Appendix 3

Synthetic Unit Hydrographs:
2-year, 10-year & 100-year:
1-hour & 24-hour Storm Events

Thursday, May 29, 2025 3:55:09 PM

U n i t H y d r o g r a p h A n a l y s i s

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Study date 05/15/25 File: lmcr12.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6619

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

INDEPENDENCE AT CANYON SPRINGS
PRE-DEVELOPMENT CONDITION
2-YR, 1-HR STORM
HYDROGRAPH

Drainage Area = 9.13(Ac.) = 0.014 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 9.13(Ac.) = 0.014 Sq. Mi.
Length along longest watercourse = 884.08(Ft.)
Length along longest watercourse measured to centroid = 442.04(Ft.)
Length along longest watercourse = 0.167 Mi.
Length along longest watercourse measured to centroid = 0.084 Mi.
Difference in elevation = 17.10(Ft.)
Slope along watercourse = 102.1265 Ft./Mi.
Average Manning's 'N' = 0.200
Lag time = 0.394 Hr.
Lag time = 23.63 Min.
25% of lag time = 5.91 Min.
40% of lag time = 9.45 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Thursday, May 29, 2025 3:55:09 PM

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	0.45	4.14

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	1.18	10.77

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 0.454(In)
Area Averaged 100-Year Rainfall = 1.180(In)

Point rain (area averaged) = 0.454(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 0.454(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
9.128	91.00	0.000

Total Area Entered = 9.13(Ac.)

RI AMC2	RI AMC-1	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	79.8	0.246	0.000	0.246	1.000	0.246
					Sum (F) =	0.246

Area averaged mean soil loss (F) (In/Hr) = 0.246
Minimum soil loss rate ((In/Hr)) = 0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

Slope of intensity-duration curve for a 1 hour storm =0.5500

U n i t H y d r o g r a p h
FOOTHILL S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	21.163	1.397	0.129
2	0.167	42.326	3.982	0.366
3	0.250	63.488	6.154	0.566
4	0.333	84.651	10.167	0.935
5	0.417	105.814	20.707	1.905
6	0.500	126.977	17.330	1.594
7	0.583	148.140	8.329	0.766
8	0.667	169.303	5.889	0.542

9	0.750	190.465	4.705	0.433
10	0.833	211.628	3.806	0.350
11	0.917	232.791	3.099	0.285
12	1.000	253.954	2.632	0.242
13	1.083	275.117	2.200	0.202
14	1.167	296.279	1.860	0.171
15	1.250	317.442	1.578	0.145
16	1.333	338.605	1.290	0.119
17	1.417	359.768	1.019	0.094
18	1.500	380.931	0.861	0.079
19	1.583	402.093	0.657	0.060
20	1.667	423.256	0.391	0.036
21	1.750	444.419	0.254	0.023
22	1.833	465.582	0.242	0.022
23	1.917	486.745	0.213	0.020
24	2.000	507.908	0.206	0.019
25	2.083	529.070	0.144	0.013
26	2.167	550.233	0.127	0.012
27	2.250	571.396	0.149	0.014
28	2.333	592.559	0.169	0.016
29	2.417	613.722	0.152	0.014
30	2.500	634.884	0.090	0.008
31	2.583	656.047	0.083	0.008
32	2.667	677.210	0.053	0.005
33	2.750	698.373	0.042	0.004
34	2.833	719.536	0.024	0.002
			Sum = 100.000 Sum=	9.199

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	3.30	0.180	(0.246)	0.162	0.018
2	0.17	4.20	0.229	(0.246)	0.206	0.023
3	0.25	4.40	0.240	(0.246)	0.216	0.024
4	0.33	4.80	0.261	(0.246)	0.235	0.026
5	0.42	5.20	0.283	0.246	(0.255)	0.037
6	0.50	6.20	0.338	0.246	(0.304)	0.091
7	0.58	6.80	0.370	0.246	(0.333)	0.124
8	0.67	8.80	0.479	0.246	(0.431)	0.233
9	0.75	13.90	0.757	0.246	(0.681)	0.511
10	0.83	31.40	1.711	0.246	(1.539)	1.464
11	0.92	7.20	0.392	0.246	(0.353)	0.146
12	1.00	3.80	0.207	(0.246)	0.186	0.021
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	2.7

Flood volume = Effective rainfall 0.23(In)
times area 9.1(Ac.)/[(In)/(Ft.)] = 0.2(Ac.Ft)

Thursday, May 29, 2025 3:55:09 PM

Total soil loss = 0.23(In)
Total soil loss = 0.173(Ac.Ft)
Total rainfall = 0.45(In)
Flood volume = 7504.9 Cubic Feet
Total soil loss = 7537.0 Cubic Feet

Peak flow rate of this hydrograph = 4.073(CFS)

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1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0000	0.00	Q				
0+10	0.0001	0.01	Q				
0+15	0.0002	0.02	Q				
0+20	0.0005	0.04	Q				
0+25	0.0011	0.08	Q				
0+30	0.0020	0.13	Q				
0+35	0.0033	0.19	Q				
0+40	0.0052	0.28	Q				
0+45	0.0084	0.46	Q				
0+50	0.0146	0.91	Q				
0+55	0.0250	1.51	VQ				
1+ 0	0.0397	2.13	QV				
1+ 5	0.0603	2.99	Q V				
1+10	0.0883	4.07	Q V				
1+15	0.1108	3.26	Q V				
1+20	0.1237	1.87	Q V				
1+25	0.1328	1.32	Q V				
1+30	0.1399	1.04	Q V				
1+35	0.1457	0.84	Q V				
1+40	0.1505	0.69	Q V				
1+45	0.1545	0.58	Q V				
1+50	0.1579	0.49	Q V				
1+55	0.1607	0.41	Q V				
2+ 0	0.1631	0.34	Q V				
2+ 5	0.1650	0.28	Q V				
2+10	0.1665	0.22	Q V				
2+15	0.1677	0.18	Q V				
2+20	0.1687	0.13	Q V				
2+25	0.1693	0.09	Q V				
2+30	0.1697	0.06	Q V				
2+35	0.1701	0.06	Q V				
2+40	0.1704	0.05	Q V				
2+45	0.1707	0.04	Q V				
2+50	0.1710	0.04	Q V				

2+55	0.1712	0.03	Q	|	|	|	V|
3+ 0	0.1714	0.04	Q	|	|	|	V|
3+ 5	0.1717	0.04	Q	|	|	|	V|
3+10	0.1719	0.03	Q	|	|	|	V|
3+15	0.1720	0.02	Q	|	|	|	V|
3+20	0.1721	0.02	Q	|	|	|	V|
3+25	0.1722	0.01	Q	|	|	|	V|
3+30	0.1723	0.01	Q	|	|	|	V|
3+35	0.1723	0.00	Q	|	|	|	V|
3+40	0.1723	0.00	Q	|	|	|	V|
3+45	0.1723	0.00	Q	|	|	|	V

Thursday, May 29, 2025 3:56:33 PM

U n i t H y d r o g r a p h A n a l y s i s

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Riverside County Synthetic Unit Hydrology Method
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INDEPENDENCE AT CANYON SPRINGS
PRE-DEVELOPMENT CONDITION
2-YR, 24-HR STORM
HYDROGRAPH

Drainage Area = 9.13(Ac.) = 0.014 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 9.13(Ac.) = 0.014 Sq. Mi.
Length along longest watercourse = 884.08(Ft.)
Length along longest watercourse measured to centroid = 442.04(Ft.)
Length along longest watercourse = 0.167 Mi.
Length along longest watercourse measured to centroid = 0.084 Mi.
Difference in elevation = 17.10(Ft.)
Slope along watercourse = 102.1265 Ft./Mi.
Average Manning's 'N' = 0.200
Lag time = 0.394 Hr.
Lag time = 23.63 Min.
25% of lag time = 5.91 Min.
40% of lag time = 9.45 Min.
Unit time = 15.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Thursday, May 29, 2025 3:56:33 PM

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	1.87	17.07

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	4.55	41.53

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 1.870(In)
Area Averaged 100-Year Rainfall = 4.550(In)

Point rain (area averaged) = 1.870(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.870(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
9.128	91.00	0.000

Total Area Entered = 9.13(Ac.)

RI AMC2	RI AMC-1	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	79.8	0.246	0.000	0.246	1.000	0.246
					Sum (F) =	0.246

Area averaged mean soil loss (F) (In/Hr) = 0.246
Minimum soil loss rate ((In/Hr)) = 0.123
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

U n i t H y d r o g r a p h
FOOTHILL S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.250	63.488	6.103	0.561
2	0.500	126.977	35.178	3.236
3	0.750	190.465	32.279	2.969
4	1.000	253.954	11.849	1.090
5	1.250	317.442	6.754	0.621
6	1.500	380.931	3.928	0.361
7	1.750	444.419	1.916	0.176
8	2.000	507.908	0.753	0.069
9	2.250	571.396	0.486	0.045
10	2.500	634.884	0.442	0.041

11	2.750	698.373	0.243	0.022
12	3.000	761.861	0.070	0.006
		Sum = 100.000	Sum=	9.199

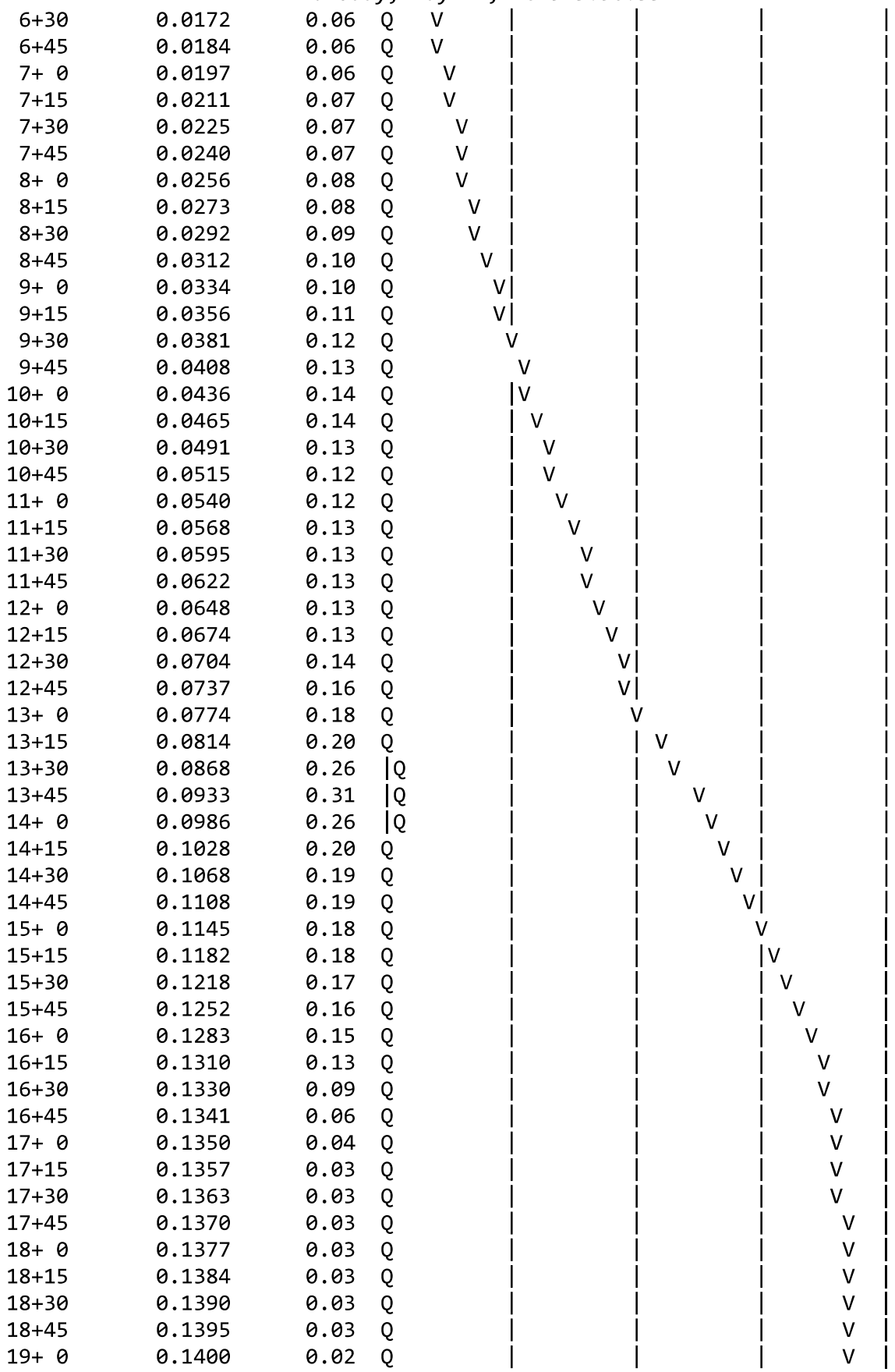
The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.25	0.20	0.015	(0.435)	0.013	0.001
2	0.50	0.30	0.022	(0.430)	0.020	0.002
3	0.75	0.30	0.022	(0.425)	0.020	0.002
4	1.00	0.40	0.030	(0.420)	0.027	0.003
5	1.25	0.30	0.022	(0.415)	0.020	0.002
6	1.50	0.30	0.022	(0.410)	0.020	0.002
7	1.75	0.30	0.022	(0.405)	0.020	0.002
8	2.00	0.40	0.030	(0.400)	0.027	0.003
9	2.25	0.40	0.030	(0.395)	0.027	0.003
10	2.50	0.40	0.030	(0.391)	0.027	0.003
11	2.75	0.50	0.037	(0.386)	0.034	0.004
12	3.00	0.50	0.037	(0.381)	0.034	0.004
13	3.25	0.50	0.037	(0.376)	0.034	0.004
14	3.50	0.50	0.037	(0.372)	0.034	0.004
15	3.75	0.50	0.037	(0.367)	0.034	0.004
16	4.00	0.60	0.045	(0.362)	0.040	0.004
17	4.25	0.60	0.045	(0.358)	0.040	0.004
18	4.50	0.70	0.052	(0.353)	0.047	0.005
19	4.75	0.70	0.052	(0.349)	0.047	0.005
20	5.00	0.80	0.060	(0.344)	0.054	0.006
21	5.25	0.60	0.045	(0.340)	0.040	0.004
22	5.50	0.70	0.052	(0.335)	0.047	0.005
23	5.75	0.80	0.060	(0.331)	0.054	0.006
24	6.00	0.80	0.060	(0.327)	0.054	0.006
25	6.25	0.90	0.067	(0.322)	0.061	0.007
26	6.50	0.90	0.067	(0.318)	0.061	0.007
27	6.75	1.00	0.075	(0.314)	0.067	0.007
28	7.00	1.00	0.075	(0.310)	0.067	0.007
29	7.25	1.00	0.075	(0.305)	0.067	0.007
30	7.50	1.10	0.082	(0.301)	0.074	0.008
31	7.75	1.20	0.090	(0.297)	0.081	0.009
32	8.00	1.30	0.097	(0.293)	0.088	0.010
33	8.25	1.50	0.112	(0.289)	0.101	0.011
34	8.50	1.50	0.112	(0.285)	0.101	0.011
35	8.75	1.60	0.120	(0.281)	0.108	0.012
36	9.00	1.70	0.127	(0.277)	0.114	0.013
37	9.25	1.90	0.142	(0.273)	0.128	0.014
38	9.50	2.00	0.150	(0.269)	0.135	0.015
39	9.75	2.10	0.157	(0.265)	0.141	0.016
40	10.00	2.20	0.165	(0.261)	0.148	0.016

41	10.25	1.50	0.112	(	0.258)	0.101		0.011
42	10.50	1.50	0.112	(	0.254)	0.101		0.011
43	10.75	2.00	0.150	(	0.250)	0.135		0.015
44	11.00	2.00	0.150	(	0.247)	0.135		0.015
45	11.25	1.90	0.142	(	0.243)	0.128		0.014
46	11.50	1.90	0.142	(	0.239)	0.128		0.014
47	11.75	1.70	0.127	(	0.236)	0.114		0.013
48	12.00	1.80	0.135	(	0.232)	0.121		0.013
49	12.25	2.50	0.187	(	0.229)	0.168		0.019
50	12.50	2.60	0.194	(	0.225)	0.175		0.019
51	12.75	2.80	0.209	(	0.222)	0.188		0.021
52	13.00	2.90	0.217	(	0.219)	0.195		0.022
53	13.25	3.40	0.254		0.215	(	0.229)	0.039
54	13.50	3.40	0.254		0.212	(	0.229)	0.042
55	13.75	2.30	0.172	(	0.209)	0.155		0.017
56	14.00	2.30	0.172	(	0.206)	0.155		0.017
57	14.25	2.70	0.202	(	0.203)	0.182		0.020
58	14.50	2.60	0.194	(	0.199)	0.175		0.019
59	14.75	2.60	0.194	(	0.196)	0.175		0.019
60	15.00	2.50	0.187	(	0.193)	0.168		0.019
61	15.25	2.40	0.180	(	0.190)	0.162		0.018
62	15.50	2.30	0.172	(	0.188)	0.155		0.017
63	15.75	1.90	0.142	(	0.185)	0.128		0.014
64	16.00	1.90	0.142	(	0.182)	0.128		0.014
65	16.25	0.40	0.030	(	0.179)	0.027		0.003
66	16.50	0.40	0.030	(	0.176)	0.027		0.003
67	16.75	0.30	0.022	(	0.174)	0.020		0.002
68	17.00	0.30	0.022	(	0.171)	0.020		0.002
69	17.25	0.50	0.037	(	0.168)	0.034		0.004
70	17.50	0.50	0.037	(	0.166)	0.034		0.004
71	17.75	0.50	0.037	(	0.163)	0.034		0.004
72	18.00	0.40	0.030	(	0.161)	0.027		0.003
73	18.25	0.40	0.030	(	0.159)	0.027		0.003
74	18.50	0.40	0.030	(	0.156)	0.027		0.003
75	18.75	0.30	0.022	(	0.154)	0.020		0.002
76	19.00	0.20	0.015	(	0.152)	0.013		0.001
77	19.25	0.30	0.022	(	0.150)	0.020		0.002
78	19.50	0.40	0.030	(	0.148)	0.027		0.003
79	19.75	0.30	0.022	(	0.146)	0.020		0.002
80	20.00	0.20	0.015	(	0.144)	0.013		0.001
81	20.25	0.30	0.022	(	0.142)	0.020		0.002
82	20.50	0.30	0.022	(	0.140)	0.020		0.002
83	20.75	0.30	0.022	(	0.138)	0.020		0.002
84	21.00	0.20	0.015	(	0.137)	0.013		0.001
85	21.25	0.30	0.022	(	0.135)	0.020		0.002
86	21.50	0.20	0.015	(	0.133)	0.013		0.001
87	21.75	0.30	0.022	(	0.132)	0.020		0.002
88	22.00	0.20	0.015	(	0.131)	0.013		0.001
89	22.25	0.30	0.022	(	0.129)	0.020		0.002
90	22.50	0.20	0.015	(	0.128)	0.013		0.001
91	22.75	0.20	0.015	(	0.127)	0.013		0.001

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92  23.00     0.20      0.015       (  0.126)       0.013        0.001
93  23.25     0.20      0.015       (  0.125)       0.013        0.001
94  23.50     0.20      0.015       (  0.124)       0.013        0.001
95  23.75     0.20      0.015       (  0.124)       0.013        0.001
96  24.00     0.20      0.015       (  0.123)       0.013        0.001
              (Loss Rate Not Used)
   Sum =     100.0                                    Sum =     0.8
      Flood volume = Effective rainfall      0.19(In)
       times area       9.1(Ac.)/[(In)/(Ft.)] =       0.1(Ac.Ft)
      Total soil loss =      1.68(In)
      Total soil loss =     1.274(Ac.Ft)
      Total rainfall =      1.87(In)
      Flood volume =        6447.2 Cubic Feet
      Total soil loss =       55513.4 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      0.312(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                   Hydrograph in  15   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
-------------------------------------------------------------------------
  0+15       0.0000      0.00  Q         |         |         |         |
  0+30       0.0001      0.01  Q         |         |         |         |
  0+45       0.0004      0.01  Q         |         |         |         |
  1+ 0       0.0008      0.02  Q         |         |         |         |
  1+15       0.0012      0.02  Q         |         |         |         |
  1+30       0.0017      0.02  Q         |         |         |         |
  1+45       0.0021      0.02  Q         |         |         |         |
  2+ 0       0.0025      0.02  Q         |         |         |         |
  2+15       0.0030      0.02  Q         |         |         |         |
  2+30       0.0035      0.03  Q         |         |         |         |
  2+45       0.0041      0.03  QV        |         |         |         |
  3+ 0       0.0047      0.03  QV        |         |         |         |
  3+15       0.0054      0.03  QV        |         |         |         |
  3+30       0.0061      0.03  QV        |         |         |         |
  3+45       0.0068      0.03  QV        |         |         |         |
  4+ 0       0.0075      0.03  Q V       |         |         |         |
  4+15       0.0083      0.04  Q V       |         |         |         |
  4+30       0.0091      0.04  Q V       |         |         |         |
  4+45       0.0100      0.04  Q V       |         |         |         |
  5+ 0       0.0109      0.05  Q V       |         |         |         |
  5+15       0.0119      0.05  Q  V      |         |         |         |
  5+30       0.0129      0.05  Q  V      |         |         |         |
  5+45       0.0139      0.05  Q  V      |         |         |         |
  6+ 0       0.0149      0.05  Q   V     |         |         |         |
  6+15       0.0160      0.05  Q   V     |         |         |         |
```


6+30 0.0172 0.06 Q
6+45 0.0184 0.06 Q
7+ 0 0.0197 0.06 Q
7+15 0.0211 0.07 Q
7+30 0.0225 0.07 Q
7+45 0.0240 0.07 Q
8+ 0 0.0256 0.08 Q
8+15 0.0273 0.08 Q
8+30 0.0292 0.09 Q
8+45 0.0312 0.10 Q
9+ 0 0.0334 0.10 Q
9+15 0.0356 0.11 Q
9+30 0.0381 0.12 Q
9+45 0.0408 0.13 Q
10+ 0 0.0436 0.14 Q
10+15 0.0465 0.14 Q
10+30 0.0491 0.13 Q
10+45 0.0515 0.12 Q
11+ 0 0.0540 0.12 Q
11+15 0.0568 0.13 Q
11+30 0.0595 0.13 Q
11+45 0.0622 0.13 Q
12+ 0 0.0648 0.13 Q
12+15 0.0674 0.13 Q
12+30 0.0704 0.14 Q
12+45 0.0737 0.16 Q
13+ 0 0.0774 0.18 Q
13+15 0.0814 0.20 Q
13+30 0.0868 0.26 Q
13+45 0.0933 0.31 Q
14+ 0 0.0986 0.26 Q
14+15 0.1028 0.20 Q
14+30 0.1068 0.19 Q
14+45 0.1108 0.19 Q
15+ 0 0.1145 0.18 Q
15+15 0.1182 0.18 Q
15+30 0.1218 0.17 Q
15+45 0.1252 0.16 Q
16+ 0 0.1283 0.15 Q
16+15 0.1310 0.13 Q
16+30 0.1330 0.09 Q
16+45 0.1341 0.06 Q
17+ 0 0.1350 0.04 Q
17+15 0.1357 0.03 Q
17+30 0.1363 0.03 Q
17+45 0.1370 0.03 Q
18+ 0 0.1377 0.03 Q
18+15 0.1384 0.03 Q
18+30 0.1390 0.03 Q
18+45 0.1395 0.03 Q
19+ 0 0.1400 0.02 Q

19+15	0.1405	0.02	Q				V
19+30	0.1409	0.02	Q				V
19+45	0.1413	0.02	Q				V
20+ 0	0.1418	0.02	Q				V
20+15	0.1422	0.02	Q				V
20+30	0.1426	0.02	Q				V
20+45	0.1430	0.02	Q				V
21+ 0	0.1434	0.02	Q				V
21+15	0.1438	0.02	Q				V
21+30	0.1442	0.02	Q				V
21+45	0.1445	0.02	Q				V
22+ 0	0.1449	0.02	Q				V
22+15	0.1452	0.02	Q				V
22+30	0.1456	0.02	Q				V
22+45	0.1459	0.02	Q				V
23+ 0	0.1462	0.01	Q				V
23+15	0.1465	0.01	Q				V
23+30	0.1468	0.01	Q				V
23+45	0.1471	0.01	Q				V
24+ 0	0.1474	0.01	Q				V
24+15	0.1477	0.01	Q				V
24+30	0.1478	0.01	Q				V
24+45	0.1479	0.00	Q				V
25+ 0	0.1480	0.00	Q				V
25+15	0.1480	0.00	Q				V
25+30	0.1480	0.00	Q				V
25+45	0.1480	0.00	Q				V
26+ 0	0.1480	0.00	Q				V
26+15	0.1480	0.00	Q				V
26+30	0.1480	0.00	Q				V
26+45	0.1480	0.00	Q				V

U n i t H y d r o g r a p h A n a l y s i s

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Study date 05/23/25 File: lmcr110.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6619

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

INDEPENDENCE AT CANYON SPRINGS
PRE-DEVELOPMENT CONDITION
10-YR, 1-HR STORM
HYDROGRAPH

Drainage Area = 9.13(Ac.) = 0.014 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 9.13(Ac.) = 0.014 Sq. Mi.
Length along longest watercourse = 884.08(Ft.)
Length along longest watercourse measured to centroid = 442.04(Ft.)
Length along longest watercourse = 0.167 Mi.
Length along longest watercourse measured to centroid = 0.084 Mi.
Difference in elevation = 17.10(Ft.)
Slope along watercourse = 102.1265 Ft./Mi.
Average Manning's 'N' = 0.200
Lag time = 0.394 Hr.
Lag time = 23.63 Min.
25% of lag time = 5.91 Min.
40% of lag time = 9.45 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	0.45	4.14

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	1.18	10.77

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 0.454(In)
Area Averaged 100-Year Rainfall = 1.180(In)

Point rain (area averaged) = 0.753(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 0.753(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
9.128	91.00	0.000

Total Area Entered = 9.13(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	91.0	0.117	0.000	0.117	1.000	0.117
					Sum (F) =	0.117

Area averaged mean soil loss (F) (In/Hr) = 0.117
Minimum soil loss rate ((In/Hr)) = 0.059
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

Slope of intensity-duration curve for a 1 hour storm =0.5500

U n i t H y d r o g r a p h
FOOTHILL S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	21.163	1.397	0.129
2	0.167	42.326	3.982	0.366
3	0.250	63.488	6.154	0.566
4	0.333	84.651	10.167	0.935
5	0.417	105.814	20.707	1.905
6	0.500	126.977	17.330	1.594
7	0.583	148.140	8.329	0.766
8	0.667	169.303	5.889	0.542
9	0.750	190.465	4.705	0.433
10	0.833	211.628	3.806	0.350
11	0.917	232.791	3.099	0.285
12	1.000	253.954	2.632	0.242

13	1.083	275.117	2.200	0.202
14	1.167	296.279	1.860	0.171
15	1.250	317.442	1.578	0.145
16	1.333	338.605	1.290	0.119
17	1.417	359.768	1.019	0.094
18	1.500	380.931	0.861	0.079
19	1.583	402.093	0.657	0.060
20	1.667	423.256	0.391	0.036
21	1.750	444.419	0.254	0.023
22	1.833	465.582	0.242	0.022
23	1.917	486.745	0.213	0.020
24	2.000	507.908	0.206	0.019
25	2.083	529.070	0.144	0.013
26	2.167	550.233	0.127	0.012
27	2.250	571.396	0.149	0.014
28	2.333	592.559	0.169	0.016
29	2.417	613.722	0.152	0.014
30	2.500	634.884	0.090	0.008
31	2.583	656.047	0.083	0.008
32	2.667	677.210	0.053	0.005
33	2.750	698.373	0.042	0.004
34	2.833	719.536	0.024	0.002
		Sum = 100.000	Sum=	9.199

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	3.30	0.298	0.117	(0.268)	0.181
2	0.17	4.20	0.379	0.117	(0.341)	0.262
3	0.25	4.40	0.397	0.117	(0.358)	0.280
4	0.33	4.80	0.434	0.117	(0.390)	0.317
5	0.42	5.20	0.470	0.117	(0.423)	0.353
6	0.50	6.20	0.560	0.117	(0.504)	0.443
7	0.58	6.80	0.614	0.117	(0.553)	0.497
8	0.67	8.80	0.795	0.117	(0.715)	0.678
9	0.75	13.90	1.255	0.117	(1.130)	1.138
10	0.83	31.40	2.836	0.117	(2.552)	2.719
11	0.92	7.20	0.650	0.117	(0.585)	0.533
12	1.00	3.80	0.343	0.117	(0.309)	0.226
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	7.6

Flood volume = Effective rainfall 0.64(In)
times area 9.1(Ac.)/[(In)/(Ft.)] = 0.5(Ac.Ft)
Total soil loss = 0.12(In)
Total soil loss = 0.089(Ac.Ft)
Total rainfall = 0.75(In)
Flood volume = 21061.0 Cubic Feet
Total soil loss = 3876.8 Cubic Feet

Peak flow rate of this hydrograph = 8.971(CFS)

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0002	0.02	Q				
0+10	0.0008	0.10	Q				
0+15	0.0025	0.23	Q				
0+20	0.0056	0.46	VQ				
0+25	0.0119	0.91	V Q				
0+30	0.0217	1.42	V Q				
0+35	0.0342	1.81	V Q				
0+40	0.0493	2.20	V Q				
0+45	0.0679	2.70	V Q				
0+50	0.0927	3.59	V Q				
0+55	0.1251	4.70	V Q				
1+ 0	0.1650	5.80	V Q				
1+ 5	0.2149	7.24	V Q				
1+10	0.2767	8.97	V Q				
1+15	0.3282	7.48	V Q				
1+20	0.3615	4.83	Q V				
1+25	0.3852	3.44	Q V				
1+30	0.4032	2.62	Q V				
1+35	0.4178	2.12	Q V				
1+40	0.4298	1.74	Q V				
1+45	0.4398	1.45	Q V				
1+50	0.4481	1.21	Q V				
1+55	0.4550	1.00	Q V				
2+ 0	0.4607	0.83	Q V				
2+ 5	0.4654	0.67	Q V				
2+10	0.4691	0.54	Q V				
2+15	0.4720	0.43	Q V				
2+20	0.4743	0.33	Q V				
2+25	0.4758	0.23	Q V				
2+30	0.4770	0.17	Q V				
2+35	0.4780	0.15	Q V				
2+40	0.4789	0.13	Q V				
2+45	0.4797	0.12	Q V				
2+50	0.4803	0.10	Q V				
2+55	0.4809	0.09	Q V				
3+ 0	0.4815	0.08	Q V				
3+ 5	0.4821	0.08	Q V				
3+10	0.4825	0.07	Q V				
3+15	0.4829	0.05	Q V				
3+20	0.4831	0.04	Q V				
3+25	0.4833	0.03	Q V				
3+30	0.4834	0.02	Q V				

```
    3+35       0.4835      0.01  Q         |         |         |        V|
    3+40       0.4835      0.00  Q         |         |         |        V|
    3+45       0.4835      0.00  Q         |         |         |        V|
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U n i t H y d r o g r a p h A n a l y s i s

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Study date 05/23/25 File: lmcr2410.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6619

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

INDEPENDENCE AT CANYON SPRINGS
PRE-DEVELOPMENT CONDITION
10-YR, 24-HR STORM
HYDROGRAPH

Drainage Area = 9.13(Ac.) = 0.014 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 9.13(Ac.) = 0.014 Sq. Mi.
Length along longest watercourse = 884.08(Ft.)
Length along longest watercourse measured to centroid = 442.04(Ft.)
Length along longest watercourse = 0.167 Mi.
Length along longest watercourse measured to centroid = 0.084 Mi.
Difference in elevation = 17.10(Ft.)
Slope along watercourse = 102.1265 Ft./Mi.
Average Manning's 'N' = 0.200
Lag time = 0.394 Hr.
Lag time = 23.63 Min.
25% of lag time = 5.91 Min.
40% of lag time = 9.45 Min.
Unit time = 15.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	1.87	17.07

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	4.55	41.53

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 1.870(In)
Area Averaged 100-Year Rainfall = 4.550(In)

Point rain (area averaged) = 2.973(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.973(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
9.128	91.00	0.000

Total Area Entered = 9.13(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	91.0	0.117	0.000	0.117	1.000	0.117
					Sum (F) =	0.117

Area averaged mean soil loss (F) (In/Hr) = 0.117
Minimum soil loss rate ((In/Hr)) = 0.059
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

U n i t H y d r o g r a p h
FOOTHILL S-Curve

Unit Hydrograph Data

Unit time period	(hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.250	63.488	6.103	0.561
2	0.500	126.977	35.178	3.236
3	0.750	190.465	32.279	2.969
4	1.000	253.954	11.849	1.090
5	1.250	317.442	6.754	0.621
6	1.500	380.931	3.928	0.361
7	1.750	444.419	1.916	0.176
8	2.000	507.908	0.753	0.069
9	2.250	571.396	0.486	0.045
10	2.500	634.884	0.442	0.041
11	2.750	698.373	0.243	0.022
12	3.000	761.861	0.070	0.006
		Sum =	100.000 Sum=	9.199

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.25	0.20	0.024	(0.207)	0.021	0.002
2	0.50	0.30	0.036	(0.204)	0.032	0.004
3	0.75	0.30	0.036	(0.202)	0.032	0.004
4	1.00	0.40	0.048	(0.199)	0.043	0.005
5	1.25	0.30	0.036	(0.197)	0.032	0.004
6	1.50	0.30	0.036	(0.195)	0.032	0.004
7	1.75	0.30	0.036	(0.192)	0.032	0.004
8	2.00	0.40	0.048	(0.190)	0.043	0.005
9	2.25	0.40	0.048	(0.188)	0.043	0.005
10	2.50	0.40	0.048	(0.186)	0.043	0.005
11	2.75	0.50	0.059	(0.183)	0.054	0.006
12	3.00	0.50	0.059	(0.181)	0.054	0.006
13	3.25	0.50	0.059	(0.179)	0.054	0.006
14	3.50	0.50	0.059	(0.177)	0.054	0.006
15	3.75	0.50	0.059	(0.174)	0.054	0.006
16	4.00	0.60	0.071	(0.172)	0.064	0.007
17	4.25	0.60	0.071	(0.170)	0.064	0.007
18	4.50	0.70	0.083	(0.168)	0.075	0.008
19	4.75	0.70	0.083	(0.166)	0.075	0.008
20	5.00	0.80	0.095	(0.164)	0.086	0.010
21	5.25	0.60	0.071	(0.161)	0.064	0.007
22	5.50	0.70	0.083	(0.159)	0.075	0.008
23	5.75	0.80	0.095	(0.157)	0.086	0.010
24	6.00	0.80	0.095	(0.155)	0.086	0.010
25	6.25	0.90	0.107	(0.153)	0.096	0.011
26	6.50	0.90	0.107	(0.151)	0.096	0.011
27	6.75	1.00	0.119	(0.149)	0.107	0.012
28	7.00	1.00	0.119	(0.147)	0.107	0.012
29	7.25	1.00	0.119	(0.145)	0.107	0.012
30	7.50	1.10	0.131	(0.143)	0.118	0.013
31	7.75	1.20	0.143	(0.141)	0.128	0.014
32	8.00	1.30	0.155	0.139	(0.139)	0.015
33	8.25	1.50	0.178	0.137	(0.161)	0.041
34	8.50	1.50	0.178	0.135	(0.161)	0.043
35	8.75	1.60	0.190	0.133	(0.171)	0.057
36	9.00	1.70	0.202	0.131	(0.182)	0.071
37	9.25	1.90	0.226	0.130	(0.203)	0.096
38	9.50	2.00	0.238	0.128	(0.214)	0.110
39	9.75	2.10	0.250	0.126	(0.225)	0.124
40	10.00	2.20	0.262	0.124	(0.235)	0.137
41	10.25	1.50	0.178	0.122	(0.161)	0.056
42	10.50	1.50	0.178	0.121	(0.161)	0.058
43	10.75	2.00	0.238	0.119	(0.214)	0.119
44	11.00	2.00	0.238	0.117	(0.214)	0.121
45	11.25	1.90	0.226	0.115	(0.203)	0.111
46	11.50	1.90	0.226	0.114	(0.203)	0.112

47	11.75	1.70	0.202		0.112	(0.182)		0.090
48	12.00	1.80	0.214		0.110	(0.193)		0.104
49	12.25	2.50	0.297		0.109	(0.268)		0.189
50	12.50	2.60	0.309		0.107	(0.278)		0.202
51	12.75	2.80	0.333		0.105	(0.300)		0.227
52	13.00	2.90	0.345		0.104	(0.310)		0.241
53	13.25	3.40	0.404		0.102	(0.364)		0.302
54	13.50	3.40	0.404		0.101	(0.364)		0.304
55	13.75	2.30	0.273		0.099	(0.246)		0.174
56	14.00	2.30	0.273		0.098	(0.246)		0.176
57	14.25	2.70	0.321		0.096	(0.289)		0.225
58	14.50	2.60	0.309		0.095	(0.278)		0.214
59	14.75	2.60	0.309		0.093	(0.278)		0.216
60	15.00	2.50	0.297		0.092	(0.268)		0.205
61	15.25	2.40	0.285		0.090	(0.257)		0.195
62	15.50	2.30	0.273		0.089	(0.246)		0.184
63	15.75	1.90	0.226		0.088	(0.203)		0.138
64	16.00	1.90	0.226		0.086	(0.203)		0.140
65	16.25	0.40	0.048	(0.085)		0.043		0.005
66	16.50	0.40	0.048	(0.084)		0.043		0.005
67	16.75	0.30	0.036	(0.082)		0.032		0.004
68	17.00	0.30	0.036	(0.081)		0.032		0.004
69	17.25	0.50	0.059	(0.080)		0.054		0.006
70	17.50	0.50	0.059	(0.079)		0.054		0.006
71	17.75	0.50	0.059	(0.078)		0.054		0.006
72	18.00	0.40	0.048	(0.076)		0.043		0.005
73	18.25	0.40	0.048	(0.075)		0.043		0.005
74	18.50	0.40	0.048	(0.074)		0.043		0.005
75	18.75	0.30	0.036	(0.073)		0.032		0.004
76	19.00	0.20	0.024	(0.072)		0.021		0.002
77	19.25	0.30	0.036	(0.071)		0.032		0.004
78	19.50	0.40	0.048	(0.070)		0.043		0.005
79	19.75	0.30	0.036	(0.069)		0.032		0.004
80	20.00	0.20	0.024	(0.068)		0.021		0.002
81	20.25	0.30	0.036	(0.067)		0.032		0.004
82	20.50	0.30	0.036	(0.066)		0.032		0.004
83	20.75	0.30	0.036	(0.066)		0.032		0.004
84	21.00	0.20	0.024	(0.065)		0.021		0.002
85	21.25	0.30	0.036	(0.064)		0.032		0.004
86	21.50	0.20	0.024	(0.063)		0.021		0.002
87	21.75	0.30	0.036	(0.063)		0.032		0.004
88	22.00	0.20	0.024	(0.062)		0.021		0.002
89	22.25	0.30	0.036	(0.061)		0.032		0.004
90	22.50	0.20	0.024	(0.061)		0.021		0.002
91	22.75	0.20	0.024	(0.060)		0.021		0.002
92	23.00	0.20	0.024	(0.060)		0.021		0.002
93	23.25	0.20	0.024	(0.059)		0.021		0.002
94	23.50	0.20	0.024	(0.059)		0.021		0.002
95	23.75	0.20	0.024	(0.059)		0.021		0.002
96	24.00	0.20	0.024	(0.059)		0.021		0.002

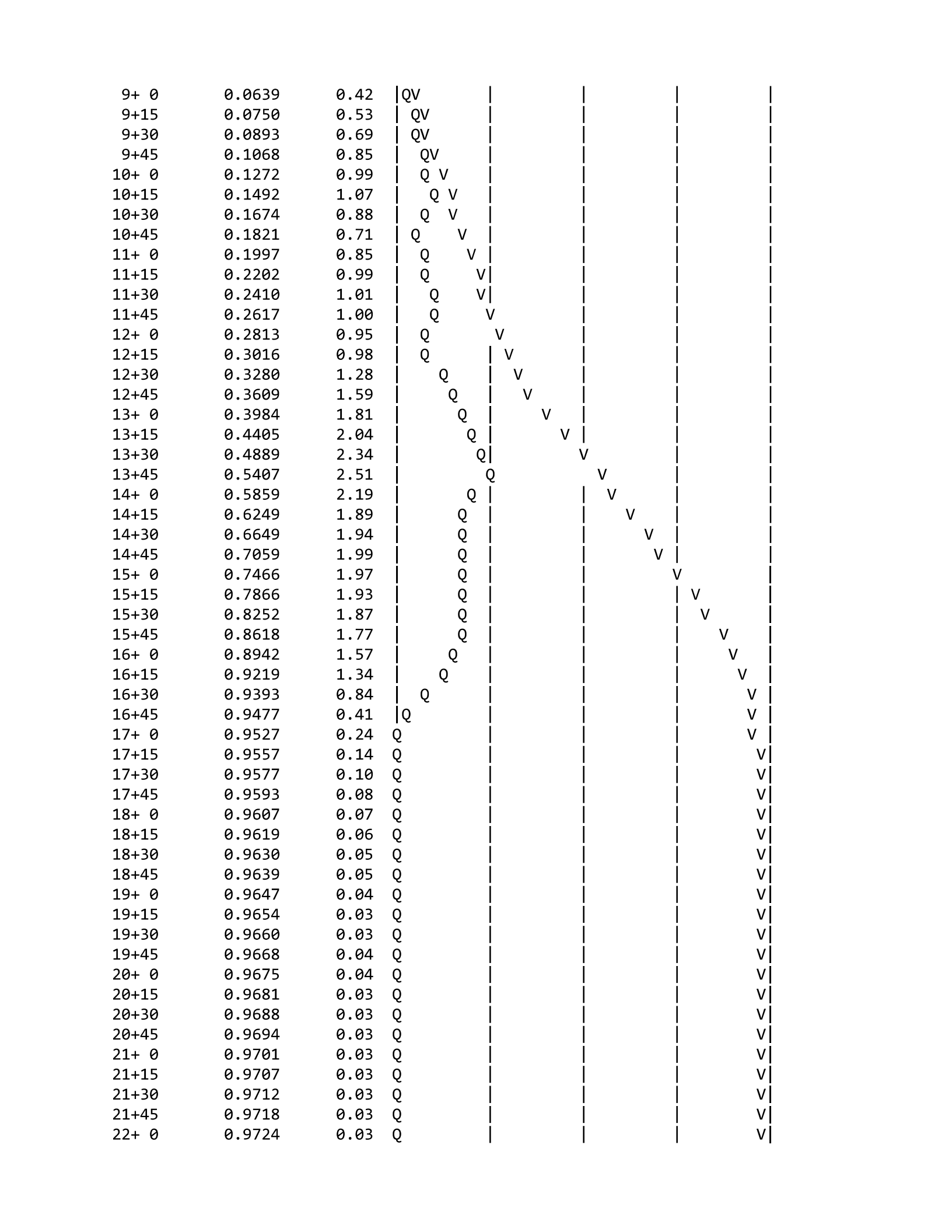
(Loss Rate Not Used)

Sum = 100.0 Sum = 5.1

Flood volume = Effective rainfall 1.28(In)

```
 times area       9.1(Ac.)/[(In)/(Ft.)] =       1.0(Ac.Ft)
Total soil loss =      1.69(In)
Total soil loss =     1.284(Ac.Ft)
Total rainfall =      2.97(In)
Flood volume =       42574.1 Cubic Feet
Total soil loss =       55919.3 Cubic Feet
---------------------------------------------------------------------
 Peak flow rate of this hydrograph =      2.507(CFS)
---------------------------------------------------------------------
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                    24 - H O U R    S T O R M
                R u n o f f      H y d r o g r a p h
---------------------------------------------------------------------
            Hydrograph in  15   Minute intervals ((CFS))

---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
---------------------------------------------------------------------
  0+15       0.0000      0.00  Q         |         |         |         |
  0+30       0.0002      0.01  Q         |         |         |         |
  0+45       0.0007      0.02  Q         |         |         |         |
  1+ 0       0.0012      0.03  Q         |         |         |         |
  1+15       0.0019      0.03  Q         |         |         |         |
  1+30       0.0026      0.03  Q         |         |         |         |
  1+45       0.0033      0.03  Q         |         |         |         |
  2+ 0       0.0040      0.03  Q         |         |         |         |
  2+15       0.0048      0.04  Q         |         |         |         |
  2+30       0.0056      0.04  Q         |         |         |         |
  2+45       0.0065      0.04  Q         |         |         |         |
  3+ 0       0.0075      0.05  Q         |         |         |         |
  3+15       0.0086      0.05  Q         |         |         |         |
  3+30       0.0097      0.05  Q         |         |         |         |
  3+45       0.0108      0.05  Q         |         |         |         |
  4+ 0       0.0119      0.05  Q         |         |         |         |
  4+15       0.0131      0.06  Q         |         |         |         |
  4+30       0.0144      0.06  Q         |         |         |         |
  4+45       0.0158      0.07  Q         |         |         |         |
  5+ 0       0.0174      0.07  Q         |         |         |         |
  5+15       0.0190      0.08  Q         |         |         |         |
  5+30       0.0205      0.08  Q         |         |         |         |
  5+45       0.0221      0.07  Q         |         |         |         |
  6+ 0       0.0237      0.08  Q         |         |         |         |
  6+15       0.0255      0.08  QV        |         |         |         |
  6+30       0.0273      0.09  QV        |         |         |         |
  6+45       0.0293      0.10  QV        |         |         |         |
  7+ 0       0.0314      0.10  QV        |         |         |         |
  7+15       0.0336      0.11  QV        |         |         |         |
  7+30       0.0358      0.11  QV        |         |         |         |
  7+45       0.0381      0.11  QV        |         |         |         |
  8+ 0       0.0407      0.12  QV        |         |         |         |
  8+15       0.0437      0.15  QV        |         |         |         |
  8+30       0.0485      0.24  QV        |         |         |         |
  8+45       0.0553      0.33  |QV       |         |         |         |
```



22+15	0.9730	0.03	Q	|	|	|	V|
22+30	0.9735	0.03	Q	|	|	|	V|
22+45	0.9741	0.03	Q	|	|	|	V|
23+ 0	0.9746	0.02	Q	|	|	|	V|
23+15	0.9750	0.02	Q	|	|	|	V|
23+30	0.9755	0.02	Q	|	|	|	V|
23+45	0.9760	0.02	Q	|	|	|	V|
24+ 0	0.9764	0.02	Q	|	|	|	V|
24+15	0.9768	0.02	Q	|	|	|	V|
24+30	0.9771	0.01	Q	|	|	|	V|
24+45	0.9772	0.01	Q	|	|	|	V|
25+ 0	0.9773	0.00	Q	|	|	|	V|
25+15	0.9773	0.00	Q	|	|	|	V|
25+30	0.9773	0.00	Q	|	|	|	V|
25+45	0.9774	0.00	Q	|	|	|	V|
26+ 0	0.9774	0.00	Q	|	|	|	V|
26+15	0.9774	0.00	Q	|	|	|	V|
26+30	0.9774	0.00	Q	|	|	|	V|
26+45	0.9774	0.00	Q	|	|	|	V|

Thursday, May 29, 2025 3:57:43 PM

U n i t H y d r o g r a p h A n a l y s i s

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Study date 05/15/25 File: lmcr1100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6619

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

INDEPENDENCE AT CANYON SPRINGS
PRE-DEVELOPMENT CONDITION
100-YR, 1-HR STORM
HYDROGRAPH

Drainage Area = 9.13(Ac.) = 0.014 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 9.13(Ac.) = 0.014 Sq. Mi.
Length along longest watercourse = 884.08(Ft.)
Length along longest watercourse measured to centroid = 442.04(Ft.)
Length along longest watercourse = 0.167 Mi.
Length along longest watercourse measured to centroid = 0.084 Mi.
Difference in elevation = 17.10(Ft.)
Slope along watercourse = 102.1265 Ft./Mi.
Average Manning's 'N' = 0.200
Lag time = 0.394 Hr.
Lag time = 23.63 Min.
25% of lag time = 5.91 Min.
40% of lag time = 9.45 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Thursday, May 29, 2025 3:57:43 PM

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	0.45	4.14

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	1.18	10.77

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 0.454(In)
Area Averaged 100-Year Rainfall = 1.180(In)

Point rain (area averaged) = 1.180(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 1.180(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
9.128	91.00	0.000

Total Area Entered = 9.13(Ac.)

RI AMC2	RI AMC-3	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	96.4	0.047	0.000	0.047	1.000	0.047
					Sum (F) =	0.047

Area averaged mean soil loss (F) (In/Hr) = 0.047
Minimum soil loss rate ((In/Hr)) = 0.023
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

Slope of intensity-duration curve for a 1 hour storm =0.5500

U n i t H y d r o g r a p h
FOOTHILL S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	21.163	1.397	0.129
2	0.167	42.326	3.982	0.366
3	0.250	63.488	6.154	0.566
4	0.333	84.651	10.167	0.935
5	0.417	105.814	20.707	1.905
6	0.500	126.977	17.330	1.594
7	0.583	148.140	8.329	0.766
8	0.667	169.303	5.889	0.542

9	0.750	190.465	4.705	0.433
10	0.833	211.628	3.806	0.350
11	0.917	232.791	3.099	0.285
12	1.000	253.954	2.632	0.242
13	1.083	275.117	2.200	0.202
14	1.167	296.279	1.860	0.171
15	1.250	317.442	1.578	0.145
16	1.333	338.605	1.290	0.119
17	1.417	359.768	1.019	0.094
18	1.500	380.931	0.861	0.079
19	1.583	402.093	0.657	0.060
20	1.667	423.256	0.391	0.036
21	1.750	444.419	0.254	0.023
22	1.833	465.582	0.242	0.022
23	1.917	486.745	0.213	0.020
24	2.000	507.908	0.206	0.019
25	2.083	529.070	0.144	0.013
26	2.167	550.233	0.127	0.012
27	2.250	571.396	0.149	0.014
28	2.333	592.559	0.169	0.016
29	2.417	613.722	0.152	0.014
30	2.500	634.884	0.090	0.008
31	2.583	656.047	0.083	0.008
32	2.667	677.210	0.053	0.005
33	2.750	698.373	0.042	0.004
34	2.833	719.536	0.024	0.002
			Sum = 100.000 Sum=	9.199

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	3.30	0.467	0.047	(0.421)	0.420
2	0.17	4.20	0.595	0.047	(0.535)	0.548
3	0.25	4.40	0.623	0.047	(0.561)	0.576
4	0.33	4.80	0.680	0.047	(0.612)	0.633
5	0.42	5.20	0.736	0.047	(0.663)	0.689
6	0.50	6.20	0.878	0.047	(0.790)	0.831
7	0.58	6.80	0.963	0.047	(0.867)	0.916
8	0.67	8.80	1.246	0.047	(1.121)	1.199
9	0.75	13.90	1.968	0.047	(1.771)	1.921
10	0.83	31.40	4.446	0.047	(4.001)	4.399
11	0.92	7.20	1.019	0.047	(0.917)	0.973
12	1.00	3.80	0.538	0.047	(0.484)	0.491
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	13.6

Flood volume = Effective rainfall 1.13(In)
times area 9.1(Ac.)/[(In)/(Ft.)] = 0.9(Ac.Ft)

Thursday, May 29, 2025 3:57:43 PM

Total soil loss = 0.05(In)
Total soil loss = 0.036(Ac.Ft)
Total rainfall = 1.18(In)
Flood volume = 37544.9 Cubic Feet
Total soil loss = 1550.7 Cubic Feet

Peak flow rate of this hydrograph = 15.157(CFS)

++

1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0 5.0 10.0 15.0 20.0
0+ 5	0.0004	0.05	Q
0+10	0.0019	0.22	Q
0+15	0.0055	0.51	VQ
0+20	0.0123	1.00	VQ
0+25	0.0258	1.96	V Q
0+30	0.0463	2.97	V Q
0+35	0.0718	3.70	V Q
0+40	0.1019	4.38	V Q
0+45	0.1379	5.23	V Q
0+50	0.1839	6.67	V Q
0+55	0.2421	8.45	V Q
1+ 0	0.3123	10.20	V Q
1+ 5	0.3983	12.48	V Q
1+10	0.5026	15.16	V Q
1+15	0.5905	12.76	Q V
1+20	0.6491	8.50	Q V
1+25	0.6909	6.06	Q V
1+30	0.7224	4.58	Q V
1+35	0.7478	3.69	Q V
1+40	0.7687	3.03	Q V
1+45	0.7860	2.52	Q V
1+50	0.8004	2.09	Q V
1+55	0.8124	1.74	Q V
2+ 0	0.8223	1.44	Q V
2+ 5	0.8304	1.17	Q V
2+10	0.8368	0.93	Q V
2+15	0.8419	0.74	Q V
2+20	0.8458	0.57	Q V
2+25	0.8485	0.40	Q V
2+30	0.8506	0.30	Q V
2+35	0.8523	0.26	Q V
2+40	0.8539	0.22	Q V
2+45	0.8553	0.20	Q V
2+50	0.8564	0.17	Q V

```
   2+55       0.8575      0.15  Q          |          |          |         V|
   3+ 0       0.8585      0.15  Q          |          |          |         V|
   3+ 5       0.8594      0.14  Q          |          |          |         V|
   3+10       0.8602      0.12  Q          |          |          |         V|
   3+15       0.8608      0.08  Q          |          |          |         V|
   3+20       0.8613      0.06  Q          |          |          |         V|
   3+25       0.8616      0.04  Q          |          |          |         V|
   3+30       0.8618      0.03  Q          |          |          |         V|
   3+35       0.8619      0.02  Q          |          |          |         V|
   3+40       0.8619      0.00  Q          |          |          |         V|
   3+45       0.8619      0.00  Q          |          |          |          V
-------------------------------------------------------------------------
```

Thursday, May 29, 2025 3:58:06 PM

U n i t H y d r o g r a p h A n a l y s i s

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Study date 05/15/25 File: lmcr24100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6619

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

INDEPENDENCE AT CANYON SPRINGS
PRE-DEVELOPMENT CONDITION
100-YR, 24-HR STORM
HYDROGRAPH

Drainage Area = 9.13(Ac.) = 0.014 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 9.13(Ac.) = 0.014 Sq. Mi.
Length along longest watercourse = 884.08(Ft.)
Length along longest watercourse measured to centroid = 442.04(Ft.)
Length along longest watercourse = 0.167 Mi.
Length along longest watercourse measured to centroid = 0.084 Mi.
Difference in elevation = 17.10(Ft.)
Slope along watercourse = 102.1265 Ft./Mi.
Average Manning's 'N' = 0.200
Lag time = 0.394 Hr.
Lag time = 23.63 Min.
25% of lag time = 5.91 Min.
40% of lag time = 9.45 Min.
Unit time = 15.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Thursday, May 29, 2025 3:58:06 PM

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	1.87	17.07

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	4.55	41.53

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 1.870(In)
Area Averaged 100-Year Rainfall = 4.550(In)

Point rain (area averaged) = 4.550(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 4.550(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
9.128	91.00	0.000

Total Area Entered = 9.13(Ac.)

RI AMC2	RI AMC-3	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
91.0	96.4	0.047	0.000	0.047	1.000	0.047
					Sum (F) =	0.047

Area averaged mean soil loss (F) (In/Hr) = 0.047
Minimum soil loss rate ((In/Hr)) = 0.023
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

U n i t H y d r o g r a p h
FOOTHILL S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.250	63.488	6.103	0.561
2	0.500	126.977	35.178	3.236
3	0.750	190.465	32.279	2.969
4	1.000	253.954	11.849	1.090
5	1.250	317.442	6.754	0.621
6	1.500	380.931	3.928	0.361
7	1.750	444.419	1.916	0.176
8	2.000	507.908	0.753	0.069
9	2.250	571.396	0.486	0.045
10	2.500	634.884	0.442	0.041

11	2.750	698.373	0.243	0.022
12	3.000	761.861	0.070	0.006
			Sum = 100.000 Sum=	9.199

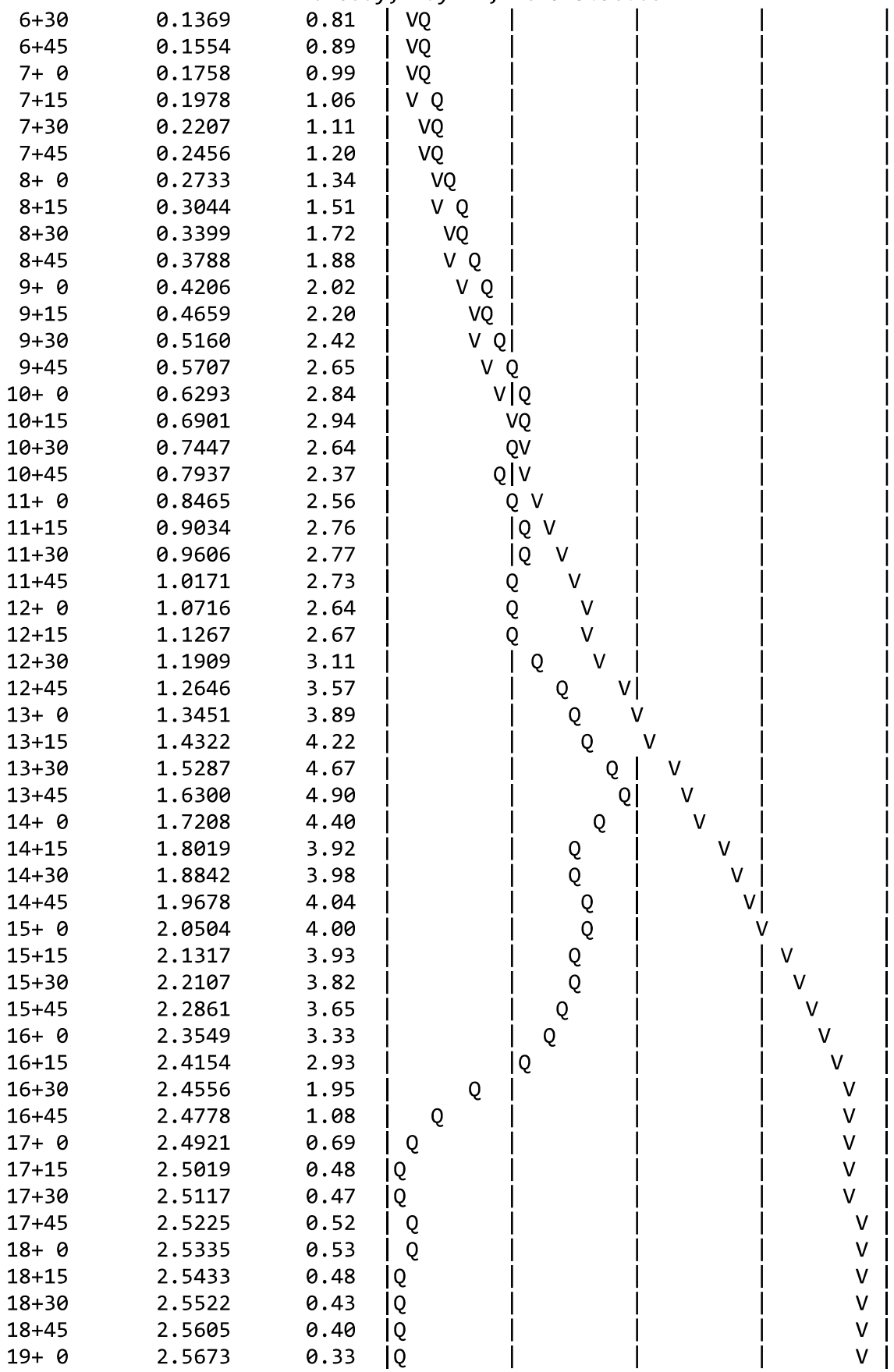
The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.25	0.20	0.036	(0.083)	0.033	0.004
2	0.50	0.30	0.055	(0.082)	0.049	0.005
3	0.75	0.30	0.055	(0.081)	0.049	0.005
4	1.00	0.40	0.073	(0.080)	0.066	0.007
5	1.25	0.30	0.055	(0.079)	0.049	0.005
6	1.50	0.30	0.055	(0.078)	0.049	0.005
7	1.75	0.30	0.055	(0.077)	0.049	0.005
8	2.00	0.40	0.073	(0.076)	0.066	0.007
9	2.25	0.40	0.073	(0.075)	0.066	0.007
10	2.50	0.40	0.073	(0.074)	0.066	0.007
11	2.75	0.50	0.091	0.073	(0.082)	0.018
12	3.00	0.50	0.091	0.072	(0.082)	0.019
13	3.25	0.50	0.091	0.072	(0.082)	0.019
14	3.50	0.50	0.091	0.071	(0.082)	0.020
15	3.75	0.50	0.091	0.070	(0.082)	0.021
16	4.00	0.60	0.109	0.069	(0.098)	0.040
17	4.25	0.60	0.109	0.068	(0.098)	0.041
18	4.50	0.70	0.127	0.067	(0.115)	0.060
19	4.75	0.70	0.127	0.066	(0.115)	0.061
20	5.00	0.80	0.146	0.065	(0.131)	0.080
21	5.25	0.60	0.109	0.065	(0.098)	0.045
22	5.50	0.70	0.127	0.064	(0.115)	0.064
23	5.75	0.80	0.146	0.063	(0.131)	0.083
24	6.00	0.80	0.146	0.062	(0.131)	0.084
25	6.25	0.90	0.164	0.061	(0.147)	0.103
26	6.50	0.90	0.164	0.060	(0.147)	0.103
27	6.75	1.00	0.182	0.060	(0.164)	0.122
28	7.00	1.00	0.182	0.059	(0.164)	0.123
29	7.25	1.00	0.182	0.058	(0.164)	0.124
30	7.50	1.10	0.200	0.057	(0.180)	0.143
31	7.75	1.20	0.218	0.056	(0.197)	0.162
32	8.00	1.30	0.237	0.056	(0.213)	0.181
33	8.25	1.50	0.273	0.055	(0.246)	0.218
34	8.50	1.50	0.273	0.054	(0.246)	0.219
35	8.75	1.60	0.291	0.053	(0.262)	0.238
36	9.00	1.70	0.309	0.053	(0.278)	0.257
37	9.25	1.90	0.346	0.052	(0.311)	0.294
38	9.50	2.00	0.364	0.051	(0.328)	0.313
39	9.75	2.10	0.382	0.050	(0.344)	0.332
40	10.00	2.20	0.400	0.050	(0.360)	0.351

41	10.25	1.50	0.273	0.049	(0.246)	0.224
42	10.50	1.50	0.273	0.048	(0.246)	0.225
43	10.75	2.00	0.364	0.048	(0.328)	0.316
44	11.00	2.00	0.364	0.047	(0.328)	0.317
45	11.25	1.90	0.346	0.046	(0.311)	0.300
46	11.50	1.90	0.346	0.045	(0.311)	0.300
47	11.75	1.70	0.309	0.045	(0.278)	0.265
48	12.00	1.80	0.328	0.044	(0.295)	0.283
49	12.25	2.50	0.455	0.043	(0.409)	0.412
50	12.50	2.60	0.473	0.043	(0.426)	0.430
51	12.75	2.80	0.510	0.042	(0.459)	0.467
52	13.00	2.90	0.528	0.042	(0.475)	0.486
53	13.25	3.40	0.619	0.041	(0.557)	0.578
54	13.50	3.40	0.619	0.040	(0.557)	0.578
55	13.75	2.30	0.419	0.040	(0.377)	0.379
56	14.00	2.30	0.419	0.039	(0.377)	0.380
57	14.25	2.70	0.491	0.038	(0.442)	0.453
58	14.50	2.60	0.473	0.038	(0.426)	0.435
59	14.75	2.60	0.473	0.037	(0.426)	0.436
60	15.00	2.50	0.455	0.037	(0.409)	0.418
61	15.25	2.40	0.437	0.036	(0.393)	0.401
62	15.50	2.30	0.419	0.036	(0.377)	0.383
63	15.75	1.90	0.346	0.035	(0.311)	0.311
64	16.00	1.90	0.346	0.035	(0.311)	0.311
65	16.25	0.40	0.073	0.034	(0.066)	0.039
66	16.50	0.40	0.073	0.033	(0.066)	0.039
67	16.75	0.30	0.055	0.033	(0.049)	0.022
68	17.00	0.30	0.055	0.032	(0.049)	0.022
69	17.25	0.50	0.091	0.032	(0.082)	0.059
70	17.50	0.50	0.091	0.032	(0.082)	0.059
71	17.75	0.50	0.091	0.031	(0.082)	0.060
72	18.00	0.40	0.073	0.031	(0.066)	0.042
73	18.25	0.40	0.073	0.030	(0.066)	0.043
74	18.50	0.40	0.073	0.030	(0.066)	0.043
75	18.75	0.30	0.055	0.029	(0.049)	0.025
76	19.00	0.20	0.036	0.029	(0.033)	0.008
77	19.25	0.30	0.055	0.028	(0.049)	0.026
78	19.50	0.40	0.073	0.028	(0.066)	0.045
79	19.75	0.30	0.055	0.028	(0.049)	0.027
80	20.00	0.20	0.036	0.027	(0.033)	0.009
81	20.25	0.30	0.055	0.027	(0.049)	0.028
82	20.50	0.30	0.055	0.027	(0.049)	0.028
83	20.75	0.30	0.055	0.026	(0.049)	0.028
84	21.00	0.20	0.036	0.026	(0.033)	0.010
85	21.25	0.30	0.055	0.026	(0.049)	0.029
86	21.50	0.20	0.036	0.025	(0.033)	0.011
87	21.75	0.30	0.055	0.025	(0.049)	0.030
88	22.00	0.20	0.036	0.025	(0.033)	0.012
89	22.25	0.30	0.055	0.025	(0.049)	0.030
90	22.50	0.20	0.036	0.024	(0.033)	0.012
91	22.75	0.20	0.036	0.024	(0.033)	0.012

```
92  23.00     0.20      0.036          0.024    (  0.033)        0.012
93  23.25     0.20      0.036          0.024    (  0.033)        0.013
94  23.50     0.20      0.036          0.024    (  0.033)        0.013
95  23.75     0.20      0.036          0.023    (  0.033)        0.013
96  24.00     0.20      0.036          0.023    (  0.033)        0.013
              (Loss Rate Not Used)
   Sum =     100.0                                    Sum =    13.9
      Flood volume = Effective rainfall      3.49(In)
       times area       9.1(Ac.)/[(In)/(Ft.)] =       2.7(Ac.Ft)
      Total soil loss =      1.06(In)
      Total soil loss =     0.808(Ac.Ft)
      Total rainfall =      4.55(In)
      Flood volume =      115543.0 Cubic Feet
      Total soil loss =       35216.9 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      4.904(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in  15   Minute intervals ((CFS))

      ---------------------------------------------------------------------
Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
-------------------------------------------------------------------------
  0+15       0.0000      0.00  Q         |         |         |         |
  0+30       0.0003      0.01  Q         |         |         |         |
  0+45       0.0010      0.03  Q         |         |         |         |
  1+ 0       0.0019      0.04  Q         |         |         |         |
  1+15       0.0029      0.05  Q         |         |         |         |
  1+30       0.0040      0.05  Q         |         |         |         |
  1+45       0.0051      0.05  Q         |         |         |         |
  2+ 0       0.0061      0.05  Q         |         |         |         |
  2+15       0.0073      0.06  Q         |         |         |         |
  2+30       0.0086      0.06  Q         |         |         |         |
  2+45       0.0101      0.07  Q         |         |         |         |
  3+ 0       0.0123      0.11  Q         |         |         |         |
  3+15       0.0152      0.14  Q         |         |         |         |
  3+30       0.0184      0.16  Q         |         |         |         |
  3+45       0.0220      0.17  Q         |         |         |         |
  4+ 0       0.0260      0.19  Q         |         |         |         |
  4+15       0.0314      0.26  VQ        |         |         |         |
  4+30       0.0384      0.34  VQ        |         |         |         |
  4+45       0.0471      0.42  VQ        |         |         |         |
  5+ 0       0.0576      0.51  V Q       |         |         |         |
  5+15       0.0695      0.58   VQ       |         |         |         |
  5+30       0.0809      0.55  |VQ       |         |         |         |
  5+45       0.0921      0.54  |VQ       |         |         |         |
  6+ 0       0.1054      0.64  |VQ       |         |         |         |
  6+15       0.1202      0.72  |VQ       |         |         |         |
```



6+30	0.1369	0.81	VQ
6+45	0.1554	0.89	VQ
7+ 0	0.1758	0.99	VQ
7+15	0.1978	1.06	V Q
7+30	0.2207	1.11	VQ
7+45	0.2456	1.20	VQ
8+ 0	0.2733	1.34	VQ
8+15	0.3044	1.51	V Q
8+30	0.3399	1.72	VQ
8+45	0.3788	1.88	V Q
9+ 0	0.4206	2.02	V Q
9+15	0.4659	2.20	VQ
9+30	0.5160	2.42	V Q
9+45	0.5707	2.65	V Q
10+ 0	0.6293	2.84	V|Q
10+15	0.6901	2.94	VQ
10+30	0.7447	2.64	QV
10+45	0.7937	2.37	Q|V
11+ 0	0.8465	2.56	Q V
11+15	0.9034	2.76	|Q V
11+30	0.9606	2.77	|Q V
11+45	1.0171	2.73	Q V
12+ 0	1.0716	2.64	Q V
12+15	1.1267	2.67	Q V
12+30	1.1909	3.11	Q V
12+45	1.2646	3.57	Q V|
13+ 0	1.3451	3.89	Q V
13+15	1.4322	4.22	Q V
13+30	1.5287	4.67	Q | V
13+45	1.6300	4.90	Q| V
14+ 0	1.7208	4.40	Q | V
14+15	1.8019	3.92	Q | V
14+30	1.8842	3.98	Q | V
14+45	1.9678	4.04	Q | V|
15+ 0	2.0504	4.00	Q | V
15+15	2.1317	3.93	Q | V
15+30	2.2107	3.82	Q | V
15+45	2.2861	3.65	Q | V
16+ 0	2.3549	3.33	Q | V
16+15	2.4154	2.93	|Q | V
16+30	2.4556	1.95	Q | V
16+45	2.4778	1.08	Q | V
17+ 0	2.4921	0.69	Q | V
17+15	2.5019	0.48	Q | V
17+30	2.5117	0.47	Q | V
17+45	2.5225	0.52	Q | V
18+ 0	2.5335	0.53	Q | V
18+15	2.5433	0.48	Q | V
18+30	2.5522	0.43	Q | V
18+45	2.5605	0.40	Q | V
19+ 0	2.5673	0.33	Q | V

19+15	2.5719	0.22	Q	|	|	|	V |
19+30	2.5764	0.22	Q	|	|	|	V |
19+45	2.5825	0.29	|Q	|	|	|	V |
20+ 0	2.5883	0.28	|Q	|	|	|	V|
20+15	2.5926	0.21	Q	|	|	|	V|
20+30	2.5969	0.21	Q	|	|	|	V|
20+45	2.6018	0.24	Q	|	|	|	V|
21+ 0	2.6068	0.24	Q	|	|	|	V|
21+15	2.6108	0.20	Q	|	|	|	V|
21+30	2.6149	0.20	Q	|	|	|	V|
21+45	2.6187	0.19	Q	|	|	|	V|
22+ 0	2.6227	0.19	Q	|	|	|	V|
22+15	2.6265	0.19	Q	|	|	|	V|
22+30	2.6306	0.19	Q	|	|	|	V|
22+45	2.6343	0.18	Q	|	|	|	V|
23+ 0	2.6372	0.14	Q	|	|	|	V|
23+15	2.6398	0.13	Q	|	|	|	V|
23+30	2.6424	0.12	Q	|	|	|	V|
23+45	2.6449	0.12	Q	|	|	|	V|
24+ 0	2.6473	0.12	Q	|	|	|	V|
24+15	2.6496	0.11	Q	|	|	|	V|
24+30	2.6511	0.07	Q	|	|	|	V|
24+45	2.6517	0.03	Q	|	|	|	V|
25+ 0	2.6521	0.02	Q	|	|	|	V|
25+15	2.6523	0.01	Q	|	|	|	V|
25+30	2.6524	0.00	Q	|	|	|	V|
25+45	2.6524	0.00	Q	|	|	|	V|
26+ 0	2.6525	0.00	Q	|	|	|	V|
26+15	2.6525	0.00	Q	|	|	|	V|
26+30	2.6525	0.00	Q	|	|	|	V|
26+45	2.6525	0.00	Q	|	|	|	V|

Thursday, May 29, 2025 3:58:41 PM

U n i t H y d r o g r a p h A n a l y s i s

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Study date 05/15/25 File: lmcrp12.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6619

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

INDEPENDENCE AT CANYON SPRINGS
POST-DEVELOPMENT CONDITION
2-YR, 1-HR STORM
HYDROGRAPH

Drainage Area = 9.13(Ac.) = 0.014 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 9.13(Ac.) = 0.014 Sq. Mi.
Length along longest watercourse = 974.40(Ft.)
Length along longest watercourse measured to centroid = 487.20(Ft.)
Length along longest watercourse = 0.185 Mi.
Length along longest watercourse measured to centroid = 0.092 Mi.
Difference in elevation = 12.66(Ft.)
Slope along watercourse = 68.6010 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.034 Hr.
Lag time = 2.06 Min.
25% of lag time = 0.51 Min.
40% of lag time = 0.82 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Thursday, May 29, 2025 3:58:41 PM

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	0.45	4.14

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	1.18	10.77

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 0.454(In)
Area Averaged 100-Year Rainfall = 1.180(In)

Point rain (area averaged) = 0.454(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 0.454(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
9.128	69.00	0.800

Total Area Entered = 9.13(Ac.)

RI AMC2	RI AMC-1	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
69.0	49.8	0.574	0.800	0.161	1.000	0.161
					Sum (F) =	0.161

Area averaged mean soil loss (F) (In/Hr) = 0.161
Minimum soil loss rate ((In/Hr)) = 0.080
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.260

Slope of intensity-duration curve for a 1 hour storm =0.5500

U n i t H y d r o g r a p h
FOOTHILL S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	242.981	49.907	4.591
2	0.167	485.962	45.766	4.210
3	0.250	728.942	4.327	0.398
			Sum = 100.000	Sum= 9.199

The following loss rate calculations reflect use of the minimum calculated loss

rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	3.30	0.180	(0.161)	0.047	0.133
2	0.17	4.20	0.229	(0.161)	0.059	0.169
3	0.25	4.40	0.240	(0.161)	0.062	0.177
4	0.33	4.80	0.261	(0.161)	0.068	0.193
5	0.42	5.20	0.283	(0.161)	0.074	0.210
6	0.50	6.20	0.338	(0.161)	0.088	0.250
7	0.58	6.80	0.370	(0.161)	0.096	0.274
8	0.67	8.80	0.479	(0.161)	0.125	0.355
9	0.75	13.90	0.757	0.161	(0.197)	0.597
10	0.83	31.40	1.711	0.161	(0.445)	1.550
11	0.92	7.20	0.392	(0.161)	0.102	0.290
12	1.00	3.80	0.207	(0.161)	0.054	0.153
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	4.4

Flood volume = Effective rainfall 0.36(In)
times area 9.1(Ac.)/[(In)/(Ft.)] = 0.3(Ac.Ft)
Total soil loss = 0.09(In)
Total soil loss = 0.069(Ac.Ft)
Total rainfall = 0.45(In)
Flood volume = 12015.1 Cubic Feet
Total soil loss = 3026.8 Cubic Feet

Peak flow rate of this hydrograph = 9.773(CFS)

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1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0042	0.61	V Q	|	|	|	|
0+10	0.0134	1.34	|V Q	|	|	|	|
0+15	0.0243	1.58	| V Q	|	|	|	|
0+20	0.0360	1.70	| VQ	|	|	|	|
0+25	0.0488	1.85	| Q	|	|	|	|
0+30	0.0633	2.11	| QV	|	|	|	|
0+35	0.0798	2.40	| Q|V	|	|	|	|
0+40	0.0997	2.88	| |Q V	|	|	|	|
0+45	0.1296	4.34	| | QV	|	|	|	|
0+50	0.1969	9.77	| |	|	| V	|	Q|
0+55	0.2527	8.10	| |	|	|	| Q V	|
1+ 0	0.2702	2.54	| Q	|	|	|	V|
1+ 5	0.2754	0.76	| Q	|	|	|	V|
1+10	0.2758	0.06	Q	|	|	|	V|

Thursday, May 29, 2025 3:59:00 PM

U n i t H y d r o g r a p h A n a l y s i s

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Study date 05/15/25 File: lmcrp242.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6619

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

INDEPENDENCE AT CANYON SPRINGS
POST-DEVELOPMENT CONDITION
2-YR, 24-HR STORM
HYDROGRAPH

Drainage Area = 9.13(Ac.) = 0.014 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 9.13(Ac.) = 0.014 Sq. Mi.
Length along longest watercourse = 974.40(Ft.)
Length along longest watercourse measured to centroid = 487.20(Ft.)
Length along longest watercourse = 0.185 Mi.
Length along longest watercourse measured to centroid = 0.092 Mi.
Difference in elevation = 12.66(Ft.)
Slope along watercourse = 68.6010 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.034 Hr.
Lag time = 2.06 Min.
25% of lag time = 0.51 Min.
40% of lag time = 0.82 Min.
Unit time = 15.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Thursday, May 29, 2025 3:59:00 PM

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	1.87	17.07

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	4.55	41.53

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 1.870(In)
Area Averaged 100-Year Rainfall = 4.550(In)

Point rain (area averaged) = 1.870(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.870(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
9.128	69.00	0.800

Total Area Entered = 9.13(Ac.)

RI AMC2	RI AMC-1	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
69.0	49.8	0.574	0.800	0.161	1.000	0.161
					Sum (F) =	0.161

Area averaged mean soil loss (F) (In/Hr) = 0.161
Minimum soil loss rate ((In/Hr)) = 0.080
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.260

U n i t H y d r o g r a p h
FOOTHILL S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.250	728.942	100.000	9.199
		Sum = 100.000	Sum=	9.199

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)

1	0.25	0.20	0.015	(0.284)	0.004	0.011
2	0.50	0.30	0.022	(0.280)	0.006	0.017
3	0.75	0.30	0.022	(0.277)	0.006	0.017
4	1.00	0.40	0.030	(0.274)	0.008	0.022
5	1.25	0.30	0.022	(0.271)	0.006	0.017
6	1.50	0.30	0.022	(0.268)	0.006	0.017
7	1.75	0.30	0.022	(0.264)	0.006	0.017
8	2.00	0.40	0.030	(0.261)	0.008	0.022
9	2.25	0.40	0.030	(0.258)	0.008	0.022
10	2.50	0.40	0.030	(0.255)	0.008	0.022
11	2.75	0.50	0.037	(0.252)	0.010	0.028
12	3.00	0.50	0.037	(0.249)	0.010	0.028
13	3.25	0.50	0.037	(0.246)	0.010	0.028
14	3.50	0.50	0.037	(0.243)	0.010	0.028
15	3.75	0.50	0.037	(0.239)	0.010	0.028
16	4.00	0.60	0.045	(0.236)	0.012	0.033
17	4.25	0.60	0.045	(0.233)	0.012	0.033
18	4.50	0.70	0.052	(0.230)	0.014	0.039
19	4.75	0.70	0.052	(0.228)	0.014	0.039
20	5.00	0.80	0.060	(0.225)	0.016	0.044
21	5.25	0.60	0.045	(0.222)	0.012	0.033
22	5.50	0.70	0.052	(0.219)	0.014	0.039
23	5.75	0.80	0.060	(0.216)	0.016	0.044
24	6.00	0.80	0.060	(0.213)	0.016	0.044
25	6.25	0.90	0.067	(0.210)	0.018	0.050
26	6.50	0.90	0.067	(0.207)	0.018	0.050
27	6.75	1.00	0.075	(0.205)	0.019	0.055
28	7.00	1.00	0.075	(0.202)	0.019	0.055
29	7.25	1.00	0.075	(0.199)	0.019	0.055
30	7.50	1.10	0.082	(0.196)	0.021	0.061
31	7.75	1.20	0.090	(0.194)	0.023	0.066
32	8.00	1.30	0.097	(0.191)	0.025	0.072
33	8.25	1.50	0.112	(0.188)	0.029	0.083
34	8.50	1.50	0.112	(0.186)	0.029	0.083
35	8.75	1.60	0.120	(0.183)	0.031	0.089
36	9.00	1.70	0.127	(0.181)	0.033	0.094
37	9.25	1.90	0.142	(0.178)	0.037	0.105
38	9.50	2.00	0.150	(0.176)	0.039	0.111
39	9.75	2.10	0.157	(0.173)	0.041	0.116
40	10.00	2.20	0.165	(0.171)	0.043	0.122
41	10.25	1.50	0.112	(0.168)	0.029	0.083
42	10.50	1.50	0.112	(0.166)	0.029	0.083
43	10.75	2.00	0.150	(0.163)	0.039	0.111
44	11.00	2.00	0.150	(0.161)	0.039	0.111
45	11.25	1.90	0.142	(0.158)	0.037	0.105
46	11.50	1.90	0.142	(0.156)	0.037	0.105
47	11.75	1.70	0.127	(0.154)	0.033	0.094
48	12.00	1.80	0.135	(0.152)	0.035	0.100
49	12.25	2.50	0.187	(0.149)	0.049	0.138
50	12.50	2.60	0.194	(0.147)	0.051	0.144
51	12.75	2.80	0.209	(0.145)	0.054	0.155

52	13.00	2.90	0.217	(0.143)	0.056	0.161
53	13.25	3.40	0.254	(0.140)	0.066	0.188
54	13.50	3.40	0.254	(0.138)	0.066	0.188
55	13.75	2.30	0.172	(0.136)	0.045	0.127
56	14.00	2.30	0.172	(0.134)	0.045	0.127
57	14.25	2.70	0.202	(0.132)	0.053	0.149
58	14.50	2.60	0.194	(0.130)	0.051	0.144
59	14.75	2.60	0.194	(0.128)	0.051	0.144
60	15.00	2.50	0.187	(0.126)	0.049	0.138
61	15.25	2.40	0.180	(0.124)	0.047	0.133
62	15.50	2.30	0.172	(0.122)	0.045	0.127
63	15.75	1.90	0.142	(0.120)	0.037	0.105
64	16.00	1.90	0.142	(0.119)	0.037	0.105
65	16.25	0.40	0.030	(0.117)	0.008	0.022
66	16.50	0.40	0.030	(0.115)	0.008	0.022
67	16.75	0.30	0.022	(0.113)	0.006	0.017
68	17.00	0.30	0.022	(0.112)	0.006	0.017
69	17.25	0.50	0.037	(0.110)	0.010	0.028
70	17.50	0.50	0.037	(0.108)	0.010	0.028
71	17.75	0.50	0.037	(0.107)	0.010	0.028
72	18.00	0.40	0.030	(0.105)	0.008	0.022
73	18.25	0.40	0.030	(0.104)	0.008	0.022
74	18.50	0.40	0.030	(0.102)	0.008	0.022
75	18.75	0.30	0.022	(0.101)	0.006	0.017
76	19.00	0.20	0.015	(0.099)	0.004	0.011
77	19.25	0.30	0.022	(0.098)	0.006	0.017
78	19.50	0.40	0.030	(0.096)	0.008	0.022
79	19.75	0.30	0.022	(0.095)	0.006	0.017
80	20.00	0.20	0.015	(0.094)	0.004	0.011
81	20.25	0.30	0.022	(0.093)	0.006	0.017
82	20.50	0.30	0.022	(0.091)	0.006	0.017
83	20.75	0.30	0.022	(0.090)	0.006	0.017
84	21.00	0.20	0.015	(0.089)	0.004	0.011
85	21.25	0.30	0.022	(0.088)	0.006	0.017
86	21.50	0.20	0.015	(0.087)	0.004	0.011
87	21.75	0.30	0.022	(0.086)	0.006	0.017
88	22.00	0.20	0.015	(0.085)	0.004	0.011
89	22.25	0.30	0.022	(0.084)	0.006	0.017
90	22.50	0.20	0.015	(0.084)	0.004	0.011
91	22.75	0.20	0.015	(0.083)	0.004	0.011
92	23.00	0.20	0.015	(0.082)	0.004	0.011
93	23.25	0.20	0.015	(0.082)	0.004	0.011
94	23.50	0.20	0.015	(0.081)	0.004	0.011
95	23.75	0.20	0.015	(0.081)	0.004	0.011
96	24.00	0.20	0.015	(0.080)	0.004	0.011

(Loss Rate Not Used)

Sum = 100.0 Sum = 5.5

Flood volume = Effective rainfall 1.38(In)
times area 9.1(Ac.)/[(In)/(Ft.)] = 1.1(Ac.Ft)
Total soil loss = 0.49(In)
Total soil loss = 0.370(Ac.Ft)

Thursday, May 29, 2025 3:59:00 PM

Total rainfall = 1.87(In)
Flood volume = 45850.9 Cubic Feet
Total soil loss = 16109.8 Cubic Feet

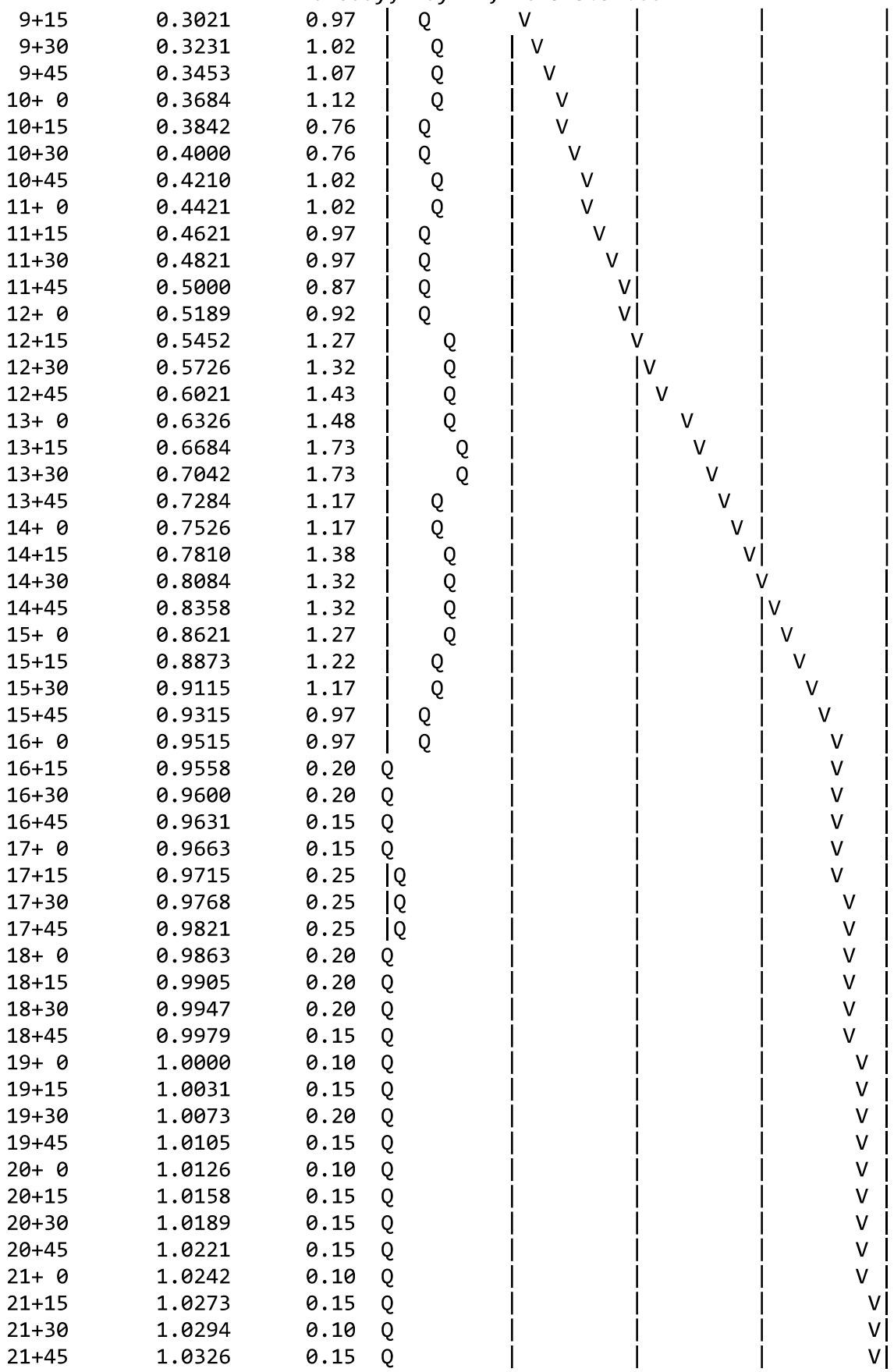
Peak flow rate of this hydrograph = 1.732(CFS)

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24 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 15 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0 2.5 5.0 7.5 10.0
0+15	0.0021	0.10	Q
0+30	0.0053	0.15	Q
0+45	0.0084	0.15	Q
1+ 0	0.0126	0.20	Q
1+15	0.0158	0.15	Q
1+30	0.0189	0.15	Q
1+45	0.0221	0.15	Q
2+ 0	0.0263	0.20	QV
2+15	0.0305	0.20	QV
2+30	0.0347	0.20	QV
2+45	0.0400	0.25	|Q
3+ 0	0.0453	0.25	|Q
3+15	0.0505	0.25	|Q
3+30	0.0558	0.25	|QV
3+45	0.0611	0.25	|QV
4+ 0	0.0674	0.31	|QV
4+15	0.0737	0.31	|QV
4+30	0.0810	0.36	|Q V
4+45	0.0884	0.36	|Q V
5+ 0	0.0968	0.41	|Q V
5+15	0.1032	0.31	|Q V
5+30	0.1105	0.36	|Q V
5+45	0.1189	0.41	|Q V
6+ 0	0.1274	0.41	|Q V
6+15	0.1368	0.46	|Q V
6+30	0.1463	0.46	|Q V
6+45	0.1568	0.51	| Q V
7+ 0	0.1674	0.51	| Q V
7+15	0.1779	0.51	| Q V
7+30	0.1895	0.56	| Q V
7+45	0.2021	0.61	| Q V
8+ 0	0.2158	0.66	| Q V
8+15	0.2316	0.76	| Q V
8+30	0.2474	0.76	| Q V
8+45	0.2642	0.82	| Q V
9+ 0	0.2821	0.87	| Q V



9+15	0.3021	0.97	
9+30	0.3231	1.02	
9+45	0.3453	1.07	
10+ 0	0.3684	1.12	
10+15	0.3842	0.76	
10+30	0.4000	0.76	
10+45	0.4210	1.02	
11+ 0	0.4421	1.02	
11+15	0.4621	0.97	
11+30	0.4821	0.97	
11+45	0.5000	0.87	
12+ 0	0.5189	0.92	
12+15	0.5452	1.27	
12+30	0.5726	1.32	
12+45	0.6021	1.43	
13+ 0	0.6326	1.48	
13+15	0.6684	1.73	
13+30	0.7042	1.73	
13+45	0.7284	1.17	
14+ 0	0.7526	1.17	
14+15	0.7810	1.38	
14+30	0.8084	1.32	
14+45	0.8358	1.32	
15+ 0	0.8621	1.27	
15+15	0.8873	1.22	
15+30	0.9115	1.17	
15+45	0.9315	0.97	
16+ 0	0.9515	0.97	
16+15	0.9558	0.20	
16+30	0.9600	0.20	
16+45	0.9631	0.15	
17+ 0	0.9663	0.15	
17+15	0.9715	0.25	
17+30	0.9768	0.25	
17+45	0.9821	0.25	
18+ 0	0.9863	0.20	
18+15	0.9905	0.20	
18+30	0.9947	0.20	
18+45	0.9979	0.15	
19+ 0	1.0000	0.10	
19+15	1.0031	0.15	
19+30	1.0073	0.20	
19+45	1.0105	0.15	
20+ 0	1.0126	0.10	
20+15	1.0158	0.15	
20+30	1.0189	0.15	
20+45	1.0221	0.15	
21+ 0	1.0242	0.10	
21+15	1.0273	0.15	
21+30	1.0294	0.10	
21+45	1.0326	0.15	

22+ 0	1.0347	0.10	Q	|	|	|	V|
22+15	1.0379	0.15	Q	|	|	|	V|
22+30	1.0400	0.10	Q	|	|	|	V|
22+45	1.0421	0.10	Q	|	|	|	V|
23+ 0	1.0442	0.10	Q	|	|	|	V|
23+15	1.0463	0.10	Q	|	|	|	V|
23+30	1.0484	0.10	Q	|	|	|	V|
23+45	1.0505	0.10	Q	|	|	|	V|
24+ 0	1.0526	0.10	Q	|	|	|	V|

U n i t H y d r o g r a p h A n a l y s i s

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Study date 05/23/25 File: lmcrp110.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6619

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

INDEPENDENCE AT CANYON SPRINGS
POST-DEVELOPMENT CONDITION
10-YR, 1-HR STORM
HYDROGRAPH

Drainage Area = 9.13(Ac.) = 0.014 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 9.13(Ac.) = 0.014 Sq. Mi.
Length along longest watercourse = 974.40(Ft.)
Length along longest watercourse measured to centroid = 487.20(Ft.)
Length along longest watercourse = 0.185 Mi.
Length along longest watercourse measured to centroid = 0.092 Mi.
Difference in elevation = 12.66(Ft.)
Slope along watercourse = 68.6010 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.034 Hr.
Lag time = 2.06 Min.
25% of lag time = 0.51 Min.
40% of lag time = 0.82 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	0.45	4.14

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	1.18	10.77

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 0.454(In)
Area Averaged 100-Year Rainfall = 1.180(In)

Point rain (area averaged) = 0.753(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 0.753(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
9.128	69.00	0.800

Total Area Entered = 9.13(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
69.0	69.0	0.373	0.800	0.104	1.000	0.104
					Sum (F) =	0.104

Area averaged mean soil loss (F) (In/Hr) = 0.104
Minimum soil loss rate ((In/Hr)) = 0.052
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.260

Slope of intensity-duration curve for a 1 hour storm =0.5500

U n i t H y d r o g r a p h
FOOTHILL S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	242.981	49.907	4.591
2	0.167	485.962	45.766	4.210
3	0.250	728.942	4.327	0.398
		Sum = 100.000	Sum=	9.199

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)

```
 1   0.08     3.30      0.298       (  0.104)       0.077        0.221
 2   0.17     4.20      0.379       (  0.104)       0.099        0.281
 3   0.25     4.40      0.397       (  0.104)       0.103        0.294
 4   0.33     4.80      0.434          0.104    (  0.113)        0.329
 5   0.42     5.20      0.470          0.104    (  0.122)        0.365
 6   0.50     6.20      0.560          0.104    (  0.146)        0.456
 7   0.58     6.80      0.614          0.104    (  0.160)        0.510
 8   0.67     8.80      0.795          0.104    (  0.207)        0.690
 9   0.75    13.90      1.255          0.104    (  0.326)        1.151
10   0.83    31.40      2.836          0.104    (  0.737)        2.731
11   0.92     7.20      0.650          0.104    (  0.169)        0.546
12   1.00     3.80      0.343       (  0.104)       0.089        0.254
              (Loss Rate Not Used)
   Sum =     100.0                                    Sum =     7.8
      Flood volume = Effective rainfall      0.65(In)
       times area       9.1(Ac.)/[(In)/(Ft.)] =       0.5(Ac.Ft)
      Total soil loss =      0.10(In)
      Total soil loss =     0.076(Ac.Ft)
      Total rainfall =      0.75(In)
      Flood volume =       21614.0 Cubic Feet
      Total soil loss =        3323.8 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =     17.670(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          1 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                   Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
  Time(h+m) Volume Ac.Ft   Q(CFS)  0        5.0      10.0      15.0      20.0
  ------------------------------------------------------------------------
    0+ 5       0.0070      1.01  V Q       |         |         |         |
    0+10       0.0223      2.22  |V  Q     |         |         |         |
    0+15       0.0403      2.62  |  V Q    |         |         |         |
    0+20       0.0600      2.86  |   VQ    |         |         |         |
    0+25       0.0819      3.18  |     Q   |         |         |         |
    0+30       0.1078      3.76  |      QV |         |         |         |
    0+35       0.1382      4.41  |       Q |V        |         |         |
    0+40       0.1761      5.50  |         Q   V     |         |         |
    0+45       0.2339      8.40  |         |     Q V |         |         |
    0+50       0.3556     17.67  |         |         |       V |    Q    |
    0+55       0.4553     14.47  |         |         |       Q |     V   |
    1+ 0       0.4866      4.55  |        Q|         |         |        V|
    1+ 5       0.4955      1.29  | Q       |         |         |        V|
    1+10       0.4962      0.10  Q         |         |         |        V|
------------------------------------------------------------------------
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U n i t H y d r o g r a p h A n a l y s i s

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Study date 05/23/25 File: lmcrp2410.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6619

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

INDEPENDENCE AT CANYON SPRINGS
POST-DEVELOPMENT CONDITION
10-YR, 24-HR STORM
HYDROGRAPH

Drainage Area = 9.13(Ac.) = 0.014 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 9.13(Ac.) = 0.014 Sq. Mi.
Length along longest watercourse = 974.40(Ft.)
Length along longest watercourse measured to centroid = 487.20(Ft.)
Length along longest watercourse = 0.185 Mi.
Length along longest watercourse measured to centroid = 0.092 Mi.
Difference in elevation = 12.66(Ft.)
Slope along watercourse = 68.6010 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.034 Hr.
Lag time = 2.06 Min.
25% of lag time = 0.51 Min.
40% of lag time = 0.82 Min.
Unit time = 15.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	1.87	17.07

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	4.55	41.53

STORM EVENT (YEAR) = 10.00
Area Averaged 2-Year Rainfall = 1.870(In)
Area Averaged 100-Year Rainfall = 4.550(In)

Point rain (area averaged) = 2.973(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 2.973(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
9.128	69.00	0.800

Total Area Entered = 9.13(Ac.)

RI AMC2	RI AMC-2	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
69.0	69.0	0.373	0.800	0.104	1.000	0.104
					Sum (F) =	0.104

Area averaged mean soil loss (F) (In/Hr) = 0.104
Minimum soil loss rate ((In/Hr)) = 0.052
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.260

U n i t H y d r o g r a p h
FOOTHILL S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.250	728.942	100.000	9.199
		Sum =	100.000	Sum= 9.199

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max		Low	Effective (In/Hr)
1	0.25	0.20	0.024	(0.184)		0.006	0.018
2	0.50	0.30	0.036	(0.182)		0.009	0.026
3	0.75	0.30	0.036	(0.180)		0.009	0.026
4	1.00	0.40	0.048	(0.178)		0.012	0.035

5	1.25	0.30	0.036	(0.176)	0.009	0.026
6	1.50	0.30	0.036	(0.174)	0.009	0.026
7	1.75	0.30	0.036	(0.172)	0.009	0.026
8	2.00	0.40	0.048	(0.170)	0.012	0.035
9	2.25	0.40	0.048	(0.168)	0.012	0.035
10	2.50	0.40	0.048	(0.166)	0.012	0.035
11	2.75	0.50	0.059	(0.164)	0.015	0.044
12	3.00	0.50	0.059	(0.161)	0.015	0.044
13	3.25	0.50	0.059	(0.159)	0.015	0.044
14	3.50	0.50	0.059	(0.158)	0.015	0.044
15	3.75	0.50	0.059	(0.156)	0.015	0.044
16	4.00	0.60	0.071	(0.154)	0.019	0.053
17	4.25	0.60	0.071	(0.152)	0.019	0.053
18	4.50	0.70	0.083	(0.150)	0.022	0.062
19	4.75	0.70	0.083	(0.148)	0.022	0.062
20	5.00	0.80	0.095	(0.146)	0.025	0.070
21	5.25	0.60	0.071	(0.144)	0.019	0.053
22	5.50	0.70	0.083	(0.142)	0.022	0.062
23	5.75	0.80	0.095	(0.140)	0.025	0.070
24	6.00	0.80	0.095	(0.138)	0.025	0.070
25	6.25	0.90	0.107	(0.137)	0.028	0.079
26	6.50	0.90	0.107	(0.135)	0.028	0.079
27	6.75	1.00	0.119	(0.133)	0.031	0.088
28	7.00	1.00	0.119	(0.131)	0.031	0.088
29	7.25	1.00	0.119	(0.129)	0.031	0.088
30	7.50	1.10	0.131	(0.128)	0.034	0.097
31	7.75	1.20	0.143	(0.126)	0.037	0.106
32	8.00	1.30	0.155	(0.124)	0.040	0.114
33	8.25	1.50	0.178	(0.122)	0.046	0.132
34	8.50	1.50	0.178	(0.121)	0.046	0.132
35	8.75	1.60	0.190	(0.119)	0.049	0.141
36	9.00	1.70	0.202	(0.117)	0.053	0.150
37	9.25	1.90	0.226	(0.116)	0.059	0.167
38	9.50	2.00	0.238	(0.114)	0.062	0.176
39	9.75	2.10	0.250	(0.112)	0.065	0.185
40	10.00	2.20	0.262	(0.111)	0.068	0.194
41	10.25	1.50	0.178	(0.109)	0.046	0.132
42	10.50	1.50	0.178	(0.108)	0.046	0.132
43	10.75	2.00	0.238	(0.106)	0.062	0.176
44	11.00	2.00	0.238	(0.104)	0.062	0.176
45	11.25	1.90	0.226	(0.103)	0.059	0.167
46	11.50	1.90	0.226	(0.101)	0.059	0.167
47	11.75	1.70	0.202	(0.100)	0.053	0.150
48	12.00	1.80	0.214	(0.098)	0.056	0.158
49	12.25	2.50	0.297	(0.097)	0.077	0.220
50	12.50	2.60	0.309	(0.096)	0.080	0.229
51	12.75	2.80	0.333	(0.094)	0.087	0.246
52	13.00	2.90	0.345	(0.093)	0.090	0.255
53	13.25	3.40	0.404	0.091	(0.105)	0.313
54	13.50	3.40	0.404	0.090	(0.105)	0.314
55	13.75	2.30	0.273	(0.088)	0.071	0.202
56	14.00	2.30	0.273	(0.087)	0.071	0.202
57	14.25	2.70	0.321	(0.086)	0.083	0.238

58	14.50	2.60	0.309	(0.085)	0.080	0.229
59	14.75	2.60	0.309	(0.083)	0.080	0.229
60	15.00	2.50	0.297	(0.082)	0.077	0.220
61	15.25	2.40	0.285	(0.081)	0.074	0.211
62	15.50	2.30	0.273	(0.079)	0.071	0.202
63	15.75	1.90	0.226	(0.078)	0.059	0.167
64	16.00	1.90	0.226	(0.077)	0.059	0.167
65	16.25	0.40	0.048	(0.076)	0.012	0.035
66	16.50	0.40	0.048	(0.075)	0.012	0.035
67	16.75	0.30	0.036	(0.074)	0.009	0.026
68	17.00	0.30	0.036	(0.072)	0.009	0.026
69	17.25	0.50	0.059	(0.071)	0.015	0.044
70	17.50	0.50	0.059	(0.070)	0.015	0.044
71	17.75	0.50	0.059	(0.069)	0.015	0.044
72	18.00	0.40	0.048	(0.068)	0.012	0.035
73	18.25	0.40	0.048	(0.067)	0.012	0.035
74	18.50	0.40	0.048	(0.066)	0.012	0.035
75	18.75	0.30	0.036	(0.065)	0.009	0.026
76	19.00	0.20	0.024	(0.064)	0.006	0.018
77	19.25	0.30	0.036	(0.063)	0.009	0.026
78	19.50	0.40	0.048	(0.063)	0.012	0.035
79	19.75	0.30	0.036	(0.062)	0.009	0.026
80	20.00	0.20	0.024	(0.061)	0.006	0.018
81	20.25	0.30	0.036	(0.060)	0.009	0.026
82	20.50	0.30	0.036	(0.059)	0.009	0.026
83	20.75	0.30	0.036	(0.059)	0.009	0.026
84	21.00	0.20	0.024	(0.058)	0.006	0.018
85	21.25	0.30	0.036	(0.057)	0.009	0.026
86	21.50	0.20	0.024	(0.057)	0.006	0.018
87	21.75	0.30	0.036	(0.056)	0.009	0.026
88	22.00	0.20	0.024	(0.055)	0.006	0.018
89	22.25	0.30	0.036	(0.055)	0.009	0.026
90	22.50	0.20	0.024	(0.054)	0.006	0.018
91	22.75	0.20	0.024	(0.054)	0.006	0.018
92	23.00	0.20	0.024	(0.053)	0.006	0.018
93	23.25	0.20	0.024	(0.053)	0.006	0.018
94	23.50	0.20	0.024	(0.053)	0.006	0.018
95	23.75	0.20	0.024	(0.052)	0.006	0.018
96	24.00	0.20	0.024	(0.052)	0.006	0.018

(Loss Rate Not Used)

Sum = 100.0 Sum = 8.8

Flood volume = Effective rainfall 2.21(In)
times area 9.1(Ac.)/[(In)/(Ft.)] = 1.7(Ac.Ft)
Total soil loss = 0.77(In)
Total soil loss = 0.582(Ac.Ft)
Total rainfall = 2.97(In)
Flood volume = 73126.2 Cubic Feet
Total soil loss = 25367.2 Cubic Feet

Peak flow rate of this hydrograph = 2.894(CFS)

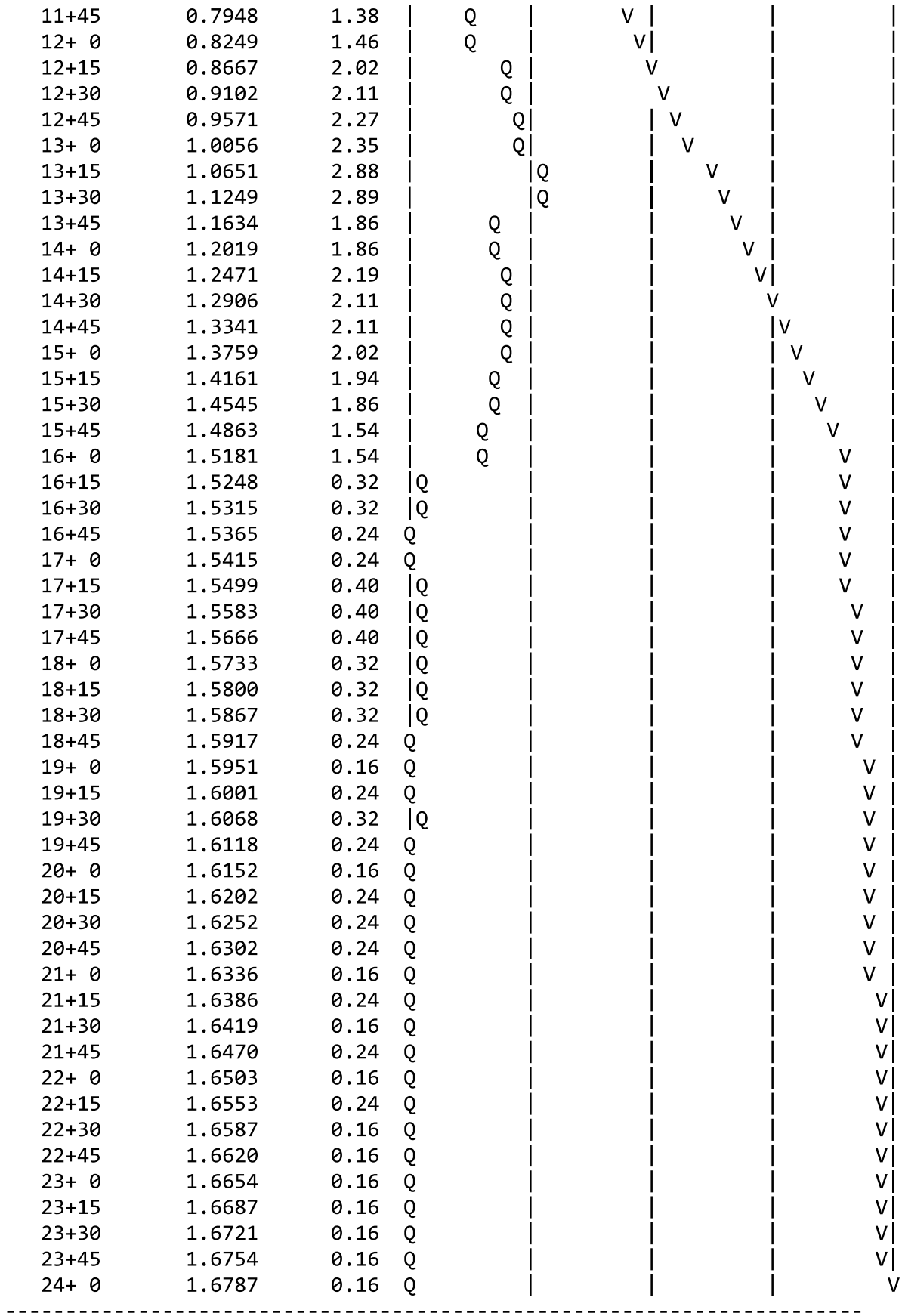
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24 - H O U R S T O R M

R u n o f f H y d r o g r a p h

Hydrograph in 15 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+15	0.0033	0.16	Q				
0+30	0.0084	0.24	Q				
0+45	0.0134	0.24	Q				
1+ 0	0.0201	0.32	VQ				
1+15	0.0251	0.24	Q				
1+30	0.0301	0.24	Q				
1+45	0.0351	0.24	Q				
2+ 0	0.0418	0.32	VQ				
2+15	0.0485	0.32	|Q				
2+30	0.0552	0.32	|Q				
2+45	0.0636	0.40	|Q				
3+ 0	0.0719	0.40	|Q				
3+15	0.0803	0.40	|Q				
3+30	0.0887	0.40	|QV				
3+45	0.0970	0.40	|QV				
4+ 0	0.1071	0.49	|QV				
4+15	0.1171	0.49	|QV				
4+30	0.1288	0.57	| QV				
4+45	0.1405	0.57	| QV				
5+ 0	0.1539	0.65	| QV				
5+15	0.1640	0.49	|Q V				
5+30	0.1757	0.57	| Q V				
5+45	0.1891	0.65	| Q V				
6+ 0	0.2025	0.65	| Q V				
6+15	0.2175	0.73	| Q V				
6+30	0.2326	0.73	| Q V				
6+45	0.2493	0.81	| Q V				
7+ 0	0.2660	0.81	| Q V				
7+15	0.2828	0.81	| Q V				
7+30	0.3012	0.89	| Q V				
7+45	0.3213	0.97	| Q V				
8+ 0	0.3430	1.05	| Q V				
8+15	0.3681	1.21	| Q V				
8+30	0.3932	1.21	| Q V				
8+45	0.4200	1.30	| Q V				
9+ 0	0.4484	1.38	| Q V				
9+15	0.4802	1.54	| Q V				
9+30	0.5137	1.62	| Q | V				
9+45	0.5488	1.70	| Q | V				
10+ 0	0.5856	1.78	| Q | V				
10+15	0.6107	1.21	| Q | V				
10+30	0.6358	1.21	| Q | V				
10+45	0.6693	1.62	| Q | V				
11+ 0	0.7027	1.62	| Q | V				
11+15	0.7345	1.54	| Q | V				
11+30	0.7663	1.54	| Q | V				


11+45 0.7948 1.38
12+ 0 0.8249 1.46
12+15 0.8667 2.02
12+30 0.9102 2.11
12+45 0.9571 2.27
13+ 0 1.0056 2.35
13+15 1.0651 2.88
13+30 1.1249 2.89
13+45 1.1634 1.86
14+ 0 1.2019 1.86
14+15 1.2471 2.19
14+30 1.2906 2.11
14+45 1.3341 2.11
15+ 0 1.3759 2.02
15+15 1.4161 1.94
15+30 1.4545 1.86
15+45 1.4863 1.54
16+ 0 1.5181 1.54
16+15 1.5248 0.32
16+30 1.5315 0.32
16+45 1.5365 0.24
17+ 0 1.5415 0.24
17+15 1.5499 0.40
17+30 1.5583 0.40
17+45 1.5666 0.40
18+ 0 1.5733 0.32
18+15 1.5800 0.32
18+30 1.5867 0.32
18+45 1.5917 0.24
19+ 0 1.5951 0.16
19+15 1.6001 0.24
19+30 1.6068 0.32
19+45 1.6118 0.24
20+ 0 1.6152 0.16
20+15 1.6202 0.24
20+30 1.6252 0.24
20+45 1.6302 0.24
21+ 0 1.6336 0.16
21+15 1.6386 0.24
21+30 1.6419 0.16
21+45 1.6470 0.24
22+ 0 1.6503 0.16
22+15 1.6553 0.24
22+30 1.6587 0.16
22+45 1.6620 0.16
23+ 0 1.6654 0.16
23+15 1.6687 0.16
23+30 1.6721 0.16
23+45 1.6754 0.16
24+ 0 1.6787 0.16

Thursday, May 29, 2025 3:59:31 PM

U n i t H y d r o g r a p h A n a l y s i s

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Study date 05/15/25 File: lmcrp1100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6619

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

INDEPENDENCE AT CANYON SPRINGS
POST-DEVELOPMENT CONDITION
100-YR, 1-HR STORM
HYDROGRAPH

Drainage Area = 9.13(Ac.) = 0.014 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 9.13(Ac.) = 0.014 Sq. Mi.
Length along longest watercourse = 974.40(Ft.)
Length along longest watercourse measured to centroid = 487.20(Ft.)
Length along longest watercourse = 0.185 Mi.
Length along longest watercourse measured to centroid = 0.092 Mi.
Difference in elevation = 12.66(Ft.)
Slope along watercourse = 68.6010 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.034 Hr.
Lag time = 2.06 Min.
25% of lag time = 0.51 Min.
40% of lag time = 0.82 Min.
Unit time = 5.00 Min.
Duration of storm = 1 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Thursday, May 29, 2025 3:59:31 PM

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	0.45	4.14

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	1.18	10.77

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 0.454(In)
Area Averaged 100-Year Rainfall = 1.180(In)

Point rain (area averaged) = 1.180(In)
Areal adjustment factor = 99.99 %
Adjusted average point rain = 1.180(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
9.128	69.00	0.800

Total Area Entered = 9.13(Ac.)

RI AMC2	RI AMC-3	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
69.0	84.4	0.194	0.800	0.054	1.000	0.054
					Sum (F) =	0.054

Area averaged mean soil loss (F) (In/Hr) = 0.054
Minimum soil loss rate ((In/Hr)) = 0.027
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.260

Slope of intensity-duration curve for a 1 hour storm =0.5500

U n i t H y d r o g r a p h
FOOTHILL S-Curve

Unit Hydrograph Data

Unit time period (hrs)		Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	242.981	49.907	4.591
2	0.167	485.962	45.766	4.210
3	0.250	728.942	4.327	0.398
			Sum = 100.000	Sum= 9.199

The following loss rate calculations reflect use of the minimum calculated loss

rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit	Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)
1	0.08	3.30	0.467	0.054	(0.121)	0.413
2	0.17	4.20	0.595	0.054	(0.155)	0.540
3	0.25	4.40	0.623	0.054	(0.162)	0.569
4	0.33	4.80	0.680	0.054	(0.177)	0.625
5	0.42	5.20	0.736	0.054	(0.191)	0.682
6	0.50	6.20	0.878	0.054	(0.228)	0.824
7	0.58	6.80	0.963	0.054	(0.250)	0.909
8	0.67	8.80	1.246	0.054	(0.324)	1.192
9	0.75	13.90	1.968	0.054	(0.512)	1.914
10	0.83	31.40	4.446	0.054	(1.156)	4.392
11	0.92	7.20	1.019	0.054	(0.265)	0.965
12	1.00	3.80	0.538	0.054	(0.140)	0.484
		(Loss Rate Not Used)				
Sum =		100.0			Sum =	13.5

Flood volume = Effective rainfall 1.13(In)
times area 9.1(Ac.)/[(In)/(Ft.)] = 0.9(Ac.Ft)
Total soil loss = 0.05(In)
Total soil loss = 0.041(Ac.Ft)
Total rainfall = 1.18(In)
Flood volume = 37297.3 Cubic Feet
Total soil loss = 1798.4 Cubic Feet

Peak flow rate of this hydrograph = 28.709(CFS)

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1 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	7.5	15.0	22.5	30.0
0+ 5	0.0131	1.90	V Q				
0+10	0.0421	4.22	V Q				
0+15	0.0769	5.05	V Q				
0+20	0.1147	5.48	V Q				
0+25	0.1560	5.99	Q				
0+30	0.2035	6.90	Q				
0+35	0.2580	7.91	Q V				
0+40	0.3244	9.63	Q V				
0+45	0.4220	14.17	QV				
0+50	0.6197	28.71	V			Q	
0+55	0.7829	23.69	Q	V			
1+ 0	0.8382	8.04	Q			V	
1+ 5	0.8549	2.42	Q			V	
1+10	0.8562	0.19	Q			V	

Thursday, May 29, 2025 3:59:49 PM

U n i t H y d r o g r a p h A n a l y s i s

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Study date 05/15/25 File: lmcrp24100.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 6619

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

INDEPENDENCE AT CANYON SPRINGS
POST-DEVELOPMENT CONDITION
100-YR, 24-HR STORM
HYDROGRAPH

Drainage Area = 9.13(Ac.) = 0.014 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 9.13(Ac.) = 0.014 Sq. Mi.
Length along longest watercourse = 974.40(Ft.)
Length along longest watercourse measured to centroid = 487.20(Ft.)
Length along longest watercourse = 0.185 Mi.
Length along longest watercourse measured to centroid = 0.092 Mi.
Difference in elevation = 12.66(Ft.)
Slope along watercourse = 68.6010 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.034 Hr.
Lag time = 2.06 Min.
25% of lag time = 0.51 Min.
40% of lag time = 0.82 Min.
Unit time = 15.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Thursday, May 29, 2025 3:59:49 PM

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	1.87	17.07

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
9.13	4.55	41.53

STORM EVENT (YEAR) = 100.00
Area Averaged 2-Year Rainfall = 1.870(In)
Area Averaged 100-Year Rainfall = 4.550(In)

Point rain (area averaged) = 4.550(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 4.550(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
9.128	69.00	0.800

Total Area Entered = 9.13(Ac.)

RI AMC2	RI AMC-3	Infil. Rate (In/Hr)	Impervious (Dec.%)	Adj. Infil. Rate (In/Hr)	Area% (Dec.)	F (In/Hr)
69.0	84.4	0.194	0.800	0.054	1.000	0.054
					Sum (F) =	0.054

Area averaged mean soil loss (F) (In/Hr) = 0.054
Minimum soil loss rate ((In/Hr)) = 0.027
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.260

U n i t H y d r o g r a p h
FOOTHILL S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.250	728.942	100.000	9.199
		Sum = 100.000	Sum=	9.199

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max	Low	Effective (In/Hr)

1	0.25	0.20	0.036	(0.096)	0.009	0.027
2	0.50	0.30	0.055	(0.095)	0.014	0.040
3	0.75	0.30	0.055	(0.094)	0.014	0.040
4	1.00	0.40	0.073	(0.093)	0.019	0.054
5	1.25	0.30	0.055	(0.091)	0.014	0.040
6	1.50	0.30	0.055	(0.090)	0.014	0.040
7	1.75	0.30	0.055	(0.089)	0.014	0.040
8	2.00	0.40	0.073	(0.088)	0.019	0.054
9	2.25	0.40	0.073	(0.087)	0.019	0.054
10	2.50	0.40	0.073	(0.086)	0.019	0.054
11	2.75	0.50	0.091	(0.085)	0.024	0.067
12	3.00	0.50	0.091	(0.084)	0.024	0.067
13	3.25	0.50	0.091	(0.083)	0.024	0.067
14	3.50	0.50	0.091	(0.082)	0.024	0.067
15	3.75	0.50	0.091	(0.081)	0.024	0.067
16	4.00	0.60	0.109	(0.080)	0.028	0.081
17	4.25	0.60	0.109	(0.079)	0.028	0.081
18	4.50	0.70	0.127	(0.078)	0.033	0.094
19	4.75	0.70	0.127	(0.077)	0.033	0.094
20	5.00	0.80	0.146	(0.076)	0.038	0.108
21	5.25	0.60	0.109	(0.075)	0.028	0.081
22	5.50	0.70	0.127	(0.074)	0.033	0.094
23	5.75	0.80	0.146	(0.073)	0.038	0.108
24	6.00	0.80	0.146	(0.072)	0.038	0.108
25	6.25	0.90	0.164	(0.071)	0.043	0.121
26	6.50	0.90	0.164	(0.070)	0.043	0.121
27	6.75	1.00	0.182	(0.069)	0.047	0.135
28	7.00	1.00	0.182	(0.068)	0.047	0.135
29	7.25	1.00	0.182	(0.067)	0.047	0.135
30	7.50	1.10	0.200	(0.066)	0.052	0.148
31	7.75	1.20	0.218	(0.065)	0.057	0.162
32	8.00	1.30	0.237	(0.065)	0.062	0.175
33	8.25	1.50	0.273	0.064	(0.071)	0.209
34	8.50	1.50	0.273	0.063	(0.071)	0.210
35	8.75	1.60	0.291	0.062	(0.076)	0.229
36	9.00	1.70	0.309	0.061	(0.080)	0.248
37	9.25	1.90	0.346	0.060	(0.090)	0.286
38	9.50	2.00	0.364	0.059	(0.095)	0.305
39	9.75	2.10	0.382	0.058	(0.099)	0.324
40	10.00	2.20	0.400	0.058	(0.104)	0.343
41	10.25	1.50	0.273	0.057	(0.071)	0.216
42	10.50	1.50	0.273	0.056	(0.071)	0.217
43	10.75	2.00	0.364	0.055	(0.095)	0.309
44	11.00	2.00	0.364	0.054	(0.095)	0.310
45	11.25	1.90	0.346	0.054	(0.090)	0.292
46	11.50	1.90	0.346	0.053	(0.090)	0.293
47	11.75	1.70	0.309	0.052	(0.080)	0.257
48	12.00	1.80	0.328	0.051	(0.085)	0.276
49	12.25	2.50	0.455	0.050	(0.118)	0.405
50	12.50	2.60	0.473	0.050	(0.123)	0.424
51	12.75	2.80	0.510	0.049	(0.132)	0.461

52	13.00	2.90	0.528	0.048	(0.137)		0.480
53	13.25	3.40	0.619	0.047	(0.161)		0.571
54	13.50	3.40	0.619	0.047	(0.161)		0.572
55	13.75	2.30	0.419	0.046	(0.109)		0.373
56	14.00	2.30	0.419	0.045	(0.109)		0.373
57	14.25	2.70	0.491	0.045	(0.128)		0.447
58	14.50	2.60	0.473	0.044	(0.123)		0.429
59	14.75	2.60	0.473	0.043	(0.123)		0.430
60	15.00	2.50	0.455	0.043	(0.118)		0.412
61	15.25	2.40	0.437	0.042	(0.114)		0.395
62	15.50	2.30	0.419	0.041	(0.109)		0.377
63	15.75	1.90	0.346	0.041	(0.090)		0.305
64	16.00	1.90	0.346	0.040	(0.090)		0.306
65	16.25	0.40	0.073	(0.039)	0.019		0.054
66	16.50	0.40	0.073	(0.039)	0.019		0.054
67	16.75	0.30	0.055	(0.038)	0.014		0.040
68	17.00	0.30	0.055	(0.038)	0.014		0.040
69	17.25	0.50	0.091	(0.037)	0.024		0.067
70	17.50	0.50	0.091	(0.037)	0.024		0.067
71	17.75	0.50	0.091	(0.036)	0.024		0.067
72	18.00	0.40	0.073	(0.035)	0.019		0.054
73	18.25	0.40	0.073	(0.035)	0.019		0.054
74	18.50	0.40	0.073	(0.034)	0.019		0.054
75	18.75	0.30	0.055	(0.034)	0.014		0.040
76	19.00	0.20	0.036	(0.033)	0.009		0.027
77	19.25	0.30	0.055	(0.033)	0.014		0.040
78	19.50	0.40	0.073	(0.033)	0.019		0.054
79	19.75	0.30	0.055	(0.032)	0.014		0.040
80	20.00	0.20	0.036	(0.032)	0.009		0.027
81	20.25	0.30	0.055	(0.031)	0.014		0.040
82	20.50	0.30	0.055	(0.031)	0.014		0.040
83	20.75	0.30	0.055	(0.030)	0.014		0.040
84	21.00	0.20	0.036	(0.030)	0.009		0.027
85	21.25	0.30	0.055	(0.030)	0.014		0.040
86	21.50	0.20	0.036	(0.029)	0.009		0.027
87	21.75	0.30	0.055	(0.029)	0.014		0.040
88	22.00	0.20	0.036	(0.029)	0.009		0.027
89	22.25	0.30	0.055	(0.028)	0.014		0.040
90	22.50	0.20	0.036	(0.028)	0.009		0.027
91	22.75	0.20	0.036	(0.028)	0.009		0.027
92	23.00	0.20	0.036	(0.028)	0.009		0.027
93	23.25	0.20	0.036	(0.028)	0.009		0.027
94	23.50	0.20	0.036	(0.027)	0.009		0.027
95	23.75	0.20	0.036	(0.027)	0.009		0.027
96	24.00	0.20	0.036	(0.027)	0.009		0.027

(Loss Rate Not Used)

Sum = 100.0 Sum = 15.1

Flood volume = Effective rainfall 3.78(In)
times area 9.1(Ac.)/[(In)/(Ft.)] = 2.9(Ac.Ft)
Total soil loss = 0.77(In)
Total soil loss = 0.582(Ac.Ft)

Thursday, May 29, 2025 3:59:49 PM

Total rainfall = 4.55(In)
Flood volume = 125398.4 Cubic Feet
Total soil loss = 25361.5 Cubic Feet

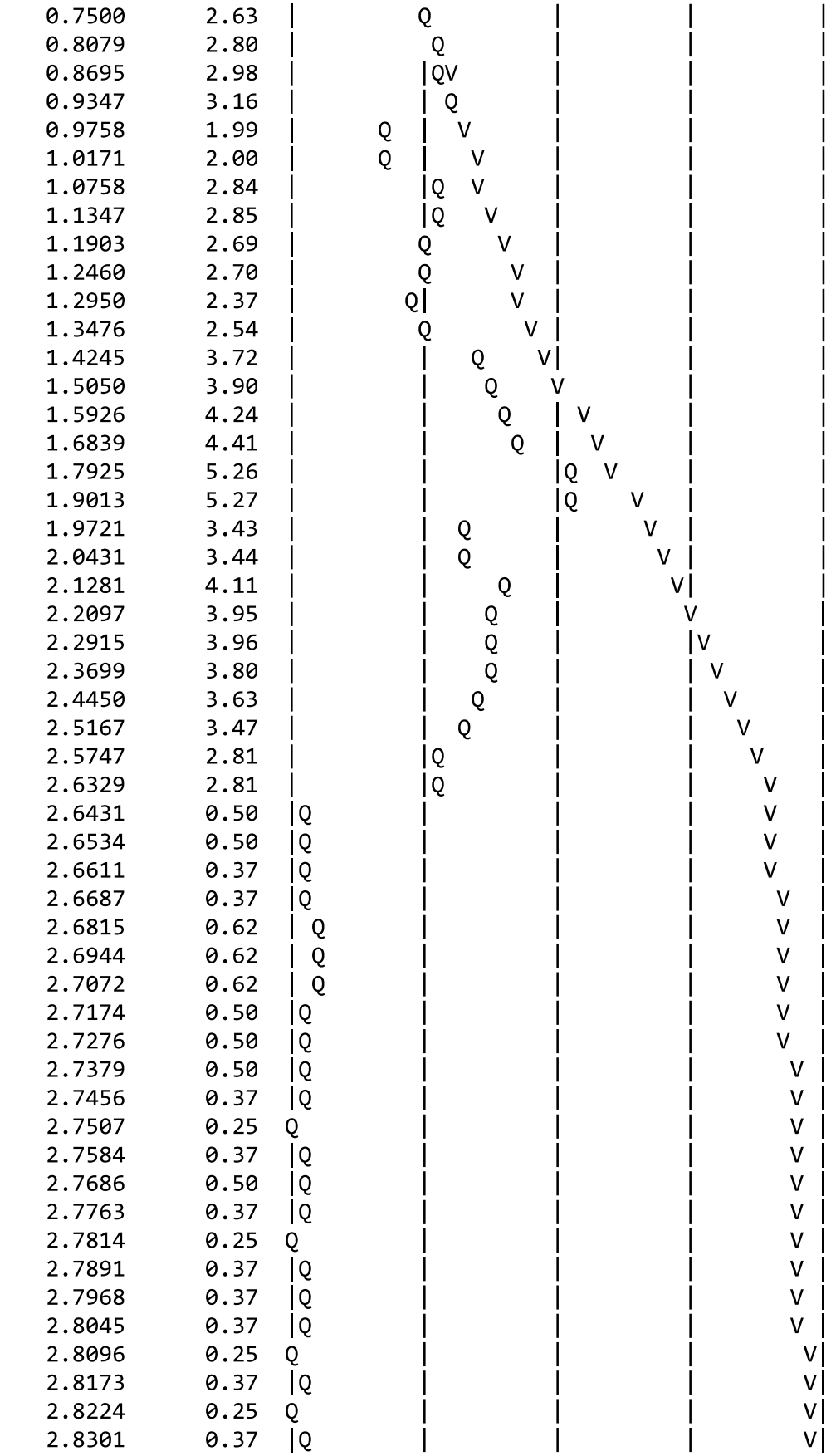
Peak flow rate of this hydrograph = 5.265(CFS)

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24 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 15 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0 2.5 5.0 7.5 10.0
0+15	0.0051	0.25	Q
0+30	0.0128	0.37	VQ
0+45	0.0205	0.37	VQ
1+ 0	0.0307	0.50	VQ
1+15	0.0384	0.37	VQ
1+30	0.0461	0.37	VQ
1+45	0.0538	0.37	VQ
2+ 0	0.0640	0.50	VQ
2+15	0.0743	0.50	Q
2+30	0.0845	0.50	Q
2+45	0.0973	0.62	VQ
3+ 0	0.1101	0.62	VQ
3+15	0.1229	0.62	VQ
3+30	0.1357	0.62	VQ
3+45	0.1485	0.62	Q
4+ 0	0.1639	0.74	Q
4+15	0.1793	0.74	Q
4+30	0.1972	0.87	VQ
4+45	0.2151	0.87	VQ
5+ 0	0.2356	0.99	Q
5+15	0.2510	0.74	QV
5+30	0.2689	0.87	Q
5+45	0.2894	0.99	QV
6+ 0	0.3099	0.99	QV
6+15	0.3329	1.12	Q
6+30	0.3560	1.12	Q
6+45	0.3816	1.24	QV
7+ 0	0.4072	1.24	QV
7+15	0.4328	1.24	Q V
7+30	0.4610	1.36	QV
7+45	0.4917	1.49	QV
8+ 0	0.5250	1.61	QV
8+15	0.5648	1.93	Q
8+30	0.6048	1.94	QV
8+45	0.6484	2.11	QV
9+ 0	0.6957	2.29	Q

9+15	0.7500	2.63	
9+30	0.8079	2.80	
9+45	0.8695	2.98	
10+ 0	0.9347	3.16	
10+15	0.9758	1.99	
10+30	1.0171	2.00	
10+45	1.0758	2.84	
11+ 0	1.1347	2.85	
11+15	1.1903	2.69	
11+30	1.2460	2.70	
11+45	1.2950	2.37	
12+ 0	1.3476	2.54	
12+15	1.4245	3.72	
12+30	1.5050	3.90	
12+45	1.5926	4.24	
13+ 0	1.6839	4.41	
13+15	1.7925	5.26	
13+30	1.9013	5.27	
13+45	1.9721	3.43	
14+ 0	2.0431	3.44	
14+15	2.1281	4.11	
14+30	2.2097	3.95	
14+45	2.2915	3.96	
15+ 0	2.3699	3.80	
15+15	2.4450	3.63	
15+30	2.5167	3.47	
15+45	2.5747	2.81	
16+ 0	2.6329	2.81	
16+15	2.6431	0.50	
16+30	2.6534	0.50	
16+45	2.6611	0.37	
17+ 0	2.6687	0.37	
17+15	2.6815	0.62	
17+30	2.6944	0.62	
17+45	2.7072	0.62	
18+ 0	2.7174	0.50	
18+15	2.7276	0.50	
18+30	2.7379	0.50	
18+45	2.7456	0.37	
19+ 0	2.7507	0.25	
19+15	2.7584	0.37	
19+30	2.7686	0.50	
19+45	2.7763	0.37	
20+ 0	2.7814	0.25	
20+15	2.7891	0.37	
20+30	2.7968	0.37	
20+45	2.8045	0.37	
21+ 0	2.8096	0.25	
21+15	2.8173	0.37	
21+30	2.8224	0.25	
21+45	2.8301	0.37	

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   22+ 0       2.8352      0.25  Q          |          |          |         V|
   22+15       2.8429      0.37  |Q         |          |          |         V|
   22+30       2.8480      0.25  Q          |          |          |         V|
   22+45       2.8531      0.25  Q          |          |          |         V|
   23+ 0       2.8583      0.25  Q          |          |          |         V|
   23+15       2.8634      0.25  Q          |          |          |         V|
   23+30       2.8685      0.25  Q          |          |          |         V|
   23+45       2.8736      0.25  Q          |          |          |         V|
   24+ 0       2.8788      0.25  Q          |          |          |         V|
-------------------------------------------------------------------------
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Appendix 4

Basin Routing Calculations:
2-year, 10-year & 100-year:
1-hour & 24-hour Storm Events

6 ft CMP Detention Tank

Depth	Stage	Total Storage	2" Orifice Outflow	12" Orifice/Weir Outflow	Total Outflow
0	582.00	0	0	0	0.00
0.5	582.50	0.047	0.10	0.00	0.10
1	583.00	0.142	0.15	0.00	0.15
1.5	583.50	0.237	0.19	0.00	0.19
2	584.00	0.332	0.23	0.00	0.23
2.5	584.50	0.426	0.25	0.00	0.25
3	585.00	0.521	0.28	0.00	0.28
3.5	585.50	0.616	0.30	0.00	0.30
4	586.00	0.711	0.32	0.00	0.32
4.5	586.50	0.806	0.34	0.00	0.34
5	587.00	0.900	0.36	2.67	3.04
5.5	587.50	0.995	0.38	3.78	4.16
6	588.00	1.090	0.40	4.63	5.03

Q2: 2" Orifice

Project Description	
Solve For	Diameter

Input Data	
Discharge	0.31 cfs
Headwater Elevation	5.00 ft
Centroid Elevation	0.10 ft
Tailwater Elevation	0.00 ft
Discharge Coefficient	0.600

Results	
Diameter	2.3 in
Headwater Height Above Centroid	4.90 ft
Tailwater Height Above Centroid	-0.10 ft
Flow Area	0.0 ft²
Velocity	10.65 ft/s

Q100: 12" Orifice

Project Description	
Solve For	Diameter

Input Data	
Discharge	4.50 cfs
Headwater Elevation	6.00 ft
Centroid Elevation	4.50 ft
Tailwater Elevation	0.00 ft
Discharge Coefficient	0.600

Results	
Diameter	11.8 in
Headwater Height Above Centroid	1.50 ft
Tailwater Height Above Centroid	-4.50 ft
Flow Area	0.8 ft²
Velocity	5.89 ft/s

FLOOD HYDROGRAPH ROUTING PROGRAM
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Study date: 01/05/26

INDEPENDENCE AT CANYON SPRINGS
ROUTING BASIN
POST-DEVELOPMENT CONDITION
2-YR, 1-HR STORM

Program License Serial Number 6619

********** HYDROGRAPH INFORMATION **********

From study/file name: lmcrp12.rte
**********HYDROGRAPH DATA**********
Number of intervals = 14
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 9.773 (CFS)
Total volume = 0.276 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

****

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Process from Point/Station 1.000 to Point/Station 2.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 14
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.500	0.047	0.100	0.047	0.047
1.000	0.142	0.150	0.141	0.143
1.500	0.237	0.190	0.236	0.238
2.000	0.332	0.230	0.331	0.333
2.500	0.426	0.250	0.425	0.427
3.000	0.521	0.280	0.520	0.522
3.500	0.616	0.300	0.615	0.617
4.000	0.711	0.320	0.710	0.712
4.500	0.806	0.340	0.805	0.807
5.000	0.900	3.040	0.890	0.910
5.500	0.995	4.160	0.981	1.009
6.000	1.090	5.030	1.073	1.107

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0 2.4 4.89 7.33 9.77	Depth (Ft.)
0.083	0.61	0.00	0.002	O I | | | |	0.02
0.167	1.34	0.02	0.009	O I | | | |	0.09
0.250	1.58	0.04	0.019	O I | | | |	0.20
0.333	1.70	0.06	0.030	O I | | | |	0.31
0.417	1.85	0.09	0.041	O I | | | |	0.44
0.500	2.11	0.10	0.054	O I | | | |	0.54
0.583	2.40	0.11	0.069	O I| | | |	0.62
0.667	2.88	0.12	0.086	O |I | | |	0.71
0.750	4.34	0.13	0.110	O | I | |	0.83
0.833	9.77	0.16	0.158	O | | | I	1.08
0.917	8.10	0.18	0.218	O | | | I |	1.40
1.000	2.54	0.20	0.254	O I | | |	1.59
1.083	0.76	0.20	0.264	O I | | | |	1.64
1.167	0.06	0.20	0.265	O | | | |	1.65
1.250	0.00	0.20	0.264	O | | | |	1.64
1.333	0.00	0.20	0.263	O | | | |	1.63
1.417	0.00	0.20	0.261	O | | | |	1.63
1.500	0.00	0.20	0.260	O | | | |	1.62
1.583	0.00	0.20	0.258	O | | | |	1.61
1.667	0.00	0.20	0.257	O | | | |	1.61
1.750	0.00	0.20	0.256	O | | | |	1.60
1.833	0.00	0.20	0.254	O | | | |	1.59
1.917	0.00	0.20	0.253	O | | | |	1.58
2.000	0.00	0.20	0.252	O | | | |	1.58
2.083	0.00	0.20	0.250	O | | | |	1.57
2.167	0.00	0.20	0.249	O | | | |	1.56
2.250	0.00	0.19	0.248	O | | | |	1.56
2.333	0.00	0.19	0.246	O | | | |	1.55
2.417	0.00	0.19	0.245	O | | | |	1.54

2.500	0.00	0.19	0.244	O				1.53
2.583	0.00	0.19	0.242	O				1.53
2.667	0.00	0.19	0.241	O				1.52
2.750	0.00	0.19	0.240	O				1.51
2.833	0.00	0.19	0.238	O				1.51
2.917	0.00	0.19	0.237	O				1.50
3.000	0.00	0.19	0.236	O				1.49
3.083	0.00	0.19	0.234	O				1.49
3.167	0.00	0.19	0.233	O				1.48
3.250	0.00	0.19	0.232	O				1.47
3.333	0.00	0.19	0.231	O				1.47
3.417	0.00	0.19	0.229	O				1.46
3.500	0.00	0.19	0.228	O				1.45
3.583	0.00	0.19	0.227	O				1.45
3.667	0.00	0.19	0.225	O				1.44
3.750	0.00	0.18	0.224	O				1.43
3.833	0.00	0.18	0.223	O				1.43
3.917	0.00	0.18	0.222	O				1.42
4.000	0.00	0.18	0.220	O				1.41
4.083	0.00	0.18	0.219	O				1.41
4.167	0.00	0.18	0.218	O				1.40
4.250	0.00	0.18	0.217	O				1.39
4.333	0.00	0.18	0.215	O				1.39
4.417	0.00	0.18	0.214	O				1.38
4.500	0.00	0.18	0.213	O				1.37
4.583	0.00	0.18	0.212	O				1.37
4.667	0.00	0.18	0.210	O				1.36
4.750	0.00	0.18	0.209	O				1.35
4.833	0.00	0.18	0.208	O				1.35
4.917	0.00	0.18	0.207	O				1.34
5.000	0.00	0.18	0.205	O				1.33
5.083	0.00	0.18	0.204	O				1.33
5.167	0.00	0.18	0.203	O				1.32
5.250	0.00	0.18	0.202	O				1.31
5.333	0.00	0.17	0.201	O				1.31
5.417	0.00	0.17	0.199	O				1.30
5.500	0.00	0.17	0.198	O				1.30
5.583	0.00	0.17	0.197	O				1.29
5.667	0.00	0.17	0.196	O				1.28
5.750	0.00	0.17	0.195	O				1.28
5.833	0.00	0.17	0.193	O				1.27
5.917	0.00	0.17	0.192	O				1.26
6.000	0.00	0.17	0.191	O				1.26
6.083	0.00	0.17	0.190	O				1.25
6.167	0.00	0.17	0.189	O				1.25
6.250	0.00	0.17	0.188	O				1.24
6.333	0.00	0.17	0.186	O				1.23
6.417	0.00	0.17	0.185	O				1.23
6.500	0.00	0.17	0.184	O				1.22
6.583	0.00	0.17	0.183	O				1.22
6.667	0.00	0.17	0.182	O				1.21
6.750	0.00	0.17	0.181	O				1.20
6.833	0.00	0.17	0.180	O				1.20

6.917	0.00	0.17	0.178	O				1.19
7.000	0.00	0.16	0.177	O				1.19
7.083	0.00	0.16	0.176	O				1.18
7.167	0.00	0.16	0.175	O				1.17
7.250	0.00	0.16	0.174	O				1.17
7.333	0.00	0.16	0.173	O				1.16
7.417	0.00	0.16	0.172	O				1.16
7.500	0.00	0.16	0.170	O				1.15
7.583	0.00	0.16	0.169	O				1.14
7.667	0.00	0.16	0.168	O				1.14
7.750	0.00	0.16	0.167	O				1.13
7.833	0.00	0.16	0.166	O				1.13
7.917	0.00	0.16	0.165	O				1.12
8.000	0.00	0.16	0.164	O				1.12
8.083	0.00	0.16	0.163	O				1.11
8.167	0.00	0.16	0.162	O				1.10
8.250	0.00	0.16	0.161	O				1.10
8.333	0.00	0.16	0.159	O				1.09
8.417	0.00	0.16	0.158	O				1.09
8.500	0.00	0.16	0.157	O				1.08
8.583	0.00	0.16	0.156	O				1.08
8.667	0.00	0.16	0.155	O				1.07
8.750	0.00	0.16	0.154	O				1.06
8.833	0.00	0.15	0.153	O				1.06
8.917	0.00	0.15	0.152	O				1.05
9.000	0.00	0.15	0.151	O				1.05
9.083	0.00	0.15	0.150	O				1.04
9.167	0.00	0.15	0.149	O				1.04
9.250	0.00	0.15	0.148	O				1.03
9.333	0.00	0.15	0.147	O				1.02
9.417	0.00	0.15	0.146	O				1.02
9.500	0.00	0.15	0.145	O				1.01
9.583	0.00	0.15	0.144	O				1.01
9.667	0.00	0.15	0.143	O				1.00
9.750	0.00	0.15	0.142	O				1.00
9.833	0.00	0.15	0.140	O				0.99
9.917	0.00	0.15	0.139	O				0.99
10.000	0.00	0.15	0.138	O				0.98
10.083	0.00	0.15	0.137	O				0.98
10.167	0.00	0.15	0.136	O				0.97
10.250	0.00	0.15	0.135	O				0.97
10.333	0.00	0.15	0.134	O				0.96
10.417	0.00	0.15	0.133	O				0.95
10.500	0.00	0.14	0.132	O				0.95
10.583	0.00	0.14	0.131	O				0.94
10.667	0.00	0.14	0.130	O				0.94
10.750	0.00	0.14	0.129	O				0.93
10.833	0.00	0.14	0.128	O				0.93
10.917	0.00	0.14	0.127	O				0.92
11.000	0.00	0.14	0.126	O				0.92
11.083	0.00	0.14	0.125	O				0.91
11.167	0.00	0.14	0.125	O				0.91
11.250	0.00	0.14	0.124	O				0.90

11.333	0.00	0.14	0.123	O	|	|	|	0.90
11.417	0.00	0.14	0.122	O	|	|	|	0.89
11.500	0.00	0.14	0.121	O	|	|	|	0.89
11.583	0.00	0.14	0.120	O	|	|	|	0.88
11.667	0.00	0.14	0.119	O	|	|	|	0.88
11.750	0.00	0.14	0.118	O	|	|	|	0.87
11.833	0.00	0.14	0.117	O	|	|	|	0.87
11.917	0.00	0.14	0.116	O	|	|	|	0.86
12.000	0.00	0.14	0.115	O	|	|	|	0.86
12.083	0.00	0.14	0.114	O	|	|	|	0.85
12.167	0.00	0.13	0.113	O	|	|	|	0.85
12.250	0.00	0.13	0.112	O	|	|	|	0.84
12.333	0.00	0.13	0.111	O	|	|	|	0.84
12.417	0.00	0.13	0.110	O	|	|	|	0.83
12.500	0.00	0.13	0.109	O	|	|	|	0.83
12.583	0.00	0.13	0.109	O	|	|	|	0.82
12.667	0.00	0.13	0.108	O	|	|	|	0.82
12.750	0.00	0.13	0.107	O	|	|	|	0.81
12.833	0.00	0.13	0.106	O	|	|	|	0.81
12.917	0.00	0.13	0.105	O	|	|	|	0.80
13.000	0.00	0.13	0.104	O	|	|	|	0.80
13.083	0.00	0.13	0.103	O	|	|	|	0.80
13.167	0.00	0.13	0.102	O	|	|	|	0.79
13.250	0.00	0.13	0.101	O	|	|	|	0.79
13.333	0.00	0.13	0.100	O	|	|	|	0.78
13.417	0.00	0.13	0.100	O	|	|	|	0.78
13.500	0.00	0.13	0.099	O	|	|	|	0.77
13.583	0.00	0.13	0.098	O	|	|	|	0.77
13.667	0.00	0.13	0.097	O	|	|	|	0.76
13.750	0.00	0.13	0.096	O	|	|	|	0.76
13.833	0.00	0.13	0.095	O	|	|	|	0.75
13.917	0.00	0.12	0.094	O	|	|	|	0.75
14.000	0.00	0.12	0.093	O	|	|	|	0.74
14.083	0.00	0.12	0.093	O	|	|	|	0.74
14.167	0.00	0.12	0.092	O	|	|	|	0.74
14.250	0.00	0.12	0.091	O	|	|	|	0.73
14.333	0.00	0.12	0.090	O	|	|	|	0.73
14.417	0.00	0.12	0.089	O	|	|	|	0.72
14.500	0.00	0.12	0.088	O	|	|	|	0.72
14.583	0.00	0.12	0.088	O	|	|	|	0.71
14.667	0.00	0.12	0.087	O	|	|	|	0.71
14.750	0.00	0.12	0.086	O	|	|	|	0.70
14.833	0.00	0.12	0.085	O	|	|	|	0.70
14.917	0.00	0.12	0.084	O	|	|	|	0.70
15.000	0.00	0.12	0.083	O	|	|	|	0.69
15.083	0.00	0.12	0.083	O	|	|	|	0.69
15.167	0.00	0.12	0.082	O	|	|	|	0.68
15.250	0.00	0.12	0.081	O	|	|	|	0.68
15.333	0.00	0.12	0.080	O	|	|	|	0.67
15.417	0.00	0.12	0.079	O	|	|	|	0.67
15.500	0.00	0.12	0.079	O	|	|	|	0.67
15.583	0.00	0.12	0.078	O	|	|	|	0.66
15.667	0.00	0.12	0.077	O	|	|	|	0.66

15.750	0.00	0.12	0.076	O				0.65
15.833	0.00	0.11	0.075	O				0.65
15.917	0.00	0.11	0.075	O				0.65
16.000	0.00	0.11	0.074	O				0.64
16.083	0.00	0.11	0.073	O				0.64
16.167	0.00	0.11	0.072	O				0.63
16.250	0.00	0.11	0.071	O				0.63
16.333	0.00	0.11	0.071	O				0.62
16.417	0.00	0.11	0.070	O				0.62
16.500	0.00	0.11	0.069	O				0.62
16.583	0.00	0.11	0.068	O				0.61
16.667	0.00	0.11	0.068	O				0.61
16.750	0.00	0.11	0.067	O				0.60
16.833	0.00	0.11	0.066	O				0.60
16.917	0.00	0.11	0.065	O				0.60
17.000	0.00	0.11	0.065	O				0.59
17.083	0.00	0.11	0.064	O				0.59
17.167	0.00	0.11	0.063	O				0.58
17.250	0.00	0.11	0.062	O				0.58
17.333	0.00	0.11	0.062	O				0.58
17.417	0.00	0.11	0.061	O				0.57
17.500	0.00	0.11	0.060	O				0.57
17.583	0.00	0.11	0.059	O				0.57
17.667	0.00	0.11	0.059	O				0.56
17.750	0.00	0.11	0.058	O				0.56
17.833	0.00	0.11	0.057	O				0.55
17.917	0.00	0.10	0.056	O				0.55
18.000	0.00	0.10	0.056	O				0.55
18.083	0.00	0.10	0.055	O				0.54
18.167	0.00	0.10	0.054	O				0.54
18.250	0.00	0.10	0.054	O				0.53
18.333	0.00	0.10	0.053	O				0.53
18.417	0.00	0.10	0.052	O				0.53
18.500	0.00	0.10	0.051	O				0.52
18.583	0.00	0.10	0.051	O				0.52
18.667	0.00	0.10	0.050	O				0.52
18.750	0.00	0.10	0.049	O				0.51
18.833	0.00	0.10	0.049	O				0.51
18.917	0.00	0.10	0.048	O				0.51
19.000	0.00	0.10	0.047	O				0.50
19.083	0.00	0.10	0.047	O				0.50
19.167	0.00	0.10	0.046	O				0.49
19.250	0.00	0.10	0.045	O				0.48
19.333	0.00	0.09	0.045	O				0.47
19.417	0.00	0.09	0.044	O				0.47
19.500	0.00	0.09	0.043	O				0.46
19.583	0.00	0.09	0.043	O				0.45
19.667	0.00	0.09	0.042	O				0.45
19.750	0.00	0.09	0.041	O				0.44
19.833	0.00	0.09	0.041	O				0.43
19.917	0.00	0.09	0.040	O				0.43
20.000	0.00	0.08	0.040	O				0.42
20.083	0.00	0.08	0.039	O				0.42

20.167	0.00	0.08	0.039	O				0.41
20.250	0.00	0.08	0.038	O				0.40
20.333	0.00	0.08	0.037	O				0.40
20.417	0.00	0.08	0.037	O				0.39
20.500	0.00	0.08	0.036	O				0.39
20.583	0.00	0.08	0.036	O				0.38
20.667	0.00	0.08	0.035	O				0.38
20.750	0.00	0.07	0.035	O				0.37
20.833	0.00	0.07	0.034	O				0.36
20.917	0.00	0.07	0.034	O				0.36
21.000	0.00	0.07	0.033	O				0.35
21.083	0.00	0.07	0.033	O				0.35
21.167	0.00	0.07	0.032	O				0.34
21.250	0.00	0.07	0.032	O				0.34
21.333	0.00	0.07	0.031	O				0.33
21.417	0.00	0.07	0.031	O				0.33
21.500	0.00	0.06	0.030	O				0.32
21.583	0.00	0.06	0.030	O				0.32
21.667	0.00	0.06	0.030	O				0.31
21.750	0.00	0.06	0.029	O				0.31
21.833	0.00	0.06	0.029	O				0.31
21.917	0.00	0.06	0.028	O				0.30
22.000	0.00	0.06	0.028	O				0.30
22.083	0.00	0.06	0.027	O				0.29
22.167	0.00	0.06	0.027	O				0.29
22.250	0.00	0.06	0.027	O				0.28
22.333	0.00	0.06	0.026	O				0.28
22.417	0.00	0.06	0.026	O				0.28
22.500	0.00	0.05	0.026	O				0.27
22.583	0.00	0.05	0.025	O				0.27
22.667	0.00	0.05	0.025	O				0.26
22.750	0.00	0.05	0.024	O				0.26
22.833	0.00	0.05	0.024	O				0.26
22.917	0.00	0.05	0.024	O				0.25
23.000	0.00	0.05	0.023	O				0.25
23.083	0.00	0.05	0.023	O				0.25
23.167	0.00	0.05	0.023	O				0.24
23.250	0.00	0.05	0.022	O				0.24
23.333	0.00	0.05	0.022	O				0.23
23.417	0.00	0.05	0.022	O				0.23
23.500	0.00	0.05	0.021	O				0.23
23.583	0.00	0.04	0.021	O				0.22
23.667	0.00	0.04	0.021	O				0.22
23.750	0.00	0.04	0.021	O				0.22
23.833	0.00	0.04	0.020	O				0.21
23.917	0.00	0.04	0.020	O				0.21
24.000	0.00	0.04	0.020	O				0.21
24.083	0.00	0.04	0.019	O				0.21
24.167	0.00	0.04	0.019	O				0.20
24.250	0.00	0.04	0.019	O				0.20
24.333	0.00	0.04	0.019	O				0.20
24.417	0.00	0.04	0.018	O				0.19
24.500	0.00	0.04	0.018	O				0.19

24.583	0.00	0.04	0.018	O				0.19
24.667	0.00	0.04	0.017	O				0.19
24.750	0.00	0.04	0.017	O				0.18
24.833	0.00	0.04	0.017	O				0.18
24.917	0.00	0.04	0.017	O				0.18
25.000	0.00	0.04	0.016	O				0.18
25.083	0.00	0.03	0.016	O				0.17
25.167	0.00	0.03	0.016	O				0.17
25.250	0.00	0.03	0.016	O				0.17
25.333	0.00	0.03	0.016	O				0.17
25.417	0.00	0.03	0.015	O				0.16
25.500	0.00	0.03	0.015	O				0.16
25.583	0.00	0.03	0.015	O				0.16
25.667	0.00	0.03	0.015	O				0.16
25.750	0.00	0.03	0.014	O				0.15
25.833	0.00	0.03	0.014	O				0.15
25.917	0.00	0.03	0.014	O				0.15
26.000	0.00	0.03	0.014	O				0.15
26.083	0.00	0.03	0.014	O				0.14
26.167	0.00	0.03	0.013	O				0.14
26.250	0.00	0.03	0.013	O				0.14
26.333	0.00	0.03	0.013	O				0.14
26.417	0.00	0.03	0.013	O				0.14
26.500	0.00	0.03	0.013	O				0.13
26.583	0.00	0.03	0.012	O				0.13
26.667	0.00	0.03	0.012	O				0.13
26.750	0.00	0.03	0.012	O				0.13
26.833	0.00	0.03	0.012	O				0.13
26.917	0.00	0.03	0.012	O				0.13
27.000	0.00	0.02	0.012	O				0.12
27.083	0.00	0.02	0.011	O				0.12
27.167	0.00	0.02	0.011	O				0.12
27.250	0.00	0.02	0.011	O				0.12
27.333	0.00	0.02	0.011	O				0.12
27.417	0.00	0.02	0.011	O				0.11
27.500	0.00	0.02	0.011	O				0.11
27.583	0.00	0.02	0.010	O				0.11
27.667	0.00	0.02	0.010	O				0.11
27.750	0.00	0.02	0.010	O				0.11
27.833	0.00	0.02	0.010	O				0.11
27.917	0.00	0.02	0.010	O				0.10
28.000	0.00	0.02	0.010	O				0.10
28.083	0.00	0.02	0.010	O				0.10
28.167	0.00	0.02	0.009	O				0.10
28.250	0.00	0.02	0.009	O				0.10
28.333	0.00	0.02	0.009	O				0.10
28.417	0.00	0.02	0.009	O				0.10
28.500	0.00	0.02	0.009	O				0.09
28.583	0.00	0.02	0.009	O				0.09
28.667	0.00	0.02	0.009	O				0.09
28.750	0.00	0.02	0.009	O				0.09
28.833	0.00	0.02	0.008	O				0.09
28.917	0.00	0.02	0.008	O				0.09

29.000	0.00	0.02	0.008	O	|	|	|	0.09
29.083	0.00	0.02	0.008	O	|	|	|	0.09
29.167	0.00	0.02	0.008	O	|	|	|	0.08
29.250	0.00	0.02	0.008	O	|	|	|	0.08
29.333	0.00	0.02	0.008	O	|	|	|	0.08
29.417	0.00	0.02	0.008	O	|	|	|	0.08
29.500	0.00	0.02	0.007	O	|	|	|	0.08
29.583	0.00	0.02	0.007	O	|	|	|	0.08
29.667	0.00	0.02	0.007	O	|	|	|	0.08
29.750	0.00	0.02	0.007	O	|	|	|	0.08
29.833	0.00	0.01	0.007	O	|	|	|	0.07
29.917	0.00	0.01	0.007	O	|	|	|	0.07
30.000	0.00	0.01	0.007	O	|	|	|	0.07
30.083	0.00	0.01	0.007	O	|	|	|	0.07
30.167	0.00	0.01	0.007	O	|	|	|	0.07
30.250	0.00	0.01	0.007	O	|	|	|	0.07
30.333	0.00	0.01	0.006	O	|	|	|	0.07
30.417	0.00	0.01	0.006	O	|	|	|	0.07
30.500	0.00	0.01	0.006	O	|	|	|	0.07
30.583	0.00	0.01	0.006	O	|	|	|	0.07
30.667	0.00	0.01	0.006	O	|	|	|	0.06
30.750	0.00	0.01	0.006	O	|	|	|	0.06
30.833	0.00	0.01	0.006	O	|	|	|	0.06
30.917	0.00	0.01	0.006	O	|	|	|	0.06
31.000	0.00	0.01	0.006	O	|	|	|	0.06
31.083	0.00	0.01	0.006	O	|	|	|	0.06
31.167	0.00	0.01	0.006	O	|	|	|	0.06
31.250	0.00	0.01	0.005	O	|	|	|	0.06
31.333	0.00	0.01	0.005	O	|	|	|	0.06
31.417	0.00	0.01	0.005	O	|	|	|	0.06
31.500	0.00	0.01	0.005	O	|	|	|	0.06
31.583	0.00	0.01	0.005	O	|	|	|	0.06
31.667	0.00	0.01	0.005	O	|	|	|	0.05
31.750	0.00	0.01	0.005	O	|	|	|	0.05
31.833	0.00	0.01	0.005	O	|	|	|	0.05
31.917	0.00	0.01	0.005	O	|	|	|	0.05
32.000	0.00	0.01	0.005	O	|	|	|	0.05
32.083	0.00	0.01	0.005	O	|	|	|	0.05
32.167	0.00	0.01	0.005	O	|	|	|	0.05
32.250	0.00	0.01	0.005	O	|	|	|	0.05
32.333	0.00	0.01	0.005	O	|	|	|	0.05
32.417	0.00	0.01	0.004	O	|	|	|	0.05
32.500	0.00	0.01	0.004	O	|	|	|	0.05
32.583	0.00	0.01	0.004	O	|	|	|	0.05
32.667	0.00	0.01	0.004	O	|	|	|	0.05
32.750	0.00	0.01	0.004	O	|	|	|	0.04
32.833	0.00	0.01	0.004	O	|	|	|	0.04
32.917	0.00	0.01	0.004	O	|	|	|	0.04
33.000	0.00	0.01	0.004	O	|	|	|	0.04
33.083	0.00	0.01	0.004	O	|	|	|	0.04
33.167	0.00	0.01	0.004	O	|	|	|	0.04
33.250	0.00	0.01	0.004	O	|	|	|	0.04
33.333	0.00	0.01	0.004	O	|	|	|	0.04

33.417	0.00	0.01	0.004	O				0.04
33.500	0.00	0.01	0.004	O				0.04
33.583	0.00	0.01	0.004	O				0.04
33.667	0.00	0.01	0.004	O				0.04
33.750	0.00	0.01	0.004	O				0.04
33.833	0.00	0.01	0.003	O				0.04
33.917	0.00	0.01	0.003	O				0.04
34.000	0.00	0.01	0.003	O				0.04
34.083	0.00	0.01	0.003	O				0.04
34.167	0.00	0.01	0.003	O				0.03
34.250	0.00	0.01	0.003	O				0.03
34.333	0.00	0.01	0.003	O				0.03
34.417	0.00	0.01	0.003	O				0.03
34.500	0.00	0.01	0.003	O				0.03
34.583	0.00	0.01	0.003	O				0.03
34.667	0.00	0.01	0.003	O				0.03
34.750	0.00	0.01	0.003	O				0.03
34.833	0.00	0.01	0.003	O				0.03
34.917	0.00	0.01	0.003	O				0.03
35.000	0.00	0.01	0.003	O				0.03
35.083	0.00	0.01	0.003	O				0.03
35.167	0.00	0.01	0.003	O				0.03
35.250	0.00	0.01	0.003	O				0.03
35.333	0.00	0.01	0.003	O				0.03
35.417	0.00	0.01	0.003	O				0.03
35.500	0.00	0.01	0.003	O				0.03
35.583	0.00	0.01	0.003	O				0.03
35.667	0.00	0.01	0.003	O				0.03
35.750	0.00	0.01	0.002	O				0.03
35.833	0.00	0.01	0.002	O				0.03
35.917	0.00	0.01	0.002	O				0.03
36.000	0.00	0.01	0.002	O				0.03
36.083	0.00	0.00	0.002	O				0.02
36.167	0.00	0.00	0.002	O				0.02
36.250	0.00	0.00	0.002	O				0.02
36.333	0.00	0.00	0.002	O				0.02
36.417	0.00	0.00	0.002	O				0.02
36.500	0.00	0.00	0.002	O				0.02
36.583	0.00	0.00	0.002	O				0.02
36.667	0.00	0.00	0.002	O				0.02
36.750	0.00	0.00	0.002	O				0.02
36.833	0.00	0.00	0.002	O				0.02
36.917	0.00	0.00	0.002	O				0.02
37.000	0.00	0.00	0.002	O				0.02
37.083	0.00	0.00	0.002	O				0.02
37.167	0.00	0.00	0.002	O				0.02
37.250	0.00	0.00	0.002	O				0.02
37.333	0.00	0.00	0.002	O				0.02
37.417	0.00	0.00	0.002	O				0.02
37.500	0.00	0.00	0.002	O				0.02
37.583	0.00	0.00	0.002	O				0.02
37.667	0.00	0.00	0.002	O				0.02
37.750	0.00	0.00	0.002	O				0.02

37.833	0.00	0.00	0.002	O				0.02
37.917	0.00	0.00	0.002	O				0.02
38.000	0.00	0.00	0.002	O				0.02
38.083	0.00	0.00	0.002	O				0.02
38.167	0.00	0.00	0.002	O				0.02
38.250	0.00	0.00	0.002	O				0.02
38.333	0.00	0.00	0.002	O				0.02
38.417	0.00	0.00	0.002	O				0.02
38.500	0.00	0.00	0.002	O				0.02
38.583	0.00	0.00	0.002	O				0.02
38.667	0.00	0.00	0.001	O				0.02
38.750	0.00	0.00	0.001	O				0.02
38.833	0.00	0.00	0.001	O				0.02
38.917	0.00	0.00	0.001	O				0.02
39.000	0.00	0.00	0.001	O				0.01
39.083	0.00	0.00	0.001	O				0.01
39.167	0.00	0.00	0.001	O				0.01
39.250	0.00	0.00	0.001	O				0.01
39.333	0.00	0.00	0.001	O				0.01
39.417	0.00	0.00	0.001	O				0.01
39.500	0.00	0.00	0.001	O				0.01
39.583	0.00	0.00	0.001	O				0.01
39.667	0.00	0.00	0.001	O				0.01
39.750	0.00	0.00	0.001	O				0.01
39.833	0.00	0.00	0.001	O				0.01
39.917	0.00	0.00	0.001	O				0.01
40.000	0.00	0.00	0.001	O				0.01
40.083	0.00	0.00	0.001	O				0.01
40.167	0.00	0.00	0.001	O				0.01
40.250	0.00	0.00	0.001	O				0.01
40.333	0.00	0.00	0.001	O				0.01
40.417	0.00	0.00	0.001	O				0.01
40.500	0.00	0.00	0.001	O				0.01
40.583	0.00	0.00	0.001	O				0.01
40.667	0.00	0.00	0.001	O				0.01
40.750	0.00	0.00	0.001	O				0.01
40.833	0.00	0.00	0.001	O				0.01
40.917	0.00	0.00	0.001	O				0.01
41.000	0.00	0.00	0.001	O				0.01
41.083	0.00	0.00	0.001	O				0.01
41.167	0.00	0.00	0.001	O				0.01
41.250	0.00	0.00	0.001	O				0.01
41.333	0.00	0.00	0.001	O				0.01
41.417	0.00	0.00	0.001	O				0.01
41.500	0.00	0.00	0.001	O				0.01
41.583	0.00	0.00	0.001	O				0.01
41.667	0.00	0.00	0.001	O				0.01
41.750	0.00	0.00	0.001	O				0.01
41.833	0.00	0.00	0.001	O				0.01
41.917	0.00	0.00	0.001	O				0.01
42.000	0.00	0.00	0.001	O				0.01
42.083	0.00	0.00	0.001	O				0.01
42.167	0.00	0.00	0.001	O				0.01

42.250	0.00	0.00	0.001	O	|	|	|	0.01
42.333	0.00	0.00	0.001	O	|	|	|	0.01
42.417	0.00	0.00	0.001	O	|	|	|	0.01
42.500	0.00	0.00	0.001	O	|	|	|	0.01
42.583	0.00	0.00	0.001	O	|	|	|	0.01
42.667	0.00	0.00	0.001	O	|	|	|	0.01
42.750	0.00	0.00	0.001	O	|	|	|	0.01
42.833	0.00	0.00	0.001	O	|	|	|	0.01
42.917	0.00	0.00	0.001	O	|	|	|	0.01
43.000	0.00	0.00	0.001	O	|	|	|	0.01
43.083	0.00	0.00	0.001	O	|	|	|	0.01
43.167	0.00	0.00	0.001	O	|	|	|	0.01
43.250	0.00	0.00	0.001	O	|	|	|	0.01
43.333	0.00	0.00	0.001	O	|	|	|	0.01
43.417	0.00	0.00	0.001	O	|	|	|	0.01
43.500	0.00	0.00	0.001	O	|	|	|	0.01
43.583	0.00	0.00	0.001	O	|	|	|	0.01
43.667	0.00	0.00	0.001	O	|	|	|	0.01
43.750	0.00	0.00	0.001	O	|	|	|	0.01
43.833	0.00	0.00	0.001	O	|	|	|	0.01
43.917	0.00	0.00	0.001	O	|	|	|	0.01
44.000	0.00	0.00	0.001	O	|	|	|	0.01
44.083	0.00	0.00	0.001	O	|	|	|	0.01
44.167	0.00	0.00	0.001	O	|	|	|	0.01
44.250	0.00	0.00	0.001	O	|	|	|	0.01
44.333	0.00	0.00	0.001	O	|	|	|	0.01
44.417	0.00	0.00	0.001	O	|	|	|	0.01
44.500	0.00	0.00	0.001	O	|	|	|	0.01
44.583	0.00	0.00	0.001	O	|	|	|	0.01
44.667	0.00	0.00	0.001	O	|	|	|	0.01
44.750	0.00	0.00	0.001	O	|	|	|	0.01
44.833	0.00	0.00	0.001	O	|	|	|	0.01
44.917	0.00	0.00	0.000	O	|	|	|	0.01
45.000	0.00	0.00	0.000	O	|	|	|	0.01
45.083	0.00	0.00	0.000	O	|	|	|	0.01
45.167	0.00	0.00	0.000	O	|	|	|	0.01
45.250	0.00	0.00	0.000	O	|	|	|	0.00

**********HYDROGRAPH DATA**********

Number of intervals = 543
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 0.202 (CFS)
Total volume = 0.275 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

****

FLOOD HYDROGRAPH ROUTING PROGRAM
Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2022
Study date: 01/05/26

INDEPENDENCE AT CANYON SPRINGS
ROUTING BASIN
POST-DEVELOPMENT CONDITION
2-YR, 24-HR STORM

Program License Serial Number 6619

********** HYDROGRAPH INFORMATION **********

From study/file name: lmcrp242.rte
**********HYDROGRAPH DATA**********
Number of intervals = 96
Time interval = 15.0 (Min.)
Maximum/Peak flow rate = 1.732 (CFS)
Total volume = 1.053 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

****

++
Process from Point/Station 1.000 to Point/Station 2.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 96
Hydrograph time unit = 15.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.500	0.047	0.100	0.046	0.048
1.000	0.142	0.150	0.140	0.144
1.500	0.237	0.190	0.235	0.239
2.000	0.332	0.230	0.330	0.334
2.500	0.426	0.250	0.423	0.429
3.000	0.521	0.280	0.518	0.524
3.500	0.616	0.300	0.613	0.619
4.000	0.711	0.320	0.708	0.714
4.500	0.806	0.340	0.802	0.810
5.000	0.900	3.040	0.869	0.931
5.500	0.995	4.160	0.952	1.038
6.000	1.090	5.030	1.038	1.142

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0	0.4	0.87	1.30	1.73	Depth (Ft.)
0.250	0.10	0.00	0.001	OI	|	|	|	|	0.01
0.500	0.15	0.01	0.004	O I	|	|	|	|	0.04
0.750	0.15	0.01	0.006	O I	|	|	|	|	0.07
1.000	0.20	0.02	0.010	O I	|	|	|	|	0.10
1.250	0.15	0.03	0.013	O I	|	|	|	|	0.14
1.500	0.15	0.03	0.016	O I	|	|	|	|	0.17
1.750	0.15	0.04	0.018	O I	|	|	|	|	0.19
2.000	0.20	0.04	0.021	O I	|	|	|	|	0.22
2.250	0.20	0.05	0.024	O I	|	|	|	|	0.26
2.500	0.20	0.06	0.027	|O I	|	|	|	|	0.29
2.750	0.25	0.07	0.031	|O I	|	|	|	|	0.33
3.000	0.25	0.07	0.034	|O I	|	|	|	|	0.37
3.250	0.25	0.08	0.038	|O I	|	|	|	|	0.41
3.500	0.25	0.09	0.042	|O I	|	|	|	|	0.44
3.750	0.25	0.10	0.045	|O I	|	|	|	|	0.48
4.000	0.31	0.10	0.049	|O I	|	|	|	|	0.51
4.250	0.31	0.10	0.053	|O I	|	|	|	|	0.53
4.500	0.36	0.11	0.058	|O I	|	|	|	|	0.56
4.750	0.36	0.11	0.063	| O I	|	|	|	|	0.58
5.000	0.41	0.11	0.068	| O I	|	|	|	|	0.61
5.250	0.31	0.11	0.073	| O I	|	|	|	|	0.64
5.500	0.36	0.12	0.078	| O I	|	|	|	|	0.66
5.750	0.41	0.12	0.083	| O I	|	|	|	|	0.69
6.000	0.41	0.12	0.089	| O I	|	|	|	|	0.72
6.250	0.46	0.13	0.096	| O I	|	|	|	|	0.76
6.500	0.46	0.13	0.103	| O I	|	|	|	|	0.79
6.750	0.51	0.13	0.110	| O |I	|	|	|	|	0.83
7.000	0.51	0.14	0.118	| O |I	|	|	|	|	0.87
7.250	0.51	0.14	0.125	| O |I	|	|	|	|	0.91

7.500	0.56	0.15	0.133	O	I			0.95
7.750	0.61	0.15	0.142	O	I			1.00
8.000	0.66	0.15	0.152	O	I			1.05
8.250	0.76	0.16	0.164	O	I			1.11
8.500	0.76	0.16	0.176	O	I			1.18
8.750	0.82	0.17	0.189	O	I			1.25
9.000	0.87	0.18	0.203	O	I			1.32
9.250	0.97	0.18	0.218	O	I			1.40
9.500	1.02	0.19	0.235	O	I			1.49
9.750	1.07	0.20	0.252	O	I			1.58
10.000	1.12	0.20	0.271	O	I			1.68
10.250	0.76	0.21	0.286	O	I			1.76
10.500	0.76	0.22	0.298	O	I			1.82
10.750	1.02	0.22	0.311	O	I			1.89
11.000	1.02	0.23	0.328	O	I			1.98
11.250	0.97	0.23	0.344	O	I			2.06
11.500	0.97	0.24	0.359	O	I			2.14
11.750	0.87	0.24	0.373	O	I			2.22
12.000	0.92	0.24	0.386	O	I			2.29
12.250	1.27	0.25	0.404	O	I			2.38
12.500	1.32	0.25	0.426	O	I			2.50
12.750	1.43	0.26	0.449	O	I			2.62
13.000	1.48	0.26	0.473	O	I			2.75
13.250	1.73	0.27	0.501	O	I		I	2.89
13.500	1.73	0.28	0.531	O	I		I	3.05
13.750	1.17	0.29	0.555	O	I			3.18
14.000	1.17	0.29	0.573	O	I			3.28
14.250	1.38	0.30	0.594	O	I			3.38
14.500	1.32	0.30	0.615	O	I			3.50
14.750	1.32	0.30	0.637	O	I			3.61
15.000	1.27	0.31	0.657	O	I			3.72
15.250	1.22	0.31	0.676	O	I			3.82
15.500	1.17	0.32	0.695	O	I			3.91
15.750	0.97	0.32	0.710	O	I			4.00
16.000	0.97	0.32	0.724	O	I			4.07
16.250	0.20	0.32	0.729	I O				4.09
16.500	0.20	0.32	0.726	I O				4.08
16.750	0.15	0.32	0.723	I O				4.07
17.000	0.15	0.32	0.720	I O				4.05
17.250	0.25	0.32	0.718	IO				4.03
17.500	0.25	0.32	0.716	IO				4.03
17.750	0.25	0.32	0.715	IO				4.02
18.000	0.20	0.32	0.713	I O				4.01
18.250	0.20	0.32	0.711	I O				4.00
18.500	0.20	0.32	0.708	I O				3.98
18.750	0.15	0.32	0.705	I O				3.97
19.000	0.10	0.32	0.701	I O				3.95
19.250	0.15	0.32	0.697	I O				3.93
19.500	0.20	0.32	0.694	I O				3.91
19.750	0.15	0.32	0.692	I O				3.90
20.000	0.10	0.32	0.688	I O				3.88
20.250	0.15	0.31	0.684	I O				3.86
20.500	0.15	0.31	0.681	I O				3.84

20.750	0.15	0.31	0.677	| I O |	|	|	|	3.82
21.000	0.10	0.31	0.673	|I O |	|	|	|	3.80
21.250	0.15	0.31	0.670	| I O |	|	|	|	3.78
21.500	0.10	0.31	0.666	|I O |	|	|	|	3.76
21.750	0.15	0.31	0.662	| I O |	|	|	|	3.74
22.000	0.10	0.31	0.658	|I O |	|	|	|	3.72
22.250	0.15	0.31	0.655	| I O |	|	|	|	3.70
22.500	0.10	0.31	0.651	|I O |	|	|	|	3.68
22.750	0.10	0.31	0.647	|I O |	|	|	|	3.66
23.000	0.10	0.31	0.642	|I O |	|	|	|	3.64
23.250	0.10	0.30	0.638	|I O |	|	|	|	3.62
23.500	0.10	0.30	0.634	|I O |	|	|	|	3.59
23.750	0.10	0.30	0.630	|I O |	|	|	|	3.57
24.000	0.10	0.30	0.626	|I O |	|	|	|	3.55
24.250	0.00	0.30	0.620	I O |	|	|	|	3.52
24.500	0.00	0.30	0.614	I O |	|	|	|	3.49
24.750	0.00	0.30	0.608	I O |	|	|	|	3.46
25.000	0.00	0.30	0.602	I O |	|	|	|	3.43
25.250	0.00	0.30	0.596	I O |	|	|	|	3.39
25.500	0.00	0.29	0.590	I O |	|	|	|	3.36
25.750	0.00	0.29	0.584	I O |	|	|	|	3.33
26.000	0.00	0.29	0.578	I O |	|	|	|	3.30
26.250	0.00	0.29	0.572	I O |	|	|	|	3.27
26.500	0.00	0.29	0.566	I O |	|	|	|	3.23
26.750	0.00	0.29	0.560	I O |	|	|	|	3.20
27.000	0.00	0.29	0.554	I O |	|	|	|	3.17
27.250	0.00	0.29	0.548	I O |	|	|	|	3.14
27.500	0.00	0.28	0.542	I O |	|	|	|	3.11
27.750	0.00	0.28	0.536	I O |	|	|	|	3.08
28.000	0.00	0.28	0.530	I O |	|	|	|	3.05
28.250	0.00	0.28	0.524	I O |	|	|	|	3.02
28.500	0.00	0.28	0.519	I O |	|	|	|	2.99
28.750	0.00	0.28	0.513	I O |	|	|	|	2.96
29.000	0.00	0.28	0.507	I O |	|	|	|	2.93
29.250	0.00	0.27	0.501	I O |	|	|	|	2.90
29.500	0.00	0.27	0.496	I O |	|	|	|	2.87
29.750	0.00	0.27	0.490	I O |	|	|	|	2.84
30.000	0.00	0.27	0.485	I O |	|	|	|	2.81
30.250	0.00	0.27	0.479	I O |	|	|	|	2.78
30.500	0.00	0.27	0.474	I O |	|	|	|	2.75
30.750	0.00	0.26	0.468	I O |	|	|	|	2.72
31.000	0.00	0.26	0.463	I O |	|	|	|	2.69
31.250	0.00	0.26	0.457	I O |	|	|	|	2.67
31.500	0.00	0.26	0.452	I O |	|	|	|	2.64
31.750	0.00	0.26	0.447	I O |	|	|	|	2.61
32.000	0.00	0.25	0.441	I O |	|	|	|	2.58
32.250	0.00	0.25	0.436	I O |	|	|	|	2.55
32.500	0.00	0.25	0.431	I O |	|	|	|	2.53
32.750	0.00	0.25	0.426	I O |	|	|	|	2.50
33.000	0.00	0.25	0.421	I O |	|	|	|	2.47
33.250	0.00	0.25	0.415	I O |	|	|	|	2.44
33.500	0.00	0.25	0.410	I O |	|	|	|	2.42
33.750	0.00	0.25	0.405	I O |	|	|	|	2.39

34.000	0.00	0.24	0.400	I	O				2.36
34.250	0.00	0.24	0.395	I	O				2.34
34.500	0.00	0.24	0.390	I	O				2.31
34.750	0.00	0.24	0.385	I	O				2.28
35.000	0.00	0.24	0.380	I	O				2.26
35.250	0.00	0.24	0.375	I	O				2.23
35.500	0.00	0.24	0.370	I	O				2.20
35.750	0.00	0.24	0.365	I	O				2.18
36.000	0.00	0.24	0.361	I	O				2.15
36.250	0.00	0.24	0.356	I	O				2.13
36.500	0.00	0.23	0.351	I	O				2.10
36.750	0.00	0.23	0.346	I	O				2.07
37.000	0.00	0.23	0.341	I	O				2.05
37.250	0.00	0.23	0.336	I	O				2.02
37.500	0.00	0.23	0.332	I	O				2.00
37.750	0.00	0.23	0.327	I	O				1.97
38.000	0.00	0.23	0.322	I	O				1.95
38.250	0.00	0.22	0.318	I	O				1.92
38.500	0.00	0.22	0.313	I	O				1.90
38.750	0.00	0.22	0.308	I	O				1.88
39.000	0.00	0.22	0.304	I	O				1.85
39.250	0.00	0.22	0.299	I	O				1.83
39.500	0.00	0.21	0.295	I	O				1.80
39.750	0.00	0.21	0.291	I	O				1.78
40.000	0.00	0.21	0.286	I	O				1.76
40.250	0.00	0.21	0.282	I	O				1.74
40.500	0.00	0.21	0.278	I	O				1.71
40.750	0.00	0.21	0.273	I	O				1.69
41.000	0.00	0.20	0.269	I	O				1.67
41.250	0.00	0.20	0.265	I	O				1.65
41.500	0.00	0.20	0.261	I	O				1.62
41.750	0.00	0.20	0.257	I	O				1.60
42.000	0.00	0.20	0.253	I	O				1.58
42.250	0.00	0.19	0.248	I	O				1.56
42.500	0.00	0.19	0.244	I	O				1.54
42.750	0.00	0.19	0.240	I	O				1.52
43.000	0.00	0.19	0.237	I	O				1.50
43.250	0.00	0.19	0.233	I	O				1.48
43.500	0.00	0.19	0.229	I	O				1.46
43.750	0.00	0.18	0.225	I	O				1.44
44.000	0.00	0.18	0.221	I	O				1.42
44.250	0.00	0.18	0.217	I	O				1.40
44.500	0.00	0.18	0.214	I	O				1.38
44.750	0.00	0.18	0.210	I	O				1.36
45.000	0.00	0.18	0.206	I	O				1.34
45.250	0.00	0.18	0.203	I	O				1.32
45.500	0.00	0.17	0.199	I	O				1.30
45.750	0.00	0.17	0.195	I	O				1.28
46.000	0.00	0.17	0.192	I	O				1.26
46.250	0.00	0.17	0.188	I	O				1.24
46.500	0.00	0.17	0.185	I	O				1.23
46.750	0.00	0.17	0.181	I	O				1.21
47.000	0.00	0.17	0.178	I	O				1.19

47.250	0.00	0.16	0.175	I O				1.17
47.500	0.00	0.16	0.171	I O				1.15
47.750	0.00	0.16	0.168	I O				1.14
48.000	0.00	0.16	0.165	I O				1.12
48.250	0.00	0.16	0.161	I O				1.10
48.500	0.00	0.16	0.158	I O				1.08
48.750	0.00	0.16	0.155	I O				1.07
49.000	0.00	0.15	0.152	I O				1.05
49.250	0.00	0.15	0.148	I O				1.03
49.500	0.00	0.15	0.145	I O				1.02
49.750	0.00	0.15	0.142	I O				1.00
50.000	0.00	0.15	0.139	I O				0.98
50.250	0.00	0.15	0.136	I O				0.97
50.500	0.00	0.15	0.133	I O				0.95
50.750	0.00	0.14	0.130	I O				0.94
51.000	0.00	0.14	0.127	I O				0.92
51.250	0.00	0.14	0.124	I O				0.91
51.500	0.00	0.14	0.121	I O				0.89
51.750	0.00	0.14	0.118	I O				0.88
52.000	0.00	0.14	0.116	I O				0.86
52.250	0.00	0.13	0.113	I O				0.85
52.500	0.00	0.13	0.110	I O				0.83
52.750	0.00	0.13	0.107	I O				0.82
53.000	0.00	0.13	0.105	I O				0.80
53.250	0.00	0.13	0.102	I O				0.79
53.500	0.00	0.13	0.099	I O				0.78
53.750	0.00	0.13	0.097	I O				0.76
54.000	0.00	0.12	0.094	I O				0.75
54.250	0.00	0.12	0.091	I O				0.73
54.500	0.00	0.12	0.089	I O				0.72
54.750	0.00	0.12	0.086	I O				0.71
55.000	0.00	0.12	0.084	I O				0.69
55.250	0.00	0.12	0.081	I O				0.68
55.500	0.00	0.12	0.079	I O				0.67
55.750	0.00	0.12	0.077	I O				0.66
56.000	0.00	0.11	0.074	I O				0.64
56.250	0.00	0.11	0.072	I O				0.63
56.500	0.00	0.11	0.070	I O				0.62
56.750	0.00	0.11	0.067	I O				0.61
57.000	0.00	0.11	0.065	I O				0.59
57.250	0.00	0.11	0.063	I O				0.58
57.500	0.00	0.11	0.061	IO				0.57
57.750	0.00	0.11	0.058	IO				0.56
58.000	0.00	0.10	0.056	IO				0.55
58.250	0.00	0.10	0.054	IO				0.54
58.500	0.00	0.10	0.052	IO				0.53
58.750	0.00	0.10	0.050	IO				0.51
59.000	0.00	0.10	0.048	IO				0.50
59.250	0.00	0.10	0.046	IO				0.49
59.500	0.00	0.09	0.044	IO				0.46
59.750	0.00	0.09	0.042	IO				0.44
60.000	0.00	0.09	0.040	IO				0.43
60.250	0.00	0.08	0.038	IO				0.41

60.500	0.00	0.08	0.037	IO				0.39
60.750	0.00	0.07	0.035	IO				0.37
61.000	0.00	0.07	0.034	IO				0.36
61.250	0.00	0.07	0.032	IO				0.34
61.500	0.00	0.07	0.031	IO				0.33
61.750	0.00	0.06	0.029	IO				0.31
62.000	0.00	0.06	0.028	IO				0.30
62.250	0.00	0.06	0.027	IO				0.29
62.500	0.00	0.05	0.026	IO				0.27
62.750	0.00	0.05	0.025	O				0.26
63.000	0.00	0.05	0.024	O				0.25
63.250	0.00	0.05	0.023	O				0.24
63.500	0.00	0.05	0.022	O				0.23
63.750	0.00	0.04	0.021	O				0.22
64.000	0.00	0.04	0.020	O				0.21
64.250	0.00	0.04	0.019	O				0.20
64.500	0.00	0.04	0.018	O				0.19
64.750	0.00	0.04	0.017	O				0.18
65.000	0.00	0.04	0.017	O				0.18
65.250	0.00	0.03	0.016	O				0.17
65.500	0.00	0.03	0.015	O				0.16
65.750	0.00	0.03	0.015	O				0.15
66.000	0.00	0.03	0.014	O				0.15
66.250	0.00	0.03	0.013	O				0.14
66.500	0.00	0.03	0.013	O				0.14
66.750	0.00	0.03	0.012	O				0.13
67.000	0.00	0.02	0.012	O				0.12
67.250	0.00	0.02	0.011	O				0.12
67.500	0.00	0.02	0.011	O				0.11
67.750	0.00	0.02	0.010	O				0.11
68.000	0.00	0.02	0.010	O				0.10
68.250	0.00	0.02	0.009	O				0.10
68.500	0.00	0.02	0.009	O				0.10
68.750	0.00	0.02	0.009	O				0.09
69.000	0.00	0.02	0.008	O				0.09
69.250	0.00	0.02	0.008	O				0.08
69.500	0.00	0.02	0.008	O				0.08
69.750	0.00	0.02	0.007	O				0.08
70.000	0.00	0.01	0.007	O				0.07
70.250	0.00	0.01	0.007	O				0.07
70.500	0.00	0.01	0.006	O				0.07
70.750	0.00	0.01	0.006	O				0.06
71.000	0.00	0.01	0.006	O				0.06
71.250	0.00	0.01	0.006	O				0.06
71.500	0.00	0.01	0.005	O				0.06
71.750	0.00	0.01	0.005	O				0.05
72.000	0.00	0.01	0.005	O				0.05
72.250	0.00	0.01	0.005	O				0.05
72.500	0.00	0.01	0.004	O				0.05
72.750	0.00	0.01	0.004	O				0.05
73.000	0.00	0.01	0.004	O				0.04
73.250	0.00	0.01	0.004	O				0.04
73.500	0.00	0.01	0.004	O				0.04

73.750	0.00	0.01	0.004	O	|	|	|	|	0.04
74.000	0.00	0.01	0.003	O	|	|	|	|	0.04
74.250	0.00	0.01	0.003	O	|	|	|	|	0.03
74.500	0.00	0.01	0.003	O	|	|	|	|	0.03
74.750	0.00	0.01	0.003	O	|	|	|	|	0.03
75.000	0.00	0.01	0.003	O	|	|	|	|	0.03
75.250	0.00	0.01	0.003	O	|	|	|	|	0.03
75.500	0.00	0.01	0.003	O	|	|	|	|	0.03
75.750	0.00	0.01	0.003	O	|	|	|	|	0.03
76.000	0.00	0.01	0.002	O	|	|	|	|	0.03
76.250	0.00	0.00	0.002	O	|	|	|	|	0.02
76.500	0.00	0.00	0.002	O	|	|	|	|	0.02
76.750	0.00	0.00	0.002	O	|	|	|	|	0.02
77.000	0.00	0.00	0.002	O	|	|	|	|	0.02
77.250	0.00	0.00	0.002	O	|	|	|	|	0.02
77.500	0.00	0.00	0.002	O	|	|	|	|	0.02
77.750	0.00	0.00	0.002	O	|	|	|	|	0.02
78.000	0.00	0.00	0.002	O	|	|	|	|	0.02
78.250	0.00	0.00	0.002	O	|	|	|	|	0.02
78.500	0.00	0.00	0.002	O	|	|	|	|	0.02
78.750	0.00	0.00	0.001	O	|	|	|	|	0.02
79.000	0.00	0.00	0.001	O	|	|	|	|	0.02
79.250	0.00	0.00	0.001	O	|	|	|	|	0.01
79.500	0.00	0.00	0.001	O	|	|	|	|	0.01
79.750	0.00	0.00	0.001	O	|	|	|	|	0.01
80.000	0.00	0.00	0.001	O	|	|	|	|	0.01
80.250	0.00	0.00	0.001	O	|	|	|	|	0.01
80.500	0.00	0.00	0.001	O	|	|	|	|	0.01
80.750	0.00	0.00	0.001	O	|	|	|	|	0.01
81.000	0.00	0.00	0.001	O	|	|	|	|	0.01
81.250	0.00	0.00	0.001	O	|	|	|	|	0.01
81.500	0.00	0.00	0.001	O	|	|	|	|	0.01
81.750	0.00	0.00	0.001	O	|	|	|	|	0.01
82.000	0.00	0.00	0.001	O	|	|	|	|	0.01
82.250	0.00	0.00	0.001	O	|	|	|	|	0.01
82.500	0.00	0.00	0.001	O	|	|	|	|	0.01
82.750	0.00	0.00	0.001	O	|	|	|	|	0.01
83.000	0.00	0.00	0.001	O	|	|	|	|	0.01
83.250	0.00	0.00	0.001	O	|	|	|	|	0.01
83.500	0.00	0.00	0.001	O	|	|	|	|	0.01
83.750	0.00	0.00	0.001	O	|	|	|	|	0.01
84.000	0.00	0.00	0.001	O	|	|	|	|	0.01
84.250	0.00	0.00	0.001	O	|	|	|	|	0.01
84.500	0.00	0.00	0.001	O	|	|	|	|	0.01
84.750	0.00	0.00	0.001	O	|	|	|	|	0.01
85.000	0.00	0.00	0.000	O	|	|	|	|	0.01
85.250	0.00	0.00	0.000	O	|	|	|	|	0.01
85.500	0.00	0.00	0.000	O	|	|	|	|	0.00

**********HYDROGRAPH DATA**********

Number of intervals = 342

Time interval = 15.0 (Min.)

Maximum/Peak flow rate = 0.324 (CFS)

```
                Total volume =       1.052 (Ac.Ft)
        Status of hydrographs being held in storage
                    Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
        Peak (CFS)      0.000     0.000     0.000     0.000     0.000
        Vol (Ac.Ft)      0.000     0.000     0.000     0.000     0.000
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FLOOD HYDROGRAPH ROUTING PROGRAM
Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2022
Study date: 01/05/26

INDEPENDENCE AT CANYON SPRINGS
ROUTING BASIN
POST-DEVELOPMENT CONDITION
10-YR, 1-HR STORM

Program License Serial Number 6619

********** HYDROGRAPH INFORMATION **********

From study/file name: lmcrp110.rte
**********HYDROGRAPH DATA**********
Number of intervals = 14
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 17.670 (CFS)
Total volume = 0.496 (Ac.Ft)

Status of hydrographs being held in storage

	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5
Peak (CFS)	0.000	0.000	0.000	0.000	0.000
Vol (Ac.Ft)	0.000	0.000	0.000	0.000	0.000

****

++
Process from Point/Station 1.000 to Point/Station 2.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 14
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)

Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)

Depth vs. Storage and Depth vs. Discharge data:

Basin Depth (Ft.)	Storage (Ac.Ft)	Outflow (CFS)	(S-O*dt/2) (Ac.Ft)	(S+O*dt/2) (Ac.Ft)
0.000	0.000	0.000	0.000	0.000
0.500	0.047	0.100	0.047	0.047
1.000	0.142	0.150	0.141	0.143
1.500	0.237	0.190	0.236	0.238
2.000	0.332	0.230	0.331	0.333
2.500	0.426	0.250	0.425	0.427
3.000	0.521	0.280	0.520	0.522
3.500	0.616	0.300	0.615	0.617
4.000	0.711	0.320	0.710	0.712
4.500	0.806	0.340	0.805	0.807
5.000	0.900	3.040	0.890	0.910
5.500	0.995	4.160	0.981	1.009
6.000	1.090	5.030	1.073	1.107

Hydrograph Detention Basin Routing

Graph values: 'I'= unit inflow; 'O'=outflow at time shown

Time (Hours)	Inflow (CFS)	Outflow (CFS)	Storage (Ac.Ft)	.0 4.4 8.84 13.25 17.67	Depth (Ft.)
0.083	1.01	0.01	0.003	OI | | | | |	0.04
0.167	2.22	0.03	0.014	O I | | | | |	0.15
0.250	2.62	0.07	0.031	O I | | | | |	0.33
0.333	2.86	0.10	0.049	O I | | | | |	0.51
0.417	3.18	0.11	0.069	O I | | | | |	0.62
0.500	3.76	0.12	0.092	O I | | | | |	0.74
0.583	4.41	0.14	0.120	O I| | | | |	0.88
0.667	5.50	0.15	0.153	O |I | | | |	1.06
0.750	8.40	0.17	0.199	O | I| | | |	1.30
0.833	17.67	0.21	0.288	O | | | | I	1.77
0.917	14.47	0.24	0.397	O | | | I |	2.35
1.000	4.55	0.26	0.461	O | I | | | |	2.68
1.083	1.29	0.27	0.479	O I | | | | |	2.78
1.167	0.10	0.27	0.482	O | | | | |	2.79
1.250	0.00	0.27	0.480	O | | | | |	2.79
1.333	0.00	0.27	0.479	O | | | | |	2.78
1.417	0.00	0.27	0.477	O | | | | |	2.77
1.500	0.00	0.27	0.475	O | | | | |	2.76
1.583	0.00	0.26	0.473	O | | | | |	2.75
1.667	0.00	0.26	0.471	O | | | | |	2.74
1.750	0.00	0.26	0.469	O | | | | |	2.73
1.833	0.00	0.26	0.468	O | | | | |	2.72
1.917	0.00	0.26	0.466	O | | | | |	2.71
2.000	0.00	0.26	0.464	O | | | | |	2.70
2.083	0.00	0.26	0.462	O | | | | |	2.69
2.167	0.00	0.26	0.460	O | | | | |	2.68
2.250	0.00	0.26	0.459	O | | | | |	2.67
2.333	0.00	0.26	0.457	O | | | | |	2.66
2.417	0.00	0.26	0.455	O | | | | |	2.65

2.500	0.00	0.26	0.453	O				2.64
2.583	0.00	0.26	0.451	O				2.63
2.667	0.00	0.26	0.450	O				2.62
2.750	0.00	0.26	0.448	O				2.62
2.833	0.00	0.26	0.446	O				2.61
2.917	0.00	0.26	0.444	O				2.60
3.000	0.00	0.26	0.443	O				2.59
3.083	0.00	0.25	0.441	O				2.58
3.167	0.00	0.25	0.439	O				2.57
3.250	0.00	0.25	0.437	O				2.56
3.333	0.00	0.25	0.436	O				2.55
3.417	0.00	0.25	0.434	O				2.54
3.500	0.00	0.25	0.432	O				2.53
3.583	0.00	0.25	0.430	O				2.52
3.667	0.00	0.25	0.429	O				2.51
3.750	0.00	0.25	0.427	O				2.51
3.833	0.00	0.25	0.425	O				2.50
3.917	0.00	0.25	0.424	O				2.49
4.000	0.00	0.25	0.422	O				2.48
4.083	0.00	0.25	0.420	O				2.47
4.167	0.00	0.25	0.418	O				2.46
4.250	0.00	0.25	0.417	O				2.45
4.333	0.00	0.25	0.415	O				2.44
4.417	0.00	0.25	0.413	O				2.43
4.500	0.00	0.25	0.412	O				2.42
4.583	0.00	0.25	0.410	O				2.41
4.667	0.00	0.25	0.408	O				2.41
4.750	0.00	0.25	0.406	O				2.40
4.833	0.00	0.25	0.405	O				2.39
4.917	0.00	0.25	0.403	O				2.38
5.000	0.00	0.24	0.401	O				2.37
5.083	0.00	0.24	0.400	O				2.36
5.167	0.00	0.24	0.398	O				2.35
5.250	0.00	0.24	0.396	O				2.34
5.333	0.00	0.24	0.395	O				2.33
5.417	0.00	0.24	0.393	O				2.32
5.500	0.00	0.24	0.391	O				2.32
5.583	0.00	0.24	0.390	O				2.31
5.667	0.00	0.24	0.388	O				2.30
5.750	0.00	0.24	0.386	O				2.29
5.833	0.00	0.24	0.385	O				2.28
5.917	0.00	0.24	0.383	O				2.27
6.000	0.00	0.24	0.381	O				2.26
6.083	0.00	0.24	0.380	O				2.25
6.167	0.00	0.24	0.378	O				2.24
6.250	0.00	0.24	0.376	O				2.24
6.333	0.00	0.24	0.375	O				2.23
6.417	0.00	0.24	0.373	O				2.22
6.500	0.00	0.24	0.371	O				2.21
6.583	0.00	0.24	0.370	O				2.20
6.667	0.00	0.24	0.368	O				2.19
6.750	0.00	0.24	0.367	O				2.18
6.833	0.00	0.24	0.365	O				2.18