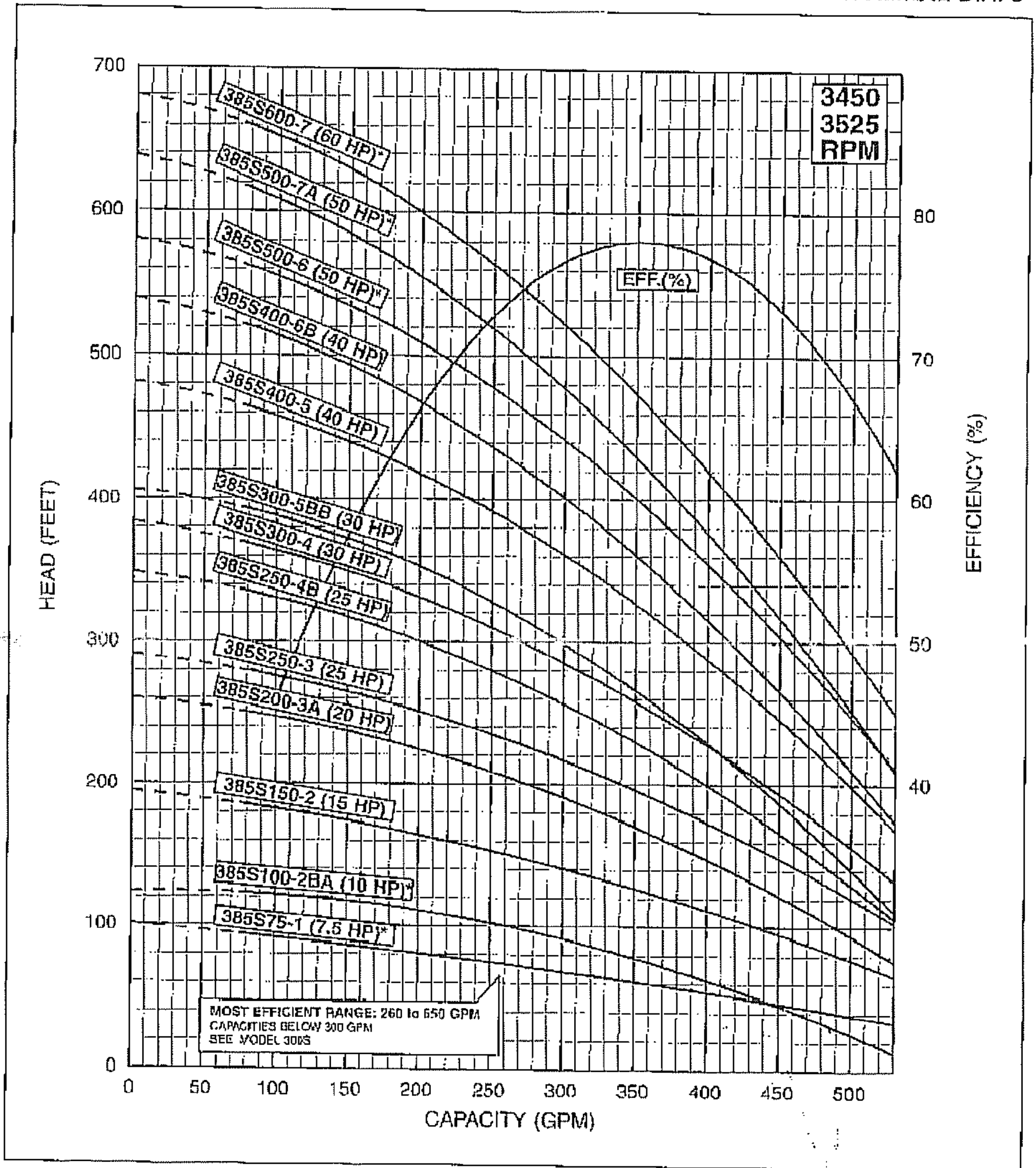
P2K-40 pumps are rated 40 GPM at optimum effeciency point. Pumps are deigned to provide 55 GPM at maximum flow at the pressures shown. Pumps shown are standard sizes. All pumps may be destaged one or two stages. High head pumps are available to 1500' of head.

All pumps are 304 stainless steel with Teflon bearings and seals. Motors are Franklin Electric Super Stainless or High Thrust Series motors with stainless casing. Power cables are heavy duty continous length. Pumps are mounted in patented wheeled carrier with stainless steel casing and self lubricating UHMW wheels.

Actual pump length may vary with voltage requirments and riser pipe size & SDR should be provided for optimum operation in riser.

PERFORMANCE CURVES 385 GPM MODEL 385S

FLOW RANGE: 75 - 550 GPM **OUTLET SIZE: 4" NPT** **NOMINAL DIA. 8"**



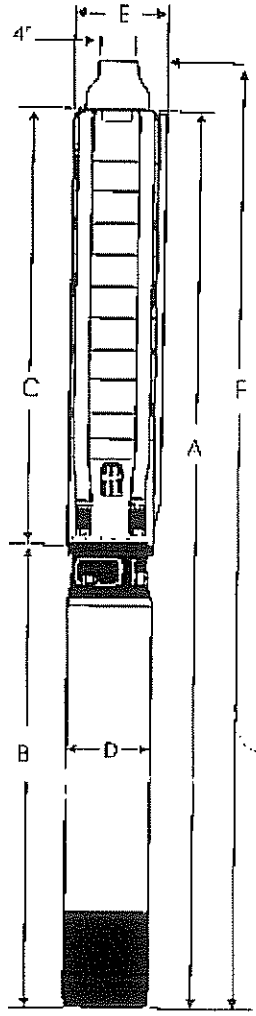
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.
6" MOTOR STANDARD, 7.5-60 HP/3450 RPM.
8" MOTOR STANDARD,75-100 HP/3525 RPM.
* Alternate motor sizes available.

Performance conforms to ISO 9906 Annex A @ 8 ft. min. submergence.

DIMENSIONS AND WEIGHTS

MODEL NO.	FIG.	HP	MOTOR SIZE	DISCH. SIZE	DIMENSIONS IN INCHES A	B	C	D	E	F	APPROX. SHIP WT.
385S75-1	A	7.5	6"	4" NPT	46.3	24.0	24.3	5.4	7.0	53.1	148
385S100-2BA	A	10	6"	4" NPT	54.8	25.4	29.4	5.4	7.0	59.6	178
385S150-2	A	15	6"	4" NPT	57.4	28.0	29.4	5.4	7.0	62.2	192
385S200-3A	A	20	6"	4" NPT	65.0	30.6	34.4	5.4	7.0	69.8	223
385S250-3	A	25	6"	4" NPT	67.5	33.1	34.4	5.4	7.0	72.3	210
385S250-4B	A	25	6"	4" NPT	72.6	33.1	39.5	5.4	7.0	77.4	210
385S300-4	A	30	6"	4" NPT	75.2	35.7	39.5	5.4	7.0	80.0	243
385S300-5BB	A	30	6"	4" NPT	80.2	35.7	44.5	5.4	7.0	85.0	252
385S400-5*	A	40	6"	4" NPT	85.3	40.8	44.5	5.4	7.0	90.1	270
385S400-6B	A	40	6"	4" NPT	90.4	40.8	49.6	5.4	7.0	95.2	285
385S500-6*	A	50	6"	4" NPT	107.4	57.8	49.6	5.4	7.0	112.2	285
385S500-7A	A	50	6"	4" NPT	113.0	57.8	55.2	5.4	7.0	117.8	450
385S600-7*	A	60	6"	4" NPT	119.0	63.8	55.2	5.4	7.0	123.8	450
385S600-8*	A	60	6"	4" NPT	124.0	63.8	60.2	5.4	7.0	128.8	459
385S750-9	A	75	8"	4" NPT	112.7	47.4	65.3	7.6	7.7	117.5	577
385S750-10	A	75	8"	4" NPT	117.7	47.4	70.3	7.6	7.7	122.5	586
385S1000-11	A	100	8"	4" NPT	130.3	54.91	75.4	7.6	7.7	135.1	672
385S1000-12	A	100	8"	4" NPT	135.3	54.91	80.4	7.6	7.7	140.1	701
385S1000-13	A	100	8"	4" NPT	140.9	54.91	85.4	7.6	7.7	145.1	709
Pipe Adapter	A									4.8	

NOTES: All models suitable for use in 8" wells, unless otherwise noted.
Weights include pump end with motor in lbs.
*Alternate motor sizes available.
All models come with a standard 5"-4" Pipe Adapter. Refer to chart for dimensions.



ATTACHMENT 1

Stage Storage Relationships

Depth vs. Storage Volume - LDS Sump (all cells)			
Depth (ft)	Total Area (ft^2)	Total Storage Volume (ft^3)	Effective Storage Volume (ft^3)
0.0	140	0	0
2.5	221	451	135

Depth vs. Storage Volume - LCS Sump (all cells)			
Depth (ft)	Total Area (ft^2)	Total Storage Volume (ft^3)	Effective Storage Volume (ft^3)
0.0	300	0	0
2.5	813	1391	417

Depth vs. Storage Volume Relationship - LCS (Cell 1)			
Depth (ft)	Total Area (ft^2)	Total Storage Volume (ft^3)	Effective Storage Volume (ft^3)
0	725	417	417
2	3049	4191	1257
4	17203	24443	7333
6	44753	86399	25920
8	76807	207959	62388

Depth vs. Storage Volume Relationship - LCS (Cell 2)			
Depth (ft)	Total Area (ft^2)	Total Storage Volume (ft^3)	Effective Storage Volume (ft^3)
0	840	417	417
2	11959	13216	3965
4	36969	62144	18643
6	70157	169270	50781

Depth vs. Storage Volume Relationship - LCS (Cell 3)			
Depth (ft)	Total Area (ft^2)	Total Storage Volume (ft^3)	Effective Storage Volume (ft^3)
0	989	417	417
2	9660	11066	3320
4	21863	42589	12902
6	40563	105015	31630

Depth vs. Storage Volume Relationship - LCS (Cell 4)			
Depth (ft)	Total Area (ft^2)	Total Storage Volume (ft^3)	Effective Storage Volume (ft^3)
0	8306	417	417
2	26644	35367	10610
4	53125	115136	34541
6	83173	251434	75430

Depth vs. Storage Volume Relationship - LCS (Cell 5)			
Depth (ft)	Total Area (ft^2)	Total Storage Volume (ft^3)	Effective Storage Volume (ft^3)
0	1088	417	417
2	12166	13671	4101
4	31849	57686	17306
6	59613	149148	44744
8	90325	299086	89726

Depth vs. Storage Volume Relationship - LCS (Cell 6)			
Depth (ft)	Total Area (ft^2)	Total Storage Volume (ft^3)	Effective Storage Volume (ft^3)
0	2959	417	417
2	21700	25076	7523
4	49924	96700	29010
6	78760	225384	67615

Depth vs. Storage Volume Relationship - LCS (Cell 7)			
Depth (ft)	Total Area (ft^2)	Total Storage Volume (ft^3)	Effective Storage Volume (ft^3)
0	2574	417	417
2	19224	22215	6665
4	41595	83034	24910
6	68404	193033	57910
8	99648	361085	108326
10	133201	593934	178180

Depth vs. Storage Volume Relationship - LCS (Cell 8)			
Depth (ft)	Total Area (ft^2)	Total Storage Volume (ft^3)	Effective Storage Volume (ft^3)
0	2595	417	417
2	16097	19109	5733
4	40930	76136	22841
6	72400	189466	56840

Depth vs. Storage Volume Relationship - LCS (Cell 9)			
Depth (ft)	Total Area (ft^2)	Total Storage Volume (ft^3)	Effective Storage Volume (ft^3)
0	1708	417	417
2	15650	17775	5333
4	38447	71872	21562
6	66467	176786	53036
8	97638	340891	102267

Depth vs. Storage Volume Relationship - LCS (Cell 10)			
Depth (ft)	Total Area (ft^2)	Total Storage Volume (ft^3)	Effective Storage Volume (ft^3)
0	4182	417	417
2	20262	24861	7458
4	48136	93259	27978
6	80258	221653	66496

Depth vs. Storage Volume Relationship - LCS (Cell 11)			
Depth (ft)	Total Area (ft^2)	Total Storage Volume (ft^3)	Effective Storage Volume (ft^3)
0	885	417	417
2	12295	13597	4079
4	34990	60882	18265
6	63274	159146	47744
8	95266	317686	95306

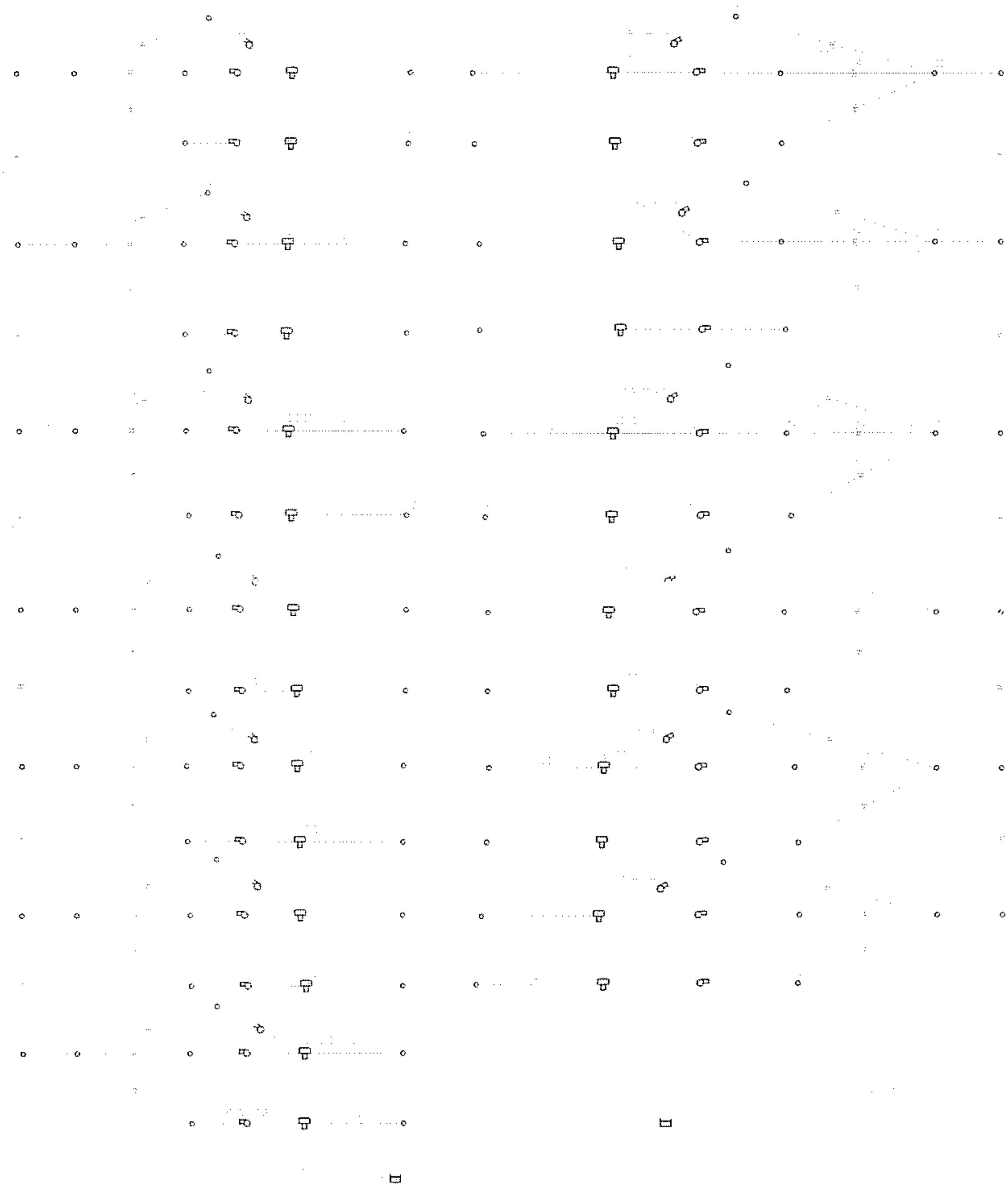
Depth vs. Storage Volume Relationship - LCS (Cell 12)			
Depth (ft)	Total Area (ft^2)	Total Storage Volume (ft^3)	Effective Storage Volume (ft^3)
0	1852	417	417
2	14567	16836	5051
4	39339	70742	21223
6	71608	181689	54507

Depth vs. Storage Volume Relationship - LCS (Cell 13)			
Depth (ft)	Total Area (ft^2)	Total Storage Volume (ft^3)	Effective Storage Volume (ft^3)
0	5014	417	417
2	14292	19723	5917
4	28325	62340	18702
6	47128	137793	41338
8	70702	255623	76687
10	98264	424589	127377
12	120954	643807	193142
14	136726	901487	270446

ATTACHMENT 2

Force Main Schematic and EPANET 2 Inputs

Marshall Steam Station Industrial Landfill No. 1
Leachate Force Main
Attachment 2: EPANET Inputs



[TITLE]
Marshall Steam Station Industrial LF No. 1 Leachate Force Main
BASE FILE

[JUNCTIONS]

;ID	Elev	Demand	Pattern	
6	848.5	0		;
8	848.5	0		;
11	848.5	0		;
12	848.5	0		;
13	848.5	0		;
16	868	0		;
10	868	0		;
14	838.5	0		;
15	838.5	0		;
18	838.5	0		;
19	838.5	0		;
21	838.5	0		;
22	836.5	0		;
23	836.5	0		;
24	836.5	0		;
25	860	0		;
27	836.5	0		;
28	836.5	0		;
29	832.5	0		;
30	832.5	0		;
31	832.5	0		;
32	852	0		;
34	832.5	0		;
35	832.5	0		;
36	830.5	0		;
37	830.5	0		;
38	830.5	0		;
39	846	0		;
41	830.5	0		;
42	830.5	0		;
43	849.5	0		;

44	849.5	0	;
45	862	0	;
46	849.5	0	;
47	849.5	0	;
48	849.5	0	;
51	838.5	0	;
52	838.5	0	;
53	838.5	0	;
54	838.5	0	;
55	858	0	;
57	838.5	0	;
60	846.5	-1	;
61	846.5	0	;
63	870	0	;
64	846.5	0	;
65	846.5	-1	;
66	846.5	0	;
67	851.5	0	;
68	851.5	0	;
70	898	0	;
71	851.5	0	;
72	851.5	0	;
73	851.5	0	;
75	834.5	0	;
76	834.5	0	;
77	834.5	0	;
78	834.5	0	;
79	834.5	0	;
80	846	0	;
82	832.5	0	;
83	832.5	0	;
85	844	0	;
86	832.5	0	;
87	832.5	0	;
88	832.5	0	;
89	830.5	0	;
90	830.5	0	;

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 91      830.5     0     ;
 92      830.5     0     ;
 93      842       0     ;
 95      830.5     0     ;
 96      814.5     0     ;
 97      814.5     0     ;
 98      834       0     ;
 99      814.5     0     ;
100      814.5     0     ;
101      814.5     0     ;
  1      872       0     ;
  2      862       0     ;
  3      860       0     ;
  4      852       0     ;
  5      844       0     ;
  7      838       0     ;
  9      890       0     ;
 17      854       0     ;
 20      848       0     ;
 26      837       0     ;
 33      835       0     ;
 40      833       0     ;
 49      826       0     ;

[RESERVOIRS]
;ID                 Head      Pattern
 ASH_BASIN_EAST     818                 ;
 ASH_BASIN_WEST     794                 ;

[TANKS]
;ID     Elevation   InitLevel   MinLevel   MaxLevel   Diameter   MinVol   VolCurve
 LCS2   848.5       0.9         0          8.5        50         0        LCS2     ;
 LDS2   848.5       0.9         0          2.5        50         0        LDS      ;
 LCS5   838.5       0.9         0          10.5       50         0        LCS5     ;
 LDS5   838.5       0.9         0          2.5        50         0        LDS      ;
 LCS7   836.5       0.9         0          12.5       50         0        LCS7     ;
 LDS7   836.5       0.9         0          2.5        50         0        LDS      ;
```

LCS9	832.5	0.9	0	10.5	50	0 LCS9	;
LDS9	832.5	0.9	0	2.5	50	0 LDS	;
LCS11	830.5	0.9	0	10.5	50	0 LCS11	;
LDS11	830.5	0.9	0	2.5	50	0 LDS	;
LCS4	849.5	0.9	0	8.5	50	0 LCS4	;
LDS4	849.5	0.9	0	2.5	50	0 LDS	;
LCS6	838.5	0.9	0	8.5	50	0 LCS6	;
LDS6	838.5	0.9	0	2.5	50	0 LDS	;
LCS1	846.5	0.9	0	10.5	50	0 LCS1	;
LDS1	846.5	0.9	0	2.5	50	0 LDS	;
LCS3	851.5	0.9	0	8.5	50	0 LCS3	;
LDS3	851.5	0.9	0	2.5	50	0 LDS	;
LCS8	834.5	0.9	0	8.5	50	0 LCS8	;
LDS8	834.5	0.9	0	2.5	50	0 LDS	;
LCS10	832.5	0.9	0	8.5	50	0 LCS10	;
LDS10	832.5	0.9	0	2.5	50	0 LDS	;
LCS12	830.5	0.9	0	8.5	50	0 LCS12	;
LDS12	830.5	0.9	0	2.5	50	0 LDS	;
LCS13	814.5	0.9	0	16.5	50	0 LCS13	;
LDS13	814.5	0.9	0	2.5	50	0 LDS	;

[PIPES]

;ID	Node1	Node2	Length	Diameter	Roughness	MinorLoss	Status	
	4	6 LCS2		1	500	150	0 Open	;
	6	13 LDS2		1	500	150	0 Open	;
	13	11	16	62	4	150	0 CV	;
	14	8	15	62	2	150	0 CV	;
	10	15 LCS5		1	500	150	0 Open	;
	11	18 LDS5		1	500	150	0 Open	;
	18	14	10	94	2	150	0 CV	;
	27	24	27	85	2	150	0 CV	;
	29	22 LCS7		1	500	150	0 Open	;
	30	28 LDS7		1	500	150	0 Open	;
	33	31	32	78	2	150	0 CV	;
	36	21	10	94	4	150	0 CV	;
	37	23	25	85	4	150	0 CV	;
	38	30	32	78	4	150	0 CV	;

39	29	LCS9	1	500	150	0	Open	;
40	35	LDS9	1	500	150	0	Open	;
44	38	39	61	2	150	0	CV	;
45	37	39	61	4	150	0	CV	;
46	42	LDS11	1	500	150	0	Open	;
47	36	LCS11	1	500	150	0	Open	;
49	43	LCS4	1	500	150	0	Open	;
50	47	LDS4	1	500	150	0	Open	;
51	44	45	40	2	150	0	CV	;
53	46	45	40	4	150	0	CV	;
60	51	LCS6	1	500	150	0	Open	;
61	54	55	69	2	150	0	CV	;
62	57	55	69	4	150	0	CV	;
65	52	LDS6	1	500	150	0	Open	;
70	60	LDS1	1	500	150	0	Open	;
72	65	LCS1	1	500	150	0	Open	;
73	66	63	124	4	150	0	CV	;
74	64	63	124	2	150	0	CV	;
75	72	LCS3	1	500	150	0	Open	;
76	73	70	137	4	150	0	CV	;
77	71	70	137	2	150	0	CV	;
78	67	LDS3	1	500	150	0	Open	;
83	75	LCS8	1	500	150	0	Open	;
84	78	80	35	2	150	0	CV	;
88	76	LDS8	1	500	150	0	Open	;
92	79	80	35	4	150	0	CV	;
95	88	85	41	4	150	0	CV	;
97	87	LCS10	1	500	150	0	Open	;
98	82	LDS10	1	500	150	0	Open	;
99	86	85	41	2	150	0	CV	;
100	89	LCS12	1	500	150	0	Open	;
104	90	LDS12	1	500	150	0	Open	;
106	95	93	33	4	150	0	CV	;
107	92	93	33	2	150	0	CV	;
110	96	LCS13	1	500	150	0	Open	;
111	100	LDS13	1	500	150	0	Open	;
115	97	98	63	2	150	0	CV	;

116	99	98	63	4	150	0 CV	;
5	61	63	124	2	150	0 CV	;
7	12	16	62	2	150	0 CV	;
8	1	2	660	6	150	0 CV	;
9	19	10	94	2	150	0 CV	;
12	2	3	381	6	150	0 CV	;
15	27	25	85	2	150	0 CV	;
16	3	4	608	6	150	0 CV	;
17	34	32	78	2	150	0 CV	;
19	4	5	469	6	150	0 CV	;
20	5	7	456	6	150	0 CV	;
21	41	39	61	2	150	0 CV	;
22	7	ASH_BASIN_EAST	203	6	150	0 Open	;
23	68	70	137	2	150	0 CV	;
24	9	17	699	6	150	0 CV	;
25	48	45	40	2	150	0 CV	;
26	17	20	442	6	150	0 CV	;
28	53	55	69	2	150	0 CV	;
31	20	26	419	6	150	0 CV	;
32	77	80	35	2	150	0 CV	;
34	83	85	41	2	150	0 CV	;
35	26	33	429	6	150	0 CV	;
41	33	40	427	6	150	0 CV	;
42	91	93	33	2	150	0 CV	;
43	40	49	1167	6	150	0 CV	;
48	101	98	63	2	150	0 CV	;
52	49	ASH_BASIN_WEST	345	6	150	0 Open	;
1	63	1	57	6	150	0 Open	;
2	16	2	56	6	150	0 Open	;
3	10	3	59	6	150	0 Open	;
54	25	4	57	6	150	0 Open	;
55	32	5	56	6	150	0 Open	;
56	39	[illegible]	57	6	150	0 Open	;
57	98	49	57	6	150	0 Open	;
58	93	40	59	6	150	0 Open	;
59	85	33	59	6	150	0 Open	;
63	80	26	58	6	150	0 Open	;

64	55	20	58	6	150	0 Open	;
66	45	17	57	6	150	0 Open	;
67	70	9	59	6	150	0 Open	;

[PUMPS]

;ID	Node1	Node2	Parameters	
P2_LDS	LDS2	12	HEAD P_LOW	;
P2_LOW	LCS2	8	HEAD P_LOW	;
P2_HIGH	LCS2	11	HEAD P_HIGH	;
P5_HIGH	LCS5	21	HEAD P_HIGH	;
P5_LOW	LCS5	14	HEAD P_LOW	;
P5_LDS	LDS5	19	HEAD P_LOW	;
P7_HIGH	LCS7	23	HEAD P_HIGH	;
P7_LOW	LCS7	24	HEAD P_LOW	;
P7_LDS	LDS7	27	HEAD P_LOW	;
P9_HIGH	LCS9	30	HEAD P_HIGH	;
P9_LOW	LCS9	31	HEAD P_LOW	;
P9_LDS	LDS9	34	HEAD P_LOW	;
P11_HIGH	LCS11	37	HEAD P_HIGH	;
P11_LOW	LCS11	38	HEAD P_LOW	;
P11_LDS	LDS11	41	HEAD P_LOW	;
P4_HIGH	LCS4	46	HEAD P_HIGH	;
P4_LOW	LCS4	44	HEAD P_LOW	;
P4_LDS	LDS4	48	HEAD P_LOW	;
P6_HIGH	LCS6	57	HEAD P_HIGH	;
P6_LOW	LCS6	54	HEAD P_LOW	;
P6_LDS	LDS6	53	HEAD P_LOW	;
P1_HIGH	LCS1	66	HEAD P_HIGH	;
P1_LOW	LCS1	64	HEAD P_LOW	;
P1_LDS	LDS1	61	HEAD P_LOW	;
P3_HIGH	LCS3	7[illegible]	HEAD P_HIGH	;
P3_LOW	LCS3	71	HEAD P_LOW	;
P3_LDS	LDS3	68	HEAD P_LOW	;
P8_HIGH	LCS8	7[illegible]	HEAD P_HIGH	;
P8_LOW	LCS8	78	HEAD P_LOW	;
P8_LDS	LDS8	77	HEAD P_LOW	;
P10_HIGH	LCS10	88	HEAD P_HIGH	;

```
 P10_LOW           LCS10                              86 HEAD P_LOW  ;
 P10_LDS           LDS10                              83 HEAD P_LOW  ;
 P12_HIGH          LCS12                              95 HEAD P_HIGH ;
 P12_LOW           LCS12                              92 HEAD P_LOW  ;
 P12_LDS           LDS12                              91 HEAD P_LOW  ;
 P13_HIGH          LCS13                              99 HEAD P_HIGH ;
 P13_LOW           LCS13                              97 HEAD P_LOW  ;
 P13_LDS           LDS13                             101 HEAD P_LOW  ;

[VALVES]
;ID                Node1           Node2             Diameter     Type      Setting      MinorLoss

[TAGS]

[DEMANDS]
;Junction          Demand          Pattern           Category

[STATUS]
;ID                Status/Setting
 P2_LDS            Closed
 P2_LOW            Closed
 P2_HIGH           Closed
 P5_HIGH           Closed
 P5_LOW            Closed
 P5_LDS            Closed
 P7_HIGH           Closed
 P7_LOW            Closed
 P7_LDS            Closed
 P9_HIGH           Closed
 P9_LOW            Closed
 P9_LDS            Closed
 P11_HIGH          Closed
 P11_LOW           Closed
 P11_LDS           Closed
 P4_HIGH           Closed
 P4_LOW            Closed
 P4_LDS            Closed
```

P6_HIGH	Closed
P6_LOW	Closed
P6_LDS	Closed
P1_HIGH	Closed
P1_LOW	Closed
P1_LDS	Closed
P3_HIGH	Closed
P3_LOW	Closed
P3_LDS	Closed
P8_HIGH	Closed
P8_LOW	Closed
P8_LDS	Closed
P10_HIGH	Closed
P10_LOW	Closed
P10_LDS	Closed
P12_HIGH	Closed
P12_LOW	Closed
P12_LDS	Closed
P13_HIGH	Closed
P13_LOW	Closed
P13_LDS	Closed

[PATTERNS]
;ID Multipliers
;Cell 1 25-year Storm Open Cell Condition - LCS

1_25_yr_LCS_Open	0	0	0	0	35.904	71.808
1_25_yr_LCS_Open	103.224	130.152	152.592	175.032	192.984	210.936
1_25_yr_LCS_Open	228.888	242.352	255.816	269.28	282.744	300.696
1_25_yr_LCS_Open	318.648	332.112	350.064	368.016	381.48	399.432
1_25_yr_LCS_Open	412.896	430.848	444.312	462.264	475.728	493.68
1_25_yr_LCS_Open	507.144	520.608	538.56	583.44	650.76	713.592
1_25_yr_LCS_Open	780.912	803.352	803.352	875.16	982.872	1117.512
1_25_yr_LCS_Open	1279.08	1498.99[illegible]	1763.784	2261.952	2908.224	13809.576
1_25_yr_LCS_Open	27138.936	4330.92	2719.728	2037.552	1691.976	1463.088
1_25_yr_LCS_Open	1279.08	1135.464	1005.312	933.504	888.624	843.744
1_25_yr_LCS_Open	794.376	749.496	704.616	659.736	610.368	587.928
1_25_yr_LCS_Open	569.976	556.512	538.56	520.608	507.144	489.192

1_25_yr_LCS_Open	471.24	457.776	439.824	426.36	408.408	390.456
1_25_yr_LCS_Open	376.992	359.04	341.088	336.6	332.112	332.112
1_25_yr_LCS_Open	327.624	323.136	318.648	318.648	314.16	309.672
1_25_yr_LCS_Open	305.184	305.184	300.696	296.208	296.208	291.72
1_25_yr_LCS_Open	287.232	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0	0	0	0	0	0
1_25_yr_LCS_Open	0					

;Cell 1 25-year Storm Open Cell Condition - LDS						
1_25_yr_LDS_Open	2					
;Cell 1 25-year Storm 10' Fill Cell Condition - LCS						
1_25_yr_LCS_10	7.6					
;Cell 1 25-year Storm 10' Fill Cell Condition - LDS						
1_25_yr_LDS_10	1.9					
;Cell 1 25-year Storm 80' Fill Cell Condition - LCS						
1_25_yr_LCS_80	5.3					
;Cell 1 25-year Storm 80' Fill Cell Condition - LDS						
1_25_yr_LDS_80	1.6					
;Cell 1 Daily Flow Open Cell Condition - LCS						
1_Avg_LCS_Open	8.1					
;Cell 1 Daily Flow Open Cell Condition - LDS						
1_Avg_LDS_Open	0.3					
;Cell 1 Daily Flow 10' Fill Condition - LCS						
1_Avg_LCS_10	1.9					
;Cell 1 Daily Flow 10' Fill Condition - LDS						
1_Avg_LDS_10	0.9					
;Cell 1 Daily Flow 80' Fill Condition - LCS						
1_Avg_LCS_80	0.8					
;Cell 1 Daily Flow 80' Fill Condition - LDS						
1_Avg_LDS_80	0.5					
;Cell 2 25-year Storm Open Cell Condition - LCS						
2_25_yr_LCS_Open	0	0	0	0	35.904	71.808
2_25_yr_LCS_Open	98.736	125.664	148.104	170.544	188.496	206.448
2_25_yr_LCS_Open	219.912	237.864	251.328	264.792	273.768	291.72
2_25_yr_LCS_Open	309.672	323.136	341.088	359.04	372.504	390.456
2_25_yr_LCS_Open	403.92	421.872	435.336	448.8	466.752	480.216
2_25_yr_LCS_Open	493.68	507.144	525.096	569.976	632.808	695.64
2_25_yr_LCS_Open	762.96	780.912	785.4	852.72	955.944	1090.584
2_25_yr_LCS_Open	1243.176	1463.088	1718.904	2203.608	2836.416	13459.512
2_25_yr_LCS_Open	26452.272	4218.72	2652.408	1983.696	1647.096	1427.184
2_25_yr_LCS_Open	1247.664	1108.536	978.384	906.576	866.184	821.304
2_25_yr_LCS_Open	776.424	731.544	686.664	641.784	596.904	574.464
2_25_yr_LCS_Open	556.512	543.048	525.096	507.144	493.68	480.216
2_25_yr_LCS_Open	462.264	444.312	430.848	412.896	399.432	381.48
2_25_yr_LCS_Open	368.016	350.064	336.6	327.624	323.136	323.136

2_25_yr_LCS_Open	318.648	314.16	314.16	309.672	305.184	300.696
2_25_yr_LCS_Open	300.696	296.208	291.72	291.72	287.232	282.744
2_25_yr_LCS_Open	278.256	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0	0	0	0	0	0
2_25_yr_LCS_Open	0					
;Cell 2 25-year Storm Open Cell Condition - LDS						
2_25_yr_LDS_Open	2					

;Cell 2 25-year Storm 10' Fill Cell Condition - LCS						
2_25_yr_LCS_10	7.4					
;Cell 2 25-year Storm 10' Fill Cell Condition - LDS						
2_25_yr_LDS_10	1.9					
;Cell 2 25-year Storm 80' Fill Cell Condition - LCS						
2_25_yr_LCS_80	5.5					
;Cell 2 25-year Storm 80' Fill Cell Condition - LDS						
2_25_yr_LDS_80	1.6					
;Cell 2 Daily Flow Open Cell Condition - LCS						
2_Avg_LCS_Open	7.9					
;Cell 2 Daily Flow Open Cell Condition - LDS						
2_Avg_LDS_Open	0.3					
;Cell 1 Daily Flow 10' Fill Cell Condition - LCS						
2_Avg_LCS_10	1.9					
;Cell 2 Daily Flow 10' Fill Cell Condition - LDS						
2_Avg_LDS_10	0.8					
;Cell 2 Daily Flow 80' Fill Cell Condition - LCS						
2_Avg_LCS_80	0.7					
;Cell 2 Daily Flow 80' Fill Cell Condition - LDS						
2_Avg_LDS_80	0.5					
;Cell 3 25-year Storm Open Cell Condition - LCS						
3_25_yr_LCS_Open	0	0	0	0	26.928	53.856
3_25_yr_LCS_Open	76.296	94.248	112.2	125.664	139.128	152.592
3_25_yr_LCS_Open	166.056	175.032	188.496	197.472	206.448	219.912
3_25_yr_LCS_Open	228.888	242.352	255.816	264.792	278.256	291.72
3_25_yr_LCS_Open	300.696	314.16	323.136	336.6	345.576	359.04
3_25_yr_LCS_Open	368.016	381.48	390.456	426.36	475.728	520.608
3_25_yr_LCS_Open	569.976	583.44	587.928	637.296	713.592	812.328
3_25_yr_LCS_Open	929.016	1090.584	1283.568	1647.096	2118.336	10057.608
3_25_yr_LCS_Open	19765.152	3150.576	1983.696	1481.04	1234.2	1068.144
3_25_yr_LCS_Open	933.504	825.792	731.544	677.688	646.272	614.856
3_25_yr_LCS_Open	578.952	547.536	511.632	480.216	444.312	426.36
3_25_yr_LCS_Open	417.384	403.92	390.456	381.48	368.016	359.04
3_25_yr_LCS_Open	345.576	332.112	323.136	309.672	296.208	287.232
3_25_yr_LCS_Open	273.768	260.304	251.328	246.84	242.352	242.352
3_25_yr_LCS_Open	237.864	233.376	233.376	228.888	228.888	224.4
3_25_yr_LCS_Open	224.4	219.912	219.912	215.424	215.424	210.936

3_25_yr_LCS_Open	210.936	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0	0	0	0	0	0
3_25_yr_LCS_Open	0					
;Cell 3 25-year Storm Open Cell Condition - LDS						
3_25_yr_LDS_Open	1.5					
;Cell 3 25-year Storm 10' Fill Cell Condition - LCS						
3_25_yr_LCS_10	5.5					

;Cell 3 25-year Storm 10' Fill Cell Condition - LDS
3_25_yr_LDS_10 1.4
;Cell 3 25-year Storm 80' Fill Cell Condition - LCS
3_25_yr_LCS_80 4.1
;Cell 3 25-year Storm 80' Fill Cell Condition - LDS
3_25_yr_LDS_80 1.2
;Cell 3 Daily Flow Open Cell Condition - LCS
3_Avg_LCS_Open 5.9
;Cell 3 Daily Flow Open Cell Condition - LDS
3_Avg_LDS_Open 0.2
;Cell 3 Daily Flow 10' Fill Cell Condition - LCS
3_Avg_LCS_10 1.4
;Cell 3 Daily Flow 10' Fill Cell Condition - LDS
3_Avg_LDS_10 0.6
;Cell 3 Daily Flow 80' Fill Cell Condition - LCS
3_Avg_LCS_80 0.6
;Cell 3 Daily Flow 80' Fill Cell Condition - LDS
3_Avg_LDS_80 0.3
;Cell 4 25-year Storm Open Cell Condition - LCS

4_25_yr_LCS_Open	0	0	0	0	35.904	67.32
4_25_yr_LCS_Open	94.248	116.688	139.128	161.568	179.52	192.984
4_25_yr_LCS_Open	210.936	224.4	237.864	251.328	260.304	273.768
4_25_yr_LCS_Open	291.72	305.184	323.136	336.6	354.552	368.016
4_25_yr_LCS_Open	381.48	394.944	412.896	426.36	439.824	453.288
4_25_yr_LCS_Open	466.752	480.216	493.68	538.56	601.392	659.736
4_25_yr_LCS_Open	718.08	740.52	745.008	807.84	906.576	1032.24
4_25_yr_LCS_Open	1175.856	1382.304	1624.656	2086.92	2679.336	12736.944
4_25_yr_LCS_Open	25029.576	3994.32	2508.792	1875.984	1561.824	1350.888
4_25_yr_LCS_Open	1180.344	1045.704	924.528	861.696	816.816	776.424
4_25_yr_LCS_Open	731.544	691.152	650.76	610.368	565.488	543.048
4_25_yr_LCS_Open	525.096	511.632	498.168	480.216	466.752	453.288
4_25_yr_LCS_Open	435.336	421.872	408.408	390.456	376.992	363.528
4_25_yr_LCS_Open	345.576	332.112	318.648	309.672	309.672	305.184
4_25_yr_LCS_Open	300.696	296.208	296.208	291.72	287.232	287.232
4_25_yr_LCS_Open	282.744	278.256	278.256	273.768	269.28	269.28
4_25_yr_LCS_Open	264.792	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0

4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0	0	0	0	0	0
4_25_yr_LCS_Open	0					
;Cell 4 25-year Storm Open Cell Condition - LDS						
4_25_yr_LDS_Open	1.8					
;Cell 4 25-year Storm 10' Fill Cell Condition - LCS						
4_25_yr_LCS_10	7					
;Cell 4 25-year Storm 10' Fill Cell Condition - LDS						
4_25_yr_LDS_10	1.8					

;Cell 4 25-year Storm 80' Fill Cell Condition - LCS						
4_25_yr_LCS_80	5.2					
;Cell 4 25-year Storm 80' Fill Cell Condition - LDS						
4_25_yr_LDS_80	1.5					
;Cell 4 Daily Flow Open Cell Condition - LCS						
4_Avg_LCS_Open	7.5					
;Cell 4 Daily Flow Open Cell Condition - LDS						
4_Avg_LDS_Open	0.3					
;Cell 4 Daily Flow 10' Fill Cell Condition - LCS						
4_Avg_LCS_10	1.8					
;Cell 4 Daily Flow 10' Fill Cell Condition - LDS						
4_Avg_LDS_10	0.8					
;Cell 4 Daily Flow 80' Fill Cell Condition - LCS						
4_Avg_LCS_80	0.7					
;Cell 4 Daily Flow 80' Fill Cell Condition - LDS						
4_Avg_LDS_80	0.4					
;Cell 5 25-year Storm Open Cell Condition - LCS						
5_25_yr_LCS_Open	0	0	0	0	31.416	62.832
5_25_yr_LCS_Open	89.76	112.2	134.64	152.592	170.544	184.008
5_25_yr_LCS_Open	201.96	215.424	228.888	237.864	246.84	264.792
5_25_yr_LCS_Open	278.256	291.72	309.672	323.136	336.6	350.064
5_25_yr_LCS_Open	363.528	376.992	390.456	403.92	421.872	430.848
5_25_yr_LCS_Open	444.312	457.776	471.24	516.12	569.976	628.32
5_25_yr_LCS_Open	686.664	704.616	709.104	771.936	861.696	982.872
5_25_yr_LCS_Open	1122	1319.472	1552.848	1992.672	2558.16	12149.016
5_25_yr_LCS_Open	23876.16	3810.312	2392.104	1790.712	1490.016	1288.056
5_25_yr_LCS_Open	1126.488	1000.824	884.136	821.304	780.912	740.52
5_25_yr_LCS_Open	700.128	659.736	619.344	578.952	538.56	516.12
5_25_yr_LCS_Open	502.656	489.192	475.728	457.776	444.312	430.848
5_25_yr_LCS_Open	417.384	403.92	390.456	372.504	359.04	345.576
5_25_yr_LCS_Open	332.112	318.648	300.696	296.208	291.72	291.72
5_25_yr_LCS_Open	287.232	282.744	282.744	278.256	273.768	273.768
5_25_yr_LCS_Open	269.28	269.26	264.792	260.304	260.304	255.816
5_25_yr_LCS_Open	251.328	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0

5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0	0	0	0	0	0
5_25_yr_LCS_Open	0					
;Cell 5 25-year Storm Open Cell Condition - LDS						
5_25_yr_LDS_Open	1.8					
;Cell 5 25-year Storm 10' Fill Cell Condition - LCS						
5_25_yr_LCS_10	6.7					
;Cell 5 25-year Storm 10' Fill Cell Condition - LDS						
5_25_yr_LDS_10	1.7					
;Cell 5 25-year Storm 80' Fill Cell Condition - LCS						
5_25_yr_LCS_80	5					

;Cell 5 25-year Storm 80' Fill Cell Condition - LDS						
5_25_yr_LDS_80	1.4					
;Cell 5 Daily Flow Open Cell Condition - LCS						
5_Avg_LCS_Open	7.1					
;Cell 5 Daily Flow Open Cell Condition - LDS						
5_Avg_LDS_Open	0.3					
;Cell 5 Daily Flow 10' Fill Cell Condition - LCS						
5_Avg_LCS_10	1.7					
;Cell 5 Daily Flow 10' Fill Cell Condition - LDS						
5_Avg_LDS_10	0.8					
;Cell 5 Daily Flow 80' Fill Cell Condition - LCS						
5_Avg_LCS_80	0.7					
;Cell 5 Daily Flow 80' Fill Cell Condition - LDS						
5_Avg_LDS_80	0.4					
;Cell 6 25-year Storm Open Cell Condition - LCS						
6_25_yr_LCS_Open	0	0	0	0	35.904	67.32
6_25_yr_LCS_Open	94.248	116.688	139.128	157.08	175.032	192.984
6_25_yr_LCS_Open	206.448	219.912	233.376	246.84	260.304	273.768
6_25_yr_LCS_Open	287.232	305.184	318.648	336.6	350.064	363.528
6_25_yr_LCS_Open	376.992	394.944	408.408	421.872	435.336	448.8
6_25_yr_LCS_Open	462.264	475.728	489.192	534.072	592.416	650.76
6_25_yr_LCS_Open	713.592	731.544	736.032	798.864	897.6	1023.264
6_25_yr_LCS_Open	1166.88	1368.84	1611.192	2064.48	2656.896	12611.28
6_25_yr_LCS_Open	24782.736	3953.928	2486.352	1858.032	1543.872	1337.424
6_25_yr_LCS_Open	1166.88	1036.728	915.552	852.72	807.84	767.448
6_25_yr_LCS_Open	727.056	686.664	641.784	601.392	561	538.56
6_25_yr_LCS_Open	520.608	507.144	493.68	475.728	462.264	448.8
6_25_yr_LCS_Open	430.848	417.384	403.92	390.456	372.504	359.04
6_25_yr_LCS_Open	345.576	327.624	314.16	305.184	305.184	300.696
6_25_yr_LCS_Open	296.208	296.208	291.72	291.72	287.232	282.744
6_25_yr_LCS_Open	282.744	278.256	273.768	269.28	269.28	264.792
6_25_yr_LCS_Open	260.304	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0

6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0	0	0	0	0	0
6_25_yr_LCS_Open	0					
;Cell 6 25-year Storm Open Cell Condition - LDS						
6_25_yr_LDS_Open	1.8					
;Cell 6 25-year Storm 10' Fill Cell Condition - LCS						
6_25_yr_LCS_10	6.9					
;Cell 6 25-year Storm 10' Fill Cell Condition - LDS						
6_25_yr_LDS_10	1.8					
;Cell 6 25-year Storm 80' Fill Cell Condition - LCS						
6_25_yr_LCS_80	5.2					
;Cell 6 25-year Storm 80' Fill Cell Condition - LDS						
6_25_yr_LDS_80	1.5					

;Cell 6 Daily Flow Open Cell Condition - LCS						
6_Avg_LCS_Open6.	7.4					
;Cell 6 Daily Flow Open Cell Condition - LDS						
6_Avg_LDS_Open	0.3					
;Cell 6 Daily Flow 10' Fill Cell Condition - LCS						
6_Avg_LCS_10	1.7					
;Cell 6 Daily Flow 10' Fill Cell Condition - LDS						
6_Avg_LDS_10	0.8					
;Cell 6 Daily Flow 80' Fill Cell Condition - LCS						
6_Avg_LCS_80	0.7					
;Cell 6 Daily Flow 80' Fill Cell Condition - LDS						
6_Avg_LDS_80	0.4					
;Cell 7 25-year Storm Open Cell Condition - LCS						
7_25_yr_LCS_Open	0	0	0	0	31.416	58.344
7_25_yr_LCS_Open	85.272	107.712	125.664	143.616	161.568	175.032
7_25_yr_LCS_Open	188.496	201.96	215.424	224.4	233.376	246.84
7_25_yr_LCS_Open	260.304	273.768	291.72	305.184	318.648	332.112
7_25_yr_LCS_Open	341.088	354.552	368.016	381.48	394.944	408.408
7_25_yr_LCS_Open	417.384	430.848	444.312	484.704	538.56	592.416
7_25_yr_LCS_Open	646.272	664.224	664.224	727.056	812.328	924.528
7_25_yr_LCS_Open	1054.68	1238.688	1458.6	1871.496	2405.568	11421.96
7_25_yr_LCS_Open	22453.464	3581.424	2252.976	1683	1400.256	1211.76
7_25_yr_LCS_Open	1059.168	937.992	830.28	771.936	731.544	695.64
7_25_yr_LCS_Open	655.248	619.344	583.44	547.536	507.144	484.704
7_25_yr_LCS_Open	471.24	457.776	444.312	430.848	417.384	403.92
7_25_yr_LCS_Open	390.456	376.992	363.528	350.064	336.6	323.136
7_25_yr_LCS_Open	309.672	296.208	282.744	278.256	273.768	273.768
7_25_yr_LCS_Open	269.28	269.28	264.792	260.304	260.304	255.816
7_25_yr_LCS_Open	255.816	251.328	246.84	246.84	242.352	242.352
7_25_yr_LCS_Open	237.864	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0

7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0	0	0	0	0	0
7_25_yr_LCS_Open	0					
;Cell 7 25-year Storm Open Cell Condition - LDS						
7_25_yr_LDS_Open	1.7					
;Cell 7 25-year Storm 10' Fill Cell Condition - LCS						
7_25_yr_LCS_10	6.3					
;Cell 7 25-year Storm 10' Fill Cell Condition - LDS						
7_25_yr_LDS_10	1.6					
;Cell 7 25-year Storm 80' Fill Cell Condition - LCS						
7_25_yr_LCS_80	4.7					
;Cell 7 25-year Storm 80' Fill Cell Condition - LDS						
7_25_yr_LDS_80	1.3					
;Cell 7 Daily Flow Open Cell Condition - LCS						
7_Avg_LCS_Open	6.7					

;Cell 7 Daily Flow Open Cell Condition - LDS						
7_Avg_LDS_Open	0.3					
;Cell 7 Daily Flow 10' Fill Cell Condition - LCS						
7_Avg_LCS_10	1.6					
;Cell 7 Daily Flow 10' Fill Cell Condition - LDS						
7_Avg_LDS_10	0.7					
;Cell 7 Daily Flow 80' Fill Cell Condition - LCS						
7_Avg_LCS_80	0.6					
;Cell 7 Daily Flow 80' Fill Cell Condition - LDS						
7_Avg_LDS_80	0.4					
;Cell 8 25-year Storm Open Cell Condition - LCS						
8_25_yr_LCS_Open	0	0	0	0	31.416	62.832
8_25_yr_LCS_Open	85.272	107.712	130.152	148.104	166.056	179.52
8_25_yr_LCS_Open	192.984	206.448	219.912	233.376	242.352	255.816
8_25_yr_LCS_Open	269.28	282.744	300.696	314.16	327.624	341.088
8_25_yr_LCS_Open	354.552	368.016	381.48	394.944	408.408	421.872
8_25_yr_LCS_Open	430.848	444.312	457.776	498.168	556.512	610.368
8_25_yr_LCS_Open	664.224	686.664	686.664	749.496	839.256	955.944
8_25_yr_LCS_Open	1090.584	1279.08	1503.48	1929.84	2481.864	11785.488
8_25_yr_LCS_Open	23162.568	3693.624	2320.296	1736.856	1445.136	1252.152
8_25_yr_LCS_Open	1090.584	969.408	857.208	794.376	758.472	718.08
8_25_yr_LCS_Open	677.688	641.784	601.392	561	520.608	502.656
8_25_yr_LCS_Open	489.192	475.728	457.776	444.312	430.848	417.384
8_25_yr_LCS_Open	403.92	390.456	376.992	363.528	350.064	336.6
8_25_yr_LCS_Open	323.136	309.672	291.72	287.232	282.744	282.744
8_25_yr_LCS_Open	278.256	273.768	273.768	269.28	269.28	264.792
8_25_yr_LCS_Open	260.304	260.304	255.816	255.816	251.328	246.84
8_25_yr_LCS_Open	246.84	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0

8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0	0	0	0	0	0
8_25_yr_LCS_Open	0					
;Cell 8 25-year Storm Open Cell Condition - LDS						
8_25_yr_LDS_Open	1.7					
;Cell 8 25-year Storm 10' Fill Cell Condition - LCS						
8_25_yr_LCS_10	6.5					
;Cell 8 25-year Storm 10' Fill Cell Condition - LDS						
8_25_yr_LDS_10	1.6					
;Cell 8 25-year Storm 80' Fill Cell Condition - LCS						
8_25_yr_LCS_80	4.9					
;Cell 8 25-year Storm 80' Fill Cell Condition - LDS						
8_25_yr_LDS_80	1.4					
;Cell 8 Daily Flow Open Cell Condition - LCS						
8_Avg_LCS_Open	6.9					
;Cell 8 Daily Flow Open Cell Condition - LDS						
8_Avg_LDS_Open	0.3					

;Cell 8 Daily Flow 10' Fill Cell Condition - LCS						
8_Avg_LCS_10	1.6					
;Cell 8 Daily Flow 10' Fill Cell Condition - LDS						
8_Avg_LDS_10	0.7					
;Cell 8 Daily Flow 80' Fill Cell Condition - LCS						
8_Avg_LCS_80	0.7					
;Cell 8 Daily Flow 80' Fill Cell Condition - LDS						
8_Avg_LDS_80	0.4					
;Cell 9 25-year Storm Open Cell Condition - LCS						
9_25_yr_LCS_Open	0	0	0	0	26.928	53.856
9_25_yr_LCS_Open	76.296	94.248	112.2	130.152	143.616	157.08
9_25_yr_LCS_Open	170.544	179.52	192.984	201.96	210.936	219.912
9_25_yr_LCS_Open	233.376	246.84	260.304	273.768	282.744	296.208
9_25_yr_LCS_Open	309.672	318.648	332.112	341.088	354.552	363.528
9_25_yr_LCS_Open	376.992	385.968	399.432	435.336	484.704	529.584
9_25_yr_LCS_Open	578.952	596.904	596.904	650.76	727.056	830.28
9_25_yr_LCS_Open	946.968	1113.024	1310.496	1678.512	2158.728	10250.592
9_25_yr_LCS_Open	20151.12	3213.408	2019.6	1512.456	1256.64	1086.096
9_25_yr_LCS_Open	951.456	843.744	745.008	691.152	659.736	623.832
9_25_yr_LCS_Open	587.928	556.512	525.096	489.192	453.288	435.336
9_25_yr_LCS_Open	426.36	412.896	399.432	385.968	376.992	363.528
9_25_yr_LCS_Open	350.064	341.088	327.624	314.16	305.184	291.72
9_25_yr_LCS_Open	278.256	269.28	255.816	251.328	246.84	246.84
9_25_yr_LCS_Open	242.352	237.864	237.864	233.376	233.376	228.888
9_25_yr_LCS_Open	228.888	224.4	224.4	219.912	219.912	215.424
9_25_yr_LCS_Open	210.936	0	0	0	0	0
9_25_yr_LCS_Open	0	0	0	0	0	0
9_25_yr_LCS_Open	0	0	0	0	0	0
9_25_yr_LCS_Open	0	0	0	0	0	0
9_25_yr_LCS_Open	0	0	0	0	0	0
9_25_yr_LCS_Open	0	0	0	0	0	0
9_25_yr_LCS_Open	0	0	0	0	0	0
9_25_yr_LCS_Open	0	0	0	0	0	0
9_25_yr_LCS_Open	0	0	0	0	0	0
9_25_yr_LCS_Open	0	0	0	0	0	0
9_25_yr_LCS_Open	0	0	0	0	0	0
9_25_yr_LCS_Open	0	0	0	0	0	0

9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0	0	0	0	0	0	
9_25_yr_LCS_Open	0						
;Cell 9 25-year Storm Open Cell Condition - LDS							
9_25_yr_LDS_Open	1.5						
;Cell 9 25-year Storm 10' Fill Cell Condition - LCS							
9_25_yr_LCS_10	5.6						
;Cell 9 25-year Storm 10' Fill Cell Condition - LDS							
9_25_yr_LDS_10	1.4						
;Cell 9 25-year Storm 80' Fill Cell Condition - LCS							
9_25_yr_LCS_80	4.2						
;Cell 9 25-year Storm 80' Fill Cell Condition - LDS							
9_25_yr_LDS_80	1.2						
;Cell 9 Daily Flow Open Cell Condition - LCS							
9_Avg_LCS_Open	6						
;Cell 9 Daily Flow Open Cell Condition - LDS							
9_Avg_LDS_Open	0.2						
;Cell 9 Daily Flow 10' Fill Cell Condition - LCS							
9_Avg_LCS_10	1.4						

;Cell 9 Daily Flow 10' Fill Cell Condition - LDS						
9_Avg_LDS_10	0.6					
;Cell 9 Daily Flow 80' Fill Cell Condition - LCS						
9_Avg_LCS_80	0.6					
;Cell 9 Daily Flow 80' Fill Cell Condition - LDS						
9_Avg_LDS_80	0.3					
;Cell 10 25-year Storm Open Cell Condition - LCS						
10_25_yr_LCS_Open	0	0	0	0	26.928	53.856
10_25_yr_LCS_Open	76.296	94.248	112.2	125.664	139.128	152.592
10_25_yr_LCS_Open	166.056	175.032	188.496	197.472	206.448	219.912
10_25_yr_LCS_Open	233.376	242.352	255.816	269.28	278.256	291.72
10_25_yr_LCS_Open	305.184	314.16	327.624	336.6	350.064	359.04
10_25_yr_LCS_Open	372.504	381.48	390.456	426.36	475.728	520.608
10_25_yr_LCS_Open	569.976	587.928	587.928	641.784	718.08	816.816
10_25_yr_LCS_Open	933.504	1095.072	1288.056	1651.584	2122.824	10084.536
10_25_yr_LCS_Open	19819.008	3159.552	1988.184	1485.528	1234.2	1068.144
10_25_yr_LCS_Open	933.504	830.28	731.544	682.176	646.272	614.856
10_25_yr_LCS_Open	578.952	547.536	516.12	480.216	448.8	430.848
10_25_yr_LCS_Open	417.384	403.92	394.944	381.48	368.016	359.04
10_25_yr_LCS_Open	345.576	332.112	323.136	309.672	296.208	287.232
10_25_yr_LCS_Open	273.768	264.792	251.328	246.84	242.352	242.352
10_25_yr_LCS_Open	237.864	237.864	233.376	233.376	228.888	224.4
10_25_yr_LCS_Open	224.4	219.912	219.912	215.424	215.424	210.936
10_25_yr_LCS_Open	210.936	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0

10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0	0	0	0	0	0
10_25_yr_LCS_Open	0					
;Cell 10 25-year Storm Open Cell Condition - LDS						
10_25_yr_LDS_Open	1.5					
;Cell 10 25-year Storm 10' Fill Cell Condition - LCS						
10_25_LCS_10	5.5					
;Cell 10 25-year Storm 10' Fill Cell Condition - LDS						
10_25_yr_LDS_10	1.4					
;Cell 10 25-year Storm 80' Fill Cell Condition - LCS						
10_25_yr_LCS_80	4.2					
;Cell 10 25-year Storm 80' Fill Cell Condition - LDS						
10_25_yr_LDS_80	1.2					
;Cell 10 Daily Flow Open Cell Condition - LCS						
10_Avg_LCS_Open	5.9					
;Cell 10 Daily Flow Open Cell Condition - LDS						
10_Avg_LDS_Open	0.2					
;Cell 10 Daily Flow 10' Fill Cell Condition - LCS						
10_Avg_LCS_10	1.4					
;Cell 10 Daily Flow 10' Fill Cell Condition - LDS						
10_Avg_LDS_10	0.6					

;Cell 80 Daily Flow 10' Fill Cell Condition - LCS						
10_Avg_LCS_80	0.6					
;Cell 10 Daily Flow 80' Fill Cell Condition - LDS						
10_Avg_LDS_80	0.3					
;Cell 11 25-year Storm Open Cell Condition - LCS						
11_25_yr_LCS_Open	0	0	0	0	26.928	49.368
11_25_yr_LCS_Open	67.32	85.272	103.224	116.688	130.152	143.616
11_25_yr_LCS_Open	152.592	161.568	175.032	184.008	192.984	201.96
11_25_yr_LCS_Open	215.424	224.4	237.864	246.84	260.304	269.28
11_25_yr_LCS_Open	278.256	291.72	300.696	309.672	323.136	332.112
11_25_yr_LCS_Open	341.088	350.064	363.528	394.944	439.824	480.216
11_25_yr_LCS_Open	525.096	543.048	543.048	592.416	664.224	753.984
11_25_yr_LCS_Open	861.696	1009.8	1189.32	1525.92	1961.256	9317.088
11_25_yr_LCS_Open	18311.04	2921.688	1835.592	1373.328	1139.952	987.36
11_25_yr_LCS_Open	861.696	767.448	677.688	628.32	596.904	569.976
11_25_yr_LCS_Open	534.072	507.144	475.728	444.312	412.896	394.944
11_25_yr_LCS_Open	385.968	376.992	363.528	354.552	341.088	332.112
11_25_yr_LCS_Open	318.648	309.672	296.208	287.232	273.768	264.792
11_25_yr_LCS_Open	255.816	242.352	233.376	228.888	224.4	224.4
11_25_yr_LCS_Open	219.912	219.912	215.424	215.424	210.936	210.936
11_25_yr_LCS_Open	206.448	206.448	201.96	201.96	197.472	197.472
11_25_yr_LCS_Open	192.984	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0

11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0	0	0	0	0	0
11_25_yr_LCS_Open	0					
;Cell 11 25-year Storm Open Cell Condition - LDS						
11_25_yr_LDS_Open	1.4					
;Cell 11 25-year Storm 10' Fill Cell Condition - LCS						
11_25_yr_LCS_10	5.1					
;Cell 11 25-year Storm 10' Fill Cell Condition - LDS						
11_25_yr_LDS_10	1.3					
;Cell 11 25-year Storm 80' Fill Cell Condition - LCS						
11_25_yr_LCS_80	3.8					
;Cell 11 25-year Storm 80' Fill Cell Condition - LDS						
11_25_yr_LDS_80	1.1					
;Cell 11 Daily Flow Open Cell Condition - LCS						
11_Avg_LCS_Open	5.5					
;Cell 11 Daily Flow Open Cell Condition - LDS						
11_Avg_LDS_Open	0.2					
;Cell 11 Daily Flow 10' Fill Cell Condition - LCS						
11_Avg_LCS_10	1.3					
;Cell 11 Daily Flow 10' Fill Cell Condition - LDS						
11_Avg_LDS_10	0.6					
;Cell 11 Daily Flow 80' Fill Cell Condition - LCS						
11_Avg_LCS_80	0.5					

;Cell 11 Daily Flow 80' Fill Cell Condition - LDS						
11_Avg_LDS_80	0.3					
;Cell 12 25-year Storm Open Cell Condition - LCS						
12_25_yr_LCS_Open	0	0	0	0	26.928	49.368
12_25_yr_LCS_Open	67.32	85.272	103.224	116.688	130.152	143.616
12_25_yr_LCS_Open	152.592	161.568	175.032	184.008	188.496	201.96
12_25_yr_LCS_Open	210.936	224.4	233.376	246.84	255.816	269.28
12_25_yr_LCS_Open	278.256	291.72	300.696	309.672	323.136	332.112
12_25_yr_LCS_Open	341.088	350.064	359.04	394.944	435.336	480.216
12_25_yr_LCS_Open	525.096	538.56	543.048	587.928	659.736	753.984
12_25_yr_LCS_Open	857.208	1009.8	1184.832	1521.432	1956.768	9290.16
12_25_yr_LCS_Open	18257.184	2912.712	1831.104	1368.84	1139.952	987.36
12_25_yr_LCS_Open	861.696	762.96	673.2	628.32	596.904	565.488
12_25_yr_LCS_Open	534.072	502.656	475.728	444.312	412.896	394.944
12_25_yr_LCS_Open	385.968	372.504	363.528	350.064	341.088	332.112
12_25_yr_LCS_Open	318.648	309.672	296.208	287.232	273.768	264.792
12_25_yr_LCS_Open	251.328	242.352	228.888	224.4	224.4	219.912
12_25_yr_LCS_Open	219.912	215.424	215.424	215.424	210.936	206.448
12_25_yr_LCS_Open	206.448	206.448	201.96	201.96	197.472	197.472
12_25_yr_LCS_Open	192.984	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0

12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0	0	0	0	0	0
12_25_yr_LCS_Open	0					
;Cell 12 25-year Storm Open Cell Condition - LDS						
12_25_yr_LDS_Open	1.3					
;Cell 12 25-year Storm 10' Fill Cell Condition - LCS						
12_25_yr_LCS_10	5.1					
;Cell 12 25-year Storm 10' Fill Cell Condition - LDS						
12_25_yr_LDS_10	1.3					
;Cell 12 25-year Storm 80' Fill Cell Condition - LCS						
12_25_yr_LCS_80	3.8					
;Cell 12 25-year Storm 80' Fill Cell Condition - LDS						
12_25_yr_LDS_80	1.1					
;Cell 12 Daily Flow Open Cell Condition - LCS						
12_Avg_LCS_Open	5.4					
;Cell 12 Daily Flow Open Cell Condition - LDS						
12_Avg_LDS_Open	0.2					
;Cell 12 Daily Flow 10' Fill Cell Condition - LCS						
12_Avg_LCS_10	1.3					
;Cell 12 Daily Flow 10' Fill Cell Condition - LDS						
12_Avg_LDS_10	0.6					
;Cell 12 Daily Flow 80' Fill Cell Condition - LCS						
12_Avg_LCS_80	0.5					
;Cell 12 Daily Flow 80' Fill Cell Condition - LDS						
12_Avg_LDS_80	0.3					

;Cell 13 25-year Storm Open Cell Condition - LCS

13_25_yr_LCS_Open	0	0	0	0	17.952	35.904
13_25_yr_LCS_Open	53.856	67.32	80.784	89.76	103.224	112.2
13_25_yr_LCS_Open	116.688	125.664	134.64	143.616	148.104	157.08
13_25_yr_LCS_Open	166.056	175.032	184.008	192.984	201.96	206.448
13_25_yr_LCS_Open	215.424	224.4	233.376	242.352	251.328	255.816
13_25_yr_LCS_Open	264.792	273.768	278.256	305.184	341.088	372.504
13_25_yr_LCS_Open	408.408	417.384	421.872	457.776	511.632	583.44
13_25_yr_LCS_Open	668.712	785.4	920.04	1180.344	1516.944	7212.216
13_25_yr_LCS_Open	14173.104	2261.952	1422.696	1063.656	884.136	762.96
13_25_yr_LCS_Open	668.712	592.416	525.096	484.704	462.264	439.824
13_25_yr_LCS_Open	412.896	390.456	368.016	345.576	318.648	305.184
13_25_yr_LCS_Open	300.696	291.72	282.744	273.768	264.792	255.816
13_25_yr_LCS_Open	246.84	237.864	228.888	219.912	215.424	206.448
13_25_yr_LCS_Open	197.472	188.496	179.52	175.032	175.032	170.544
13_25_yr_LCS_Open	170.544	170.544	166.056	166.056	161.568	161.568
13_25_yr_LCS_Open	161.568	157.08	157.08	157.08	152.592	152.592
13_25_yr_LCS_Open	148.104	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0

13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0	0	0	0	0	0
13_25_yr_LCS_Open	0					
;Cell 13 25-year Storm Open Cell Condition - LDS						
13_25_yr_LDS_Open	1					
;Cell 13 25-year Storm 10' Fill Cell Condition - LCS						
13_25_yr_LCS_10	4					
;Cell 13 25-year Storm 10' Fill Cell Condition - LDS						
13_25_yr_LDS_10	1					
;Cell 13 25-year Storm 80' Fill Cell Condition - LCS						
13_25_yr_LCS_80	3					
;Cell 13 25-year Storm 80' Fill Cell Condition - LDS						
13_25_yr_LDS_80	0.9					
;Cell 13 Daily Flow Open Cell Condition - LCS						
13_Avg_LCS_Open	4.2					
;Cell 13 Daily Flow Open Cell Condition - LDS						
13_Avg_LDS_Open	0.2					
;Cell 13 Daily Flow 10' Fill Cell Condition - LCS						
13_Avg_LCS_10	1					
;Cell 13 Daily Flow 10' Fill Cell Condition - LDS						
13_Avg_LDS_10	0.4					
;Cell 13 Daily Flow 80' Fill Cell Condition - LCS						
13_Avg_LCS_80	0.4					
;Cell 13 Daily Flow 80' Fill Cell Condition - LDS						
13_Avg_LDS_80	0.2					
;Closed Cell Condition						
CLOSED	0					

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[CURVES]
;ID              X-Value         Y-Value
;PUMP: GunnCo P2K 40-2
 P_LOW                  0              60
 P_LOW                 10              57
 P_LOW                 20              52
 P_LOW                 30              44
 P_LOW                 40              32
 P_LOW                 50              19
 P_LOW                 60               0
 P_LOW                 61             -50
;PUMP: GunnCo P2K 385-S75-1
 P_HIGH                 0             100
 P_HIGH                50              95
 P_HIGH               100              90
 P_HIGH               150              85
 P_HIGH               200              80
 P_HIGH               250              75
 P_HIGH               300              68
 P_HIGH               350              60
 P_HIGH               400              52
 P_HIGH               450              45
 P_HIGH               500              40
 P_HIGH               530               0
 P_HIGH               531             -50
;VOLUME: LDS Volume for All Cells
 LDS                    0               0
 LDS                  2.5             135
;VOLUME: LCS Volume - Cell 1
 LCS1_24                0               0
 LCS1_24              2.5             417
 LCS1_24              4.5            1257
 LCS1_24              6.5            7333
 LCS1_24              8.5           25920
 LCS1_24             10.5           62388
;VOLUME: LCS Volume - Cell 2
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LCS2_24	0	0
LCS2_24	2.5	417
LCS2_24	4.5	4257
LCS2_24	6.5	18935
LCS2_24	8.5	51073
;VOLUME: LCS Volume - Cell 3		
LCS3_24	0	0
LCS3_24	2.5	417
LCS3_24	4.5	3320
LCS3_24	6.5	12902
LCS3_24	8.5	31630
;VOLUME: LCS Volume - Cell 4		
LCS4_24	0	0
LCS4_24	2.5	417
LCS4_24	4.5	10902
LCS4_24	6.5	34833
LCS4_24	8.5	75722
;VOLUME: LCS Volume - Cell 5		
LCS5_24	0	0
LCS5_24	2.5	417
LCS5_24	4.5	4393
LCS5_24	6.5	17598
LCS5_24	8.5	45036
LCS5_24	10.5	90018
;VOLUME: LCS Volume - Cell 6		
LCS6_24	0	0
LCS6_24	2.5	417
LCS6_24	4.5	7813
LCS6_24	6.5	29302
LCS6_24	8.5	67907
;VOLUME: LCS Volume - Cell 7		
LCS7_24	0	0
LCS7_24	2.5	417
LCS7_24	4.5	6957
LCS7_24	6.5	25202
LCS7_24	8.5	58202
LCS7_24	10.5	108618

LCS7_24	12.5	178472
;VOLUME: LCS Volume - Cell 8		
LCS8_24	0	0
LCS8_24	2.5	417
LCS8_24	4.5	6025
LCS8_24	6.5	23133
LCS8_24	8.5	57132
;VOLUME: LCS Volume - Cell 9		
LCS9_24	0	0
LCS9_24	2.5	417
LCS9_24	4.5	5623
LCS9_24	6.5	21854
LCS9_24	8.5	53328
LCS9_24	10.5	102559
;VOLUME: LCS Volume - Cell 10		
LCS10_24	0	0
LCS10_24	2.5	417
LCS10_24	4.5	7750
LCS10_24	6.5	28270
LCS10_24	8.5	66788
;VOLUME: LCS Volume - Cell 11		
LCS11_24	0	0
LCS11_24	2.5	417
LCS11_24	4.5	4371
LCS11_24	6.5	18557
LCS11_24	8.5	48036
LCS11_24	10.5	95598
;VOLUME: LCS Volume - Cell 12		
LCS12_24	0	0
LCS12_24	2.5	417
LCS12_24	4.5	5343
LCS12_24	6.5	21515
LCS12_24	8.5	54799
;VOLUME: LCS Volume - Cell 13		
LCS13_24	0	0
LCS13_24	2.5	417
LCS13_24	4.5	6209

LCS13_24	6.5	18994
LCS13_24	8.5	41630
LCS13_24	10.5	76979
LCS13_24	12.5	127669
LCS13_24	14.5	193434
LCS13_24	16.5	270738
;VOLUME: LCS Volume - Cell 1, Case 1		
LCS1_1	0	0
LCS1_1	2.5	417
LCS1_1	4.5	4191
LCS1_1	6.5	24443
LCS1_1	8.5	86399
LCS1_1	10.5	207959
;VOLUME: LCS Volume - Cell 2, Case 1		
LCS2_1	0	0
LCS2_1	2.5	417
LCS2_1	4.5	13216
LCS2_1	6.5	62144
LCS2_1	8.5	169270
;VOLUME: LCS Volume - Cell 3, Case 1		
LCS3_1	0	0
LCS3_1	2.5	417
LCS3_1	4.5	11060
LCS3_1	6.5	42589
LCS3_1	8.5	105015
;VOLUME: LCS Volume - Cell 4, Case 1		
LCS4_1	0	0
LCS4_1	2.5	417
LCS4_1	4.5	35367
LCS4_1	6.5	115136
LCS4_1	8.5	251434
;VOLUME: LCS Volume - Cell 5, Case 1		
LCS5_1	0	0
LCS5_1	2.5	417
LCS5_1	4.5	13671
LCS5_1	6.5	57686
LCS5_1	8.5	149149

LCS5_1	10.5	299086
;VOLUME: LCS Volume - Cell 6, Case 1		
LCS6_1	0	0
LCS6_1	2.5	417
LCS6_1	4.5	25076
LCS6_1	6.5	96700
LCS6_1	8.5	225384
;VOLUME: LCS Volume - Cell 7, Case 1		
LCS7_1	0	0
LCS7_1	2.5	417
LCS7_1	4.5	22215
LCS7_1	6.5	83034
LCS7_1	8.5	193033
LCS7_1	10.5	361085
LCS7_1	12.5	593934
;VOLUME: LCS Volume - Cell 8, Case 1		
LCS8_1	0	0
LCS8_1	2.5	417
LCS8_1	4.5	19109
LCS8_1	6.5	76139
LCS8_1	8.5	189466
;VOLUME: LCS Volume - Cell 9, Case 1		
LCS9_1	0	0
LCS9_1	2.5	417
LCS9_1	4.5	17775
LCS9_1	6.5	71872
LCS9_1	8.5	176786
LCS9_1	10.5	340891
;VOLUME: LCS Volume - Cell 10, Case 1		
LCS10_1	0	0
LCS10_1	2.5	417
LCS10_1	4.5	24861
LCS10_1	6.5	93259
LCS10_1	8.5	221653
;VOLUME: LCS Volume - Cell 11, Case 1		
LCS11_1	0	0
LCS11_1	2.5	417

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 LCS11_1                4.5       13597
 LCS11_1                6.5       60882
 LCS11_1                8.5      159146
 LCS11_1               10.5      317686
;VOLUME: LCS Volume - Cell 12, Case 1
 LCS12_1                  0           0
 LCS12_1                2.5         417
 LCS12_1                4.5       16836
 LCS12_1                6.5       70742
 LCS12_1                8.5      181689
;VOLUME: LCS Volume - Cell 13, Case 1
 LCS13_1                  0           0
 LCS13_1                2.5         417
 LCS13_1                4.5       19723
 LCS13_1                6.5       62340
 LCS13_1                8.5      137793
 LCS13_1               10.5      255623
 LCS13_1               12.5      424589
 LCS13_1               14.5      643807
 LCS13_1               16.5      901487

[CONTROLS]

[RULES]
RULE 1
IF TANK LCS1 LEVEL ABOVE 2.0
THEN PUMP P1_LOW STATUS IS OPEN

RULE 2
IF TANK LCS1 LEVEL BELOW 1.0
THEN PUMP P1_LOW STATUS IS CLOSED

RULE 3
IF TANK LCS1 LEVEL ABOVE 3.8
THEN PUMP P1_HIGH STATUS IS OPEN

RULE 4
```

IF TANK LCS1 LEVEL BELOW 2.3
THEN PUMP P1_HIGH STATUS IS CLOSED

RULE 5
IF TANK LDS1 LEVEL ABOVE 2.0
THEN PUMP P1_LDS STATUS IS OPEN

RULE 6
IF TANK LDS1 LEVEL BELOW 1.0
THEN PUMP P1_LDS STATUS IS CLOSED

RULE 7
IF TANK LCS2 LEVEL ABOVE 2.0
THEN PUMP P2_LOW STATUS IS OPEN

RULE 8
IF TANK LCS2 LEVEL BELOW 1.0
THEN PUMP P2_LOW STATUS IS CLOSED

RULE 9
IF TANK LCS2 LEVEL ABOVE 3.8
THEN PUMP P2_HIGH STATUS IS OPEN

RULE 10
IF TANK LCS2 LEVEL BELOW 2.3
THEN PUMP P2_HIGH STATUS IS CLOSED

RULE 11
IF TANK LDS2 LEVEL ABOVE 2.0
THEN PUMP P2_LDS STATUS IS OPEN

RULE 12
IF TANK LDS2 LEVEL BELOW 1.0
THEN PUMP P2_LDS STATUS IS CLOSED

RULE 13
IF TANK LCS3 LEVEL ABOVE 2.0

THEN PUMP P3_LOW STATUS IS OPEN

RULE 14
IF TANK LCS3 LEVEL BELOW 1.0
THEN PUMP P3_LOW STATUS IS CLOSED

RULE 15
IF TANK LCS3 LEVEL ABOVE 3.8
THEN PUMP P3_HIGH STATUS IS OPEN

RULE 16
IF TANK LCS3 LEVEL BELOW 2.3
THEN PUMP P3_HIGH STATUS IS CLOSED

RULE 17
IF TANK LDS3 LEVEL ABOVE 2.0
THEN PUMP P3_LDS STATUS IS OPEN

RULE 18
IF TANK LDS3 LEVEL BELOW 1.0
THEN PUMP P3_LDS STATUS IS CLOSED

RULE 19
IF TANK LCS4 LEVEL ABOVE 2.0
THEN PUMP P4_LOW STATUS IS OPEN

RULE 20
IF TANK LCS4 LEVEL BELOW 1.0
THEN PUMP P4_LOW STATUS IS CLOSED

RULE 21
IF TANK LCS4 LEVEL ABOVE 3.8
THEN PUMP P4_HIGH STATUS IS OPEN

RULE 22
IF TANK LCS4 LEVEL BELOW 2.3
THEN PUMP P4_HIGH STATUS IS CLOSED

RULE 23
IF TANK LDS4 LEVEL ABOVE 2.0
THEN PUMP P4_LDS STATUS IS OPEN

RULE 24
IF TANK LDS4 LEVEL BELOW 1.0
THEN PUMP P4_LDS STATUS IS CLOSED

RULE 25
IF TANK LCS5 LEVEL ABOVE 2.0
THEN PUMP P5_LOW STATUS IS OPEN

RULE 26
IF TANK LCS5 LEVEL BELOW 1.0
THEN PUMP P5_LOW STATUS IS CLOSED

RULE 27
IF TANK LCS5 LEVEL ABOVE 3.8
THEN PUMP P5_HIGH STATUS IS OPEN

RULE 28
IF TANK LCS5 LEVEL BELOW 2.3
THEN PUMP P5_HIGH STATUS IS CLOSED

RULE 29
IF TANK LDS5 LEVEL ABOVE 2.0
THEN PUMP P5_LDS STATUS IS OPEN

RULE 30
IF TANK LDS5 LEVEL BELOW 1.0
THEN PUMP P5_LDS STATUS IS CLOSED

RULE 31
IF TANK LCS6 LEVEL ABOVE 2.0
THEN PUMP P6_LOW STATUS IS OPEN

RULE 32
IF TANK LCS6 LEVEL BELOW 1.0
THEN PUMP P6_LOW STATUS IS CLOSED

RULE 33
IF TANK LCS6 LEVEL ABOVE 3.8
THEN PUMP P6_HIGH STATUS IS OPEN

RULE 34
IF TANK LCS6 LEVEL BELOW 2.3
THEN PUMP P6_HIGH STATUS IS CLOSED

RULE 35
IF TANK LDS6 LEVEL ABOVE 2.0
THEN PUMP P6_LDS STATUS IS OPEN

RULE 36
IF TANK LDS6 LEVEL BELOW 1.0
THEN PUMP P6_LDS STATUS IS CLOSED

RULE 37
IF TANK LCS7 LEVEL ABOVE 2.0
THEN PUMP P7_LOW STATUS IS OPEN

RULE 38
IF TANK LCS7 LEVEL BELOW 1.0
THEN PUMP P7_LOW STATUS IS CLOSED

RULE 39
IF TANK LCS7 LEVEL ABOVE 3.8
THEN PUMP P7_HIGH STATUS IS OPEN

RULE 40
IF TANK LCS7 LEVEL BELOW 2.3
THEN PUMP P7_HIGH STATUS IS CLOSED

RULE 41

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IF TANK LDS7 LEVEL ABOVE 2.0
THEN PUMP P7_LDS STATUS IS OPEN

RULE 42
IF TANK LDS7 LEVEL BELOW 1.0
THEN PUMP P7_LDS STATUS IS CLOSED

RULE 43
IF TANK LCS8 LEVEL ABOVE 2.0
THEN PUMP P8_LOW STATUS IS OPEN

RULE 44
IF TANK LCS8 LEVEL BELOW 1.0
THEN PUMP P8_LOW STATUS IS CLOSED

RULE 45
IF TANK LCS8 LEVEL ABOVE 3.8
THEN PUMP P8_HIGH STATUS IS OPEN

RULE 46
IF TANK LCS8 LEVEL BELOW 2.3
THEN PUMP P8_HIGH STATUS IS CLOSED

RULE 47
IF TANK LDS8 LEVEL ABOVE 2.0
THEN PUMP P8_LDS STATUS IS OPEN

RULE 48
IF TANK LDS8 LEVEL BELOW 1.0
THEN PUMP P8_LDS STATUS IS CLOSED

RULE 49
IF TANK LCS9 LEVEL ABOVE 2.0
THEN PUMP P9_LOW STATUS IS OPEN

RULE 50
IF TANK LCS9 LEVEL BELOW 1.0
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THEN PUMP P9_LOW STATUS IS CLOSED

RULE 51
IF TANK LCS9 LEVEL ABOVE 3.8
THEN PUMP P9_HIGH STATUS IS OPEN

RULE 52
IF TANK LCS9 LEVEL BELOW 2.3
THEN PUMP P9_HIGH STATUS IS CLOSED

RULE 53
IF TANK LDS9 LEVEL ABOVE 2.0
THEN PUMP P9_LDS STATUS IS OPEN

RULE 54
IF TANK LDS9 LEVEL BELOW 1.0
THEN PUMP P9_LDS STATUS IS CLOSED

RULE 55
IF TANK LCS10 LEVEL ABOVE 2.0
THEN PUMP P10_LOW STATUS IS OPEN

RULE 56
IF TANK LCS10 LEVEL BELOW 1.0
THEN PUMP P10_LOW STATUS IS CLOSED

RULE 57
IF TANK LCS10 LEVEL ABOVE 3.8
THEN PUMP P10_HIGH STATUS IS OPEN

RULE 58
IF TANK LCS10 LEVEL BELOW 2.3
THEN PUMP P10_HIGH STATUS IS CLOSED

RULE 59
IF TANK LDS10 LEVEL ABOVE 2.0
THEN PUMP P10_LDS STATUS IS OPEN
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RULE 60
IF TANK LDS10 LEVEL BELOW 1.0
THEN PUMP P10_LDS STATUS IS CLOSED

RULE 61
IF TANK LCS11 LEVEL ABOVE 2.0
THEN PUMP P11_LOW STATUS IS OPEN

RULE 62
IF TANK LCS11 LEVEL BELOW 1.0
THEN PUMP P11_LOW STATUS IS CLOSED

RULE 63
IF TANK LCS11 LEVEL ABOVE 3.8
THEN PUMP P11_HIGH STATUS IS OPEN

RULE 64
IF TANK LCS11 LEVEL BELOW 2.3
THEN PUMP P11_HIGH STATUS IS CLOSED

RULE 65
IF TANK LDS11 LEVEL ABOVE 2.0
THEN PUMP P11_LDS STATUS IS OPEN

RULE 66
IF TANK LDS11 LEVEL BELOW 1.0
THEN PUMP P11_LDS STATUS IS CLOSED

RULE 67
IF TANK LCS12 LEVEL ABOVE 2.0
THEN PUMP P12_LOW STATUS IS OPEN

RULE 68
IF TANK LCS12 LEVEL BELOW 1.0
THEN PUMP P12_LOW STATUS IS CLOSED

RULE 69
IF TANK LCS12 LEVEL ABOVE 3.8
THEN PUMP P12_HIGH STATUS IS OPEN

RULE 70
IF TANK LCS12 LEVEL BELOW 2.3
THEN PUMP P12_HIGH STATUS IS CLOSED

RULE 71
IF TANK LDS12 LEVEL ABOVE 2.0
THEN PUMP P12_LDS STATUS IS OPEN

RULE 72
IF TANK LDS12 LEVEL BELOW 1.0
THEN PUMP P12_LDS STATUS IS CLOSED

RULE 73
IF TANK LCS13 LEVEL ABOVE 2.0
THEN PUMP P13_LOW STATUS IS OPEN

RULE 74
IF TANK LCS13 LEVEL BELOW 1.0
THEN PUMP P13_LOW STATUS IS CLOSED

RULE 75
IF TANK LCS13 LEVEL ABOVE 3.8
THEN PUMP P13_HIGH STATUS IS OPEN

RULE 76
IF TANK LCS13 LEVEL BELOW 2.3
THEN PUMP P13_HIGH STATUS IS CLOSED

RULE 77
IF TANK LDS13 LEVEL ABOVE 2.0
THEN PUMP P13_LDS STATUS IS OPEN

RULE 78

IF TANK LDS13 LEVEL BELOW 1.0
THEN PUMP P13_LDS STATUS IS CLOSED

		72:00:00
		0:15
		0:15
		0:15
Pattern Start		0:00
Report Timestep		0:15
Report Start		0:00
Start ClockTime		12:00 AM
Statistic	None	

[OPTIONS]

Units	GPM
Headloss	H-W

[COORDINATES]

;Node	X-Coord	Y-Coord
6	-1204.08	5401.36
8	3217.69	5414.97
11	2715.47	6269.19
12	3272.11	4149.66
13	-1204.08	4149.66
16	5448.98	5414.97
10	5454.55	2632.82
14	3293.98	2632.82
15	-1145.22	2632.82
18	-1121.61	1416.77
19	3353.01	1428.57
21	2443.92	3624.56
22	-1086.19	59.03
23	2432.11	956.32
24	3246.75	59.03
25	5454.55	59.03
27	3282.17	-1086.19

28	-1097.99	-1086.19
29	-1086.19	-2207.79
30	2432.11	-1404.96
31	3388.43	-2207.79
32	5454.55	-2219.6
34	3435.66	-3305.79
35	-1121.61	-3293.98
36	-1204.25	-4368.36
37	2337.66	-3589.14
38	3447.46	-4356.55
39	5454.55	-4356.55
41	3423.85	-5348.29
42	-1286.89	-5360.09
43	-2278.63	5407.32
44	-5525.38	5407.32
45	-7119.24	5407.32
46	-5171.19	6151.12
47	-2266.82	4108.62
48	-5513.58	4096.81
51	-2314.05	2680.06
52	-2278.63	1452.18
53	-5466.35	1452.18
54	-5501.77	2691.85
55	-7119.24	2691.85
57	-5159.39	3565.53
60	-1263.28	6847.7
61	3234.95	6847.7
63	5454.55	7863.05
64	3223.14	7863.05
65	-1286.89	7874.85
66	2573.79	8689.49
67	-2231.4	6859.5
68	-5501.77	6871.31
70	-7119.24	7886.66
71	-5501.77	7886.66
72	-2195.99	7886.66
73	-5147.58	8689.49

75	-2290.44	106.26
76	-2302.24	-1074.38
77	-5478.16	-1074.38
78	-5466.35	118.06
79	-5029.52	897.28
80	-7119.24	118.0[illegible]
82	-2349.47	-3282.17
83	-5501.77	-3270.37
85	-7119.24	-2172.37
86	-5513.58	-2172.37
87	-2337.66	-2172.37
88	-5112.16	-1416.77
89	-2361.28	-4344.75
90	-2361.28	-5371.9
91	-5454.55	-5371.9
92	-5466.35	-4344.75
93	-7119.24	-4344.75
95	-5076.74	-3530.11
96	-2361.28	-6351.83
97	-5478.16	-6351.83
98	-7119.24	-6351.83
99	-5076.74	-5667.06
100	-2361.28	-7367.18
101	-5454.55	-7367.18
1	6432.01	7858
2	6419.98	5415.16
3	6407.94	2635.38
4	6407.94	60.17
5	6407.94	-2214.2
7	6419.98	-4356.[illegible]
9	-7960.29	7882.07
17	-7948.26	5403.1[illegible]
20	-7936.22	2695.55
26	-7924.19	120.34
33	-7912.15	-2178.1
40	-7924.19	-4344.16
49	-7912.15	-6353.79

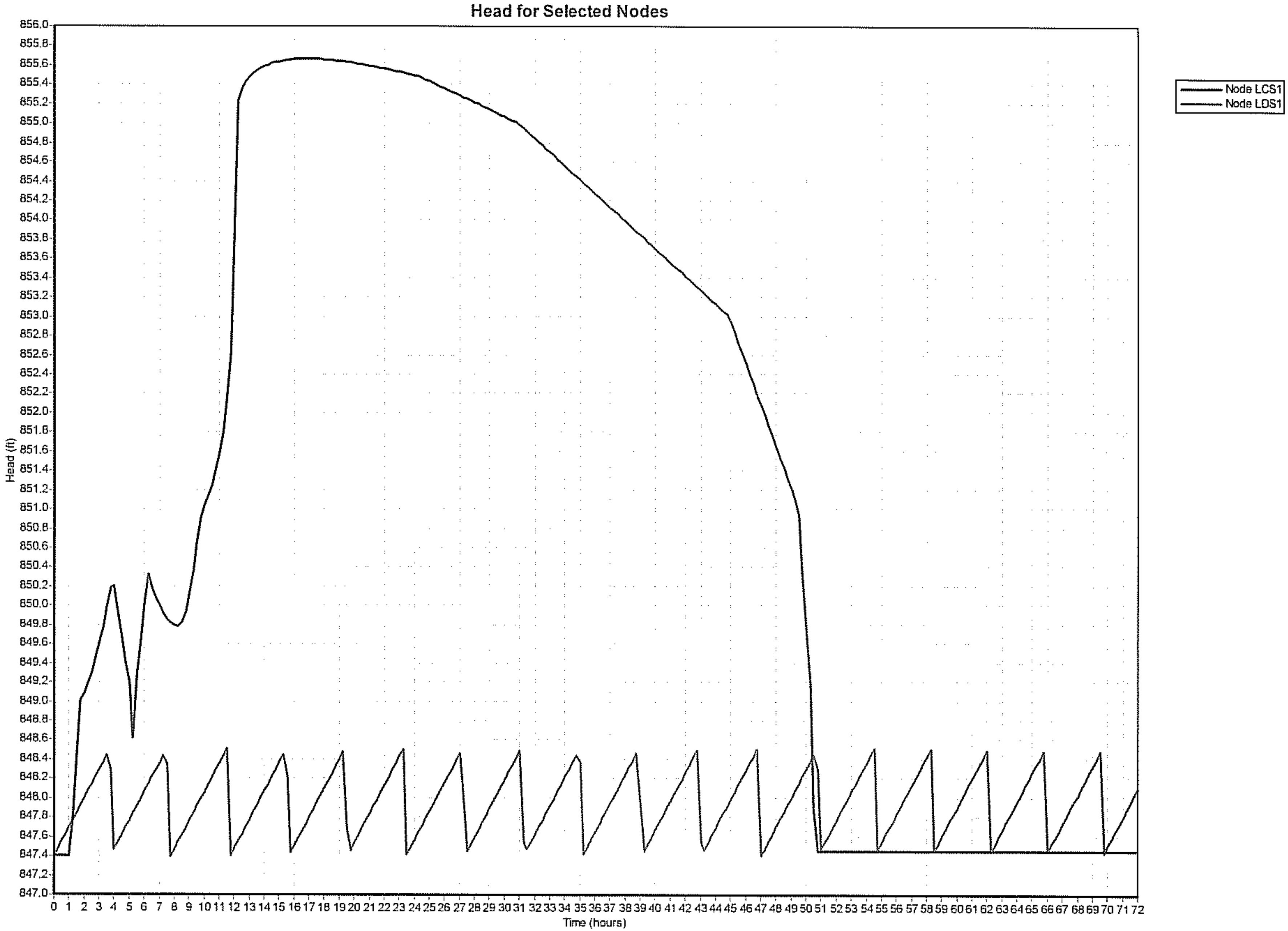
ASH_BASIN_EAST	1463.99	-7378.98
ASH_BASIN_WEST	-2491.15	-8181.82
LCS2	836.73	5401.36
LDS2	850.34	4149.66
LCS5	743.8	2632.82
LDS5	720.19	1416.77
LCS7	672.96	59.03
LDS7	732	-1086.19
LCS9	590.32	-2207.79
LDS9	554.9	-3293.98
LCS11	507.67	-4368.36
LDS11	566.71	-5360.09
LCS4	-4002.36	5407.32
LDS4	-4025.97	4108.62
LCS6	-4002.36	2680.05
LDS6	-3966.94	1452.18
LCS1	767.41	7874.85
LDS1	791.03	6847.7
LCS3	-3931.52	7886.66
LDS3	-3955.14	6859.5
LCS8	-3943.33	106.26
LDS8	-3896.1	-1074.38
LCS10	-3896.1	-2172.37
LDS10	-3860.68	-3282.17
LCS12	-3860.68	-4344.75
LDS12	-3778.04	-5371.9
LCS13	-3801.65	-6351.83
LDS13	-3813.46	-7367.18

[END]

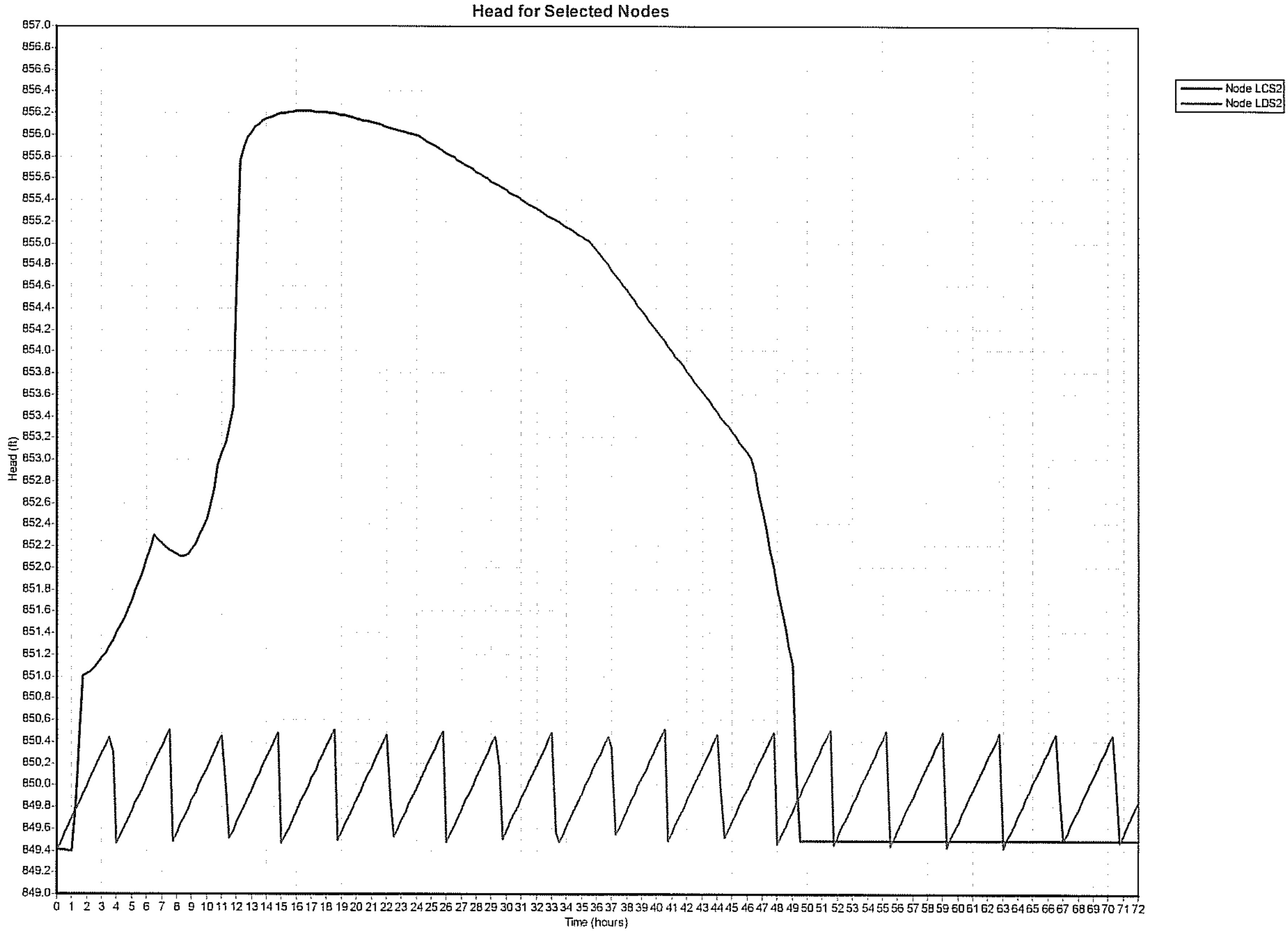
ATTACHMENT 3

Head Within Sumps for 25-year Leachate Generation Condition

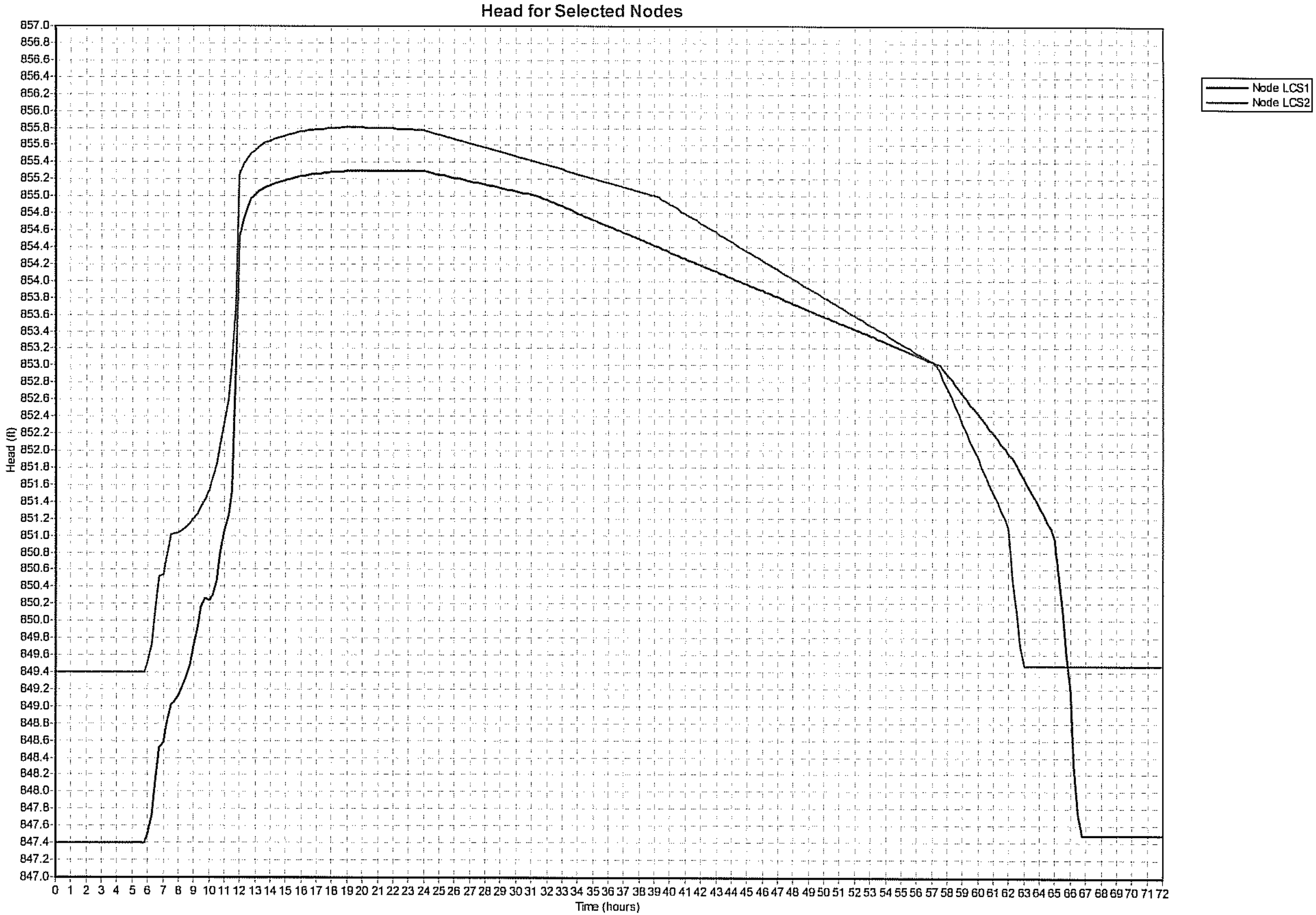
25 Year Condition, Sequence 1



25 Year Condition, Sequence 2

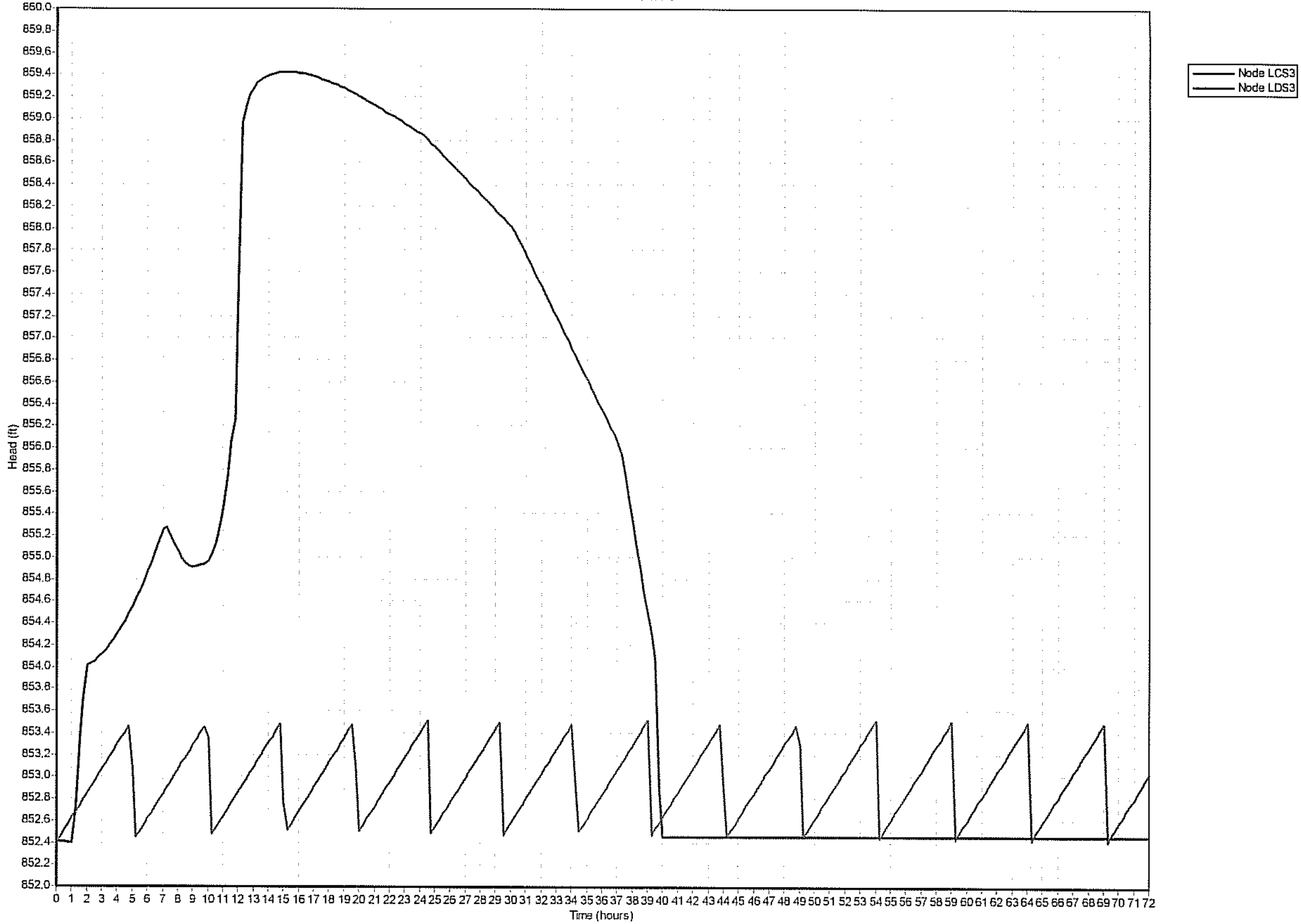


25 Year Condition, Sequence 2A Cells 1 and 2 Open, No Suction

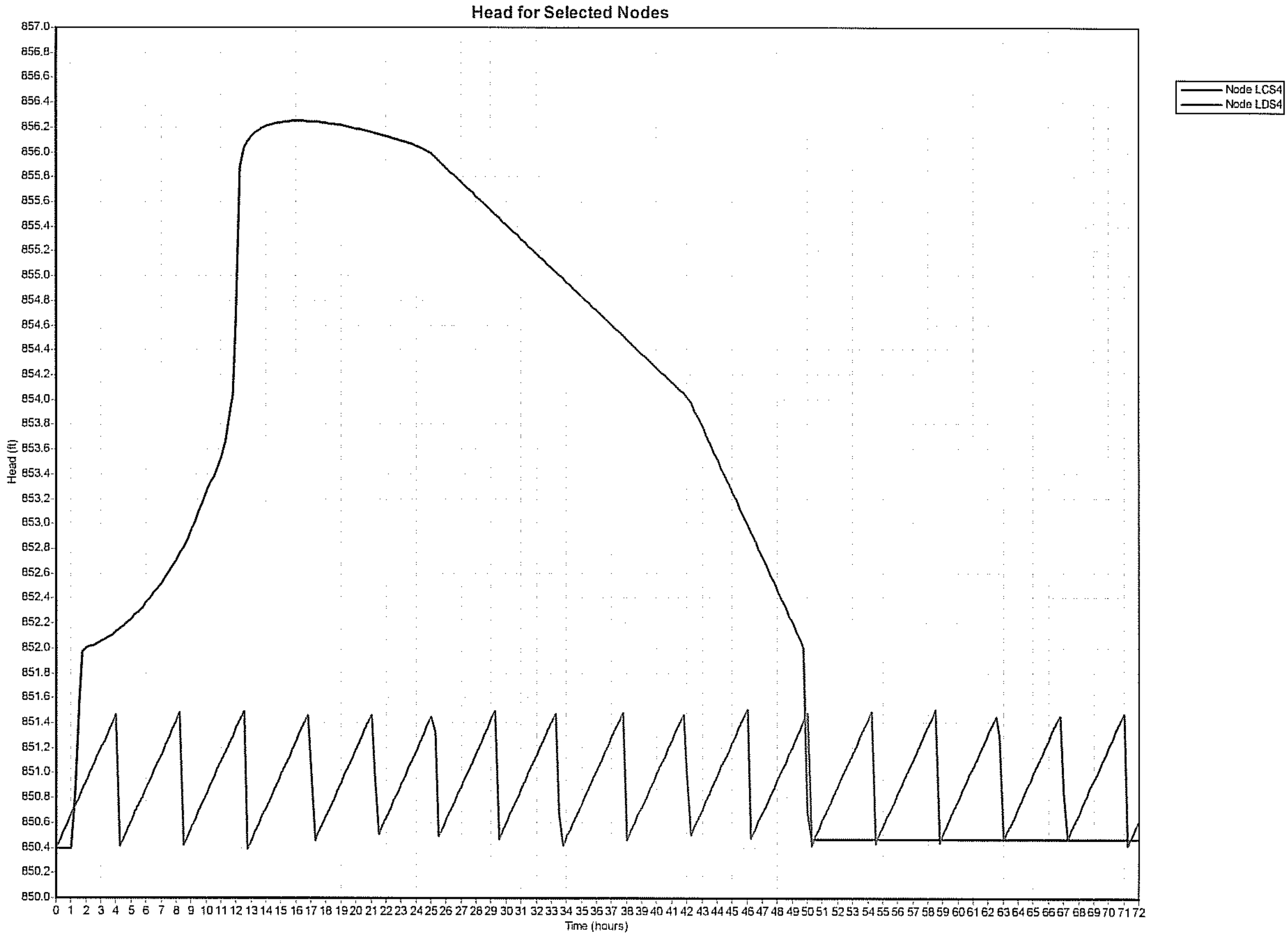


25 Year Condition, Sequence 3

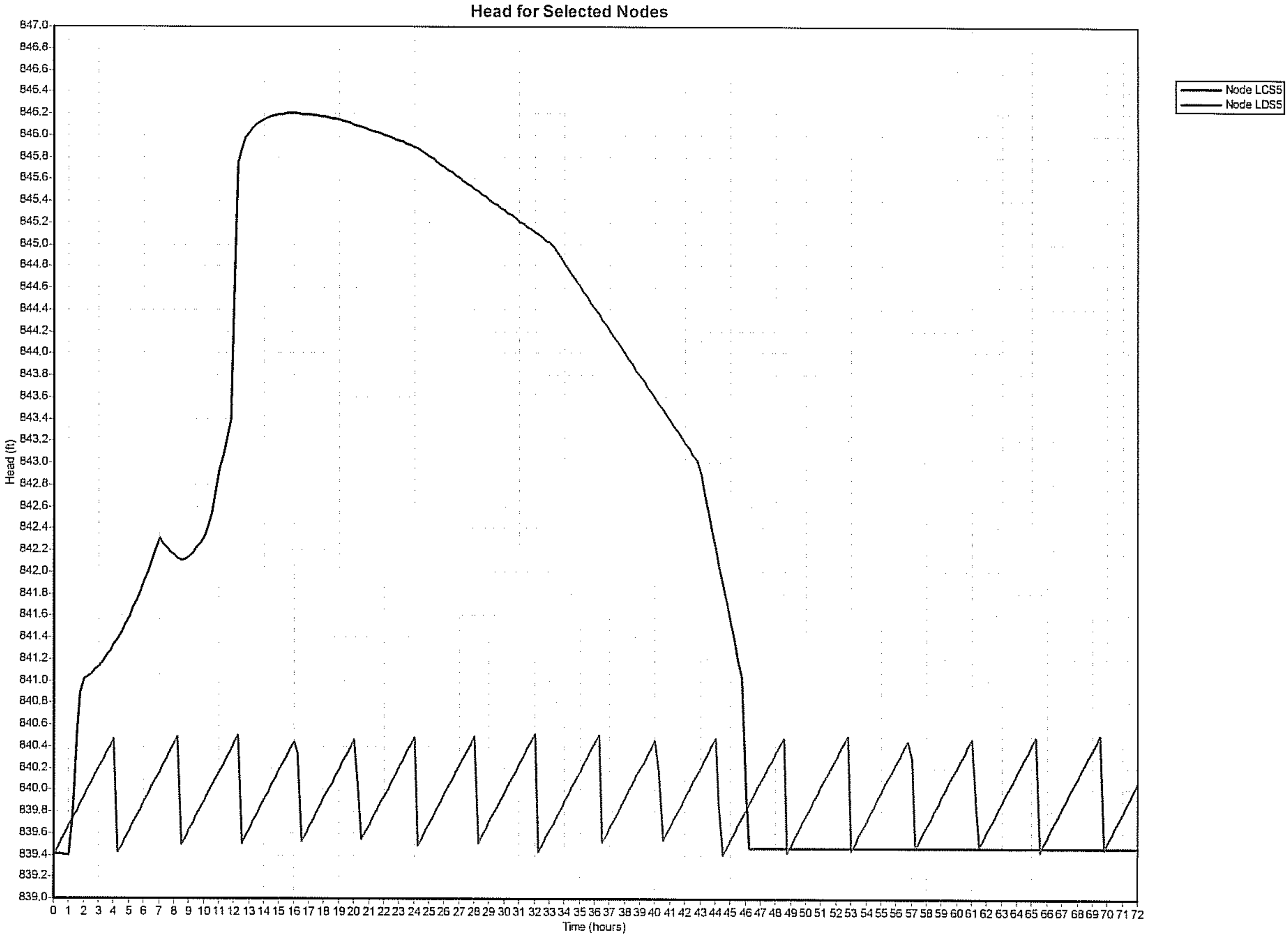
Head for Selected Nodes



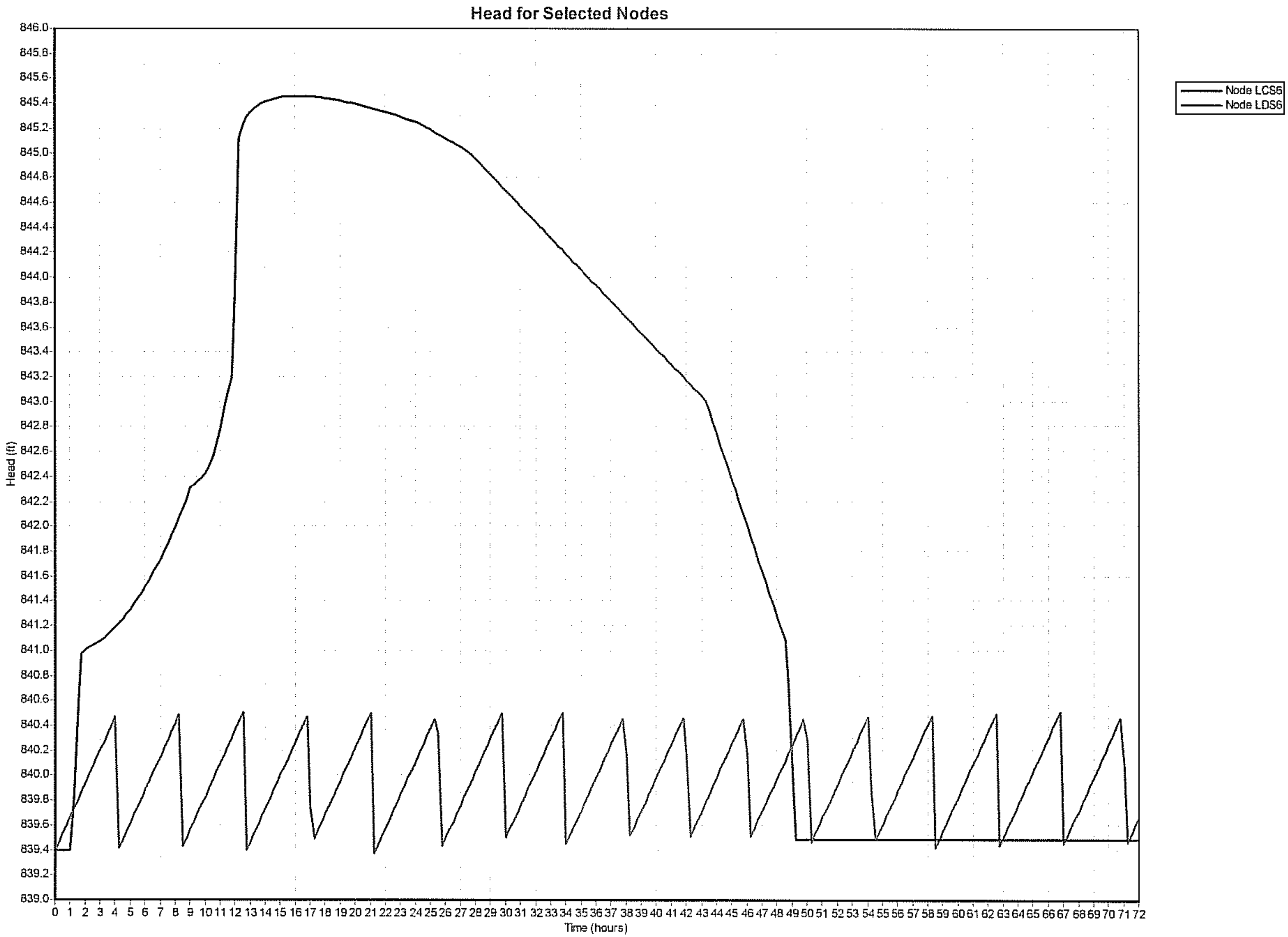
25 Year Condition, Sequence 4



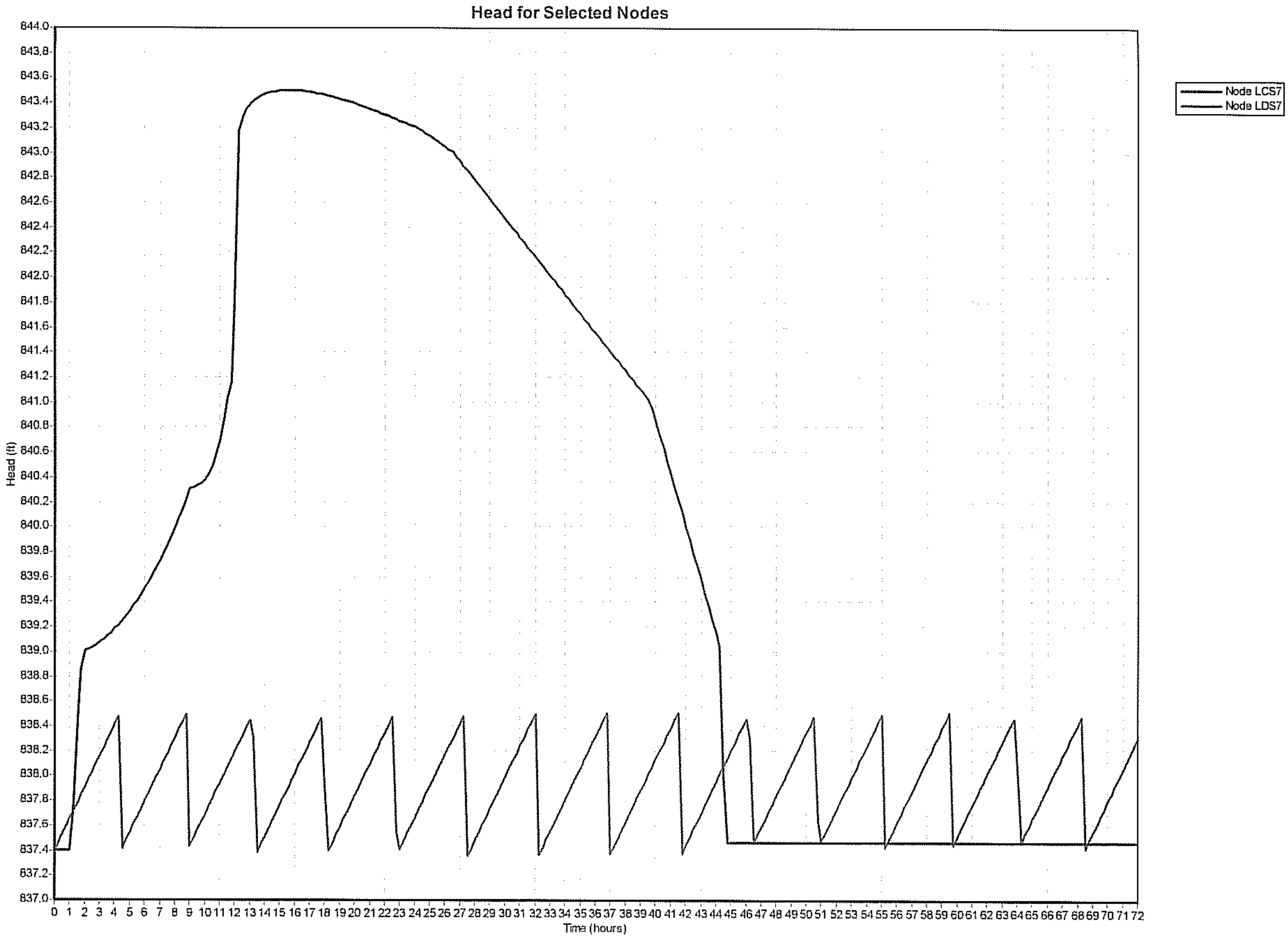
25 Year Condition, Sequence 5



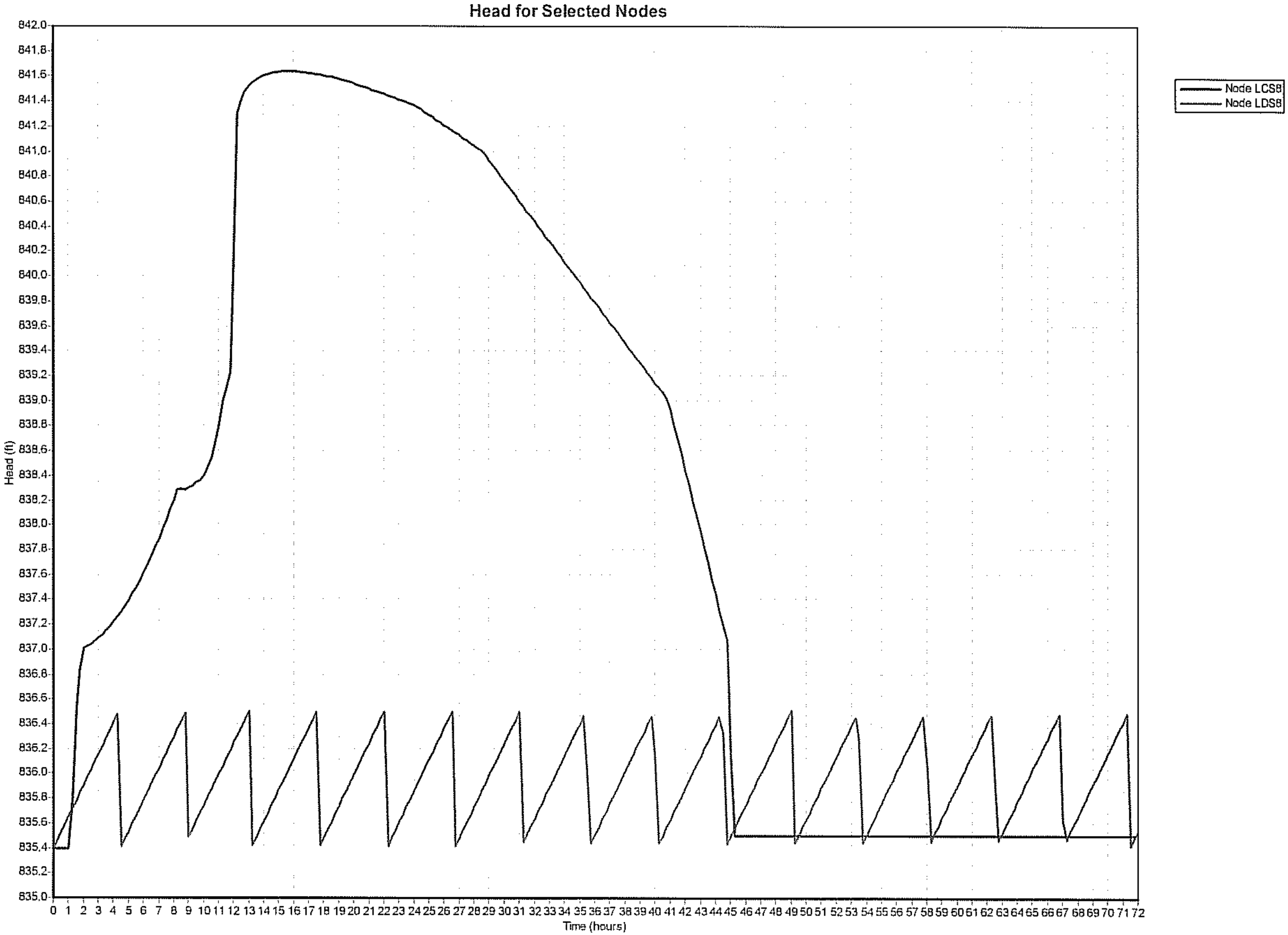
25 Year Condition, Sequence 6



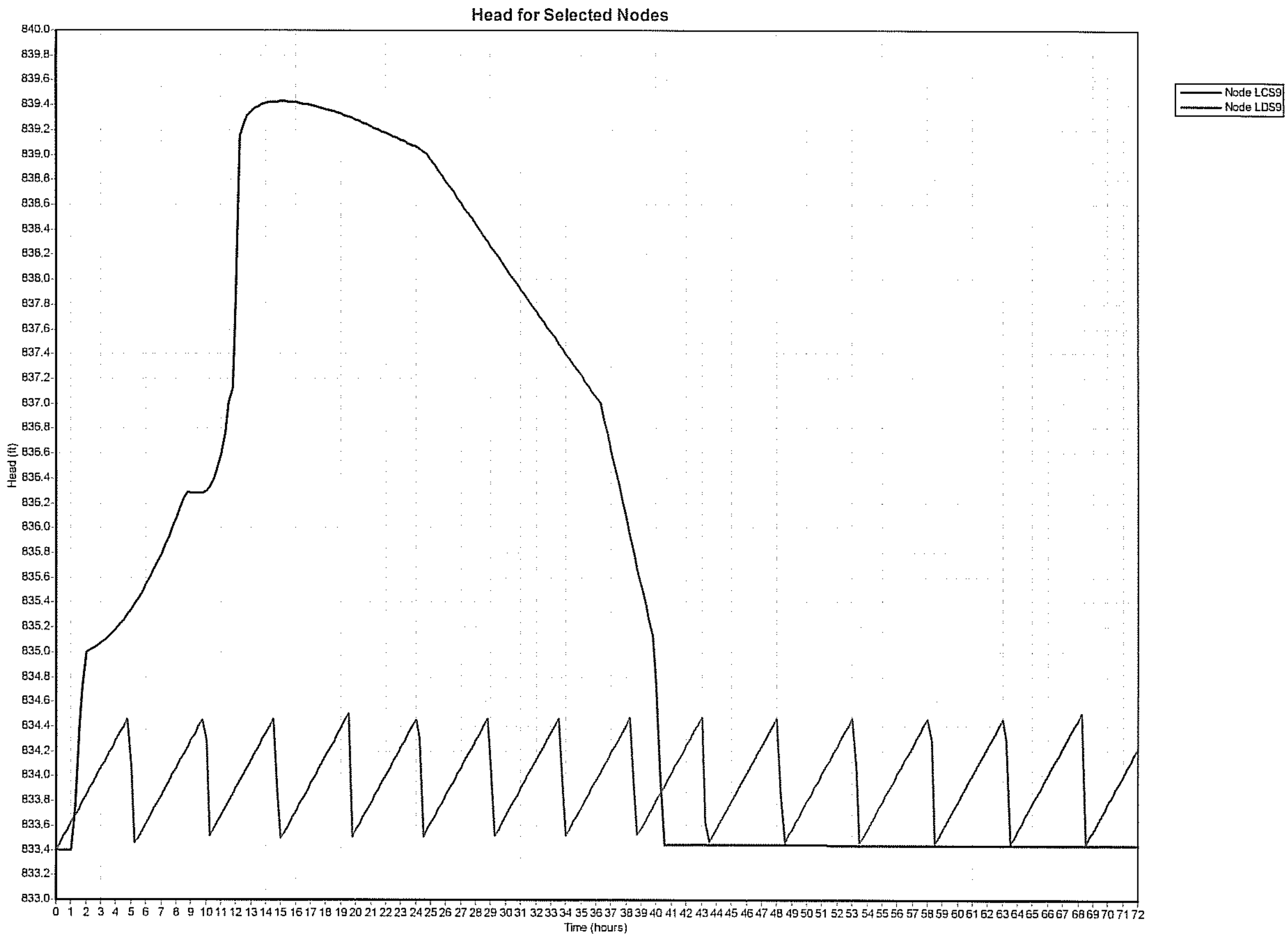
25 Year Condition, Sequence 7



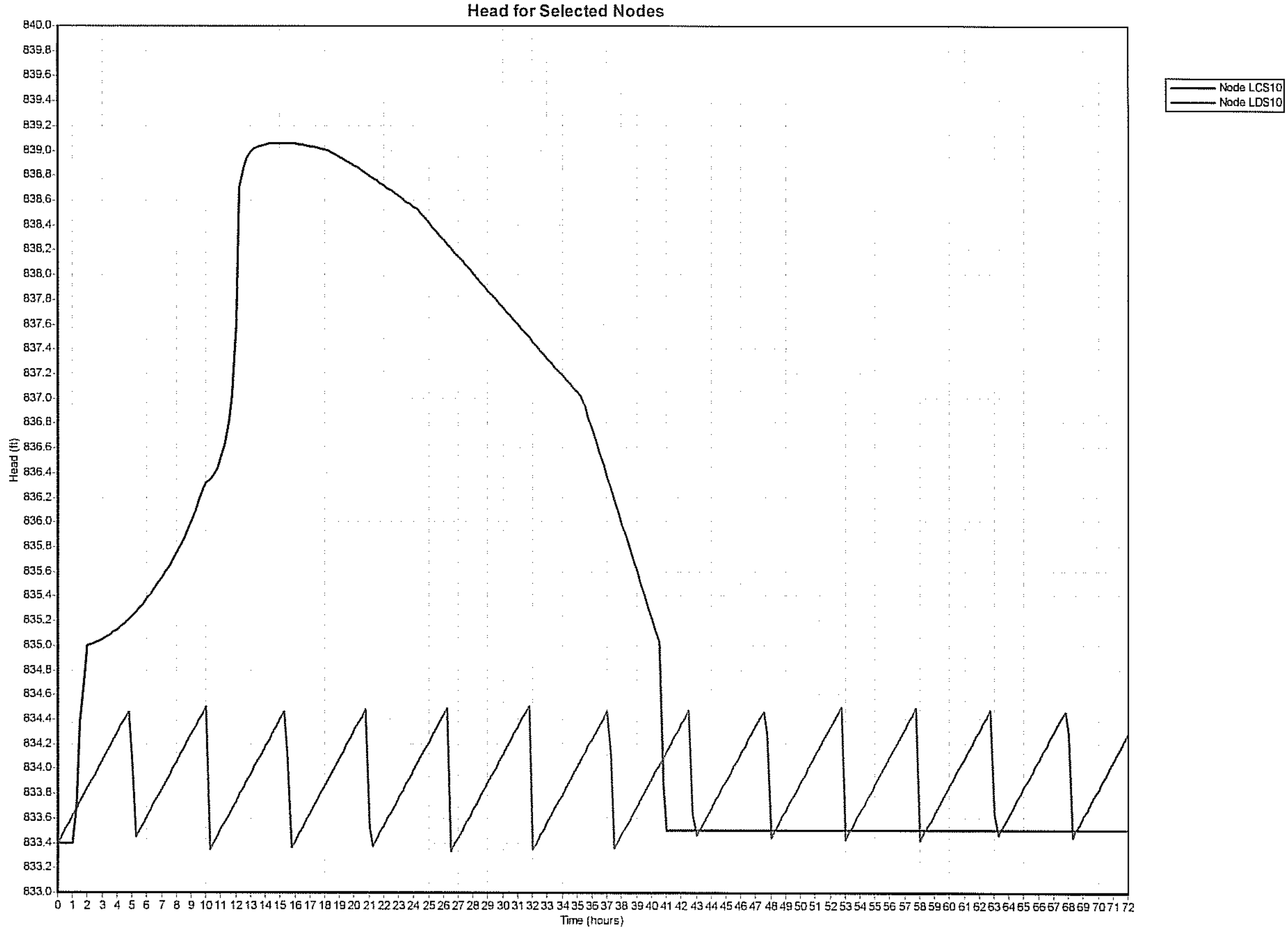
25 Year Condition, Sequence 8



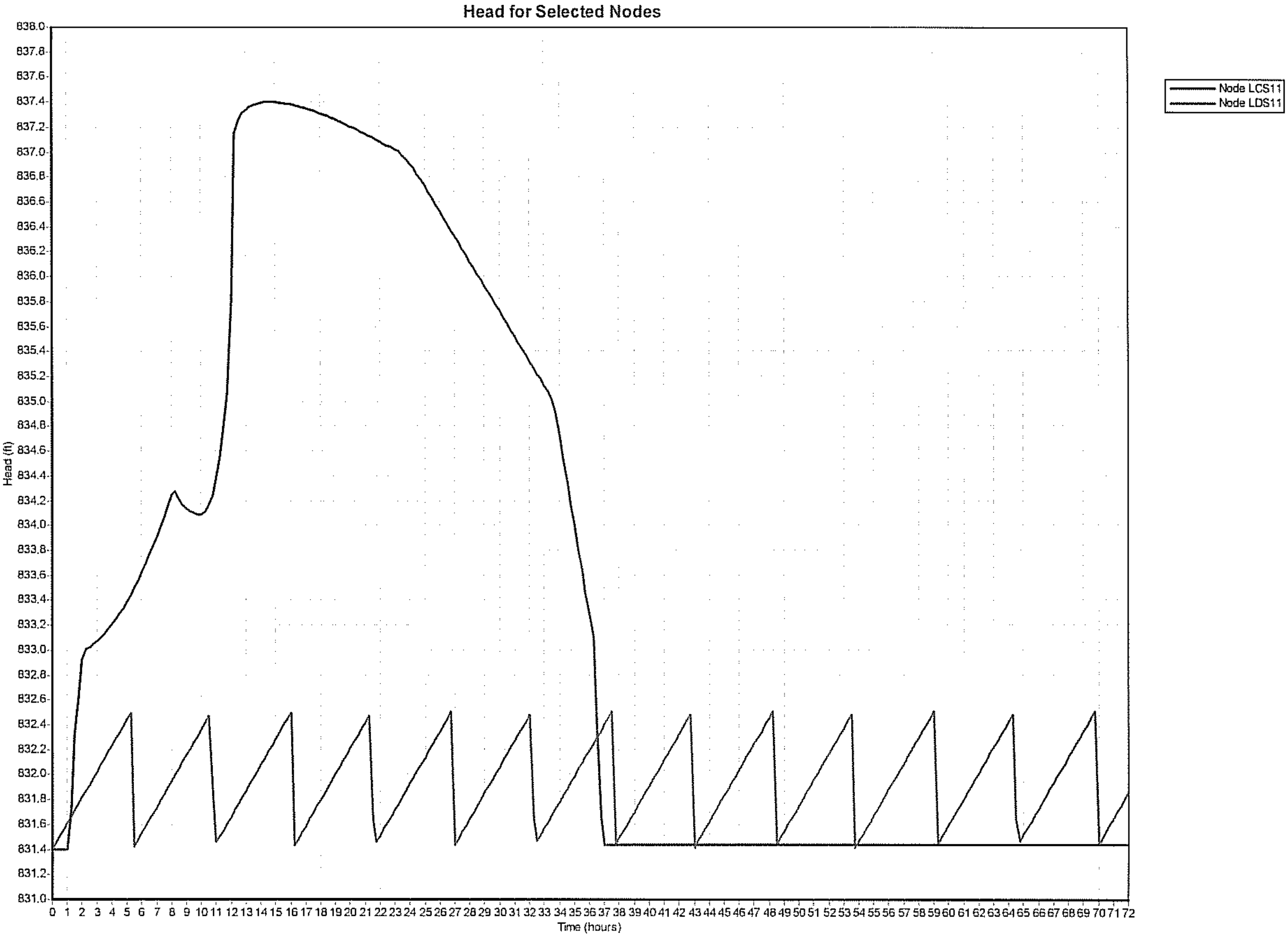
25 Year Condition, Sequence 9



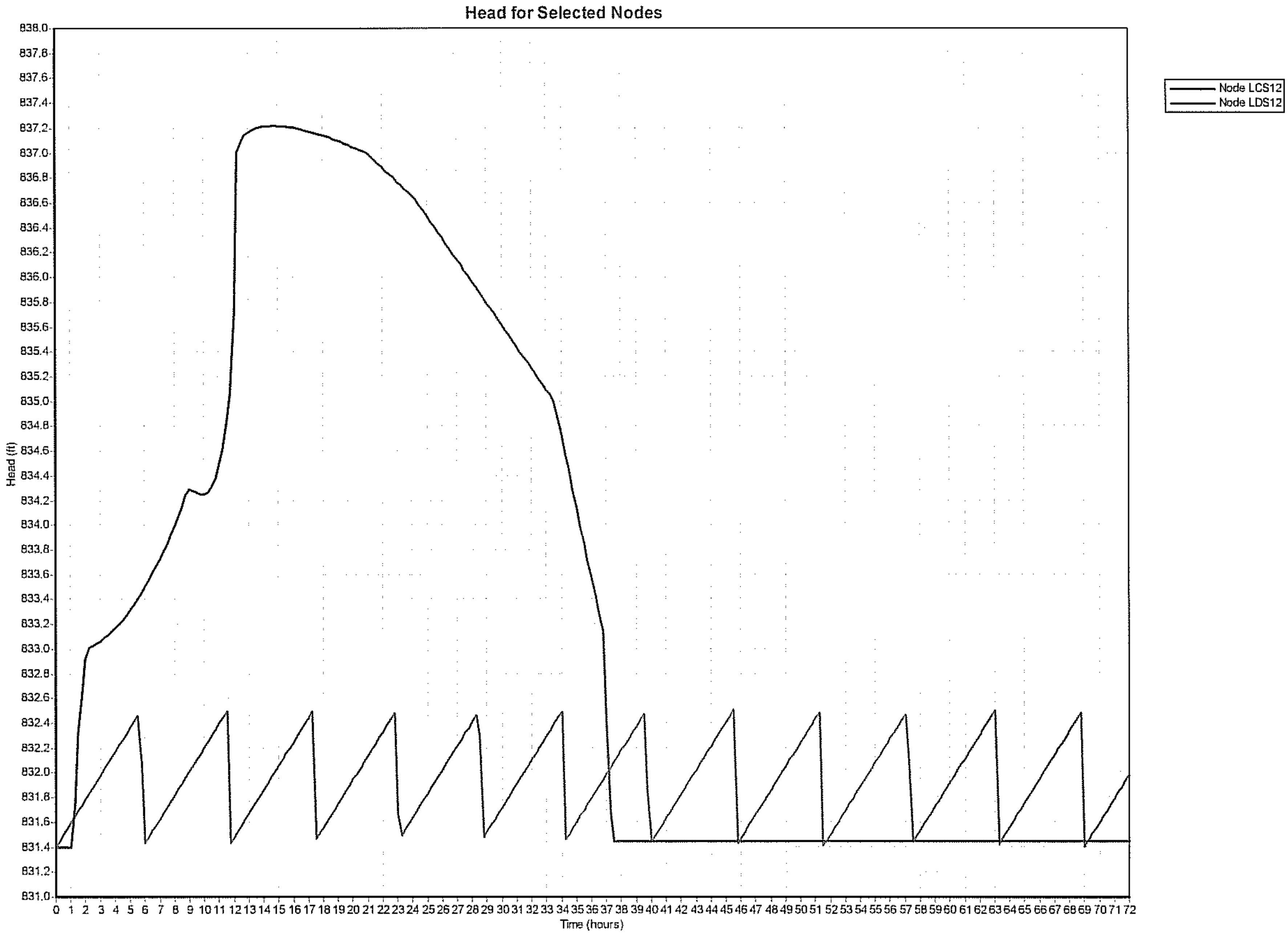
25 Year Condition, Sequence 10



25 Year Condition, Sequence 11



25 Year Condition, Sequence 12



25 Year Condition, Sequence 13