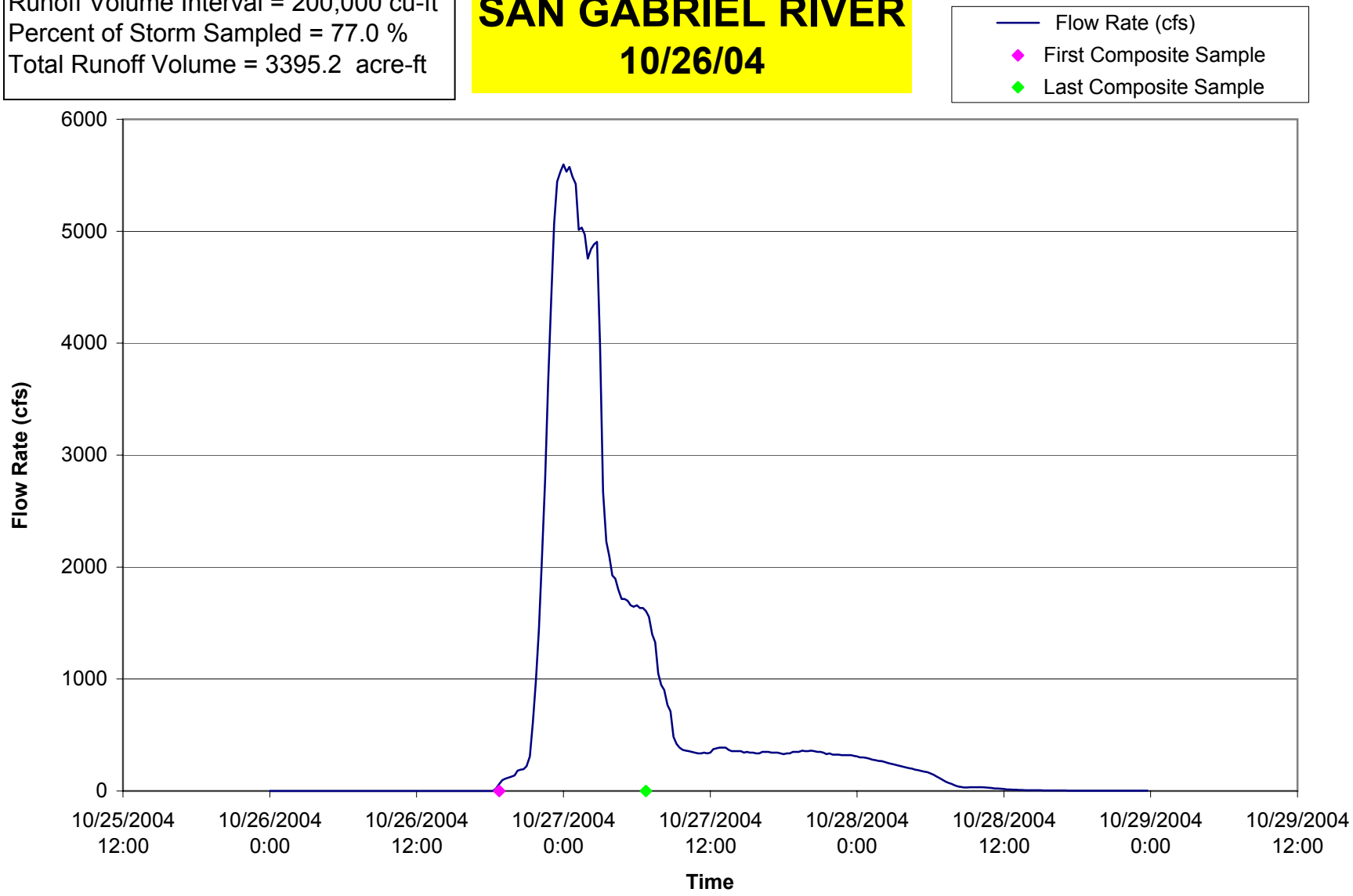
# APPENDIX G

# Hydrographs

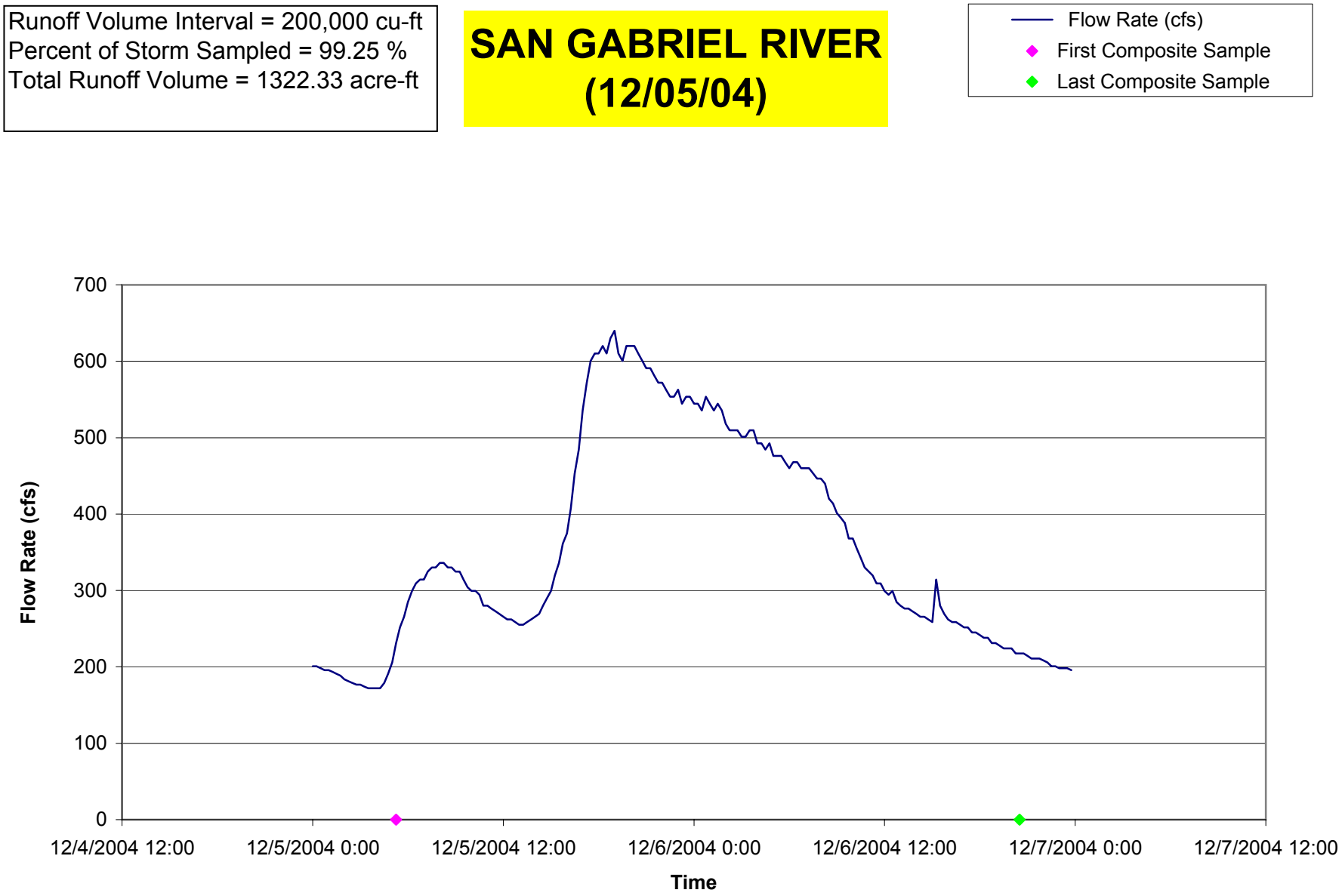
Runoff Volume Interval = 200,000 cu-ft
Percent of Storm Sampled = 77.0 %
Total Runoff Volume = 3395.2 acre-ft

# SAN GABRIEL RIVER
## 10/26/04



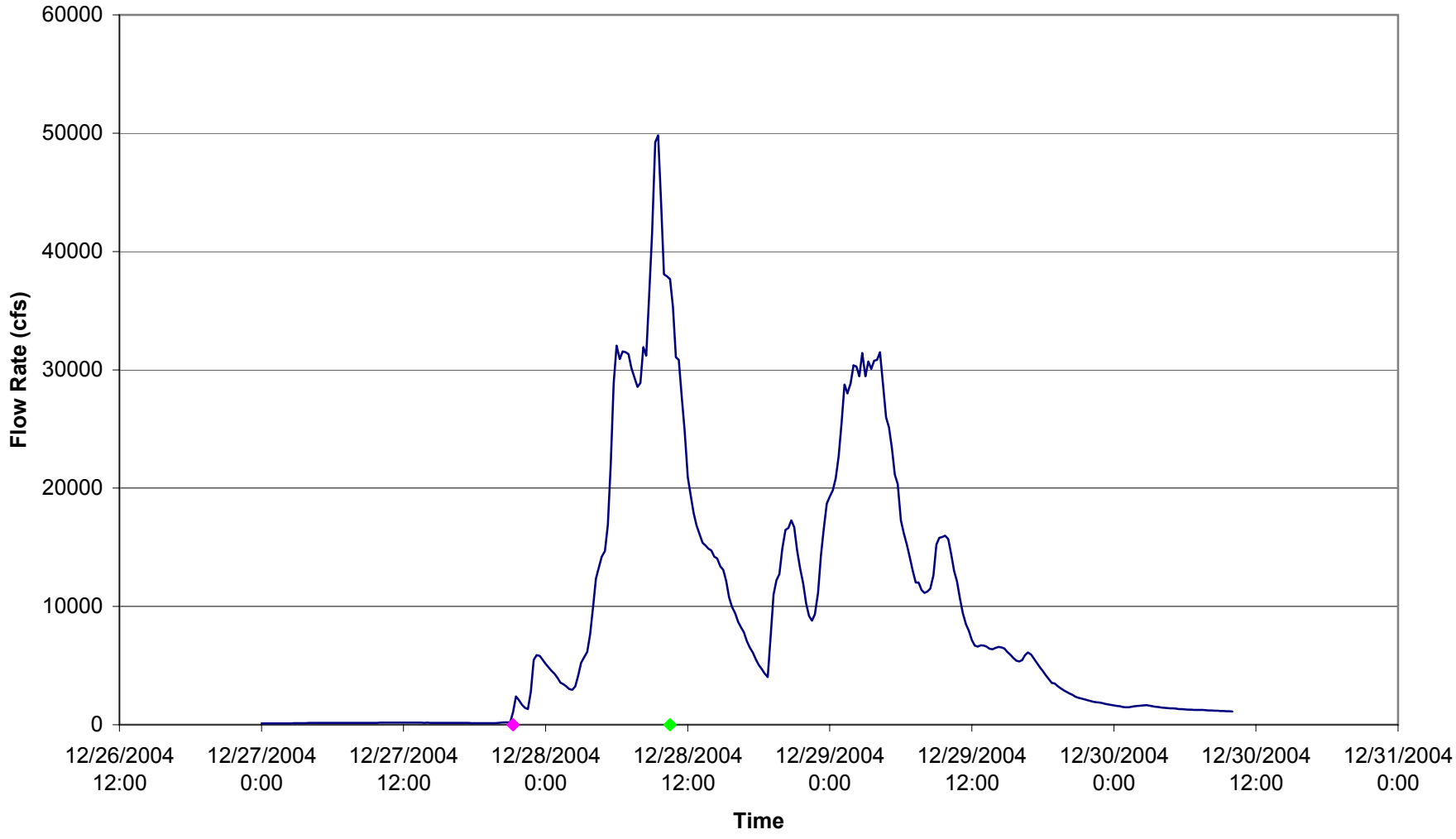
Runoff Volume Interval = 200,000 cu-ft
Percent of Storm Sampled = 99.25 %
Total Runoff Volume = 1322.33 acre-ft

# SAN GABRIEL RIVER (12/05/04)



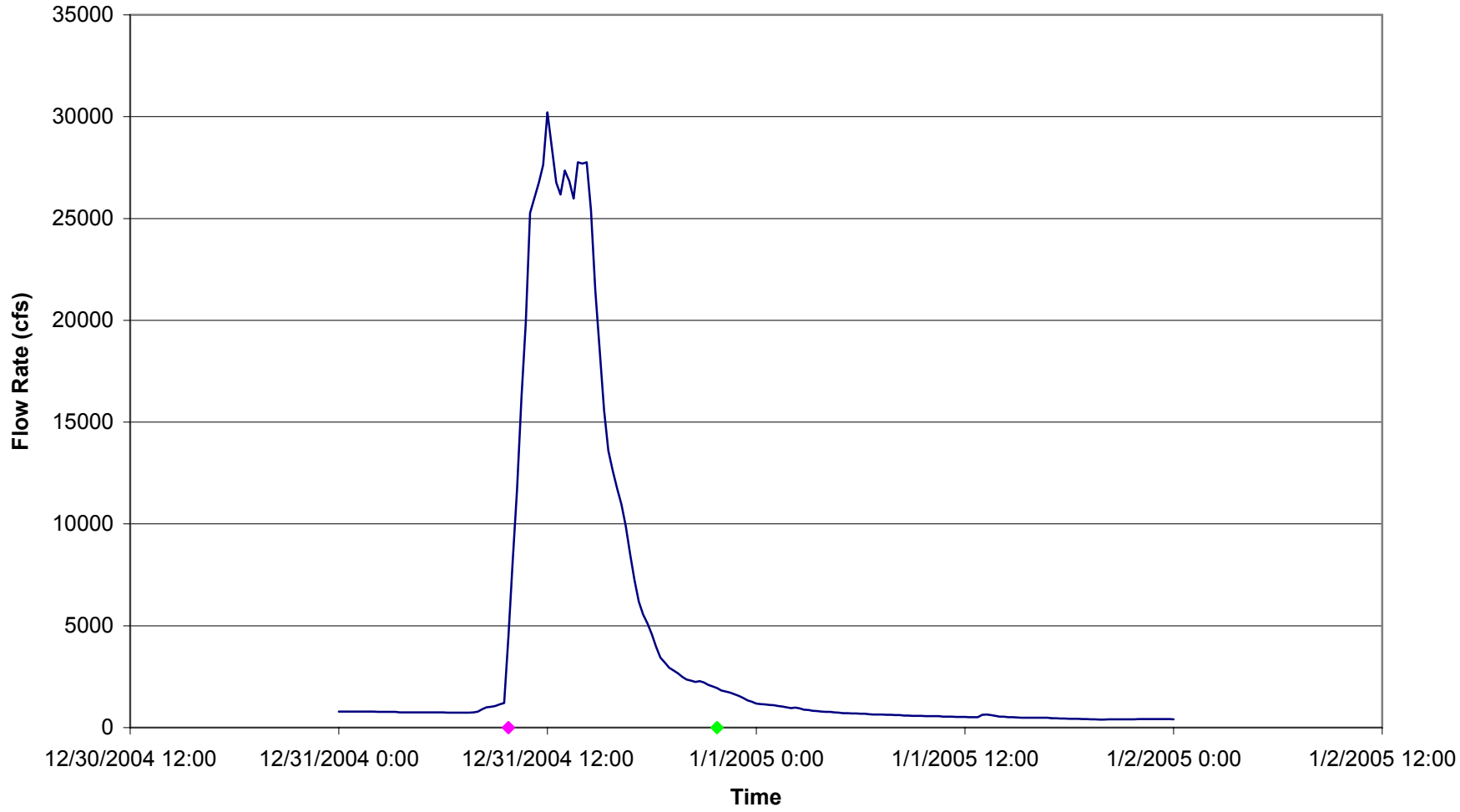
Runoff Volume Interval = 200,000 cu-ft
Percent of Storm Sampled = 30.79 %
Total Runoff Volume = 60277.3 acre-ft

# SAN GABRIEL RIVER
## (12/27/04)



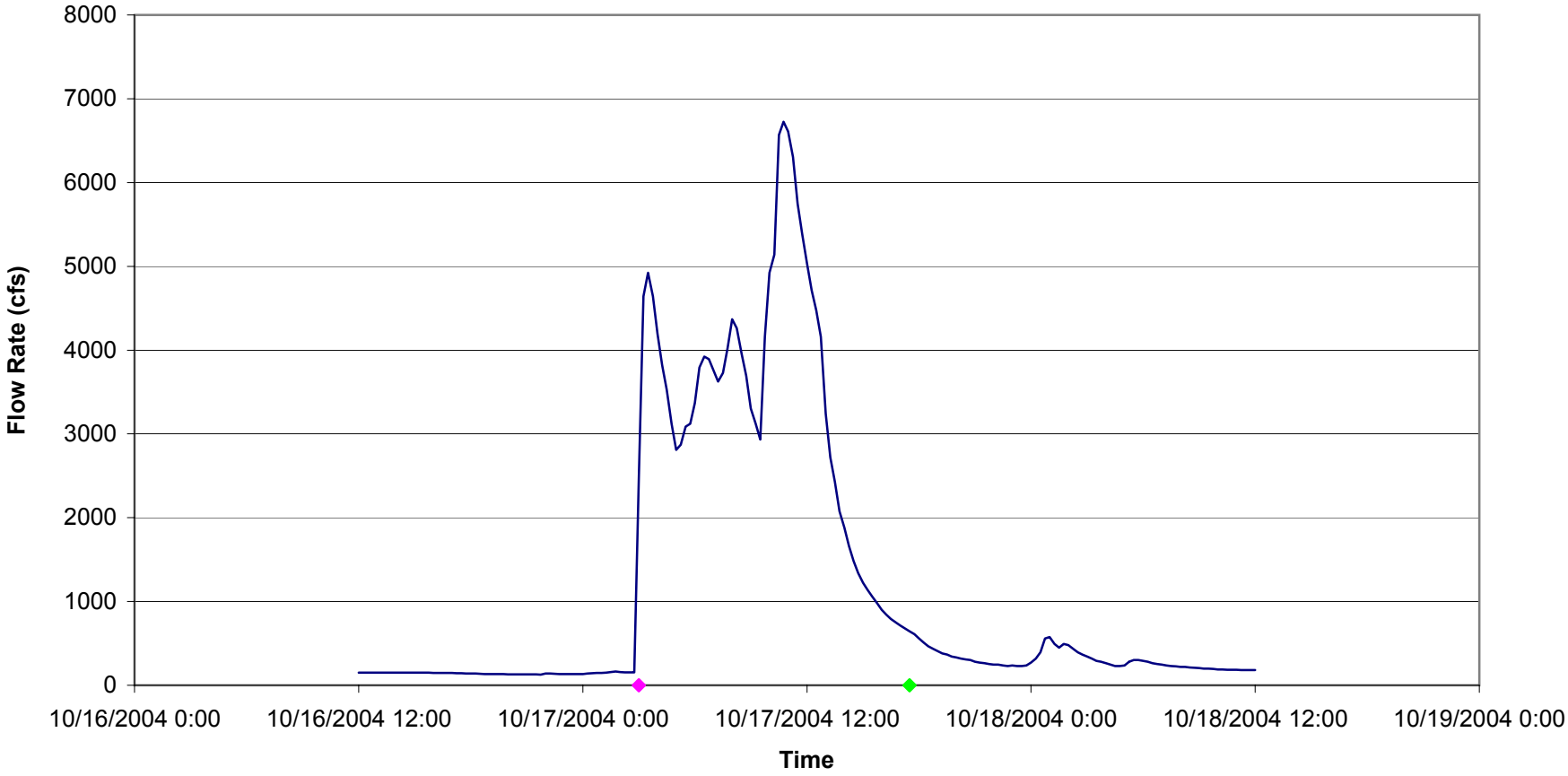
Runoff Volume Interval = 200,000 cu-ft
Percent of Storm Sampled = 98.8 %
Total Runoff Volume = 14751.34 acre-ft

# SAN GABRIEL RIVER
## (12/31/04)



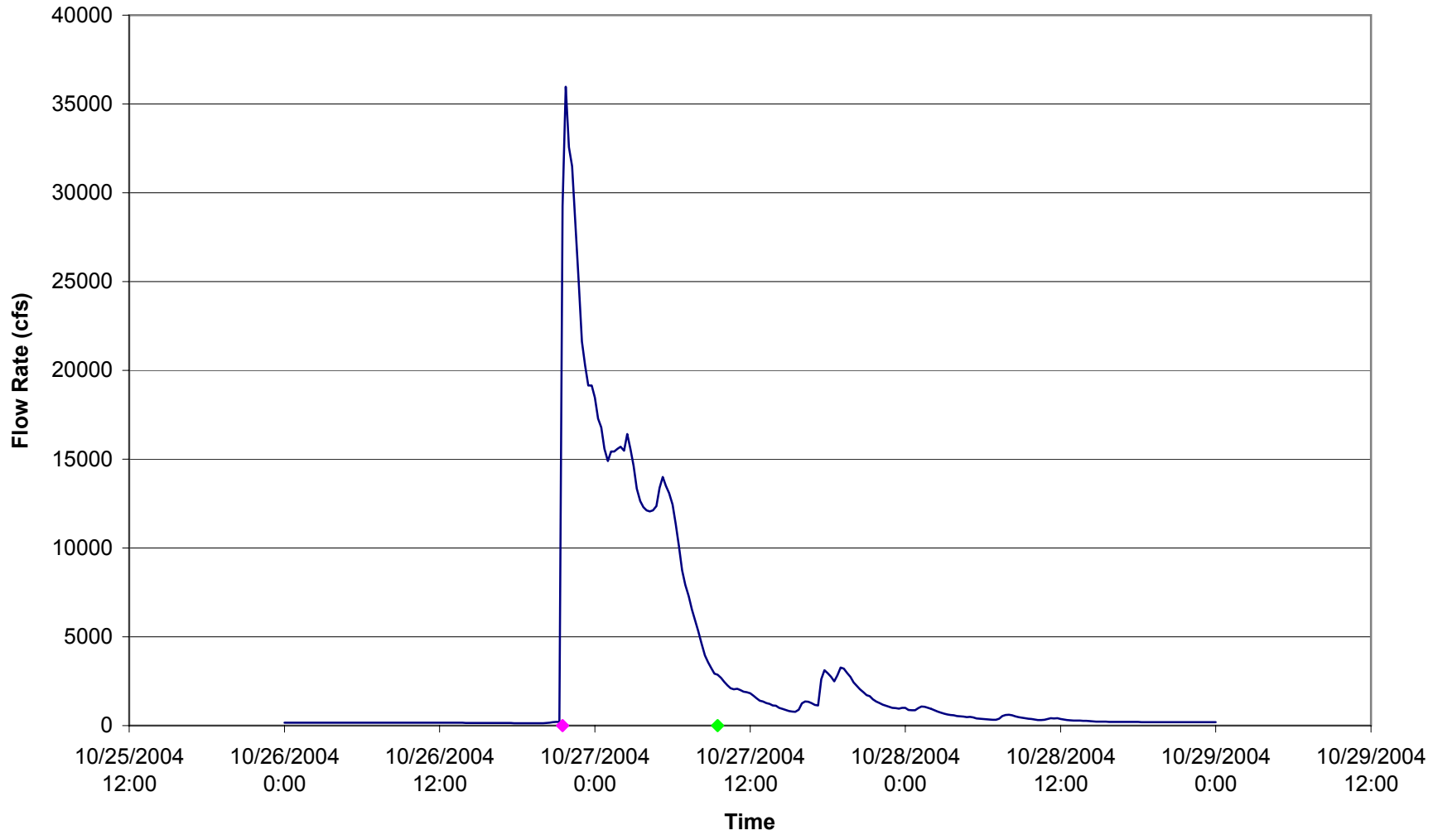
Runoff Volume Interval = 900,000 cu-ft
Percent of Storm Sampled = 94.28 %
Total Runoff Volume = 4454.97 acre-ft

# LOS ANGELES RIVER
# 10/17/04



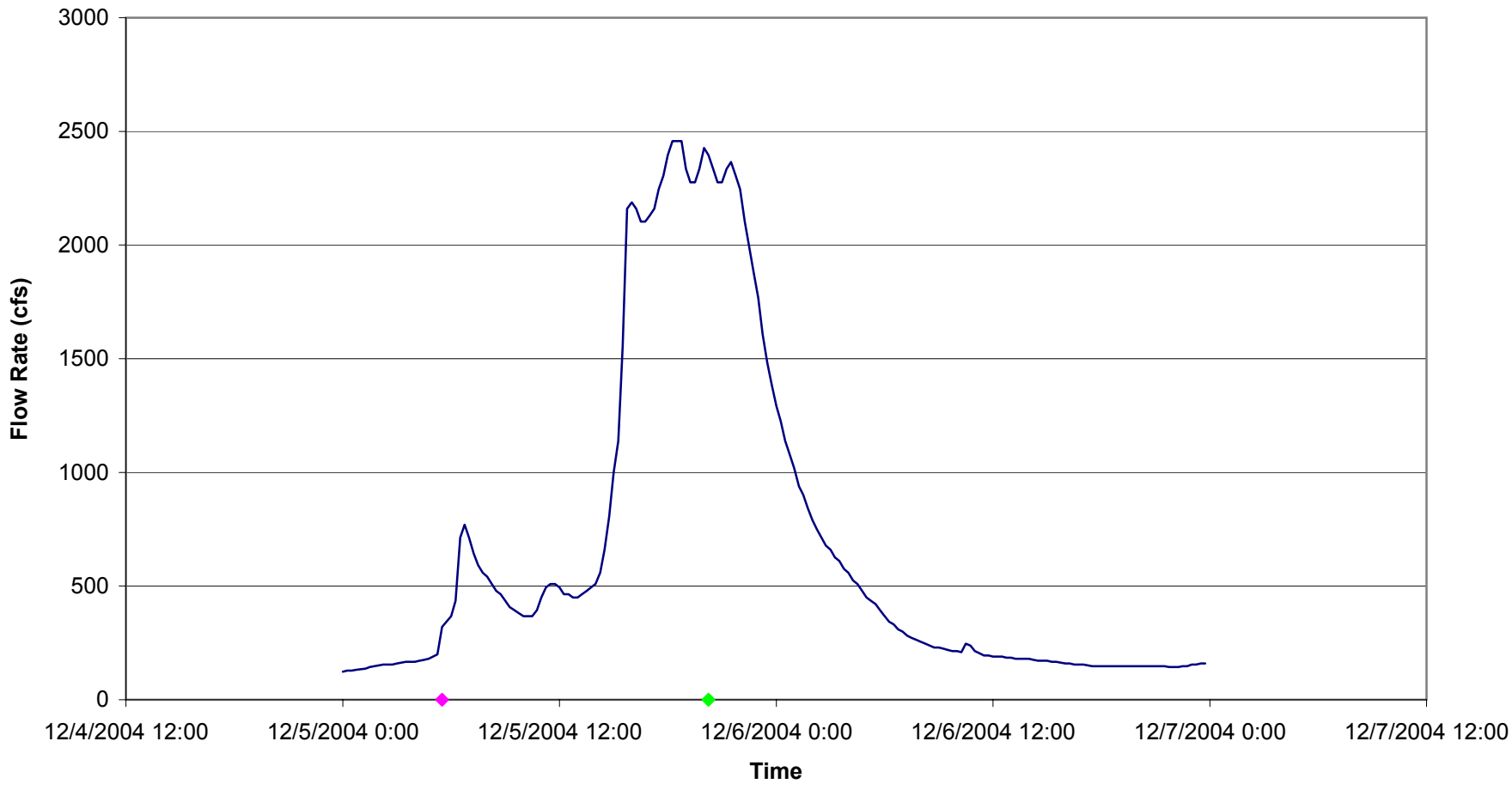
Runoff Volume Interval = 900,000 cu-ft
Percent of Storm Sampled = 86.2 %
Total Runoff Volume = 17302.3 acre-ft

# LOS ANGELES RIVER
## 10/26/04



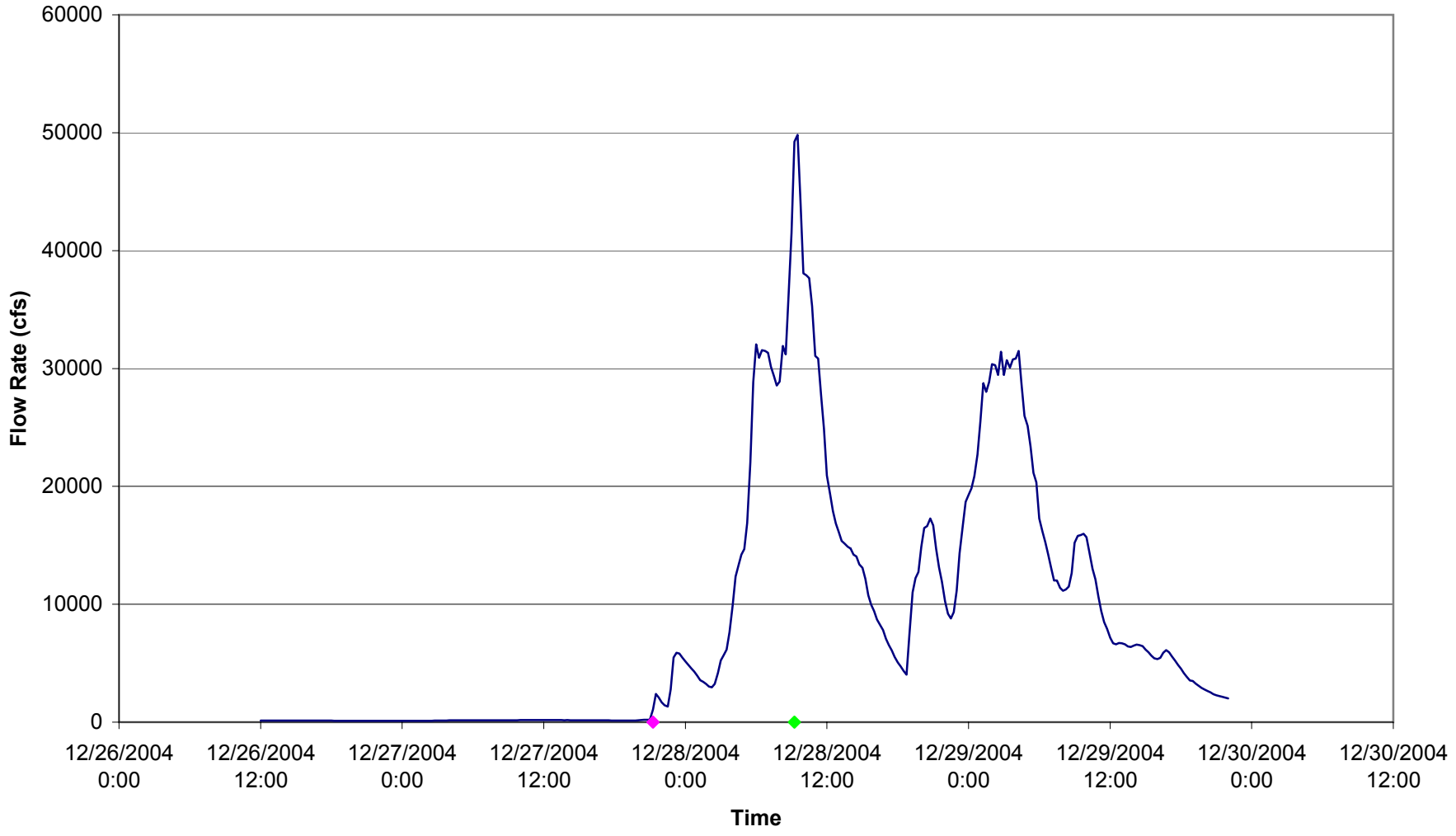
Runoff Volume Interval = 900,000 cu-ft
Percent of Storm Sampled = 55.5 %
Total Runoff Volume = 2459.9 acre-ft

# LOS ANGELES RIVER (12/05/04)



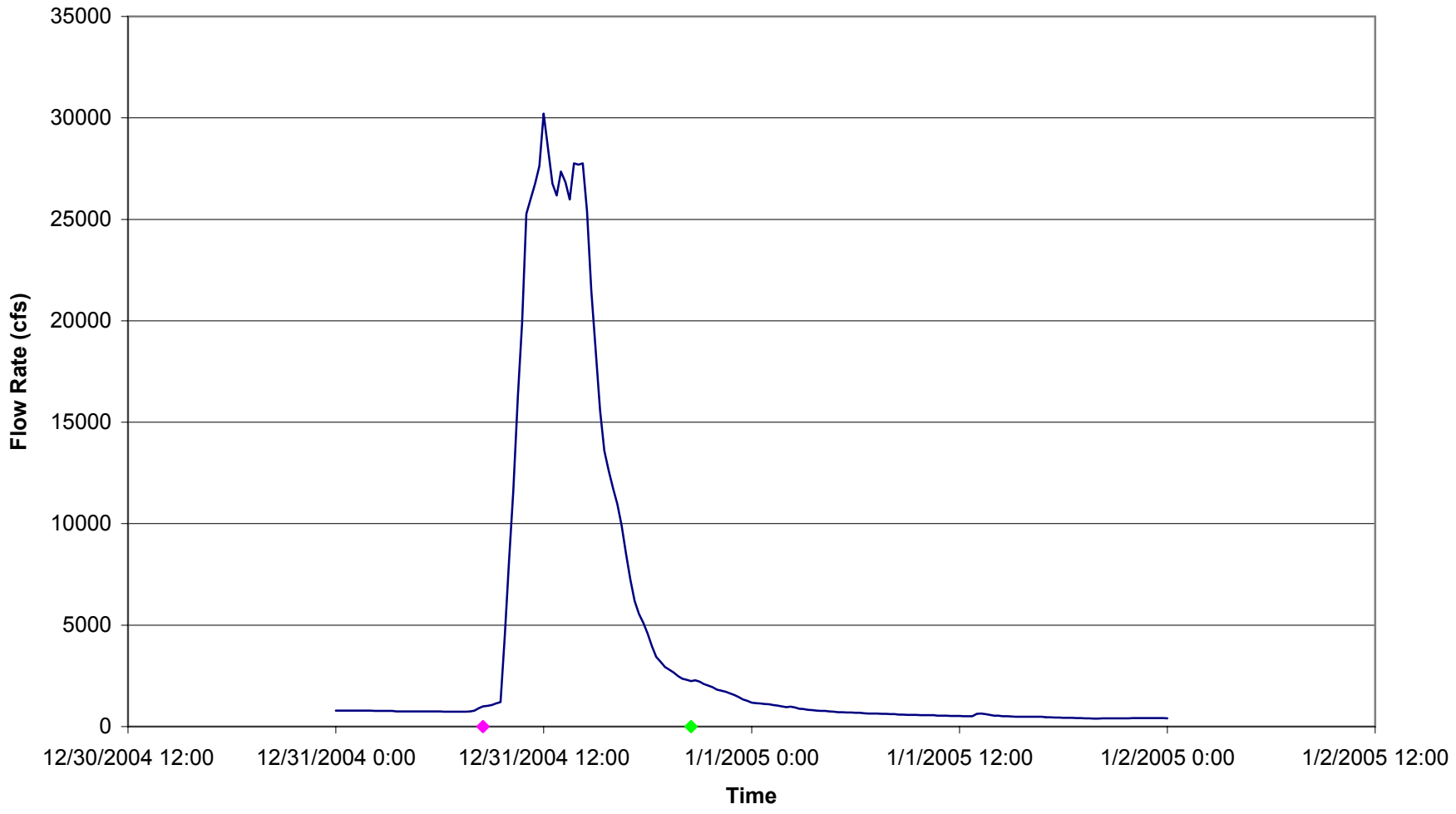
Runoff Volume Interval = 500,000 cu-ft
Percent of Storm Sampled = 21.9 %
Total Runoff Volume = 15,618.6 acre-ft

# LOS ANGELES RIVER
## (12/27/04)



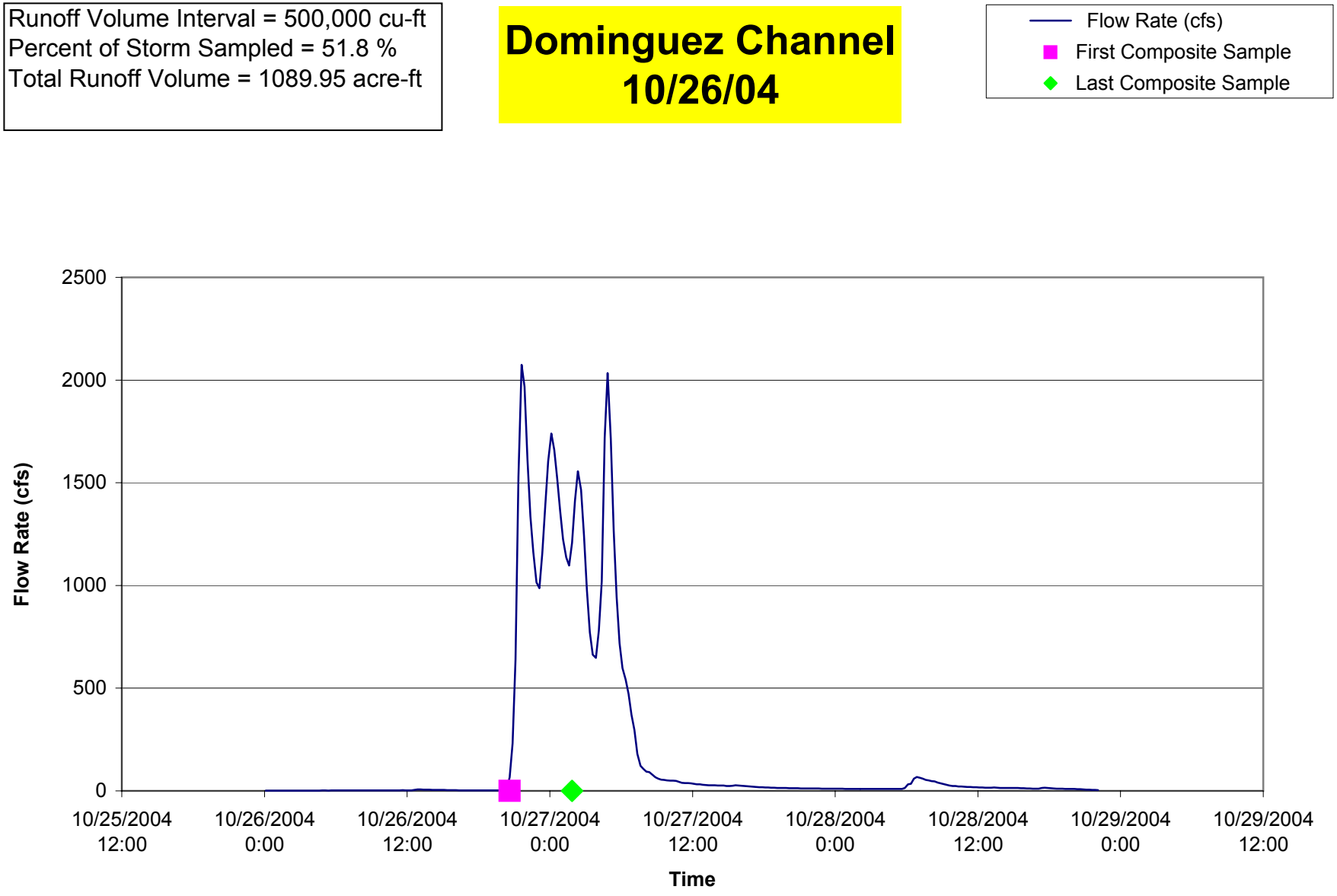
Runoff Volume Interval = 900,000 cu-ft
Percent of Storm Sampled = 97.36 %
Total Runoff Volume = 14536.96 acre-ft

# LOS ANGELES RIVER
## (12/31/04)



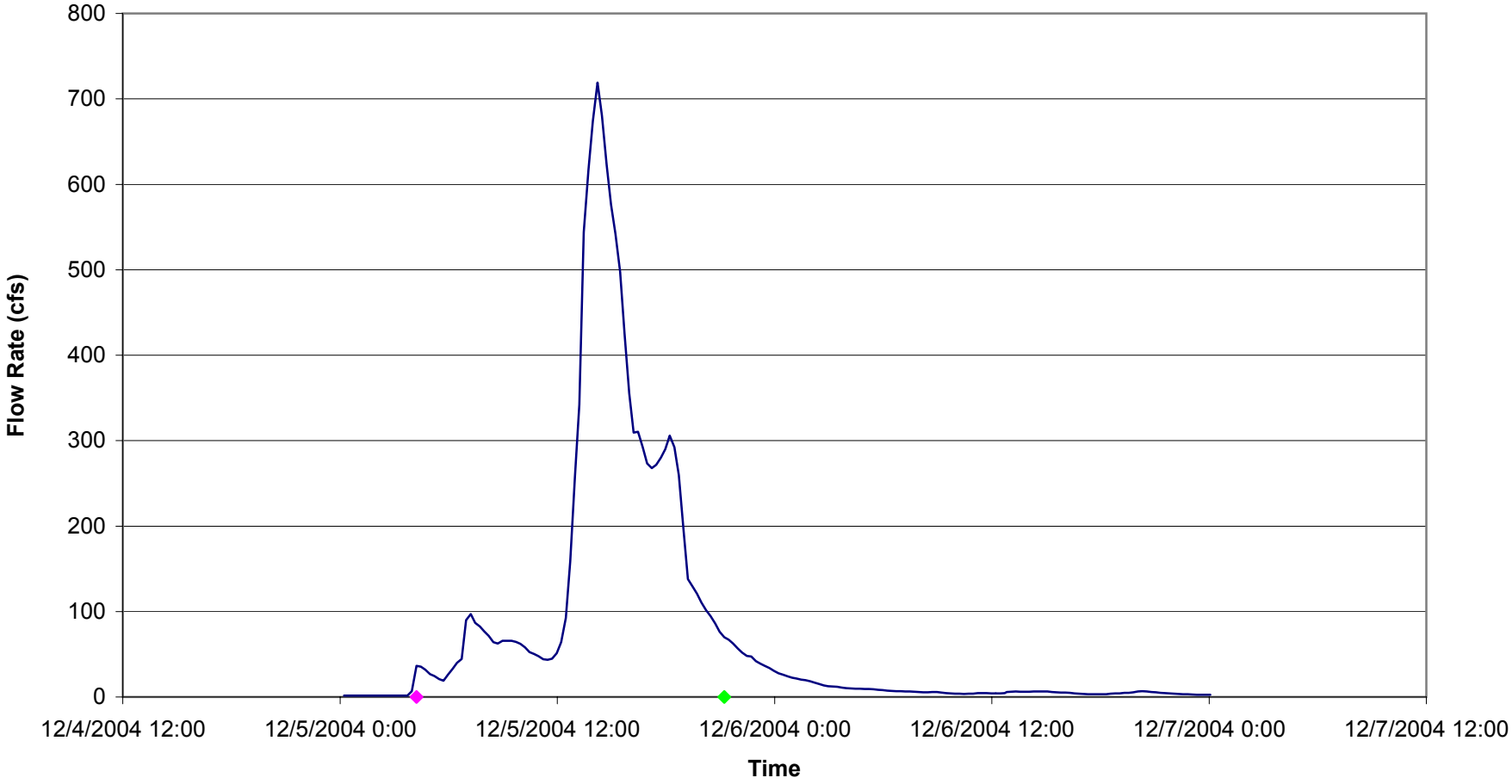
Runoff Volume Interval = 500,000 cu-ft
Percent of Storm Sampled = 51.8 %
Total Runoff Volume = 1089.95 acre-ft

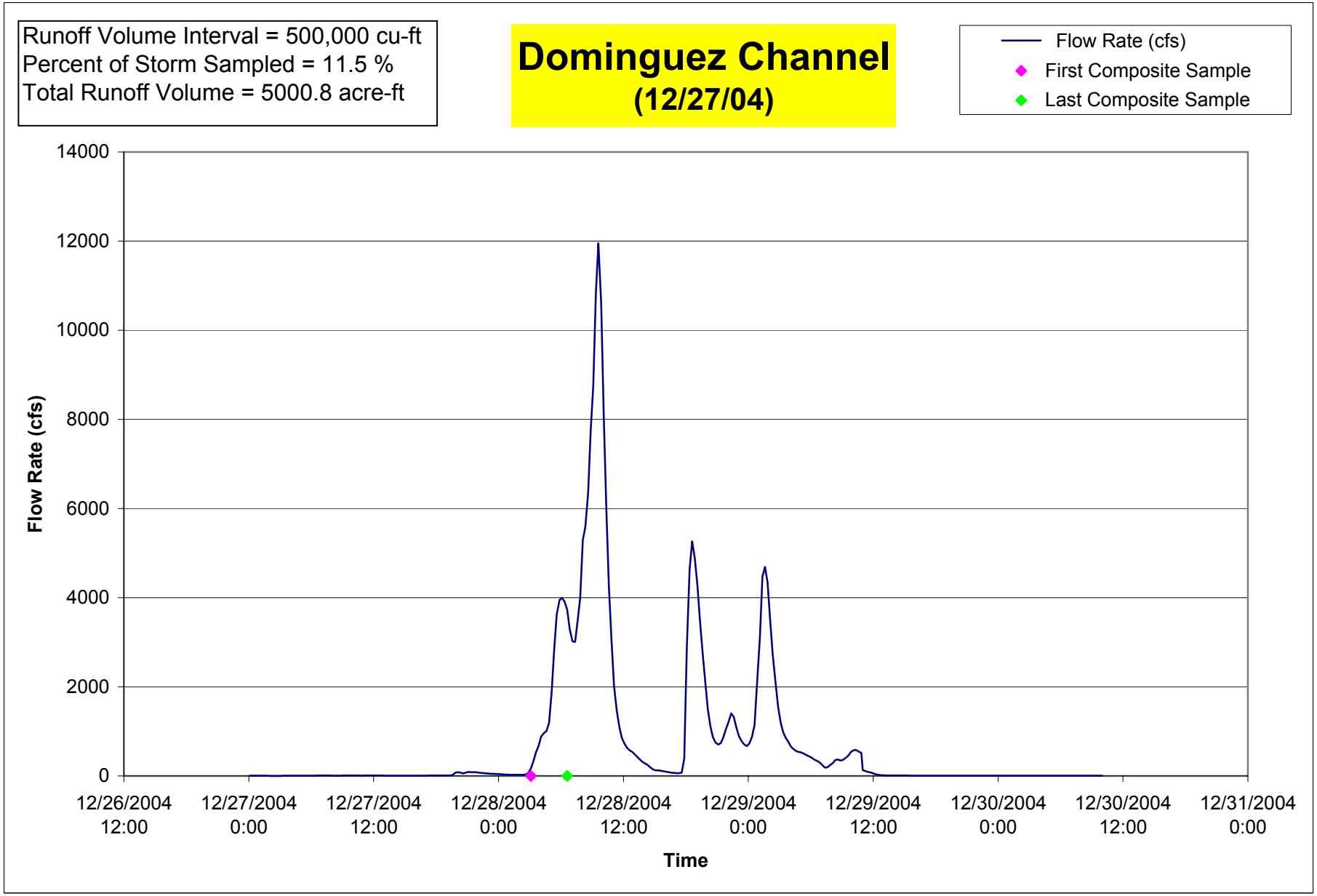
# Dominguez Channel 10/26/04



Runoff Volume Interval = 250,000 cu-ft
Percent of Storm Sampled =92.6 %
Total Runoff Volume = 296.2 acre-ft

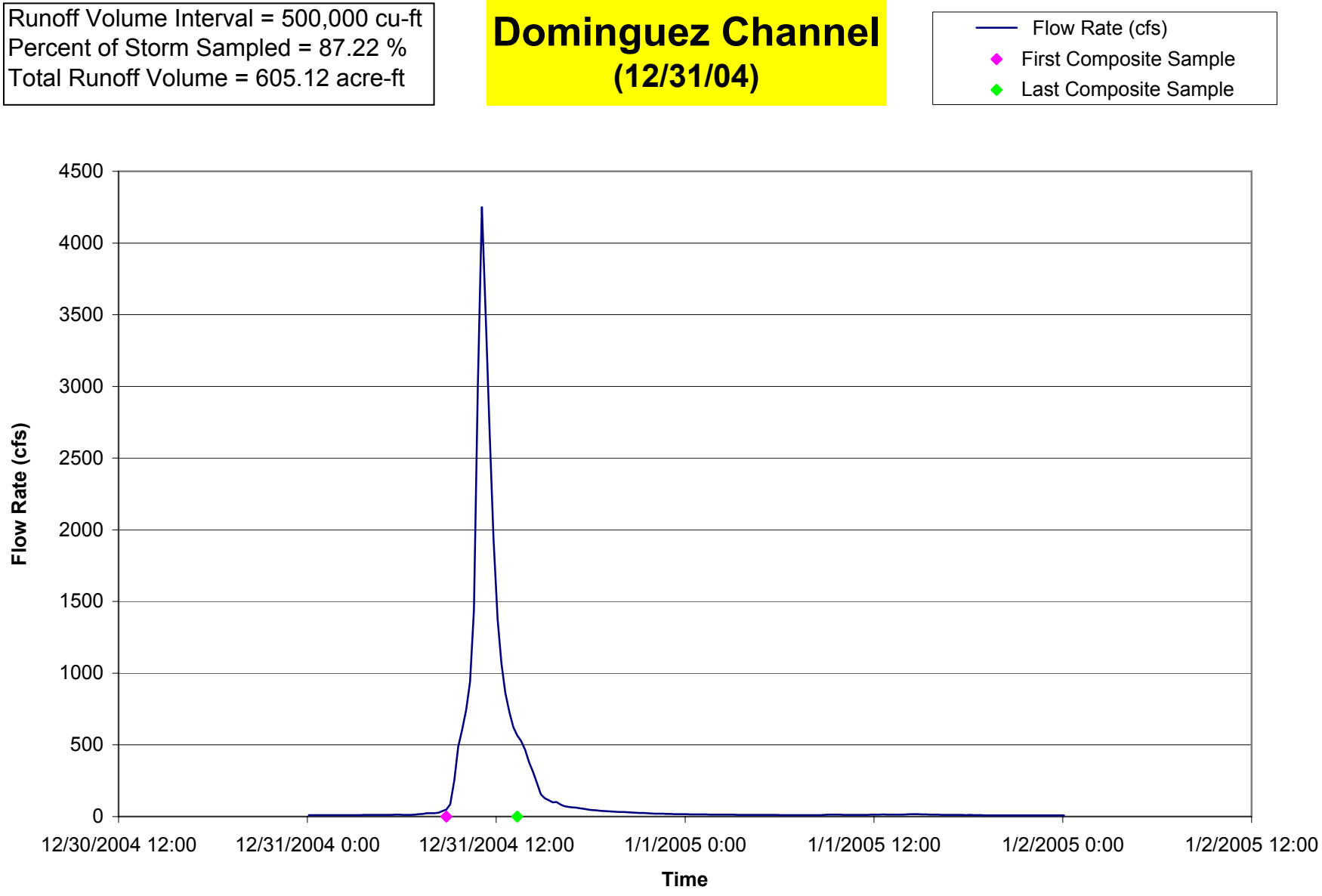
# Dominguez Channel (12/05/04)




Runoff Volume Interval = 500,000 cu-ft
Percent of Storm Sampled = 11.5 %
Total Runoff Volume = 5000.8 acre-ft
Dominguez Channel
(12/27/04)
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
14000
12000
10000
8000
6000
4000
2000
0
Flow Rate (cfs)
12/26/2004 12:00
12/27/2004 0:00
12/27/2004 12:00
12/28/2004 0:00
12/28/2004 12:00
12/29/2004 0:00
12/29/2004 12:00
12/30/2004 0:00
12/30/2004 12:00
12/31/2004 0:00
Time

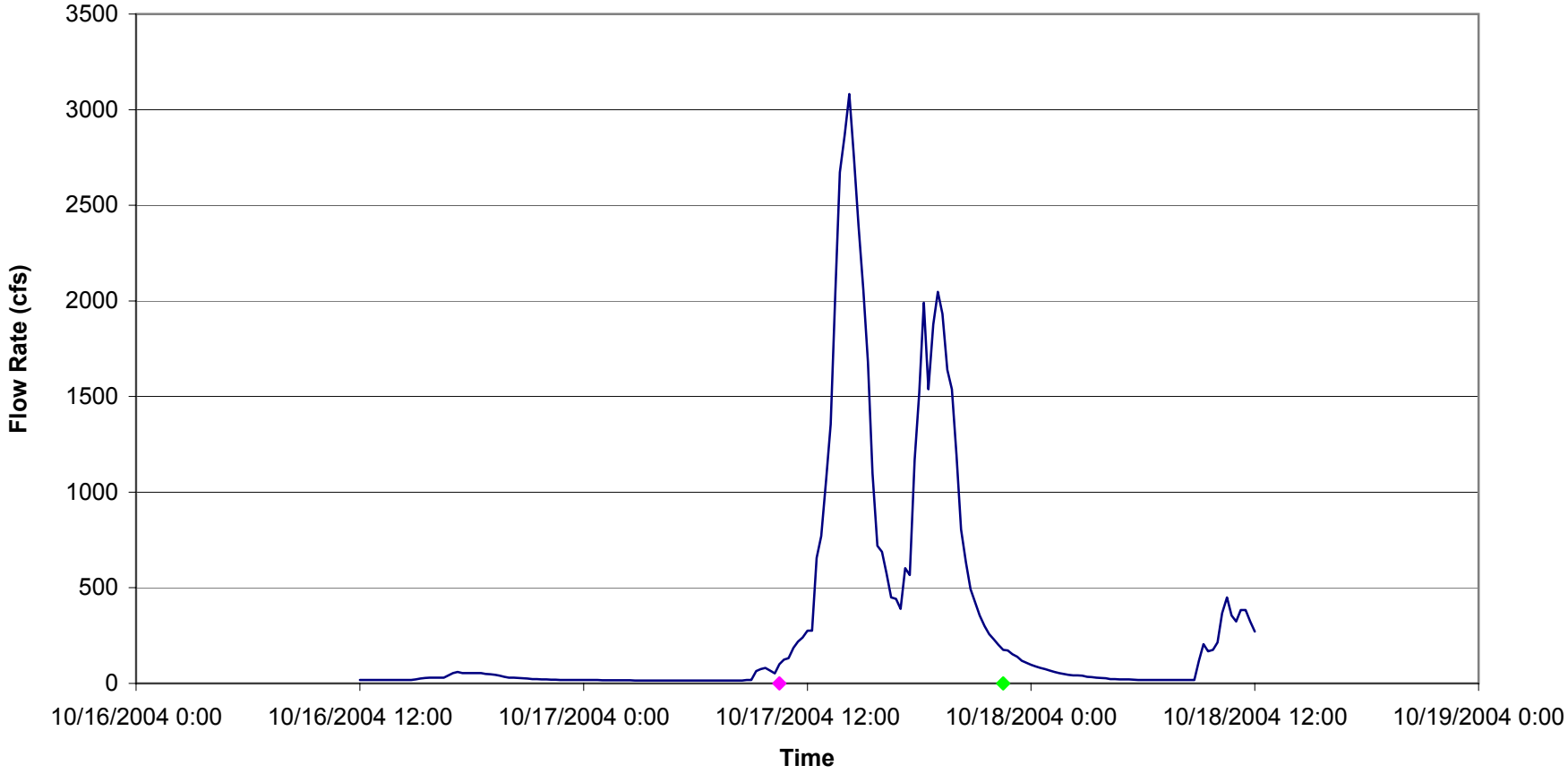
Runoff Volume Interval = 500,000 cu-ft
Percent of Storm Sampled = 87.22 %
Total Runoff Volume = 605.12 acre-ft

# Dominguez Channel
## (12/31/04)



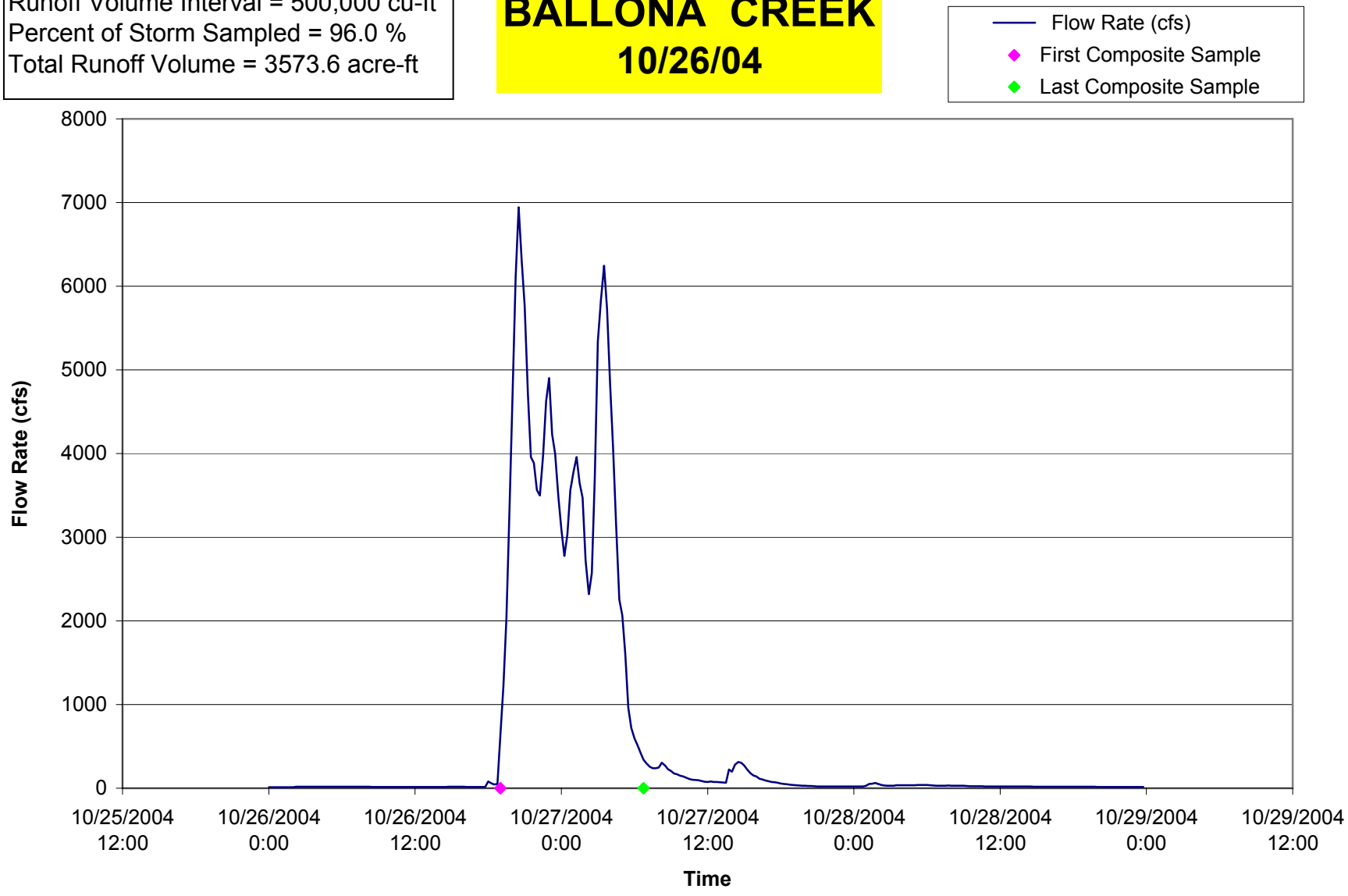
# BALLONA CREEK
# 10/17/04

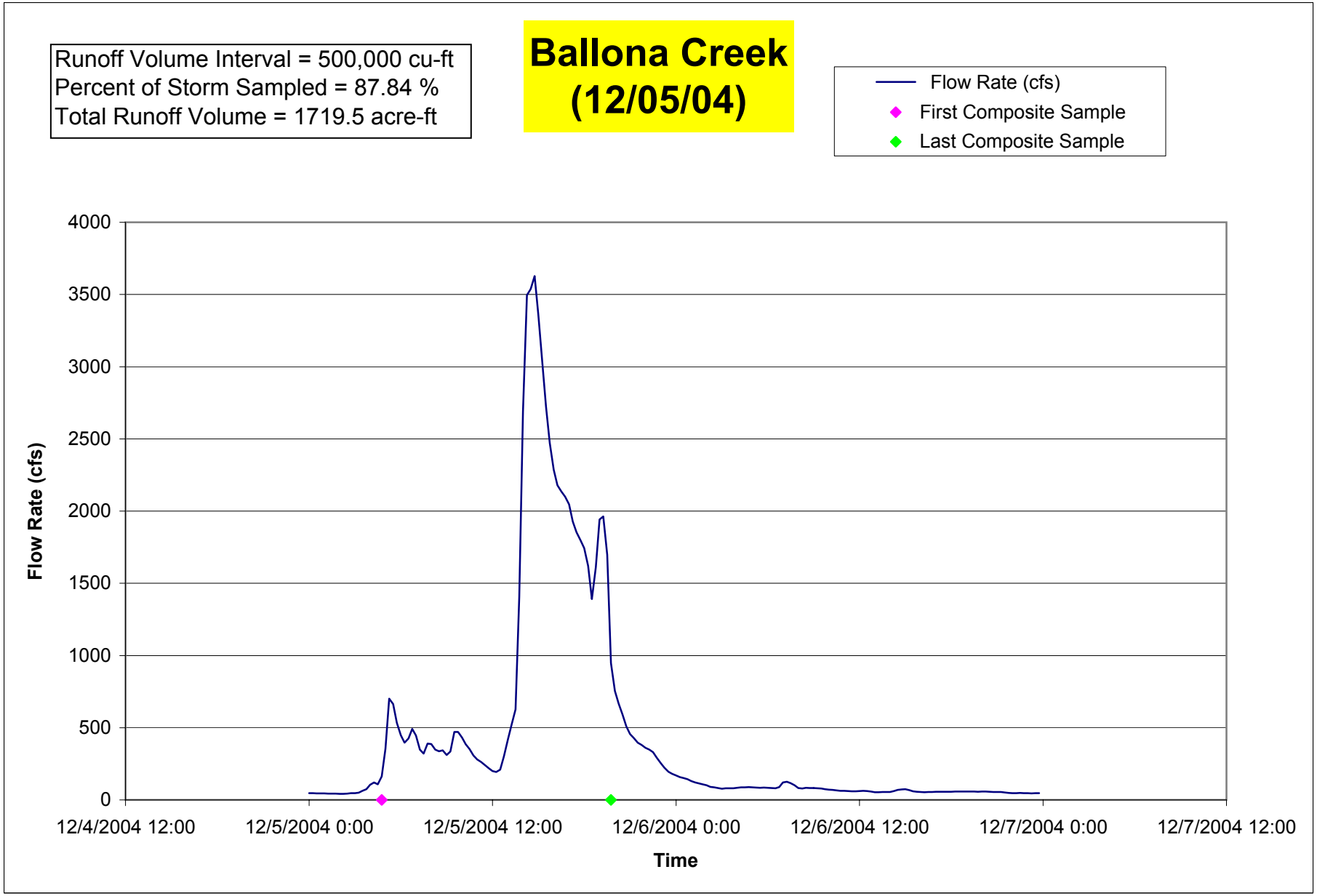
Runoff Volume Interval = 500,000 cu-ft
Percent of Storm Sampled = 79.5 %
Total Runoff Volume = 1390.17 acre-ft

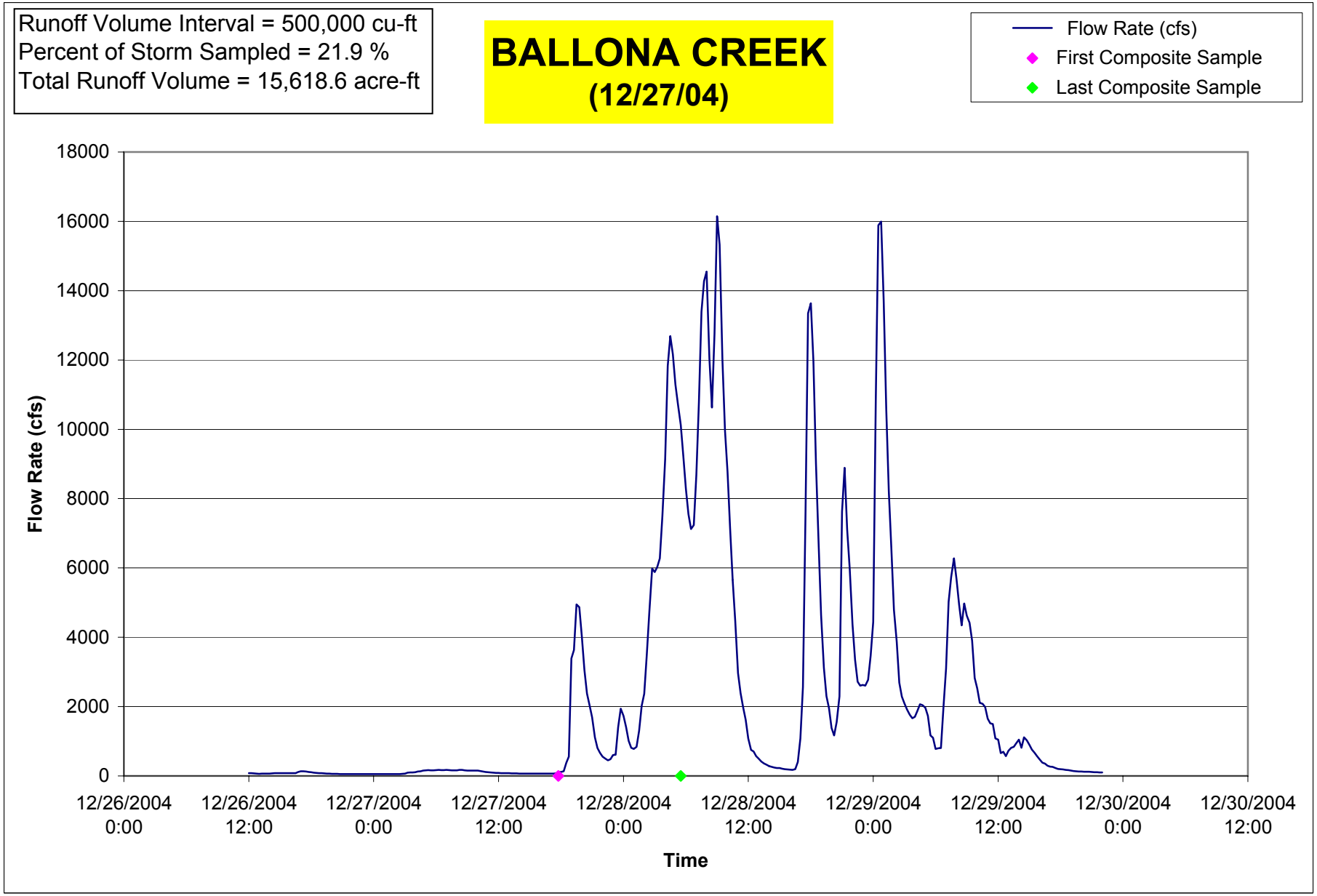


Runoff Volume Interval = 500,000 cu-ft
Percent of Storm Sampled = 96.0 %
Total Runoff Volume = 3573.6 acre-ft

# BALLONA CREEK
# 10/26/04

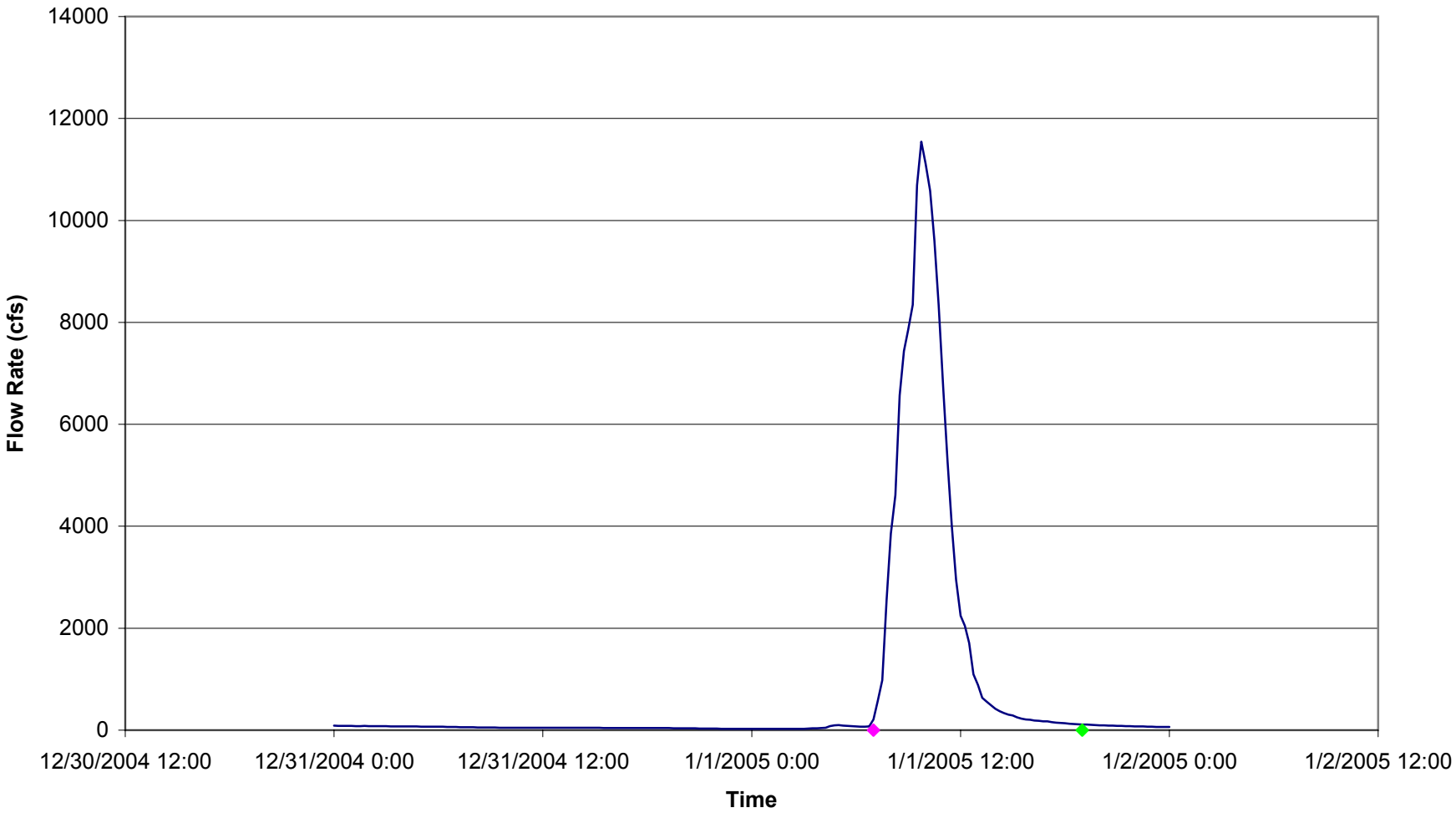



Runoff Volume Interval = 500,000 cu-ft
Percent of Storm Sampled = 87.84 %
Total Runoff Volume = 1719.5 acre-ft
Ballona Creek
(12/05/04)
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
4000
3500
3000
2500
2000
1500
1000
500
0
Flow Rate (cfs)
12/4/2004 12:00
12/5/2004 0:00
12/5/2004 12:00
12/6/2004 0:00
12/6/2004 12:00
12/7/2004 0:00
12/7/2004 12:00
Time


Runoff Volume Interval = 500,000 cu-ft
Percent of Storm Sampled = 21.9 %
Total Runoff Volume = 15,618.6 acre-ft
BALLONA CREEK
(12/27/04)
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
Flow Rate (cfs)
12/26/2004 0:00
12/26/2004 12:00
12/27/2004 0:00
12/27/2004 12:00
12/28/2004 0:00
12/28/2004 12:00
12/29/2004 0:00
12/29/2004 12:00
12/30/2004 0:00
12/30/2004 12:00
Time

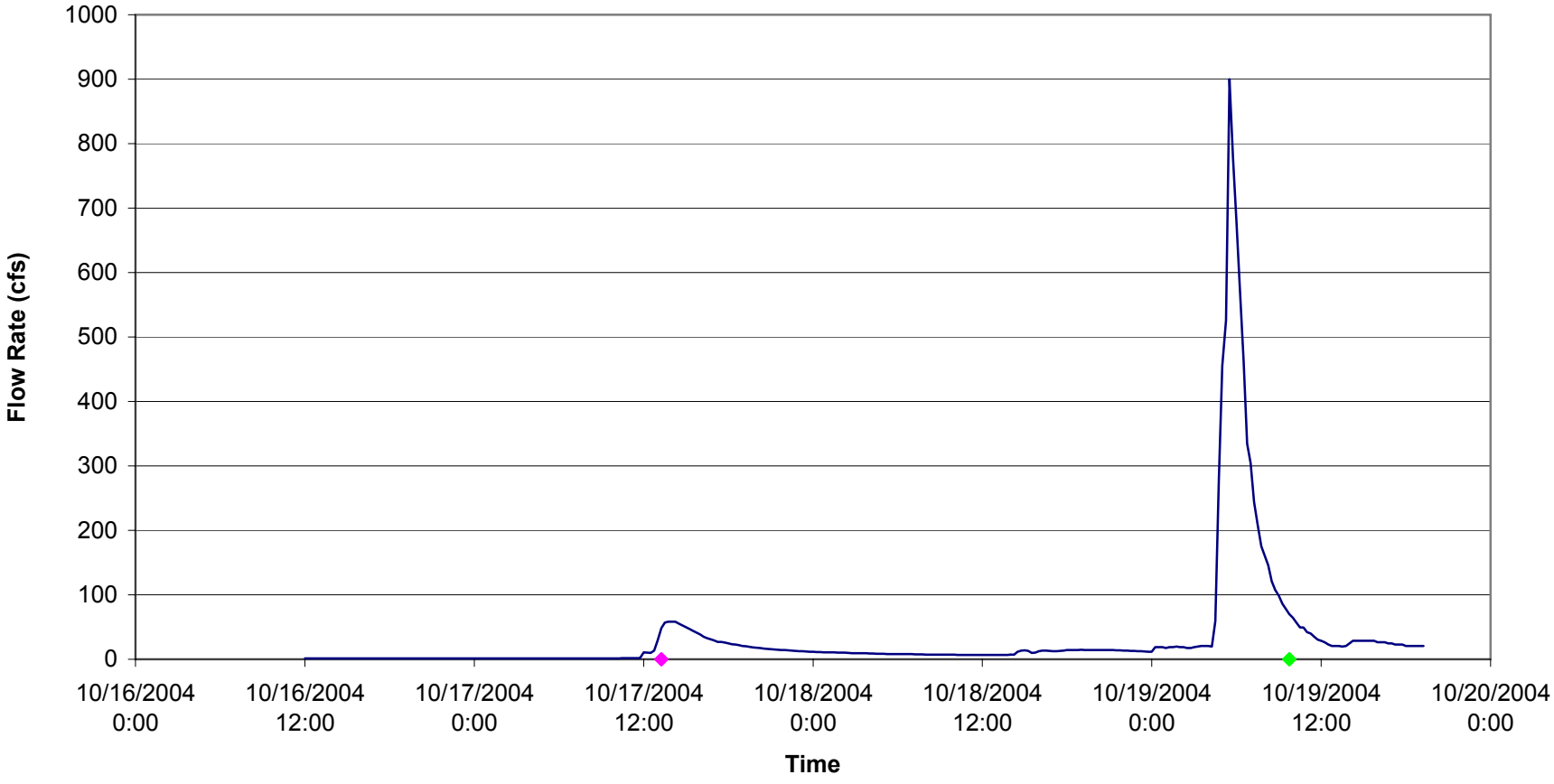
Runoff Volume Interval = 500,000 cu-ft
Percent of Storm Sampled = 99.3 %
Total Runoff Volume = 2898.23 acre-ft

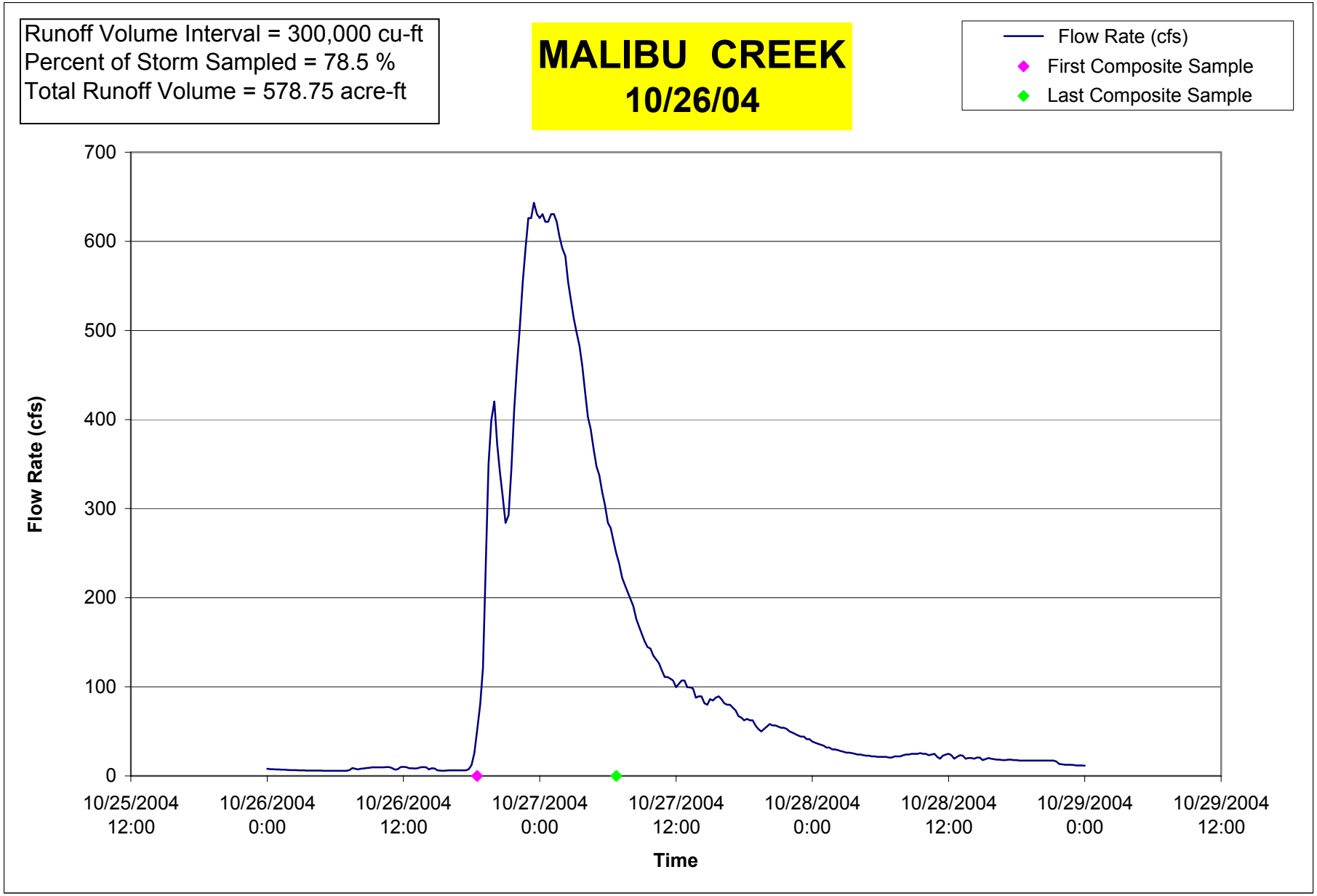
# BALLONA CREEK
## (12/31/04)



# MALIBU CREEK
# 10/17/04

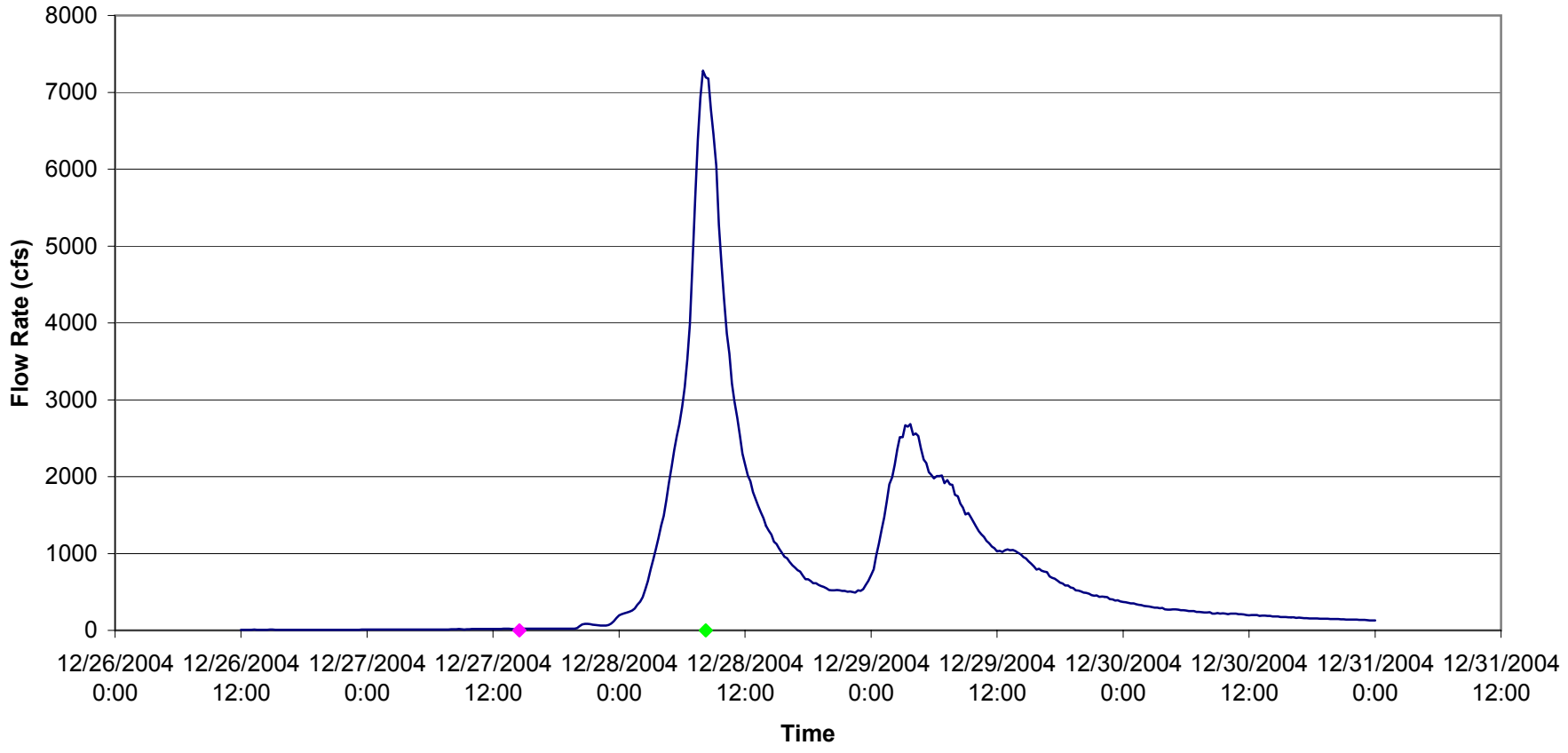
Runoff Volume Interval = 300,000 cu-ft
Percent of Storm Sampled = 89.0 %
Total Runoff Volume = 217.87 acre-ft




Runoff Volume Interval = 300,000 cu-ft
Percent of Storm Sampled = 78.5 %
Total Runoff Volume = 578.75 acre-ft
MALIBU CREEK
10/26/04
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
Flow Rate (cfs)
700
600
500
400
300
200
100
0
10/25/2004 12:00
10/26/2004 0:00
10/26/2004 12:00
10/27/2004 0:00
10/27/2004 12:00
10/28/2004 0:00
10/28/2004 12:00
10/29/2004 0:00
10/29/2004 12:00
Time

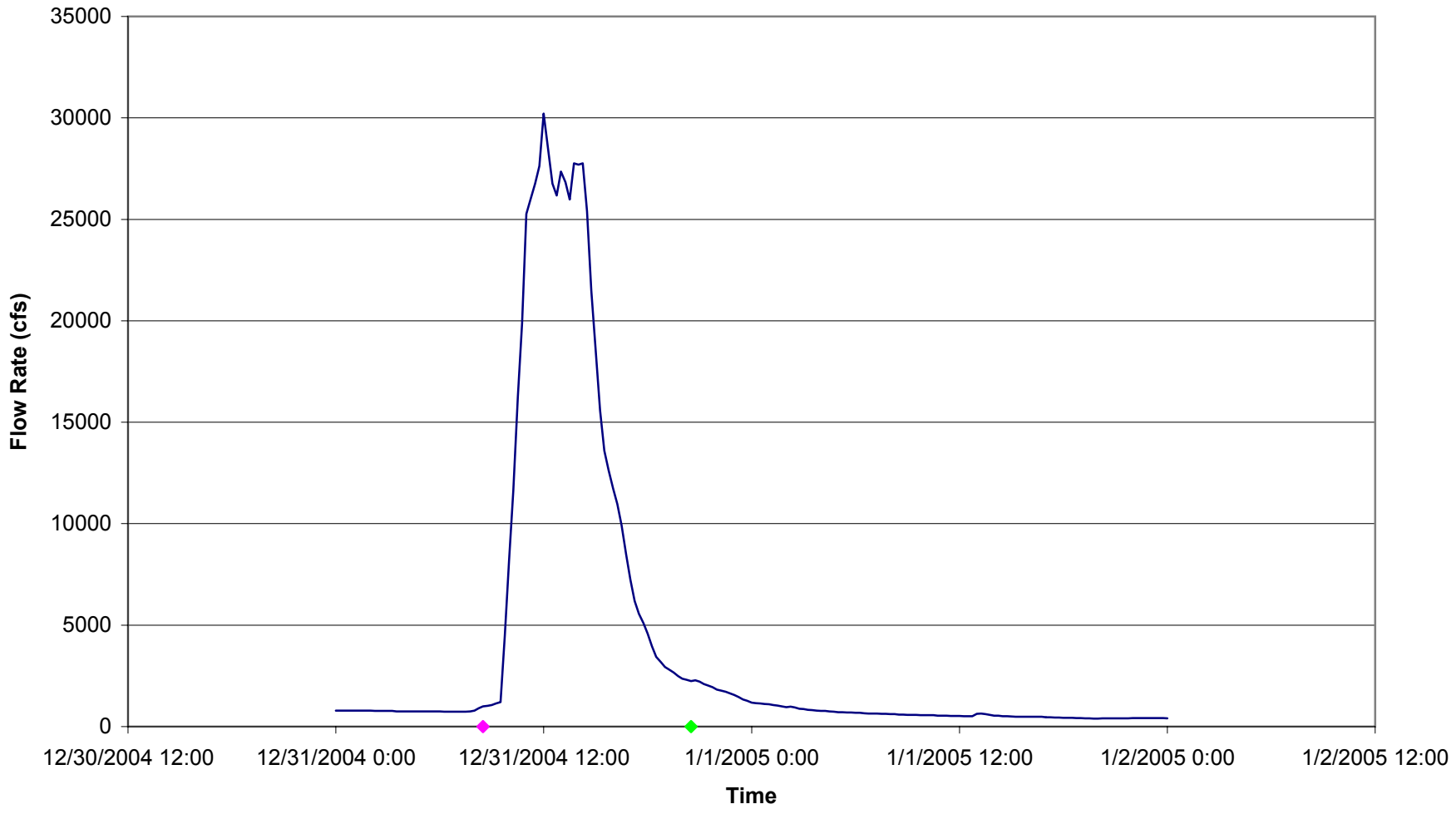
Runoff Volume Interval = 300,000 cu-ft
Percent of Storm Sampled = 23.06 %
Total Runoff Volume =6608.00 acre-ft

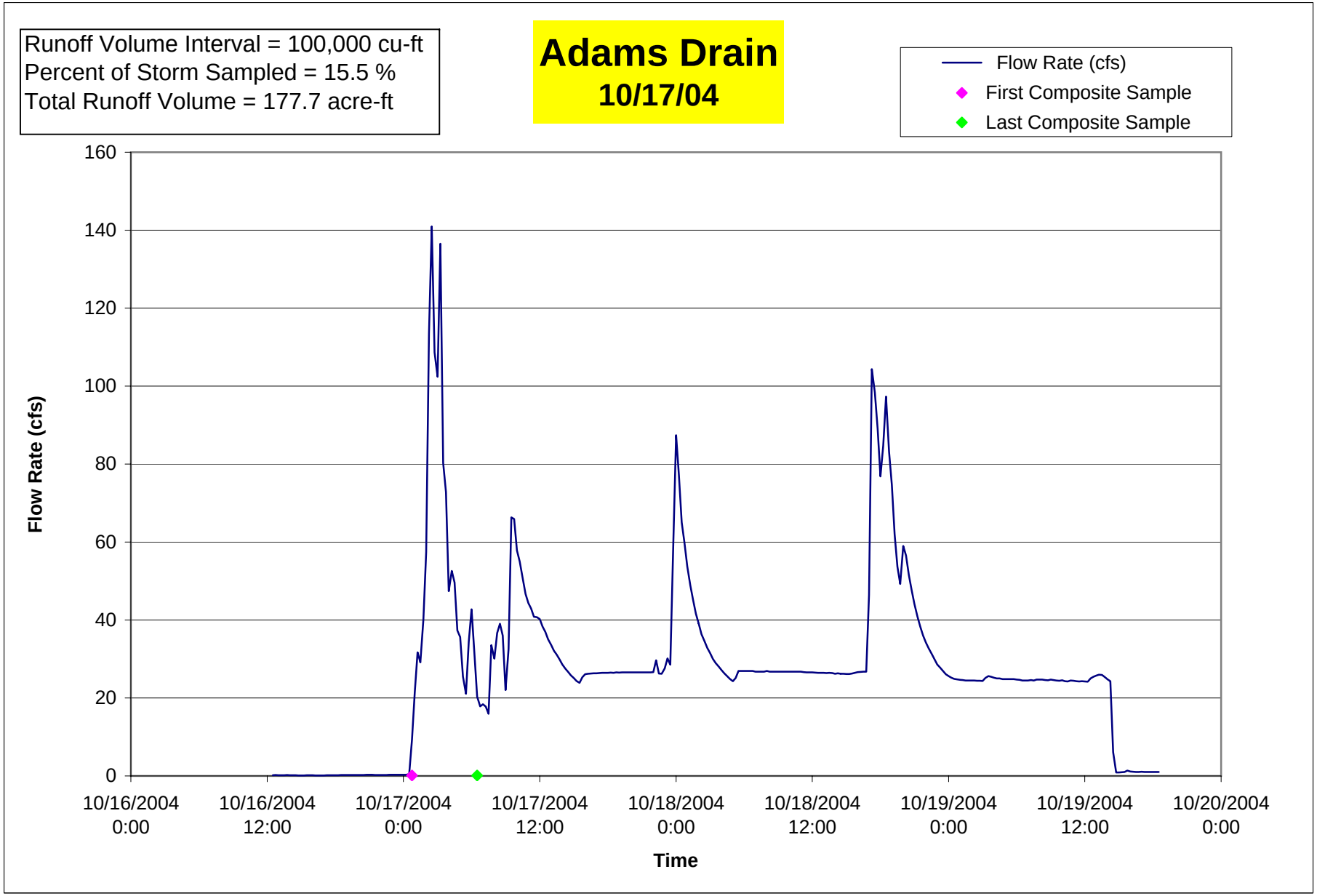
# MALIBU CREEK
## (12/27/04)

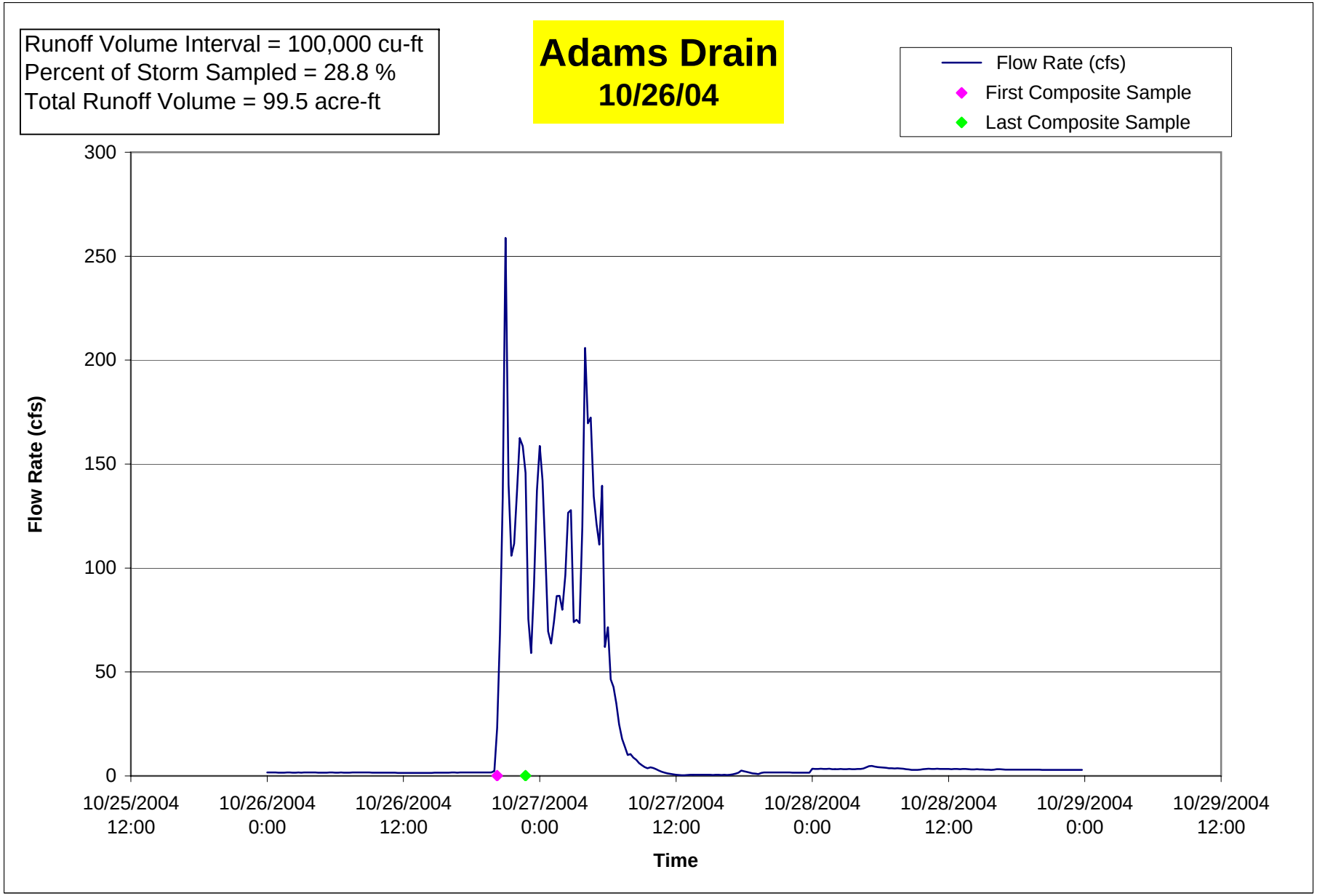


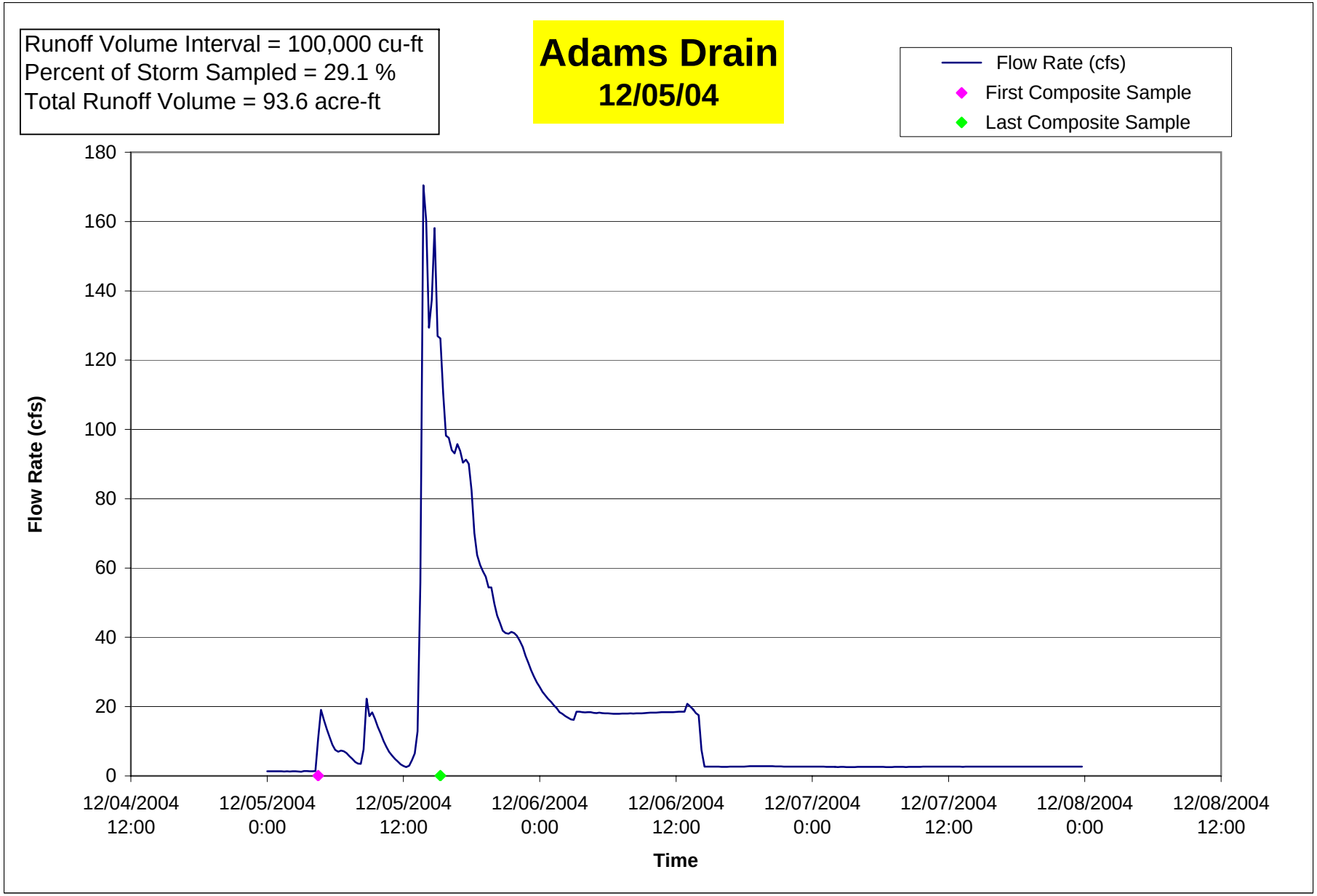
Runoff Volume Interval = 900,000 cu-ft
Percent of Storm Sampled = 97.36 %
Total Runoff Volume = 14536.96 acre-ft

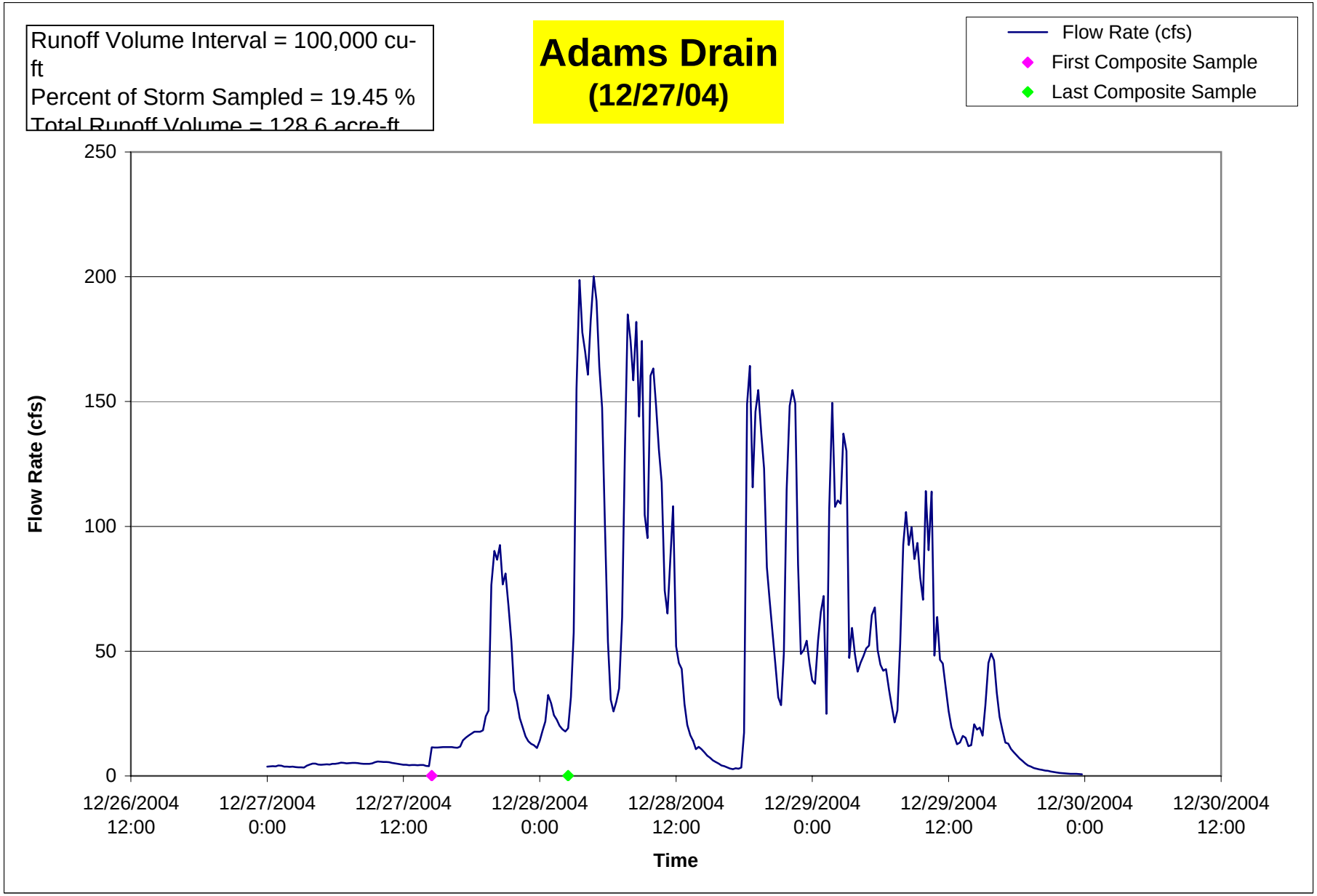
# LOS ANGELES RIVER
## (12/31/04)




Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 15.5 %
Total Runoff Volume = 177.7 acre-ft
Adams Drain
10/17/04
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
Flow Rate (cfs)
160
140
120
100
80
60
40
20
0
10/16/2004 0:00
10/16/2004 12:00
10/17/2004 0:00
10/17/2004 12:00
10/18/2004 0:00
10/18/2004 12:00
10/19/2004 0:00
10/19/2004 12:00
10/20/2004 0:00
Time

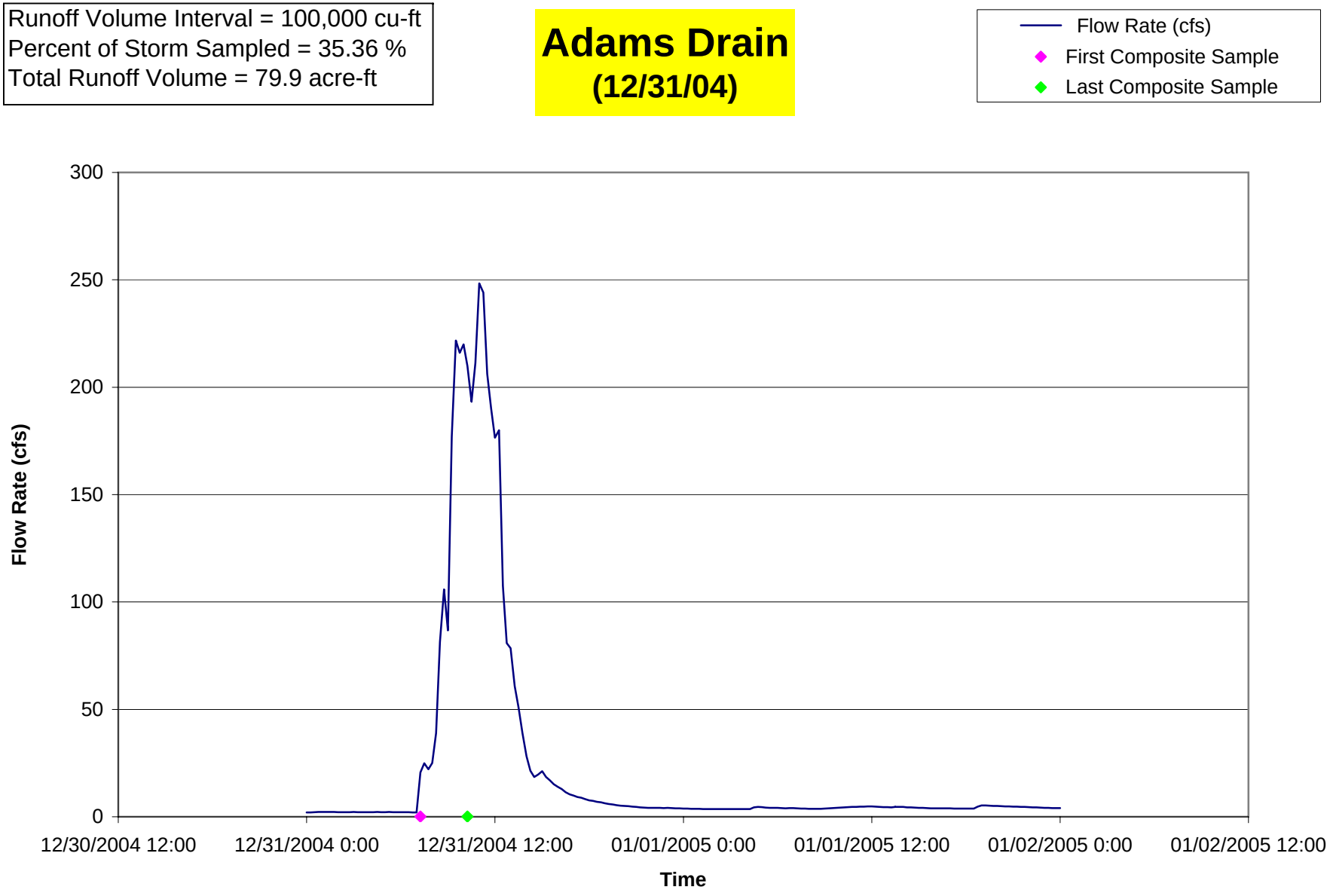

Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 28.8 %
Total Runoff Volume = 99.5 acre-ft
Adams Drain
10/26/04
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
300
250
200
150
100
50
0
Flow Rate (cfs)
10/25/2004 12:00
10/26/2004 0:00
10/26/2004 12:00
10/27/2004 0:00
10/27/2004 12:00
10/28/2004 0:00
10/28/2004 12:00
10/29/2004 0:00
10/29/2004 12:00
Time


Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 29.1 %
Total Runoff Volume = 93.6 acre-ft
Adams Drain
12/05/04
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
Flow Rate (cfs)
180
160
140
120
100
80
60
40
20
0
12/04/2004 12:00
12/05/2004 0:00
12/05/2004 12:00
12/06/2004 0:00
12/06/2004 12:00
12/07/2004 0:00
12/07/2004 12:00
12/08/2004 0:00
12/08/2004 12:00
Time


Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 19.45 %
Total Runoff Volume = 128.6 acre-ft
Adams Drain
(12/27/04)
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
250
200
150
100
50
0
Flow Rate (cfs)
12/26/2004 12:00
12/27/2004 0:00
12/27/2004 12:00
12/28/2004 0:00
12/28/2004 12:00
12/29/2004 0:00
12/29/2004 12:00
12/30/2004 0:00
12/30/2004 12:00
Time

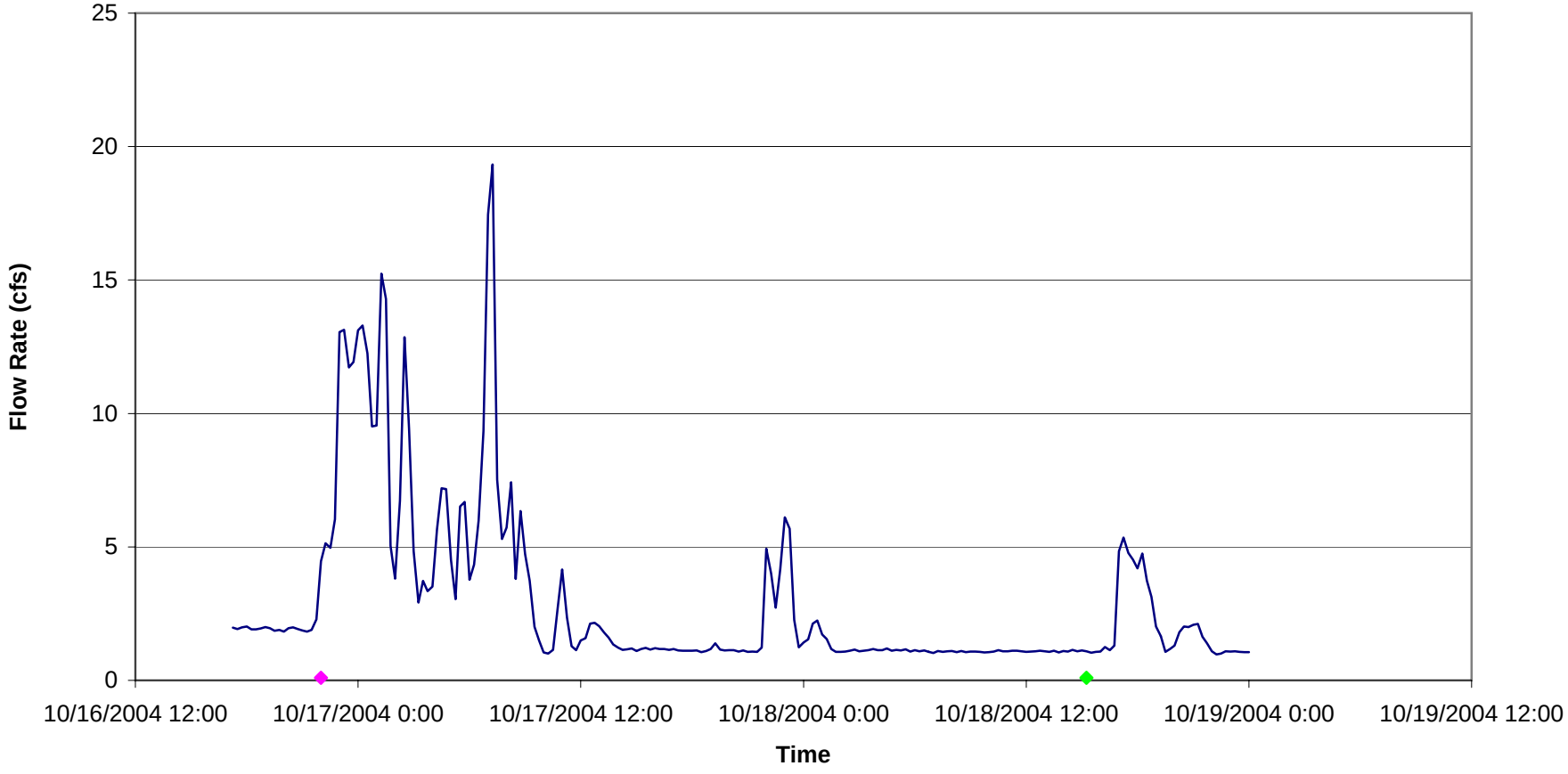
Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 35.36 %
Total Runoff Volume = 79.9 acre-ft

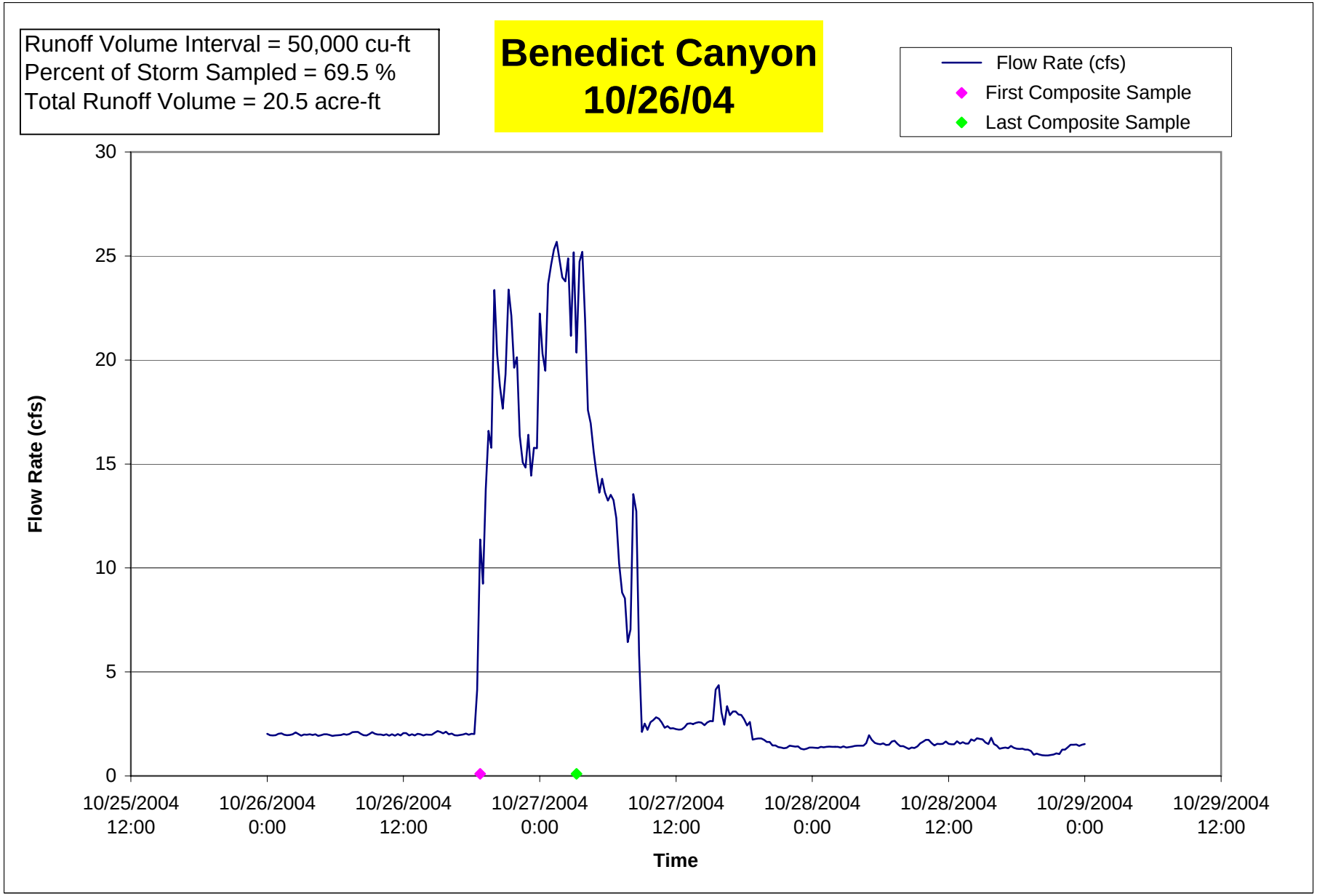
# Adams Drain
## (12/31/04)

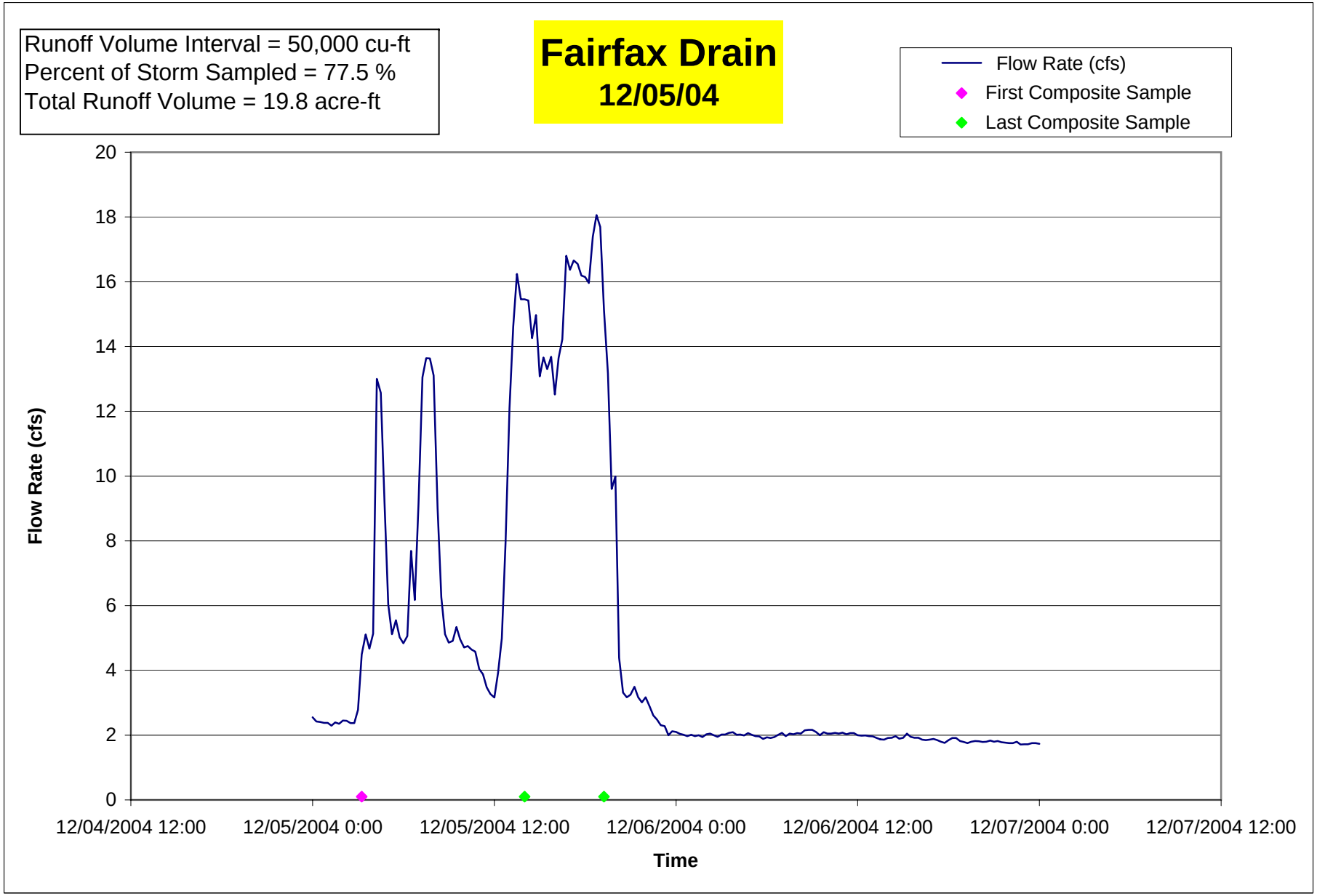


# Benedict Canyon
# 10/17/04

Runoff Volume Interval = 40,000 cu-ft
Percent of Storm Sampled = 93.7 %
Total Runoff Volume = 11.9 acre-ft

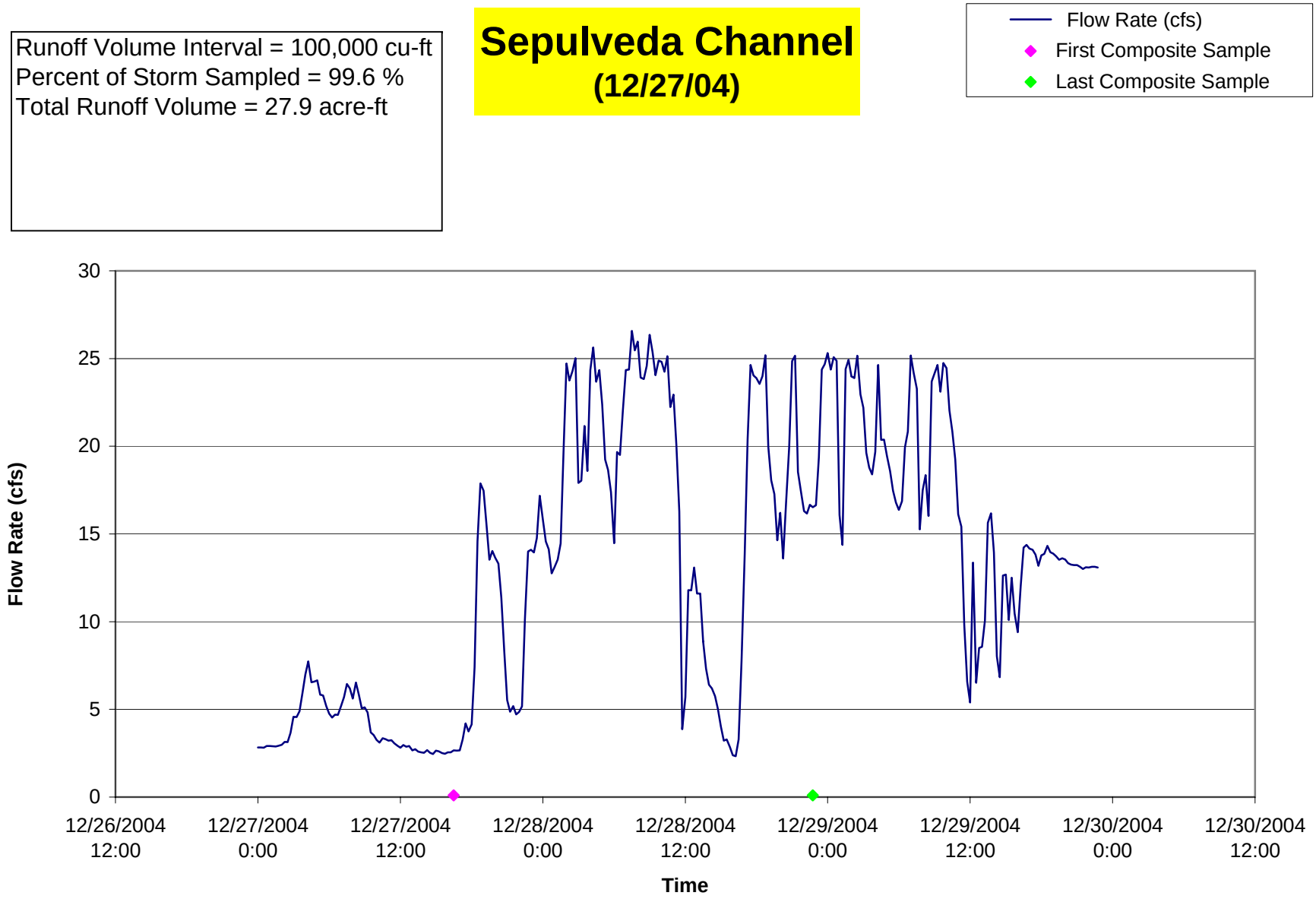



Runoff Volume Interval = 50,000 cu-ft
Percent of Storm Sampled = 69.5 %
Total Runoff Volume = 20.5 acre-ft
Benedict Canyon
10/26/04
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
Flow Rate (cfs)
30
25
20
15
10
5
0
10/25/2004 12:00
10/26/2004 0:00
10/26/2004 12:00
10/27/2004 0:00
10/27/2004 12:00
10/28/2004 0:00
10/28/2004 12:00
10/29/2004 0:00
10/29/2004 12:00
Time


Runoff Volume Interval = 50,000 cu-ft
Percent of Storm Sampled = 77.5 %
Total Runoff Volume = 19.8 acre-ft
Fairfax Drain
12/05/04
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
Flow Rate (cfs)
0
2
4
6
8
10
12
14
16
18
20
12/04/2004 12:00
12/05/2004 0:00
12/05/2004 12:00
12/06/2004 0:00
12/06/2004 12:00
12/07/2004 0:00
12/07/2004 12:00
Time

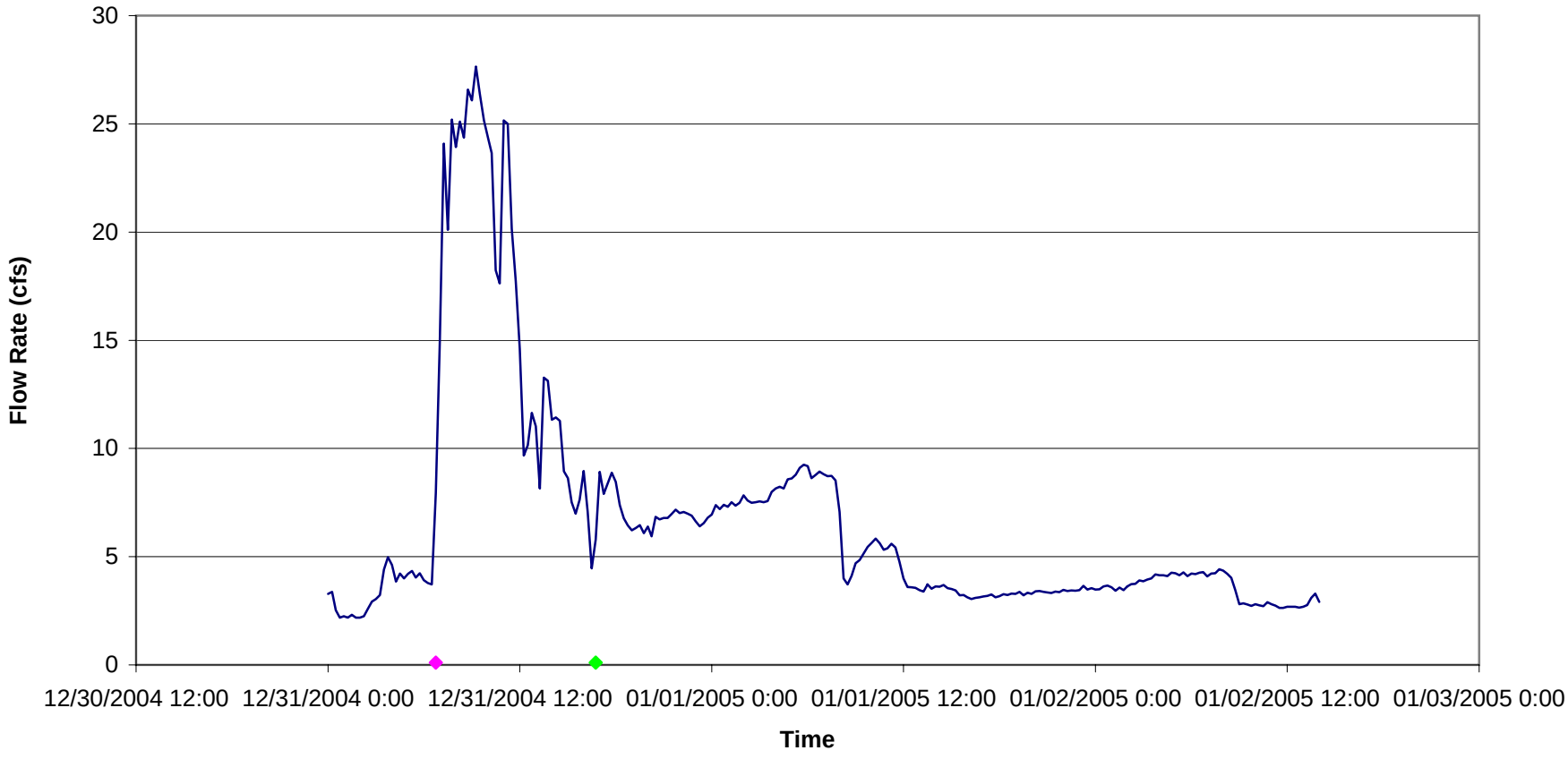
Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 99.6 %
Total Runoff Volume = 27.9 acre-ft

# Sepulveda Channel
## (12/27/04)



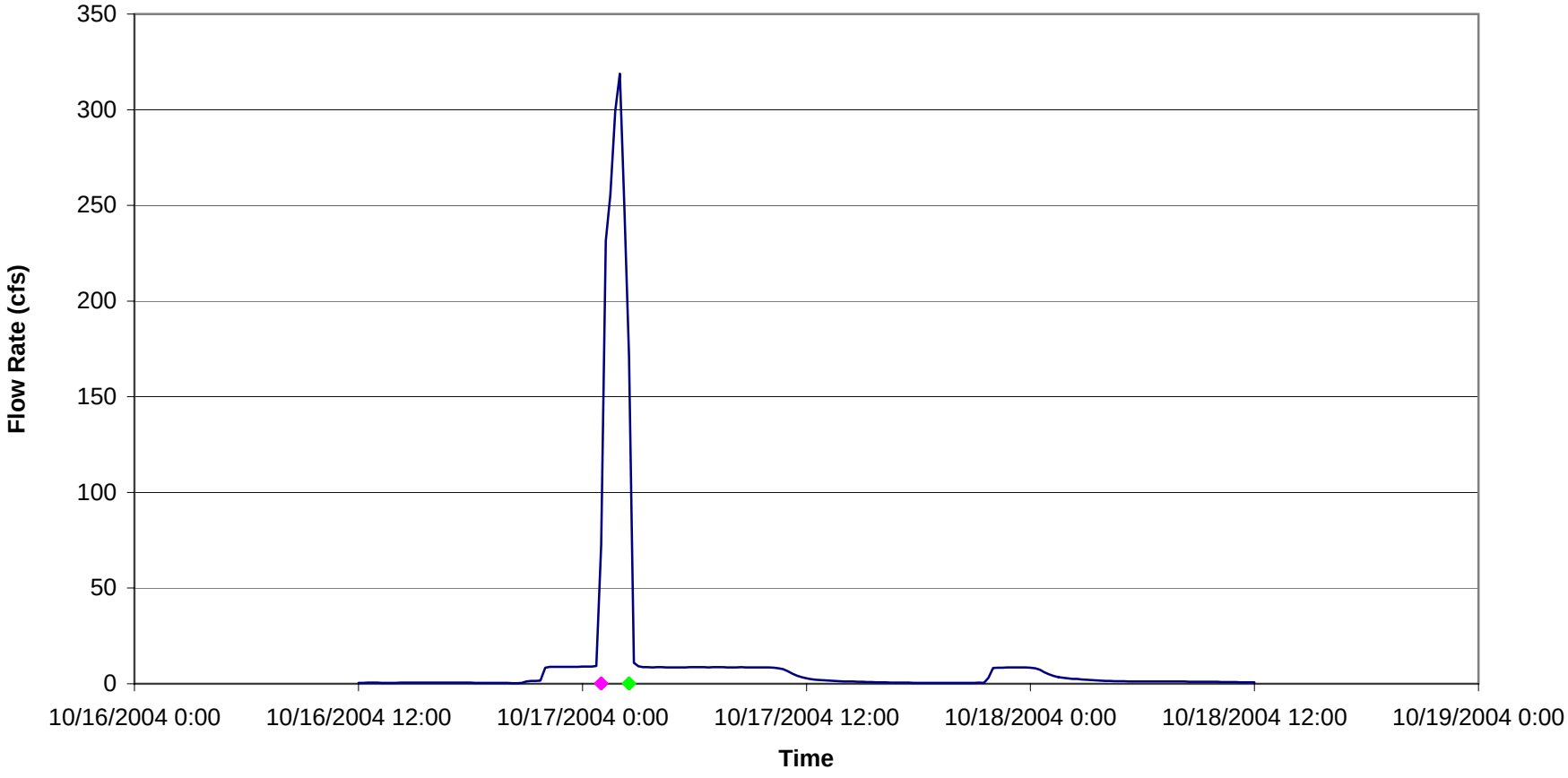
Runoff Volume Interval = 50,000 cu-ft
Percent of Storm Sampled = 67.2 %
Total Runoff Volume = 23.17 acre-ft

# Benedict Canyon
## (12/31/04)



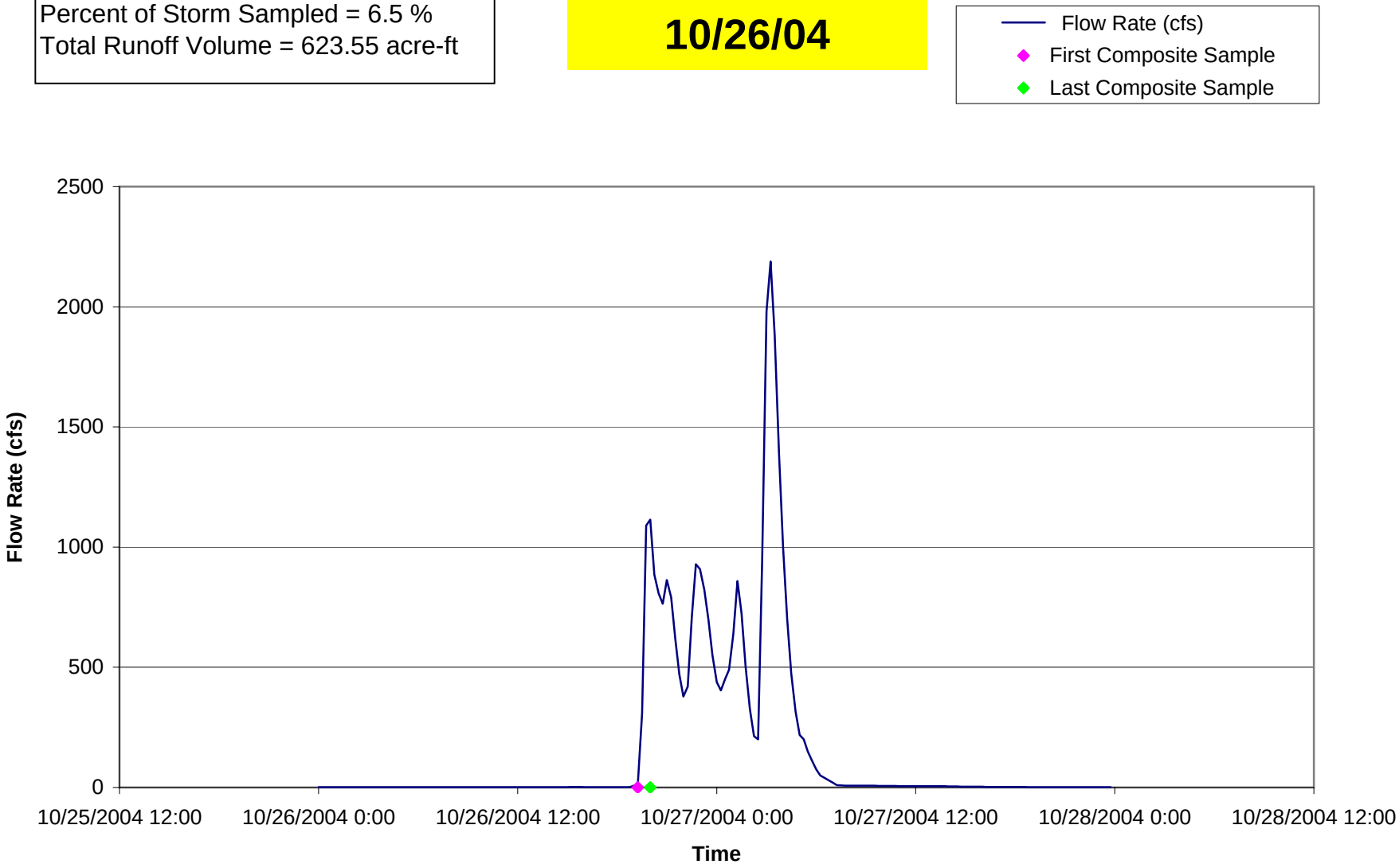
# Centinela Channel
# 10/17/04

Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 81.96 %
Total Runoff Volume = 38.73 acre-ft



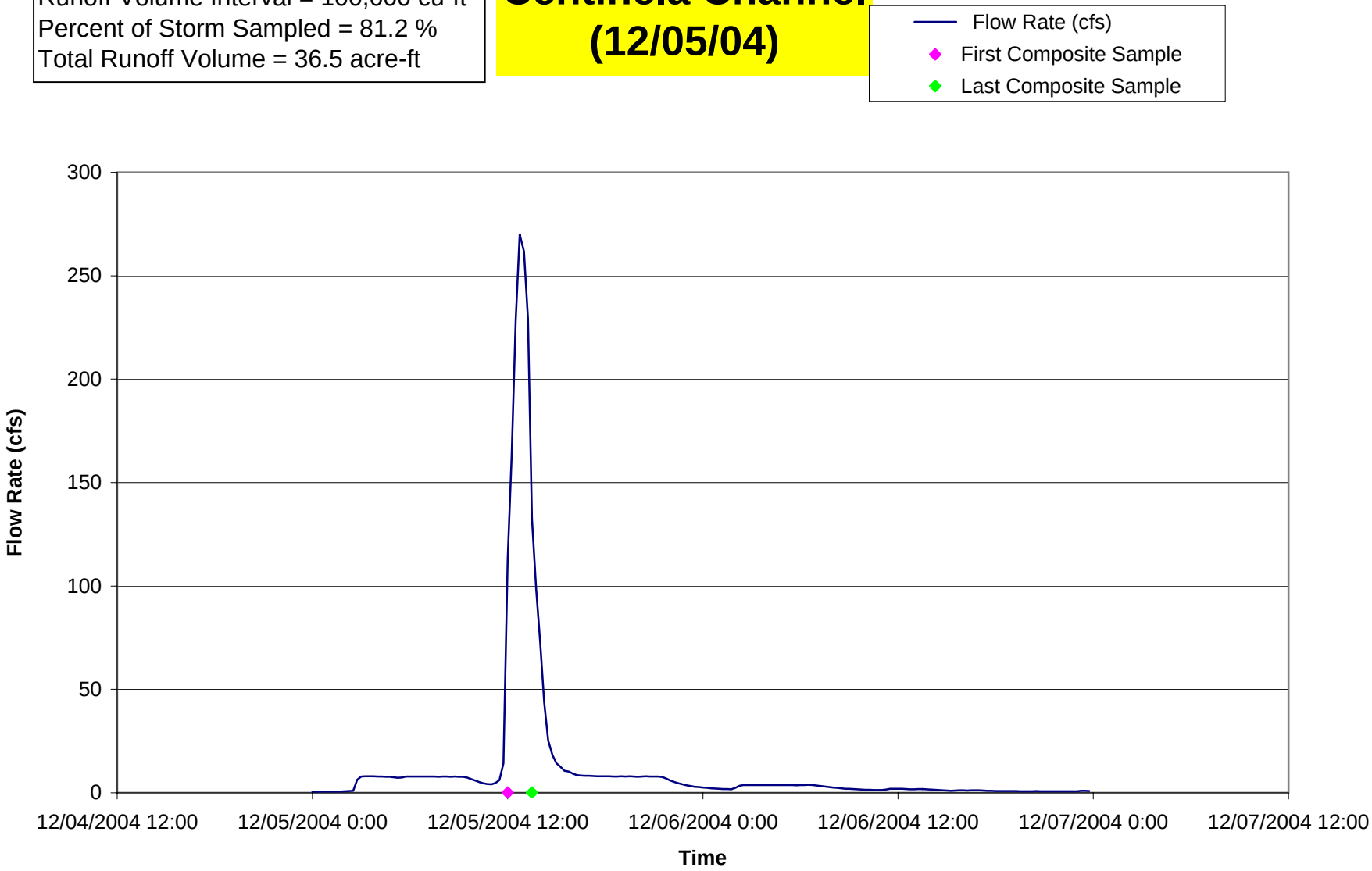
Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 6.5 %
Total Runoff Volume = 623.55 acre-ft

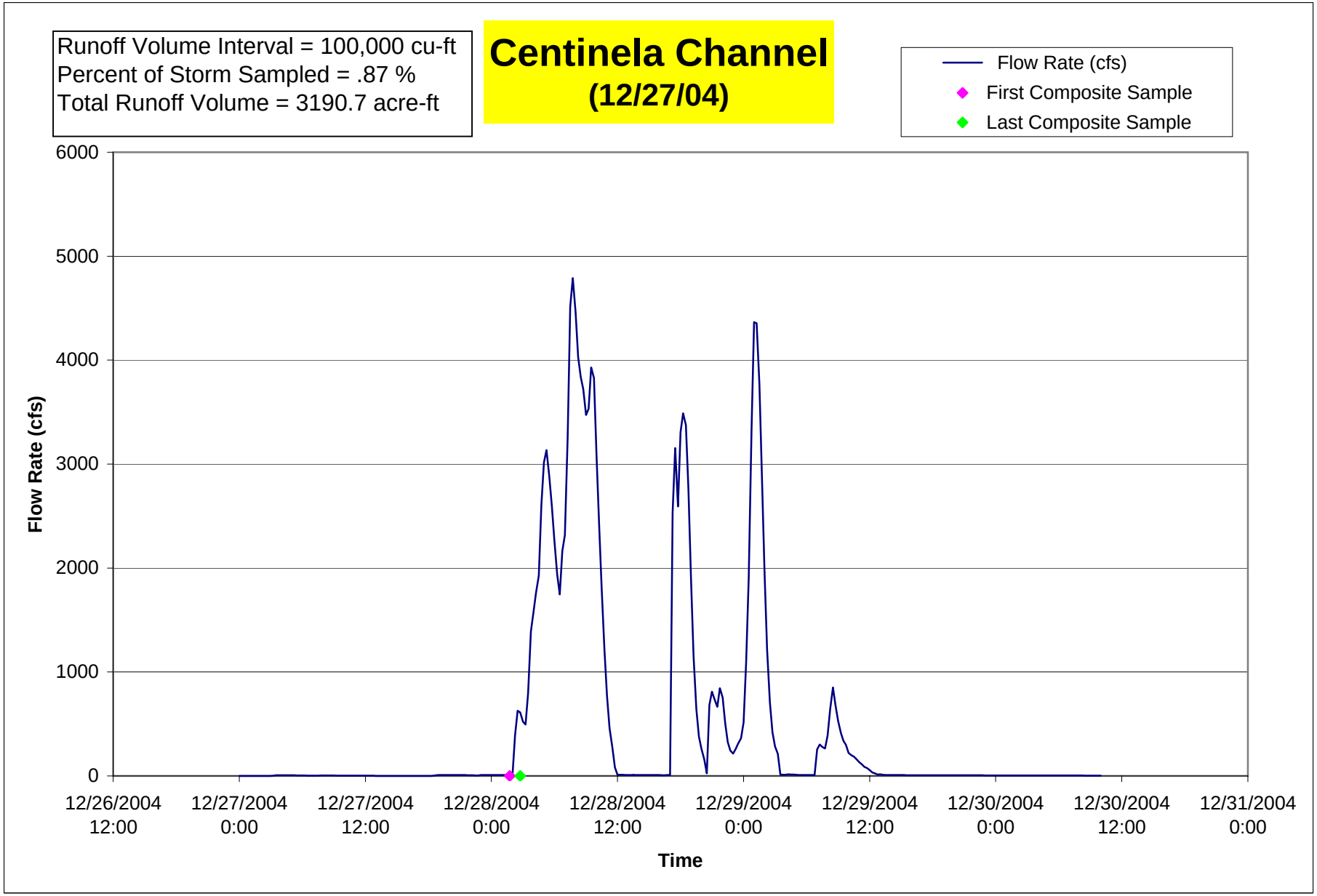
# Centnila Channel 10/26/04



Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 81.2 %
Total Runoff Volume = 36.5 acre-ft

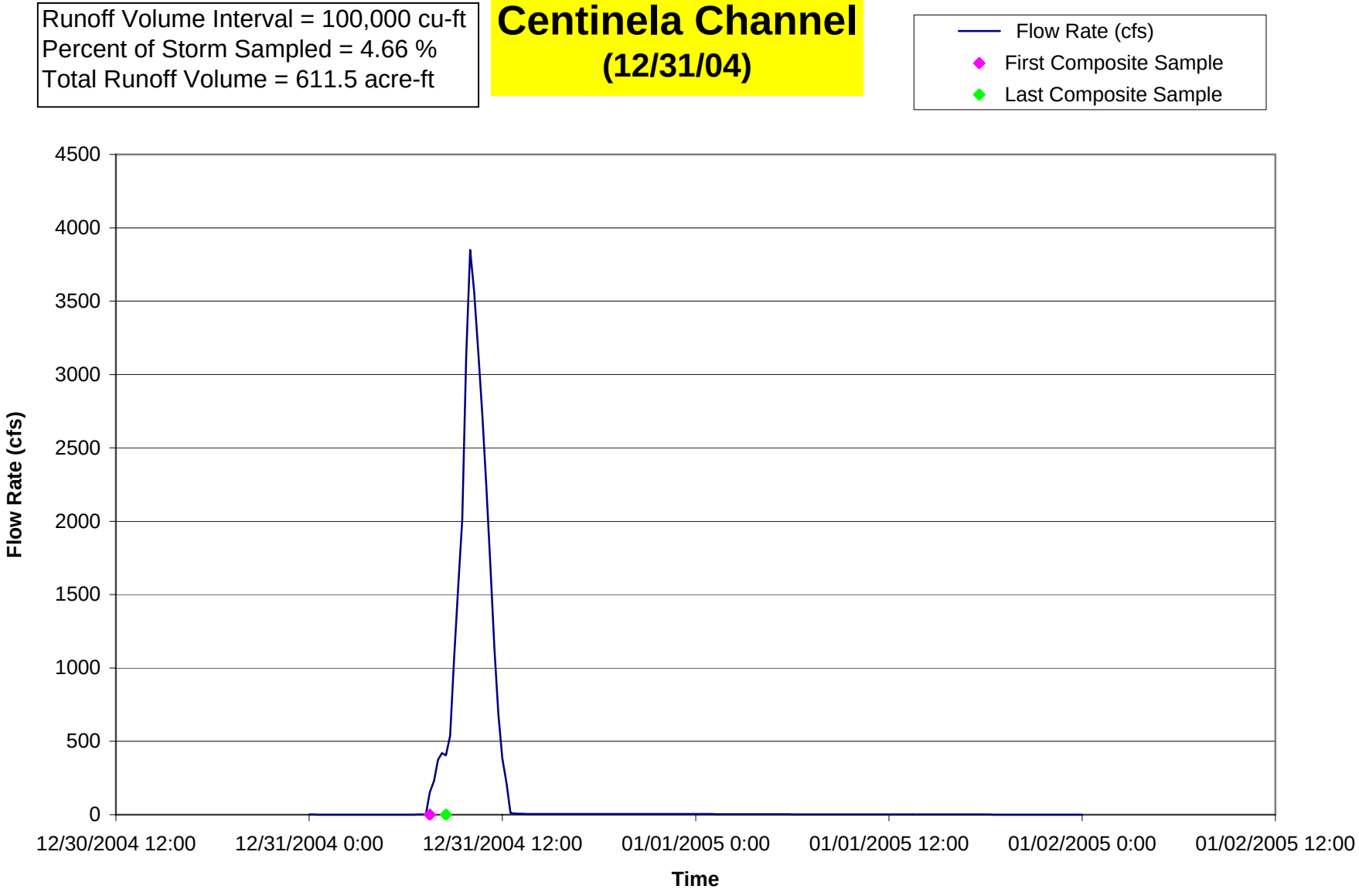
# Centinela Channel (12/05/04)

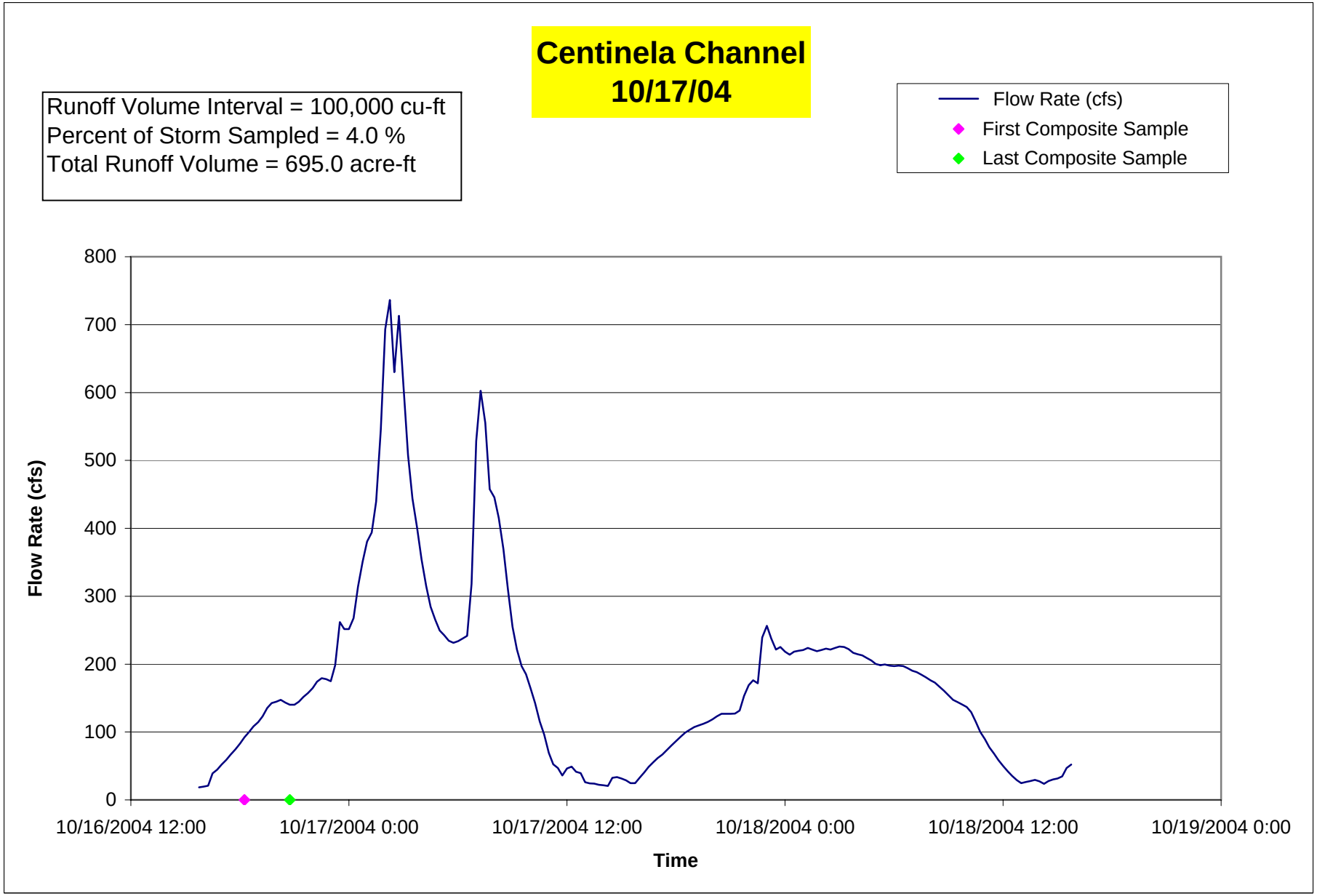


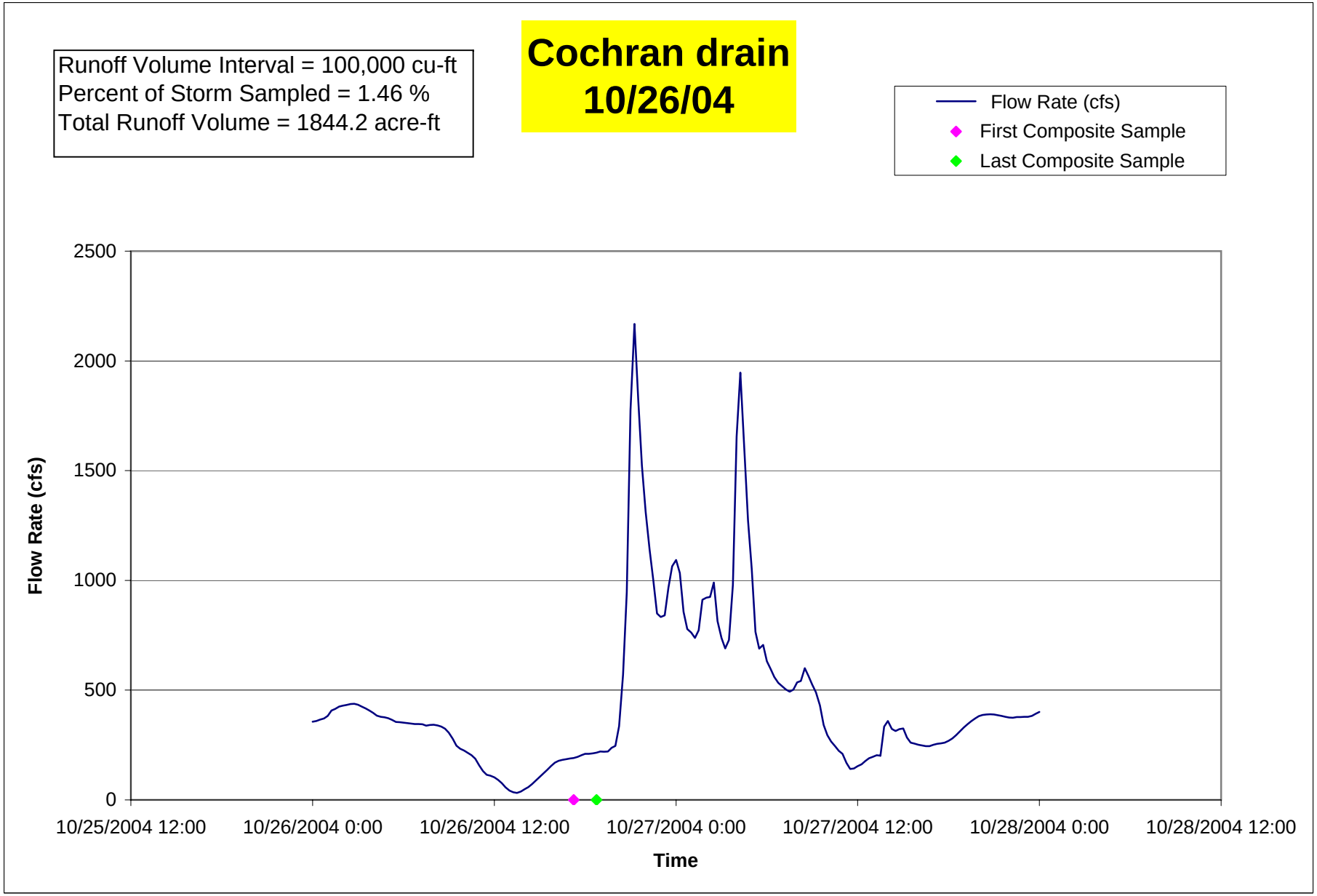

Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = .87 %
Total Runoff Volume = 3190.7 acre-ft
Centinela Channel
(12/27/04)
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
6000
5000
4000
3000
2000
1000
0
Flow Rate (cfs)
12/26/2004 12:00
12/27/2004 0:00
12/27/2004 12:00
12/28/2004 0:00
12/28/2004 12:00
12/29/2004 0:00
12/29/2004 12:00
12/30/2004 0:00
12/30/2004 12:00
12/31/2004 0:00
Time

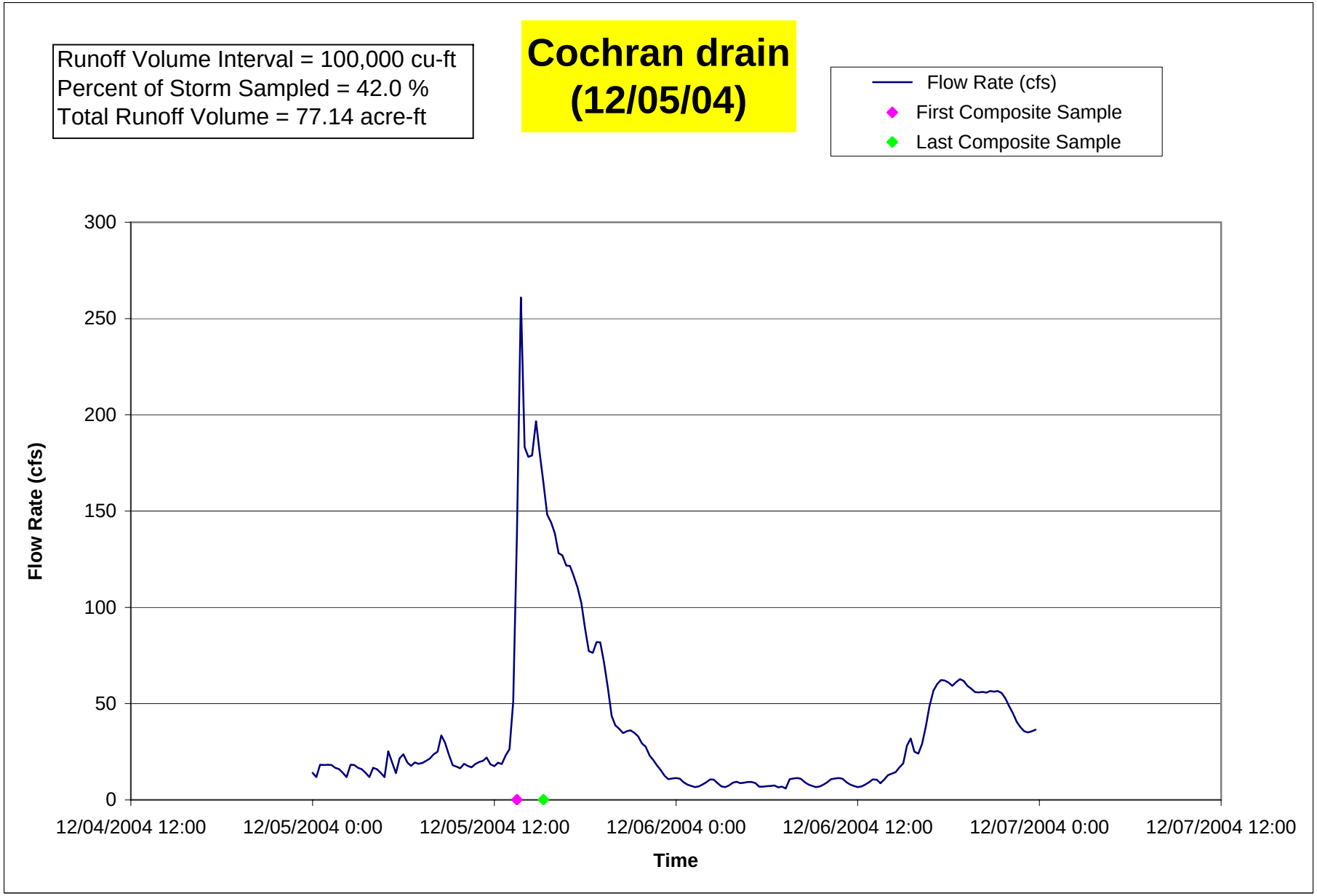
Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 4.66 %
Total Runoff Volume = 611.5 acre-ft

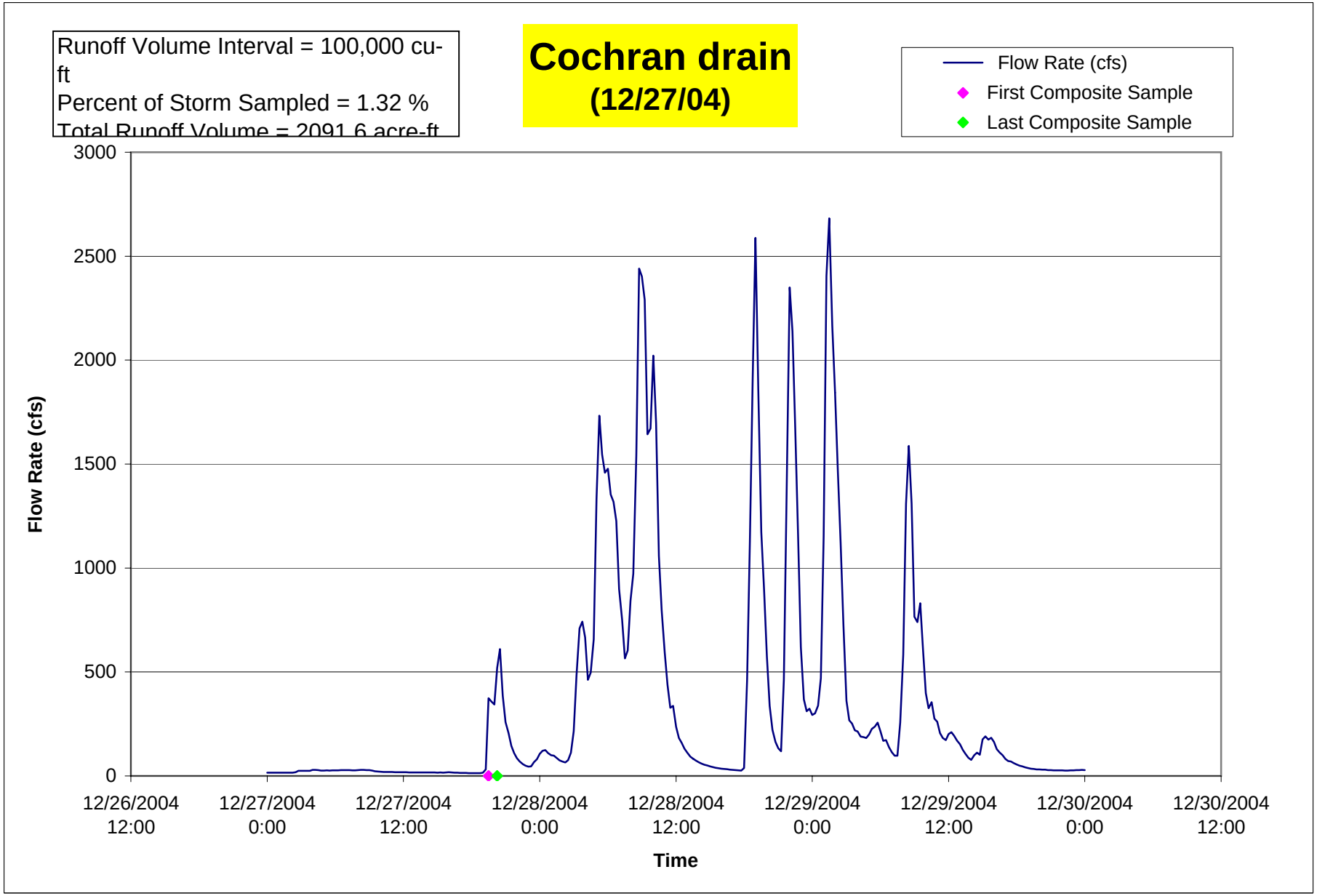
# Centinela Channel
## (12/31/04)




Centinela Channel
10/17/04
Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 4.0 %
Total Runoff Volume = 695.0 acre-ft
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
800
700
600
500
400
300
200
100
0
Flow Rate (cfs)
10/16/2004 12:00
10/17/2004 0:00
10/17/2004 12:00
10/18/2004 0:00
10/18/2004 12:00
10/19/2004 0:00
Time

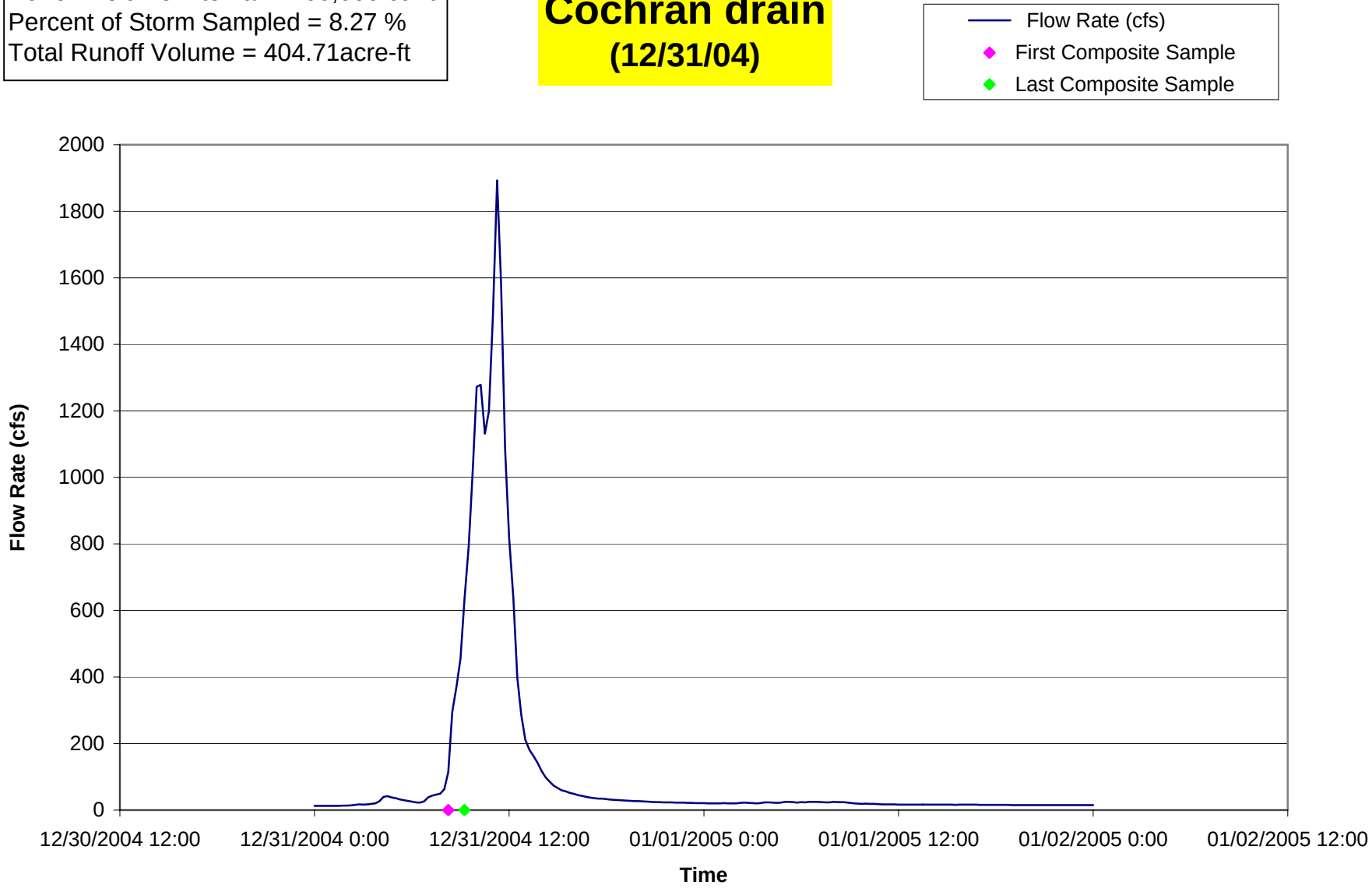

Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 1.46 %
Total Runoff Volume = 1844.2 acre-ft
Cochran drain
10/26/04
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
2500
2000
1500
1000
500
0
Flow Rate (cfs)
10/25/2004 12:00
10/26/2004 0:00
10/26/2004 12:00
10/27/2004 0:00
10/27/2004 12:00
10/28/2004 0:00
10/28/2004 12:00
Time


Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 42.0 %
Total Runoff Volume = 77.14 acre-ft
Cochran drain
(12/05/04)
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
300
250
200
150
100
50
0
Flow Rate (cfs)
12/04/2004 12:00
12/05/2004 0:00
12/05/2004 12:00
12/06/2004 0:00
12/06/2004 12:00
12/07/2004 0:00
12/07/2004 12:00
Time


Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 1.32 %
Total Runoff Volume = 2091.6 acre-ft
Cochran drain
(12/27/04)
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
3000
2500
2000
1500
1000
500
0
Flow Rate (cfs)
12/26/2004 12:00
12/27/2004 0:00
12/27/2004 12:00
12/28/2004 0:00
12/28/2004 12:00
12/29/2004 0:00
12/29/2004 12:00
12/30/2004 0:00
12/30/2004 12:00
Time

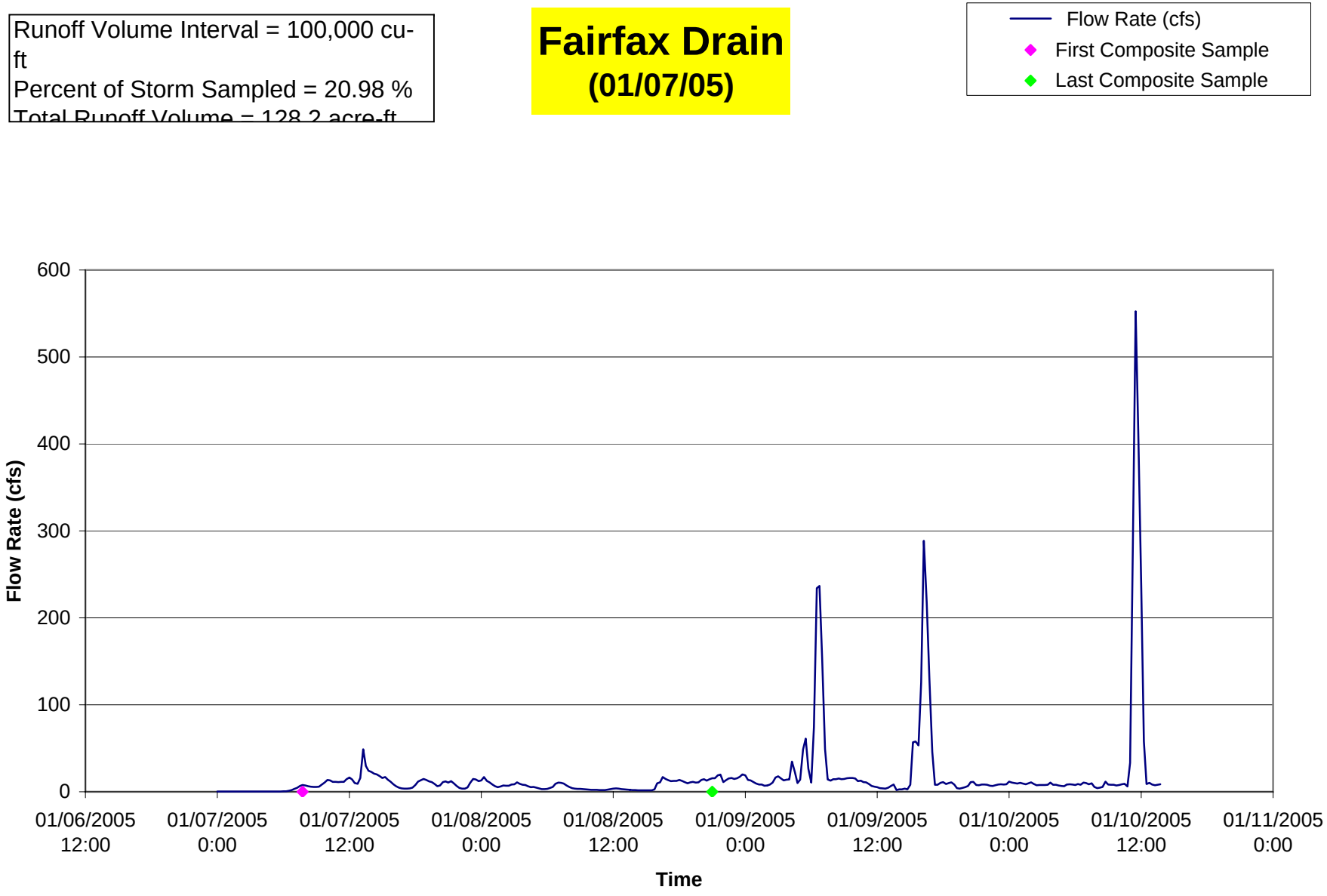
Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 8.27 %
Total Runoff Volume = 404.71acre-ft

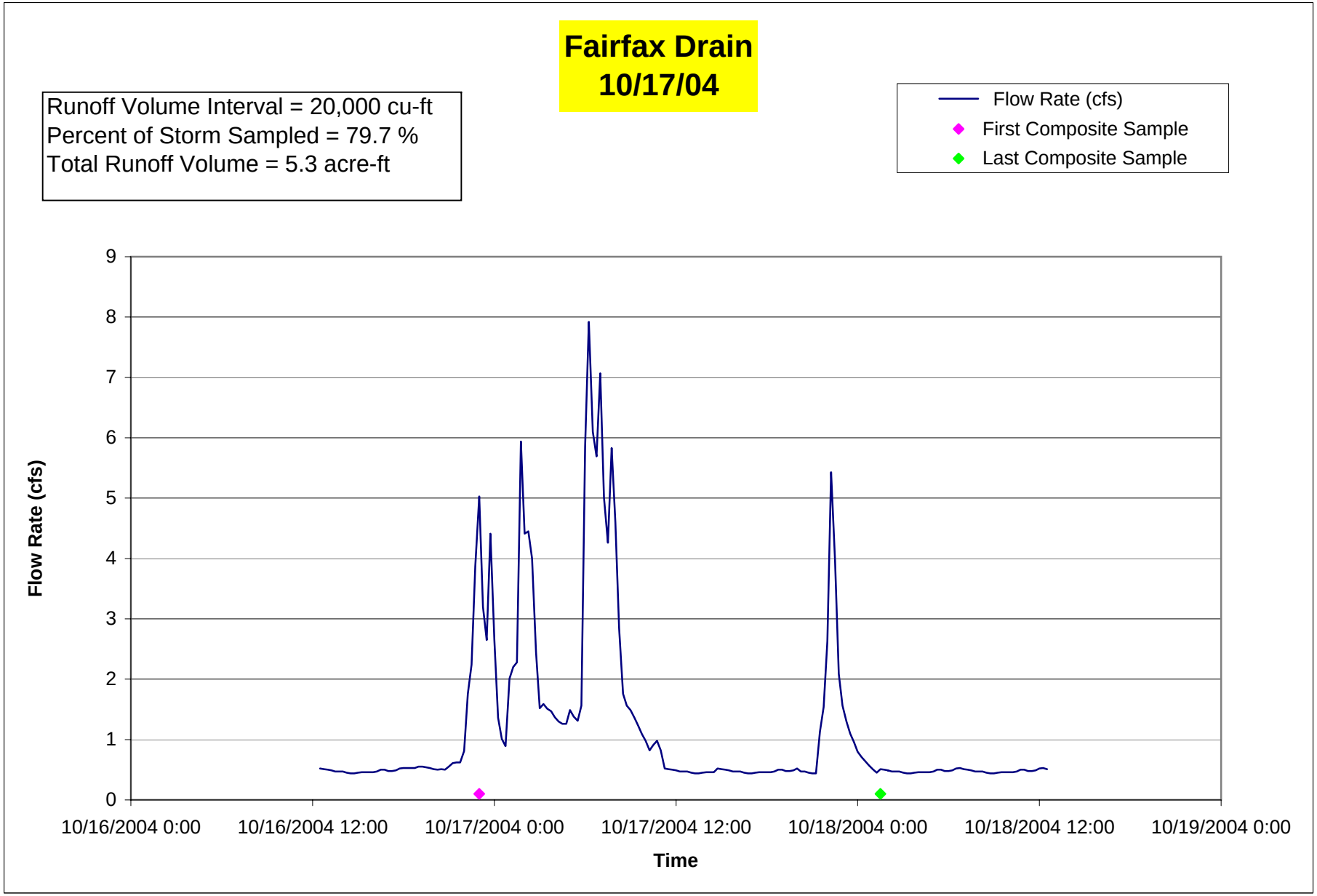
# Cochran drain (12/31/04)

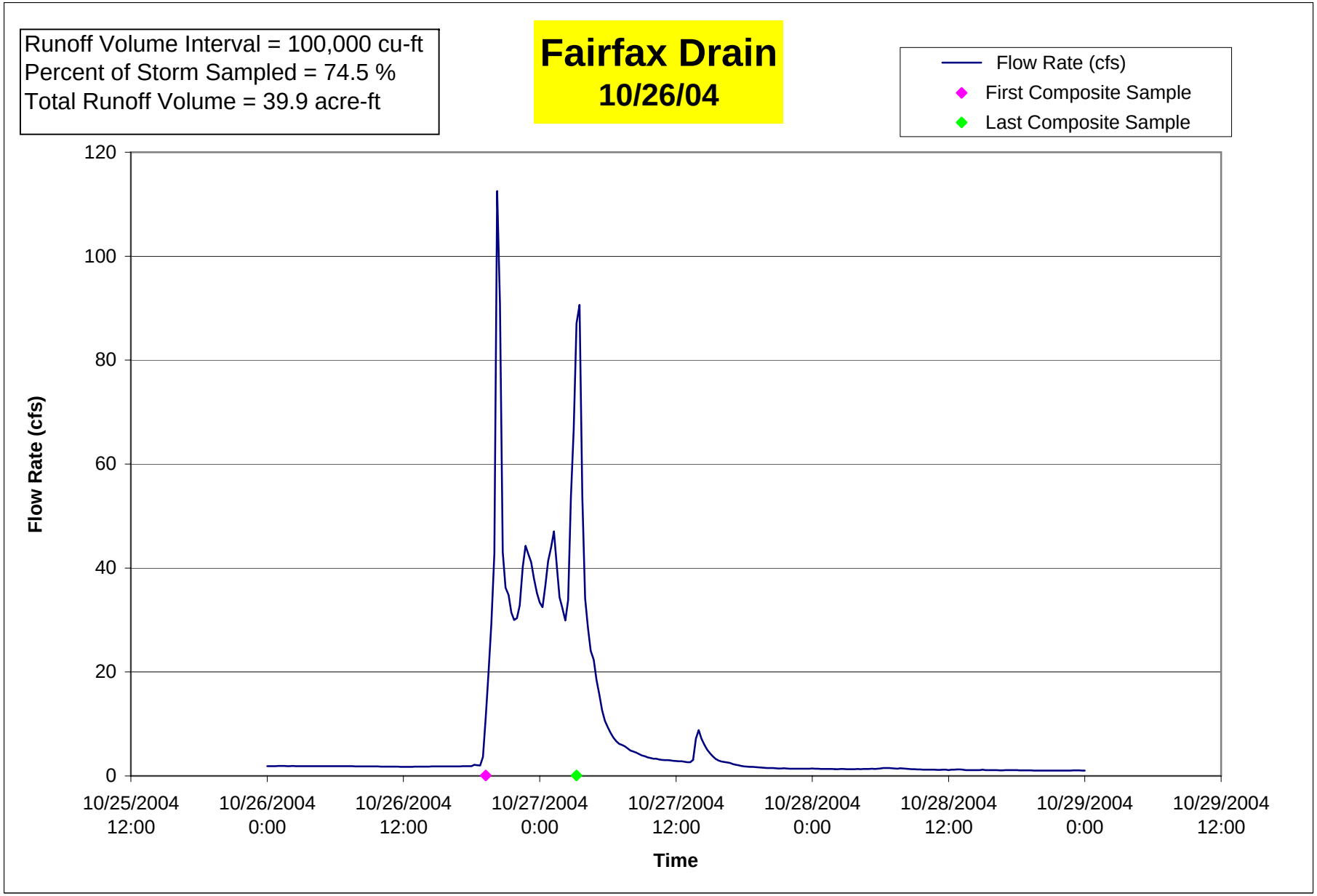


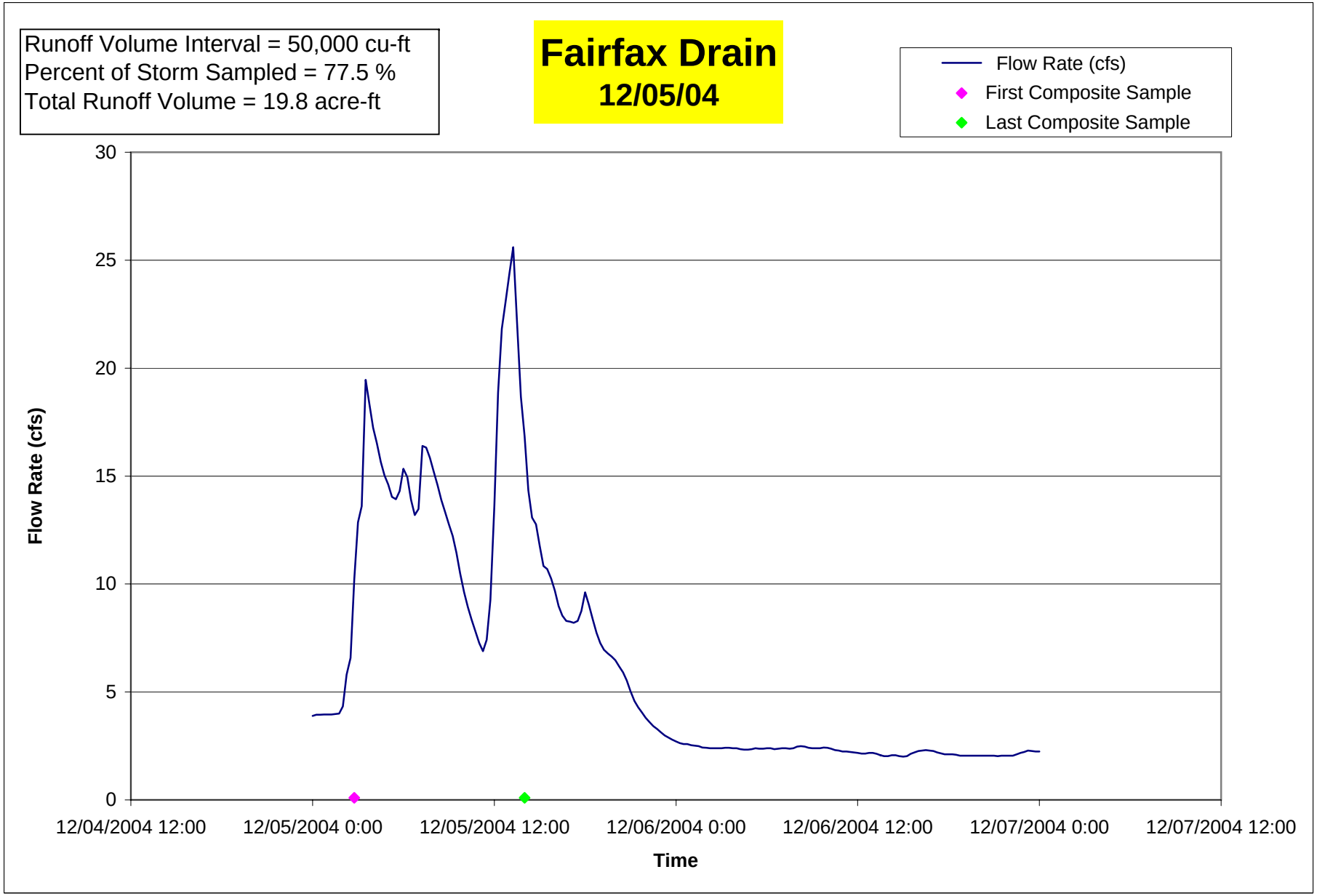
Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 20.98 %
Total Runoff Volume = 128.2 acre-ft

# Fairfax Drain
## (01/07/05)



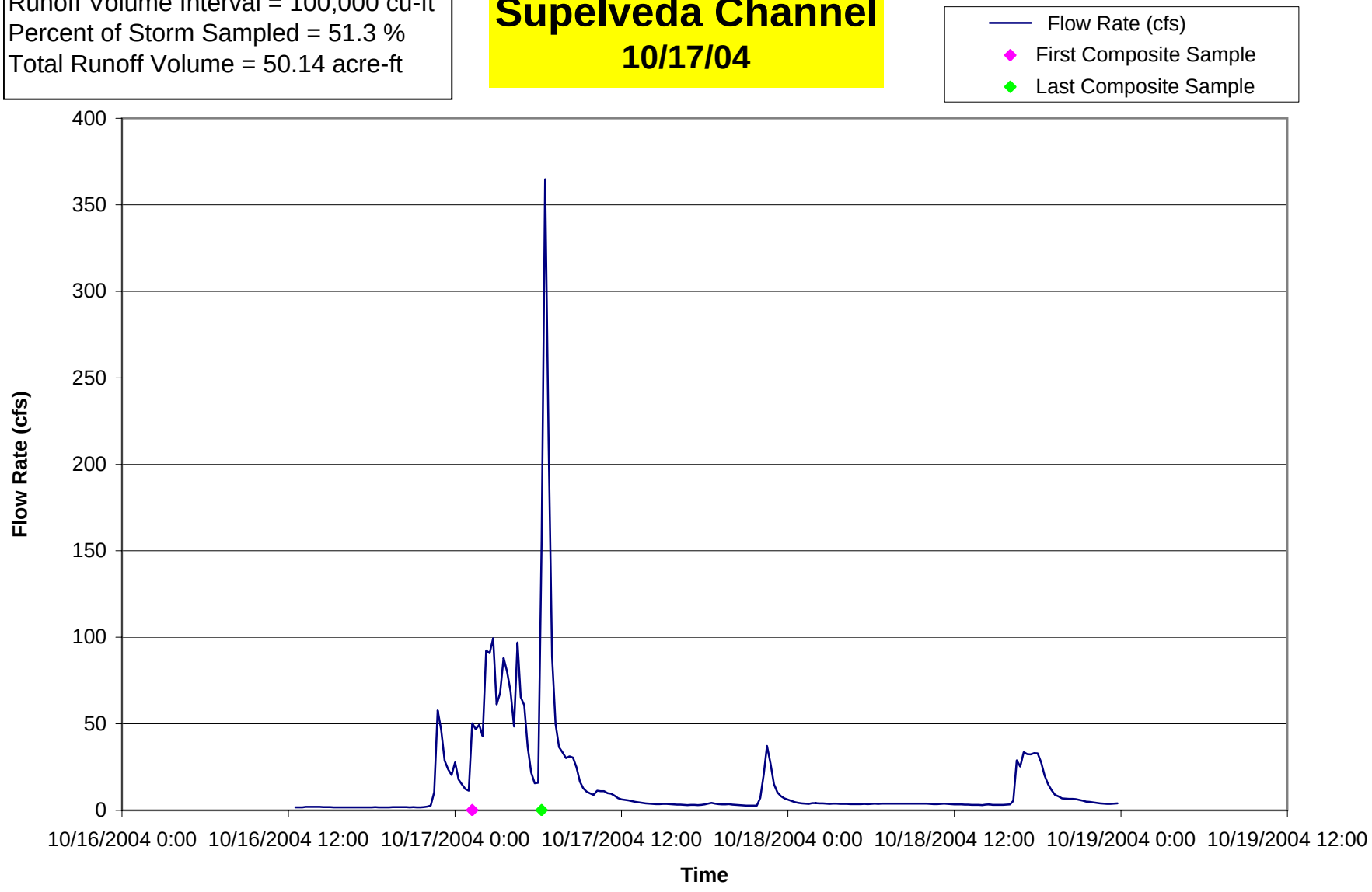

Fairfax Drain
10/17/04
Runoff Volume Interval = 20,000 cu-ft
Percent of Storm Sampled = 79.7 %
Total Runoff Volume = 5.3 acre-ft
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
Flow Rate (cfs)
0
1
2
3
4
5
6
7
8
9
10/16/2004 0:00
10/16/2004 12:00
10/17/2004 0:00
10/17/2004 12:00
10/18/2004 0:00
10/18/2004 12:00
10/19/2004 0:00
Time

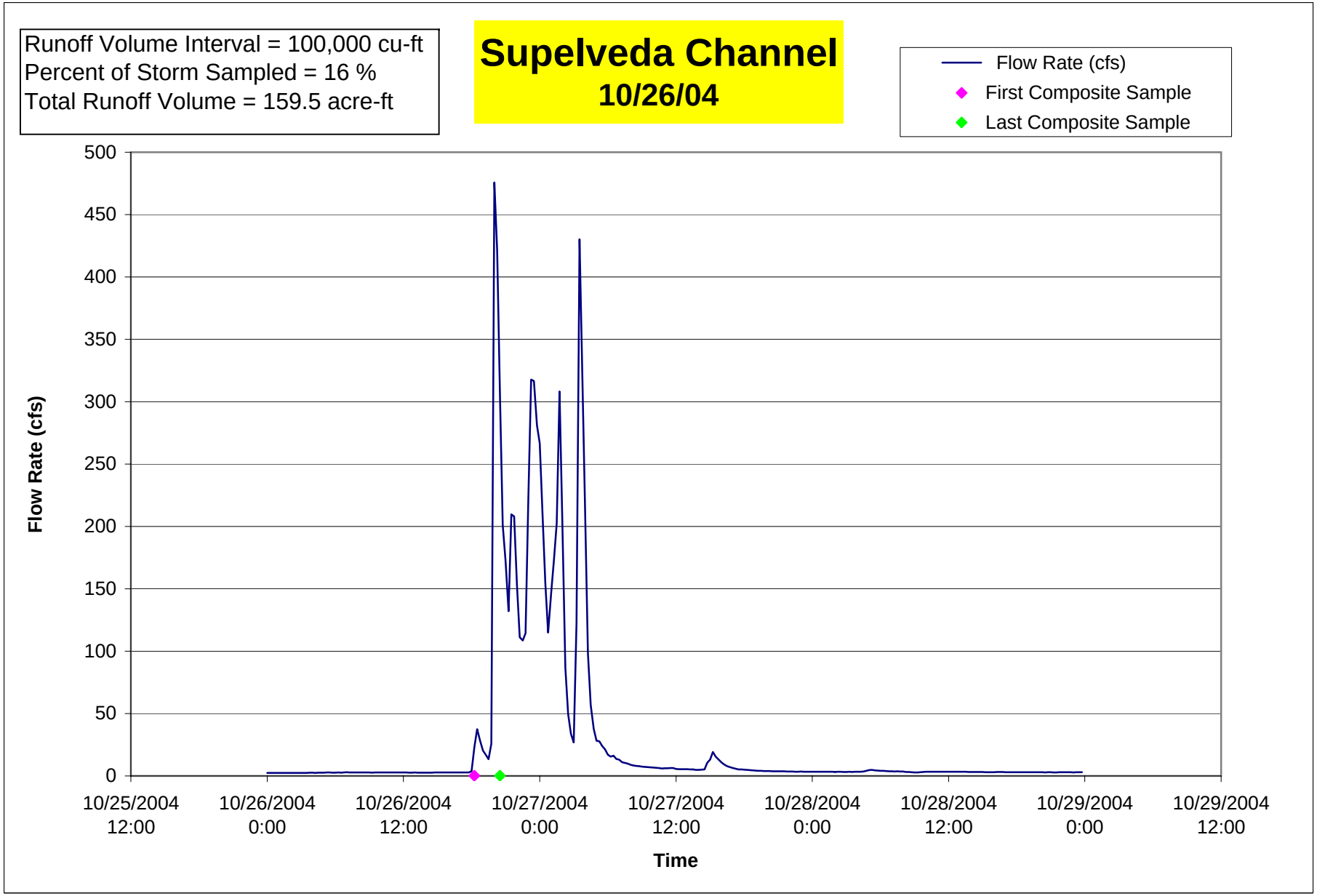

Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 74.5 %
Total Runoff Volume = 39.9 acre-ft
Fairfax Drain
10/26/04
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
Flow Rate (cfs)
120
100
80
60
40
20
0
10/25/2004 12:00
10/26/2004 0:00
10/26/2004 12:00
10/27/2004 0:00
10/27/2004 12:00
10/28/2004 0:00
10/28/2004 12:00
10/29/2004 0:00
10/29/2004 12:00
Time

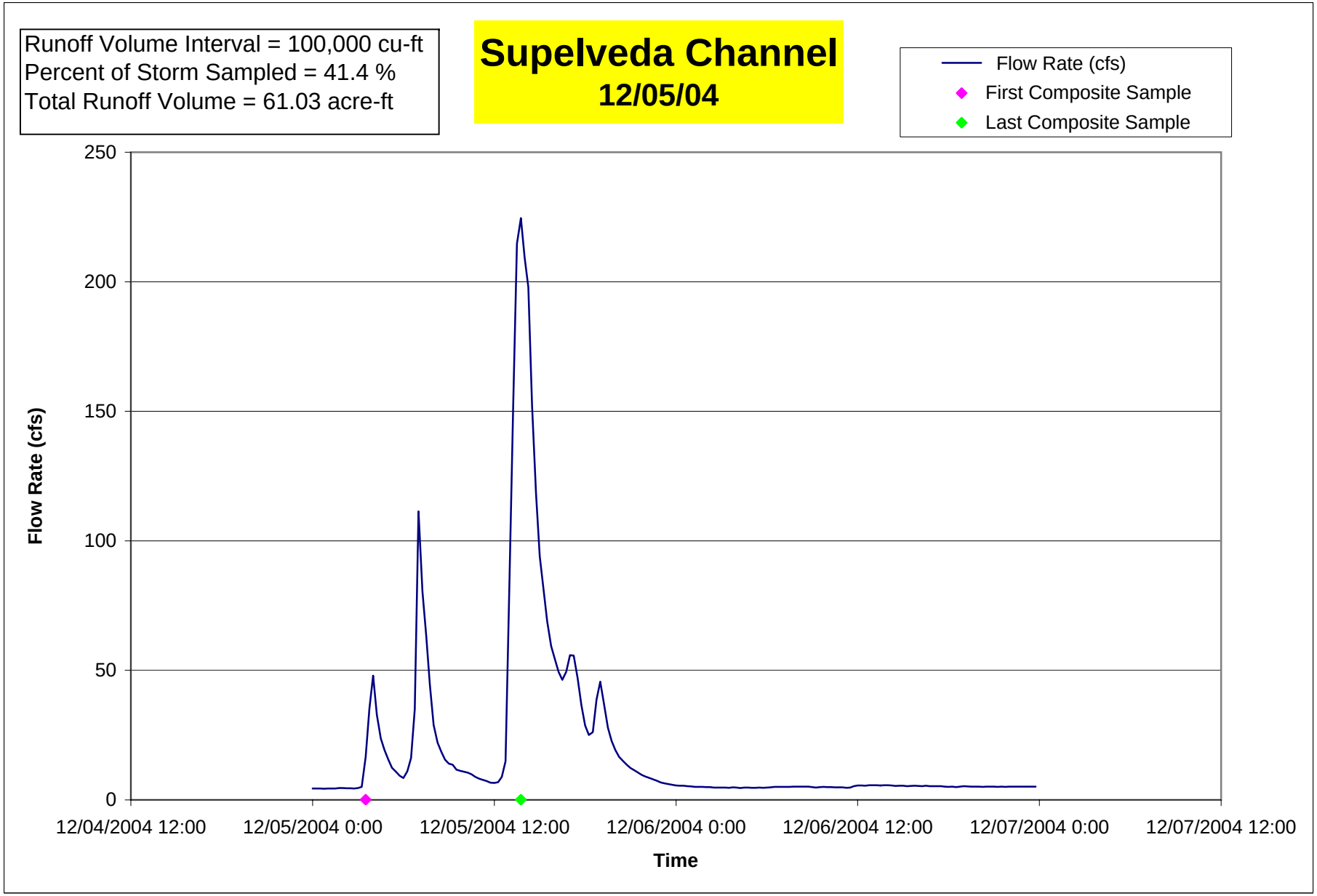

Runoff Volume Interval = 50,000 cu-ft
Percent of Storm Sampled = 77.5 %
Total Runoff Volume = 19.8 acre-ft
Fairfax Drain
12/05/04
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
Flow Rate (cfs)
30
25
20
15
10
5
0
12/04/2004 12:00
12/05/2004 0:00
12/05/2004 12:00
12/06/2004 0:00
12/06/2004 12:00
12/07/2004 0:00
12/07/2004 12:00
Time

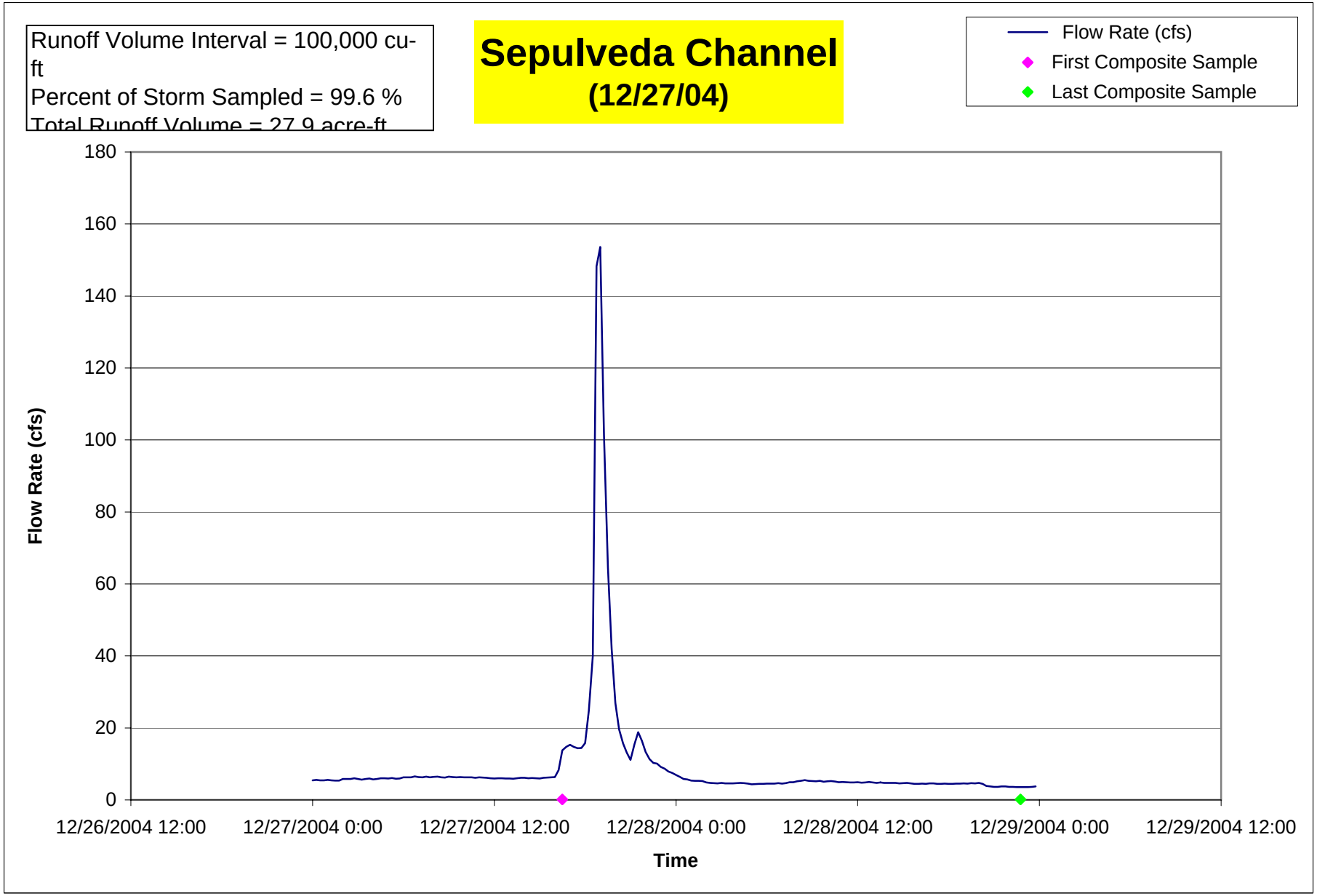
Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 51.3 %
Total Runoff Volume = 50.14 acre-ft

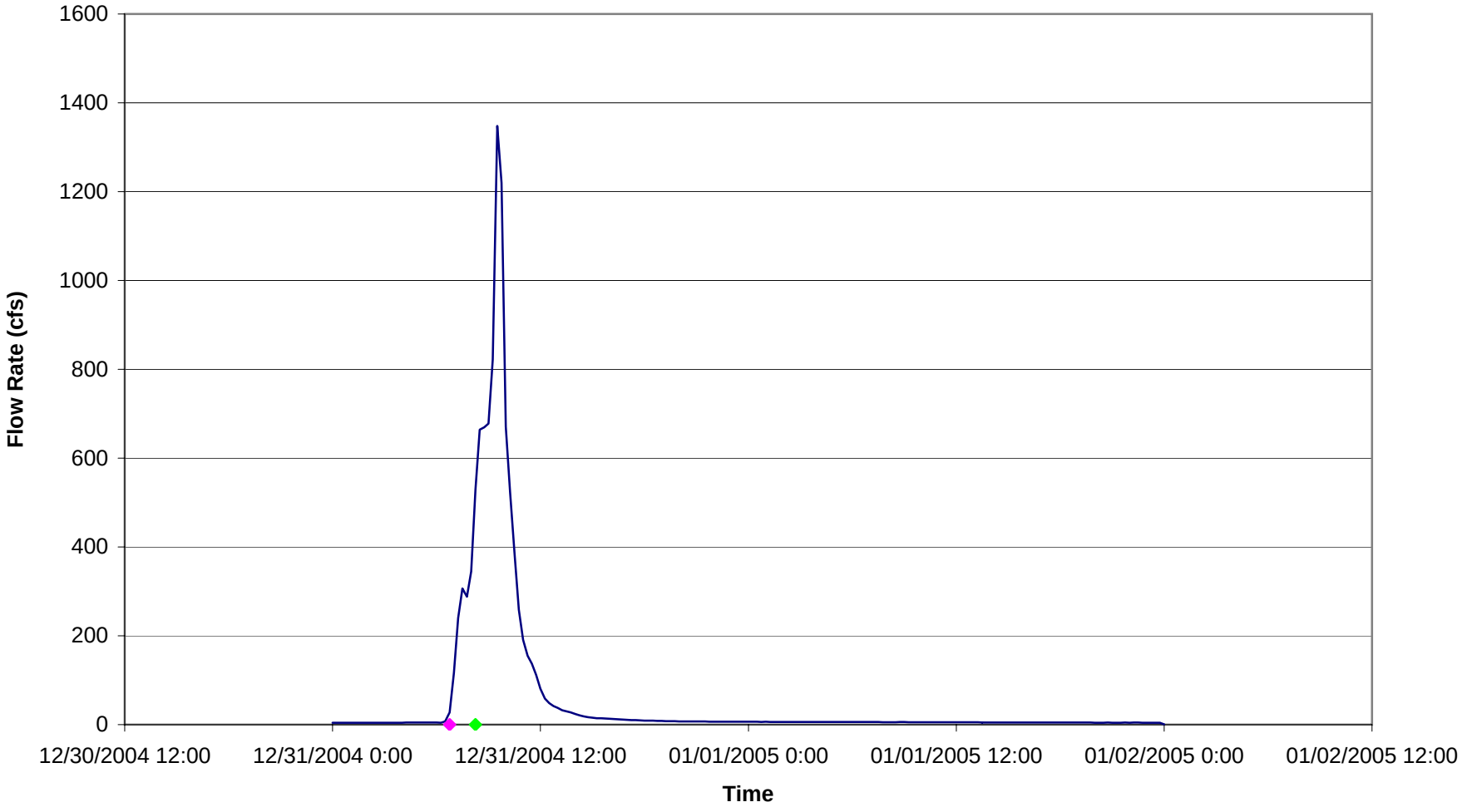
# Supelveda Channel
## 10/17/04




Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 16 %
Total Runoff Volume = 159.5 acre-ft
Supelveda Channel
10/26/04
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
Flow Rate (cfs)
500
450
400
350
300
250
200
150
100
50
0
10/25/2004 12:00
10/26/2004 0:00
10/26/2004 12:00
10/27/2004 0:00
10/27/2004 12:00
10/28/2004 0:00
10/28/2004 12:00
10/29/2004 0:00
10/29/2004 12:00
Time


Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 41.4 %
Total Runoff Volume = 61.03 acre-ft
Supelveda Channel
12/05/04
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
Flow Rate (cfs)
250
200
150
100
50
0
12/04/2004 12:00
12/05/2004 0:00
12/05/2004 12:00
12/06/2004 0:00
12/06/2004 12:00
12/07/2004 0:00
12/07/2004 12:00
Time


Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 99.6 %
Total Runoff Volume = 27.9 acre-ft
Sepulveda Channel
(12/27/04)
Flow Rate (cfs)
First Composite Sample
Last Composite Sample
Flow Rate (cfs)
180
160
140
120
100
80
60
40
20
0
12/26/2004 12:00
12/27/2004 0:00
12/27/2004 12:00
12/28/2004 0:00
12/28/2004 12:00
12/29/2004 0:00
12/29/2004 12:00
Time

Runoff Volume Interval = 100,000 cu-ft
Percent of Storm Sampled = 15.4 %
Total Runoff Volume = 617.57 acre-ft

# Sepulveda Channel
## (12/31/04)