Preliminary

Drainage Report

For

Luna & 395 Commercial

Victorville, CA

Prepared
September 2022
Revised
November 2022

United Engineering Group - California
8885 Haven Avenue
Suite 195
Rancho Cucamonga, CA 91730

Tel: (909) 466-9240

Provided for:

Guardian Commercial Real Estate LP
5780 Fleet St., Suite 225
Carlsbad, CA 92008

Tel: (949) 933-7701

Project # 30216

This report has been prepared by or under the direction of the following registered civil engineer who attests to the technical information contained herein. The registered civil engineer has also judged the qualifications of any employees that have provided data and calculations upon which the recommendations, conclusions, and decisions are based.

Christopher F. Lenz, PE 63001

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I. INTRODUCTION

Luna 395 Commercial is a siteplan of approximately 3.57 acres with 4 proposed buildings, located at the southwest corner of Luna Steet and Hwy 395 in the City of Victorville. The property is rectangular in shape and is bordered by the paved roads to the West, South, and East. This is a "priority project" as it is greater than 10,000 sf of impervious area, and thus a WQMP is required.

The purpose of this study is to determine the I00-year storm runoff emanating from on-site and off-site areas for the Luna 395 Commercial Project, and to show how the site plan handles storm water. The study will determine the peak flow rate for the existing condition, the peak flow rate for the proposed condition, proposed condition flow rate routed through two combination water quality and detention basins, and one underground storage system. Additional analysis will confirm hydraulic capacity of collection systems.

The scope of the study includes the following:

- Determination of points of flow concentration and watershed areas.
- Determination of the I00-year 24 hours storm runoff based upon the onsite drainage conditions utilizing the San Bernardino County Flood Control District (SBCFCD) SCS Unit Hydrograph Method.

II. SITE DISCUSSION

The current property is vacant, undeveloped land with uniform slope of roughly 1.7% to the east. The topography indicates that the runoff drains in an easterly direction primarily in the form of sheet flow. There is existing development surrounding the site. Along the east side of the site is the Line E-01 regional system. The sites flows concentrate along the east side of the project where they intersect the Line E-01 regional flow path.

III. RAINFALL DATA

The San Bernardino County Flood Control District (SBCFCD) hydrology Manual, (Reference 1) was used to develop the hydrological parameters for the 10-year and 100-year storm events. The Rational Method was used to determine the peak flow rates associated with the existing project conditions as well as the time of concentration used in the Unit Hydrograph method. In addition, the Unit Hydrograph Method was utilized to determine the runoff volume. Computations were performed using the CivilCADD drainage software for San Bernardino County Developed by CivilDesign Corporation.

Rainfall data was taken from the isohyetal maps from the SBCFCD hydrology Manual.

Return Period – Duration	Isohyetal (in)
10 year – 1 hour	0.69
2 year – 6 hour	0.89
2 year – 24 hour	1.64
100 year – 1 hour	1.15
100 year – 6 hour	2.51
100 year – 24 hour	5.41

Hydrologic Soil Group "A" and an Antecedent Moisture Conditions (AMC) 2 (10yr) and 3 (100yr) are used for the study area. The percentage impervious

is 90, and the SCS runoff is 46 and 32. Refer to Appendix B for additional detail.

The projects runoff is designed to be contained in two basins and one underground system that will act as both water quality infiltration, and flood storage for peak runoff mitigation. The 100- year 24 runoff event is the limiting factor for design.

IV. ONSITE RUNOFF

Existing Condition/Pre Development

The runoff from the subject site in the existing condition is primarily sheet flow draining easterly to the roughly the northeast corner of the site. It is shown as Area A and Nodes 101 to 102 on the Existing Conditions Drainage Exhibit in Appendix A. The peak flow rate is 6.4 cfs and the time of concentration is 19.6 minutes.

Proposed Condition/Post Development

The proposed condition is to utilize three small basins for water quality and flood routing and another underground system for stormwater treatment and detention for the site. The Rational method was prepared for determination of time of concentration for use in the development of the Unit Hydrographs. The post development 100 year runoff for area A1 is 1.9 cfs and 7.2 min. The post development 100 year runoff for area B1 is 1.9 cfs and 7.5 min. The post development 100 year runoff for area C1 is 2.8 cfs and 7.4 min. The post development 100 year runoff for area D1 is 9.5 cfs and 7.0 min.

The post development runoff is routed through the proposed basins to confirm post development runoff could be mitigated to less than pre-development runoff. The four systems are designed to be dual purpose retention and detention with the roughly bottom one half (0.5) to one (1) foot of depth supplying the required water quality retention and infiltration of the WQMP design storms. After routing through the proposed basin the post development 100 year 24 hour runoff for area A1 is 1.22 cfs at a depth of 0.92', for Area B1 is 0.94 cfs at a depth of 1.4', for Area C1 is 1.68 cfs at a depth of 2.20', and for Area D1 is 2.80 cfs at a depth of 7.9'. The total post development runoff is 5.7 cfs, or 90% of predevelopment peak runoff. Refer to Appendix B for detailed output files.

The primary hydraulic design elements are the roads, curb openings, storm drain, and the outlets from the basins. Drive lanes within the project will be used to carry runoff. At time of final design details for individual collection systems will be confirmed. Storm drain will be used to accept

and route offsite flows from the south, per the Line E-01 Plans. Refer to the Proposed Conditions Drainage Exhibit, Appendices B and C additional detail.

V. OFFSITE RUNOFF

The offsite contributing areas to the subject site are from the South. Line E-01 will be carried northerly through an earthen channel. For preliminary design it is assumed the culvert crossing of the southern access point will match the culvert sizing of the system under Luna. At time of final design additional details will be provided.

VI. STORMWATER TREATMENT

Stormwater treatment will be provided by the bottom of the proposed basins, where the required volume will infiltrate into the groundwater. The basins exceed the required water quality volume. Water quality calculations were prepared based on the San Bernardino County Model Water Quality Management Plan Guidance document. The following calculations were used in sizing of facilities;

- WQ Contributing area
  - Area A1 – 0.43 acres
  - Area B1 – 0.44 acres
  - Area C1 – 0.64 acres
  - Area D1 – 2.10 acres
- 2 yr 1 hour rainfall – 0.40”
- Impervious ratio – 90% (from SBCFCD hydrology Manual)
- C_{BMP} = 0.73
- Drainage Area Region – Desert – Regression Coefficient P_6 = 1.2371
- P_6 = 1.2371 x 0.40” = 0.49”
- Regression Constant a = 1.963 for 48 hours
- P_0 = a * C_{BMP} * P_6 = 1.963 x 0.73 x 0.49 = 0.702
- V_0 = (P_0 * A)/12
  - V_{A1} = (0.702 x 0.43)/12 = 0.025 acft
  - V_{B1} = (0.702 x 0.44)/12 = 0.026 acft
  - V_{C1} = (0.702 x 0.64)/12 = 0.037 acft
  - V_{D1} = (0.702 x 2.10)/12 = 0.123 acft

VII. CONCLUSION

The proposed development of the Luna 395 Commercial Project, a 3.57 acre, 4 building site plan can be mitigated as designed and analyzed in this report to be compatible with the City of Victorville Master Plan of Drainage. The development of the subject site will not change area drainage patterns,

impact any of the surrounding properties, or change any of the regional master plan facilities. The Site will construct combination retention and detention basins and an underground storage system of sufficient size to handle water quality through infiltration, and flood mitigation through detention. The drive aisles will be analyzed and confirmed to contain the 10 year and 100 year runoff remains within the curbs. The basins and outlet structures have been designed and analyzed in conjunction with preliminary grading design and street grades to confirm capacity to adequately handle the design storm runoff.

REFERENCES

1. San Bernardino County Flood Control and Water Conservation District Hydrology Manual, August 1986.

2. Master Plan of Drainage for Oro Grande Wash and Adjacent Watersheds that are Tributary to the Mojave River, Williamson & Schmid, March 1992.

APPENDIX A:
PROJECT PRE AND POST CONDITION EXHIBITS

LEGEND:

- CONTRIBUTORY AREA
- PROJECT BOUNDARY
- FLOWPATH
- FLOW DIRECTION

102 / XX — NODE/CONCENTRATION POINT, FLOWLINE ELEVATION 32XX

A1 / 6.8 — SUBAREA, ACRES

BENCHMARK: CITY OF ADELANTO BENCHMARK NO. U-306; ALSO BEING NATIONAL GEODETIC SURVEY BENCHMARK DESIGNATION U-306; PID EV0114; A BRASS DISK STAMPED U306 1935; SET IN CONCRETE; SOUTHWEST CORNER OF PALMDALE ROAD & KOALA ROAD. ELEVATION 3201.187 FEET (ADELANTO CITYWIDE DATUM).

REVISIONS

NO.	DESCRIPTION	DATE

REGISTERED PROFESSIONAL ENGINEER — CHRISTOPHER F. LENZ — NO. 63001 EXP. 6/30/18 CIVIL — STATE OF CALIFORNIA

CHRISTOPHER F. LENZ DATE
R.C.E. No. 63001

united engineering group
8885 Haven Avenue
Suite 195
Rancho Cucamonga,
CA 91730
Phone: 909.466.9240
www.unitedeng.com

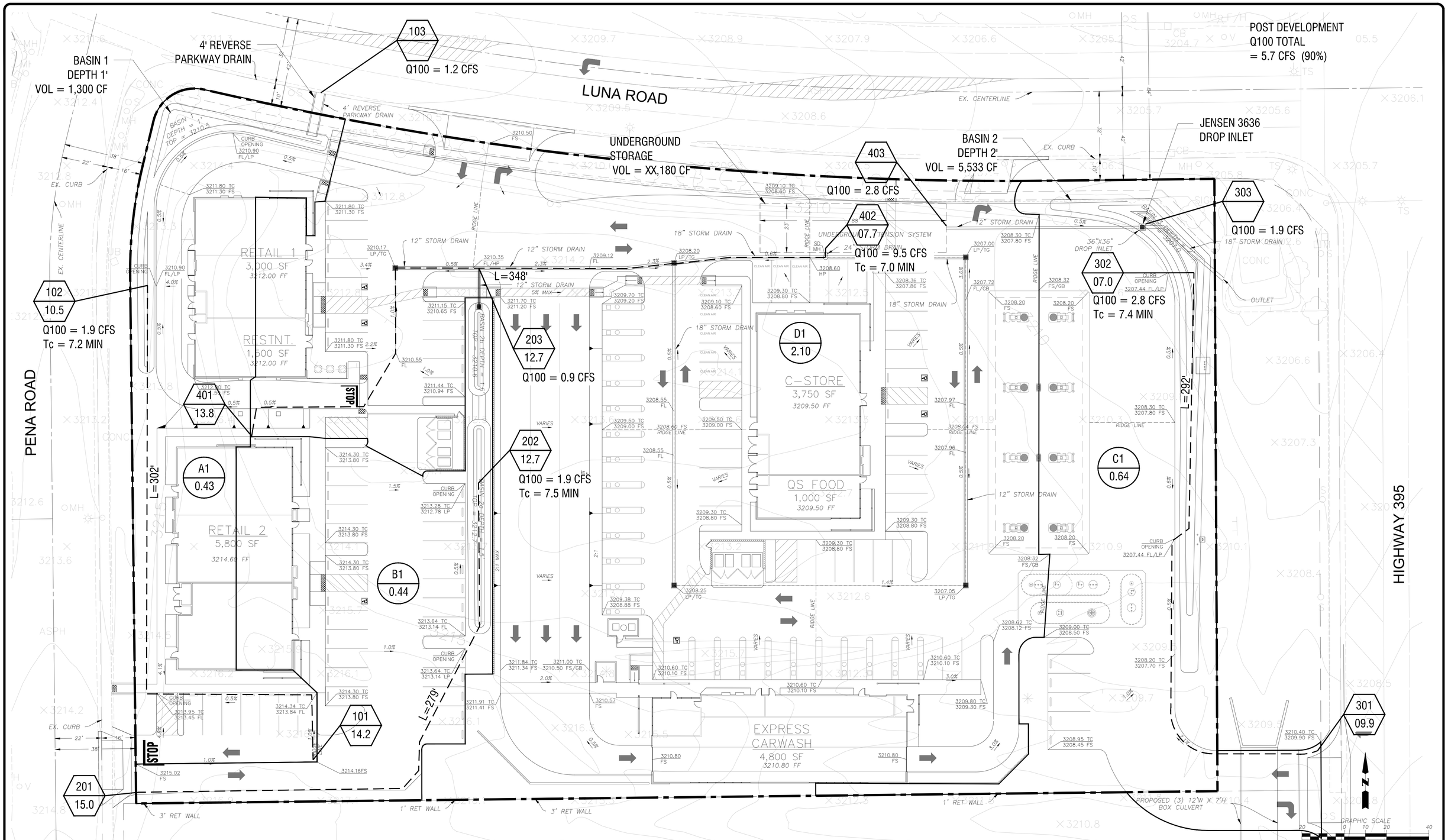
LUNA & 395

DRAINAGE REPORT EXHIBIT
EXISTING CONDITION

DATE
AUGUST 24, 2022

SHEET 1 OF 1

PROJECT NUMBER
CA-30216



LEGEND:

- CONTRIBUTORY AREA
- PROJECT BOUNDARY
- FLOWPATH
- FLOW DIRECTION

102 / XX — NODE/CONCENTRATION POINT; FLOWLINE ELEVATION 32XX'

A1 / 6.8 — SUBAREA; ACRES

BENCHMARK: CITY OF ADELANTO BENCHMARK NO. U-306; ALSO BEING NATIONAL GEODETIC SURVEY BENCHMARK DESIGNATION U-306; PID EV0114; A BRASS DISK STAMPED U306 1935; SET IN CONCRETE; SOUTHWEST CORNER OF PALMDALE ROAD & KOALA ROAD. ELEVATION 3201.187 FEET (ADELANTO CITYWIDE DATUM).

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EXP. 6/30/18
CIVIL
STATE OF CALIFORNIA

CHRISTOPHER F. LENZ DATE
R.C.E. No. 63001

ueg
united engineering group
8885 Haven Avenue
Suite 195
Rancho Cucamonga,
CA 91730
Phone: 909.466.9240
www.unitedeng.com

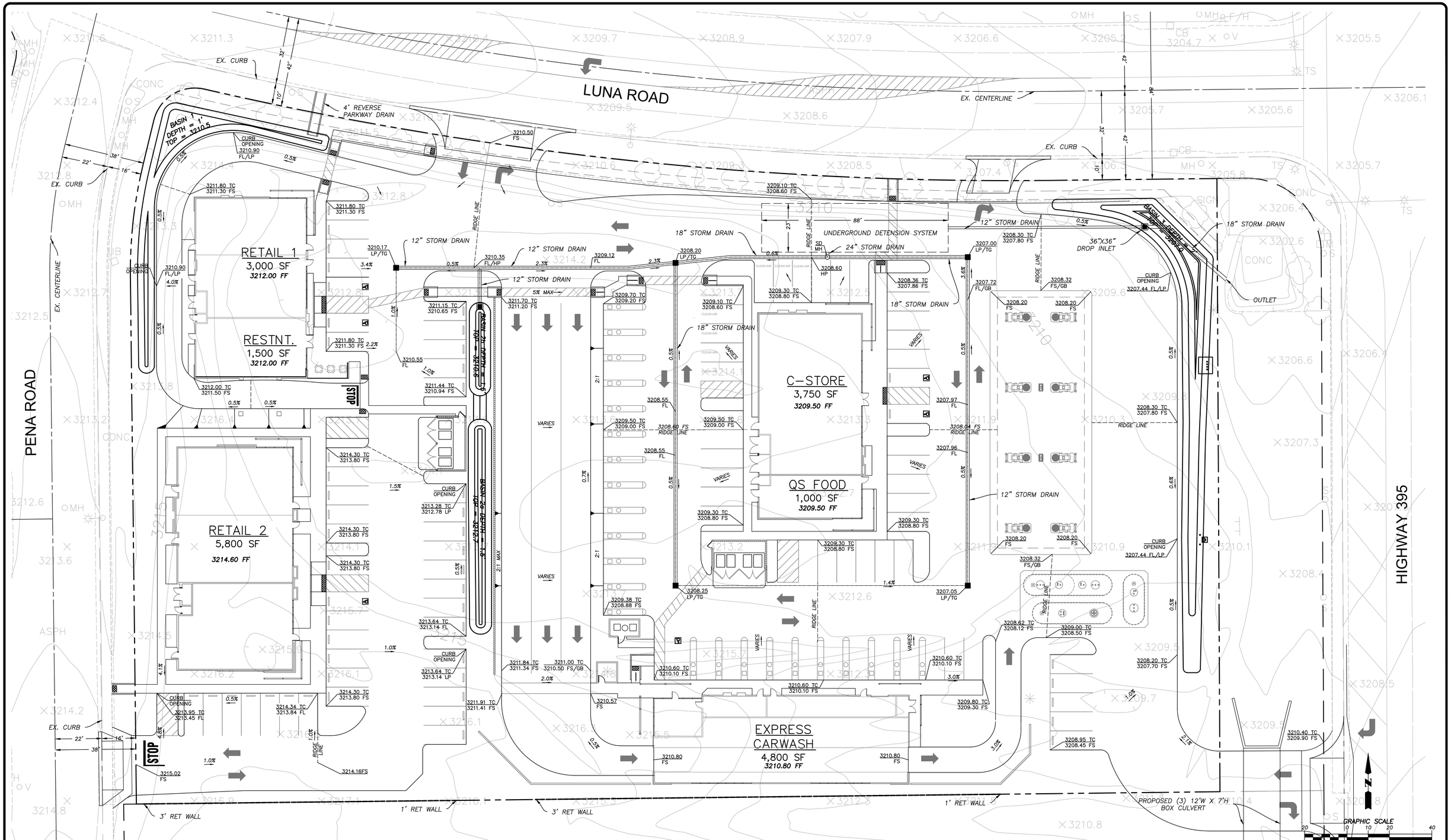
LUNA & 395

CONCEPTUAL GRADING PLAN
DRAINAGE PROPOSED CONDITION

DATE
NOVEMBER 21, 2022

SHEET 1 OF 1

PROJECT NUMBER
CA-30216



BENCHMARK: CITY OF ADELANTO BENCHMARK NO. U-306; ALSO BEING NATIONAL GEODETIC SURVEY BENCHMARK DESIGNATION U-306; PID EV0114; A BRASS DISK STAMPED U306 1935; SET IN CONCRETE; SOUTHWEST CORNER OF PALMDALE ROAD & KOALA ROAD. ELEVATION 3201.187 FEET (ADELANTO CITYWIDE DATUM).

REVISIONS		
NO.	DESCRIPTION	DATE

REGISTERED PROFESSIONAL ENGINEER CHRISTOPHER F. LENZ NO. 63001 EXP. 6/30/18 CIVIL STATE OF CALIFORNIA

CHRISTOPHER F. LENZ DATE
R.C.E. No. 63001

ueg
united engineering group
8885 Haven Avenue
Suite 195
Rancho Cucamonga,
CA 91730
Phone: 909.466.9240
www.unitedeng.com

LUNA & 395

CONCEPTUAL GRADING PLAN
SEC LUNA RD. & PENA RD.

DATE
NOVEMBER 21, 2022

SHEET 1 OF 1

PROJECT NUMBER
CA-30216

APPENDIX B:
PROJECT RATIONAL
SCS UNIT HYDROGRAPH
HYDROLOGY STUDY INFORMATION

NOAA Atlas 14, Volume 6, Version 2
Location name: Victorville, California, USA*
Latitude: 34.4862°, Longitude: -117.4113°
Elevation: 3257.47 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.078** (0.064-0.095)	**0.112** (0.093-0.137)	**0.158** (0.130-0.194)	**0.195** (0.159-0.241)	**0.245** (0.194-0.314)	**0.284** (0.220-0.371)	**0.324** (0.244-0.433)	**0.364** (0.267-0.501)	**0.419** (0.295-0.601)	**0.462** (0.314-0.685)
10-min	**0.111** (0.092-0.136)	**0.161** (0.133-0.197)	**0.226** (0.186-0.278)	**0.279** (0.228-0.346)	**0.352** (0.278-0.450)	**0.407** (0.315-0.532)	**0.464** (0.350-0.621)	**0.522** (0.383-0.718)	**0.601** (0.423-0.862)	**0.662** (0.450-0.982)
15-min	**0.135** (0.111-0.165)	**0.195** (0.161-0.238)	**0.274** (0.225-0.336)	**0.338** (0.276-0.418)	**0.425** (0.336-0.544)	**0.493** (0.381-0.643)	**0.561** (0.424-0.751)	**0.631** (0.464-0.869)	**0.727** (0.512-1.04)	**0.800** (0.544-1.19)
30-min	**0.204** (0.169-0.249)	**0.295** (0.243-0.361)	**0.414** (0.341-0.508)	**0.511** (0.418-0.632)	**0.643** (0.508-0.823)	**0.745** (0.576-0.973)	**0.849** (0.641-1.14)	**0.955** (0.701-1.31)	**1.10** (0.774-1.58)	**1.21** (0.824-1.80)
60-min	**0.276** (0.228-0.337)	**0.399** (0.330-0.488)	**0.561** (0.462-0.688)	**0.692** (0.565-0.856)	**0.871** (0.688-1.11)	**1.01** (0.781-1.32)	**1.15** (0.868-1.54)	**1.29** (0.949-1.78)	**1.49** (1.05-2.13)	**1.64** (1.12-2.43)
2-hr	**0.388** (0.321-0.474)	**0.528** (0.436-0.646)	**0.718** (0.591-0.881)	**0.878** (0.717-1.09)	**1.10** (0.872-1.41)	**1.28** (0.993-1.68)	**1.47** (1.11-1.97)	**1.67** (1.23-2.30)	**1.95** (1.37-2.79)	**2.17** (1.48-3.22)
3-hr	**0.488** (0.403-0.596)	**0.652** (0.538-0.797)	**0.878** (0.723-1.08)	**1.07** (0.875-1.33)	**1.35** (1.07-1.73)	**1.57** (1.22-2.05)	**1.81** (1.37-2.42)	**2.07** (1.52-2.85)	**2.43** (1.71-3.49)	**2.73** (1.86-4.05)
6-hr	**0.669** (0.553-0.817)	**0.885** (0.731-1.08)	**1.19** (0.980-1.46)	**1.46** (1.19-1.80)	**1.85** (1.46-2.36)	**2.17** (1.68-2.83)	**2.51** (1.90-3.36)	**2.89** (2.12-3.98)	**3.45** (2.43-4.94)	**3.91** (2.66-5.80)
12-hr	**0.834** (0.690-1.02)	**1.15** (0.949-1.41)	**1.60** (1.31-1.96)	**1.98** (1.62-2.45)	**2.55** (2.02-3.26)	**3.02** (2.34-3.95)	**3.53** (2.67-4.73)	**4.09** (3.00-5.63)	**4.90** (3.45-7.03)	**5.58** (3.80-8.29)
24-hr	**1.14** (1.01-1.31)	**1.64** (1.46-1.89)	**2.35** (2.08-2.72)	**2.97** (2.60-3.46)	**3.87** (3.28-4.66)	**4.61** (3.83-5.67)	**5.41** (4.38-6.81)	**6.29** (4.95-8.14)	**7.56** (5.72-10.2)	**8.62** (6.30-12.0)
2-day	**1.23** (1.09-1.41)	**1.76** (1.56-2.02)	**2.51** (2.22-2.90)	**3.17** (2.77-3.69)	**4.13** (3.50-4.98)	**4.94** (4.10-6.07)	**5.82** (4.71-7.33)	**6.78** (5.34-8.78)	**8.20** (6.20-11.1)	**9.39** (6.86-13.1)
3-day	**1.31** (1.16-1.51)	**1.86** (1.65-2.14)	**2.64** (2.33-3.05)	**3.33** (2.92-3.88)	**4.34** (3.68-5.23)	**5.19** (4.31-6.38)	**6.12** (4.96-7.71)	**7.14** (5.63-9.25)	**8.65** (6.54-11.7)	**9.92** (7.24-13.9)
4-day	**1.41** (1.25-1.63)	**1.99** (1.76-2.30)	**2.82** (2.49-3.26)	**3.55** (3.11-4.14)	**4.63** (3.92-5.58)	**5.53** (4.59-6.80)	**6.51** (5.27-8.20)	**7.59** (5.98-9.84)	**9.19** (6.95-12.4)	**10.5** (7.69-14.7)
7-day	**1.54** (1.36-1.77)	**2.15** (1.90-2.47)	**3.01** (2.66-3.48)	**3.77** (3.31-4.40)	**4.89** (4.14-5.89)	**5.81** (4.82-7.15)	**6.81** (5.52-8.58)	**7.91** (6.23-10.2)	**9.52** (7.19-12.8)	**10.9** (7.93-15.2)
10-day	**1.64** (1.46-1.89)	**2.28** (2.02-2.63)	**3.19** (2.82-3.69)	**3.98** (3.49-4.64)	**5.14** (4.36-6.19)	**6.10** (5.06-7.50)	**7.13** (5.78-8.98)	**8.26** (6.51-10.7)	**9.90** (7.48-13.4)	**11.3** (8.23-15.7)
20-day	**1.99** (1.77-2.30)	**2.75** (2.44-3.17)	**3.82** (3.37-4.41)	**4.75** (4.16-5.53)	**6.11** (5.18-7.36)	**7.22** (6.00-8.88)	**8.42** (6.82-10.6)	**9.73** (7.66-12.6)	**11.6** (8.77-15.7)	**13.2** (9.61-18.4)
30-day	**2.34** (2.07-2.69)	**3.20** (2.83-3.68)	**4.41** (3.90-5.10)	**5.47** (4.79-6.38)	**7.02** (5.95-8.45)	**8.29** (6.88-10.2)	**9.65** (7.82-12.2)	**11.1** (8.76-14.4)	**13.2** (10.0-17.9)	**15.0** (10.9-20.9)
45-day	**2.75** (2.44-3.16)	**3.71** (3.28-4.27)	**5.07** (4.48-5.86)	**6.26** (5.48-7.29)	**8.00** (6.78-9.63)	**9.43** (7.82-11.6)	**11.0** (8.87-13.8)	**12.6** (9.93-16.3)	**15.0** (11.3-20.2)	**16.9** (12.4-23.6)
60-day	**3.10** (2.75-3.56)	**4.12** (3.65-4.75)	**5.58** (4.93-6.45)	**6.85** (6.00-7.98)	**8.72** (7.39-10.5)	**10.3** (8.51-12.6)	**11.9** (9.64-15.0)	**13.7** (10.8-17.7)	**16.2** (12.3-21.9)	**18.3** (13.4-25.6)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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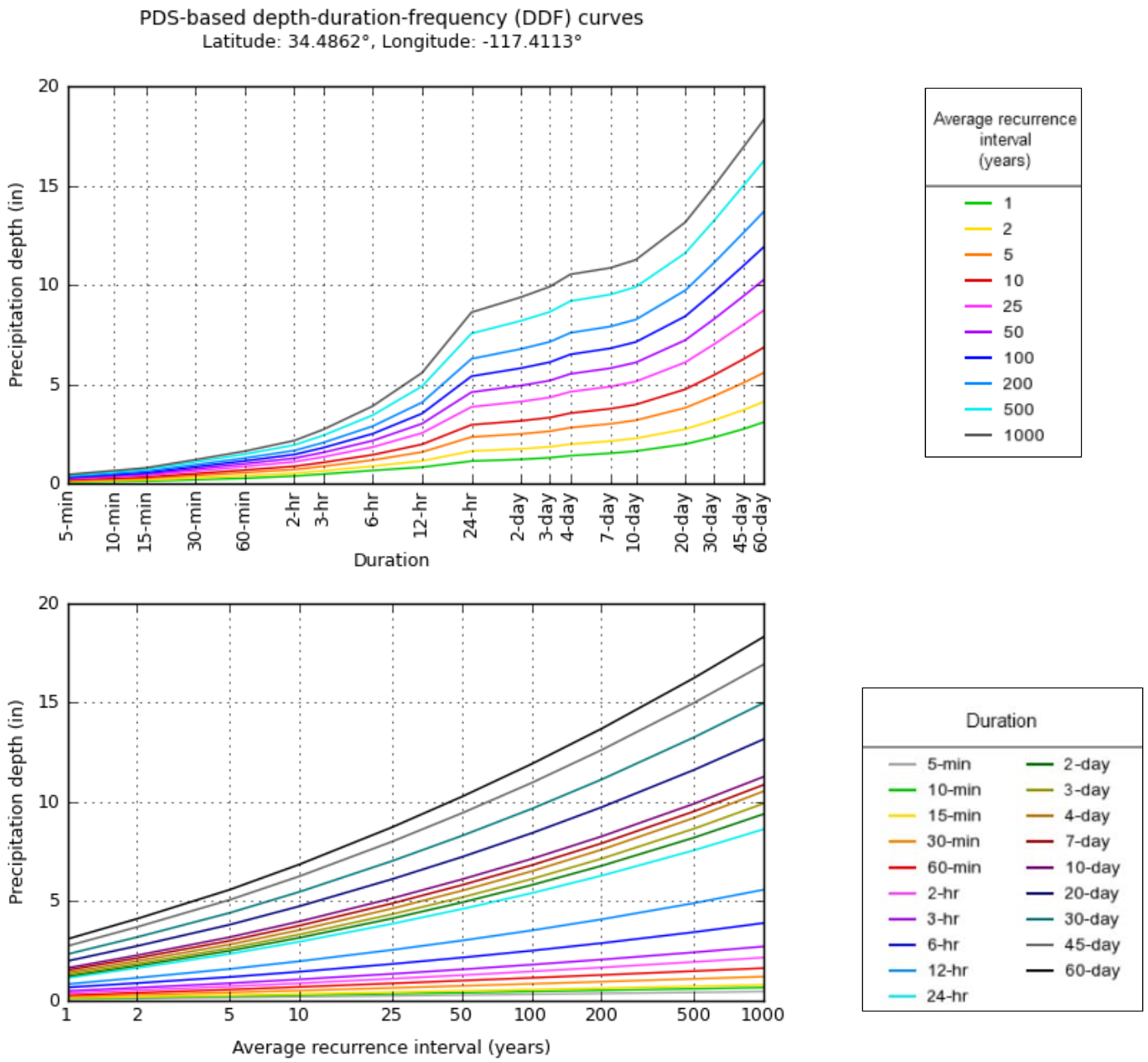
PF graphical



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Created (GMT): Wed Oct 20 17:44:29 2021

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Maps & aerials

Small scale terrain

Large scale terrain

Large scale map

Large scale aerial

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US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Disclaimer

Curve (1) Numbers of Hydrologic Soil-Cover Complexes For Pervious Areas-AMC II

Cover Type (3)	Quality of Cover (2)	Soil Group A	B	C	D
NATURAL COVERS -					
Barren (Rockland, eroded and graded land)		78	86	91	93
Chaparral, Broadleaf (Manzonita, ceanothus and scrub oak)	Poor	53	70	80	85
	Fair	40	63	75	81
	Good	31	57	71	78
Chaparral, Narrowleaf (Chamise and redshank)	Poor	71	82	88	91
	Fair	55	72	81	86
Grass, Annual or Perennial	Poor	67	78	86	89
	Fair	50	69	79	84
	Good	38	61	74	80
Meadows or Cienegas (Areas with seasonally high water table, principal vegetation is sod forming grass)	Poor	63	77	85	88
	Fair	51	70	80	84
	Good	30	58	71	78
Open Brush (Soft wood shrubs - buckwheat, sage, etc.)	Poor	62	76	84	88
	Fair	46	66	77	83
	Good	41	63	75	81
Woodland (Coniferous or broadleaf trees predominate. Canopy density is at least 50 percent.)	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	25	55	70	77
Woodland, Grass (Coniferous or broadleaf trees with canopy density from 20 to 50 percent)	Poor	57	73	82	86
	Fair	44	65	77	82
	Good	33	58	72	79
URBAN COVERS -					
Residential or Commercial Landscaping (Lawn, shrubs, etc.)	Good	32	56	69	75
Turf (Irrigated and mowed grass)	Poor	58	74	83	87
	Fair	44	65	77	82
	Good	33	58	72	79
AGRICULTURAL COVERS -					
Fallow (Land plowed but not tilled or seeded)		77	86	91	94

SAN BERNARDINO COUNTY

HYDROLOGY MANUAL

CURVE NUMBERS FOR PERVIOUS AREAS

Figure C-3 (1 of 2)

ACTUAL IMPERVIOUS COVER

Land Use (1)	Range-Percent	Recommended Value For Average Conditions-Percent (2)
Natural or Agriculture	0 - 0	0
Public Park	10 - 25	15
School	30 - 50	40
Single Family Residential: (3)		
2.5 acre lots	5 - 15	10
1 acre lots	10 - 25	20
2 dwellings/acre	20 - 40	30
3-4 dwellings/acre	30 - 50	40
5-7 dwellings/acre	35 - 55	50
8-10 dwellings/acre	50 - 70	60
More than 10 dwellings/acre	65 - 90	80
Multiple Family Residential:		
Condominiums	45 - 70	65
Apartments	65 - 90	80
Mobile Home Park	60 - 85	75
Commercial, Downtown Business or Industrial	80 - 100	90

Notes:

1. Land use should be based on ultimate development of the watershed. Long range master plans for the County and incorporated cities should be reviewed to insure reasonable land use assumptions.

2. Recommended values are based on average conditions which may not apply to a particular study area. The percentage impervious may vary greatly even on comparable sized lots due to differences in dwelling size, improvements, etc. Landscape practices should also be considered as it is common in some areas to use ornamental gravels underlain by impervious plastic materials in place of lawns and shrubs. A field investigation of a study area shall always be made, and a review of aerial photos, where available, may assist in estimating the percentage of impervious cover in developed areas.

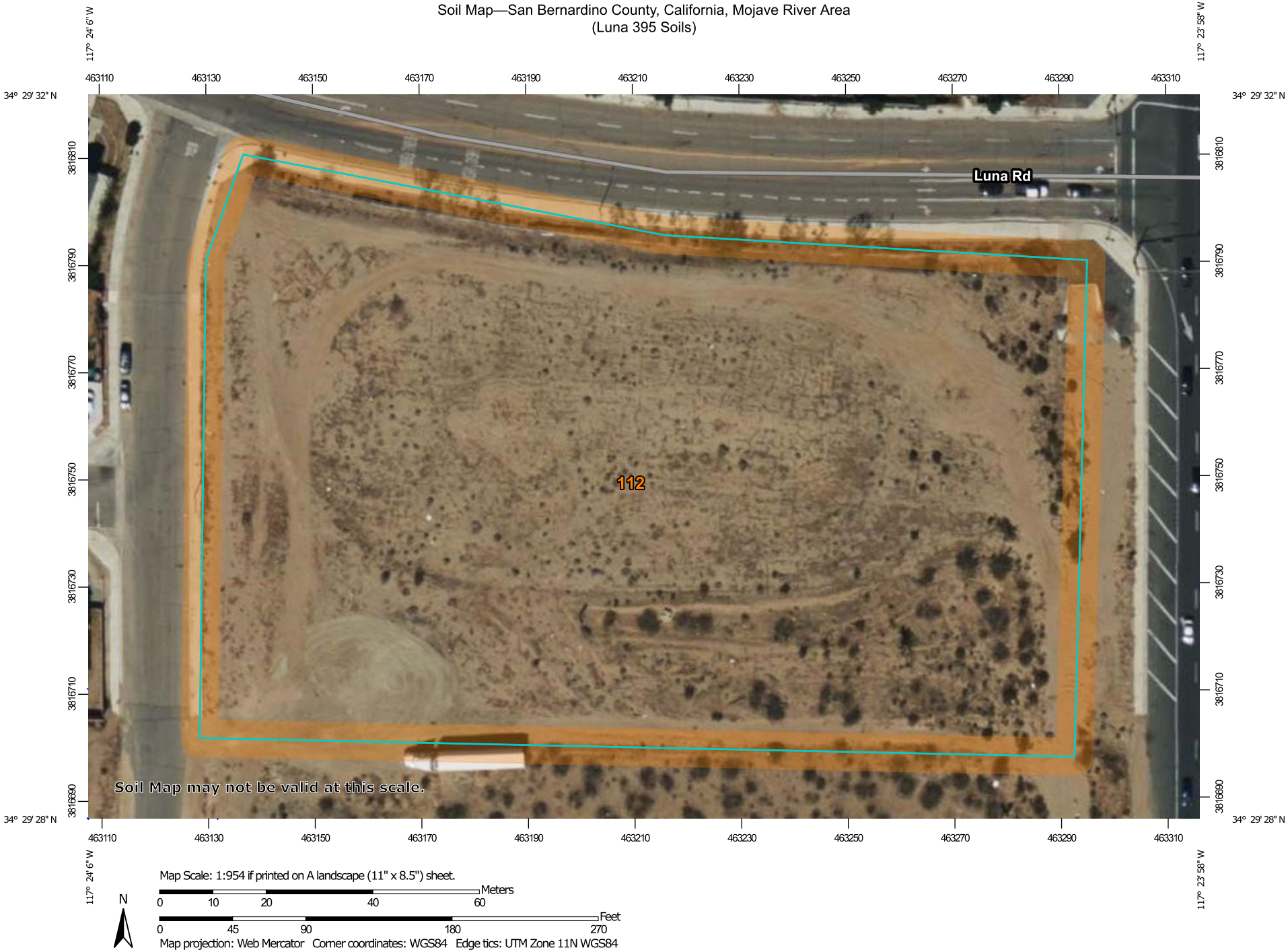
3. For typical equestrian subdivisions increase impervious area 5 percent over the values recommended in the table above.

SAN BERNARDINO COUNTY
HYDROLOGY MANUAL

ACTUAL IMPERVIOUS COVER FOR DEVELOPED AREAS

Figure C-4

Soil Map—San Bernardino County, California, Mojave River Area
(Luna 395 Soils)



Map Scale: 1:954 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 10 20 40 60

Feet
0 45 90 180 270

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Bernardino County, California, Mojave River Area
Survey Area Data: Version 13, Sep 13, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 27, 2021—May 24, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
112	CAJON SAND, 0 TO 2 PERCENT SLOPES	4.0	100.0%
Totals for Area of Interest		**4.0**	**100.0%**

San Bernardino County, California, Mojave River Area

112—CAJON SAND, 0 TO 2 PERCENT SLOPES

Map Unit Setting

National map unit symbol: hkrj
Elevation: 1,800 to 3,200 feet
Mean annual precipitation: 3 to 6 inches
Mean annual air temperature: 59 to 66 degrees F
Frost-free period: 180 to 290 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Cajon and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cajon

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite sources

Typical profile

H1 - 0 to 7 inches: sand
H2 - 7 to 25 inches: sand
H3 - 25 to 45 inches: gravelly sand
H4 - 45 to 60 inches: stratified sand to loamy fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water supply, 0 to 60 inches: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: R030XF012CA - Sandy
Hydric soil rating: No

Minor Components

Manet
Percent of map unit: 5 percent
Landform: Playas
Hydric soil rating: Yes

Kimberlina
Percent of map unit: 5 percent

Helendale
Percent of map unit: 5 percent

Data Source Information

Soil Survey Area: San Bernardino County, California, Mojave River Area
Survey Area Data: Version 13, Sep 13, 2021

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2005 Version 7.1

Rational Hydrology Study Date: 08/24/22

Luna 395
Existing Condition
100 Year Runoff

Program License Serial Number 6232

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 100.0
Computed rainfall intensity:
Storm year = 100.00 1 hour rainfall = 1.150 (In.)
Slope used for rainfall intensity curve b = 0.7000
Soil antecedent moisture condition (AMC) = 3

++

Process from Point/Station 101.000 to Point/Station 102.000
**** INITIAL AREA EVALUATION ****

UNDEVELOPED (average cover) subarea
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 50.00
Adjusted SCS curve number for AMC 3 = 70.00
Pervious ratio(Ap) = 1.0000 Max loss rate(Fm)= 0.532 (In/Hr)
Initial subarea data:
Initial area flow distance = 530.000(Ft.)
Top (of initial area) elevation = 17.000(Ft.)
Bottom (of initial area) elevation = 8.000(Ft.)
Difference in elevation = 9.000(Ft.)
Slope = 0.01698 s(%)= 1.70
TC = k(0.706)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 19.612 min.
Rainfall intensity = 2.516(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.709
Subarea runoff = 6.372(CFS)

Total initial stream area = 3.570(Ac.)
Pervious area fraction = 1.000
Initial area Fm value = 0.532(In/Hr)
End of computations, Total Study Area = 3.57 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 1.000
Area averaged SCS curve number = 50.0

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2005 Version 7.1

Rational Hydrology Study Date: 11/21/22

Luna 395
Rational Tc and Q check
Area A
100yr peak

Program License Serial Number 6232

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 100.0
Computed rainfall intensity:
Storm year = 100.00 1 hour rainfall = 1.150 (In.)
Slope used for rainfall intensity curve b = 0.7000
Soil antecedent moisture condition (AMC) = 3

++

Process from Point/Station 101.000 to Point/Station 102.000
**** INITIAL AREA EVALUATION ****

COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.079 (In/Hr)
Initial subarea data:
Initial area flow distance = 302.000(Ft.)
Top (of initial area) elevation = 14.200(Ft.)
Bottom (of initial area) elevation = 10.500(Ft.)
Difference in elevation = 3.700(Ft.)
Slope = 0.01225 s(%)= 1.23
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 7.198 min.
Rainfall intensity = 5.074(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.886
Subarea runoff = 1.933(CFS)

Total initial stream area = 0.430(Ac.)
Pervious area fraction = 0.100
Initial area Fm value = 0.079(In/Hr)
End of computations, Total Study Area = 0.43 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.100
Area averaged SCS curve number = 32.0

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2005 Version 7.1

Rational Hydrology Study Date: 11/21/22

Luna 395
Rational Tc and Q Check
Area B
100yr Peak

Program License Serial Number 6232

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 100.0
Computed rainfall intensity:
Storm year = 100.00 1 hour rainfall = 1.150 (In.)
Slope used for rainfall intensity curve b = 0.7000
Soil antecedent moisture condition (AMC) = 3

++

Process from Point/Station 201.000 to Point/Station 202.000
**** INITIAL AREA EVALUATION ****

COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.079 (In/Hr)
Initial subarea data:
Initial area flow distance = 279.000(Ft.)
Top (of initial area) elevation = 15.000(Ft.)
Bottom (of initial area) elevation = 12.700(Ft.)
Difference in elevation = 2.300(Ft.)
Slope = 0.00824 s(%)= 0.82
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 7.549 min.
Rainfall intensity = 4.908(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.886
Subarea runoff = 1.912(CFS)

Total initial stream area = 0.440(Ac.)
Pervious area fraction = 0.100
Initial area Fm value = 0.079(In/Hr)
End of computations, Total Study Area = 0.44 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.100
Area averaged SCS curve number = 32.0

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2005 Version 7.1

Rational Hydrology Study Date: 11/21/22

Luna 395
Rational Tc and Q check
Area C
100yr peak

Program License Serial Number 6232

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 100.0
Computed rainfall intensity:
Storm year = 100.00 1 hour rainfall = 1.150 (In.)
Slope used for rainfall intensity curve b = 0.7000
Soil antecedent moisture condition (AMC) = 3

++

Process from Point/Station 301.000 to Point/Station 302.000
**** INITIAL AREA EVALUATION ****

COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.079 (In/Hr)
Initial subarea data:
Initial area flow distance = 292.000(Ft.)
Top (of initial area) elevation = 9.900(Ft.)
Bottom (of initial area) elevation = 7.000(Ft.)
Difference in elevation = 2.900(Ft.)
Slope = 0.00993 s(%)= 0.99
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 7.407 min.
Rainfall intensity = 4.974(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.886
Subarea runoff = 2.820(CFS)

Total initial stream area = 0.640(Ac.)
Pervious area fraction = 0.100
Initial area Fm value = 0.079(In/Hr)
End of computations, Total Study Area = 0.64 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.
Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.100
Area averaged SCS curve number = 32.0

San Bernardino County Rational Hydrology Program

(Hydrology Manual Date - August 1986)

CIVILCADD/CIVILDESIGN Engineering Software, (c) 1989-2005 Version 7.1

Rational Hydrology Study Date: 11/21/22

Program License Serial Number 6232

********* Hydrology Study Control Information **********

Rational hydrology study storm event year is 100.0
Computed rainfall intensity:
Storm year = 100.00 1 hour rainfall = 1.150 (In.)
Slope used for rainfall intensity curve b = 0.7000
Soil antecedent moisture condition (AMC) = 3

++

Process from Point/Station 401.000 to Point/Station 402.000

**** INITIAL AREA EVALUATION ****

COMMERCIAL subarea type
Decimal fraction soil group A = 1.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 0.000
SCS curve number for soil(AMC 2) = 32.00
Adjusted SCS curve number for AMC 3 = 52.00
Pervious ratio(Ap) = 0.1000 Max loss rate(Fm)= 0.079 (In/Hr)
Initial subarea data:
Initial area flow distance = 348.000(Ft.)
Top (of initial area) elevation = 13.800(Ft.)
Bottom (of initial area) elevation = 7.700(Ft.)
Difference in elevation = 6.100(Ft.)
Slope = 0.01753 s(%)= 1.75
TC = k(0.304)*[(length^3)/(elevation change)]^0.2
Initial area time of concentration = 7.092 min.
Rainfall intensity = 5.127(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.886
Subarea runoff = 9.542(CFS)
Total initial stream area = 2.100(Ac.)
Pervious area fraction = 0.100
Initial area Fm value = 0.079(In/Hr)
End of computations, Total Study Area = 2.10 (Ac.)
The following figures may
be used for a unit hydrograph study of the same area.

Note: These figures do not consider reduced effective area
effects caused by confluences in the rational equation.

Area averaged pervious area fraction(Ap) = 0.100
Area averaged SCS curve number = 32.0

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 11/22/22

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```
      ******** Area-averaged max loss rate, Fm ********


      SCS curve  SCS curve     Area     Area     Fp(Fig C6)    Ap
Fm
      No.(AMCII) NO.(AMC 3)    (Ac.)    Fraction     (In/Hr)   (dec.)
(In/Hr)
       32.0      52.0          2.54      1.000     0.785    0.010
0.008

      Area-averaged adjusted loss rate Fm (In/Hr) =  0.008

      ********* Area-Averaged low loss rate fraction, Yb **********

      Area       Area          SCS CN    SCS CN      S     Pervious
       (Ac.)      Fract         (AMC2)    (AMC3)           Yield Fr
           0.03   0.010         32.0      52.0       9.23     0.183
           2.51   0.990         98.0      98.0       0.20     0.956

      Area-averaged catchment yield fraction, Y =  0.948
      Area-averaged low loss fraction, Yb =  0.052
      User entry of time of concentration  =   0.110 (hours)
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++
      Watershed area =       2.54(Ac.)
      Catchment Lag time =   0.088 hours
      Unit interval =   5.000 minutes
      Unit interval percentage of lag time = 94.6970
      Hydrograph baseflow =     0.00(CFS)
      Average maximum watershed loss rate(Fm) =  0.000(In/Hr)
      Average low loss rate fraction (Yb) = 0.052 (decimal)
      Note: user entry of the Fm value
      DESERT S-Graph Selected
      Computed peak 5-minute rainfall =  0.546(In)
      Computed peak 30-minute rainfall =  0.934(In)
      Specified peak 1-hour rainfall =  1.150(In)
      Computed peak 3-hour rainfall =  1.856(In)
      Specified peak 6-hour rainfall =  2.510(In)
      Specified peak 24-hour rainfall =  5.410(In)


      Rainfall depth area reduction factors:
      Using a total area of       2.54(Ac.) (Ref: fig. E-4)

      5-minute factor = 1.000     Adjusted rainfall =  0.546(In)
      30-minute factor = 1.000    Adjusted rainfall =  0.934(In)
      1-hour factor = 1.000       Adjusted rainfall =  1.150(In)
      3-hour factor = 1.000       Adjusted rainfall =  1.856(In)
      6-hour factor = 1.000       Adjusted rainfall =  2.510(In)
      24-hour factor = 1.000      Adjusted rainfall =  5.410(In)
      ------------------------------------------------------------------
---

                        U n i t  H y d r o g r a p h
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
+++
      Interval          'S' Graph          Unit Hydrograph
      Number            Mean values             ((CFS))
      ------------------------------------------------------------------
---
```

(K = 30.72 (CFS))

1	15.498	4.761
2	64.965	15.195
3	82.606	5.419
4	90.463	2.414
5	94.742	1.314
6	97.231	0.765
7	98.497	0.389
8	99.522	0.315
9	100.000	0.147

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.5456	0.5456
2	0.6717	0.1261
3	0.7586	0.0869
4	0.8270	0.0684
5	0.8843	0.0573
6	0.9340	0.0497
7	0.9782	0.0442
8	1.0182	0.0400
9	1.0548	0.0366
10	1.0887	0.0339
11	1.1202	0.0316
12	1.1499	0.0296
13	1.1907	0.0408
14	1.2297	0.0391
15	1.2673	0.0375
16	1.3034	0.0361
17	1.3383	0.0349
18	1.3721	0.0337
19	1.4048	0.0327
20	1.4365	0.0317
21	1.4674	0.0309
22	1.4974	0.0300
23	1.5267	0.0293
24	1.5553	0.0286
25	1.5832	0.0279
26	1.6105	0.0273
27	1.6372	0.0267
28	1.6633	0.0261
29	1.6890	0.0256
30	1.7141	0.0251
31	1.7388	0.0247
32	1.7630	0.0242
33	1.7868	0.0238
34	1.8102	0.0234
35	1.8332	0.0230
36	1.8558	0.0226
37	1.8781	0.0223
38	1.9000	0.0219
39	1.9217	0.0216
40	1.9430	0.0213
41	1.9640	0.0210
42	1.9847	0.0207
43	2.0052	0.0204
44	2.0253	0.0202
45	2.0453	0.0199

46	2.0649	0.0197
47	2.0844	0.0194
48	2.1036	0.0192
49	2.1226	0.0190
50	2.1413	0.0188
51	2.1599	0.0186
52	2.1782	0.0183
53	2.1964	0.0181
54	2.2143	0.0180
55	2.2321	0.0178
56	2.2497	0.0176
57	2.2671	0.0174
58	2.2844	0.0172
59	2.3014	0.0171
60	2.3183	0.0169
61	2.3351	0.0168
62	2.3517	0.0166
63	2.3681	0.0164
64	2.3844	0.0163
65	2.4006	0.0162
66	2.4166	0.0160
67	2.4325	0.0159
68	2.4483	0.0157
69	2.4639	0.0156
70	2.4794	0.0155
71	2.4947	0.0154
72	2.5100	0.0152
73	2.5292	0.0193
74	2.5484	0.0191
75	2.5674	0.0190
76	2.5863	0.0189
77	2.6051	0.0188
78	2.6238	0.0187
79	2.6424	0.0186
80	2.6608	0.0185
81	2.6792	0.0184
82	2.6975	0.0183
83	2.7157	0.0182
84	2.7337	0.0181
85	2.7517	0.0180
86	2.7696	0.0179
87	2.7874	0.0178
88	2.8051	0.0177
89	2.8227	0.0176
90	2.8402	0.0175
91	2.8577	0.0174
92	2.8750	0.0174
93	2.8923	0.0173
94	2.9095	0.0172
95	2.9266	0.0171
96	2.9436	0.0170
97	2.9606	0.0169
98	2.9774	0.0169
99	2.9942	0.0168
100	3.0110	0.0167
101	3.0276	0.0166
102	3.0442	0.0166
103	3.0607	0.0165
104	3.0771	0.0164
105	3.0934	0.0164

106	3.1097	0.0163
107	3.1260	0.0162
108	3.1421	0.0162
109	3.1582	0.0161
110	3.1742	0.0160
111	3.1902	0.0160
112	3.2060	0.0159
113	3.2219	0.0158
114	3.2376	0.0158
115	3.2533	0.0157
116	3.2690	0.0156
117	3.2846	0.0156
118	3.3001	0.0155
119	3.3155	0.0155
120	3.3310	0.0154
121	3.3463	0.0153
122	3.3616	0.0153
123	3.3768	0.0152
124	3.3920	0.0152
125	3.4071	0.0151
126	3.4222	0.0151
127	3.4372	0.0150
128	3.4522	0.0150
129	3.4671	0.0149
130	3.4820	0.0149
131	3.4968	0.0148
132	3.5116	0.0148
133	3.5263	0.0147
134	3.5409	0.0147
135	3.5555	0.0146
136	3.5701	0.0146
137	3.5846	0.0145
138	3.5991	0.0145
139	3.6135	0.0144
140	3.6279	0.0144
141	3.6422	0.0143
142	3.6565	0.0143
143	3.6708	0.0142
144	3.6850	0.0142
145	3.6991	0.0142
146	3.7132	0.0141
147	3.7273	0.0141
148	3.7413	0.0140
149	3.7553	0.0140
150	3.7692	0.0139
151	3.7831	0.0139
152	3.7970	0.0139
153	3.8108	0.0138
154	3.8246	0.0138
155	3.8383	0.0137
156	3.8520	0.0137
157	3.8657	0.0137
158	3.8793	0.0136
159	3.8929	0.0136
160	3.9064	0.0135
161	3.9200	0.0135
162	3.9334	0.0135
163	3.9469	0.0134
164	3.9602	0.0134
165	3.9736	0.0134

166	3.9869	0.0133
167	4.0002	0.0133
168	4.0135	0.0133
169	4.0267	0.0132
170	4.0399	0.0132
171	4.0530	0.0131
172	4.0661	0.0131
173	4.0792	0.0131
174	4.0923	0.0130
175	4.1053	0.0130
176	4.1182	0.0130
177	4.1312	0.0129
178	4.1441	0.0129
179	4.1570	0.0129
180	4.1698	0.0128
181	4.1827	0.0128
182	4.1954	0.0128
183	4.2082	0.0128
184	4.2209	0.0127
185	4.2336	0.0127
186	4.2463	0.0127
187	4.2589	0.0126
188	4.2715	0.0126
189	4.2841	0.0126
190	4.2966	0.0125
191	4.3091	0.0125
192	4.3216	0.0125
193	4.3341	0.0125
194	4.3465	0.0124
195	4.3589	0.0124
196	4.3713	0.0124
197	4.3836	0.0123
198	4.3959	0.0123
199	4.4082	0.0123
200	4.4205	0.0123
201	4.4327	0.0122
202	4.4449	0.0122
203	4.4571	0.0122
204	4.4692	0.0121
205	4.4813	0.0121
206	4.4934	0.0121
207	4.5055	0.0121
208	4.5176	0.0120
209	4.5296	0.0120
210	4.5416	0.0120
211	4.5535	0.0120
212	4.5655	0.0119
213	4.5774	0.0119
214	4.5893	0.0119
215	4.6012	0.0119
216	4.6130	0.0118
217	4.6248	0.0118
218	4.6366	0.0118
219	4.6484	0.0118
220	4.6601	0.0117
221	4.6718	0.0117
222	4.6835	0.0117
223	4.6952	0.0117
224	4.7069	0.0117
225	4.7185	0.0116

226	4.7301	0.0116
227	4.7417	0.0116
228	4.7533	0.0116
229	4.7648	0.0115
230	4.7763	0.0115
231	4.7878	0.0115
232	4.7993	0.0115
233	4.8107	0.0114
234	4.8221	0.0114
235	4.8336	0.0114
236	4.8449	0.0114
237	4.8563	0.0114
238	4.8676	0.0113
239	4.8790	0.0113
240	4.8903	0.0113
241	4.9015	0.0113
242	4.9128	0.0113
243	4.9240	0.0112
244	4.9352	0.0112
245	4.9464	0.0112
246	4.9576	0.0112
247	4.9688	0.0112
248	4.9799	0.0111
249	4.9910	0.0111
250	5.0021	0.0111
251	5.0132	0.0111
252	5.0242	0.0111
253	5.0353	0.0110
254	5.0463	0.0110
255	5.0573	0.0110
256	5.0683	0.0110
257	5.0792	0.0110
258	5.0902	0.0109
259	5.1011	0.0109
260	5.1120	0.0109
261	5.1229	0.0109
262	5.1337	0.0109
263	5.1446	0.0108
264	5.1554	0.0108
265	5.1662	0.0108
266	5.1770	0.0108
267	5.1878	0.0108
268	5.1985	0.0108
269	5.2093	0.0107
270	5.2200	0.0107
271	5.2307	0.0107
272	5.2414	0.0107
273	5.2520	0.0107
274	5.2627	0.0106
275	5.2733	0.0106
276	5.2839	0.0106
277	5.2945	0.0106
278	5.3051	0.0106
279	5.3157	0.0106
280	5.3262	0.0105
281	5.3367	0.0105
282	5.3473	0.0105
283	5.3577	0.0105
284	5.3682	0.0105
285	5.3787	0.0105

286	5.3891	0.0104
287	5.3996	0.0104
288	5.4100	0.0104

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0104	0.0000	0.0104
2	0.0104	0.0000	0.0104
3	0.0105	0.0000	0.0105
4	0.0105	0.0000	0.0105
5	0.0105	0.0000	0.0105
6	0.0105	0.0000	0.0105
7	0.0106	0.0000	0.0106
8	0.0106	0.0000	0.0106
9	0.0106	0.0000	0.0106
10	0.0106	0.0000	0.0106
11	0.0107	0.0000	0.0107
12	0.0107	0.0000	0.0107
13	0.0107	0.0000	0.0107
14	0.0107	0.0000	0.0107
15	0.0108	0.0000	0.0108
16	0.0108	0.0000	0.0108
17	0.0108	0.0000	0.0108
18	0.0108	0.0000	0.0108
19	0.0109	0.0000	0.0109
20	0.0109	0.0000	0.0109
21	0.0109	0.0000	0.0109
22	0.0110	0.0000	0.0110
23	0.0110	0.0000	0.0110
24	0.0110	0.0000	0.0110
25	0.0111	0.0000	0.0111
26	0.0111	0.0000	0.0111
27	0.0111	0.0000	0.0111
28	0.0111	0.0000	0.0111
29	0.0112	0.0000	0.0112
30	0.0112	0.0000	0.0112
31	0.0112	0.0000	0.0112
32	0.0113	0.0000	0.0113
33	0.0113	0.0000	0.0113
34	0.0113	0.0000	0.0113
35	0.0114	0.0000	0.0114
36	0.0114	0.0000	0.0114
37	0.0114	0.0000	0.0114
38	0.0114	0.0000	0.0114
39	0.0115	0.0000	0.0115
40	0.0115	0.0000	0.0115
41	0.0116	0.0000	0.0116
42	0.0116	0.0000	0.0116
43	0.0116	0.0000	0.0116
44	0.0117	0.0000	0.0117
45	0.0117	0.0000	0.0117
46	0.0117	0.0000	0.0117
47	0.0118	0.0000	0.0118
48	0.0118	0.0000	0.0118
49	0.0118	0.0000	0.0118
50	0.0119	0.0000	0.0119

51	0.0119	0.0000	0.0119
52	0.0119	0.0000	0.0119
53	0.0120	0.0000	0.0120
54	0.0120	0.0000	0.0120
55	0.0121	0.0000	0.0121
56	0.0121	0.0000	0.0121
57	0.0121	0.0000	0.0121
58	0.0122	0.0000	0.0122
59	0.0122	0.0000	0.0122
60	0.0123	0.0000	0.0123
61	0.0123	0.0000	0.0123
62	0.0123	0.0000	0.0123
63	0.0124	0.0000	0.0124
64	0.0124	0.0000	0.0124
65	0.0125	0.0000	0.0125
66	0.0125	0.0000	0.0125
67	0.0126	0.0000	0.0126
68	0.0126	0.0000	0.0126
69	0.0127	0.0000	0.0127
70	0.0127	0.0000	0.0127
71	0.0128	0.0000	0.0128
72	0.0128	0.0000	0.0128
73	0.0128	0.0000	0.0128
74	0.0129	0.0000	0.0129
75	0.0129	0.0000	0.0129
76	0.0130	0.0000	0.0130
77	0.0130	0.0000	0.0130
78	0.0131	0.0000	0.0131
79	0.0131	0.0000	0.0131
80	0.0132	0.0000	0.0132
81	0.0133	0.0000	0.0133
82	0.0133	0.0000	0.0133
83	0.0134	0.0000	0.0134
84	0.0134	0.0000	0.0134
85	0.0135	0.0000	0.0135
86	0.0135	0.0000	0.0135
87	0.0136	0.0000	0.0136
88	0.0136	0.0000	0.0136
89	0.0137	0.0000	0.0137
90	0.0137	0.0000	0.0137
91	0.0138	0.0000	0.0138
92	0.0139	0.0000	0.0139
93	0.0139	0.0000	0.0139
94	0.0140	0.0000	0.0140
95	0.0141	0.0000	0.0141
96	0.0141	0.0000	0.0141
97	0.0142	0.0000	0.0142
98	0.0142	0.0000	0.0142
99	0.0143	0.0000	0.0143
100	0.0144	0.0000	0.0144
101	0.0145	0.0000	0.0145
102	0.0145	0.0000	0.0145
103	0.0146	0.0000	0.0146
104	0.0147	0.0000	0.0147
105	0.0148	0.0000	0.0148
106	0.0148	0.0000	0.0148
107	0.0149	0.0000	0.0149
108	0.0150	0.0000	0.0150
109	0.0151	0.0000	0.0151
110	0.0151	0.0000	0.0151

111	0.0152	0.0000	0.0152
112	0.0153	0.0000	0.0153
113	0.0154	0.0000	0.0154
114	0.0155	0.0000	0.0155
115	0.0156	0.0000	0.0156
116	0.0156	0.0000	0.0156
117	0.0158	0.0000	0.0158
118	0.0158	0.0000	0.0158
119	0.0160	0.0000	0.0160
120	0.0160	0.0000	0.0160
121	0.0162	0.0000	0.0162
122	0.0162	0.0000	0.0162
123	0.0164	0.0000	0.0164
124	0.0164	0.0000	0.0164
125	0.0166	0.0000	0.0166
126	0.0166	0.0000	0.0166
127	0.0168	0.0000	0.0168
128	0.0169	0.0000	0.0169
129	0.0170	0.0000	0.0170
130	0.0171	0.0000	0.0171
131	0.0173	0.0000	0.0173
132	0.0174	0.0000	0.0174
133	0.0175	0.0000	0.0175
134	0.0176	0.0000	0.0176
135	0.0178	0.0000	0.0178
136	0.0179	0.0000	0.0179
137	0.0181	0.0000	0.0181
138	0.0182	0.0000	0.0182
139	0.0184	0.0000	0.0184
140	0.0185	0.0000	0.0185
141	0.0187	0.0000	0.0187
142	0.0188	0.0000	0.0188
143	0.0190	0.0000	0.0190
144	0.0191	0.0000	0.0191
145	0.0152	0.0000	0.0152
146	0.0154	0.0000	0.0154
147	0.0156	0.0000	0.0156
148	0.0157	0.0000	0.0157
149	0.0160	0.0000	0.0160
150	0.0162	0.0000	0.0162
151	0.0164	0.0000	0.0164
152	0.0166	0.0000	0.0166
153	0.0169	0.0000	0.0169
154	0.0171	0.0000	0.0171
155	0.0174	0.0000	0.0174
156	0.0176	0.0000	0.0176
157	0.0180	0.0000	0.0180
158	0.0181	0.0000	0.0181
159	0.0186	0.0000	0.0186
160	0.0188	0.0000	0.0188
161	0.0192	0.0000	0.0192
162	0.0194	0.0000	0.0194
163	0.0199	0.0000	0.0199
164	0.0202	0.0000	0.0202
165	0.0207	0.0000	0.0207
166	0.0210	0.0000	0.0210
167	0.0216	0.0000	0.0216
168	0.0219	0.0000	0.0219
169	0.0226	0.0000	0.0226
170	0.0230	0.0000	0.0230

171	0.0238	0.0000	0.0238
172	0.0242	0.0000	0.0242
173	0.0251	0.0000	0.0251
174	0.0256	0.0000	0.0256
175	0.0267	0.0000	0.0267
176	0.0273	0.0000	0.0273
177	0.0286	0.0000	0.0286
178	0.0293	0.0000	0.0293
179	0.0309	0.0000	0.0309
180	0.0317	0.0000	0.0317
181	0.0337	0.0000	0.0337
182	0.0349	0.0000	0.0349
183	0.0375	0.0000	0.0375
184	0.0391	0.0000	0.0391
185	0.0296	0.0000	0.0296
186	0.0316	0.0000	0.0316
187	0.0366	0.0000	0.0366
188	0.0400	0.0000	0.0400
189	0.0497	0.0000	0.0497
190	0.0573	0.0000	0.0573
191	0.0869	0.0000	0.0869
192	0.1261	0.0000	0.1261
193	0.5456	0.0000	0.5456
194	0.0684	0.0000	0.0684
195	0.0442	0.0000	0.0442
196	0.0339	0.0000	0.0339
197	0.0408	0.0000	0.0408
198	0.0361	0.0000	0.0361
199	0.0327	0.0000	0.0327
200	0.0300	0.0000	0.0300
201	0.0279	0.0000	0.0279
202	0.0261	0.0000	0.0261
203	0.0247	0.0000	0.0247
204	0.0234	0.0000	0.0234
205	0.0223	0.0000	0.0223
206	0.0213	0.0000	0.0213
207	0.0204	0.0000	0.0204
208	0.0197	0.0000	0.0197
209	0.0190	0.0000	0.0190
210	0.0183	0.0000	0.0183
211	0.0178	0.0000	0.0178
212	0.0172	0.0000	0.0172
213	0.0168	0.0000	0.0168
214	0.0163	0.0000	0.0163
215	0.0159	0.0000	0.0159
216	0.0155	0.0000	0.0155
217	0.0193	0.0000	0.0193
218	0.0189	0.0000	0.0189
219	0.0186	0.0000	0.0186
220	0.0183	0.0000	0.0183
221	0.0180	0.0000	0.0180
222	0.0177	0.0000	0.0177
223	0.0174	0.0000	0.0174
224	0.0172	0.0000	0.0172
225	0.0169	0.0000	0.0169
226	0.0167	0.0000	0.0167
227	0.0165	0.0000	0.0165
228	0.0163	0.0000	0.0163
229	0.0161	0.0000	0.0161
230	0.0159	0.0000	0.0159

231	0.0157	0.0000	0.0157
232	0.0155	0.0000	0.0155
233	0.0153	0.0000	0.0153
234	0.0152	0.0000	0.0152
235	0.0150	0.0000	0.0150
236	0.0149	0.0000	0.0149
237	0.0147	0.0000	0.0147
238	0.0146	0.0000	0.0146
239	0.0144	0.0000	0.0144
240	0.0143	0.0000	0.0143
241	0.0142	0.0000	0.0142
242	0.0140	0.0000	0.0140
243	0.0139	0.0000	0.0139
244	0.0138	0.0000	0.0138
245	0.0137	0.0000	0.0137
246	0.0135	0.0000	0.0135
247	0.0134	0.0000	0.0134
248	0.0133	0.0000	0.0133
249	0.0132	0.0000	0.0132
250	0.0131	0.0000	0.0131
251	0.0130	0.0000	0.0130
252	0.0129	0.0000	0.0129
253	0.0128	0.0000	0.0128
254	0.0127	0.0000	0.0127
255	0.0126	0.0000	0.0126
256	0.0125	0.0000	0.0125
257	0.0125	0.0000	0.0125
258	0.0124	0.0000	0.0124
259	0.0123	0.0000	0.0123
260	0.0122	0.0000	0.0122
261	0.0121	0.0000	0.0121
262	0.0120	0.0000	0.0120
263	0.0120	0.0000	0.0120
264	0.0119	0.0000	0.0119
265	0.0118	0.0000	0.0118
266	0.0117	0.0000	0.0117
267	0.0117	0.0000	0.0117
268	0.0116	0.0000	0.0116
269	0.0115	0.0000	0.0115
270	0.0115	0.0000	0.0115
271	0.0114	0.0000	0.0114
272	0.0113	0.0000	0.0113
273	0.0113	0.0000	0.0113
274	0.0112	0.0000	0.0112
275	0.0112	0.0000	0.0112
276	0.0111	0.0000	0.0111
277	0.0110	0.0000	0.0110
278	0.0110	0.0000	0.0110
279	0.0109	0.0000	0.0109
280	0.0109	0.0000	0.0109
281	0.0108	0.0000	0.0108
282	0.0108	0.0000	0.0108
283	0.0107	0.0000	0.0107
284	0.0106	0.0000	0.0106
285	0.0106	0.0000	0.0106
286	0.0105	0.0000	0.0105
287	0.0105	0.0000	0.0105
288	0.0104	0.0000	0.0104

--

```
      ------------------------------------------------------------------
--
      Total soil rain loss =      0.00(In)
      Total effective rainfall =      5.41(In)
      Peak flow rate in flood hydrograph =      9.65(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   5   Minute intervals ((CFS))

      ------------------------------------------------------------------
--
  Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5
10.0

-------------------------------------------------------------------------
    0+ 5       0.0003      0.05  Q         |         |         |
|
    0+10       0.0018      0.21  Q         |         |         |
|
    0+15       0.0036      0.26  VQ        |         |         |
|
    0+20       0.0056      0.29  VQ        |         |         |
|
    0+25       0.0077      0.30  VQ        |         |         |
|
    0+30       0.0099      0.31  VQ        |         |         |
|
    0+35       0.0120      0.32  VQ        |         |         |
|
    0+40       0.0143      0.32  VQ        |         |         |
|
    0+45       0.0165      0.32  VQ        |         |         |
|
    0+50       0.0187      0.33  VQ        |         |         |
|
    0+55       0.0210      0.33  VQ        |         |         |
|
    1+ 0       0.0232      0.33  VQ        |         |         |
|
    1+ 5       0.0255      0.33  VQ        |         |         |
|
    1+10       0.0278      0.33  VQ        |         |         |
|
    1+15       0.0300      0.33  |Q        |         |         |
|
    1+20       0.0323      0.33  |Q        |         |         |
|
    1+25       0.0346      0.33  |Q        |         |         |
|
    1+30       0.0369      0.33  |Q        |         |         |
|
    1+35       0.0392      0.33  |Q        |         |         |
|
    1+40       0.0415      0.33  |Q        |         |         |
```

1+45	0.0438	0.33	|Q	|	|	|
1+50	0.0461	0.34	|Q	|	|	|
1+55	0.0484	0.34	|Q	|	|	|
2+ 0	0.0507	0.34	|Q	|	|	|
2+ 5	0.0530	0.34	|Q	|	|	|
2+10	0.0554	0.34	|Q	|	|	|
2+15	0.0577	0.34	|QV	|	|	|
2+20	0.0601	0.34	|QV	|	|	|
2+25	0.0624	0.34	|QV	|	|	|
2+30	0.0648	0.34	|QV	|	|	|
2+35	0.0671	0.34	|QV	|	|	|
2+40	0.0695	0.34	|QV	|	|	|
2+45	0.0719	0.35	|QV	|	|	|
2+50	0.0743	0.35	|QV	|	|	|
2+55	0.0767	0.35	|QV	|	|	|
3+ 0	0.0791	0.35	|QV	|	|	|
3+ 5	0.0815	0.35	|QV	|	|	|
3+10	0.0839	0.35	|QV	|	|	|
3+15	0.0863	0.35	|Q V	|	|	|
3+20	0.0887	0.35	|Q V	|	|	|
3+25	0.0912	0.35	|Q V	|	|	|
3+30	0.0936	0.35	|Q V	|	|	|
3+35	0.0961	0.36	|Q V	|	|	|
3+40	0.0985	0.36	|Q V	|	|	|
3+45	0.1010	0.36	|Q V	|	|	|
3+50	0.1034	0.36	|Q V	|	|	|
3+55	0.1059	0.36	|Q V	|	|	|
4+ 0	0.1084	0.36	|Q V	|	|	|
4+ 5	0.1109	0.36	|Q V	|	|	|
4+10	0.1134	0.36	|Q V	|	|	|

4+15	0.1159	0.36	|Q V	|	|
4+20	0.1184	0.37	|Q V	|	|
4+25	0.1209	0.37	|Q V	|	|
4+30	0.1235	0.37	|Q V	|	|
4+35	0.1260	0.37	|Q V	|	|
4+40	0.1286	0.37	|Q V	|	|
4+45	0.1311	0.37	|Q V	|	|
4+50	0.1337	0.37	|Q V	|	|
4+55	0.1363	0.37	|Q V	|	|
5+ 0	0.1388	0.37	|Q V	|	|
5+ 5	0.1414	0.38	|Q V	|	|
5+10	0.1440	0.38	|Q V	|	|
5+15	0.1466	0.38	|Q V	|	|
5+20	0.1493	0.38	|Q V	|	|
5+25	0.1519	0.38	|Q V	|	|
5+30	0.1545	0.38	|Q V	|	|
5+35	0.1572	0.38	|Q V	|	|
5+40	0.1598	0.39	|Q V	|	|
5+45	0.1625	0.39	|Q V	|	|
5+50	0.1651	0.39	|Q V	|	|
5+55	0.1678	0.39	|Q V	|	|
6+ 0	0.1705	0.39	|Q V	|	|
6+ 5	0.1732	0.39	|Q V	|	|
6+10	0.1759	0.39	|Q V	|	|
6+15	0.1787	0.40	|Q V	|	|
6+20	0.1814	0.40	|Q V	|	|
6+25	0.1841	0.40	|Q V	|	|
6+30	0.1869	0.40	|Q V	|	|
6+35	0.1896	0.40	|Q V	|	|
6+40	0.1924	0.40	|Q V	|	|

6+45	0.1952	0.40	Q V		
6+50	0.1980	0.41	Q V		
6+55	0.2008	0.41	Q V		
7+ 0	0.2036	0.41	Q V		
7+ 5	0.2064	0.41	Q V		
7+10	0.2093	0.41	Q V		
7+15	0.2121	0.41	Q V		
7+20	0.2150	0.42	Q V		
7+25	0.2179	0.42	Q V		
7+30	0.2208	0.42	Q V		
7+35	0.2237	0.42	Q V		
7+40	0.2266	0.42	Q V		
7+45	0.2295	0.42	Q V		
7+50	0.2325	0.43	Q V		
7+55	0.2354	0.43	Q V		
8+ 0	0.2384	0.43	Q V		
8+ 5	0.2414	0.43	Q V		
8+10	0.2443	0.43	Q V		
8+15	0.2474	0.44	Q V		
8+20	0.2504	0.44	Q V		
8+25	0.2534	0.44	Q V		
8+30	0.2565	0.44	Q V		
8+35	0.2595	0.45	Q V		
8+40	0.2626	0.45	Q V		
8+45	0.2657	0.45	Q V		
8+50	0.2688	0.45	Q V		
8+55	0.2719	0.45	Q V		
9+ 0	0.2751	0.46	Q V		
9+ 5	0.2782	0.46	Q V		
9+10	0.2814	0.46	Q V		

9+15	0.2846	0.46	|Q V|			
9+20	0.2878	0.47	|Q V			
9+25	0.2911	0.47	|Q V			
9+30	0.2943	0.47	|Q V			
9+35	0.2976	0.47	|Q V			
9+40	0.3009	0.48	|Q V			
9+45	0.3042	0.48	|Q V			
9+50	0.3075	0.48	|Q V			
9+55	0.3108	0.48	|Q V			
10+ 0	0.3142	0.49	|Q V			
10+ 5	0.3176	0.49	|Q |V			
10+10	0.3210	0.49	|Q |V			
10+15	0.3244	0.50	|Q |V			
10+20	0.3278	0.50	| Q |V			
10+25	0.3313	0.50	| Q |V			
10+30	0.3348	0.51	| Q |V			
10+35	0.3383	0.51	| Q |V			
10+40	0.3418	0.51	| Q |V			
10+45	0.3454	0.52	| Q | V			
10+50	0.3490	0.52	| Q | V			
10+55	0.3526	0.52	| Q | V			
11+ 0	0.3562	0.53	| Q | V			
11+ 5	0.3599	0.53	| Q | V			
11+10	0.3636	0.54	| Q | V			
11+15	0.3673	0.54	| Q | V			
11+20	0.3710	0.54	| Q | V			
11+25	0.3748	0.55	| Q | V			
11+30	0.3786	0.55	| Q | V			
11+35	0.3824	0.56	| Q | V			
11+40	0.3863	0.56	| Q | V			

11+45	0.3902	0.57	Q	V		
11+50	0.3941	0.57	Q	V		
11+55	0.3981	0.58	Q	V		
12+ 0	0.4021	0.58	Q	V		
12+ 5	0.4060	0.57	Q	V		
12+10	0.4095	0.51	Q	V		
12+15	0.4129	0.49	Q	V		
12+20	0.4162	0.49	Q	V		
12+25	0.4196	0.49	Q	V		
12+30	0.4230	0.49	Q	V		
12+35	0.4264	0.50	Q	V		
12+40	0.4299	0.50	Q	V		
12+45	0.4334	0.51	Q	V		
12+50	0.4369	0.51	Q	V		
12+55	0.4405	0.52	Q	V		
13+ 0	0.4441	0.53	Q	V		
13+ 5	0.4478	0.54	Q	V		
13+10	0.4516	0.55	Q	V		
13+15	0.4554	0.55	Q	V		
13+20	0.4593	0.56	Q	V		
13+25	0.4632	0.57	Q	V		
13+30	0.4673	0.58	Q	V		
13+35	0.4713	0.59	Q	V		
13+40	0.4755	0.60	Q	V		
13+45	0.4797	0.62	Q	V		
13+50	0.4841	0.63	Q	V		
13+55	0.4885	0.64	Q	V		
14+ 0	0.4930	0.66	Q	V		
14+ 5	0.4976	0.67	Q	V		
14+10	0.5023	0.69	Q	V		

14+15	0.5071	0.70	Q		V		
14+20	0.5121	0.72	Q		V		
14+25	0.5172	0.74	Q		V		
14+30	0.5224	0.76	Q		V		
14+35	0.5278	0.78	Q		V		
14+40	0.5333	0.80	Q		V		
14+45	0.5390	0.83	Q		V		
14+50	0.5449	0.86	Q		V		
14+55	0.5510	0.89	Q		V		
15+ 0	0.5574	0.93	Q		V		
15+ 5	0.5640	0.96	Q		V		
15+10	0.5710	1.01	Q		V		
15+15	0.5782	1.05	Q		V		
15+20	0.5859	1.12	Q		V		
15+25	0.5936	1.12	Q		V		
15+30	0.6005	1.00	Q		V		
15+35	0.6075	1.01	Q		V		
15+40	0.6151	1.10	Q		V		
15+45	0.6234	1.22	Q		V		
15+50	0.6333	1.43	Q		V		
15+55	0.6453	1.75	Q		V		
16+ 0	0.6623	2.46	Q		V		
16+ 5	0.6984	5.25			Q	V	
16+10	0.7649	9.65				V	Q
16+15	0.7973	4.71			Q	V	
16+20	0.8166	2.80		Q		V	
16+25	0.8303	1.99	Q			V	
16+30	0.8418	1.67	Q			V	
16+35	0.8513	1.38	Q			V	
16+40	0.8598	1.23	Q			V	

16+45	0.8670	1.05	Q			V
16+50	0.8733	0.91	Q			V
16+55	0.8791	0.84	Q			V
17+ 0	0.8845	0.79	Q			V
17+ 5	0.8897	0.75	Q			V
17+10	0.8946	0.71	Q			V
17+15	0.8992	0.68	Q			V
17+20	0.9037	0.65	Q			V
17+25	0.9079	0.62	Q			V
17+30	0.9121	0.60	Q			V
17+35	0.9160	0.58	Q			V
17+40	0.9199	0.56	Q			V
17+45	0.9236	0.54	Q			V
17+50	0.9272	0.52	Q			V
17+55	0.9307	0.51	Q			V
18+ 0	0.9341	0.50	Q			V
18+ 5	0.9376	0.50	Q			V
18+10	0.9414	0.55	Q			V
18+15	0.9453	0.57	Q			V
18+20	0.9492	0.56	Q			V
18+25	0.9531	0.56	Q			V
18+30	0.9569	0.55	Q			V
18+35	0.9606	0.55	Q			V
18+40	0.9644	0.54	Q			V
18+45	0.9680	0.53	Q			V
18+50	0.9716	0.53	Q			V
18+55	0.9752	0.52	Q			V
19+ 0	0.9787	0.51	Q			V
19+ 5	0.9822	0.50	Q			V
19+10	0.9856	0.50	Q			V

19+15	0.9890	0.49	Q				V
19+20	0.9924	0.49	Q				V
19+25	0.9957	0.48	Q				V
19+30	0.9989	0.47	Q				V
19+35	1.0022	0.47	Q				V
19+40	1.0054	0.46	Q				V
19+45	1.0085	0.46	Q				V
19+50	1.0117	0.45	Q				V
19+55	1.0148	0.45	Q				V
20+ 0	1.0178	0.45	Q				V
20+ 5	1.0209	0.44	Q				V
20+10	1.0239	0.44	Q				V
20+15	1.0269	0.43	Q				V
20+20	1.0298	0.43	Q				V
20+25	1.0328	0.43	Q				V
20+30	1.0357	0.42	Q				V
20+35	1.0385	0.42	Q				V
20+40	1.0414	0.41	Q				V
20+45	1.0442	0.41	Q				V
20+50	1.0470	0.41	Q				V
20+55	1.0498	0.40	Q				V
21+ 0	1.0526	0.40	Q				V
21+ 5	1.0553	0.40	Q				V
21+10	1.0581	0.40	Q				V
21+15	1.0608	0.39	Q				V
21+20	1.0634	0.39	Q				V
21+25	1.0661	0.39	Q				V
21+30	1.0688	0.38	Q				V
21+35	1.0714	0.38	Q				V
21+40	1.0740	0.38	Q				V

|
| 21+45 | 1.0766 | 0.38 | Q | | | | V |
|
| 21+50 | 1.0792 | 0.37 | Q | | | | V |
|
| 21+55 | 1.0817 | 0.37 | Q | | | | V |
|
| 22+ 0 | 1.0843 | 0.37 | Q | | | | V |
|
| 22+ 5 | 1.0868 | 0.37 | Q | | | | V |
|
| 22+10 | 1.0893 | 0.36 | Q | | | | V |
|
| 22+15 | 1.0918 | 0.36 | Q | | | | V |
|
| 22+20 | 1.0943 | 0.36 | Q | | | | V |
|
| 22+25 | 1.0967 | 0.36 | Q | | | | V |
|
| 22+30 | 1.0992 | 0.36 | Q | | | | V |
|
| 22+35 | 1.1016 | 0.35 | Q | | | | V |
|
| 22+40 | 1.1040 | 0.35 | Q | | | | V |
|
| 22+45 | 1.1064 | 0.35 | Q | | | | V |
|
| 22+50 | 1.1088 | 0.35 | Q | | | | V |
|
| 22+55 | 1.1112 | 0.35 | Q | | | | V |
|
| 23+ 0 | 1.1136 | 0.34 | Q | | | | V |
|
| 23+ 5 | 1.1159 | 0.34 | Q | | | | |
V|
| 23+10 | 1.1183 | 0.34 | Q | | | | |
V|
| 23+15 | 1.1206 | 0.34 | Q | | | | |
V|
| 23+20 | 1.1229 | 0.34 | Q | | | | |
V|
| 23+25 | 1.1252 | 0.33 | Q | | | | |
V|
| 23+30 | 1.1275 | 0.33 | Q | | | | |
V|
| 23+35 | 1.1298 | 0.33 | Q | | | | |
V|
| 23+40 | 1.1321 | 0.33 | Q | | | | |
V|
| 23+45 | 1.1343 | 0.33 | Q | | | | |
V|
| 23+50 | 1.1366 | 0.33 | Q | | | | |
V|
| 23+55 | 1.1388 | 0.32 | Q | | | | |
V|
| 24+ 0 | 1.1410 | 0.32 | Q | | | | |
V|
| 24+ 5 | 1.1429 | 0.27 | Q | | | | |
V|
| 24+10 | 1.1437 | 0.11 | Q | | | | |

```
V|
   24+15       1.1441      0.06  Q         |         |         |
V|
   24+20       1.1443      0.03  Q         |         |         |
V|
   24+25       1.1444      0.02  Q         |         |         |
V|
   24+30       1.1445      0.01  Q         |         |         |
V|
   24+35       1.1445      0.00  Q         |         |         |
V|
   24+40       1.1445      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 11/21/22

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San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6232

Luna 395
SCS Hydrograph
Area A
100yr

Storm Event Year = 100

Antecedent Moisture Condition = 3

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 100		
0.43	1	1.15
Rainfall data for year 100		
0.43	6	2.51
Rainfall data for year 100		
0.43	24	5.41

++

******** Area-averaged max loss rate, Fm ********

SCS curve No.(AMCII)	SCS curve NO.(AMC 3)	Area (Ac.)	Area Fraction	Fp(Fig C6) (In/Hr)	Ap (dec.)	Fm (In/Hr)
32.0	52.0	0.43	1.000	0.785	0.010	0.008

Area-averaged adjusted loss rate Fm (In/Hr) = 0.008

********* Area-Averaged low loss rate fraction, Yb **********

Area (Ac.)	Area Fract	SCS CN (AMC2)	SCS CN (AMC3)	S	Pervious Yield Fr
0.00	0.010	32.0	52.0	9.23	0.183
0.43	0.990	98.0	98.0	0.20	0.956

Area-averaged catchment yield fraction, Y = 0.948
Area-averaged low loss fraction, Yb = 0.052
User entry of time of concentration = 0.100 (hours)

++

Watershed area = 0.43(Ac.)
Catchment Lag time = 0.080 hours
Unit interval = 5.000 minutes
Unit interval percentage of lag time = 104.1667
Hydrograph baseflow = 0.00(CFS)
Average maximum watershed loss rate(Fm) = 0.000(In/Hr)
Average low loss rate fraction (Yb) = 0.052 (decimal)
Note: user entry of the Fm value
DESERT S-Graph Selected
Computed peak 5-minute rainfall = 0.546(In)
Computed peak 30-minute rainfall = 0.934(In)
Specified peak 1-hour rainfall = 1.150(In)
Computed peak 3-hour rainfall = 1.856(In)
Specified peak 6-hour rainfall = 2.510(In)
Specified peak 24-hour rainfall = 5.410(In)

Rainfall depth area reduction factors:
Using a total area of 0.43(Ac.) (Ref: fig. E-4)

5-minute factor = 1.000 Adjusted rainfall = 0.546(In)
30-minute factor = 1.000 Adjusted rainfall = 0.934(In)
1-hour factor = 1.000 Adjusted rainfall = 1.150(In)
3-hour factor = 1.000 Adjusted rainfall = 1.856(In)
6-hour factor = 1.000 Adjusted rainfall = 2.510(In)
24-hour factor = 1.000 Adjusted rainfall = 5.410(In)

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

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Interval Number	'S' Graph Mean values	Unit Hydrograph ((CFS))

(K = 5.20 (CFS))

1	18.591	0.967
2	68.747	2.608
3	85.045	0.848
4	92.196	0.372
5	96.028	0.199
6	98.002	0.103
7	99.202	0.062
8	100.000	0.042

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.5457	0.5457
2	0.6718	0.1261
3	0.7587	0.0869
4	0.8271	0.0684
5	0.8844	0.0573
6	0.9341	0.0497
7	0.9783	0.0442
8	1.0183	0.0400
9	1.0549	0.0366
10	1.0888	0.0339
11	1.1203	0.0316
12	1.1500	0.0296
13	1.1908	0.0408
14	1.2299	0.0391
15	1.2674	0.0375
16	1.3035	0.0361
17	1.3384	0.0349
18	1.3721	0.0337
19	1.4048	0.0327
20	1.4366	0.0317
21	1.4675	0.0309
22	1.4975	0.0300
23	1.5268	0.0293
24	1.5553	0.0286
25	1.5833	0.0279
26	1.6105	0.0273
27	1.6372	0.0267
28	1.6634	0.0261
29	1.6890	0.0256
30	1.7141	0.0251
31	1.7388	0.0247
32	1.7630	0.0242
33	1.7868	0.0238
34	1.8102	0.0234
35	1.8332	0.0230
36	1.8558	0.0226
37	1.8781	0.0223
38	1.9001	0.0219
39	1.9217	0.0216
40	1.9430	0.0213
41	1.9640	0.0210
42	1.9847	0.0207
43	2.0052	0.0204
44	2.0254	0.0202
45	2.0453	0.0199
46	2.0650	0.0197

47	2.0844	0.0194
48	2.1036	0.0192
49	2.1226	0.0190
50	2.1413	0.0188
51	2.1599	0.0186
52	2.1782	0.0183
53	2.1964	0.0181
54	2.2144	0.0180
55	2.2321	0.0178
56	2.2497	0.0176
57	2.2671	0.0174
58	2.2844	0.0172
59	2.3014	0.0171
60	2.3184	0.0169
61	2.3351	0.0168
62	2.3517	0.0166
63	2.3682	0.0164
64	2.3845	0.0163
65	2.4006	0.0162
66	2.4166	0.0160
67	2.4325	0.0159
68	2.4483	0.0157
69	2.4639	0.0156
70	2.4794	0.0155
71	2.4948	0.0154
72	2.5100	0.0152
73	2.5292	0.0193
74	2.5484	0.0191
75	2.5674	0.0190
76	2.5863	0.0189
77	2.6051	0.0188
78	2.6238	0.0187
79	2.6424	0.0186
80	2.6609	0.0185
81	2.6792	0.0184
82	2.6975	0.0183
83	2.7157	0.0182
84	2.7338	0.0181
85	2.7517	0.0180
86	2.7696	0.0179
87	2.7874	0.0178
88	2.8051	0.0177
89	2.8227	0.0176
90	2.8403	0.0175
91	2.8577	0.0174
92	2.8751	0.0174
93	2.8923	0.0173
94	2.9095	0.0172
95	2.9266	0.0171
96	2.9436	0.0170
97	2.9606	0.0169
98	2.9775	0.0169
99	2.9943	0.0168
100	3.0110	0.0167
101	3.0276	0.0166
102	3.0442	0.0166
103	3.0607	0.0165
104	3.0771	0.0164
105	3.0935	0.0164
106	3.1098	0.0163

107	3.1260	0.0162
108	3.1421	0.0162
109	3.1582	0.0161
110	3.1742	0.0160
111	3.1902	0.0160
112	3.2061	0.0159
113	3.2219	0.0158
114	3.2377	0.0158
115	3.2534	0.0157
116	3.2690	0.0156
117	3.2846	0.0156
118	3.3001	0.0155
119	3.3156	0.0155
120	3.3310	0.0154
121	3.3463	0.0153
122	3.3616	0.0153
123	3.3768	0.0152
124	3.3920	0.0152
125	3.4072	0.0151
126	3.4222	0.0151
127	3.4372	0.0150
128	3.4522	0.0150
129	3.4671	0.0149
130	3.4820	0.0149
131	3.4968	0.0148
132	3.5116	0.0148
133	3.5263	0.0147
134	3.5409	0.0147
135	3.5556	0.0146
136	3.5701	0.0146
137	3.5846	0.0145
138	3.5991	0.0145
139	3.6135	0.0144
140	3.6279	0.0144
141	3.6423	0.0143
142	3.6565	0.0143
143	3.6708	0.0142
144	3.6850	0.0142
145	3.6991	0.0142
146	3.7132	0.0141
147	3.7273	0.0141
148	3.7413	0.0140
149	3.7553	0.0140
150	3.7693	0.0139
151	3.7832	0.0139
152	3.7970	0.0139
153	3.8108	0.0138
154	3.8246	0.0138
155	3.8384	0.0137
156	3.8521	0.0137
157	3.8657	0.0137
158	3.8793	0.0136
159	3.8929	0.0136
160	3.9065	0.0135
161	3.9200	0.0135
162	3.9334	0.0135
163	3.9469	0.0134
164	3.9603	0.0134
165	3.9736	0.0134
166	3.9869	0.0133

167	4.0002	0.0133
168	4.0135	0.0133
169	4.0267	0.0132
170	4.0399	0.0132
171	4.0530	0.0131
172	4.0661	0.0131
173	4.0792	0.0131
174	4.0923	0.0130
175	4.1053	0.0130
176	4.1183	0.0130
177	4.1312	0.0129
178	4.1441	0.0129
179	4.1570	0.0129
180	4.1699	0.0128
181	4.1827	0.0128
182	4.1955	0.0128
183	4.2082	0.0128
184	4.2209	0.0127
185	4.2336	0.0127
186	4.2463	0.0127
187	4.2589	0.0126
188	4.2715	0.0126
189	4.2841	0.0126
190	4.2966	0.0125
191	4.3091	0.0125
192	4.3216	0.0125
193	4.3341	0.0125
194	4.3465	0.0124
195	4.3589	0.0124
196	4.3713	0.0124
197	4.3836	0.0123
198	4.3959	0.0123
199	4.4082	0.0123
200	4.4205	0.0123
201	4.4327	0.0122
202	4.4449	0.0122
203	4.4571	0.0122
204	4.4692	0.0121
205	4.4814	0.0121
206	4.4935	0.0121
207	4.5055	0.0121
208	4.5176	0.0120
209	4.5296	0.0120
210	4.5416	0.0120
211	4.5535	0.0120
212	4.5655	0.0119
213	4.5774	0.0119
214	4.5893	0.0119
215	4.6012	0.0119
216	4.6130	0.0118
217	4.6248	0.0118
218	4.6366	0.0118
219	4.6484	0.0118
220	4.6601	0.0117
221	4.6719	0.0117
222	4.6836	0.0117
223	4.6952	0.0117
224	4.7069	0.0117
225	4.7185	0.0116
226	4.7301	0.0116

227	4.7417	0.0116
228	4.7533	0.0116
229	4.7648	0.0115
230	4.7763	0.0115
231	4.7878	0.0115
232	4.7993	0.0115
233	4.8107	0.0114
234	4.8222	0.0114
235	4.8336	0.0114
236	4.8450	0.0114
237	4.8563	0.0114
238	4.8677	0.0113
239	4.8790	0.0113
240	4.8903	0.0113
241	4.9015	0.0113
242	4.9128	0.0113
243	4.9240	0.0112
244	4.9353	0.0112
245	4.9465	0.0112
246	4.9576	0.0112
247	4.9688	0.0112
248	4.9799	0.0111
249	4.9910	0.0111
250	5.0021	0.0111
251	5.0132	0.0111
252	5.0242	0.0111
253	5.0353	0.0110
254	5.0463	0.0110
255	5.0573	0.0110
256	5.0683	0.0110
257	5.0792	0.0110
258	5.0902	0.0109
259	5.1011	0.0109
260	5.1120	0.0109
261	5.1229	0.0109
262	5.1337	0.0109
263	5.1446	0.0108
264	5.1554	0.0108
265	5.1662	0.0108
266	5.1770	0.0108
267	5.1878	0.0108
268	5.1985	0.0108
269	5.2093	0.0107
270	5.2200	0.0107
271	5.2307	0.0107
272	5.2414	0.0107
273	5.2520	0.0107
274	5.2627	0.0106
275	5.2733	0.0106
276	5.2839	0.0106
277	5.2945	0.0106
278	5.3051	0.0106
279	5.3157	0.0106
280	5.3262	0.0105
281	5.3368	0.0105
282	5.3473	0.0105
283	5.3578	0.0105
284	5.3682	0.0105
285	5.3787	0.0105
286	5.3892	0.0104

287	5.3996	0.0104
288	5.4100	0.0104

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0104	0.0000	0.0104
2	0.0104	0.0000	0.0104
3	0.0105	0.0000	0.0105
4	0.0105	0.0000	0.0105
5	0.0105	0.0000	0.0105
6	0.0105	0.0000	0.0105
7	0.0106	0.0000	0.0106
8	0.0106	0.0000	0.0106
9	0.0106	0.0000	0.0106
10	0.0106	0.0000	0.0106
11	0.0107	0.0000	0.0107
12	0.0107	0.0000	0.0107
13	0.0107	0.0000	0.0107
14	0.0107	0.0000	0.0107
15	0.0108	0.0000	0.0108
16	0.0108	0.0000	0.0108
17	0.0108	0.0000	0.0108
18	0.0108	0.0000	0.0108
19	0.0109	0.0000	0.0109
20	0.0109	0.0000	0.0109
21	0.0109	0.0000	0.0109
22	0.0110	0.0000	0.0110
23	0.0110	0.0000	0.0110
24	0.0110	0.0000	0.0110
25	0.0111	0.0000	0.0111
26	0.0111	0.0000	0.0111
27	0.0111	0.0000	0.0111
28	0.0111	0.0000	0.0111
29	0.0112	0.0000	0.0112
30	0.0112	0.0000	0.0112
31	0.0112	0.0000	0.0112
32	0.0113	0.0000	0.0113
33	0.0113	0.0000	0.0113
34	0.0113	0.0000	0.0113
35	0.0114	0.0000	0.0114
36	0.0114	0.0000	0.0114
37	0.0114	0.0000	0.0114
38	0.0114	0.0000	0.0114
39	0.0115	0.0000	0.0115
40	0.0115	0.0000	0.0115
41	0.0116	0.0000	0.0116
42	0.0116	0.0000	0.0116
43	0.0116	0.0000	0.0116
44	0.0117	0.0000	0.0117
45	0.0117	0.0000	0.0117
46	0.0117	0.0000	0.0117
47	0.0118	0.0000	0.0118
48	0.0118	0.0000	0.0118
49	0.0118	0.0000	0.0118
50	0.0119	0.0000	0.0119
51	0.0119	0.0000	0.0119

52	0.0119	0.0000	0.0119
53	0.0120	0.0000	0.0120
54	0.0120	0.0000	0.0120
55	0.0121	0.0000	0.0121
56	0.0121	0.0000	0.0121
57	0.0121	0.0000	0.0121
58	0.0122	0.0000	0.0122
59	0.0122	0.0000	0.0122
60	0.0123	0.0000	0.0123
61	0.0123	0.0000	0.0123
62	0.0123	0.0000	0.0123
63	0.0124	0.0000	0.0124
64	0.0124	0.0000	0.0124
65	0.0125	0.0000	0.0125
66	0.0125	0.0000	0.0125
67	0.0126	0.0000	0.0126
68	0.0126	0.0000	0.0126
69	0.0127	0.0000	0.0127
70	0.0127	0.0000	0.0127
71	0.0128	0.0000	0.0128
72	0.0128	0.0000	0.0128
73	0.0128	0.0000	0.0128
74	0.0129	0.0000	0.0129
75	0.0129	0.0000	0.0129
76	0.0130	0.0000	0.0130
77	0.0130	0.0000	0.0130
78	0.0131	0.0000	0.0131
79	0.0131	0.0000	0.0131
80	0.0132	0.0000	0.0132
81	0.0133	0.0000	0.0133
82	0.0133	0.0000	0.0133
83	0.0134	0.0000	0.0134
84	0.0134	0.0000	0.0134
85	0.0135	0.0000	0.0135
86	0.0135	0.0000	0.0135
87	0.0136	0.0000	0.0136
88	0.0136	0.0000	0.0136
89	0.0137	0.0000	0.0137
90	0.0137	0.0000	0.0137
91	0.0138	0.0000	0.0138
92	0.0139	0.0000	0.0139
93	0.0139	0.0000	0.0139
94	0.0140	0.0000	0.0140
95	0.0141	0.0000	0.0141
96	0.0141	0.0000	0.0141
97	0.0142	0.0000	0.0142
98	0.0142	0.0000	0.0142
99	0.0143	0.0000	0.0143
100	0.0144	0.0000	0.0144
101	0.0145	0.0000	0.0145
102	0.0145	0.0000	0.0145
103	0.0146	0.0000	0.0146
104	0.0147	0.0000	0.0147
105	0.0148	0.0000	0.0148
106	0.0148	0.0000	0.0148
107	0.0149	0.0000	0.0149
108	0.0150	0.0000	0.0150
109	0.0151	0.0000	0.0151
110	0.0151	0.0000	0.0151
111	0.0152	0.0000	0.0152

112	0.0153	0.0000	0.0153
113	0.0154	0.0000	0.0154
114	0.0155	0.0000	0.0155
115	0.0156	0.0000	0.0156
116	0.0156	0.0000	0.0156
117	0.0158	0.0000	0.0158
118	0.0158	0.0000	0.0158
119	0.0160	0.0000	0.0160
120	0.0160	0.0000	0.0160
121	0.0162	0.0000	0.0162
122	0.0162	0.0000	0.0162
123	0.0164	0.0000	0.0164
124	0.0164	0.0000	0.0164
125	0.0166	0.0000	0.0166
126	0.0166	0.0000	0.0166
127	0.0168	0.0000	0.0168
128	0.0169	0.0000	0.0169
129	0.0170	0.0000	0.0170
130	0.0171	0.0000	0.0171
131	0.0173	0.0000	0.0173
132	0.0174	0.0000	0.0174
133	0.0175	0.0000	0.0175
134	0.0176	0.0000	0.0176
135	0.0178	0.0000	0.0178
136	0.0179	0.0000	0.0179
137	0.0181	0.0000	0.0181
138	0.0182	0.0000	0.0182
139	0.0184	0.0000	0.0184
140	0.0185	0.0000	0.0185
141	0.0187	0.0000	0.0187
142	0.0188	0.0000	0.0188
143	0.0190	0.0000	0.0190
144	0.0191	0.0000	0.0191
145	0.0152	0.0000	0.0152
146	0.0154	0.0000	0.0154
147	0.0156	0.0000	0.0156
148	0.0157	0.0000	0.0157
149	0.0160	0.0000	0.0160
150	0.0162	0.0000	0.0162
151	0.0164	0.0000	0.0164
152	0.0166	0.0000	0.0166
153	0.0169	0.0000	0.0169
154	0.0171	0.0000	0.0171
155	0.0174	0.0000	0.0174
156	0.0176	0.0000	0.0176
157	0.0180	0.0000	0.0180
158	0.0181	0.0000	0.0181
159	0.0186	0.0000	0.0186
160	0.0188	0.0000	0.0188
161	0.0192	0.0000	0.0192
162	0.0194	0.0000	0.0194
163	0.0199	0.0000	0.0199
164	0.0202	0.0000	0.0202
165	0.0207	0.0000	0.0207
166	0.0210	0.0000	0.0210
167	0.0216	0.0000	0.0216
168	0.0219	0.0000	0.0219
169	0.0226	0.0000	0.0226
170	0.0230	0.0000	0.0230
171	0.0238	0.0000	0.0238

172	0.0242	0.0000	0.0242
173	0.0251	0.0000	0.0251
174	0.0256	0.0000	0.0256
175	0.0267	0.0000	0.0267
176	0.0273	0.0000	0.0273
177	0.0286	0.0000	0.0286
178	0.0293	0.0000	0.0293
179	0.0309	0.0000	0.0309
180	0.0317	0.0000	0.0317
181	0.0337	0.0000	0.0337
182	0.0349	0.0000	0.0349
183	0.0375	0.0000	0.0375
184	0.0391	0.0000	0.0391
185	0.0296	0.0000	0.0296
186	0.0316	0.0000	0.0316
187	0.0366	0.0000	0.0366
188	0.0400	0.0000	0.0400
189	0.0497	0.0000	0.0497
190	0.0573	0.0000	0.0573
191	0.0869	0.0000	0.0869
192	0.1261	0.0000	0.1261
193	0.5457	0.0000	0.5457
194	0.0684	0.0000	0.0684
195	0.0442	0.0000	0.0442
196	0.0339	0.0000	0.0339
197	0.0408	0.0000	0.0408
198	0.0361	0.0000	0.0361
199	0.0327	0.0000	0.0327
200	0.0300	0.0000	0.0300
201	0.0279	0.0000	0.0279
202	0.0261	0.0000	0.0261
203	0.0247	0.0000	0.0247
204	0.0234	0.0000	0.0234
205	0.0223	0.0000	0.0223
206	0.0213	0.0000	0.0213
207	0.0204	0.0000	0.0204
208	0.0197	0.0000	0.0197
209	0.0190	0.0000	0.0190
210	0.0183	0.0000	0.0183
211	0.0178	0.0000	0.0178
212	0.0172	0.0000	0.0172
213	0.0168	0.0000	0.0168
214	0.0163	0.0000	0.0163
215	0.0159	0.0000	0.0159
216	0.0155	0.0000	0.0155
217	0.0193	0.0000	0.0193
218	0.0189	0.0000	0.0189
219	0.0186	0.0000	0.0186
220	0.0183	0.0000	0.0183
221	0.0180	0.0000	0.0180
222	0.0177	0.0000	0.0177
223	0.0174	0.0000	0.0174
224	0.0172	0.0000	0.0172
225	0.0169	0.0000	0.0169
226	0.0167	0.0000	0.0167
227	0.0165	0.0000	0.0165
228	0.0163	0.0000	0.0163
229	0.0161	0.0000	0.0161
230	0.0159	0.0000	0.0159
231	0.0157	0.0000	0.0157

232	0.0155	0.0000	0.0155
233	0.0153	0.0000	0.0153
234	0.0152	0.0000	0.0152
235	0.0150	0.0000	0.0150
236	0.0149	0.0000	0.0149
237	0.0147	0.0000	0.0147
238	0.0146	0.0000	0.0146
239	0.0144	0.0000	0.0144
240	0.0143	0.0000	0.0143
241	0.0142	0.0000	0.0142
242	0.0140	0.0000	0.0140
243	0.0139	0.0000	0.0139
244	0.0138	0.0000	0.0138
245	0.0137	0.0000	0.0137
246	0.0135	0.0000	0.0135
247	0.0134	0.0000	0.0134
248	0.0133	0.0000	0.0133
249	0.0132	0.0000	0.0132
250	0.0131	0.0000	0.0131
251	0.0130	0.0000	0.0130
252	0.0129	0.0000	0.0129
253	0.0128	0.0000	0.0128
254	0.0127	0.0000	0.0127
255	0.0126	0.0000	0.0126
256	0.0125	0.0000	0.0125
257	0.0125	0.0000	0.0125
258	0.0124	0.0000	0.0124
259	0.0123	0.0000	0.0123
260	0.0122	0.0000	0.0122
261	0.0121	0.0000	0.0121
262	0.0120	0.0000	0.0120
263	0.0120	0.0000	0.0120
264	0.0119	0.0000	0.0119
265	0.0118	0.0000	0.0118
266	0.0117	0.0000	0.0117
267	0.0117	0.0000	0.0117
268	0.0116	0.0000	0.0116
269	0.0115	0.0000	0.0115
270	0.0115	0.0000	0.0115
271	0.0114	0.0000	0.0114
272	0.0113	0.0000	0.0113
273	0.0113	0.0000	0.0113
274	0.0112	0.0000	0.0112
275	0.0112	0.0000	0.0112
276	0.0111	0.0000	0.0111
277	0.0110	0.0000	0.0110
278	0.0110	0.0000	0.0110
279	0.0109	0.0000	0.0109
280	0.0109	0.0000	0.0109
281	0.0108	0.0000	0.0108
282	0.0108	0.0000	0.0108
283	0.0107	0.0000	0.0107
284	0.0106	0.0000	0.0106
285	0.0106	0.0000	0.0106
286	0.0105	0.0000	0.0105
287	0.0105	0.0000	0.0105
288	0.0104	0.0000	0.0104

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--
      Total soil rain loss =      0.00(In)
      Total effective rainfall =      5.41(In)
      Peak flow rate in flood hydrograph =      1.65(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   5   Minute intervals ((CFS))

      ------------------------------------------------------------------
--
  Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5
10.0

------------------------------------------------------------------------
    0+ 5       0.0001      0.01  Q         |         |         |
|
    0+10       0.0003      0.04  Q         |         |         |
|
    0+15       0.0006      0.05  Q         |         |         |
|
    0+20       0.0010      0.05  Q         |         |         |
|
    0+25       0.0013      0.05  Q         |         |         |
|
    0+30       0.0017      0.05  Q         |         |         |
|
    0+35       0.0021      0.05  Q         |         |         |
|
    0+40       0.0025      0.05  Q         |         |         |
|
    0+45       0.0028      0.05  Q         |         |         |
|
    0+50       0.0032      0.06  Q         |         |         |
|
    0+55       0.0036      0.06  Q         |         |         |
|
    1+ 0       0.0040      0.06  Q         |         |         |
|
    1+ 5       0.0044      0.06  Q         |         |         |
|
    1+10       0.0048      0.06  Q         |         |         |
|
    1+15       0.0051      0.06  QV        |         |         |
|
    1+20       0.0055      0.06  QV        |         |         |
|
    1+25       0.0059      0.06  QV        |         |         |
|
    1+30       0.0063      0.06  QV        |         |         |
|
    1+35       0.0067      0.06  QV        |         |         |
|
    1+40       0.0071      0.06  QV        |         |         |
|
```

1+45	0.0075	0.06	QV			
1+50	0.0079	0.06	QV			
1+55	0.0082	0.06	QV			
2+ 0	0.0086	0.06	QV			
2+ 5	0.0090	0.06	QV			
2+10	0.0094	0.06	QV			
2+15	0.0098	0.06	Q V			
2+20	0.0102	0.06	Q V			
2+25	0.0106	0.06	Q V			
2+30	0.0110	0.06	Q V			
2+35	0.0114	0.06	Q V			
2+40	0.0118	0.06	Q V			
2+45	0.0122	0.06	Q V			
2+50	0.0126	0.06	Q V			
2+55	0.0130	0.06	Q V			
3+ 0	0.0134	0.06	Q V			
3+ 5	0.0139	0.06	Q V			
3+10	0.0143	0.06	Q V			
3+15	0.0147	0.06	Q V			
3+20	0.0151	0.06	Q V			
3+25	0.0155	0.06	Q V			
3+30	0.0159	0.06	Q V			
3+35	0.0163	0.06	Q V			
3+40	0.0167	0.06	Q V			
3+45	0.0172	0.06	Q V			
3+50	0.0176	0.06	Q V			
3+55	0.0180	0.06	Q V			
4+ 0	0.0184	0.06	Q V			
4+ 5	0.0188	0.06	Q V			
4+10	0.0193	0.06	Q V			

4+15	0.0197	0.06	Q	V			
4+20	0.0201	0.06	Q	V			
4+25	0.0205	0.06	Q	V			
4+30	0.0210	0.06	Q	V			
4+35	0.0214	0.06	Q	V			
4+40	0.0218	0.06	Q	V			
4+45	0.0223	0.06	Q	V			
4+50	0.0227	0.06	Q	V			
4+55	0.0231	0.06	Q	V			
5+ 0	0.0236	0.06	Q	V			
5+ 5	0.0240	0.06	Q	V			
5+10	0.0244	0.06	Q	V			
5+15	0.0249	0.06	Q	V			
5+20	0.0253	0.06	Q	V			
5+25	0.0258	0.06	Q	V			
5+30	0.0262	0.06	Q	V			
5+35	0.0267	0.07	Q	V			
5+40	0.0271	0.07	Q	V			
5+45	0.0276	0.07	Q	V			
5+50	0.0280	0.07	Q	V			
5+55	0.0285	0.07	Q	V			
6+ 0	0.0289	0.07	Q	V			
6+ 5	0.0294	0.07	Q	V			
6+10	0.0298	0.07	Q	V			
6+15	0.0303	0.07	Q	V			
6+20	0.0308	0.07	Q	V			
6+25	0.0312	0.07	Q	V			
6+30	0.0317	0.07	Q	V			
6+35	0.0322	0.07	Q	V			
6+40	0.0326	0.07	Q	V			

6+45	0.0331	0.07	Q	V			
6+50	0.0336	0.07	Q	V			
6+55	0.0341	0.07	Q	V			
7+ 0	0.0345	0.07	Q	V			
7+ 5	0.0350	0.07	Q	V			
7+10	0.0355	0.07	Q	V			
7+15	0.0360	0.07	Q	V			
7+20	0.0365	0.07	Q	V			
7+25	0.0370	0.07	Q	V			
7+30	0.0374	0.07	Q	V			
7+35	0.0379	0.07	Q	V			
7+40	0.0384	0.07	Q	V			
7+45	0.0389	0.07	Q	V			
7+50	0.0394	0.07	Q	V			
7+55	0.0399	0.07	Q	V			
8+ 0	0.0404	0.07	Q	V			
8+ 5	0.0409	0.07	Q	V			
8+10	0.0414	0.07	Q	V			
8+15	0.0419	0.07	Q	V			
8+20	0.0425	0.07	Q	V			
8+25	0.0430	0.07	Q	V			
8+30	0.0435	0.08	Q	V			
8+35	0.0440	0.08	Q	V			
8+40	0.0445	0.08	Q	V			
8+45	0.0451	0.08	Q	V			
8+50	0.0456	0.08	Q	V			
8+55	0.0461	0.08	Q	V			
9+ 0	0.0466	0.08	Q	V			
9+ 5	0.0472	0.08	Q	V			
9+10	0.0477	0.08	Q	V			

9+15	0.0483	0.08	Q	V|	|	|
9+20	0.0488	0.08	Q	V	|	|
9+25	0.0494	0.08	Q	V	|	|
9+30	0.0499	0.08	Q	V	|	|
9+35	0.0505	0.08	Q	V	|	|
9+40	0.0510	0.08	Q	V	|	|
9+45	0.0516	0.08	Q	V	|	|
9+50	0.0521	0.08	Q	V	|	|
9+55	0.0527	0.08	Q	V	|	|
10+ 0	0.0533	0.08	Q	V	|	|
10+ 5	0.0538	0.08	Q	|V	|	|
10+10	0.0544	0.08	Q	|V	|	|
10+15	0.0550	0.08	Q	|V	|	|
10+20	0.0556	0.08	Q	|V	|	|
10+25	0.0562	0.09	Q	|V	|	|
10+30	0.0568	0.09	Q	|V	|	|
10+35	0.0574	0.09	Q	|V	|	|
10+40	0.0580	0.09	Q	|V	|	|
10+45	0.0586	0.09	Q	| V	|	|
10+50	0.0592	0.09	Q	| V	|	|
10+55	0.0598	0.09	Q	| V	|	|
11+ 0	0.0604	0.09	Q	| V	|	|
11+ 5	0.0610	0.09	Q	| V	|	|
11+10	0.0616	0.09	Q	| V	|	|
11+15	0.0623	0.09	Q	| V	|	|
11+20	0.0629	0.09	Q	| V	|	|
11+25	0.0635	0.09	Q	| V	|	|
11+30	0.0642	0.09	Q	| V	|	|
11+35	0.0648	0.09	Q	| V	|	|
11+40	0.0655	0.10	Q	| V	|	|

11+45	0.0662	0.10	Q	| V |		
11+50	0.0668	0.10	Q	| V |		
11+55	0.0675	0.10	Q	| V |		
12+ 0	0.0682	0.10	Q	| V |		
12+ 5	0.0688	0.10	Q	| V |		
12+10	0.0694	0.09	Q	| V |		
12+15	0.0700	0.08	Q	| V |		
12+20	0.0706	0.08	Q	| V |		
12+25	0.0711	0.08	Q	| V |		
12+30	0.0717	0.08	Q	| V |		
12+35	0.0723	0.08	Q	| V |		
12+40	0.0729	0.08	Q	| V |		
12+45	0.0734	0.09	Q	| V |		
12+50	0.0740	0.09	Q	| V |		
12+55	0.0747	0.09	Q	| V |		
13+ 0	0.0753	0.09	Q	| V |		
13+ 5	0.0759	0.09	Q	| V |		
13+10	0.0765	0.09	Q	| V |		
13+15	0.0772	0.09	Q	| V |		
13+20	0.0778	0.10	Q	| V |		
13+25	0.0785	0.10	Q	| V |		
13+30	0.0792	0.10	Q	| V |		
13+35	0.0799	0.10	Q	| V |		
13+40	0.0806	0.10	Q	| V |		
13+45	0.0813	0.10	Q	| V |		
13+50	0.0821	0.11	Q	| V |		
13+55	0.0828	0.11	Q	| V |		
14+ 0	0.0836	0.11	Q	| V |		
14+ 5	0.0843	0.11	Q	| V |		
14+10	0.0851	0.12	Q	| V |		

14+15	0.0860	0.12	Q	|	V |	|
14+20	0.0868	0.12	Q	|	V |	|
14+25	0.0877	0.13	Q	|	V |	|
14+30	0.0886	0.13	Q	|	V |	|
14+35	0.0895	0.13	Q	|	V |	|
14+40	0.0904	0.14	Q	|	V |	|
14+45	0.0914	0.14	Q	|	V |	|
14+50	0.0924	0.15	Q	|	V|	|
14+55	0.0934	0.15	Q	|	V|	|
15+ 0	0.0945	0.16	Q	|	V|	|
15+ 5	0.0956	0.16	Q	|	V|	|
15+10	0.0968	0.17	Q	|	V|	|
15+15	0.0981	0.18	Q	|	V	|
15+20	0.0994	0.19	Q	|	V	|
15+25	0.1007	0.19	Q	|	V	|
15+30	0.1018	0.17	Q	|	|V	|
15+35	0.1030	0.17	Q	|	|V	|
15+40	0.1043	0.19	Q	|	|V	|
15+45	0.1057	0.21	Q	|	|V	|
15+50	0.1074	0.25	Q	|	| V	|
15+55	0.1095	0.30	|Q	|	| V	|
16+ 0	0.1125	0.43	|Q	|	| V	|
16+ 5	0.1192	0.97	| Q	|	| V	|
16+10	0.1305	1.65	| Q	|	| V	|
16+15	0.1358	0.76	| Q	|	| V |	|
16+20	0.1388	0.45	|Q	|	| V |	|
16+25	0.1410	0.32	|Q	|	| V|	|
16+30	0.1429	0.27	|Q	|	| V|	|
16+35	0.1445	0.23	Q	|	| V|	|
16+40	0.1458	0.20	Q	|	| V	|

16+45	0.1470	0.16	Q	|	|	V |
16+50	0.1480	0.15	Q	|	|	V |
16+55	0.1490	0.14	Q	|	|	V |
17+ 0	0.1499	0.13	Q	|	|	V |
17+ 5	0.1507	0.13	Q	|	|	|V |
17+10	0.1516	0.12	Q	|	|	|V |
17+15	0.1523	0.11	Q	|	|	|V |
17+20	0.1531	0.11	Q	|	|	|V |
17+25	0.1538	0.10	Q	|	|	|V |
17+30	0.1545	0.10	Q	|	|	|V |
17+35	0.1552	0.10	Q	|	|	| V |
17+40	0.1558	0.09	Q	|	|	| V |
17+45	0.1564	0.09	Q	|	|	| V |
17+50	0.1571	0.09	Q	|	|	| V |
17+55	0.1576	0.09	Q	|	|	| V |
18+ 0	0.1582	0.08	Q	|	|	| V |
18+ 5	0.1588	0.09	Q	|	|	| V |
18+10	0.1595	0.09	Q	|	|	| V |
18+15	0.1601	0.10	Q	|	|	| V |
18+20	0.1608	0.10	Q	|	|	| V |
18+25	0.1614	0.09	Q	|	|	| V |
18+30	0.1621	0.09	Q	|	|	| V |
18+35	0.1627	0.09	Q	|	|	| V |
18+40	0.1633	0.09	Q	|	|	| V |
18+45	0.1640	0.09	Q	|	|	| V |
18+50	0.1646	0.09	Q	|	|	| V |
18+55	0.1652	0.09	Q	|	|	| V |
19+ 0	0.1658	0.09	Q	|	|	| V |
19+ 5	0.1664	0.09	Q	|	|	| V |
19+10	0.1669	0.08	Q	|	|	| V |

19+15	0.1675	0.08	Q				V
19+20	0.1681	0.08	Q				V
19+25	0.1686	0.08	Q				V
19+30	0.1692	0.08	Q				V
19+35	0.1697	0.08	Q				V
19+40	0.1703	0.08	Q				V
19+45	0.1708	0.08	Q				V
19+50	0.1713	0.08	Q				V
19+55	0.1719	0.08	Q				V
20+ 0	0.1724	0.08	Q				V
20+ 5	0.1729	0.07	Q				V
20+10	0.1734	0.07	Q				V
20+15	0.1739	0.07	Q				V
20+20	0.1744	0.07	Q				V
20+25	0.1749	0.07	Q				V
20+30	0.1754	0.07	Q				V
20+35	0.1759	0.07	Q				V
20+40	0.1764	0.07	Q				V
20+45	0.1768	0.07	Q				V
20+50	0.1773	0.07	Q				V
20+55	0.1778	0.07	Q				V
21+ 0	0.1783	0.07	Q				V
21+ 5	0.1787	0.07	Q				V
21+10	0.1792	0.07	Q				V
21+15	0.1796	0.07	Q				V
21+20	0.1801	0.07	Q				V
21+25	0.1805	0.07	Q				V
21+30	0.1810	0.06	Q				V
21+35	0.1814	0.06	Q				V
21+40	0.1819	0.06	Q				V

21+45	0.1823	0.06	Q				V
21+50	0.1828	0.06	Q				V
21+55	0.1832	0.06	Q				V
22+ 0	0.1836	0.06	Q				V
22+ 5	0.1840	0.06	Q				V
22+10	0.1845	0.06	Q				V
22+15	0.1849	0.06	Q				V
22+20	0.1853	0.06	Q				V
22+25	0.1857	0.06	Q				V
22+30	0.1861	0.06	Q				V
22+35	0.1866	0.06	Q				V
22+40	0.1870	0.06	Q				V
22+45	0.1874	0.06	Q				V
22+50	0.1878	0.06	Q				V
22+55	0.1882	0.06	Q				V
23+ 0	0.1886	0.06	Q				V
23+ 5	0.1890	0.06	Q				V
23+10	0.1894	0.06	Q				V
23+15	0.1898	0.06	Q				V
23+20	0.1902	0.06	Q				V
23+25	0.1905	0.06	Q				V
23+30	0.1909	0.06	Q				V
23+35	0.1913	0.06	Q				V
23+40	0.1917	0.06	Q				V
23+45	0.1921	0.06	Q				V
23+50	0.1925	0.06	Q				V
23+55	0.1928	0.05	Q				V
24+ 0	0.1932	0.05	Q				V
24+ 5	0.1935	0.04	Q				V
24+10	0.1936	0.02	Q				V

```
   24+15       0.1937      0.01  Q         |         |         |
V|
   24+20       0.1937      0.00  Q         |         |         |
V|
   24+25       0.1937      0.00  Q         |         |         |
V|
   24+30       0.1938      0.00  Q         |         |         |
V|
   24+35       0.1938      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 11/21/22

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San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6232

Luna 395
SCS Hydrograph
Area A and Area B
100 year

Storm Event Year = 100

Antecedent Moisture Condition = 3

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 100		
0.44	1	1.15
Rainfall data for year 100		
0.44	6	2.51
Rainfall data for year 100		
0.44	24	5.41

++

******** Area-averaged max loss rate, Fm ********

SCS curve No.(AMCII)	SCS curve NO.(AMC 3)	Area (Ac.)	Area Fraction	Fp(Fig C6) (In/Hr)	Ap (dec.)	Fm (In/Hr)
32.0	52.0	0.44	1.000	0.785	0.010	0.008

Area-averaged adjusted loss rate Fm (In/Hr) = 0.008

********* Area-Averaged low loss rate fraction, Yb **********

Area (Ac.)	Area Fract	SCS CN (AMC2)	SCS CN (AMC3)	S	Pervious Yield Fr
0.00	0.010	32.0	52.0	9.23	0.183
0.44	0.990	98.0	98.0	0.20	0.956

Area-averaged catchment yield fraction, Y = 0.948
Area-averaged low loss fraction, Yb = 0.052
User entry of time of concentration = 0.100 (hours)

++

Watershed area = 0.44(Ac.)
Catchment Lag time = 0.080 hours
Unit interval = 5.000 minutes
Unit interval percentage of lag time = 104.1667
Hydrograph baseflow = 0.00(CFS)
Average maximum watershed loss rate(Fm) = 0.000(In/Hr)
Average low loss rate fraction (Yb) = 0.052 (decimal)
Note: user entry of the Fm value
DESERT S-Graph Selected
Computed peak 5-minute rainfall = 0.546(In)
Computed peak 30-minute rainfall = 0.934(In)
Specified peak 1-hour rainfall = 1.150(In)
Computed peak 3-hour rainfall = 1.856(In)
Specified peak 6-hour rainfall = 2.510(In)
Specified peak 24-hour rainfall = 5.410(In)

Rainfall depth area reduction factors:
Using a total area of 0.44(Ac.) (Ref: fig. E-4)

5-minute factor = 1.000 Adjusted rainfall = 0.546(In)
30-minute factor = 1.000 Adjusted rainfall = 0.934(In)
1-hour factor = 1.000 Adjusted rainfall = 1.150(In)
3-hour factor = 1.000 Adjusted rainfall = 1.856(In)
6-hour factor = 1.000 Adjusted rainfall = 2.510(In)
24-hour factor = 1.000 Adjusted rainfall = 5.410(In)

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

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Interval Number	'S' Graph Mean values	Unit Hydrograph ((CFS))

(K = 5.32 (CFS))

1	18.591	0.989
2	68.747	2.669
3	85.045	0.867
4	92.196	0.381
5	96.028	0.204
6	98.002	0.105
7	99.202	0.064
8	100.000	0.042

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.5457	0.5457
2	0.6718	0.1261
3	0.7587	0.0869
4	0.8271	0.0684
5	0.8844	0.0573
6	0.9341	0.0497
7	0.9783	0.0442
8	1.0183	0.0400
9	1.0549	0.0366
10	1.0888	0.0339
11	1.1203	0.0316
12	1.1500	0.0296
13	1.1908	0.0408
14	1.2299	0.0391
15	1.2674	0.0375
16	1.3035	0.0361
17	1.3384	0.0349
18	1.3721	0.0337
19	1.4048	0.0327
20	1.4366	0.0317
21	1.4675	0.0309
22	1.4975	0.0300
23	1.5268	0.0293
24	1.5553	0.0286
25	1.5833	0.0279
26	1.6105	0.0273
27	1.6372	0.0267
28	1.6634	0.0261
29	1.6890	0.0256
30	1.7141	0.0251
31	1.7388	0.0247
32	1.7630	0.0242
33	1.7868	0.0238
34	1.8102	0.0234
35	1.8332	0.0230
36	1.8558	0.0226
37	1.8781	0.0223
38	1.9001	0.0219
39	1.9217	0.0216
40	1.9430	0.0213
41	1.9640	0.0210
42	1.9847	0.0207
43	2.0052	0.0204
44	2.0254	0.0202
45	2.0453	0.0199
46	2.0650	0.0197

47	2.0844	0.0194
48	2.1036	0.0192
49	2.1226	0.0190
50	2.1413	0.0188
51	2.1599	0.0186
52	2.1782	0.0183
53	2.1964	0.0181
54	2.2144	0.0180
55	2.2321	0.0178
56	2.2497	0.0176
57	2.2671	0.0174
58	2.2844	0.0172
59	2.3014	0.0171
60	2.3184	0.0169
61	2.3351	0.0168
62	2.3517	0.0166
63	2.3682	0.0164
64	2.3845	0.0163
65	2.4006	0.0162
66	2.4166	0.0160
67	2.4325	0.0159
68	2.4483	0.0157
69	2.4639	0.0156
70	2.4794	0.0155
71	2.4948	0.0154
72	2.5100	0.0152
73	2.5292	0.0193
74	2.5484	0.0191
75	2.5674	0.0190
76	2.5863	0.0189
77	2.6051	0.0188
78	2.6238	0.0187
79	2.6424	0.0186
80	2.6609	0.0185
81	2.6792	0.0184
82	2.6975	0.0183
83	2.7157	0.0182
84	2.7338	0.0181
85	2.7517	0.0180
86	2.7696	0.0179
87	2.7874	0.0178
88	2.8051	0.0177
89	2.8227	0.0176
90	2.8403	0.0175
91	2.8577	0.0174
92	2.8751	0.0174
93	2.8923	0.0173
94	2.9095	0.0172
95	2.9266	0.0171
96	2.9436	0.0170
97	2.9606	0.0169
98	2.9775	0.0169
99	2.9943	0.0168
100	3.0110	0.0167
101	3.0276	0.0166
102	3.0442	0.0166
103	3.0607	0.0165
104	3.0771	0.0164
105	3.0935	0.0164
106	3.1098	0.0163

107	3.1260	0.0162
108	3.1421	0.0162
109	3.1582	0.0161
110	3.1742	0.0160
111	3.1902	0.0160
112	3.2061	0.0159
113	3.2219	0.0158
114	3.2377	0.0158
115	3.2534	0.0157
116	3.2690	0.0156
117	3.2846	0.0156
118	3.3001	0.0155
119	3.3156	0.0155
120	3.3310	0.0154
121	3.3463	0.0153
122	3.3616	0.0153
123	3.3768	0.0152
124	3.3920	0.0152
125	3.4072	0.0151
126	3.4222	0.0151
127	3.4372	0.0150
128	3.4522	0.0150
129	3.4671	0.0149
130	3.4820	0.0149
131	3.4968	0.0148
132	3.5116	0.0148
133	3.5263	0.0147
134	3.5409	0.0147
135	3.5556	0.0146
136	3.5701	0.0146
137	3.5846	0.0145
138	3.5991	0.0145
139	3.6135	0.0144
140	3.6279	0.0144
141	3.6423	0.0143
142	3.6565	0.0143
143	3.6708	0.0142
144	3.6850	0.0142
145	3.6991	0.0142
146	3.7132	0.0141
147	3.7273	0.0141
148	3.7413	0.0140
149	3.7553	0.0140
150	3.7693	0.0139
151	3.7832	0.0139
152	3.7970	0.0139
153	3.8108	0.0138
154	3.8246	0.0138
155	3.8384	0.0137
156	3.8521	0.0137
157	3.8657	0.0137
158	3.8793	0.0136
159	3.8929	0.0136
160	3.9065	0.0135
161	3.9200	0.0135
162	3.9334	0.0135
163	3.9469	0.0134
164	3.9603	0.0134
165	3.9736	0.0134
166	3.9869	0.0133

167	4.0002	0.0133
168	4.0135	0.0133
169	4.0267	0.0132
170	4.0399	0.0132
171	4.0530	0.0131
172	4.0661	0.0131
173	4.0792	0.0131
174	4.0923	0.0130
175	4.1053	0.0130
176	4.1183	0.0130
177	4.1312	0.0129
178	4.1441	0.0129
179	4.1570	0.0129
180	4.1698	0.0128
181	4.1827	0.0128
182	4.1955	0.0128
183	4.2082	0.0128
184	4.2209	0.0127
185	4.2336	0.0127
186	4.2463	0.0127
187	4.2589	0.0126
188	4.2715	0.0126
189	4.2841	0.0126
190	4.2966	0.0125
191	4.3091	0.0125
192	4.3216	0.0125
193	4.3341	0.0125
194	4.3465	0.0124
195	4.3589	0.0124
196	4.3713	0.0124
197	4.3836	0.0123
198	4.3959	0.0123
199	4.4082	0.0123
200	4.4205	0.0123
201	4.4327	0.0122
202	4.4449	0.0122
203	4.4571	0.0122
204	4.4692	0.0121
205	4.4814	0.0121
206	4.4935	0.0121
207	4.5055	0.0121
208	4.5176	0.0120
209	4.5296	0.0120
210	4.5416	0.0120
211	4.5535	0.0120
212	4.5655	0.0119
213	4.5774	0.0119
214	4.5893	0.0119
215	4.6012	0.0119
216	4.6130	0.0118
217	4.6248	0.0118
218	4.6366	0.0118
219	4.6484	0.0118
220	4.6601	0.0117
221	4.6719	0.0117
222	4.6836	0.0117
223	4.6952	0.0117
224	4.7069	0.0117
225	4.7185	0.0116
226	4.7301	0.0116

227	4.7417	0.0116
228	4.7533	0.0116
229	4.7648	0.0115
230	4.7763	0.0115
231	4.7878	0.0115
232	4.7993	0.0115
233	4.8107	0.0114
234	4.8222	0.0114
235	4.8336	0.0114
236	4.8450	0.0114
237	4.8563	0.0114
238	4.8677	0.0113
239	4.8790	0.0113
240	4.8903	0.0113
241	4.9015	0.0113
242	4.9128	0.0113
243	4.9240	0.0112
244	4.9353	0.0112
245	4.9464	0.0112
246	4.9576	0.0112
247	4.9688	0.0112
248	4.9799	0.0111
249	4.9910	0.0111
250	5.0021	0.0111
251	5.0132	0.0111
252	5.0242	0.0111
253	5.0353	0.0110
254	5.0463	0.0110
255	5.0573	0.0110
256	5.0683	0.0110
257	5.0792	0.0110
258	5.0902	0.0109
259	5.1011	0.0109
260	5.1120	0.0109
261	5.1229	0.0109
262	5.1337	0.0109
263	5.1446	0.0108
264	5.1554	0.0108
265	5.1662	0.0108
266	5.1770	0.0108
267	5.1878	0.0108
268	5.1985	0.0108
269	5.2093	0.0107
270	5.2200	0.0107
271	5.2307	0.0107
272	5.2414	0.0107
273	5.2520	0.0107
274	5.2627	0.0106
275	5.2733	0.0106
276	5.2839	0.0106
277	5.2945	0.0106
278	5.3051	0.0106
279	5.3157	0.0106
280	5.3262	0.0105
281	5.3368	0.0105
282	5.3473	0.0105
283	5.3578	0.0105
284	5.3682	0.0105
285	5.3787	0.0105
286	5.3892	0.0104

287	5.3996	0.0104
288	5.4100	0.0104

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0104	0.0000	0.0104
2	0.0104	0.0000	0.0104
3	0.0105	0.0000	0.0105
4	0.0105	0.0000	0.0105
5	0.0105	0.0000	0.0105
6	0.0105	0.0000	0.0105
7	0.0106	0.0000	0.0106
8	0.0106	0.0000	0.0106
9	0.0106	0.0000	0.0106
10	0.0106	0.0000	0.0106
11	0.0107	0.0000	0.0107
12	0.0107	0.0000	0.0107
13	0.0107	0.0000	0.0107
14	0.0107	0.0000	0.0107
15	0.0108	0.0000	0.0108
16	0.0108	0.0000	0.0108
17	0.0108	0.0000	0.0108
18	0.0108	0.0000	0.0108
19	0.0109	0.0000	0.0109
20	0.0109	0.0000	0.0109
21	0.0109	0.0000	0.0109
22	0.0110	0.0000	0.0110
23	0.0110	0.0000	0.0110
24	0.0110	0.0000	0.0110
25	0.0111	0.0000	0.0111
26	0.0111	0.0000	0.0111
27	0.0111	0.0000	0.0111
28	0.0111	0.0000	0.0111
29	0.0112	0.0000	0.0112
30	0.0112	0.0000	0.0112
31	0.0112	0.0000	0.0112
32	0.0113	0.0000	0.0113
33	0.0113	0.0000	0.0113
34	0.0113	0.0000	0.0113
35	0.0114	0.0000	0.0114
36	0.0114	0.0000	0.0114
37	0.0114	0.0000	0.0114
38	0.0114	0.0000	0.0114
39	0.0115	0.0000	0.0115
40	0.0115	0.0000	0.0115
41	0.0116	0.0000	0.0116
42	0.0116	0.0000	0.0116
43	0.0116	0.0000	0.0116
44	0.0117	0.0000	0.0117
45	0.0117	0.0000	0.0117
46	0.0117	0.0000	0.0117
47	0.0118	0.0000	0.0118
48	0.0118	0.0000	0.0118
49	0.0118	0.0000	0.0118
50	0.0119	0.0000	0.0119
51	0.0119	0.0000	0.0119

52	0.0119	0.0000	0.0119
53	0.0120	0.0000	0.0120
54	0.0120	0.0000	0.0120
55	0.0121	0.0000	0.0121
56	0.0121	0.0000	0.0121
57	0.0121	0.0000	0.0121
58	0.0122	0.0000	0.0122
59	0.0122	0.0000	0.0122
60	0.0123	0.0000	0.0123
61	0.0123	0.0000	0.0123
62	0.0123	0.0000	0.0123
63	0.0124	0.0000	0.0124
64	0.0124	0.0000	0.0124
65	0.0125	0.0000	0.0125
66	0.0125	0.0000	0.0125
67	0.0126	0.0000	0.0126
68	0.0126	0.0000	0.0126
69	0.0127	0.0000	0.0127
70	0.0127	0.0000	0.0127
71	0.0128	0.0000	0.0128
72	0.0128	0.0000	0.0128
73	0.0128	0.0000	0.0128
74	0.0129	0.0000	0.0129
75	0.0129	0.0000	0.0129
76	0.0130	0.0000	0.0130
77	0.0130	0.0000	0.0130
78	0.0131	0.0000	0.0131
79	0.0131	0.0000	0.0131
80	0.0132	0.0000	0.0132
81	0.0133	0.0000	0.0133
82	0.0133	0.0000	0.0133
83	0.0134	0.0000	0.0134
84	0.0134	0.0000	0.0134
85	0.0135	0.0000	0.0135
86	0.0135	0.0000	0.0135
87	0.0136	0.0000	0.0136
88	0.0136	0.0000	0.0136
89	0.0137	0.0000	0.0137
90	0.0137	0.0000	0.0137
91	0.0138	0.0000	0.0138
92	0.0139	0.0000	0.0139
93	0.0139	0.0000	0.0139
94	0.0140	0.0000	0.0140
95	0.0141	0.0000	0.0141
96	0.0141	0.0000	0.0141
97	0.0142	0.0000	0.0142
98	0.0142	0.0000	0.0142
99	0.0143	0.0000	0.0143
100	0.0144	0.0000	0.0144
101	0.0145	0.0000	0.0145
102	0.0145	0.0000	0.0145
103	0.0146	0.0000	0.0146
104	0.0147	0.0000	0.0147
105	0.0148	0.0000	0.0148
106	0.0148	0.0000	0.0148
107	0.0149	0.0000	0.0149
108	0.0150	0.0000	0.0150
109	0.0151	0.0000	0.0151
110	0.0151	0.0000	0.0151
111	0.0152	0.0000	0.0152

112	0.0153	0.0000	0.0153
113	0.0154	0.0000	0.0154
114	0.0155	0.0000	0.0155
115	0.0156	0.0000	0.0156
116	0.0156	0.0000	0.0156
117	0.0158	0.0000	0.0158
118	0.0158	0.0000	0.0158
119	0.0160	0.0000	0.0160
120	0.0160	0.0000	0.0160
121	0.0162	0.0000	0.0162
122	0.0162	0.0000	0.0162
123	0.0164	0.0000	0.0164
124	0.0164	0.0000	0.0164
125	0.0166	0.0000	0.0166
126	0.0166	0.0000	0.0166
127	0.0168	0.0000	0.0168
128	0.0169	0.0000	0.0169
129	0.0170	0.0000	0.0170
130	0.0171	0.0000	0.0171
131	0.0173	0.0000	0.0173
132	0.0174	0.0000	0.0174
133	0.0175	0.0000	0.0175
134	0.0176	0.0000	0.0176
135	0.0178	0.0000	0.0178
136	0.0179	0.0000	0.0179
137	0.0181	0.0000	0.0181
138	0.0182	0.0000	0.0182
139	0.0184	0.0000	0.0184
140	0.0185	0.0000	0.0185
141	0.0187	0.0000	0.0187
142	0.0188	0.0000	0.0188
143	0.0190	0.0000	0.0190
144	0.0191	0.0000	0.0191
145	0.0152	0.0000	0.0152
146	0.0154	0.0000	0.0154
147	0.0156	0.0000	0.0156
148	0.0157	0.0000	0.0157
149	0.0160	0.0000	0.0160
150	0.0162	0.0000	0.0162
151	0.0164	0.0000	0.0164
152	0.0166	0.0000	0.0166
153	0.0169	0.0000	0.0169
154	0.0171	0.0000	0.0171
155	0.0174	0.0000	0.0174
156	0.0176	0.0000	0.0176
157	0.0180	0.0000	0.0180
158	0.0181	0.0000	0.0181
159	0.0186	0.0000	0.0186
160	0.0188	0.0000	0.0188
161	0.0192	0.0000	0.0192
162	0.0194	0.0000	0.0194
163	0.0199	0.0000	0.0199
164	0.0202	0.0000	0.0202
165	0.0207	0.0000	0.0207
166	0.0210	0.0000	0.0210
167	0.0216	0.0000	0.0216
168	0.0219	0.0000	0.0219
169	0.0226	0.0000	0.0226
170	0.0230	0.0000	0.0230
171	0.0238	0.0000	0.0238

172	0.0242	0.0000	0.0242
173	0.0251	0.0000	0.0251
174	0.0256	0.0000	0.0256
175	0.0267	0.0000	0.0267
176	0.0273	0.0000	0.0273
177	0.0286	0.0000	0.0286
178	0.0293	0.0000	0.0293
179	0.0309	0.0000	0.0309
180	0.0317	0.0000	0.0317
181	0.0337	0.0000	0.0337
182	0.0349	0.0000	0.0349
183	0.0375	0.0000	0.0375
184	0.0391	0.0000	0.0391
185	0.0296	0.0000	0.0296
186	0.0316	0.0000	0.0316
187	0.0366	0.0000	0.0366
188	0.0400	0.0000	0.0400
189	0.0497	0.0000	0.0497
190	0.0573	0.0000	0.0573
191	0.0869	0.0000	0.0869
192	0.1261	0.0000	0.1261
193	0.5457	0.0000	0.5457
194	0.0684	0.0000	0.0684
195	0.0442	0.0000	0.0442
196	0.0339	0.0000	0.0339
197	0.0408	0.0000	0.0408
198	0.0361	0.0000	0.0361
199	0.0327	0.0000	0.0327
200	0.0300	0.0000	0.0300
201	0.0279	0.0000	0.0279
202	0.0261	0.0000	0.0261
203	0.0247	0.0000	0.0247
204	0.0234	0.0000	0.0234
205	0.0223	0.0000	0.0223
206	0.0213	0.0000	0.0213
207	0.0204	0.0000	0.0204
208	0.0197	0.0000	0.0197
209	0.0190	0.0000	0.0190
210	0.0183	0.0000	0.0183
211	0.0178	0.0000	0.0178
212	0.0172	0.0000	0.0172
213	0.0168	0.0000	0.0168
214	0.0163	0.0000	0.0163
215	0.0159	0.0000	0.0159
216	0.0155	0.0000	0.0155
217	0.0193	0.0000	0.0193
218	0.0189	0.0000	0.0189
219	0.0186	0.0000	0.0186
220	0.0183	0.0000	0.0183
221	0.0180	0.0000	0.0180
222	0.0177	0.0000	0.0177
223	0.0174	0.0000	0.0174
224	0.0172	0.0000	0.0172
225	0.0169	0.0000	0.0169
226	0.0167	0.0000	0.0167
227	0.0165	0.0000	0.0165
228	0.0163	0.0000	0.0163
229	0.0161	0.0000	0.0161
230	0.0159	0.0000	0.0159
231	0.0157	0.0000	0.0157

232	0.0155	0.0000	0.0155
233	0.0153	0.0000	0.0153
234	0.0152	0.0000	0.0152
235	0.0150	0.0000	0.0150
236	0.0149	0.0000	0.0149
237	0.0147	0.0000	0.0147
238	0.0146	0.0000	0.0146
239	0.0144	0.0000	0.0144
240	0.0143	0.0000	0.0143
241	0.0142	0.0000	0.0142
242	0.0140	0.0000	0.0140
243	0.0139	0.0000	0.0139
244	0.0138	0.0000	0.0138
245	0.0137	0.0000	0.0137
246	0.0135	0.0000	0.0135
247	0.0134	0.0000	0.0134
248	0.0133	0.0000	0.0133
249	0.0132	0.0000	0.0132
250	0.0131	0.0000	0.0131
251	0.0130	0.0000	0.0130
252	0.0129	0.0000	0.0129
253	0.0128	0.0000	0.0128
254	0.0127	0.0000	0.0127
255	0.0126	0.0000	0.0126
256	0.0125	0.0000	0.0125
257	0.0125	0.0000	0.0125
258	0.0124	0.0000	0.0124
259	0.0123	0.0000	0.0123
260	0.0122	0.0000	0.0122
261	0.0121	0.0000	0.0121
262	0.0120	0.0000	0.0120
263	0.0120	0.0000	0.0120
264	0.0119	0.0000	0.0119
265	0.0118	0.0000	0.0118
266	0.0117	0.0000	0.0117
267	0.0117	0.0000	0.0117
268	0.0116	0.0000	0.0116
269	0.0115	0.0000	0.0115
270	0.0115	0.0000	0.0115
271	0.0114	0.0000	0.0114
272	0.0113	0.0000	0.0113
273	0.0113	0.0000	0.0113
274	0.0112	0.0000	0.0112
275	0.0112	0.0000	0.0112
276	0.0111	0.0000	0.0111
277	0.0110	0.0000	0.0110
278	0.0110	0.0000	0.0110
279	0.0109	0.0000	0.0109
280	0.0109	0.0000	0.0109
281	0.0108	0.0000	0.0108
282	0.0108	0.0000	0.0108
283	0.0107	0.0000	0.0107
284	0.0106	0.0000	0.0106
285	0.0106	0.0000	0.0106
286	0.0105	0.0000	0.0105
287	0.0105	0.0000	0.0105
288	0.0104	0.0000	0.0104

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--
      Total soil rain loss =      0.00(In)
      Total effective rainfall =      5.41(In)
      Peak flow rate in flood hydrograph =      1.69(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   5   Minute intervals ((CFS))

      ------------------------------------------------------------------
--
  Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5
10.0

------------------------------------------------------------------------
    0+ 5       0.0001      0.01  Q         |         |         |
|
    0+10       0.0003      0.04  Q         |         |         |
|
    0+15       0.0007      0.05  Q         |         |         |
|
    0+20       0.0010      0.05  Q         |         |         |
|
    0+25       0.0014      0.05  Q         |         |         |
|
    0+30       0.0018      0.05  Q         |         |         |
|
    0+35       0.0021      0.06  Q         |         |         |
|
    0+40       0.0025      0.06  Q         |         |         |
|
    0+45       0.0029      0.06  Q         |         |         |
|
    0+50       0.0033      0.06  Q         |         |         |
|
    0+55       0.0037      0.06  Q         |         |         |
|
    1+ 0       0.0041      0.06  Q         |         |         |
|
    1+ 5       0.0045      0.06  Q         |         |         |
|
    1+10       0.0049      0.06  Q         |         |         |
|
    1+15       0.0053      0.06  QV        |         |         |
|
    1+20       0.0057      0.06  QV        |         |         |
|
    1+25       0.0060      0.06  QV        |         |         |
|
    1+30       0.0064      0.06  QV        |         |         |
|
    1+35       0.0068      0.06  QV        |         |         |
|
    1+40       0.0072      0.06  QV        |         |         |
|
```

1+45	0.0076	0.06	QV			
1+50	0.0080	0.06	QV			
1+55	0.0084	0.06	QV			
2+ 0	0.0088	0.06	QV			
2+ 5	0.0092	0.06	QV			
2+10	0.0097	0.06	QV			
2+15	0.0101	0.06	Q V			
2+20	0.0105	0.06	Q V			
2+25	0.0109	0.06	Q V			
2+30	0.0113	0.06	Q V			
2+35	0.0117	0.06	Q V			
2+40	0.0121	0.06	Q V			
2+45	0.0125	0.06	Q V			
2+50	0.0129	0.06	Q V			
2+55	0.0133	0.06	Q V			
3+ 0	0.0138	0.06	Q V			
3+ 5	0.0142	0.06	Q V			
3+10	0.0146	0.06	Q V			
3+15	0.0150	0.06	Q V			
3+20	0.0154	0.06	Q V			
3+25	0.0159	0.06	Q V			
3+30	0.0163	0.06	Q V			
3+35	0.0167	0.06	Q V			
3+40	0.0171	0.06	Q V			
3+45	0.0176	0.06	Q V			
3+50	0.0180	0.06	Q V			
3+55	0.0184	0.06	Q V			
4+ 0	0.0188	0.06	Q V			
4+ 5	0.0193	0.06	Q V			
4+10	0.0197	0.06	Q V			

4+15	0.0201	0.06	Q	V			
4+20	0.0206	0.06	Q	V			
4+25	0.0210	0.06	Q	V			
4+30	0.0215	0.06	Q	V			
4+35	0.0219	0.06	Q	V			
4+40	0.0223	0.06	Q	V			
4+45	0.0228	0.06	Q	V			
4+50	0.0232	0.06	Q	V			
4+55	0.0237	0.06	Q	V			
5+ 0	0.0241	0.06	Q	V			
5+ 5	0.0246	0.07	Q	V			
5+10	0.0250	0.07	Q	V			
5+15	0.0255	0.07	Q	V			
5+20	0.0259	0.07	Q	V			
5+25	0.0264	0.07	Q	V			
5+30	0.0268	0.07	Q	V			
5+35	0.0273	0.07	Q	V			
5+40	0.0277	0.07	Q	V			
5+45	0.0282	0.07	Q	V			
5+50	0.0287	0.07	Q	V			
5+55	0.0291	0.07	Q	V			
6+ 0	0.0296	0.07	Q	V			
6+ 5	0.0301	0.07	Q	V			
6+10	0.0305	0.07	Q	V			
6+15	0.0310	0.07	Q	V			
6+20	0.0315	0.07	Q	V			
6+25	0.0320	0.07	Q	V			
6+30	0.0324	0.07	Q	V			
6+35	0.0329	0.07	Q	V			
6+40	0.0334	0.07	Q	V			

6+45	0.0339	0.07	Q	V			
6+50	0.0344	0.07	Q	V			
6+55	0.0349	0.07	Q	V			
7+ 0	0.0353	0.07	Q	V			
7+ 5	0.0358	0.07	Q	V			
7+10	0.0363	0.07	Q	V			
7+15	0.0368	0.07	Q	V			
7+20	0.0373	0.07	Q	V			
7+25	0.0378	0.07	Q	V			
7+30	0.0383	0.07	Q	V			
7+35	0.0388	0.07	Q	V			
7+40	0.0393	0.07	Q	V			
7+45	0.0398	0.07	Q	V			
7+50	0.0403	0.07	Q	V			
7+55	0.0409	0.07	Q	V			
8+ 0	0.0414	0.07	Q	V			
8+ 5	0.0419	0.07	Q	V			
8+10	0.0424	0.08	Q	V			
8+15	0.0429	0.08	Q	V			
8+20	0.0434	0.08	Q	V			
8+25	0.0440	0.08	Q	V			
8+30	0.0445	0.08	Q	V			
8+35	0.0450	0.08	Q	V			
8+40	0.0456	0.08	Q	V			
8+45	0.0461	0.08	Q	V			
8+50	0.0466	0.08	Q	V			
8+55	0.0472	0.08	Q	V			
9+ 0	0.0477	0.08	Q	V			
9+ 5	0.0483	0.08	Q	V			
9+10	0.0488	0.08	Q	V			

9+15	0.0494	0.08	Q	V|		
9+20	0.0499	0.08	Q	V		
9+25	0.0505	0.08	Q	V		
9+30	0.0511	0.08	Q	V		
9+35	0.0516	0.08	Q	V		
9+40	0.0522	0.08	Q	V		
9+45	0.0528	0.08	Q	V		
9+50	0.0533	0.08	Q	V		
9+55	0.0539	0.08	Q	V		
10+ 0	0.0545	0.08	Q	V		
10+ 5	0.0551	0.09	Q	|V		
10+10	0.0557	0.09	Q	|V		
10+15	0.0563	0.09	Q	|V		
10+20	0.0569	0.09	Q	|V		
10+25	0.0575	0.09	Q	|V		
10+30	0.0581	0.09	Q	|V		
10+35	0.0587	0.09	Q	|V		
10+40	0.0593	0.09	Q	|V		
10+45	0.0599	0.09	Q	| V		
10+50	0.0605	0.09	Q	| V		
10+55	0.0612	0.09	Q	| V		
11+ 0	0.0618	0.09	Q	| V		
11+ 5	0.0624	0.09	Q	| V		
11+10	0.0631	0.09	Q	| V		
11+15	0.0637	0.09	Q	| V		
11+20	0.0644	0.09	Q	| V		
11+25	0.0650	0.09	Q	| V		
11+30	0.0657	0.10	Q	| V		
11+35	0.0663	0.10	Q	| V		
11+40	0.0670	0.10	Q	| V		

11+45	0.0677	0.10	Q	| V |		
11+50	0.0684	0.10	Q	| V |		
11+55	0.0691	0.10	Q	| V |		
12+ 0	0.0698	0.10	Q	| V |		
12+ 5	0.0704	0.10	Q	| V |		
12+10	0.0710	0.09	Q	| V |		
12+15	0.0716	0.08	Q	| V |		
12+20	0.0722	0.08	Q	| V |		
12+25	0.0728	0.08	Q	| V |		
12+30	0.0734	0.09	Q	| V |		
12+35	0.0739	0.09	Q	| V |		
12+40	0.0745	0.09	Q	| V |		
12+45	0.0752	0.09	Q	| V |		
12+50	0.0758	0.09	Q	| V |		
12+55	0.0764	0.09	Q	| V |		
13+ 0	0.0770	0.09	Q	| V |		
13+ 5	0.0777	0.09	Q	| V |		
13+10	0.0783	0.09	Q	| V |		
13+15	0.0790	0.10	Q	| V |		
13+20	0.0797	0.10	Q	| V |		
13+25	0.0803	0.10	Q	| V |		
13+30	0.0810	0.10	Q	| V |		
13+35	0.0817	0.10	Q	| V |		
13+40	0.0825	0.11	Q	| V |		
13+45	0.0832	0.11	Q	| V |		
13+50	0.0840	0.11	Q	| V |		
13+55	0.0847	0.11	Q	| V |		
14+ 0	0.0855	0.11	Q	| V |		
14+ 5	0.0863	0.12	Q	| V |		
14+10	0.0871	0.12	Q	| V |		

14+15	0.0880	0.12	Q	|	V |	|
14+20	0.0888	0.12	Q	|	V |	|
14+25	0.0897	0.13	Q	|	V |	|
14+30	0.0906	0.13	Q	|	V |	|
14+35	0.0916	0.14	Q	|	V |	|
14+40	0.0925	0.14	Q	|	V |	|
14+45	0.0935	0.14	Q	|	V |	|
14+50	0.0945	0.15	Q	|	V|	|
14+55	0.0956	0.15	Q	|	V|	|
15+ 0	0.0967	0.16	Q	|	V|	|
15+ 5	0.0979	0.17	Q	|	V|	|
15+10	0.0991	0.18	Q	|	V|	|
15+15	0.1003	0.18	Q	|	V	|
15+20	0.1017	0.19	Q	|	V	|
15+25	0.1030	0.19	Q	|	V	|
15+30	0.1042	0.17	Q	|	|V	|
15+35	0.1054	0.18	Q	|	|V	|
15+40	0.1067	0.19	Q	|	|V	|
15+45	0.1082	0.21	Q	|	|V	|
15+50	0.1099	0.25	|Q	|	| V	|
15+55	0.1121	0.31	|Q	|	| V	|
16+ 0	0.1151	0.44	|Q	|	| V	|
16+ 5	0.1219	0.99	| Q	|	| V	|
16+10	0.1336	1.69	| Q	|	| V	|
16+15	0.1389	0.78	| Q	|	| V |	
16+20	0.1421	0.46	|Q	|	| V |	
16+25	0.1443	0.33	|Q	|	| V|	
16+30	0.1462	0.27	|Q	|	| V|	
16+35	0.1478	0.23	Q	|	| V|	
16+40	0.1492	0.20	Q	|	| V	|

16+45	0.1504	0.17	Q			V	
16+50	0.1514	0.15	Q			V	
16+55	0.1524	0.14	Q			V	
17+ 0	0.1534	0.14	Q			V	
17+ 5	0.1543	0.13	Q				V
17+10	0.1551	0.12	Q				V
17+15	0.1559	0.12	Q				V
17+20	0.1567	0.11	Q				V
17+25	0.1574	0.11	Q				V
17+30	0.1581	0.10	Q				V
17+35	0.1588	0.10	Q				V
17+40	0.1594	0.10	Q				V
17+45	0.1601	0.09	Q				V
17+50	0.1607	0.09	Q				V
17+55	0.1613	0.09	Q				V
18+ 0	0.1619	0.09	Q				V
18+ 5	0.1625	0.09	Q				V
18+10	0.1632	0.10	Q				V
18+15	0.1638	0.10	Q				V
18+20	0.1645	0.10	Q				V
18+25	0.1652	0.10	Q				V
18+30	0.1659	0.10	Q				V
18+35	0.1665	0.09	Q				V
18+40	0.1671	0.09	Q				V
18+45	0.1678	0.09	Q				V
18+50	0.1684	0.09	Q				V
18+55	0.1690	0.09	Q				V
19+ 0	0.1696	0.09	Q				V
19+ 5	0.1702	0.09	Q				V
19+10	0.1708	0.09	Q				V

19+15	0.1714	0.09	Q				V
19+20	0.1720	0.08	Q				V
19+25	0.1726	0.08	Q				V
19+30	0.1731	0.08	Q				V
19+35	0.1737	0.08	Q				V
19+40	0.1742	0.08	Q				V
19+45	0.1748	0.08	Q				V
19+50	0.1753	0.08	Q				V
19+55	0.1759	0.08	Q				V
20+ 0	0.1764	0.08	Q				V
20+ 5	0.1769	0.08	Q				V
20+10	0.1774	0.08	Q				V
20+15	0.1780	0.07	Q				V
20+20	0.1785	0.07	Q				V
20+25	0.1790	0.07	Q				V
20+30	0.1795	0.07	Q				V
20+35	0.1800	0.07	Q				V
20+40	0.1805	0.07	Q				V
20+45	0.1810	0.07	Q				V
20+50	0.1814	0.07	Q				V
20+55	0.1819	0.07	Q				V
21+ 0	0.1824	0.07	Q				V
21+ 5	0.1829	0.07	Q				V
21+10	0.1834	0.07	Q				V
21+15	0.1838	0.07	Q				V
21+20	0.1843	0.07	Q				V
21+25	0.1847	0.07	Q				V
21+30	0.1852	0.07	Q				V
21+35	0.1857	0.07	Q				V
21+40	0.1861	0.07	Q				V

21+45	0.1866	0.07	Q				V
21+50	0.1870	0.06	Q				V
21+55	0.1874	0.06	Q				V
22+ 0	0.1879	0.06	Q				V
22+ 5	0.1883	0.06	Q				V
22+10	0.1888	0.06	Q				V
22+15	0.1892	0.06	Q				V
22+20	0.1896	0.06	Q				V
22+25	0.1900	0.06	Q				V
22+30	0.1905	0.06	Q				V
22+35	0.1909	0.06	Q				V
22+40	0.1913	0.06	Q				V
22+45	0.1917	0.06	Q				V
22+50	0.1921	0.06	Q				V
22+55	0.1926	0.06	Q				V
23+ 0	0.1930	0.06	Q				V
23+ 5	0.1934	0.06	Q				V
23+10	0.1938	0.06	Q				V
23+15	0.1942	0.06	Q				V
23+20	0.1946	0.06	Q				V
23+25	0.1950	0.06	Q				V
23+30	0.1954	0.06	Q				V
23+35	0.1958	0.06	Q				V
23+40	0.1962	0.06	Q				V
23+45	0.1966	0.06	Q				V
23+50	0.1969	0.06	Q				V
23+55	0.1973	0.06	Q				V
24+ 0	0.1977	0.06	Q				V
24+ 5	0.1980	0.05	Q				V
24+10	0.1982	0.02	Q				V

```
   24+15       0.1982      0.01  Q         |          |          |
V|
   24+20       0.1982      0.00  Q         |          |          |
V|
   24+25       0.1983      0.00  Q         |          |          |
V|
   24+30       0.1983      0.00  Q         |          |          |
V|
   24+35       0.1983      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 11/21/22

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      ******** Area-averaged max loss rate, Fm ********


      SCS curve  SCS curve     Area     Area     Fp(Fig C6)    Ap
Fm
      No.(AMCII) NO.(AMC 3)    (Ac.)    Fraction     (In/Hr)   (dec.)
(In/Hr)
       32.0      52.0          0.64      1.000     0.785    0.010
0.008

      Area-averaged adjusted loss rate Fm (In/Hr) =  0.008

      ********* Area-Averaged low loss rate fraction, Yb **********

      Area       Area          SCS CN    SCS CN      S     Pervious
       (Ac.)      Fract         (AMC2)    (AMC3)           Yield Fr
           0.01   0.010         32.0      52.0       9.23     0.183
           0.63   0.990         98.0      98.0       0.20     0.956

      Area-averaged catchment yield fraction, Y =  0.948
      Area-averaged low loss fraction, Yb =  0.052
      User entry of time of concentration  =   0.100 (hours)
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++
      Watershed area =       0.64(Ac.)
      Catchment Lag time =   0.080 hours
      Unit interval =   5.000 minutes
      Unit interval percentage of lag time = 104.1667
      Hydrograph baseflow =     0.00(CFS)
      Average maximum watershed loss rate(Fm) =  0.000(In/Hr)
      Average low loss rate fraction (Yb) = 0.052 (decimal)
      Note: user entry of the Fm value
      DESERT S-Graph Selected
      Computed peak 5-minute rainfall =  0.546(In)
      Computed peak 30-minute rainfall =  0.934(In)
      Specified peak 1-hour rainfall =  1.150(In)
      Computed peak 3-hour rainfall =  1.856(In)
      Specified peak 6-hour rainfall =  2.510(In)
      Specified peak 24-hour rainfall =  5.410(In)


      Rainfall depth area reduction factors:
      Using a total area of       0.64(Ac.) (Ref: fig. E-4)

      5-minute factor = 1.000     Adjusted rainfall =  0.546(In)
      30-minute factor = 1.000    Adjusted rainfall =  0.934(In)
      1-hour factor = 1.000       Adjusted rainfall =  1.150(In)
      3-hour factor = 1.000       Adjusted rainfall =  1.856(In)
      6-hour factor = 1.000       Adjusted rainfall =  2.510(In)
      24-hour factor = 1.000      Adjusted rainfall =  5.410(In)
      ------------------------------------------------------------------
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                        U n i t  H y d r o g r a p h
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
+++
      Interval          'S' Graph          Unit Hydrograph
      Number            Mean values             ((CFS))
      ------------------------------------------------------------------
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```

(K = 7.74 (CFS))

1	18.591	1.439
2	68.747	3.882
3	85.045	1.261
4	92.196	0.554
5	96.028	0.297
6	98.002	0.153
7	99.202	0.093
8	100.000	0.062

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.5457	0.5457
2	0.6718	0.1261
3	0.7587	0.0869
4	0.8271	0.0684
5	0.8843	0.0573
6	0.9341	0.0497
7	0.9783	0.0442
8	1.0183	0.0400
9	1.0549	0.0366
10	1.0888	0.0339
11	1.1203	0.0316
12	1.1500	0.0296
13	1.1908	0.0408
14	1.2298	0.0391
15	1.2674	0.0375
16	1.3035	0.0361
17	1.3384	0.0349
18	1.3721	0.0337
19	1.4048	0.0327
20	1.4366	0.0317
21	1.4674	0.0309
22	1.4975	0.0300
23	1.5268	0.0293
24	1.5553	0.0286
25	1.5832	0.0279
26	1.6105	0.0273
27	1.6372	0.0267
28	1.6634	0.0261
29	1.6890	0.0256
30	1.7141	0.0251
31	1.7388	0.0247
32	1.7630	0.0242
33	1.7868	0.0238
34	1.8102	0.0234
35	1.8332	0.0230
36	1.8558	0.0226
37	1.8781	0.0223
38	1.9001	0.0219
39	1.9217	0.0216
40	1.9430	0.0213
41	1.9640	0.0210
42	1.9847	0.0207
43	2.0052	0.0204
44	2.0254	0.0202
45	2.0453	0.0199
46	2.0650	0.0197

47	2.0844	0.0194
48	2.1036	0.0192
49	2.1226	0.0190
50	2.1413	0.0188
51	2.1599	0.0186
52	2.1782	0.0183
53	2.1964	0.0181
54	2.2144	0.0180
55	2.2321	0.0178
56	2.2497	0.0176
57	2.2671	0.0174
58	2.2844	0.0172
59	2.3014	0.0171
60	2.3184	0.0169
61	2.3351	0.0168
62	2.3517	0.0166
63	2.3682	0.0164
64	2.3845	0.0163
65	2.4006	0.0162
66	2.4166	0.0160
67	2.4325	0.0159
68	2.4483	0.0157
69	2.4639	0.0156
70	2.4794	0.0155
71	2.4947	0.0154
72	2.5100	0.0152
73	2.5292	0.0193
74	2.5484	0.0191
75	2.5674	0.0190
76	2.5863	0.0189
77	2.6051	0.0188
78	2.6238	0.0187
79	2.6424	0.0186
80	2.6609	0.0185
81	2.6792	0.0184
82	2.6975	0.0183
83	2.7157	0.0182
84	2.7338	0.0181
85	2.7517	0.0180
86	2.7696	0.0179
87	2.7874	0.0178
88	2.8051	0.0177
89	2.8227	0.0176
90	2.8403	0.0175
91	2.8577	0.0174
92	2.8751	0.0174
93	2.8923	0.0173
94	2.9095	0.0172
95	2.9266	0.0171
96	2.9436	0.0170
97	2.9606	0.0169
98	2.9775	0.0169
99	2.9943	0.0168
100	3.0110	0.0167
101	3.0276	0.0166
102	3.0442	0.0166
103	3.0607	0.0165
104	3.0771	0.0164
105	3.0935	0.0164
106	3.1097	0.0163

107	3.1260	0.0162
108	3.1421	0.0162
109	3.1582	0.0161
110	3.1742	0.0160
111	3.1902	0.0160
112	3.2061	0.0159
113	3.2219	0.0158
114	3.2377	0.0158
115	3.2534	0.0157
116	3.2690	0.0156
117	3.2846	0.0156
118	3.3001	0.0155
119	3.3156	0.0155
120	3.3310	0.0154
121	3.3463	0.0153
122	3.3616	0.0153
123	3.3768	0.0152
124	3.3920	0.0152
125	3.4072	0.0151
126	3.4222	0.0151
127	3.4372	0.0150
128	3.4522	0.0150
129	3.4671	0.0149
130	3.4820	0.0149
131	3.4968	0.0148
132	3.5116	0.0148
133	3.5263	0.0147
134	3.5409	0.0147
135	3.5556	0.0146
136	3.5701	0.0146
137	3.5846	0.0145
138	3.5991	0.0145
139	3.6135	0.0144
140	3.6279	0.0144
141	3.6422	0.0143
142	3.6565	0.0143
143	3.6708	0.0142
144	3.6850	0.0142
145	3.6991	0.0142
146	3.7132	0.0141
147	3.7273	0.0141
148	3.7413	0.0140
149	3.7553	0.0140
150	3.7693	0.0139
151	3.7832	0.0139
152	3.7970	0.0139
153	3.8108	0.0138
154	3.8246	0.0138
155	3.8384	0.0137
156	3.8521	0.0137
157	3.8657	0.0137
158	3.8793	0.0136
159	3.8929	0.0136
160	3.9065	0.0135
161	3.9200	0.0135
162	3.9334	0.0135
163	3.9469	0.0134
164	3.9603	0.0134
165	3.9736	0.0134
166	3.9869	0.0133

167	4.0002	0.0133
168	4.0135	0.0133
169	4.0267	0.0132
170	4.0399	0.0132
171	4.0530	0.0131
172	4.0661	0.0131
173	4.0792	0.0131
174	4.0923	0.0130
175	4.1053	0.0130
176	4.1183	0.0130
177	4.1312	0.0129
178	4.1441	0.0129
179	4.1570	0.0129
180	4.1698	0.0128
181	4.1827	0.0128
182	4.1955	0.0128
183	4.2082	0.0128
184	4.2209	0.0127
185	4.2336	0.0127
186	4.2463	0.0127
187	4.2589	0.0126
188	4.2715	0.0126
189	4.2841	0.0126
190	4.2966	0.0125
191	4.3091	0.0125
192	4.3216	0.0125
193	4.3341	0.0125
194	4.3465	0.0124
195	4.3589	0.0124
196	4.3713	0.0124
197	4.3836	0.0123
198	4.3959	0.0123
199	4.4082	0.0123
200	4.4205	0.0123
201	4.4327	0.0122
202	4.4449	0.0122
203	4.4571	0.0122
204	4.4692	0.0121
205	4.4814	0.0121
206	4.4935	0.0121
207	4.5055	0.0121
208	4.5176	0.0120
209	4.5296	0.0120
210	4.5416	0.0120
211	4.5535	0.0120
212	4.5655	0.0119
213	4.5774	0.0119
214	4.5893	0.0119
215	4.6012	0.0119
216	4.6130	0.0118
217	4.6248	0.0118
218	4.6366	0.0118
219	4.6484	0.0118
220	4.6601	0.0117
221	4.6719	0.0117
222	4.6836	0.0117
223	4.6952	0.0117
224	4.7069	0.0117
225	4.7185	0.0116
226	4.7301	0.0116

227	4.7417	0.0116
228	4.7533	0.0116
229	4.7648	0.0115
230	4.7763	0.0115
231	4.7878	0.0115
232	4.7993	0.0115
233	4.8107	0.0114
234	4.8222	0.0114
235	4.8336	0.0114
236	4.8449	0.0114
237	4.8563	0.0114
238	4.8677	0.0113
239	4.8790	0.0113
240	4.8903	0.0113
241	4.9015	0.0113
242	4.9128	0.0113
243	4.9240	0.0112
244	4.9353	0.0112
245	4.9464	0.0112
246	4.9576	0.0112
247	4.9688	0.0112
248	4.9799	0.0111
249	4.9910	0.0111
250	5.0021	0.0111
251	5.0132	0.0111
252	5.0242	0.0111
253	5.0353	0.0110
254	5.0463	0.0110
255	5.0573	0.0110
256	5.0683	0.0110
257	5.0792	0.0110
258	5.0902	0.0109
259	5.1011	0.0109
260	5.1120	0.0109
261	5.1229	0.0109
262	5.1337	0.0109
263	5.1446	0.0108
264	5.1554	0.0108
265	5.1662	0.0108
266	5.1770	0.0108
267	5.1878	0.0108
268	5.1985	0.0108
269	5.2093	0.0107
270	5.2200	0.0107
271	5.2307	0.0107
272	5.2414	0.0107
273	5.2520	0.0107
274	5.2627	0.0106
275	5.2733	0.0106
276	5.2839	0.0106
277	5.2945	0.0106
278	5.3051	0.0106
279	5.3157	0.0106
280	5.3262	0.0105
281	5.3368	0.0105
282	5.3473	0.0105
283	5.3578	0.0105
284	5.3682	0.0105
285	5.3787	0.0105
286	5.3892	0.0104

287	5.3996	0.0104
288	5.4100	0.0104

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0104	0.0000	0.0104
2	0.0104	0.0000	0.0104
3	0.0105	0.0000	0.0105
4	0.0105	0.0000	0.0105
5	0.0105	0.0000	0.0105
6	0.0105	0.0000	0.0105
7	0.0106	0.0000	0.0106
8	0.0106	0.0000	0.0106
9	0.0106	0.0000	0.0106
10	0.0106	0.0000	0.0106
11	0.0107	0.0000	0.0107
12	0.0107	0.0000	0.0107
13	0.0107	0.0000	0.0107
14	0.0107	0.0000	0.0107
15	0.0108	0.0000	0.0108
16	0.0108	0.0000	0.0108
17	0.0108	0.0000	0.0108
18	0.0108	0.0000	0.0108
19	0.0109	0.0000	0.0109
20	0.0109	0.0000	0.0109
21	0.0109	0.0000	0.0109
22	0.0110	0.0000	0.0110
23	0.0110	0.0000	0.0110
24	0.0110	0.0000	0.0110
25	0.0111	0.0000	0.0111
26	0.0111	0.0000	0.0111
27	0.0111	0.0000	0.0111
28	0.0111	0.0000	0.0111
29	0.0112	0.0000	0.0112
30	0.0112	0.0000	0.0112
31	0.0112	0.0000	0.0112
32	0.0113	0.0000	0.0113
33	0.0113	0.0000	0.0113
34	0.0113	0.0000	0.0113
35	0.0114	0.0000	0.0114
36	0.0114	0.0000	0.0114
37	0.0114	0.0000	0.0114
38	0.0114	0.0000	0.0114
39	0.0115	0.0000	0.0115
40	0.0115	0.0000	0.0115
41	0.0116	0.0000	0.0116
42	0.0116	0.0000	0.0116
43	0.0116	0.0000	0.0116
44	0.0117	0.0000	0.0117
45	0.0117	0.0000	0.0117
46	0.0117	0.0000	0.0117
47	0.0118	0.0000	0.0118
48	0.0118	0.0000	0.0118
49	0.0118	0.0000	0.0118
50	0.0119	0.0000	0.0119
51	0.0119	0.0000	0.0119

52	0.0119	0.0000	0.0119
53	0.0120	0.0000	0.0120
54	0.0120	0.0000	0.0120
55	0.0121	0.0000	0.0121
56	0.0121	0.0000	0.0121
57	0.0121	0.0000	0.0121
58	0.0122	0.0000	0.0122
59	0.0122	0.0000	0.0122
60	0.0123	0.0000	0.0123
61	0.0123	0.0000	0.0123
62	0.0123	0.0000	0.0123
63	0.0124	0.0000	0.0124
64	0.0124	0.0000	0.0124
65	0.0125	0.0000	0.0125
66	0.0125	0.0000	0.0125
67	0.0126	0.0000	0.0126
68	0.0126	0.0000	0.0126
69	0.0127	0.0000	0.0127
70	0.0127	0.0000	0.0127
71	0.0128	0.0000	0.0128
72	0.0128	0.0000	0.0128
73	0.0128	0.0000	0.0128
74	0.0129	0.0000	0.0129
75	0.0129	0.0000	0.0129
76	0.0130	0.0000	0.0130
77	0.0130	0.0000	0.0130
78	0.0131	0.0000	0.0131
79	0.0131	0.0000	0.0131
80	0.0132	0.0000	0.0132
81	0.0133	0.0000	0.0133
82	0.0133	0.0000	0.0133
83	0.0134	0.0000	0.0134
84	0.0134	0.0000	0.0134
85	0.0135	0.0000	0.0135
86	0.0135	0.0000	0.0135
87	0.0136	0.0000	0.0136
88	0.0136	0.0000	0.0136
89	0.0137	0.0000	0.0137
90	0.0137	0.0000	0.0137
91	0.0138	0.0000	0.0138
92	0.0139	0.0000	0.0139
93	0.0139	0.0000	0.0139
94	0.0140	0.0000	0.0140
95	0.0141	0.0000	0.0141
96	0.0141	0.0000	0.0141
97	0.0142	0.0000	0.0142
98	0.0142	0.0000	0.0142
99	0.0143	0.0000	0.0143
100	0.0144	0.0000	0.0144
101	0.0145	0.0000	0.0145
102	0.0145	0.0000	0.0145
103	0.0146	0.0000	0.0146
104	0.0147	0.0000	0.0147
105	0.0148	0.0000	0.0148
106	0.0148	0.0000	0.0148
107	0.0149	0.0000	0.0149
108	0.0150	0.0000	0.0150
109	0.0151	0.0000	0.0151
110	0.0151	0.0000	0.0151
111	0.0152	0.0000	0.0152

112	0.0153	0.0000	0.0153
113	0.0154	0.0000	0.0154
114	0.0155	0.0000	0.0155
115	0.0156	0.0000	0.0156
116	0.0156	0.0000	0.0156
117	0.0158	0.0000	0.0158
118	0.0158	0.0000	0.0158
119	0.0160	0.0000	0.0160
120	0.0160	0.0000	0.0160
121	0.0162	0.0000	0.0162
122	0.0162	0.0000	0.0162
123	0.0164	0.0000	0.0164
124	0.0164	0.0000	0.0164
125	0.0166	0.0000	0.0166
126	0.0166	0.0000	0.0166
127	0.0168	0.0000	0.0168
128	0.0169	0.0000	0.0169
129	0.0170	0.0000	0.0170
130	0.0171	0.0000	0.0171
131	0.0173	0.0000	0.0173
132	0.0174	0.0000	0.0174
133	0.0175	0.0000	0.0175
134	0.0176	0.0000	0.0176
135	0.0178	0.0000	0.0178
136	0.0179	0.0000	0.0179
137	0.0181	0.0000	0.0181
138	0.0182	0.0000	0.0182
139	0.0184	0.0000	0.0184
140	0.0185	0.0000	0.0185
141	0.0187	0.0000	0.0187
142	0.0188	0.0000	0.0188
143	0.0190	0.0000	0.0190
144	0.0191	0.0000	0.0191
145	0.0152	0.0000	0.0152
146	0.0154	0.0000	0.0154
147	0.0156	0.0000	0.0156
148	0.0157	0.0000	0.0157
149	0.0160	0.0000	0.0160
150	0.0162	0.0000	0.0162
151	0.0164	0.0000	0.0164
152	0.0166	0.0000	0.0166
153	0.0169	0.0000	0.0169
154	0.0171	0.0000	0.0171
155	0.0174	0.0000	0.0174
156	0.0176	0.0000	0.0176
157	0.0180	0.0000	0.0180
158	0.0181	0.0000	0.0181
159	0.0186	0.0000	0.0186
160	0.0188	0.0000	0.0188
161	0.0192	0.0000	0.0192
162	0.0194	0.0000	0.0194
163	0.0199	0.0000	0.0199
164	0.0202	0.0000	0.0202
165	0.0207	0.0000	0.0207
166	0.0210	0.0000	0.0210
167	0.0216	0.0000	0.0216
168	0.0219	0.0000	0.0219
169	0.0226	0.0000	0.0226
170	0.0230	0.0000	0.0230
171	0.0238	0.0000	0.0238

172	0.0242	0.0000	0.0242
173	0.0251	0.0000	0.0251
174	0.0256	0.0000	0.0256
175	0.0267	0.0000	0.0267
176	0.0273	0.0000	0.0273
177	0.0286	0.0000	0.0286
178	0.0293	0.0000	0.0293
179	0.0309	0.0000	0.0309
180	0.0317	0.0000	0.0317
181	0.0337	0.0000	0.0337
182	0.0349	0.0000	0.0349
183	0.0375	0.0000	0.0375
184	0.0391	0.0000	0.0391
185	0.0296	0.0000	0.0296
186	0.0316	0.0000	0.0316
187	0.0366	0.0000	0.0366
188	0.0400	0.0000	0.0400
189	0.0497	0.0000	0.0497
190	0.0573	0.0000	0.0573
191	0.0869	0.0000	0.0869
192	0.1261	0.0000	0.1261
193	0.5457	0.0000	0.5457
194	0.0684	0.0000	0.0684
195	0.0442	0.0000	0.0442
196	0.0339	0.0000	0.0339
197	0.0408	0.0000	0.0408
198	0.0361	0.0000	0.0361
199	0.0327	0.0000	0.0327
200	0.0300	0.0000	0.0300
201	0.0279	0.0000	0.0279
202	0.0261	0.0000	0.0261
203	0.0247	0.0000	0.0247
204	0.0234	0.0000	0.0234
205	0.0223	0.0000	0.0223
206	0.0213	0.0000	0.0213
207	0.0204	0.0000	0.0204
208	0.0197	0.0000	0.0197
209	0.0190	0.0000	0.0190
210	0.0183	0.0000	0.0183
211	0.0178	0.0000	0.0178
212	0.0172	0.0000	0.0172
213	0.0168	0.0000	0.0168
214	0.0163	0.0000	0.0163
215	0.0159	0.0000	0.0159
216	0.0155	0.0000	0.0155
217	0.0193	0.0000	0.0193
218	0.0189	0.0000	0.0189
219	0.0186	0.0000	0.0186
220	0.0183	0.0000	0.0183
221	0.0180	0.0000	0.0180
222	0.0177	0.0000	0.0177
223	0.0174	0.0000	0.0174
224	0.0172	0.0000	0.0172
225	0.0169	0.0000	0.0169
226	0.0167	0.0000	0.0167
227	0.0165	0.0000	0.0165
228	0.0163	0.0000	0.0163
229	0.0161	0.0000	0.0161
230	0.0159	0.0000	0.0159
231	0.0157	0.0000	0.0157

232	0.0155	0.0000	0.0155
233	0.0153	0.0000	0.0153
234	0.0152	0.0000	0.0152
235	0.0150	0.0000	0.0150
236	0.0149	0.0000	0.0149
237	0.0147	0.0000	0.0147
238	0.0146	0.0000	0.0146
239	0.0144	0.0000	0.0144
240	0.0143	0.0000	0.0143
241	0.0142	0.0000	0.0142
242	0.0140	0.0000	0.0140
243	0.0139	0.0000	0.0139
244	0.0138	0.0000	0.0138
245	0.0137	0.0000	0.0137
246	0.0135	0.0000	0.0135
247	0.0134	0.0000	0.0134
248	0.0133	0.0000	0.0133
249	0.0132	0.0000	0.0132
250	0.0131	0.0000	0.0131
251	0.0130	0.0000	0.0130
252	0.0129	0.0000	0.0129
253	0.0128	0.0000	0.0128
254	0.0127	0.0000	0.0127
255	0.0126	0.0000	0.0126
256	0.0125	0.0000	0.0125
257	0.0125	0.0000	0.0125
258	0.0124	0.0000	0.0124
259	0.0123	0.0000	0.0123
260	0.0122	0.0000	0.0122
261	0.0121	0.0000	0.0121
262	0.0120	0.0000	0.0120
263	0.0120	0.0000	0.0120
264	0.0119	0.0000	0.0119
265	0.0118	0.0000	0.0118
266	0.0117	0.0000	0.0117
267	0.0117	0.0000	0.0117
268	0.0116	0.0000	0.0116
269	0.0115	0.0000	0.0115
270	0.0115	0.0000	0.0115
271	0.0114	0.0000	0.0114
272	0.0113	0.0000	0.0113
273	0.0113	0.0000	0.0113
274	0.0112	0.0000	0.0112
275	0.0112	0.0000	0.0112
276	0.0111	0.0000	0.0111
277	0.0110	0.0000	0.0110
278	0.0110	0.0000	0.0110
279	0.0109	0.0000	0.0109
280	0.0109	0.0000	0.0109
281	0.0108	0.0000	0.0108
282	0.0108	0.0000	0.0108
283	0.0107	0.0000	0.0107
284	0.0106	0.0000	0.0106
285	0.0106	0.0000	0.0106
286	0.0105	0.0000	0.0105
287	0.0105	0.0000	0.0105
288	0.0104	0.0000	0.0104

--

```
--
      Total soil rain loss =      0.00(In)
      Total effective rainfall =      5.41(In)
      Peak flow rate in flood hydrograph =      2.45(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   5   Minute intervals ((CFS))

      ------------------------------------------------------------------
--
  Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5
10.0

------------------------------------------------------------------------
    0+ 5       0.0001      0.01  Q         |         |         |
|
    0+10       0.0005      0.06  Q         |         |         |
|
    0+15       0.0010      0.07  Q         |         |         |
|
    0+20       0.0015      0.07  Q         |         |         |
|
    0+25       0.0020      0.08  Q         |         |         |
|
    0+30       0.0026      0.08  Q         |         |         |
|
    0+35       0.0031      0.08  Q         |         |         |
|
    0+40       0.0037      0.08  Q         |         |         |
|
    0+45       0.0042      0.08  Q         |         |         |
|
    0+50       0.0048      0.08  Q         |         |         |
|
    0+55       0.0054      0.08  Q         |         |         |
|
    1+ 0       0.0059      0.08  Q         |         |         |
|
    1+ 5       0.0065      0.08  Q         |         |         |
|
    1+10       0.0071      0.08  Q         |         |         |
|
    1+15       0.0077      0.08  QV        |         |         |
|
    1+20       0.0082      0.08  QV        |         |         |
|
    1+25       0.0088      0.08  QV        |         |         |
|
    1+30       0.0094      0.08  QV        |         |         |
|
    1+35       0.0100      0.08  QV        |         |         |
|
    1+40       0.0105      0.08  QV        |         |         |
|
```

1+45	0.0111	0.08	QV			
1+50	0.0117	0.08	QV			
1+55	0.0123	0.08	QV			
2+ 0	0.0129	0.08	QV			
2+ 5	0.0135	0.09	QV			
2+10	0.0140	0.09	QV			
2+15	0.0146	0.09	Q V			
2+20	0.0152	0.09	Q V			
2+25	0.0158	0.09	Q V			
2+30	0.0164	0.09	Q V			
2+35	0.0170	0.09	Q V			
2+40	0.0176	0.09	Q V			
2+45	0.0182	0.09	Q V			
2+50	0.0188	0.09	Q V			
2+55	0.0194	0.09	Q V			
3+ 0	0.0200	0.09	Q V			
3+ 5	0.0206	0.09	Q V			
3+10	0.0212	0.09	Q V			
3+15	0.0218	0.09	Q V			
3+20	0.0224	0.09	Q V			
3+25	0.0231	0.09	Q V			
3+30	0.0237	0.09	Q V			
3+35	0.0243	0.09	Q V			
3+40	0.0249	0.09	Q V			
3+45	0.0255	0.09	Q V			
3+50	0.0262	0.09	Q V			
3+55	0.0268	0.09	Q V			
4+ 0	0.0274	0.09	Q V			
4+ 5	0.0280	0.09	Q V			
4+10	0.0287	0.09	Q V			

4+15	0.0293	0.09	Q	V			
4+20	0.0299	0.09	Q	V			
4+25	0.0306	0.09	Q	V			
4+30	0.0312	0.09	Q	V			
4+35	0.0318	0.09	Q	V			
4+40	0.0325	0.09	Q	V			
4+45	0.0331	0.09	Q	V			
4+50	0.0338	0.09	Q	V			
4+55	0.0344	0.09	Q	V			
5+ 0	0.0351	0.09	Q	V			
5+ 5	0.0357	0.09	Q	V			
5+10	0.0364	0.10	Q	V			
5+15	0.0370	0.10	Q	V			
5+20	0.0377	0.10	Q	V			
5+25	0.0384	0.10	Q	V			
5+30	0.0390	0.10	Q	V			
5+35	0.0397	0.10	Q	V			
5+40	0.0404	0.10	Q	V			
5+45	0.0410	0.10	Q	V			
5+50	0.0417	0.10	Q	V			
5+55	0.0424	0.10	Q	V			
6+ 0	0.0431	0.10	Q	V			
6+ 5	0.0437	0.10	Q	V			
6+10	0.0444	0.10	Q	V			
6+15	0.0451	0.10	Q	V			
6+20	0.0458	0.10	Q	V			
6+25	0.0465	0.10	Q	V			
6+30	0.0472	0.10	Q	V			
6+35	0.0479	0.10	Q	V			
6+40	0.0486	0.10	Q	V			

6+45	0.0493	0.10	Q	V			
6+50	0.0500	0.10	Q	V			
6+55	0.0507	0.10	Q	V			
7+ 0	0.0514	0.10	Q	V			
7+ 5	0.0521	0.10	Q	V			
7+10	0.0528	0.10	Q	V			
7+15	0.0536	0.10	Q	V			
7+20	0.0543	0.10	Q	V			
7+25	0.0550	0.11	Q	V			
7+30	0.0557	0.11	Q	V			
7+35	0.0565	0.11	Q	V			
7+40	0.0572	0.11	Q	V			
7+45	0.0579	0.11	Q	V			
7+50	0.0587	0.11	Q	V			
7+55	0.0594	0.11	Q	V			
8+ 0	0.0602	0.11	Q	V			
8+ 5	0.0609	0.11	Q	V			
8+10	0.0617	0.11	Q	V			
8+15	0.0624	0.11	Q	V			
8+20	0.0632	0.11	Q	V			
8+25	0.0640	0.11	Q	V			
8+30	0.0647	0.11	Q	V			
8+35	0.0655	0.11	Q	V			
8+40	0.0663	0.11	Q	V			
8+45	0.0671	0.11	Q	V			
8+50	0.0678	0.11	Q	V			
8+55	0.0686	0.11	Q	V			
9+ 0	0.0694	0.12	Q	V			
9+ 5	0.0702	0.12	Q	V			
9+10	0.0710	0.12	Q	V			

9+15	0.0718	0.12	Q	V|	|	|
9+20	0.0726	0.12	Q	V	|	|
9+25	0.0735	0.12	Q	V	|	|
9+30	0.0743	0.12	Q	V	|	|
9+35	0.0751	0.12	Q	V	|	|
9+40	0.0759	0.12	Q	V	|	|
9+45	0.0768	0.12	Q	V	|	|
9+50	0.0776	0.12	Q	V	|	|
9+55	0.0784	0.12	Q	V	|	|
10+ 0	0.0793	0.12	Q	V	|	|
10+ 5	0.0801	0.12	Q	|V	|	|
10+10	0.0810	0.12	Q	|V	|	|
10+15	0.0819	0.13	Q	|V	|	|
10+20	0.0827	0.13	Q	|V	|	|
10+25	0.0836	0.13	Q	|V	|	|
10+30	0.0845	0.13	Q	|V	|	|
10+35	0.0854	0.13	Q	|V	|	|
10+40	0.0863	0.13	Q	|V	|	|
10+45	0.0872	0.13	Q	| V	|	|
10+50	0.0881	0.13	Q	| V	|	|
10+55	0.0890	0.13	Q	| V	|	|
11+ 0	0.0899	0.13	Q	| V	|	|
11+ 5	0.0908	0.13	Q	| V	|	|
11+10	0.0917	0.14	Q	| V	|	|
11+15	0.0927	0.14	Q	| V	|	|
11+20	0.0936	0.14	Q	| V	|	|
11+25	0.0946	0.14	Q	| V	|	|
11+30	0.0955	0.14	Q	| V	|	|
11+35	0.0965	0.14	Q	| V	|	|
11+40	0.0975	0.14	Q	| V	|	|

11+45	0.0985	0.14	Q	| V |		
11+50	0.0994	0.14	Q	| V |		
11+55	0.1004	0.15	Q	| V |		
12+ 0	0.1015	0.15	Q	| V |		
12+ 5	0.1024	0.14	Q	| V |		
12+10	0.1033	0.13	Q	| V |		
12+15	0.1042	0.12	Q	| V |		
12+20	0.1050	0.12	Q	| V |		
12+25	0.1059	0.12	Q	| V |		
12+30	0.1067	0.12	Q	| V |		
12+35	0.1076	0.12	Q	| V |		
12+40	0.1084	0.13	Q	| V |		
12+45	0.1093	0.13	Q	| V |		
12+50	0.1102	0.13	Q	| V |		
12+55	0.1111	0.13	Q	| V |		
13+ 0	0.1120	0.13	Q	| V |		
13+ 5	0.1130	0.14	Q	| V |		
13+10	0.1139	0.14	Q	| V |		
13+15	0.1149	0.14	Q	| V |		
13+20	0.1159	0.14	Q	| V |		
13+25	0.1169	0.14	Q	| V |		
13+30	0.1179	0.15	Q	| V |		
13+35	0.1189	0.15	Q	| V |		
13+40	0.1200	0.15	Q	| V |		
13+45	0.1210	0.16	Q	| V |		
13+50	0.1221	0.16	Q	| V |		
13+55	0.1232	0.16	Q	| V |		
14+ 0	0.1244	0.17	Q	| V |		
14+ 5	0.1255	0.17	Q	| V |		
14+10	0.1267	0.17	Q	| V |		

14+15	0.1280	0.18	Q	|	V |	|
14+20	0.1292	0.18	Q	|	V |	|
14+25	0.1305	0.19	Q	|	V |	|
14+30	0.1318	0.19	Q	|	V |	|
14+35	0.1332	0.20	Q	|	V |	|
14+40	0.1346	0.20	Q	|	V |	|
14+45	0.1360	0.21	Q	|	V |	|
14+50	0.1375	0.22	Q	|	V|	|
14+55	0.1391	0.22	Q	|	V|	|
15+ 0	0.1407	0.23	Q	|	V|	|
15+ 5	0.1423	0.24	Q	|	V|	|
15+10	0.1441	0.26	|Q	|	V|	|
15+15	0.1460	0.27	|Q	|	V	|
15+20	0.1479	0.28	|Q	|	V	|
15+25	0.1498	0.28	|Q	|	V	|
15+30	0.1516	0.25	|Q	|	|V	|
15+35	0.1533	0.26	|Q	|	|V	|
15+40	0.1552	0.28	|Q	|	|V	|
15+45	0.1574	0.31	|Q	|	|V	|
15+50	0.1599	0.37	|Q	|	| V	|
15+55	0.1630	0.45	|Q	|	| V	|
16+ 0	0.1674	0.64	| Q	|	| V	|
16+ 5	0.1774	1.44	| Q |		| V	|
16+10	0.1943	2.45	| Q|		| V	|
16+15	0.2020	1.13	| Q |		| V |	
16+20	0.2066	0.67	| Q |		| V |	
16+25	0.2099	0.48	|Q |		| V|	
16+30	0.2127	0.40	|Q |		| V|	
16+35	0.2150	0.34	|Q |		| V|	
16+40	0.2170	0.30	|Q |		| V	

16+45	0.2187	0.24	Q	|	|	V |
16+50	0.2203	0.22	Q	|	|	V |
16+55	0.2217	0.21	Q	|	|	V |
17+ 0	0.2231	0.20	Q	|	|	V |
17+ 5	0.2244	0.19	Q	|	|	|V |
17+10	0.2256	0.18	Q	|	|	|V |
17+15	0.2267	0.17	Q	|	|	|V |
17+20	0.2279	0.16	Q	|	|	|V |
17+25	0.2289	0.16	Q	|	|	|V |
17+30	0.2300	0.15	Q	|	|	|V |
17+35	0.2310	0.14	Q	|	|	| V |
17+40	0.2319	0.14	Q	|	|	| V |
17+45	0.2329	0.14	Q	|	|	| V |
17+50	0.2338	0.13	Q	|	|	| V |
17+55	0.2346	0.13	Q	|	|	| V |
18+ 0	0.2355	0.12	Q	|	|	| V |
18+ 5	0.2364	0.13	Q	|	|	| V |
18+10	0.2373	0.14	Q	|	|	| V |
18+15	0.2383	0.14	Q	|	|	| V |
18+20	0.2393	0.14	Q	|	|	| V |
18+25	0.2403	0.14	Q	|	|	| V |
18+30	0.2412	0.14	Q	|	|	| V |
18+35	0.2422	0.14	Q	|	|	| V |
18+40	0.2431	0.14	Q	|	|	| V |
18+45	0.2440	0.13	Q	|	|	| V |
18+50	0.2450	0.13	Q	|	|	| V |
18+55	0.2459	0.13	Q	|	|	| V |
19+ 0	0.2467	0.13	Q	|	|	| V |
19+ 5	0.2476	0.13	Q	|	|	| V |
19+10	0.2485	0.13	Q	|	|	| V |

19+15	0.2493	0.12	Q	|	|	|	V |
19+20	0.2502	0.12	Q	|	|	|	V |
19+25	0.2510	0.12	Q	|	|	|	V |
19+30	0.2518	0.12	Q	|	|	|	V |
19+35	0.2526	0.12	Q	|	|	|	V |
19+40	0.2534	0.12	Q	|	|	|	V |
19+45	0.2542	0.12	Q	|	|	|	V |
19+50	0.2550	0.11	Q	|	|	|	V |
19+55	0.2558	0.11	Q	|	|	|	V |
20+ 0	0.2566	0.11	Q	|	|	|	V |
20+ 5	0.2573	0.11	Q	|	|	|	V |
20+10	0.2581	0.11	Q	|	|	|	V |
20+15	0.2588	0.11	Q	|	|	|	V |
20+20	0.2596	0.11	Q	|	|	|	V |
20+25	0.2603	0.11	Q	|	|	|	V |
20+30	0.2611	0.11	Q	|	|	|	V |
20+35	0.2618	0.11	Q	|	|	|	V |
20+40	0.2625	0.10	Q	|	|	|	V |
20+45	0.2632	0.10	Q	|	|	|	V |
20+50	0.2639	0.10	Q	|	|	|	V |
20+55	0.2646	0.10	Q	|	|	|	V |
21+ 0	0.2653	0.10	Q	|	|	|	V |
21+ 5	0.2660	0.10	Q	|	|	|	V |
21+10	0.2667	0.10	Q	|	|	|	V |
21+15	0.2674	0.10	Q	|	|	|	V |
21+20	0.2681	0.10	Q	|	|	|	V |
21+25	0.2687	0.10	Q	|	|	|	V |
21+30	0.2694	0.10	Q	|	|	|	V |
21+35	0.2701	0.10	Q	|	|	|	V |
21+40	0.2707	0.10	Q	|	|	|	V |

21+45	0.2714	0.09	Q				V
21+50	0.2720	0.09	Q				V
21+55	0.2727	0.09	Q				V
22+ 0	0.2733	0.09	Q				V
22+ 5	0.2739	0.09	Q				V
22+10	0.2746	0.09	Q				V
22+15	0.2752	0.09	Q				V
22+20	0.2758	0.09	Q				V
22+25	0.2764	0.09	Q				V
22+30	0.2770	0.09	Q				V
22+35	0.2777	0.09	Q				V
22+40	0.2783	0.09	Q				V
22+45	0.2789	0.09	Q				V
22+50	0.2795	0.09	Q				V
22+55	0.2801	0.09	Q				V
23+ 0	0.2807	0.09	Q				V
23+ 5	0.2813	0.09	Q				V
23+10	0.2819	0.09	Q				V
23+15	0.2824	0.09	Q				V
23+20	0.2830	0.08	Q				V
23+25	0.2836	0.08	Q				V
23+30	0.2842	0.08	Q				V
23+35	0.2848	0.08	Q				V
23+40	0.2853	0.08	Q				V
23+45	0.2859	0.08	Q				V
23+50	0.2865	0.08	Q				V
23+55	0.2870	0.08	Q				V
24+ 0	0.2876	0.08	Q				V
24+ 5	0.2880	0.07	Q				V
24+10	0.2882	0.03	Q				V

```
   24+15       0.2883      0.01  Q         |          |          |
V|
   24+20       0.2883      0.01  Q         |          |          |
V|
   24+25       0.2884      0.00  Q         |          |          |
V|
   24+30       0.2884      0.00  Q         |          |          |
V|
   24+35       0.2884      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

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2004, Version 7.0

Study date 11/21/22

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San Bernardino County Synthetic Unit Hydrology Method
Manual date - August 1986

Program License Serial Number 6232

Luna 395
SCS Hydrograph
Area D
100 Year

Storm Event Year = 100

Antecedent Moisture Condition = 3

English (in-lb) Input Units Used

English Rainfall Data (Inches) Input Values Used

English Units used in output format

Area averaged rainfall intensity isohyetal data:

Sub-Area (Ac.)	Duration (hours)	Isohyetal (In)
Rainfall data for year 100		
2.10	1	1.15
Rainfall data for year 100		
2.10	6	2.51
Rainfall data for year 100		
2.10	24	6.00

++

```
      ******** Area-averaged max loss rate, Fm ********


      SCS curve  SCS curve     Area     Area     Fp(Fig C6)    Ap
Fm
      No.(AMCII) NO.(AMC 3)    (Ac.)    Fraction     (In/Hr)   (dec.)
(In/Hr)
       32.0      52.0          2.10      1.000     0.785    0.010
0.008

      Area-averaged adjusted loss rate Fm (In/Hr) =  0.008

      ********* Area-Averaged low loss rate fraction, Yb **********

      Area       Area          SCS CN    SCS CN      S     Pervious
       (Ac.)      Fract         (AMC2)    (AMC3)           Yield Fr
           0.02   0.010         32.0      52.0       9.23     0.215
           2.08   0.990         98.0      98.0       0.20     0.960

      Area-averaged catchment yield fraction, Y =  0.953
      Area-averaged low loss fraction, Yb =  0.047
      User entry of time of concentration  =   0.100 (hours)
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++
      Watershed area =       2.10(Ac.)
      Catchment Lag time =   0.080 hours
      Unit interval =   5.000 minutes
      Unit interval percentage of lag time = 104.1667
      Hydrograph baseflow =     0.00(CFS)
      Average maximum watershed loss rate(Fm) =  0.000(In/Hr)
      Average low loss rate fraction (Yb) = 0.052 (decimal)
      Note: user entry of the Fm value
      Note: user entry of the Yb value
      DESERT S-Graph Selected
      Computed peak 5-minute rainfall =  0.548(In)
      Computed peak 30-minute rainfall =  0.937(In)
      Specified peak 1-hour rainfall =  1.154(In)
      Computed peak 3-hour rainfall =  1.858(In)
      Specified peak 6-hour rainfall =  2.510(In)
      Specified peak 24-hour rainfall =  6.000(In)


      Rainfall depth area reduction factors:
      Using a total area of       2.10(Ac.) (Ref: fig. E-4)

      5-minute factor = 1.000     Adjusted rainfall =  0.548(In)
      30-minute factor = 1.000    Adjusted rainfall =  0.937(In)
      1-hour factor = 1.000       Adjusted rainfall =  1.154(In)
      3-hour factor = 1.000       Adjusted rainfall =  1.858(In)
      6-hour factor = 1.000       Adjusted rainfall =  2.510(In)
      24-hour factor = 1.000      Adjusted rainfall =  6.000(In)
      ------------------------------------------------------------------
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                      U n i t  H y d r o g r a p h
      ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
+++
      Interval          'S' Graph          Unit Hydrograph
      Number            Mean values             ((CFS))
      ------------------------------------------------------------------
```

(K = 25.40 (CFS))

1	18.591	4.722
2	68.747	12.738
3	85.045	4.139
4	92.196	1.816
5	96.028	0.973
6	98.002	0.501
7	99.202	0.305
8	100.000	0.203

Peak Unit Number	Adjusted mass rainfall (In)	Unit rainfall (In)
1	0.5475	0.5475
2	0.6741	0.1266
3	0.7613	0.0872
4	0.8299	0.0686
5	0.8874	0.0575
6	0.9372	0.0499
7	0.9816	0.0444
8	1.0217	0.0401
9	1.0585	0.0367
10	1.0925	0.0340
11	1.1242	0.0317
12	1.1539	0.0297
13	1.1947	0.0408
14	1.2337	0.0390
15	1.2712	0.0375
16	1.3072	0.0361
17	1.3421	0.0348
18	1.3758	0.0337
19	1.4084	0.0326
20	1.4401	0.0317
21	1.4709	0.0308
22	1.5009	0.0300
23	1.5301	0.0292
24	1.5586	0.0285
25	1.5865	0.0278
26	1.6137	0.0272
27	1.6403	0.0266
28	1.6664	0.0261
29	1.6919	0.0256
30	1.7170	0.0251
31	1.7416	0.0246
32	1.7658	0.0241
33	1.7895	0.0237
34	1.8128	0.0233
35	1.8357	0.0229
36	1.8583	0.0226
37	1.8805	0.0222
38	1.9024	0.0219
39	1.9240	0.0216
40	1.9452	0.0212
41	1.9661	0.0209
42	1.9868	0.0207
43	2.0072	0.0204
44	2.0273	0.0201
45	2.0471	0.0199

46	2.0667	0.0196
47	2.0861	0.0194
48	2.1052	0.0191
49	2.1242	0.0189
50	2.1428	0.0187
51	2.1613	0.0185
52	2.1796	0.0183
53	2.1977	0.0181
54	2.2156	0.0179
55	2.2333	0.0177
56	2.2508	0.0175
57	2.2681	0.0173
58	2.2853	0.0172
59	2.3023	0.0170
60	2.3192	0.0168
61	2.3358	0.0167
62	2.3524	0.0165
63	2.3688	0.0164
64	2.3850	0.0162
65	2.4011	0.0161
66	2.4170	0.0160
67	2.4328	0.0158
68	2.4485	0.0157
69	2.4641	0.0156
70	2.4795	0.0154
71	2.4948	0.0153
72	2.5100	0.0152
73	2.5318	0.0219
74	2.5536	0.0217
75	2.5752	0.0216
76	2.5968	0.0215
77	2.6182	0.0214
78	2.6395	0.0213
79	2.6607	0.0212
80	2.6819	0.0211
81	2.7029	0.0210
82	2.7238	0.0209
83	2.7446	0.0208
84	2.7654	0.0207
85	2.7860	0.0207
86	2.8066	0.0206
87	2.8271	0.0205
88	2.8475	0.0204
89	2.8678	0.0203
90	2.8880	0.0202
91	2.9081	0.0201
92	2.9281	0.0200
93	2.9481	0.0200
94	2.9680	0.0199
95	2.9878	0.0198
96	3.0075	0.0197
97	3.0272	0.0197
98	3.0468	0.0196
99	3.0663	0.0195
100	3.0857	0.0194
101	3.1051	0.0194
102	3.1244	0.0193
103	3.1436	0.0192
104	3.1628	0.0192
105	3.1818	0.0191

106	3.2009	0.0190
107	3.2198	0.0189
108	3.2387	0.0189
109	3.2575	0.0188
110	3.2763	0.0188
111	3.2950	0.0187
112	3.3136	0.0186
113	3.3322	0.0186
114	3.3507	0.0185
115	3.3691	0.0184
116	3.3875	0.0184
117	3.4058	0.0183
118	3.4241	0.0183
119	3.4423	0.0182
120	3.4605	0.0182
121	3.4786	0.0181
122	3.4966	0.0180
123	3.5146	0.0180
124	3.5325	0.0179
125	3.5504	0.0179
126	3.5682	0.0178
127	3.5860	0.0178
128	3.6037	0.0177
129	3.6214	0.0177
130	3.6390	0.0176
131	3.6566	0.0176
132	3.6741	0.0175
133	3.6916	0.0175
134	3.7090	0.0174
135	3.7264	0.0174
136	3.7437	0.0173
137	3.7610	0.0173
138	3.7783	0.0172
139	3.7954	0.0172
140	3.8126	0.0171
141	3.8297	0.0171
142	3.8467	0.0171
143	3.8637	0.0170
144	3.8807	0.0170
145	3.8976	0.0169
146	3.9145	0.0169
147	3.9313	0.0168
148	3.9481	0.0168
149	3.9649	0.0167
150	3.9816	0.0167
151	3.9982	0.0167
152	4.0149	0.0166
153	4.0315	0.0166
154	4.0480	0.0165
155	4.0645	0.0165
156	4.0810	0.0165
157	4.0974	0.0164
158	4.1138	0.0164
159	4.1301	0.0163
160	4.1464	0.0163
161	4.1627	0.0163
162	4.1789	0.0162
163	4.1951	0.0162
164	4.2113	0.0162
165	4.2274	0.0161

166	4.2435	0.0161
167	4.2596	0.0161
168	4.2756	0.0160
169	4.2916	0.0160
170	4.3075	0.0159
171	4.3234	0.0159
172	4.3393	0.0159
173	4.3551	0.0158
174	4.3710	0.0158
175	4.3867	0.0158
176	4.4025	0.0157
177	4.4182	0.0157
178	4.4339	0.0157
179	4.4495	0.0156
180	4.4651	0.0156
181	4.4807	0.0156
182	4.4962	0.0155
183	4.5117	0.0155
184	4.5272	0.0155
185	4.5427	0.0155
186	4.5581	0.0154
187	4.5735	0.0154
188	4.5889	0.0154
189	4.6042	0.0153
190	4.6195	0.0153
191	4.6348	0.0153
192	4.6500	0.0152
193	4.6652	0.0152
194	4.6804	0.0152
195	4.6955	0.0152
196	4.7107	0.0151
197	4.7258	0.0151
198	4.7408	0.0151
199	4.7559	0.0150
200	4.7709	0.0150
201	4.7858	0.0150
202	4.8008	0.0150
203	4.8157	0.0149
204	4.8306	0.0149
205	4.8455	0.0149
206	4.8603	0.0148
207	4.8752	0.0148
208	4.8900	0.0148
209	4.9047	0.0148
210	4.9195	0.0147
211	4.9342	0.0147
212	4.9489	0.0147
213	4.9635	0.0147
214	4.9782	0.0146
215	4.9928	0.0146
216	5.0074	0.0146
217	5.0219	0.0146
218	5.0365	0.0145
219	5.0510	0.0145
220	5.0655	0.0145
221	5.0799	0.0145
222	5.0944	0.0144
223	5.1088	0.0144
224	5.1232	0.0144
225	5.1375	0.0144

226	5.1519	0.0143
227	5.1662	0.0143
228	5.1805	0.0143
229	5.1947	0.0143
230	5.2090	0.0142
231	5.2232	0.0142
232	5.2374	0.0142
233	5.2516	0.0142
234	5.2658	0.0142
235	5.2799	0.0141
236	5.2940	0.0141
237	5.3081	0.0141
238	5.3222	0.0141
239	5.3362	0.0140
240	5.3502	0.0140
241	5.3642	0.0140
242	5.3782	0.0140
243	5.3922	0.0140
244	5.4061	0.0139
245	5.4200	0.0139
246	5.4339	0.0139
247	5.4478	0.0139
248	5.4617	0.0139
249	5.4755	0.0138
250	5.4893	0.0138
251	5.5031	0.0138
252	5.5169	0.0138
253	5.5306	0.0138
254	5.5444	0.0137
255	5.5581	0.0137
256	5.5718	0.0137
257	5.5854	0.0137
258	5.5991	0.0137
259	5.6127	0.0136
260	5.6263	0.0136
261	5.6399	0.0136
262	5.6535	0.0136
263	5.6671	0.0136
264	5.6806	0.0135
265	5.6941	0.0135
266	5.7076	0.0135
267	5.7211	0.0135
268	5.7346	0.0135
269	5.7480	0.0134
270	5.7614	0.0134
271	5.7748	0.0134
272	5.7882	0.0134
273	5.8016	0.0134
274	5.8149	0.0134
275	5.8283	0.0133
276	5.8416	0.0133
277	5.8549	0.0133
278	5.8682	0.0133
279	5.8814	0.0133
280	5.8947	0.0132
281	5.9079	0.0132
282	5.9211	0.0132
283	5.9343	0.0132
284	5.9475	0.0132
285	5.9606	0.0132

286	5.9738	0.0131
287	5.9869	0.0131
288	6.0000	0.0131

Unit Period (number)	Unit Rainfall (In)	Unit Soil-Loss (In)	Effective Rainfall (In)
1	0.0131	0.0000	0.0131
2	0.0131	0.0000	0.0131
3	0.0132	0.0000	0.0132
4	0.0132	0.0000	0.0132
5	0.0132	0.0000	0.0132
6	0.0132	0.0000	0.0132
7	0.0133	0.0000	0.0133
8	0.0133	0.0000	0.0133
9	0.0133	0.0000	0.0133
10	0.0133	0.0000	0.0133
11	0.0134	0.0000	0.0134
12	0.0134	0.0000	0.0134
13	0.0134	0.0000	0.0134
14	0.0134	0.0000	0.0134
15	0.0135	0.0000	0.0135
16	0.0135	0.0000	0.0135
17	0.0135	0.0000	0.0135
18	0.0136	0.0000	0.0136
19	0.0136	0.0000	0.0136
20	0.0136	0.0000	0.0136
21	0.0137	0.0000	0.0137
22	0.0137	0.0000	0.0137
23	0.0137	0.0000	0.0137
24	0.0137	0.0000	0.0137
25	0.0138	0.0000	0.0138
26	0.0138	0.0000	0.0138
27	0.0138	0.0000	0.0138
28	0.0139	0.0000	0.0139
29	0.0139	0.0000	0.0139
30	0.0139	0.0000	0.0139
31	0.0140	0.0000	0.0140
32	0.0140	0.0000	0.0140
33	0.0140	0.0000	0.0140
34	0.0140	0.0000	0.0140
35	0.0141	0.0000	0.0141
36	0.0141	0.0000	0.0141
37	0.0142	0.0000	0.0142
38	0.0142	0.0000	0.0142
39	0.0142	0.0000	0.0142
40	0.0142	0.0000	0.0142
41	0.0143	0.0000	0.0143
42	0.0143	0.0000	0.0143
43	0.0144	0.0000	0.0144
44	0.0144	0.0000	0.0144
45	0.0144	0.0000	0.0144
46	0.0145	0.0000	0.0145
47	0.0145	0.0000	0.0145
48	0.0145	0.0000	0.0145
49	0.0146	0.0000	0.0146
50	0.0146	0.0000	0.0146

51	0.0147	0.0000	0.0147
52	0.0147	0.0000	0.0147
53	0.0147	0.0000	0.0147
54	0.0148	0.0000	0.0148
55	0.0148	0.0000	0.0148
56	0.0148	0.0000	0.0148
57	0.0149	0.0000	0.0149
58	0.0149	0.0000	0.0149
59	0.0150	0.0000	0.0150
60	0.0150	0.0000	0.0150
61	0.0151	0.0000	0.0151
62	0.0151	0.0000	0.0151
63	0.0152	0.0000	0.0152
64	0.0152	0.0000	0.0152
65	0.0152	0.0000	0.0152
66	0.0153	0.0000	0.0153
67	0.0153	0.0000	0.0153
68	0.0154	0.0000	0.0154
69	0.0154	0.0000	0.0154
70	0.0155	0.0000	0.0155
71	0.0155	0.0000	0.0155
72	0.0155	0.0000	0.0155
73	0.0156	0.0000	0.0156
74	0.0156	0.0000	0.0156
75	0.0157	0.0000	0.0157
76	0.0157	0.0000	0.0157
77	0.0158	0.0000	0.0158
78	0.0158	0.0000	0.0158
79	0.0159	0.0000	0.0159
80	0.0159	0.0000	0.0159
81	0.0160	0.0000	0.0160
82	0.0161	0.0000	0.0161
83	0.0161	0.0000	0.0161
84	0.0162	0.0000	0.0162
85	0.0162	0.0000	0.0162
86	0.0163	0.0000	0.0163
87	0.0163	0.0000	0.0163
88	0.0164	0.0000	0.0164
89	0.0165	0.0000	0.0165
90	0.0165	0.0000	0.0165
91	0.0166	0.0000	0.0166
92	0.0166	0.0000	0.0166
93	0.0167	0.0000	0.0167
94	0.0167	0.0000	0.0167
95	0.0168	0.0000	0.0168
96	0.0169	0.0000	0.0169
97	0.0170	0.0000	0.0170
98	0.0170	0.0000	0.0170
99	0.0171	0.0000	0.0171
100	0.0171	0.0000	0.0171
101	0.0172	0.0000	0.0172
102	0.0173	0.0000	0.0173
103	0.0174	0.0000	0.0174
104	0.0174	0.0000	0.0174
105	0.0175	0.0000	0.0175
106	0.0176	0.0000	0.0176
107	0.0177	0.0000	0.0177
108	0.0177	0.0000	0.0177
109	0.0178	0.0000	0.0178
110	0.0179	0.0000	0.0179

111	0.0180	0.0000	0.0180
112	0.0180	0.0000	0.0180
113	0.0182	0.0000	0.0182
114	0.0182	0.0000	0.0182
115	0.0183	0.0000	0.0183
116	0.0184	0.0000	0.0184
117	0.0185	0.0000	0.0185
118	0.0186	0.0000	0.0186
119	0.0187	0.0000	0.0187
120	0.0188	0.0000	0.0188
121	0.0189	0.0000	0.0189
122	0.0189	0.0000	0.0189
123	0.0191	0.0000	0.0191
124	0.0192	0.0000	0.0192
125	0.0193	0.0000	0.0193
126	0.0194	0.0000	0.0194
127	0.0195	0.0000	0.0195
128	0.0196	0.0000	0.0196
129	0.0197	0.0000	0.0197
130	0.0198	0.0000	0.0198
131	0.0200	0.0000	0.0200
132	0.0200	0.0000	0.0200
133	0.0202	0.0000	0.0202
134	0.0203	0.0000	0.0203
135	0.0205	0.0000	0.0205
136	0.0206	0.0000	0.0206
137	0.0207	0.0000	0.0207
138	0.0208	0.0000	0.0208
139	0.0210	0.0000	0.0210
140	0.0211	0.0000	0.0211
141	0.0213	0.0000	0.0213
142	0.0214	0.0000	0.0214
143	0.0216	0.0000	0.0216
144	0.0217	0.0000	0.0217
145	0.0152	0.0000	0.0152
146	0.0153	0.0000	0.0153
147	0.0156	0.0000	0.0156
148	0.0157	0.0000	0.0157
149	0.0160	0.0000	0.0160
150	0.0161	0.0000	0.0161
151	0.0164	0.0000	0.0164
152	0.0165	0.0000	0.0165
153	0.0168	0.0000	0.0168
154	0.0170	0.0000	0.0170
155	0.0173	0.0000	0.0173
156	0.0175	0.0000	0.0175
157	0.0179	0.0000	0.0179
158	0.0181	0.0000	0.0181
159	0.0185	0.0000	0.0185
160	0.0187	0.0000	0.0187
161	0.0191	0.0000	0.0191
162	0.0194	0.0000	0.0194
163	0.0199	0.0000	0.0199
164	0.0201	0.0000	0.0201
165	0.0207	0.0000	0.0207
166	0.0209	0.0000	0.0209
167	0.0216	0.0000	0.0216
168	0.0219	0.0000	0.0219
169	0.0226	0.0000	0.0226
170	0.0229	0.0000	0.0229

171	0.0237	0.0000	0.0237
172	0.0241	0.0000	0.0241
173	0.0251	0.0000	0.0251
174	0.0256	0.0000	0.0256
175	0.0266	0.0000	0.0266
176	0.0272	0.0000	0.0272
177	0.0285	0.0000	0.0285
178	0.0292	0.0000	0.0292
179	0.0308	0.0000	0.0308
180	0.0317	0.0000	0.0317
181	0.0337	0.0000	0.0337
182	0.0348	0.0000	0.0348
183	0.0375	0.0000	0.0375
184	0.0390	0.0000	0.0390
185	0.0297	0.0000	0.0297
186	0.0317	0.0000	0.0317
187	0.0367	0.0000	0.0367
188	0.0401	0.0000	0.0401
189	0.0499	0.0000	0.0499
190	0.0575	0.0000	0.0575
191	0.0872	0.0000	0.0872
192	0.1266	0.0000	0.1266
193	0.5475	0.0000	0.5475
194	0.0686	0.0000	0.0686
195	0.0444	0.0000	0.0444
196	0.0340	0.0000	0.0340
197	0.0408	0.0000	0.0408
198	0.0361	0.0000	0.0361
199	0.0326	0.0000	0.0326
200	0.0300	0.0000	0.0300
201	0.0278	0.0000	0.0278
202	0.0261	0.0000	0.0261
203	0.0246	0.0000	0.0246
204	0.0233	0.0000	0.0233
205	0.0222	0.0000	0.0222
206	0.0212	0.0000	0.0212
207	0.0204	0.0000	0.0204
208	0.0196	0.0000	0.0196
209	0.0189	0.0000	0.0189
210	0.0183	0.0000	0.0183
211	0.0177	0.0000	0.0177
212	0.0172	0.0000	0.0172
213	0.0167	0.0000	0.0167
214	0.0162	0.0000	0.0162
215	0.0158	0.0000	0.0158
216	0.0154	0.0000	0.0154
217	0.0219	0.0000	0.0219
218	0.0215	0.0000	0.0215
219	0.0212	0.0000	0.0212
220	0.0209	0.0000	0.0209
221	0.0207	0.0000	0.0207
222	0.0204	0.0000	0.0204
223	0.0201	0.0000	0.0201
224	0.0199	0.0000	0.0199
225	0.0197	0.0000	0.0197
226	0.0194	0.0000	0.0194
227	0.0192	0.0000	0.0192
228	0.0190	0.0000	0.0190
229	0.0188	0.0000	0.0188
230	0.0186	0.0000	0.0186

231	0.0184	0.0000	0.0184
232	0.0183	0.0000	0.0183
233	0.0181	0.0000	0.0181
234	0.0179	0.0000	0.0179
235	0.0178	0.0000	0.0178
236	0.0176	0.0000	0.0176
237	0.0175	0.0000	0.0175
238	0.0173	0.0000	0.0173
239	0.0172	0.0000	0.0172
240	0.0171	0.0000	0.0171
241	0.0169	0.0000	0.0169
242	0.0168	0.0000	0.0168
243	0.0167	0.0000	0.0167
244	0.0165	0.0000	0.0165
245	0.0164	0.0000	0.0164
246	0.0163	0.0000	0.0163
247	0.0162	0.0000	0.0162
248	0.0161	0.0000	0.0161
249	0.0160	0.0000	0.0160
250	0.0159	0.0000	0.0159
251	0.0158	0.0000	0.0158
252	0.0157	0.0000	0.0157
253	0.0156	0.0000	0.0156
254	0.0155	0.0000	0.0155
255	0.0154	0.0000	0.0154
256	0.0153	0.0000	0.0153
257	0.0152	0.0000	0.0152
258	0.0151	0.0000	0.0151
259	0.0150	0.0000	0.0150
260	0.0150	0.0000	0.0150
261	0.0149	0.0000	0.0149
262	0.0148	0.0000	0.0148
263	0.0147	0.0000	0.0147
264	0.0146	0.0000	0.0146
265	0.0146	0.0000	0.0146
266	0.0145	0.0000	0.0145
267	0.0144	0.0000	0.0144
268	0.0143	0.0000	0.0143
269	0.0143	0.0000	0.0143
270	0.0142	0.0000	0.0142
271	0.0141	0.0000	0.0141
272	0.0141	0.0000	0.0141
273	0.0140	0.0000	0.0140
274	0.0139	0.0000	0.0139
275	0.0139	0.0000	0.0139
276	0.0138	0.0000	0.0138
277	0.0138	0.0000	0.0138
278	0.0137	0.0000	0.0137
279	0.0136	0.0000	0.0136
280	0.0136	0.0000	0.0136
281	0.0135	0.0000	0.0135
282	0.0135	0.0000	0.0135
283	0.0134	0.0000	0.0134
284	0.0134	0.0000	0.0134
285	0.0133	0.0000	0.0133
286	0.0132	0.0000	0.0132
287	0.0132	0.0000	0.0132
288	0.0131	0.0000	0.0131

--

```
      ------------------------------------------------------------------
--
      Total soil rain loss =      0.00(In)
      Total effective rainfall =      6.00(In)
      Peak flow rate in flood hydrograph =      8.08(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   5   Minute intervals ((CFS))

      ------------------------------------------------------------------
--
  Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5
10.0

-------------------------------------------------------------------------
    0+ 5       0.0004      0.06  Q         |         |         |
|
    0+10       0.0020      0.23  Q         |         |         |
|
    0+15       0.0040      0.28  VQ        |         |         |
|
    0+20       0.0061      0.31  VQ        |         |         |
|
    0+25       0.0083      0.32  VQ        |         |         |
|
    0+30       0.0105      0.33  VQ        |         |         |
|
    0+35       0.0128      0.33  VQ        |         |         |
|
    0+40       0.0152      0.34  VQ        |         |         |
|
    0+45       0.0175      0.34  VQ        |         |         |
|
    0+50       0.0198      0.34  VQ        |         |         |
|
    0+55       0.0221      0.34  VQ        |         |         |
|
    1+ 0       0.0245      0.34  VQ        |         |         |
|
    1+ 5       0.0268      0.34  |Q        |         |         |
|
    1+10       0.0292      0.34  |Q        |         |         |
|
    1+15       0.0315      0.34  |Q        |         |         |
|
    1+20       0.0339      0.34  |Q        |         |         |
|
    1+25       0.0362      0.34  |Q        |         |         |
|
    1+30       0.0386      0.34  |Q        |         |         |
|
    1+35       0.0410      0.34  |Q        |         |         |
|
    1+40       0.0433      0.34  |Q        |         |         |
```

1+45	0.0457	0.35	|Q	|	|	|
1+50	0.0481	0.35	|Q	|	|	|
1+55	0.0505	0.35	|Q	|	|	|
2+ 0	0.0529	0.35	|QV	|	|	|
2+ 5	0.0553	0.35	|QV	|	|	|
2+10	0.0577	0.35	|QV	|	|	|
2+15	0.0601	0.35	|QV	|	|	|
2+20	0.0625	0.35	|QV	|	|	|
2+25	0.0649	0.35	|QV	|	|	|
2+30	0.0674	0.35	|QV	|	|	|
2+35	0.0698	0.35	|QV	|	|	|
2+40	0.0722	0.35	|QV	|	|	|
2+45	0.0747	0.35	|QV	|	|	|
2+50	0.0771	0.36	|QV	|	|	|
2+55	0.0796	0.36	|Q V	|	|	|
3+ 0	0.0820	0.36	|Q V	|	|	|
3+ 5	0.0845	0.36	|Q V	|	|	|
3+10	0.0870	0.36	|Q V	|	|	|
3+15	0.0895	0.36	|Q V	|	|	|
3+20	0.0920	0.36	|Q V	|	|	|
3+25	0.0944	0.36	|Q V	|	|	|
3+30	0.0969	0.36	|Q V	|	|	|
3+35	0.0994	0.36	|Q V	|	|	|
3+40	0.1020	0.36	|Q V	|	|	|
3+45	0.1045	0.37	|Q V	|	|	|
3+50	0.1070	0.37	|Q V	|	|	|
3+55	0.1095	0.37	|Q V	|	|	|
4+ 0	0.1121	0.37	|Q V	|	|	|
4+ 5	0.1146	0.37	|Q V	|	|	|
4+10	0.1171	0.37	|Q V	|	|	|

4+15	0.1197	0.37	|Q V |	|	|
4+20	0.1223	0.37	|Q V |	|	|
4+25	0.1248	0.37	|Q V |	|	|
4+30	0.1274	0.37	|Q V |	|	|
4+35	0.1300	0.37	|Q V |	|	|
4+40	0.1326	0.38	|Q V |	|	|
4+45	0.1352	0.38	|Q V |	|	|
4+50	0.1378	0.38	|Q V |	|	|
4+55	0.1404	0.38	|Q V |	|	|
5+ 0	0.1430	0.38	|Q V |	|	|
5+ 5	0.1456	0.38	|Q V |	|	|
5+10	0.1482	0.38	|Q V |	|	|
5+15	0.1509	0.38	|Q V |	|	|
5+20	0.1535	0.38	|Q V |	|	|
5+25	0.1562	0.39	|Q V |	|	|
5+30	0.1588	0.39	|Q V |	|	|
5+35	0.1615	0.39	|Q V |	|	|
5+40	0.1642	0.39	|Q V |	|	|
5+45	0.1669	0.39	|Q V |	|	|
5+50	0.1696	0.39	|Q V |	|	|
5+55	0.1723	0.39	|Q V |	|	|
6+ 0	0.1750	0.39	|Q V |	|	|
6+ 5	0.1777	0.39	|Q V |	|	|
6+10	0.1804	0.40	|Q V |	|	|
6+15	0.1831	0.40	|Q V |	|	|
6+20	0.1859	0.40	|Q V |	|	|
6+25	0.1886	0.40	|Q V |	|	|
6+30	0.1914	0.40	|Q V |	|	|
6+35	0.1942	0.40	|Q V |	|	|
6+40	0.1969	0.40	|Q V |	|	|

6+45	0.1997	0.40	|Q V |	|	|
6+50	0.2025	0.41	|Q V |	|	|
6+55	0.2053	0.41	|Q V |	|	|
7+ 0	0.2082	0.41	|Q V |	|	|
7+ 5	0.2110	0.41	|Q V |	|	|
7+10	0.2138	0.41	|Q V |	|	|
7+15	0.2167	0.41	|Q V |	|	|
7+20	0.2195	0.41	|Q V |	|	|
7+25	0.2224	0.42	|Q V |	|	|
7+30	0.2252	0.42	|Q V |	|	|
7+35	0.2281	0.42	|Q V |	|	|
7+40	0.2310	0.42	|Q V |	|	|
7+45	0.2339	0.42	|Q V |	|	|
7+50	0.2368	0.42	|Q V|	|	|
7+55	0.2398	0.42	|Q V|	|	|
8+ 0	0.2427	0.43	|Q V|	|	|
8+ 5	0.2457	0.43	|Q V|	|	|
8+10	0.2486	0.43	|Q V|	|	|
8+15	0.2516	0.43	|Q V|	|	|
8+20	0.2546	0.43	|Q V|	|	|
8+25	0.2576	0.43	|Q V|	|	|
8+30	0.2606	0.44	|Q V|	|	|
8+35	0.2636	0.44	|Q V	|	|
8+40	0.2666	0.44	|Q V	|	|
8+45	0.2697	0.44	|Q V	|	|
8+50	0.2727	0.44	|Q V	|	|
8+55	0.2758	0.45	|Q V	|	|
9+ 0	0.2789	0.45	|Q V	|	|
9+ 5	0.2820	0.45	|Q V	|	|
9+10	0.2851	0.45	|Q V	|	|

|
| 9+15 | 0.2882 | 0.45 | Q | V | | |
|
| 9+20 | 0.2914 | 0.46 | Q | V | | |
|
| 9+25 | 0.2945 | 0.46 | Q | V | | |
|
| 9+30 | 0.2977 | 0.46 | Q | V | | |
|
| 9+35 | 0.3009 | 0.46 | Q | V | | |
|
| 9+40 | 0.3041 | 0.46 | Q | V | | |
|
| 9+45 | 0.3073 | 0.47 | Q | V | | |
|
| 9+50 | 0.3105 | 0.47 | Q | V | | |
|
| 9+55 | 0.3137 | 0.47 | Q | V | | |
|
| 10+ 0 | 0.3170 | 0.47 | Q | V | | |
|
| 10+ 5 | 0.3203 | 0.48 | Q | V | | |
|
| 10+10 | 0.3236 | 0.48 | Q | V | | |
|
| 10+15 | 0.3269 | 0.48 | Q | V | | |
|
| 10+20 | 0.3302 | 0.48 | Q | V | | |
|
| 10+25 | 0.3336 | 0.49 | Q | V | | |
|
| 10+30 | 0.3369 | 0.49 | Q | V | | |
|
| 10+35 | 0.3403 | 0.49 | Q | V | | |
|
| 10+40 | 0.3437 | 0.49 | Q | V | | |
|
| 10+45 | 0.3471 | 0.50 | Q | V | | |
|
| 10+50 | 0.3506 | 0.50 | Q | V | | |
|
| 10+55 | 0.3540 | 0.50 | Q | V | | |
|
| 11+ 0 | 0.3575 | 0.51 | Q | V | | |
|
| 11+ 5 | 0.3610 | 0.51 | Q | V | | |
|
| 11+10 | 0.3645 | 0.51 | Q | V | | |
|
| 11+15 | 0.3681 | 0.51 | Q | V | | |
|
| 11+20 | 0.3716 | 0.52 | Q | V | | |
|
| 11+25 | 0.3752 | 0.52 | Q | V | | |
|
| 11+30 | 0.3788 | 0.52 | Q | V | | |
|
| 11+35 | 0.3825 | 0.53 | Q | V | | |
|
| 11+40 | 0.3861 | 0.53 | Q | V | | |

11+45	0.3898	0.54	Q	V		
11+50	0.3936	0.54	Q	V		
11+55	0.3973	0.54	Q	V		
12+ 0	0.4011	0.55	Q	V		
12+ 5	0.4046	0.52	Q	V		
12+10	0.4076	0.44	Q	V		
12+15	0.4105	0.41	Q	V		
12+20	0.4133	0.41	Q	V		
12+25	0.4161	0.40	Q	V		
12+30	0.4189	0.41	Q	V		
12+35	0.4217	0.41	Q	V		
12+40	0.4245	0.41	Q	V		
12+45	0.4274	0.42	Q	V		
12+50	0.4303	0.42	Q	V		
12+55	0.4333	0.43	Q	V		
13+ 0	0.4363	0.44	Q	V		
13+ 5	0.4394	0.44	Q	V		
13+10	0.4425	0.45	Q	V		
13+15	0.4456	0.46	Q	V		
13+20	0.4488	0.47	Q	V		
13+25	0.4521	0.47	Q	V		
13+30	0.4554	0.48	Q	V		
13+35	0.4588	0.49	Q	V		
13+40	0.4622	0.50	Q	V		
13+45	0.4657	0.51	Q	V		
13+50	0.4693	0.52	Q	V		
13+55	0.4729	0.53	Q	V		
14+ 0	0.4766	0.54	Q	V		
14+ 5	0.4805	0.55	Q	V		
14+10	0.4844	0.57	Q	V		

14+15	0.4883	0.58	Q		V		
14+20	0.4924	0.59	Q		V		
14+25	0.4966	0.61	Q		V		
14+30	0.5010	0.63	Q		V		
14+35	0.5054	0.64	Q		V		
14+40	0.5100	0.67	Q		V		
14+45	0.5147	0.69	Q		V		
14+50	0.5196	0.71	Q		V		
14+55	0.5247	0.74	Q		V		
15+ 0	0.5300	0.77	Q		V		
15+ 5	0.5355	0.80	Q		V		
15+10	0.5412	0.84	Q		V		
15+15	0.5473	0.88	Q		V		
15+20	0.5537	0.93	Q		V		
15+25	0.5600	0.92	Q		V		
15+30	0.5657	0.82	Q		V		
15+35	0.5715	0.84	Q		V		
15+40	0.5778	0.92	Q		V		
15+45	0.5848	1.02	Q		V		
15+50	0.5931	1.20	Q		V		
15+55	0.6034	1.49	Q		V		
16+ 0	0.6179	2.11	Q		V		
16+ 5	0.6506	4.75			Q	V	
16+10	0.7063	8.08				V	Q
16+15	0.7319	3.72		Q		V	
16+20	0.7470	2.20	Q			V	
16+25	0.7578	1.57	Q			V	
16+30	0.7668	1.31	Q			V	
16+35	0.7745	1.11	Q			V	
16+40	0.7812	0.97	Q			V	

16+45	0.7867	0.80	Q			V
16+50	0.7918	0.74	Q			V
16+55	0.7965	0.69	Q			V
17+ 0	0.8009	0.65	Q			V
17+ 5	0.8051	0.61	Q			V
17+10	0.8091	0.58	Q			V
17+15	0.8129	0.55	Q			V
17+20	0.8166	0.53	Q			V
17+25	0.8201	0.51	Q			V
17+30	0.8235	0.49	Q			V
17+35	0.8267	0.47	Q			V
17+40	0.8299	0.46	Q			V
17+45	0.8329	0.44	Q			V
17+50	0.8359	0.43	Q			V
17+55	0.8387	0.42	Q			V
18+ 0	0.8415	0.41	Q			V
18+ 5	0.8445	0.43	Q			V
18+10	0.8480	0.51	Q			V
18+15	0.8516	0.53	Q			V
18+20	0.8552	0.53	Q			V
18+25	0.8589	0.53	Q			V
18+30	0.8625	0.52	Q			V
18+35	0.8661	0.52	Q			V
18+40	0.8696	0.51	Q			V
18+45	0.8731	0.51	Q			V
18+50	0.8766	0.50	Q			V
18+55	0.8800	0.50	Q			V
19+ 0	0.8834	0.49	Q			V
19+ 5	0.8867	0.49	Q			V
19+10	0.8900	0.48	Q			V

19+15	0.8933	0.48	Q				V
19+20	0.8965	0.47	Q				V
19+25	0.8997	0.47	Q				V
19+30	0.9029	0.46	Q				V
19+35	0.9061	0.46	Q				V
19+40	0.9092	0.45	Q				V
19+45	0.9123	0.45	Q				V
19+50	0.9153	0.45	Q				V
19+55	0.9184	0.44	Q				V
20+ 0	0.9214	0.44	Q				V
20+ 5	0.9244	0.43	Q				V
20+10	0.9274	0.43	Q				V
20+15	0.9303	0.43	Q				V
20+20	0.9332	0.42	Q				V
20+25	0.9361	0.42	Q				V
20+30	0.9390	0.42	Q				V
20+35	0.9419	0.42	Q				V
20+40	0.9447	0.41	Q				V
20+45	0.9475	0.41	Q				V
20+50	0.9503	0.41	Q				V
20+55	0.9531	0.40	Q				V
21+ 0	0.9559	0.40	Q				V
21+ 5	0.9587	0.40	Q				V
21+10	0.9614	0.40	Q				V
21+15	0.9641	0.39	Q				V
21+20	0.9668	0.39	Q				V
21+25	0.9695	0.39	Q				V
21+30	0.9721	0.39	Q				V
21+35	0.9748	0.39	Q				V
21+40	0.9774	0.38	Q				V

|
| 21+45 | 0.9801 | 0.38 | Q | | | | V |
|
| 21+50 | 0.9827 | 0.38 | Q | | | | V |
|
| 21+55 | 0.9853 | 0.38 | Q | | | | V |
|
| 22+ 0 | 0.9878 | 0.37 | Q | | | | V |
|
| 22+ 5 | 0.9904 | 0.37 | Q | | | | V |
|
| 22+10 | 0.9930 | 0.37 | Q | | | | V |
|
| 22+15 | 0.9955 | 0.37 | Q | | | | V |
|
| 22+20 | 0.9980 | 0.37 | Q | | | | V |
|
| 22+25 | 1.0005 | 0.37 | Q | | | | V |
|
| 22+30 | 1.0030 | 0.36 | Q | | | | V |
|
| 22+35 | 1.0055 | 0.36 | Q | | | | V |
|
| 22+40 | 1.0080 | 0.36 | Q | | | | V |
|
| 22+45 | 1.0105 | 0.36 | Q | | | | V |
|
| 22+50 | 1.0129 | 0.36 | Q | | | | V |
|
| 22+55 | 1.0154 | 0.35 | Q | | | | V |
|
| 23+ 0 | 1.0178 | 0.35 | Q | | | | V |
|
| 23+ 5 | 1.0202 | 0.35 | Q | | | | V |
|
| 23+10 | 1.0226 | 0.35 | Q | | | | V |
|
| 23+15 | 1.0250 | 0.35 | Q | | | |
V|
| 23+20 | 1.0274 | 0.35 | Q | | | |
V|
| 23+25 | 1.0298 | 0.35 | Q | | | |
V|
| 23+30 | 1.0322 | 0.34 | Q | | | |
V|
| 23+35 | 1.0345 | 0.34 | Q | | | |
V|
| 23+40 | 1.0369 | 0.34 | Q | | | |
V|
| 23+45 | 1.0392 | 0.34 | Q | | | |
V|
| 23+50 | 1.0415 | 0.34 | Q | | | |
V|
| 23+55 | 1.0439 | 0.34 | Q | | | |
V|
| 24+ 0 | 1.0462 | 0.34 | Q | | | |
V|
| 24+ 5 | 1.0481 | 0.27 | Q | | | |
V|
| 24+10 | 1.0488 | 0.10 | Q | | | |

```
V|
   24+15       1.0491      0.05  Q         |         |         |
V|
   24+20       1.0493      0.03  Q         |         |         |
V|
   24+25       1.0494      0.01  Q         |         |         |
V|
   24+30       1.0494      0.01  Q         |         |         |
V|
   24+35       1.0495      0.00  Q         |         |         |
V|
-------------------------------------------------------------------------
```

FLOOD HYDROGRAPH ROUTING PROGRAM
Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2005
Study date: 11/22/22

Luna 395
Basin Routing
Basin A
a

Program License Serial Number 6232

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

From study/file name: luna395prob.rte
**********HYDROGRAPH DATA**********
Number of intervals = 295
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 1.687 (CFS)
Total volume = 0.198 (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 102.000 to Point/Station 103.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 295
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  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
            (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
      ------------------------------------------------------------------
---
          0.000      0.000      0.000      0.000        0.000
          0.750      0.015      0.063      0.015        0.015
          1.000      0.024      1.733      0.018        0.030
      ------------------------------------------------------------------
--
                  Hydrograph Detention Basin Routing
      ------------------------------------------------------------------
---

      Graph values: 'I'= unit inflow; 'O'=outflow at time shown
      ------------------------------------------------------------------
---
  Time   Inflow  Outflow    Storage
Depth
 (Hours)  (CFS)    (CFS)     (Ac.Ft) .0       0.4    0.84    1.27    1.69
(Ft.)
  0.083    0.01    0.00      0.000  O       |       |       |       |
0.00
  0.167    0.04    0.00      0.000  O       |       |       |       |
0.01
  0.250    0.05    0.00      0.000  O       |       |       |       |
0.02
  0.333    0.05    0.00      0.001  O       |       |       |       |
0.04
  0.417    0.05    0.00      0.001  OI      |       |       |       |
0.06
  0.500    0.05    0.01      0.001  OI      |       |       |       |
0.07
  0.583    0.06    0.01      0.002  OI      |       |       |       |
0.09
  0.667    0.06    0.01      0.002  OI      |       |       |       |
0.11
  0.750    0.06    0.01      0.002  OI      |       |       |       |
0.12
  0.833    0.06    0.01      0.003  OI      |       |       |       |
0.14
  0.917    0.06    0.01      0.003  OI      |       |       |       |
0.15
  1.000    0.06    0.01      0.003  OI      |       |       |       |
0.17
  1.083    0.06    0.02      0.004  OI      |       |       |       |
0.18
  1.167    0.06    0.02      0.004  OI      |       |       |       |
0.20
  1.250    0.06    0.02      0.004  OI      |       |       |       |
0.21
  1.333    0.06    0.02      0.004  OI      |       |       |       |
```

0.22								
1.417	0.06	0.02	0.005	OI				
0.24								
1.500	0.06	0.02	0.005	OI				
0.25								
1.583	0.06	0.02	0.005	OI				
0.26								
1.667	0.06	0.02	0.005	OI				
0.27								
1.750	0.06	0.02	0.006	OI				
0.29								
1.833	0.06	0.03	0.006	OI				
0.30								
1.917	0.06	0.03	0.006	OI				
0.31								
2.000	0.06	0.03	0.006	OI				
0.32								
2.083	0.06	0.03	0.007	OI				
0.33								
2.167	0.06	0.03	0.007	OI				
0.34								
2.250	0.06	0.03	0.007	OI				
0.35								
2.333	0.06	0.03	0.007	OI				
0.36								
2.417	0.06	0.03	0.007	OI				
0.37								
2.500	0.06	0.03	0.008	OI				
0.38								
2.583	0.06	0.03	0.008	OI				
0.39								
2.667	0.06	0.03	0.008	OI				
0.40								
2.750	0.06	0.03	0.008	OI				
0.41								
2.833	0.06	0.04	0.008	OI				
0.42								
2.917	0.06	0.04	0.009	OI				
0.43								
3.000	0.06	0.04	0.009	OI				
0.43								
3.083	0.06	0.04	0.009	OI				
0.44								
3.167	0.06	0.04	0.009	OI				
0.45								
3.250	0.06	0.04	0.009	OI				
0.46								
3.333	0.06	0.04	0.009	OI				
0.47								
3.417	0.06	0.04	0.009	OI				
0.47								
3.500	0.06	0.04	0.010	OI				
0.48								
3.583	0.06	0.04	0.010	OI				
0.49								
3.667	0.06	0.04	0.010	OI				
0.49								
3.750	0.06	0.04	0.010	OI				
0.50								
3.833	0.06	0.04	0.010	OI				

0.51								
3.917	0.06	0.04	0.010	OI	|	|	|	|
0.51								
4.000	0.06	0.04	0.010	OI	|	|	|	|
0.52								
4.083	0.06	0.04	0.011	OI	|	|	|	|
0.53								
4.167	0.06	0.04	0.011	OI	|	|	|	|
0.53								
4.250	0.06	0.05	0.011	OI	|	|	|	|
0.54								
4.333	0.06	0.05	0.011	OI	|	|	|	|
0.55								
4.417	0.06	0.05	0.011	OI	|	|	|	|
0.55								
4.500	0.06	0.05	0.011	OI	|	|	|	|
0.56								
4.583	0.06	0.05	0.011	OI	|	|	|	|
0.56								
4.667	0.06	0.05	0.011	OI	|	|	|	|
0.57								
4.750	0.06	0.05	0.011	OI	|	|	|	|
0.57								
4.833	0.06	0.05	0.012	OI	|	|	|	|
0.58								
4.917	0.06	0.05	0.012	OI	|	|	|	|
0.59								
5.000	0.06	0.05	0.012	OI	|	|	|	|
0.59								
5.083	0.07	0.05	0.012	OI	|	|	|	|
0.60								
5.167	0.07	0.05	0.012	OI	|	|	|	|
0.60								
5.250	0.07	0.05	0.012	OI	|	|	|	|
0.61								
5.333	0.07	0.05	0.012	OI	|	|	|	|
0.61								
5.417	0.07	0.05	0.012	OI	|	|	|	|
0.62								
5.500	0.07	0.05	0.012	OI	|	|	|	|
0.62								
5.583	0.07	0.05	0.013	OI	|	|	|	|
0.63								
5.667	0.07	0.05	0.013	|O	|	|	|	|
0.63								
5.750	0.07	0.05	0.013	|O	|	|	|	|
0.64								
5.833	0.07	0.05	0.013	|O	|	|	|	|
0.64								
5.917	0.07	0.05	0.013	|O	|	|	|	|
0.64								
6.000	0.07	0.05	0.013	|O	|	|	|	|
0.65								
6.083	0.07	0.05	0.013	|O	|	|	|	|
0.65								
6.167	0.07	0.06	0.013	|O	|	|	|	|
0.66								
6.250	0.07	0.06	0.013	|O	|	|	|	|
0.66								
6.333	0.07	0.06	0.013	|O	|	|	|	|

0.67								
6.417	0.07	0.06	0.013	|O	|	|	|	|
0.67								
6.500	0.07	0.06	0.014	|O	|	|	|	|
0.68								
6.583	0.07	0.06	0.014	|O	|	|	|	|
0.68								
6.667	0.07	0.06	0.014	|O	|	|	|	|
0.68								
6.750	0.07	0.06	0.014	|O	|	|	|	|
0.69								
6.833	0.07	0.06	0.014	|O	|	|	|	|
0.69								
6.917	0.07	0.06	0.014	|O	|	|	|	|
0.70								
7.000	0.07	0.06	0.014	|O	|	|	|	|
0.70								
7.083	0.07	0.06	0.014	|O	|	|	|	|
0.71								
7.167	0.07	0.06	0.014	|O	|	|	|	|
0.71								
7.250	0.07	0.06	0.014	|O	|	|	|	|
0.71								
7.333	0.07	0.06	0.014	|O	|	|	|	|
0.72								
7.417	0.07	0.06	0.014	|O	|	|	|	|
0.72								
7.500	0.07	0.06	0.015	|O	|	|	|	|
0.73								
7.583	0.07	0.06	0.015	|O	|	|	|	|
0.73								
7.667	0.07	0.06	0.015	|O	|	|	|	|
0.73								
7.750	0.07	0.06	0.015	|O	|	|	|	|
0.74								
7.833	0.07	0.06	0.015	|O	|	|	|	|
0.74								
7.917	0.07	0.06	0.015	|O	|	|	|	|
0.75								
8.000	0.07	0.06	0.015	|O	|	|	|	|
0.75								
8.083	0.07	0.07	0.015	|O	|	|	|	|
0.75								
8.167	0.08	0.07	0.015	|O	|	|	|	|
0.75								
8.250	0.08	0.08	0.015	|O	|	|	|	|
0.75								
8.333	0.08	0.08	0.015	|O	|	|	|	|
0.75								
8.417	0.08	0.08	0.015	|O	|	|	|	|
0.75								
8.500	0.08	0.08	0.015	|O	|	|	|	|
0.75								
8.583	0.08	0.08	0.015	|O	|	|	|	|
0.75								
8.667	0.08	0.08	0.015	|O	|	|	|	|
0.75								
8.750	0.08	0.08	0.015	|O	|	|	|	|
0.75								
8.833	0.08	0.08	0.015	|O	|	|	|	|

0.75
  8.917   0.08   0.08   0.015 |O | | | |
0.75
  9.000   0.08   0.08   0.015 |O | | | |
0.75
  9.083   0.08   0.08   0.015 |O | | | |
0.75
  9.167   0.08   0.08   0.015 |O | | | |
0.75
  9.250   0.08   0.08   0.015 |O | | | |
0.75
  9.333   0.08   0.08   0.015 |O | | | |
0.75
  9.417   0.08   0.08   0.015 |O | | | |
0.75
  9.500   0.08   0.08   0.015 |O | | | |
0.75
  9.583   0.08   0.08   0.015 |O | | | |
0.75
  9.667   0.08   0.08   0.015 |O | | | |
0.75
  9.750   0.08   0.08   0.015 |O | | | |
0.75
  9.833   0.08   0.08   0.015 |O | | | |
0.75
  9.917   0.08   0.08   0.015 |O | | | |
0.75
 10.000   0.08   0.08   0.015 |O | | | |
0.75
 10.083   0.09   0.08   0.015 |O | | | |
0.75
 10.167   0.09   0.09   0.015 |O | | | |
0.75
 10.250   0.09   0.09   0.015 |O | | | |
0.75
 10.333   0.09   0.09   0.015 |O | | | |
0.75
 10.417   0.09   0.09   0.015 |O | | | |
0.75
 10.500   0.09   0.09   0.015 |O | | | |
0.75
 10.583   0.09   0.09   0.015 |O | | | |
0.75
 10.667   0.09   0.09   0.015 |O | | | |
0.75
 10.750   0.09   0.09   0.015 |O | | | |
0.75
 10.833   0.09   0.09   0.015 |O | | | |
0.75
 10.917   0.09   0.09   0.015 |O | | | |
0.75
 11.000   0.09   0.09   0.015 |O | | | |
0.75
 11.083   0.09   0.09   0.015 |O | | | |
0.75
 11.167   0.09   0.09   0.015 |O | | | |
0.75
 11.250   0.09   0.09   0.015 |O | | | |
0.75
 11.333   0.09   0.09   0.015 |O | | | |

0.75								
11.417	0.09	0.09	0.015	|O	|	|	|	|
0.75								
11.500	0.10	0.10	0.015	|O	|	|	|	|
0.75								
11.583	0.10	0.10	0.015	|O	|	|	|	|
0.75								
11.667	0.10	0.10	0.015	|O	|	|	|	|
0.76								
11.750	0.10	0.10	0.015	|O	|	|	|	|
0.76								
11.833	0.10	0.10	0.015	|O	|	|	|	|
0.76								
11.917	0.10	0.10	0.015	|O	|	|	|	|
0.76								
12.000	0.10	0.10	0.015	|O	|	|	|	|
0.76								
12.083	0.10	0.10	0.015	|O	|	|	|	|
0.76								
12.167	0.09	0.09	0.015	|O	|	|	|	|
0.75								
12.250	0.08	0.09	0.015	|O	|	|	|	|
0.75								
12.333	0.08	0.09	0.015	|O	|	|	|	|
0.75								
12.417	0.08	0.08	0.015	|O	|	|	|	|
0.75								
12.500	0.09	0.08	0.015	|O	|	|	|	|
0.75								
12.583	0.09	0.09	0.015	|O	|	|	|	|
0.75								
12.667	0.09	0.09	0.015	|O	|	|	|	|
0.75								
12.750	0.09	0.09	0.015	|O	|	|	|	|
0.75								
12.833	0.09	0.09	0.015	|O	|	|	|	|
0.75								
12.917	0.09	0.09	0.015	|O	|	|	|	|
0.75								
13.000	0.09	0.09	0.015	|O	|	|	|	|
0.75								
13.083	0.09	0.09	0.015	|O	|	|	|	|
0.75								
13.167	0.09	0.09	0.015	|O	|	|	|	|
0.75								
13.250	0.10	0.10	0.015	|O	|	|	|	|
0.75								
13.333	0.10	0.10	0.015	|O	|	|	|	|
0.76								
13.417	0.10	0.10	0.015	|O	|	|	|	|
0.76								
13.500	0.10	0.10	0.015	|O	|	|	|	|
0.76								
13.583	0.10	0.10	0.015	|O	|	|	|	|
0.76								
13.667	0.11	0.10	0.015	|O	|	|	|	|
0.76								
13.750	0.11	0.11	0.015	|OI	|	|	|	|
0.76								
13.833	0.11	0.11	0.015	| O	|	|	|	|

0.76
 13.917 0.11 0.11 0.015 | O | | | |
0.76
 14.000 0.11 0.11 0.015 | O | | | |
0.76
 14.083 0.12 0.11 0.015 | O | | | |
0.76
 14.167 0.12 0.12 0.015 | O | | | |
0.76
 14.250 0.12 0.12 0.015 | O | | | |
0.76
 14.333 0.12 0.12 0.015 | O | | | |
0.76
 14.417 0.13 0.13 0.015 | O | | | |
0.76
 14.500 0.13 0.13 0.015 | O | | | |
0.76
 14.583 0.14 0.13 0.015 | O | | | |
0.76
 14.667 0.14 0.14 0.015 | O | | | |
0.76
 14.750 0.14 0.14 0.015 | O | | | |
0.76
 14.833 0.15 0.15 0.015 | O | | | |
0.76
 14.917 0.15 0.15 0.015 | O | | | |
0.76
 15.000 0.16 0.16 0.016 | OI | | | |
0.76
 15.083 0.17 0.16 0.016 | O | | | |
0.76
 15.167 0.18 0.17 0.016 | O | | | |
0.77
 15.250 0.18 0.18 0.016 | O | | | |
0.77
 15.333 0.19 0.19 0.016 | O | | | |
0.77
 15.417 0.19 0.19 0.016 | O | | | |
0.77
 15.500 0.17 0.18 0.016 | O | | | |
0.77
 15.583 0.18 0.18 0.016 | O | | | |
0.77
 15.667 0.19 0.18 0.016 | O | | | |
0.77
 15.750 0.21 0.20 0.016 | OI | | | |
0.77
 15.833 0.25 0.23 0.016 | O | | | |
0.77
 15.917 0.31 0.27 0.016 | O | | | |
0.78
 16.000 0.44 0.35 0.017 | O I | | | |
0.79
 16.083 0.99 0.64 0.018 | | O | I | | |
0.84
 16.167 1.69 1.18 0.021 | | | O | I|
0.92
 16.250 0.78 1.22 0.021 | | I | O| |
0.92
 16.333 0.46 0.75 0.019 | I O | | |

```
0.85
 16.417    0.33    0.47      0.017  |     I O       |       |       |
0.81
 16.500    0.27    0.34      0.016  |    IO |       |       |       |
0.79
 16.583    0.23    0.27      0.016  |   IO  |       |       |       |
0.78
 16.667    0.20    0.23      0.016  |  IO   |       |       |       |
0.78
 16.750    0.17    0.20      0.016  |  O    |       |       |       |
0.77
 16.833    0.15    0.17      0.016  | IO    |       |       |       |
0.77
 16.917    0.14    0.15      0.015  | O     |       |       |       |
0.76
 17.000    0.14    0.14      0.015  | O     |       |       |       |
0.76
 17.083    0.13    0.13      0.015  | O     |       |       |       |
0.76
 17.167    0.12    0.13      0.015  | O     |       |       |       |
0.76
 17.250    0.12    0.12      0.015  | O     |       |       |       |
0.76
 17.333    0.11    0.12      0.015  | O     |       |       |       |
0.76
 17.417    0.11    0.11      0.015  | O     |       |       |       |
0.76
 17.500    0.10    0.11      0.015  |IO     |       |       |       |
0.76
 17.583    0.10    0.10      0.015  |O      |       |       |       |
0.76
 17.667    0.10    0.10      0.015  |O      |       |       |       |
0.76
 17.750    0.09    0.10      0.015  |O      |       |       |       |
0.75
 17.833    0.09    0.09      0.015  |O      |       |       |       |
0.75
 17.917    0.09    0.09      0.015  |O      |       |       |       |
0.75
 18.000    0.09    0.09      0.015  |O      |       |       |       |
0.75
 18.083    0.09    0.09      0.015  |O      |       |       |       |
0.75
 18.167    0.10    0.09      0.015  |O      |       |       |       |
0.75
 18.250    0.10    0.10      0.015  |O      |       |       |       |
0.75
 18.333    0.10    0.10      0.015  |O      |       |       |       |
0.76
 18.417    0.10    0.10      0.015  |O      |       |       |       |
0.76
 18.500    0.10    0.10      0.015  |O      |       |       |       |
0.76
 18.583    0.09    0.10      0.015  |O      |       |       |       |
0.75
 18.667    0.09    0.09      0.015  |O      |       |       |       |
0.75
 18.750    0.09    0.09      0.015  |O      |       |       |       |
0.75
 18.833    0.09    0.09      0.015  |O      |       |       |       |
```

0.75
 18.917 0.09 0.09 0.015 |O | | | |
0.75
 19.000 0.09 0.09 0.015 |O | | | |
0.75
 19.083 0.09 0.09 0.015 |O | | | |
0.75
 19.167 0.09 0.09 0.015 |O | | | |
0.75
 19.250 0.09 0.09 0.015 |O | | | |
0.75
 19.333 0.08 0.08 0.015 |O | | | |
0.75
 19.417 0.08 0.08 0.015 |O | | | |
0.75
 19.500 0.08 0.08 0.015 |O | | | |
0.75
 19.583 0.08 0.08 0.015 |O | | | |
0.75
 19.667 0.08 0.08 0.015 |O | | | |
0.75
 19.750 0.08 0.08 0.015 |O | | | |
0.75
 19.833 0.08 0.08 0.015 |O | | | |
0.75
 19.917 0.08 0.08 0.015 |O | | | |
0.75
 20.000 0.08 0.08 0.015 |O | | | |
0.75
 20.083 0.08 0.08 0.015 |O | | | |
0.75
 20.167 0.08 0.08 0.015 |O | | | |
0.75
 20.250 0.07 0.08 0.015 |O | | | |
0.75
 20.333 0.07 0.07 0.015 |O | | | |
0.75
 20.417 0.07 0.07 0.015 |O | | | |
0.75
 20.500 0.07 0.07 0.015 |O | | | |
0.75
 20.583 0.07 0.07 0.015 |O | | | |
0.75
 20.667 0.07 0.07 0.015 |O | | | |
0.75
 20.750 0.07 0.07 0.015 |O | | | |
0.75
 20.833 0.07 0.07 0.015 |O | | | |
0.75
 20.917 0.07 0.07 0.015 |O | | | |
0.75
 21.000 0.07 0.07 0.015 |O | | | |
0.75
 21.083 0.07 0.07 0.015 |O | | | |
0.75
 21.167 0.07 0.07 0.015 |O | | | |
0.75
 21.250 0.07 0.07 0.015 |O | | | |
0.75
 21.333 0.07 0.07 0.015 |O | | | |

0.75
 21.417   0.07   0.07   0.015 |O | | | |
0.75
 21.500   0.07   0.07   0.015 |O | | | |
0.75
 21.583   0.07   0.07   0.015 |O | | | |
0.75
 21.667   0.07   0.07   0.015 |O | | | |
0.75
 21.750   0.07   0.07   0.015 |O | | | |
0.75
 21.833   0.06   0.07   0.015 |O | | | |
0.75
 21.917   0.06   0.06   0.015 |O | | | |
0.75
 22.000   0.06   0.06   0.015 |O | | | |
0.75
 22.083   0.06   0.06   0.015 |O | | | |
0.75
 22.167   0.06   0.06   0.015 |O | | | |
0.75
 22.250   0.06   0.06   0.015 |O | | | |
0.75
 22.333   0.06   0.06   0.015 |O | | | |
0.75
 22.417   0.06   0.06   0.015 |O | | | |
0.75
 22.500   0.06   0.06   0.015 |O | | | |
0.75
 22.583   0.06   0.06   0.015 |O | | | |
0.75
 22.667   0.06   0.06   0.015 |O | | | |
0.75
 22.750   0.06   0.06   0.015 |O | | | |
0.75
 22.833   0.06   0.06   0.015 |O | | | |
0.75
 22.917   0.06   0.06   0.015 |O | | | |
0.75
 23.000   0.06   0.06   0.015 |O | | | |
0.74
 23.083   0.06   0.06   0.015 |O | | | |
0.74
 23.167   0.06   0.06   0.015 |O | | | |
0.74
 23.250   0.06   0.06   0.015 |O | | | |
0.74
 23.333   0.06   0.06   0.015 |O | | | |
0.74
 23.417   0.06   0.06   0.015 |O | | | |
0.74
 23.500   0.06   0.06   0.015 |O | | | |
0.74
 23.583   0.06   0.06   0.015 |O | | | |
0.74
 23.667   0.06   0.06   0.015 |O | | | |
0.73
 23.750   0.06   0.06   0.015 |O | | | |
0.73
 23.833   0.06   0.06   0.015 |O | | | |

0.73
 23.917 0.06 0.06 0.015 |O | | | |
0.73
 24.000 0.06 0.06 0.015 |O | | | |
0.73
 24.083 0.05 0.06 0.014 IO | | | |
0.72
 24.167 0.02 0.06 0.014 IO | | | |
0.71
 24.250 0.01 0.06 0.014 IO | | | |
0.70
 24.333 0.00 0.06 0.014 IO | | | |
0.68
 24.417 0.00 0.06 0.013 IO | | | |
0.66
 24.500 0.00 0.05 0.013 IO | | | |
0.64
 24.583 0.00 0.05 0.013 O | | | |
0.63
 24.667 0.00 0.05 0.012 O | | | |
0.61
 24.750 0.00 0.05 0.012 O | | | |
0.59
 24.833 0.00 0.05 0.011 O | | | |
0.57
 24.917 0.00 0.05 0.011 O | | | |
0.56
 25.000 0.00 0.05 0.011 O | | | |
0.54
 25.083 0.00 0.04 0.011 O | | | |
0.53
 25.167 0.00 0.04 0.010 O | | | |
0.51
 25.250 0.00 0.04 0.010 O | | | |
0.50
 25.333 0.00 0.04 0.010 O | | | |
0.48
 25.417 0.00 0.04 0.009 O | | | |
0.47
 25.500 0.00 0.04 0.009 O | | | |
0.45
 25.583 0.00 0.04 0.009 O | | | |
0.44
 25.667 0.00 0.04 0.009 O | | | |
0.43
 25.750 0.00 0.04 0.008 O | | | |
0.42
 25.833 0.00 0.03 0.008 O | | | |
0.41
 25.917 0.00 0.03 0.008 O | | | |
0.39
 26.000 0.00 0.03 0.008 O | | | |
0.38
 26.083 0.00 0.03 0.007 O | | | |
0.37
 26.167 0.00 0.03 0.007 O | | | |
0.36
 26.250 0.00 0.03 0.007 O | | | |
0.35
 26.333 0.00 0.03 0.007 O | | | |

0.34
 26.417 0.00 0.03 0.007 O | | | |
0.33
 26.500 0.00 0.03 0.006 O | | | |
0.32
 26.583 0.00 0.03 0.006 O | | | |
0.31
 26.667 0.00 0.03 0.006 O | | | |
0.30
 26.750 0.00 0.02 0.006 O | | | |
0.29
 26.833 0.00 0.02 0.006 O | | | |
0.29
 26.917 0.00 0.02 0.006 O | | | |
0.28
 27.000 0.00 0.02 0.005 O | | | |
0.27
 27.083 0.00 0.02 0.005 O | | | |
0.26
 27.167 0.00 0.02 0.005 O | | | |
0.26
 27.250 0.00 0.02 0.005 O | | | |
0.25
 27.333 0.00 0.02 0.005 O | | | |
0.24
 27.417 0.00 0.02 0.005 O | | | |
0.23
 27.500 0.00 0.02 0.005 O | | | |
0.23
 27.583 0.00 0.02 0.004 O | | | |
0.22
 27.667 0.00 0.02 0.004 O | | | |
0.21
 27.750 0.00 0.02 0.004 O | | | |
0.21
 27.833 0.00 0.02 0.004 O | | | |
0.20
 27.917 0.00 0.02 0.004 O | | | |
0.20
 28.000 0.00 0.02 0.004 O | | | |
0.19
 28.083 0.00 0.02 0.004 O | | | |
0.19
 28.167 0.00 0.02 0.004 O | | | |
0.18
 28.250 0.00 0.01 0.004 O | | | |
0.18
 28.333 0.00 0.01 0.003 O | | | |
0.17
 28.417 0.00 0.01 0.003 O | | | |
0.17
 28.500 0.00 0.01 0.003 O | | | |
0.16
 28.583 0.00 0.01 0.003 O | | | |
0.16
 28.667 0.00 0.01 0.003 O | | | |
0.15
 28.750 0.00 0.01 0.003 O | | | |
0.15
 28.833 0.00 0.01 0.003 O | | | |

0.14
 28.917 0.00 0.01 0.003 O | | | |
0.14
 29.000 0.00 0.01 0.003 O | | | |
0.13
 29.083 0.00 0.01 0.003 O | | | |
0.13
 29.167 0.00 0.01 0.003 O | | | |
0.13
 29.250 0.00 0.01 0.002 O | | | |
0.12
 29.333 0.00 0.01 0.002 O | | | |
0.12
 29.417 0.00 0.01 0.002 O | | | |
0.12
 29.500 0.00 0.01 0.002 O | | | |
0.11
 29.583 0.00 0.01 0.002 O | | | |
0.11
 29.667 0.00 0.01 0.002 O | | | |
0.11
 29.750 0.00 0.01 0.002 O | | | |
0.10
 29.833 0.00 0.01 0.002 O | | | |
0.10
 29.917 0.00 0.01 0.002 O | | | |
0.10
 30.000 0.00 0.01 0.002 O | | | |
0.10
 30.083 0.00 0.01 0.002 O | | | |
0.09
 30.167 0.00 0.01 0.002 O | | | |
0.09
 30.250 0.00 0.01 0.002 O | | | |
0.09
 30.333 0.00 0.01 0.002 O | | | |
0.08
 30.417 0.00 0.01 0.002 O | | | |
0.08
 30.500 0.00 0.01 0.002 O | | | |
0.08
 30.583 0.00 0.01 0.002 O | | | |
0.08
 30.667 0.00 0.01 0.002 O | | | |
0.08
 30.750 0.00 0.01 0.001 O | | | |
0.07
 30.833 0.00 0.01 0.001 O | | | |
0.07
 30.917 0.00 0.01 0.001 O | | | |
0.07
 31.000 0.00 0.01 0.001 O | | | |
0.07
 31.083 0.00 0.01 0.001 O | | | |
0.07
 31.167 0.00 0.01 0.001 O | | | |
0.06
 31.250 0.00 0.01 0.001 O | | | |
0.06
 31.333 0.00 0.01 0.001 O | | | |

0.06
 31.417 0.00 0.00 0.001 O | | | |
0.06
 31.500 0.00 0.00 0.001 O | | | |
0.06
 31.583 0.00 0.00 0.001 O | | | |
0.06
 31.667 0.00 0.00 0.001 O | | | |
0.05
 31.750 0.00 0.00 0.001 O | | | |
0.05
 31.833 0.00 0.00 0.001 O | | | |
0.05
 31.917 0.00 0.00 0.001 O | | | |
0.05
 32.000 0.00 0.00 0.001 O | | | |
0.05
 32.083 0.00 0.00 0.001 O | | | |
0.05
 32.167 0.00 0.00 0.001 O | | | |
0.04
 32.250 0.00 0.00 0.001 O | | | |
0.04
 32.333 0.00 0.00 0.001 O | | | |
0.04
 32.417 0.00 0.00 0.001 O | | | |
0.04
 32.500 0.00 0.00 0.001 O | | | |
0.04
 32.583 0.00 0.00 0.001 O | | | |
0.04
 32.667 0.00 0.00 0.001 O | | | |
0.04
 32.750 0.00 0.00 0.001 O | | | |
0.04
 32.833 0.00 0.00 0.001 O | | | |
0.04
 32.917 0.00 0.00 0.001 O | | | |
0.03
 33.000 0.00 0.00 0.001 O | | | |
0.03
 33.083 0.00 0.00 0.001 O | | | |
0.03
 33.167 0.00 0.00 0.001 O | | | |
0.03
 33.250 0.00 0.00 0.001 O | | | |
0.03
 33.333 0.00 0.00 0.001 O | | | |
0.03
 33.417 0.00 0.00 0.001 O | | | |
0.03
 33.500 0.00 0.00 0.001 O | | | |
0.03
 33.583 0.00 0.00 0.001 O | | | |
0.03
 33.667 0.00 0.00 0.001 O | | | |
0.03
 33.750 0.00 0.00 0.001 O | | | |
0.03
 33.833 0.00 0.00 0.001 O | | | |

```
0.03
 33.917    0.00    0.00      0.000  O       |       |       |       |
0.02
 34.000    0.00    0.00      0.000  O       |       |       |       |
0.02
 34.083    0.00    0.00      0.000  O       |       |       |       |
0.02
 34.167    0.00    0.00      0.000  O       |       |       |       |
0.02
 34.250    0.00    0.00      0.000  O       |       |       |       |
0.02
 34.333    0.00    0.00      0.000  O       |       |       |       |
0.02
 34.417    0.00    0.00      0.000  O       |       |       |       |
0.02
 34.500    0.00    0.00      0.000  O       |       |       |       |
0.02
 34.583    0.00    0.00      0.000  O       |       |       |       |
0.02
 34.667    0.00    0.00      0.000  O       |       |       |       |
0.02
 34.750    0.00    0.00      0.000  O       |       |       |       |
0.02
 34.833    0.00    0.00      0.000  O       |       |       |       |
0.02
 34.917    0.00    0.00      0.000  O       |       |       |       |
0.02
 35.000    0.00    0.00      0.000  O       |       |       |       |
0.02
 35.083    0.00    0.00      0.000  O       |       |       |       |
0.02
 35.167    0.00    0.00      0.000  O       |       |       |       |
0.02
 35.250    0.00    0.00      0.000  O       |       |       |       |
0.02
 35.333    0.00    0.00      0.000  O       |       |       |       |
0.01
 35.417    0.00    0.00      0.000  O       |       |       |       |
0.01
 35.500    0.00    0.00      0.000  O       |       |       |       |
0.01
 35.583    0.00    0.00      0.000  O       |       |       |       |
0.01
 35.667    0.00    0.00      0.000  O       |       |       |       |
0.01
 35.750    0.00    0.00      0.000  O       |       |       |       |
0.01
 35.833    0.00    0.00      0.000  O       |       |       |       |
0.01
 35.917    0.00    0.00      0.000  O       |       |       |       |
0.01
 36.000    0.00    0.00      0.000  O       |       |       |       |
0.01

      ****************************HYDROGRAPH
DATA****************************
                  Number of intervals =   432
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =        1.221 (CFS)
                  Total volume =       0.198 (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 - 2005
Study date: 11/22/22

Luna 395
Basin Routing
Basin B
a

Program License Serial Number 6232

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

From study/file name: luna395prob.rte
**********HYDROGRAPH DATA**********
Number of intervals = 295
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 1.687 (CFS)
Total volume = 0.198 (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 202.000 to Point/Station 203.000
**** RETARDING BASIN ROUTING ****

_____

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 295
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  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
            (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
      ------------------------------------------------------------------
---
          0.000      0.000      0.000      0.000        0.000
          0.500      0.005      0.027      0.005        0.005
          1.250      0.021      0.027      0.021        0.021
          1.500      0.044      1.527      0.039        0.049
      ------------------------------------------------------------------
--
                  Hydrograph Detention Basin Routing
      ------------------------------------------------------------------
---

      Graph values: 'I'= unit inflow; 'O'=outflow at time shown
      ------------------------------------------------------------------
---
  Time   Inflow  Outflow    Storage
Depth
 (Hours)  (CFS)    (CFS)     (Ac.Ft) .0       0.4    0.84    1.27    1.69
(Ft.)
  0.083    0.01    0.00      0.000  O       |       |       |       |
0.00
  0.167    0.04    0.00      0.000  O       |       |       |       |
0.02
  0.250    0.05    0.00      0.000  O       |       |       |       |
0.05
  0.333    0.05    0.00      0.001  O       |       |       |       |
0.08
  0.417    0.05    0.01      0.001  OI      |       |       |       |
0.11
  0.500    0.05    0.01      0.001  OI      |       |       |       |
0.14
  0.583    0.06    0.01      0.002  OI      |       |       |       |
0.18
  0.667    0.06    0.01      0.002  OI      |       |       |       |
0.21
  0.750    0.06    0.01      0.002  OI      |       |       |       |
0.24
  0.833    0.06    0.01      0.003  OI      |       |       |       |
0.27
  0.917    0.06    0.02      0.003  OI      |       |       |       |
0.30
  1.000    0.06    0.02      0.003  OI      |       |       |       |
0.32
  1.083    0.06    0.02      0.004  OI      |       |       |       |
0.35
  1.167    0.06    0.02      0.004  OI      |       |       |       |
0.38
  1.250    0.06    0.02      0.004  OI      |       |       |       |
0.40
```

1.333	0.06	0.02	0.004	OI				
0.42								
1.417	0.06	0.02	0.004	OI				
0.45								
1.500	0.06	0.03	0.005	OI				
0.47								
1.583	0.06	0.03	0.005	OI				
0.49								
1.667	0.06	0.03	0.005	OI				
0.51								
1.750	0.06	0.03	0.005	OI				
0.52								
1.833	0.06	0.03	0.006	OI				
0.53								
1.917	0.06	0.03	0.006	OI				
0.54								
2.000	0.06	0.03	0.006	OI				
0.55								
2.083	0.06	0.03	0.006	OI				
0.56								
2.167	0.06	0.03	0.006	OI				
0.57								
2.250	0.06	0.03	0.007	OI				
0.58								
2.333	0.06	0.03	0.007	OI				
0.59								
2.417	0.06	0.03	0.007	OI				
0.60								
2.500	0.06	0.03	0.007	OI				
0.61								
2.583	0.06	0.03	0.008	OI				
0.62								
2.667	0.06	0.03	0.008	OI				
0.63								
2.750	0.06	0.03	0.008	OI				
0.64								
2.833	0.06	0.03	0.008	OI				
0.65								
2.917	0.06	0.03	0.008	OI				
0.66								
3.000	0.06	0.03	0.009	OI				
0.67								
3.083	0.06	0.03	0.009	OI				
0.68								
3.167	0.06	0.03	0.009	OI				
0.69								
3.250	0.06	0.03	0.009	OI				
0.70								
3.333	0.06	0.03	0.010	OI				
0.72								
3.417	0.06	0.03	0.010	OI				
0.73								
3.500	0.06	0.03	0.010	OI				
0.74								
3.583	0.06	0.03	0.010	OI				
0.75								
3.667	0.06	0.03	0.011	OI				
0.76								
3.750	0.06	0.03	0.011	OI				
0.77								

3.833	0.06	0.03	0.011	OI				
0.78								
3.917	0.06	0.03	0.011	OI				
0.79								
4.000	0.06	0.03	0.012	OI				
0.81								
4.083	0.06	0.03	0.012	OI				
0.82								
4.167	0.06	0.03	0.012	OI				
0.83								
4.250	0.06	0.03	0.012	OI				
0.84								
4.333	0.06	0.03	0.013	OI				
0.85								
4.417	0.06	0.03	0.013	OI				
0.86								
4.500	0.06	0.03	0.013	OI				
0.88								
4.583	0.06	0.03	0.013	OI				
0.89								
4.667	0.06	0.03	0.014	OI				
0.90								
4.750	0.06	0.03	0.014	OI				
0.91								
4.833	0.06	0.03	0.014	OI				
0.92								
4.917	0.06	0.03	0.014	OI				
0.94								
5.000	0.06	0.03	0.015	OI				
0.95								
5.083	0.07	0.03	0.015	OI				
0.96								
5.167	0.07	0.03	0.015	OI				
0.97								
5.250	0.07	0.03	0.015	OI				
0.98								
5.333	0.07	0.03	0.016	OI				
1.00								
5.417	0.07	0.03	0.016	OI				
1.01								
5.500	0.07	0.03	0.016	OI				
1.02								
5.583	0.07	0.03	0.016	OI				
1.04								
5.667	0.07	0.03	0.017	OI				
1.05								
5.750	0.07	0.03	0.017	OI				
1.06								
5.833	0.07	0.03	0.017	OI				
1.07								
5.917	0.07	0.03	0.018	OI				
1.09								
6.000	0.07	0.03	0.018	OI				
1.10								
6.083	0.07	0.03	0.018	OI				
1.11								
6.167	0.07	0.03	0.018	OI				
1.13								
6.250	0.07	0.03	0.019	OI				
1.14								

6.333	0.07	0.03	0.019	OI				
1.15								
6.417	0.07	0.03	0.019	OI				
1.17								
6.500	0.07	0.03	0.020	OI				
1.18								
6.583	0.07	0.03	0.020	OI				
1.19								
6.667	0.07	0.03	0.020	OI				
1.21								
6.750	0.07	0.03	0.020	OI				
1.22								
6.833	0.07	0.03	0.021	OI				
1.24								
6.917	0.07	0.03	0.021	OI				
1.25								
7.000	0.07	0.04	0.021	OI				
1.25								
7.083	0.07	0.05	0.021	|O				
1.25								
7.167	0.07	0.06	0.022	|O				
1.26								
7.250	0.07	0.06	0.022	|O				
1.26								
7.333	0.07	0.07	0.022	|O				
1.26								
7.417	0.07	0.07	0.022	|O				
1.26								
7.500	0.07	0.07	0.022	|O				
1.26								
7.583	0.07	0.07	0.022	|O				
1.26								
7.667	0.07	0.07	0.022	|O				
1.26								
7.750	0.07	0.07	0.022	|O				
1.26								
7.833	0.07	0.07	0.022	|O				
1.26								
7.917	0.07	0.07	0.022	|O				
1.26								
8.000	0.07	0.07	0.022	|O				
1.26								
8.083	0.07	0.07	0.022	|O				
1.26								
8.167	0.08	0.07	0.022	|O				
1.26								
8.250	0.08	0.07	0.022	|O				
1.26								
8.333	0.08	0.08	0.022	|O				
1.26								
8.417	0.08	0.08	0.022	|O				
1.26								
8.500	0.08	0.08	0.022	|O				
1.26								
8.583	0.08	0.08	0.022	|O				
1.26								
8.667	0.08	0.08	0.022	|O				
1.26								
8.750	0.08	0.08	0.022	|O				
1.26								

8.833	0.08	0.08	0.022	O				1.26
8.917	0.08	0.08	0.022	O				1.26
9.000	0.08	0.08	0.022	O				1.26
9.083	0.08	0.08	0.022	O				1.26
9.167	0.08	0.08	0.022	O				1.26
9.250	0.08	0.08	0.022	O				1.26
9.333	0.08	0.08	0.022	O				1.26
9.417	0.08	0.08	0.022	O				1.26
9.500	0.08	0.08	0.022	O				1.26
9.583	0.08	0.08	0.022	O				1.26
9.667	0.08	0.08	0.022	O				1.26
9.750	0.08	0.08	0.022	O				1.26
9.833	0.08	0.08	0.022	O				1.26
9.917	0.08	0.08	0.022	O				1.26
10.000	0.08	0.08	0.022	O				1.26
10.083	0.09	0.08	0.022	O				1.26
10.167	0.09	0.08	0.022	O				1.26
10.250	0.09	0.09	0.022	O				1.26
10.333	0.09	0.09	0.022	O				1.26
10.417	0.09	0.09	0.022	O				1.26
10.500	0.09	0.09	0.022	O				1.26
10.583	0.09	0.09	0.022	O				1.26
10.667	0.09	0.09	0.022	O				1.26
10.750	0.09	0.09	0.022	O				1.26
10.833	0.09	0.09	0.022	O				1.26
10.917	0.09	0.09	0.022	O				1.26
11.000	0.09	0.09	0.022	O				1.26
11.083	0.09	0.09	0.022	O				1.26
11.167	0.09	0.09	0.022	O				1.26
11.250	0.09	0.09	0.022	O				1.26

11.333	0.09	0.09	0.022	|O	|	|	|	|
1.26								
11.417	0.09	0.09	0.022	|O	|	|	|	|
1.26								
11.500	0.10	0.09	0.022	|O	|	|	|	|
1.26								
11.583	0.10	0.09	0.022	|O	|	|	|	|
1.26								
11.667	0.10	0.10	0.022	|O	|	|	|	|
1.26								
11.750	0.10	0.10	0.022	|O	|	|	|	|
1.26								
11.833	0.10	0.10	0.022	|O	|	|	|	|
1.26								
11.917	0.10	0.10	0.022	|O	|	|	|	|
1.26								
12.000	0.10	0.10	0.022	|O	|	|	|	|
1.26								
12.083	0.10	0.10	0.022	|O	|	|	|	|
1.26								
12.167	0.09	0.10	0.022	|O	|	|	|	|
1.26								
12.250	0.08	0.09	0.022	|O	|	|	|	|
1.26								
12.333	0.08	0.09	0.022	|O	|	|	|	|
1.26								
12.417	0.08	0.09	0.022	|O	|	|	|	|
1.26								
12.500	0.09	0.09	0.022	|O	|	|	|	|
1.26								
12.583	0.09	0.09	0.022	|O	|	|	|	|
1.26								
12.667	0.09	0.09	0.022	|O	|	|	|	|
1.26								
12.750	0.09	0.09	0.022	|O	|	|	|	|
1.26								
12.833	0.09	0.09	0.022	|O	|	|	|	|
1.26								
12.917	0.09	0.09	0.022	|O	|	|	|	|
1.26								
13.000	0.09	0.09	0.022	|O	|	|	|	|
1.26								
13.083	0.09	0.09	0.022	|O	|	|	|	|
1.26								
13.167	0.09	0.09	0.022	|O	|	|	|	|
1.26								
13.250	0.10	0.09	0.022	|O	|	|	|	|
1.26								
13.333	0.10	0.09	0.022	|O	|	|	|	|
1.26								
13.417	0.10	0.10	0.022	|O	|	|	|	|
1.26								
13.500	0.10	0.10	0.022	|O	|	|	|	|
1.26								
13.583	0.10	0.10	0.022	|O	|	|	|	|
1.26								
13.667	0.11	0.10	0.022	|O	|	|	|	|
1.26								
13.750	0.11	0.10	0.022	|OI	|	|	|	|
1.26								

13.833	0.11	0.10	0.022	OI				
1.26								
13.917	0.11	0.11	0.022	O				
1.26								
14.000	0.11	0.11	0.022	O				
1.26								
14.083	0.12	0.11	0.022	O				
1.26								
14.167	0.12	0.11	0.022	O				
1.26								
14.250	0.12	0.12	0.022	O				
1.26								
14.333	0.12	0.12	0.022	O				
1.27								
14.417	0.13	0.12	0.022	O				
1.27								
14.500	0.13	0.12	0.022	O				
1.27								
14.583	0.14	0.13	0.023	O				
1.27								
14.667	0.14	0.13	0.023	O				
1.27								
14.750	0.14	0.14	0.023	O				
1.27								
14.833	0.15	0.14	0.023	O				
1.27								
14.917	0.15	0.14	0.023	O				
1.27								
15.000	0.16	0.15	0.023	OI				
1.27								
15.083	0.17	0.15	0.023	OI				
1.27								
15.167	0.18	0.16	0.023	O				
1.27								
15.250	0.18	0.17	0.023	O				
1.27								
15.333	0.19	0.18	0.023	O				
1.27								
15.417	0.19	0.18	0.023	O				
1.28								
15.500	0.17	0.18	0.023	O				
1.28								
15.583	0.18	0.18	0.023	O				
1.28								
15.667	0.19	0.18	0.023	O				
1.28								
15.750	0.21	0.19	0.023	OI				
1.28								
15.833	0.25	0.20	0.024	OI				
1.28								
15.917	0.31	0.23	0.024	OI				
1.28								
16.000	0.44	0.29	0.025	O	I			
1.29								
16.083	0.99	0.44	0.027		O		I	
1.32								
16.167	1.69	0.77	0.032			O		I
1.37								
16.250	0.78	0.94	0.035			I	O	
1.40								

16.333	0.46	0.82	0.033	| I O|	|	|	1.38
16.417	0.33	0.66	0.031	| I | O |	|	|	1.36
16.500	0.27	0.53	0.029	| I | O |	|	|	1.33
16.583	0.23	0.43	0.027	| I O |	|	|	1.32
16.667	0.20	0.35	0.026	| I O |	|	|	1.30
16.750	0.17	0.29	0.025	| I O |	|	|	1.29
16.833	0.15	0.24	0.024	| I O |	|	|	1.29
16.917	0.14	0.21	0.024	| IO |	|	|	1.28
17.000	0.14	0.18	0.023	| IO |	|	|	1.28
17.083	0.13	0.16	0.023	| IO |	|	|	1.27
17.167	0.12	0.15	0.023	| O |	|	|	1.27
17.250	0.12	0.14	0.023	| O |	|	|	1.27
17.333	0.11	0.13	0.023	| O |	|	|	1.27
17.417	0.11	0.12	0.022	| O |	|	|	1.27
17.500	0.10	0.12	0.022	|IO |	|	|	1.26
17.583	0.10	0.11	0.022	|IO |	|	|	1.26
17.667	0.10	0.11	0.022	|IO |	|	|	1.26
17.750	0.09	0.10	0.022	|O |	|	|	1.26
17.833	0.09	0.10	0.022	|O |	|	|	1.26
17.917	0.09	0.09	0.022	|O |	|	|	1.26
18.000	0.09	0.09	0.022	|O |	|	|	1.26
18.083	0.09	0.09	0.022	|O |	|	|	1.26
18.167	0.10	0.09	0.022	|O |	|	|	1.26
18.250	0.10	0.09	0.022	|O |	|	|	1.26
18.333	0.10	0.09	0.022	|O |	|	|	1.26
18.417	0.10	0.10	0.022	|O |	|	|	1.26
18.500	0.10	0.10	0.022	|O |	|	|	1.26
18.583	0.09	0.10	0.022	|O |	|	|	1.26
18.667	0.09	0.10	0.022	|O |	|	|	1.26
18.750	0.09	0.09	0.022	|O |	|	|	1.26

18.833	0.09	0.09	0.022	O				1.26
18.917	0.09	0.09	0.022	O				1.26
19.000	0.09	0.09	0.022	O				1.26
19.083	0.09	0.09	0.022	O				1.26
19.167	0.09	0.09	0.022	O				1.26
19.250	0.09	0.09	0.022	O				1.26
19.333	0.08	0.09	0.022	O				1.26
19.417	0.08	0.09	0.022	O				1.26
19.500	0.08	0.08	0.022	O				1.26
19.583	0.08	0.08	0.022	O				1.26
19.667	0.08	0.08	0.022	O				1.26
19.750	0.08	0.08	0.022	O				1.26
19.833	0.08	0.08	0.022	O				1.26
19.917	0.08	0.08	0.022	O				1.26
20.000	0.08	0.08	0.022	O				1.26
20.083	0.08	0.08	0.022	O				1.26
20.167	0.08	0.08	0.022	O				1.26
20.250	0.07	0.08	0.022	O				1.26
20.333	0.07	0.08	0.022	O				1.26
20.417	0.07	0.08	0.022	O				1.26
20.500	0.07	0.07	0.022	O				1.26
20.583	0.07	0.07	0.022	O				1.26
20.667	0.07	0.07	0.022	O				1.26
20.750	0.07	0.07	0.022	O				1.26
20.833	0.07	0.07	0.022	O				1.26
20.917	0.07	0.07	0.022	O				1.26
21.000	0.07	0.07	0.022	O				1.26
21.083	0.07	0.07	0.022	O				1.26
21.167	0.07	0.07	0.022	O				1.26
21.250	0.07	0.07	0.022	O				1.26

21.333	0.07	0.07	0.022	O				1.26
21.417	0.07	0.07	0.022	O				1.26
21.500	0.07	0.07	0.022	O				1.26
21.583	0.07	0.07	0.022	O				1.26
21.667	0.07	0.07	0.022	O				1.26
21.750	0.07	0.07	0.022	O				1.26
21.833	0.06	0.07	0.022	O				1.26
21.917	0.06	0.07	0.022	O				1.26
22.000	0.06	0.06	0.022	O				1.26
22.083	0.06	0.06	0.022	O				1.26
22.167	0.06	0.06	0.022	O				1.26
22.250	0.06	0.06	0.022	O				1.26
22.333	0.06	0.06	0.022	O				1.26
22.417	0.06	0.06	0.022	O				1.26
22.500	0.06	0.06	0.022	O				1.26
22.583	0.06	0.06	0.022	O				1.26
22.667	0.06	0.06	0.022	O				1.26
22.750	0.06	0.06	0.022	O				1.26
22.833	0.06	0.06	0.022	O				1.26
22.917	0.06	0.06	0.022	O				1.26
23.000	0.06	0.06	0.022	O				1.26
23.083	0.06	0.06	0.022	O				1.26
23.167	0.06	0.06	0.021	O				1.26
23.250	0.06	0.06	0.021	O				1.26
23.333	0.06	0.06	0.021	O				1.26
23.417	0.06	0.06	0.021	O				1.26
23.500	0.06	0.06	0.021	O				1.26
23.583	0.06	0.06	0.021	O				1.26
23.667	0.06	0.06	0.021	O				1.26
23.750	0.06	0.06	0.021	O				1.26

23.833	0.06	0.06	0.021	|O	|	|	|	|
1.26								
23.917	0.06	0.06	0.021	|O	|	|	|	|
1.25								
24.000	0.06	0.06	0.021	|O	|	|	|	|
1.25								
24.083	0.05	0.05	0.021	IO	|	|	|	|
1.25								
24.167	0.02	0.05	0.021	O	|	|	|	|
1.25								
24.250	0.01	0.03	0.021	O	|	|	|	|
1.25								
24.333	0.00	0.03	0.021	O	|	|	|	|
1.25								
24.417	0.00	0.03	0.021	O	|	|	|	|
1.24								
24.500	0.00	0.03	0.021	O	|	|	|	|
1.23								
24.583	0.00	0.03	0.020	O	|	|	|	|
1.22								
24.667	0.00	0.03	0.020	O	|	|	|	|
1.21								
24.750	0.00	0.03	0.020	O	|	|	|	|
1.21								
24.833	0.00	0.03	0.020	O	|	|	|	|
1.20								
24.917	0.00	0.03	0.020	O	|	|	|	|
1.19								
25.000	0.00	0.03	0.019	O	|	|	|	|
1.18								
25.083	0.00	0.03	0.019	O	|	|	|	|
1.17								
25.167	0.00	0.03	0.019	O	|	|	|	|
1.16								
25.250	0.00	0.03	0.019	O	|	|	|	|
1.15								
25.333	0.00	0.03	0.019	O	|	|	|	|
1.14								
25.417	0.00	0.03	0.019	O	|	|	|	|
1.14								
25.500	0.00	0.03	0.018	O	|	|	|	|
1.13								
25.583	0.00	0.03	0.018	O	|	|	|	|
1.12								
25.667	0.00	0.03	0.018	O	|	|	|	|
1.11								
25.750	0.00	0.03	0.018	O	|	|	|	|
1.10								
25.833	0.00	0.03	0.018	O	|	|	|	|
1.09								
25.917	0.00	0.03	0.017	O	|	|	|	|
1.08								
26.000	0.00	0.03	0.017	O	|	|	|	|
1.07								
26.083	0.00	0.03	0.017	O	|	|	|	|
1.07								
26.167	0.00	0.03	0.017	O	|	|	|	|
1.06								
26.250	0.00	0.03	0.017	O	|	|	|	|
1.05								

26.333	0.00	0.03	0.017	O				
1.04								
26.417	0.00	0.03	0.016	O				
1.03								
26.500	0.00	0.03	0.016	O				
1.02								
26.583	0.00	0.03	0.016	O				
1.01								
26.667	0.00	0.03	0.016	O				
1.01								
26.750	0.00	0.03	0.016	O				
1.00								
26.833	0.00	0.03	0.015	O				
0.99								
26.917	0.00	0.03	0.015	O				
0.98								
27.000	0.00	0.03	0.015	O				
0.97								
27.083	0.00	0.03	0.015	O				
0.96								
27.167	0.00	0.03	0.015	O				
0.95								
27.250	0.00	0.03	0.014	O				
0.94								
27.333	0.00	0.03	0.014	O				
0.94								
27.417	0.00	0.03	0.014	O				
0.93								
27.500	0.00	0.03	0.014	O				
0.92								
27.583	0.00	0.03	0.014	O				
0.91								
27.667	0.00	0.03	0.014	O				
0.90								
27.750	0.00	0.03	0.013	O				
0.89								
27.833	0.00	0.03	0.013	O				
0.88								
27.917	0.00	0.03	0.013	O				
0.87								
28.000	0.00	0.03	0.013	O				
0.87								
28.083	0.00	0.03	0.013	O				
0.86								
28.167	0.00	0.03	0.012	O				
0.85								
28.250	0.00	0.03	0.012	O				
0.84								
28.333	0.00	0.03	0.012	O				
0.83								
28.417	0.00	0.03	0.012	O				
0.82								
28.500	0.00	0.03	0.012	O				
0.81								
28.583	0.00	0.03	0.011	O				
0.80								
28.667	0.00	0.03	0.011	O				
0.80								
28.750	0.00	0.03	0.011	O				
0.79								

28.833	0.00	0.03	0.011	O				
0.78								
28.917	0.00	0.03	0.011	O				
0.77								
29.000	0.00	0.03	0.011	O				
0.76								
29.083	0.00	0.03	0.010	O				
0.75								
29.167	0.00	0.03	0.010	O				
0.74								
29.250	0.00	0.03	0.010	O				
0.73								
29.333	0.00	0.03	0.010	O				
0.73								
29.417	0.00	0.03	0.010	O				
0.72								
29.500	0.00	0.03	0.009	O				
0.71								
29.583	0.00	0.03	0.009	O				
0.70								
29.667	0.00	0.03	0.009	O				
0.69								
29.750	0.00	0.03	0.009	O				
0.68								
29.833	0.00	0.03	0.009	O				
0.67								
29.917	0.00	0.03	0.009	O				
0.67								
30.000	0.00	0.03	0.008	O				
0.66								
30.083	0.00	0.03	0.008	O				
0.65								
30.167	0.00	0.03	0.008	O				
0.64								
30.250	0.00	0.03	0.008	O				
0.63								
30.333	0.00	0.03	0.008	O				
0.62								
30.417	0.00	0.03	0.007	O				
0.61								
30.500	0.00	0.03	0.007	O				
0.60								
30.583	0.00	0.03	0.007	O				
0.60								
30.667	0.00	0.03	0.007	O				
0.59								
30.750	0.00	0.03	0.007	O				
0.58								
30.833	0.00	0.03	0.006	O				
0.57								
30.917	0.00	0.03	0.006	O				
0.56								
31.000	0.00	0.03	0.006	O				
0.55								
31.083	0.00	0.03	0.006	O				
0.54								
31.167	0.00	0.03	0.006	O				
0.53								
31.250	0.00	0.03	0.006	O				
0.53								

31.333	0.00	0.03	0.005	O				
0.52								
31.417	0.00	0.03	0.005	O				
0.51								
31.500	0.00	0.03	0.005	O				
0.50								
31.583	0.00	0.03	0.005	O				
0.48								
31.667	0.00	0.03	0.005	O				
0.46								
31.750	0.00	0.02	0.004	O				
0.45								
31.833	0.00	0.02	0.004	O				
0.43								
31.917	0.00	0.02	0.004	O				
0.41								
32.000	0.00	0.02	0.004	O				
0.40								
32.083	0.00	0.02	0.004	O				
0.38								
32.167	0.00	0.02	0.004	O				
0.37								
32.250	0.00	0.02	0.004	O				
0.36								
32.333	0.00	0.02	0.003	O				
0.34								
32.417	0.00	0.02	0.003	O				
0.33								
32.500	0.00	0.02	0.003	O				
0.32								
32.583	0.00	0.02	0.003	O				
0.31								
32.667	0.00	0.02	0.003	O				
0.30								
32.750	0.00	0.02	0.003	O				
0.29								
32.833	0.00	0.01	0.003	O				
0.28								
32.917	0.00	0.01	0.003	O				
0.27								
33.000	0.00	0.01	0.003	O				
0.26								
33.083	0.00	0.01	0.002	O				
0.25								
33.167	0.00	0.01	0.002	O				
0.24								
33.250	0.00	0.01	0.002	O				
0.23								
33.333	0.00	0.01	0.002	O				
0.22								
33.417	0.00	0.01	0.002	O				
0.21								
33.500	0.00	0.01	0.002	O				
0.20								
33.583	0.00	0.01	0.002	O				
0.20								
33.667	0.00	0.01	0.002	O				
0.19								
33.750	0.00	0.01	0.002	O				
0.18								

33.833	0.00	0.01	0.002	O	|	|	|	|
0.18								
33.917	0.00	0.01	0.002	O	|	|	|	|
0.17								
34.000	0.00	0.01	0.002	O	|	|	|	|
0.16								
34.083	0.00	0.01	0.002	O	|	|	|	|
0.16								
34.167	0.00	0.01	0.002	O	|	|	|	|
0.15								
34.250	0.00	0.01	0.001	O	|	|	|	|
0.15								
34.333	0.00	0.01	0.001	O	|	|	|	|
0.14								
34.417	0.00	0.01	0.001	O	|	|	|	|
0.14								
34.500	0.00	0.01	0.001	O	|	|	|	|
0.13								
34.583	0.00	0.01	0.001	O	|	|	|	|
0.13								
34.667	0.00	0.01	0.001	O	|	|	|	|
0.12								
34.750	0.00	0.01	0.001	O	|	|	|	|
0.12								
34.833	0.00	0.01	0.001	O	|	|	|	|
0.11								
34.917	0.00	0.01	0.001	O	|	|	|	|
0.11								
35.000	0.00	0.01	0.001	O	|	|	|	|
0.10								
35.083	0.00	0.01	0.001	O	|	|	|	|
0.10								
35.167	0.00	0.01	0.001	O	|	|	|	|
0.10								
35.250	0.00	0.01	0.001	O	|	|	|	|
0.09								
35.333	0.00	0.00	0.001	O	|	|	|	|
0.09								
35.417	0.00	0.00	0.001	O	|	|	|	|
0.09								
35.500	0.00	0.00	0.001	O	|	|	|	|
0.08								
35.583	0.00	0.00	0.001	O	|	|	|	|
0.08								
35.667	0.00	0.00	0.001	O	|	|	|	|
0.08								
35.750	0.00	0.00	0.001	O	|	|	|	|
0.07								
35.833	0.00	0.00	0.001	O	|	|	|	|
0.07								
35.917	0.00	0.00	0.001	O	|	|	|	|
0.07								
36.000	0.00	0.00	0.001	O	|	|	|	|
0.07								
36.083	0.00	0.00	0.001	O	|	|	|	|
0.06								
36.167	0.00	0.00	0.001	O	|	|	|	|
0.06								
36.250	0.00	0.00	0.001	O	|	|	|	|
0.06								

36.333	0.00	0.00	0.001	O				
0.06								
36.417	0.00	0.00	0.001	O				
0.06								
36.500	0.00	0.00	0.001	O				
0.05								
36.583	0.00	0.00	0.001	O				
0.05								
36.667	0.00	0.00	0.000	O				
0.05								
36.750	0.00	0.00	0.000	O				
0.05								
36.833	0.00	0.00	0.000	O				
0.05								
36.917	0.00	0.00	0.000	O				
0.04								
37.000	0.00	0.00	0.000	O				
0.04								
37.083	0.00	0.00	0.000	O				
0.04								
37.167	0.00	0.00	0.000	O				
0.04								
37.250	0.00	0.00	0.000	O				
0.04								
37.333	0.00	0.00	0.000	O				
0.04								
37.417	0.00	0.00	0.000	O				
0.04								
37.500	0.00	0.00	0.000	O				
0.03								
37.583	0.00	0.00	0.000	O				
0.03								
37.667	0.00	0.00	0.000	O				
0.03								
37.750	0.00	0.00	0.000	O				
0.03								
37.833	0.00	0.00	0.000	O				
0.03								
37.917	0.00	0.00	0.000	O				
0.03								
38.000	0.00	0.00	0.000	O				
0.03								
38.083	0.00	0.00	0.000	O				
0.03								
38.167	0.00	0.00	0.000	O				
0.03								
38.250	0.00	0.00	0.000	O				
0.02								
38.333	0.00	0.00	0.000	O				
0.02								
38.417	0.00	0.00	0.000	O				
0.02								
38.500	0.00	0.00	0.000	O				
0.02								
38.583	0.00	0.00	0.000	O				
0.02								
38.667	0.00	0.00	0.000	O				
0.02								
38.750	0.00	0.00	0.000	O				
0.02								

```
 38.833    0.00    0.00      0.000  O       |       |       |       |
0.02
 38.917    0.00    0.00      0.000  O       |       |       |       |
0.02

      ****************************HYDROGRAPH
DATA***************************
                  Number of intervals =   467
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =        0.941 (CFS)
                  Total volume =       0.198 (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 - 2005
Study date: 11/22/22

Luna 395
Basin Routing
Underground System

Program License Serial Number 6232

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

From study/file name: Luna395bd.rte
**********HYDROGRAPH DATA**********
Number of intervals = 296
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 9.655 (CFS)
Total volume = 1.145 (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 402.000 to Point/Station 403.000
**** RETARDING BASIN ROUTING ****

User entry of depth-outflow-storage data

Total number of inflow hydrograph intervals = 296
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  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
            (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
      ------------------------------------------------------------------
---
          0.000      0.000      0.000      0.000        0.000
          5.000      0.180      0.280      0.179        0.181
          7.000      0.210      3.080      0.199        0.221
          8.000      0.280      3.080      0.269        0.291
      ------------------------------------------------------------------
--
                  Hydrograph Detention Basin Routing
      ------------------------------------------------------------------
---

      Graph values: 'I'= unit inflow; 'O'=outflow at time shown
      ------------------------------------------------------------------
---
  Time   Inflow  Outflow    Storage
Depth
 (Hours)  (CFS)    (CFS)     (Ac.Ft) .0       2.4    4.83    7.24    9.65
(Ft.)
  0.083    0.05    0.00      0.000  O       |       |       |       |
0.00
  0.167    0.21    0.00      0.001  O       |       |       |       |
0.03
  0.250    0.26    0.00      0.003  O       |       |       |       |
0.07
  0.333    0.29    0.01      0.005  O       |       |       |       |
0.13
  0.417    0.30    0.01      0.007  OI      |       |       |       |
0.18
  0.500    0.31    0.01      0.009  OI      |       |       |       |
0.24
  0.583    0.32    0.02      0.011  OI      |       |       |       |
0.30
  0.667    0.32    0.02      0.013  OI      |       |       |       |
0.35
  0.750    0.32    0.02      0.015  OI      |       |       |       |
0.41
  0.833    0.33    0.03      0.017  OI      |       |       |       |
0.47
  0.917    0.33    0.03      0.019  OI      |       |       |       |
0.53
  1.000    0.33    0.03      0.021  OI      |       |       |       |
0.58
  1.083    0.33    0.04      0.023  OI      |       |       |       |
0.64
  1.167    0.33    0.04      0.025  OI      |       |       |       |
0.69
  1.250    0.33    0.04      0.027  OI      |       |       |       |
0.75
```

1.333	0.33	0.05	0.029	OI				
0.80								
1.417	0.33	0.05	0.031	OI				
0.86								
1.500	0.33	0.05	0.033	OI				
0.91								
1.583	0.33	0.05	0.035	OI				
0.97								
1.667	0.33	0.06	0.037	OI				
1.02								
1.750	0.33	0.06	0.039	OI				
1.07								
1.833	0.34	0.06	0.040	OI				
1.12								
1.917	0.34	0.07	0.042	OI				
1.18								
2.000	0.34	0.07	0.044	OI				
1.23								
2.083	0.34	0.07	0.046	OI				
1.28								
2.167	0.34	0.07	0.048	OI				
1.33								
2.250	0.34	0.08	0.050	OI				
1.38								
2.333	0.34	0.08	0.051	OI				
1.43								
2.417	0.34	0.08	0.053	OI				
1.48								
2.500	0.34	0.09	0.055	OI				
1.53								
2.583	0.34	0.09	0.057	OI				
1.58								
2.667	0.34	0.09	0.059	OI				
1.63								
2.750	0.35	0.09	0.060	OI				
1.67								
2.833	0.35	0.10	0.062	OI				
1.72								
2.917	0.35	0.10	0.064	OI				
1.77								
3.000	0.35	0.10	0.065	OI				
1.82								
3.083	0.35	0.10	0.067	OI				
1.86								
3.167	0.35	0.11	0.069	OI				
1.91								
3.250	0.35	0.11	0.070	OI				
1.96								
3.333	0.35	0.11	0.072	OI				
2.00								
3.417	0.35	0.11	0.074	OI				
2.05								
3.500	0.35	0.12	0.075	OI				
2.10								
3.583	0.36	0.12	0.077	OI				
2.14								
3.667	0.36	0.12	0.079	OI				
2.19								
3.750	0.36	0.12	0.080	OI				
2.23								

3.833	0.36	0.13	0.082	OI				
2.27								
3.917	0.36	0.13	0.083	OI				
2.32								
4.000	0.36	0.13	0.085	OI				
2.36								
4.083	0.36	0.13	0.087	OI				
2.41								
4.167	0.36	0.14	0.088	OI				
2.45								
4.250	0.36	0.14	0.090	OI				
2.49								
4.333	0.37	0.14	0.091	OI				
2.54								
4.417	0.37	0.14	0.093	OI				
2.58								
4.500	0.37	0.15	0.094	OI				
2.62								
4.583	0.37	0.15	0.096	OI				
2.66								
4.667	0.37	0.15	0.097	OI				
2.70								
4.750	0.37	0.15	0.099	OI				
2.75								
4.833	0.37	0.16	0.100	OI				
2.79								
4.917	0.37	0.16	0.102	OI				
2.83								
5.000	0.37	0.16	0.103	OI				
2.87								
5.083	0.38	0.16	0.105	OI				
2.91								
5.167	0.38	0.17	0.106	OI				
2.95								
5.250	0.38	0.17	0.108	OI				
2.99								
5.333	0.38	0.17	0.109	OI				
3.03								
5.417	0.38	0.17	0.111	OI				
3.07								
5.500	0.38	0.17	0.112	OI				
3.11								
5.583	0.38	0.18	0.113	OI				
3.15								
5.667	0.39	0.18	0.115	OI				
3.19								
5.750	0.39	0.18	0.116	OI				
3.23								
5.833	0.39	0.18	0.118	OI				
3.27								
5.917	0.39	0.19	0.119	OI				
3.31								
6.000	0.39	0.19	0.121	OI				
3.35								
6.083	0.39	0.19	0.122	OI				
3.39								
6.167	0.39	0.19	0.123	OI				
3.43								
6.250	0.40	0.19	0.125	OI				
3.46								

6.333	0.40	0.20	0.126	OI				
3.50								
6.417	0.40	0.20	0.127	OI				
3.54								
6.500	0.40	0.20	0.129	OI				
3.58								
6.583	0.40	0.20	0.130	OI				
3.62								
6.667	0.40	0.20	0.132	OI				
3.65								
6.750	0.40	0.21	0.133	OI				
3.69								
6.833	0.41	0.21	0.134	OI				
3.73								
6.917	0.41	0.21	0.136	OI				
3.77								
7.000	0.41	0.21	0.137	OI				
3.81								
7.083	0.41	0.22	0.138	OI				
3.84								
7.167	0.41	0.22	0.140	OI				
3.88								
7.250	0.41	0.22	0.141	OI				
3.92								
7.333	0.42	0.22	0.142	OI				
3.96								
7.417	0.42	0.22	0.144	OI				
3.99								
7.500	0.42	0.23	0.145	OI				
4.03								
7.583	0.42	0.23	0.146	OI				
4.07								
7.667	0.42	0.23	0.148	OI				
4.10								
7.750	0.42	0.23	0.149	OI				
4.14								
7.833	0.43	0.23	0.150	OI				
4.18								
7.917	0.43	0.24	0.152	OI				
4.21								
8.000	0.43	0.24	0.153	OI				
4.25								
8.083	0.43	0.24	0.154	OI				
4.29								
8.167	0.43	0.24	0.156	OI				
4.32								
8.250	0.44	0.24	0.157	OI				
4.36								
8.333	0.44	0.25	0.158	OI				
4.40								
8.417	0.44	0.25	0.160	OI				
4.44								
8.500	0.44	0.25	0.161	OI				
4.47								
8.583	0.45	0.25	0.162	OI				
4.51								
8.667	0.45	0.25	0.164	OI				
4.55								
8.750	0.45	0.26	0.165	OI				
4.58								

8.833	0.45	0.26	0.166	OI				
4.62								
8.917	0.45	0.26	0.168	OI				
4.66								
9.000	0.46	0.26	0.169	OI				
4.69								
9.083	0.46	0.26	0.170	OI				
4.73								
9.167	0.46	0.27	0.172	OI				
4.77								
9.250	0.46	0.27	0.173	OI				
4.81								
9.333	0.47	0.27	0.174	OI				
4.84								
9.417	0.47	0.27	0.176	OI				
4.88								
9.500	0.47	0.28	0.177	OI				
4.92								
9.583	0.47	0.28	0.178	OI				
4.95								
9.667	0.48	0.28	0.180	OI				
4.99								
9.750	0.48	0.36	0.181	|O				
5.05								
9.833	0.48	0.42	0.181	|O				
5.10								
9.917	0.48	0.45	0.182	|O				
5.12								
10.000	0.49	0.47	0.182	|O				
5.13								
10.083	0.49	0.48	0.182	|O				
5.14								
10.167	0.49	0.49	0.182	|O				
5.15								
10.250	0.50	0.49	0.182	|O				
5.15								
10.333	0.50	0.49	0.182	|O				
5.15								
10.417	0.50	0.50	0.182	|O				
5.16								
10.500	0.51	0.50	0.182	|O				
5.16								
10.583	0.51	0.50	0.182	|O				
5.16								
10.667	0.51	0.51	0.182	|O				
5.16								
10.750	0.52	0.51	0.182	|O				
5.17								
10.833	0.52	0.51	0.183	|O				
5.17								
10.917	0.52	0.52	0.183	|O				
5.17								
11.000	0.53	0.52	0.183	|O				
5.17								
11.083	0.53	0.53	0.183	|O				
5.18								
11.167	0.54	0.53	0.183	|O				
5.18								
11.250	0.54	0.53	0.183	|O				
5.18								

11.333	0.54	0.54	0.183	|O	|	|	|	|
5.18								
11.417	0.55	0.54	0.183	|O	|	|	|	|
5.19								
11.500	0.55	0.55	0.183	|O	|	|	|	|
5.19								
11.583	0.56	0.55	0.183	|O	|	|	|	|
5.19								
11.667	0.56	0.55	0.183	|O	|	|	|	|
5.20								
11.750	0.57	0.56	0.183	|O	|	|	|	|
5.20								
11.833	0.57	0.56	0.183	|O	|	|	|	|
5.20								
11.917	0.58	0.57	0.183	|O	|	|	|	|
5.21								
12.000	0.58	0.57	0.183	|O	|	|	|	|
5.21								
12.083	0.57	0.57	0.183	|O	|	|	|	|
5.21								
12.167	0.51	0.56	0.183	|O	|	|	|	|
5.20								
12.250	0.49	0.53	0.183	|O	|	|	|	|
5.18								
12.333	0.49	0.51	0.182	|O	|	|	|	|
5.16								
12.417	0.49	0.50	0.182	|O	|	|	|	|
5.16								
12.500	0.49	0.49	0.182	|O	|	|	|	|
5.15								
12.583	0.50	0.49	0.182	|O	|	|	|	|
5.15								
12.667	0.50	0.50	0.182	|O	|	|	|	|
5.15								
12.750	0.51	0.50	0.182	|O	|	|	|	|
5.16								
12.833	0.51	0.51	0.182	|O	|	|	|	|
5.16								
12.917	0.52	0.51	0.182	|O	|	|	|	|
5.17								
13.000	0.53	0.52	0.183	|O	|	|	|	|
5.17								
13.083	0.54	0.53	0.183	|O	|	|	|	|
5.18								
13.167	0.55	0.53	0.183	|O	|	|	|	|
5.18								
13.250	0.55	0.54	0.183	|O	|	|	|	|
5.19								
13.333	0.56	0.55	0.183	|O	|	|	|	|
5.19								
13.417	0.57	0.56	0.183	|O	|	|	|	|
5.20								
13.500	0.58	0.57	0.183	|O	|	|	|	|
5.21								
13.583	0.59	0.58	0.183	|O	|	|	|	|
5.21								
13.667	0.60	0.59	0.183	|OI	|	|	|	|
5.22								
13.750	0.62	0.60	0.183	|OI	|	|	|	|
5.23								

13.833	0.63	0.61	0.184	O				
5.24								
13.917	0.64	0.62	0.184	O				
5.24								
14.000	0.66	0.63	0.184	O				
5.25								
14.083	0.67	0.65	0.184	O				
5.26								
14.167	0.69	0.66	0.184	O				
5.27								
14.250	0.70	0.68	0.184	O				
5.28								
14.333	0.72	0.69	0.184	O				
5.29								
14.417	0.74	0.71	0.185	O				
5.31								
14.500	0.76	0.73	0.185	O				
5.32								
14.583	0.78	0.75	0.185	O				
5.33								
14.667	0.80	0.77	0.185	O				
5.35								
14.750	0.83	0.79	0.185	O				
5.37								
14.833	0.86	0.82	0.186	O				
5.38								
14.917	0.89	0.84	0.186	O				
5.40								
15.000	0.93	0.87	0.186	OI				
5.42								
15.083	0.96	0.91	0.187	O				
5.45								
15.167	1.01	0.95	0.187	O				
5.48								
15.250	1.05	0.99	0.188	O				
5.51								
15.333	1.12	1.04	0.188	O				
5.54								
15.417	1.12	1.07	0.189	O				
5.57								
15.500	1.00	1.07	0.188	O				
5.56								
15.583	1.01	1.04	0.188	O				
5.54								
15.667	1.10	1.05	0.188	O				
5.55								
15.750	1.22	1.10	0.189	OI				
5.59								
15.833	1.43	1.21	0.190	O				
5.66								
15.917	1.75	1.39	0.192	OI				
5.80								
16.000	2.46	1.74	0.196	O	I			
6.04								
16.083	5.25	2.77	0.207		O	I		
6.78								
16.167	9.65	3.08	0.238		O			I
7.40								
16.250	4.71	3.08	0.266		O	I		
7.80								

16.333	2.80	3.08	0.271	|	|IO	|	|	|
7.87								
16.417	1.99	3.08	0.266	|	I | O	|	|	|
7.80								
16.500	1.67	3.08	0.257	|	I | O	|	|	|
7.68								
16.583	1.38	3.08	0.247	|	I | O	|	|	|
7.52								
16.667	1.23	3.08	0.234	|	I | O	|	|	|
7.35								
16.750	1.05	3.08	0.221	|	I | O	|	|	|
7.16								
16.833	0.91	2.84	0.207	|	I |O	|	|	|
6.83								
16.917	0.84	1.88	0.197	|	I O |	|	|	|
6.15								
17.000	0.79	1.37	0.192	|	I O |	|	|	|
5.78								
17.083	0.75	1.08	0.189	|	IO |	|	|	|
5.57								
17.167	0.71	0.91	0.187	|	IO |	|	|	|
5.45								
17.250	0.68	0.80	0.186	|	O |	|	|	|
5.37								
17.333	0.65	0.73	0.185	|	O |	|	|	|
5.32								
17.417	0.62	0.69	0.184	|	O |	|	|	|
5.29								
17.500	0.60	0.65	0.184	|IO	|	|	|	|
5.26								
17.583	0.58	0.62	0.184	|IO	|	|	|	|
5.24								
17.667	0.56	0.59	0.183	|O	|	|	|	|
5.22								
17.750	0.54	0.57	0.183	|O	|	|	|	|
5.21								
17.833	0.52	0.55	0.183	|O	|	|	|	|
5.19								
17.917	0.51	0.54	0.183	|O	|	|	|	|
5.18								
18.000	0.50	0.52	0.183	|O	|	|	|	|
5.17								
18.083	0.50	0.51	0.182	|O	|	|	|	|
5.16								
18.167	0.55	0.52	0.183	|O	|	|	|	|
5.17								
18.250	0.57	0.54	0.183	|O	|	|	|	|
5.18								
18.333	0.56	0.55	0.183	|O	|	|	|	|
5.19								
18.417	0.56	0.56	0.183	|O	|	|	|	|
5.20								
18.500	0.55	0.56	0.183	|O	|	|	|	|
5.20								
18.583	0.55	0.55	0.183	|O	|	|	|	|
5.20								
18.667	0.54	0.55	0.183	|O	|	|	|	|
5.19								
18.750	0.53	0.54	0.183	|O	|	|	|	|
5.19								

18.833	0.53	0.54	0.183	O				
5.18								
18.917	0.52	0.53	0.183	O				
5.18								
19.000	0.51	0.52	0.183	O				
5.17								
19.083	0.50	0.51	0.183	O				
5.17								
19.167	0.50	0.51	0.182	O				
5.16								
19.250	0.49	0.50	0.182	O				
5.16								
19.333	0.49	0.50	0.182	O				
5.15								
19.417	0.48	0.49	0.182	O				
5.15								
19.500	0.47	0.48	0.182	O				
5.15								
19.583	0.47	0.48	0.182	O				
5.14								
19.667	0.46	0.47	0.182	O				
5.14								
19.750	0.46	0.47	0.182	O				
5.13								
19.833	0.45	0.46	0.182	O				
5.13								
19.917	0.45	0.46	0.182	O				
5.13								
20.000	0.45	0.45	0.182	O				
5.12								
20.083	0.44	0.45	0.182	O				
5.12								
20.167	0.44	0.44	0.182	O				
5.12								
20.250	0.43	0.44	0.182	O				
5.11								
20.333	0.43	0.44	0.182	O				
5.11								
20.417	0.43	0.43	0.182	O				
5.11								
20.500	0.42	0.43	0.182	O				
5.11								
20.583	0.42	0.42	0.182	O				
5.10								
20.667	0.41	0.42	0.182	O				
5.10								
20.750	0.41	0.42	0.181	O				
5.10								
20.833	0.41	0.41	0.181	O				
5.10								
20.917	0.40	0.41	0.181	O				
5.09								
21.000	0.40	0.41	0.181	O				
5.09								
21.083	0.40	0.40	0.181	O				
5.09								
21.167	0.40	0.40	0.181	O				
5.09								
21.250	0.39	0.40	0.181	O				
5.08								

21.333	0.39	0.39	0.181	O				
5.08								
21.417	0.39	0.39	0.181	O				
5.08								
21.500	0.38	0.39	0.181	O				
5.08								
21.583	0.38	0.39	0.181	O				
5.08								
21.667	0.38	0.38	0.181	O				
5.07								
21.750	0.38	0.38	0.181	O				
5.07								
21.833	0.37	0.38	0.181	O				
5.07								
21.917	0.37	0.38	0.181	O				
5.07								
22.000	0.37	0.37	0.181	O				
5.07								
22.083	0.37	0.37	0.181	O				
5.06								
22.167	0.36	0.37	0.181	O				
5.06								
22.250	0.36	0.37	0.181	O				
5.06								
22.333	0.36	0.36	0.181	O				
5.06								
22.417	0.36	0.36	0.181	O				
5.06								
22.500	0.36	0.36	0.181	O				
5.06								
22.583	0.35	0.36	0.181	O				
5.05								
22.667	0.35	0.35	0.181	O				
5.05								
22.750	0.35	0.35	0.181	O				
5.05								
22.833	0.35	0.35	0.181	O				
5.05								
22.917	0.35	0.35	0.181	O				
5.05								
23.000	0.34	0.35	0.181	O				
5.05								
23.083	0.34	0.34	0.181	O				
5.05								
23.167	0.34	0.34	0.181	O				
5.04								
23.250	0.34	0.34	0.181	O				
5.04								
23.333	0.34	0.34	0.181	O				
5.04								
23.417	0.33	0.34	0.181	O				
5.04								
23.500	0.33	0.34	0.181	O				
5.04								
23.583	0.33	0.33	0.181	O				
5.04								
23.667	0.33	0.33	0.181	O				
5.04								
23.750	0.33	0.33	0.181	O				
5.04								

23.833	0.33	0.33	0.181	|O	|	|	|	|
5.03								
23.917	0.32	0.33	0.181	|O	|	|	|	|
5.03								
24.000	0.32	0.33	0.180	|O	|	|	|	|
5.03								
24.083	0.27	0.31	0.180	IO	|	|	|	|
5.02								
24.167	0.11	0.28	0.180	O	|	|	|	|
4.99								
24.250	0.06	0.28	0.178	O	|	|	|	|
4.95								
24.333	0.03	0.27	0.177	O	|	|	|	|
4.91								
24.417	0.02	0.27	0.175	O	|	|	|	|
4.86								
24.500	0.01	0.27	0.173	O	|	|	|	|
4.81								
24.583	0.00	0.27	0.171	O	|	|	|	|
4.76								
24.667	0.00	0.26	0.170	O	|	|	|	|
4.71								
24.750	0.00	0.26	0.168	O	|	|	|	|
4.66								
24.833	0.00	0.26	0.166	O	|	|	|	|
4.61								
24.917	0.00	0.26	0.164	O	|	|	|	|
4.56								
25.000	0.00	0.25	0.162	O	|	|	|	|
4.51								
25.083	0.00	0.25	0.161	O	|	|	|	|
4.47								
25.167	0.00	0.25	0.159	O	|	|	|	|
4.42								
25.250	0.00	0.24	0.157	O	|	|	|	|
4.37								
25.333	0.00	0.24	0.156	O	|	|	|	|
4.32								
25.417	0.00	0.24	0.154	O	|	|	|	|
4.28								
25.500	0.00	0.24	0.152	O	|	|	|	|
4.23								
25.583	0.00	0.23	0.151	O	|	|	|	|
4.19								
25.667	0.00	0.23	0.149	O	|	|	|	|
4.14								
25.750	0.00	0.23	0.148	O	|	|	|	|
4.10								
25.833	0.00	0.23	0.146	O	|	|	|	|
4.06								
25.917	0.00	0.22	0.144	O	|	|	|	|
4.01								
26.000	0.00	0.22	0.143	O	|	|	|	|
3.97								
26.083	0.00	0.22	0.141	O	|	|	|	|
3.93								
26.167	0.00	0.22	0.140	O	|	|	|	|
3.88								
26.250	0.00	0.22	0.138	O	|	|	|	|
3.84								

26.333	0.00	0.21	0.137	O				
3.80								
26.417	0.00	0.21	0.135	O				
3.76								
26.500	0.00	0.21	0.134	O				
3.72								
26.583	0.00	0.21	0.133	O				
3.68								
26.667	0.00	0.20	0.131	O				
3.64								
26.750	0.00	0.20	0.130	O				
3.60								
26.833	0.00	0.20	0.128	O				
3.57								
26.917	0.00	0.20	0.127	O				
3.53								
27.000	0.00	0.20	0.126	O				
3.49								
27.083	0.00	0.19	0.124	O				
3.45								
27.167	0.00	0.19	0.123	O				
3.42								
27.250	0.00	0.19	0.122	O				
3.38								
27.333	0.00	0.19	0.120	O				
3.34								
27.417	0.00	0.19	0.119	O				
3.31								
27.500	0.00	0.18	0.118	O				
3.27								
27.583	0.00	0.18	0.117	O				
3.24								
27.667	0.00	0.18	0.115	O				
3.20								
27.750	0.00	0.18	0.114	O				
3.17								
27.833	0.00	0.18	0.113	O				
3.14								
27.917	0.00	0.17	0.112	O				
3.10								
28.000	0.00	0.17	0.110	O				
3.07								
28.083	0.00	0.17	0.109	O				
3.04								
28.167	0.00	0.17	0.108	O				
3.00								
28.250	0.00	0.17	0.107	O				
2.97								
28.333	0.00	0.16	0.106	O				
2.94								
28.417	0.00	0.16	0.105	O				
2.91								
28.500	0.00	0.16	0.104	O				
2.88								
28.583	0.00	0.16	0.103	O				
2.85								
28.667	0.00	0.16	0.101	O				
2.82								
28.750	0.00	0.16	0.100	O				
2.79								

28.833	0.00	0.15	0.099	O				
2.76								
28.917	0.00	0.15	0.098	O				
2.73								
29.000	0.00	0.15	0.097	O				
2.70								
29.083	0.00	0.15	0.096	O				
2.67								
29.167	0.00	0.15	0.095	O				
2.64								
29.250	0.00	0.15	0.094	O				
2.61								
29.333	0.00	0.14	0.093	O				
2.59								
29.417	0.00	0.14	0.092	O				
2.56								
29.500	0.00	0.14	0.091	O				
2.53								
29.583	0.00	0.14	0.090	O				
2.50								
29.667	0.00	0.14	0.089	O				
2.48								
29.750	0.00	0.14	0.088	O				
2.45								
29.833	0.00	0.14	0.087	O				
2.42								
29.917	0.00	0.13	0.086	O				
2.40								
30.000	0.00	0.13	0.085	O				
2.37								
30.083	0.00	0.13	0.085	O				
2.35								
30.167	0.00	0.13	0.084	O				
2.32								
30.250	0.00	0.13	0.083	O				
2.30								
30.333	0.00	0.13	0.082	O				
2.27								
30.417	0.00	0.13	0.081	O				
2.25								
30.500	0.00	0.12	0.080	O				
2.23								
30.583	0.00	0.12	0.079	O				
2.20								
30.667	0.00	0.12	0.078	O				
2.18								
30.750	0.00	0.12	0.078	O				
2.16								
30.833	0.00	0.12	0.077	O				
2.13								
30.917	0.00	0.12	0.076	O				
2.11								
31.000	0.00	0.12	0.075	O				
2.09								
31.083	0.00	0.12	0.074	O				
2.06								
31.167	0.00	0.11	0.074	O				
2.04								
31.250	0.00	0.11	0.073	O				
2.02								

31.333	0.00	0.11	0.072	O				
2.00								
31.417	0.00	0.11	0.071	O				
1.98								
31.500	0.00	0.11	0.070	O				
1.96								
31.583	0.00	0.11	0.070	O				
1.94								
31.667	0.00	0.11	0.069	O				
1.92								
31.750	0.00	0.11	0.068	O				
1.90								
31.833	0.00	0.10	0.067	O				
1.87								
31.917	0.00	0.10	0.067	O				
1.86								
32.000	0.00	0.10	0.066	O				
1.84								
32.083	0.00	0.10	0.065	O				
1.82								
32.167	0.00	0.10	0.065	O				
1.80								
32.250	0.00	0.10	0.064	O				
1.78								
32.333	0.00	0.10	0.063	O				
1.76								
32.417	0.00	0.10	0.063	O				
1.74								
32.500	0.00	0.10	0.062	O				
1.72								
32.583	0.00	0.10	0.061	O				
1.70								
32.667	0.00	0.09	0.061	O				
1.68								
32.750	0.00	0.09	0.060	O				
1.67								
32.833	0.00	0.09	0.059	O				
1.65								
32.917	0.00	0.09	0.059	O				
1.63								
33.000	0.00	0.09	0.058	O				
1.61								
33.083	0.00	0.09	0.057	O				
1.60								
33.167	0.00	0.09	0.057	O				
1.58								
33.250	0.00	0.09	0.056	O				
1.56								
33.333	0.00	0.09	0.056	O				
1.55								
33.417	0.00	0.09	0.055	O				
1.53								
33.500	0.00	0.08	0.054	O				
1.51								
33.583	0.00	0.08	0.054	O				
1.50								
33.667	0.00	0.08	0.053	O				
1.48								
33.750	0.00	0.08	0.053	O				
1.47								

33.833	0.00	0.08	0.052	O				
1.45								
33.917	0.00	0.08	0.052	O				
1.43								
34.000	0.00	0.08	0.051	O				
1.42								
34.083	0.00	0.08	0.051	O				
1.40								
34.167	0.00	0.08	0.050	O				
1.39								
34.250	0.00	0.08	0.049	O				
1.37								
34.333	0.00	0.08	0.049	O				
1.36								
34.417	0.00	0.08	0.048	O				
1.35								
34.500	0.00	0.07	0.048	O				
1.33								
34.583	0.00	0.07	0.047	O				
1.32								
34.667	0.00	0.07	0.047	O				
1.30								
34.750	0.00	0.07	0.046	O				
1.29								
34.833	0.00	0.07	0.046	O				
1.27								
34.917	0.00	0.07	0.045	O				
1.26								
35.000	0.00	0.07	0.045	O				
1.25								
35.083	0.00	0.07	0.044	O				
1.23								
35.167	0.00	0.07	0.044	O				
1.22								
35.250	0.00	0.07	0.044	O				
1.21								
35.333	0.00	0.07	0.043	O				
1.20								
35.417	0.00	0.07	0.043	O				
1.18								
35.500	0.00	0.07	0.042	O				
1.17								
35.583	0.00	0.06	0.042	O				
1.16								
35.667	0.00	0.06	0.041	O				
1.15								
35.750	0.00	0.06	0.041	O				
1.13								
35.833	0.00	0.06	0.040	O				
1.12								
35.917	0.00	0.06	0.040	O				
1.11								
36.000	0.00	0.06	0.040	O				
1.10								
36.083	0.00	0.06	0.039	O				
1.09								
36.167	0.00	0.06	0.039	O				
1.07								
36.250	0.00	0.06	0.038	O				
1.06								

36.333	0.00	0.06	0.038	O				
1.05								
36.417	0.00	0.06	0.037	O				
1.04								
36.500	0.00	0.06	0.037	O				
1.03								
36.583	0.00	0.06	0.037	O				
1.02								
36.667	0.00	0.06	0.036	O				
1.01								
36.750	0.00	0.06	0.036	O				
1.00								
36.833	0.00	0.06	0.035	O				
0.99								
36.917	0.00	0.05	0.035	O				
0.98								
37.000	0.00	0.05	0.035	O				
0.97								
37.083	0.00	0.05	0.034	O				
0.95								
37.167	0.00	0.05	0.034	O				
0.94								
37.250	0.00	0.05	0.034	O				
0.93								
37.333	0.00	0.05	0.033	O				
0.92								
37.417	0.00	0.05	0.033	O				
0.91								
37.500	0.00	0.05	0.033	O				
0.90								
37.583	0.00	0.05	0.032	O				
0.90								
37.667	0.00	0.05	0.032	O				
0.89								
37.750	0.00	0.05	0.032	O				
0.88								
37.833	0.00	0.05	0.031	O				
0.87								
37.917	0.00	0.05	0.031	O				
0.86								
38.000	0.00	0.05	0.031	O				
0.85								
38.083	0.00	0.05	0.030	O				
0.84								
38.167	0.00	0.05	0.030	O				
0.83								
38.250	0.00	0.05	0.030	O				
0.82								
38.333	0.00	0.05	0.029	O				
0.81								
38.417	0.00	0.05	0.029	O				
0.80								
38.500	0.00	0.04	0.029	O				
0.80								
38.583	0.00	0.04	0.028	O				
0.79								
38.667	0.00	0.04	0.028	O				
0.78								
38.750	0.00	0.04	0.028	O				
0.77								

38.833	0.00	0.04	0.027	O				
0.76								
38.917	0.00	0.04	0.027	O				
0.75								
39.000	0.00	0.04	0.027	O				
0.75								
39.083	0.00	0.04	0.027	O				
0.74								
39.167	0.00	0.04	0.026	O				
0.73								
39.250	0.00	0.04	0.026	O				
0.72								
39.333	0.00	0.04	0.026	O				
0.71								
39.417	0.00	0.04	0.025	O				
0.71								
39.500	0.00	0.04	0.025	O				
0.70								
39.583	0.00	0.04	0.025	O				
0.69								
39.667	0.00	0.04	0.025	O				
0.68								
39.750	0.00	0.04	0.024	O				
0.68								
39.833	0.00	0.04	0.024	O				
0.67								
39.917	0.00	0.04	0.024	O				
0.66								
40.000	0.00	0.04	0.024	O				
0.66								
40.083	0.00	0.04	0.023	O				
0.65								
40.167	0.00	0.04	0.023	O				
0.64								
40.250	0.00	0.04	0.023	O				
0.64								
40.333	0.00	0.04	0.023	O				
0.63								
40.417	0.00	0.03	0.022	O				
0.62								
40.500	0.00	0.03	0.022	O				
0.62								
40.583	0.00	0.03	0.022	O				
0.61								
40.667	0.00	0.03	0.022	O				
0.60								
40.750	0.00	0.03	0.021	O				
0.60								
40.833	0.00	0.03	0.021	O				
0.59								
40.917	0.00	0.03	0.021	O				
0.58								
41.000	0.00	0.03	0.021	O				
0.58								
41.083	0.00	0.03	0.021	O				
0.57								
41.167	0.00	0.03	0.020	O				
0.56								
41.250	0.00	0.03	0.020	O				
0.56								

41.333	0.00	0.03	0.020	O				
0.55								
41.417	0.00	0.03	0.020	O				
0.55								
41.500	0.00	0.03	0.019	O				
0.54								
41.583	0.00	0.03	0.019	O				
0.54								
41.667	0.00	0.03	0.019	O				
0.53								
41.750	0.00	0.03	0.019	O				
0.52								
41.833	0.00	0.03	0.019	O				
0.52								
41.917	0.00	0.03	0.018	O				
0.51								
42.000	0.00	0.03	0.018	O				
0.51								
42.083	0.00	0.03	0.018	O				
0.50								
42.167	0.00	0.03	0.018	O				
0.50								
42.250	0.00	0.03	0.018	O				
0.49								
42.333	0.00	0.03	0.018	O				
0.49								
42.417	0.00	0.03	0.017	O				
0.48								
42.500	0.00	0.03	0.017	O				
0.48								
42.583	0.00	0.03	0.017	O				
0.47								
42.667	0.00	0.03	0.017	O				
0.47								
42.750	0.00	0.03	0.017	O				
0.46								
42.833	0.00	0.03	0.016	O				
0.46								
42.917	0.00	0.03	0.016	O				
0.45								
43.000	0.00	0.02	0.016	O				
0.45								
43.083	0.00	0.02	0.016	O				
0.44								
43.167	0.00	0.02	0.016	O				
0.44								
43.250	0.00	0.02	0.016	O				
0.43								
43.333	0.00	0.02	0.015	O				
0.43								
43.417	0.00	0.02	0.015	O				
0.42								
43.500	0.00	0.02	0.015	O				
0.42								
43.583	0.00	0.02	0.015	O				
0.41								
43.667	0.00	0.02	0.015	O				
0.41								
43.750	0.00	0.02	0.015	O				
0.41								

43.833	0.00	0.02	0.014	O				
0.40								
43.917	0.00	0.02	0.014	O				
0.40								
44.000	0.00	0.02	0.014	O				
0.39								
44.083	0.00	0.02	0.014	O				
0.39								
44.167	0.00	0.02	0.014	O				
0.38								
44.250	0.00	0.02	0.014	O				
0.38								
44.333	0.00	0.02	0.014	O				
0.38								
44.417	0.00	0.02	0.013	O				
0.37								
44.500	0.00	0.02	0.013	O				
0.37								
44.583	0.00	0.02	0.013	O				
0.36								
44.667	0.00	0.02	0.013	O				
0.36								
44.750	0.00	0.02	0.013	O				
0.36								
44.833	0.00	0.02	0.013	O				
0.35								
44.917	0.00	0.02	0.013	O				
0.35								
45.000	0.00	0.02	0.012	O				
0.35								
45.083	0.00	0.02	0.012	O				
0.34								
45.167	0.00	0.02	0.012	O				
0.34								
45.250	0.00	0.02	0.012	O				
0.33								
45.333	0.00	0.02	0.012	O				
0.33								
45.417	0.00	0.02	0.012	O				
0.33								
45.500	0.00	0.02	0.012	O				
0.32								
45.583	0.00	0.02	0.012	O				
0.32								
45.667	0.00	0.02	0.011	O				
0.32								
45.750	0.00	0.02	0.011	O				
0.31								
45.833	0.00	0.02	0.011	O				
0.31								
45.917	0.00	0.02	0.011	O				
0.31								
46.000	0.00	0.02	0.011	O				
0.30								
46.083	0.00	0.02	0.011	O				
0.30								
46.167	0.00	0.02	0.011	O				
0.30								
46.250	0.00	0.02	0.011	O				
0.29								

46.333	0.00	0.02	0.010	O				
0.29								
46.417	0.00	0.02	0.010	O				
0.29								
46.500	0.00	0.02	0.010	O				
0.28								
46.583	0.00	0.02	0.010	O				
0.28								
46.667	0.00	0.02	0.010	O				
0.28								
46.750	0.00	0.02	0.010	O				
0.28								
46.833	0.00	0.02	0.010	O				
0.27								
46.917	0.00	0.02	0.010	O				
0.27								
47.000	0.00	0.01	0.010	O				
0.27								
47.083	0.00	0.01	0.010	O				
0.26								
47.167	0.00	0.01	0.009	O				
0.26								
47.250	0.00	0.01	0.009	O				
0.26								
47.333	0.00	0.01	0.009	O				
0.26								
47.417	0.00	0.01	0.009	O				
0.25								
47.500	0.00	0.01	0.009	O				
0.25								
47.583	0.00	0.01	0.009	O				
0.25								
47.667	0.00	0.01	0.009	O				
0.24								
47.750	0.00	0.01	0.009	O				
0.24								
47.833	0.00	0.01	0.009	O				
0.24								
47.917	0.00	0.01	0.009	O				
0.24								
48.000	0.00	0.01	0.008	O				
0.23								
48.083	0.00	0.01	0.008	O				
0.23								
48.167	0.00	0.01	0.008	O				
0.23								
48.250	0.00	0.01	0.008	O				
0.23								
48.333	0.00	0.01	0.008	O				
0.22								
48.417	0.00	0.01	0.008	O				
0.22								
48.500	0.00	0.01	0.008	O				
0.22								
48.583	0.00	0.01	0.008	O				
0.22								
48.667	0.00	0.01	0.008	O				
0.22								
48.750	0.00	0.01	0.008	O				
0.21								

48.833	0.00	0.01	0.008	O				
0.21								
48.917	0.00	0.01	0.008	O				
0.21								
49.000	0.00	0.01	0.007	O				
0.21								
49.083	0.00	0.01	0.007	O				
0.20								
49.167	0.00	0.01	0.007	O				
0.20								
49.250	0.00	0.01	0.007	O				
0.20								
49.333	0.00	0.01	0.007	O				
0.20								
49.417	0.00	0.01	0.007	O				
0.20								
49.500	0.00	0.01	0.007	O				
0.19								
49.583	0.00	0.01	0.007	O				
0.19								
49.667	0.00	0.01	0.007	O				
0.19								
49.750	0.00	0.01	0.007	O				
0.19								
49.833	0.00	0.01	0.007	O				
0.19								
49.917	0.00	0.01	0.007	O				
0.18								
50.000	0.00	0.01	0.007	O				
0.18								
50.083	0.00	0.01	0.006	O				
0.18								
50.167	0.00	0.01	0.006	O				
0.18								
50.250	0.00	0.01	0.006	O				
0.18								
50.333	0.00	0.01	0.006	O				
0.17								
50.417	0.00	0.01	0.006	O				
0.17								
50.500	0.00	0.01	0.006	O				
0.17								
50.583	0.00	0.01	0.006	O				
0.17								
50.667	0.00	0.01	0.006	O				
0.17								
50.750	0.00	0.01	0.006	O				
0.16								
50.833	0.00	0.01	0.006	O				
0.16								
50.917	0.00	0.01	0.006	O				
0.16								
51.000	0.00	0.01	0.006	O				
0.16								
51.083	0.00	0.01	0.006	O				
0.16								
51.167	0.00	0.01	0.006	O				
0.16								
51.250	0.00	0.01	0.006	O				
0.15								

51.333	0.00	0.01	0.006	O				
0.15								
51.417	0.00	0.01	0.005	O				
0.15								
51.500	0.00	0.01	0.005	O				
0.15								
51.583	0.00	0.01	0.005	O				
0.15								
51.667	0.00	0.01	0.005	O				
0.15								
51.750	0.00	0.01	0.005	O				
0.14								
51.833	0.00	0.01	0.005	O				
0.14								
51.917	0.00	0.01	0.005	O				
0.14								
52.000	0.00	0.01	0.005	O				
0.14								
52.083	0.00	0.01	0.005	O				
0.14								
52.167	0.00	0.01	0.005	O				
0.14								
52.250	0.00	0.01	0.005	O				
0.14								
52.333	0.00	0.01	0.005	O				
0.13								
52.417	0.00	0.01	0.005	O				
0.13								
52.500	0.00	0.01	0.005	O				
0.13								
52.583	0.00	0.01	0.005	O				
0.13								
52.667	0.00	0.01	0.005	O				
0.13								
52.750	0.00	0.01	0.005	O				
0.13								
52.833	0.00	0.01	0.005	O				
0.13								
52.917	0.00	0.01	0.004	O				
0.12								
53.000	0.00	0.01	0.004	O				
0.12								
53.083	0.00	0.01	0.004	O				
0.12								
53.167	0.00	0.01	0.004	O				
0.12								
53.250	0.00	0.01	0.004	O				
0.12								
53.333	0.00	0.01	0.004	O				
0.12								
53.417	0.00	0.01	0.004	O				
0.12								
53.500	0.00	0.01	0.004	O				
0.12								
53.583	0.00	0.01	0.004	O				
0.11								
53.667	0.00	0.01	0.004	O				
0.11								
53.750	0.00	0.01	0.004	O				
0.11								

53.833	0.00	0.01	0.004	O				
0.11								
53.917	0.00	0.01	0.004	O				
0.11								
54.000	0.00	0.01	0.004	O				
0.11								
54.083	0.00	0.01	0.004	O				
0.11								
54.167	0.00	0.01	0.004	O				
0.11								
54.250	0.00	0.01	0.004	O				
0.11								
54.333	0.00	0.01	0.004	O				
0.10								
54.417	0.00	0.01	0.004	O				
0.10								
54.500	0.00	0.01	0.004	O				
0.10								
54.583	0.00	0.01	0.004	O				
0.10								
54.667	0.00	0.01	0.004	O				
0.10								
54.750	0.00	0.01	0.004	O				
0.10								
54.833	0.00	0.01	0.004	O				
0.10								
54.917	0.00	0.01	0.003	O				
0.10								
55.000	0.00	0.01	0.003	O				
0.10								
55.083	0.00	0.01	0.003	O				
0.09								
55.167	0.00	0.01	0.003	O				
0.09								
55.250	0.00	0.01	0.003	O				
0.09								
55.333	0.00	0.01	0.003	O				
0.09								
55.417	0.00	0.01	0.003	O				
0.09								
55.500	0.00	0.01	0.003	O				
0.09								
55.583	0.00	0.00	0.003	O				
0.09								
55.667	0.00	0.00	0.003	O				
0.09								
55.750	0.00	0.00	0.003	O				
0.09								
55.833	0.00	0.00	0.003	O				
0.09								
55.917	0.00	0.00	0.003	O				
0.08								
56.000	0.00	0.00	0.003	O				
0.08								
56.083	0.00	0.00	0.003	O				
0.08								
56.167	0.00	0.00	0.003	O				
0.08								
56.250	0.00	0.00	0.003	O				
0.08								

56.333	0.00	0.00	0.003	O				
0.08								
56.417	0.00	0.00	0.003	O				
0.08								
56.500	0.00	0.00	0.003	O				
0.08								
56.583	0.00	0.00	0.003	O				
0.08								
56.667	0.00	0.00	0.003	O				
0.08								
56.750	0.00	0.00	0.003	O				
0.08								
56.833	0.00	0.00	0.003	O				
0.08								
56.917	0.00	0.00	0.003	O				
0.07								
57.000	0.00	0.00	0.003	O				
0.07								
57.083	0.00	0.00	0.003	O				
0.07								
57.167	0.00	0.00	0.003	O				
0.07								
57.250	0.00	0.00	0.003	O				
0.07								
57.333	0.00	0.00	0.003	O				
0.07								
57.417	0.00	0.00	0.003	O				
0.07								
57.500	0.00	0.00	0.002	O				
0.07								
57.583	0.00	0.00	0.002	O				
0.07								
57.667	0.00	0.00	0.002	O				
0.07								
57.750	0.00	0.00	0.002	O				
0.07								
57.833	0.00	0.00	0.002	O				
0.07								
57.917	0.00	0.00	0.002	O				
0.07								
58.000	0.00	0.00	0.002	O				
0.06								
58.083	0.00	0.00	0.002	O				
0.06								
58.167	0.00	0.00	0.002	O				
0.06								
58.250	0.00	0.00	0.002	O				
0.06								
58.333	0.00	0.00	0.002	O				
0.06								
58.417	0.00	0.00	0.002	O				
0.06								
58.500	0.00	0.00	0.002	O				
0.06								
58.583	0.00	0.00	0.002	O				
0.06								
58.667	0.00	0.00	0.002	O				
0.06								
58.750	0.00	0.00	0.002	O				
0.06								

58.833	0.00	0.00	0.002	O				
0.06								
58.917	0.00	0.00	0.002	O				
0.06								
59.000	0.00	0.00	0.002	O				
0.06								
59.083	0.00	0.00	0.002	O				
0.06								
59.167	0.00	0.00	0.002	O				
0.06								
59.250	0.00	0.00	0.002	O				
0.06								
59.333	0.00	0.00	0.002	O				
0.05								
59.417	0.00	0.00	0.002	O				
0.05								
59.500	0.00	0.00	0.002	O				
0.05								
59.583	0.00	0.00	0.002	O				
0.05								
59.667	0.00	0.00	0.002	O				
0.05								
59.750	0.00	0.00	0.002	O				
0.05								
59.833	0.00	0.00	0.002	O				
0.05								
59.917	0.00	0.00	0.002	O				
0.05								
60.000	0.00	0.00	0.002	O				
0.05								
60.083	0.00	0.00	0.002	O				
0.05								
60.167	0.00	0.00	0.002	O				
0.05								
60.250	0.00	0.00	0.002	O				
0.05								
60.333	0.00	0.00	0.002	O				
0.05								
60.417	0.00	0.00	0.002	O				
0.05								
60.500	0.00	0.00	0.002	O				
0.05								
60.583	0.00	0.00	0.002	O				
0.05								
60.667	0.00	0.00	0.002	O				
0.05								
60.750	0.00	0.00	0.002	O				
0.05								
60.833	0.00	0.00	0.002	O				
0.05								
60.917	0.00	0.00	0.002	O				
0.04								
61.000	0.00	0.00	0.002	O				
0.04								
61.083	0.00	0.00	0.002	O				
0.04								
61.167	0.00	0.00	0.002	O				
0.04								
61.250	0.00	0.00	0.002	O				
0.04								

61.333	0.00	0.00	0.002	O				
0.04								
61.417	0.00	0.00	0.002	O				
0.04								
61.500	0.00	0.00	0.001	O				
0.04								
61.583	0.00	0.00	0.001	O				
0.04								
61.667	0.00	0.00	0.001	O				
0.04								
61.750	0.00	0.00	0.001	O				
0.04								
61.833	0.00	0.00	0.001	O				
0.04								
61.917	0.00	0.00	0.001	O				
0.04								
62.000	0.00	0.00	0.001	O				
0.04								
62.083	0.00	0.00	0.001	O				
0.04								
62.167	0.00	0.00	0.001	O				
0.04								
62.250	0.00	0.00	0.001	O				
0.04								
62.333	0.00	0.00	0.001	O				
0.04								
62.417	0.00	0.00	0.001	O				
0.04								
62.500	0.00	0.00	0.001	O				
0.04								
62.583	0.00	0.00	0.001	O				
0.04								
62.667	0.00	0.00	0.001	O				
0.04								
62.750	0.00	0.00	0.001	O				
0.04								
62.833	0.00	0.00	0.001	O				
0.03								
62.917	0.00	0.00	0.001	O				
0.03								
63.000	0.00	0.00	0.001	O				
0.03								
63.083	0.00	0.00	0.001	O				
0.03								
63.167	0.00	0.00	0.001	O				
0.03								
63.250	0.00	0.00	0.001	O				
0.03								
63.333	0.00	0.00	0.001	O				
0.03								
63.417	0.00	0.00	0.001	O				
0.03								
63.500	0.00	0.00	0.001	O				
0.03								
63.583	0.00	0.00	0.001	O				
0.03								
63.667	0.00	0.00	0.001	O				
0.03								
63.750	0.00	0.00	0.001	O				
0.03								

63.833	0.00	0.00	0.001	O				
0.03								
63.917	0.00	0.00	0.001	O				
0.03								
64.000	0.00	0.00	0.001	O				
0.03								
64.083	0.00	0.00	0.001	O				
0.03								
64.167	0.00	0.00	0.001	O				
0.03								
64.250	0.00	0.00	0.001	O				
0.03								
64.333	0.00	0.00	0.001	O				
0.03								
64.417	0.00	0.00	0.001	O				
0.03								
64.500	0.00	0.00	0.001	O				
0.03								
64.583	0.00	0.00	0.001	O				
0.03								
64.667	0.00	0.00	0.001	O				
0.03								
64.750	0.00	0.00	0.001	O				
0.03								
64.833	0.00	0.00	0.001	O				
0.03								
64.917	0.00	0.00	0.001	O				
0.03								
65.000	0.00	0.00	0.001	O				
0.03								
65.083	0.00	0.00	0.001	O				
0.03								
65.167	0.00	0.00	0.001	O				
0.03								
65.250	0.00	0.00	0.001	O				
0.03								
65.333	0.00	0.00	0.001	O				
0.03								
65.417	0.00	0.00	0.001	O				
0.03								
65.500	0.00	0.00	0.001	O				
0.02								
65.583	0.00	0.00	0.001	O				
0.02								
65.667	0.00	0.00	0.001	O				
0.02								
65.750	0.00	0.00	0.001	O				
0.02								
65.833	0.00	0.00	0.001	O				
0.02								
65.917	0.00	0.00	0.001	O				
0.02								
66.000	0.00	0.00	0.001	O				
0.02								
66.083	0.00	0.00	0.001	O				
0.02								
66.167	0.00	0.00	0.001	O				
0.02								
66.250	0.00	0.00	0.001	O				
0.02								

```
 66.333    0.00    0.00      0.001  O       |       |       |       |
0.02
 66.417    0.00    0.00      0.001  O       |       |       |       |
0.02
 66.500    0.00    0.00      0.001  O       |       |       |       |
0.02
 66.583    0.00    0.00      0.001  O       |       |       |       |
0.02
 66.667    0.00    0.00      0.001  O       |       |       |       |
0.02
 66.750    0.00    0.00      0.001  O       |       |       |       |
0.02
 66.833    0.00    0.00      0.001  O       |       |       |       |
0.02
 66.917    0.00    0.00      0.001  O       |       |       |       |
0.02
 67.000    0.00    0.00      0.001  O       |       |       |       |
0.02
 67.083    0.00    0.00      0.001  O       |       |       |       |
0.02
 67.167    0.00    0.00      0.001  O       |       |       |       |
0.02
 67.250    0.00    0.00      0.001  O       |       |       |       |
0.02
 67.333    0.00    0.00      0.001  O       |       |       |       |
0.02
 67.417    0.00    0.00      0.001  O       |       |       |       |
0.02
 67.500    0.00    0.00      0.001  O       |       |       |       |
0.02
 67.583    0.00    0.00      0.001  O       |       |       |       |
0.02
 67.667    0.00    0.00      0.001  O       |       |       |       |
0.02
 67.750    0.00    0.00      0.001  O       |       |       |       |
0.02
 67.833    0.00    0.00      0.001  O       |       |       |       |
0.02
 67.917    0.00    0.00      0.001  O       |       |       |       |
0.02
 68.000    0.00    0.00      0.001  O       |       |       |       |
0.02
 68.083    0.00    0.00      0.001  O       |       |       |       |
0.02

      ****************************HYDROGRAPH
DATA**************************
                  Number of intervals =   817
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =        3.080 (CFS)
                  Total volume =       1.144 (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 - 2005
                             Study date: 11/22/22

      ------------------------------------------------------------------
---


      Luna 395
      Basin Routing
      Basin C

      ------------------------------------------------------------------
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      Program License Serial Number 6232

      ------------------------------------------------------------------
--
      ********************* HYDROGRAPH INFORMATION
**********************

                  From study/file name: luna395proc.rte
      ****************************HYDROGRAPH
DATA***************************
                  Number of intervals =   295
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =        2.454 (CFS)
                  Total volume =       0.288 (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      302.000 to Point/Station
303.000
      **** RETARDING BASIN ROUTING ****
      ____________________________________________________________________
____

      User entry of depth-outflow-storage data
      ------------------------------------------------------------------
--
      Total number of inflow hydrograph intervals = 295
      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  Storage    Outflow   (S-O*dt/2)   (S+O*dt/2)
            (Ft.)    (Ac.Ft)    (CFS)     (Ac.Ft)    (Ac.Ft)
      ------------------------------------------------------------------
---
          0.000      0.000      0.000      0.000        0.000
          0.250      0.001      0.015      0.001        0.001
          1.250      0.019      0.015      0.019        0.019
          2.000      0.053      0.015      0.053        0.053
          2.250      0.069      2.065      0.062        0.076
      ------------------------------------------------------------------
--
                  Hydrograph Detention Basin Routing
      ------------------------------------------------------------------
---

      Graph values: 'I'= unit inflow; 'O'=outflow at time shown
      ------------------------------------------------------------------
---
  Time   Inflow  Outflow    Storage
Depth
 (Hours)  (CFS)    (CFS)     (Ac.Ft) .0       0.6    1.23    1.84    2.45
(Ft.)
  0.083    0.01    0.00      0.000  O       |       |       |       |
0.01
  0.167    0.06    0.00      0.000  O       |       |       |       |
0.07
  0.250    0.07    0.01      0.001  O       |       |       |       |
0.16
  0.333    0.07    0.01      0.001  O       |       |       |       |
0.25
  0.417    0.08    0.01      0.001  OI      |       |       |       |
0.28
  0.500    0.08    0.01      0.002  OI      |       |       |       |
0.30
  0.583    0.08    0.01      0.002  OI      |       |       |       |
0.33
  0.667    0.08    0.01      0.003  OI      |       |       |       |
0.35
  0.750    0.08    0.01      0.003  OI      |       |       |       |
0.38
  0.833    0.08    0.01      0.004  OI      |       |       |       |
0.40
  0.917    0.08    0.01      0.004  OI      |       |       |       |
0.43
  1.000    0.08    0.01      0.005  OI      |       |       |       |
0.45
  1.083    0.08    0.01      0.005  OI      |       |       |       |
0.48
  1.167    0.08    0.01      0.006  OI      |       |       |       |
0.51
  1.250    0.08    0.01      0.006  OI      |       |       |       |
```

0.53								
1.333	0.08	0.01	0.007	OI				
0.56								
1.417	0.08	0.01	0.007	OI				
0.58								
1.500	0.08	0.01	0.007	OI				
0.61								
1.583	0.08	0.01	0.008	OI				
0.64								
1.667	0.08	0.01	0.008	OI				
0.66								
1.750	0.08	0.01	0.009	OI				
0.69								
1.833	0.08	0.01	0.009	OI				
0.72								
1.917	0.08	0.01	0.010	OI				
0.74								
2.000	0.08	0.01	0.010	OI				
0.77								
2.083	0.09	0.01	0.011	OI				
0.80								
2.167	0.09	0.01	0.011	OI				
0.82								
2.250	0.09	0.01	0.012	OI				
0.85								
2.333	0.09	0.01	0.012	OI				
0.88								
2.417	0.09	0.01	0.013	OI				
0.90								
2.500	0.09	0.01	0.013	OI				
0.93								
2.583	0.09	0.01	0.014	OI				
0.96								
2.667	0.09	0.01	0.014	OI				
0.99								
2.750	0.09	0.01	0.015	OI				
1.01								
2.833	0.09	0.01	0.015	OI				
1.04								
2.917	0.09	0.01	0.016	OI				
1.07								
3.000	0.09	0.01	0.016	OI				
1.10								
3.083	0.09	0.01	0.017	OI				
1.13								
3.167	0.09	0.01	0.017	OI				
1.15								
3.250	0.09	0.01	0.018	OI				
1.18								
3.333	0.09	0.01	0.018	OI				
1.21								
3.417	0.09	0.01	0.019	OI				
1.24								
3.500	0.09	0.01	0.019	OI				
1.26								
3.583	0.09	0.01	0.020	OI				
1.27								
3.667	0.09	0.01	0.020	OI				
1.28								
3.750	0.09	0.01	0.021	OI				

1.29								
	3.833	0.09	0.01	0.021	OI			
1.30								
	3.917	0.09	0.01	0.022	OI			
1.31								
	4.000	0.09	0.01	0.022	OI			
1.32								
	4.083	0.09	0.01	0.023	OI			
1.34								
	4.167	0.09	0.01	0.023	OI			
1.35								
	4.250	0.09	0.01	0.024	OI			
1.36								
	4.333	0.09	0.01	0.025	OI			
1.37								
	4.417	0.09	0.01	0.025	OI			
1.38								
	4.500	0.09	0.01	0.026	OI			
1.39								
	4.583	0.09	0.01	0.026	OI			
1.41								
	4.667	0.09	0.01	0.027	OI			
1.42								
	4.750	0.09	0.01	0.027	OI			
1.43								
	4.833	0.09	0.01	0.028	OI			
1.44								
	4.917	0.09	0.01	0.028	OI			
1.45								
	5.000	0.09	0.01	0.029	OI			
1.47								
	5.083	0.09	0.01	0.029	OI			
1.48								
	5.167	0.10	0.01	0.030	OI			
1.49								
	5.250	0.10	0.01	0.030	OI			
1.50								
	5.333	0.10	0.01	0.031	OI			
1.52								
	5.417	0.10	0.01	0.032	OI			
1.53								
	5.500	0.10	0.01	0.032	OI			
1.54								
	5.583	0.10	0.01	0.033	OI			
1.55								
	5.667	0.10	0.01	0.033	OI			
1.56								
	5.750	0.10	0.01	0.034	OI			
1.58								
	5.833	0.10	0.01	0.034	OI			
1.59								
	5.917	0.10	0.01	0.035	OI			
1.60								
	6.000	0.10	0.01	0.036	OI			
1.61								
	6.083	0.10	0.01	0.036	OI			
1.63								
	6.167	0.10	0.01	0.037	OI			
1.64								
	6.250	0.10	0.01	0.037	OI			

1.65								
6.333	0.10	0.01	0.038	OI	|	|	|	|
1.67								
6.417	0.10	0.01	0.038	OI	|	|	|	|
1.68								
6.500	0.10	0.01	0.039	OI	|	|	|	|
1.69								
6.583	0.10	0.01	0.040	OI	|	|	|	|
1.71								
6.667	0.10	0.01	0.040	OI	|	|	|	|
1.72								
6.750	0.10	0.01	0.041	OI	|	|	|	|
1.73								
6.833	0.10	0.01	0.041	OI	|	|	|	|
1.74								
6.917	0.10	0.01	0.042	OI	|	|	|	|
1.76								
7.000	0.10	0.01	0.043	OI	|	|	|	|
1.77								
7.083	0.10	0.01	0.043	OI	|	|	|	|
1.78								
7.167	0.10	0.01	0.044	OI	|	|	|	|
1.80								
7.250	0.10	0.01	0.044	OI	|	|	|	|
1.81								
7.333	0.10	0.01	0.045	OI	|	|	|	|
1.83								
7.417	0.11	0.01	0.046	OI	|	|	|	|
1.84								
7.500	0.11	0.01	0.046	OI	|	|	|	|
1.85								
7.583	0.11	0.01	0.047	OI	|	|	|	|
1.87								
7.667	0.11	0.01	0.048	OI	|	|	|	|
1.88								
7.750	0.11	0.01	0.048	OI	|	|	|	|
1.89								
7.833	0.11	0.01	0.049	OI	|	|	|	|
1.91								
7.917	0.11	0.01	0.049	OI	|	|	|	|
1.92								
8.000	0.11	0.01	0.050	OI	|	|	|	|
1.94								
8.083	0.11	0.01	0.051	OI	|	|	|	|
1.95								
8.167	0.11	0.01	0.051	OI	|	|	|	|
1.97								
8.250	0.11	0.01	0.052	OI	|	|	|	|
1.98								
8.333	0.11	0.01	0.053	OI	|	|	|	|
1.99								
8.417	0.11	0.05	0.053	OI	|	|	|	|
2.00								
8.500	0.11	0.09	0.054	|O	|	|	|	|
2.01								
8.583	0.11	0.10	0.054	|O	|	|	|	|
2.01								
8.667	0.11	0.11	0.054	|O	|	|	|	|
2.01								
8.750	0.11	0.11	0.054	|O	|	|	|	|

2.01
  8.833 0.11 0.11 0.054 |O | | | |
2.01
  8.917 0.11 0.11 0.054 |O | | | |
2.01
  9.000 0.12 0.11 0.054 |O | | | |
2.01
  9.083 0.12 0.11 0.054 |O | | | |
2.01
  9.167 0.12 0.12 0.054 |O | | | |
2.01
  9.250 0.12 0.12 0.054 |O | | | |
2.01
  9.333 0.12 0.12 0.054 |O | | | |
2.01
  9.417 0.12 0.12 0.054 |O | | | |
2.01
  9.500 0.12 0.12 0.054 |O | | | |
2.01
  9.583 0.12 0.12 0.054 |O | | | |
2.01
  9.667 0.12 0.12 0.054 |O | | | |
2.01
  9.750 0.12 0.12 0.054 |O | | | |
2.01
  9.833 0.12 0.12 0.054 |O | | | |
2.01
  9.917 0.12 0.12 0.054 |O | | | |
2.01
 10.000 0.12 0.12 0.054 |O | | | |
2.01
 10.083 0.12 0.12 0.054 |O | | | |
2.01
 10.167 0.12 0.12 0.054 |O | | | |
2.01
 10.250 0.13 0.12 0.054 |O | | | |
2.01
 10.333 0.13 0.13 0.054 |O | | | |
2.01
 10.417 0.13 0.13 0.054 |O | | | |
2.01
 10.500 0.13 0.13 0.054 |O | | | |
2.01
 10.583 0.13 0.13 0.054 |O | | | |
2.01
 10.667 0.13 0.13 0.054 |O | | | |
2.01
 10.750 0.13 0.13 0.054 |O | | | |
2.01
 10.833 0.13 0.13 0.054 |O | | | |
2.01
 10.917 0.13 0.13 0.054 |O | | | |
2.01
 11.000 0.13 0.13 0.054 |O | | | |
2.01
 11.083 0.13 0.13 0.054 |O | | | |
2.01
 11.167 0.14 0.13 0.054 |O | | | |
2.01
 11.250 0.14 0.13 0.054 |O | | | |

2.01								
11.333	0.14	0.14	0.054	|O	|	|	|	|
2.01								
11.417	0.14	0.14	0.054	|O	|	|	|	|
2.01								
11.500	0.14	0.14	0.054	|O	|	|	|	|
2.02								
11.583	0.14	0.14	0.054	|O	|	|	|	|
2.02								
11.667	0.14	0.14	0.054	|O	|	|	|	|
2.02								
11.750	0.14	0.14	0.054	|O	|	|	|	|
2.02								
11.833	0.14	0.14	0.054	|O	|	|	|	|
2.02								
11.917	0.15	0.14	0.054	|O	|	|	|	|
2.02								
12.000	0.15	0.15	0.054	|O	|	|	|	|
2.02								
12.083	0.14	0.14	0.054	|O	|	|	|	|
2.02								
12.167	0.13	0.14	0.054	|O	|	|	|	|
2.02								
12.250	0.12	0.13	0.054	|O	|	|	|	|
2.01								
12.333	0.12	0.13	0.054	|O	|	|	|	|
2.01								
12.417	0.12	0.12	0.054	|O	|	|	|	|
2.01								
12.500	0.12	0.12	0.054	|O	|	|	|	|
2.01								
12.583	0.12	0.12	0.054	|O	|	|	|	|
2.01								
12.667	0.13	0.13	0.054	|O	|	|	|	|
2.01								
12.750	0.13	0.13	0.054	|O	|	|	|	|
2.01								
12.833	0.13	0.13	0.054	|O	|	|	|	|
2.01								
12.917	0.13	0.13	0.054	|O	|	|	|	|
2.01								
13.000	0.13	0.13	0.054	|O	|	|	|	|
2.01								
13.083	0.14	0.13	0.054	|O	|	|	|	|
2.01								
13.167	0.14	0.14	0.054	|O	|	|	|	|
2.01								
13.250	0.14	0.14	0.054	|O	|	|	|	|
2.01								
13.333	0.14	0.14	0.054	|O	|	|	|	|
2.02								
13.417	0.14	0.14	0.054	|O	|	|	|	|
2.02								
13.500	0.15	0.14	0.054	|O	|	|	|	|
2.02								
13.583	0.15	0.15	0.054	|O	|	|	|	|
2.02								
13.667	0.15	0.15	0.054	|O	|	|	|	|
2.02								
13.750	0.16	0.15	0.054	|OI	|	|	|	|

2.02								
13.833	0.16	0.16	0.054	O				
2.02								
13.917	0.16	0.16	0.054	O				
2.02								
14.000	0.17	0.16	0.054	O				
2.02								
14.083	0.17	0.17	0.054	O				
2.02								
14.167	0.17	0.17	0.054	O				
2.02								
14.250	0.18	0.17	0.054	O				
2.02								
14.333	0.18	0.18	0.054	O				
2.02								
14.417	0.19	0.18	0.054	O				
2.02								
14.500	0.19	0.19	0.054	O				
2.02								
14.583	0.20	0.19	0.054	O				
2.02								
14.667	0.20	0.20	0.054	O				
2.02								
14.750	0.21	0.20	0.054	O				
2.02								
14.833	0.22	0.21	0.055	O				
2.02								
14.917	0.22	0.22	0.055	O				
2.02								
15.000	0.23	0.22	0.055	OI				
2.03								
15.083	0.24	0.23	0.055	O				
2.03								
15.167	0.26	0.24	0.055	O				
2.03								
15.250	0.27	0.25	0.055	O				
2.03								
15.333	0.28	0.27	0.055	O				
2.03								
15.417	0.28	0.28	0.055	O				
2.03								
15.500	0.25	0.27	0.055	O				
2.03								
15.583	0.26	0.26	0.055	O				
2.03								
15.667	0.28	0.26	0.055	O				
2.03								
15.750	0.31	0.28	0.055	OI				
2.03								
15.833	0.37	0.32	0.055	O				
2.04								
15.917	0.45	0.37	0.056	OI				
2.04								
16.000	0.64	0.48	0.057	O I				
2.06								
16.083	1.44	0.82	0.059		O	I		
2.10								
16.167	2.45	1.51	0.065			O		I
2.18								
16.250	1.13	1.68	0.066			I	O	

2.20
 16.333 0.67 1.20 0.062 | I   O| | |
2.14
 16.417 0.48 0.82 0.059 | I | O | | |
2.10
 16.500 0.40 0.58 0.057 | I O| | | |
2.07
 16.583 0.34 0.45 0.056 | IO | | | |
2.05
 16.667 0.30 0.37 0.056 | IO | | | |
2.04
 16.750 0.24 0.31 0.055 | IO | | | |
2.04
 16.833 0.22 0.26 0.055 | IO | | | |
2.03
 16.917 0.21 0.24 0.055 | IO | | | |
2.03
 17.000 0.20 0.22 0.055 | O | | | |
2.02
 17.083 0.19 0.20 0.054 | O | | | |
2.02
 17.167 0.18 0.19 0.054 | O | | | |
2.02
 17.250 0.17 0.18 0.054 | O | | | |
2.02
 17.333 0.16 0.17 0.054 | O | | | |
2.02
 17.417 0.16 0.16 0.054 | O | | | |
2.02
 17.500 0.15 0.16 0.054 |IO | | | |
2.02
 17.583 0.14 0.15 0.054 |O | | | |
2.02
 17.667 0.14 0.15 0.054 |O | | | |
2.02
 17.750 0.14 0.14 0.054 |O | | | |
2.02
 17.833 0.13 0.14 0.054 |O | | | |
2.01
 17.917 0.13 0.13 0.054 |O | | | |
2.01
 18.000 0.12 0.13 0.054 |O | | | |
2.01
 18.083 0.13 0.13 0.054 |O | | | |
2.01
 18.167 0.14 0.13 0.054 |O | | | |
2.01
 18.250 0.14 0.14 0.054 |O | | | |
2.01
 18.333 0.14 0.14 0.054 |O | | | |
2.02
 18.417 0.14 0.14 0.054 |O | | | |
2.02
 18.500 0.14 0.14 0.054 |O | | | |
2.02
 18.583 0.14 0.14 0.054 |O | | | |
2.02
 18.667 0.14 0.14 0.054 |O | | | |
2.01
 18.750 0.13 0.14 0.054 |O | | | |

2.01
 18.833 0.13 0.13 0.054 |O | | | |
2.01
 18.917 0.13 0.13 0.054 |O | | | |
2.01
 19.000 0.13 0.13 0.054 |O | | | |
2.01
 19.083 0.13 0.13 0.054 |O | | | |
2.01
 19.167 0.13 0.13 0.054 |O | | | |
2.01
 19.250 0.12 0.13 0.054 |O | | | |
2.01
 19.333 0.12 0.12 0.054 |O | | | |
2.01
 19.417 0.12 0.12 0.054 |O | | | |
2.01
 19.500 0.12 0.12 0.054 |O | | | |
2.01
 19.583 0.12 0.12 0.054 |O | | | |
2.01
 19.667 0.12 0.12 0.054 |O | | | |
2.01
 19.750 0.12 0.12 0.054 |O | | | |
2.01
 19.833 0.11 0.12 0.054 |O | | | |
2.01
 19.917 0.11 0.11 0.054 |O | | | |
2.01
 20.000 0.11 0.11 0.054 |O | | | |
2.01
 20.083 0.11 0.11 0.054 |O | | | |
2.01
 20.167 0.11 0.11 0.054 |O | | | |
2.01
 20.250 0.11 0.11 0.054 |O | | | |
2.01
 20.333 0.11 0.11 0.054 |O | | | |
2.01
 20.417 0.11 0.11 0.054 |O | | | |
2.01
 20.500 0.11 0.11 0.054 |O | | | |
2.01
 20.583 0.11 0.11 0.054 |O | | | |
2.01
 20.667 0.10 0.11 0.054 |O | | | |
2.01
 20.750 0.10 0.10 0.054 |O | | | |
2.01
 20.833 0.10 0.10 0.054 |O | | | |
2.01
 20.917 0.10 0.10 0.054 |O | | | |
2.01
 21.000 0.10 0.10 0.054 |O | | | |
2.01
 21.083 0.10 0.10 0.054 |O | | | |
2.01
 21.167 0.10 0.10 0.054 |O | | | |
2.01
 21.250 0.10 0.10 0.054 |O | | | |

2.01								
21.333	0.10	0.10	0.054	|O	|	|	|	|
2.01								
21.417	0.10	0.10	0.054	|O	|	|	|	|
2.01								
21.500	0.10	0.10	0.054	|O	|	|	|	|
2.01								
21.583	0.10	0.10	0.054	|O	|	|	|	|
2.01								
21.667	0.10	0.10	0.054	|O	|	|	|	|
2.01								
21.750	0.09	0.10	0.054	|O	|	|	|	|
2.01								
21.833	0.09	0.09	0.054	|O	|	|	|	|
2.01								
21.917	0.09	0.09	0.054	|O	|	|	|	|
2.01								
22.000	0.09	0.09	0.054	|O	|	|	|	|
2.01								
22.083	0.09	0.09	0.054	|O	|	|	|	|
2.01								
22.167	0.09	0.09	0.054	|O	|	|	|	|
2.01								
22.250	0.09	0.09	0.054	|O	|	|	|	|
2.01								
22.333	0.09	0.09	0.054	|O	|	|	|	|
2.01								
22.417	0.09	0.09	0.054	|O	|	|	|	|
2.01								
22.500	0.09	0.09	0.054	|O	|	|	|	|
2.01								
22.583	0.09	0.09	0.054	|O	|	|	|	|
2.01								
22.667	0.09	0.09	0.054	|O	|	|	|	|
2.01								
22.750	0.09	0.09	0.054	|O	|	|	|	|
2.01								
22.833	0.09	0.09	0.054	|O	|	|	|	|
2.01								
22.917	0.09	0.09	0.054	|O	|	|	|	|
2.01								
23.000	0.09	0.09	0.054	|O	|	|	|	|
2.01								
23.083	0.09	0.09	0.054	|O	|	|	|	|
2.01								
23.167	0.09	0.09	0.054	|O	|	|	|	|
2.01								
23.250	0.09	0.09	0.054	|O	|	|	|	|
2.01								
23.333	0.08	0.09	0.054	|O	|	|	|	|
2.01								
23.417	0.08	0.08	0.054	|O	|	|	|	|
2.01								
23.500	0.08	0.08	0.054	|O	|	|	|	|
2.01								
23.583	0.08	0.08	0.054	|O	|	|	|	|
2.01								
23.667	0.08	0.08	0.054	|O	|	|	|	|
2.01								
23.750	0.08	0.08	0.054	|O	|	|	|	|

2.01
 23.833 0.08 0.08 0.054 |O | | | |
2.01
 23.917 0.08 0.08 0.054 |O | | | |
2.01
 24.000 0.08 0.08 0.054 |O | | | |
2.01
 24.083 0.07 0.08 0.053 IO | | | |
2.01
 24.167 0.03 0.06 0.053 O | | | |
2.01
 24.250 0.01 0.03 0.053 O | | | |
2.00
 24.333 0.01 0.02 0.053 O | | | |
2.00
 24.417 0.00 0.01 0.053 O | | | |
2.00
 24.500 0.00 0.01 0.053 O | | | |
2.00
 24.583 0.00 0.01 0.053 O | | | |
1.99
 24.667 0.00 0.01 0.053 O | | | |
1.99
 24.750 0.00 0.01 0.053 O | | | |
1.99
 24.833 0.00 0.01 0.052 O | | | |
1.99
 24.917 0.00 0.01 0.052 O | | | |
1.99
 25.000 0.00 0.01 0.052 O | | | |
1.98
 25.083 0.00 0.01 0.052 O | | | |
1.98
 25.167 0.00 0.01 0.052 O | | | |
1.98
 25.250 0.00 0.01 0.052 O | | | |
1.98
 25.333 0.00 0.01 0.052 O | | | |
1.97
 25.417 0.00 0.01 0.052 O | | | |
1.97
 25.500 0.00 0.01 0.052 O | | | |
1.97
 25.583 0.00 0.01 0.052 O | | | |
1.97
 25.667 0.00 0.01 0.051 O | | | |
1.97
 25.750 0.00 0.01 0.051 O | | | |
1.96
 25.833 0.00 0.01 0.051 O | | | |
1.96
 25.917 0.00 0.01 0.051 O | | | |
1.96
 26.000 0.00 0.01 0.051 O | | | |
1.96
 26.083 0.00 0.01 0.051 O | | | |
1.95
 26.167 0.00 0.01 0.051 O | | | |
1.95
 26.250 0.00 0.01 0.051 O | | | |

1.95								
26.333	0.00	0.01	0.051	O	|	|	|	|
1.95								
26.417	0.00	0.01	0.050	O	|	|	|	|
1.94								
26.500	0.00	0.01	0.050	O	|	|	|	|
1.94								
26.583	0.00	0.01	0.050	O	|	|	|	|
1.94								
26.667	0.00	0.01	0.050	O	|	|	|	|
1.94								
26.750	0.00	0.01	0.050	O	|	|	|	|
1.94								
26.833	0.00	0.01	0.050	O	|	|	|	|
1.93								
26.917	0.00	0.01	0.050	O	|	|	|	|
1.93								
27.000	0.00	0.01	0.050	O	|	|	|	|
1.93								
27.083	0.00	0.01	0.050	O	|	|	|	|
1.93								
27.167	0.00	0.01	0.050	O	|	|	|	|
1.92								
27.250	0.00	0.01	0.049	O	|	|	|	|
1.92								
27.333	0.00	0.01	0.049	O	|	|	|	|
1.92								
27.417	0.00	0.01	0.049	O	|	|	|	|
1.92								
27.500	0.00	0.01	0.049	O	|	|	|	|
1.92								
27.583	0.00	0.01	0.049	O	|	|	|	|
1.91								
27.667	0.00	0.01	0.049	O	|	|	|	|
1.91								
27.750	0.00	0.01	0.049	O	|	|	|	|
1.91								
27.833	0.00	0.01	0.049	O	|	|	|	|
1.91								
27.917	0.00	0.01	0.049	O	|	|	|	|
1.90								
28.000	0.00	0.01	0.049	O	|	|	|	|
1.90								
28.083	0.00	0.01	0.048	O	|	|	|	|
1.90								
28.167	0.00	0.01	0.048	O	|	|	|	|
1.90								
28.250	0.00	0.01	0.048	O	|	|	|	|
1.89								
28.333	0.00	0.01	0.048	O	|	|	|	|
1.89								
28.417	0.00	0.01	0.048	O	|	|	|	|
1.89								
28.500	0.00	0.01	0.048	O	|	|	|	|
1.89								
28.583	0.00	0.01	0.048	O	|	|	|	|
1.89								
28.667	0.00	0.01	0.048	O	|	|	|	|
1.88								
28.750	0.00	0.01	0.048	O	|	|	|	|

1.88								
28.833	0.00	0.01	0.047	O	|	|	|	|
1.88								
28.917	0.00	0.01	0.047	O	|	|	|	|
1.88								
29.000	0.00	0.01	0.047	O	|	|	|	|
1.87								
29.083	0.00	0.01	0.047	O	|	|	|	|
1.87								
29.167	0.00	0.01	0.047	O	|	|	|	|
1.87								
29.250	0.00	0.01	0.047	O	|	|	|	|
1.87								
29.333	0.00	0.01	0.047	O	|	|	|	|
1.86								
29.417	0.00	0.01	0.047	O	|	|	|	|
1.86								
29.500	0.00	0.01	0.047	O	|	|	|	|
1.86								
29.583	0.00	0.01	0.047	O	|	|	|	|
1.86								
29.667	0.00	0.01	0.046	O	|	|	|	|
1.86								
29.750	0.00	0.01	0.046	O	|	|	|	|
1.85								
29.833	0.00	0.01	0.046	O	|	|	|	|
1.85								
29.917	0.00	0.01	0.046	O	|	|	|	|
1.85								
30.000	0.00	0.01	0.046	O	|	|	|	|
1.85								
30.083	0.00	0.01	0.046	O	|	|	|	|
1.84								
30.167	0.00	0.01	0.046	O	|	|	|	|
1.84								
30.250	0.00	0.01	0.046	O	|	|	|	|
1.84								
30.333	0.00	0.01	0.046	O	|	|	|	|
1.84								
30.417	0.00	0.01	0.046	O	|	|	|	|
1.84								
30.500	0.00	0.01	0.045	O	|	|	|	|
1.83								
30.583	0.00	0.01	0.045	O	|	|	|	|
1.83								
30.667	0.00	0.01	0.045	O	|	|	|	|
1.83								
30.750	0.00	0.01	0.045	O	|	|	|	|
1.83								
30.833	0.00	0.01	0.045	O	|	|	|	|
1.82								
30.917	0.00	0.01	0.045	O	|	|	|	|
1.82								
31.000	0.00	0.01	0.045	O	|	|	|	|
1.82								
31.083	0.00	0.01	0.045	O	|	|	|	|
1.82								
31.167	0.00	0.01	0.045	O	|	|	|	|
1.81								
31.250	0.00	0.01	0.045	O	|	|	|	|

1.81								
31.333	0.00	0.01	0.044	O	|	|	|	|
1.81								
31.417	0.00	0.01	0.044	O	|	|	|	|
1.81								
31.500	0.00	0.01	0.044	O	|	|	|	|
1.81								
31.583	0.00	0.01	0.044	O	|	|	|	|
1.80								
31.667	0.00	0.01	0.044	O	|	|	|	|
1.80								
31.750	0.00	0.01	0.044	O	|	|	|	|
1.80								
31.833	0.00	0.01	0.044	O	|	|	|	|
1.80								
31.917	0.00	0.01	0.044	O	|	|	|	|
1.79								
32.000	0.00	0.01	0.044	O	|	|	|	|
1.79								
32.083	0.00	0.01	0.043	O	|	|	|	|
1.79								
32.167	0.00	0.01	0.043	O	|	|	|	|
1.79								
32.250	0.00	0.01	0.043	O	|	|	|	|
1.79								
32.333	0.00	0.01	0.043	O	|	|	|	|
1.78								
32.417	0.00	0.01	0.043	O	|	|	|	|
1.78								
32.500	0.00	0.01	0.043	O	|	|	|	|
1.78								
32.583	0.00	0.01	0.043	O	|	|	|	|
1.78								
32.667	0.00	0.01	0.043	O	|	|	|	|
1.77								
32.750	0.00	0.01	0.043	O	|	|	|	|
1.77								
32.833	0.00	0.01	0.043	O	|	|	|	|
1.77								
32.917	0.00	0.01	0.042	O	|	|	|	|
1.77								
33.000	0.00	0.01	0.042	O	|	|	|	|
1.76								
33.083	0.00	0.01	0.042	O	|	|	|	|
1.76								
33.167	0.00	0.01	0.042	O	|	|	|	|
1.76								
33.250	0.00	0.01	0.042	O	|	|	|	|
1.76								
33.333	0.00	0.01	0.042	O	|	|	|	|
1.76								
33.417	0.00	0.01	0.042	O	|	|	|	|
1.75								
33.500	0.00	0.01	0.042	O	|	|	|	|
1.75								
33.583	0.00	0.01	0.042	O	|	|	|	|
1.75								
33.667	0.00	0.01	0.042	O	|	|	|	|
1.75								
33.750	0.00	0.01	0.041	O	|	|	|	|

1.74								
33.833	0.00	0.01	0.041	O	|	|	|	|
1.74								
33.917	0.00	0.01	0.041	O	|	|	|	|
1.74								
34.000	0.00	0.01	0.041	O	|	|	|	|
1.74								
34.083	0.00	0.01	0.041	O	|	|	|	|
1.74								
34.167	0.00	0.01	0.041	O	|	|	|	|
1.73								
34.250	0.00	0.01	0.041	O	|	|	|	|
1.73								
34.333	0.00	0.01	0.041	O	|	|	|	|
1.73								
34.417	0.00	0.01	0.041	O	|	|	|	|
1.73								
34.500	0.00	0.01	0.040	O	|	|	|	|
1.72								
34.583	0.00	0.01	0.040	O	|	|	|	|
1.72								
34.667	0.00	0.01	0.040	O	|	|	|	|
1.72								
34.750	0.00	0.01	0.040	O	|	|	|	|
1.72								
34.833	0.00	0.01	0.040	O	|	|	|	|
1.71								
34.917	0.00	0.01	0.040	O	|	|	|	|
1.71								
35.000	0.00	0.01	0.040	O	|	|	|	|
1.71								
35.083	0.00	0.01	0.040	O	|	|	|	|
1.71								
35.167	0.00	0.01	0.040	O	|	|	|	|
1.71								
35.250	0.00	0.01	0.040	O	|	|	|	|
1.70								
35.333	0.00	0.01	0.039	O	|	|	|	|
1.70								
35.417	0.00	0.01	0.039	O	|	|	|	|
1.70								
35.500	0.00	0.01	0.039	O	|	|	|	|
1.70								
35.583	0.00	0.01	0.039	O	|	|	|	|
1.69								
35.667	0.00	0.01	0.039	O	|	|	|	|
1.69								
35.750	0.00	0.01	0.039	O	|	|	|	|
1.69								
35.833	0.00	0.01	0.039	O	|	|	|	|
1.69								
35.917	0.00	0.01	0.039	O	|	|	|	|
1.68								
36.000	0.00	0.01	0.039	O	|	|	|	|
1.68								
36.083	0.00	0.01	0.039	O	|	|	|	|
1.68								
36.167	0.00	0.01	0.038	O	|	|	|	|
1.68								
36.250	0.00	0.01	0.038	O	|	|	|	|

1.68								
36.333	0.00	0.01	0.038	O	|	|	|	|
1.67								
36.417	0.00	0.01	0.038	O	|	|	|	|
1.67								
36.500	0.00	0.01	0.038	O	|	|	|	|
1.67								
36.583	0.00	0.01	0.038	O	|	|	|	|
1.67								
36.667	0.00	0.01	0.038	O	|	|	|	|
1.66								
36.750	0.00	0.01	0.038	O	|	|	|	|
1.66								
36.833	0.00	0.01	0.038	O	|	|	|	|
1.66								
36.917	0.00	0.01	0.037	O	|	|	|	|
1.66								
37.000	0.00	0.01	0.037	O	|	|	|	|
1.66								
37.083	0.00	0.01	0.037	O	|	|	|	|
1.65								
37.167	0.00	0.01	0.037	O	|	|	|	|
1.65								
37.250	0.00	0.01	0.037	O	|	|	|	|
1.65								
37.333	0.00	0.01	0.037	O	|	|	|	|
1.65								
37.417	0.00	0.01	0.037	O	|	|	|	|
1.64								
37.500	0.00	0.01	0.037	O	|	|	|	|
1.64								
37.583	0.00	0.01	0.037	O	|	|	|	|
1.64								
37.667	0.00	0.01	0.037	O	|	|	|	|
1.64								
37.750	0.00	0.01	0.036	O	|	|	|	|
1.63								
37.833	0.00	0.01	0.036	O	|	|	|	|
1.63								
37.917	0.00	0.01	0.036	O	|	|	|	|
1.63								
38.000	0.00	0.01	0.036	O	|	|	|	|
1.63								
38.083	0.00	0.01	0.036	O	|	|	|	|
1.63								
38.167	0.00	0.01	0.036	O	|	|	|	|
1.62								
38.250	0.00	0.01	0.036	O	|	|	|	|
1.62								
38.333	0.00	0.01	0.036	O	|	|	|	|
1.62								
38.417	0.00	0.01	0.036	O	|	|	|	|
1.62								
38.500	0.00	0.01	0.036	O	|	|	|	|
1.61								
38.583	0.00	0.01	0.035	O	|	|	|	|
1.61								
38.667	0.00	0.01	0.035	O	|	|	|	|
1.61								
38.750	0.00	0.01	0.035	O	|	|	|	|

1.61								
38.833	0.00	0.01	0.035	O	|	|	|	|
1.61								
38.917	0.00	0.01	0.035	O	|	|	|	|
1.60								
39.000	0.00	0.01	0.035	O	|	|	|	|
1.60								
39.083	0.00	0.01	0.035	O	|	|	|	|
1.60								
39.167	0.00	0.01	0.035	O	|	|	|	|
1.60								
39.250	0.00	0.01	0.035	O	|	|	|	|
1.59								
39.333	0.00	0.01	0.034	O	|	|	|	|
1.59								
39.417	0.00	0.01	0.034	O	|	|	|	|
1.59								
39.500	0.00	0.01	0.034	O	|	|	|	|
1.59								
39.583	0.00	0.01	0.034	O	|	|	|	|
1.58								
39.667	0.00	0.01	0.034	O	|	|	|	|
1.58								
39.750	0.00	0.01	0.034	O	|	|	|	|
1.58								
39.833	0.00	0.01	0.034	O	|	|	|	|
1.58								
39.917	0.00	0.01	0.034	O	|	|	|	|
1.58								
40.000	0.00	0.01	0.034	O	|	|	|	|
1.57								
40.083	0.00	0.01	0.034	O	|	|	|	|
1.57								
40.167	0.00	0.01	0.033	O	|	|	|	|
1.57								
40.250	0.00	0.01	0.033	O	|	|	|	|
1.57								
40.333	0.00	0.01	0.033	O	|	|	|	|
1.56								
40.417	0.00	0.01	0.033	O	|	|	|	|
1.56								
40.500	0.00	0.01	0.033	O	|	|	|	|
1.56								
40.583	0.00	0.01	0.033	O	|	|	|	|
1.56								
40.667	0.00	0.01	0.033	O	|	|	|	|
1.56								
40.750	0.00	0.01	0.033	O	|	|	|	|
1.55								
40.833	0.00	0.01	0.033	O	|	|	|	|
1.55								
40.917	0.00	0.01	0.033	O	|	|	|	|
1.55								
41.000	0.00	0.01	0.032	O	|	|	|	|
1.55								
41.083	0.00	0.01	0.032	O	|	|	|	|
1.54								
41.167	0.00	0.01	0.032	O	|	|	|	|
1.54								
41.250	0.00	0.01	0.032	O	|	|	|	|

1.54								
41.333	0.00	0.01	0.032	O	|	|	|	|
1.54								
41.417	0.00	0.01	0.032	O	|	|	|	|
1.53								
41.500	0.00	0.01	0.032	O	|	|	|	|
1.53								
41.583	0.00	0.01	0.032	O	|	|	|	|
1.53								
41.667	0.00	0.01	0.032	O	|	|	|	|
1.53								
41.750	0.00	0.01	0.031	O	|	|	|	|
1.53								
41.833	0.00	0.01	0.031	O	|	|	|	|
1.52								
41.917	0.00	0.01	0.031	O	|	|	|	|
1.52								
42.000	0.00	0.01	0.031	O	|	|	|	|
1.52								
42.083	0.00	0.01	0.031	O	|	|	|	|
1.52								
42.167	0.00	0.01	0.031	O	|	|	|	|
1.51								
42.250	0.00	0.01	0.031	O	|	|	|	|
1.51								
42.333	0.00	0.01	0.031	O	|	|	|	|
1.51								
42.417	0.00	0.01	0.031	O	|	|	|	|
1.51								
42.500	0.00	0.01	0.031	O	|	|	|	|
1.50								
42.583	0.00	0.01	0.030	O	|	|	|	|
1.50								
42.667	0.00	0.01	0.030	O	|	|	|	|
1.50								
42.750	0.00	0.01	0.030	O	|	|	|	|
1.50								
42.833	0.00	0.01	0.030	O	|	|	|	|
1.50								
42.917	0.00	0.01	0.030	O	|	|	|	|
1.49								
43.000	0.00	0.01	0.030	O	|	|	|	|
1.49								
43.083	0.00	0.01	0.030	O	|	|	|	|
1.49								
43.167	0.00	0.01	0.030	O	|	|	|	|
1.49								
43.250	0.00	0.01	0.030	O	|	|	|	|
1.48								
43.333	0.00	0.01	0.030	O	|	|	|	|
1.48								
43.417	0.00	0.01	0.029	O	|	|	|	|
1.48								
43.500	0.00	0.01	0.029	O	|	|	|	|
1.48								
43.583	0.00	0.01	0.029	O	|	|	|	|
1.48								
43.667	0.00	0.01	0.029	O	|	|	|	|
1.47								
43.750	0.00	0.01	0.029	O	|	|	|	|

1.47								
43.833	0.00	0.01	0.029	O	|	|	|	|
1.47								
43.917	0.00	0.01	0.029	O	|	|	|	|
1.47								
44.000	0.00	0.01	0.029	O	|	|	|	|
1.46								
44.083	0.00	0.01	0.029	O	|	|	|	|
1.46								
44.167	0.00	0.01	0.028	O	|	|	|	|
1.46								
44.250	0.00	0.01	0.028	O	|	|	|	|
1.46								
44.333	0.00	0.01	0.028	O	|	|	|	|
1.45								
44.417	0.00	0.01	0.028	O	|	|	|	|
1.45								
44.500	0.00	0.01	0.028	O	|	|	|	|
1.45								
44.583	0.00	0.01	0.028	O	|	|	|	|
1.45								
44.667	0.00	0.01	0.028	O	|	|	|	|
1.45								
44.750	0.00	0.01	0.028	O	|	|	|	|
1.44								
44.833	0.00	0.01	0.028	O	|	|	|	|
1.44								
44.917	0.00	0.01	0.028	O	|	|	|	|
1.44								
45.000	0.00	0.01	0.027	O	|	|	|	|
1.44								
45.083	0.00	0.01	0.027	O	|	|	|	|
1.43								
45.167	0.00	0.01	0.027	O	|	|	|	|
1.43								
45.250	0.00	0.01	0.027	O	|	|	|	|
1.43								
45.333	0.00	0.01	0.027	O	|	|	|	|
1.43								
45.417	0.00	0.01	0.027	O	|	|	|	|
1.43								
45.500	0.00	0.01	0.027	O	|	|	|	|
1.42								
45.583	0.00	0.01	0.027	O	|	|	|	|
1.42								
45.667	0.00	0.01	0.027	O	|	|	|	|
1.42								
45.750	0.00	0.01	0.027	O	|	|	|	|
1.42								
45.833	0.00	0.01	0.026	O	|	|	|	|
1.41								
45.917	0.00	0.01	0.026	O	|	|	|	|
1.41								
46.000	0.00	0.01	0.026	O	|	|	|	|
1.41								
46.083	0.00	0.01	0.026	O	|	|	|	|
1.41								
46.167	0.00	0.01	0.026	O	|	|	|	|
1.40								
46.250	0.00	0.01	0.026	O	|	|	|	|

1.40								
46.333	0.00	0.01	0.026	O	|	|	|	|
1.40								
46.417	0.00	0.01	0.026	O	|	|	|	|
1.40								
46.500	0.00	0.01	0.026	O	|	|	|	|
1.40								
46.583	0.00	0.01	0.025	O	|	|	|	|
1.39								
46.667	0.00	0.01	0.025	O	|	|	|	|
1.39								
46.750	0.00	0.01	0.025	O	|	|	|	|
1.39								
46.833	0.00	0.01	0.025	O	|	|	|	|
1.39								
46.917	0.00	0.01	0.025	O	|	|	|	|
1.38								
47.000	0.00	0.01	0.025	O	|	|	|	|
1.38								
47.083	0.00	0.01	0.025	O	|	|	|	|
1.38								
47.167	0.00	0.01	0.025	O	|	|	|	|
1.38								
47.250	0.00	0.01	0.025	O	|	|	|	|
1.38								
47.333	0.00	0.01	0.025	O	|	|	|	|
1.37								
47.417	0.00	0.01	0.024	O	|	|	|	|
1.37								
47.500	0.00	0.01	0.024	O	|	|	|	|
1.37								
47.583	0.00	0.01	0.024	O	|	|	|	|
1.37								
47.667	0.00	0.01	0.024	O	|	|	|	|
1.36								
47.750	0.00	0.01	0.024	O	|	|	|	|
1.36								
47.833	0.00	0.01	0.024	O	|	|	|	|
1.36								
47.917	0.00	0.01	0.024	O	|	|	|	|
1.36								
48.000	0.00	0.01	0.024	O	|	|	|	|
1.35								
48.083	0.00	0.01	0.024	O	|	|	|	|
1.35								
48.167	0.00	0.01	0.024	O	|	|	|	|
1.35								
48.250	0.00	0.01	0.023	O	|	|	|	|
1.35								
48.333	0.00	0.01	0.023	O	|	|	|	|
1.35								
48.417	0.00	0.01	0.023	O	|	|	|	|
1.34								
48.500	0.00	0.01	0.023	O	|	|	|	|
1.34								
48.583	0.00	0.01	0.023	O	|	|	|	|
1.34								
48.667	0.00	0.01	0.023	O	|	|	|	|
1.34								
48.750	0.00	0.01	0.023	O	|	|	|	|

1.33								
48.833	0.00	0.01	0.023	O	|	|	|	|
1.33								
48.917	0.00	0.01	0.023	O	|	|	|	|
1.33								
49.000	0.00	0.01	0.022	O	|	|	|	|
1.33								
49.083	0.00	0.01	0.022	O	|	|	|	|
1.32								
49.167	0.00	0.01	0.022	O	|	|	|	|
1.32								
49.250	0.00	0.01	0.022	O	|	|	|	|
1.32								
49.333	0.00	0.01	0.022	O	|	|	|	|
1.32								
49.417	0.00	0.01	0.022	O	|	|	|	|
1.32								
49.500	0.00	0.01	0.022	O	|	|	|	|
1.31								
49.583	0.00	0.01	0.022	O	|	|	|	|
1.31								
49.667	0.00	0.01	0.022	O	|	|	|	|
1.31								
49.750	0.00	0.01	0.022	O	|	|	|	|
1.31								
49.833	0.00	0.01	0.021	O	|	|	|	|
1.30								
49.917	0.00	0.01	0.021	O	|	|	|	|
1.30								
50.000	0.00	0.01	0.021	O	|	|	|	|
1.30								
50.083	0.00	0.01	0.021	O	|	|	|	|
1.30								
50.167	0.00	0.01	0.021	O	|	|	|	|
1.30								
50.250	0.00	0.01	0.021	O	|	|	|	|
1.29								
50.333	0.00	0.01	0.021	O	|	|	|	|
1.29								
50.417	0.00	0.01	0.021	O	|	|	|	|
1.29								
50.500	0.00	0.01	0.021	O	|	|	|	|
1.29								
50.583	0.00	0.01	0.021	O	|	|	|	|
1.28								
50.667	0.00	0.01	0.020	O	|	|	|	|
1.28								
50.750	0.00	0.01	0.020	O	|	|	|	|
1.28								
50.833	0.00	0.01	0.020	O	|	|	|	|
1.28								
50.917	0.00	0.01	0.020	O	|	|	|	|
1.27								
51.000	0.00	0.01	0.020	O	|	|	|	|
1.27								
51.083	0.00	0.01	0.020	O	|	|	|	|
1.27								
51.167	0.00	0.01	0.020	O	|	|	|	|
1.27								
51.250	0.00	0.01	0.020	O	|	|	|	|

1.27
 51.333 0.00 0.01 0.020 O | | | |
1.26
 51.417 0.00 0.01 0.020 O | | | |
1.26
 51.500 0.00 0.01 0.019 O | | | |
1.26
 51.583 0.00 0.01 0.019 O | | | |
1.26
 51.667 0.00 0.01 0.019 O | | | |
1.25
 51.750 0.00 0.01 0.019 O | | | |
1.25
 51.833 0.00 0.01 0.019 O | | | |
1.25
 51.917 0.00 0.01 0.019 O | | | |
1.24
 52.000 0.00 0.01 0.019 O | | | |
1.24
 52.083 0.00 0.01 0.019 O | | | |
1.23
 52.167 0.00 0.01 0.019 O | | | |
1.23
 52.250 0.00 0.01 0.018 O | | | |
1.22
 52.333 0.00 0.01 0.018 O | | | |
1.21
 52.417 0.00 0.01 0.018 O | | | |
1.21
 52.500 0.00 0.01 0.018 O | | | |
1.20
 52.583 0.00 0.01 0.018 O | | | |
1.20
 52.667 0.00 0.01 0.018 O | | | |
1.19
 52.750 0.00 0.01 0.018 O | | | |
1.19
 52.833 0.00 0.01 0.018 O | | | |
1.18
 52.917 0.00 0.01 0.018 O | | | |
1.17
 53.000 0.00 0.01 0.018 O | | | |
1.17
 53.083 0.00 0.01 0.017 O | | | |
1.16
 53.167 0.00 0.01 0.017 O | | | |
1.16
 53.250 0.00 0.01 0.017 O | | | |
1.15
 53.333 0.00 0.01 0.017 O | | | |
1.15
 53.417 0.00 0.01 0.017 O | | | |
1.14
 53.500 0.00 0.01 0.017 O | | | |
1.13
 53.583 0.00 0.01 0.017 O | | | |
1.13
 53.667 0.00 0.01 0.017 O | | | |
1.12
 53.750 0.00 0.01 0.017 O | | | |

1.12								
53.833	0.00	0.01	0.017	O	|	|	|	|
1.11								
53.917	0.00	0.01	0.016	O	|	|	|	|
1.11								
54.000	0.00	0.01	0.016	O	|	|	|	|
1.10								
54.083	0.00	0.01	0.016	O	|	|	|	|
1.09								
54.167	0.00	0.01	0.016	O	|	|	|	|
1.09								
54.250	0.00	0.01	0.016	O	|	|	|	|
1.08								
54.333	0.00	0.01	0.016	O	|	|	|	|
1.08								
54.417	0.00	0.01	0.016	O	|	|	|	|
1.07								
54.500	0.00	0.01	0.016	O	|	|	|	|
1.07								
54.583	0.00	0.01	0.016	O	|	|	|	|
1.06								
54.667	0.00	0.01	0.015	O	|	|	|	|
1.05								
54.750	0.00	0.01	0.015	O	|	|	|	|
1.05								
54.833	0.00	0.01	0.015	O	|	|	|	|
1.04								
54.917	0.00	0.01	0.015	O	|	|	|	|
1.04								
55.000	0.00	0.01	0.015	O	|	|	|	|
1.03								
55.083	0.00	0.01	0.015	O	|	|	|	|
1.03								
55.167	0.00	0.01	0.015	O	|	|	|	|
1.02								
55.250	0.00	0.01	0.015	O	|	|	|	|
1.01								
55.333	0.00	0.01	0.015	O	|	|	|	|
1.01								
55.417	0.00	0.01	0.015	O	|	|	|	|
1.00								
55.500	0.00	0.01	0.014	O	|	|	|	|
1.00								
55.583	0.00	0.01	0.014	O	|	|	|	|
0.99								
55.667	0.00	0.01	0.014	O	|	|	|	|
0.99								
55.750	0.00	0.01	0.014	O	|	|	|	|
0.98								
55.833	0.00	0.01	0.014	O	|	|	|	|
0.97								
55.917	0.00	0.01	0.014	O	|	|	|	|
0.97								
56.000	0.00	0.01	0.014	O	|	|	|	|
0.96								
56.083	0.00	0.01	0.014	O	|	|	|	|
0.96								
56.167	0.00	0.01	0.014	O	|	|	|	|
0.95								
56.250	0.00	0.01	0.014	O	|	|	|	|

0.95
 56.333 0.00 0.01 0.013 O | | | |
0.94
 56.417 0.00 0.01 0.013 O | | | |
0.93
 56.500 0.00 0.01 0.013 O | | | |
0.93
 56.583 0.00 0.01 0.013 O | | | |
0.92
 56.667 0.00 0.01 0.013 O | | | |
0.92
 56.750 0.00 0.01 0.013 O | | | |
0.91
 56.833 0.00 0.01 0.013 O | | | |
0.90
 56.917 0.00 0.01 0.013 O | | | |
0.90
 57.000 0.00 0.01 0.013 O | | | |
0.89
 57.083 0.00 0.01 0.012 O | | | |
0.89
 57.167 0.00 0.01 0.012 O | | | |
0.88
 57.250 0.00 0.01 0.012 O | | | |
0.88
 57.333 0.00 0.01 0.012 O | | | |
0.87
 57.417 0.00 0.01 0.012 O | | | |
0.86
 57.500 0.00 0.01 0.012 O | | | |
0.86
 57.583 0.00 0.01 0.012 O | | | |
0.85
 57.667 0.00 0.01 0.012 O | | | |
0.85
 57.750 0.00 0.01 0.012 O | | | |
0.84
 57.833 0.00 0.01 0.012 O | | | |
0.84
 57.917 0.00 0.01 0.011 O | | | |
0.83
 58.000 0.00 0.01 0.011 O | | | |
0.82
 58.083 0.00 0.01 0.011 O | | | |
0.82
 58.167 0.00 0.01 0.011 O | | | |
0.81
 58.250 0.00 0.01 0.011 O | | | |
0.81
 58.333 0.00 0.01 0.011 O | | | |
0.80
 58.417 0.00 0.01 0.011 O | | | |
0.80
 58.500 0.00 0.01 0.011 O | | | |
0.79
 58.583 0.00 0.01 0.011 O | | | |
0.78
 58.667 0.00 0.01 0.011 O | | | |
0.78
 58.750 0.00 0.01 0.010 O | | | |

0.77								
58.833	0.00	0.01	0.010	O	|	|	|	|
0.77								
58.917	0.00	0.01	0.010	O	|	|	|	|
0.76								
59.000	0.00	0.01	0.010	O	|	|	|	|
0.76								
59.083	0.00	0.01	0.010	O	|	|	|	|
0.75								
59.167	0.00	0.01	0.010	O	|	|	|	|
0.74								
59.250	0.00	0.01	0.010	O	|	|	|	|
0.74								
59.333	0.00	0.01	0.010	O	|	|	|	|
0.73								
59.417	0.00	0.01	0.010	O	|	|	|	|
0.73								
59.500	0.00	0.01	0.009	O	|	|	|	|
0.72								
59.583	0.00	0.01	0.009	O	|	|	|	|
0.72								
59.667	0.00	0.01	0.009	O	|	|	|	|
0.71								
59.750	0.00	0.01	0.009	O	|	|	|	|
0.70								
59.833	0.00	0.01	0.009	O	|	|	|	|
0.70								
59.917	0.00	0.01	0.009	O	|	|	|	|
0.69								
60.000	0.00	0.01	0.009	O	|	|	|	|
0.69								
60.083	0.00	0.01	0.009	O	|	|	|	|
0.68								
60.167	0.00	0.01	0.009	O	|	|	|	|
0.68								
60.250	0.00	0.01	0.009	O	|	|	|	|
0.67								
60.333	0.00	0.01	0.008	O	|	|	|	|
0.66								
60.417	0.00	0.01	0.008	O	|	|	|	|
0.66								
60.500	0.00	0.01	0.008	O	|	|	|	|
0.65								
60.583	0.00	0.01	0.008	O	|	|	|	|
0.65								
60.667	0.00	0.01	0.008	O	|	|	|	|
0.64								
60.750	0.00	0.01	0.008	O	|	|	|	|
0.64								
60.833	0.00	0.01	0.008	O	|	|	|	|
0.63								
60.917	0.00	0.01	0.008	O	|	|	|	|
0.62								
61.000	0.00	0.01	0.008	O	|	|	|	|
0.62								
61.083	0.00	0.01	0.008	O	|	|	|	|
0.61								
61.167	0.00	0.01	0.007	O	|	|	|	|
0.61								
61.250	0.00	0.01	0.007	O	|	|	|	|

0.60
 61.333 0.00 0.01 0.007 O | | | |
0.59
 61.417 0.00 0.01 0.007 O | | | |
0.59
 61.500 0.00 0.01 0.007 O | | | |
0.58
 61.583 0.00 0.01 0.007 O | | | |
0.58
 61.667 0.00 0.01 0.007 O | | | |
0.57
 61.750 0.00 0.01 0.007 O | | | |
0.57
 61.833 0.00 0.01 0.007 O | | | |
0.56
 61.917 0.00 0.01 0.006 O | | | |
0.55
 62.000 0.00 0.01 0.006 O | | | |
0.55
 62.083 0.00 0.01 0.006 O | | | |
0.54
 62.167 0.00 0.01 0.006 O | | | |
0.54
 62.250 0.00 0.01 0.006 O | | | |
0.53
 62.333 0.00 0.01 0.006 O | | | |
0.53
 62.417 0.00 0.01 0.006 O | | | |
0.52
 62.500 0.00 0.01 0.006 O | | | |
0.51
 62.583 0.00 0.01 0.006 O | | | |
0.51
 62.667 0.00 0.01 0.006 O | | | |
0.50
 62.750 0.00 0.01 0.005 O | | | |
0.50
 62.833 0.00 0.01 0.005 O | | | |
0.49
 62.917 0.00 0.01 0.005 O | | | |
0.49
 63.000 0.00 0.01 0.005 O | | | |
0.48
 63.083 0.00 0.01 0.005 O | | | |
0.47
 63.167 0.00 0.01 0.005 O | | | |
0.47
 63.250 0.00 0.01 0.005 O | | | |
0.46
 63.333 0.00 0.01 0.005 O | | | |
0.46
 63.417 0.00 0.01 0.005 O | | | |
0.45
 63.500 0.00 0.01 0.005 O | | | |
0.45
 63.583 0.00 0.01 0.004 O | | | |
0.44
 63.667 0.00 0.01 0.004 O | | | |
0.43
 63.750 0.00 0.01 0.004 O | | | |

0.43
 63.833 0.00 0.01 0.004 O | | | |
0.42
 63.917 0.00 0.01 0.004 O | | | |
0.42
 64.000 0.00 0.01 0.004 O | | | |
0.41
 64.083 0.00 0.01 0.004 O | | | |
0.41
 64.167 0.00 0.01 0.004 O | | | |
0.40
 64.250 0.00 0.01 0.004 O | | | |
0.39
 64.333 0.00 0.01 0.003 O | | | |
0.39
 64.417 0.00 0.01 0.003 O | | | |
0.38
 64.500 0.00 0.01 0.003 O | | | |
0.38
 64.583 0.00 0.01 0.003 O | | | |
0.37
 64.667 0.00 0.01 0.003 O | | | |
0.37
 64.750 0.00 0.01 0.003 O | | | |
0.36
 64.833 0.00 0.01 0.003 O | | | |
0.35
 64.917 0.00 0.01 0.003 O | | | |
0.35
 65.000 0.00 0.01 0.003 O | | | |
0.34
 65.083 0.00 0.01 0.003 O | | | |
0.34
 65.167 0.00 0.01 0.002 O | | | |
0.33
 65.250 0.00 0.01 0.002 O | | | |
0.33
 65.333 0.00 0.01 0.002 O | | | |
0.32
 65.417 0.00 0.01 0.002 O | | | |
0.31
 65.500 0.00 0.01 0.002 O | | | |
0.31
 65.583 0.00 0.01 0.002 O | | | |
0.30
 65.667 0.00 0.01 0.002 O | | | |
0.30
 65.750 0.00 0.01 0.002 O | | | |
0.29
 65.833 0.00 0.01 0.002 O | | | |
0.28
 65.917 0.00 0.01 0.002 O | | | |
0.28
 66.000 0.00 0.01 0.001 O | | | |
0.27
 66.083 0.00 0.01 0.001 O | | | |
0.27
 66.167 0.00 0.01 0.001 O | | | |
0.26
 66.250 0.00 0.01 0.001 O | | | |

0.26
 66.333   0.00   0.01   0.001 O | | | |
0.25
 66.417   0.00   0.01   0.001 O | | | |
0.23
 66.500   0.00   0.01   0.001 O | | | |
0.21
 66.583   0.00   0.01   0.001 O | | | |
0.19
 66.667   0.00   0.01   0.001 O | | | |
0.17
 66.750   0.00   0.01   0.001 O | | | |
0.15
 66.833   0.00   0.01   0.001 O | | | |
0.14
 66.917   0.00   0.01   0.000 O | | | |
0.12
 67.000   0.00   0.01   0.000 O | | | |
0.11
 67.083   0.00   0.01   0.000 O | | | |
0.10
 67.167   0.00   0.01   0.000 O | | | |
0.09
 67.250   0.00   0.00   0.000 O | | | |
0.08
 67.333   0.00   0.00   0.000 O | | | |
0.07
 67.417   0.00   0.00   0.000 O | | | |
0.07
 67.500   0.00   0.00   0.000 O | | | |
0.06
 67.583   0.00   0.00   0.000 O | | | |
0.05
 67.667   0.00   0.00   0.000 O | | | |
0.05
 67.750   0.00   0.00   0.000 O | | | |
0.04
 67.833   0.00   0.00   0.000 O | | | |
0.04
 67.917   0.00   0.00   0.000 O | | | |
0.04
 68.000   0.00   0.00   0.000 O | | | |
0.03
 68.083   0.00   0.00   0.000 O | | | |
0.03
 68.167   0.00   0.00   0.000 O | | | |
0.03
 68.250   0.00   0.00   0.000 O | | | |
0.02
 68.333   0.00   0.00   0.000 O | | | |
0.02
 68.417   0.00   0.00   0.000 O | | | |
0.02
 68.500   0.00   0.00   0.000 O | | | |
0.02
 68.583   0.00   0.00   0.000 O | | | |
0.02

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

```
                  Number of intervals =   823
                  Time interval =    5.0 (Min.)
                  Maximum/Peak flow rate =        1.683 (CFS)
                  Total volume =       0.288 (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
      ****************************************************************
*****

      ----------------------------------------------------------------
--
```

APPENDIX C:
PROJECT HYDRAULIC CALCULATIONS

Weir Report

Basin A Outlet

Rectangular Weir

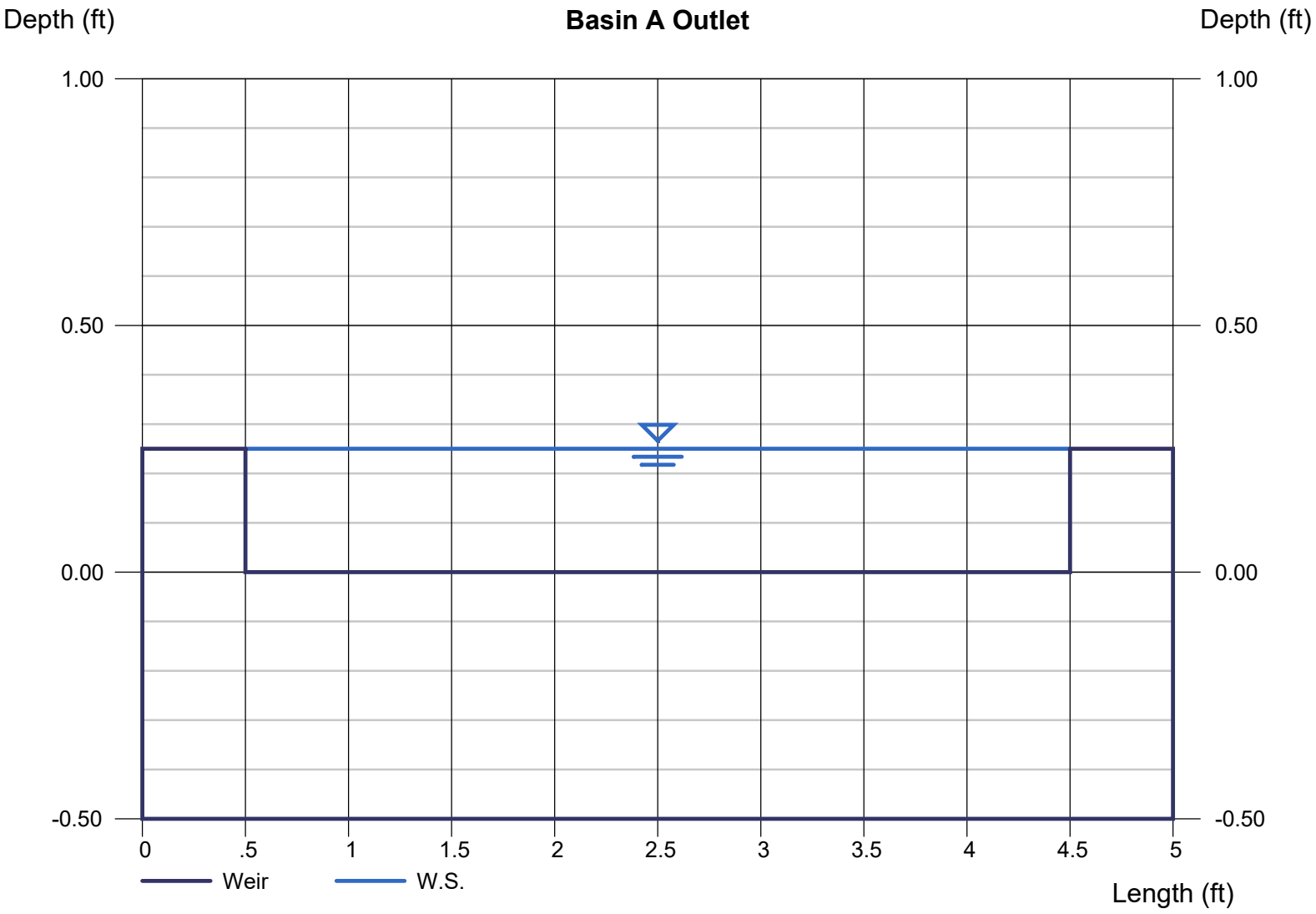
Crest	= Sharp
Bottom Length (ft)	= 4.00
Total Depth (ft)	= 0.25

Calculations

Weir Coeff. Cw	= 3.33
Compute by:	Q vs Depth
No. Increments	= 10

Highlighted

Depth (ft)	= 0.25
Q (cfs)	= 1.665
Area (sqft)	= 1.00
Velocity (ft/s)	= 1.67
Top Width (ft)	= 4.00



Inlet Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Tuesday, Nov 22 2022

Basin C Revised Outlet Design

Drop Grate Inlet

Location	= Sag
Curb Length (ft)	= -0-
Throat Height (in)	= -0-
Grate Area (sqft)	= 0.66
Grate Width (ft)	= 1.00
Grate Length (ft)	= 1.00

Gutter

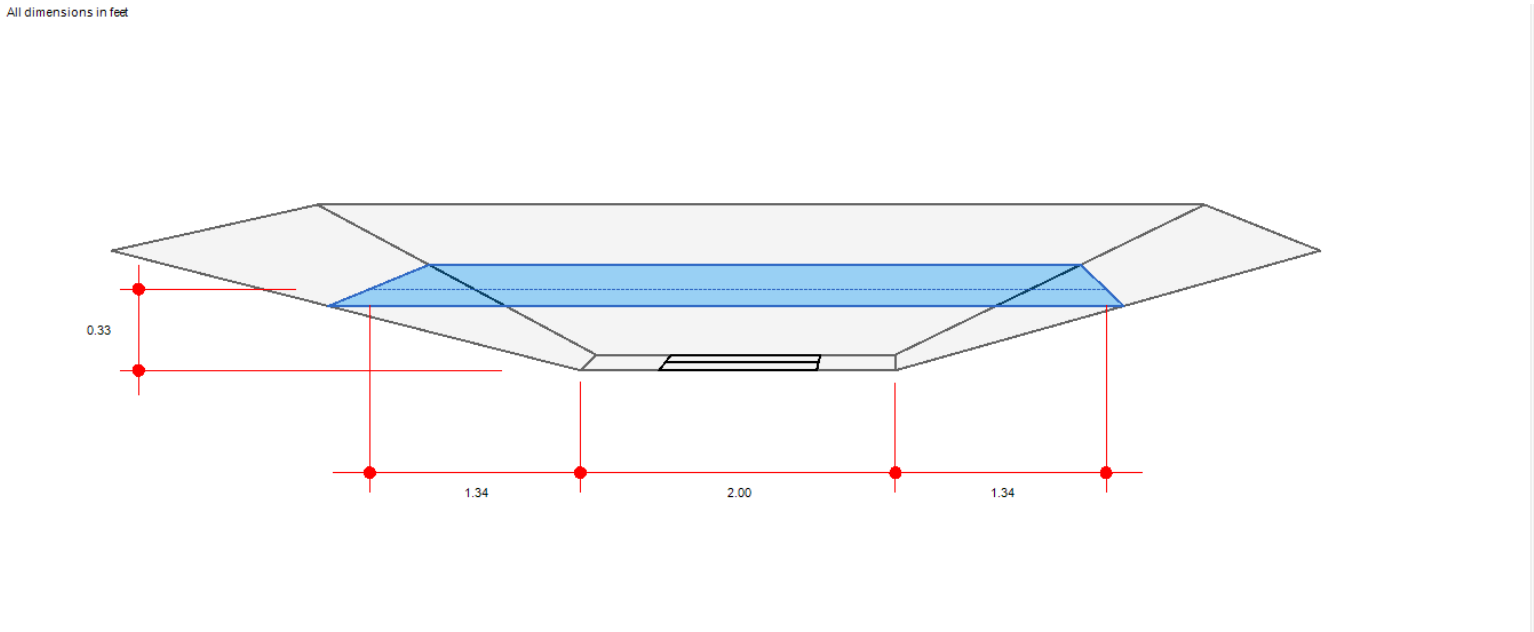
Slope, Sw (ft/ft)	= 0.250
Slope, Sx (ft/ft)	= 0.250
Local Depr (in)	= -0-
Gutter Width (ft)	= 2.00
Gutter Slope (%)	= -0-
Gutter n-value	= -0-

Calculations

Compute by:	Known Q
Q (cfs)	= 2.05

Highlighted

Q Total (cfs)	= 2.05
Q Capt (cfs)	= 2.05
Q Bypass (cfs)	= -0-
Depth at Inlet (in)	= 4.01
Efficiency (%)	= 100
Gutter Spread (ft)	= 4.67
Gutter Vel (ft/s)	= -0-
Bypass Spread (ft)	= -0-
Bypass Depth (in)	= -0-



Inlet Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Monday, Nov 7 2022

Basin 2 Outlet - 3rd Rev

Drop Grate Inlet

Location	= Sag
Curb Length (ft)	= -0-
Throat Height (in)	= -0-
Grate Area (sqft)	= 0.66
Grate Width (ft)	= 1.00
Grate Length (ft)	= 1.00

Gutter

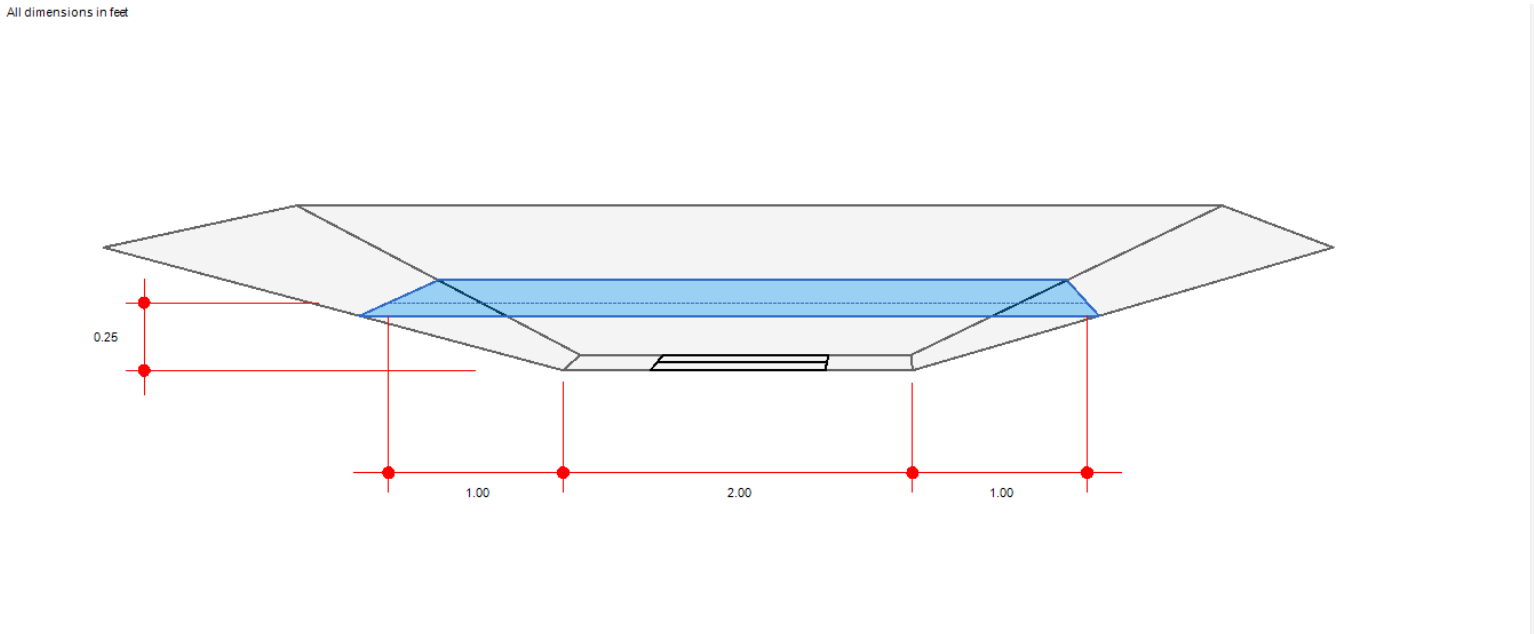
Slope, Sw (ft/ft)	= 0.250
Slope, Sx (ft/ft)	= 0.250
Local Depr (in)	= -0-
Gutter Width (ft)	= 2.00
Gutter Slope (%)	= -0-
Gutter n-value	= -0-

Calculations

Compute by:	Q vs Depth
Max Depth (in)	= 3

Highlighted

Q Total (cfs)	= 1.50
Q Capt (cfs)	= 1.50
Q Bypass (cfs)	= -0-
Depth at Inlet (in)	= 3.00
Efficiency (%)	= 100
Gutter Spread (ft)	= 4.00
Gutter Vel (ft/s)	= -0-
Bypass Spread (ft)	= -0-
Bypass Depth (in)	= -0-



DYODS™
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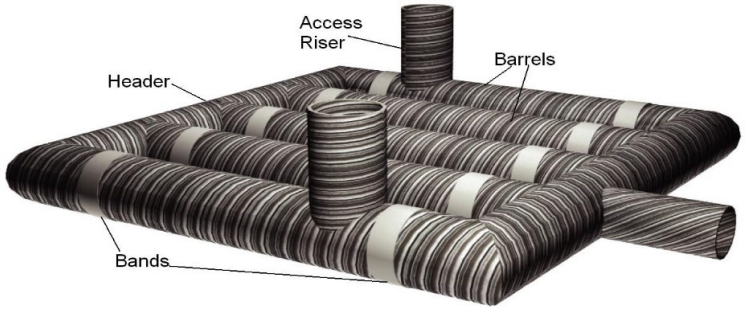
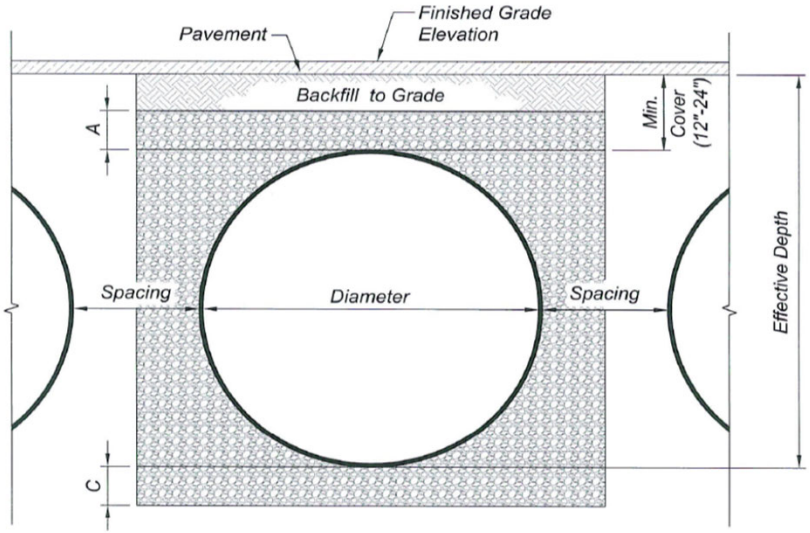
CONTECH CMP DETENTION SYSTEMS

CONTECH STORMWATER SOLUTIONS INC.

For design assistance, drawings,
and pricing send completed worksheet to:
dyods@contech-cpi.com





Project Summary

Date:	11/22/2022
Project Name:	Luna 395
City / County:	Victorville
State:	CA
Designed By:	CM
Company:	United Engineering
Telephone:	

Enter Information in Blue Cells

Corrugated Metal Pipe Calculator

Storage Volume Required (cf):	12,200
Limiting Width (ft):	23.00
Invert Depth Below Asphalt (ft):	
Solid or Perforated Pipe:	Perforated
Shape Or Diameter (in):	96
Number Of Headers:	1
Spacing between Barrels (ft):	3.00
Stone Width Around Perimeter of System (ft):	2
Depth A: Porous Stone Above Pipe (in):	6
Depth C: Porous Stone Below Pipe (in):	6
Stone Porosity (0 to 40%):	40

50.27 ft^2 Pipe Area

System Sizing

Pipe Storage:	8,595	cf	
Porous Stone Storage:	3,848	cf	
Total Storage Provided:	12,444	cf	102.0% Of Required Storage
Number of Barrels:	2	barrels	
Length per Barrel:	76.0	ft	
Length Per Header:	19.0	ft	
Rectangular Footprint (W x L):	23. ft x 88. ft		

CONTECH Materials

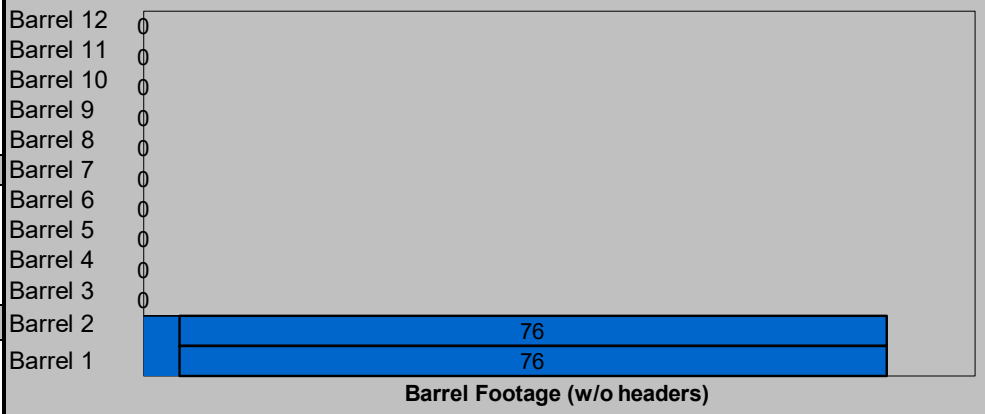
Total CMP Footage:	171	ft
Approximate Total Pieces:	9	pcs
Approximate Coupling Bands:	8	bands
Approximate Truckloads:	5	trucks

Construction Quantities**

Total Excavation:	0	cy
Porous Stone Backfill For Storage:	356	cy stone
Backfill to Grade Excluding Stone:	-675	cy fill

***Construction quantities are approximate and should be verified upon final design*

System Layout



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