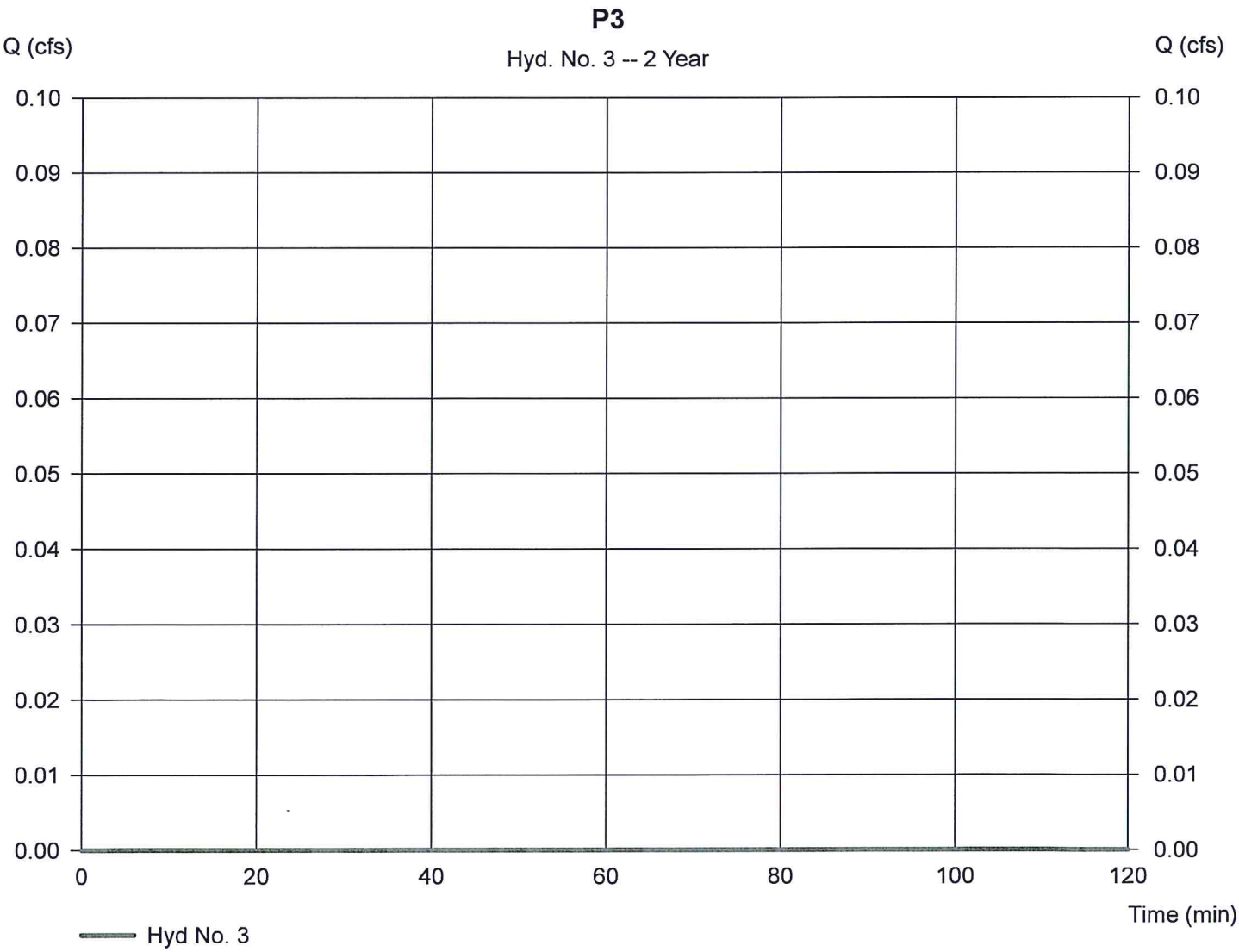
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 3

P3

Hydrograph type	= SCS Runoff	Peak discharge	= 0.000 cfs
Storm frequency	= 2 yrs	Time to peak	= n/a
Time interval	= 2 min	Hyd. volume	= 0 cuft
Drainage area	= 0.300 ac	Curve number	= 31.7
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 7.20 min
Total precip.	= 3.10 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



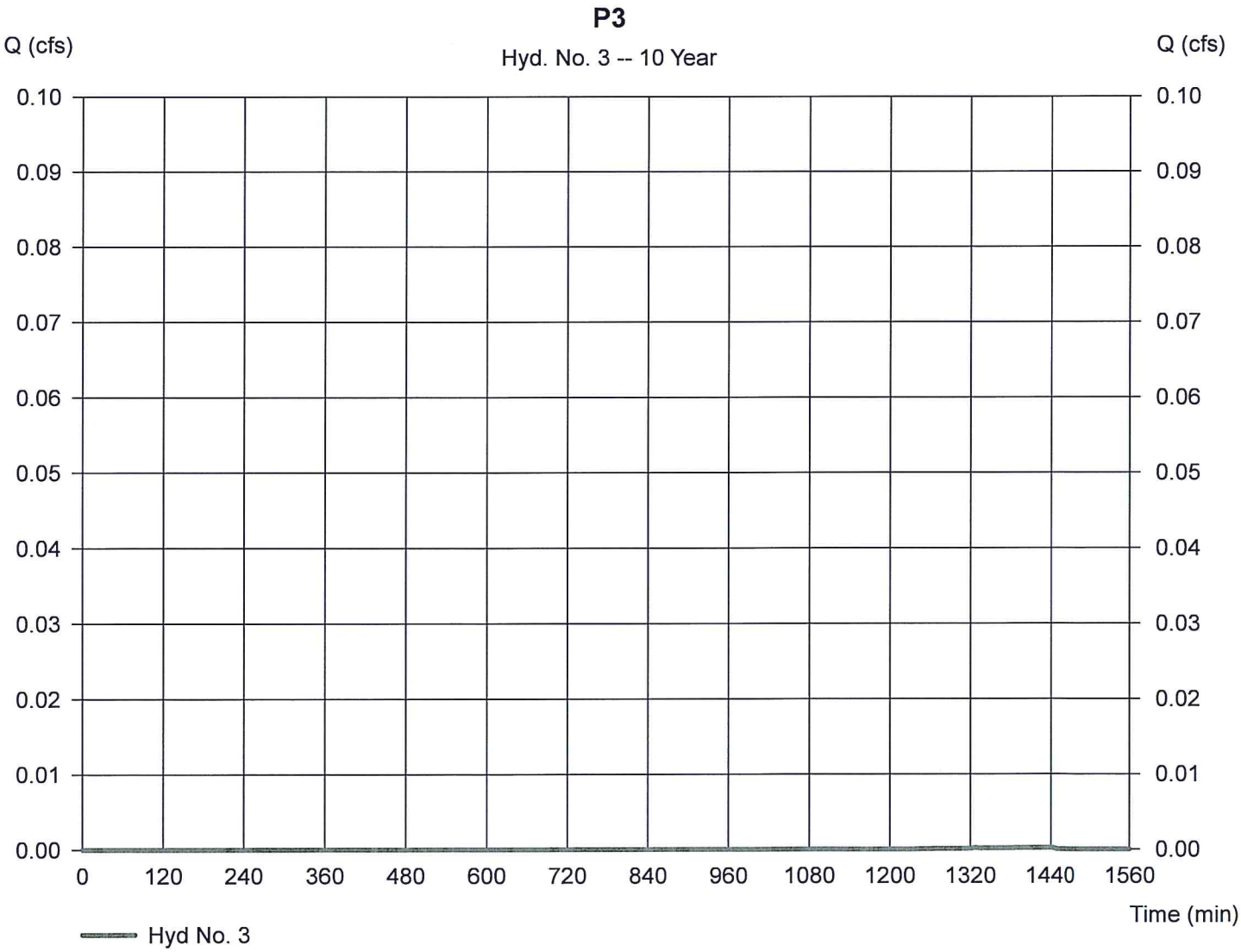
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 3

P3

Hydrograph type	= SCS Runoff	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= 1326 min
Time interval	= 2 min	Hyd. volume	= 2 cuft
Drainage area	= 0.300 ac	Curve number	= 31.7
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 7.20 min
Total precip.	= 4.50 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



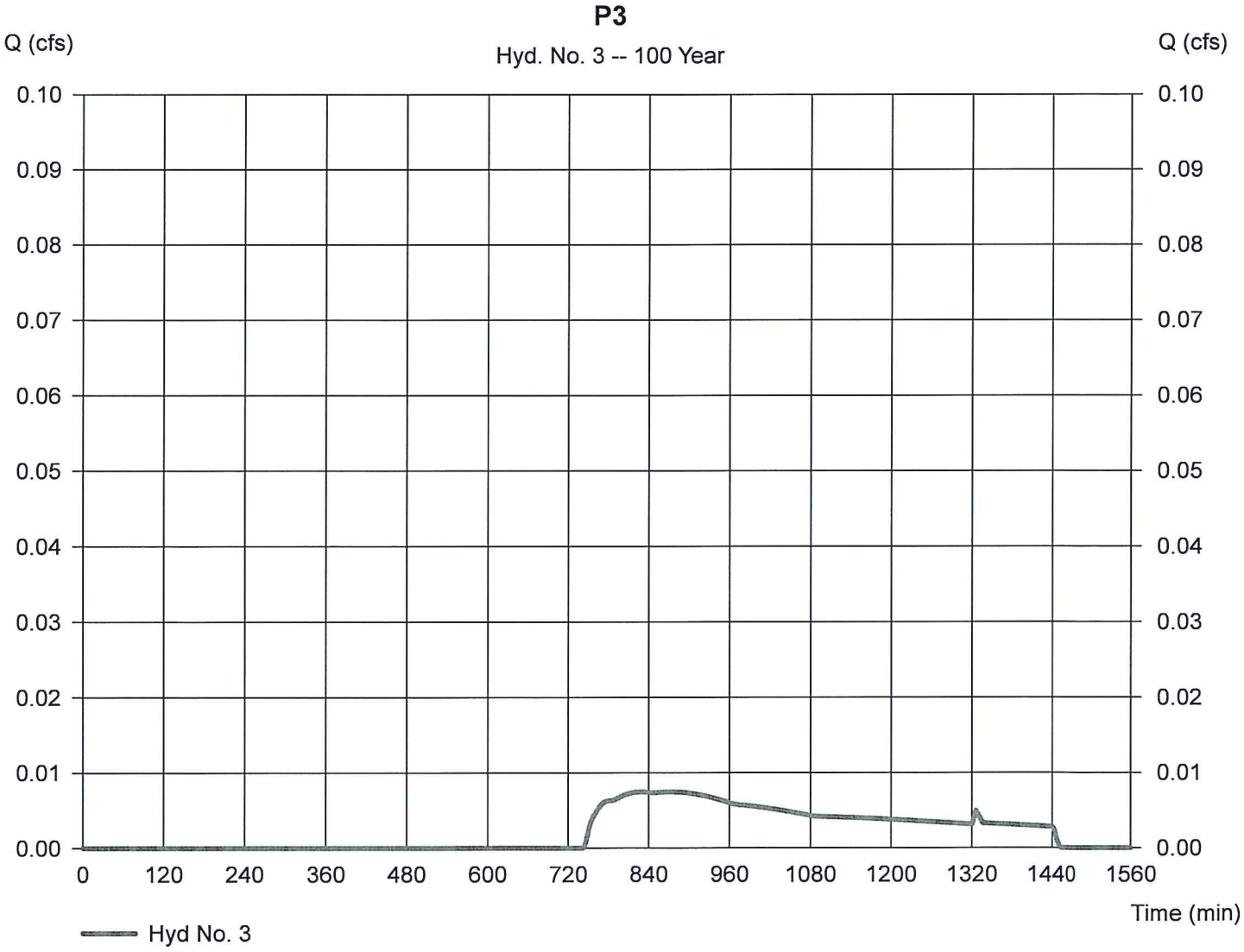
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 3

P3

Hydrograph type	= SCS Runoff	Peak discharge	= 0.007 cfs
Storm frequency	= 100 yrs	Time to peak	= 830 min
Time interval	= 2 min	Hyd. volume	= 201 cuft
Drainage area	= 0.300 ac	Curve number	= 31.7
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 7.20 min
Total precip.	= 6.40 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



Worksheet 2: Runoff curve number and runoff **SM-4860**

Project: 267 Great Rd By JTM Date 8/26/15

Location: Acton, MA Checked _____ Date _____

Circle one: Present [Developed] P4

1. Runoff curve number (CN)

Soil name and hydrologic group (appendix A)	Cover description (cover type, treatment, and hydrologic condition: percent impervious: unconnected/connected impervious area ratio)	CN 1/ Table 2-2	CN 1/ Fig. 2-3	CN 1/ Fig. 2-4	Area Acres	Product of CN x Area
A	Woods	30			0.00	0.00
A	Open	39			0.46	17.85
	Impervious	98			0.38	37.02
A	Gravel	76			0.00	0.00
Totals =					0.84	54.87

1/ Use only one CN source per line.

CN (weighted) = $\frac{\text{total product}}{\text{total area}} = \frac{54.87}{0.84} = 65.68$; Use CN = [65.7]

2. Runoff

		Storm #1	Storm #2	Storm #3
Frequency.....	yr	2	10	100
Rainfall, P (24-hour).....	in	3.1	4.5	6.4
Runoff, Q..... (Use P and CN with table 2-1, fig. 2-1,) or eqs. 2-3 and 2-4.)	in	0.58	1.38	2.71
Runoff, Q.....	cf	1759	4170	8220

(210-VI-TR-55, Second Ed., June 1986)

Worksheet 3: Time of Concentration (Tc) or travel time (Tt) SM-4860

Project: 267 Great Rd By JTM Date 8/26/2015

Location: Acton, MA Checked _____ Date _____

Circle one: Present | Developed
Circle one: Tc | Tt through subarea P4 _____

			A-B			
Sheet flow (Applicable to Tc only)		Segment ID				
1. Surface Description (table 3-1)			Grass			
2. Mannings roughness coeff., n (table 3-1)			0.24			
3. Flow length, L (total L <= 300 ft)		ft	50			
4. Two-yr 24-hr rainfall, P2		in	3.1			
5. Land Slope, s		ft/ft	0.045			
6. Tt = 0.007 (nL)^0.8 / (P2^0.5 s^0.4)	Compute Tt	hr	0.10			0.10
Shallow concentrated Flow		Segment ID	B-C			
7. Surface Description (paved or unpaved)			unpaved			
8. Flow Length, L		ft	54			
9. Watercourse slope, s		ft/ft	0.02			
10. Average Velocity, V (figure 3-1)		ft/s	2.28			
11. Tt = L / 3600V	Compute Tt	hr	0.01			0.01
Channel flow		Segment ID				
12. Cross sectional flow area, a		sf				
13. Wetted perimeter, pw		ft				
14. Hydraulic radius, r=a/wp	Compute r	ft				
15. Channel Slope, s		ft/ft				
16. Manning's roughness coeff., n						
17. V = 1.49 r^2/3 s^1/2 / n	Compute V	ft/s				
18. Flow length, L		ft				
19. Tt = L / 3600V	Compute Tt	hr				0

20. Watershed or subarea Tc or Tt (add Tt in steps 6, 11, and 19) hr 0.11
min 6.4

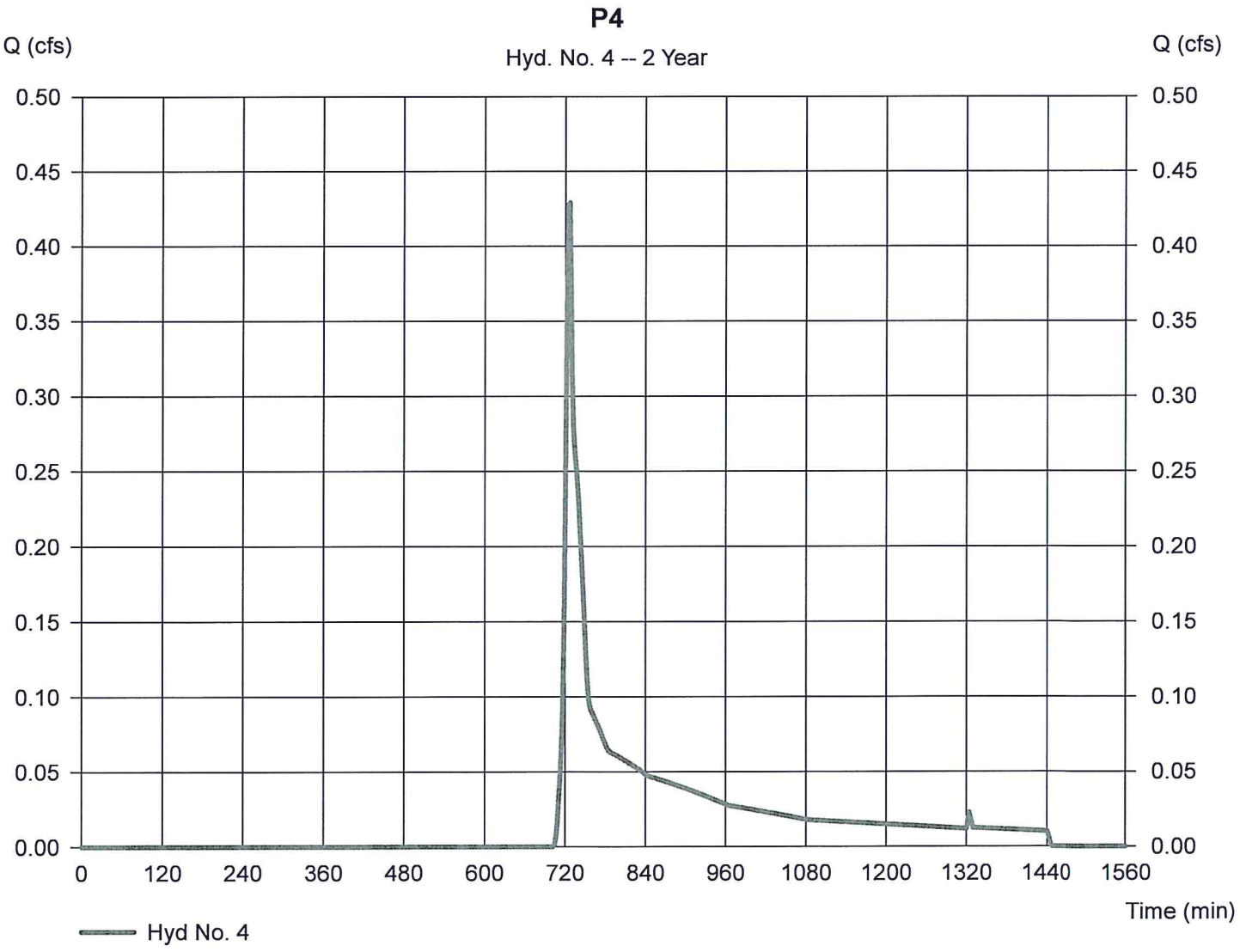
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 4

P4

Hydrograph type	= SCS Runoff	Peak discharge	= 0.429 cfs
Storm frequency	= 2 yrs	Time to peak	= 726 min
Time interval	= 2 min	Hyd. volume	= 1,660 cuft
Drainage area	= 0.840 ac	Curve number	= 65.7
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 6.40 min
Total precip.	= 3.10 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



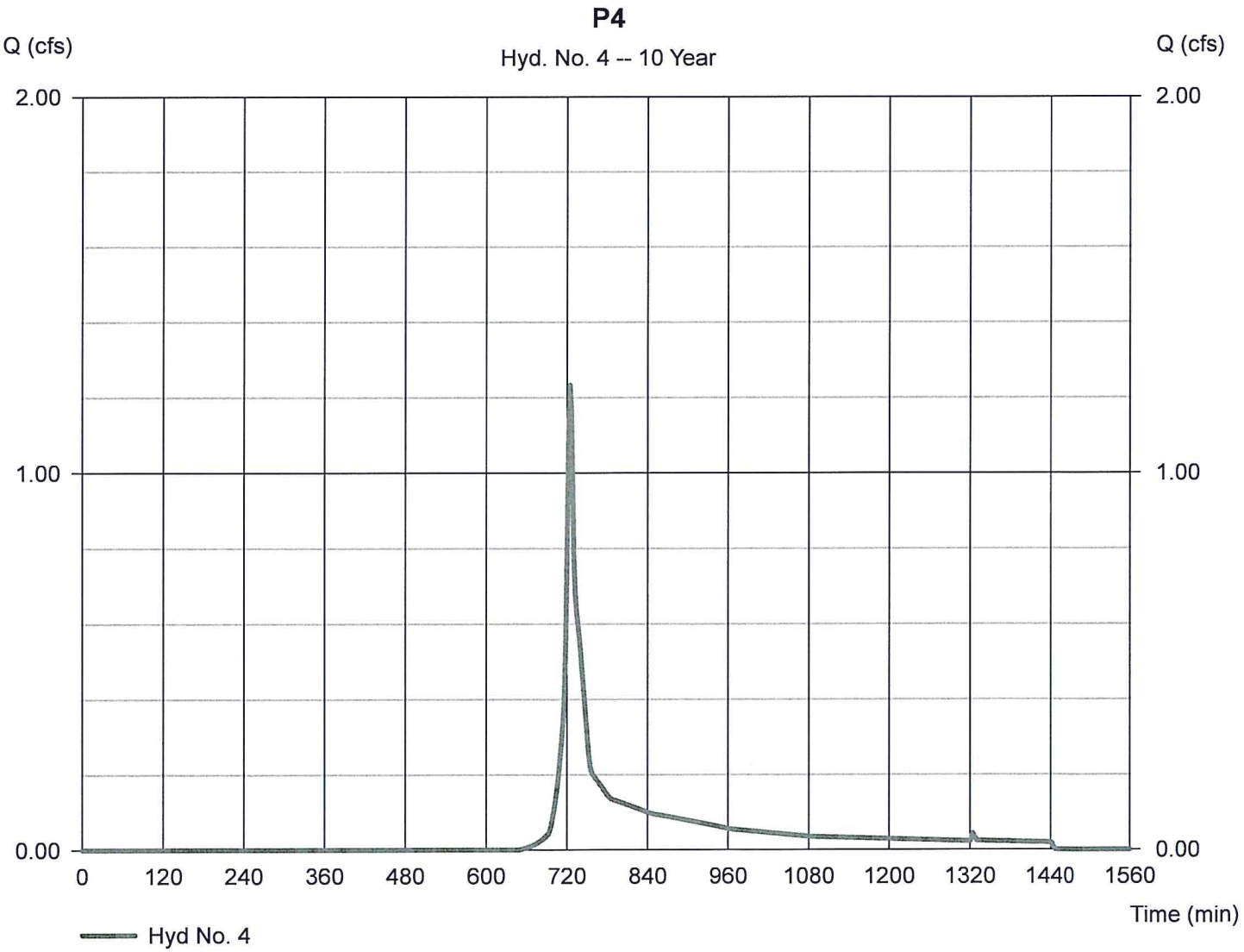
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 4

P4

Hydrograph type	= SCS Runoff	Peak discharge	= 1.234 cfs
Storm frequency	= 10 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 3,935 cuft
Drainage area	= 0.840 ac	Curve number	= 65.7
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 6.40 min
Total precip.	= 4.50 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



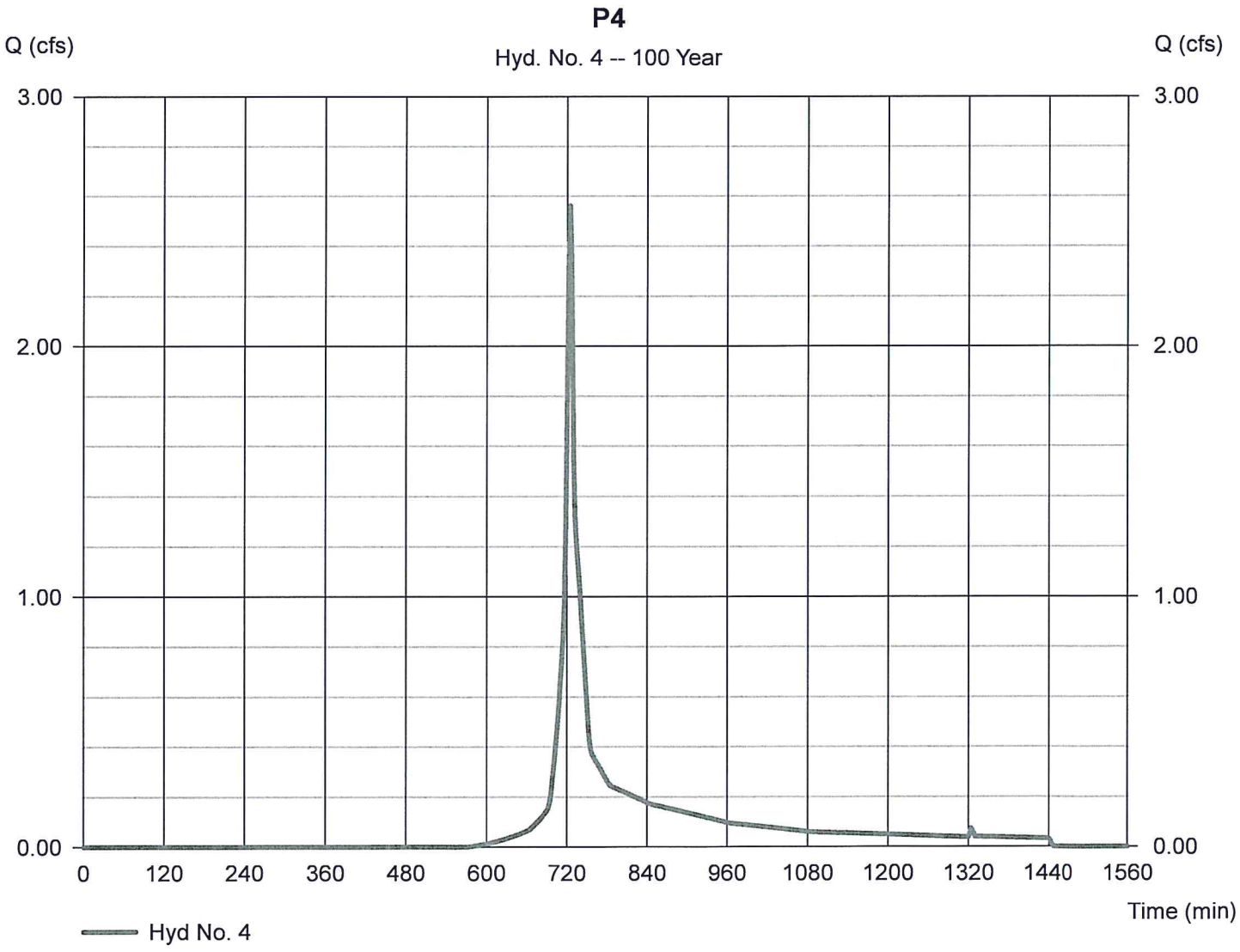
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 4

P4

Hydrograph type	= SCS Runoff	Peak discharge	= 2.563 cfs
Storm frequency	= 100 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 7,753 cuft
Drainage area	= 0.840 ac	Curve number	= 65.7
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 6.40 min
Total precip.	= 6.40 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

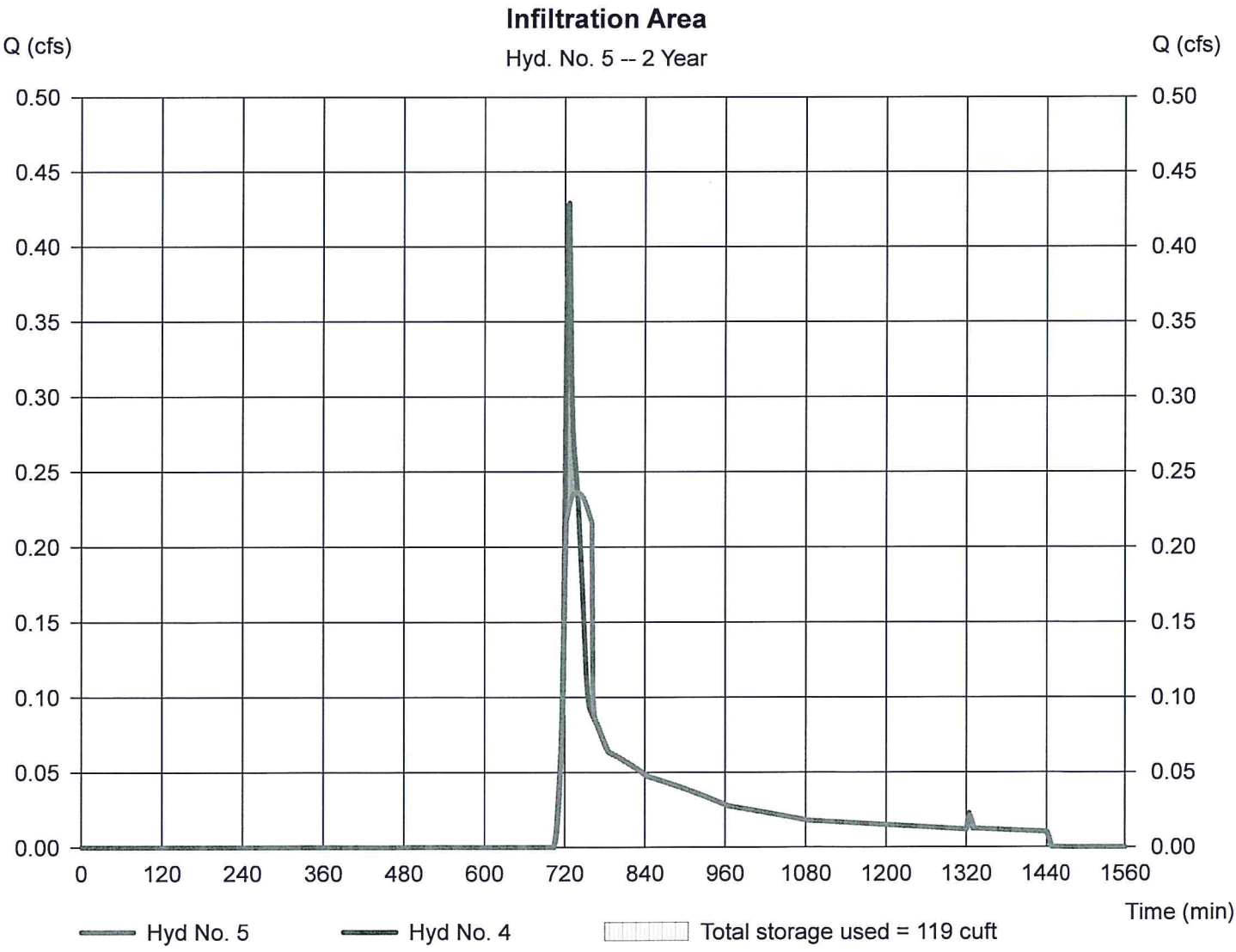
Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 5

Infiltration Area

Hydrograph type	= Reservoir	Peak discharge	= 0.236 cfs
Storm frequency	= 2 yrs	Time to peak	= 738 min
Time interval	= 2 min	Hyd. volume	= 1,660 cuft
Inflow hyd. No.	= 4 - P4	Max. Elevation	= 153.27 ft
Reservoir name	= Infiltration Area 1	Max. Storage	= 119 cuft

Storage Indication method used. Outflow includes exfiltration.



Hydrograph Report

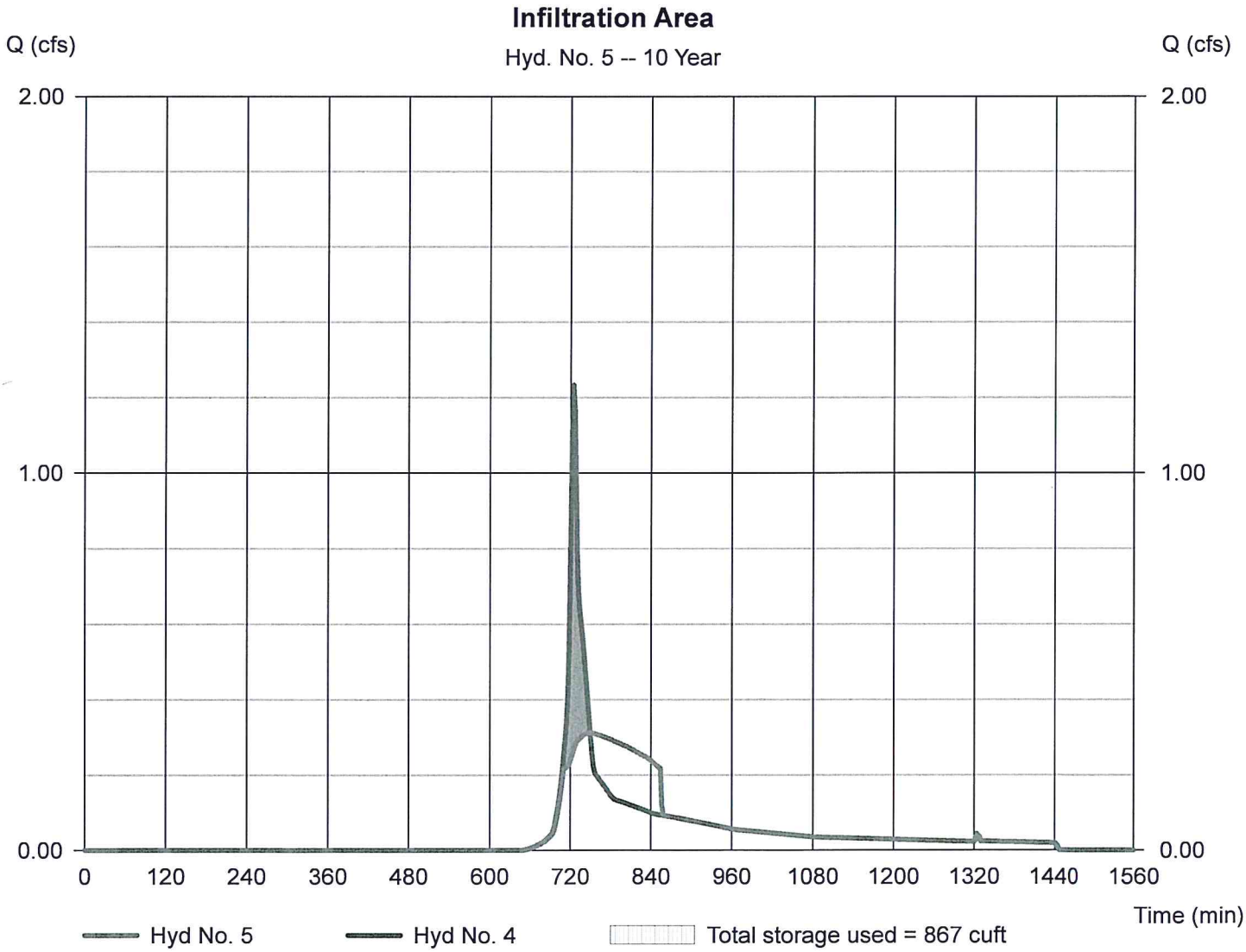
Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 5

Infiltration Area

Hydrograph type	= Reservoir	Peak discharge	= 0.312 cfs
Storm frequency	= 10 yrs	Time to peak	= 750 min
Time interval	= 2 min	Hyd. volume	= 3,935 cuft
Inflow hyd. No.	= 4 - P4	Max. Elevation	= 154.13 ft
Reservoir name	= Infiltration Area 1	Max. Storage	= 867 cuft

Storage Indication method used. Outflow includes exfiltration.



Hydrograph Report

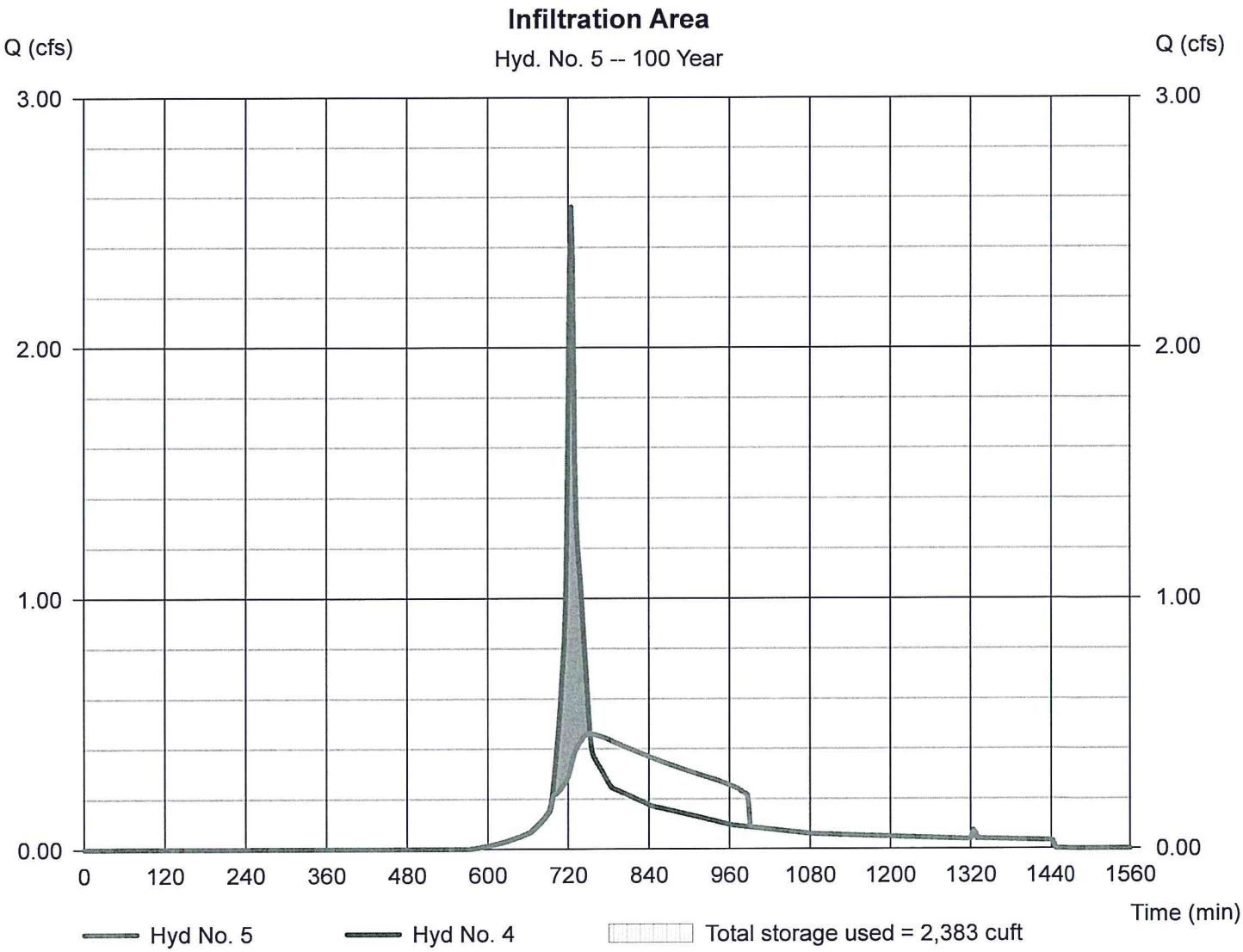
Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 5

Infiltration Area

Hydrograph type	= Reservoir	Peak discharge	= 0.462 cfs
Storm frequency	= 100 yrs	Time to peak	= 752 min
Time interval	= 2 min	Hyd. volume	= 7,753 cuft
Inflow hyd. No.	= 4 - P4	Max. Elevation	= 155.85 ft
Reservoir name	= Infiltration Area 1	Max. Storage	= 2,383 cuft

Storage Indication method used. Outflow includes exfiltration.



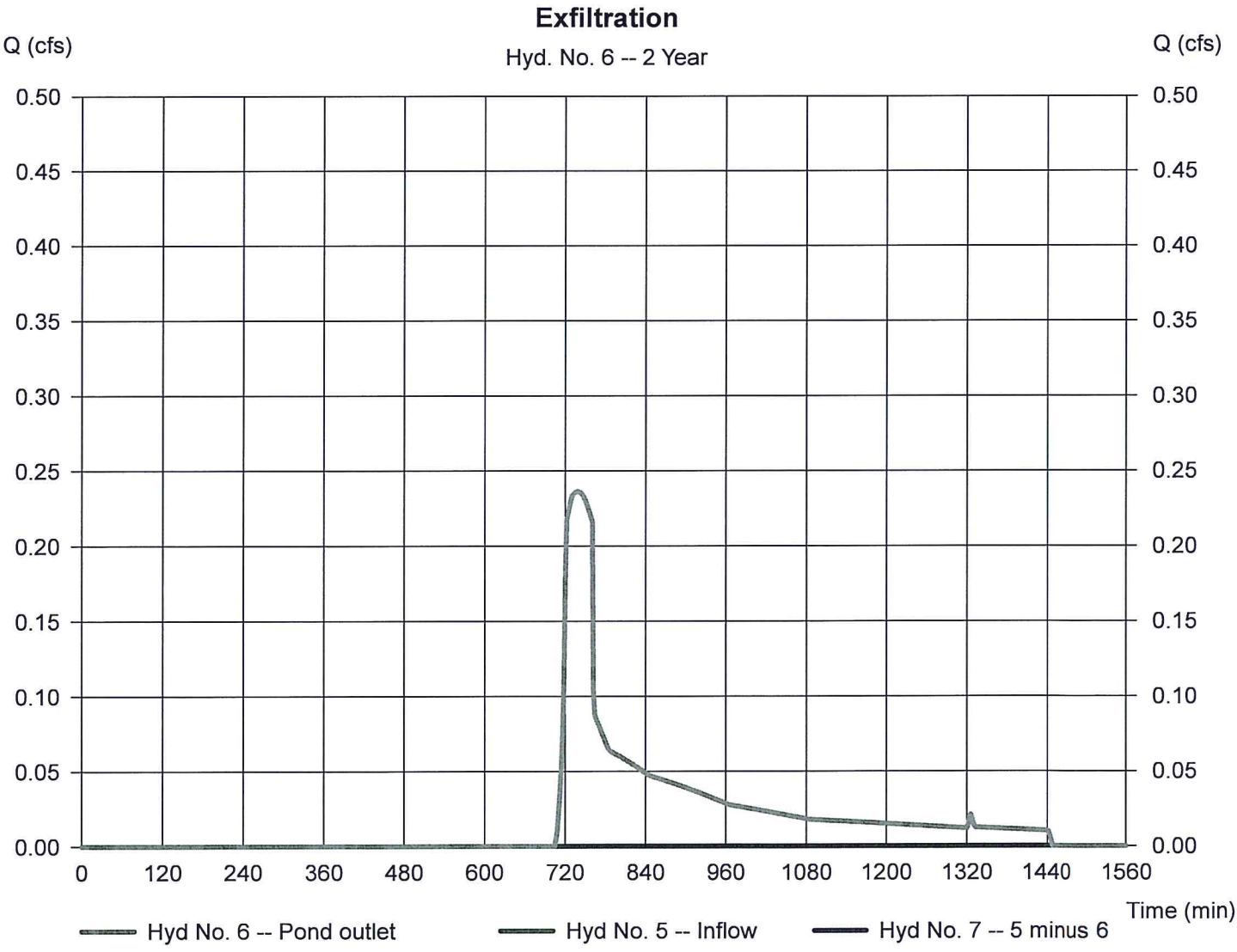
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 6

Exfiltration

Hydrograph type	= Diversion1	Peak discharge	= 0.236 cfs
Storm frequency	= 2 yrs	Time to peak	= 738 min
Time interval	= 2 min	Hyd. volume	= 1,660 cuft
Inflow hydrograph	= 5 - Infiltration Area	2nd diverted hyd.	= 7
Diversion method	= Pond - Infiltration Area 1	Pond structure	= Exfiltration



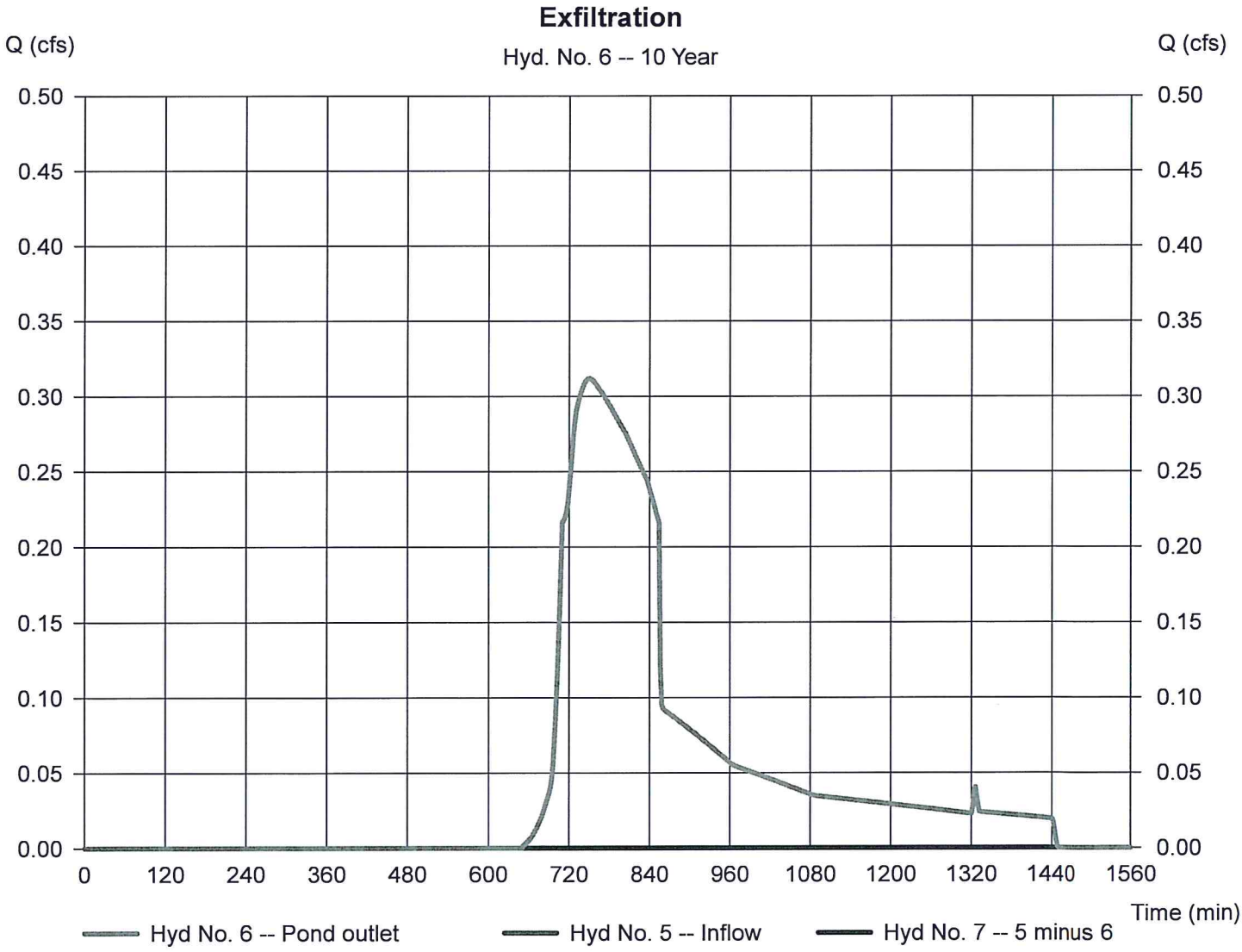
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 6

Exfiltration

Hydrograph type	= Diversion1	Peak discharge	= 0.312 cfs
Storm frequency	= 10 yrs	Time to peak	= 750 min
Time interval	= 2 min	Hyd. volume	= 3,935 cuft
Inflow hydrograph	= 5 - Infiltration Area	2nd diverted hyd.	= 7
Diversion method	= Pond - Infiltration Area 1	Pond structure	= Exfiltration



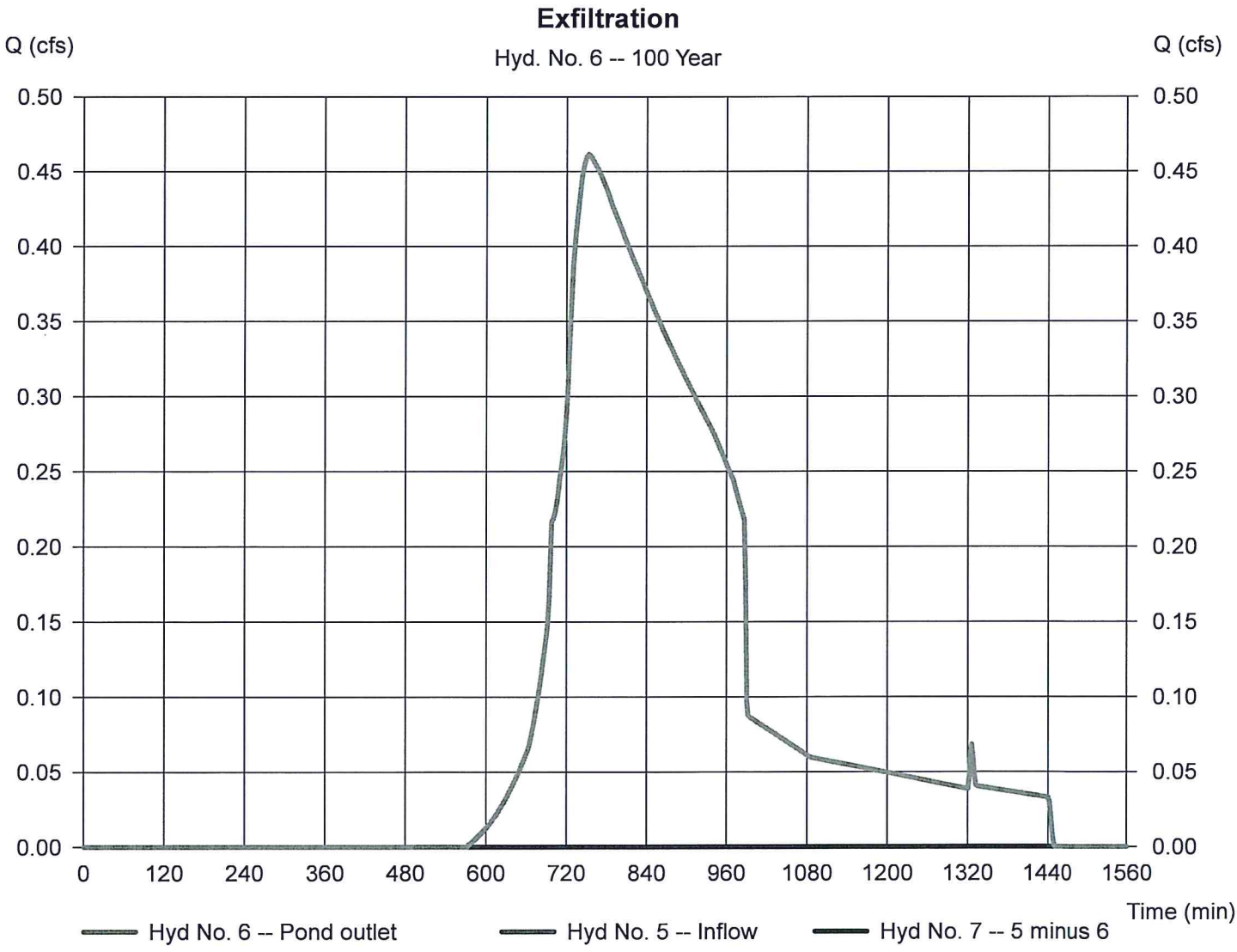
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 6

Exfiltration

Hydrograph type	= Diversion1	Peak discharge	= 0.462 cfs
Storm frequency	= 100 yrs	Time to peak	= 752 min
Time interval	= 2 min	Hyd. volume	= 7,753 cuft
Inflow hydrograph	= 5 - Infiltration Area	2nd diverted hyd.	= 7
Diversion method	= Pond - Infiltration Area 1	Pond structure	= Exfiltration



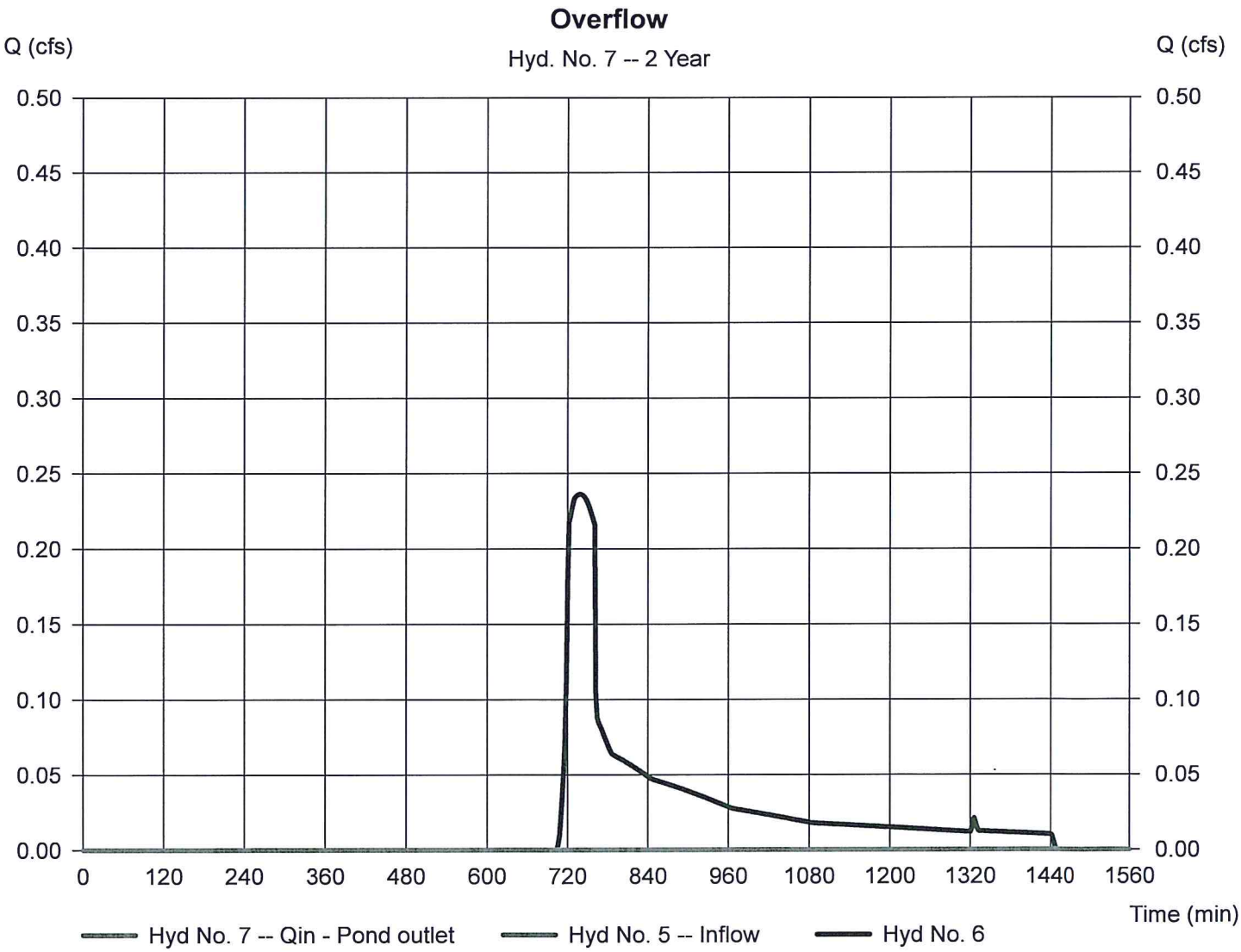
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 7

Overflow

Hydrograph type	= Diversion2	Peak discharge	= 0.000 cfs
Storm frequency	= 2 yrs	Time to peak	= 714 min
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hydrograph	= 5 - Infiltration Area	2nd diverted hyd.	= 6
Diversion method	= Pond - Infiltration Area 1	Pond structure	= Exfiltration



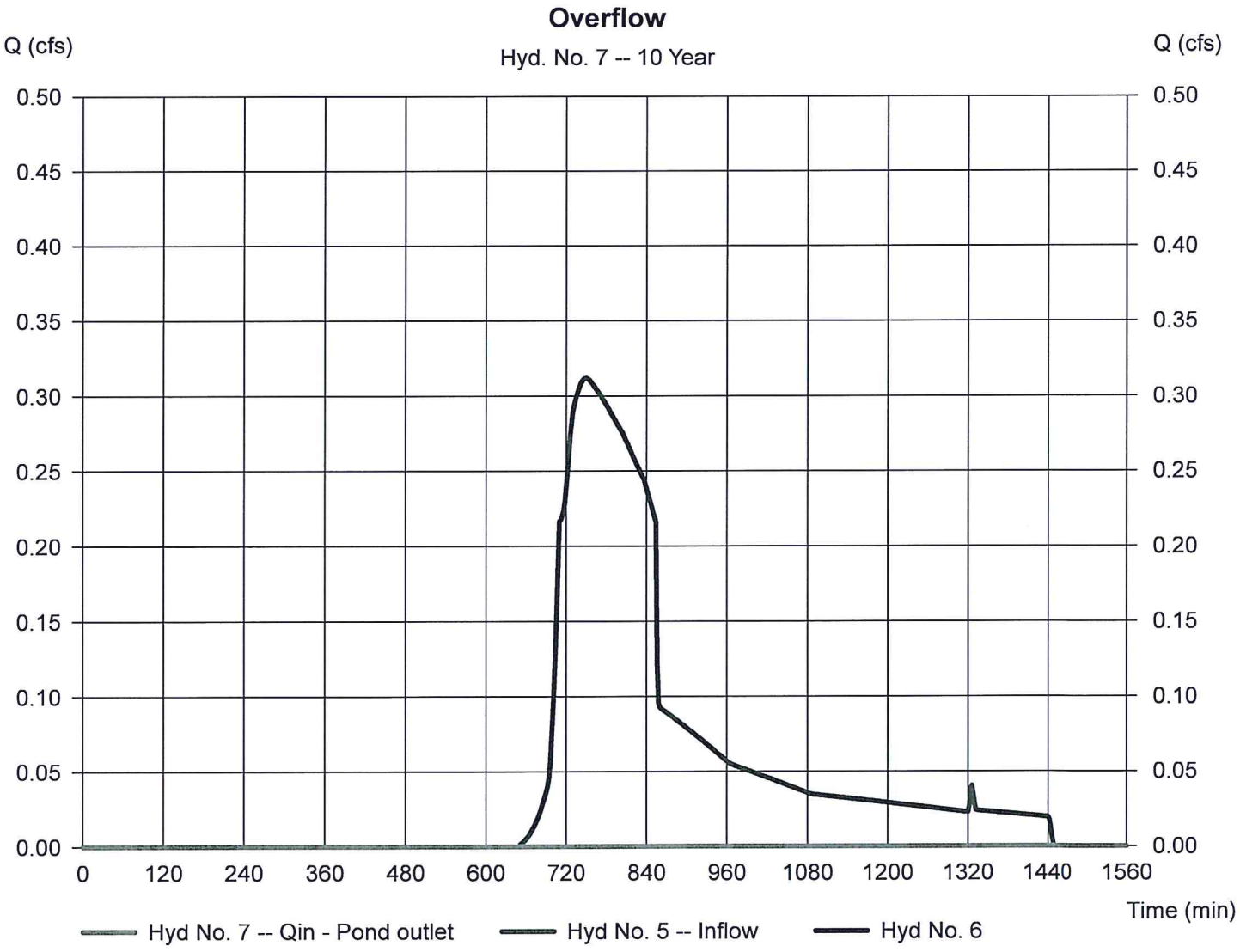
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 7

Overflow

Hydrograph type	= Diversion2	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= 702 min
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hydrograph	= 5 - Infiltration Area	2nd diverted hyd.	= 6
Diversion method	= Pond - Infiltration Area 1	Pond structure	= Exfiltration



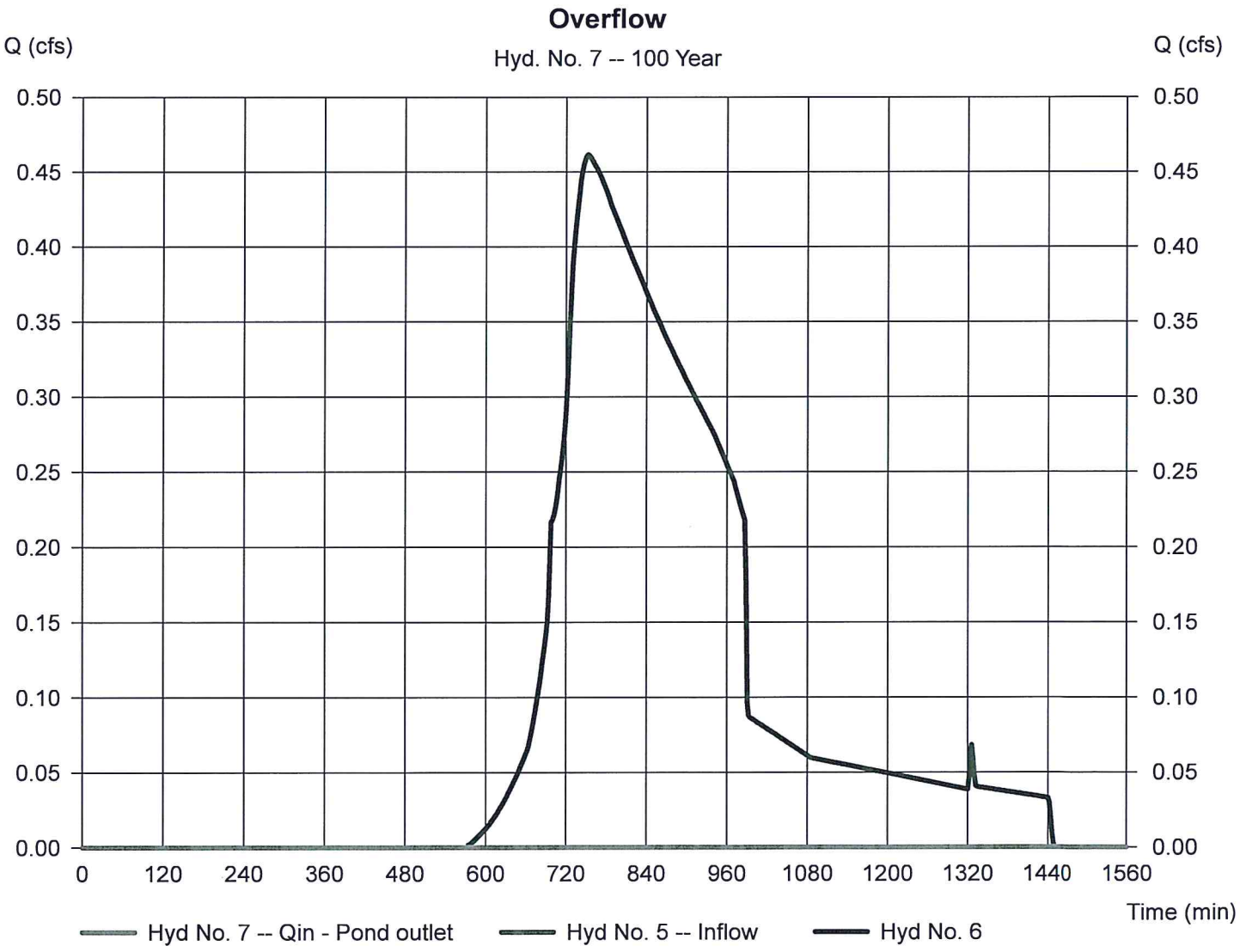
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 7

Overflow

Hydrograph type	= Diversion2	Peak discharge	= 0.000 cfs
Storm frequency	= 100 yrs	Time to peak	= 678 min
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hydrograph	= 5 - Infiltration Area	2nd diverted hyd.	= 6
Diversion method	= Pond - Infiltration Area 1	Pond structure	= Exfiltration



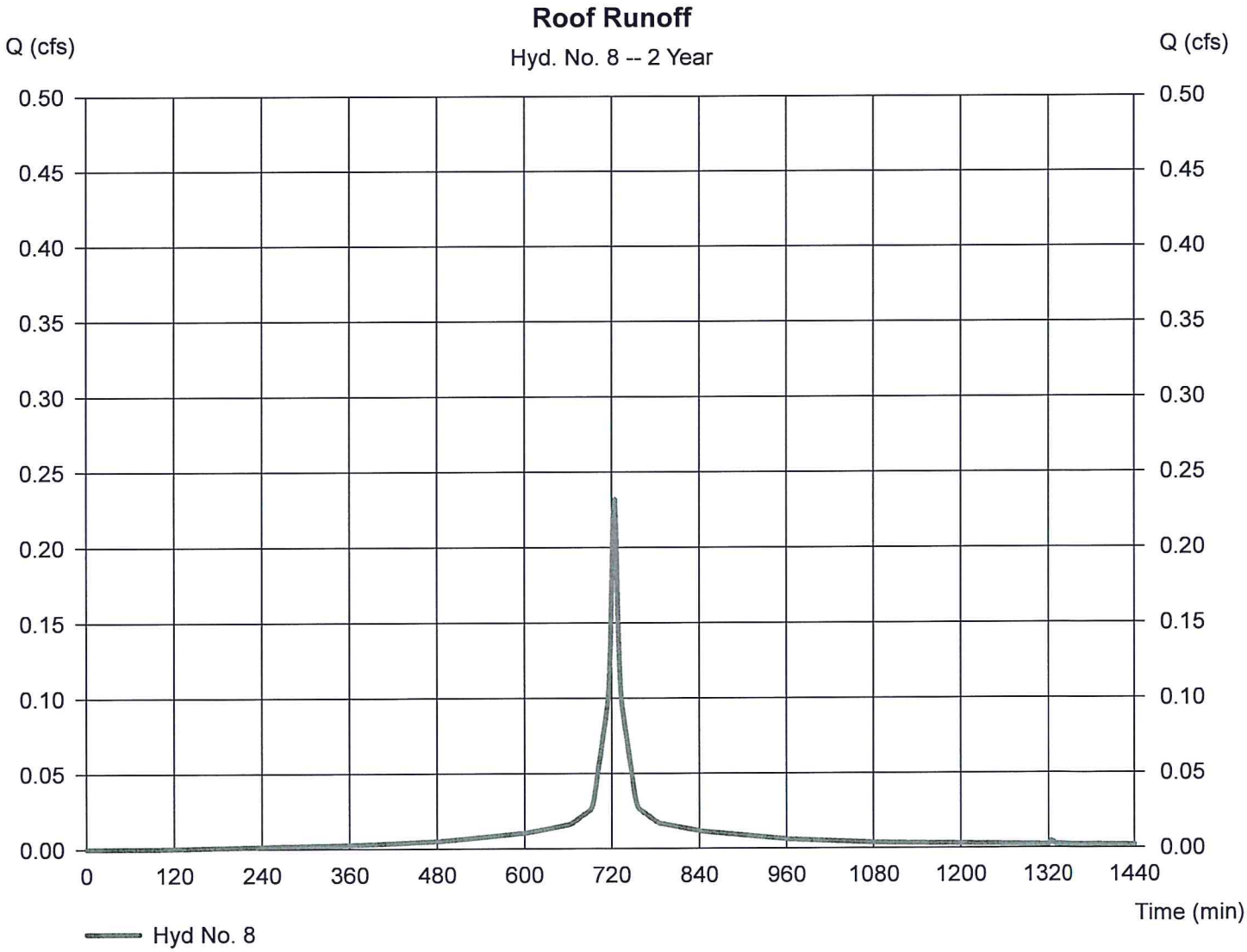
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 8

Roof Runoff

Hydrograph type	= SCS Runoff	Peak discharge	= 0.232 cfs
Storm frequency	= 2 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 781 cuft
Drainage area	= 0.080 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.10 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



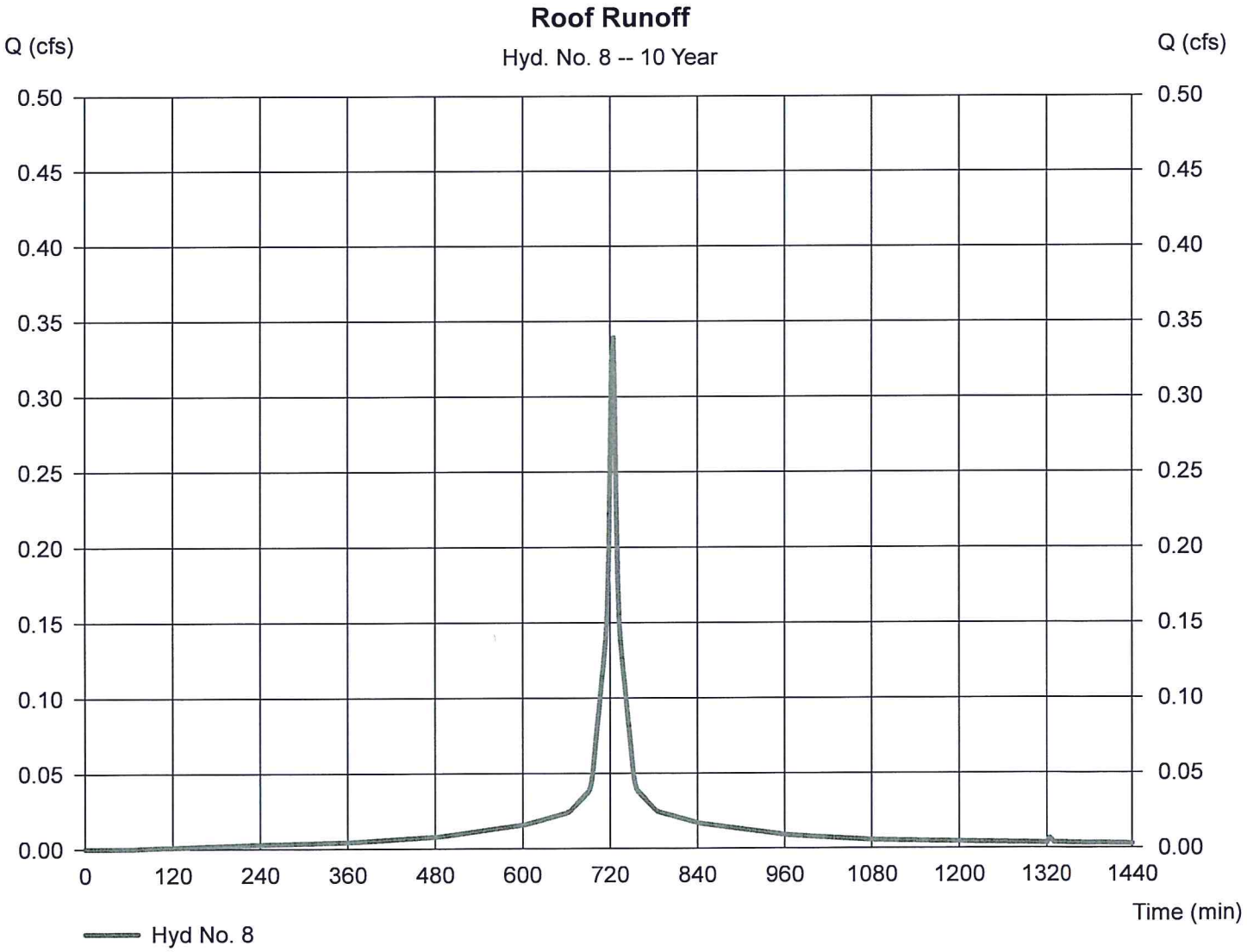
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 8

Roof Runoff

Hydrograph type	= SCS Runoff	Peak discharge	= 0.339 cfs
Storm frequency	= 10 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 1,161 cuft
Drainage area	= 0.080 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 6.00 min
Total precip.	= 4.50 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



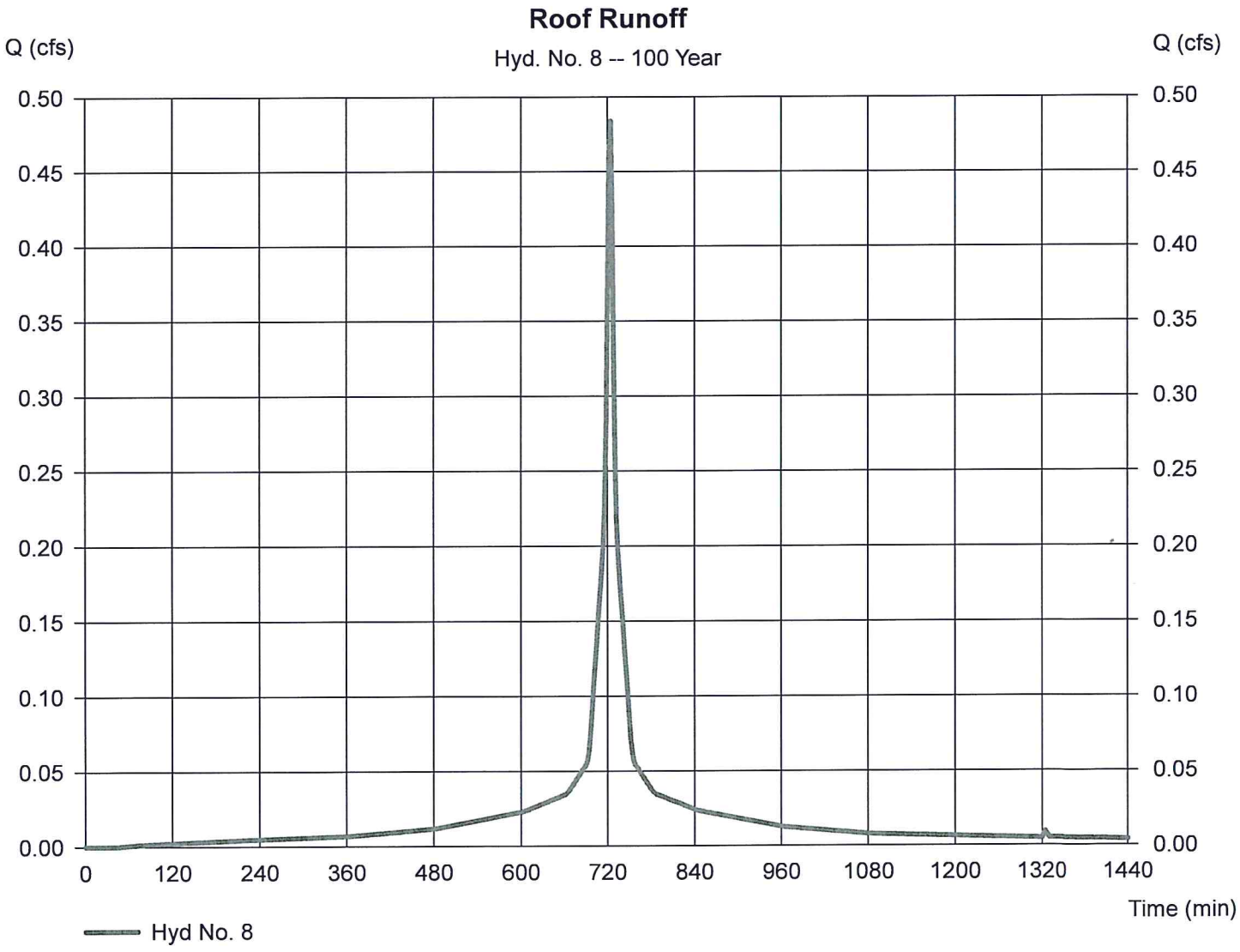
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 8

Roof Runoff

Hydrograph type	= SCS Runoff	Peak discharge	= 0.484 cfs
Storm frequency	= 100 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 1,677 cuft
Drainage area	= 0.080 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 6.00 min
Total precip.	= 6.40 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

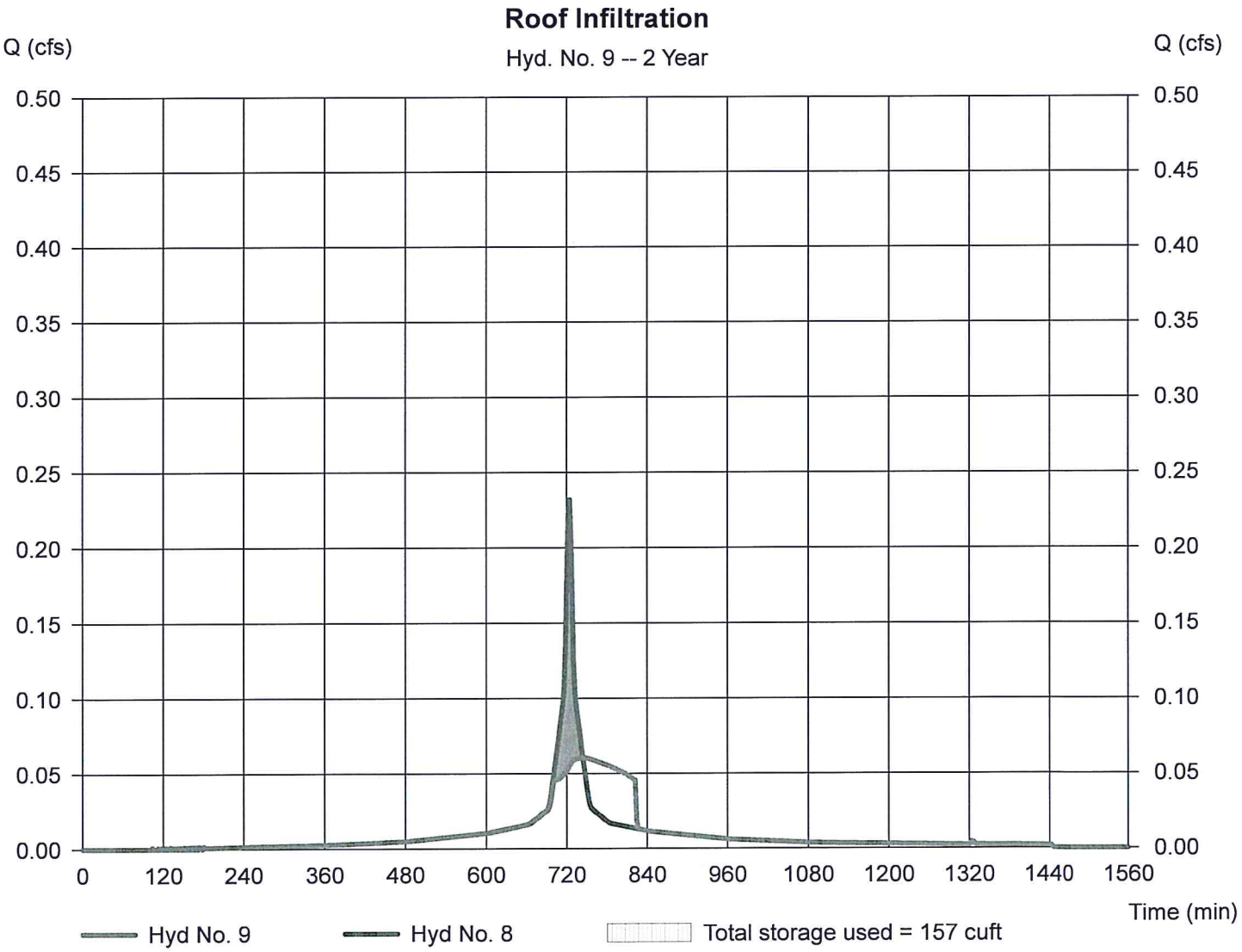
Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 9

Roof Infiltration

Hydrograph type	= Reservoir	Peak discharge	= 0.060 cfs
Storm frequency	= 2 yrs	Time to peak	= 744 min
Time interval	= 2 min	Hyd. volume	= 781 cuft
Inflow hyd. No.	= 8 - Roof Runoff	Max. Elevation	= 154.08 ft
Reservoir name	= Roof Infiltration	Max. Storage	= 157 cuft

Storage Indication method used. Outflow includes exfiltration.



Hydrograph Report

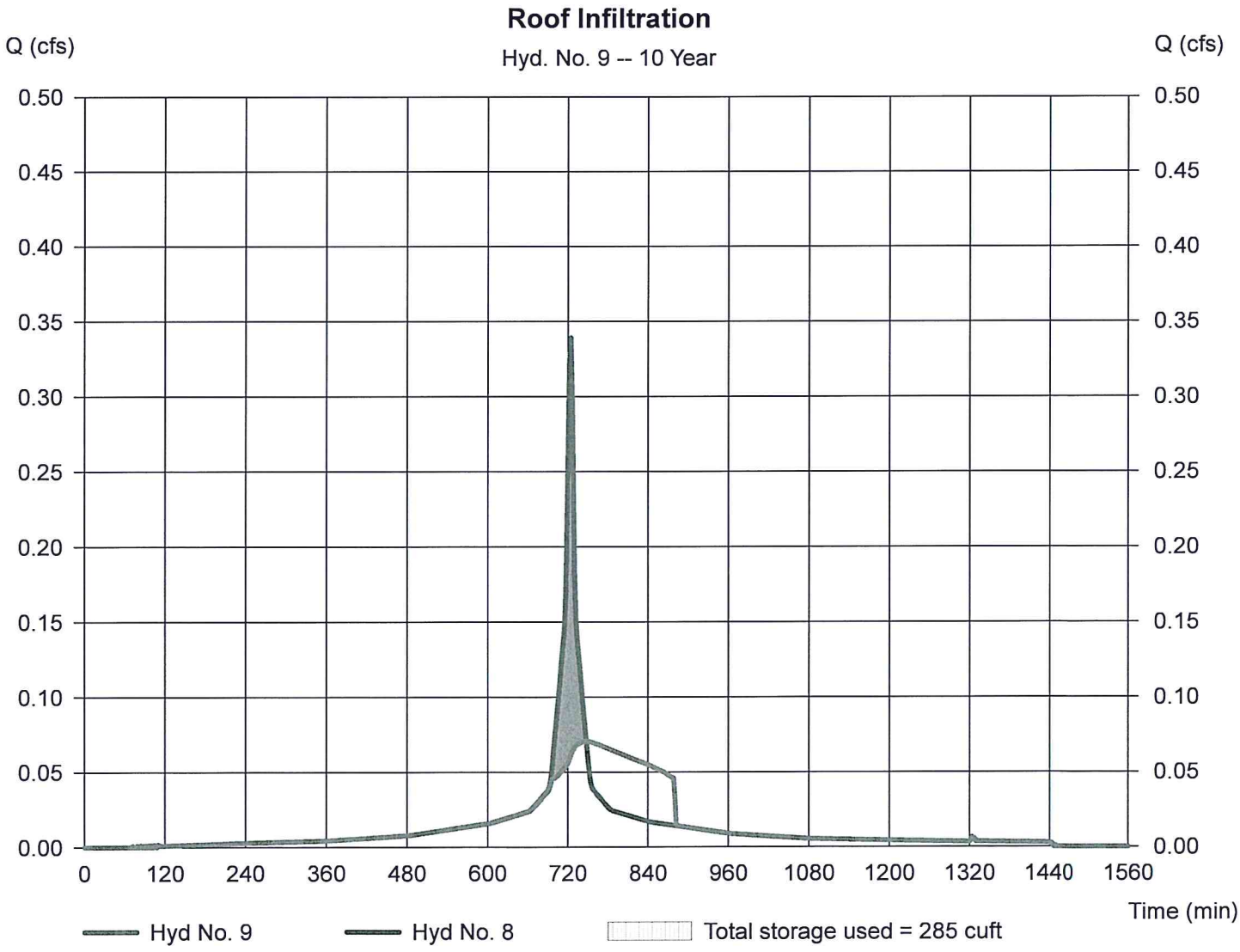
Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 9

Roof Infiltration

Hydrograph type	= Reservoir	Peak discharge	= 0.071 cfs
Storm frequency	= 10 yrs	Time to peak	= 748 min
Time interval	= 2 min	Hyd. volume	= 1,161 cuft
Inflow hyd. No.	= 8 - Roof Runoff	Max. Elevation	= 154.79 ft
Reservoir name	= Roof Infiltration	Max. Storage	= 285 cuft

Storage Indication method used. Outflow includes exfiltration.



Hydrograph Report

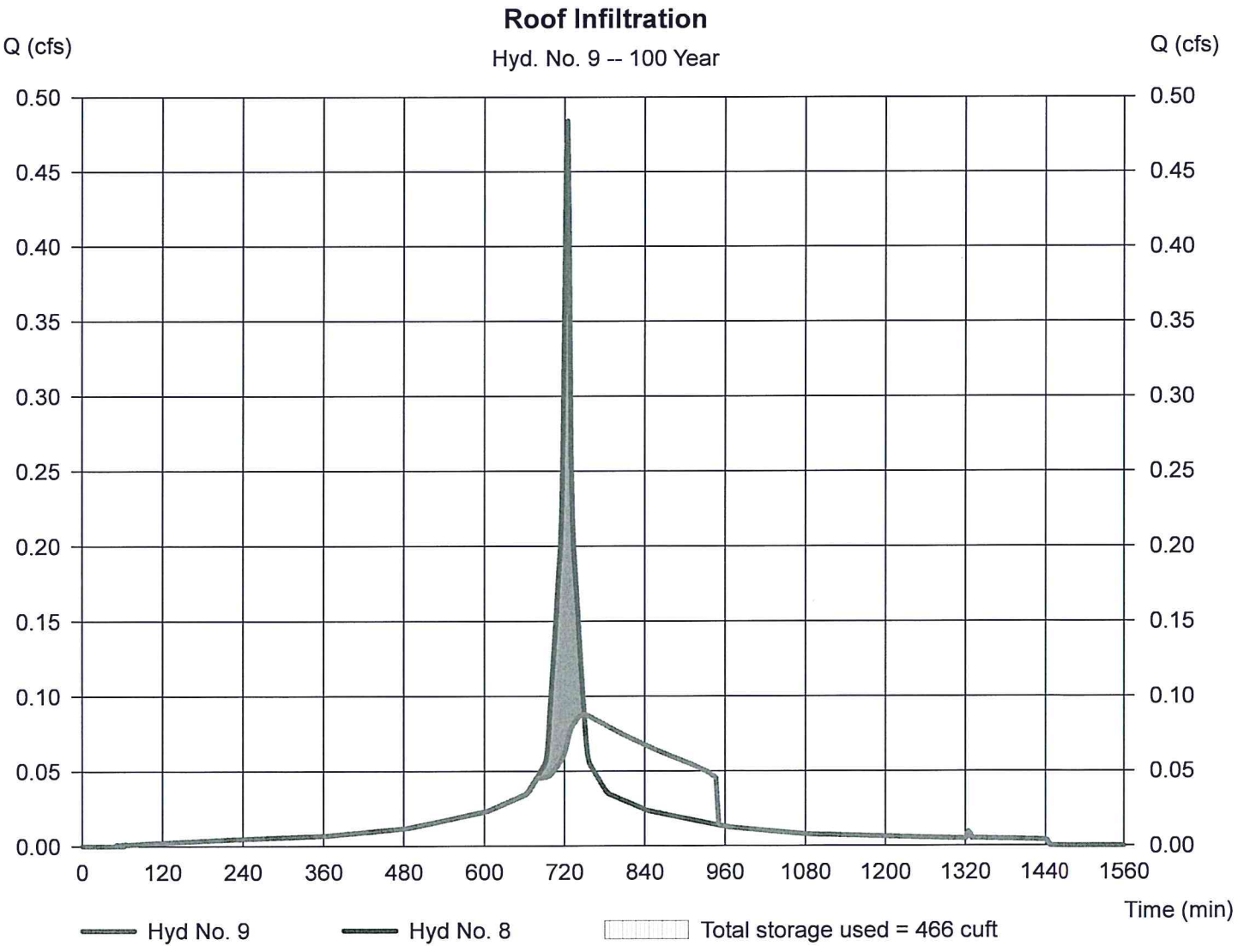
Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 9

Roof Infiltration

Hydrograph type	= Reservoir	Peak discharge	= 0.088 cfs
Storm frequency	= 100 yrs	Time to peak	= 750 min
Time interval	= 2 min	Hyd. volume	= 1,677 cuft
Inflow hyd. No.	= 8 - Roof Runoff	Max. Elevation	= 155.99 ft
Reservoir name	= Roof Infiltration	Max. Storage	= 466 cuft

Storage Indication method used. Outflow includes exfiltration.



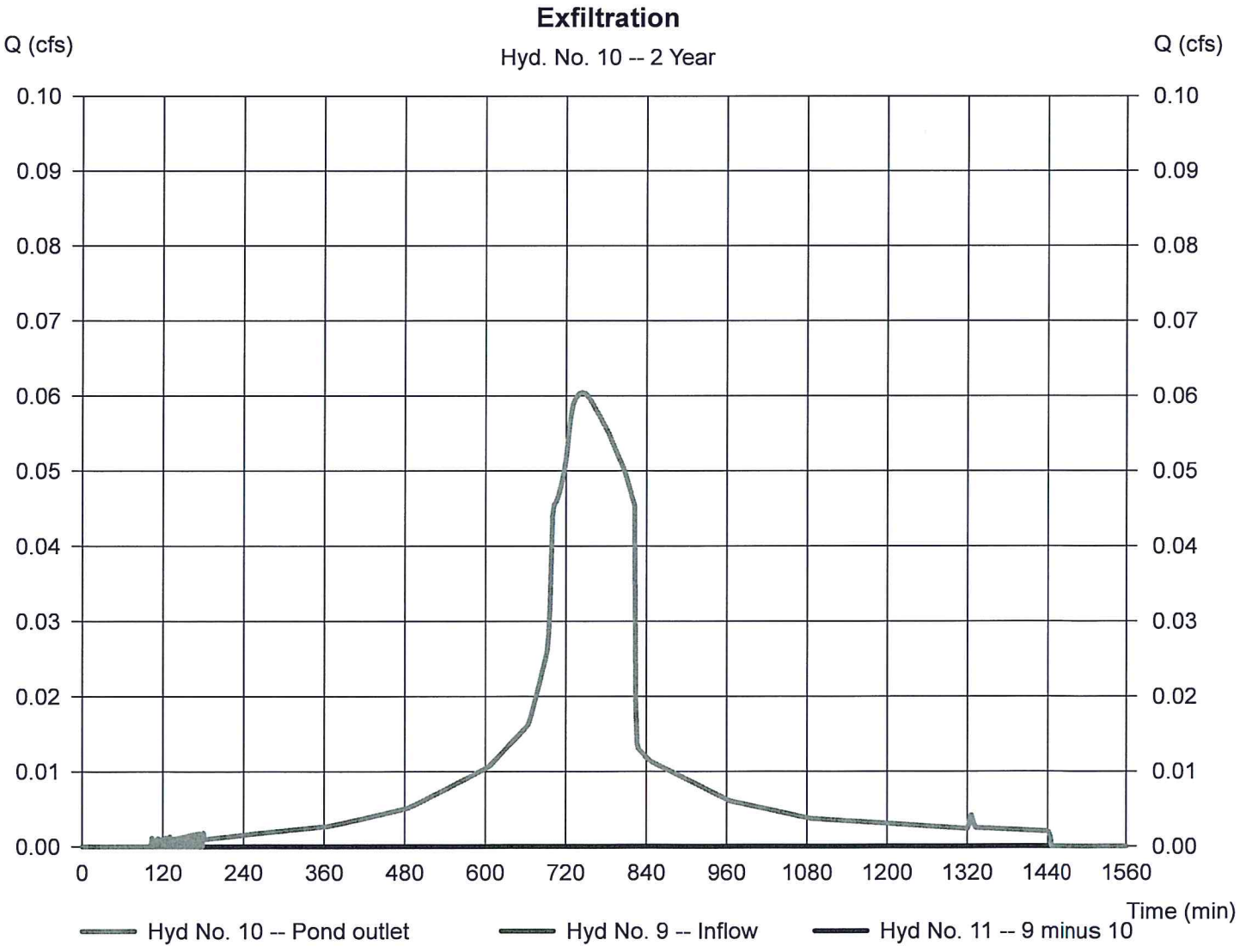
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 10

Exfiltration

Hydrograph type	= Diversion1	Peak discharge	= 0.060 cfs
Storm frequency	= 2 yrs	Time to peak	= 744 min
Time interval	= 2 min	Hyd. volume	= 781 cuft
Inflow hydrograph	= 9 - Roof Infiltration	2nd diverted hyd.	= 11
Diversion method	= Pond - Roof Infiltration	Pond structure	= Exfiltration



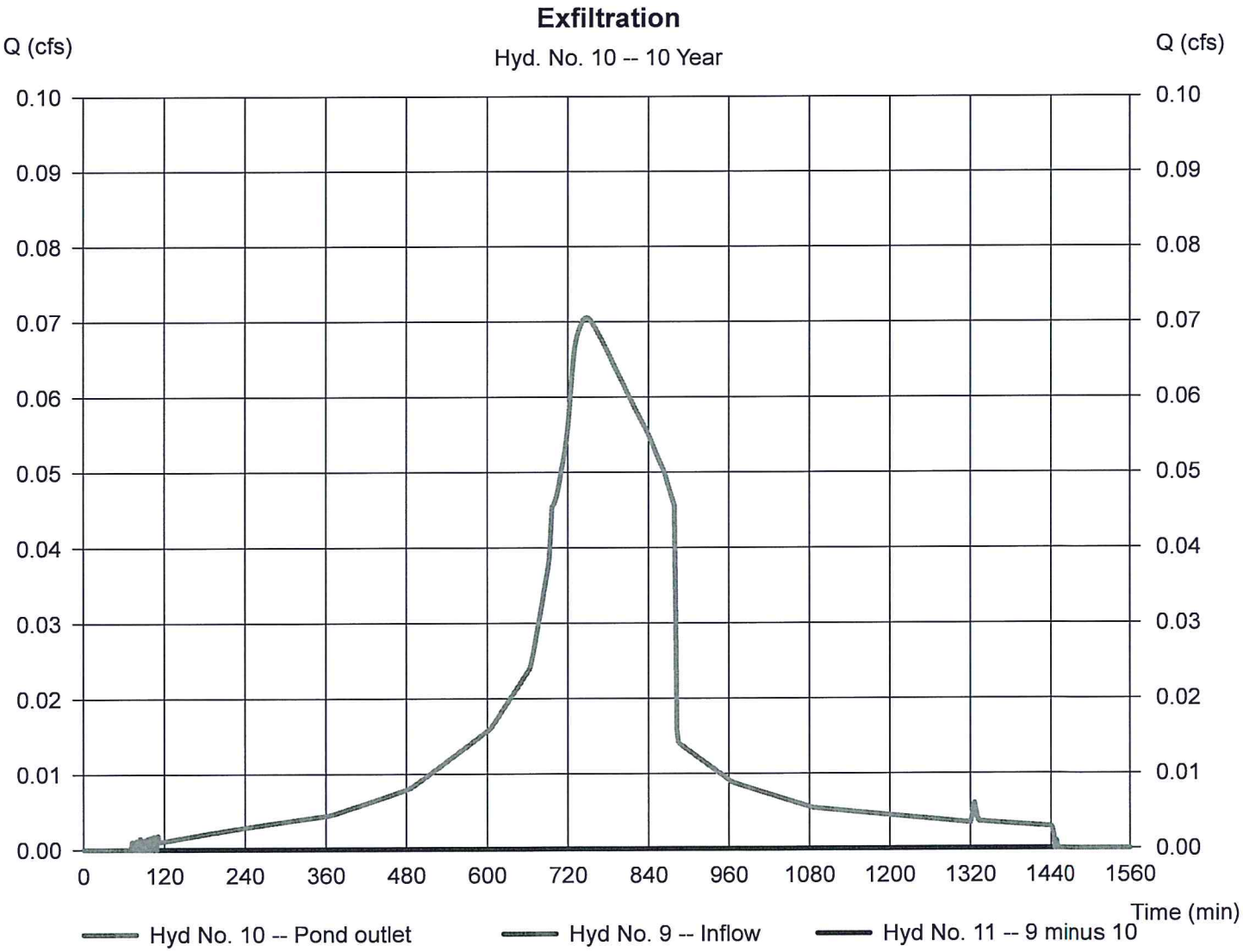
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 10

Exfiltration

Hydrograph type	= Diversion1	Peak discharge	= 0.071 cfs
Storm frequency	= 10 yrs	Time to peak	= 748 min
Time interval	= 2 min	Hyd. volume	= 1,161 cuft
Inflow hydrograph	= 9 - Roof Infiltration	2nd diverted hyd.	= 11
Diversion method	= Pond - Roof Infiltration	Pond structure	= Exfiltration



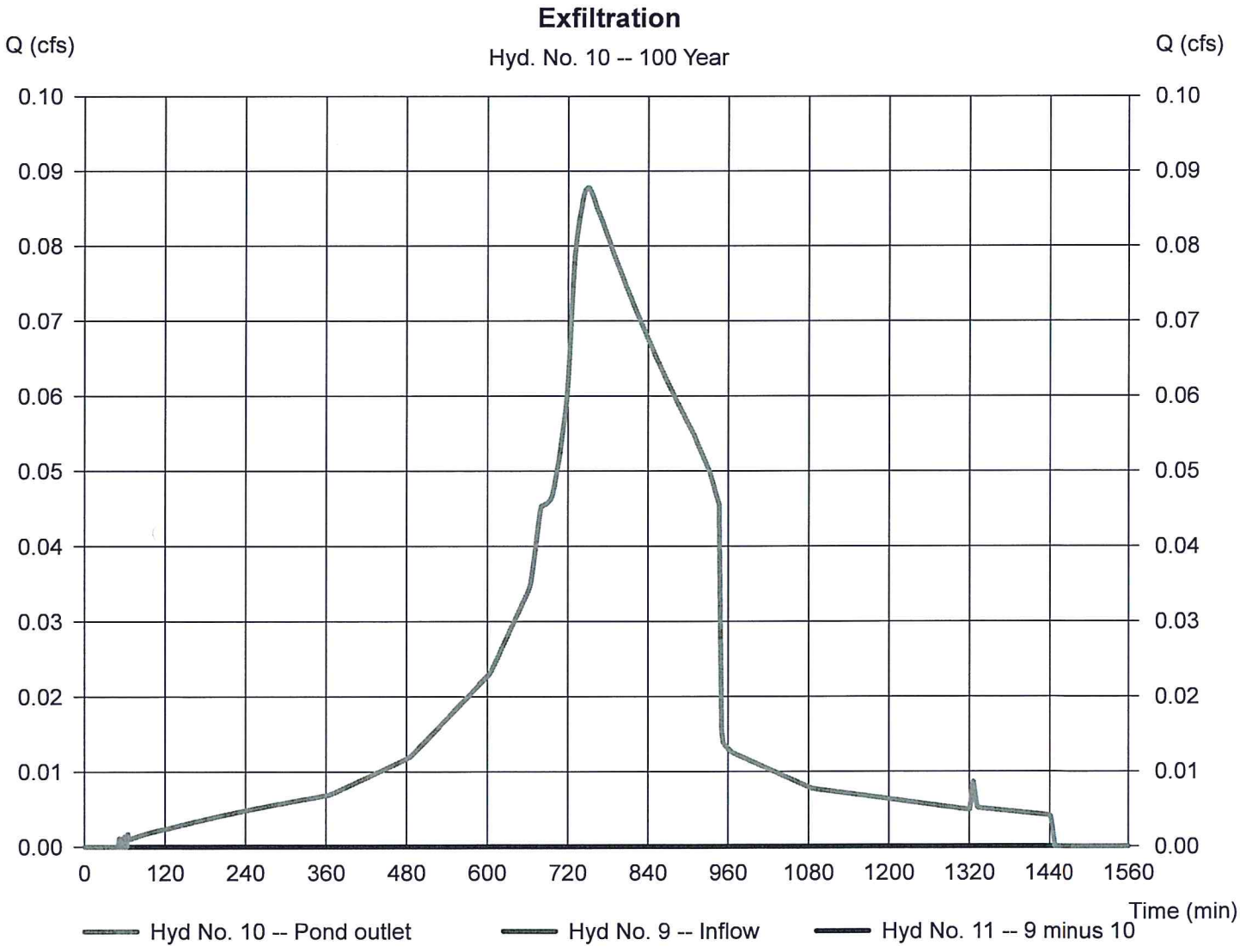
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 10

Exfiltration

Hydrograph type	= Diversion1	Peak discharge	= 0.088 cfs
Storm frequency	= 100 yrs	Time to peak	= 750 min
Time interval	= 2 min	Hyd. volume	= 1,677 cuft
Inflow hydrograph	= 9 - Roof Infiltration	2nd diverted hyd.	= 11
Diversion method	= Pond - Roof Infiltration	Pond structure	= Exfiltration



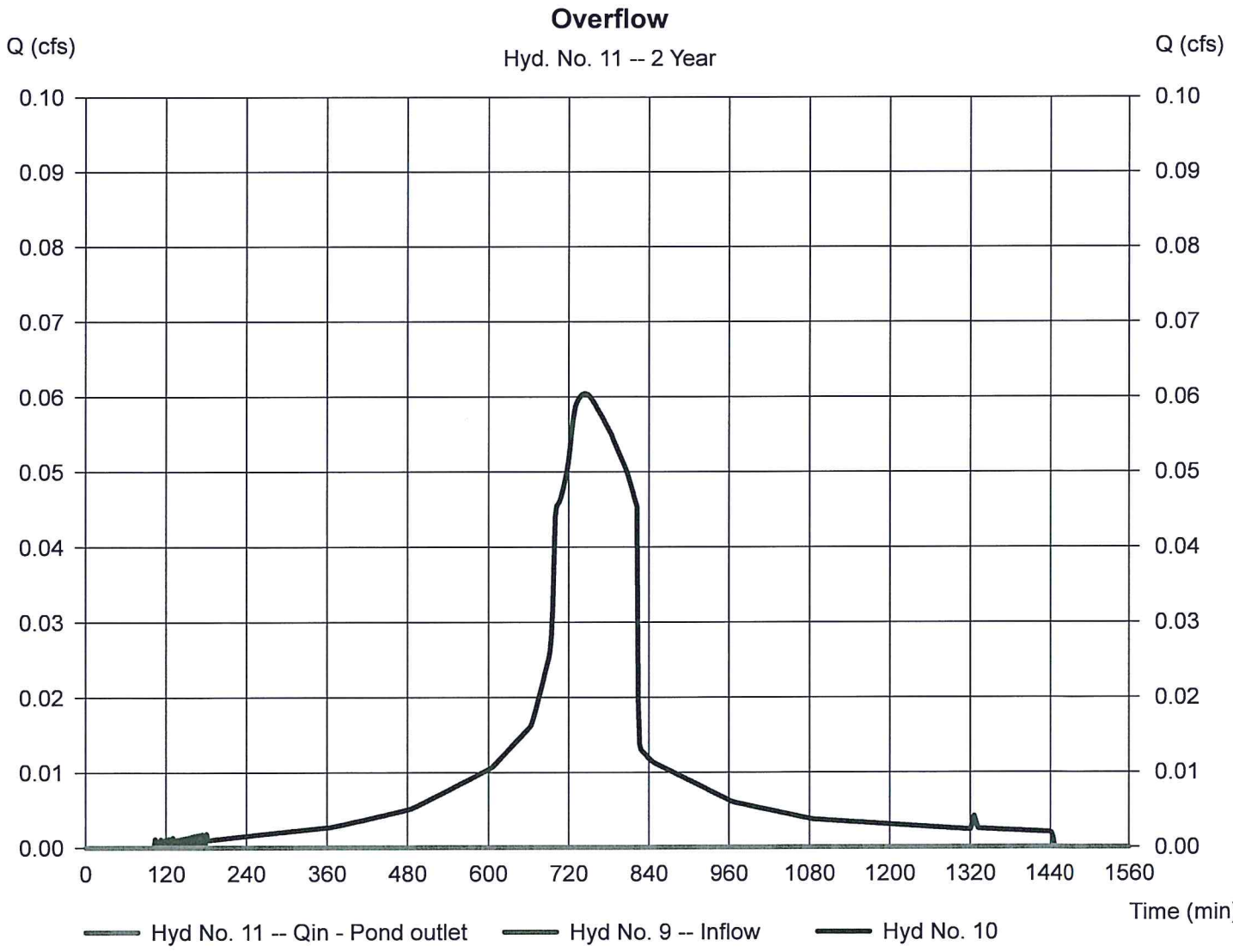
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 11

Overflow

Hydrograph type	= Diversion2	Peak discharge	= 0.000 cfs
Storm frequency	= 2 yrs	Time to peak	= 684 min
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hydrograph	= 9 - Roof Infiltration	2nd diverted hyd.	= 10
Diversion method	= Pond - Roof Infiltration	Pond structure	= Exfiltration



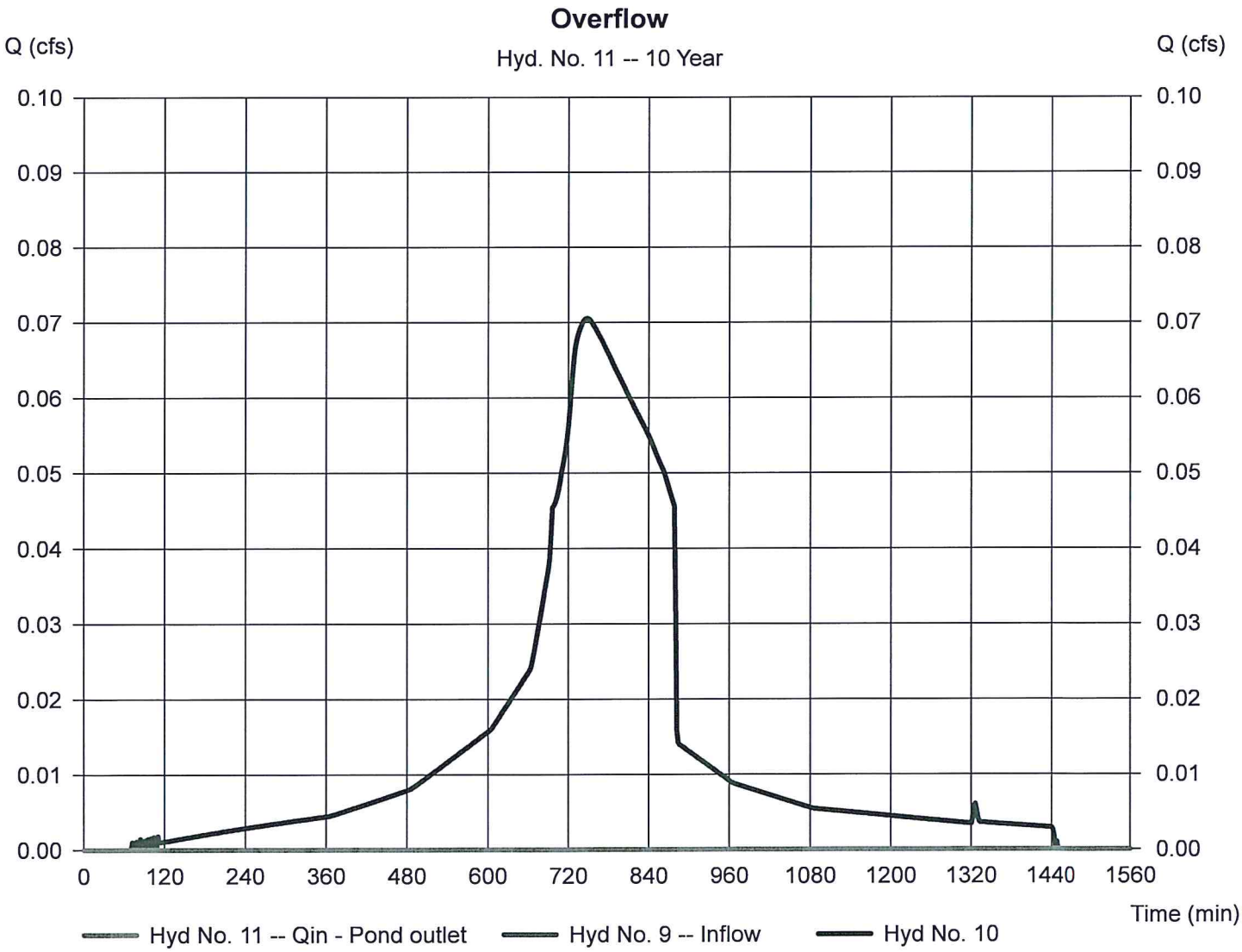
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 11

Overflow

Hydrograph type	= Diversion2	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= 644 min
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hydrograph	= 9 - Roof Infiltration	2nd diverted hyd.	= 10
Diversion method	= Pond - Roof Infiltration	Pond structure	= Exfiltration



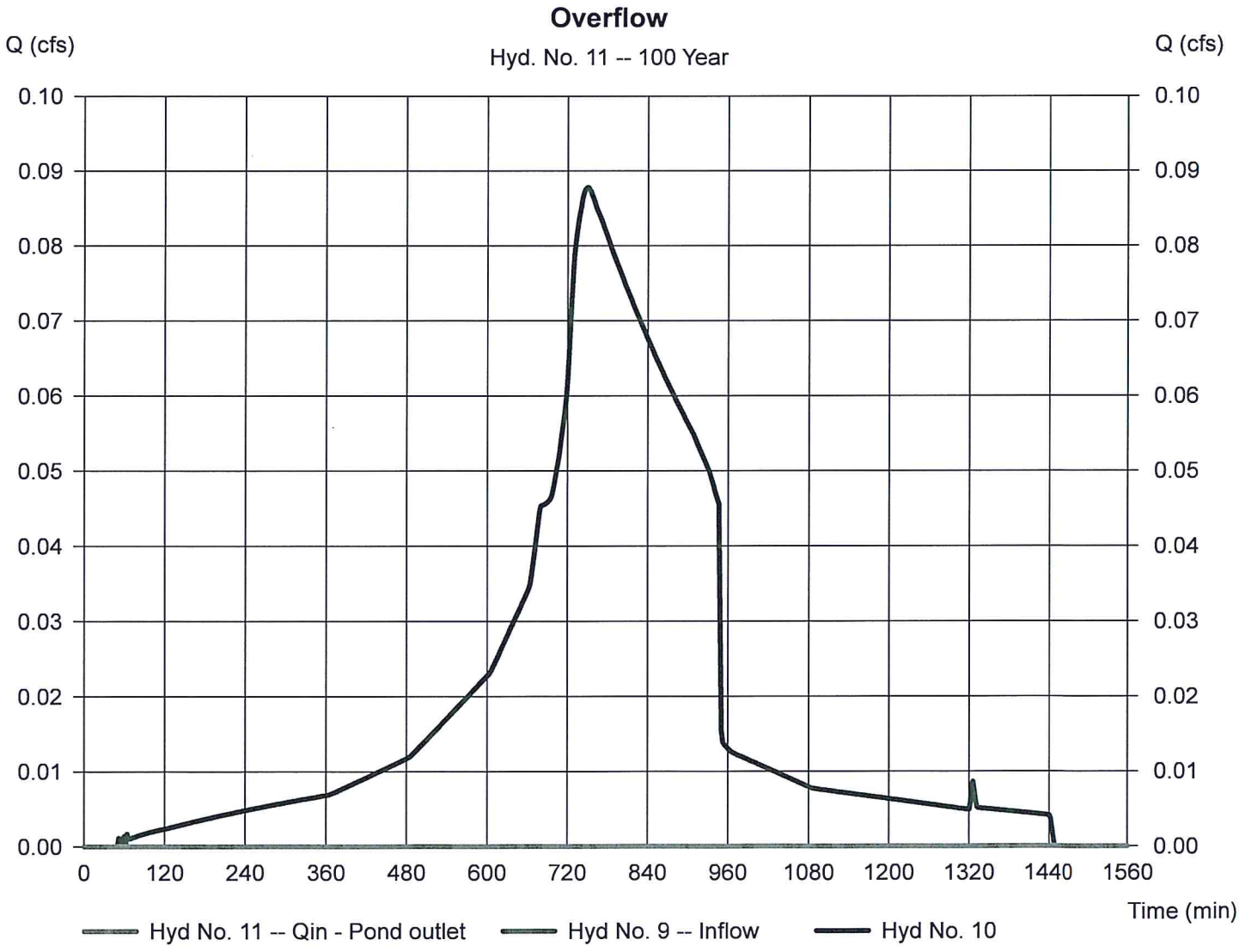
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 11

Overflow

Hydrograph type	= Diversion2	Peak discharge	= 0.000 cfs
Storm frequency	= 100 yrs	Time to peak	= 574 min
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hydrograph	= 9 - Roof Infiltration	2nd diverted hyd.	= 10
Diversion method	= Pond - Roof Infiltration	Pond structure	= Exfiltration



Worksheet 2: Runoff curve number and runoff **SM-4860**

Project: 267 Great Rd By JTM Date 8/26/15

Location: Acton, MA Checked _____ Date _____

Circle one: Present [Developed] P5

1. Runoff curve number (CN)

Soil name and hydrologic group (appendix A)	Cover description (cover type, treatment, and hydrologic condition: percent impervious: unconnected/connected impervious area ratio)	CN 1/ Table 2-2	CN 1/ Fig. 2-3	CN 1/ Fig. 2-4	Area Acres	Product of CN x Area
A	Woods	30			0.02	0.60
A	Open	39			0.33	12.83
	Impervious	98			0.20	19.84
A	Gravel	76			0.00	0.00
Totals =					0.55	33.28

1/ Use only one CN source per line.

CN (weighted) = $\frac{\text{total product}}{\text{total area}} = \frac{33.28}{0.55} = 60.33$; Use CN = [60.3]

2. Runoff

		Storm #1	Storm #2	Storm #3
Frequency.....	yr	2	10	100
Rainfall, P (24-hour).....	in	3.1	4.5	6.4
Runoff, Q..... (Use P and CN with table 2-1, fig. 2-1,) or eqs. 2-3 and 2-4.)	in	0.38	1.04	2.22
Runoff, Q.....	cf	763	2081	4440

(210-VI-TR-55, Second Ed., June 1986)

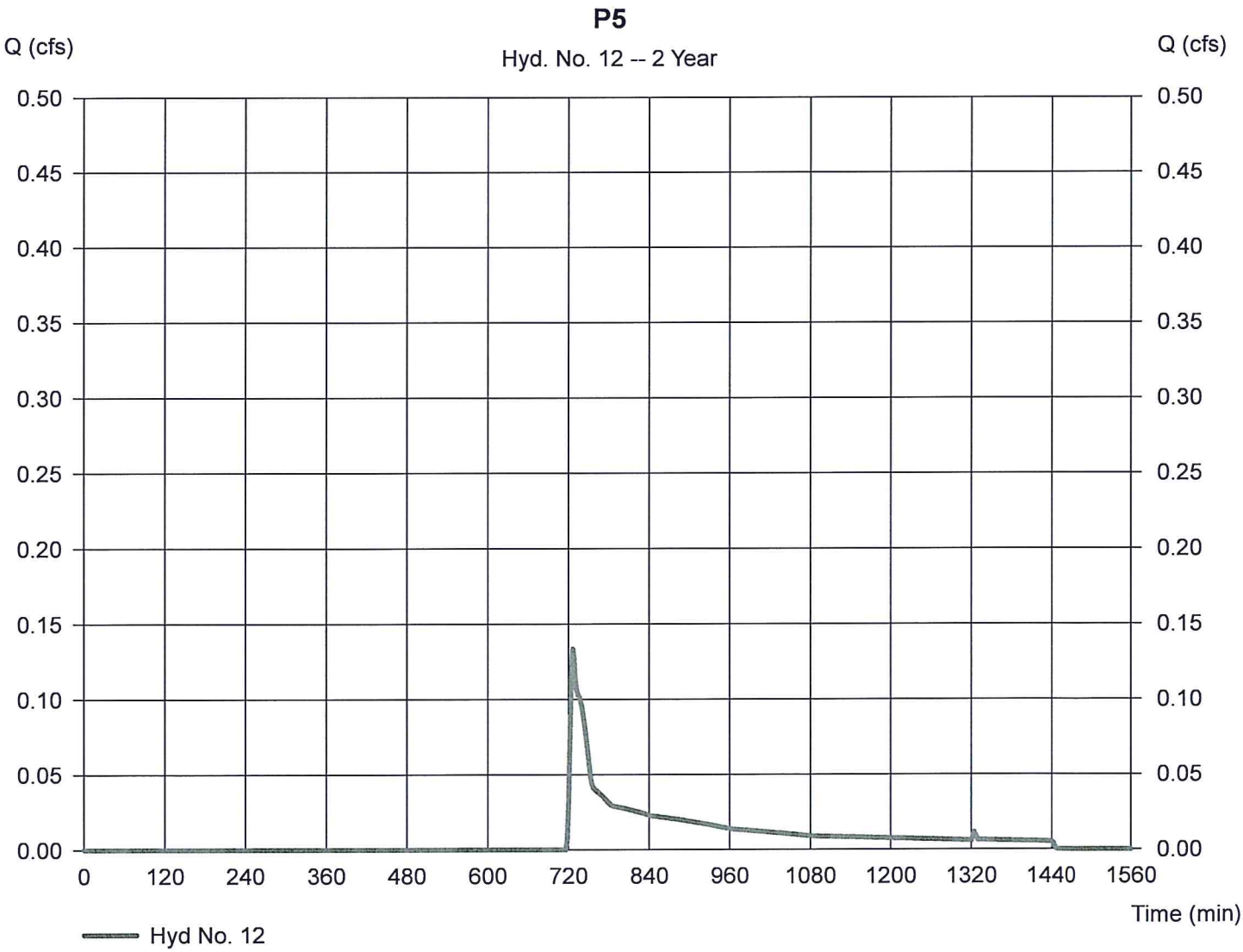
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 12

P5

Hydrograph type	= SCS Runoff	Peak discharge	= 0.133 cfs
Storm frequency	= 2 yrs	Time to peak	= 726 min
Time interval	= 2 min	Hyd. volume	= 711 cuft
Drainage area	= 0.550 ac	Curve number	= 60.3
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.10 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



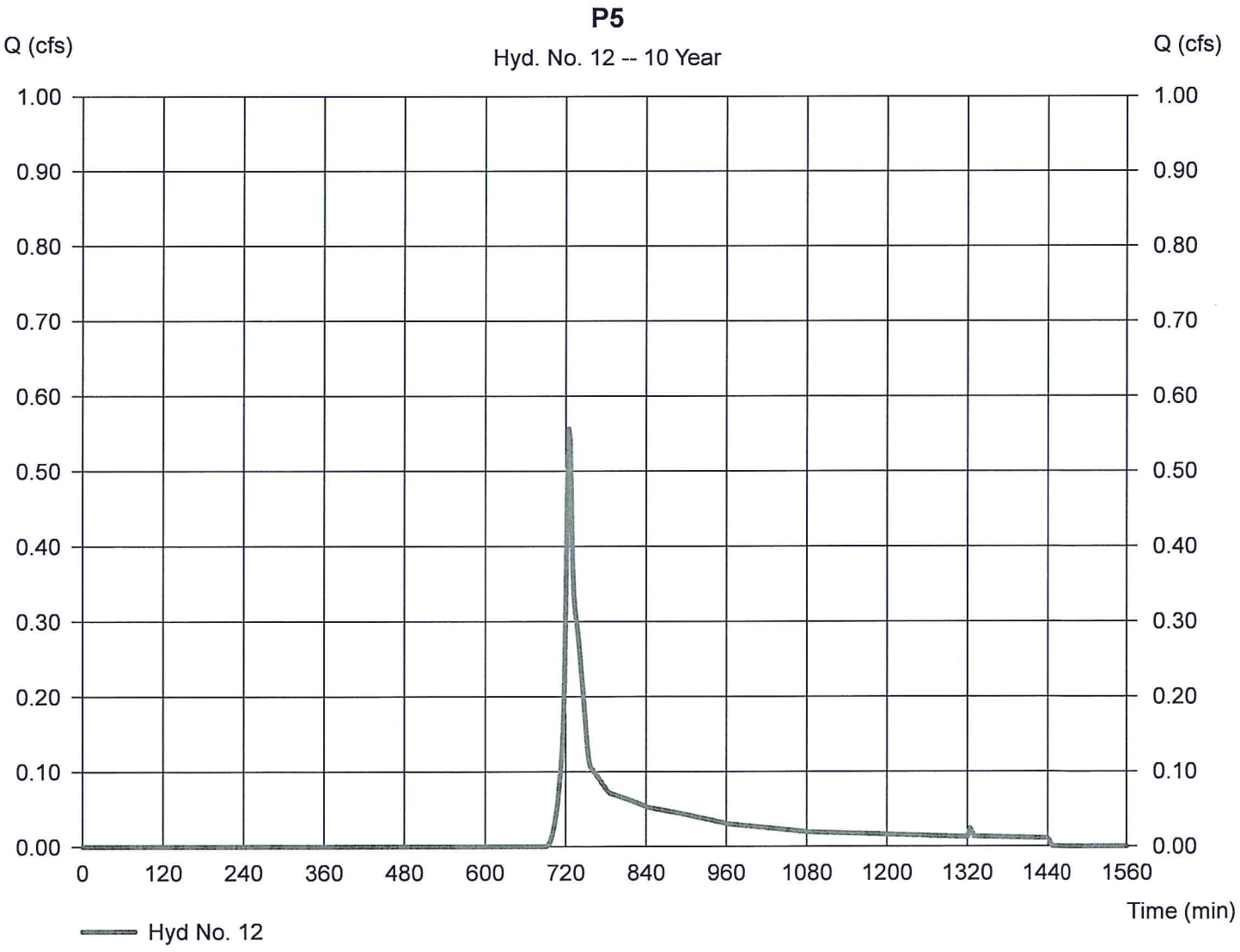
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 12

P5

Hydrograph type	= SCS Runoff	Peak discharge	= 0.556 cfs
Storm frequency	= 10 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 1,942 cuft
Drainage area	= 0.550 ac	Curve number	= 60.3
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 6.00 min
Total precip.	= 4.50 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



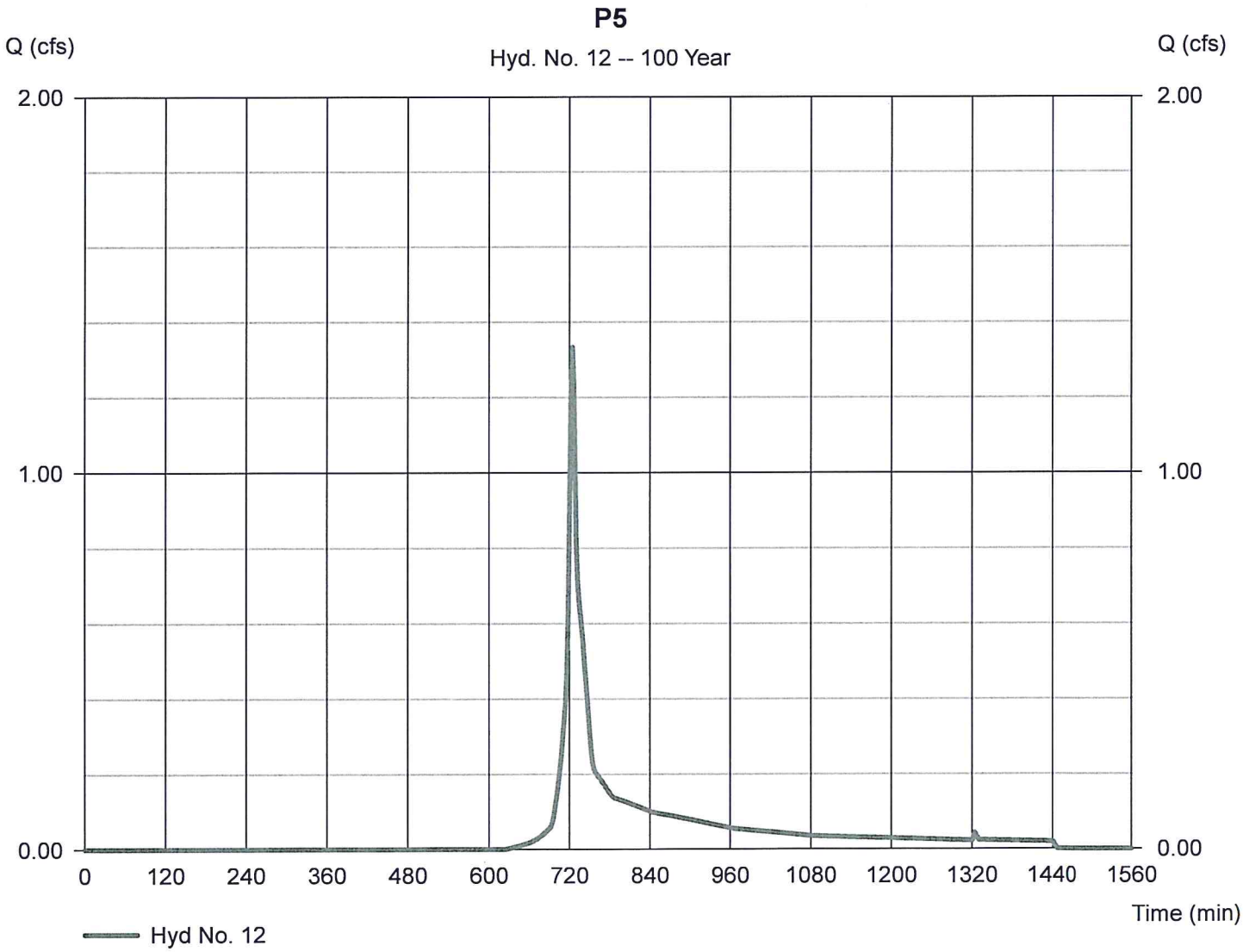
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 12

P5

Hydrograph type	= SCS Runoff	Peak discharge	= 1.333 cfs
Storm frequency	= 100 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 4,145 cuft
Drainage area	= 0.550 ac	Curve number	= 60.3
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 6.00 min
Total precip.	= 6.40 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

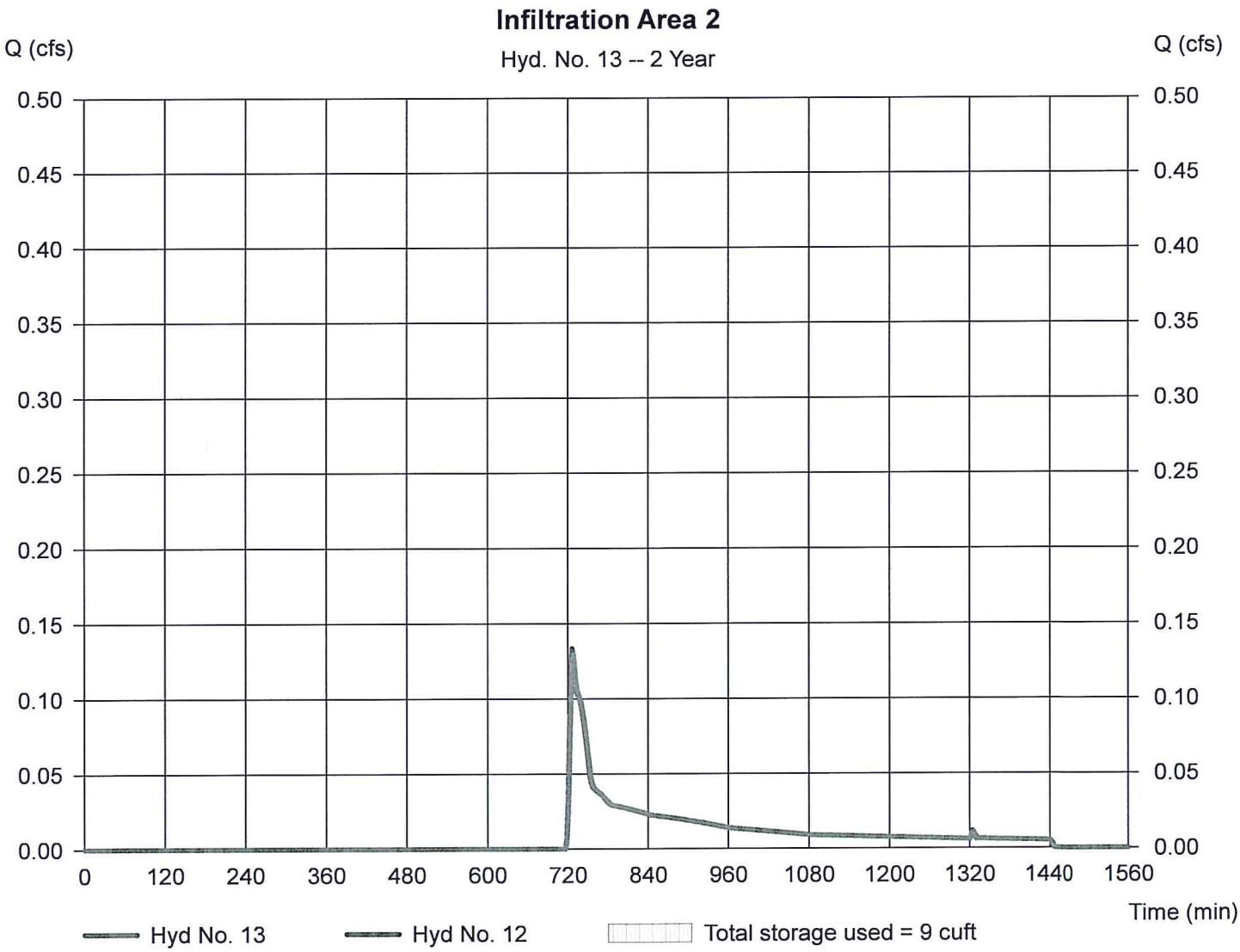
Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 13

Infiltration Area 2

Hydrograph type	= Reservoir	Peak discharge	= 0.130 cfs
Storm frequency	= 2 yrs	Time to peak	= 728 min
Time interval	= 2 min	Hyd. volume	= 711 cuft
Inflow hyd. No.	= 12 - P5	Max. Elevation	= 158.03 ft
Reservoir name	= Infiltration Area 2	Max. Storage	= 9 cuft

Storage Indication method used. Outflow includes exfiltration.



Hydrograph Report

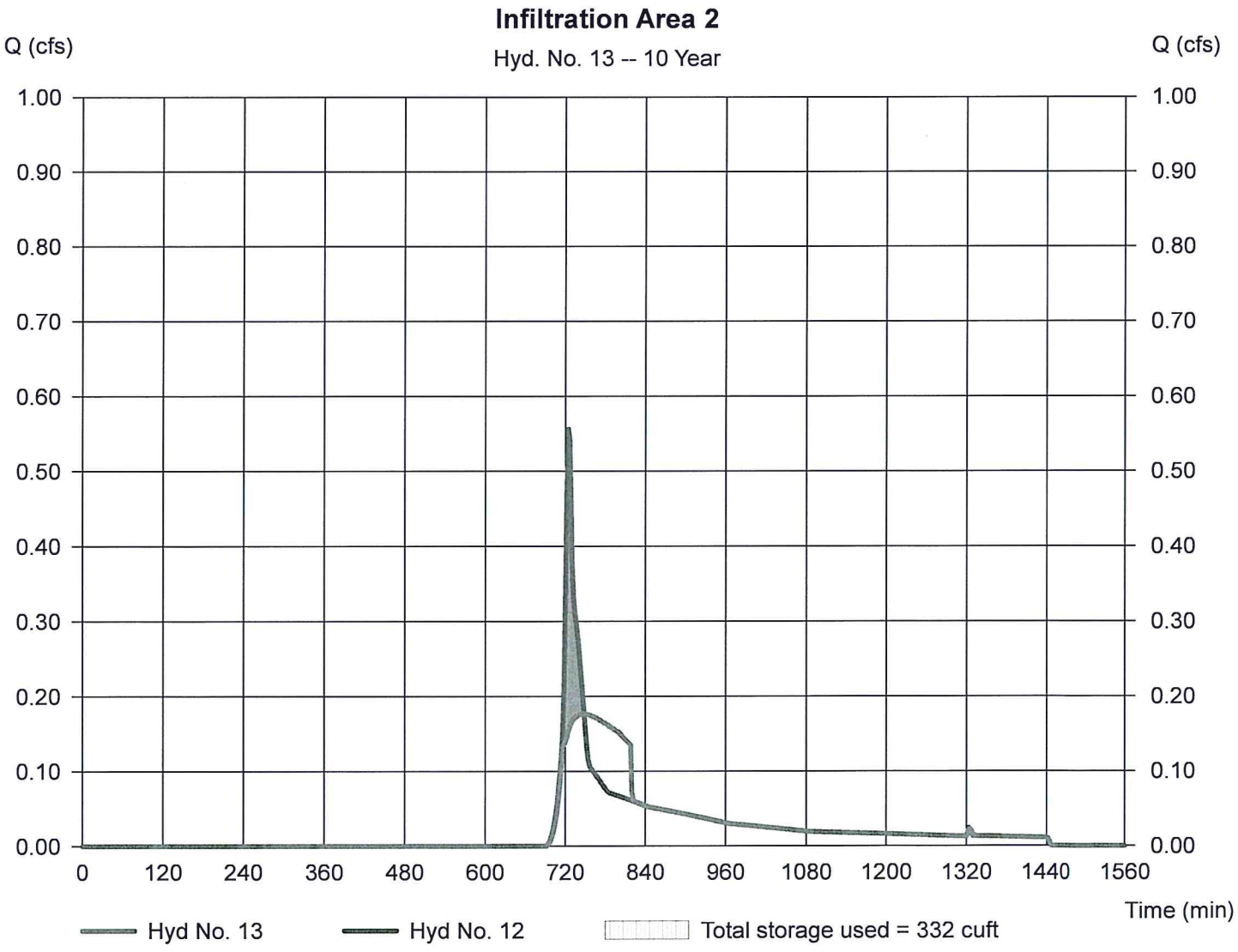
Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 13

Infiltration Area 2

Hydrograph type	= Reservoir	Peak discharge	= 0.177 cfs
Storm frequency	= 10 yrs	Time to peak	= 748 min
Time interval	= 2 min	Hyd. volume	= 1,942 cuft
Inflow hyd. No.	= 12 - P5	Max. Elevation	= 158.80 ft
Reservoir name	= Infiltration Area 2	Max. Storage	= 332 cuft

Storage Indication method used. Outflow includes exfiltration.



Hydrograph Report

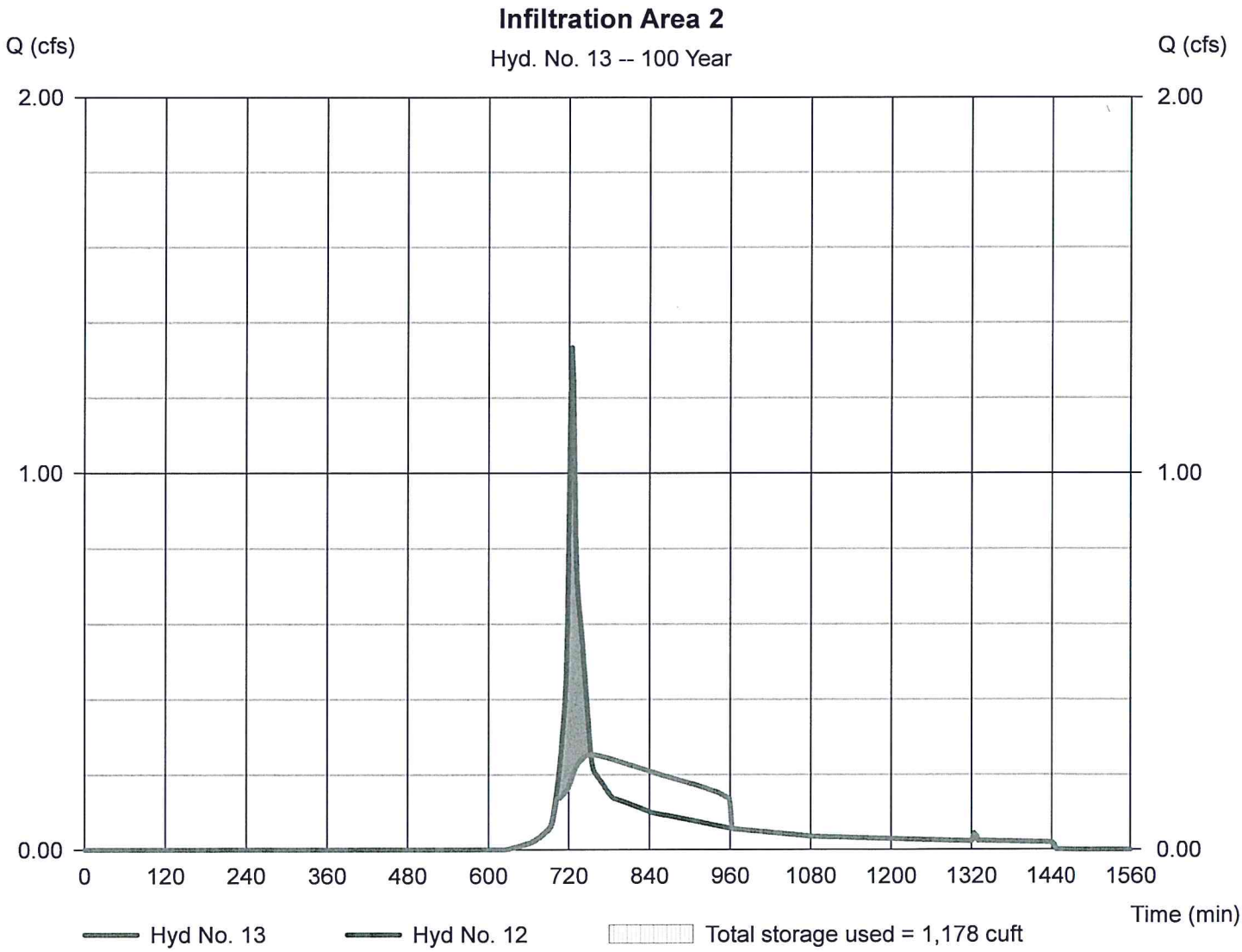
Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 13

Infiltration Area 2

Hydrograph type	= Reservoir	Peak discharge	= 0.253 cfs
Storm frequency	= 100 yrs	Time to peak	= 752 min
Time interval	= 2 min	Hyd. volume	= 4,145 cuft
Inflow hyd. No.	= 12 - P5	Max. Elevation	= 160.21 ft
Reservoir name	= Infiltration Area 2	Max. Storage	= 1,178 cuft

Storage Indication method used. Outflow includes exfiltration.



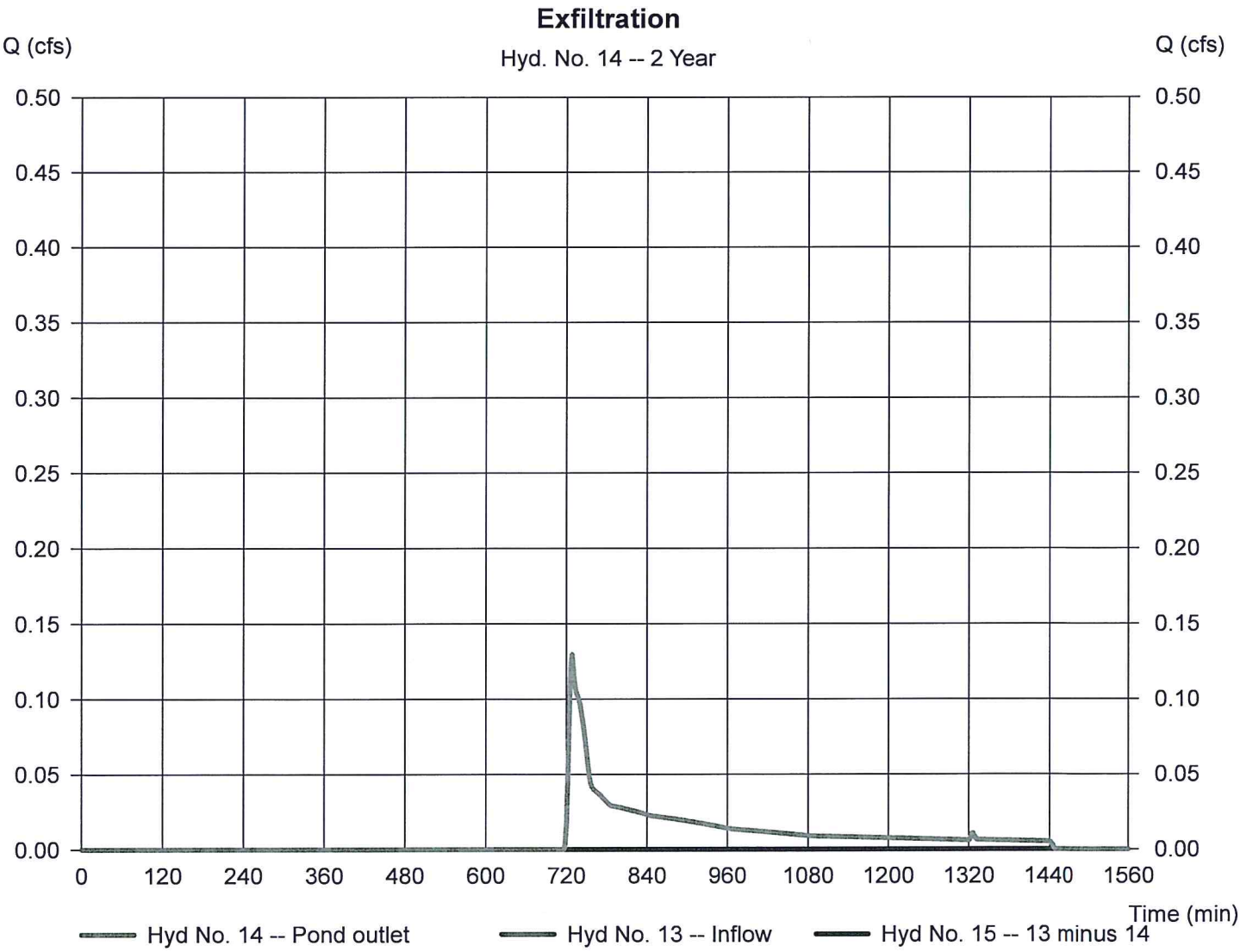
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 14

Exfiltration

Hydrograph type	= Diversion1	Peak discharge	= 0.130 cfs
Storm frequency	= 2 yrs	Time to peak	= 728 min
Time interval	= 2 min	Hyd. volume	= 711 cuft
Inflow hydrograph	= 13 - Infiltration Area 2	2nd diverted hyd.	= 15
Diversion method	= Pond - Infiltration Area 2	Pond structure	= Exfiltration



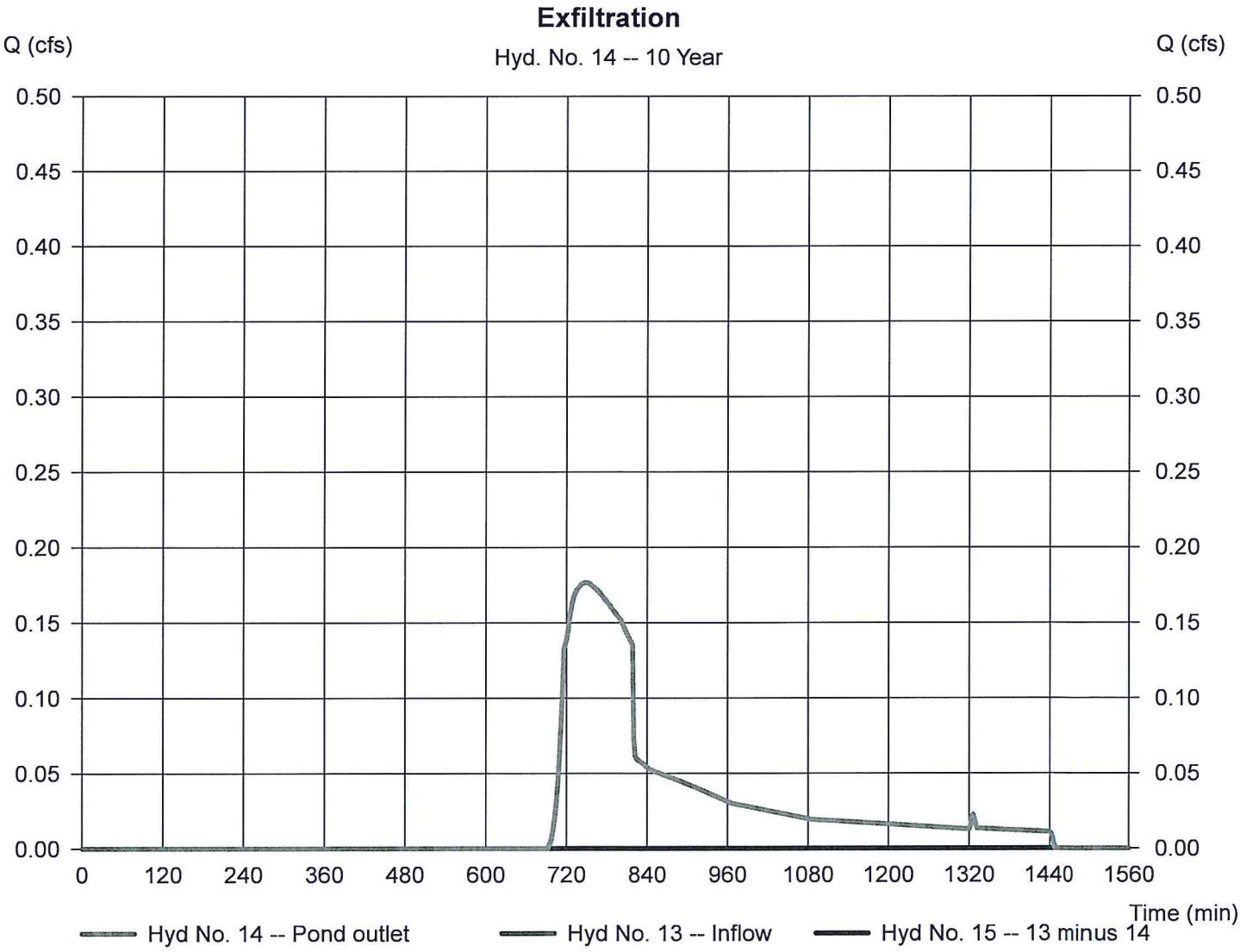
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 14

Exfiltration

Hydrograph type	= Diversion1	Peak discharge	= 0.177 cfs
Storm frequency	= 10 yrs	Time to peak	= 748 min
Time interval	= 2 min	Hyd. volume	= 1,942 cuft
Inflow hydrograph	= 13 - Infiltration Area 2	2nd diverted hyd.	= 15
Diversion method	= Pond - Infiltration Area 2	Pond structure	= Exfiltration



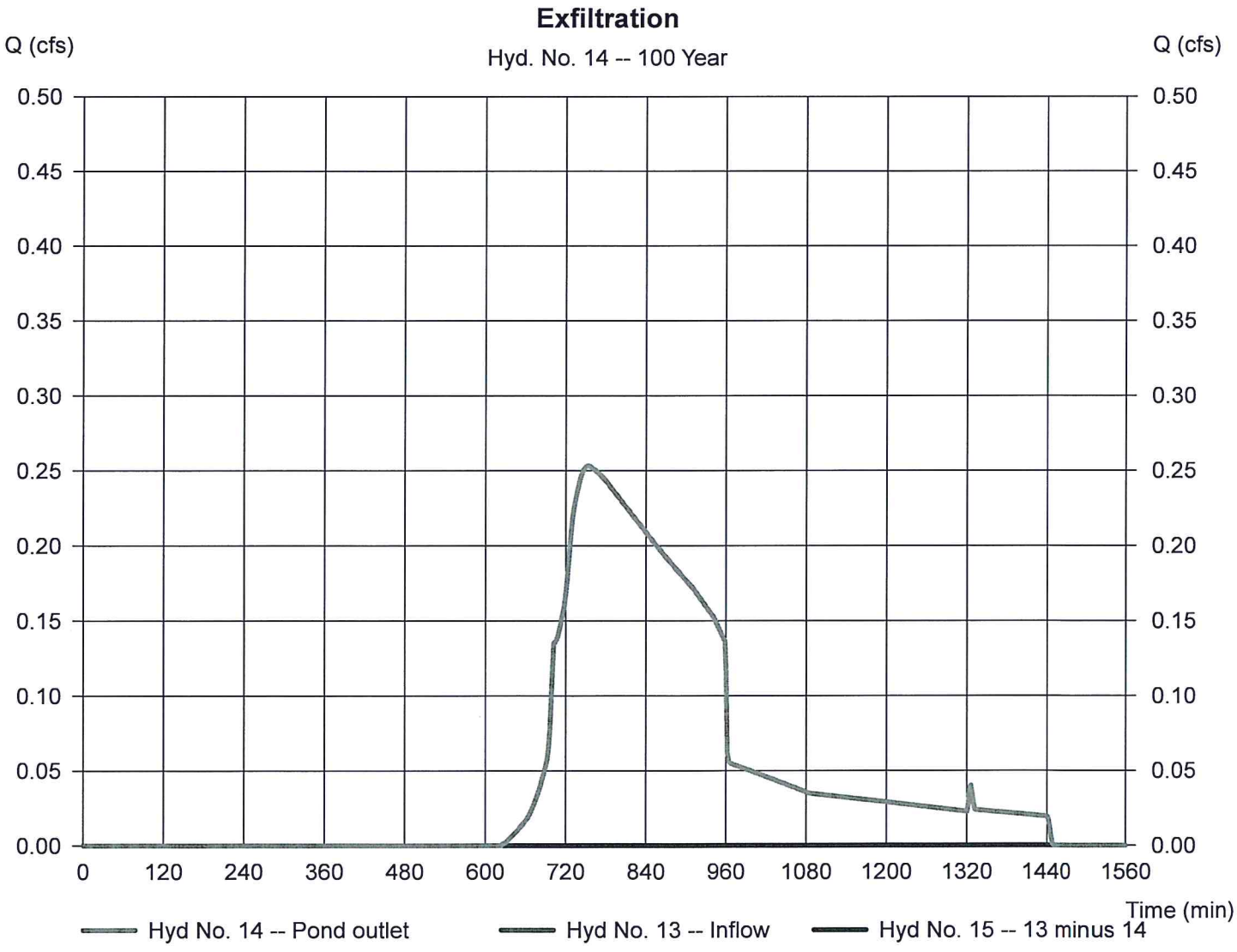
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 14

Exfiltration

Hydrograph type	= Diversion1	Peak discharge	= 0.253 cfs
Storm frequency	= 100 yrs	Time to peak	= 752 min
Time interval	= 2 min	Hyd. volume	= 4,145 cuft
Inflow hydrograph	= 13 - Infiltration Area 2	2nd diverted hyd.	= 15
Diversion method	= Pond - Infiltration Area 2	Pond structure	= Exfiltration



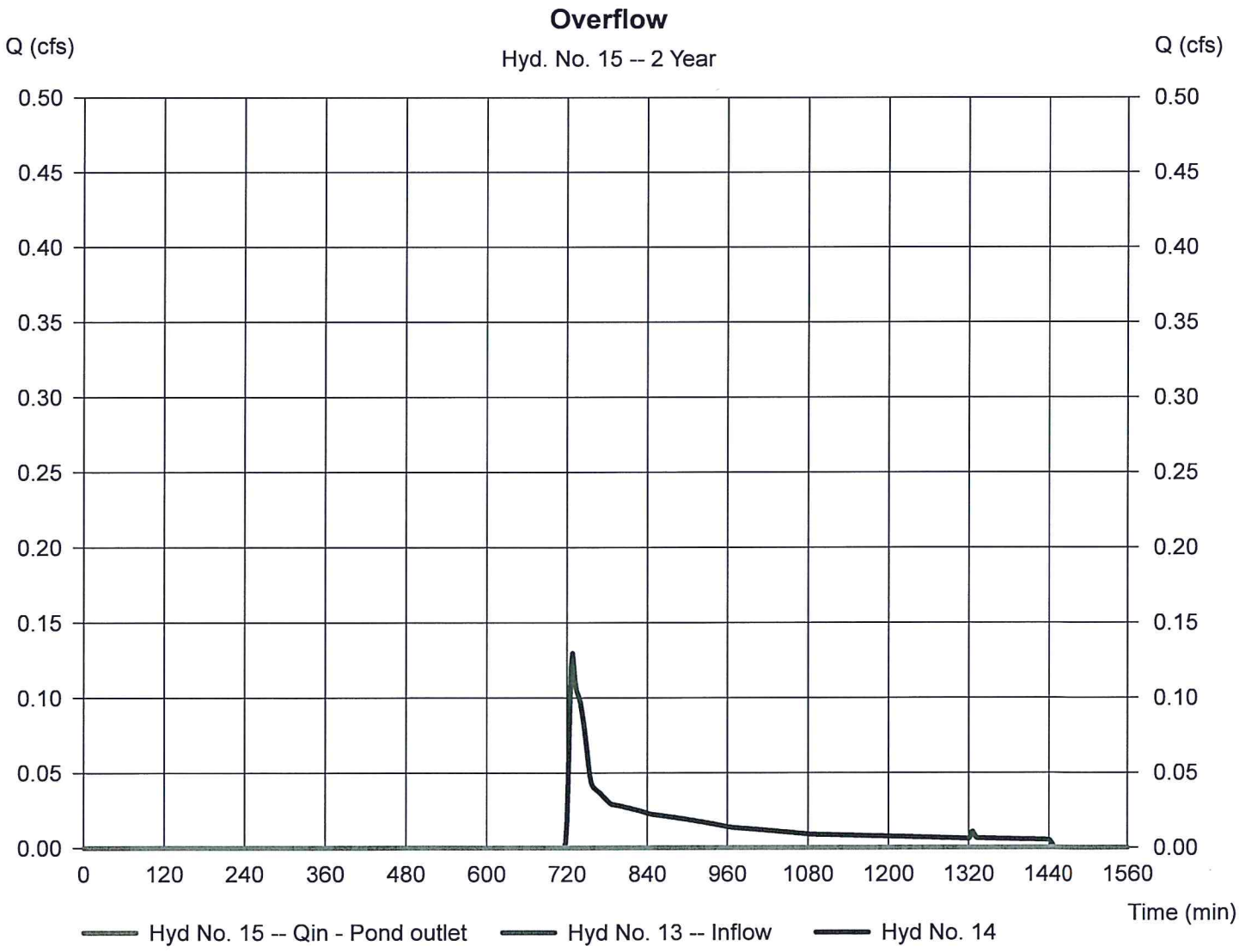
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 15

Overflow

Hydrograph type	= Diversion2	Peak discharge	= 0.000 cfs
Storm frequency	= 2 yrs	Time to peak	= 730 min
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hydrograph	= 13 - Infiltration Area 2	2nd diverted hyd.	= 14
Diversion method	= Pond - Infiltration Area 2	Pond structure	= Exfiltration



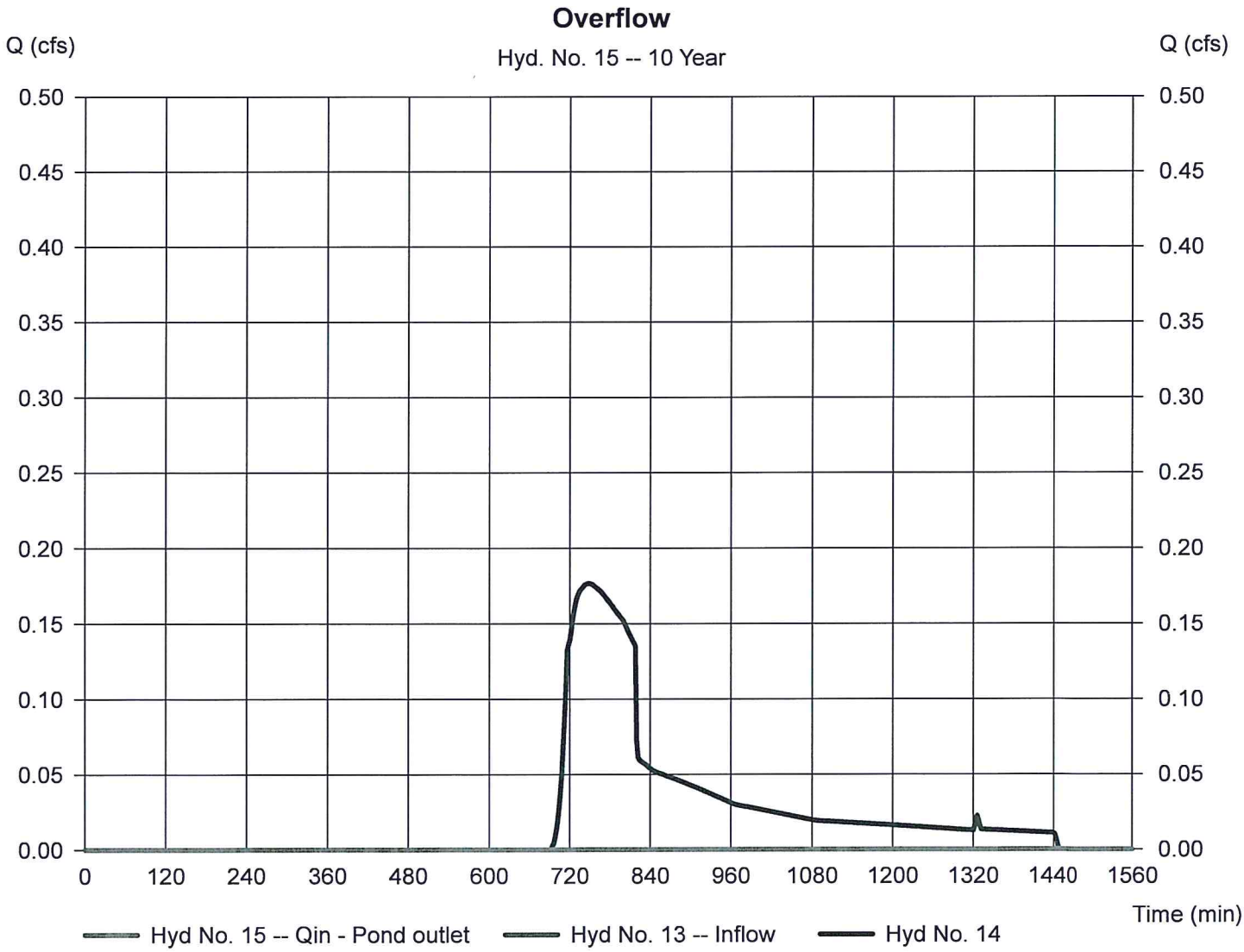
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 15

Overflow

Hydrograph type	= Diversion2	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= 822 min
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hydrograph	= 13 - Infiltration Area 2	2nd diverted hyd.	= 14
Diversion method	= Pond - Infiltration Area 2	Pond structure	= Exfiltration



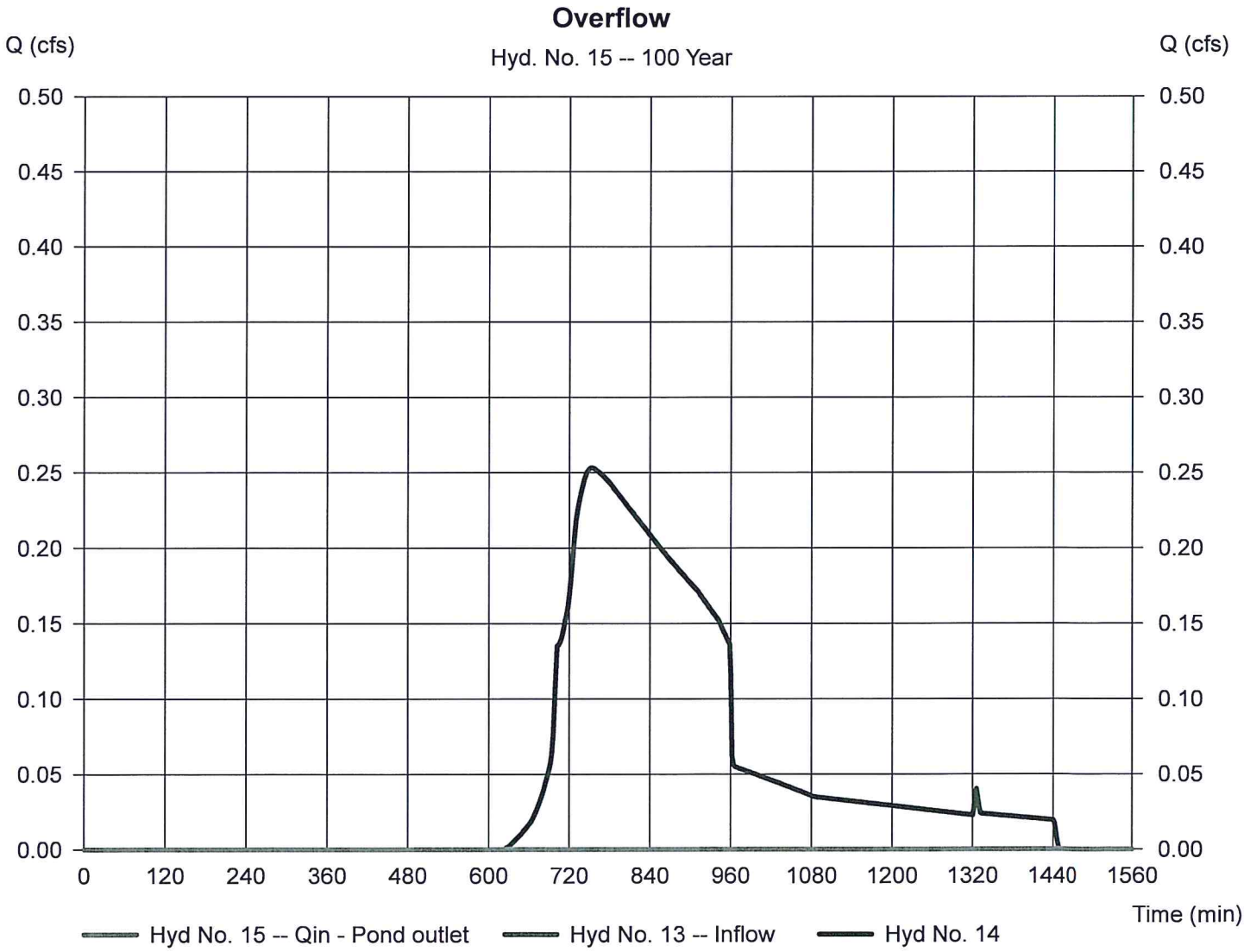
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 15

Overflow

Hydrograph type	= Diversion2	Peak discharge	= 0.000 cfs
Storm frequency	= 100 yrs	Time to peak	= 1158 min
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hydrograph	= 13 - Infiltration Area 2	2nd diverted hyd.	= 14
Diversion method	= Pond - Infiltration Area 2	Pond structure	= Exfiltration



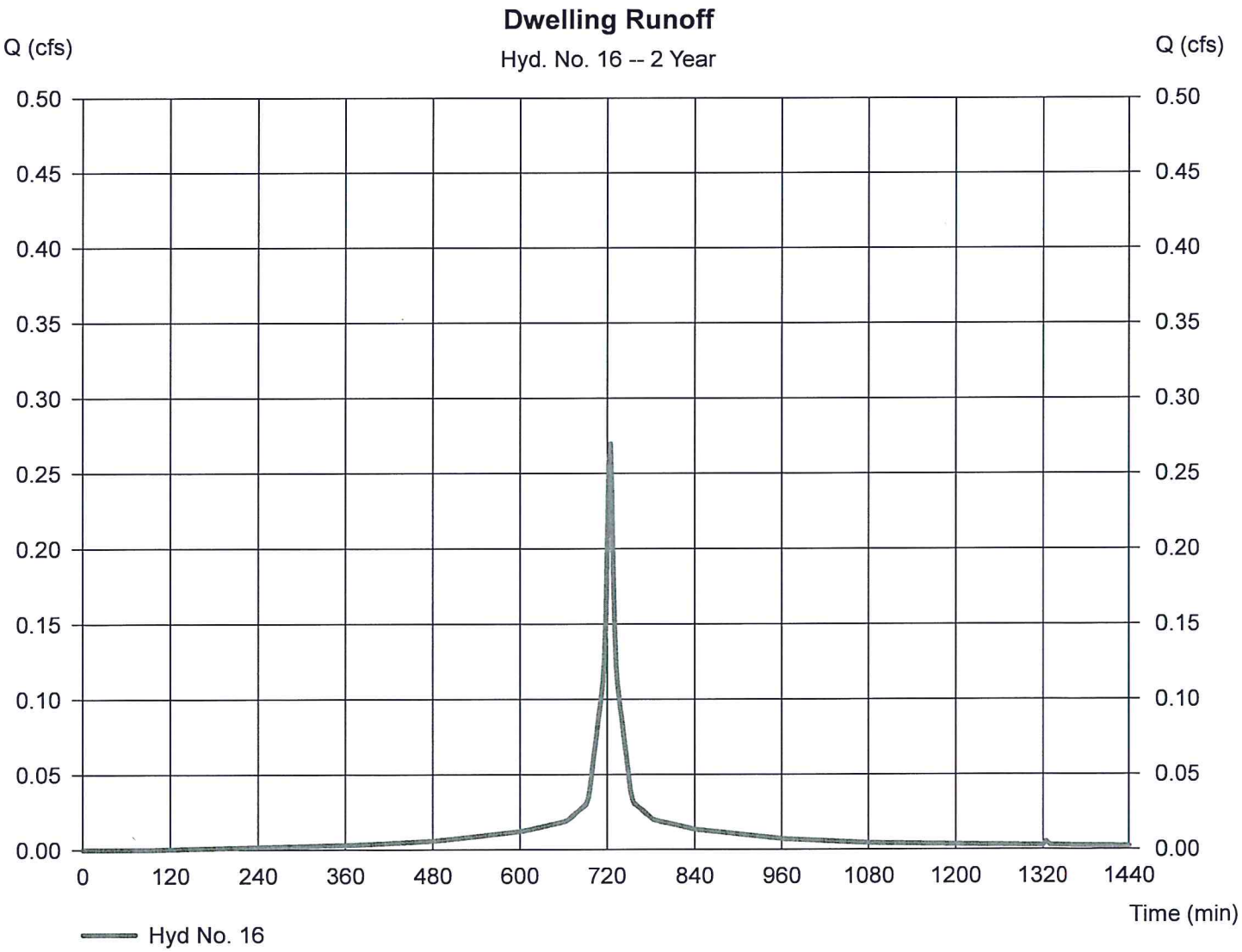
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 16

Dwelling Runoff

Hydrograph type	= SCS Runoff	Peak discharge	= 0.270 cfs
Storm frequency	= 2 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 908 cuft
Drainage area	= 0.093 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.10 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



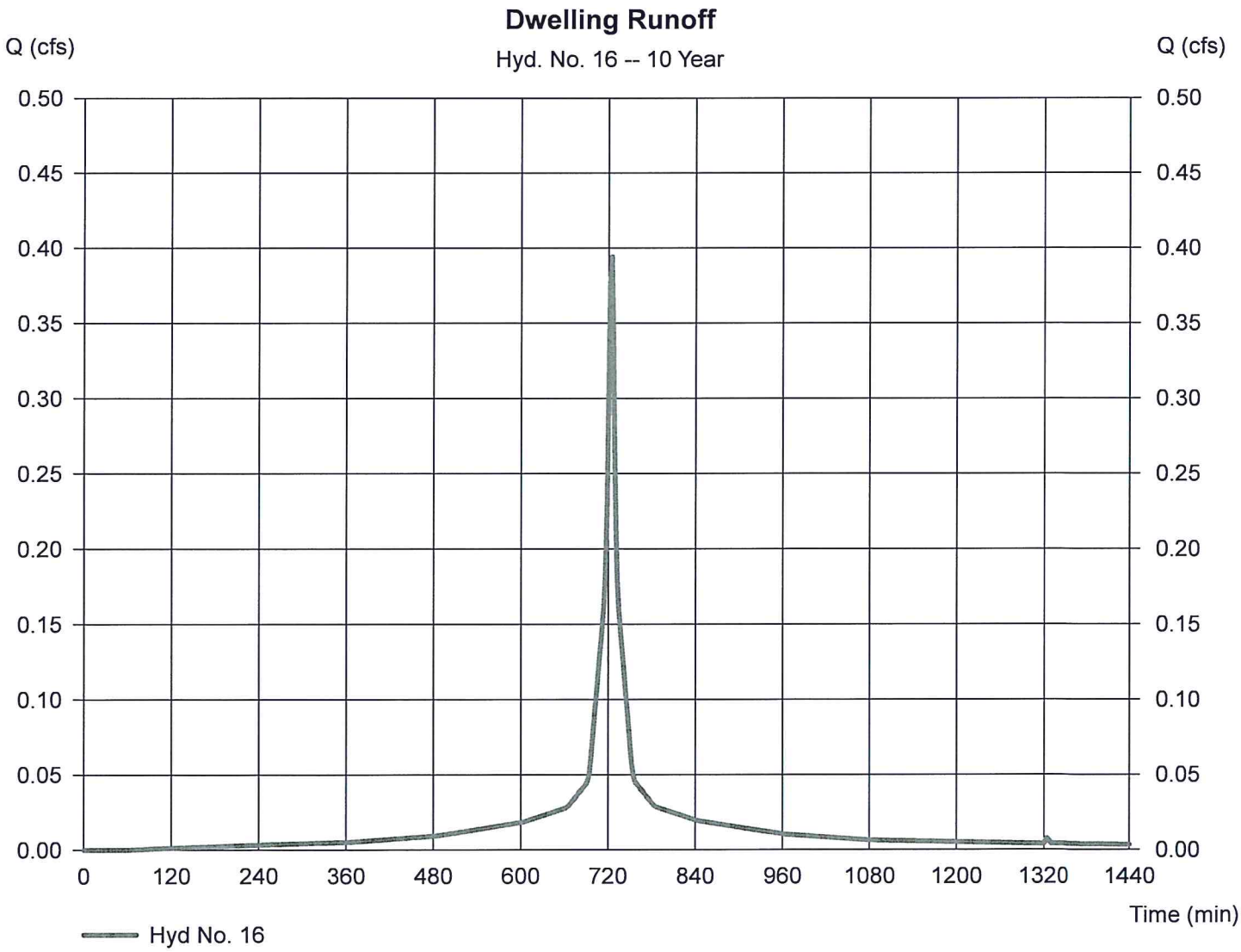
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 16

Dwelling Runoff

Hydrograph type	= SCS Runoff	Peak discharge	= 0.394 cfs
Storm frequency	= 10 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 1,350 cuft
Drainage area	= 0.093 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 6.00 min
Total precip.	= 4.50 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



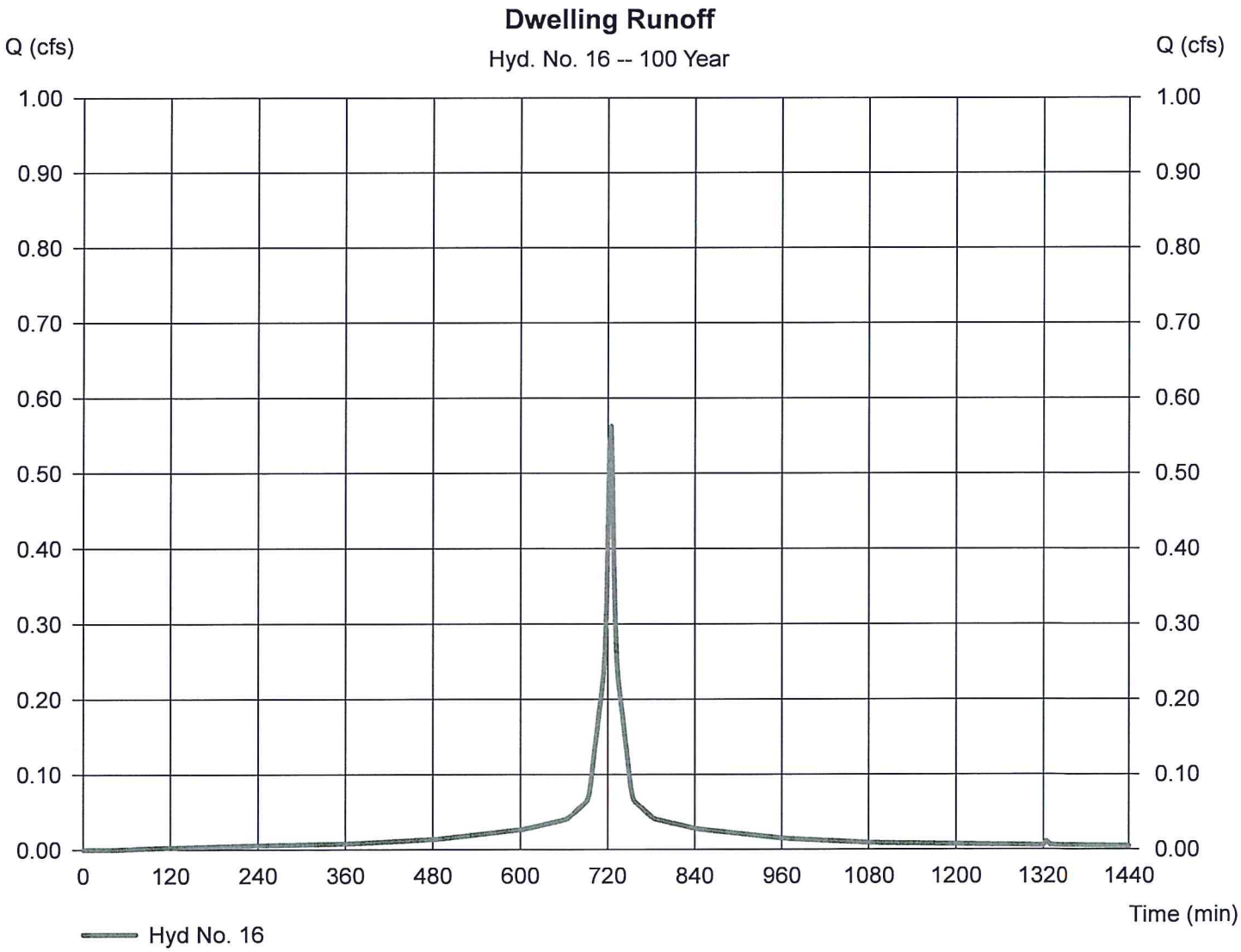
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 16

Dwelling Runoff

Hydrograph type	= SCS Runoff	Peak discharge	= 0.563 cfs
Storm frequency	= 100 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 1,950 cuft
Drainage area	= 0.093 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 6.00 min
Total precip.	= 6.40 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

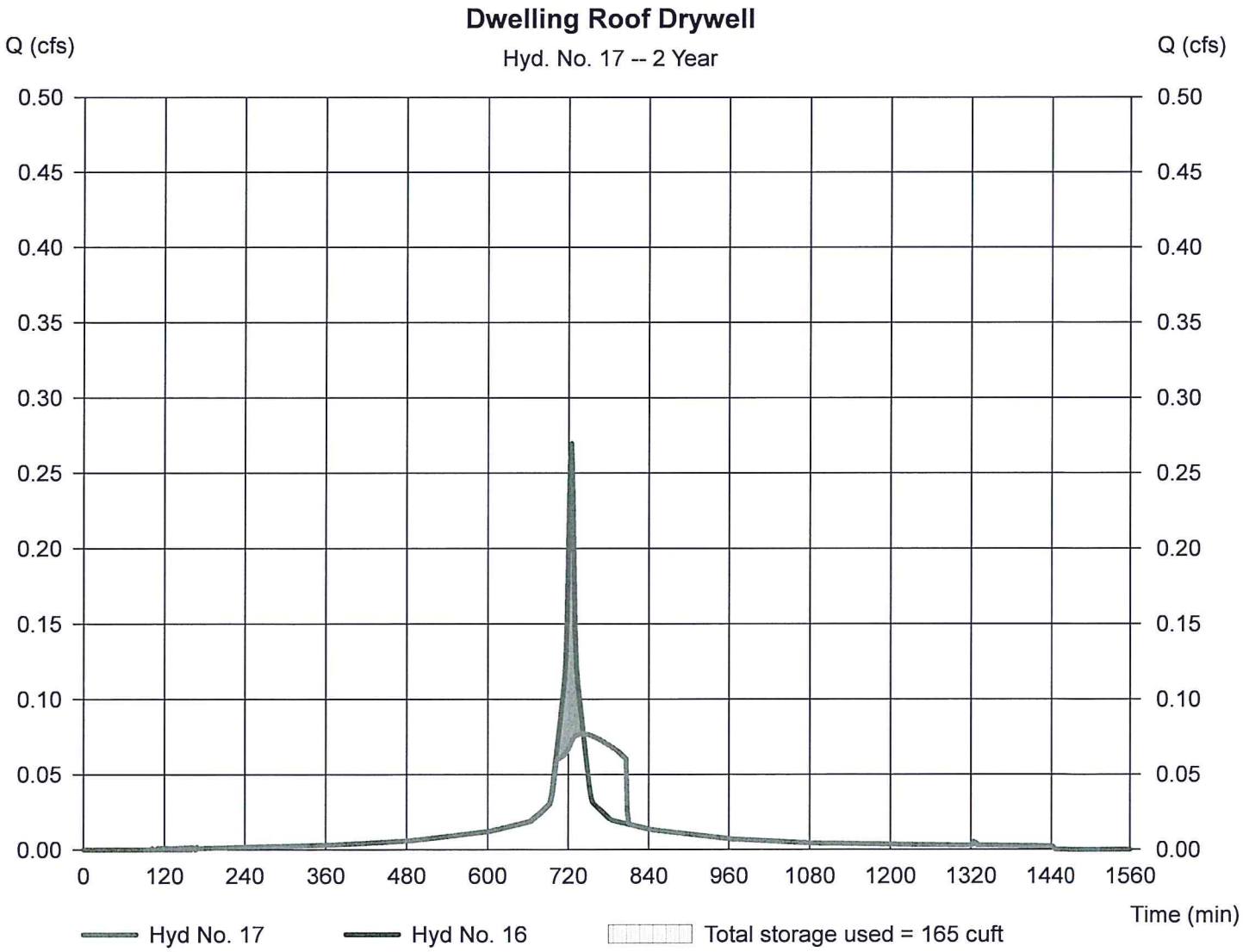
Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 17

Dwelling Roof Drywell

Hydrograph type	= Reservoir	Peak discharge	= 0.077 cfs
Storm frequency	= 2 yrs	Time to peak	= 742 min
Time interval	= 2 min	Hyd. volume	= 908 cuft
Inflow hyd. No.	= 16 - Dwelling Runoff	Max. Elevation	= 161.91 ft
Reservoir name	= Dwelling Roof Drywell	Max. Storage	= 165 cuft

Storage Indication method used. Outflow includes exfiltration.



Hydrograph Report

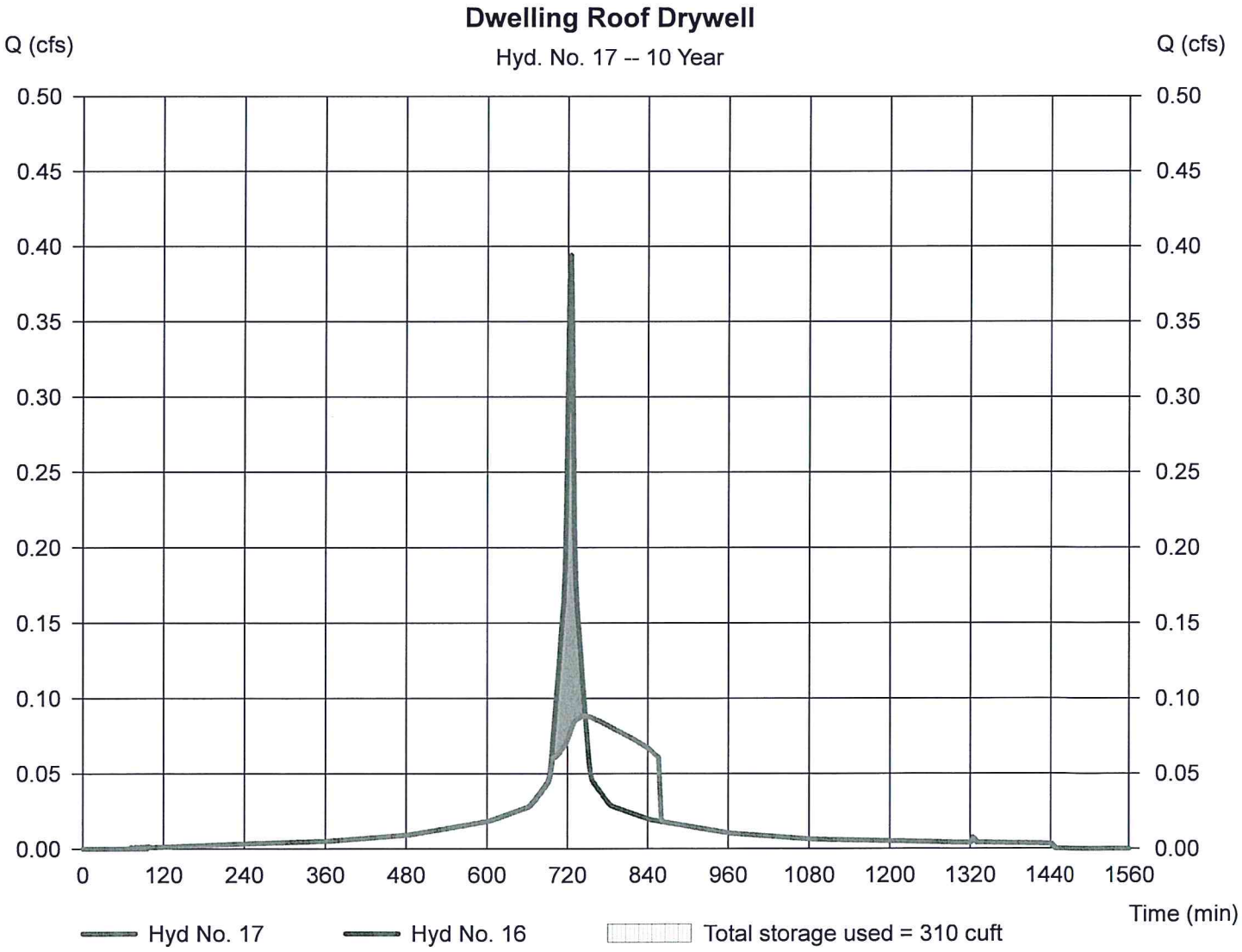
Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 17

Dwelling Roof Drywell

Hydrograph type	= Reservoir	Peak discharge	= 0.088 cfs
Storm frequency	= 10 yrs	Time to peak	= 746 min
Time interval	= 2 min	Hyd. volume	= 1,349 cuft
Inflow hyd. No.	= 16 - Dwelling Runoff	Max. Elevation	= 162.50 ft
Reservoir name	= Dwelling Roof Drywell	Max. Storage	= 310 cuft

Storage Indication method used. Outflow includes exfiltration.



Hydrograph Report

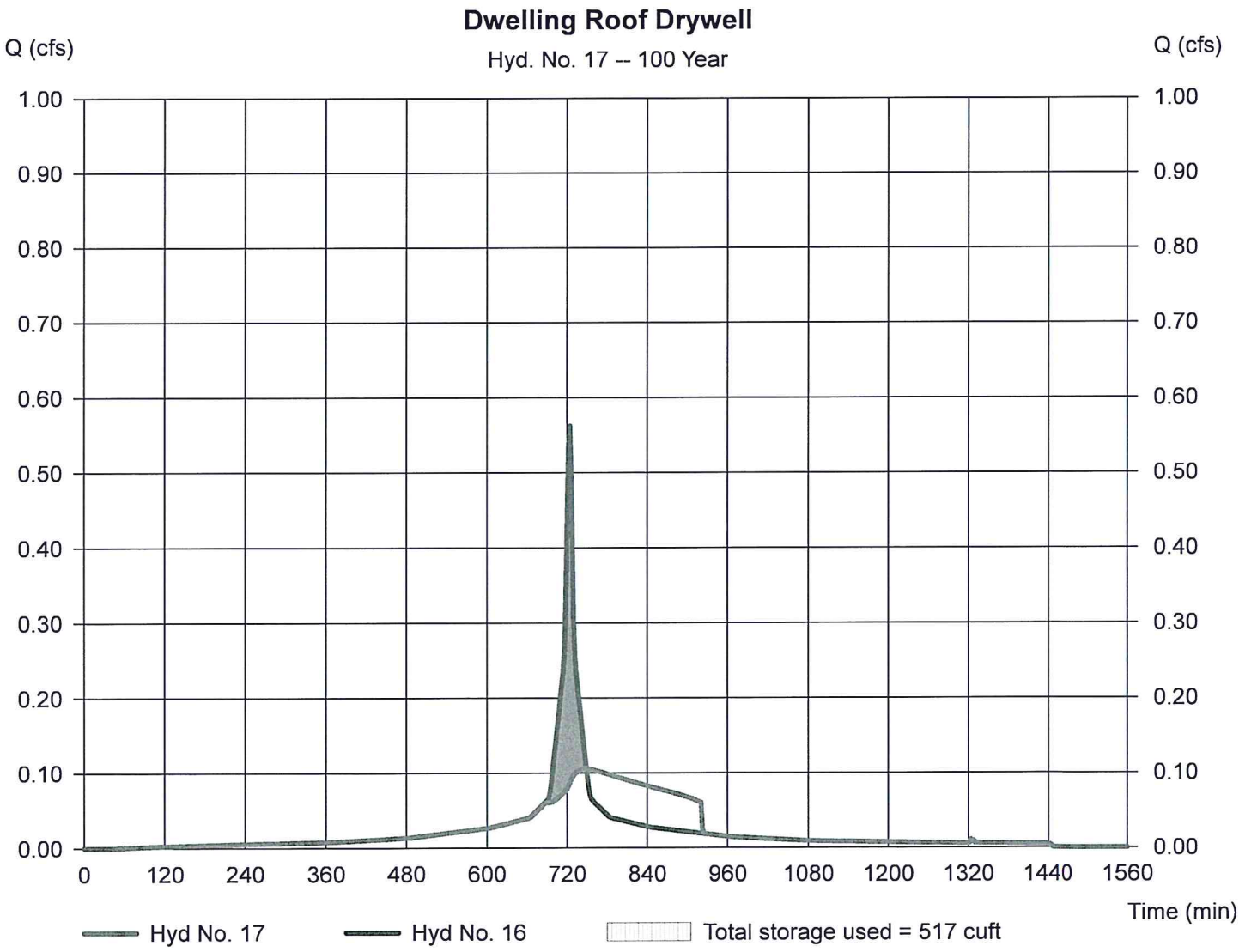
Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 17

Dwelling Roof Drywell

Hydrograph type	= Reservoir	Peak discharge	= 0.106 cfs
Storm frequency	= 100 yrs	Time to peak	= 748 min
Time interval	= 2 min	Hyd. volume	= 1,950 cuft
Inflow hyd. No.	= 16 - Dwelling Runoff	Max. Elevation	= 163.41 ft
Reservoir name	= Dwelling Roof Drywell	Max. Storage	= 517 cuft

Storage Indication method used. Outflow includes exfiltration.



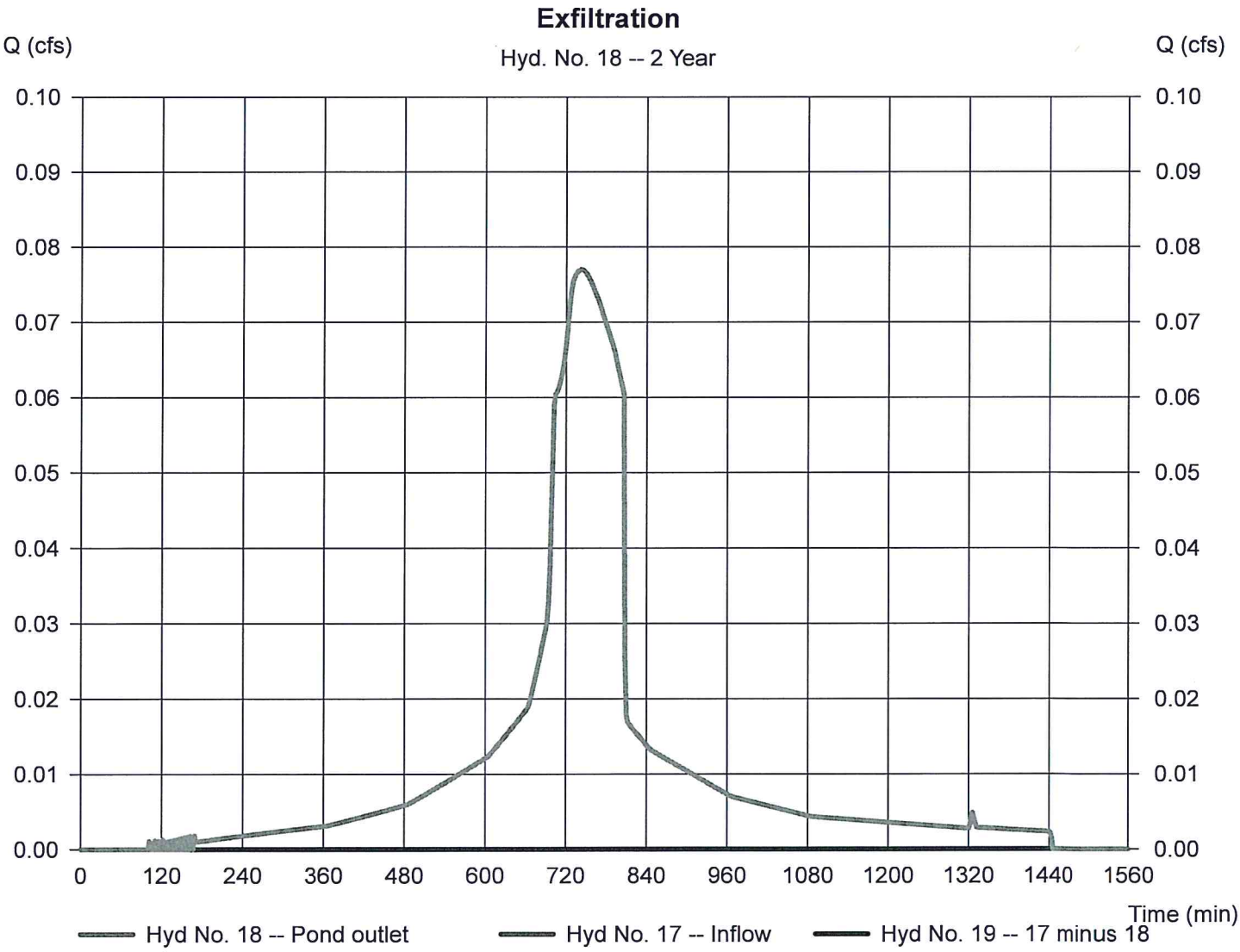
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 18

Exfiltration

Hydrograph type	= Diversion1	Peak discharge	= 0.077 cfs
Storm frequency	= 2 yrs	Time to peak	= 742 min
Time interval	= 2 min	Hyd. volume	= 908 cuft
Inflow hydrograph	= 17 - Dwelling Roof Drywell	2nd diverted hyd.	= 19
Diversion method	= Pond - Dwelling Roof Drywell	Pond structure	= Exfiltration



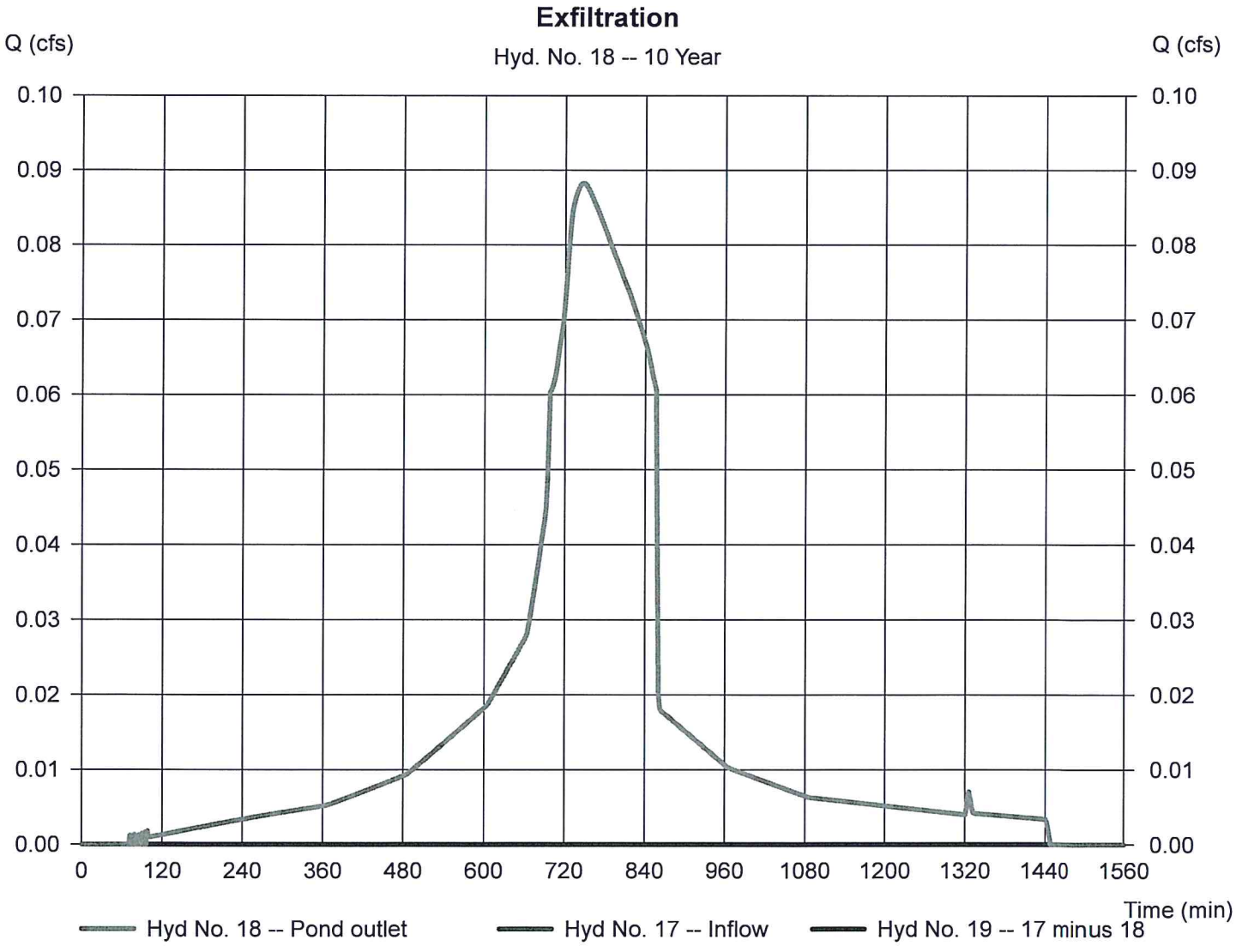
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 18

Exfiltration

Hydrograph type	= Diversion1	Peak discharge	= 0.088 cfs
Storm frequency	= 10 yrs	Time to peak	= 746 min
Time interval	= 2 min	Hyd. volume	= 1,349 cuft
Inflow hydrograph	= 17 - Dwelling Roof Drywell	2nd diverted hyd.	= 19
Diversion method	= Pond - Dwelling Roof Drywell	Pond structure	= Exfiltration



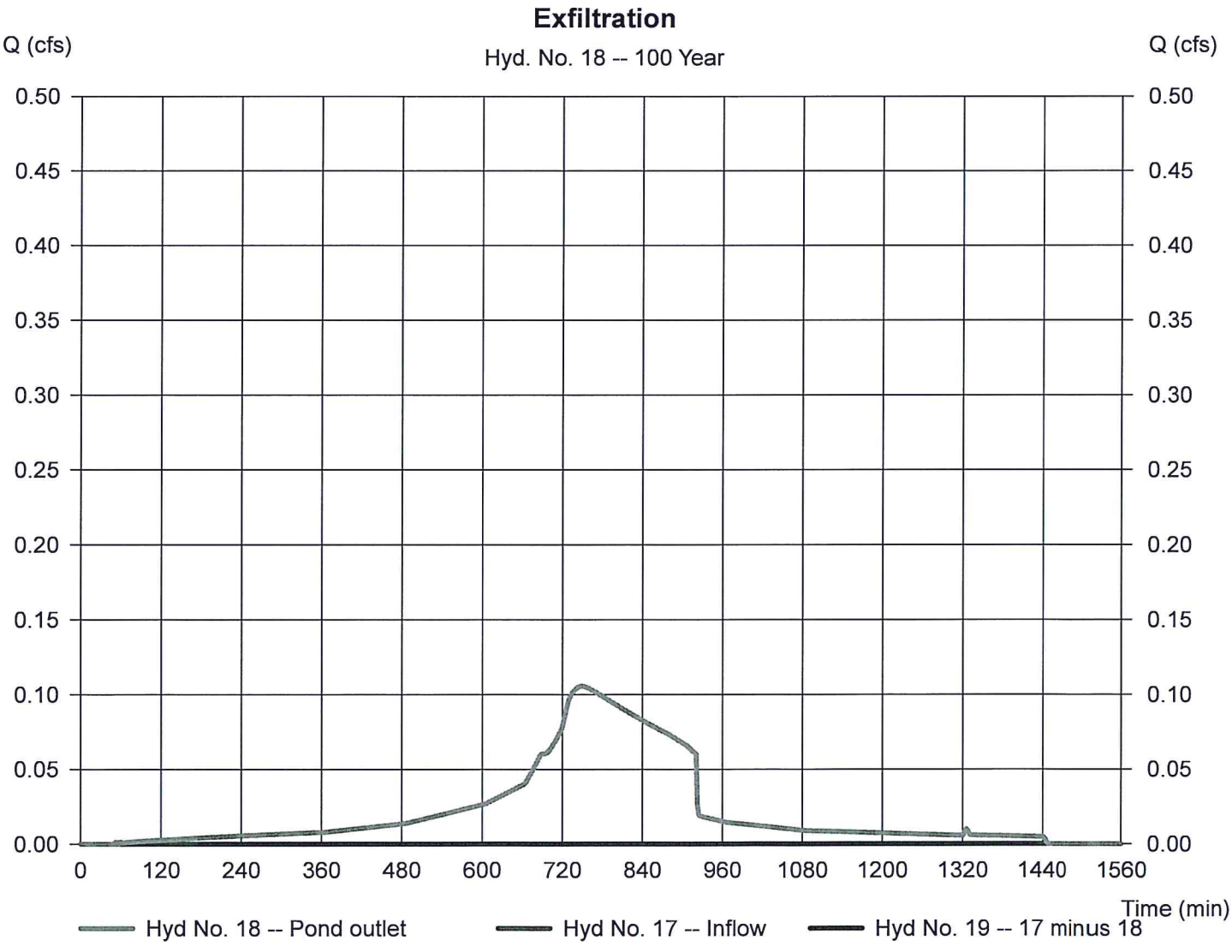
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 18

Exfiltration

Hydrograph type	= Diversion1	Peak discharge	= 0.106 cfs
Storm frequency	= 100 yrs	Time to peak	= 748 min
Time interval	= 2 min	Hyd. volume	= 1,950 cuft
Inflow hydrograph	= 17 - Dwelling Roof Drywell	2nd diverted hyd.	= 19
Diversion method	= Pond - Dwelling Roof Drywell	Pond structure	= Exfiltration



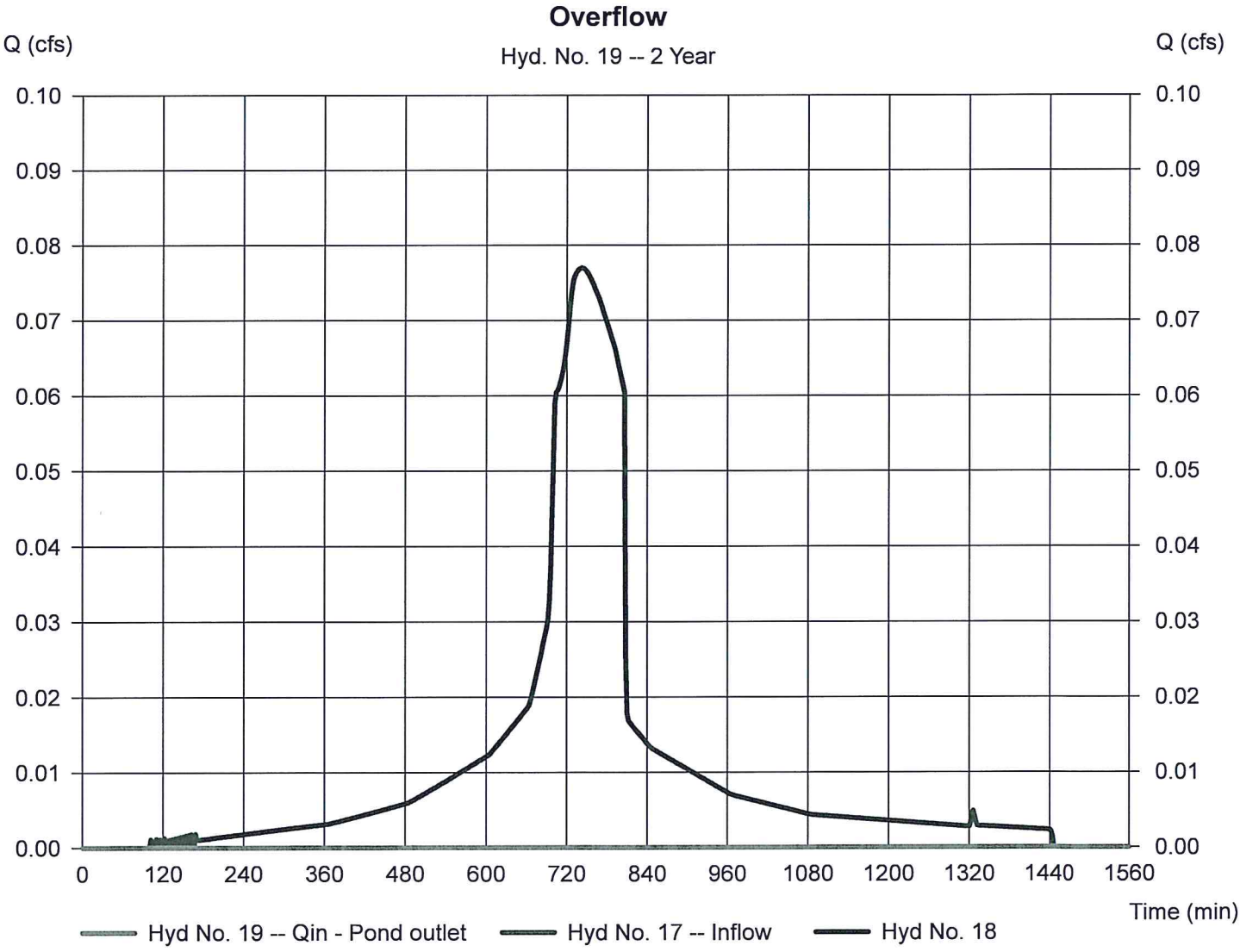
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 19

Overflow

Hydrograph type	= Diversion2	Peak discharge	= 0.000 cfs
Storm frequency	= 2 yrs	Time to peak	= 702 min
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hydrograph	= 17 - Dwelling Roof Drywell	2nd diverted hyd.	= 18
Diversion method	= Pond - Dwelling Roof Drywell	Pond structure	= Exfiltration



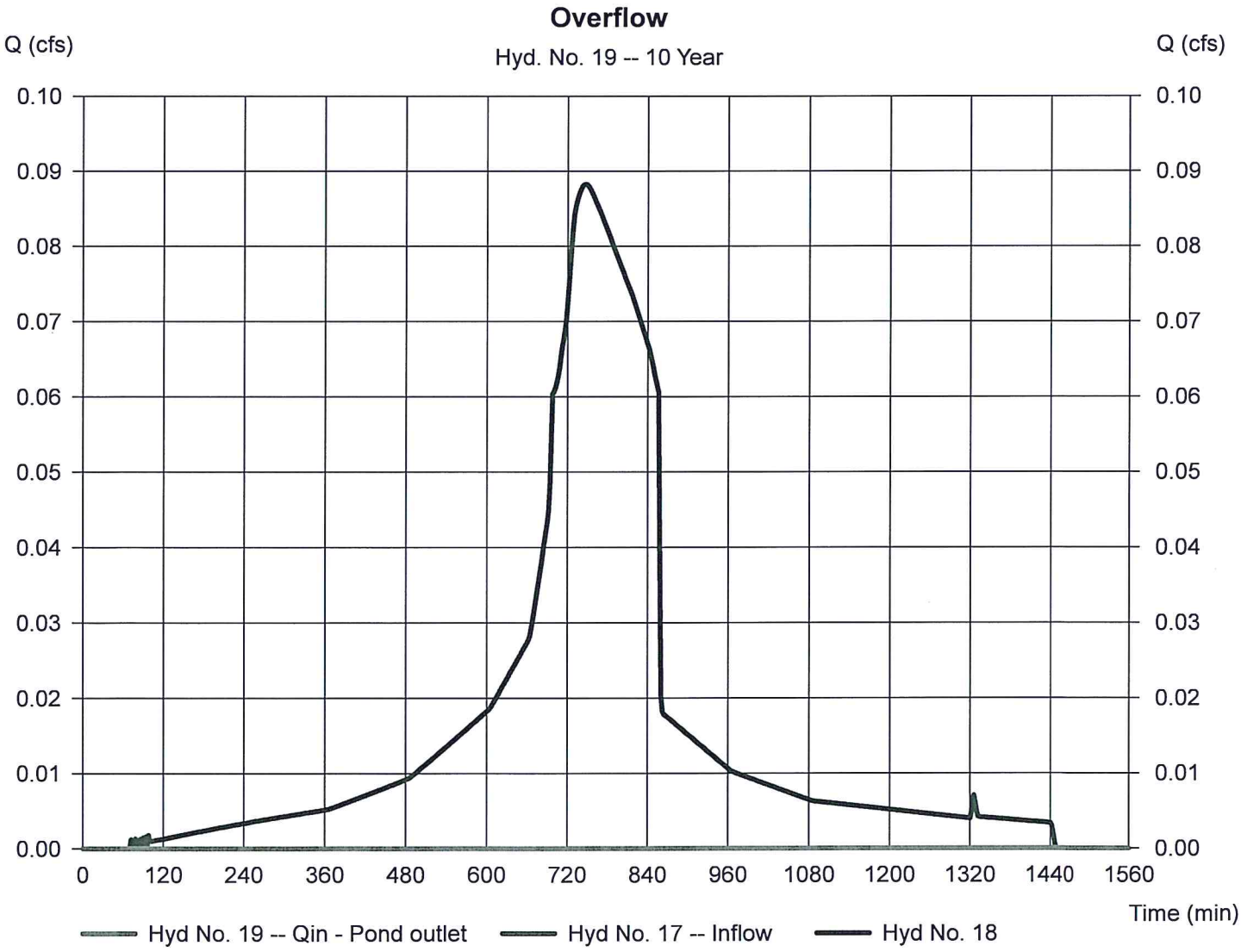
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 19

Overflow

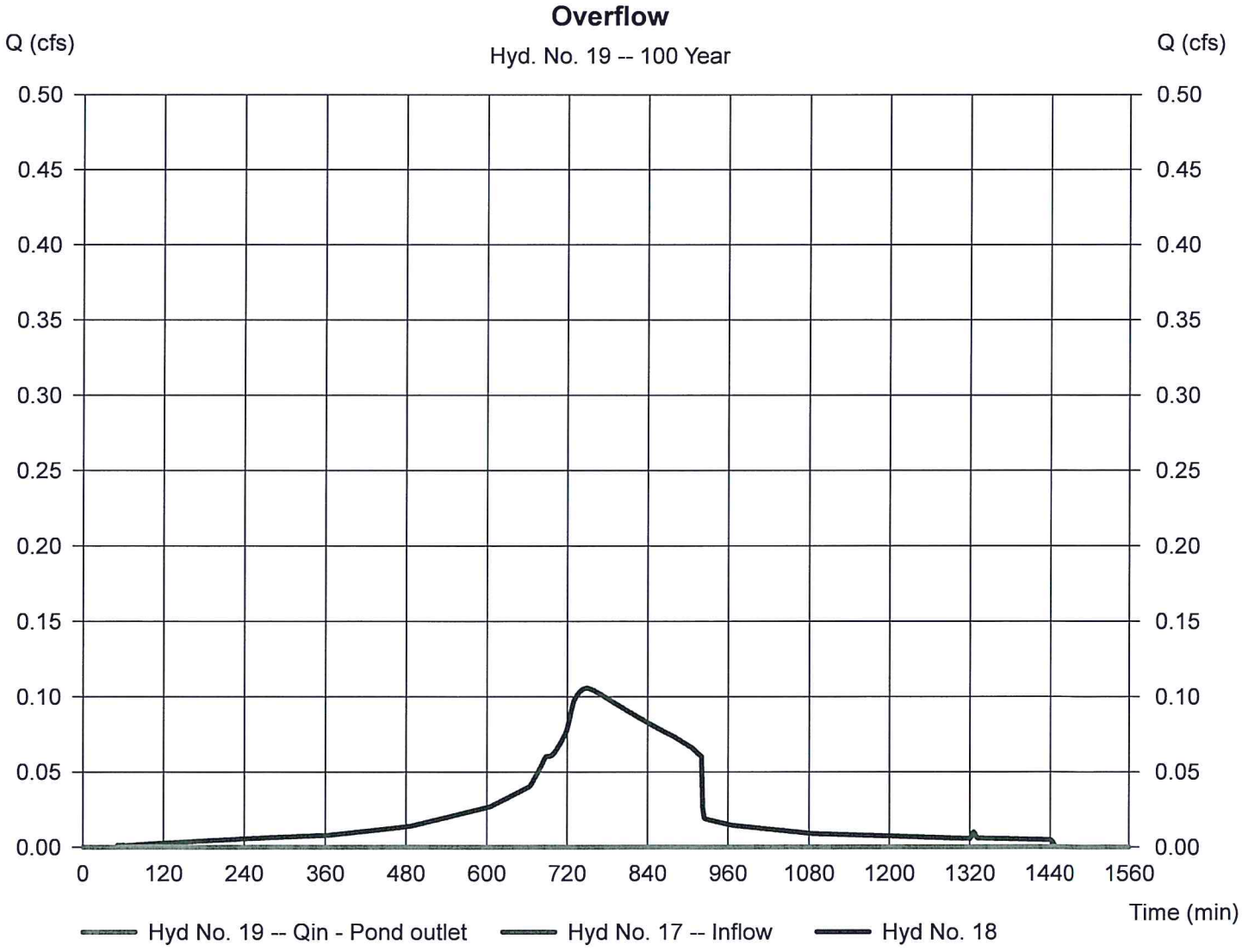
Hydrograph type	= Diversion2	Peak discharge	= 0.000 cfs
Storm frequency	= 10 yrs	Time to peak	= 664 min
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hydrograph	= 17 - Dwelling Roof Drywell	2nd diverted hyd.	= 18
Diversion method	= Pond - Dwelling Roof Drywell	Pond structure	= Exfiltration



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.2 — Tuesday, Nov 3, 2015

Hyd. No. 19

Overflow

Hydrograph type	= Diversion2	Peak discharge	= 0.000 cfs
Storm frequency	= 100 yrs	Time to peak	= 686 min
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hydrograph	= 17 - Dwelling Roof Drywell	2nd diverted hyd.	= 18
Diversion method	= Pond - Dwelling Roof Drywell	Pond structure	= Exfiltration